



TIMKEN

Where You Turn

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1990 and Newer Bearing and Seal Application Catalog

1990 et nouveau Catalogue d'application de roulements et de joints

Catálogo de aplicaciones de rodamientos y retenes 1990 y posteriores

For Automotive and Light Truck

Pour les automobiles et camions légers

Para automóviles y camiones ligeros



BSAC 2010

Featuring An Expanded Hub Unit Bearing / Bearing Module Technology Section

INTRODUCTION

Original equipment (OE) quality is what you get with every aftermarket hub unit bearing, bearing and seal sold by Timken. Vehicle manufacturers from around the world choose the Timken® brand because of its reputation for quality. You too can choose Timken with the same confidence vehicle manufacturers have had for more than a century.

An expanded Hub Unit Bearing Technology Section is included in this edition. As a leader in hub unit bearing technology for OE automotive manufacturers, Timken is also a leader in the automotive aftermarket for this product line.

If you have comments regarding this catalog, please complete the postage paid card found in the back of this catalog or send an e-mail to auto.am@timken.com.

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

INTRODUCTION

En achetant un joint, un moyeu ou un roulement de rechange vendu par Timken, vous bénéficiez de la qualité des produits d'origine. Des constructeurs automobiles des quatre coins du monde ont choisi Timken, car ce nom est synonyme de qualité et ce, depuis plus d'un siècle. Comme eux, faites confiance à Timken.

Cette édition inclut également une liste complète de roulements pour moyeu. Déjà leader dans le domaine des technologies de

roulements pour les constructeurs automobiles, Timken est à la tête du marché des pièces de rechange pour cette gamme de produits.

Pour tout commentaire sur ce catalogue, renvoyez-nous la carte port payé incluse à la fin du catalogue ou envoyez-nous un courrier électronique à l'adresse suivante : auto.am@timken.com.

Malgré le soin apporté à l'exactitude des informations contenues dans ce document, Timken ne saurait en aucun cas être tenu pour responsable des erreurs ou omissions, ni en aucune autre façon.

INTRODUCCIÓN

Calidad de Equipo Original (OE) es lo que usted obtiene en cada ensamble de maza, rodamiento y retén de repuesto de Timken. Los fabricantes de vehículos en todo el mundo eligen la marca Timken por su reputación de calidad. Usted también puede elegir a Timken con la misma confianza con la que lo han hecho los fabricantes por más de un siglo.

En esta edición se incluye una extensa sección de Tecnología en Ensamblajes de Maza. Así como es líder en la tecnología de mazas para fabricantes de Equipo Original, Timken también es líder en esta línea de productos para el mercado de repuesto automotriz.

Si tiene algún comentario sobre este catálogo, por favor llene la tarjeta con porte pagado que se encuentra en la parte posterior o envíe un correo a auto.am@timken.com.

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HOW TO USE THIS CATALOG

See the section 'Application Index Model to Page Number' beginning on page ix, to find the page number where your vehicle is listed.

Vehicles are arranged alphabetically by make and model.

The product quantity (if more than one) necessary to do a complete repair is contained in brackets following the part number.

Helpful Information:

- The model year of a vehicle can be identified by the tenth digit from the left in the Vehicle Identification Number (VIN) on the dash, looking through the windshield or on the doorjamb.
- The vehicle engine type can be determined from the decal under the hood or by using the eighth digit from the left in the VIN.
- The type of braking system (ABS or non-ABS, front or 4-wheel) can be found through actual inspection of the system, or in the case of General Motors, the decal located in the trunk or the glove box.

COMMENT UTILISER CE CATALOGUE

Pour connaître le numéro de la page répertoriant votre véhicule, consultez la section Modèles d'index d'application et leur numéro de page, commençant à la page ix.

Les véhicules sont classés par ordre alphabétique, par marque et par modèle.

Les quantités requises (si plus d'un) pour une réparation complète sont indiquées entre crochets après le numéro de la pièce.

Information utile :

- Pour identifier la marque, le modèle et l'année du véhicule. Vous trouverez cette dernière information dans le Numéro d'identification du véhicule automobile, placé sur le tableau de bord, sur le pare-brise ou sur le montant de la portière.
- La cylindrée du moteur est indiquée sur l'autocollant placé sous le capot. Vous pouvez aussi consulter la partie gauche du Numéro d'identification du véhicule automobile, qui indique la cylindrée.
- Vous connaîtrez le type du système de freinage (ABS ou non, freinage avant ou aux quatre roues) en inspectant le système, ou (dans le cas de véhicules General Motors) en consultant l'étiquette placée dans le coffre ou la boîte à gants, qui indique les codes des freins.

CÓMO USAR ESTE CATÁLOGO

Vea la sección "Índice de Aplicaciones por Modelo y Número de Página" a partir de la página ix, para encontrar el número de página en que se encuentra enlistado el modelo de su vehículo.

Los vehículos se encuentran ordenados alfabéticamente por fabricante y modelo. La cantidad de piezas necesarias para una completa reparación (si son más de una) se indica entre paréntesis después del número de parte.

La cantidad de piezas necesarias para una completa reparación (si son más de una) se indica entre paréntesis después del número de parte.

Información útil:

- El año del modelo del vehículo puede identificarse a partir del décimo dígito de la izquierda del Número de Identificación del Vehículo (VIN, por sus siglas en inglés) que se encuentra en una etiqueta en el tablero, en el parabrisas o en el marco de la puerta.
- El tipo de motor del vehículo puede identificarse en la calcomanía que se encuentra debajo de la cajuela o con el octavo dígito de la izquierda en el VIN.
- Puede encontrar el tipo de sistema de frenos (ABS, no ABS, delantero o en las 4 ruedas) inspeccionando el propio sistema, o en el caso de General Motors, se encuentra una calcomanía en la guantera o en la cajuela, en la que se especifica el tipo de frenos.

SETTING THE PACE FOR AUTOMOTIVE AFTERMARKET

TIMKEN – WHERE YOU TURN

Timken is indeed where customers turn for original equipment (OE) replacement hub unit bearings, bearings and seals, but it is also where customers turn for quality and innovation.

QUALITY

Quality is the cornerstone of our reputation and is central to the ability of each of our businesses to achieve its mission. Each associate is committed to fully satisfying customer requirements and to continually improve everything we do to create value in our products and services.

INNOVATION IN:

Manufacturing

With more than 50 manufacturing plants, we continue to offer products that extend beyond the bearing itself to the environment around the bearing.

Hub Unit Bearings

OE market strengths are transferred to our aftermarket hub unit bearings, offering customers a full line of quality replacement parts including SENSOR-PAC™, UNIPAC™ and UNIPAC-PLUS™. Timken hub unit bearings are pre-set, pre-greased and pre-sealed, which helps make installation easier.

Seals

While Timken is known for its top-quality bearings, the company also has an impressive history of designing top-quality seals. Integral to bearing performance, Timken is proud of its numerous patented seals, which are made in some of the world's most advanced manufacturing plants.

Steel

Timken provides customers around the world with high-quality steel. Capitalizing on the synergy between our bearing and steel businesses, we use our expertise to select bearing materials that meet the most demanding application requirements and help extend bearing life.

Technology

When people think of Timken, they often think of advanced technology. There are understandable reasons for that. Timken engineers and scientists at our 9 global technology centers continue to develop new friction management solutions.



PRENDRE LES DEVANT POUR LE MARCHÉ DES PIÈCES ET ACCESSOIRES D'AUTOMOBILE

TIMKEN – QUAND ÇA TOURNE

Par le fait même, Timken est le partenaire de choix des clients souhaitant obtenir des moyeux, des joints et des roulements de rechange. Cela dit, chez Timken, nous savons que nos clients recherchent également la qualité et l'innovation.

QUALITÉ

La qualité est la pierre angulaire de notre réputation. Elle est au centre de toutes nos activités, qui ne sauraient remplir leurs objectifs sans elle. Chaque collaborateur s'engage à respecter pleinement les exigences de ses clients tout en apportant continuellement des améliorations aux efforts de Timken, afin d'augmenter la valeur de ses produits et services.

LES CIBLES DE L'INNOVATION :

Fabrication

Forte de ses quelque 50 usines, l'entreprise Timken, loin de s'arrêter au roulement en lui-même, continue de proposer des produits propres à l'environnement du roulement.

Moyeux

Toutes les qualités du marché de l'équipement d'origine se retrouvent également dans les moyeux de rechange que nous proposons. Nos clients peuvent accéder à toute une gamme de pièces de rechange de qualité, qui comprend les pièces SENSOR-PAC™, UNIPAC™ et UNIPACPLUS™. Les moyeux Timken sont installés, graissés et scellés à l'avance, de manière à faciliter l'installation.

Joints

Certes, l'entreprise Timken est en premier lieu reconnue pour ses roulements de grande qualité. Cependant, ses performances en matière de conception de joints ont toujours

été impressionnantes. Chez Timken, nous sommes fiers de présenter nos nombreux joints brevetés, qui jouent un rôle crucial dans les performances des roulements et sont fabriqués dans des usines à la fine pointe de la technologie mondiale.

Acier

Timken fournit des aciers de grande qualité à des clients dans le monde entier. Grâce à la synergie entre nos activités d'acier et de roulements, nous mettons à profit notre expertise pour sélectionner des matériaux qui répondent aux conditions d'utilisation les plus exigeantes et aident à prolonger la durée de vie des roulements.

Technologies

Le nom de Timken est souvent associé à une avancée technologique. Cette association de pensée est tout à fait compréhensible. En effet, les scientifiques et ingénieurs rassemblés dans les 9 Centres technologiques mondiaux de Timken travaillent sans cesse au développement de nouvelles solutions de gestion des frictions.



MARCANDO EL CAMINO PARA EL MERCADO DE REPUESTO AUTOMOTRIZ

TIMKEN – PRESENTE EN TODO MOVIMIENTO

Timken es definitivamente adonde acuden los clientes para reemplazar mazas, rodamientos y sellos de equipo original (OE), y también adonde acuden por calidad e innovación.

CALIDAD

La calidad es la piedra angular de nuestra reputación y es fundamental para que cada una de nuestras divisiones cumpla con su misión. Todos los empleados estamos comprometidos a satisfacer por completo los requerimientos de los clientes y a mejorar continuamente en todo lo que hacemos para crear valor en nuestros productos y servicios.

INNOVACIÓN EN:

Fabricación

Con más de 50 plantas, seguimos ofreciendo productos que van más allá de los rodamientos y se ocupan del entorno que los rodea.

Unidades de rodamientos de mazas

Los beneficios de equipo original (OE) se transfieren a nuestras unidades de mazas, lo que ofrece a nuestros clientes una línea completa de partes de repuesto de alta calidad como SENSOR-PAC™, UNIPAC™ y UNIPACPLUS™. Las unidades de maza de Timken están preajustadas, preengrasadas y preselladas, lo que facilita su instalación.

Retenes

Si bien Timken es reconocida por la gran calidad de sus rodamientos, también cuenta con una admirable trayectoria en el diseño de retenes de alta calidad. Como parte integral en el

desempeño de los rodamientos, Timken se enorgullece de sus numerosos retenes patentados y que se fabrican en algunas de las plantas más avanzadas del mundo.

Acero

Timken provee acero de alta calidad a clientes de todo el mundo. Aprovechando la sinergia entre nuestros negocios de rodamientos y de acero, usamos nuestra experiencia para seleccionar materiales para los rodamientos que cumplan con los requisitos de las aplicaciones más exigentes y contribuyan a prolongar su vida útil.

Tecnología

Cuando se piensa en Timken, por lo general se piensa en tecnología de avanzada. Y es comprensible, pues los ingenieros y científicos de nuestros 9 centros globales de tecnología continúan desarrollando nuevas soluciones para el manejo de la fricción.



MANUFACTURER / MODEL TO PAGE NUMBER

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ABBREVIATION KEY

Abbreviation	Stands For...	Abbreviation	Stands For...	Abbreviation	Stands For...
2Dr	2 Door	Dsl	Diesel	O/S	Output Shaft
2WD	Two Wheel Drive	Elec	Electric	OD	Outside Diameter
4Dr	4 Door	Exc	Except	OE	Original Equipment
4WD	Four Wheel Drive	Exh	Exhaust	OHV	Overhead Valve
A/C	Air Conditioning	Ext	Extension	Opt	Optional
A/T	Automatic Transmission	Flg	Flange	Pass	Passenger
ABS	Antilock Brake System	Frt	Front	Pc	Piece
Acc	Accessory	FWD	Front Wheel Drive	Prod	Production
Amp	Amperage	GVW	Gross Vehicle Weight	PTFE	Tetrafluoro-Ethylene Propylene
Assy	Assembly	GVWR	Gross Vehicle Weight Rating	RG	Ring Gear
ATX	Automatic Transaxle	H/D	Heavy Duty	RH	Right Hand
Auto	Automatic	Harmnc	Harmonic	Rlr	Roller
AWD	All Wheel Drive	HD	Heavy Duty	Rpr	Repair
Bbl	Barrel	HO	High Output	Rr	Rear
Brg	Bearing	Hsg	Housing	RWD	Rear Wheel Drive
Brks	Brakes	Hyd	Hydraulic	Ser	Series
C/S	Counter Shaft	I/S	Input Shaft	Shft	Shaft
Carb	Carburetor	ID	Inside Diameter	Slvs	Sleeves
cc	Cubic Centimeters	Incl	Include	SOHC	Single Overhead Cam
Ch	Chassis	Indep	Independent	Spd	Speed
Chry	Chrysler	Inter	Intermediate	SRW	Single Rear Wheel
CID	Cubic Inch Displacement	IRS	Independent Rear Suspension	Std	Standard
Cl	Clutch	L	Liter	Susp	Suspension
Comm	Commercial	L/D	Light Duty	Taprd	Tapered
Conv	Converter	Lb	Pound	Trans	Transmission
Cyl	Cylinder	LH	Left Hand	Turbo	Turbocharger
Dbl	Double	Limo	Limousine	VIN	Vehicle Identification Number
Dia	Diameter	M/T	Manual Transmission	W/	With
Diaph	Diaphragm	Man	Manual	W/O	Without
Diff	Differential	mm	Millimeter	WD	Wheel Drive
DOHC	Dual Overhead Cam	Mtg	Mounting	Whl	Wheel
Dr	Door	Ndl	Needle	Whls	Wheels
DRW	Dual Rear Wheel	O/D	Overdrive		

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL					

FRONT WHEEL**FWD**

2009-2004	3.2TL	
Ball Bearing	.....	510073[2]
2008-2004	TSX	
Ball Bearing	.....	510073[2]
2006-2002	RSX	
Ball Bearing	.....	510039[2]
2004-1996	3.5RL	
Ball Bearing	.....	510011[2]
2003-2001	3.2CL	
Ball Bearing	.....	510050[2]
2003-1999	3.2TL	
Ball Bearing	.....	510050[2]
2001-1994	Integra	
Ball Bearing	.....	510030[2]
1999-1998	2.3CL	
Bearing Module	.....	513098[2]
1999-1997	3.0CL	
Bearing Module	.....	510038[2]
1998-1996	3.2TL	
Ball Bearing	.....	510011[2]
1998-1995	2.5TL	
Bearing Module	.....	510038[2]
1997	2.2CL	
Bearing Module	.....	513098[2]
1995-1991	Legend	
Ball Bearing	.....	510011[2]
1994-1992	Vigor	
Bearing Module	.....	513093[2]
1993-1990	Integra	
Ball Bearing	.....	513241[2]
1990	Legend	
Ball Bearing	.....	513052[2]

RWD

2005-1991	NSX	
Bearing Module	.....	513099[2]

AWD

2008-2005	3.5RL	
Hub Unit Bearing	.....	HA590147[2] ²⁵

REAR WHEEL**FWD**

2009-2004	3.2TL	
Hub Unit Bearing	.....	512188[2]
2008-2004	TSX	
Hub Unit Bearing	.....	HA590019[2] ²⁵
2006-2002	RSX	
Hub Unit Bearing	.....	HA590005[2]
2004-1996	3.5RL	
Hub Unit Bearing	.....	512123[2]
2003-2001	3.2CL	
Hub Unit Bearing	.....	512173[2]
2003-1999	3.2TL	
Hub Unit Bearing	.....	512179[2]
2001-1994	Integra (ABS)	
Hub Unit Bearing	.....	513105[2]
1999-1998	2.3CL	
Hub Unit Bearing	.....	512172[2]

REAR WHEEL (cont.)**FWD (cont.)**

1999-1997	3.0CL	
Hub Unit Bearing	.....	512172[2]
1998-1996	3.2TL	
Hub Unit Bearing	.....	512121[2]
1998-1995	2.5TL	
Hub Unit Bearing	.....	512120[2]
1997	2.2CL	
Hub Unit Bearing	.....	512172[2]
1996-1994	Integra (Non-ABS)	
Hub Unit Bearing	.....	513105[2]
1995-1991	Legend	
Hub Unit Bearing	.....	512008[2]
1994-1992	Vigor	
Hub Unit Bearing	.....	512031[2]
1993-1990	Integra (ABS)	
Hub Unit Bearing	.....	513105[2]
1993-1990	Integra (Non-ABS)	
Hub Unit Bearing	.....	513033[2]
1990	Legend	
Hub Unit Bearing	.....	513049[2]

RWD

2005-1991	NSX	
Bearing Module	.....	511012[2]
Seal	.....	710293[2]

AWD

2008-2005	3.5RL	
Hub Unit Bearing	.....	HA590146[2] ²⁵

REAR AXLE**Differential**

1995	Legend	
Cone/Cup	.....	NP484279-NP905784[2]
1994-1992	Vigor	
Seal	.....	710147[2]
Bearing Assy	.....	32009XM[2]

Pinion

1995	Legend	
Cone/Cup (Inner)	.....	NP929079-NP030857
Cone/Cup (Outer)	.....	NP463799-NP235899
1994-1992	Vigor	
Seal (Inner)	.....	710242
Bearing Assy (Inner)	.....	33208
Seal (Outer)	.....	710250
Bearing Assy (Outer)	.....	32008XM

CLUTCH**Pilot Bearing**

2001-1990	(4 Cyl.)	
Ball Bearing	.....	102CC

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL (cont.)					

CLUTCH

Release Bearing

2001-1994	Integra GSR GSRL Type R	
	Bearing Assy	614072
2001-1994	Integra RS GS LS LSSPL	
	Bearing Assy	614068
2000-1991	NSX	
	Bearing Assy	614138
1999-1998	2.3CL	
	Bearing Assy	614068
1997	2.2CL	
	Bearing Assy	614068
1995-1991	Legend	
	Bearing Assy	614138
1994-1992	Vigor	
	Bearing Assy	614139
1993-1990	Integra	
	Bearing Assy	614104
1990	Legend	
	Bearing Assy	614068

6-SPEED MANUAL TRANSMISSION

Selector Shaft Seal/Man. Shaft

2005-1991		
	Seal	710299

4-SPEED AUTOMATIC TRANSAXLE

Differential

2004-1996	3.5RL	
	Bearing Assy	32009XM[2]
2001-1990	Integra	
	Ball Bearing	208[2]
2000-1991	NSX	
	Bearing Assy	32011XM[2]
1999-1998	2.3CL	
	Bearing Assy (LH)	30208M[2]
1999-1996	3.2TL	
	Bearing Assy	32009XM[2]
1998-1995	2.5TL	
	Bearing Assy	32009XM[2]
1997	2.2CL (A6VA)	
	Bearing Assy (LH)	30208M[2]
1995-1991	Legend	
	Bearing Assy	32009XM[2]
1994-1992	Vigor	
	Bearing Assy	32009XM[2]
1990	Legend	
	Bearing Assy	30208M[2]

Torque Converter / Frt Pump

2004-1999	3.2TL	
	Seal	417486
2004-1996	3.5RL	
	Seal	710238
2004-1991	NSX (MR9A)	
	Seal	710238
2001	3.2CL	
	Seal	350609
2001-1990	Integra	
	Seal	350609

4-SPEED AUTOMATIC TRANSAXLE (cont.)

Torque Converter / Frt Pump (cont.)

1999-1998	2.3CL	
	Seal	350609
1999-1997	3.0CL	
	Seal	350609
1998-1996	3.2TL	
	Seal	350609
1998-1995	2.5TL	
	Seal	350609
1997	2.2CL	
	Seal	350609
1995-1991	Legend	
	Seal	710238
1994-1992	Vigor	
	Seal	350609
1990	Legend	
	Seal	350609

Output Shaft

2008-1996	3.5RL	
	Seal (RH)	710260
	Repair Sleeve (RH)	KWK99177
	Seal (LH)	225545
	Repair Sleeve (LH)	KWK99215
2005-1991	NSX (MR9A)	
	Seal (LH)	224068
	Seal (RH)	710291
2001-1994	Integra	
	Seal (RH)	1036
	Repair Sleeve (RH)	KWK99157
	Seal (LH)	223543
	Repair Sleeve (LH)	KWK99139
1999-1998	2.3CL	
	Seal (RH)	224066
	Repair Sleeve (RH)	KWK99157
	Seal Viton (LH)	224026
	Repair Sleeve (LH)	KWK99157
1999-1997	3.0CL	
	Seal (RH)	710110
	Repair Sleeve (RH)	KWK99134
	Seal Viton (LH)	224026
	Repair Sleeve (LH)	KWK99157
1999-1996	3.2TL	
	Seal (RH)	225545
	Repair Sleeve (RH)	KWK99215
	Seal (LH)	223805
	Repair Sleeve (LH)	KWK99147
1998-1995	2.5TL	
	Seal (RH)	710173
	Repair Sleeve (RH)	KWK99157
	Seal (LH)	350609
	Repair Sleeve (LH)	KWK99170
1997	2.2CL	
	Seal (RH)	224066
	Repair Sleeve (RH)	KWK99157
	Seal (LH)	712551
	Repair Sleeve (LH)	KWK99157

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL (cont.)					

4-SPEED AUTOMATIC TRANSAXLE (cont.)

Output Shaft (cont.)

1995-1991	Legend	
Seal (RH)	.....	710260
Repair Sleeve (RH)	.....	KWK99177
Seal (LH)	.....	225545
Repair Sleeve (LH)	.....	KWK99215
1994-1992	Vigor	
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
Seal (LH)	.....	710173
Repair Sleeve (LH)	.....	KWK99196
1993-1990	Integra	
Seal (RH)	.....	1036
Repair Sleeve (RH)	.....	KWK99157
Seal (LH)	.....	223805
Repair Sleeve (LH)	.....	KWK99157
1990	Legend	
Seal Viton	.....	224026[2]
Repair Sleeve	.....	KWK99157[2]

Pinion

2001-1996	3.5RL	
Seal (Frt)	.....	221207
Bearing Assy (Rr)	.....	32207M
1998-1996	3.2TL	
Seal (Frt)	.....	221207
Bearing Assy (Rr)	.....	32207M
1998-1995	2.5TL	
Seal (Frt)	.....	710242
Bearing Assy (Frt)	.....	33208
Bearing Assy (Rr)	.....	32009XM
1995-1991	Legend	
Seal (Frt)	.....	221207
Bearing Assy (Rr)	.....	32207M
1994-1992	Vigor	
Seal (Frt)	.....	710242
Bearing Assy (Frt)	.....	33208
Bearing Assy (Rr)	.....	32008XM

Extension Housing

1998-1995	2.5TL	
Bearing Assy	.....	32008XM

Manual Shaft

2005-1990		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED AUTOMATIC TRANSAXLE

Differential

2001-2000	3.2TL	
Bearing Assy	.....	32009XM[2]

5-SPEED AUTOMATIC TRANSAXLE

Torque Converter

2006-2002	RSX (MRMA)	
Seal	.....	350609
2003-2001	3.2CL (MGFA)	
Seal	.....	350609
2003-2001	3.2TL (B7WA)	
Seal	.....	350609
2000	3.2TL (M7WA)	
Seal	.....	350609

Output Shaft

2008-2007	TL	
Seal (LH)	.....	710199
Repair Sleeve (LH)	.....	KWK99139
2008-2004	TSX (MCTA)	
Seal (RH)	.....	710217
Repair Sleeve (RH)	.....	KWK99139
2006-2002	RSX (MRMA)	
Seal (LH)	.....	710300
Repair Sleeve (LH)	.....	KWK99157
2003-2001	3.2CL (MGFA)	
Seal (LH)	.....	710199
Repair Sleeve (LH)	.....	KWK99139
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
2003-2001	3.2TL (B7WA)	
Seal (LH)	.....	710199
Repair Sleeve (LH)	.....	KWK99139
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
2000	3.2TL (M7WA)	
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
Seal (LH)	.....	710199
Repair Sleeve (LH)	.....	KWK99139

Manual Shaft

2005-1991		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE

Differential

2006-2002	RSX, TSX	
Ball Bearing	.....	208[2]
2001-1990	Integra	
Ball Bearing	.....	208[2]
1999-1998	2.3CL	
Bearing Assy (LH)	.....	33108[2]
Bearing Assy (RH)	.....	32008XM[2]
1997	2.2CL	
Bearing Assy (LH)	.....	33108[2]
Bearing Assy (RH)	.....	32008XM[2]
1996-1991	NSX	
Bearing Assy (RH)	.....	32011XM[2]
1994-1992	Vigor (L3A3)	
Cone/Cup (LH)	.....	XAA32008X-Y32008X[2]
Bearing Assy (RH)	.....	32010X[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL (cont.)					

5-SPEED MANUAL TRANSAXLE (cont.)

Differential (cont.)

1990	Legend (C3P4, G3T4)
Cone/Cup (LH)	XAA32008X-Y32008X[2]
Bearing Assy (RH)	32010X[2]

Input Shaft

2001-1990	Integra
Seal	222830
Repair Sleeve	KWK99111
1997	2.2CL
Seal	222830
Repair Sleeve	KWK99111
1994-1992	Vigor (L3A3)
Seal	222830
Repair Sleeve	KWK99111
1994-1991	NSX
Seal	223235
Repair Sleeve	KWK99128
1993-1991	Legend (K4A6)
Seal	710157
Repair Sleeve	KWK99103
1990	Legend (C3P4, G3T4)
Seal	710157
Repair Sleeve	KWK99103

Output Shaft

2004-2002	RSX, TSX
Seal (LH)	224068
Seal (RH)	710291
2001-1994	Integra
Seal (LH)	223543
Repair Sleeve (LH)	KWK99139
Seal (RH)	224045
Repair Sleeve (RH)	KWK99157
1999-1998	2.3CL
Seal (LH)	2007N
Repair Sleeve (LH)	KWK99139
Seal (RH)	3459S
Repair Sleeve (RH)	KWK99157
1997	2.2CL
Seal (LH)	2007N
Repair Sleeve (LH)	KWK99139
Seal (RH)	3459S
Repair Sleeve	KWK99157
1996-1991	NSX
Seal (LH)	710291
Repair Sleeve (LH)	KWK99162
Seal (RH)	224068
Repair Sleeve (RH)	KWK99157
1995-1991	Legend
Seal (LH)	224520
Repair Sleeve (LH)	KWK99177
Seal (RH)	225545
Repair Sleeve (RH)	KWK99215
1994-1992	Vigor
Seal (LH)	710173
Repair Sleeve (LH)	KWK99196
Seal (RH)	224025
Repair Sleeve (RH)	KWK99157

5-SPEED MANUAL TRANSAXLE (cont.)

Output Shaft (cont.)

1993-1990	Integra
Seal (LH)	224025
Repair Sleeve	KWK99157
1990	Legend
Seal	712551[2]
Repair Sleeve	KWK99157[2]

Pinion

1995-1991	Legend (K4A6)
Seal (Frt)	225775
1994-1992	Vigor (L3A3)
Seal (Frt)	710242
Bearing Assy (Frt)	33208
Bearing Assy (Rr)	32008XM

Selector Shaft Seal/Man. Shaft

1999-1998	2.3CL
Seal (Top)	221603
Repair Sleeve	KWK99058
Seal (Side)	221607
Repair Sleeve	KWK99058
1997	2.2CL
Seal (Top)	221603
Repair Sleeve	KWK99058
Seal (Side)	221607
Repair Sleeve	KWK99058
1994-1992	Vigor
Seal (Top)	710249
Repair Sleeve (Top)	KWK99078
Seal (Side)	221607
Repair Sleeve (Side)	KWK99058

Extension Housing

1994-1992	Vigor
Seal	224025
Repair Sleeve	KWK99157

6-SPEED MANUAL TRANSAXLE

Input Shaft

2004-1997	NSX
Seal	223235
Repair Sleeve	KWK99128

Output Shaft

2004-1997	NSX
Seal (LH)	710291
Seal (RH)	224068

Differential

2002-1997	NSX
Bearing Assy (RH)	32011XM
Bearing Assy (LH)	33208

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL (cont.)					

POWER STEERING**Pump Shaft**

1999-1991	2.2CL, 2.3CL, 3.2TL, Legend	
Seal		221920
1994-1992	Vigor	
Seal		222028
1991	Integra	
Seal		221620
1990		
Seal		221620

OIL PUMP**6 Cylinder**

2008-2007	3.2L, 3.5L	
Seal		711181
2008-1996	3.5L	
Seal		711181
2007-1996	3.2TL	
Seal		711181
2005-1991	3.0L, 3.2L	
Seal		711181
2003-2001	3.2CL	
Seal		711181
1999-1998	2.3CL	
Seal Viton		712009
Repair Sleeve		KWK99106
1999-1997	3.0CL	
Seal		711181
1997	2.2CL	
Seal Viton		712009
Repair Sleeve		KWK99106
1995-1990	2.5L, 2.7L, 3.2L	
Seal		711181

CAMSHAFT SEAL**4 Cylinder**

2001-1994	1.8L (DOHC)	
Seal		222743
2001-1994	1.8L VTEC	
Seal		1989
1999-1998	2.3CL	
Seal		712008
1997	2.2CL	
Seal		712008
1993-1990	Integra RS LS LSSP GS GSL	
Seal		222743

5 Cylinder

1998-1995	2.5TL	
Seal		1989
1994-1992	Vigor	
Seal		1989

6 Cylinder

2008	TL	
Seal		710451[2]
Repair Sleeve		KWK99147
2008-2005	RL	
Seal		710451[2]

CAMSHAFT SEAL (cont.)**6 Cylinder (cont.)**

2007-1999	3.2TL	
Seal		710451
Repair Sleeve		KWK99147[2]
2004-1996	3.5RL	
Seal		3771
2004-1991	NSX	
Seal		1989[2]
Repair Sleeve		KWK99112[2]
2003-2001	3.2CL	
Seal		710451
Repair Sleeve		KWK99147[2]
1999-1997	3.0CL	
Seal		710451
1998-1996	3.2TL	
Seal		3771
1995-1991	Legend	
Seal		3771
1990	Legend	
Seal Viton		713771

CRANKSHAFT FRONT SEAL**4 Cylinder**

2009-2004	TSX	
Seal Viton		228008
2001-1990	Integra	
Seal		223802
Repair Sleeve		KWK99147
1999-1998	2.3CL	
Seal		224015
Repair Sleeve		KWK99157
1997	2.2CL	
Seal		224015
Repair Sleeve		KWK99157

5 Cylinder

1998-1995	2.5TL	
Seal		224015
Repair Sleeve		KWK99157
1994-1992	Vigor	
Seal		224015
Repair Sleeve		KWK99157

6 Cylinder

2007-1996	3.2TL	
Seal		1181
Repair Sleeve		KWK99163
2004-1996	3.5RL	
Seal		1181
Repair Sleeve		KWK99163
2004-1991	NSX	
Seal		1181
Repair Sleeve		KWK99169
1999-1997	3.0CL	
Seal		1181
Repair Sleeve		KWK99162
1995-1990	Legend	
Seal		1181
Repair Sleeve		KWK99162

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

ACURA - Integra, Legend, NSX, RSX, TSX, Vigor, 2.2CL, 2.3CL, 2.5TL, 3.0CL, 3.2CL, 3.2TL, 3.5RL (cont.)

CRANKSHAFT REAR SEAL

4 Cylinder

2008-2004	TSX
Seal Viton	228008
Repair Sleeve	KWK99315
2006-2002	RSX
Seal Viton	228008
Repair Sleeve	KWK99315
2001-1990	Integra
Seal	228015
Repair Sleeve	KWK99315
1999-1997	CL
Seal	228015
Repair Sleeve	KWK99315

5 Cylinder

1998-1995	2.5TL
Seal	228015
Repair Sleeve	KWK99315
1994-1992	Vigor
Seal	228015
Repair Sleeve	KWK99315

6 Cylinder

2008	TL
Seal Viton	228008
Repair Sleeve	KWK99315
2008-1996	3.5RL
Seal Viton	228008
Repair Sleeve	KWK99315
2008-1996	TL
Seal Viton	228008
Repair Sleeve	KWK99315

CRANKSHAFT REAR SEAL (cont.)

6 Cylinder (cont.)

2005-1991	NSX
Seal Viton	228008
Repair Sleeve	KWK99315
2003-2001	3.2CL
Seal Viton	228008
Repair Sleeve	KWK99315
1999-1997	3.0CL
Seal Viton	228008
Repair Sleeve	KWK99315
1995-1990	Legend
Seal Viton	228008
Repair Sleeve	KWK99315

ACURA - SUV - MDX

FRONT WHEEL

AWD

2008-2007	
Hub Unit Bearing	HA590228[2] ²⁵
2006-2003	
Ball Bearing	510085[2]
2002-2001	
Ball Bearing	510011[2]

REAR WHEEL

AWD

2008-2007	
Hub Unit Bearing	HA590229[2] ²⁵
2006-2003	
Ball Bearing	511036[2] ²⁵
2002-2001	
Ball Bearing	510039[2]

5-SPEED AUTOMATIC TRANSAXLE

Torque Converter

2004-2003	(MDKA)
Seal	710238
2002-2001	(BGHA, MGHA)
Seal	350609

Output Shaft

2008-2003	
Seal (LH)	710199
Repair Sleeve	KWK99139
2002	
Repair Sleeve (RH)	KWK99157
Seal (LH)	710217
Repair Sleeve	KWK99139
Seal (RH)	710300
2001	
Seal (LH)	710199
Repair Sleeve (LH)	KWK99139
Seal (RH)	710300
Repair Sleeve (RH)	KWK99157

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

ACURA - SUV - MDX (cont.)**5-SPEED AUTOMATIC TRANSAXLE****Manual Shaft**

2006-2001

Seal 221207

Repair Sleeve KWK99049

OIL PUMP**6 Cylinder**

2006-2001 3471cc/3.5L

Seal 711181

CAMSHAFT SEAL**6 Cylinder**

2006-2001 3471cc/3.5L

Seal 710451

CRANKSHAFT REAR SEAL**6 Cylinder**

2006-2001 3471cc/3.5L

Seal Viton 228008

Repair Sleeve KWK99315

ACURA - SUV - RDX**FRONT WHEEL****AWD**

2008-2007

Bearing Assy WB000012[2]²⁵**REAR WHEEL****AWD**

2008-2007

Hub Unit Bearing HA590204[2]²⁵**ACURA - SUV - SLX****FRONT WHEEL****4WD**

1999-1996

Seal (Inner) 710168[2]

Bearing Assy (Inner) 32009XM[2]

Bearing Assy (Outer) 32008XM[2]

REAR WHEEL**4WD**

1999-1996

Seal (Inner) 225230[2]

Ball Bearing (Inner) 511016[2]

Seal (Outer) 473179[2]

4WD FRONT AXLE**Axle Shaft**

1999-1996

Seal 710516[2]

Ball Bearing 106CC[2]

4WD FRONT AXLE**Differential**

1999-1996

Set SET45[2]

Pinion

1999-1996

Seal 474133

Bearing Assy (Inner) 32307

Bearing Assy (Outer) 30306M

REAR AXLE**Differential**

1999-1996

Bearing Assy 30210M[2]

Pinion

1999-1996

Seal 710248

Bearing Assy (Inner) 32307

Bearing Assy (Outer) 32332C

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

ACURA - SUV - SLX (cont.)**TRANSFER CASE****Input Shaft**

1999-1998
Seal 224250
1997-1996
Seal 710247
Repair Sleeve KWK99149

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1999-1996
Seal 3227
Repair Sleeve KWK99174

Rear Seal/Ext. Housing

1999-1996
Seal 3459S

Selector Shaft Seal/Man. Shaft

1999-1996
Seal 8792S

POWER STEERING**Pump Shaft**

1999-1996
Seal Viton 222036

CAMSHAFT SEAL**6 Cylinder**

1999-1998 3496cc/3.5L
Seal 1981[4]
Repair Sleeve KWK99114[4]
1997-1996 3165cc/3.2L
Seal 1981[2]
Repair Sleeve KWK99114[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1999-1996 3165cc/3.2, 3494cc/3.5L
Seal 224025
Repair Sleeve KWK99157

CRANKSHAFT REAR SEAL**6 Cylinder**

1999-1996 3165cc/3.2, 3494cc/3.5L
Seal 710060
Repair Sleeve KWK99364

ALFA ROMEO - Spider, 164**FRONT WHEEL****RWD**

1994-1990 Spider
Seal (Inner) 224100[2]
Bearing Assy (Inner) 30206M[2]
Bearing Assy (Outer) 32303[2]

REAR WHEEL**RWD**

1994-1990 Spider
Seal 223035[2]
Ball Bearing 88107[2]

REAR AXLE**Differential**

1994-1990 Spider 2000
Cone/Cup 28150-28300[2]
1993-1991 164
Bearing Assy 32009XM[2]

Pinion

1994-1990 Spider 2000
Cone/Cup (Inner) HM89446-HM89410
Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990 (ZF4HP22)
Seal 224052
Repair Sleeve KWK99157

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ALFA ROMEO - Spider, 164 (cont.)					

4-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

1990 (ZF4HP22)
Seal 3459S

CLUTCH**Release Bearing**

1994-1990 Spider 2000
Bearing Assy 614100

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1995-1991 (ZF4HP18Q)
Cone/Cup (RH) LM300849-LM300811
Cone/Cup (LH) LM806649-LM806610

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1990 1962cc/2.0L
Seal 223520
Repair Sleeve KWK99139

6 Cylinder

1995-1991 2959cc/3.0L
Seal 223520
Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1990 1962cc/2.0L
Seal 228480
Repair Sleeve KWK99328

6 Cylinder

1995-1991 2959cc/3.0L
Seal 228480
Repair Sleeve KWK99328

ASTON MARTIN - ALL**FRONT WHEEL****RWD**

1994-1990 Virage
Set (Inner) SET17[2]
Set (Outer) SET8[2]
1992-1990 Lagonda
Set (Inner) SET17[2]
Set (Outer) SET8[2]

REAR WHEEL**RWD**

1993-1990 Virage
Bearing Assy JXC25469C[2]
1990 Lagonda
Set SET37[2]

REAR AXLE**Axle Shaft**

1993-1990 DBS, Lagonda, Vantage, Virage,
Volante, V8
Set SET17[2]

Differential

1993 Lagonda, Vantage, Virage,
Volante, V8
Cone/Cup 25577C-25523[2]
1992-1990 DBS, Lagonda, Vantage, Virage,
Volante, V8
Cone/Cup 25577-25523[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ASTON MARTIN - ALL (cont.)					

REAR AXLE**Pinion**

1992-1990	Virage	
	Cone/Cup (Inner)	HM89446-HM89410
	Cone/Cup (Outer)	M88043-M88010
1992-1990	Vantage	
	Cone/Cup (Inner)	HM89446-HM89410
	Cone/Cup (Outer)	M88043-M88010
1990	Lagonda	
	Cone/Cup (Inner)	HM89446-HM89410
	Cone/Cup (Outer)	M88043-M88010
1990	V8	
	Cone/Cup (Inner)	HM89446-HM89410
	Cone/Cup (Outer)	M88043-M88010
1990	Volante	
	Cone/Cup (Inner)	HM89446-HM89410
	Cone/Cup (Outer)	M88043-M88010

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993-1990	(A727)	
	Seal	331227H
	Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

1993-1990	(A727)	
	Seal	7300S
	Ball Bearing	207XLO[2]
	Seal Kit	5206 ⁶⁴

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1997	(4L80E)	
	Seal	4598
	Repair Sleeve	KWK99199

Rear Seal/Ext. Housing

1997	(4L80E)	
	Seal	9449
	Seal Kit	5208 ⁶⁴

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

1997	(4L80E)	
	Seal	8792S

Output Shaft

1997	(4L80E)	
	Seal	4934

AUDI - A3, A4, A6, A8, Cabriolet, RS4, RS6, S4, S5, S6, S8, TT, V8 Quattro, Allroad Quattro**FRONT WHEEL****FWD**

2009	A3	
	Hub Unit Bearing	513262[2] ²⁵
2009-2008	TT	
	Hub Unit Bearing	HA590106[2] ²⁵
2008-2006	A3	
	Hub Unit Bearing	HA590198[2] ²⁵
2008-2002	A4	
	Bearing Module	512305[2] ²⁵
2008-2000	A6	
	Ball Bearing	510020[2]
2006-2000	TT	
	Ball Bearing	510003[2]

FRONT WHEEL (cont.)**FWD (cont.)**

2001-1996	A4	
	Ball Bearing	510019[2]
1999-1997	A8	
	Ball Bearing	510019[2]
1999-1995	A6	
	Ball Bearing	510019[2]
1998-1994	Cabriolet	
	Ball Bearing	510020[2]

²⁵New Item, Check For Availability⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
AUDI - A3, A4, A6, A8, Cabriolet, RS4, RS6, S4, S5, S6, S8, TT, V8 Quattro, Allroad Quattro (cont.)					

FRONT WHEEL**AWD**

2009-2008	TT	
Hub Unit Bearing	HA590106[2]	²⁵
2009-2006	A3	
Hub Unit Bearing	513262[2]	²⁵
2009-2004	A8, S8	
Bearing Module	BM500012[2]	²⁵
2009-2002	A6, S6	
Bearing Module	BM500012[2]	²⁵
2008	R8	
Ball Bearing	510020[2]	
2008-2007	RS4	
Bearing Module	512305[2]	²⁵
2008-2004	S4	
Bearing Module	512305[2]	²⁵
2008-2003	A4	
Bearing Module	512305[2]	²⁵
2006-2000	TT	
Ball Bearing	510003[2]	
2005-2001	Allroad Quattro	
Ball Bearing	510019[2]	
2004-2000	S6	
Bearing Module	512305[2]	²⁵
2003-1997	A8, S8	
Ball Bearing	510019[2]	
2002-1996	A4	
Ball Bearing	510069[2]	
2000-1996	S4	
Ball Bearing	510019[2]	
1994-1992	V8	
Ball Bearing	510019[2]	
1991-1990	V8	
Ball Bearing	510020[2]	

REAR WHEEL**FWD**

2009-2008	TT	
Hub Unit Bearing	512319[2]	²⁵
2009-2006	A3	
Hub Unit Bearing	HA590159[2]	²⁵
2008-2003	A4	
Hub Unit Bearing	512231[2]	
2006	A6	
Bearing Module	BM500012[2]	²⁵
2006-2005	A4 Cabriolet (from VIN#8H5006847)(w/o quattro)	
Hub Unit Bearing	512231[2]	
2006-2000	TT	
Hub Unit Bearing	512012[2]	
2005-2002	A4	
Hub Unit Bearing	512231[2]	
2001-1996	A4	
Seal (Inner)	1962[2]	
Set (Inner)	SET8[2]	
Set (Outer)	SET2[2]	
1998-1994	Cabriolet	
Seal (Inner)	1962[2]	
Set (Inner)	SET8[2]	
Set (Outer)	SET2[2]	

REAR WHEEL (cont.)**FWD (cont.)**

1997-1995	A6	
Seal (Inner)	1962[2]	
Set (Inner)	SET8[2]	
Set (Outer)	SET2[2]	
Ball Bearing	510020[2]	

AWD

2009-2008	RS4	
Ball Bearing	510019[2]	
2009-2008	TT	
Hub Unit Bearing	HA590106[2]	²⁵
2009-2007	A6, S6	
Bearing Module	BM500012[2]	²⁵
2009-2004	A8, S8	
Bearing Module	BM500012[2]	²⁵
2008	R8	
Bearing Module	BM500012[2]	²⁵
2008-2007	S4	
Ball Bearing	510019[2]	
2008-2002	A4 Quattro	
Ball Bearing	510019[2]	
2008-2000	A6 Quattro Sedan V8	
Ball Bearing	510020[2]	
2007-2002	S4	
Ball Bearing	510020[2]	
2006	A6 Quattro Wagon	
Ball Bearing	510020[2]	
2006-2005	S4	
Hub Unit Bearing	512231[2]	
2006-2000	TT	
Ball Bearing	510003[2]	
2006-1995	A6 Quattro Sedan V6	
Ball Bearing	510019[2]	
2005-2001	Allroad Quattro	
Ball Bearing	510020[2]	
2004-1998	A6 Quattro Wagon	
Ball Bearing	510020[2]	
2004-1995	RS6, S6	
Ball Bearing	510019[2]	
2001-1998	A4 Quattro	
Ball Bearing	510020[2]	
1997-1996	A4	
Ball Bearing	510019[2]	
1994-1990	V8	
Ball Bearing	510019[2]	

REAR AXLE**Differential**

2004-2002	A4, A6, A8, TT Quattro Models	
Cone/Cup (LH)	LM300849-LM300811	
2001-1995	A4, A6, A8, TT Quattro Models	
Cone/Cup (LH)	LM300849-LM300811	
Seal (RH)	224520	
Set (RH)	SET45	
Repair Sleeve (RH)	KWK99177	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
AUDI - A3, A4, A6, A8, Cabriolet, RS4, RS6, S4, S5, S6, S8, TT, V8 Quattro, Allroad Quattro (cont.)					

REAR AXLE (cont.)

Differential (cont.)

1994-1990	V8 Quattro
Seal (RH)	224520
Set (LH)	SET37
Set (RH)	SET45
Repair Sleeve (RH)	KWK99177

Pinion

2005-1990	
Cone/Cup (Inner)	HM801346X-HM801310
Cone/Cup (Outer)	M88048-M88010

CLUTCH - 4 CYLINDER

Pilot Bearing

2002-1997	1781cc/1.8L (DOHC)
Ndle Bearing	F85265

CLUTCH - 6 CYLINDER

Pilot Bearing

2002-1994	2671cc/2.7L, 2771cc/2.8L, 2976cc/3.0L
Bearing Only	F212285

CLUTCH - 8 CYLINDER

Pilot Bearing

2002-1990	3562cc/3.6L, 4172cc/4.2L
Bearing Only	F212285

CLUTCH - 4 CYLINDER

Release Bearing

2002-2000	1781cc./1.8L (220mm Cl.)
Bearing Assy	614111
2002-1997	1781cc./1.8L (228mm Cl.)
Bearing Assy	614073

CLUTCH - 6 CYLINDER

Release Bearing

2002-1994	2671cc/2.7L, 2771cc/2.8L, 2976cc/3.0L
Bearing Assy	614073

CLUTCH - 8 CYLINDER

Release Bearing

1991-1990	3562cc/3.6L
Bearing Assy	614073

3-SPEED AUTOMATIC TRANSAXLE

Differential

1991-1990	(VW 003, 087)
Cone/Cup	LM300849-LM300811[2]
1990	(VW 089)
Cone/Cup	LM29749-LM29710[2]

3-SPEED AUTOMATIC TRANSAXLE

Torque Converter

1991-1990	(VW 087, 089)
Seal	3083
Repair Sleeve	KWK99169

Output Shaft

1991-1990	(VW 003, 087, 089)
Seal	224520[2]
Repair Sleeve	KWK99177[2]

Pinion

1991-1990	(VW 087)
Seal (Frt)	1012N
Cone/Cup (Frt)	M86649-M86610
Seal (Rr)	222820
Cone/Cup (Rr)	M88048-M88010
Repair Sleeve	KWK99177
1990	(VW 089)
Seal (Frt)	239146
Cone/Cup (Frt)	M86649-M86610
Seal (Rr)	222535
Cone/Cup (Rr)	M86649-M86610
Repair Sleeve	KWK99098

4-SPEED AUTOMATIC TRANSAXLE

Differential

1998-1992	
Cone/Cup (LH)	LM806649-LM806610
Cone/Cup (RH)	LM300849-LM300811
1998-1991	(VW 097)
Cone/Cup	LM503349A-LM503310[2]
1994-1991	
Cone/Cup	LM300849-LM300811[2]

Torque Converter / Frt Pump

1998-1992	
Seal	225110
Repair Sleeve	KWK99177
1994-1991	
Seal	225110
Repair Sleeve	KWK99177

Output Shaft

1994-1991	
Seal	225010[2]
Repair Sleeve	KWK99196[2]

Pinion

1998-1991	(VW 097)
Bearing Assy (Frt)	513185
Cone/Cup (Rr)	LM29749-LM29710

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

AUDI - A3, A4, A6, A8, Cabriolet, RS4, RS6, S4, S5, S6, S8, TT, V8 Quattro, Allroad Quattro (cont.)**5-SPEED AUTOMATIC TRANSAXLE****Torque Converter**

2002-1996

Seal 224052

Repair Sleeve KWK99157

Output Shaft

2006-1996

Seal 223510[2]

Repair Sleeve KWK99139

6-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008-2004

Seal 223510

Repair Sleeve KWK99139

5-SPEED MANUAL TRANSAXLE**Differential**

2001-1990

Set (LH) SET45

Cone/Cup (RH) LM300849-LM300811

Input Shaft

2001-1990

Seal 222540

Repair Sleeve KWK99098

CAMSHAFT SEAL**4 Cylinder**

2006-1997 1781cc/1.8L (DOHC)

Seal 3476S[2]

Repair Sleeve KWK99128[2]

6 Cylinder2005-1994 2671cc/2.7L, 2771cc/2.8L,
2976cc/3.0L

Seal 3476S[4]

Repair Sleeve KWK99128[4]

8 Cylinder

2006-1997 4172cc/4.2L

Seal Viton 1108

Repair Sleeve KWK99139

1996-1990 3562cc/3.6L, 4172cc/4.2L

Seal 3476S[4]

Repair Sleeve KWK99128[4]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2006-1997 1781cc/1.8L (DOHC)

Seal 3476S

Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**6 Cylinder**2005-1994 2671cc/2.7L, 2771cc/2.8L,
2976cc/3.0L

Seal Viton 1108

Repair Sleeve KWK99139

8 Cylinder

2006-1997 4172cc/4.2L

Seal Viton 1108

Repair Sleeve KWK99139

1994-1990 3562cc/3.6L, 4172cc/4.2L

Seal Viton 1108

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder**

2006-1997 1781cc/1.8L

Seal 716102

Repair Sleeve KWK99333

6 Cylinder

2005-1994 2671cc/2.7L, 2771cc/2.8L

Seal 716102

Repair Sleeve KWK99333

8 Cylinder

2005-1990 3562cc/3.6L, 4172cc/4.2L

Seal 716102

Repair Sleeve KWK99333

AUDI - Coupe Quattro**FRONT WHEEL****AWD**

1991-1990 Coupe Quattro
 Ball Bearing 510020[2]

REAR WHEEL**AWD**

1991-1990 Coupe Quattro
 Ball Bearing 510020[2]

REAR AXLE**Differential**

1992-1990
 Set (LH) SET37
 Set (RH) SET45

Pinion

1992-1990
 Cone/Cup (Inner) HM801346X-HM801310
 Cone/Cup (Outer) M88048-M88010

CLUTCH**Pilot Bearing**

1991-1990 Coupe Quattro
 Ball Bearing 202FF

Release Bearing

1991-1990 Coupe Quattro
 Bearing Assy 614073

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1991-1990 (VW 003, 087)
 Cone/Cup LM300849-LM300811[2]
 1990 (VW 089)
 Cone/Cup LM29749-LM29710[2]

Torque Converter

1991-1990 (VW 087, 089)
 Seal 3083
 Repair Sleeve KWK99169

Output Shaft

1991-1990 (VW 003, 087, 089)
 Seal 224520[2]
 Repair Sleeve KWK99177[2]

3-SPEED AUTOMATIC TRANSAXLE**Pinion**

1991-1990 (VW 087)
 Seal (Frt) 1012N
 Cone/Cup (Frt) M86649-M86610
 Seal (Rr) 222820
 Cone/Cup (Rr) M88048-M88010
 Repair Sleeve KWK99177
 1990 (VW 089)
 Seal (Frt) 239146
 Cone/Cup (Frt) M86649-M86610
 Seal (Rr) 222535
 Cone/Cup (Rr) M86649-M86610
 Repair Sleeve KWK99098

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1994-1991
 Cone/Cup LM300849-LM300811[2]

Torque Converter / Frt Pump

1994-1991
 Seal 225110
 Repair Sleeve KWK99177

Output Shaft

1994-1991
 Seal 225010[2]
 Repair Sleeve KWK99196[2]

Pinion

1998-1991
 Bearing Assy (Frt) 513185
 Cone/Cup (Rr) LM29749-LM29710

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2001-1990
 Seal 222540
 Repair Sleeve KWK99098

Output Shaft

2001-1990
 Seal 224520[2]
 Repair Sleeve KWK99177[2]

CRANKSHAFT FRONT SEAL**5 Cylinder**

1991-1990 1986cc/2.0L, 2144cc/2.2L,
 2226cc/2.2L, 2309cc/2.3L
 Seal Viton 1108
 Repair Sleeve KWK99139

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

AUDI - Coupe Quattro (cont.)**CRANKSHAFT REAR SEAL****5 Cylinder**

1991-1990	1986cc/2.0L, 2144cc/2.2L, 2226cc/2.2L, 2309cc/2.3L	
Seal	716102	
Repair Sleeve	KWK99333	

AUDI - 80, 90, 100, 200, FWD & Quattro**FRONT WHEEL****FWD**

1995-1990	90	
Set	SET39[2]	
1994-1992	100	
Ball Bearing	510019[2]	
1992-1990	80	
Set	SET39[2]	
1991	100	
Ball Bearing	510019[2]	
1990	100 (3 Spd.)	
Ball Bearing	513242[2]	
1990	100 (5 Spd.)	
Ball Bearing	510020[2]	

AWD

1995-1990	90	
Ball Bearing	510019[2]	
1994-1990	100	
Ball Bearing	510019[2]	
1992-1990	80	
Ball Bearing	510020[2]	
1991-1990	200 (M/T)(Turbo)	
Ball Bearing	510020[2]	

REAR WHEEL**AWD**

1995-1990	90	
Ball Bearing	510020[2]	
1995-1990	80, 90 (Rear ~ Disc Brakes)	
Seal (Inner)	1962[2]	
Set (Inner)	SET8[2]	
Set (Outer)	SET2[2]	
1994-1990	100	
Ball Bearing	510019[2]	
1994-1990	100	
Seal (Inner)	1962[2]	
Set (Inner)	SET8[2]	
Set (Outer)	SET2[2]	
1992-1990	80	
Ball Bearing	510020[2]	
1991-1990	200 (Turbo)	
Ball Bearing	510019[2]	

FRONT AXLE**Differential**

1993-1990	100 Quattro	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1993-1990	90 Quattro	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1992-1990	80 Quattro	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1991	100 (A/T)	
Cone/Cup	LM503349-LM503310[2]	
1991	80 (A/T)	
Cone/Cup	LM503349-LM503310[2]	
1991	80 (M/T)	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1991	90 (A/T)	
Cone/Cup	LM503349-LM503310[2]	
1991-1990	200 (Turbo)	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1991-1990	200 (Turbo) Quattro	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1990	80 (A/T)	
Cone/Cup	LM300849-LM300811[2]	
1990	80 (M/T)	
Set (LH)	SET45	
Cone/Cup (RH)	LM300849-LM300811	
1990	90 (A/T)	
Cone/Cup	LM300849-LM300811[2]	

Pinion

1991	100 (A/T)	
Cone/Cup (Inner)	LM29749-LM29710	
Cone/Cup (Outer)	LM78349-LM78310A	
1991	80 (A/T)	
Cone/Cup (Inner)	LM29749-LM29710	
Cone/Cup (Outer)	LM78349-LM78310A	
1991	90 (A/T)	
Cone/Cup (Inner)	LM29749-LM29710	
Cone/Cup (Outer)	LM78349-LM78310A	
1991-1990	80 (M/T)	
Cone/Cup (Inner)	JLM104942A-JLM104914	
1990	100 (A/T)	
Cone/Cup (Inner)	M86649-M86610	
Cone/Cup (Outer)	M86649-M86610	

AUDI - 80, 90, 100, 200, FWD & Quattro (cont.)

FRONT AXLE (cont.)

Pinion (cont.)

1990	80 (A/T)	
	Cone/Cup (Inner)	M86649-M86610
	Cone/Cup (Outer)	M86649-M86610
1990	90 (A/T)	
	Cone/Cup (Inner)	M86649-M86610
	Cone/Cup (Outer)	M86649-M86610

REAR AXLE

Differential

1992-1990		
	Set (LH)	SET37
	Set (RH)	SET45

Pinion

1994-1990		
	Seal	223843
	Cone/Cup (Inner)	HM801346X-HM801310
	Cone/Cup (Outer)	M88048-M88010

CLUTCH

Pilot Bearing

1990	(4 Cyl.)	
	Bushing	PB23
1990	(5 Cyl.)	
	Ndle Bearing	F85706

Release Bearing

1995-1990	90	
	Bearing Assy	614073
1994-1990	100	
	Bearing Assy	614073
1992-1990	80	
	Bearing Assy	614073
1991-1990	200 (Turbo)	
	Bearing Assy	614073

3-SPEED AUTOMATIC TRANSAXLE

Differential

1991-1990	(VW 003, 087)	
	Cone/Cup	LM300849-LM300811[2]
1990	(VW 089)	
	Cone/Cup	LM29749-LM29710[2]

Torque Converter

1991-1990	(VW 087, 089)	
	Seal	3083
	Repair Sleeve	KWK99169

Output Shaft

1991-1990	(VW 003, 087, 089)	
	Seal	224520[2]
	Repair Sleeve	KWK99177[2]

3-SPEED AUTOMATIC TRANSAXLE

Pinion

1991-1990	(VW 087)	
	Seal (Frt)	1012N
	Cone/Cup (Frt)	M86649-M86610
	Seal (Rr)	222820
	Cone/Cup (Rr)	M88048-M88010
	Repair Sleeve	KWK99177
1990	(VW 089)	
	Seal (Frt)	239146
	Cone/Cup (Frt)	M86649-M86610
	Seal (Rr)	222535
	Cone/Cup (Rr)	M86649-M86610
	Repair Sleeve	KWK99098

4-SPEED AUTOMATIC TRANSAXLE

Differential

1998-1992	(ZF 4HP 18)	
	Cone/Cup (LH)	LM806649-LM806610
	Cone/Cup (RH)	LM300849-LM300811
1998-1991	(VW 097)	
	Cone/Cup	LM503349A-LM503310[2]
1994-1991	(VW 095)	
	Cone/Cup	LM300849-LM300811[2]

Torque Converter / Frt Pump

1998-1992	(ZF 4HP 18)	
	Seal	225110
	Repair Sleeve	KWK99177
1994-1991	(VW 095)	
	Seal	225110
	Repair Sleeve	KWK99177

Output Shaft

1994-1991	(VW 095)	
	Seal	225010[2]
	Repair Sleeve	KWK99196[2]

Pinion

1998-1991	(VW 097)	
	Bearing Assy (Frt)	513185
	Cone/Cup (Rr)	LM29749-LM29710

5-SPEED MANUAL TRANSAXLE

Differential

2001-1990		
	Set (LH)	SET45
	Cone/Cup (RH)	LM300849-LM300811

Input Shaft

2001-1990		
	Seal	222540
	Repair Sleeve	KWK99098

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

AUDI - 80, 90, 100, 200, FWD & Quattro (cont.)**5-SPEED MANUAL TRANSAXLE****Output Shaft**

2001-1990

Seal 224520[2]

Repair Sleeve KWK99177[2]

CAMSHAFT SEAL**6 Cylinder**

1995-1992 2771cc/2.8L

Seal 3476S

Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**4 Cylinder**

1990 1983cc/2.0L

Seal 3476S

Repair Sleeve KWK99128

5 Cylinder1997-1990 1986cc/2.0L, 2144cc/2.1L,
2226cc/2.2L, 2309cc/2.3L

Seal Viton 1108

Repair Sleeve KWK99139

6 Cylinder

1995-1992 2671cc/2.7L, 2771cc/2.8L

Seal Viton 1108

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder**

1990 1983cc/2.0L

Seal 716102

Repair Sleeve KWK99333

CRANKSHAFT REAR SEAL**5 Cylinder**

1997-1990 2226cc/2.2L, 2309cc/2.3L

Seal 716102

Repair Sleeve KWK99333

6 Cylinder

2000-1992 2671cc/2.7L, 2771cc/2.8L

Seal 716102

Repair Sleeve KWK99333

AUDI - SUV - Allroad Quattro**FRONT WHEEL****AWD**

2005-2001

Ball Bearing 510019[2]

REAR WHEEL**AWD**

2005-2001

Ball Bearing 510020[2]

REAR AXLE**Differential**

2005-2001

Seal (RH) 224520

Cone/Cup (LH) LM300849-LM300811

Set (RH) SET45

Repair Sleeve KWK99177[2]

Pinion

2005-2001

Cone/Cup (Inner) HM801346X-HM801310

Cone/Cup (Outer) M88048-M88010

CLUTCH - 6 CYLINDER**Pilot Bearing**

2005-2001 2671cc/2.7L

Bearing Only F212285

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

AUDI - SUV - Allroad Quattro (cont.)**CLUTCH - 6 CYLINDER****Release Bearing**

2005-2001 2671cc./2.7L (240mm Cl.)
 Bearing Assy 614073

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2005-2001 (5HP24A, ZF5HP19)
 Seal 224052
 Repair Sleeve KWK99157

CAMSHAFT SEAL**6 Cylinder**

2005-2001 2671cc/2.7L
 Seal 3476S[4]
 Repair Sleeve KWK99128[4]

8 Cylinder

2005-2003 4172cc/4.2L
 Seal 3476S
 Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-2001 2671cc/2.7L
 Seal Viton 1108
 Repair Sleeve KWK99139

8 Cylinder

2005-2003 4172cc/4.2L
 Seal Viton 1108
 Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**6 Cylinder**

2005-2001 2671cc/2.7L
 Seal 716102
 Repair Sleeve KWK99333

8 Cylinder

2005-2003 4172cc/4.2L
 Seal 716102
 Repair Sleeve KWK99333

AUDI - SUV - Q7**FRONT WHEEL****AWD**

2009-2007
 Ball Bearing 510082[2]²⁵

REAR WHEEL**AWD**

2009-2007
 Ball Bearing 510082[2]²⁵

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

AVANTI II - Avanti**FRONT WHEEL****RWD****2007-2005**Hub Unit Bearing HA590017[2]²⁵**2004-2001**

Hub Unit Bearing 513090[2]

1991-1990

Seal (Inner) 205017[2]

Set (Inner) SET6[2]

Set (Outer) SET3[2]

REAR WHEEL**RWD****2007-2005**

Seal 8835S[2]

Cylindrical Bearing 6408[2]

Bearing & Seal Kit TRP1559TV[2]¹⁹**2004-2001**

Seal 8660S[2]

Cylindrical Bearing 5707[2]

Bearing & Seal Kit TRP1563TAV[2]¹⁹**1991-1990**

Seal 8660S[2]

Cylindrical Bearing 5707[2]

Bearing & Seal Kit TRP1563TAV[2]¹⁹**REAR AXLE****Axle Shaft****2007-2005** (7.5" R.G.)(Indep. Rr. Susp.)

Ndle Bearing FC66998[2]

Seal Viton 714569[2]

2007-2005 (8.8" R.G.)(Indep. Rr. Susp.)

Ndle Bearing FC66998[2]

Differential Rebuild Kit**2007-2005** (7.5" R.G.)(Indep. Rr. Susp.)

Kit DRK315

1990 (8.5" R.G.)

Kit DRK321

Differential**2007-2001** (7.5", 8.8" R.G.)

Cone/Cup LM501349-LM501314[2]

1991-1990 (7.5", 8.8" R.G.)

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

Pinion**2007-2001** (7.5", 8.8" R.G.)

Seal Viton 3604

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

1991-1990 (7.5", 8.8" R.G.)

Seal Viton 3604

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

REAR AXLE (cont.)**Pinion (cont.)****1990**

Seal (RC On) 2043

Cone/Cup (Inner) (RC

On) M802048-M802011

Cone/Cup (Outer) (RC

On) M88048-M88010

Seal (To RC) 8610

Cone/Cup (Inner) (To

RC) HM89249-HM89210

Cone/Cup (Outer) (To

RC) M86649-M86610

CRANKSHAFT FRONT SEAL**8 Cylinder****1990** 305/5.0L, 350/5.7L

Seal 9845

Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL**8 Cylinder****1990** 305/5.0L

Seal Viton 4359V

Seal PTFE H/D 5274A

Repair Sleeve KWK99364

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BENTLEY - Continental, Eight, Mulsanne, Turbo R**FRONT WHEEL****RWD****1992-1990**

Cone/Cup (Inner) LM29749-LM29710[2]

Set (Outer) SET4[2]

REAR WHEEL**RWD****1992-1990**

Cone/Cup (Inner) 18790-18720[2]

Cone/Cup (Outer) 18690-18620[2]

REAR AXLE**Differential****1992-1990**

Cone/Cup (LH) 25590-25520

Cone/Cup (RH) 368A-362A

REAR AXLE**Pinion****1992-1990**

Cone/Cup (Inner) HM903249-HM903210

Cone/Cup (Outer) HM88649-HM88610

BMW - Mini Cooper - Mini**FRONT WHEEL****FWD****2008-2002**Hub Unit Bearing 513226[2]²⁵**REAR WHEEL****FWD****2008-2002**Hub Unit Bearing HA590161[2]²⁵***BMW - 1000 & 2000 Series - 128i, 135i*****FRONT WHEEL****RWD****2008** 128iHub Unit Bearing HA590162[2]²⁵**2008** 135iHub Unit Bearing HA590162[2]²⁵**CRANKSHAFT REAR SEAL****6 Cylinder****2008** 3.0L (DOHC)

Seal Viton 229005

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 3 Series - 318i, 318is, 318ti, 320i, 323ci, 323i, 323is, 325ci, 325i, 325is, 325ix, 328i, 328is, 328ci, 328xi, 330i, 330ci, 330xi, 335xi, M3, Z3					

FRONT WHEEL**RWD**

2009-2006	
Hub Unit Bearing	HA590162[2] ²⁵
2006-2001	(Exc. 325xi & 330xi)
Hub Unit Bearing	513125[2]
2000-1998	323
Hub Unit Bearing	HA590308[2]
2000-1996	328 Ser.
Hub Unit Bearing	513125[2]
2000-1996	M3, Z3
Hub Unit Bearing	513125[2]
1999-1996	318i
Hub Unit Bearing	513125[2]
1995-1992	
Hub Unit Bearing	513125[2]
1991-1990	M3
Hub Unit Bearing	513094[2]
1991-1990	318i, 318is, 325, 325e, 325es, 325i, 325is
Hub Unit Bearing	513111[2]

AWD

2008-2006	
Ball Bearing	510081[2]
2005-2001	325xi & 330xi
Ball Bearing	510080[2]
1991-1990	325iX
Ball Bearing	513106[2]

REAR WHEEL**RWD**

2009-2001	3.0L, 3.2L
Ball Bearing	511026[2]
2008-2001	2.5L
Ball Bearing	513106[2]
2000-1990	318i, 318is, 323i, 323is, 323ci, 325, 325e, 325es, 325i, 325is, 325ix, 325ci, 328i, 328is, 328ci
Ball Bearing	513106[2]
1999-1997	Z3
Ball Bearing (6 Cyl.)	513106[2]
Ball Bearing (4 Cyl.)	513113[2]
1999-1995	318ti
Ball Bearing	513113[2]
1999-1994	M3
Ball Bearing	511026[2]
1991-1990	M3
Ball Bearing	513113[2]

AWD

2008-2007	328 Ser.
Ball Bearing	513106[2]
2006-2001	
Ball Bearing	511026[2]
1991-1990	
Ball Bearing	513106[2]

FRONT AXLE**Differential**

1991-1990	325iX
Seal	473823[2]
Cone/Cup	LM29749-LM29710[2]
Repair Sleeve	KWK99139[2]

Pinion

1991-1990	325iX
Cone/Cup (Inner)	M88048-M88010
Cone/Cup (Outer)	M86649-M86610

REAR AXLE**Differential**

2008-1990	M3, 323 Ser, 325 Ser, 328 Ser, 330i, 330xi
Seal	473823[2]
Cone/Cup	LM503349A-LM503310[2]
Repair Sleeve	KWK99139[2]
2002-1991	Z3, 318 Ser, 323 Ser
Seal	239146[2]
Set	SET45[2]

Pinion

2008-1990	M3, 323 Ser, 325 Ser, 328 Ser, 330i, 330xi
Seal	1979
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	HM88542-HM88510
Repair Sleeve	KWK99177
2005-1991	Z3, 318 Ser., 323 Ser.
Seal	1992
Cone/Cup (Inner)	HM89446-HM89410
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99157

TRANSFER CASE**Input Shaft**

1991-1990	(A95)
Seal (M/T)	710310
Repair Sleeve (M/T)	KWK99128
Ball Bearing (A/T,M/T)	109TB

Front Output Shaft

1991-1990	(A95)
Seal	1172S
Repair Sleeve	KWK99139

Rear Output Shaft

1991-1990	(A95)
Ball Bearing (Center)	107WB[2]
Ball Bearing (Rr)	105CB[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 3 Series - 318i, 318is, 318ti, 320i, 323ci, 323i, 323is, 325ci, 325i, 325is, 325ix, 328i, 328is, 328ci, 328xi, 330i, 330ci, 330xi, 335xi, M3, Z3 (cont.)					

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2000-1990	(4L30E)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174
1993-1990	(ZF4HP22)	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

Rear Seal/Ext. Housing

2000-1990	(4L30E)	
Seal	.....	710432
1993-1990	(ZF4HP22)	
Seal	.....	710140

Selector Shaft Seal/Man. Shaft

2000-1990	(4L30E)	
Seal	.....	8792S

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-2001	(ZF5HP19)	
Seal	.....	224510
Repair Sleeve	.....	KWK99177
1999-1995	(ZF5HP18)	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

Rear Seal/Ext. Housing

2005-1995	(ZF5HP18)(ZF5HP19)	
Seal	.....	710140

Selector Shaft Seal/Man. Shaft

2005-1996	(5L40E)	
Seal	.....	8792S

CLUTCH - 4 CYLINDER**Pilot Bearing**

2000-1991	1796cc/1.8L, 1895cc/1.9L	
Ball Bearing	.....	102CC
1994-1990	1766cc/1.8L, 1796cc/1.8L, 1990cc/2.0L, 2302cc/2.3L	
Ball Bearing	.....	201CC

CLUTCH - 6 CYLINDER**Pilot Bearing**

2003-1996	2494cc/2.5L, 2793cc/2.8L, 2990cc/3.0L, 3152cc/3.2L, 3245cc/3.2L	
Ball Bearing	.....	102CC
1995-1990	2494cc/2.5L, 2693cc/2.7L, 2788cc/2.8L, 2985cc/3.0L, 2990cc/3.0L	
Ball Bearing	.....	201CC

CLUTCH - 4 CYLINDER**Release Bearing**

1999-1990	1766cc/1.8L, 1796cc/1.8L, 1895cc/1.9L, 1990cc/2.0L, 2302cc/2.3L	
Bearing Assy	.....	614105

CLUTCH - 6 CYLINDER**Release Bearing**

2002-1990	2494cc/2.5L, 2693cc/2.7L, 2788cc/2.8L, 2793cc/2.8L, 2985cc/3.0L, 2990cc/3.0L	
Bearing Assy	.....	614105

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1996	(ZF S5 31)	
Seal	.....	470672
1992-1991	(Getrag 245)	
Seal	.....	223010
Repair Sleeve	.....	KWK99114
1992-1990	(Getrag 240, 260)	
Seal	.....	223535
Repair Sleeve	.....	KWK99139
1991-1990	(Getrag 265)	
Seal	.....	223010
Ball Bearing	.....	306L[2]
Repair Sleeve	.....	KWK99114

Countershaft

1991-1990		
Ball Bearing (Frt)	.....	305AG[2]

Rear Output Shaft

1996	(ZF S5 31)	
Seal	.....	224010
1992-1990		
Seal	.....	473677
1991-1990	(Getrag 260)	
Seal	.....	473677
Ball Bearing	.....	306L[2]

A/C COMPRESSOR

1991-1990	(Nippondenso 10P15)(Axial)	
Ball Bearing	.....	5000KFF[2]

ALTERNATOR

1994-1990	(Bosch 80, 105, 115, 140 Amp.)	
Ball Bearing (Rear End)	.....	201CC[2]
1994-1990	(Bosch 80, 105, 115, 140 Amp.)	
Ball Bearing (Drive End)	.....	303CC[2]
1993-1990	(Bosch 45, 65, 90 Amp.)	
Ball Bearing (Rear End)	.....	201S[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 3 Series - 318i, 318is, 318ti, 320i, 323ci, 323i, 323is, 325ci, 325i, 325is, 325ix, 328i, 328is, 328ci, 328xi, 330i, 330ci, 330xi, 335xi, M3, Z3 (cont.)					

DRIVESHAFT SUPPORT

2007-1990 (1.1811 30mm I.D.)
 Ball Bearing 106CC[2]

AUXILIARY SHAFT**6 Cylinder**

2005-1990 2494cc/2.5L, 2494cc/2.5L
 (DOHC), 2693cc/2.7L,
 2793cc/2.8L (DOHC),
 2979cc/3.0L (DOHC)
 Seal 223802
 Repair Sleeve KWK99147

CRANKSHAFT FRONT SEAL**4 Cylinder**

1999-1996 19895CC/1.9L (DOHC)
 Seal Viton 229005
 Repair Sleeve KWK99354
 1995-1991 1766cc/1.8L
 Seal Viton 229005
 Repair Sleeve KWK99354
 1991-1990 2.3L (DOHC)
 Seal Viton 229005
 Repair Sleeve KWK99354

6 Cylinder

2006-1994 2494cc/2.5L, 2494cc/2.5L
 (DOHC), 2693cc/2.7L,
 2793cc/2.8L (DOHC),
 2979cc/3.0L (DOHC)
 Seal Viton 716484
 Repair Sleeve KWK99189
 2000-1996 3.2L
 Seal Viton 229005
 Repair Sleeve KWK99393

CRANKSHAFT REAR SEAL**4 Cylinder**

1999-1990
 Seal Viton 229005
 Repair Sleeve KWK99354

6 Cylinder

2009-1990 2494cc/2.5L, 2693cc/2.7L,
 2793cc/2.8L, 2990cc/3.0L
 Seal Viton 229005
 Repair Sleeve KWK99354
 2005-1996 3152cc/3.2L
 Seal Viton 229005

BMW - 4 Series - Z4**FRONT WHEEL****RWD**

2008-2003 Z4
 Hub Unit Bearing HA590308[2]

REAR WHEEL**RWD**

2008-2003 Z4
 Ball Bearing 513106[2]

REAR AXLE**Differential**

2008-2003
 Cone/Cup LM503349A-LM503310[2]

REAR AXLE**Pinion**

2008-2003
 Seal 1979
 Cone/Cup (Inner) HM89449-HM89410
 Cone/Cup (Outer) HM88542-HM88510

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-2003 (ZF5HP19)
 Seal 224510
 Repair Sleeve KWK99177

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BMW - 4 Series - Z4 (cont.)

5-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2007-2006	(A6HP19Z)	
Seal	.....	710140

Selector Shaft Seal/Man. Shaft

2005-2003	(5L40E)	
Seal	.....	8792S

AUXILIARY SHAFT

6 Cylinder

2007-2003	2494cc/2.5L (DOHC), 2979cc/3.0L (DOHC)	
Seal	.....	223802
Repair Sleeve	.....	KWK99147

CRANKSHAFT FRONT SEAL

6 Cylinder

2004-2003	2492cc/2.5L, 2959cc/3.0L	
Seal Viton	.....	716484
Repair Sleeve	.....	KWK99189

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2003	2494cc/2.5L (DOHC), 2979cc/3.0L (DOHC), 2996cc/3.0L (DOHC)	
Seal Viton	.....	229005
Repair Sleeve	.....	KWK99354

BMW - 5 Series - 525i, 525iT, 525xi, 528i, 528xi, 530i, 530xi, 535i, 535xi, 540i, 545i, 550i, M5, X5

FRONT WHEEL

RWD

2009-2006	M5	
Hub Unit Bearing	.....	HA590163[2] ²⁵
2005-1997	525i, 528i, 530i, 540i	
Hub Unit Bearing	.....	HA593427[2]
1995-1992	(Exc. M5)	
Hub Unit Bearing	.....	513125[2]
1993-1991	M5	
Hub Unit Bearing	.....	513096[2]
1991	525i, 535i	
Hub Unit Bearing (To	.....	
3/31/91)	.....	513096[2]
Hub Unit Bearing	.....	
(From 4/1/91)	.....	513125[2]
1990		
Hub Unit Bearing	.....	513096[2]

REAR WHEEL

RWD

2009-2006	(Exc. M5 & Wagon)	
Hub Unit Bearing	.....	512225[2]
Bearing Module	.....	BM500010[2] ²⁵
2005-1997		
Hub Unit Bearing	.....	512225[2]
1995-1992	525i	
Ball Bearing (Wagon)	.....	513180[2]
Ball Bearing (Sedan)	.....	511020[2]
1995-1990	(Exc. 525i)	
Ball Bearing	.....	513180[2]
1993	525iT (Wagon)	
Ball Bearing	.....	513180[2]

REAR WHEEL (cont.)

RWD (cont.)

1991-1990	525i Sedan	
Ball Bearing	.....	511020[2]

AWD

2009-2006	528xi	
Bearing Module	.....	BM500010[2] ²⁵
Hub Unit Bearing	.....	512225[2]

REAR AXLE

Differential

2005-2001	525i, 530i	
Seal	.....	473823[2]
Cone/Cup	.....	LM503349A-LM503310[2]
Repair Sleeve	.....	KWK99139[2]
2003-1997	M5, 528i, 540i	
Seal	.....	1012N[2]
Cone/Cup	.....	JLM104948-JLM104910[2]
Repair Sleeve	.....	KWK99177[2]
1995-1991	M5, 540i	
Seal	.....	1012N[2]
Cone/Cup	.....	JLM104948-JLM104910[2]
Repair Sleeve	.....	KWK99177[2]
1995-1990	524td, 525i, 528e, 528i, 530i, 533i, 535i, 535is	
Seal	.....	473823[2]
Cone/Cup	.....	LM503349A-LM503310[2]
Repair Sleeve	.....	KWK99139[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 5 Series - 525i, 525iT, 525xi, 528i, 528xi, 530i, 530xi, 535i, 535xi, 540i, 545i, 550i, M5, X5 (cont.)					

REAR AXLE**Pinion**

2008-2001	525i, 530i
Seal	1979
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	HM88542-HM88510
Repair Sleeve	KWK99177
2008-1997	M5, 528i, 540i
Seal	223520
Cone/Cup (Inner)	HM803149-HM803110
Cone/Cup (Outer)	HM89448-HM89410
Repair Sleeve	KWK99139
1995-1991	M5, 540i
Seal	223520
Cone/Cup (Inner)	HM803149-HM803110
Cone/Cup (Outer)	HM89448-HM89410
Repair Sleeve	KWK99139
1995-1990	524td, 525i, 528e, 528i, 530i, 533i, 535i, 535is
Seal	1979
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	HM88542-HM88510
Repair Sleeve	KWK99177

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1997-1991	(4L30E)
Seal	3227
Repair Sleeve	KWK99174
1993-1990	(ZF4HP22)
Seal	224052
Repair Sleeve	KWK99157

Rear Seal/Ext. Housing

1999-1991	(4L30E)
Seal	710437
1993-1990	(ZF4HP22)
Seal	710140

Selector Shaft Seal/Man. Shaft

1999-1991	(4L30E)
Seal	8792S

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-2002	(ZF5HP19)
Seal	224510
Repair Sleeve	KWK99177
2003-1997	(ZF5HP24)
Seal	224052
Repair Sleeve	KWK99157
1995-1994	(ZF5HP18)(ZF5HP30)
Seal	224052
Repair Sleeve	KWK99157

5-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2004-1994	(ZF5HP18)(ZF5HP19)
Seal	710140[2]

Selector Shaft Seal/Man. Shaft

2000	(5L40E)
Seal	8792S

CLUTCH - 6 CYLINDER**Pilot Bearing**

1995-1990	2494cc/2.5L, 2693cc/2.7L, 2788cc/2.8L, 2985cc/3.0L, 2990cc/3.0L
Ball Bearing	201CC

CLUTCH - 8 CYLINDER**Pilot Bearing**

1995-1994	2997cc/3.0L
Ball Bearing	201CC

CLUTCH - 6 CYLINDER**Release Bearing**

2002-1990	
Bearing Assy	614105

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1995-1991	(ZF S5 31)
Seal	470672
1993-1990	(Getrag 260, 280)
Seal	223535
Repair Sleeve	KWK99139

Rear Output Shaft

1995-1991	(ZF S5 31)
Seal	224010
1993-1990	(Getrag 260, 280)
Seal	473677

6-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1995	
Seal	710360
Repair Sleeve	KWK99139

Rear Output Shaft

1995	
Seal Viton	710279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 5 Series - 525i, 525iT, 525xi, 528i, 528xi, 530i, 530xi, 535i, 535xi, 540i, 545i, 550i, M5, X5 (cont.)					

ALTERNATOR

1994-1990	(Bosch 80, 105, 115, 140 Amp.)	
	Ball Bearing (Drive End)	303CC[2]
1994-1990	(Bosch 80, 105, 115, 140 Amp.)	
	Ball Bearing (Rear End)	201CC[2]

DRIVESHAFT SUPPORT

1995-1990	(1.1811 30mm I.D.)	
	Ball Bearing	106CC[2]

POWER STEERING**Pump Shaft**

1993-1990		
	Seal	222820

AUXILIARY SHAFT**6 Cylinder**

2005-1991	2494cc/2.5L, 2793cc/2.8L, 2979cc/3.0L	
	Seal	223802
	Repair Sleeve	KWK99147

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-1994	2494cc/2.5L, 2793cc/2.8L, 2979cc/3.0L	
	Seal Viton	716484
	Repair Sleeve	KWK99189
1993-1991	3535cc/3.5L (DOHC)	
	Seal	224462
1993-1990	3210cc/3.2L, 3430cc/3.5L	
	Seal	224250
	Repair Sleeve	KWK99166
1993-1990	2443cc/2.4L (Diesel) 2494cc/2.5L, 2693cc/2.7L	
	Seal Viton	716484
	Repair Sleeve	KWK99189

8 Cylinder

2005-1994	2997cc/3.0, 3982cc/4.0L, 4398cc/4.4L	
	Seal Viton	716484
	Repair Sleeve	KWK99189
2003-2000	4941cc/5.0L	
	Seal Viton	716484

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-1994	2494cc/2.5L, 2793cc/2.8L, 2979cc/3.0L	
	Seal Viton	229005
	Repair Sleeve	KWK99354
1993-1990	2443cc/2.4L (Diesel) 2494cc/2.5L, 2693cc/2.7L, 2788cc/2.8L, 3210cc/3.2L, 3430cc/3.4L, 3453cc/3.5L, 3535cc/3.5L	
	Seal Viton	229005
	Repair Sleeve	KWK99354

8 Cylinder

2008-2006	4.8L	
	Seal	231003
2005-1994	2997cc/3.0L, 3982cc/4.0L, 4398cc/4.4L	
	Seal	231003
	Repair Sleeve	KWK99393
2003-2000	4941cc/5.0L	
	Seal	231003
	Repair Sleeve	KWK99393

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 6 Series - 645Ci, 650i, M6					

FRONT WHEEL**RWD**

2009-2006 M6
Hub Unit Bearing HA590163[2]²⁵

REAR WHEEL**RWD**

2009-2006 (Exc. M6)
Bearing Module BM500010[2]²⁵
2009-2006 M6
Bearing Module BM500001[2]²⁵
2005-2004
Bearing Module BM500010[2]²⁵

REAR AXLE**Pinion**

2008-1990
Seal 223520
Cone/Cup (Inner) HM803149-HM803110
Cone/Cup (Outer) HM89448-HM89410
Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**8 Cylinder**

2005-2004 4398cc/4.4L (DOHC)
Seal Viton 716484
Repair Sleeve KWK99189

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-2006 4837cc/4.8L (DOHC)
Seal 231003
2005-2004 4398cc/4.4L (DOHC)
Seal 231003
Repair Sleeve KWK99393

BMW - 7 Series - 735i, 735il, 740i, 740il, 745i, 745Li, 750i, 750iL, 750Li, 760i, 760Li

FRONT WHEEL**RWD**

2009-2002
Hub Unit Bearing 513173[2]
2001-1995
Hub Unit Bearing HA592519[2]
1994-1992
Hub Unit Bearing 513125[2]
1991-1990
Hub Unit Bearing 513096[2]

REAR WHEEL**RWD**

2009-2002 745i, iL 760Li
Bearing Module BM500010[2]²⁵
2001-1995
Ball Bearing 511026[2]
1994-1990
Ball Bearing 513180[2]

REAR AXLE**Differential**

2001-1990 L7, 740i, 740il, 750il
Seal 1012N[2]
Cone/Cup JLM104948-JLM104910[2]
Repair Sleeve KWK99177[2]
1992-1990 733i, 735i, 735il
Seal 473823[2]
Cone/Cup LM503349A-LM503310[2]
Repair Sleeve KWK99139[2]

REAR AXLE**Pinion**

2007-1990 L7, 740i, 740il, 750il
Seal 223520
Cone/Cup (Inner) HM803149-HM803110
Cone/Cup (Outer) HM89448-HM89410
Repair Sleeve KWK99139
1992-1990 733i, 735i, 735il
Seal 1979
Cone/Cup (Inner) HM89449-HM89410
Cone/Cup (Outer) HM88542-HM88510
Repair Sleeve KWK99177

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1992-1990 (ZF 4HP 22, ZF 4HP 24)
Seal 224052
Repair Sleeve KWK99157

Rear Seal/Ext. Housing

1992-1990 (ZF 4HP 22, ZF 4HP 24)
Seal 710140

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2001-1993 (ZF5HP24)(ZF5HP30)
Seal 224052
Repair Sleeve KWK99157

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BMW - 7 Series - 735i, 735il, 740i, 740il, 745i, 745Li, 750i, 750iL, 750Li, 760i, 760Li (cont.)					

CLUTCH - 6 CYLINDER**Pilot Bearing**

1992-1990
Ball Bearing 201CC

Release Bearing

1992-1990
Bearing Assy 614105

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1992-1990 (Getrag 260)
Seal 223535
Repair Sleeve KWK99139

Rear Output Shaft

1992-1990 (Getrag 260)
Seal 473677

ALTERNATOR

1994-1990 (Bosch 80, 115, 140 Amp.)
Ball Bearing (Drive End) 303CC
1994-1990 (Bosch 80, 115, 140 Amp.)
Ball Bearing (Rear End) 201CC
1993-1990 (Bosch 65, 90 Amp.)
Ball Bearing (Rear End) 201S

DRIVESHAFT SUPPORT

1997-1990 (1.1811 30mm I.D.)
Ball Bearing 106CC[2]

AUXILIARY SHAFT**12 Cylinder**

2001-1990 4988cc/5.0L, 5379cc/5.4L
Seal 222820
Repair Sleeve KWK99111

CRANKSHAFT FRONT SEAL**6 Cylinder**

1992-1990 3210cc/3.2L, 3430cc/3.5L
Seal 224250
Repair Sleeve KWK99166

8 Cylinder

2005-1993 3982cc/4.0L, 4398cc/4.4L
Seal Viton 716484
Repair Sleeve KWK99189

12 Cylinder

2007-2003 5972cc/6.0L
Seal Viton 716484
Repair Sleeve KWK99189
2001-1990 4988cc/5.0L, 5379cc/5.4L
Seal (Lower) 225530
Repair Sleeve (Lower) KWK99215
Seal (Upper) 222820
Repair Sleeve (Upper) KWK99111

CRANKSHAFT REAR SEAL**6 Cylinder**

1992-1990 3210cc/3.2L, 3430cc/3.5L
Seal Viton 229005
Repair Sleeve KWK99354

8 Cylinder

2008-2006 4.8L
Seal 231003
2005-1993 3982cc/4.0L, 4398cc/4.4L
Seal 231003
Repair Sleeve KWK99393

12 Cylinder

2007-2003 5972cc/6.0L
Seal 231003
Repair Sleeve KWK99393
2001-1990 4988cc/5.0L, 5379cc/5.4L
Seal 231003
Repair Sleeve KWK99393

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BMW - 8 Series - 840ci, 850ci, 850csi, 850i, Z8 Roadster**FRONT WHEEL****RWD**

2003-2000	Z8 Roadster	
Hub Unit Bearing	.....	HA593427[2]
1997-1993		
Hub Unit Bearing	.....	513125[2]
1992		
Hub Unit Bearing		
(From 4/1/92)	.....	513125[2]
Hub Unit Bearing (To		
3/31/92)	.....	513096[2]
1991		
Hub Unit Bearing	.....	513096[2]

REAR WHEEL**RWD**

2003-1991	Z8 Roadster	
Ball Bearing	.....	511026[2]

REAR AXLE**Differential**

1997-1991		
Seal	.....	1012N[2]
Cone/Cup	.....	JLM104948-JLM104910[2]
Repair Sleeve	.....	KWK99177[2]

Pinion

1997-1991		
Seal	.....	223520
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM89448-HM89410
Repair Sleeve	.....	KWK99139

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1994-1991	(ZF 4HP 22, ZF 4HP 24)	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

Rear Seal/Ext. Housing

1994-1991	(ZF 4HP 22, ZF 4HP 24)	
Seal	.....	710140

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1997-1994	(ZF5HP24)(ZF5HP30)	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

6-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1997-1991		
Seal	.....	710360
Repair Sleeve	.....	KWK99139

6-SPEED MANUAL TRANSMISSION**Rear Output Shaft**

1997-1991		
Seal Viton	.....	710279

ALTERNATOR

1997-1991	(Bosch 140 Amp.)	
Ball Bearing (Drive End)	.....	303CC
1997-1991	(Bosch 140 Amp.)	
Ball Bearing (Rear End)	.....	201CC

CRANKSHAFT FRONT SEAL**8 Cylinder**

2003-2000	4941cc/5.0L	
Seal Viton	.....	716484
Repair Sleeve	.....	KWK99189
1997-1994	3982cc/4.0L, 4398cc/4.4L	
Seal Viton	.....	716484
Repair Sleeve	.....	KWK99189

12 Cylinder

1997-1991	4988cc/5.0L, 5379cc/5.4L,	
	5576/5.6L	
Seal (Lower)	.....	225530
Repair Sleeve (Lower)	.....	KWK99215
Seal (Upper)	.....	222820
Repair Sleeve (Upper)	.....	KWK99111

CRANKSHAFT REAR SEAL**8 Cylinder**

2003-2000	4837cc/4.8L, 4941/5.0L	
Seal	.....	231003
Repair Sleeve	.....	KWK99393
1997-1994	3982cc/4.0L, 4398cc/4.4L	
Seal	.....	231003
Repair Sleeve	.....	KWK99393

12 Cylinder

1997-1991	4988cc/5.0L, 5379cc/5.4L,	
	5576/5.6L	
Seal	.....	231003
Repair Sleeve	.....	KWK99393

BMW - SUV - X3, X5, X6**FRONT WHEEL****AWD**

2009-2004	X3	
Ball Bearing		510081[2]
2009-2001	X5	
Ball Bearing		510081[2]
2000	X5	
Ball Bearing (From		
4/00)		510081[2]
Ball Bearing (To 4/00)		510080[2]

REAR WHEEL**AWD**

2009-2004	X3	
Ball Bearing		511026[2]
2009-2000	X5	
Bearing Module		BM500010[2] ²⁵

REAR AXLE**Axle Shaft**

2008		
Seal		473823
Repair Sleeve		KWK99139

Differential

2008-2000		
Cone/Cup		LM503349A-LM503310[2]

Pinion

2008-2000		
Seal		1979
Cone/Cup (Inner)		HM89449-HM89410
Cone/Cup (Outer)		HM88542-HM88510

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-2000	(ZF5HP24)	
Seal		224052
Repair Sleeve		KWK99157

Selector Shaft Seal/Man. Shaft

2006-2000	(5L40E)	
Seal		8792S

DRIVESHAFT SUPPORT

2007-2000		
Ball Bearing		106CC

AUXILIARY SHAFT**6 Cylinder**

2007-2001	2494cc/2.5L (DOHC), 2979cc/3.0L (DOHC), 2996cc/3.0L (DOHC)	
Seal		223802
Repair Sleeve		KWK99354

CRANKSHAFT FRONT SEAL**6 Cylinder**

2009-2001	2494cc/2.5L (DOHC), 2979cc/3.0L (DOHC), 2996cc/3.0L (DOHC)	
Seal Viton		716484
Repair Sleeve		KWK99189

8 Cylinder

2009-2000	4398cc/4.4L (DOHC), 4598cc/4.6L (DOHC)	
Seal		231003
Repair Sleeve		KWK99393

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2001	2494cc/2.5L (DOHC), 2979cc/3.0L (DOHC), 2996cc/3.0L (DOHC)	
Seal Viton		229005
Repair Sleeve		KWK99354

8 Cylinder

2009-2000	4398cc/4.4L (DOHC), 4598cc/4.6L (DOHC), 4799/4.8L (DOHC)	
Seal		231003
Repair Sleeve		KWK99393

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BUICK - FRONT DRIVE - Century**FRONT WHEEL****FWD**

2005	(Non-ABS)	
Hub Unit Bearing	.....	HA590085[2] ⁸⁴
2005-2003	(ABS)	
Hub Unit Bearing	.....	513179[2] ⁷³
2003	(Non-ABS)	
Hub Unit Bearing	.....	513160[2] ⁸³
Hub Unit Bearing	.....	HA590085[2] ⁸⁴
2002-1997	(ABS)	
Hub Unit Bearing	.....	513121[2] ⁷²
1996-1994		
Hub Unit Bearing	.....	513087[2] ⁴⁵
1993-1990		
Hub Unit Bearing	.....	513016K[2] ⁶¹
Seal Kit	.....	5698[2] ¹²

REAR WHEEL**FWD**

2005-2004	(ABS)	
Hub Unit Bearing	.....	512237[2] ⁸⁴
2005-2003	(Non-ABS)	
Hub Unit Bearing	.....	512221[2]
2003-1997	(ABS)	
Hub Unit Bearing	.....	512151[2]
1996-1994		
Hub Unit Bearing	.....	512078[2]
1993-1990		
Hub Unit Bearing	.....	513018[2]

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1996-1990	
Seal	4072N

Output Shaft

1996-1994		
Seal (LH)		3543
Repair Sleeve (LH)	KWK99139	
Seal (RH)		3543
Repair Sleeve (RH)	KWK99139	
1993-1990		
Seal (LH)		3543
Repair Sleeve (LH)	KWK99139	
Seal (RH)		3543
Repair Sleeve (RH)	KWK99139	

Manual Shaft

1996-1990	
Seal	8792S
Repair Sleeve	KWK99049

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2005-1990	
Seal	4072N

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2005-1997	(4T65 E)	
Seal (LH) (Yellow)	.....	100165
Repair Sleeve (LH)	.....	KWK99139
Seal (RH) (Green)	.....	3543
Repair Sleeve (RH)	.....	KWK99139
1996-1990		
Seal (LH)	.....	710096
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3543
Repair Sleeve (RH)	.....	KWK99139

Manual Shaft

2005-1990	
Seal	8792S
Repair Sleeve	KWK99049

ALTERNATOR

2001-1990	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

2002-1992	
Seal	70135
1991-1990	
Seal	221925

CRANKSHAFT FRONT SEAL**4 Cylinder**

1996-1993	134/2.2L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
1992-1990	151/2.5L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176

6 Cylinder

2005-1994	3.1L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176
1993-1990	204/3.3L	
Seal Viton	.....	710162
Repair Sleeve	.....	KWK99193

CRANKSHAFT REAR SEAL**4 Cylinder**

1996-1993	134/2.2L	
Seal	.....	4307V
Seal PTFE H/D Optiona	.....	5273
Repair Sleeve Optional	.....	KWK99298
1992-1990	151/2.5L	
Seal	.....	3698

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.⁴⁵Brg Flg Mtg Holes Non-Threaded.⁶¹Kit = Seal,

Hub Nut, & Brg Unit

⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁷³Plastic Wire Clip.⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - FRONT DRIVE - Century (cont.)**CRANKSHAFT REAR SEAL****6 Cylinder**

2005-1994	189/3.1L
Seal	4307V
Seal PTFE H/D Optiona	5273
Repair Sleeve Optional	KWK99298
1993-1990	204/3.3L
Seal Viton	320691
Repair Sleeve	KWK99328

BUICK - FRONT DRIVE - Electra, LeSabre, Park Avenue**FRONT WHEEL****FWD**

2005-2001	LeSabre (2nd Design)
Hub Unit Bearing	513179[2] ⁷³
2005-2001	Park Avenue (2nd Design)
Hub Unit Bearing	513179[2] ⁷³
2001-2000	LeSabre (1st Design)
Hub Unit Bearing	513121[2] ⁷²
2001-1997	Park Avenue (1st Design)
Hub Unit Bearing	513121[2] ⁷²
1999-1994	LeSabre (ABS)
Hub Unit Bearing	513087[2] ⁴⁵
1996-1994	Park Avenue
Hub Unit Bearing	513087[2] ⁴⁵
1993-1992	LeSabre (ABS)
Hub Unit Bearing	513087[2] ⁴⁵
1993-1992	Park Avenue
Hub Unit Bearing	513087[2] ⁴⁵
1992	LeSabre (Non-ABS)
Hub Unit Bearing	513088[2]
1991-1990	
Hub Unit Bearing	513016K[2] ⁶¹
Seal Kit	5698[2] ¹²

REAR WHEEL**FWD**

2005-2000	LeSabre
Hub Unit Bearing	512003[2]
2005-1997	Park Avenue
Hub Unit Bearing	512003[2]
1999-1997	LeSabre (ABS)
Hub Unit Bearing	513062[2]
1996-1991	(ABS)
Hub Unit Bearing	513062[2]
1992-1990	(Non-ABS)
Hub Unit Bearing	513018[2]
1990	(ABS)
Hub Unit Bearing	513041[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2005-1994	(4T60E, 4T65E)
Seal	4072N
1993-1990	LeSabre
Seal	4072N
1993-1990	Electra Park Ave
Seal	4072N

Output Shaft

2005-1998	(4T65 E)
Seal (LH) (Yellow)	100165
Repair Sleeve (LH)	KWK99193
Seal (RH) (Green)	3543
Repair Sleeve (RH)	KWK99193
1997-1994	(4T60E)
Seal (LH)	710096
Repair Sleeve (LH)	KWK99193
Seal (RH)	3543
Repair Sleeve (RH)	KWK99193
1993-1990	
Seal (LH)	710096
Seal (RH)	3543

Manual Shaft

2005-1991	(4T65 E)
Seal	8792S

ALTERNATOR

2001-1990	Electra, LeSabre, Electra Park Avenue, Park Avenue
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

2002-1992	
Seal	7013S
1991-1990	(integral reservoir)
Seal	221925
Ball Bearing	203FF[2]
1991-1990	(remote reservoir)
Seal	7013S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-1990	3.0L, 3.8L
Seal Viton	710162
Repair Sleeve	KWK99193

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit. ⁴⁵Brg Flg Mtg Holes Non-Threaded. ⁶¹Kit = Seal, Hub Nut, & Brg Unit ⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded. ⁷³Plastic Wire Clip.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BUICK - FRONT DRIVE - Electra, LeSabre, Park Avenue (cont.)**CRANKSHAFT REAR SEAL****6 Cylinder**

2005-1991 3.8L

Seal Viton 320691

Repair Sleeve KWK99328

Seal PTFE H/D 5291

1990 3.8L

Seal 5591

BUICK - FRONT DRIVE - Allure, LaCrosse**FRONT WHEEL****FWD**

2009-2005 (ABS)

Hub Unit Bearing HA590093[2]⁴⁰

2008-2005 (Non-ABS)

Hub Unit Bearing HA590085[2]⁸⁴**REAR WHEEL****FWD**

2009-2005 (ABS)

Hub Unit Bearing HA590092[2]

2009-2005 (Non-ABS)

Hub Unit Bearing HA590074[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2008-2005 (4T65 E)

Seal 4072N

Output Shaft

2008-2005 (4T65 E)

Seal (LH) (Yellow) 100165

Repair Sleeve (LH) KWK99193

Seal (RH) (Green) 3543

Repair Sleeve (RH) KWK99139

Manual Shaft

2008-2005 (4T65 E)

Seal 8792S

Repair Sleeve KWK99050

CRANKSHAFT FRONT SEAL**6 Cylinder**

2009-2005 3.8L

Seal Viton 710162

Repair Sleeve KWK99193

8 Cylinder

2009-2008 5.3L

Seal Viton 100470

Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2008 5.3L

Seal 100085

2009-2005 3.8L

Seal Viton 320691

Seal PTFE H/D 5291

Repair Sleeve KWK99328

8 Cylinder

2008 5.3L

Seal 100085

⁴⁰5 Stud.⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - FRONT DRIVE - Lucerne

FRONT WHEEL

FWD

2009-2006
Hub Unit Bearing HA590093[2]⁴⁰

REAR WHEEL

FWD

2009-2006
Hub Unit Bearing HA590149[2]²⁵

4-SPEED AUTOMATIC TRANSAXLE

Torque Convertor / Frt Pump

2008-2006 (4T65 E)
Seal 4072N
2006 (4T80 E)
Seal 224840

Output Shaft

2008-2006 (4T65 E)
Seal (LH) (Yellow) 100165
Repair Sleeve (LH) KWK99193
Seal (RH) (Green) 3543
Repair Sleeve (RH) KWK99193
2006 (4T80 E)
Seal (LH) 714679
Repair Sleeve (LH) KWK99160
Seal (RH) 4674N
Repair Sleeve (RH) KWK99160

CAMSHAFT SEAL

8 Cylinder

2007-2006 4.6L (DOHC)
Seal Viton 710261

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2006 3.8L
Seal Viton 710162
Repair Sleeve KWK99193

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2006 3.8L
Seal Viton 320691
Seal PTFE H/D 5291
Repair Sleeve KWK99328

8 Cylinder

2009-2006 4.6L (DOHC)
Seal Viton 710262

BUICK - FRONT DRIVE - Regal

FRONT WHEEL

FWD

2004-2003 (Non-ABS)
Hub Unit Bearing 513160[2]⁸³
Hub Unit Bearing HA590085[2]⁸⁴
2004-2001 (ABS)
Hub Unit Bearing 513179[2]⁷³
2001-1997 (ABS)
Hub Unit Bearing 513121[2]⁷²
1996-1990
Hub Unit Bearing 513044[2]

REAR WHEEL

FWD

2004-2003 (ABS)(Disc)
Hub Unit Bearing 512237[2]⁸⁴
2004-2003 (Non-ABS)
Hub Unit Bearing 512221[2]
2002-1999 (Disc)
Hub Unit Bearing 512150[2]⁸³
Hub Unit Bearing 512237[2]⁸⁴

REAR WHEEL (cont.)

FWD (cont.)

1998-1997 (ABS)(4 Whl. Disc)
Hub Unit Bearing 512150[2]⁸³
Hub Unit Bearing 512237[2]⁸⁴
1996 (1st Design)
Hub Unit Bearing 512004[2]¹¹
1996 (2nd Design)
Hub Unit Bearing 512151[2]¹⁰
1995-1992 (ABS)
Hub Unit Bearing 512004[2]
1993-1990 (Non-ABS)(Disc)
Hub Unit Bearing 513018[2]
1991-1990 (ABS)
Hub Unit Bearing 513042[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Convertor / Frt Pump

2004-1990 (4T60E, 4T65E)
Seal 4072N

¹⁰Dia. Of Bolt At Strut & Knuckle = 14mm.

Item, Check For Availability ⁴⁰5 Stud.

¹¹Dia. Of Bolt At Strut & Knuckle = 16mm.

⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.

²⁵New

³⁴⁷³Plastic Wire Clip. ⁸³Deplete Inventory

⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BUICK - FRONT DRIVE - Regal (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

2004-1997	(4T65 E)	
Seal (LH) (Yellow)	.....	100165
Repair Sleeve (LH)	.....	KWK99139
Seal (RH) (Green)	.....	3543
Repair Sleeve (RH)	.....	KWK99139
2000-1993	(4T60E)	
Seal (LH)	.....	710096
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3543
Repair Sleeve (RH)	.....	KWK99139
1998-1990		
Seal (LH)	.....	710096
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3543
Repair Sleeve (RH)	.....	KWK99139

Manual Shaft

2004-1990	
Seal	8792S

ALTERNATOR

1994-1993	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

2002-1992	
Seal	7013S
1991-1990	(remote reservoir)
Seal	7013S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2004-1990	3.8L
Seal Viton	710162
Repair Sleeve	KWK99193

CRANKSHAFT FRONT SEAL (cont.)**6 Cylinder (cont.)**

1996-1990	189/3.1L
Seal	9845
Repair Sleeve	KWK99176

CRANKSHAFT REAR SEAL**6 Cylinder**

2004-1990	3.8L
Seal Viton	320691
Repair Sleeve	KWK99328
Seal PTFE H/D	5291
1996-1990	189/3.1L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

BUICK - FRONT DRIVE - Riviera, Reatta**FRONT WHEEL****FWD**

1999-1997	
Hub Unit Bearing	513121[2] ⁷²
1996-1992	
Hub Unit Bearing	513087[2] ⁴⁵
1991-1990	
Hub Unit Bearing	513059[2]

REAR WHEEL**FWD**

1999-1991	
Hub Unit Bearing	512003[2]
1990	(ABS)
Hub Unit Bearing	513041[2]

REAR WHEEL (cont.)**FWD (cont.)**

1990	(Non-ABS)
Hub Unit Bearing	513018[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1999-1990	(4T60E, 4T65E)
Seal	4072N

⁴⁵Brg Flg Mtg Holes Non-Threaded.⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - FRONT DRIVE - Riviera, Reatta (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

1999-1997	
Seal (LH) (Yellow)	100165
Seal (RH) (Green)	3543
1996-1995	
Seal (LH)	100165
Seal (RH)	710096
1993-1990	
Seal (LH)	710096
Seal (RH)	3543

Manual Shaft

1999-1990	
Seal	8792S

ALTERNATOR

1999-1990	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

1999-1992	
Seal	7013S
Ball Bearing	203FF[2]
1991-1990	
Seal	221925
Ball Bearing	203FF[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1999-1990	231/3.8L	
Seal Viton		710162
Repair Sleeve		KWK99193

CRANKSHAFT REAR SEAL**6 Cylinder**

1999-1990	231/3.8L	
Seal Viton		320691
Repair Sleeve		KWK99328

BUICK - FRONT DRIVE - Skylark**FRONT WHEEL****FWD**

1998-1990	
Hub Unit Bearing	513017K[2] ⁶¹
Seal Kit	5697[2] ¹²

REAR WHEEL**FWD**

1998-1991	(ABS)
Hub Unit Bearing	512001[2]
1991-1990	(Non-ABS)
Hub Unit Bearing	513012[2]

CLUTCH**Release Bearing**

1991-1990	4 Cyl. Quad4 (5 Spd.)
Bearing Assy	614069

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1995-1990	
Seal	4072N

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

1995-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

1995-1990	
Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1998-1994	
Seal	4072N

Output Shaft

1998-1994	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve (RH)	KWK99139

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - FRONT DRIVE - Skylark (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Manual Shaft**

1998-1994
Seal 8792S

4-SPEED MANUAL TRANSAXLE**Output Shaft**

1998-1995
Seal (LH) 710096
Repair Sleeve (LH) KWK99139
Seal (RH) 3543
Repair Sleeve (RH) KWK99139

ALTERNATOR

1998-1990
Ball Bearing (Drive End) 203FF
Ball Bearing (Rear End) 100CCAB

CAMSHAFT SEAL**4 Cylinder**

1997-1996 146/2.4L
Seal (Frt) 223605

CRANKSHAFT FRONT SEAL**4 Cylinder**

1998-1996 146/2.4L
Seal Viton 320259
Repair Sleeve KWK99199
1995-1990 138/2.3L
Seal Viton 320259
Repair Sleeve KWK99199
1991-1990 151/2.5L
Seal 9845
Repair Sleeve KWK99176

6 Cylinder

1998-1994 189/3.1L
Seal 9845
Repair Sleeve KWK99176
1993-1990 204/3.3L
Seal Viton 710162
Repair Sleeve KWK99193

CRANKSHAFT REAR SEAL**4 Cylinder**

1998-1996 146/2.4L
Seal 40375
1995-1990 138/2.3L
Seal 40375
1991-1990 151/2.5L
Seal 3698

6 Cylinder

1998-1994 189/3.1L
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298
1993-1990 204/3.3L
Seal Viton 320691
Repair Sleeve KWK99328

BUICK - REAR DRIVE - LeSabre**FRONT WHEEL****RWD**

1990
Seal (Inner) 8871[2]
Set (Inner) SET6[2]
Set (Outer) SET3[2]

REAR WHEEL**RWD**

1990 LeSabre
Seal 8660S[2]
Cylindrical Bearing 5707[2]
Bearing & Seal Kit TRP1563TAV[2]¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - REAR DRIVE - LeSabre (cont.)**REAR AXLE****Differential Rebuild Kit**

1990 (8.5" R.G.)
 Kit DRK321

Differential

1990 (7.5", 8.5" R.G.)
 Cone/Cup LM501349-LM501314[2]

Pinion

1990 LeSabre
 Seal 2043
 Cone/Cup (Inner) M802048-M802011
 Cone/Cup (Outer) M88048-M88010[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990 LeSabre
 Seal 3227
 Repair Sleeve KWK99174

Rear Seal/Ext. Housing

1990 LeSabre
 Seal (Rr) 9613S

Selector Shaft Seal/Man. Shaft

1990 LeSabre
 Seal 8792S

GENERATOR / ALTERNATOR

1990
 Ball Bearing (Drive End) 203F
 Ball Bearing (Rear End) MNJ471S

POWER STEERING**Pump Shaft**

1990
 Seal 7013S

Worm Shaft

1990
 Seal 222025

CRANKSHAFT FRONT SEAL**8 Cylinder**

1990 307/5.0L
 Seal 472082
 Repair Sleeve KWK99199

CRANKSHAFT REAR SEAL**8 Cylinder**

1990 307/5.0L
 Seal Rope 5095

BUICK - REAR DRIVE - Roadmaster Estate Wagon, Roadmaster Sedan**FRONT WHEEL****RWD**

1996-1991
 Seal (Inner) 4739[2]
 Set (Inner) SET6[2]
 Set (Outer) SET3[2]

REAR WHEEL**RWD**

1996-1991 (Sedan)
 Seal (Inner) 8660S[2]
 Cylindrical Bearing
 (Inner) 5707[2]
 Bearing & Seal Kit TRP1563TAV[2]¹⁹
 1996-1991 (Wagon)
 Seal (Inner) 8835S[2]
 Cylindrical Bearing 6408[2]
 Bearing & Seal Kit TRP1559TV[2]¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BUICK - REAR DRIVE - Roadmaster Estate Wagon, Roadmaster Sedan (cont.)**REAR AXLE****Differential Rebuild Kit**

1996-1991

Kit DRK321

Differential

1996-1991

Cone/Cup LM501349-LM501314[2]

Pinion

1996-1991

Seal 2043

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1996-1991

Seal 3227

Repair Sleeve KWK99174

Rear Seal/Ext. Housing

1996-1991

Seal 9613S

Seal Kit 5200⁶⁴**Selector Shaft Seal/Man. Shaft**

1996-1991

Seal 8792S

A/C COMPRESSOR

1996-1991

Ball Bearing 907257[2]

1996-1991

Ball Bearing (Frt Head) S128

GENERATOR / ALTERNATOR

1996-1991

Ball Bearing (Drive End) 203FF

Ball Bearing (Rear End) 100CCAB

POWER STEERING**Pitman Shaft**

1996-1991

Seal Kit PSK1²⁴**Pump Shaft**

1996-1991

Seal 480821

Worm Shaft

1996-1991

Seal 222025

CRANKSHAFT FRONT SEAL**8 Cylinder**

1996-1992 350/5.7L

Seal 9845

Repair Sleeve KWK99176

1992-1991 305/5.0L

Seal 9845

Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL**8 Cylinder**

1996-1992 350/5.7L

Seal Viton 4359V

Seal PTFE H/D 5274

Repair Sleeve KWK99364

1992-1991 305/5.0L

Seal Viton 4359V

Seal PTFE H/D 5274

Repair Sleeve KWK99364

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately⁶⁴Seal & Bushing Kit

BUICK - Minivan - Terraza**FRONT WHEEL****FWD****2007-2006**Hub Unit Bearing HA590157[2]²⁵**2005**Hub Unit Bearing HA590093[2]⁴⁰**AWD****2006**Hub Unit Bearing HA590157[2]²⁵**2005**Hub Unit Bearing HA590093[2]⁴⁰**REAR WHEEL****FWD****2007**Hub Unit Bearing HA590116[2]²⁵**2006**Hub Unit Bearing HA590158[2]²⁵**2005**(Exc. Indep. Rr.
Susp.)(Rectangular Flange)

Hub Unit Bearing HA590092[2]

2005(Indep. Rr. Susp.)(Triangular
Flange)

Hub Unit Bearing HA590091[2]

AWD**2006**Hub Unit Bearing HA590157[2]²⁵**2005**Hub Unit Bearing HA590093[2]⁴⁰**TRANSFER CASE****Input Shaft****2006-2005**

Cone/Cup LM503349-LM503310

Front Output Shaft**2006-2005**

Bearing Assy 32006[2]

Mainshaft**2006-2005**

Bearing Assy 32006[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump****2006-2005** (4T65 E)

Seal 4072N

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft****2007-2005** (4T65 E)

Seal (LH) (Yellow) 100165

Repair Sleeve (LH) KWK99139

Seal (RH) (Green) 3543

Repair Sleeve (LH) KWK99139

Manual Shaft**2007-2005** (4T65 E)

Seal 8792S

CRANKSHAFT FRONT SEAL**6 Cylinder****2006** 3.9L

Seal 9845

Repair Sleeve KWK99176

Harmnc Balancer Slvs 88176

2006-2005 3.5L

Seal 9845

Repair Sleeve KWK99176

Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**6 Cylinder****2007-2005** 3.5L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

2006 3.9L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

²⁵New Item, Check For Availability⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

BUICK - SUV - Enclave**FRONT WHEEL****FWD**

2009-2008

Hub Unit Bearing HA590227[2]²⁵**AWD**

2009-2008

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****FWD**

2009-2008

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****AWD**

2009-2008

Hub Unit Bearing HA590227[2]²⁵**BUICK - SUV - Rainier****FRONT WHEEL****RWD**

2007-2004

Hub Unit Bearing 513188[2]

AWD

2007-2004

Hub Unit Bearing 513188[2]

REAR WHEEL**RWD**

2007-2004

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹**AWD**

2007-2004

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹**FRONT AXLE****Differential Rebuild Kit**

2007-2004

Kit DRK320A

4WD FRONT AXLE**Axle Shaft**

2007-2004

Seal 710491[2]

Differential

2007-2004

Set SET11[2]

4WD FRONT AXLE**Pinion**

2007-2004

Seal 8611N

Cone/Cup (Inner) M88048S-M88010

Cone/Cup (Outer) M86649-M86610

Repair Sleeve KWK99152

REAR AXLE**Differential Rebuild Kit**

2007-2004 (7.5" R.G., 7.625" R.G.)

Kit DRK320C

2007-2004 (8" R.G.)

Kit DRK320D

2007-2004 (8.625" R.G.)

Kit DRK321C

Differential

2007-2004 (8.625" R.G.)

Set SET36[2]

2005-2004 (7.5" R.G., 7.625" R.G.)

Cone/Cup LM501349-LM501314[2]

Pinion

2007-2004 (8.625" R.G.)

Seal 710506

Cone/Cup (Inner) NP457992-NP926068

Cone/Cup (Outer) M86649-M86610

2005-2004 (7.5" R.G., 7.625" R.G.)

Seal 710506

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-2004 (4L60E)

Seal 3227

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
BUICK - SUV - Rainier (cont.)					

4-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2006-2004 (4L60E)

Seal 9613S
 Seal Kit 5200⁶⁴

Selector Shaft Seal/Man. Shaft

2007-2004 (4L60E)

Seal 8792S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2007-2004 325/ 5.3L

Seal Viton 100470

CRANKSHAFT REAR SEAL**8 Cylinder**

2007-2004 325/ 5.3L

Seal 100085

BUICK - SUV - Rendezvous**FRONT WHEEL****FWD**

2007-2003 (Non-ABS)

Hub Unit Bearing HA590048[2]⁸³
 Hub Unit Bearing HA590085[2]⁸⁴

2007-2002 (ABS)

Hub Unit Bearing 513187[2]

AWD

2006-2002 (ABS)

Hub Unit Bearing 513187[2]

REAR WHEEL**FWD**

2007-2003 (Non-ABS)(Disc)

Hub Unit Bearing 512236[2]

2007-2002 (ABS)(Disc)

Hub Unit Bearing 512222[2]

AWD

2006-2002

Hub Unit Bearing 513121[2]⁷²**TRANSFER CASE****Input Shaft**

2006-2002

Cone/Cup LM503349-LM503310

Front Output Shaft

2006-2002

Bearing Assy 32006[2]

TRANSFER CASE**Mainshaft**

2006-2002

Bearing Assy 32006[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2007-2002 (4T65 E)

Seal 4072N

Output Shaft

2007-2002 (4T65 E)

Seal (LH) (Yellow) 100165
 Repair Sleeve (LH) KWK99139
 Seal (RH) (Green) 3543
 Repair Sleeve (RH) KWK99139

Manual Shaft

2007-2002 (4T65 E)

Seal 8792S
 Repair Sleeve KWK99050

POWER STEERING**Pump Shaft**

2002

Seal 7013S

⁶⁴Seal & Bushing Kit⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

BUICK - SUV - Rendezvous (cont.)**CRANKSHAFT FRONT SEAL****6 Cylinder**

2007-2006 3.5L

Seal 9845

Repair Sleeve KWK99176

Harmnc Balancer Slvs 88176

2005-2002 207/3.4L

Seal 9845

Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-2006 3.5L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

CRANKSHAFT REAR SEAL (cont.)**6 Cylinder (cont.)**

2005-2002 3.4L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

CADILLAC - FRONT DRIVE - Allante**FRONT WHEEL****FWD**

1993

Hub Unit Bearing 513087[2]⁴⁵

1992-1990

Hub Unit Bearing 513059[2]

REAR WHEEL**FWD**

1993

Hub Unit Bearing 512006[2]

1992-1991

Hub Unit Bearing 512003[2]

1990

Hub Unit Bearing 513041[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1993

Seal 224840

Repair Sleeve KWK99189

1992-1990

Seal 4072N

Output Shaft

1993

Seal (LH) 714679

Repair Sleeve (LH) KWK99160

Seal (RH) 4674N

Repair Sleeve (RH) KWK99160

1992-1990

Seal (LH) 710096

Repair Sleeve (LH) KWK99139

Seal (RH) 3543

Repair Sleeve (RH) KWK99139

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

1993-1990

Seal 8792S

A/C COMPRESSOR1993-1990 (Frigidaire R4)(Harrison DA6,
V5, HR6)

Ball Bearing 907257[2]

ALTERNATOR

1991-1990

Ball Bearing (Drive End) 203FF

Ball Bearing (Rear End) 100CCAB

POWER STEERING**Pump Shaft**

1993-1992

Seal 7013S

1991-1990

Seal 221925

Worm Shaft

1990

Seal 222510

CRANKSHAFT FRONT SEAL**8 Cylinder**

1993 281/4.6L

Seal Viton 710263

Repair Sleeve KWK99199

1992-1990 273/4.5L

Seal 471424

Repair Sleeve KWK99199

⁴⁵Brg Flg Mtg Holes Non-Threaded.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - FRONT DRIVE - Allante (cont.)

CRANKSHAFT REAR SEAL

8 Cylinder

1993	281/4.6L	
Seal Viton		710262
1992-1990	273/4.5L	
Seal Viton		710075

CADILLAC - FRONT DRIVE - DeVille, Fleetwood

FRONT WHEEL

FWD

2005-2001	(2nd Design)	
Hub Unit Bearing		513179[2] ⁷³
2001-1997	(1st Design)(Exc. H/D Suspension, Hearse/Limo)	
Hub Unit Bearing		513121[2] ⁷²
1996-1994		
Hub Unit Bearing		513087[2] ⁴⁵
1993-1992	(ABS)	
Hub Unit Bearing		513087[2] ⁴⁵
1993-1992	(Non-ABS)	
Hub Unit Bearing		513088[2]
1993-1990	(J55 H/D Brks.)	
Hub Unit Bearing		513063[2]
Hub Unit Bearing		513016K[2] ⁶¹

REAR WHEEL

FWD

2005-2000	(Exc. H/D Suspension, Hearse/Limo)	
Hub Unit Bearing		512003[2]
2002-1997	(H/D Suspension, Hearse/Limo)	
Cone		JXC25469CA[2] ⁰⁹
1999-1994	(Exc. H/D Suspension, Hearse/Limo)	
Hub Unit Bearing		512006[2]
1993-1991	(ABS)	
Hub Unit Bearing		513062[2]
1993-1990	(J55 H/D Brks.)	
Hub Unit Bearing		512005[2]
1993-1990	(Non-ABS)	
Hub Unit Bearing		513018[2]
1990	(ABS)	
Hub Unit Bearing		513041[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2005-1993	(4T80 E)	
Seal		224840
Repair Sleeve		KWK99189
1995-1990	(4T60E)	
Seal		4072N
1990	(THM440 T4)	
Seal		4072N

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2005-1993	(4T80 E)	
Seal (LH)		714679
Seal (RH)		4674N
1995-1990	(4T60E)	
Seal (LH)		710096
Repair Sleeve (LH)		KWK99139
Seal (RH)		3543
Repair Sleeve (RH)		KWK99139
1990	(THM440 T4)	
Seal (LH)		710096
Repair Sleeve (LH)		KWK99139
Seal (RH)		3543
Repair Sleeve (RH)		KWK99139

Manual Shaft

2005-1990		
Seal		8792S

A/C COMPRESSOR

2002-1990	(Frigidaire R4)(Harrison DA6, V5, HR6)	
Ball Bearing		907257[2]

ALTERNATOR

1993-1990		
Ball Bearing (Drive End)		203FF
Ball Bearing (Rear End)		100CCAB

POWER STEERING

Pump Shaft

1993-1992		
Seal		7013S
1991-1990		
Seal		221925
Ball Bearing		203FF[2]

CAMSHAFT SEAL

8 Cylinder

2002-1994	281/4.6L	
Seal Viton		710261

CRANKSHAFT FRONT SEAL

8 Cylinder

2005-2003	279/4.6L (DOHC)	
Seal Viton		710261

⁰⁹Use Assembly 90UA7 ⁴⁵Brg Flg Mtg Holes Non-Threaded. ⁶¹Kit = Seal, Hub Nut, & Brg Unit
⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded. ⁷³Plastic Wire Clip.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CADILLAC - FRONT DRIVE - DeVille, Fleetwood (cont.)**CRANKSHAFT FRONT SEAL (cont.)****8 Cylinder (cont.)**

2002-1994	281/4.6L	
Seal Viton	.....	710263
Repair Sleeve	.....	KWK99199
1995-1991	300/4.9L	
Seal	.....	471424
Repair Sleeve	.....	KWK99199
1990	273/4.5L	
Seal	.....	471424
Repair Sleeve	.....	KWK99199

CRANKSHAFT REAR SEAL (cont.)**8 Cylinder (cont.)**

1990	273/4.5L	
Seal Viton	.....	710075

CRANKSHAFT REAR SEAL**8 Cylinder**

2005-2003	4.6L/279 DOHC	
Seal Viton	.....	710262
2002-1994	281/4.6L	
Seal Viton	.....	710262
1995-1991	300/4.9L	
Seal Viton	.....	710075

CADILLAC - FRONT DRIVE - DTS**FRONT WHEEL****FWD**

2008-2006		
Hub Unit Bearing	.....	HA590093[2] ⁴⁰

REAR WHEEL**FWD**

2008-2006		
Hub Unit Bearing	.....	HA590149[2] ²⁵

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2006	(4T80 E)	
Seal	.....	224840

Output Shaft

2009-2006	(4T80 E)	
Seal (LH)	.....	714679
Seal (RH)	.....	4674N

Manual Shaft

2008-2006	(4T80 E)	
Seal	.....	8792S

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-2006	4.6L	
Seal Viton	.....	710262

²⁵New Item, Check For Availability⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - FRONT DRIVE - Eldorado

FRONT WHEEL

FWD

2002-2001	(2nd Design)	
Hub Unit Bearing	.....	513179[2] ⁷³
2001-1997	(1st Design)	
Hub Unit Bearing	.....	513121[2] ⁷²
1996-1992		
Hub Unit Bearing	.....	513087[2] ⁴⁵
1991-1990		
Hub Unit Bearing	.....	513059[2]

REAR WHEEL

FWD

2002-1993		
Hub Unit Bearing	.....	512006[2]
1992-1991		
Hub Unit Bearing	.....	512003[2]
1990	(ABS)	
Hub Unit Bearing	.....	513041[2]
1990	(Non-ABS)	
Hub Unit Bearing	.....	513018[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2002-1993	(4T80 E)	
Seal	.....	224840
Repair Sleeve	.....	KWK99189
1995-1990	(4T60E)	
Seal	.....	4072N
1990	(THM440)	
Seal	.....	4072N

Output Shaft

2002-1993	(4T80)	
Seal (LH)	.....	714679
Seal (RH)	.....	4674N
1995-1990	(4T60E)	
Seal (LH)	.....	710096
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3543
Repair Sleeve (RH)	.....	KWK99139
1990	(THM440)	
Seal (LH)	.....	710096
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3543
Repair Sleeve (RH)	.....	KWK99139

Manual Shaft

2002-1990		
Seal	.....	8792S

A/C COMPRESSOR

2002-1990	(Frigidaire R4)(Harrison DA6, V5, HR6)	
Ball Bearing	.....	907257[2]

ALTERNATOR

1991-1990		
Ball Bearing (Drive End)	.....	203FF
Ball Bearing (Rear End)	.....	100CCAB

POWER STEERING

Pitman Shaft

1990		
Seal Kit	.....	PSK1 ²⁴

Pump Shaft

2001-1994	281/4.6L	
Ball Bearing	.....	203FF[2]
1993-1991	281/4.6L	
Seal	.....	7013S
1993-1991	299/4.9L	
Seal	.....	480821
1990		
Seal	.....	221925
Ball Bearing	.....	203FF[2]

Worm Shaft

1991-1990		
Seal	.....	222025

CRANKSHAFT FRONT SEAL

8 Cylinder

2002-1993	281/4.6L	
Seal Viton	.....	710263
Repair Sleeve	.....	KWK99199
1993-1991	300/4.9L	
Seal	.....	471424
Repair Sleeve	.....	KWK99199
1990	273/4.5L	
Seal	.....	471424
Repair Sleeve	.....	KWK99199

CRANKSHAFT REAR SEAL

8 Cylinder

2002-1993	281/4.6L	
Seal Viton	.....	710262
1993-1991	300/4.9L	
Seal Viton	.....	710075
1990	273/4.5L	
Seal Viton	.....	710075

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

⁴⁵Brg Flg Mtg Holes Non-Threaded.

⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.

⁷³Plastic Wire Clip.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CADILLAC - FRONT DRIVE - Seville**FRONT WHEEL****FWD**

2004-2001	
Hub Unit Bearing	513179[2] ⁷³
2001-1997	
Hub Unit Bearing	513121[2] ⁷²
1996-1992	
Hub Unit Bearing	513087[2] ⁴⁵
1991-1990	
Hub Unit Bearing	513059[2]

REAR WHEEL**FWD**

2004-1998	
Hub Unit Bearing	512003[2]
1997-1993	
Hub Unit Bearing	512006[2]
1992-1991	
Hub Unit Bearing	512003[2]
1990 (ABS)	
Hub Unit Bearing	513041[2]
1990 (Non-ABS)	
Hub Unit Bearing	513018[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2004-1993 (4T80 E)	
Seal	224840
Repair Sleeve	KWK99189
1995-1990 (4T60E)	
Seal	4072N
1992-1990 (THM440)	
Seal	4072N

Output Shaft

2004-1993 (4T80 E)	
Seal (LH)	714679
Seal (RH)	4674N
1995-1990 (4T60E)	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve (RH)	KWK99139
1992-1990 (THM440)	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve (RH)	KWK99139

Manual Shaft

2004-1990	
Seal	8792S

A/C COMPRESSOR

2002-1990 (Frigidaire R4)(Harrison DA6, V5, HR6)	
Ball Bearing	907257[2]

ALTERNATOR

1991-1990	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

2001-1994	
Ball Bearing	203FF[2]
1993-1991 281/4.6L	
Seal	7013S
1993-1991 299/4.9L	
Seal	480821
1990	
Seal	221925
Ball Bearing	203FF[2]

CAMSHAFT SEAL**8 Cylinder**

2001-1994 281/4.6L	
Seal Viton	710261

CRANKSHAFT FRONT SEAL**8 Cylinder**

2002-1993 281/4.6L	
Seal Viton	710263
Repair Sleeve	KWK99199
1993-1991 300/4.9L	
Seal	471424
Repair Sleeve	KWK99199
1990 273/4.5L	
Seal	471424
Repair Sleeve	KWK99199

CRANKSHAFT REAR SEAL**8 Cylinder**

2004-1993 4.6L (DOHC)	
Seal Viton	710262
1993-1991 300/4.9L	
Seal Viton	710075
1990 273/4.5L	
Seal Viton	710075

⁴⁵Brg Flg Mtg Holes Non-Threaded.
Wire Clip.⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁷³Plastic

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - REAR DRIVE - Comm. Chassis/Limousine, DeVille, Fleetwood

REAR WHEEL

RWD

1992-1990	(11" Brks.)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹

REAR AXLE

Differential Rebuild Kit

1996-1991	(9.5" R.G.)	
Kit	.....	DRK324
1990	(7.5" R.G.)	
Kit	.....	DRK320

Differential

1996-1991	(9.5" R.G.)	
Cone/Cup	.....	JLM506849-JLM506811[2]
1996-1990	(7.50", 8.50" R.G.)	
Cone/Cup	.....	LM501349-LM501314[2]

Pinion

1996-1991	(9.5" R.G.)	
Seal	.....	3896
Cone/Cup (Inner)	.....	HM804846-HM804810
Cone/Cup (Outer)	.....	HM88649-HM88610
1996-1990	(8.5" R.G.)	
Seal	.....	2043
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010
1990	(7.5" R.G.)	
Seal	.....	8610
Cone/Cup (Inner)	.....	HM89249-HM89210
Cone/Cup (Outer)	.....	M86649-M86610

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1990	(THM200, 2004R)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174

Rear Seal/Ext. Housing

1990	(THM200, 2004R)	
Seal	.....	9613S

Selector Shaft Seal/Man. Shaft

1996-1990		
Seal	.....	8792S

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1996-1990	(4L60E, 4L60E, 4L60/MD8)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174
1990	(THM200 4R)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

1996-1990	(4L60E, 4L60E, 4L60/MD8)	
Seal	.....	9613S
1990	(THM200 4R)	
Seal	.....	9613S

Selector Shaft Seal/Man. Shaft

1996-1990		
Seal	.....	8792S

ALTERNATOR

1991-1990		
Ball Bearing (Drive End)	.....	203FF
Ball Bearing (Rear End)	.....	100CCAB

CRANKSHAFT FRONT SEAL

8 Cylinder

1996-1990	350/5.7L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
1992-1991	305/5.0L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
1990	307/5.0L	
Seal	.....	472082
Repair Sleeve	.....	KWK99199

CRANKSHAFT REAR SEAL

8 Cylinder

1996-1990	305/5.0L, 350/5.7L	
Seal Viton	.....	4359V
Seal PTFE H/D	.....	5274
Repair Sleeve	.....	KWK99364
1990	307/5.0L	
Seal Rope	.....	5095

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - REAR DRIVE - Catera**FRONT WHEEL****RWD**

2001-1997
Hub Unit Bearing HA596467[2]

REAR WHEEL**RWD**

2001-1997
Seal 6712NA[2]
Ball Bearing 510052[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2001-1997 (4L30E)
Seal 6712NA
Repair Sleeve KWK99187

Rear Seal/Ext. Housing

2001-1997 (4L30E)
Seal 3459S

Selector Shaft Seal/Man. Shaft

2001-1997 (4L30E)
Seal 8792S

ALTERNATOR

2001-1997
Ball Bearing (Drive End) 203FF
Ball Bearing (Rear End) 100CCAB

CAMSHAFT SEAL**6 Cylinder**

2001-1997
Seal 714436

CRANKSHAFT FRONT SEAL**6 Cylinder**

2001-1997
Seal 223750

CRANKSHAFT REAR SEAL**6 Cylinder**

2001-1997 (DOHC)
Seal Viton 710237

CADILLAC - REAR DRIVE - CTS Sedan**FRONT WHEEL****RWD**

2009-2008
Hub Unit Bearing HA590260[2]²⁵
2007-2004 CTS V
Hub Unit Bearing HA590077[2]
2007-2003 CTS
Hub Unit Bearing 513186[2]

AWD

2009-2008
Hub Unit Bearing HA590260[2]²⁵

REAR WHEEL**RWD**

2008
Hub Unit Bearing HA590260[2]²⁵

REAR WHEEL (cont.)**RWD (cont.)**

2007-2004 CTS V
Hub Unit Bearing HA590082[2]
2007-2003 CTS
Hub Unit Bearing 512223[2]

REAR AXLE**Pinion**

2004
Cone/Cup (Inner) NP922169-NP233028[2]

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2007-2003 (5L40E)
Seal 8792S

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - REAR DRIVE - CTS Sedan (cont.)**6-SPEED MANUAL TRANSMISSION****Main Shaft**

2006-2004
Cone/Cup (Frt) LM12749-LM12711[2]

Front Countershaft

2006-2004
Cone/Cup (Frt) LM48548-LM48510[2]
Bearing Assy (Rr) 32008XM[2]

Rear Countershaft

2006-2004
Cone/Cup LM12749-LM12711[2]

CAMSHAFT SEAL**6 Cylinder**

2004-2003 3.2L/3175 DOHC
Seal 714436[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2004-2003 3.2L/3175 DOHC
Seal 223802

8 Cylinder

2007-2006 6.0L
Seal Viton 100470
2005-2004 346/5.7L
Seal Viton 100470

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-2005 2.8L/2792 DOHC
Seal Viton 710237
2004-2003 3.2L/3175 DOHC
Seal Viton 710237

CRANKSHAFT REAR SEAL**8 Cylinder**

2007-2004 350 /5.7L, 364 /6.0L
Seal 100085

CADILLAC - REAR DRIVE - STS**FRONT WHEEL****RWD**

2009-2006 STS V
Hub Unit Bearing HA590167[2]²⁵
2009-2005 STS (Exc. Performance Pkg)
Hub Unit Bearing 513186[2]
2009-2005 STS (Performance Pkg)(H/D)
Hub Unit Bearing HA590077[2]
2007-2005 STS (Performance Pkg)(Exc.
H/D)
Hub Unit Bearing HA590049[2]²⁵

AWD

2009-2005 STS (Exc. H/D)
Hub Unit Bearing HA590049[2]²⁵
2009-2005 STS (H/D)
Hub Unit Bearing HA590077[2]

REAR WHEEL**RWD**

2009-2005 STS (Exc. H/D)
Hub Unit Bearing 512223[2]
2009-2005 STS (H/D)
Hub Unit Bearing HA590079[2]

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2005 (5L40E)
Seal 8792S

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CADILLAC - REAR DRIVE - STS (cont.)					

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2009-2006 (6L80)
Seal 710533

6-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2006 (6L80)
Seal 8792S

6-SPEED MANUAL TRANSMISSION**Main Shaft**

2006
Cone/Cup (Frt) LM12749-LM12711[2]

Front Countershaft

2006
Cone/Cup (Frt) LM48548-LM48510[2]
Bearing Assy (Rr) 32008XM[2]

Rear Countershaft

2006
Cone/Cup LM12749-LM12711[2]

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-2005 4.4L, 4.6L
Seal Viton 710262

CADILLAC - REAR DRIVE - XLR**FRONT WHEEL****RWD**

2008-2004
Hub Unit Bearing 513139[2]

REAR WHEEL**RWD**

2008-2004
Hub Unit Bearing 512153[2]

REAR AXLE**Differential**

2006-2004
Cone/Cup 387A-382A[2]

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2004 (5L50E)
Seal 8792S

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2009-2006 (6L80)
Seal 710533

6-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2006 (6L80)
Seal 8792S

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-2004 4.4L, 4.6L
Seal Viton 710262

CADILLAC - SUV, Truck - Escalade, Escalade ESV, Escalade EXT**FRONT WHEEL****RWD**

2009-2007	
Hub Unit Bearing	SP450303[2] ²⁵
2006	
Hub Unit Bearing	SP500300[2] ²⁵
2005-2002	
Hub Unit Bearing	SP550305[2] ⁸³
Hub Unit Bearing	SP450301[2] ⁸⁴
2000-1999	
Hub Unit Bearing	SP550300[2] ⁹⁶
Hub Unit Bearing	SP550307[2] ⁸⁵

4WD

2002	
Hub Unit Bearing	SP500300[2] ²⁵
2000-1999	
Hub Unit Bearing (RH)	SP550300[2] ⁹⁶
Hub Unit Bearing (RH)	SP550307[2] ⁸⁵
Hub Unit Bearing (LH)	SP550301[2] ⁹⁶
Hub Unit Bearing (LH)	SP550307[2] ⁸⁵
Sensor Kit (RH)	SK550300[2] ³⁹
Sensor Kit (LH)	SK550301[2] ³⁹

AWD

2009-2007	
Hub Unit Bearing	SP500301[2] ²⁵
2006	
Hub Unit Bearing	SP500300[2] ²⁵
Hub Unit Bearing	SP550307[2] ⁸⁵
2005-2002	
Hub Unit Bearing	SP500300[2] ²⁵

REAR WHEEL**RWD**

2009-1999	
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹

4WD

2002-1999	
Seal	4762N
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹

AWD

2009-2002	
Seal	4762N
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2002-1999	(8.25" R.G.)
Ndle Bearing (Inner)	B2010[2]
Ndle Bearing (Outer)	SCH208[2]
Ndle Bearing	SCH78[2]

4WD FRONT AXLE**Differential**

2006-2002	(Under 7500 GVW)
Cone/Cup	LM501349-LM501314[2]
2000-1999	(Over 7500 GVW)
Set	SET42[2]

Pinion

2008-2003	
Seal	710536
Cone/Cup (Inner)	NP544520-NP099285
Cone/Cup (Outer)	M88048-M88010
2002-1999	
Seal	710536
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010

REAR AXLE**Differential Rebuild Kit**

2007-2002	(8.625" R.G.)
Kit	DRK321C
2006-2002	(9.5" R.G.)
Kit	DRK324B
2000-1999	(8.625" RG)
Kit	DRK321C

Differential

2006-2002	(8.625" R.G.)
Set	SET36[2]
2006-2002	(9.5" R.G.)
Set	SET42[2]
2000	(2nd Design)
Set	SET36[2]
2000-1999	(1st Design)
Cone/Cup	LM501349-LM501314[2]

Pinion

2008-2002	(8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP544520-NP099285
Cone/Cup (Outer)	M88048-M88010
2006-2002	(9.5" R.G.)
Seal	710507
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
2000-1999	(8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010

TRANSFER CASE REBUILD KIT

2000-1999	(New Process 243)
Kit	TCRK241D[2] ¹⁶

¹⁶Obsolete ¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²⁵New Item, Check For Availability³⁹Opt. Kit = Cable, Screw, Grease. ⁸³Deplete Inventory ⁸⁴Reorder ⁸⁵652 Stud ~ Reorder ~ SP550307 Will Service Both Sides. ⁹⁶6 Stud ~ Deplete Inventory.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CADILLAC - SUV, Truck - Escalade, Escalade ESV, Escalade EXT (cont.)**TRANSFER CASE****Input Shaft**

2008-2003	(Borg Warner)	
Ndle Bearing (Pilot)	.....	BK3026
Ball Bearing	.....	211TB
Ball Bearing	.....	109TB[2]
2002-1999	(New Process 149)	
Ndle Bearing (Rr)	.....	B5020[2]
Ball Bearing (Rr)	.....	N5210KLB
Ball Bearing (Frt)	.....	110CB
Seal	.....	472636
2000-1999	(New Process 243)	
Seal (O.E.)	.....	3173
Ball Bearing	.....	110L
Seal (Opt)	.....	710928
Repair Sleeve	.....	KWK99193
Ndle Bearing (Pilot)	.....	FC66561

Front Output Shaft

2008-2003	(Borg Warner)	
Ball Bearing	.....	109TB[2]
Ball Bearing	.....	211TB
2002-1999	(New Process 149)	
Seal	.....	710495 ²⁵
Ball Bearing	.....	110CB
2000-1999	(New Process 243)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	J2416

Rear Output Shaft

2008-2003	(Borg Warner)	
Seal	.....	4503N
Ball Bearing	.....	209LO
2002-1999	(New Process 149)	
Seal	.....	710496
Ndle Bearing (Pilot)	.....	B5020[2]
Ball Bearing	.....	N5210KLB
2000-1999	(New Process 243)	
Seal	.....	4333N
Ball Bearing	.....	207
Ndle Bearing (Pilot)	.....	B5020

Oil Pump Housing

2000-1999	(New Process 243)	
Seal	.....	341022
Repair Sleeve	.....	KWK99225

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1999	(4L60, 4L60E, 4L65E)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174
2002-1999	(4L80E)	
Seal	.....	4598
Repair Sleeve	.....	KWK99199

4-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2006-2002	(4L60E, 4L80E)	
Seal	.....	4934
Seal Kit	.....	5200 ⁶⁴
2002-1999	(4L80E)(Booted)	
Seal	.....	4333N
2002-1999	(4L80E)(Exc. Booted)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴
2000-1999	(4L60E, 4L80E)	
Seal	.....	4934

Selector Shaft Seal/Man. Shaft

2008-1999		
Seal	.....	8792S

Output Shaft

2009-2007	(6L80)	
Seal	.....	710533
2006-1999	(4L80E)	
Seal	.....	4934

A/C COMPRESSOR

2002-1999	(Frigidaire R4)	
Ball Bearing (Frt Head)	.....	S128[2]
2002-1999	(Frigidaire R4)	
Ball Bearing	.....	907257[2]

ALTERNATOR

2000-1999		
Ball Bearing (Rear End)	.....	100CCAB

POWER STEERING**Pump Shaft**

2002-1999		
Seal	.....	7013S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2009-2007	6.2L Gas	
Seal Viton	.....	100470
Repair Sleeve	.....	KWK99210
2006-2002	325/5.3L, 364/6.0L	
Seal Viton	.....	100470
2000-1999	350/5.7L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2007		
Seal Viton	.....	4359V
2009-2002	325/5.3L, 364/6.0L	
Seal	.....	100085
2000-1999	350/5.7L	
Seal Viton	.....	4359V

²⁵New Item, Check For Availability⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CADILLAC - SUV, Truck - SRX**FRONT WHEEL****RWD**

2009-2004

Hub Unit Bearing HA590077[2]

AWD

2009-2004

Hub Unit Bearing HA590078[2]

REAR WHEEL**RWD**

2009-2004

Hub Unit Bearing HA590079[2]

AWD

2009-2004

Hub Unit Bearing HA590079[2]

TRANSFER CASE**Input Shaft**

2005-2004

Ball Bearing 110CB

Front Output Shaft

2009-2004

Seal 714503

Ball Bearing (Frt) 109TB

Ball Bearing (Rr) 206WB

Rear Output Shaft

2005-2004 (Borg Warner)

Seal 4503N

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2004 (5L40E)

Seal 8792S

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2004 4.6L (DOHC)

Seal Viton 710262

CHEVROLET - FRONT DRIVE - Aveo, Aveo5**FRONT WHEEL****FWD**

2008-2004

Set SET35[2]

REAR WHEEL**FWD**

2008-2004

Ball Bearing WB000022[2]²⁵**CRANKSHAFT FRONT SEAL****4 Cylinder**

2009-2004 1.6 L

Seal 223606

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2004 1.6L

Seal Viton 228008

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - FRONT DRIVE - Beretta, Cavalier, Corsica**FRONT WHEEL****FWD****2005-1997**Hub Unit Bearing 513017K[2]⁶¹**1996-1990**Hub Unit Bearing 513017K[2]⁶¹Seal Kit 5697[2]¹²**REAR WHEEL****FWD****2005-2004 (ABS)**

Hub Unit Bearing 512001[2]

2005-2004 (Non-ABS)

Hub Unit Bearing 513012[2]

2003-1992

Hub Unit Bearing 512001[2]

1991-1990

Hub Unit Bearing 513012[2]

CLUTCH - 4 CYLINDER**Release Bearing****2001-1995**

Hyd. Bearing Assy 619006

1994-1993 138/2.3L

Hyd. Bearing Assy 619005

1994-1990 (Isuzu)

Bearing Assy 614108

1992-1990 (Muncie)

Bearing Assy 614069

CLUTCH - 6 CYLINDER**Release Bearing****1996-1993 189/3.1L**

Hyd. Bearing Assy 619005

1992-1990 (Muncie)

Bearing Assy 614069

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter****2002-1990 (THM125C)**

Seal 4072N

Repair Sleeve KWK99172

Output Shaft**2000-1990**

Seal (LH) 3543[2]

Repair Sleeve (LH) KWK99139

Seal Kit (LH) 5690¹⁸

Seal (RH) 3543

Repair Sleeve (RH) KWK99139

Seal Kit (RH) 5690¹⁸**Manual Shaft****2002-1990**

Seal 8792S

4-SPEED AUTOMATIC TRANSAXLE**Differential****2005-2000 Cavalier**

Cone/Cup LM501349-LM501310[2]

Torque Converter / Frt Pump**2005-1994 (4T40E, 4T45E, 4T60E)**

Seal 4072N

Repair Sleeve KWK99172

Output Shaft**2005-1995 (4T40E)**Seal SL260001[2]²⁵**1996-1994 (4T60E)**

Seal (LH) 710096

Repair Sleeve (RH) KWK99139

Seal (RH) 3543

Repair Sleeve (RH) KWK99139

Manual Shaft**2005-1994**

Seal 8792S

4-SPEED MANUAL TRANSAXLE**Output Shaft****2003-2000**

Seal (LH) 100165

Seal (RH) 3543

5-SPEED MANUAL TRANSAXLE**Differential****2005-2000 (Opel)**

Set SET45

Cone/Cup LM501349-LM501310⁵⁵**1999-1990 (Isuzu)**

Bearing Assy 32008XM[2]

1994-1990 (Exc. Isuzu)

Set SET11[2]

Input Shaft**2005-2000 (Opel)**

Seal 222835

Repair Sleeve KWK99111

1999-1995 (Isuzu)

Seal (Frt) 222835

Ball Bearing (Frt) 306VVL[2]

Repair Sleeve KWK99111

1994-1990 (Isuzu)

Seal (Frt) 222835

Bearing Assy (Frt) 32206M[2]

Repair Sleeve KWK99111

Bearing Assy (Rr) 30306M[2]

1992-1990 (Exc. Isuzu)

Ball Bearing (Frt) 305DD[2]

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.¹⁸Opt. = Brg, Slv, Hardware, Hsg.²⁵New Item,

Check For Availability

⁵⁵Opt. Set Components⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - FRONT DRIVE - Beretta, Cavalier, Corsica (cont.)

5-SPEED MANUAL TRANSAXLE

Output Shaft

2005-2000

Seal	3543
Repair Sleeve	KWK99138
Ball Bearing	306VVL

1999-1990

Seal (LH)	3543
Set (LH)	SET5[2]
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Bearing Assy (RH)	32206M[2]
Repair Sleeve (RH)	KWK99139

Selector Shaft Seal/Man. Shaft

1999-1990 (Isuzu)

Seal	710243
Repair Sleeve	KWK99058

ALTERNATOR

1990

Ball Bearing (Drive End)	203FF

1990

Ball Bearing (Rear End)	MNJ471S

POWER STEERING

Pump Shaft

2002-1992

Seal	7013S

1991-1990

Seal	221925

CAMSHAFT SEAL

4 Cylinder

2002-1996 146/2.4L

Seal Viton	713771
Repair Sleeve	KWK99139

1995-1990 138/2.3L (DOHC)

Seal Viton	713771
Repair Sleeve	KWK99139

CRANKSHAFT FRONT SEAL

4 Cylinder

2002-1996 2.4L (DOHC)

Seal Viton	320259
Repair Sleeve	KWK99199

2002-1992 2.2L (OHV)

Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

1995-1990 2.3L (DOHC)

Seal Viton	320259
Repair Sleeve	KWK99199

6 Cylinder

1996-1990 189/3.1L

Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

CRANKSHAFT REAR SEAL

4 Cylinder

2005-2002 134/2.2L (DOHC)

Seal Viton	710237

2002-1996 2.4L (DOHC)

Seal	40375

2002-1990 134/2.2L (OHV)

Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

1995-1990 138/2.3L (DOHC)

Seal	40375

6 Cylinder

1996-1990 189/3.1L

Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - FRONT DRIVE - Celebrity**FRONT WHEEL****FWD**

1990 (JA2, JA3, JA8, Brks.)
 Hub Unit Bearing 513016K[2]⁶¹
 Seal Kit 5698[2]¹²

REAR WHEEL**FWD**

1990
 Hub Unit Bearing 513018[2]

CLUTCH**Release Bearing**

1990 (Muncie)
 Bearing Assy 614069
 1990 (Isuzu)
 Bearing Assy 614108

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1990
 Seal 4072N

Output Shaft

1990 (THM125)
 Seal 3543[2]
 Repair Sleeve KWK99139[2]

Manual Shaft

1990 (THM125)
 Seal 8792S
 Repair Sleeve KWK99049

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1990
 Seal 4072N

Output Shaft

1990
 Seal (LH) 710096
 Repair Sleeve (LH) KWK99139
 Seal (RH) 3543
 Repair Sleeve (RH) KWK99139

Manual Shaft

1990
 Seal 8792S
 Repair Sleeve KWK99049

ALTERNATOR

1990
 Ball Bearing (Drive End) 203FF
 1990
 Ball Bearing (Rear End) 100CCAB

CRANKSHAFT FRONT SEAL**4 Cylinder**

1990 151/2.5L
 Seal 9845
 Repair Sleeve KWK99176

6 Cylinder

1990 189/3.1L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**4 Cylinder**

1990 151/2.5L
 Seal 3698

6 Cylinder

1990 191/3.1L
 Seal 4307V
 Seal PTFE H/D 5273
 Repair Sleeve KWK99298

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET - FRONT DRIVE - Cobalt, Optra

FRONT WHEEL

FWD

2009-2005 (ABS)(Non-Sport Suspension)
Hub Unit Bearing HA590068[2]
2009-2005 (Non-ABS)(Non-Sport Suspension)
Hub Unit Bearing HA590069[2]
2009-2005 (Sport Suspension)
Hub Unit Bearing HA590086[2]

REAR WHEEL

FWD

2009-2005 (ABS)(Drum)
Hub Unit Bearing HA590066[2]
2009-2005 (Disc)
Hub Unit Bearing HA590088[2]
2009-2005 (Non-ABS)(Drum)
Hub Unit Bearing HA590067[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Convertor / Frt Pump

2008-2005 (4T45E)
Seal 4072N
Repair Sleeve KWK99172

Output Shaft

2007-2005 (4T45E)
Seal SL260001[2]²⁵

Manual Shaft

2008-2005
Seal 8792S

CRANKSHAFT FRONT SEAL

4 Cylinder

2006-2005 2.0L (DOHC)
Seal 9845
Repair Sleeve KWK99176
2006-2005 2.2L (DOHC)
Seal 9845
Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL

4 Cylinder

2009-2005 2.0L (DOHC)
Seal Viton 710237
2009-2005 2.2L, 2.4L
Seal Viton 710237

CHEVROLET - FRONT DRIVE - Impala, Lumina, Monte Carlo

FRONT WHEEL

FWD

2009-2006 (ABS)
Hub Unit Bearing HA590093[2]⁴⁰
2009-2006 (Non-ABS)
Hub Unit Bearing HA590085[2]⁸⁴
2005-2002 Impala, Monte Carlo (ABS)
Hub Unit Bearing 513179[2]⁷³
2005-2000 Impala, Monte Carlo (Non-ABS)
Hub Unit Bearing 513160[2]⁸³
Hub Unit Bearing HA590085[2]⁸⁴
2001-2000 Impala, Monte Carlo (ABS)
Hub Unit Bearing 513121[2]⁷²
2001-1990 Lumina
Hub Unit Bearing
(ABS, Non-ABS) 513044[2]
1999-1995 Monte Carlo
Hub Unit Bearing
(ABS, Non-ABS) 513044[2]

REAR WHEEL

FWD

2009-2006 (ABS)
Hub Unit Bearing HA590092[2]
2007-2006 (Non-ABS)
Hub Unit Bearing HA590074[2]
2005-2000 Impala, Monte Carlo (ABS)
Hub Unit Bearing 512237[2]⁸⁴
2005-2000 Impala, Monte Carlo (Non-ABS)
Hub Unit Bearing 512221[2]
2002-2000 Impala (Drum Brks.)
Hub Unit Bearing 513018[2]
2001-2000 Lumina (ABS)
Hub Unit Bearing 512151[2]
2001-2000 Lumina (Non-ABS)
Hub Unit Bearing 513018[2]
1999-1997 (ABS)
Hub Unit Bearing 512151[2]
1999-1990 (Non-ABS)
Hub Unit Bearing 513018[2]
1996-1992 (ABS)
Hub Unit Bearing 512004[2]

²⁵New Item, Check For Availability ⁴⁰5 Stud. ⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.

⁷³Plastic Wire Clip. ⁸³Deplete Inventory ⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - FRONT DRIVE - Impala, Lumina, Monte Carlo (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Torque Converter**

1993-1990

Seal 4072N[2]
 Repair Sleeve KWK99062

Output Shaft

1993-1990

Seal 3543[2]
 Repair Sleeve KWK99139[2]

Manual Shaft

1993-1990

Seal 8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2008-1990 (4T60E, 4T65E)

Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2008-1997 (4T65 E)

Seal (LH) (Yellow) 100165
 Repair Sleeve (LH) KWK99139
 Seal (RH) (Green) 3543
 Repair Sleeve (RH) KWK99139

1999-1990 (4T60E)

Seal (LH) 710096
 Repair Sleeve (LH) KWK99139
 Seal (RH) 3543
 Repair Sleeve (RH) KWK99139

Manual Shaft

2008-1990

Seal 8792S

5-SPEED MANUAL TRANSAXLE**Differential**

1992-1991

Set SET11[2]

Input Shaft

2003-2000

Seal 222835
 Repair Sleeve KWK99111

1992-1991

Ball Bearing 305DD[2]

5-SPEED MANUAL TRANSAXLE**Output Shaft**

1992-1991

Seal (LH) 2003N[2]
 Set (LH) SET5[2]
 Repair Sleeve (LH) KWK99146
 Seal (RH) 2003N[2]
 Cone/Cup (RH) LM503349A-LM503310[2]
 Repair Sleeve (RH) KWK99146

Selector Shaft Seal/Man. Shaft

1992-1991

Seal 3667[2]

A/C COMPRESSOR

2002-1990 (Harrison V5)

Ball Bearing 907257[2]

ALTERNATOR

1998

Ball Bearing (Rear End) 100CCAB

1992-1991

Ball Bearing (Drive End) 203FF

POWER STEERING**Pump Shaft**

2002-1992

Seal 7013S

1991-1990

Ball Bearing 203FF[2]

CAMSHAFT SEAL**6 Cylinder**

1997-1991 201/3.4L (DOHC)

Seal Viton 474241V
 Repair Sleeve KWK99166

CRANKSHAFT FRONT SEAL**4 Cylinder**

1993 134/2.2L

Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

1992-1990 151/2.5L

Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

6 Cylinder

2009-2006 3.5L

Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

2006 3.9L

Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - FRONT DRIVE - Impala, Lumina, Monte Carlo (cont.)

CRANKSHAFT FRONT SEAL (cont.)

6 Cylinder (cont.)

2005-2000	201/3.4L OHV	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176
2005-1998	3800/3.8L	
Seal Viton		710162
Repair Sleeve		KWK99193
2001-1990	191/3.1L	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176
1997-1991	201/3.4L (DOHC)	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176

8 Cylinder

2009-2006	5.3L	
Seal Viton		100470

CRANKSHAFT REAR SEAL

4 Cylinder

1993	134/2.2L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298
1992-1990	151/2.5L	
Seal		3698

6 Cylinder

2009-2006	3.5L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298
2009-2006	3.9L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298
2005-2000	201/3.4L OHV	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

CRANKSHAFT REAR SEAL (cont.)

6 Cylinder (cont.)

2005-1998	3.8L	
Seal Viton		320691
Repair Sleeve		KWK99328
2001-1990	191/3.1L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298
1997-1991	201/3.4L (DOHC)	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

8 Cylinder

2009-2006	5.3L	
Seal		100085

CHEVROLET - FRONT DRIVE - Malibu, Fleet Classic (Fleet Vehicle)

FRONT WHEEL

FWD

2009-2004	Malibu	
Hub Unit Bearing		
(ABS)		HA590070[2]
Hub Unit Bearing		
(Non-ABS)		HA590071[2]
2005-2004	Classic	
Hub Unit Bearing		
(ABS)		513137[2]
2003-1997		
Hub Unit Bearing		
(ABS)		513137[2]
Hub Unit Bearing		

(Non-ABS)	513160[2] ⁸³
Hub Unit Bearing	
(Non-ABS)	HA590085[2] ⁸⁴

REAR WHEEL

FWD

2009-2008		
Hub Unit Bearing		HA590080[2]
2007-2004	(Disc ~ Rear Wheel)	
Hub Unit Bearing		HA590080[2]
2007-2004	(Drum ~ Rear Wheel)	
Hub Unit Bearing		
(ABS)		HA590080[2]
Hub Unit Bearing		
(Non-ABS)		HA590081[2]

⁸³Deplete Inventory

⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - FRONT DRIVE - Malibu, Fleet Classic (Fleet Vehicle) (cont.)**REAR WHEEL (cont.)****FWD (cont.)**

2005-2002	(N Body Code)	
Hub Unit Bearing	.....	512152[2]
2001-1997		
Hub Unit Bearing	.....	512003[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2008-1997	(4T40E, 4T45E, 4T65E)	
Seal	.....	4072N
Repair Sleeve	.....	KWK99172

Output Shaft

2008-2006	(4T65 E)	
Seal (LH) (Yellow)	.....	100165
Repair Sleeve (LH)	.....	KWK99139
Seal (RH) (Green)	.....	3543
Repair Sleeve (RH)	.....	KWK99139
2006-1997	(4T40E, 4T45E)	
Seal	.....	SL260001[2] ²⁵

Manual Shaft

2008-1997		
Seal	.....	8792S
Repair Sleeve	.....	KWK99049

A/C COMPRESSOR

2002-1997	(Harrison V5)	
Ball Bearing	.....	907257[2]

POWER STEERING**Pump Shaft**

2002-1997		
Seal	.....	7013S

CRANKSHAFT FRONT SEAL**4 Cylinder**

1999-1997	146/2.4L	
Seal Viton	.....	320259
Repair Sleeve	.....	KWK99199

6 Cylinder

2008-2004	213/3.5L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176
2007-2006	237/3.9L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176
2003-1997	191/3.1L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2004	2.2L, 2.4L	
Seal Viton	.....	710237
1999-1997	146/2.4L	
Seal	.....	40375

6 Cylinder

2008-2004	213/3.5L	
Seal	.....	4307V
Seal PTFE H/D	.....	5273
Repair Sleeve	.....	KWK99298
2006	237/3.9L	
Seal	.....	4307V
Seal PTFE H/D	.....	5273
Repair Sleeve	.....	KWK99298
2003-1997	191/3.1L	
Seal	.....	4307V
Seal PTFE H/D	.....	5273
Repair Sleeve	.....	KWK99298

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - REAR DRIVE - Caprice**FRONT WHEEL****RWD**

1993-1990	
Seal (Inner)	8871[2]
Set (Inner)	SET6[2]
Set (Outer)	SET3[2]

REAR WHEEL**RWD**

1993-1990	(Chevrolet C Axle)(7.5", 7.75", 8.5" R.G.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
1993-1990	(Police, Taxi)(Wagons)(Pontiac P Axle)(Limited Slip Differential)(8.5", 8.75", 8.875" R.G.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹

REAR AXLE**Differential Rebuild Kit**

1993-1990	(7.5" R.G., 7.625" R.G.)
Kit	DRK320

Differential

1993-1990	(7.5" R.G., 7.625" R.G.)
Cone/Cup	LM501349-LM501314[2]

Pinion

1993-1990	(7.5" R.G., 7.625" R.G.)
Seal	8610
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
1993-1990	(8.5", 8.75", 8.875" R.G.)
Seal	2043
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1991-1990	(THM200)
Seal	3227[2]
Repair Sleeve	KWK99174
1990	(HM3L80)
Seal	6712NA[2]

Rear Seal/Ext. Housing

1991-1990	(THM200, 350)
Seal	9613S[2]
Seal Kit	5200 ⁶⁴
Repair Sleeve	KWK99149

3-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

1991-1990	(THM200)
Seal	8792S[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993-1990	(4L60, 4L60E, 4L65E)
Seal	3227[2]
1993-1990	(THM700 R4)
Seal	3227[2]

Rear Seal/Ext. Housing

1993-1990	(4L60, 4L60E, 4L65E)
Seal	9613S[2]
1993-1990	(THM700 R4)
Seal	9613S[2]

Selector Shaft Seal/Man. Shaft

1993-1990	(4L60, 4L60E, 4L65E)
Seal	8792S[2]
1993-1990	(THM700 R4)
Seal	8792S[2]

ALTERNATOR

1993-1990	(Delco 120, 124 Amp.)
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

CRANKSHAFT FRONT SEAL**6 Cylinder**

1993-1990	262/4.3L
Seal	9845
Repair Sleeve	KWK99176

8 Cylinder

1993-1990	350/5.7L
Seal	9845
Repair Sleeve	KWK99176
1993-1990	305/5.0L
Seal	9845
Repair Sleeve	KWK99176
1990	307/5.0L
Seal Viton	320259
Repair Sleeve	KWK99199

CRANKSHAFT REAR SEAL**6 Cylinder**

1993-1990	262/4.3L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364

8 Cylinder

1993-1990	305/5.0L
Seal	5092
1993-1990	350/5.7L code (L), (V)
Seal	5092

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - REAR DRIVE - Caprice (cont.)**CRANKSHAFT REAR SEAL (cont.)****8 Cylinder (cont.)**

1990 307/5.0L

Seal 5092

CHEVROLET - REAR DRIVE - Camaro, IROC, Z-28**FRONT WHEEL****RWD****2002-1993**

Hub Unit Bearing 513090[2]

1992-1990 (Exc. IROC, Z28)

Seal (Inner) 8871[2]

Set (Inner) SET6[2]

Set (Outer) SET34[2]

1992-1990 (IROC, Z28)

Seal (Inner) 8871[2]

Set (Inner) SET6[2]

Set (Outer) SET3[2]

REAR WHEEL**RWD****2002-1991** (7.5" R.G., 7.625" R.G.)

Seal 8660S[2]

Cylindrical Bearing 5707[2]

Bearing & Seal Kit TRP1563TAV[2]⁹³**1990** (7.75" R.G.)

Seal (LH) 224255[2]

Set (LH) SET9[2]

Seal (RH) 710179[2]

Set (RH) SET9[2]

1990 (Exc. 7.75" R.G.)

Seal 8660S[2]

Cylindrical Bearing 5707[2]

Bearing & Seal Kit TRP1563TAV[2]⁹³**REAR AXLE****Differential Rebuild Kit****2002-1999** (10 Bolt Hsg. Cover)(7.5" ,
7.625" R.G.)

Kit DRK320C

1998-1990 (10 Bolt Hsg. Cover)(7.5" ,
7.625" R.G.)

Kit DRK320

1993-1990 (7.75" R.G.)

Kit DRK326

Differential**2002-1990** (7.5", 7.625", 8.5" R.G.)

Cone/Cup LM501349-LM501314[2]

1990 (7.75" R.G.)

Cone/Cup LM102949-LM102911[2]

REAR AXLE**Pinion****2002-1999** (7.5" R.G., 7.625" R.G.)

Seal 8610

Seal (2nd Design) 710474²⁵

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

1998-1990 (7.5" R.G., 7.625" R.G.)

Seal 8610

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

1990 (7.75" R.G.)

Seal 7457N

Cone/Cup (Inner) HM89446-HM89410

Cone/Cup (Outer) M86649-M86610

3-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft****1992-1990**

Seal 8792S[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter****2002-1990** (THM700)(4L60 E)

Seal 3227[2]

Repair Sleeve KWK99174

Rear Seal/Ext. Housing**2002-1990** (THM700)(4L60 E)

Seal 9613S[2]

Seal Kit 5200⁶⁴**Selector Shaft Seal/Man. Shaft****2002-1990**

Seal 8792S

CLUTCH**Pilot Bearing****2002-1993** (8 Cyl.)

Ball Bearing 57080

2002-1990 (6 Cyl.)

Bushing H/D PB652HD

1992 8 Cyl. 5.0L LB9

Ball Bearing 57080

1992 8 Cyl. Exc. 5.0L LB9

Bushing H/D PB656HD

1991-1990 (8 Cyl.)

Bushing H/D PB656HD

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
Bushing Kit ⁹³Non-Traction Control.²⁵New Item, Check For Availability⁶⁴Seal &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - REAR DRIVE - Camaro, IROC, Z-28 (cont.)

CLUTCH - 6 CYLINDER

Release Bearing

2002-1995	3800/3.8L	
Bearing Assy		614174
1995-1990	(w/o 3800/3.8L)	
Bearing Assy		614083

CLUTCH - 8 CYLINDER

Release Bearing

2002-1998		
Bearing Assy		614174
1997-1993		
Bearing Assy		614116
1992-1990		
Bearing Assy		614083

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1990	(Borg Warner /Tremec-T5)	
Kit		TRK5W

Front Input Shaft

2002-1990	(Borg Warner /Tremec-T5)	
Seal		7412S
Set		SET5
Repair Sleeve		KWK99125

Front Countershaft

2002-1990	(Borg Warner /Tremec-T5)	
Cone/Cup (Frt)		LM67048-LM67010BCE[2]
Set (Rr)		SET6[2]
Ndle Bearing Thrust		NTA1423[2]

Mainshaft Pilot

2002-1990	(Borg Warner /Tremec-T5)	
Ndle Bearing		QBR23549[15]

Rear Output Shaft

2002-1990	(Borg Warner /Tremec-T5)	
Seal		9613S[2]
Cone/Cup		25877-25821[2]
Seal Kit		5200 ⁶⁴

6-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1993	(Borg Warner /Tremec-T56)	
Kit		TRK56

Front Input Shaft

2002-1993	(Borg Warner /Tremec-T56)	
Seal		7412S
Cone/Cup		M88048-M88010[2]
Repair Sleeve		KWK99125

6-SPEED MANUAL TRANSMISSION

Center Counter Shaft

2002-1993	(Borg Warner /Tremec-T56)	
Set (Frt)		SET5[2]
Bearing Assy (Rr)		32008XM[2]

Rear Output Shaft

2002-1993	(Borg Warner /Tremec-T56)	
Seal		9613S
Set		SET16[2]
Seal Kit		5200 ⁶⁴

A/C COMPRESSOR

2002-1990		
Ball Bearing		907257[2]
1995-1990		
Ball Bearing (Frt Head)		S128[2]

ALTERNATOR

2001-1990		
Ball Bearing (Rear End)		100CCAB

POWER STEERING

Pump Shaft

2002-1990		
Seal		7013S[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

2002-1995	3800/3.8L	
Seal Viton		710162
Repair Sleeve		KWK99193
1995-1993	201/3.4L	
Seal		9845
Repair Sleeve		KWK99176
1992-1990	191/3.1L	
Seal		9845
Repair Sleeve		KWK99176

8 Cylinder

2002-1998	350/5.7L	
Seal Viton		100470
1997-1990	350/5.7L	
Seal		9845
Repair Sleeve		KWK99176
1992-1990	305/5.0L	
Seal		9845
Repair Sleeve		KWK99176

CRANKSHAFT REAR SEAL

6 Cylinder

2002-1995	3800/3.8L	
Seal Viton		320691
Repair Sleeve		KWK99328
1995-1993	201/3.4L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - REAR DRIVE - Camaro, IROC, Z-28 (cont.)**CRANKSHAFT REAR SEAL (cont.)****6 Cylinder (cont.)**

1992-1990 191/3.1L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

8 Cylinder

2002-1998 346/5.7L (GEN III)

Seal 100085

1997-1990 350/5.7L

Seal Viton 4359V

Seal PTFE H/D 5274

Repair Sleeve KWK99364

1992-1990 305/5.0L

Seal Viton 4359V

Seal PTFE H/D 5274

Repair Sleeve KWK99364

CHEVROLET - REAR DRIVE - Caprice, Impala**FRONT WHEEL****RWD**

1996-1994

Seal (Inner) 4739[2]

Set (Inner) SET6[2]

Set (Outer) SET3[2]

REAR WHEEL**RWD**

1996-1994 (Sedan)

Seal 8660S[2]

Cylindrical Bearing 5707[2]

Bearing & Seal Kit TRP1563TAV[2]¹⁹

1996-1994 (Wagon)

Seal 8835S[2]

Cylindrical Bearing 6408[2]

Bearing & Seal Kit TRP1559TV[2]¹⁹**REAR AXLE****Differential Rebuild Kit**

1996-1994 (7.625" R.G.)

Kit DRK320

Differential

1996-1994

Cone/Cup LM501349-LM501314[2]

Pinion

1996-1994 (7.5" R.G., 7.625" R.G.)

Seal 8610

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

REAR AXLE (cont.)**Pinion (cont.)**

1996-1994 (8.5", 8.75", 8.875" R.G.)

Seal 2043

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1996-1994

Seal 3227

Repair Sleeve KWK99174

Rear Seal/Ext. Housing

1996-1994

Seal 9613S

Repair Sleeve KWK99149

Selector Shaft Seal/Man. Shaft

1996-1994

Seal 8792S

Repair Sleeve KWK99050

CRANKSHAFT FRONT SEAL**8 Cylinder**

1996-1994 265/4.3L

Seal 9845

Repair Sleeve KWK99176

1996-1994 350/5.7L

Seal 9845

Repair Sleeve KWK99176

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - REAR DRIVE - Caprice, Impala (cont.)**CRANKSHAFT REAR SEAL****8 Cylinder**

1996-1994	265/4.3L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364
1996-1994	350/5.7L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364

CHEVROLET - REAR DRIVE - Corvette**FRONT WHEEL****RWD**

2008-1997	
Hub Unit Bearing	513139[2]
1996-1991	
Hub Unit Bearing	513085[2]
1990	
Hub Unit Bearing	513019[2]

REAR WHEEL**RWD**

2008-1997	
Hub Unit Bearing	512153[2]
1996-1990	
Hub Unit Bearing	513020[2]

REAR AXLE**Differential Rebuild Kit**

1999-1990	(Dana/Spicer 36ICA Axle)
Kit	DRK338
1999-1990	(Dana/Spicer 44ICA Axle)
Kit	DRK339A

Differential

2005-1997	
Cone/Cup	387A-382A[2]
1996-1990	(A/T)
Seal	3543[2]
Cone/Cup	LM501349-LM501314[2]
Repair Sleeve	KWK99139[2]
1996-1990	(M/T)
Seal Viton	473227V[2]
Set	SET36[2]
Repair Sleeve	KWK99150

Pinion

2002-1997	
Cone/Cup (Inner)	NP201062-NP101912
Cone/Cup (Outer)	NP568415-NP908986

REAR AXLE (cont.)**Pinion (cont.)**

1996-1990	(A/T)
Seal Viton	5778V
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	M86647-M86610
Repair Sleeve	KWK99155
1996-1990	(M/T)
Seal	9316
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99187

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1990	(THM700)(4L60 E)
Seal	3227
Repair Sleeve	KWK99174

Rear Seal/Ext. Housing

2006-1990	(THM700)(4L60 E)
Seal	9613S
Seal Kit	5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2005-1990	(THM700)(4L60 E)
Seal	8792S

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2008-2006	(6L80)
Seal	710533

6-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2006	(6L80)
Seal	8792S

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET - REAR DRIVE - Corvette (cont.)**CLUTCH****Pilot Bearing**

2001-1990
Ball Bearing 57080

CLUTCH - 8 CYLINDER**Release Bearing**

1996-1994
Bearing Assy 614166 ¹⁶
1993-1990
Bearing Assy 614117

6-SPEED MANUAL TRANSMISSION**Front Input Shaft Pocket**

2003-1997 (Borg Warner /Tremec-T56)
Set SET16[2]

Main Shaft

2003-1997 (Borg Warner /Tremec-T56)
Seal (Frt) 7412S
Cone/Cup (Frt) M88048-M88010[2]
Cone/Cup (Rr) 25572-25520[2]

Countershaft

2003-1997 (Borg Warner /Tremec-T56)
Set (Frt) SET5[2]
Bearing Assy (Middle) 32008XM[2]

Rear Output Shaft

2003-1997 (Borg Warner /Tremec-T56)
Seal 9613S
Set SET16[2]
Seal Kit 5200 ⁶⁴
1996-1990 (ZF S6-40)
Seal 9613S[2]
Seal Kit 5200 ⁶⁴

A/C COMPRESSOR

2002-1990
Ball Bearing 907257[2]
2001-1990
Ball Bearing (Frt Head) S128

ALTERNATOR

1991-1990
Ball Bearing (Rear End) 100CCAB
1991-1990
Ball Bearing (Drive End) 203FF

POWER STEERING**Pitman Shaft**

1992-1990 (800 Gear)(4 bolt side cover)
Seal Kit PSK1 ²⁴

POWER STEERING**Pump Shaft**

2001-1990
Seal 221925
Ball Bearing 203FF[2]

Worm Shaft

1992-1990
Seal 222025

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008-2005 364/6.0L, 376/6.2L, 427/7.0L
Seal Viton 100470
Repair Sleeve KWK99210
2004-1997 350/5.7L
Seal Viton 100470
Repair Sleeve KWK99210
1996-1990 350/5.7L (OHV) (P)
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
1995-1990 350/5.7L (DOHC) (ZR-1)
Seal 710173
Repair Sleeve KWK99196

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-1997 5.7L, 6.0L, 6.2L, 7.0L
Seal 100085
1996-1990 350/5.7L
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364

¹⁶Obsolete²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately⁶⁴Seal & Bushing Kit

CHEVROLET Import - (See also GEO 1990 through 1997) - Metro, Prizm, Sprint**FRONT WHEEL****FWD**

2002-1998	Prizm (ABS)	
Seal (Inner)	.....	1993[2]
Ball Bearing (Inner)	.....	510007[2]
Seal (Outer)	.....	4898[2]
2002-1998	Prizm (Non-ABS)	
Seal (Inner)	.....	1993[2]
Ball Bearing (Inner)	.....	510007[2]
Seal (Outer)	.....	4898[2]
Hub Unit Bearing	.....	518507[2] ⁰⁶
Seal Kit	.....	5696[2] ¹²
2001-1998	Metro	
Seal (Inner)	.....	710394[2]
Ball Bearing (Inner)	.....	510001[2]
Seal (Outer)	.....	710175[2]

REAR WHEEL**FWD**

2002-1998	Prizm (ABS)	
Hub Unit Bearing	.....	512184[2]
2002-1998	Prizm (Non-ABS)	
Hub Unit Bearing	.....	512018[2]
2001-1998	Metro (ABS)	
Hub Unit Bearing	.....	512204[2]
2001-1998	Metro (Non-ABS)	
Ball Bearing (Inner)	.....	205F[2]
Ball Bearing (Outer)	.....	204F[2]

CLUTCH**Pilot Bearing**

2001-1998	1324cc/1.3L	
Ball Bearing	.....	200CC
2000-1990	3 Cyl.1.0	
Ball Bearing	.....	200CC

Release Bearing

2002-1998	Prizm	
Bearing Assy	.....	614152
2000-1998	Metro	
Bearing Assy	.....	614082

3-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1998	(Aisin A210)	
Ball Bearing	.....	207[2]

Torque Converter

2001-1998	(Aisin A210)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2001-1998	(Aisin A210)	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]

Manual Shaft

2001-1998	(Aisin A210)	
Seal	.....	710116

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1998	(Aisin)	
Seal	.....	710416[2]

Torque Converter / Frt Pump

2002-1998	(Aisin)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Output Shaft

2002-1998	(Aisin)	
Seal (LH)	.....	710109
Seal (RH)	.....	710110

Manual Shaft

2002-1998	(Aisin)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

2001-1998	Suzuki MX1	
Ball Bearing (LH)	.....	207S
Ball Bearing (RH)	.....	107WB

Input Shaft

2002-1998	(Aisin)	
Seal	.....	320603
Ball Bearing	.....	101SS[2]
Repair Sleeve	.....	KWK99098
2001-1998	(Suzuki MX1)	
Bearing Assy (LH)	.....	32204[2]
Seal (RH)	.....	222030
Bearing Assy (RH)	.....	32004WB[2]
Repair Sleeve	.....	KWK99098

Output Shaft

2002-1998	(Aisin)	
Seal (LH)	.....	710109
Seal (RH)	.....	710110
2001-1998	(Suzuki MX1)	
Seal (LH)	.....	223552
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	223535
Repair Sleeve (RH)	.....	KWK99139

⁰⁶Kit = 2 Seals, Studded Spindle, Bearing, Plate¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET Import - (See also GEO 1990 through 1997) - Metro, Prizm, Sprint (cont.)**5-SPEED MANUAL TRANSAXLE****Selector Shaft Seal/Man. Shaft**

2002-1990 (Aisin)
 Seal 1015N
 Repair Sleeve KWK99082

POWER STEERING**Pitman Shaft**

2002-1998 Prizm
 Seal 221510

Pump Shaft

2002-1998 Prizm
 Seal 710412

Worm Shaft

2002-1998 Prizm
 Seal 222630

CAMSHAFT SEAL**3 Cylinder**

2000-1998 993cc/1.0L
 Seal 710310
 Repair Sleeve KWK99128

4 Cylinder

2001-1998 1324cc/1.3L
 Seal 710310
 Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**3 Cylinder**

2000-1998 993cc/1.0L
 Seal 710310
 Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1998 1.8L (DOHC)
 Seal 223800
 2001-1998 1324cc/1.3L
 Seal 710310
 Repair Sleeve KWK99128

CRANKSHAFT REAR SEAL**3 Cylinder**

2000-1998 993cc/1.0L
 Seal 710334

4 Cylinder

2002-1998 1.8L (DOHC)
 Seal 3698
 2001-1998 1324cc/1.3L
 Seal 710334

CHEVROLET - Import SUV - Tracker**FRONT WHEEL****RWD**

2004-2001
 Hub Unit Bearing 513193[2]
 2000-1998
 Seal (Inner) 710240[2]
 Bearing Assy (Inner) 517009[2]
 Seal (Outer) 710239[2]

4WD

2004-2001
 Hub Unit Bearing 513193[2]
 2000-1998
 Seal (Inner) 710240[2]
 Bearing Assy (Inner) 517009[2]
 Seal (Outer) 710239[2]

REAR WHEEL**RWD**

2004-1998
 Seal (Inner) 710522[2]
 Seal (Outer) 710193[2]
 Ball Bearing 511024[2]

FRONT AXLE**Steering Knuckle**

2004-1998
 Seal (Inner) 710255
 Seal (Outer) 710256

CHEVROLET - Import SUV - Tracker (cont.)**4WD FRONT AXLE****Differential**

2004-1998
Cone/Cup 17887-17831[2]

Pinion

2004-1998
Bearing Assy (Inner) 30307M
Seal Viton (Outer) 350572
Bearing Assy (Outer) 30306M
Repair Sleeve KWK99147

REAR AXLE**Differential**

2004-1998
Cone/Cup 17887-17831[2]

Pinion

2004-1998
Seal Viton 350572
Bearing Assy (Inner) 30307M
Bearing Assy (Outer) 30306M
Repair Sleeve KWK99147

TRANSFER CASE**Input Shaft**

2004-1998
Seal 223540
Ball Bearing 207[2]
Repair Sleeve KWK99139

Front Output Shaft

2004-1998
Ball Bearing (Inner) 306L[2]
Seal (Outer) 1213N
Ball Bearing (Outer) RW122[2]
Repair Sleeve KWK99157

Rear Output Shaft

2002-1998
Seal 1213N
Ball Bearing RW122[2]
Repair Sleeve KWK99157

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1998 (3L30)
Seal 6712NA
Repair Sleeve KWK99187

Rear Seal/Ext. Housing

1998 (3L30)
Seal 710343
Seal Kit 5200⁶⁴

3-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

1998-1990 (3L30)
Seal 8792S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-1998 (0372LE)
Seal 223605

Rear Seal/Ext. Housing

2004-1998 (0372LE)
Seal 710319

Selector Shaft Seal/Man. Shaft

2004-1998 (0372LE)
Seal 221207

CLUTCH**Release Bearing**

2000-1998
Bearing Assy 614056

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2002-1998
Seal 222535
Repair Sleeve KWK99098

Rear Output Shaft

2002-1998
Seal 455134
Repair Sleeve KWK99098

ALTERNATOR

2001-1998 (Nippondenso)
Ball Bearing (Drive End) 303CC

POWER STEERING**Pump Shaft**

2001-1998
Seal 221730

CAMSHAFT SEAL**4 Cylinder**

2000-1998 1.6L
Seal 710310
Repair Sleeve KWK99128

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-1999 2.0L (DOHC)
Seal 710521
Repair Sleeve KWK99128

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET - Import SUV - Tracker (cont.)**CRANKSHAFT FRONT SEAL (cont.)****4 Cylinder (cont.)**

2000-1998 1.6L

Seal 710310

Repair Sleeve KWK99128

6 Cylinder

2004-2001 2492cc/2.5L (DOHC)

Seal 710521

Repair Sleeve KWK99177

CRANKSHAFT REAR SEAL**4 Cylinder**

2003-1999 2.0L (DOHC)

Seal 710520

2000-1998 1.6L

Seal 710334

CRANKSHAFT REAR SEAL**6 Cylinder**

2004-2001 2492cc/2.5L (DOHC)

Seal 710520

CHEVROLET/GMC - Lt Truck - Acadia**FRONT WHEEL****FWD**

2008-2007

Hub Unit Bearing HA590227[2]²⁵**AWD**

2008-2007

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****FWD**

2008-2007

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****AWD**

2008-2007

Hub Unit Bearing HA590227[2]²⁵**CHEVROLET/GMC - Lt Truck - Astro / Safari****FRONT WHEEL****RWD**

2005-2003

Hub Unit Bearing HA590307[2]

2002-1991

Seal (Inner) 4739[2]

Set (Inner) SET6[2]

Set (Outer) SET3[2]

1990

Seal (Inner) 8871[2]

Set (Inner) SET6[2]

Set (Outer) SET3[2]

FRONT WHEEL**AWD**

2005-2003

Hub Unit Bearing (RH) SP550309²⁵Hub Unit Bearing (LH) SP550310⁷⁸

2002-1995 (ABS)

Hub Unit Bearing SP550308[2]⁸⁴

1994-1990

Hub Unit Bearing 515005[2]

REAR WHEEL**RWD**

2005-2003

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal New Item.⁸⁴Reorder²⁵New Item, Check For Availability⁷⁸6 Stud,

CHEVROLET/GMC - Lt Truck - Astro / Safari (cont.)

REAR WHEEL (cont.)

RWD (cont.)

2002-1990	
Seal Viton	4795V[2]
Cylindrical Bearing	513023[2]
Bearing & Seal Kit	
(Non-ABS)	TRP57509[2] ¹⁹

4WD FRONT AXLE

Axle Shaft

2005-1997	
Seal	710491[2]
Ndle Bearing	HK4012[2]
1996-1990	
Seal	223255[2]
Ndle Bearing	B2010[2]

Differential Rebuild Kit

2005-1990	
Kit	DRK320A

Differential

2005-1990	
Set	SET11[2]

Pinion

2005-1990	
Seal	8611N
Cone/Cup (Inner) (O.E.)	M88048S-M88010
Cone/Cup (Outer)	M86649-M86610

REAR AXLE

Differential Rebuild Kit

2005-1999	(7.5" R.G., 7.625" R.G.)
Kit	DRK320C
1998-1990	(7.5" R.G., 7.625" R.G.)
Kit	DRK320

Differential

2005-2004	
Cone/Cup	LM501349-LM501314[2]
2003-2002	
Set (8.5" R.G.)	SET36[2]
Cone/Cup (Exc. 8.5" R.G.)	LM501349-LM501314[2]
2001-1990	
Cone/Cup	LM501349-LM501314[2]

Pinion

2005-2001	(7.625" R.G.)
Seal	8516N
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
2004-1997	(8.5" R.G.)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048S-M88010
Repair Sleeve	KWK99193

REAR AXLE (cont.)

Pinion (cont.)

2000	(7.625" R.G.)
Seal (1st Design 1.5" I.D.)	8610
Seal (2nd Design 1.687" I.D.)	8516N
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
1999-1990	(7.5" R.G.)
Seal	8610
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610

TRANSFER CASE REBUILD KIT

2002-1999	
Kit	TCRK233[2] ¹⁶
1998-1990	
Kit	TCRK1372[2]

TRANSFER CASE

Input Shaft

2005-1999	(New Process 136C)
Ball Bearing	110CB
Ball Bearing (Frt)	207
Seal	472636
2002-1999	(New Process 246)
Ndle Bearing	FC66561[2]
1998-1990	
Seal (O.E.)	710062
Ball Bearing	109TB
Repair Sleeve	KWK99175
Ndle Bearing (Pilot)	SCH1310

Front Output Shaft

2005-1999	(New Process 136C)
Ball Bearing (Frt)	207
Ball Bearing	110CB
1998-1990	
Seal	714503
Ball Bearing	207
Ndle Bearing (Pilot)	JH1612

Rear Output Shaft

2005-1999	(New Process 136C)
Seal	710496
Ndle Bearing (Frt)	J2416
2002-1999	(New Process 246)
Ndle Bearing	B5020[2]
1998-1990	(Warner 4472)(booted)
Seal	4503N
Ball Bearing	208SL[2]
1998-1990	(Warner 4472)(w/o boot)
Seal	714503
Ball Bearing	208SL[2]

¹⁶Obsolete

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET/GMC - Lt Truck - Astro / Safari (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Torque Converter**

2005-1993	(4L60, 4L60E, 4L65E)
Seal	3227
Repair Sleeve	KWK99174
1992-1990	
Seal	3227[2]
Repair Sleeve	KWK99174

Rear Seal/Ext. Housing

2005-1990	
Seal (Non-Booted)	4583
Seal (Booted)	4934
Seal Kit Opt Seal &	
Bushing	5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2005-1990	(THM700)(4L60 E)
Seal	8792S
Repair Sleeve	KWK99050

A/C COMPRESSOR

2002-1990	
Ball Bearing	907257[2]
2002-1990	
Ball Bearing (Frt Head)	S128

POWER STEERING**Pitman Shaft**

2001-1990	
Seal Kit	PSK1 ²⁴

Pump Shaft

2001-1994	
Seal	7013S
1993-1990	(integral reservoir)
Seal	221925
Ball Bearing	203FF[2]
1993-1990	(remote reservoir)
Seal	7013S

Worm Shaft

2001-1990	
Seal	222025

CRANKSHAFT FRONT SEAL**4 Cylinder**

1990	151/2.5L
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

6 Cylinder

2005-1990	262/4.3L
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

CRANKSHAFT REAR SEAL**4 Cylinder**

1990	151/2.5L
Seal	3698
Repair Sleeve	KWK99300

6 Cylinder

2005-1997	4.3L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364
1996-1990	262/4.3L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately⁶⁴Seal & Bushing Kit

CHEVROLET/GMC - Lt Truck - Colorado/Canyon**FRONT WHEEL****RWD****2009**

Hub Unit Bearing
Sensor Part Of Knuckle HA590300[2]⁰²

2008-2004 (Z71 Pkg.)

Hub Unit Bearing (RH) HA590053⁰²
Hub Unit Bearing (LH) HA590061⁰²
Sensor Kit (RH) SK590053
Sensor Kit (LH) SK590061

2008-2004 (Z85 Pkg.)

Hub Unit Bearing (RH) HA590062⁰²
Hub Unit Bearing (LH) HA590058⁰²
Sensor Kit (LH) SK590058
Sensor Kit (RH) SK590062

2008-2004 (ZQ8 Pkg.)

Hub Unit Bearing (RH) HA590059⁰²
Hub Unit Bearing (LH) HA590054⁰²
Sensor Kit (LH) SK590054
Sensor Kit (RH) SK590059

4WD**2009**

Hub Unit Bearing
Sensor Part Of Knuckle HA590304[2]⁰²

2008-2004

Hub Unit Bearing (RH) HA590023⁰²
Hub Unit Bearing (LH) HA590060⁰²
Sensor Kit (RH) SK590053
Sensor Kit (LH) SK590061

REAR WHEEL**RWD****2008-2004**

Seal 4762N[2]
Cylindrical Bearing 513067[2]
Bearing & Seal Kit TRP59047[2]¹⁹

4WD FRONT AXLE**Differential****2006-2004**

Cone/Cup LM501349-LM501314[2]

Pinion**2008-2004**

Seal 710549
Cone/Cup (Inner) HM89249-HM89210
Cone/Cup (Outer) M86649-M86610

REAR AXLE**Differential Rebuild Kit****2007-2004 (8" R.G.)**

Kit DRK320D

Differential**2006-2004**

Set SET36[2]

REAR AXLE**Pinion****2008-2004**

Seal 710474²⁵
Cone/Cup (Inner) HM89249-HM89210
Cone/Cup (Outer) M86649-M86610

TRANSFER CASE**Front Output Shaft****2008-2004**

Seal Viton 4813V
Ball Bearing (New
Process 231C, 233C) 206WB
Ball Bearing (New
Process 236) 207

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter****2006-2004 (4L60E)**

Seal 3227

Rear Seal/Ext. Housing**2006-2004 (4L60E)**

Seal 9613S

Selector Shaft Seal/Man. Shaft**2008-2004 (4L60E)**

Seal 8792S

⁰²Does Not Come w/ Sensor Cable.
Check For Availability

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

²⁵New Item,

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET/GMC - Lt Truck - Trailblazer/Envoy**FRONT WHEEL****RWD****2009-2002**

Hub Unit Bearing 513188[2]

4WD**2009-2002**

Hub Unit Bearing 513188[2]

REAR WHEEL**RWD****2009-2002**

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹**4WD FRONT AXLE****Axle Shaft****2008-2002** (7.25" R.G.)

Seal 710491[2]

Ndlle Bearing (Outer) SCH208[2]

Ndlle Bearing (Pilot) SCH78[2]

2004-2002 (7.25" R.G.)(1.5" O.D.)

Ndlle Bearing B2010[2]

2004-2002 (7.25" R.G.)(1.85" O.D.)

Ndlle Bearing HK4012[2]

Differential Rebuild Kit**2005-2002**

Kit DRK320A

Differential**2006-2002**

Set SET11[2]

Pinion**2008** (7.25" R.G.)

Seal 710547

2007-2002 (7.25" R.G.)

Seal 8611N

Cone/Cup (Inner) M88048S-M88010

Cone/Cup (Outer) M86649-M86610

REAR AXLE**Differential Rebuild Kit****2007-2002** (8.5", 8.625" R.G.)

Kit DRK321C

2005-2002 (7.5" R.G., 7.625" R.G.)

Kit DRK320C

Differential**2007-2002** (8.5", 8.625" R.G.)

Set SET36[2]

2005-2002 (7.5" R.G., 7.625" R.G.)

Cone/Cup LM501349-LM501314[2]

REAR AXLE**Pinion****2008-2002** (8.5", 8.625" R.G.)(113" W/B)Seal 710474²⁵

Cone/Cup (Inner) NP457992-NP926068

Cone/Cup (Outer) M86649-M86610

2008-2002 (8.5", 8.625" R.G.)(129" W/B)

Seal 710506

Cone/Cup (Inner) NP544520-NP099285

Cone/Cup (Outer) M88048-M88010

2005-2002 (7.5" R.G., 7.625" R.G.)

Seal 8610

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

TRANSFER CASE**Input Shaft****2008-2002** (New Process 233C)

Seal 3173

Seal (Opt) 710928

Repair Sleeve KWK99193

Front Output Shaft**2008-2002** (New Process 233C)

Seal Viton 4813V

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter****2006-2002** (4L60E)

Seal 3227

Rear Seal/Ext. Housing**2006-2002** (4L60E)

Seal 9613S

Selector Shaft Seal/Man. Shaft**2008-2006** (4L60E, 4L70E)

Seal 8792S

2005-2002 (4L60E)

Seal 8792S

CRANKSHAFT FRONT SEAL**6 Cylinder****2000-1998** 262/4.3L

Seal 9845

8 Cylinder**2008-2003** 325/5.3L, 364/6.0L

Seal Viton 100470

Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL**8 Cylinder****2009-2003** 5.3L, 6.0L

Seal 100085

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET/GMC - Lt Truck - Equinox

FRONT WHEEL

FWD

2009-2007
 Hub Unit Bearing HA590262[2]²⁵
 2006-2005 (ABS)
 Hub Unit Bearing 513189[2]
 2006-2005 (Non-ABS)
 Hub Unit Bearing 513190[2]

AWD

2009-2007
 Hub Unit Bearing HA590262[2]²⁵
 2006-2005 (ABS)
 Hub Unit Bearing 513189[2]
 2006-2005 (Non-ABS)
 Hub Unit Bearing 513190[2]

REAR WHEEL

FWD

2009-2007
 Hub Unit Bearing HA590264[2]²⁵
 2006-2005 (ABS)
 Hub Unit Bearing 512229[2]
 2006-2005 (Non-ABS)
 Hub Unit Bearing 512230[2]

AWD

2009-2007
 Hub Unit Bearing HA590264[2]²⁵
 2006-2005
 Hub Unit Bearing 512229[2]

5-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2007-2005 (AF33)
 Seal 221207

5-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2009-2005 (AF33)
 Seal 4764

CRANKSHAFT FRONT SEAL

6 Cylinder

2009-2005 207/3.4L
 Seal 9845
 Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL

6 Cylinder

2009-2005 207/3.4L
 Seal 4307V
 Seal PTFE H/D 5273
 Repair Sleeve KWK99298

CHEVROLET/GMC - Lt Truck - HHR

FRONT WHEEL

FWD

2008-2006 (ABS)
 Hub Unit Bearing HA590086[2]
 2008-2006 (Non-ABS)
 Hub Unit Bearing HA590087[2]

REAR WHEEL

FWD

2008-2006 (ABS)
 Hub Unit Bearing HA590088[2]
 2008-2006 (Non-ABS)
 Hub Unit Bearing HA590089[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2009-2006 (4T45E)
 Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2009-2006 (4T45E)
 Seal SL260001[2]²⁵

Manual Shaft

2009-2006 (4T45E)
 Seal 8792S

²⁵New Item, Check For Availability

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC - Lt Truck - HHR (cont.)**CRANKSHAFT REAR SEAL****4 Cylinder**

2009-2006 2.0L, 2.2L, 2.4L

Seal Viton 710237

CHEVROLET/GMC - Lt Truck - Lumina APV, Venture**FRONT WHEEL****FWD**

2005-2003 (Non-ABS)

Hub Unit Bearing 513160[2]⁸³Hub Unit Bearing HA590085[2]⁸⁴

2005-2002 (FWD)(ABS)

Hub Unit Bearing 513179[2]⁷³

2004-2002

Hub Unit Bearing 513187[2]

2001

Hub Unit Bearing 513121[2]⁷²Hub Unit Bearing 513179[2]⁷³

2000-1997 (ABS)

Hub Unit Bearing 513121[2]⁷²

1996-1992

Hub Unit Bearing 513087[2]⁴⁵

1991-1990

Hub Unit Bearing 513016K[2]⁶¹Seal Kit 5698[2]¹²**REAR WHEEL****FWD**

2005-1997 (Disc)

Hub Unit Bearing 512150[2]⁸³Hub Unit Bearing 512237[2]⁸⁴

2005-1997 (Drum)

Hub Unit Bearing 512078[2]²⁷

1996-1992

Hub Unit Bearing 512078[2]

1991-1990

Hub Unit Bearing 513018[2]

AWD

2005-2002

Hub Unit Bearing 513121[2]⁷²**3-SPEED AUTOMATIC TRANSAXLE****Torque Converter**

1996-1990 (THM125C)

Seal 4072N[2]

Repair Sleeve KWK99172

Output Shaft

1995-1990 (THM125C)

Seal 3543[2]

Repair Sleeve KWK99139[2]

Seal Kit 5690[2]¹⁸**3-SPEED AUTOMATIC TRANSAXLE****Manual Shaft**

1996-1990 (THM125C)

Seal 8792S[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2005-1990 (4T60E, 4T65E)

Seal 4072N

Repair Sleeve KWK99172

Output Shaft

2005-1999 (4T65 E)

Seal (LH) 100165

Repair Sleeve (LH) KWK99139

Seal (RH) 3543

Repair Sleeve (RH) KWK99138

1998-1992 (4T60E)

Seal (LH) 710096

Repair Sleeve (LH) KWK99139

Seal (RH) 3543

Repair Sleeve (RH) KWK99138

Manual Shaft

2005-1990 (4T60E, 4T65E)

Seal 8792S

A/C COMPRESSOR

2002-1990

Ball Bearing 907257[2]

Ball Bearing (Frt Head) S128

ALTERNATOR

1999-1992 (Delco 140 Amp.)

Ball Bearing (Rear End) 100CCAB

POWER STEERING**Pump Shaft**

2002-1996

Seal 7013S

1995-1990 (integral reservoir)

Ball Bearing 203FF[2]

1995-1990 (remote reservoir)

Seal 7013S

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.¹⁸Opt. = Brg, Slv, Hardware, Hsg.²⁷DomesticVehicles Only ⁴⁵Brg Flg Mtg Holes Non-Threaded.⁶¹Kit = Seal, Hub Nut, & Brg Unit⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁷³Plastic Wire Clip.⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC - Lt Truck - Lumina APV, Venture (cont.)

CRANKSHAFT FRONT SEAL

6 Cylinder

2005-1996	201/3.4L	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176
1995-1992	231/3.8L	
Seal Viton		710162
Repair Sleeve		KWK99193
1995-1990	191/3.1L	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176

CRANKSHAFT REAR SEAL

6 Cylinder

2005-1996	201/3.4L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

CRANKSHAFT REAR SEAL (cont.)

6 Cylinder (cont.)

1995-1992	231/3.8L	
Seal Viton		320691
Repair Sleeve		KWK99328
1995-1990	189/3.1L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

CHEVROLET/GMC - Lt Truck - S10 Blazer/S15 Jimmy, S10 Pickup/S15 Sonoma, Syclone/Typhoon

FRONT WHEEL

RWD

2005-1998	Blazer/Jimmy	
Hub Unit Bearing		SP450300[2] ⁴⁰
Sensor Kit		SK450300[2] ³⁹
2003-1998	S10/Sonoma	
Seal (Inner)		4739[2]
Set (Inner)		SET6[2]
Set (Outer)		SET34[2]
1997-1991		
Seal (Inner)		4739[2]
Set (Inner)		SET6[2]
Set (Outer)		SET34[2]
1990		
Seal (Inner)		8871[2]
Set (Inner)		SET6[2]
Set (Outer)		SET34[2]

4WD

2005-1998		
Hub Unit Bearing		513124[2]
1997		
Hub Unit Bearing		513061[2]
1996-1994		
Hub Unit Bearing		513061[2]
1993-1992	Blazer/Jimmy	
Hub Unit Bearing		513061[2]
1993-1991	Pickup	
Hub Unit Bearing		513013[2]
1991	Blazer/Jimmy 2Dr.	
Hub Unit Bearing		513013[2]
1991	Blazer/Jimmy 4 Dr.	
Hub Unit Bearing		513061[2]
1990		
Hub Unit Bearing		513013[2]

AWD

1997		
Hub Unit Bearing		513124[2]
1992-1991	Syclone, Typhoon	
Hub Unit Bearing		513061[2]

REAR WHEEL

RWD

2005-1992	(Exc. Extended Cab)	
Seal (Axle Code K)(Mf		
In Canada)		8660S[2]
Seal (Axle Code C)(Mf		
In U.S.A.)		710166[2]
Cylindrical Bearing		5707[2]
Bearing & Seal Kit		TRP1563TAV[2] ¹⁹
2004-1995	(Extended Cab)	
Seal (Limited Slip		
Differential)(8.5" R.G.)		4762N[2]
Cylindrical Bearing		
(Limited Slip		
Differential)(8.5" R.G.)		513067[2]
Bearing & Seal Kit		
(Limited Slip		
Differential)(8.5" R.G.)		TRP59047[2] ¹⁹
Seal (Exc. Limited Slip		
Differential)(8.5" R.G.)		8835S[2]
Cylindrical Bearing		
(Exc. Limited Slip		
Differential)(8.5" R.G.)		6408[2]
Bearing & Seal Kit		
(Exc. Limited Slip		
Differential)(8.5" R.G.)		TRP1559TV[2] ¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

³⁹Opt. Kit = Cable, Screw, Grease.

⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC - Lt Truck - S10 Blazer/S15 Jimmy, S10 Pickup/S15 Sonoma, Syclone/Typhoon (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

2001-1999	Blazer/Jimmy
Seal Viton (Limited Slip	
Differential)(7.6" R.G.)	4795V[2]
Cylindrical Bearing	
(Limited Slip	
Differential)(7.6" R.G.)	513023[2]
1991	(4 Dr.)(7.625" R.G.)
Seal	710166[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
1991	(7.625" R.G.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
1990	
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

4WD

2005-1992	(Exc. Extended Cab)
Seal (Axle Code K)(Mf	
In Canada)	8660S[2]
Seal (Axle Code C)(Mf	
In U.S.A.)	710166[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
2004-1995	(Extended Cab)
Seal (Limited Slip	
Differential)(8.5" R.G.)	4762N[2]
Cylindrical Bearing	
(Limited Slip	
Differential)(8.5" R.G.)	513067[2]
Bearing & Seal Kit	
(Limited Slip	
Differential)(8.5" R.G.)	TRP59047[2] ¹⁹
Seal (Exc. Limited Slip	
Differential)(8.5" R.G.)	8835S[2]
Cylindrical Bearing	
(Exc. Limited Slip	
Differential)(8.5" R.G.)	6408[2]
Bearing & Seal Kit	
(Exc. Limited Slip	
Differential)(8.5" R.G.)	TRP1559TV[2] ¹⁹
2001-1999	Blazer/Jimmy
Seal Viton (Limited Slip	
Differential)(7.6" R.G.)	4795V[2]
Cylindrical Bearing	
(Limited Slip	
Differential)(7.6" R.G.)	513023[2]
1991	(4 Dr.)(7.625" R.G.)
Seal	710166[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
1991	(7.625" R.G.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

REAR WHEEL (cont.)**4WD (cont.)**

1990	
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
AWD	
1993-1992	Syclone, Typhoon
Seal (Axle Code K)(Mf	
In Canada)	8660S[2]
Seal (Axle Code C)(Mf	
In U.S.A.)	710166[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
1991	Syclone, Typhoon
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2005-1998	
Seal	710491[2]
Ndle Bearing	B2010[2]
1996-1990	
Seal	223255[2]
Ndle Bearing	B2010[2]

Differential Rebuild Kit

2005-1990	(7.25" R.G.)
Kit	DRK320A

Differential

2004-1990	(7.25" R.G.)
Set	SET11[2]

Pinion

2005-1990	(7.25" R.G.)
Seal	8611N
Cone/Cup (Inner)	M88048S-M88010
Cone/Cup (Outer)	M86649-M86610

REAR AXLE**Differential Rebuild Kit**

2005-1999	(7.5" R.G., 7.625" R.G.)
Kit	DRK320C
2004-2003	(8.625" R.G.)
Kit	DRK321C
1998-1990	(7.5" R.G., 7.625" R.G.)
Kit	DRK320

Differential

2005-2001	(7.5" R.G., 7.625" R.G.)
Cone/Cup	LM501349-LM501314[2]
2004-2001	(8.5", 8.625" R.G.)
Set	SET36[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

CHEVROLET/GMC - Lt Truck - S10 Blazer/S15 Jimmy, S10 Pickup/S15 Sonoma, Syclone/Typhoon (cont.)**REAR AXLE (cont.)****Differential (cont.)**

2000	(8.5" R.G.)
Cone/Cup (1st Design)	LM501349-LM501314[2]
Set (2nd Design)	SET36[2]
1999-1990	
Cone/Cup	LM501349-LM501314[2]

Pinion

2005-2004	(8.5", 8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010
2005-1999	(7.5" R.G., 7.625" R.G.)
Seal (1.5" ID)	8610
Seal (1.6")	710474 ²⁵
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99152
2003-1997	(8.5" R.G.)(2nd Design)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99212
1998-1990	(7.5" R.G., 7.625" R.G.)
Seal	8610
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99152
1997-1990	(8.5" R.G.)(1st Design)
Seal	2043
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99193

TRANSFER CASE REBUILD KIT

2002-1998	(New Process 236)(Opt. code NP8)(Elec. shift)
Kit	TCRK236[2]
2002-1992	(New Process 233C)(Opt. code NP1)(Elec. shift)
Kit	TCRK233[2] ¹⁶
1997-1990	(New Process 231C)(floor shift)
Kit	TCRK231A[2] ¹⁶

TRANSFER CASE**Input Shaft**

2005-1998	(New Process 236)(Opt. code NP8)(Elec. shift)
Ball Bearing	110CB
Ndle Bearing (Pilot)	FC66561
Seal	472636
2005-1994	(New Process 231, 233)
Seal (O.E.)	3173
Ball Bearing	110L
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561

TRANSFER CASE (cont.)**Input Shaft (cont.)**

1993-1991	(New Process 231, 233)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1990	(New Process 231C)(floor shift)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	SCH1810

Front Output Shaft

2005-1995	(New Process 231, 233)
Seal Viton	4813V
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416
2002-1998	(New Process 236)(Opt. code NP8)(Elec. shift)
Ball Bearing	207
Ndle Bearing (Pilot)	J2416
1994-1990	(New Process 231, 233)
Seal	710046
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416

Rear Output Shaft

2002-1994	(New Process 231, 233)
Seal	4333N
Ball Bearing	206WB
Seal Kit	5200 ⁶⁴
Ndle Bearing (Pilot)	B5020
1993-1991	(New Process 231, 233)(ext cab)
Seal	9449
Ball Bearing	207
Seal Kit	5208 ⁶⁴
Ndle Bearing (Pilot)	B5020
1993-1990	(New Process 231)(Std. cab)
Seal	9613S
Ball Bearing	206WB
Seal Kit	5200 ⁶⁴
Ndle Bearing (Pilot)	B5020

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-1990	
Seal	3227[2]
Repair Sleeve	KWK99174

¹⁶Obsolete²⁵New Item, Check For Availability⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC - Lt Truck - S10 Blazer/S15 Jimmy, S10 Pickup/S15 Sonoma, Syclone/Typhoon (cont.)

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2008-1997	(4L60, 4L60E, THM700R4)	
Seal	.....	4934
1996-1990	(4L60, 4L60E, 4L65E)	
Seal	.....	9613S[2]
Repair Sleeve	.....	KWK99149
Seal Kit	.....	5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2005-1990		
Seal	.....	8792S[2]
Repair Sleeve	.....	KWK99050

CLUTCH

Pilot Bearing

2002-1994	133/2.2L (Gas)	
Bushing H/D	.....	PB652HD
2002-1990	262/4.3L	
Ball Bearing	.....	57080
1993-1990	151/2.5L	
Bushing H/D	.....	PB656HD
1993-1990	173/2.8L	
Bushing H/D	.....	PB652HD

CLUTCH - 4 CYLINDER

Release Bearing

2000-1996	133/2.2L (Gas)	
Bearing Assy	.....	614174
1995-1994	133/2.2L (Gas)	
Bearing Assy	.....	614083
1993-1990	151/2.5L	
Bearing Assy	.....	614083

CLUTCH - 6 CYLINDER

Release Bearing

2000-1996	262/4.3L	
Bearing Assy	.....	614174
1995-1990	262/4.3L	
Bearing Assy	.....	614083
1993-1990	173/2.8L	
Bearing Assy	.....	614083

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2001-1996	(New Venture M50)	
Kit	.....	TRK235E ⁴¹
1995-1990	(Warner T5 World Class)	
Kit	.....	TRK5W

Front Input Shaft

2005-1995	(New Venture M50)(4WD)	
Seal	.....	4529N
2005-1995	(New Venture MW2)(2WD)	
Seal	.....	223020
Ball Bearing	.....	306VVL[2]

5-SPEED MANUAL TRANSMISSION (cont.)

Front Input Shaft (cont.)

1995-1990	(Warner)	
Seal	.....	7412S
Set	.....	SET5[2]
Repair Sleeve	.....	KWK99125
1994-1990	(Hydramatic 5 Spd. (4WD))	
Seal	.....	4529N

Rear Output Shaft

2005-1995	(New Venture M50)(4WD)	
Seal	.....	4530
2005-1995	(New Venture MW2)(2WD)	
Seal	.....	416288
Ball Bearing	.....	306L[2]
1995-1990	(Warner)	
Seal	.....	9613S
Repair Sleeve	.....	KWK99149
Seal Kit	.....	5200 ⁶⁴
1994-1990	(Hydramatic 5 Spd. (4WD))	
Seal	.....	4532N

A/C COMPRESSOR

2002-1990		
Ball Bearing	.....	907257[2]
Ball Bearing (Frt Head)	.....	S128

DRIVESHAFT SUPPORT

2001-1990		
Ball Bearing	.....	88107[2]
Hanger Bearing Assy	.....	HB88107A[2]

POWER STEERING

Pitman Shaft

1996-1990		
Seal Kit	.....	PSK1 ²⁴

Pump Shaft

2002-1994		
Seal	.....	7013S
1993-1990	(integral reservoir)	
Ball Bearing	.....	203FF[2]
1993-1990	(remote reservoir)	
Seal	.....	70135

Worm Shaft

1996-1990		
Seal	.....	222025

MANUAL STEERING

Pitman Shaft

1993-1990		
Seal	.....	251511

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately
Bushing Kit

⁴¹Contains Larger C/S Brgs

⁶⁴Seal &

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC - Lt Truck - S10 Blazer/S15 Jimmy, S10 Pickup/S15 Sonoma, Syclone/Typhoon (cont.)

MANUAL STEERING

Worm Shaft

1993-1990
Seal 480821
Ball Bearing 8537[2] ¹⁶

CRANKSHAFT FRONT SEAL

4 Cylinder

2003-1994 133/2.2L (Gas)
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
1993-1990 151/2.5L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

6 Cylinder

2005-1990 262/4.3L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
1993-1990 173/2.8L
Seal 9845
Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL

4 Cylinder

2003-1994 133/2.2L (Gas)
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298
1997-1990 2.5L
Seal 3698

CRANKSHAFT REAR SEAL (cont.)

4 Cylinder (cont.)

1993-1990 151/2.5L
Seal 3698

6 Cylinder

2005-1990 262/4.3L
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364
1993-1990 173/2.8L
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298

CHEVROLET/GMC - Lt Truck - SSR

FRONT WHEEL

RWD

2006-2003
Hub Unit Bearing 513188[2]

REAR WHEEL

RWD

2006-2003
Seal 4762N[2]
Cylindrical Bearing 513067[2]
Bearing & Seal Kit TRP59047[2] ¹⁹

REAR AXLE

Differential Rebuild Kit

2006-2003 (8.625" R.G.)
Kit DRK321C

REAR AXLE

Differential

2006-2005 (A/T)
Set SET36[2]
2006-2005 (M/T)
Set SET42[2]
2004-2003
Set SET36[2]

Pinion

2006-2005 (A/T)
Seal 710506
Cone/Cup (Inner) NP544520-NP099285
Cone/Cup (Outer) M88048-M88010
2006-2005 (M/T)
Cone/Cup (Inner) HM804846-HM804810
Cone/Cup (Outer) HM88649-HM88610

¹⁶Obsolete

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC - Lt Truck - SSR (cont.)

REAR AXLE (cont.)

Pinion (cont.)

2004-2003
 Seal 710506
 Cone/Cup (Inner) NP544520-NP099285
 Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2006-2003 (4L60E, 4L65E)
 Seal 3227

Rear Seal/Ext. Housing

2006-2003 (4L60E, 4L65E)
 Seal 9613S

Selector Shaft Seal/Man. Shaft

2006-2003 (4L60E, 4L65E)
 Seal 8792S

CRANKSHAFT FRONT SEAL

8 Cylinder

2006-2003 325/5.3L, 364/6.0L
 Seal Viton 100470
 Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL

8 Cylinder

2006-2003 325/5.3L, 364/6.0L
 Seal Viton 100470

CHEVROLET/GMC - Lt Truck - Uplander

FRONT WHEEL

FWD

2008-2006
 Hub Unit Bearing HA590157[2]²⁵
 2005
 Hub Unit Bearing HA590093[2]⁴⁰

AWD

2006
 Hub Unit Bearing HA590157[2]²⁵
 2005
 Hub Unit Bearing HA590093[2]⁴⁰

REAR WHEEL

FWD

2008-2006 (Exc. Indep. Rr. Susp.)
 Hub Unit Bearing HA590158[2]²⁵
 2006 (Indep. Rr. Susp.)
 Hub Unit Bearing HA590116[2]²⁵
 2005 (Exc. Indep. Rr. Susp.)
 Hub Unit Bearing HA590092[2]
 2005 (Indep. Rr. Susp.)
 Hub Unit Bearing HA590091[2]

REAR WHEEL

AWD

2006
 Hub Unit Bearing HA590157[2]²⁵
 2005
 Hub Unit Bearing HA590093[2]⁴⁰

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2008-2005 (4T65 E)
 Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2008-2005 (4T65 E)
 Seal (LH) 100165
 Repair Sleeve (LH) KWK99139
 Seal (RH) 3543
 Repair Sleeve (RH) KWK99139

Manual Shaft

2008-2005 (4T65 E)
 Seal 8792S

²⁵New Item, Check For Availability

⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET/GMC - Lt Truck - Uplander (cont.)**CRANKSHAFT FRONT SEAL****6 Cylinder**

2008-2005 213/3.5L, 237/3.9L

Seal 9845

Repair Sleeve KWK99176

Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2005 213/3.5L, 237/3.9L

Seal 4307V

Seal PTFE H/D 5273

Repair Sleeve KWK99298

CHEVROLET/GMC TRUCK - 1/2 TON - Avalanche**FRONT WHEEL****RWD**

2009-2007

Hub Unit Bearing SP450303[2]²⁵

2006-2002

Hub Unit Bearing SP550305[2]⁸³Hub Unit Bearing SP450301[2]⁸⁴**4WD**

2009-2007

Hub Unit Bearing SP500301[2]²⁵

2006-2002

Hub Unit Bearing SP500300[2]²⁵**REAR WHEEL****RWD**

2009-2002

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹**4WD**

2009-2002

Seal 4762N[2]

Cylindrical Bearing 513067[2]

Bearing & Seal Kit TRP59047[2]¹⁹**4WD FRONT AXLE****Differential**

2006-2002

Cone/Cup LM501349-LM501314[2]

4WD FRONT AXLE**Pinion**

2008-2007

Seal 710536

Cone/Cup (Inner) NP457992-NP926068

Cone/Cup (Outer) M88048-M88010

2006-2002

Seal 710281

Cone/Cup (Inner) NP457992-NP926068

Cone/Cup (Outer) M88048-M88010

Differential: Output Shaft

2007-2002

Seal 710475[2]²⁵**REAR AXLE****Differential Rebuild Kit**

2007-2002 (8.625" R.G.)

Kit DRK321C

2004-2002 (9.5" R.G.)

Kit DRK324B

Differential

2006-2002 (8.5", 8.625" R.G.)

Set SET36[2]

2005-2002 (9.5" R.G.)

Set SET42[2]

Pinion

2008-2003 (8.625" R.G.)

Seal 710506

Cone/Cup (Inner) NP544520-NP099285

Cone/Cup (Outer) M88048-M88010

2004-2003 (9.5" R.G.)

Seal 710507

Cone/Cup (Inner) HM804846-HM804810

Cone/Cup (Outer) HM88649-HM88610

2002 (8.5" R.G.)

Cone/Cup (Inner) NP457992-NP926068

Cone/Cup (Outer) M88048-M88010

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Inventory⁸⁴Reorder²⁵New Item, Check For Availability⁸³Deplete

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET/GMC TRUCK - 1/2 TON - Avalanche (cont.)**TRANSFER CASE****Input Shaft**

2007-2002	(New Process 246)	
Seal	.....	472636
Ball Bearing	.....	207
Ball Bearing	.....	110CB
Ndle Bearing	.....	B5020[2]
Ndle Bearing (Pilot)	.....	FC66561

Front Output Shaft

2007-2002	(New Process 246)	
Seal	.....	710495 ²⁵
Ball Bearing	.....	207
Ball Bearing	.....	110CB
Ndle Bearing (Pilot)	.....	J2416

Rear Output Shaft

2006-2002	(New Process 246)	
Seal	.....	710496
Ndle Bearing (Pilot)	.....	B5020[2]

Oil Pump Housing

2006-2002	(New Process 246)	
Seal	.....	341022

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-2002	(4L60E, 4L70E)	
Seal	.....	3227

Rear Seal/Ext. Housing

2006-2002	(4L60E, 4L70E)	
Seal	.....	9613S

Selector Shaft Seal/Man. Shaft

2008-2002	(4L60E, 4L70E)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

CRANKSHAFT FRONT SEAL**8 Cylinder**

2009-2002	325/5.3L, 364/6.0L	
Seal Viton	.....	100470
Repair Sleeve	.....	KWK99210

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2002	325/5.3L, 364/6.0L	
Seal	.....	100085

CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15**FRONT WHEEL****RWD**

2009-2007	New Style	
Hub Unit Bearing	.....	SP450303[2] ²⁵
2007-2001	Classic Style (Crew Cab/HD Brakes)	
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2006-1999	Classic Style (Without Crew Cab/HD Brakes)	
Hub Unit Bearing	.....	SP450301[2] ⁸⁴

FRONT WHEEL (cont.)**RWD (cont.)**

1999-1995	Old Style C Series (Diesel)	
Seal (Inner)	.....	4740[2]
Set (Inner)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]
1999-1995	Old Style C Series (Gas)	
Seal (Inner)	.....	4739[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]
1999-1992	Suburban/Tahoe/Yukon	
Seal (Inner)	.....	4739[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]

²⁵New Item, Check For Availability⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)					

FRONT WHEEL (cont.)**RWD (cont.)**

1994-1990	C1500 (H/D)
Seal (Inner)	4739[2]
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]
1991-1990	C1500 (L/D)
Seal (Inner)	4739[2]
Set (Inner)	SET6[2]
Set (Outer)	SET3[2]
1990	R Series
Seal	8871[2]
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]

4WD

2009-2007	Classic Style
Hub Unit Bearing	SP500301[2] ²⁵
2007-2001	Classic Style (Crew Cab/HD Brakes)
Hub Unit Bearing	SP580304[2] ⁸³
Hub Unit Bearing	SP580310[2] ⁸⁴
2006-1999	(4-Wheel ABS)
Hub Unit Bearing	SP500300[2] ²⁵
1999-1996	(2-Wheel ABS)
Hub Unit Bearing (LH)	SP580303[2] ⁹⁵
Hub Unit Bearing (RH)	SP580302[2] ⁹⁵
1999-1995	(4-Wheel ABS)
Hub Unit Bearing	SP550307[2] ⁸⁵
Sensor Kit	SK550301[2] ³⁹
1994-1992	
Seal	710106[2]
Hub Unit Bearing	515001[2] ⁹⁰
1991-1990	(Exc. Extended Cab)(L/D Suspension)
Seal	710106[2]
Hub Unit Bearing	515002[2] ²⁹
1991-1990	(Extended Cab)(F44 H/D Suspension)
Seal	710106[2]
Hub Unit Bearing	515001[2] ⁹⁰

AWD

2007	
Hub Unit Bearing	SP500301[2] ²⁵
2006-2001	
Hub Unit Bearing	SP500300[2] ²⁵

REAR WHEEL**RWD**

2009-2007	
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹
2006-2001	(Exc. Quadrateer)(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹

REAR WHEEL (cont.)**RWD (cont.)**

2006-1999	Classic Style (Exc. Quadrateer)(Exc. 9.5" R.G.)
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹
2005-2002	Quadrateer (Exc. Crew Cab)
Hub Unit Bearing	HA590003[2] ⁷⁸
1999-1990	(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹
1999-1990	Old Style
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹

4WD

2009-2007	
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹
2006-2001	(Exc. Quadrateer)(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹
2006-1999	Classic Style (Exc. Quadrateer)(Exc. 9.5" R.G.)
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹
1999-1990	(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹
1999-1990	Old Style
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹

AWD

2006-2001	(4-Wheel ABS)
Hub Unit Bearing	SP500300[2] ²⁵
2006-1999	Classic Style (Exc. Quadrateer)(Exc. 9.5" R.G.)
Seal	4762N[2]
Cylindrical Bearing	513067[2]
Bearing & Seal Kit	TRP59047[2] ¹⁹
2005	
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²⁵New Item, Check For Availability ²⁹Seal Not Serviceable.
³⁹Opt. Kit = Cable, Screw, Grease. ⁷⁸6 Stud, New Item. ⁸³Deplete Inventory
⁸⁶Reorder ⁸⁵6 Stud ~ Reorder ~ SP550307 Will Service Both Sides. ⁹⁰6 Stud. ⁹⁵8 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)					

4WD FRONT AXLE**Axle Shaft**

2007-2005	(9.25" R.G.)	
Seal	.....	450094[2]
Repair Sleeve	.....	KWK99193[2]
2002-1999	(8.25" R.G.)	
Seal	.....	710475[2] ²⁵
Ndle Bearing (Inner)	.....	B2010[2]
Ndle Bearing (Outer)	.....	SCH208[2]
1998	(8.25" R.G.)	
Ndle Bearing (Inner)	.....	B2010[2]
Ndle Bearing (Outer)	.....	B2012[2]
1997	(8.25" R.G.)	
Seal	.....	710101[2]
Ndle Bearing (Inner)	(1st Design)	B2012[2]
Ndle Bearing (Inner)	(2nd Design)	B2010[2]
Ndle Bearing (Outer)	.....	B2012[2]
1996-1990	(8.25" R.G.)	
Seal	.....	710101[2]
Ndle Bearing (Inner)	.....	B2012[2]
Ndle Bearing (Outer)	.....	B2012[2]
1991-1990	(8.5" R.G.)	
Seal	.....	5131[2]

Differential Rebuild Kit

2004-1997	(8.5" R.G.)	
Kit	.....	DRK321
2001-1990	(Limited Slip Differential)(8.5" R.G.)	
Kit	.....	DRK321D
1997-1990	(8.25" R.G.)	
Kit	.....	DRK321A
1996-1990	(8.5" R.G.)	
Kit	.....	DRK321

Differential

2006	(Crew Cab)	
Set	.....	SET42[2]
2006	(Exc. 4 Dr. Crew Cab)	
Cone/Cup	.....	LM501349-LM501314[2]
2005-1990	(8.5", 8.25" R.G.)	
Cone/Cup	.....	LM501349-LM501314[2]
2004-1990	(7.25" R.G.)	
Set	.....	SET11[2]

Pinion

2008-2005	(9.25" R.G.)	
Seal	.....	710536
2008-2000	(8.25" R.G.)	
Seal	.....	710536
Cone/Cup (Inner)	.....	NP457992-NP926068
Cone/Cup (Outer)	.....	M88048-M88010
2007-2001	(9.5" R.G.)	
Seal	.....	710507

4WD FRONT AXLE (cont.)**Pinion (cont.)**

2006-2003	(Crew Cab)	
Seal	.....	710281
Cone/Cup (Inner)	.....	HM88649-HM88610
Cone/Cup (Outer)	.....	HM804846-HM804810
2006-2003	(Exc. 4 Dr. Crew Cab)	
Seal	.....	710281
Cone/Cup (Inner)	.....	NP544520-NP099285
Cone/Cup (Outer)	.....	M88048-M88010
2004-1990	(7.25" R.G.)	
Seal	.....	710281
Cone/Cup (Inner)	.....	M88048S-M88010
Cone/Cup (Outer)	.....	M86649-M86610
1999-1990	(K Series)(8.25" R.G.)	
Seal	.....	710281
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010
Repair Sleeve	.....	KWK99193
1991-1990	(V Series)(8.25" R.G.)	
Seal	.....	8622
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010
Repair Sleeve	.....	KWK99193

Spindle Kit

1991-1990	
Bearing & Seal Kit	 SBK1[2] ³³

Spindle

1991-1990	
Seal (Inner)	 722108[2]
Ndle Bearing (Inner)	 B2110[2]
Seal (Outer)	 722109[2]

Differential: Output Shaft

2007-1999	(Exc. H/D)	
Seal	.....	710475[2] ²⁵

REAR AXLE**Differential Rebuild Kit**

2007-2002	(8.625" R.G.)	
Kit	.....	DRK321C
2007-1998	(9.5" R.G.)	
Kit	.....	DRK324B
2000-1997	(8.5" R.G.)	
Kit	.....	DRK321
1997-1990	(9.5" R.G.)(14 Bolt Rr End)	
Kit	.....	DRK324
1996-1990	(8.5" R.G.)	
Kit	.....	DRK321

Differential

2006-2001	(8.625" R.G.)	
Set	.....	SET36[2]
2005-1990	(14 Bolt Cover)(9.5" R.G.)	
Set	.....	SET42[2]

²⁵New Item, Check For Availability³³Opt. Kit = Brg B2110, Seals 722108 & 722109.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)

REAR AXLE (cont.)**Differential (cont.)**

2000	(8.625" R.G.)
Cone/Cup (1st Design)	LM501349-LM501314[2]
Set (2nd Design)	SET36[2]
1999-1990	(8.125", 8.5", 8.625" R.G.)
Cone/Cup	LM501349-LM501314[2]

Pinion

2007-2001	(8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP544520-NP099285
Cone/Cup (Outer)	M88048-M88010
2007-1998	(9.5" R.G.)
Seal	710507
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
Repair Sleeve	KWK99193
2000-1998	(8.5", 8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99193
1997	(8.5", 8.625" R.G.)
Seal (2nd Design)	710506
Seal (1st Design)	2043
Cone/Cup (Inner) (2nd Design)	NP457992-NP926068
Cone/Cup (Inner) (1st Design)	M802048-M802011
Cone/Cup (Outer) (All)	M88048-M88010
1997-1990	(9.5" R.G.)
Seal (1st Design)	3896
Seal (2nd Design)	710507
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
Repair Sleeve	KWK99193
1996-1990	(8.5" R.G.)
Seal	2043
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010

TRANSFER CASE REBUILD KIT

2000-1994	(New Process 241C)
Kit	TCRK241D[2] ¹⁶
2000-1994	(New Process 243)
Kit	TCRK243[2] ¹⁶
1993-1990	(New Process 241C)
Kit	TCRK241[2]

TRANSFER CASE**Input Shaft**

2007-1999	(New Process 246, 261C)
Ndle Bearing	FC66561[2]
Seal	472636

TRANSFER CASE (cont.)**Input Shaft (cont.)**

2005-1998	(New Process 136C)
Seal	472636
Ndle Bearing (Pilot)	FC66561
Ball Bearing	110CB
Ball Bearing (Frt)	207
2005-1998	(New Process 236C)
Seal	472636
Ndle Bearing (Pilot)	FC66561
Ndle Bearing (Rr)	B5020[2]
Ball Bearing	110CB
Ball Bearing (Frt)	207
2005-1991	(New Process 233C)
Seal (Rr)	4333N
Ndle Bearing (Pilot)	FC66561
Ball Bearing (Frt)	206WB
Ball Bearing	110L

Front Output Shaft

2008-2003	(149, 241C, 243C, 261C, 263C)
Seal	710495 ²⁵
Ndle Bearing	J2416
Ball Bearing	207
2005-1998	(226, 236, 246)
Seal	710495 ²⁵
Ndle Bearing	J2416
2005-1995	(New Process 136C)
Ndle Bearing	J2416
Ball Bearing	207
2005-1990	(New Process 233C)
Ndle Bearing	J2416
Ball Bearing	206WB
Seal Viton	4813V
1997-1990	
Seal	3946
Repair Sleeve	KWK99187

Rear Output Shaft

2005-1998	(New Process 136C)
Seal	710496
Ball Bearing	110CB
2005-1998	(New Process 236C)
Seal	710496
Ndle Bearing (Pilot)	B5020[2]
Ball Bearing	110CB
2005-1991	(New Process 233C)
Seal	4333N
2002-1999	(New Process 246)
Ndle Bearing	B5020[2]
1999-1992	(New Process 241, 243)(2nd Design)
Seal	4333N
Ball Bearing	207[2]
Ndle Bearing (Pilot)	B5020

¹⁶Obsolete ²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)					

TRANSFER CASE (cont.)**Rear Output Shaft (cont.)**

1991	(New Process 241)	
Seal (1st Design)	.....	9449
Ball Bearing (1st Design)	.....	1207L
Seal (2nd Design)	.....	4333N
Ball Bearing	.....	207
Seal Kit (1st Design)	.....	5208 ⁶⁴
Ndle Bearing (Pilot)	.....	B5020
1990	(New Process 241)	
Seal	.....	9449
Ball Bearing	.....	1207L[2]
Seal Kit	.....	5208 ⁶⁴
Ndle Bearing (Pilot)	.....	B5020

Oil Pump Housing

2005-1990	(New Process 233C, 236C)	
Seal	.....	341022

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990		
Seal	.....	6712NA[2]
Repair Sleeve	.....	KWK99187

Rear Seal/Ext. Housing

1990	(w/o THM350)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴

Selector Shaft Seal/Man. Shaft

1990		
Seal	.....	8792S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1991	(4L80E)	
Seal	.....	4598
Repair Sleeve	.....	KWK99199
2006-1990	(THM700)(4L60 E)	
Seal	.....	3227[2]
Repair Sleeve	.....	KWK99174

Rear Seal/Ext. Housing

2006-1991	(4L80E)(Booted)	
Seal	.....	4333N
2006-1991	(4L80E)(Exc. Booted)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴
2006-1990	(4L60, 4L60E, 4L65E)	
Seal	.....	9613S[2]
Repair Sleeve	.....	KWK99149
Seal Kit	.....	5200 ⁶⁴

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-1990	(4L60, 4L60E, 4L65E, 4L70E, 4L80E, 4L85E)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2008	(6L80)	
Seal	.....	710533

CLUTCH - 6 CYLINDER**Pilot Bearing**

2002-1999	262/4.3L	
Ball Bearing	.....	302CC
1998-1990	262/4.3L	
Ball Bearing	.....	57080

CLUTCH - 8 CYLINDER**Pilot Bearing**

2002-2001	294/4.8L	
Ball Bearing	.....	302CC
2000-1990	293/4.8, 305/5.0, 350/5.7, 379/6.2 (Diesel), 395/6.5 (Diesel), 454/7.4	
Ball Bearing	.....	57080

CLUTCH - 6 CYLINDER**Release Bearing**

2002-1996	262/4.3L	
Bearing Assy	.....	614174
1995-1990	262/4.3L (w/o cable activation)	
Bearing Assy	.....	614109

CLUTCH - 8 CYLINDER**Release Bearing**

2002-1996	293/4.8, 305/5.0, 350/5.7	
Bearing Assy	.....	614174
1995-1990	305/5.0 (w/o cable Cl.) 350/5.7, 379/6.2, 395/6.5, 454/7.4	
Bearing Assy	.....	614109

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1991-1990	(Muncie)(M20)(CH465)(2nd Design)	
Seal	.....	481181N
Ball Bearing	.....	211FFLE[2]
Repair Sleeve	.....	KWK99162

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)					

4-SPEED MANUAL TRANSMISSION

(cont.)

Input Shaft (cont.)

1990	(Muncie M20, CH465)(1st Design)	
Seal	.....	481181N
Ball Bearing	.....	N1211L[2]
Repair Sleeve	.....	KWK99162

Rear Output Shaft

1991-1990	(Muncie M20, CH465)	
Seal	.....	410085
Ball Bearing	.....	308FFL[2]

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2003-1995	(New Venture 3500)	
Kit	.....	TRK235B
1998-1996	(New Venture 4500)	
Kit	.....	TRK4500GMI
1995-1991	(New Venture 4500)	
Kit	.....	TRK4500GM

Front Input Shaft

2007-1991	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138
2000-1999	(New Process 4500)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-NP728109[2]
1998-1991	(New Process 4500)	
Seal	.....	714655[2]
Cone/Cup	.....	M802048CP-M802011AP[2]
Repair Sleeve	.....	KWK99133
1991-1990	(Getrag)	
Seal	.....	4529N
Repair Sleeve	.....	KWK99133

Front Countershaft

2007-1991	(New Process 3500)	
Ndle Bearing	.....	FC68336[2]
2000-1991	(New Process 4500)	
Cone/Cup	.....	LM102949CP-LM102910P[2]

Rear Countershaft

2000-1991	(New Process 4500)	
Cone/Cup	.....	LM501349HP-LM501310P[2]

Rear Output Shaft

2007-1996	(New Process 3500)(2WD)	
Seal	.....	4528N
Ball Bearing	.....	307FF5[2]
2007-1991	(New Process 3500)(4WD)	
Seal	.....	4532N
Ball Bearing	.....	307FF5[2]

5-SPEED MANUAL TRANSMISSION

(cont.)

Rear Output Shaft (cont.)

2001-1996	(Getrag MG5)(New Venture Gear M50)	
Seal	.....	410085
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99146
2000-1991	(New Process 4500)	
Seal	.....	714654
Cone/Cup	.....	M804049-M804010[2]
Repair Sleeve	.....	KWK99199
1995-1992	(Getrag)(4WD)(MG5)	
Seal	.....	410085
Ball Bearing	.....	307FF[2]
Repair Sleeve	.....	KWK99146
1995-1990	(Getrag MG5)(4WD)	
Seal	.....	2692
Ball Bearing	.....	307FF[2]
Repair Sleeve	.....	KWK99187
1991-1990	(Getrag)(4WD)(MG5)	
Seal	.....	4532N
Repair Sleeve	.....	KWK99146

Extension Housing

1999-1991	(New Process 4500)(2WD)	
Ndle Bearing	.....	B5020

A/C COMPRESSOR

2002-1990		
Ball Bearing	.....	907257[2]
Ball Bearing (Frt Head)	.....	S128

DRIVESHAFT SUPPORT

2007-1990	(Spicer 1280, 1310, 1330)(1.3780" Brg. I.D.)	
Ball Bearing	.....	88107[2]
Hanger Bearing Assy	.....	HB88107A[2]
1991-1990	(Spicer 1410)(4WD)(1.5748" Brg. I.D.)	
Hanger Bearing Assy	.....	HB108[2]

POWER STEERING

Pitman Shaft

2000-1990		
Seal Kit	.....	PSK1 ²⁴

Pump Shaft

2000-1990		
Seal	.....	7013S[2]
Ball Bearing	.....	8537[2] ¹⁶

¹⁶Obsolete ²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1/2 TON - Blazer/Jimmy (Full Size), C-10/15, K-10/15, R-10/15, Silverado/Sierra, Silverado/Sierra HD, Suburban, Tahoe/Yukon, V-10/15 (cont.)					

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-1999	4.3 V6	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176
2006-1999	4.8L	
Seal Viton	.....	100470
1998-1990	4.3 V6	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
Harmnc Balancer Slvs	.....	88176

8 Cylinder

2008-1999	293/4.8L, 325/5.3L, 364/6.0L, 378/6.2L	
Seal Viton	.....	100470
Repair Sleeve	.....	KWK99210
2000-1990	283/4.6L, 307/5.0L, 327/5.4L, 350/5.7L, 4006/6.6L (GAS)	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
1999-1990	379/6.2L (Diesel) 395/6.5L (Diesel), 454/7.4L (GAS)	
Seal	.....	3945
Repair Sleeve	.....	KWK99233

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-1999	4.3 V6	
Seal Viton	.....	4359V
Seal PTFE H/D	.....	5274
Repair Sleeve	.....	KWK99364
1998-1990	262/4.3L	
Seal Viton	.....	4359V
Seal PTFE H/D	.....	5274
Repair Sleeve	.....	KWK99364

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2007	6.2L Gas	
Seal	.....	100085
2009-1999	293/4.8L, 325/5.3L, 364/6.0L	
Seal	.....	100085
2000-1990	305/5.0L, 350/5.7L	
Seal Viton	.....	4359V
Seal PTFE H/D	.....	5274
Repair Sleeve	.....	KWK99364
1999-1992	379/6.2L (Diesel) 395/6.5L (Diesel) 395/6.5L (Turbo Diesel)	
Seal Viton	.....	710258
Repair Sleeve	.....	KWK99452
1991-1990	(379/6.2L Diesel)	
Seal	.....	5163
1990	(454/7.4L)	
Seal	.....	5072

CHEVROLET/GMC TRUCK - 1/2 TON - G10/G15, Express/Savana**FRONT WHEEL****RWD**

2009-2003		
Hub Unit Bearing	.....	SP450301[2] ⁸⁴
2002-1993		
Seal (Inner)	.....	4739[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]
1992-1990		
Seal (Inner)	.....	8871[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]

FRONT WHEEL**AWD**

2009-2003		
Hub Unit Bearing	.....	SP500300[2] ²⁵

REAR WHEEL**RWD**

2009-1996		
Seal	.....	4762N[2]
Cylindrical Bearing	.....	513067[2]
Bearing & Seal Kit	.....	TRP59047[2] ¹⁹
1995-1990		
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability⁸⁴Reorder

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC TRUCK - 1/2 TON - G10/G15, Express/Savana (cont.)

REAR WHEEL

AWD

2009-2003
 Seal 4762N[2]
 Cylindrical Bearing 513067[2]
 Bearing & Seal Kit TRP59047[2]¹⁹

4WD FRONT AXLE

Axle Shaft

2008-2003
 Seal 710491[2]

Differential

2006-2003
 Set SET11[2]

Pinion

2008-2003
 Seal 710547
 Cone/Cup (Inner) M86649-M86610
 Cone/Cup (Outer) M86649-M86610

REAR AXLE

Differential Rebuild Kit

2007-2006 (8.625" R.G.)
 Kit DRK321C
2005-1998 (9.5" R.G.)
 Kit DRK324B
2002-1997 (8.5" R.G.)
 Kit DRK321C
1997-1990 (9.5" R.G.)
 Kit DRK324
1996-1990 (8.5" R.G.)
 Kit DRK321

Differential

2006-2001 (8.625" R.G.)
 Set SET36[2]
2005-1993 (9.5" R.G.)
 Set SET42[2]
2000 (8.625" R.G.)(1st Design)
 Cone/Cup LM501349-LM501310[2]
2000 (8.625" R.G.)(2nd Design)
 Set SET36[2]
1999-1990 (8.5", 8.625" R.G.)
 Cone/Cup LM501349-LM501314[2]

Pinion

2007-2001 (8.625" R.G.)
 Seal 710506
 Cone/Cup (Inner) NP544520-NP099285
 Cone/Cup (Outer) M88048-M88010
 Repair Sleeve KWK99193
2005-1998 (9.5" R.G.)
 Seal 710507
 Cone/Cup (Inner) HM804846-HM804810
 Cone/Cup (Outer) HM88649-HM88610
 Repair Sleeve KWK99193

REAR AXLE (cont.)

Pinion (cont.)

2002-1997 (8.5", 8.625" R.G.)
 Seal 710506
 Cone/Cup (Inner) NP457992-NP926068
 Cone/Cup (Outer) M88048-M88010
 Repair Sleeve KWK99193
1997-1993 (9.5" R.G.)
 Seal 3896
 Cone/Cup (Inner) HM804846-HM804810
 Cone/Cup (Outer) HM88649-HM88610
 Repair Sleeve KWK99193
1996-1990 (8.5" R.G.)
 Seal 2043
 Cone/Cup (Inner) M802048-M802011
 Cone/Cup (Outer) M88048-M88010
 Repair Sleeve KWK99193

TRANSFER CASE

Front Output Shaft

2009-2003
 Seal 4503N

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1992-1990
 Seal 6712NA[2]
 Repair Sleeve KWK99187

Rear Seal/Ext. Housing

1990
 Seal 9449
 Seal Kit 5208⁶⁴

Selector Shaft Seal/Man. Shaft

1990
 Seal 8792S

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2008-1990 (4L60, 4L60E, THM700R4)
 Seal 3227[2]
 Repair Sleeve KWK99174
2006-1991 (4L80E)
 Seal 4598
 Repair Sleeve KWK99199

Rear Seal/Ext. Housing

2006-1991 (4L80E)(Booted)
 Seal 4333N
2006-1991 (4L80E)(Exc. Booted)
 Seal 9449
 Seal Kit 5208⁶⁴
2006-1990 (4L60, 4L60E, 4L65E)
 Seal 9613S[2]
 Repair Sleeve KWK99149
 Seal Kit 5200⁶⁴

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC TRUCK - 1/2 TON - G10/G15, Express/Savana (cont.)

4-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2008-1990
Seal 8792S
Repair Sleeve KWK99050

CLUTCH - 6 CYLINDER

Pilot Bearing

2000-1990
Ball Bearing 57080

CLUTCH - 8 CYLINDER

Pilot Bearing

2002-1990
Ball Bearing 57080

CLUTCH

Release Bearing

2000-1990 (Hyd. Mechanism)
Bearing Assy 614174

DRIVESHAFT SUPPORT

1990
Ball Bearing 88107[2]
Hanger Bearing Assy HB88107A[2]

POWER STEERING

Pitman Shaft

2000-1990
Seal Kit PSK1²⁴

Pump Shaft

2000-1990
Seal 7013S[2]
Ball Bearing 8537[2]¹⁶

CRANKSHAFT FRONT SEAL

6 Cylinder

2009-1990 194/3.2L, 230/3.8L, 250/4.1L,
262/4.3L, 292/4.8L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

CRANKSHAFT FRONT SEAL

8 Cylinder

2008-2003 325/ 5.3L
Seal Viton 100470
Repair Sleeve KWK99210
2002-1990 307/5.0L, 350/5.7L, 400/6.6L
Seal 9845
Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL

6 Cylinder

2009-1990 4.3L
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364

8 Cylinder

2009-2003 5.3L
Seal 100085
2002-1990 305/5.0L, 350/5.7L
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364

CHEVROLET/GMC TRUCK - 3/4 TON - Avalanche

FRONT WHEEL

RWD

2005-2004
Hub Unit Bearing SP580306[2]⁸³
Hub Unit Bearing SP580310[2]⁸⁴

FRONT WHEEL

4WD

2006-2002
Hub Unit Bearing SP580304[2]⁸³
Hub Unit Bearing SP580310[2]⁸⁴

¹⁶Obsolete
⁸⁴Reorder

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

⁸³Deplete Inventory

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC TRUCK - 3/4 TON - Avalanche (cont.)

REAR WHEEL

RWD

2005-2004 (10.5", 11.5" R.G.)
 Seal SL260002[2]²⁵
 Cone/Cup (Inner) 387AS-382A[2]
 Set (Outer) SET38[2]
 2005-2004 (9.5" R.G.)
 Seal 710105[2]
 Cylindrical Bearing R1561TV[2]
 Bearing & Seal Kit TGM1561R[2]¹⁹

4WD

2006-2003 (10.5", 11.5" R.G.)
 Seal SL260002[2]²⁵
 Cone/Cup (Inner) 387AS-382A[2]
 Set (Outer) SET38[2]
 2006-2002 (9.5" R.G.)
 Seal 710105
 Cylindrical Bearing R1561TV[2]
 Bearing & Seal Kit TGM1561R[2]¹⁹

4WD FRONT AXLE

Differential Rebuild Kit

2006-2003
 Kit DRK324A

Differential

2006-2003 (9.25" R.G.)
 Set SET42[2]

Pinion

2006-2002 (9.25" R.G.)
 Seal 710281
 Cone/Cup (Inner) HM804846-HM804810
 Cone/Cup (Outer) HM88649-HM88610

REAR AXLE

Differential Rebuild Kit

2004-2002 (9.5" R.G.)
 Kit DRK324B

Differential

2006-2002 (10.5" R.G.)
 Set SET38[2]
 2005-2003 (9.5" R.G.)
 Set SET42[2]
 2005-2002 (10.5" R.G.)(H/D)
 Cone/Cup 387AS-382A[2]

REAR AXLE

Pinion

2006-2002 (10.5" R.G.)
 Seal 710508
 Cone/Cup (Inner) HM903249-HM903210
 Cone/Cup (Outer) (L/D) NP457992-NP926068
 Cone/Cup (Outer) (H/D) NP544520-NP099285
 Cylindrical Bearing
 (Pilot) R1581TV
 2004-2003 (9.5" R.G.)
 Seal 710507
 Cone/Cup (Inner) HM804846-HM804810
 Cone/Cup (Outer) HM88649-HM88610

TRANSFER CASE

Input Shaft

2006-2002 (New Process 246)
 Seal 472636
 Ball Bearing 207
 Ball Bearing 110CB
 Ndle Bearing B5020[2]
 Ndle Bearing (Pilot) FC66561

Front Output Shaft

2006-2002 (New Process 246)
 Seal 710495²⁵
 Ball Bearing 207
 Ball Bearing 110CB
 Ndle Bearing (Pilot) J2416

Rear Output Shaft

2006-2002 (New Process 246)
 Seal 710496
 Ndle Bearing (Pilot) B5020[2]

Oil Pump Housing

2006-2002 (New Process 246)
 Seal 341022

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2006-2002 (4L80E)
 Seal 4598

Rear Seal/Ext. Housing

2006-2002 (4L80E)(Booted)
 Seal 4333N
 2006-2002 (4L80E)(Exc. Booted)
 Seal 9449

Selector Shaft Seal/Man. Shaft

2006-2002 (4L85E)
 Seal 8792S
 Repair Sleeve KWK99050

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25, Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500					

FRONT WHEEL**RWD**

2009-2008	(SRW)	
Hub Unit Bearing	.....	SP580312[2] ²⁵
2007-2006	Classic Style	
Hub Unit Bearing	.....	SP580305[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2005-2001	Classic Style Silverado/Sierra (2" Body Raise)(H/D Series)	
Hub Unit Bearing	.....	SP580305[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2005-2001	Classic Style Silverado/Sierra, Suburban, Yukon XL (Exc. 2" Body Raise)	
Hub Unit Bearing	.....	SP580306[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2000-1999	Classic Style Silverado/Sierra, Suburban, Tahoe, Yukon, Yukon XL	
Hub Unit Bearing	.....	SP580307[2] ⁸³
Hub Unit Bearing	.....	HA590352[2] ⁸⁴
2000-1992	Old Style C (7200 GVW)	
Seal (Inner)	.....	4739[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]
2000-1992	Old Style C (8600 GVW)	
Seal (Inner)	.....	4740[2]
Set (Inner)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]
1991-1990	(8600 GVW)	
Seal (Inner)	.....	8974S[2]
Set (Inner)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]
1991-1990	(7200 GVW)	
Seal (Inner)	.....	4739[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]

4WD

2009-2008	(SRW)	
Hub Unit Bearing	.....	SP580312[2] ²⁵
2007-1999	Classic Style Silverado/Sierra, Suburban, Tahoe, Yukon, Yukon XL	
Hub Unit Bearing	.....	SP580304[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2000-1996	Old Style C/K Series	
Hub Unit Bearing (RH)	.....	SP580302 ⁹⁵
Hub Unit Bearing (LH)	.....	SP580303 ⁹⁵
Sensor Kit (RH)	.....	SK580302 ³⁹
Sensor Kit (LH)	.....	SK580303 ³⁹
Seal	.....	710103[2]
2000-1995	Old Style C/K Series	
Seal (RH)	.....	710103[2]
Hub Unit Bearing (RH)	.....	SP550300 ⁹⁶
Hub Unit Bearing (LH)	.....	SP550301 ⁹⁶
Hub Unit Bearing (RH)	.....	SP550307 ⁸⁵
Hub Unit Bearing (LH)	.....	SP550307 ⁸⁵
Sensor Kit	.....	SK550301[2] ³⁹

FRONT WHEEL (cont.)**4WD (cont.)**

1995	Pickup, Suburban, Tahoe (8 Stud Wheel)(ABS)	
Hub Unit Bearing (LH)	.....	SP580301 ⁹⁵
Hub Unit Bearing (RH)	.....	SP580300 ⁹⁵
Sensor Kit (RH)	.....	SK580300 ³⁹
Sensor Kit (LH)	.....	SK580301 ³⁹
Seal	.....	710103[2]
1994-1992	Pickup, Suburban (8600 GVW)(8 Stud Wheel)	
Hub Unit Bearing	.....	HA591339[2] ⁸⁷
1994-1990	Pickup, Suburban (6 Stud Wheel)	
Hub Unit Bearing	.....	515001[2] ⁹⁰
1993-1990	(Exc. Hub Assembly)	
Seal (Inner) (1st Design	.....	416273[2]
Cone/Cup (Inner) (1st Design)	.....	368A-362A[2]
Seal (Inner) (2nd Design	.....	471271[2]
Cone/Cup (Inner) (2nd Design)	.....	LM104949-JLM104910[2]
Set (Outer)	.....	SET45[2]
1991-1990	Pickup, Suburban (8600 GVW)(8 Stud Wheel)(Non-ABS)	
Hub Unit Bearing	.....	HA591339[2] ⁸⁷

REAR WHEEL**RWD**

2009-1999	(10.5", 11.5" R.G.)	
Seal	.....	SL260002[2] ²⁵
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
2005-2003	Quadrasteer	
Hub Unit Bearing	.....	HA590004[2] ⁷⁵
2005-1990	C Series, Yukon XL, Silverado/Sierra, Suburban (9.5" R.G.)	
Seal	.....	710105[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹
2000-1990	(Drum ~ Rear Wheel)(10.5" R.G.)	
Seal	.....	2081[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
Repair Sleeve	.....	KWK99282[2]
1991-1990	R Series (9.5" R.G.)	
Seal	.....	3747[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹

4WD

2009-1999	(10.5", 11.5" R.G.)	
Seal	.....	SL260002[2] ²⁵
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Cable, Screw, Grease. ⁷⁵8 Stud, New Item.
Stud ~ Reorder ~ SP550307 Will Service Both Sides.
⁹⁵8 Stud. ⁹⁶6 Stud ~ Deplete Inventory.

²⁵New Item, Check For Availability
⁸³Deplete Inventory ⁸⁴Reorder
⁸⁷Hub Unit Only. W/O Rotor

³⁹Opt. Kit =
⁸⁵6
⁹⁰6 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25, Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500 (cont.)					

REAR WHEEL (cont.)**4WD (cont.)**

2008-1990	K Series, Yukon XL, Silverado/Sierra, Suburban (9.5" R.G.)	
Seal	710105[2]	
Cylindrical Bearing	R1561TV[2]	
Bearing & Seal Kit	TGM1561R[2]	¹⁹
2005-2003	Quadrasteer	
Hub Unit Bearing	HA590004[2]	⁷⁵
1999-1990	(10.5" R.G.)	
Seal	2081[2]	
Cone/Cup (Inner)	387AS-382A[2]	
Set (Outer)	SET38[2]	
1991-1990	V Series (9.5" R.G.)	
Seal	3747[2]	
Cylindrical Bearing	R1561TV[2]	
Bearing & Seal Kit	TGM1561R[2]	¹⁹

4WD FRONT AXLE**Differential Rebuild Kit**

2004-1997	(8.5" R.G.)	
Kit	DRK321C	
2002-1990	(9.25" R.G.)	
Kit	DRK324A	
1996-1990	(8.5" R.G.)	
Kit	DRK321	

Differential

2006-1990	(9.25" R.G.)	
Seal	450094[2]	
Set	SET42[2]	
2000-1990	(8.25", 8.5" R.G.)(GM Axle)	
Cone/Cup	LM501349-LM501314[2]	

Pinion

2008-2001	(9.25" R.G.)	
Seal	710536	
Cone/Cup (Inner)		
(9.25" R.G.)	HM804846-HM804810	
Cone/Cup (Outer)		
(9.25" R.G.)	HM88649-HM88610	
2000-1990		
Seal (8.25" & 9.25" R.G.)	710281	
Seal (8.5" R.G.)	8622	
Cone/Cup (Inner)		
(8.25" R.G.)	M802048-M802011	
Cone/Cup (Outer)		
(8.25" R.G.)	M88048-M88010	
Cone (Outer) (8.25" R.G.)(Opt.)	M88048A	
Cone/Cup (Inner)		
(9.25" R.G.)	HM804846-HM804810	
Cone/Cup (Outer)		
(9.25" R.G.)	HM88649-HM88610	

4WD FRONT AXLE**Spindle Kit**

1991-1990	
Bearing & Seal Kit	SBK1[2] ³³

Spindle

1991-1990	
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

Differential: Output Shaft

2007-1999	
Seal	710497[2] ²⁵

REAR AXLE**Differential Rebuild Kit**

2007-1998	(9.5" R.G.)(14 Bolt Rr End)	
Kit	DRK324B	
2007-1997	(10.5" R.G.)	
Kit	DRK325B	
2004-1997	(8.5" R.G.)	
Kit	DRK321C	
1997-1990	(9.5" R.G.)	
Kit	DRK324	
1996-1990	(10.5" R.G.)(2nd Design)(Prod. From Early 1988 On)	
Kit	DRK325A	
1996-1990	(8.5" R.G.)	
Kit	DRK321	

Differential

2006-1990	(9.5" R.G.)	
Set	SET42[2]	
2006-1990	(10.5" R.G.)	
Cone/Cup	387AS-382A[2]	
2000-1990	(8.5" R.G.)	
Cone/Cup	LM501349-LM501314[2]	

Pinion

2007-2005	(10.5" R.G.)(H/D)	
Seal	710508	
Cone/Cup (Inner)	HM807046-HM807010	
Cone/Cup (Outer)	NP457992-NP926068	
Cylindrical Bearing	R1581TV[2]	
2007-1998	(9.5" R.G.)	
Seal	710507	
Cone/Cup (Inner)	HM804846-HM804810	
Cone/Cup (Outer)	HM88649-HM88610	
2004-2003	(10.5", 11.5" R.G.)	
Seal	710508	
Cone/Cup (Inner)	HM903249-HM903210	
Cone/Cup (Outer)	NP544520-NP099285	
Cylindrical Bearing	R1581TV[2]	

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²⁵New Item, Check For Availability
Brg B2110, Seals 722108 & 722109. ⁷⁵8 Stud, New Item.

³³Opt. Kit =

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25,					
Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500 (cont.)					

REAR AXLE (cont.)**Pinion (cont.)**

2002-1997	(8.5", 8.625" R.G.)
Seal	710506
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99193
2002-1990	(10.5" R.G.)
Seal	2286
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1997-1990	(9.5" R.G.)
Seal	3896
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610

TRANSFER CASE REBUILD KIT

2000-1994	(New Process 241C)
Kit	TCRK241D ¹⁶
2000-1994	(New Process 243C)
Kit	TCRK243 ¹⁶
1993-1990	(New Process 241C)
Kit	TCRK241D ¹⁶

TRANSFER CASE**Input Shaft**

2007-2003	(New Process 246)
Seal	472636
2007-1999	(New Process 261C)
Seal	472636
2000-1995	(New Process 241, 243)
Seal (O.E.)	3173
Ball Bearing	110L
Seal (Opt)	710928
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1994	(New Process 241)(1st Design)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1994	(New Process 241)(2nd Design)
Seal (O.E.)	3173
Ball Bearing	110L
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1993-1991	(New Process 241)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1990	(New Process 241)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Seal (Opt)	710298
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	SCH1810

Front Output Shaft

2007-1998	(New Process 241, 243)
Seal	710495 ²⁵
Ball Bearing	207
Ndle Bearing (Pilot)	J2416
Repair Sleeve	KWK99187
1997-1990	(New Process 241, 243)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416

Rear Output Shaft

2000-1991	(New Process 241, 243)
Seal	4333N
Ball Bearing	207
Ndle Bearing (Pilot)	B5020
1991	(New Process 241)
Seal (2nd Design)	4333N
Seal (1st Design)	9449
Ball Bearing	207
Ndle Bearing (Pilot)	B5020
1990	(New Process 241)
Seal	9449
Ball Bearing	207[2]
Seal Kit	5208 ⁶⁴
Ndle Bearing (Pilot)	B5020[2]

Oil Pump Housing

2000-1990	(New Process 208, 241, 243)
Seal	341022
Repair Sleeve	KWK99225

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990	
Seal	6712NA[2]
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

1990	(THM400)(1.890" Shaft)
Seal	9449[2]
Seal Kit	5208 ⁶⁴

Selector Shaft Seal/Man. Shaft

1990	
Seal	8792S[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1993	(4L60, 4L60E, 4L65E)
Seal	3227
Repair Sleeve	KWK99174
2006-1991	(4L80E)(THMR2)
Seal	4598
Repair Sleeve	KWK99199
1992-1990	(THM700)(4L60 E)
Seal	3227[2]
Repair Sleeve	KWK99174

¹⁶Obsolete²⁵New Item, Check For Availability⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25,					
Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500 (cont.)					

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2006-1993	(4L60, 4L60E, 4L65E)	
Seal	.....	9613S
2006-1991	(4L80E)(THMR2)(Booted)	
Seal	.....	4333N
2006-1991	(4L80E)(THMR2)(Exc. Booted)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴
1992-1990	(THM700 R4)	
Seal	.....	9613S[2]
Repair Sleeve	.....	KWK99149
Seal Kit	.....	5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2009-1990		
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

5-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2007-2001	(Allison 1000, 1000/M74)	
Seal	.....	415988

Selector Shaft Seal/Man. Shaft

2007-2001	(Allison 1000, 1000/M74)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

6-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2009-2007	(6L90)	
Seal	.....	8792S

CLUTCH

Pilot Bearing

2002-2001	346/6.0, 496/8.1	
Ball Bearing	.....	302CC
2000-1994	(Gas)	
Ball Bearing	.....	57080
2000-1990	(Diesel)(TurboDiesel)	
Ball Bearing	.....	57080
1993-1990	(Gas)	
Bushing H/D	.....	PB656HD

CLUTCH - 6 CYLINDER

Release Bearing

1995-1990	(Hyd.)	
Bearing Assy	.....	614109

CLUTCH - 8 CYLINDER

Release Bearing

2002-1996		
Bearing Assy	.....	614174
1995-1990	(w/o cable Cl.)	
Bearing Assy	.....	614109

4-SPEED MANUAL TRANSMISSION

Input Shaft

1991	(CH465)	
Seal	.....	481181N
Ball Bearing	.....	211FFLE[2]
Repair Sleeve	.....	KWK99162
1990	(CH465)(1st Design)	
Seal	.....	481181N
Ball Bearing	.....	N1211L[2]
Repair Sleeve	.....	KWK99162
1990	(CH465)(2nd Design)	
Seal	.....	481181N
Ball Bearing	.....	211FFLE[2]
Repair Sleeve	.....	KWK99162

Rear Output Shaft

1991-1990	(CH465)	
Seal	.....	410085
Ball Bearing	.....	308FFL[2]

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1996	(New Venture 4500)	
Kit	.....	TRK4500GMI
1999-1991	(New Venture 3500)	
Kit	.....	TRK235B
1995-1991	(New Venture 4500)	
Kit	.....	TRK4500GM

Front Input Shaft

2007-1999	(New Process 4500, 4500HD)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-NP728109[2]
Repair Sleeve	.....	KWK99133
1998-1991	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138
1998-1991	(New Process 4500)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-M802011AP[2]
Repair Sleeve	.....	KWK99133
1991-1990	(Getrag MG5)(4WD)	
Seal	.....	4529N
Repair Sleeve	.....	KWK99138
1991-1990	(Getrag)(4WD)	
Seal	.....	4529N
Repair Sleeve	.....	KWK99133

Front Countershaft

2007-1991	(New Process 4500)	
Cone/Cup	.....	LM102949CP-LM102910P[2]

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25, Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500 (cont.)					

5-SPEED MANUAL TRANSMISSION**Rear Countershaft**

2007-1991 (New Process 4500)
Cone/Cup LM501349HP-LM501310P[2]

Rear Output Shaft

2007-1991 (New Process 4500)
Seal 714654
Cone/Cup M804049-M804010[2]
2004-2001 (New Process 4500HD)
Seal 714670
Cone/Cup M804049-M804010[2]
1998-1996 (New Process 3500)(4WD)
Seal 4528N
Ball Bearing 307FFTB[2]
1998-1991 (New Process 3500)(4WD)
Seal 4532N
Ball Bearing 307FFTB[2]
1995-1991 (N.P.3500 # C320844)(4WD)
Seal 4530
Ball Bearing 307FFTB[2]
1995-1991 (N.P.3500 Exc. # C320844)(4WD)
Seal 4528N
Ball Bearing 307FFTB[2]
1991-1990 (Getrag)
Seal 4530

Extension Housing

2007-1991 (New Process 4500)(2WD)
Ndle Bearing B5020[2]

A/C COMPRESSOR

2002-1990
Ball Bearing 907257[2]
Ball Bearing (Frt Head) S128

ALTERNATOR

2002-1990 (Delco 100, 124, 140, 145 Amp.)
Ball Bearing (Rear End) 100CCAB
1991-1990 (Delco 56, 66, 78 Amp.)
Ball Bearing (Drive End) 203FF
1991-1990 (Delco 37, 42, 55, 56, 61, 63, 66, 78 Amp.)
Ball Bearing (Rear End) MNJ471S

DRIVESHAFT SUPPORT

2007-1990 (1.378" 35mm Brg. I.D.)
Ball Bearing 88107[2]
Hanger Bearing Assy HB88107A[2]
2000-1991 (1.57" 40mm Brg. I.D.)(6.625 Flg Mtg Base)
Hanger Bearing Assy HB88508A

POWER STEERING**Pitman Shaft**

1991-1990
Seal (Inner) 471413
Seal (Outer) 7412S
Seal Kit PSK1²⁴

Pump Shaft

2002-1990
Seal 480821

Worm Shaft

1991-1990
Seal 222025

CRANKSHAFT FRONT SEAL**6 Cylinder**

1995-1990 250/4.1L, 262/4.3L, 292/4.8L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

8 Cylinder

2008-1999 294/4.8L, 325/5.3L, 364/6.0L
Seal Viton 100470
Repair Sleeve KWK99210
2004-2001 402/6.6L (Diesel)
Seal 3945
Repair Sleeve KWK99233
Harmnc Balancer Slvs 88233
2000-1990 379/6.2L (Diesel) 395/6.5L (Diesel), 454/7.4L (GAS)
Seal 3945
Repair Sleeve KWK99233
2000-1990 283/4.6L, 307/5.0L, 327/5.4L, 350/5.7L, 4006/6.6L (GAS)
Seal 9845
Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL**6 Cylinder**

1995-1990
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364

8 Cylinder

2009-2001 402/6.6L (Diesel)
Seal Viton 710258
Repair Sleeve KWK99452
2009-1999 293/4.8L, 325/5.3L, 364/6.0L
Seal 100085
2000-1992 379/6.2L (Diesel), 395/6.5L (Diesel)
Seal Viton 710258
Repair Sleeve KWK99452
2000-1991 (454/7.4L)
Seal Viton 2261
Repair Sleeve KWK99435

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 3/4 TON - C-20/25, K-20/25, R-20/25, Silverado/Sierra, Suburban, Silverado 2500 HD, V-20/25, Yukon XL 2500 (cont.)					

CRANKSHAFT REAR SEAL (cont.)**8 Cylinder (cont.)**

2000-1990	305/5.0L, 350/5.7L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364
1991-1990	(379/6.2L Diesel)
Seal	5163

CHEVROLET/GMC TRUCK - 3/4 TON - G20/G25, Express/Savana**FRONT WHEEL****RWD**

2009-2006	
Hub Unit Bearing	HA590352[2] ⁸⁴
2005-2003	(7300 GVWR)
Hub Unit Bearing	SP550305[2] ⁸³
Hub Unit Bearing	SP450301[2] ⁸⁴
2005-2003	(8500 & 8600 GVWR)
Hub Unit Bearing	HA590352[2] ⁸⁴
2002-1996	(H/D Brks.)
Seal (Inner)	4740[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15103S-15243[2]
2002-1991	(L/D)
Seal (Inner)	4739[2]
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]
1995-1990	(H/D Brks.)
Seal (Inner)	8974S[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	1779-1729X[2]
1990	(JB5 L/D Brks.)
Seal (Inner)	8871[2]
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]

REAR WHEEL**RWD**

2009-2003	(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹
2009-1999	(10.5", 11.5" R.G.)
Seal	SL260002[2] ²⁵
Cone/Cup (Inner)	387AS-382A[2]
Set (Outer)	SET38[2]
2002-1990	(9.5" R.G.)
Seal	710105[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹
2002-1990	(10.5" R.G.)
Seal (Inner)	2081[2]
Cone/Cup (Inner)	387AS-382A[2]
Set (Outer)	SET38[2]
1995-1990	(8.5" R.G.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2005-2003	
Seal	710491[2]

Differential Rebuild Kit

2005	(7.25" R.G.)
Kit	DRK320A

Differential

2006-2003	
Set	SET11[2]

Pinion

2006-2003	
Seal	710547
Seal (5.3L)	710532
Cone/Cup (Inner)	M86649-M86610
Cone/Cup (Outer)	M86649-M86610

REAR AXLE**Differential Rebuild Kit**

2004-1997	(8.5" R.G.)
Kit	DRK321C
2002-1998	(9.5" R.G.)
Kit	DRK324B
2002-1990	(10.5" R.G.)
Kit	DRK325B
1997-1990	(10.5" R.G.)(2nd Design)
Kit	DRK325A
1997-1990	(9.5" R.G.)
Kit	DRK324
1996-1990	(8.5" R.G.)
Kit	DRK321

Differential

2008-2003	(Dana/Spicer 60 Axle)
Cone/Cup	NP197868-NP802507[2]
2005-2003	(10.5" R.G.)
Cone/Cup	469-453X[2]
2005-1993	(9.5" R.G.)
Set	SET42[2]
2004-2001	(8.625" R.G.)
Set	SET36[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Inventory

⁸⁴Reorder

²⁵New Item, Check For Availability

⁸³Deplete

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC TRUCK - 3/4 TON - G20/G25, Express/Savana (cont.)

REAR AXLE (cont.)

Differential (cont.)

2002-1990	(10.5" R.G.)	
Cone/Cup		387AS-382A[2]
2000	(8.625" R.G.)(1st Design)	
Cone/Cup		LM501349-LM501314[2]
2000	(8.625" R.G.)(2nd Design)	
Set		SET36[2]
1999-1997	(8.5" R.G.)	
Cone/Cup		LM501349-LM501314[2]
1995-1990	(8.125", 8.5" R.G.)	
Cone/Cup		LM501349-LM501314[2]

Pinion

2008-2006	(10.5" R.G.)(H/D)	
Seal		710508
Cone/Cup (Inner)		HM807046-HM807010
Cone/Cup (Outer)		HM88542-HM88510
2008-2003	(Dana/Spicer 60 Axle)	
Seal		100712V
Cone/Cup (Inner)		HM803146-HM803110
Cone/Cup (Outer)		HM88542-HM88510
2006-2003	(9.75" R.G.)	
Cone/Cup (Inner)		HM803146-HM803110
Cone/Cup (Outer)		HM88542-HM88510
2004-2003	(10.5" R.G.)	
Seal		710508
Cone/Cup (Inner)		HM903249-HM903210
Cone/Cup (Outer)		NP544520-NP099285
Cylindrical Bearing		R1581TV[2]
2002-2000	(10.5" R.G.)	
Seal		710508
Cone/Cup (Inner)		HM903249-HM903210
Cone/Cup (Outer)		NP457992-NP926068
Cylindrical Bearing		R1581TV[2]
2002-1998	(9.5" R.G.)	
Seal		710507
Cone/Cup (Inner)		HM804846-HM804810
Cone/Cup (Outer)		HM88649-HM88610
2002-1997	(8.5" R.G.)	
Seal		710506
Cone/Cup (Inner)		NP457992-NP926068
Cone/Cup (Outer)		M88048-M88010
1999-1990	(10.5" R.G.)	
Seal		710508
Cone/Cup (Inner)		HM903249-HM903210
Cone/Cup (Outer)		M802048-M802011
Cylindrical Bearing		R1581TV[2]
1997-1990	(9.5" R.G.)	
Seal		3896
Cone/Cup (Inner)		HM804846-HM804810
Cone/Cup (Outer)		HM88649-HM88610
1996-1990	(8.5", 8.75" R.G.)	
Seal		2043
Cone/Cup (Inner)		M802048-M802011
Cone/Cup (Outer)		M88048-M88010

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1995-1990	(THM700)(4L60 E)	
Seal		3227
Repair Sleeve		KWK99174

3-SPEED AUTOMATIC TRANSMISSION (cont.)

Torque Converter (cont.)

1992-1990		
Seal		6712NA[2]
Repair Sleeve		KWK99187

Rear Seal/Ext. Housing

1995-1990		
Seal		9613S
Repair Sleeve		KWK99149
Seal Kit		5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

1990		
Seal		8792S

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2006-1991	(4L80E)	
Seal		4598
Repair Sleeve		KWK99199
2006-1990	(THM700)(4L60 E)	
Seal		3227[2]
Repair Sleeve		KWK99174

Rear Seal/Ext. Housing

2008-1991	(4L80E)(Booted)	
Seal		4333N
2008-1991	(4L80E)(Exc. Booted)	
Seal		9449
Seal Kit		5208 ⁶⁴
2006-1990	(4L60, 4L60E, 4L65E)	
Seal		9613S[2]
Repair Sleeve		KWK99149
Seal Kit		5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2008-1990		
Seal		8792S
Repair Sleeve		KWK99050

CLUTCH

Pilot Bearing

2000-1994	(Gas)	
Ball Bearing		57080
2000-1990	(Diesel)(TurboDiesel)	
Ball Bearing		57080
1993-1990	(Gas)	
Bushing H/D		PB656HD

Release Bearing

2002-1990	(Hyd. Mechanism)	
Bearing Assy		614174

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHEVROLET/GMC TRUCK - 3/4 TON - G20/G25, Express/Savana (cont.)

4-SPEED MANUAL TRANSMISSION

Input Shaft

1990 (New Process MY6)
 Seal 7412S
 Repair Sleeve KWK99125

Rear Output Shaft

1990 (New Process)
 Seal 9613S
 Ball Bearing 308LOE[2]
 Repair Sleeve KWK99149
 Seal Kit 5200⁶⁴

A/C COMPRESSOR

2002-1990
 Ball Bearing 907257[2]
 Ball Bearing (Frt Head) S128

ALTERNATOR

2002-1990 (Delco 100, 124, 140, 145 Amp.)
 Ball Bearing (Rear End) 100CCAB
 1991-1990 (Delco 56, 66, 78 Amp.)
 Ball Bearing (Drive End) 203FF
 1991-1990 (Delco 37, 42, 55, 56, 61, 63, 66, 78 Amp.)
 Ball Bearing (Rear End) MNJ471S

DRIVESHAFT SUPPORT

1994-1990 (1.378" 35mm Brg. I.D.)
 Ball Bearing 88107[2]
 Hanger Bearing Assy HB88107A[2]
 1991-1990 (1.57" 40mm Brg. I.D.)
 Hanger Bearing Assy HB108[2]

POWER STEERING

Pitman Shaft

2000-1990
 Seal Kit PSK1²⁴
 Seal (Inner) 471413
 Seal (Outer) 7412S

Pump Shaft

2000-1990
 Seal 7013S[2]
 Ball Bearing 8537[2]¹⁶

Worm Shaft

1991-1990 Exc. P Ser.
 Seal 222025

MANUAL STEERING

Pitman Shaft

1990
 Seal 313842

MANUAL STEERING

Worm Shaft

1990
 Seal 7013S
 Ball Bearing 8537[2]¹⁶

CRANKSHAFT FRONT SEAL

6 Cylinder

2005-1990 230/3.8L, 250/4.1L, 262/4.3L, 292/4.8L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

8 Cylinder

2008-2003 294/4.8L, 325/5.3L, 364/6.0L
 Seal Viton 100470
 Repair Sleeve KWK99210
 2002-1990 379/6.2L (Diesel) 395/6.5L (Diesel) 395/6.5L (Turbo Diesel)
 Seal 3945
 Repair Sleeve KWK99233
 Harmnc Balancer Slvs 88233
 2002-1990 283/4.6L, 307/5.0L, 327/5.4L, 350/5.7L, 4006/6.6L (GAS)
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL

6 Cylinder

2005-1999 262/4.3L
 Seal Viton 4359V
 Seal 5512
 Repair Sleeve KWK99364
 1998-1990
 Seal Viton 4359V

8 Cylinder

2009-2003 292/4.8L, 325/5.3L, 364/6.0L
 Seal 100085
 2006-1992 (Diesel)
 Seal Viton 710258
 Repair Sleeve KWK99452
 2002-1990 305/5.0L, 350/5.7L
 Seal Viton 4359V
 Seal PTFE H/D 5274
 Repair Sleeve KWK99364
 1991-1990 (Diesel)
 Seal 5163

¹⁶Obsolete

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - C-30/35, K-30/35, R-30/35, Silverado/Sierra, V-30/35					

FRONT WHEEL**RWD**

2009-2008	(DRW)	
Hub Unit Bearing	.....	SP580313[2] ²⁵
2007-2001	Classic Style Silverado/Sierra	
Hub Unit Bearing	.....	SP580308[2] ¹⁶
Hub Unit Bearing	.....	SP580311[2] ⁵⁸
2002-1992	Old Style	
Seal (Inner) (15,000 GVWR)	.....	5682[2]
Cone/Cup (Inner)	.....	26884-26822[2]
(15,000 GVWR)	.....	26884-26822[2]
Seal (Inner) (Exc. 15,000 GVWR)	.....	4740[2]
Set (Inner) (Exc. 15,000 GVWR)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]
1991-1990		
Seal (Inner)	.....	8974S[2]
Set (Inner)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]
1990	(Disc ~ Front Wheel)	
Seal (Inner)	.....	8974S[2]
Set (Inner)	.....	SET45[2]
Cone/Cup (Outer)	.....	15103S-15243[2]

4WD

2008	(DRW)	
Hub Unit Bearing	.....	SP580313[2] ²⁵
2007-2004	Classic Style Silverado/Sierra (SRW)(9900 GVWR)	
Hub Unit Bearing	.....	SP580304[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2007-2001	Classic Style Silverado/Sierra (DRW)	
Hub Unit Bearing	.....	SP580309[2] ¹⁶
Hub Unit Bearing	.....	SP580311[2] ⁵⁸
2000-1996	(ABS)	
Seal	.....	710103[2]
Hub Unit Bearing (RH)	.....	SP580302[2] ⁸⁷
Sensor Kit (RH)	.....	SK580302[2] ³⁹
Hub Unit Bearing (LH)	.....	SP580303[2] ⁸⁷
Sensor Kit (LH)	.....	SK580303[2] ³⁹
1995	(ABS)	
Hub Unit Bearing (RH)	.....	SP580300[2] ⁹⁵
Sensor Kit (RH)	.....	SK580300[2] ³⁹
Hub Unit Bearing (LH)	.....	SP580301[2] ⁹⁵
Sensor Kit (LH)	.....	SK580301[2] ³⁹
Seal	.....	710103[2]
1994-1990		
Hub Unit Bearing	.....	HA591339[2] ⁸⁷
Seal	.....	710103[2]

REAR WHEEL**RWD**

2009-2001	(10.5", 11.5" R.G.)	
Seal	.....	SL260002[2] ²⁵
Cone/Cup (Inner)	.....	387AS-382A[2]
(10.5" R.G.)	.....	387AS-382A[2]
Set (Outer) (10.5" R.G.)	.....	SET38[2]
Cone/Cup (Inner)	.....	NP706218-NP910345[2]
(11.5" R.G.)	.....	NP706218-NP910345[2]
Cone/Cup (Outer)	.....	NP145100-NP913325[2]
(11.5" R.G.)	.....	NP145100-NP913325[2]
2000-1990		
Seal (Inner)	.....	2081[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
(10.5" R.G.)	.....	387AS-382A[2]
Set (Outer) (10.5" R.G.)	.....	SET38[2]
Cone/Cup (Inner)	.....	NP706218-NP910345[2]
(11.5" R.G.)	.....	NP706218-NP910345[2]
Cone/Cup (Outer)	.....	NP145100-NP913325[2]
(11.5" R.G.)	.....	NP145100-NP913325[2]
1991-1990	(9.5" R.G.)	
Seal	.....	2081[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹

4WD

2009-2001	(10.5", 11.5" R.G.)	
Seal	.....	SL260002[2] ²⁵
Cone/Cup (Inner)	.....	387AS-382A[2]
(10.5" R.G.)	.....	387AS-382A[2]
Set (Outer) (10.5" R.G.)	.....	SET38[2]
Cone/Cup (Inner)	.....	NP706218-NP910345[2]
(11.5" R.G.)	.....	NP706218-NP910345[2]
Cone/Cup (Outer)	.....	NP145100-NP913325[2]
(11.5" R.G.)	.....	NP145100-NP913325[2]
2000-1990		
Seal (Inner)	.....	2081[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
(10.5" R.G.)	.....	387AS-382A[2]
Set (Outer) (10.5" R.G.)	.....	SET38[2]
Cone/Cup (Inner)	.....	NP706218-NP910345[2]
(11.5" R.G.)	.....	NP706218-NP910345[2]
Cone/Cup (Outer)	.....	NP145100-NP913325[2]
(11.5" R.G.)	.....	NP145100-NP913325[2]
1991-1990	(9.5" R.G.)	
Seal	.....	2081[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹

FRONT AXLE**Differential Rebuild Kit**

2004-1990	(9.25" R.G.)	
Kit	.....	DRK324A

¹⁶Obsolete ¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²⁵New Item, Check For Availability
³⁹Opt. Kit = Cable, Screw, Grease. ⁵⁸Replaces SP580308 and SP580309 ⁸³Deplete Inventory
⁸⁴Reorder ⁸⁷Hub Unit Only. W/O Rotor ⁹⁵8 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - C-30/35, K-30/35, R-30/35, Silverado/Sierra, V-30/35 (cont.)					

FRONT AXLE**Differential**

2006-1990	(9.25" R.G.)
Seal	450094[2]
Set	SET42[2]
1991-1990	(Dana/Spicer 60 F Axle)
Cone/Cup	387A-382S[2]

Pinion

2008-1999	(9.25" R.G.)
Seal	710536
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
1998-1997	(9.25" R.G.)
Seal	710281
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
1996-1990	(9.25" R.G.)
Seal	710281
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
1991-1990	(Dana/Spicer 60 F Axle)
Seal	9316
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510

Spindle Kit

1991-1990	(Dana/Spicer 60 F Axle)
Bearing & Seal Kit	SBK3[2] ³⁵

Spindle

1991-1990	(Dana/Spicer 60 F Axle)
Seal (Inner)	710044[2]
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710045[2]

Steering Knuckle

1991-1990	(Dana/Spicer 60 F Axle)
Seal (Upper)	710304[2]
Cone/Cup (Upper)	23100-23256[2]
Seal (Lower)	710304[2]
Cone/Cup (Lower)	23100-23256[2]

4WD FRONT AXLE**Differential: Output Shaft**

2007-1999	
Seal	710497[2] ²⁵

REAR AXLE**Differential Rebuild Kit**

2003-2001	(11.5" R.G.)
Kit	DRK327
2003-1997	(10.5" R.G.)
Kit	DRK325B
2003-1997	(9.5" R.G.)
Kit	DRK324B

REAR AXLE (cont.)**Differential Rebuild Kit (cont.)**

1996-1990	(10.5" R.G.)(2nd Design)(Prod. From Mid 1988 On)
Kit	DRK325A
1996-1990	(9.5" R.G.)
Kit	DRK324
1996-1990	(Dana/Spicer 70 H/D Axle)
Kit	DRK332HD
1991-1990	(Dana/Spicer 60H/D Axle)
Kit	DRK331
1990	(Dana/Spicer 70U Axle)
Kit	DRK332U

Differential

2006-1990	(10.5" R.G.)
Cone/Cup	387AS-382A[2]
2005-2001	(11.5" R.G.)
Cone/Cup	3984-3920[2]
2002-1990	(Dana/Spicer 70H/D, 70-3H/D, 80 Axle)
Cone/Cup	469-453X[2]
1999-1990	(9.5" R.G.)
Set	SET42[2]
1995-1990	(Isuzu R040 Axle)
Cone/Cup	29590-29522[2]
1991-1990	(Rockwell C100 Axle)
Cone/Cup	395-394A[2]
1990	(Dana/Spicer 60H/D, 70B, 70U Axle)
Cone/Cup	387A-382S[2]

Pinion

2007-1997	(11.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM807046-HM807010
Cone/Cup (Outer)	M802048-M802011
2006-2005	(10.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM807046-HM807010
Cone/Cup (Outer)	NP457992-NP926068
Cylindrical Bearing	R1581TV[2]
2004-2003	(10.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	NP544520-NP099285
Cylindrical Bearing	R1581TV[2]
2004-2003	(10.5" R.G.)(H/D)
Seal	710508
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	NP544520-NP099285
Cylindrical Bearing	R1581TV[2]
2002-2000	(10.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	NP457992-NP926068
Cylindrical Bearing	R1581TV[2]

²⁵New Item, Check For Availability³⁵Opt. Kit = Brg B2414, Seals 710044 & 710045

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - C-30/35, K-30/35, R-30/35, Silverado/Sierra, V-30/35 (cont.)					

REAR AXLE (cont.)**Pinion (cont.)**

2000-1990	(Dana/Spicer 80 Axle)
Seal Viton	4525V
Cone/Cup (Inner)	HM807046-HM807010
Cone/Cup (Outer)	M802048-M802011
1999-1998	(10.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1999-1998	(9.5" R.G.)
Seal	710507
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
1999-1990	(Isuzu R040 Axle)
Seal	710268
Bearing Assy (Inner)	30309M
Bearing Assy (Outer)	30309M
1997	(10.5" R.G.)
Seal (1st Design)	2286
Seal (2nd Design)	710508
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1997-1990	(9.5" R.G.)
Seal	3896
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
1997-1990	(Dana/Spicer 70B, 70H/D, 70-3H/D Axle)
Seal	9316
Cone/Cup (Inner)	HM807040-HM807010
Cone/Cup (Outer)	HM88542-HM88510
1996-1990	(10.5" R.G.)
Seal	2286
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1994-1990	(Dana/Spicer 70U Axle)
Seal	9316
Cone/Cup (Inner)	HM803149-HM803110
Cone/Cup (Outer)	HM88542-HM88510
1991-1990	(Rockwell C100 Axle)
Seal	475080N
Cone/Cup (Inner)	M903345-M903310
Cone/Cup (Outer)	44143-44348
1990	(Dana/Spicer 60H/D Axle)
Seal	9316
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510

TRANSFER CASE REBUILD KIT

2002-1990	(Warner 4401, 4470)
Kit	TCRK4470
2002-1990	(Warner 1370)
Kit	TCRK1356
1990	(New Process 205)(T400)(late SM465)
Kit	TCRK205GDMD

TRANSFER CASE REBUILD KIT (cont.)

1990	(New Process 205)(THM350)(early SM465)
Kit	TCRK205G

TRANSFER CASE**Input Shaft**

2007-2001	(New Process 261C, 263C)
Seal (Exc. Engine code U and G)	472636
2002-1990	(Warner 1370, 4401, 4470)
Seal (O.E.)	714503
Ball Bearing	110CB
Ndle Bearing (Pilot)	BK3026
1990	(New Process 205)(T400)(late SM465)
Seal (O.E.)	3173
Ball Bearing	1210L
Repair Sleeve (Opt)	KWK99193
Seal (Opt)	710298
Ndle Bearing (Pilot)	QAR29523

Front Output Shaft

2007-2001	(New Process 261C, 231C)
Seal	710495 ²⁵
2002-1990	(Warner 1370, 4401, 4470)
Seal	714503
Ball Bearing	207
Ndle Bearing (Pilot)	B2012
1990	(New Process 203, 205)
Seal	710005
Ball Bearing	307L
Repair Sleeve	KWK99174
Ndle Bearing (Pilot)	M28161

Rear Output Shaft

2002-1990	(Warner 4470)
Seal (Exc. Boot)	714503
Seal (Booted)	4503N
Ball Bearing	208
2002-1990	(Warner 1370, 4401)
Seal (Exc. Boot)	714503
Seal (Booted)	4503N
Ball Bearing	207
1990	(New Process 205)
Seal	473468
Ball Bearing	307L[2]
Repair Sleeve	KWK99212
Ndle Bearing (Pilot)	B3216

Idler Shaft

1990	(New Process 205)
Cone/Cup	2793-2720[2]

Oil Pump Housing

2002-1990	(Warner 4470)
Ndle Bearing	B3012

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - C-30/35, K-30/35, R-30/35, Silverado/Sierra, V-30/35 (cont.)					

TRANSFER CASE**Selector Shaft Seal/Man. Shaft**

2002-1990	(Warner 1370, 4401, 4470)	
Seal	.....	330385
1990	(New Process 205)	
Seal	.....	2287
Repair Sleeve	.....	KWK99076

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990		
Seal	.....	6712NA[2]
Repair Sleeve	.....	KWK99187

Selector Shaft Seal/Man. Shaft

1990		
Seal	.....	8792S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1991	(4L80E)	
Seal	.....	4598
Repair Sleeve	.....	KWK99199
2002-1990	(THM700)(4L60 E)	
Seal	.....	3227[2]
Repair Sleeve	.....	KWK99174

Rear Seal/Ext. Housing

2006-1991	(4L80E)(THMR2)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴
2006-1991	(4L80E)(THMR2)(Booted)	
Seal	.....	4333N
2002-1990	(THM700)(4L60 E)	
Seal	.....	9613S[2]
Repair Sleeve	.....	KWK99149
Seal Kit	.....	5200 ⁶⁴

Selector Shaft Seal/Man. Shaft

2008-1990		
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

5-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2007-2001	(Allison 1000, 1000/M74)	
Seal	.....	415988

Selector Shaft Seal/Man. Shaft

2007-2001	(Allison 1000, 1000/M74)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

6-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2009-2007	(6L90)	
Seal	.....	8792S

CLUTCH**Pilot Bearing**

2001-1990		
Ball Bearing	.....	57080

CLUTCH - 8 CYLINDER**Release Bearing**

2000-1996		
Bearing Assy	.....	614174
1995-1990	(w/o cable CL.)	
Bearing Assy	.....	614109

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1991-1990	(Muncie)(M20)(CH465)(2nd Design)	
Seal	.....	481181N
Ball Bearing	.....	211FFLE[2]
Repair Sleeve	.....	KWK99162
1990	(Muncie M20, CH465)(1st Design)	
Seal	.....	481181N
Ball Bearing	.....	N1211L[2]
Repair Sleeve	.....	KWK99162

Rear Output Shaft

1991-1990	(Muncie M20, CH465)	
Seal	.....	410085
Ball Bearing	.....	1308SL[2]

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2002-1996	(New Venture 4500)	
Kit	.....	TRK4500GMI
1995-1991	(New Venture 4500)	
Kit	.....	TRK4500GM

Front Input Shaft

2007-1999	(New Process 4500)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-NP728109[2]
Repair Sleeve	.....	KWK99133
1998-1991	(New Process 4500)	
Seal	.....	714655[2]
Cone/Cup	.....	M802048CP-M802011AP[2]
Repair Sleeve	.....	KWK99133
1993-1991	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - C-30/35, K-30/35, R-30/35, Silverado/Sierra, V-30/35 (cont.)					

5-SPEED MANUAL TRANSMISSION**Front Countershaft**

2007-1991 (New Process 4500)
Cone/Cup LM102949CP-LM102910P[2]

Rear Countershaft

2007-1991 (New Process 4500)
Cone/Cup LM501349HP-LM501310P[2]

Rear Output Shaft

2007-1991 (N. P. 4500 w/o 15,000 GVWR)
Seal 714654
Cone/Cup M804049-M804010[2]
2001-1991 (New Process 4500)(15,000 GVWR)
Seal 415449
Cone/Cup M804049-M804010[2]
1993-1991 (N.P.3500 # C320844)(4WD)
Seal 4530
Ball Bearing 307FFTB[2]
1993-1991 (N.P.3500 Exc. # C320844)(4WD)
Seal 4528N
Ball Bearing 307FFTB[2]
1993-1991 (New Process 3500)(4WD)
Seal 4532N
Ball Bearing 307FFTB[2]

DRIVESHAFT SUPPORT

2002-2001 (Spicer 1480)(1.5748" 40mm Brg. I.D.)
Hanger Bearing Assy HB88508AA
2002-1990 (Spicer 1280, 1310, 1330)(1.3780" Brg. I.D.)
Ball Bearing 88107[2]
Hanger Bearing Assy HB88107A[2]
2000-1990 (Spicer 1410)(1.5748" 40mm Brg. I.D. 2.25" height)
Hanger Bearing Assy HB88508A[2]

POWER STEERING**Pitman Shaft**

1991-1990 Exc. C/K Ser.
Seal (Inner) 471413
Seal (Outer) 7412S
Seal Kit PSK1²⁴

Pump Shaft

2001-1990
Seal 480821

Worm Shaft

1991-1990 Exc. P Ser.
Seal 222025
Ndle Bearing SCE148[2]

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008-2001 364/6.0L
Seal Viton 100470
Repair Sleeve KWK99210
2004-2001 400/6.6L (Diesel)
Seal 3945
Repair Sleeve KWK99233
Harmnc Balancer Slvs 88233
2000-1990 379/6.2L (Diesel) 395/6.5L (Diesel), 454/7.4L (GAS)
Seal 3945
Repair Sleeve KWK99233
Harmnc Balancer Slvs 88233
2000-1990 283/4.6L, 307/5.0L, 327/5.4L, 350/5.7L, 4006/6.6L (GAS)
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2001 364/6.0L
Seal 100085
2009-2001 6.5L Diesel, 6.6L Diesel
Seal Viton 710258
Repair Sleeve KWK99452
2000-1992 (Diesel)
Seal Viton 710258
Repair Sleeve KWK99452
2000-1991 (454/7.4L)
Seal Viton 2261
Repair Sleeve KWK99435
2000-1990 (w/o 454 & Diesel)
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364
1991-1990 (Diesel)
Seal 5163
1990 (454/7.4L)
Seal 5072

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHEVROLET/GMC TRUCK - 1 TON - G30/G35, P30/P35, Express/Savana**FRONT WHEEL****RWD**

2009	
Hub Unit Bearing	HA590352[2] ⁸⁴
2008-2006	
Hub Unit Bearing	HA590353[2]
2005-2003	
Hub Unit Bearing	HA590352[2] ⁸⁴
2002-1992	Express, G Series, Savanna
Seal (Inner)	4740[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15103S-15243[2]
1999-1991	P Series (Exc. I Beam Axle)
Seal (Inner)	4740[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15103S-15243[2]
1999-1990	P Series (I Beam Axle)
Seal (Inner)	5682[2]
Cone/Cup (Inner)	26884-26823[2]
Cone/Cup (Outer)	15103S-15243[2]
1991-1990	G30/G35 (Disc Brks.)
Seal (Inner)	8974S[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15103S-15243[2]
1990	P Series (Exc. I Beam Axle)
Seal (Inner)	8974S[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15103S-15243[2]

REAR WHEEL**RWD**

2009-2001	(10.5", 11.5" R.G.)
Seal	SL260002[2] ²⁵
Cone/Cup (Inner)	
(10.5" R.G.)	387AS-382A[2]
Set (Outer) (10.5"	
R.G.)	SET38[2]
Cone/Cup (Inner)	
(11.5" R.G.)	NP706218-NP910345[2]
Cone/Cup (Outer)	
(11.5" R.G.)	NP145100-NP913325[2]
2000-1990	
Seal	2081[2]
Cone/Cup (Inner) (Exc.	
DRW)	387AS-382A[2]
Set (Outer) (Exc. DRW)	
Cone/Cup (Inner)	
(DRW)	NP706218-NP910345[2]
Cone/Cup (Outer)	
(DRW)	NP145100-NP913325[2]
1999-1997	P Series Motor Home
Seal (Inner)	6358[2]
Cone/Cup (Inner)	39590-39520[2]
Cone/Cup (Outer)	JLM506849-JLM506810[2]
1996-1990	P Series Motor Home
Seal (Inner)	6358[2]
Cone/Cup (Inner)	395CS-394CS[2]
Cone/Cup (Outer)	387A-382A[2]
1991-1990	(9.5" R.G.)
Seal (Inner)	3747[2]
Cylindrical Bearing	
(Inner)	R1561TV[2]
Bearing & Seal Kit	TGM1561R[2] ¹⁹

4WD FRONT AXLE**Differential**

2006-2003	
Set	SET11[2]

Pinion

2006-2003	
Cone/Cup (Inner)	M86649-M86610
Cone/Cup (Outer)	M86649-M86610

REAR AXLE**Differential Rebuild Kit**

2007-1998	(10.5" R.G.)
Kit	DRK325B
1997-1990	(10.5" R.G.)
Kit	DRK325A

Differential

2006-2003	(10.5" R.G.)
Cone/Cup	469-453X[2]
2002-1992	(10.5" R.G.)
Cone/Cup	387AS-382A[2]
1996-1990	(9.5" R.G.)
Set	SET42[2]
1991-1990	(10.5" R.G.)(DRW & 7.4L)
Cone/Cup	469-453X[2]
1990	(9.5", 9.75" R.G.)(10.5")(5.7L
	or 6.2L)(DRW & Spicer)
Cone/Cup	387A-382S[2]

Pinion

2008-2003	(10.5" R.G.)
Seal	710508
Cone/Cup (Inner)	HM807040-HM807010
Cone/Cup (Outer)	HM88542-HM88510
2006	(9.75" R.G.)
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510
2002-1998	(10.5" R.G.)
Seal	710505
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1997-1996	(10.5" R.G.)
Seal	2286
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1995-1991	(10.5" R.G.)(Exc. Spicer Axle)
Seal	2286
Cone/Cup (Inner)	HM903249-HM903210
Cone/Cup (Outer)	M802048-M802011
Cylindrical Bearing	R1581TV[2]
1995-1990	(9.5" R.G.)
Seal	3896
Cone/Cup (Inner)	HM804846-HM804810
Cone/Cup (Outer)	HM88649-HM88610
Repair Sleeve	KWK99193

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHEVROLET/GMC TRUCK - 1 TON - G30/G35, P30/P35, Express/Savana (cont.)

REAR AXLE (cont.)

Pinion (cont.)

1991-1990	(10.5" R.G.)(Spicer Axle)	
Seal	9316	
Cone/Cup (Outer)	HM88542-HM88510	
Cone/Cup (Inner)	HM807040-HM807010	
Cone/Cup	HM803149-HM803110[2]	
Repair Sleeve	KWK99187	
1991-1990	(9.75" R.G.)	
Seal	9316	
Cone/Cup (Inner)	HM803146-HM803110	
Cone/Cup (Outer)	HM88542-HM88510	
Repair Sleeve	KWK99187	

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1995-1990	(THM700)(4L60 E)	
Seal	3227	
Repair Sleeve	KWK99174	
1992-1990	(w/o THM700)	
Seal	6712NA[2]	
Repair Sleeve	KWK99187	

Rear Seal/Ext. Housing

1995-1990	(w/o 4L80E, THM400, THM475)	
Seal	9613S	
Repair Sleeve	KWK99149	
Seal Kit	5200 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1990		
Seal	8792S	

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2006-1991	(4L80E)	
Seal	4598	
Repair Sleeve	KWK99199	
2006-1990	(THM700)(4L60 E)	
Seal	3227	
Repair Sleeve	KWK99174	

Rear Seal/Ext. Housing

2008-1991	(4L80E)(Booted)	
Seal	4333N	
2008-1991	(4L80E)(Exc. Booted)	
Seal	9449	
Seal Kit	5208 ⁶⁴	
2008-1990	(4L60, 4L60E)	
Seal	9613S	
Repair Sleeve	KWK99149	
Seal Kit	5200 ⁶⁴	

4-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2006-1990		
Seal	8792S	
Repair Sleeve	KWK99050	

CLUTCH

Pilot Bearing

2002-2001	364/6.0L, 496/8.1L	
Ball Bearing	203FF	
2002-1990	(w/o 364/ 6.0L, 496/ 8.1L)	
Ball Bearing	57080	
2002-1990	(Diesel)(TurboDiesel)	
Ball Bearing	57080	

Release Bearing

2000-1990	(Hyd. Mechanism)	
Bearing Assy	614174	

4-SPEED MANUAL TRANSMISSION

Input Shaft

1990	(New Process MY6)	
Seal	7412S	
Repair Sleeve	KWK99125	

Rear Output Shaft

1990	(New Process)	
Seal	9613S	
Ball Bearing	308LOE[2]	
Repair Sleeve	KWK99149	
Seal Kit	5200 ⁶⁴	

DRIVESHAFT SUPPORT

1999-1991		
Hanger Bearing Assy	HB88508A[2]	
1991-1990		
Ball Bearing	88107[2]	
Hanger Bearing Assy	HB88107A[2]	

POWER STEERING

Pitman Shaft

2000-1990		
Seal Kit	PSK1 ²⁴	
Seal (Inner)	471413	
Seal (Outer)	7412S	

Pump Shaft

2000-1990		
Seal	7013S[2]	
Ball Bearing	8537[2] ¹⁶	

Worm Shaft

1996-1990		
Seal	222025	

¹⁶Obsolete²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1 TON - G30/G35, P30/P35, Express/Savana					
(cont.)					

MANUAL STEERING

Pitman Shaft

1990	
Seal	313842

Worm Shaft

1990	
Seal	7013S
Ball Bearing	8537[2] ¹⁶

CRANKSHAFT FRONT SEAL

6 Cylinder

1999-1990	
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

8 Cylinder

2008-2003	294/4.8L, 325/5.3L, 364/6.0L
Seal Viton	100470
Repair Sleeve	KWK99210
2002-1990	379/6.2L (Diesel) 395/6.5L
	(Diesel), 454/7.4L (GAS)
Seal	3945
Repair Sleeve	KWK99233
Harmnc Balancer Slvs	88233
2002-1990	283/4.6L, 307/5.0L, 327/5.4L,
	350/5.7L, 4006/6.6L (GAS)
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

CRANKSHAFT REAR SEAL

6 Cylinder

1999-1990	
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364

CRANKSHAFT REAR SEAL

8 Cylinder

2009-2003	292/4.8L, 364/6.0L
Seal	100085
2006	6.6L (Diesel)
Seal Viton	710258
2002-1992	(Diesel)
Seal Viton	710258
Repair Sleeve	KWK99452
2002-1990	305/5.0L, 350/5.7L
Seal Viton	4359V
Seal PTFE H/D	5274
Repair Sleeve	KWK99364
2000-1992	(454/7.4L)
Seal Viton	2261
Repair Sleeve	KWK99435
1991-1990	(Diesel)
Seal	5163
1991-1990	(454/7.4L)
Seal	5072

CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500

FRONT WHEEL

FWD

1998-1997	(12,000 lb. Axle W7R042HD)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Cone/Cup (Outer)	JM205149-JM205110[2]
1998-1997	(W6R042)
Seal Viton (Inner)	370199A[2] ⁵⁷
Cone/Cup (Inner)	JM205149-JM205110[2]
Bearing Assy (Outer)	32207M[2]
1998-1997	(W7R042M)
Seal (Inner)	370211A[2] ⁵⁷
Bearing Assy (Inner)	32208M[2]

FRONT WHEEL (cont.)

FWD (cont.)

1997-1993	(9,000 lb. Axle B7T042)
Seal (Outer)	370211A[2] ⁵⁷
Bearing Assy (Outer)	33208[2]
Bearing Assy (Inner)	33212[2]
1997-1990	(11,000 lb. Axle C6H042,
	C7H042, C7H064,
	W7R042HD)
Seal (Inner)	370211A[2] ⁵⁷
Bearing Assy (Outer)	33208[2]

¹⁶Obsolete

⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

FRONT WHEEL (cont.)**FWD (cont.)**

1997-1990	(14,500 lb. Axle)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Cone/Cup (Outer)	JM205149A-JM205110[2]
1997-1990	(16,000 lb. Axle C6H042, C7H042, C7H064)
Seal (Inner)	370182A[2] ⁵⁷
Cone/Cup (Inner)	6461A-6420[2]
Cone/Cup (Outer)	557S-552A[2]
1997-1990	(8,000 lb. Axle B7T042, C5H042, C6H042, C7H042, C7H064, P6S042)
Seal Viton (Inner)	370199A[2] ⁵⁷
Cone/Cup (Inner)	JM205149A-JM205110[2]
Bearing Assy (Outer)	32207M[2]
1997-1990	(W5S042)
Seal (Inner)	710087[2]
Bearing Assy (Inner)	513046[2]
Bearing Assy (Outer)	513045[2] ^Z
1996-1992	(12,000 lb. Axle C6H042, C7H042, C7H064)
Seal (Inner)	370211A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1996-1990	(W7R042M Air Brks. Z06 Axle)
Seal (Inner)	710084[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^Z
1996-1990	(H/D W7R042)
Seal (Inner)	710084[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^Z
1996-1990	(W7R042M Hyd.Brks. Z05 Axle)
Seal (Inner)	710088[2]
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	4388-4335[2]
1994-1990	(W7R042T)
Seal (Inner)	710088[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^Z
1991	(12,000 lb. Axle Early C6H042, C7H042, C7H064)
Seal (Inner)	370211A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1991	(12,000 lb. Axle Late C6H042, C7H042, C7H064)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1991-1990	(9,000 lb. Axle B6P042, C6D042)
Seal (Inner)	370011A[2] ⁵⁷
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	45282-45220[2]

FRONT WHEEL (cont.)**FWD (cont.)**

1991-1990	(9,000 lb. Axle C7D064)
Seal (Inner)	370018A[2] ⁵⁷
Cone/Cup (Inner)	39581-39520[2]
Cone/Cup (Outer)	26878-26820[2]
1991-1990	(7,000 lb. Axle F070, B6P042, C5D042, C6D042, C7D042, C7D064, P4T042, P6T042)
Seal (Inner)	8976S[2]
Cone/Cup (Inner)	45284-45220[2]
Seal (Outer)	370145A[2] ⁵⁷
Cone/Cup (Outer)	2796-2720[2]
1990	(14,000 lb. Axle C6H042, C7H042, C7H064)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Cone/Cup (Outer)	JM205149A-JM205110[2]
1990	(12,000 lb. Axle B6P042, C6D042, P6T042, S7T042)
Seal (Inner)	370011A[2] ⁵⁷
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	45282-45220[2]
1990	(5,000 lb. Axle F050, C5D042, C6D042, C7D042, P4T042)
Seal (Inner)	8975S[2]
Cone/Cup (Inner)	3578A-3525[2]
Cone/Cup (Outer)	15103S-15243[2]
1990	(5,500 lb. Axle F055, C5D042, C6D042, C7D042, P4T042)
Seal (Inner)	8975S[2]
Cone/Cup (Inner)	3578A-3525[2]
Cone/Cup (Outer)	15103S-15243[2]

REAR WHEEL**RWD**

1998-1997	(Spicer S150S)(W6R042)
Seal (Inner)	370008A[2] ⁵⁷
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	45282-45220[2]
1998-1990	W5S042
Seal (Inner)	710085[2]
Bearing Assy (Inner)	32215[2]
Seal (Outer)	710086[2]
Bearing Assy (Outer)	32213M[2]
1997-1990	(Eaton 21065, 22065, 23070, 23085, 23105, 26085 Axle)(B7T042, C6H042, C7H042)
Seal (Inner)	370003A[2] ⁵⁷
Cone/Cup (Inner)	594A-592A[2]
Cone/Cup (Outer)	580-572[2]
1997-1990	(Eaton 23105 Axle)(C5H042)
Seal (Inner)	370023A[2] ⁵⁷
Cone/Cup (Inner)	594A-592A[2]
Cone/Cup (Outer)	47686-47620[2]

^ZNon-Cancellable/Non-Returnable⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

REAR WHEEL (cont.)

RWD (cont.)

1997-1990	(Eaton DS341, DT341, DS402 Axle)(C7H064)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1997-1990	(Rockwell 23160 Axle)(C6H042, C7H042)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1997-1990	(Rockwell SL100, SQ100P Axle)(C7H064)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1997-1990	(Eaton 15040 Axle)(B7T042, C6H042, C7H042, P4T042, P6S042)	
Seal (Inner)	.....	370008A[2] ⁵⁷
Cone/Cup (Inner)	.....	33287-33462[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1997-1990	(Eaton 15040 Axle)(C5D042, C5H042, P4T042)	
Seal (Inner)	.....	370008A[2] ⁵⁷
Cone/Cup (Inner)	.....	33287-33462[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1996-1991	(Eaton 19050 B7T042, P6S042)	
Seal (Inner)	.....	370024A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1996-1990	(W6R042)	
Seal (Inner)	.....	710085[2]
Bearing Assy (Inner)	.....	32215[2]
Seal (Outer)	.....	710086[2]
Bearing Assy (Outer)	.....	32213M[2]
1996-1990	(Eaton 19050, 19055 Axle)(C5D042, C6H042, C7H042)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1994-1990	(W7R042HD, W7R042T)	
Seal (Inner)	.....	710089[2]
Bearing Assy (Inner)	.....	32219M[2]
Seal (Outer)	.....	710090[2]
Bearing Assy (Outer)	.....	32218M[2]
1994-1990	(W7R042M)	
Seal (Inner)	.....	710278[2]
Bearing Assy (Inner)	.....	32216[2]
Seal (Outer)	.....	710277[2]
Bearing Assy (Outer)	.....	32215[2]

REAR WHEEL (cont.)

RWD (cont.)

1992-1990	50, 60, 70 Ser. (17500 lb. H175, T175 Axle)(B6P042, C6D042, C7D042, C7D064, P6T04)	
Seal (Inner)	.....	370009A[2] ⁵⁷
Cone/Cup (Inner)	.....	495AX-493[2]
Seal (Outer)	.....	6864S[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1992-1990	50, 60, 70 Ser. (19000 lb. Axle)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1991-1990	40, 50, 60 Ser. (H110, 11000 lb. Axle)(B6P042, C6D042, P6T042)	
Seal (Inner)	.....	370046A[2] ⁵⁷
Cone/Cup (Inner)	.....	3984-3920[2]
Cone/Cup (Outer)	.....	28682-28622A[2]
1991-1990	40, 50, 60 Ser. (H135, 13500 lb. Axle)(B6P042, C6D042, P6T042)	
Seal (Inner)	.....	370046A[2] ⁵⁷
Cone/Cup (Inner)	.....	3984-3920[2]
Cone/Cup (Outer)	.....	28682-28622A[2]
1991-1990	(Eaton 17121, 17221 Axle)(B6P042, C6D042, P6T042)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1991-1990	50, 60 Ser. (15000 lb. H150, T150 Axle)(B6P042, C6D042, P6T042)	
Seal (Inner)	.....	370009A[2] ⁵⁷
Cone/Cup (Inner)	.....	33287-33472[2]
Seal (Outer)	.....	6864S[2]
Cone/Cup (Outer)	.....	3982-3925[2]

SINGLE REAR AXLE

Differential Rebuild Kit

1997-1990	(Eaton 26085P, 26085T Axles)	
Kit	.....	DRK72A
1997-1990	(Eaton 19050T, 19055D, 19055S, 19055T Axles)	
Kit	.....	DRK23D
1997-1990	(Eaton 15040T Axle)	
Kit	.....	DRK24
1994-1990	(Dana/Spicer M185T, M190T, M220T Axles)	
Kit	.....	DRK214
1991-1990	(Eaton 17401 Axle)	
Kit	.....	DRK23B
1991-1990	(Eaton 16121 Axle)	
Kit	.....	DRK23B

⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

SINGLE REAR AXLE**Differential**

1997-1990	(Eaton 15040T Axle)	
Cone/Cup (LH)	.....	498-493
Cone/Cup (RH)	.....	33275-33472
1997-1990	(Eaton 26085P, 26085T Axles)	
Cone/Cup (LH)	.....	68450-68712
Cone/Cup (RH)	.....	42346-42584
1997-1990	(Rockwell 23160 Axle)	
Bearing Assy (LH)	.....	32021X
Bearing Assy (RH)	.....	32021X
1997-1990	(Eaton 19050T, 19055D, 19055S, 19055T Axles)	
Cone/Cup (LH)	.....	42381-42584
Cone/Cup (RH)	.....	495A-493
1997-1990	(Eaton 15040S Axle)	
Cone/Cup (LH)	.....	3994-3920
Cone/Cup (RH)	.....	497-493
1997-1990	(Eaton 21065S, 23070S, 23105S Axles)	
Cone/Cup (LH)	.....	598-592A
Cone/Cup (RH)	.....	497-493
1997-1990	(Eaton 21065T Axle)	
Cone/Cup (LH)	.....	56425-56650
Cone/Cup (RH)	.....	497-493
1997-1990	(Eaton 23070P, 23070T Axles)	
Cone/Cup (LH)	.....	56425-56650
Cone/Cup (RH)	.....	497-493
1997-1990	(Eaton 17200, 17220, 17221, 17800, 17801, 18221, 7800 Axles)	
Cone/Cup (LH)	.....	56425-56650
Cone/Cup (RH)	.....	497-493
1995-1990	(Isuzu R065 Axle)	
Cone/Cup (LH)	.....	3984-3920
Cone/Cup (RH)	.....	3984-3920
1995-1990	(Isuzu R077 Axle)	
Bearing Assy (LH)	.....	30214
Bearing Assy (RH)	.....	30214
1994-1990	(Isuzu R094 Axle)	
Bearing Assy (LH)	.....	32216
Bearing Assy (RH)	.....	32216
1994-1990	(Dana/Spicer M185T, M190S, M190T, M220T Axles)	
Cone/Cup (LH)	.....	JM822049-JM822010
Cone/Cup (RH)	.....	JM716649-JM716610
1991-1990	(Eaton 17401 Axle)	
Cone/Cup (LH)	.....	567-563
Cone/Cup (RH)	.....	3994-3920
1991-1990	(Eaton 16121 Axle)	
Cone/Cup (LH)	.....	567-563
Cone/Cup (RH)	.....	3994-3920

SINGLE REAR AXLE**Pinion**

1997-1990	(Eaton 23070P, 23070T Axles)	
Cone/Cup (Inner)	.....	78215C-78551
Seal (Outer)	.....	712937[2]
Cone/Cup (Outer)	.....	72212C-72487
Cylindrical Bearing	.....	MUB5207UM[2]
1997-1990	(Eaton 26085P, 26085T Axles)	
Cone/Cup (Inner)	.....	78215C-78551
Seal (Outer)	.....	712937[2]
Cone/Cup (Outer)	.....	72212C-72487
Cylindrical Bearing	.....	MUS1308UM[2]
1997-1990	(Rockwell 23160 Axle)	
Cone/Cup (Inner)	.....	9278-9220
Seal (Outer)	.....	417987N[2]
Cone/Cup (Outer)	.....	HM813843-HM813810
1997-1990	(Eaton 19050S Axle)	
Cone/Cup (Inner)	.....	72200C-72487
Seal (Outer)	.....	9773R[2]
Cone/Cup (Outer)	.....	HM903249-HM903210
Cylindrical Bearing	.....	RUB1570UM[2]
1997-1990	(Eaton 19050T, 19055D, 19055S, 19055T Axle)(2.375" Pinion Shaft)	
Cone/Cup (Inner)	.....	55175C-55437
Seal (Outer)	.....	9773R[2]
Cone/Cup (Outer)	.....	55175C-55437
Cylindrical Bearing	.....	MUS1307UM[2]
1997-1990	(Eaton 15040S Axle)	
Cone/Cup (Inner)	.....	55175C-55437
Seal (Outer)	.....	9773R[2]
Cone/Cup (Outer)	.....	HM903249-HM903210
Cylindrical Bearing	.....	MUB1305UDM[2]
1997-1990	(Eaton 15040T Axle)	
Cone/Cup (Inner)	.....	HM903249-HM903210
Seal Kit (Outer)	.....	722250S[2] ²⁰
Cone/Cup (Outer)	.....	HM903249-HM903210
Cylindrical Bearing	.....	MU1305TDM[2]
1997-1990	(Eaton 21065S Axle)	
Cone/Cup (Inner)	.....	78215C-78551
Seal (Outer)	.....	9773R[2]
Cone/Cup (Outer)	.....	55200C-55437
Cylindrical Bearing	.....	MUS1308UM[2]
1997-1990	(Eaton 21065T Axle)	
Cone/Cup (Inner)	.....	72200C-72487
Seal (Outer)	.....	9773R[2]
Cone/Cup (Outer)	.....	55200C-55437
Cylindrical Bearing	.....	MUS1307UM[2]
1997-1990	(Eaton 23070S, 23105S Axles)	
Cone/Cup (Inner)	.....	H913842-H913810
Seal (Outer)	.....	712937[2]
Cone/Cup (Outer)	.....	72212C-72487
Cylindrical Bearing	.....	MUS1308UM[2]
1995-1990	(Isuzu R065, R077 Axles)	
Bearing Assy (Inner)	.....	30310
Seal (Outer)	.....	710276[2]
Bearing Assy (Outer)	.....	30309M
1994-1990	(Eaton 1504T Axle)	
Cone/Cup (Inner)	.....	HM903249-HM903210
Cone/Cup (Outer)	.....	HM903249-HM903210

²⁰Seal Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

SINGLE REAR AXLE (cont.)

Pinion (cont.)

1994-1990	(Isuzu R094 Axle)	
Bearing Assy (Inner)	.....	30310
Seal (Outer)	.....	710275[2]
Bearing Assy (Outer)	.....	30311
1994-1990	(Isuzu R105 Axle)	
Bearing Assy (Inner)	.....	30312
Seal (Outer)	.....	710275[2]
Cone/Cup (Outer)	.....	580-572
1994-1990	(Dana/Spicer M185T, M190S, M190T, M220T Axles)	
Cone/Cup (Inner)	.....	72225C-72487
Seal (Outer)	.....	477163N[2]
Cone/Cup (Outer)	.....	55200C-55437
Cylindrical Bearing	.....	MUS1308UM
1994-1990	(15,000 lb. 1 Spd. Axle)	
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM803149-HM803110
1994-1990	(15,000 lb. 2 Spd. Axle)	
Cone/Cup (Inner)	.....	HM903249-HM903210
Cone/Cup (Outer)	.....	HM903249-HM903210
1992-1990	(11,000 lb. Axle)	
Cone/Cup (Inner)	.....	M903345-M903310
Cone/Cup (Outer)	.....	44143-44348
1992-1990	(13,500 lb. Axle)	
Cone/Cup (Inner)	.....	HM803146-HM803110
Cone/Cup (Outer)	.....	44143-44348
1992-1990	(17,000 lb. 1 Spd. Axle)	
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	HM804846-HM804810
1992-1990	(17,000 lb. 2 Spd. Axle)	
Cone/Cup (Inner)	.....	55175C-55437
Cone/Cup (Outer)	.....	55175C-55437
1992-1990	(Eaton 34RT Axle)	
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	55200C-55437
1992-1990	(R S SLHR Axle)	
Cone/Cup (Inner)	.....	72200C-72487
Cone/Cup (Outer)	.....	72188C-72487
1991-1990	(Eaton 16121, 17401 Axles)(2.625" Pinion Shaft)	
Cone/Cup (Inner)	.....	HM903249-HM903210
Seal (Outer)	.....	712625[2]
Cone/Cup (Outer)	.....	HM903249-HM903210
Cylindrical Bearing	.....	MUS1307UM
1991-1990	(Eaton 16121, 17401 Axles)(2.375" Pinion Shaft)	
Cone/Cup (Inner)	.....	HM903249-HM903210
Seal (Outer)	.....	712375[2]
Cone/Cup (Outer)	.....	HM903249-HM903210
Cylindrical Bearing	.....	MUS1307UM
1991-1990	(379/6.2L Diesel)	
Seal	.....	5163
1991-1990	(454/7.4L)	
Seal	.....	5072

TANDEM REAR AXLE - FRONTMOST AXLE

Differential Rebuild Kit

1997-1990	(Eaton DS341 Axle)	
Kit	.....	DRK196

TANDEM REAR AXLE - FRONTMOST AXLE (cont.)

Differential Rebuild Kit (cont.)

1997-1990	(Eaton DT341, DT381, DS402, DT402 Axles)	
Kit	.....	DRK207

Differential

1997-1990	(Rockwell SL100P, SQ100P Axles)	
Cone/Cup (LH)	.....	JM716649-JM716610
Cone/Cup (RH)	.....	JM716649-JM716610
1997-1990	(Eaton DS341 Axle)	
Cone/Cup (LH)	.....	497-493
Cone/Cup (RH)	.....	567-563
1997-1990	(Eaton DT341, DT381, DS402, DT402 Axles)	
Cone/Cup (LH)	.....	497-493
Cone/Cup (RH)	.....	56425-56650

Pinion

1997-1990	(Rockwell SL100P, SQ100P Axles)	
Cone/Cup (Inner)	.....	72212C-72487
Cone/Cup (Outer)	.....	72212C-72487
Cylindrical Bearing	.....	RU1570UM
1997-1990	(Eaton DS341 Axle)	
Seal	.....	9773R
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	55200C-55437
Cylindrical Bearing	.....	MUS1307UM
1997-1990	(Eaton DT341, DT381, DS402, DT402 Axles)	
Cone/Cup (Inner)	.....	72218C-72487
Cone/Cup (Outer)	.....	HM807049-HM807010
Cylindrical Bearing	.....	MUS1307UM

Through Shaft - Input Shaft

1997-1990	(Eaton DS341, DT341, DT381, DS402, DT402 Axles)	
Seal	.....	475012N[2]
Cone/Cup	.....	3979-JM511910[2]

Through Shaft - Output Shaft

1997-1990	(Eaton DS341, DT341, DT381, DS402, DT402 Axles)	
Cone/Cup (Inner)	.....	29675-29620[2]
Seal (Outer)	.....	475003N[2]
Ball Bearing (Outer)	.....	MA1209EL[2]

TANDEM REAR AXLE - REARMOST AXLE

Differential Rebuild Kit

1997-1990	(Eaton DT341, DS402, DT402 Axles)	
Kit	.....	DRK207
1997-1990	(Eaton DS341 Axle)	
Kit	.....	DRK196

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

TANDEM REAR AXLE - REARMOST AXLE

Differential

1997-1990	(Rockwell SL100P, SQ100P Axles)	
	Cone/Cup (LH)	JM716649-JM716610
	Cone/Cup (RH)	JM716649-JM716610
1997-1990	(Eaton DT341, DS402, DT402 Axles)	
	Cone/Cup (LH)	497-493
	Cone/Cup (RH)	56425-56650
1997-1990	(Eaton DS341 Axle)	
	Cone/Cup (LH)	497-493
	Cone/Cup (RH)	567-563

Pinion

1997-1990	(Rockwell SL100P, SQ100P Axles)	
	Seal	3905
	Cone/Cup (Inner)	72212C-72487
	Cone/Cup (Outer)	72212C-72487
	Cylindrical Bearing	RU1570UM
1997-1990	(Eaton DT341, DS402, DT402 Axles)	
	Cone/Cup (Inner)	72218C-72487
	Cone/Cup (Outer)	HM807049-HM807010
	Cylindrical Bearing (Pilot)	MUS1307UM
1997-1990	(Eaton DS341 Axle)	
	Seal	9773R
	Cone/Cup (Inner)	55200C-55437
	Cone/Cup (Outer)	55200C-55437
	Cylindrical Bearing	MUS1307UM

CLUTCH

Pilot Bearing

1997-1990	403 (6.6)(3208 Caterpillar Diesel)	
	Ball Bearing	305DD
1994-1990	5.8, 6.1, 6.5, 8.4 (Diesel)	
	Ball Bearing	205FF
1991-1990	350, 366, 427 (Gas)	
	Ball Bearing	205FF
1991-1990	4 53, 8.2 L (Detroit Diesel)	
	Ball Bearing	205FF

Release Bearing

1997-1995	7.1 (Turbo Diesel)(335mm Cl.)	
	Bearing Assy	613011
1997-1995	7.1 (Turbo Diesel)(380mm Cl.)	
	Bearing Only	613014
1997-1990	366 (6.0) (Spicer 13" Cl.)	
	Bearing Assy	614057
1997-1990	427 (7.0) (Spicer 13" Cl.)	
	Bearing Assy	614057
1997-1990	366 (6.0) (14" Cl.)	
	Bearing Assy	614098
1997-1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Cl.)	
	Bearing Assy	614098

CLUTCH (cont.)

Release Bearing (cont.)

1997-1990	427 (7.0) (14" Cl.)	
	Bearing Assy	614098
1996-1990	403 (6.6)(Turbo Diesel)(14" Cl.)	
	Bearing Assy	614098
1996-1990	403 (6.6)(Turbo Diesel)(Spicer 13" Cl.)	
	Bearing Assy	614057
1994-1990	8.4 (Turbo Diesel)(355mm Cl.)	
	Bearing Only	613009
1994-1990	8.4 (Turbo Diesel)(355mm Cl.)	
	Bearing Only	613009
1994-1990	6.5 (Turbo Diesel)(330mm Cl.)	
	Bearing Assy	614018 ⁴²
1994-1990	5.8 (Turbo Diesel)(355mm Cl.)	
	Bearing Only	613009
1994-1990	6.5 (Turbo Diesel)(355mm Cl.)	
	Bearing Only	613009
1994-1990	8.4 (Turbo Diesel)(380mm Cl.)	
	Bearing Only	613009
1991-1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Cl.)(1.5" spline)	
	Bearing Assy	614024
1991-1990	500 (8.2)(Detroit Diesel)(Lipe flywheel)	
	Bearing Only	GE2505C
1991-1990	500 (8.2)(Detroit Diesel)(flat flywheel)	
	Bearing Assy	614065
1991-1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Cl.)(1.75" spline)	
	Bearing Assy	614065
1991-1990	454 (7.4) (14" Cl.)	
	Bearing Assy	614024
1991-1990	VT225 (14" Cl.)	
	Bearing Assy	614024
1991-1990	292 (4.8)(12" Cl.)	
	Bearing Assy	614018 ⁴²
1991-1990	(3208 Caterpillar Diesel)	
	Bearing Assy	614024
1991-1990	432 (7.2)(14" single Disc Cl.)	
	Bearing Assy	614024
1991-1990	350 (5.7)(12" Cl.)	
	Bearing Assy	614018 ⁴²
1991-1990	350 (5.7)(13" Cl.)	
	Bearing Only	CA02135C
1991-1990	366 (6.0) (13" Cl.)	
	Bearing Only	CA02135C
1990	6.5 (Diesel)(Turbo Diesel)(330mm Cl.)	
	Bearing Only	613009
1990	427 (7.0) (14" Cl.) FS6106A	
	Bearing Assy	614097
1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Cl.)	
	Bearing Assy	614097
1990	427 (7.0) (Spicer 14" Cl.)	
	Bearing Assy	614096
1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Spicer 5xxx Cl.)	
	Bearing Assy	614096

⁴²Self-Aligning Brg

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
CHEVROLET/GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 50, 60, 70, 4500, 5500, 6500, 7500 (cont.)					

CLUTCH (cont.)**Release Bearing (cont.)**

1990	636/10.4L (Diesel)(Turbo Diesel)(14" Cl.)(1.75" spline)	
	Bearing Assy	614065
1990	427 (7.0)	
	Bearing Only	CA02135C
1990	427 (7.0) (14" single plate Cl.)	
	Bearing Assy	614024
1990	500 (8.2)(Diesel)(Turbo Diesel)(14" Spicer 4054 Cl.)	
	Bearing Only	CA02135C
1990	500 (8.2)(Diesel)(Turbo Diesel)(14" push type Cl.)	
	Bearing Only	GE2505C
1990	636/10.4L (Diesel)(Turbo Diesel)(14" single plate Cl.)	
	Bearing Assy	614024

DRIVESHAFT SUPPORT

1997-1990	(Spicer 1480)(1.5748" 40mm Brg. I.D.)	
	Hanger Bearing Assy	HB88508AA[2]
1997-1990	(Spicer 1760)(2.3622" 60mm Brg. I.D.)	
	Hanger Bearing Assy	HB88512AHD[2]
1997-1990	(Spicer 1710)(1.9685" 50mm Brg. I.D.)	
	Hanger Bearing Assy	HB88510[2]
1997-1990	(Spicer 1550, 1610, 1650)(1.7717" 45mm Brg. I.D.)(end yoke style)	
	Ball Bearing	88509[2]
	Hanger Bearing Assy	HB88509A[2]
1997-1990	(Spicer 1550, 1610, 1650)(1.7717" 45mm Brg. I.D.)(slip yoke style)	
	Ball Bearing	88509[2]
	Hanger Bearing Assy	HB88509[2]
1996-1990	(Cleveland 055)(1.5748" 40mm Brg. I.D. 2.250" height)	
	Hanger Bearing Assy	HB88508AB[2]
1991-1990	(Spicer 1310, 1350)(1.5748" 40mm Brg. I.D.)	
	Ball Bearing	88508[2]
	Hanger Bearing Assy	HB88508C[2]
1990	(Rockwell 68WB)(1.9685" Brg. I.D.)	
	Hanger Bearing Assy	HB88510[2]
1990	(Spicer 1410)(1.3780" 35mm Brg. I.D.)	
	Ball Bearing	88107[2]
	Hanger Bearing Assy	HB88107A[2]
1990	(Rockwell 58WB)(1.7717" 45mm Brg. I.D.)	
	Ball Bearing	88509[2]
	Hanger Bearing Assy	HB88509B[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1994-1990	6494cc/6.5L (Turbo Diesel)	
	Seal Viton	710350
	Repair Sleeve	KWK99235

8 Cylinder

1996-1990	366/6.0L, 427/7.0L	
	Seal	3945
	Repair Sleeve	KWK99233

CRANKSHAFT REAR SEAL**6 Cylinder**

1994-1990	6494cc/6.5L (Turbo Diesel)	
	Seal Viton	710349
	Repair Sleeve	KWK99413

8 Cylinder

1996-1990	366/6.0L, 427/7.0L	
	Seal Viton	2261
	Repair Sleeve	KWK99435

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - FRONT DRIVE - Cirrus, Sebring**FRONT WHEEL****FWD**

2008-2007	Sebring (ABS)	
Hub Unit Bearing	.....	HA590219[2] ²⁵
2008-2007	Sebring (Non-ABS)	
Hub Unit Bearing	.....	HA590214[2] ²⁵
2006-1995	Sebring (Convertible)(Sedan)	
Hub Unit Bearing	.....	513138[2]
2005-1995	Sebring (Coupe)	
Hub Unit Bearing	.....	513157[2]
2000-1995	Cirrus	
Hub Unit Bearing	.....	513138[2]

REAR WHEEL**FWD**

2008-2007	Sebring (Disc)	
Hub Unit Bearing	.....	HA590216[2] ²⁵
2008-2007	Sebring (Drum)	
Hub Unit Bearing	.....	HA590221[2] ²⁵
2006-2005	Sebring (Sedan)(Non-ABS)	
Hub Unit Bearing	.....	512154[2]
2006-2001	Sebring (Sedan)(ABS)	
Hub Unit Bearing	.....	512220[2]
2006-1998	Sebring (Convertible)(ABS)	
Hub Unit Bearing	.....	512220[2]
2005-2001	Sebring (Coupe)(ABS)	
Hub Unit Bearing	.....	HA590306[2]
Bearing Module (Opt)	.....	512136[2]
2005-2001	Sebring (Coupe)(Non-ABS)	
Bearing Module	.....	512136[2]
2004-2003	Sebring (Sedan)(Non-ABS)	
Hub Unit Bearing	.....	512154[2]
2000-1999	Cirrus (Non-ABS)	
Hub Unit Bearing	.....	512154[2]
2000-1998	Cirrus (ABS)	
Hub Unit Bearing	.....	512220[2]
2000-1997	Sebring (Coupe)(Non-ABS)	
Bearing Module	.....	512136[2]
2000-1996	Sebring (Convertible)(Non-ABS)	
Hub Unit Bearing	.....	512154[2]
2000-1996	Sebring (Coupe)(ABS)	
Hub Unit Bearing	.....	HA590306[2]
Bearing Module (Opt)	.....	512136[2]
1998-1995	Cirrus (Non-ABS)	
Hub Unit Bearing	.....	512154[2]
1997-1996	Sebring (Convertible)(ABS)	
Hub Unit Bearing	.....	512133[2]
1997-1995	Cirrus (ABS)	
Hub Unit Bearing	.....	512133[2]
1995	Sebring (Coupe)(ABS)	
Hub Unit Bearing	.....	512133[2]
1995	Sebring (Coupe)(Non-ABS)	
Hub Unit Bearing	.....	512154[2]

CLUTCH**Release Bearing**

2000-1995	(4 Cyl.)	
Bearing Assy	.....	614121
1998-1995	(6 Cyl.)	
Bearing Assy	.....	614092

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2006-1997	(A604 41TE)(Prod. from mid 1997 on)	
Seal (LH)	.....	3459S
Cone/Cup (LH)	.....	NP889967-NP714580
Seal (RH)	.....	3459S
Cone/Cup (RH)	.....	NP952605-JL69310P
2006-1993	(42LE)	
Set	.....	SET36[2]
1997-1996	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	JL69348-JL69310
1995	(A604 41TE)	
Cone/Cup	.....	JL69348-JL69310[2]

Torque Converter / Frt Pump

2006-1995	
Seal	331228H
Repair Sleeve	KWK99149

Transfer Shaft

2006-2002	(40TE, 41TE)	
Cone/Cup (Inner)	.....	NP853895-NP352518[2]
Cone/Cup (Outer)	.....	NP716862-LM501310[2]
2001-1996	(A604, 41TE)	
Cone/Cup (Inner)	.....	NP853895-NP352518[2]
Set (Outer)	.....	SET45[2]
1995	(A604, 41TE)	
Cone/Cup (Inner)	.....	13687-13623X[2]
Set (Outer)	.....	SET45[2]

Output Shaft

2008-1995	(41TE)	
Seal	.....	3459S[2]
Repair Sleeve	.....	KWK99147[2]
2006-2001	(40TE, 41TE)	
Cone/Cup (Outer)	.....	NP117885-LM300811[2]
Cone/Cup (Inner)	.....	NP952605-JL69310P[2]
2000-1997	(A604 41TE)(Prod. from mid 1997 on)	
Cone/Cup (Outer)	.....	LM300848-LM300811[2]
Cone/Cup (Inner)	.....	NP952605-JL69310P[2]
1997-1995	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (Outer)	.....	LM300848-LM300811[2]
Cone/Cup (Inner)	.....	JL69348-JL69310[2]

Manual Shaft

2008-2007	(40TES, 41TES)	
Seal	.....	8609
2006-1995	(40TE, 41TE)	
Seal	.....	8609

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHRYSLER - FRONT DRIVE - Cirrus, Sebring (cont.)

5-SPEED MANUAL TRANSAXLE

Differential

2003-1995	(A578)	
Seal	3459S[2]	
Set	SET11[2]	
Repair Sleeve	KWK99157[2]	

Input Shaft

2003-1995	(A578)	
Seal (Frt)	3732S	
Set (Frt)	SET4[2]	
Repair Sleeve	KWK99106	
Set (Rr)	SET5[2]	

Selector Shaft Seal/Man. Shaft

2003-1995	(A578)	
Seal	3816	

OIL PUMP

4 Cylinder

2005-2001	2350/2.4L (SOHC)	
Seal	222025	
Repair Sleeve	KWK99078	

CAMSHAFT SEAL

4 Cylinder

2006-1995	122/2.0L (DOHC), 148/2.4L (DOHC)	
Seal Viton	320249[2]	
Repair Sleeve	KWK99139[2]	
2005-2001	2350cc/2.4L (SOHC)	
Seal	3771[2]	
Repair Sleeve	KWK99139[2]	

6 Cylinder

2005-2001	181/3.0L	
Seal	3771[2]	
Repair Sleeve	KWK99139[2]	
2000-1995	2497cc/2.5L	
Seal (Frt)	223010[2]	
Repair Sleeve (Frt)	KWK99114[2]	
Seal (Rr)	710302[2]	
Repair Sleeve (Rr)	KWK99114	

CRANKSHAFT FRONT SEAL

4 Cylinder

2006-1995	148/2.4L (DOHC)	
Seal Viton	320348	
Repair Sleeve	KWK99128	
2005-2001	2350cc/2.4L (SOHC)	
Seal	224460	
2000-1995	122/2.0L (SOHC)	
Seal Viton	320348	
Repair Sleeve	KWK99128	

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2007	213/3.5L	
Seal	3638	
Repair Sleeve	KWK99112	
2008-2001	167/2.7L (DOHC)	
Seal	710469	
2005-2001	181/3.0L	
Seal	223750	
2000-1995	2497cc/2.5L	
Seal	223750	

CRANKSHAFT REAR SEAL

4 Cylinder

2006-2001	2429cc/2.4L (DOHC)	
Seal Viton	710056	
Seal PTFE H/D	5279	
2005-2001	2350/2.4L (SOHC)	
Seal Viton	710235	
2000-1995	122/2.0L, 148/2.4L	
Seal Viton	710056	
Seal PTFE H/D	5279	

6 Cylinder

2008-2007	215/3.5L	
Seal Viton	710056	
Seal PTFE H/D	5279	
2008-2001	167/2.7L (DOHC)	
Seal Viton	710056	
Seal PTFE H/D	5279	
2005-2001	181/3.0L	
Seal Viton	710056	
Seal PTFE H/D	5279	
2000-1995	2497cc/2.5L	
Seal Viton	710056	
Seal PTFE H/D	5279	

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - FRONT DRIVE - 300M, Concorde, Daytona, Dynasty, Imperial, LeBaron, LHS, New Yorker**FRONT WHEEL****FWD**

2004-2001	Concorde	
	Hub Unit Bearing	513089[2]
2004-1998	300M	
	Hub Unit Bearing	
	(Speed Sensor on CV)	513089[2]
2001-1994	LHS	
	Hub Unit Bearing	
	(Speed Sensor on CV)	513089[2]
2000-1998	Concorde	
	Hub Unit Bearing	513089[2]
1997-1993	Concorde	
	Hub Unit Bearing	513089[2]
1996-1994	New Yorker	
	Hub Unit Bearing	513089[2]
1995-1994	LeBaron	
	Hub Unit Bearing	513075[2]
1993-1991	Daytona, Dynasty, Imperial, LeBaron, New Yorker	
	Hub Unit Bearing	513075[2]
1990	Daytona, Dynasty, LeBaron (Exc. Turbo)	
	Seal	5604[2] ⁵⁶
	Ball Bearing (Opt)	513006[2]
	Hub Unit Bearing (4 Stud)	518501[2] ⁶²
	Hub Unit Bearing (5 Lug Whl.)	518502[2] ⁶³
1990	Imperial, New Yorker	
	Seal	5604[2] ⁵⁶
	Hub Unit Bearing	513075[2]
1990	LeBaron (Turbo)	
	Seal	5604[2] ⁵⁶
	Hub Unit Bearing	513075[2]

REAR WHEEL**FWD**

2004-1999	300M	
	Hub Unit Bearing	512029[2]
2004-1993	Concorde	
	Hub Unit Bearing	512029[2]
2001-1994	LHS, New Yorker	
	Hub Unit Bearing	512029[2]
1995-1994	LeBaron	
	Seal (Inner)	4099
	Set (Inner)	SET46[2]
	Cone/Cup (Outer) (O.E.)	LM12749F-LM12711[2]
	Set (Outer) (Opt. Non-Polymer Set)	SET16[2]
1993-1990		
	Seal (Inner)	4099[2]
	Set (Inner)	SET46[2]
	Cone/Cup (Outer) (O.E.)	LM12749F-LM12711[2]
	Set (Outer) (Opt. Non-Polymer Set)	SET16[2]

CLUTCH**Release Bearing**

1995-1991	3.0L	
	Bearing Assy	614092
1993-1990	(4 Cyl.)	
	Bearing Assy	614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1995-1990	(A413, A470, 31TH)	
	Seal	3459S[2]
	Repair Sleeve (Opt)	KWK99157[2]
	Set	SET11[2]

Input Shaft

1995-1990	(A413, A470, 31TH)	
	Seal	331228H
	Repair Sleeve	KWK99149

Transfer Shaft

1995-1990	(A413, A470, 31TH)	
	Set	SET11[2]

Output Shaft

1995-1990	(A413, A470, 31TH)	
	Seal	3459S[2]
	Set	SET17[2]
	Repair Sleeve	KWK99157[2]

Manual Shaft

1995-1990	(A413, A470, 31TH)	
	Seal	8609

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2004-1993	(A606, 42LE)	
	Seal	3459S[2]
	Repair Sleeve	KWK99157[2]
	Set	SET36[2]
1995-1990	(A604 41TE)	
	Seal	3459S[2]
	Set	SET11[2]
	Repair Sleeve	KWK99157[2]

Torque Converter / Frt Pump

2004-1993	(41TE, 42LE)	
	Seal	331228H
	Repair Sleeve	KWK99149

⁵⁶Opt. Kit = Seal 3948 & Sleeve ⁶²Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

CHRYSLER - FRONT DRIVE - 300M, Concorde, Daytona, Dynasty, Imperial, LeBaron, LHS, New Yorker (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Transfer Shaft**

2004-2000	(A606, 42LE)
Seal (Outer)	4889
Cone/Cup (Outer)	26131H-NP941813[2]
Seal (Inner)	4990
Cone/Cup (Inner)	M802048CP-M802011AP
1999-1993	(A606, 42LE)
Seal (Outer)	4889
Cone/Cup (Outer)	26131H-26334[2]
Seal (Inner)	4990
Cone/Cup (Inner)	M802048CP-M802011AP[2]
1995-1993	(41TE)
Cone/Cup (Inner)	13687-13623X[2]
Set (Outer)	SET45[2]

Output Shaft

2004-2001	(A606, 42LE)
Cone/Cup (Outer)	NP952605-JL69310P[2]
Cone/Cup (Inner)	NP117885-LM300811[2]
Seal (LH)	4738N
Seal (RH)	4748N
2000-1997	(A606 42LE)(Prod. from mid 1997 on)
Cone/Cup (Outer)	NP952605-JL69310P[2]
Cone/Cup (Inner)	LM300848-LM300811[2]
Seal (LH)	4738N
Seal (RH)	4748N

Manual Shaft

2004-1990	(A604 41TE)
Seal	8609[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1993-1990	(A465, A520, A523, A525, A543, A555, A568)
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]

Input Shaft

1992-1990	(A465, A520, A523, A525, A543, A555, A568)
Seal (Frt)	3732S
Set (Frt)	SET4
Repair Sleeve (Frt)	KWK99106
Set (Rr)	SET5

Selector Shaft Seal/Man. Shaft

1995-1990	(A465, A520, A523, A525, A543, A555, A568)
Seal	3816

CAMSHAFT SEAL**4 Cylinder**

1994-1990	153/2.5L
Seal	3655S
Repair Sleeve	KWK99139
1990	122/2.0L, 135/2.2L
Seal	3655S
Repair Sleeve	KWK99139

6 Cylinder

2004-1998	3200cc/3.2L (SOHC), 3518cc/3.5L (SOHC)
Seal	714655[2]
Repair Sleeve	KWK99112[2]
1997-1993	215/3.5L
Seal	714655[2]
Repair Sleeve	KWK99112[2]
1995-1994	181/3.0L
Seal	3771[2]
Repair Sleeve	KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1990	135/2.2L, 153/2.5L
Seal	3638
Repair Sleeve	KWK99112

6 Cylinder

2004-1998	167/2.7L (DOHC)
Seal	710469
2004-1994	215/3.5L
Repair Sleeve	KWK99139
2001-1998	197/3.2L
Seal	1987S
Repair Sleeve	KWK99139
1997-1990	201/3.3L, 230/3.8L
Seal	3638
Repair Sleeve	KWK99112
1995-1990	181/3.0L
Seal	223750

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1990	135/2.2L, 153/2.5L
Seal Viton	710056
Seal PTFE H/D	5279
Seal Kit	5279A ²⁰

6 Cylinder

2004-1990	
Seal Viton	710056
Seal PTFE H/D	5279

²⁰Seal Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - FRONT DRIVE - Neon (See also Dodge)**FRONT WHEEL****FWD**

2002

Set SET49[2]

2001-2000

Ball Bearing 510057[2]

REAR WHEEL**FWD**

2002-2000

Hub Unit Bearing 512167[2]

CHRYSLER - REAR DRIVE - Crossfire**FRONT WHEEL****RWD**

2008-2004

Seal SL260011[2]

Set (Inner) SET17[2]

Set (Outer) SET12[2]

REAR WHEEL**RWD**

2008-2004

Ball Bearing 513130[2]

REAR AXLE**Pinion**

2005-2004

Cone/Cup (Inner) NP443760-NP564799

CHRYSLER - REAR DRIVE - Prowler (See also Plymouth)**FRONT WHEEL****RWD**

2002-2001

Hub Unit Bearing 513123[2]

REAR WHEEL**RWD**

2002-2001

Hub Unit Bearing 513089[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-2001 (A606, 42LE)

Seal 3459S[2]

Set SET36[2]

Repair Sleeve KWK99157[2]

Torque Converter / Frt Pump

2002-2001 (A606, 42LE)

Seal 331228H

Repair Sleeve KWK99149

4-SPEED AUTOMATIC TRANSAXLE**Transfer Shaft**

2002-2001 (A606, 42LE)

Seal (Outer) 4889

Cone/Cup (Outer) 26131H-NP941813

Seal (Inner) 4890

Cone/Cup (Inner) M802048CP-M802011AP

Output Shaft

2002-2001 (A606, 42LE)

Cone/Cup (Outer) NP952605-JL69310P[2]

Cone/Cup (Inner) NP117885-LM300811[2]

Seal (LH) 4738N

Seal (RH) 4748N

Manual Shaft

2002-2001 (A606, 42LE)

Seal 8609[2]

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

CHRYSLER - REAR DRIVE - Prowler (See also Plymouth) (cont.)

CAMSHAFT SEAL

6 Cylinder

2002-2001 215/3.5L
 Seal 714655[2]
 Repair Sleeve KWK99112[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

2002-2001 215/3.5L
 Seal 3638
 Repair Sleeve KWK99112

CRANKSHAFT REAR SEAL

6 Cylinder

2002-2001 215/3.5L
 Seal Viton 710056
 Seal PTFE H/D 5279

CHRYSLER - REAR DRIVE - 300 Series (2005-on)

FRONT WHEEL

RWD

2008-2005
 Hub Unit Bearing HA590030[2]²⁵

AWD

2009-2005
 Hub Unit Bearing HA590142[2]²⁵

REAR WHEEL

RWD

2008-2005 300
 Hub Unit Bearing HA590142[2]²⁵

AWD

2009-2005
 Hub Unit Bearing HA590142[2]²⁵

4WD FRONT AXLE

Differential

2006-2005
 Cone/Cup (LH) LM503349-LM503310

Pinion

2006-2005
 Cone/Cup (Inner) M88043-M88010
 Cone/Cup (Outer) M88043-M88010

REAR AXLE

Pinion

2006-2005
 Cone/Cup (Inner) NP443760-NP564799

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2007-2005 (42RLE)
 Seal 331228H
 Repair Sleeve KWK99149

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2007-2005 (42RLE)
 Seal 7300S
 Seal Kit 5206⁶⁴

CAMSHAFT SEAL

6 Cylinder

2006-2005 167/2.7L (DOHC), 215/3.5L (SOHC)
 Seal 714655

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2005 167/2.7L (DOHC)
 Seal 710469
 2008-2005 215/3.5L (SOHC)
 Seal 1987S
 Repair Sleeve KWK99138

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2005 2.7L, 3.5L
 Seal Viton 710056
 Seal PTFE H/D 5279

²⁵New Item, Check For Availability

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - Import - TC Maserati**FRONT WHEEL****FWD**

1991-1990 TC Maserati

Seal 5604[2]⁵⁶

Ball Bearing (Opt) 513006[2]

Hub Unit Bearing (4

Lug Whl.) 518501[2]⁶²

Hub Unit Bearing (5

Lug Whl.) 518502[2]⁶³**REAR WHEEL****FWD**

1991-1990 TC Maserati

Seal (Inner) 4099[2]

Set (Inner) SET45[2]

Set (Outer) SET16[2]

3-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

1991-1990

Seal 8609

CRANKSHAFT FRONT SEAL**4 Cylinder**

1990 135/2.2L

Seal 3638

Repair Sleeve KWK99112

6 Cylinder

1991-1990 181/3.0L

Seal 223750

CHRYSLER - CUV - Pacifica**FRONT WHEEL****FWD**

2008-2007

Hub Unit Bearing HA590217[2]²⁵

2006-2004

Hub Unit Bearing HA590208[2]

AWD

2008-2007

Hub Unit Bearing HA590217[2]²⁵

2006-2004

Hub Unit Bearing HA590208[2]

REAR WHEEL**FWD**

2008-2007

Hub Unit Bearing HA590274[2]²⁵

2006-2004

Hub Unit Bearing HA590209[2]

AWD

2008-2007

Hub Unit Bearing HA590274[2]²⁵

2006-2004

Hub Unit Bearing HA590209[2]

TRANSFER CASE**Input Shaft**

2005-2004

Seal 710501

TRANSFER CASE**Front Output Shaft**

2005-2004

Seal 3459S

Repair Sleeve KWK99157

Ball Bearing 106WB

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2004

Seal 331228H

Repair Sleeve KWK99149

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2008-2004 (41TE)

Cone/Cup (LH) NP889967-NP714580[2]

Cone/Cup (RH) NP952605-JL69310P[2]

Transfer Shaft

2008-2004 (41TE)

Cone/Cup (LH) NP853895-NP352518[2]

Cone/Cup (RH) NP716862-LM501310[2]

²⁵New Item, Check For Availability
Bolts, Studded Spindle, Seal, & Bearing⁵⁶Opt. Kit = Seal 3948 & Sleeve⁶²Kit = Plate, Gasket, 3⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHRYSLER - CUV - Pacifica (cont.)

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2008-2004	(41TE)	
Cone/Cup (LH)	.....	NP117885-LM300811[2]
Cone/Cup (RH)	.....	NP952605-JL69310P[2]
Seal	.....	3459S[2]
Repair Sleeve	.....	KWK99157[2]

Manual Shaft

2008-2004	(41AE, 41TE)	
Seal	.....	8609

CAMSHAFT SEAL

6 Cylinder

2006-2004	215/3.5L	
Seal	.....	714655

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2004	215/3.5L, 230/3.8	
Seal	.....	3638
Repair Sleeve	.....	KWK99112

CRANKSHAFT REAR SEAL

6 Cylinder

2007-2004	215/3.5L, 230/3.8	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

CHRYSLER - Minivan, Truck - Aspen

FRONT WHEEL

RWD

2009-2007		
Hub Unit Bearing	.....	HA590244[2] ²⁵

4WD

2009-2007		
Hub Unit Bearing	.....	HA590244[2] ²⁵

REAR WHEEL

RWD

2009-2007		
Cylindrical Bearing	.....	6410[2]
Seal	.....	SL260004[2] ²⁵

4WD

2009-2007		
Cylindrical Bearing	.....	6410[2]
Seal	.....	SL260004[2] ²⁵

4WD FRONT AXLE

Axle Shaft

2008-2007	(8" R.G.)	
Seal	.....	710489 ²⁵

REAR AXLE

Differential Rebuild Kit

2007	(8.25" R.G.)	
Kit	.....	DRK303B ²⁵

REAR AXLE (cont.)

Differential Rebuild Kit (cont.)

2007	(9.25" R.G.)	
Kit	.....	DRK304A ²⁵

Pinion

2008-2007	(8.25" R.G.)	
Seal	.....	710480
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M86649-M86610

TRANSFER CASE

Front Output Shaft

2008-2007	(New Process 244HD)	
Seal	.....	3946
Repair Sleeve	.....	KWK99187

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - Minivan, Truck - PT Cruiser**FRONT WHEEL****FWD****2008-2002**Set (Tapered Rlr. Brg.) SET49[2]
Ball Bearing (Opt) 510058[2]**2001**

Ball Bearing 510057[2]

REAR WHEEL**FWD****2008-2003**

Hub Unit Bearing 512167[2]

2002-2001 (RW Disc)

Hub Unit Bearing 512168[2]

2002-2001 (RW Drum)

Hub Unit Bearing 512167[2]

CLUTCH**Release Bearing****2004-2001**

Bearing Assy 614121

4-SPEED AUTOMATIC TRANSAXLE**Differential****2004-2001** (A604)

Cone/Cup (LH) NP889967-NP714580

Cone/Cup (RH) NP952605-JL69310P

Transfer Shaft**2004-2001** (A604)

Cone/Cup (LH) NP853895-NP352518[2]

Cone/Cup (RH) NP716862-LM501310[2]

Output Shaft**2008-2001** (40TE, 41TE)

Seal 3459S[2]

Cone/Cup (LH) NP117885-LM300811[2]

Cone/Cup (RH) NP952605-JL69310P[2]

Repair Sleeve KWK99157[2]

Manual Shaft**2007-2001** (40TE, 41TE)

Seal 8609

5-SPEED MANUAL TRANSAXLE**Differential****2004-2001** (A578)

Seal 3459S[2]

Set SET11[2]

Repair Sleeve KWK99157

5-SPEED MANUAL TRANSAXLE**Input Shaft****2004-2001** (A578)

Seal 3732S

Set (Frt) SET4

Set (Rr) SET5

Repair Sleeve KWK99106

Selector Shaft Seal/Man. Shaft**2007-2001** (A578)

Seal 3816

CAMSHAFT SEAL**4 Cylinder****2008-2001** 148/2.4L

Seal Viton 320249

Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder****2008-2001** 148/2.4L

Seal Viton 320348

Repair Sleeve KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder****2008-2001** 148/2.4L

Seal Viton 710056

Seal PTFE H/D 5279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHRYSLER - Minivan, Truck - Town & Country Van, Grand Voyager, Voyager from 2000 (See also Plymouth)

FRONT WHEEL

FWD

2008	
Hub Unit Bearing	HA590243[2] ²⁵
2007-2001	
Hub Unit Bearing	513123[2]
2000-1996 (14" Whl.)	
Hub Unit Bearing	513122[2]
2000-1996 (15", 16", 17" Whl.)	
Hub Unit Bearing	513123[2]
1995-1991 (14" Whl.)	
Hub Unit Bearing	513075[2]
1995-1990 (15" Whl.)	
Hub Unit Bearing	513074[2] ⁴⁴
1990 (14" Whl.)	
Seal	5604[2] ⁵⁶
Ball Bearing	513006[2]
Hub Unit Bearing (4	
Stud)	518501[2] ⁶²
Hub Unit Bearing (5	
Lug Whl.)	518502[2] ⁶³

REAR WHEEL

FWD

2009-2008	
Hub Unit Bearing	HA590317[2] ²⁵
2007-2001 (ABS)	
Hub Unit Bearing	512169[2]
2007-2001 (Non-ABS)	
Hub Unit Bearing	512170[2]
2000-1996 (14" Whl.)	
Hub Unit Bearing	512155[2]
2000-1996 (15", 16", 17" Whl.)	
Hub Unit Bearing	512156[2]
1995-1990	
Seal (Inner)	4249[2]
Set (Inner)	SET17[2]
Cone/Cup (Outer)	
(O.E.)	LM12749F-LM12711[2]
Set (Outer) (Opt.	
Non-Polymer Set)	SET16[2]

AWD

2004-1997 (15", 16", 17" Whl.)	
Hub Unit Bearing	512157[2]
1995-1992	
Hub Unit Bearing	512125[2]

AWD REAR AXLE

Differential

2000-1994	
Cone/Cup	JL69349H-JL69310[2]

Pinion

2000-1994	
Set (Inner)	SET45
Set (Outer)	SET17

TRANSFER CASE

Input Shaft

2004-1992	
Seal	710501

Front Output Shaft

2004-1992	
Seal	3459S
Ball Bearing	106WB[2]
Repair Sleeve	KWK99157

3-SPEED AUTOMATIC TRANSAXLE

Differential

2002-1997 (A404 31TH)(Prod. from mid 1997 on)	
Cone/Cup (LH)	NP889967-NP714580
Cone/Cup (RH)	NP952605-JL69310P
1997-1996 (A404 31TH)(Prod. thru mid 1997)	
Cone/Cup (LH)	JL69348-JL69310
Cone/Cup (RH)	NP889967-NP714580
1995-1992 (A404 31TH)	
Cone/Cup	JL69349CP-JL69310P[2]
1991-1990 (A404)	
Cone/Cup	JL69349H-JL69310[2]
1991-1990 (A413)	
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157

Torque Converter

1998-1990	
Seal	331228H
Repair Sleeve	KWK99149

Transfer Shaft

2002-1997 (A404 31TH)(Prod. from mid 1997 on)	
Cone/Cup (LH)	NP952605-JL69310P[2]
Cone/Cup (RH)	NP952605-JL69310P[2]
1997-1992 (A404 31TH)(Prod. thru mid 1997)	
Cone/Cup (LH)	JL69349CP-JL69310P[2]
Cone/Cup (RH)	JL69349CP-JL69310P[2]
1991-1990 (A404, 31TH)	
Cone/Cup (LH)	JL69349H-JL69310[2]
Cone/Cup (RH)	JL69349H-JL69310[2]
1991-1990 (A413)	
Set	SET11[2]

²⁵New Item, Check For Availability ⁴⁴Brg Flg Mtg Holes Threaded.

⁵⁶Opt. Kit = Seal 3948 & Sleeve ⁶²Kit = Plate, Gasket, 3 Bolts, Studed Spindle, Seal, & Bearing

⁶³Kit = Plate, Gasket, 3 Bolts, Studed Spindle, Seal, & Bearing

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

CHRYSLER - Minivan, Truck - Town & Country Van, Grand Voyager, Voyager from 2000 (See also Plymouth) (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

2002-1990 (A404, 31TH)
 Cone/Cup (LH) L68149P-L68111P[2]
 Cone/Cup (RH) L68149P-L68111P[2]

Manual Shaft

2002-1990
 Seal 8609

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2004-1997 (A604 41TE)(AWD)(Prod. from mid 1997 on)
 Cone/Cup (LH) NP889967-NP714580
 Cone (RH) LM503349
 2004-1997 (A604 41TE)(Prod. from mid 1997 on)
 Cone/Cup (LH) NP889967-NP714580
 Cone/Cup (RH) NP952605-JL69310P
 1999-1993 (A606, 42LE)
 Set SET36[2]
 1997 (A604 41TE)(AWD)(Prod. thru mid 1997)
 Cone/Cup (LH) NP889967-NP714580
 Cone/Cup (RH) JL69348-JL69310
 1997-1995 (A604 41TE)(Prod. thru mid 1997)
 Cone/Cup (LH) NP889967-NP714580
 Cone/Cup (RH) JL69348-JL69310
 1995-1992 (A604 41TE)
 Cone/Cup JL69348-JL69310
 1995-1991 (A604 41TE)(AWD)
 Cone/Cup (LH) JL69348-JL69310
 Cone (RH) LM503349
 1991-1990 (A604, A670)
 Set SET11[2]

Torque Converter / Frt Pump

2002-1990
 Seal 331228H
 Repair Sleeve KWK99149

Transfer Shaft

2004-2002 (A604 41TE)(AWD)
 Cone/Cup (LH) NP853895-NP352518[2]
 Cone/Cup (RH) NP716862-LM501310[2]
 2001-1996 (A604 41TE)(AWD)
 Cone/Cup (LH) NP853895-NP352518[2]
 Set (RH) SET45[2]
 1995-1992 (A604 41TE)(AWD)
 Cone/Cup (LH) 13687-13623X[2]
 Set (RH) SET45[2]
 1991-1990 (A604, A670)
 Set SET11[2]

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2004-2001 (A604 41TE)
 Cone/Cup (RH) NP952605-JL69310P[2]
 Cone/Cup (LH) NP117885-LM300911[2]
 Seal 3459S[2]
 2000-1997 (A604 41TE)(incl. AWD)(Prod. from mid 1997 on)
 Cone/Cup (RH) NP952605-JL69310P[2]
 Cone/Cup (LH) LM300848-LM300911[2]
 Seal 3459S[2]
 1997-1992 (A604 41TE)(incl. AWD)(Prod. thru mid 1997)
 Cone/Cup (RH) JL69348-JL69310[2]
 Cone/Cup (LH) LM300848-LM300911[2]
 Seal 3459S[2]
 1991-1990 (A604, A670)
 Seal 3459S[2]
 Set SET17[2]

Manual Shaft

2007-1990
 Seal 8609

POWER STEERING**Pump Shaft**

1995-1990
 Seal 7013S

Worm Shaft

1992-1990
 Seal 7188S

CAMSHAFT SEAL**4 Cylinder**

2003-2000 148/2.4L (DOHC)
 Seal Viton 320249[2]
 Repair Sleeve KWK99139[2]

6 Cylinder

2000 2972cc/3.0L
 Seal 3771[2]
 Repair Sleeve KWK99139

INTERMEDIATE SHAFT**6 Cylinder**

2002-1990 201/3.3L, 230/3.8L
 Seal 3655S
 Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-2000 148/2.4L (DOHC)
 Seal Viton 320348
 Repair Sleeve KWK99112

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

CHRYSLER - Minivan, Truck - Town & Country Van, Grand Voyager, Voyager from 2000 (See also Plymouth) (cont.)
CRANKSHAFT FRONT SEAL
6 Cylinder

2008-2003	201/3.3L, 230/3.8L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112
2002-1990	201/3.3L, 230/3.8L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112
2000	2972cc/3.0L	
Seal	.....	223750

CRANKSHAFT REAR SEAL
4 Cylinder

2003-2000	148/2.4L (DOHC)	
Seal Viton	.....	710056

CRANKSHAFT REAR SEAL
6 Cylinder

2008-1990	181/3.0L, 201/3.3L, 231/3.8L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

DAEWOO - Lanos, Leganza, Nubira
FRONT WHEEL
FWD

2002-1999	Lanos, Nubria	
Ball Bearing	.....	513113[2]
2002-1999	Leganza	
Ball Bearing	.....	510065[2]

REAR WHEEL
FWD

2002-1999	Lanos (Non-ABS)	
Seal (Inner)	.....	471498[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET1[2]
2002-1999	Leganza	
Hub Unit Bearing	.....	512159[2]
2002-1999	Nubria	
Seal (Inner)	.....	471498[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET1[2]

4-SPEED AUTOMATIC TRANSAXLE
Torque Converter / Frt Pump

2002-1998		
Seal	.....	223830
Repair Sleeve	.....	KWK99147
2002-1998	(4T40E)	
Seal	.....	4072N

Output Shaft

2002-1998	(42LE)	
Seal	.....	3543[2]
Repair Sleeve	.....	KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE
Manual Shaft

2002-1998	(4T40E)	
Seal	.....	8792S
2002-1998	(Aisin 50-42LE)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

CRANKSHAFT FRONT SEAL

2002-1998	(DOHC)	
Seal Viton	.....	710237
Repair Sleeve	.....	KWK99354

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DAIHATSU - Charade**FRONT WHEEL****FWD**

1992-1990 Charade (From 1/1/89)
 Ball Bearing 510012[2]

REAR WHEEL**FWD**

1992-1990
 Ball Bearing (Inner) 205F[2]
 Ball Bearing (Outer) 303BB[2]

CLUTCH**Release Bearing**

1992-1990
 Bearing Assy 614110

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1992-1990 (Aisin A210)
 Ball Bearing 207S[2]

Torque Converter

1992-1990 (Aisin A210)
 Seal 223830
 Repair Sleeve KWK99147

Output Shaft

1992-1990 (Aisin A210)
 Seal 223540[2]
 Repair Sleeve KWK99139[2]

Manual Shaft

1992-1990 (Aisin A210)
 Seal 710116

MANUAL STEERING**Pitman Shaft**

1992-1990
 Ball Bearing 202AG[2]

CAMSHAFT SEAL**3 Cylinder**

1992-1990 993cc/1.0L
 Seal 712008
 Repair Sleeve KWK99111

4 Cylinder

1992-1990 1295cc/1.3L
 Seal 223800

CRANKSHAFT FRONT SEAL**3 Cylinder**

1992-1990 993cc/1.0L
 Seal 223420

CRANKSHAFT FRONT SEAL**4 Cylinder**

1992-1990 1295cc/1.3L
 Seal 223420

CRANKSHAFT REAR SEAL**3 Cylinder**

1992-1990 993cc/1.0L
 Seal 710271

4 Cylinder

1992-1990 1295cc/1.3L
 Seal 228009
 Repair Sleeve KWK99313

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DAIHATSU - SUV - Rocky**FRONT WHEEL****4WD**

1992-1990
 Seal (Inner) 224200S[2]
 Bearing Assy (Inner) 32007X[2]
 Seal (Outer) 225535[2]

REAR WHEEL**4WD**

1992-1990
 Seal (Inner) 225208[2]
 Ball Bearing (Inner) 511022[2]
 Seal (Outer) 225008[2]

4WD FRONT AXLE**Differential**

1992-1990
 Cone/Cup 16150-16282[2]

Pinion

1992-1990
 Bearing Assy (Inner) 30306M
 Seal (Outer) 710269
 Bearing Assy (Outer) 30305C

REAR AXLE**Differential**

1992-1990
 Bearing Assy 30208M[2]

Pinion

1992-1990
 Bearing Assy (Inner) 30307M
 Seal (Outer) 710270
 Bearing Assy (Outer) 30306M
 Repair Sleeve KWK99177

3-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

1992-1990 (Aisin A210)
 Repair Sleeve KWK99139[2]
 Seal 223540[2]

Selector Shaft Seal/Man. Shaft

1992-1990 (Aisin A210)
 Seal 710116

CLUTCH**Pilot Bearing**

1992-1990 Rocky
 Ball Bearing 101SS

Release Bearing

1992-1990
 Bearing Assy 614145

CRANKSHAFT FRONT SEAL**4 Cylinder**

1992-1990 1589cc/1.6L
 Seal 223420

CRANKSHAFT REAR SEAL**4 Cylinder**

1992-1990 1589cc/1.6L
 Seal 228009
 Repair Sleeve KWK99313

DODGE - FRONT DRIVE - Daytona, Dynasty, Shadow, Spirit**FRONT WHEEL****FWD**

1995-1991
 Hub Unit Bearing 513075[2]

FRONT WHEEL (cont.)**FWD (cont.)**

1990
 Seal 5604[2]⁵⁶
 Ball Bearing (Opt) 513006[2]
 Hub Unit Bearing (4
 Stud) 518501[2]⁶²
 Lug Whl.) 518502[2]⁶³

⁵⁶Opt. Kit = Seal 3948 & Sleeve ⁶²Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - FRONT DRIVE - Daytona, Dynasty, Shadow, Spirit (cont.)**FRONT WHEEL (cont.)****FWD (cont.)**

1990	Daytona	
Seal	.....	5604[2] ⁵⁶
Ball Bearing (Opt)	.....	513006[2]
Hub Unit Bearing (14" Whl.)	.....	518502[2] ⁶³
Hub Unit Bearing (15", 16" Whl.)	.....	513075[2]
1990	Dynasty	
Hub Unit Bearing	.....	513075[2]

REAR WHEEL**FWD**

1995-1990		
Seal (Inner)	.....	4099[2]
Set (Inner)	.....	SET46[2]
Cone/Cup (Outer) (O.E.)	.....	LM12749F-LM12711[2]
Set (Outer) (Opt. Non-Polymer Set)	.....	SET16[2]

CLUTCH**Release Bearing**

1995-1991	6 Cyl. 3.0, 3.2	
Bearing Assy	.....	614092
1994-1990	(4 Cyl.)	
Bearing Assy	.....	614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1995-1990	(A404, A413, A470, A670, 31TH)	
Seal	.....	3459S[2]
Set	.....	SET11[2]
Repair Sleeve (Opt)	.....	KWK99157[2]

Torque Converter

1995-1990		
Seal	.....	331228H[2]
Repair Sleeve	.....	KWK99149

Output Shaft

2001-1992	(31TH)	
Seal	.....	3459S[2]
Repair Sleeve	.....	KWK99157
1991-1990	(A404, A413, A470, A670, 31TH)	
Seal	.....	3459S[2]
Set	.....	SET17[2]
Repair Sleeve	.....	KWK99157[2]

3-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

1995-1990	(A404, A413, A470, A670, 31TH)	
Seal	.....	8609

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1995-1990	(A604, 41TE, 42LE)	
Seal	.....	331228H
Repair Sleeve	.....	KWK99149

Output Shaft

1996-1990	(A604 41TE)	
Seal	.....	3459S[2]
Set	.....	SET17[2]
Repair Sleeve	.....	KWK99157[2]

Manual Shaft

1995-1990	(A604, 41TE)	
Seal	.....	8609

5-SPEED MANUAL TRANSAXLE**Differential**

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal	.....	3459S[2]
Set	.....	SET11[2]
Repair Sleeve	.....	KWK99157[2]

Input Shaft

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal (Frt)	.....	3732S
Set (Frt)	.....	SET4
Set (Rr)	.....	SET5
Repair Sleeve	.....	KWK99106

Selector Shaft Seal/Man. Shaft

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal	.....	3816

CAMSHAFT SEAL**4 Cylinder**

2004-2001	2350cc/2.4L (SOHC)	
Seal	.....	3771[2]
Repair Sleeve	.....	KWK99139[2]
1995-1990	135/2.2L, 153/2.5L	
Seal	.....	3655S
Repair Sleeve	.....	KWK99139
1993-1991	135/2.2L	
Seal	.....	223801
Repair Sleeve	.....	KWK99147

⁵⁶Opt. Kit = Seal 3948 & Sleeve⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - FRONT DRIVE - Daytona, Dynasty, Shadow, Spirit (cont.)

CAMSHAFT SEAL

6 Cylinder

1995-1990	2972cc/3.0L	
Seal	.....	3771
Repair Sleeve	.....	KWK99139

CRANKSHAFT FRONT SEAL

4 Cylinder

1995-1990	153/2.5L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112

6 Cylinder

1994-1990	181/3.0L	
Seal	.....	223750
1993-1990	201/3.3L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112

CRANKSHAFT REAR SEAL

4 Cylinder

1995-1990	135/2.2L, 153/2.5L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

6 Cylinder

1995-1990	181/3.0L, 201/3.3L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

DODGE - FRONT DRIVE - Avenger

FRONT WHEEL

FWD

2008	(ABS)	
Hub Unit Bearing	.....	HA590219[2] ²⁵
2008	(Non-ABS)	
Hub Unit Bearing	.....	HA590214[2] ²⁵
2000-1995		
Hub Unit Bearing	.....	513157[2]

AWD

2008	(ABS)	
Hub Unit Bearing	.....	HA590219[2] ²⁵

REAR WHEEL

FWD

2008	(RW Drum)	
Hub Unit Bearing	.....	HA590221[2] ²⁵
2008	R/T	
Hub Unit Bearing	.....	HA590216[2] ²⁵
2000-1995	(ABS, Non-ABS)	
Hub Unit Bearing	.....	HA590306[2]
Bearing Module (Opt)	.....	512136[2]

AWD

2008	R/T	
Hub Unit Bearing	.....	HA590216[2] ²⁵

CLUTCH

Release Bearing

2000-1995	
Bearing Assy	614121

4-SPEED AUTOMATIC TRANSAXLE

Differential

2008-1997	(A604 41TE)(Prod. from mid 1997 on)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	NP952605-JL69310P
1997-1996	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	JL69348-JL69310
1995	(A604 41TE)	
Cone/Cup	.....	JL69348-JL69310[2]

Torque Converter / Frt Pump

2008-1995	
Seal	331228H
Repair Sleeve	KWK99149

²⁵New Item, Check For Availability

DODGE - FRONT DRIVE - Avenger (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Transfer Shaft**

2008-1996	(A604, 41TE)
Cone/Cup (Inner)	NP853895-NP352518[2]
Set (Outer)	SET45[2]
1995	(A604, 41TE)
Cone/Cup (Inner)	13687-13623X[2]
Set (Outer)	SET45[2]

Output Shaft

2008	(40TES, 41TES)
Seal	3459S[2]
Repair Sleeve	KWK99157[2]
2000-1997	(A604 41TE)(Prod. from mid 1997 on)
Cone/Cup (Outer)	LM300848-LM300911[2]
Cone/Cup (Inner)	NP952605-JL69310P[2]
2000-1995	(A604 41TE)
Seal	3459S[2]
Repair Sleeve	KWK99157[2]
1997-1995	(A604 41TE)(Prod. thru mid 1997)
Cone/Cup (Outer)	LM300848-LM300811[2]
Cone/Cup (Inner)	JL69348-JL69310[2]

Manual Shaft

2008-1995	(41TE, 40TES, 41TES)
Seal	8609

5-SPEED MANUAL TRANSAXLE**Differential**

1999-1995	(A578)
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]

Output Shaft

1999-1995	(A578)
Seal	3459S[2]
Repair Sleeve	KWK99157[2]

Selector Shaft Seal/Man. Shaft

1999-1995	(A578)
Seal	3816

CAMSHAFT SEAL**4 Cylinder**

1999-1995	122/2.0L
Seal Viton	320249
Repair Sleeve	KWK99139

6 Cylinder

2000-1995	2497cc/2.5L
Seal	3771[2]
Repair Sleeve	KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1999-1995	122/2.0L
Seal Viton	320348
Repair Sleeve	KWK99128

6 Cylinder

2008	167/2.7L (DOHC)
Seal	710469
2008	215/3.5L (SOHC)
Repair Sleeve	KWK99139
2000-1995	2497cc/2.5L
Seal	223750
Repair Sleeve	KWK99147

CRANKSHAFT REAR SEAL**4 Cylinder**

1999-1995	122/2.0L
Seal Viton	710056
Seal PTFE H/D	5279

6 Cylinder

2008	167/2.7L (DOHC), 215/3.5L (SOHC)
Seal Viton	710056
Seal PTFE H/D	5279
2000-1995	2497cc/2.5L
Seal Viton	710056
Seal PTFE H/D	5279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - FRONT DRIVE - Caliber**FRONT WHEEL****FWD****2008-2007**Bearing Assy 510090[2] ²⁵**AWD****2008-2007**Bearing Assy 510090[2] ²⁵**REAR WHEEL****FWD****2008-2007 (ABS)**Hub Unit Bearing HA590216[2] ²⁵**2008-2007 (Non-ABS)**Hub Unit Bearing HA590221[2] ²⁵**REAR WHEEL****AWD****2008-2007**Hub Unit Bearing HA590230[2] ²⁵**DODGE - FRONT DRIVE - Omni****FRONT WHEEL****FWD****1990** Omni(Exc. Shelby)Seal 5604[2] ⁵⁶

Ball Bearing B39[2]

Hub Unit Bearing 518500[2] ⁶²**REAR WHEEL****FWD****1990**

Seal (Inner) 4099[2]

Set (Inner) SET46[2]

Cone/Cup (Outer)

(O.E.) LM12749F-LM12711[2]

Set (Outer) (Opt.)

Non-Polymer Set) SET16[2]

CLUTCH**Release Bearing****1990** (4 Cyl.)

Bearing Assy 614092

3-SPEED AUTOMATIC TRANSAXLE**Differential****1990** (A404, A413, A470, A670, 31TH)

Seal 3459S[2]

Set SET11[2]

Repair Sleeve (Opt) KWK99157[2]

Torque Converter**1990**

Seal 331228H[2]

Repair Sleeve KWK99149

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft****1990** (A404, A413, A470, A670, 31TH)

Seal 3459S[2]

Repair Sleeve KWK99157[2]

Set SET17[2]

Manual Shaft**1990** (A404, A413, A470, A670, 31TH)

Seal 8609

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump****1990** (A604, 41TE, 42LE)

Seal 331228H

Repair Sleeve KWK99149

Output Shaft**1990** (A604 41TE)

Set SET17[2]

Manual Shaft**1990** (A604, 41TE)

Seal 8609

5-SPEED MANUAL TRANSAXLE**Differential****1990** (A465, A520, A523, A525, A543, A555, A568)

Seal 3459S[2]

Set SET11[2]

Repair Sleeve KWK99157[2]

²⁵New Item, Check For Availability⁵⁶Opt. Kit = Seal 3948 & Sleeve⁶²Kit = Plate, Gasket, 3

Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

DODGE - FRONT DRIVE - Omni (cont.)

5-SPEED MANUAL TRANSAXLE

Input Shaft

1990 (A465, A520, A523, A525,
A543, A555, A568)
Seal (Frt) 3732S
Set (Frt) SET4[2]
Repair Sleeve KWK99106
Set (Rr) SET5[2]

Selector Shaft Seal/Man. Shaft

1990 (A465, A520, A523, A525,
A543, A555, A568)
Seal 3816

CRANKSHAFT FRONT SEAL

4 Cylinder

1990 135/2.2L
Seal Viton 710056
Seal PTFE H/D 5279

CRANKSHAFT REAR SEAL

4 Cylinder

1990 135/2.2L
Seal 3655S
Repair Sleeve KWK99139

DODGE - FRONT DRIVE - Intrepid

FRONT WHEEL

FWD

2004-1993
Hub Unit Bearing
(Speed Sensor on CV) 513089[2]

REAR WHEEL

FWD

2004-1998 (ABS)
Hub Unit Bearing 512029[2]
1997-1993 (ABS, Non-ABS)
Hub Unit Bearing
(Substitute ABS Unit) 512029[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

2004-1993 (A606, 42LE)
Set SET36[2]

Torque Convertor / Frt Pump

2002-1993 (A606, 42LE)
Seal 331228H
Repair Sleeve KWK99149

Transfer Shaft

2004-2000 (A606, 42LE)
Cone/Cup (Inner) M802048CP-M802011AP[2]
Cone/Cup (Outer) 26131H-NP941813[2]
1999-1993 (A606, 42LE)
Cone/Cup (Inner) M802048CP-M802011AP[2]
Cone/Cup (Outer) 26131H-26334[2]

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2004-1993 (42LE)
Seal (LH) 4738N
Seal (RH) 4748N
2004-1993 (A606, 42LE)
Cone/Cup (Outer) NP952605-JL69310P[2]
Cone/Cup (Inner) NP114036-LM300811[2]

CAMSHAFT SEAL

6 Cylinder

2004-2000 215/3.5L
Seal 714655[2]
Repair Sleeve KWK99112[2]
2001-1998 3200cc/3.2L
Seal 714655[2]
Repair Sleeve KWK99112[2]
1997-1993 215/3.5L
Seal 714655[2]
Repair Sleeve KWK99112[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

2004-1998 167/2.7L (DOHC)
Seal 710469
2004-1994 215/3.5L
Repair Sleeve KWK99139
2001-1998 197/3.2L
Repair Sleeve KWK99139
1997-1993 201/3.3L
Seal 3638
Repair Sleeve KWK99112

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - FRONT DRIVE - Intrepid (cont.)**CRANKSHAFT REAR SEAL****6 Cylinder**

2004-2000	215/3.5L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279
2004-1998	167/2.7L (DOHC)	
Seal Viton	.....	710056
2001-1998	3200cc/3.2L	
Seal Viton	.....	710056
1997-1993	201/3.3L, 215/3.5L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

DODGE - FRONT DRIVE - Monaco**FRONT WHEEL****FWD**

1992-1990		
Ball Bearing	.....	513144K[2]

REAR WHEEL**FWD**

1991-1990	(Non-ABS)	
Hub Unit Bearing	.....	513070[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

1992-1990		
Seal	.....	320583
Repair Sleeve	.....	KWK99157

Output Shaft

1992-1990	(ZF4HP 18)	
Seal (LH)	.....	224462
Seal (RH)	.....	710422 ¹⁶
1992-1990	(w/o ZF4HP 18)	
Seal	.....	223543[2]
Repair Sleeve	.....	KWK99139[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1992-1990	182/3.0L	
Seal Viton	.....	710196
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL**6 Cylinder**

1992-1990	182/3.0L	
Seal	.....	228010
Repair Sleeve	.....	KWK99315

DODGE - FRONT DRIVE - Neon, SX 2.0**FRONT WHEEL****FWD**

2005-2002		
Set	.....	SET49[2]
2001-2000		
Ball Bearing	.....	510057[2]
1999-1995		
Ball Bearing	.....	510032[2]
Hub Unit Bearing (4		
Lug Whl.)	.....	HA590181K[2] ⁶⁸
Hub Unit Bearing (5		
Lug Whl.)	.....	HA590182K[2] ⁶⁸

REAR WHEEL**FWD**

2005-2000	(ABS, Non-ABS)	
Hub Unit Bearing	.....	512167[2]
1999-1998		
Hub Unit Bearing	.....	512013[2]
1997-1995		
Hub Unit Bearing (4		
Lug Whl.)	.....	512021[2]
Hub Unit Bearing (5		
Lug Whl.)	.....	512023[2]

¹⁶Obsolete⁶⁸Kit = Flg, Brg, & Snap Ring

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - FRONT DRIVE - Neon, SX 2.0 (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Torque Converter**

2006-2002 41TE

Seal 331228H

Repair Sleeve KWK99149

CLUTCH**Release Bearing**

2002-1995

Bearing Assy 614121

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2005-1995

Seal 3816

3-SPEED AUTOMATIC TRANSAXLE**Differential**2001-1997 (A404 31TH)(Prod. from mid
1997 on)

Seal (LH) 3459S

Cone/Cup (LH) NP889967-NP714580

Repair Sleeve KWK99157

Seal (RH) 3459S

Cone/Cup (RH) NP952605-JL69310P

Repair Sleeve KWK99157

1997-1996 (A404 31TH)(Prod. thru mid
1997)

Seal (LH) 3459S

Cone/Cup (LH) NP889967-NP714580

Seal (RH) 3459S

Cone/Cup (RH) JL69348-JL69310

1995 (A404 31TH)

Seal 3459S[2]

Cone/Cup JL69349CP-JL69310P[2]

Torque Converter

2002-1995

Seal 331228H

Repair Sleeve KWK99149

Transfer Shaft2001-1997 (A404 31TH)(Prod. from mid
1997 on)

Cone/Cup (LH) NP952605-JL69310P[2]

Cone/Cup (RH) NP952605-JL69310P[2]

1997-1995 (A404 31TH)(Prod. thru mid
1997)

Cone/Cup (LH) JL69349CP-JL69310P[2]

Cone/Cup (RH) JL69349CP-JL69310P[2]

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2001-1995 (A404 31TH)

Seal 3459S[2]

Repair Sleeve KWK99157[2]

Cone/Cup L68149P-L68111P[2]

Manual Shaft

2001-1995 (31TH)

Seal 8609

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2003-2002 (A604, 41TE)

Cone/Cup (LH) NP889967-NP714580[2]

Cone/Cup (RH) NP952605-JL69310P[2]

Transfer Shaft

2003-2002 (A604, 41TE)

Cone/Cup (LH) NP853895-NP352518[2]

Cone/Cup (RH) NP716862-LM501310[2]

Output Shaft

2003-2002 (A604, 41TE)

Cone/Cup (LH) NP117885-LM300811[2]

Cone/Cup (RH) NP952605-JL69310P[2]

Seal 3459S[2]

Repair Sleeve KWK99157[2]

Manual Shaft

2005-2002 (41TE)

Seal 8609

5-SPEED MANUAL TRANSAXLE**Differential**

2002-1995

Seal 3459S[2]

Set SET11[2]

Repair Sleeve KWK99157[2]

Output Shaft

2005-2002 (41TE)

Seal 3459S[2]

Repair Sleeve KWK99157[2]

CAMSHAFT SEAL**4 Cylinder**

2005-1995 122/2.0L

Seal Viton 320249

Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2005-1995 122/2.0L, 148/2.4L

Seal Viton 320348

Repair Sleeve KWK99128

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - FRONT DRIVE - Neon, SX 2.0 (cont.)**CRANKSHAFT REAR SEAL****4 Cylinder**

2005-2003	122/2.0L (SOHC), 148/2.4L (DOHC)	
Seal Viton	710056	
Seal PTFE H/D	5279	
2002-1995	1996cc/2.0L	
Seal Viton	710056	
Seal PTFE H/D	5279	

DODGE - FRONT DRIVE - Stratus**FRONT WHEEL****FWD**

2006-2001	Stratus (Sedan)	
Hub Unit Bearing	513138[2]	
2005-2001	Stratus (Coupe)	
Hub Unit Bearing	513157[2]	
2000-1995		
Hub Unit Bearing	513138[2]	

REAR WHEEL**FWD**

2006-1998	(Sedan)(ABS)	
Hub Unit Bearing	512220[2]	
2006-1995	(Sedan)(Non-ABS)	
Hub Unit Bearing	512154[2]	
2005-2001	(Coupe)	
Hub Unit Bearing	HA590306[2]	
Bearing Module (Opt)	512136[2]	
1997-1995	(Sedan)(ABS)	
Hub Unit Bearing	512133[2]	

CLUTCH**Release Bearing**

2002-1995	(4 Cyl.)	
Bearing Assy	614121	

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2000-1995		
Seal	3816	

3-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1997	(A404 31TH)(Prod. from mid 1997 on)	
Seal (LH)	3459S	
Cone/Cup (LH)	NP889967-NP714580	
Repair Sleeve	KWK99157	
Seal (RH)	3459S	
Cone/Cup (RH)	NP952605-JL69310P	
Repair Sleeve	KWK99157	
1997-1996	(A404 31TH)(Prod. thru mid 1997)	
Seal (LH)	3459S	
Cone/Cup (LH)	NP889967-NP714580	
Seal (RH)	3459S	
Cone/Cup (RH)	JL69348-JL69310	
1995	(A404 31TH)	
Seal	3459S[2]	
Cone/Cup	JL69349CP-JL69310P[2]	

Torque Converter

2001-1995	(A404 31TH)	
Seal	331228H	
Repair Sleeve	KWK99149	

Transfer Shaft

2001-1997	(A404 31TH)(Prod. from mid 1997 on)	
Cone/Cup (LH)	NP952605-JL69310P[2]	
Cone/Cup (RH)	NP952605-JL69310P[2]	
1997-1995	(A404 31TH)(Prod. thru mid 1997)	
Cone/Cup (LH)	JL69349CP-JL69310P[2]	
Cone/Cup (RH)	JL69349CP-JL69310P[2]	

Output Shaft

2001-1995	(A404 31TH)	
Seal	3459S[2]	
Repair Sleeve	KWK99157[2]	
Cone/Cup	L68149P-L68111P[2]	

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

DODGE - FRONT DRIVE - Stratus (cont.)

3-SPEED AUTOMATIC TRANSAXLE

Manual Shaft

2001-1995 (A404 31TH)
Seal 8609

4-SPEED AUTOMATIC TRANSAXLE

Differential

2003-1997 (A604 41TE)(Prod. from mid 1997 on)
Cone/Cup (LH) NP889967-NP714580
Cone/Cup (RH) NP952605-JL69310P
1997-1996 (A604 41TE)(Prod. thru mid 1997)
Cone/Cup (LH) NP889967-NP714580
Cone/Cup (RH) JL69348-JL69310
1995 (A604 41TE)
Cone/Cup JL69348-JL69310[2]

Torque Convertor / Frt Pump

2003-1995 (41TE)
Seal 331228H
Repair Sleeve KWK99149

Input Shaft

2002 Stratus (Coupe)(2.4L)
Ndle Bearing B1616[2]

Transfer Shaft

2003-2002 (A604, 41TE)
Cone/Cup (Inner) NP853895-NP352518[2]
Cone/Cup (Outer) NP716862-LM501310[2]
2001-1996 (A604, 41TE)
Cone/Cup (Inner) NP853895-NP352518[2]
Set (Outer) SET45[2]
1995 (A604, 41TE)
Cone/Cup (Inner) 13687-13623X[2]
Set (Outer) SET45[2]

Output Shaft

2006-1995 (A604 41TE)
Seal 3459S[2]
Repair Sleeve KWK99157[2]
2005-2001 (F4A42 1, F4A51 2)
Seal Viton 710259[2]

Manual Shaft

2006-1995 (40TE, 41TE)
Seal 8609

5-SPEED MANUAL TRANSAXLE

Differential

1998-1995
Set SET11

5-SPEED MANUAL TRANSAXLE

Output Shaft

1998-1995
Seal 3459S[2]
Repair Sleeve KWK99157[2]

CAMSHAFT SEAL

4 Cylinder

2006-1995 122/2.0L (SOHC), 148/2.4L (DOHC)
Seal Viton 320249
Repair Sleeve KWK99139
2005-2001 2350cc/2.4L (SOHC)
Seal 3771

6 Cylinder

2005-2001 181/3.0L
Seal 3771[2]
Repair Sleeve KWK99139[2]
2000-1995 2497cc/2.5L
Seal 3771[2]
Repair Sleeve KWK99139[2]

CRANKSHAFT FRONT SEAL

4 Cylinder

2006-1995 122/2.0L, 148/2.4L (DOHC)
Seal Viton 320348
Repair Sleeve KWK99128
2005-2001 2351cc/2.4L (SOHC)
Seal 224460

6 Cylinder

2006-2001 167/2.7L (DOHC)
Seal 710469
2005-2001 181/3.0L
Seal 223750
2000-1995 2497cc/2.5L
Seal Viton 320348

CRANKSHAFT REAR SEAL

4 Cylinder

2006-1995 2429cc/2.4L (DOHC)
Seal Viton 710056
Seal PTFE H/D 5279
2005-2001 2350cc/2.4L (SOHC)
Seal 710238
2000-1995 122/2.0L, 148/2.4L
Seal Viton 710056
Seal PTFE H/D 5279

6 Cylinder

2006-2001 167/2.7L, 181/3.0L
Seal Viton 710056
Seal PTFE H/D 5279
2000-1995 2497cc/2.5L
Seal Viton 229005
Seal PTFE H/D 5279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - REAR DRIVE - Challenger, Charger, Magnum (New Style)

FRONT WHEEL

RWD

2009-2005
Hub Unit Bearing HA590030[2]²⁵

AWD

2009-2005 Charger, Magnum
Hub Unit Bearing HA590142²⁵

REAR WHEEL

RWD

2009-2005
Hub Unit Bearing HA590142[2]²⁵

AWD

2009-2005 Charger, Magnum
Hub Unit Bearing HA590142[2]²⁵

4WD FRONT AXLE

Differential

2006-2005 Magnum
Cone/Cup LM503349-LM503310[2]

Pinion

2006-2005 Magnum
Cone/Cup (Inner) M88043-M88010
Cone/Cup (Outer) M88043-M88010

REAR AXLE

Pinion

2006-2005
Cone/Cup (Inner) NP443760-NP564799

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2008-2005 (42RLE)
Seal 331228H
Repair Sleeve KWK99149

Rear Seal/Ext. Housing

2008-2005 (42RLE)
Seal Kit 5206⁶⁴

CAMSHAFT SEAL

6 Cylinder

2006-2005 215/3.5L
Seal 714655

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2005 167/2.7L (DOHC)
Seal 710469
2008-2005 215/3.5L (SOHC)
Repair Sleeve KWK99139
2006-2005 215/3.5L
Seal 3638

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2005 167/2.7L (DOHC), 215/3.5L (SOHC)
Seal Viton 710056
Seal PTFE H/D 5279

DODGE - REAR DRIVE - Viper GTS Coupe, Viper RT/10

FRONT WHEEL

RWD

2008-1996
Hub Unit Bearing 513132[2]
1995-1992
Hub Unit Bearing 513109[2]⁹⁰

REAR WHEEL

RWD

2008-1996
Hub Unit Bearing 513109[2]⁹⁰
1995-1992
Hub Unit Bearing 513109[2]⁹⁰

²⁵New Item, Check For Availability

⁶⁴Seal & Bushing Kit

⁹⁰6 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - REAR DRIVE - Viper GTS Coupe, Viper RT/10 (cont.)

REAR AXLE

Axle Shaft

2002-1992 (Spicer 44 Ser.)
 Ndle Bearing B2412[2]

Differential Rebuild Kit

2000-1992 (Dana/Spicer 44 Axle)
 Kit DRK339A

Differential

2006-1992 (Dana/Spicer 44 Axle)
 Seal Viton 473227V[2]
 Set SET36[2]

Pinion

2006-2001 (Dana/Spicer 44 Axle)
 Seal Viton 100715V
 Cone/Cup (Inner) M802048-M802011
 Cone/Cup (Outer) M88048-M88010
 2000-1992 (Dana/Spicer 44 Axle)
 Seal 9316
 Repair Sleeve KWK99187
 Cone/Cup (Inner) M802048-M802011
 Cone/Cup (Outer) M88048-M88010

CLUTCH

Pilot Bearing

2002-1992
 Ndle Bearing SCE1211

Release Bearing

2002-1992 8.0 V10
 Bearing Assy 614061

6-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1992
 Kit TRK56

Main Shaft

2002-1992 (Frt. main shaft)
 Seal 7412S[2]
 Cone/Cup M88048-M88010[2]
 2002-1992 (Main shaft pocket)
 Seal 7300S[2]
 Set SET16[2]
 2002-1992 (Rr. main shaft)
 Cone/Cup 25572-25520[2]

Countershaft

2002-1992 (Frt. C/S)
 Set SET5[2]
 2002-1992 (Middle C/S)
 Bearing Assy 32008XM[2]
 2002-1992 (Rr. C/S)
 Set SET16[2]

CRANKSHAFT FRONT SEAL

10 Cylinder

2006-1994 488/8.0L, 505/8.3L
 Seal Viton 471424V
 Repair Sleeve KWK99199
 Harmnc Balancer Slvs 88199

CRANKSHAFT REAR SEAL

10 Cylinder

2002-1994 488/8.0L
 Seal 328039

DODGE - Import - Colt, Colt Vista, Stealth, 2000-GTX**FRONT WHEEL****FWD**

1996-1991	Stealth (FWD)	
Seal (Inner)	.....	710182[2]
Ball Bearing (Inner)	.....	510034[2]
Seal (Outer)	.....	710183[2]
1995-1993	Colt	
Seal (Inner)	.....	8430S[2]
Ball Bearing (Inner)	.....	510016[2]
Seal (Outer)	.....	4898[2]
1992-1990	Colt	
Seal (Inner)	.....	474134[2]
Set (Inner)	.....	SET41[2]
Set (Outer)	.....	SET41[2]
1991-1990	Colt Vista (FWD)	
Seal (Inner)	.....	474134[2]
Set (Inner)	.....	SET41[2]
Set (Outer)	.....	SET41[2]
1990	2000 GTX (Canada only)	
Seal	.....	225230[2]
Ball Bearing	.....	513036[2]

4WD

1991-1990	Colt Vista	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]

AWD

1996-1991	Stealth R/T	
Hub Unit Bearing	.....	513133[2]

REAR WHEEL**FWD**

1996-1991	Stealth (FWD)	
Hub Unit Bearing	.....	512039[2]
1995-1993	Colt (ABS)	
Hub Unit Bearing	.....	512033[2]
1995-1993	Colt (Non-ABS)	
Hub Unit Bearing	.....	512148[2]
1992-1991	Colt (Rr. Drum)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	516001WB[2]
Bearing Assy (Outer)	.....	516001WB[2]
1991-1990	Colt Vista (FWD)	
Seal (Inner)	.....	1196[2]
Set (Inner)	.....	SET4[2]
Set (Outer)	.....	SET1[2]
1990	2000 GTX (Canada only)	
Seal (Inner)	.....	1196[2]
Set (Inner)	.....	SET4[2]
Set (Outer)	.....	SET1[2]
1990	Colt (2Dr.)(Disc)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	516000[2]
Bearing Assy (Outer)	.....	516000[2]
1990	Colt (2Dr.)(Drum)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	516001WB[2]
Bearing Assy (Outer)	.....	516001WB[2]

REAR WHEEL (cont.)**FWD (cont.)**

1990	Colt (4Dr.)	
Seal (Inner)	.....	1205N
Bearing Assy (Inner)	.....	513029[2] ^z
Bearing Assy (Outer)	.....	513029[2] ^z

4WD

1994-1992	Colt Wagon (4WD)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	513029[2] ^z
Bearing Assy (Outer)	.....	513029[2] ^z
1991-1990	Colt Wagon (4WD)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	513029[2] ^z
Bearing Assy (Outer)	.....	513029[2] ^z

AWD

1996-1991	Stealth R/T	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]

REAR AXLE**Pinion**

1996-1991	Stealth R/T (AWD)	
Seal	.....	710207
Repair Sleeve	.....	KWK99166
1991-1990	Colt Vista	
Seal	.....	471747
Repair Sleeve	.....	KWK99139
Bearing Assy (Inner)	.....	32207M
Bearing Assy (Outer)	.....	30305M

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1994-1992		
Seal	.....	320583
Repair Sleeve	.....	KWK99157

CLUTCH**Release Bearing**

1996-1991	Stealth R/T (AWD)	
Bearing Assy	.....	614099
1996-1990	Stealth (w/o AWD)	
Bearing Assy	.....	614126
1992-1990	Colt (FWD)(w/o (4WD)	
Bearing Assy	.....	614126
1990	Colt Vista (FWD)	
Bearing Assy	.....	614126

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1996-1990	(w/o KM172 0, KM172 5)	
Ball Bearing	.....	207[2]
1990	(KM172 0, KM172 5)	
Bearing Assy	.....	30207M[2]

^zNon-Cancellable/Non-Returnable

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - Import - Colt, Colt Vista, Stealth, 2000-GTX (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Torque Converter****1996-1990**

Seal 320583

Repair Sleeve KWK99157

Output Shaft**1996-1990**

Seal 223543[2]

Repair Sleeve KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential****1996-1990** (F4A21 2, F4A22 2, F4A33 1, KM176 5)

Ball Bearing 207[2]

1992-1990 (ZF4HP 18)

Cone/Cup (LH) LM806649-LM806610

Cone/Cup (RH) LM300849-LM300811

Torque Converter / Frt Pump**1996-1990** (w/o ZF4HP 18, 41TE)

Seal 320583

Repair Sleeve KWK99157

1992-1990 (ZF4HP 18)

Seal 224510

Repair Sleeve KWK99177

Output Shaft**1996-1993** (F4A21 2, F4A22 2)

Seal 223543[2]

Repair Sleeve KWK99139[2]

1996-1993 (F4A33 1)

Seal Viton 710259[2]

1996-1992 (W4A32 1)

Seal (LH) 223543

Repair Sleeve KWK99139

Seal (RH) 710199

Repair Sleeve KWK99139

1992-1990 (F4A21 2, F4A22 2, F4A33 1, KM176 5)

Seal 223543[2]

Repair Sleeve KWK99139[2]

1992-1990 (ZF4HP 18)

Seal (LH) 224462

Seal (RH) 710422¹⁶**4-SPEED MANUAL TRANSAXLE****Differential****1992-1990** (F4M21 1)

Ball Bearing 207[2]

Input Shaft**1992-1990** (F4M21 1, KM200 0)

Seal Viton 712007

Repair Sleeve KWK99098

4-SPEED MANUAL TRANSAXLE**Output Shaft****1992-1990** (F4M21 1, KM200 0)

Seal 223543[2]

Bearing Assy 30206M[2]

Repair Sleeve KWK99139[2]

Selector Shaft Seal/Man. Shaft**1992-1990** (KM160 2)

Seal 710222

5-SPEED MANUAL TRANSAXLE**Differential****1996-1990** (KM182 2, F5M22 2, KM182 0, KM206 0, KM221 1)

Bearing Assy 30207M[2]

1996-1990 (F5M21 1, F5M21 2, W5M31

2, W5M33 2, KM162 0,

KM162 0, KM163 0, KM201 0)

Ball Bearing 207[2]

1994-1991 (Getrag)

Seal 710353[2]

Input Shaft**1996-1990** (F5M21 1, F5M21 2, F5M22 2, F5M33 2W5M31 2, W5M33 2)

Seal Viton 712007

Repair Sleeve KWK99098

1994-1991 (Getrag)

Seal Viton 712007

Repair Sleeve KWK99098

1991-1990 (KM182 2, KM182 0, KM221 1)

Seal Viton (Center) 712007

Ball Bearing (Center) 304WB[2]

Bearing Assy (Rr) 30304[2]

Repair Sleeve KWK99098

Output Shaft**1996-1992** (W5M33 2)

Seal (LH) 223543

Repair Sleeve KWK99139

Seal (RH) 710199

Repair Sleeve KWK99139

1996-1990 (F5M21 1, F5M21 2, F5M22 2, KM201 0, KM206 0)

Seal 223543[2]

Bearing Assy 30206M[2]

Repair Sleeve KWK99139[2]

1996-1990 (KM182 2, KM162 0, KM163

0, KM221 1, F5M31 2, F5M33

2)

Seal 223543[2]

Repair Sleeve KWK99139[2]

1994-1993 (Getrag)

Seal Viton 710259[2]

1993-1992 (W5M31 2)

Seal (LH) 223543

Repair Sleeve (LH) KWK99139

Seal (RH) 1981

Repair Sleeve (RH) KWK99114

¹⁶Obsolete

DODGE - Import - Colt, Colt Vista, Stealth, 2000-GTX (cont.)**5-SPEED MANUAL TRANSAXLE (cont.)****Output Shaft (cont.)**

1992-1991	(Getrag)
Seal	223543[2]
Repair Sleeve	KWK99139[2]

Selector Shaft Seal/Man. Shaft

1996-1990	(KM162 0)
Seal	710222

6-SPEED MANUAL TRANSAXLE**Input Shaft**

1996-1995	(Getrag)
Seal Viton	712007
Repair Sleeve	KWK99098

Output Shaft

1996-1995	(Getrag)
Seal Viton	710259[2]

DRIVESHAFT SUPPORT

1991-1990	Colt Vista (4WD)
Hanger Bearing Assy	HB25[2]

OIL PUMP**4 Cylinder**

1994-1993	2351cc/ 2.4L
Seal	222025
Repair Sleeve	KWK99078
1991-1990	122/2.0L
Seal	222025
Repair Sleeve	KWK99078
1990	1597cc/1.6L (DOHC)
Seal	222025
Repair Sleeve	KWK99078
1990	1755cc/1.8L (SOHC)
Seal	221710
Repair Sleeve	KWK99078

CAMSHAFT SEAL**4 Cylinder**

1996-1990	
Seal	3771[2]
Repair Sleeve	KWK99139[2]

6 Cylinder

1996-1991	2972cc/3.0L
Seal	3771[2]
Repair Sleeve	KWK99139[2]
1996-1991	2972cc/3.0L (DOHC)
Seal (Frt)	223010[2]
Seal (Rr)	710302[2]
Repair Sleeve	KWK99114[4]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1996-1992	1834cc/1.8L
Seal	223750
Repair Sleeve	KWK99145
1996-1990	1595cc/1.6L (DOHC), 1597cc/1.6L, 1755cc/1.8L, 1997cc/2.0L, 2351cc/2.4L
Seal	224460
1995-1990	1468cc/1.5L
Seal	223018
Repair Sleeve	KWK99114

6 Cylinder

1996-1991	181/3.0L
Seal	223750

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1993	1834cc/1.8L, 2351cc/2.4L
Seal Viton	710235
1994-1990	1468cc/1.5L
Seal	227235
1992-1990	1595cc/1.6L (DOHC), 1834cc/1.8L, 1997cc/2.0L, 2351cc/2.4L
Seal Viton	228005
Repair Sleeve	KWK99315

6 Cylinder

1996-1991	2972cc/3.0L
Seal Viton	710056
Seal PTFE H/D	5279

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - Minivan (See also Plymouth) - Caravan, Grand Caravan**FRONT WHEEL****FWD**

2008	
Hub Unit Bearing	HA590243[2] ²⁵
2007-2001	
Hub Unit Bearing	513123[2]
2000-1996 (14" Whl.)	
Hub Unit Bearing	513122[2]
2000-1996 (15", 16", 17" Whl.)	
Hub Unit Bearing	513123[2]
1995-1991 (14" Whl.)	
Hub Unit Bearing	513075[2]
1995-1990 (15" Whl.)	
Hub Unit Bearing	513074[2] ⁴⁴
1990 (14" Whl.)	
Seal	5604[2] ⁵⁶
Ball Bearing (Opt)	513006[2]
Hub Unit Bearing (4	
Stud)	518501[2] ⁶²
Hub Unit Bearing (5	
Lug Whl.)	518502[2] ⁶³

AWD

1993-1991 (14" Whl.)	
Hub Unit Bearing	513075[2]
1993-1991 (15" Whl.)	
Hub Unit Bearing	513074[2] ⁴⁴

REAR WHEEL**FWD**

2009-2008	
Hub Unit Bearing	HA590317[2] ²⁵
2007-2001 (ABS)	
Hub Unit Bearing	512169[2]
2007-2001 (Non-ABS)	
Hub Unit Bearing	512170[2]
2000-1996 (14" Whl.)	
Hub Unit Bearing	512155[2]
2000-1996 (15", 16", 17" Whl.)	
Hub Unit Bearing	512156[2]
1995-1990	
Seal (Inner)	4249[2]
Set (Inner)	SET17[2]
Set (Outer)	SET16[2]

AWD

2004-1997 (15", 16", 17" Whl.)	
Hub Unit Bearing	512157[2]
1993-1991	
Hub Unit Bearing	512125[2]

FRONT AXLE**Differential**

1999-1994 (AWD)	
Cone/Cup	JL69349H-JL69310[2]

FRONT AXLE**Pinion**

1999-1994 (AWD)	
Set (Inner)	SET45
Set (Outer)	SET17

AWD REAR AXLE**Differential**

2002-1994	
Cone/Cup	JL69349H-JL69310[2]

Pinion

2002-1994	
Set (Inner)	SET45
Set (Outer)	SET17

TRANSFER CASE**Input Shaft**

2004-1992	
Seal	710501

Front Output Shaft

2004-1991	
Seal	3459S
Repair Sleeve	KWK99157
Ball Bearing	106WB

CLUTCH**Release Bearing**

1994-1990 (4 Cyl.)	
Bearing Assy	614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**

2003-1996 (A404 31TH)	
Seal (LH)	3459S
Cone/Cup (LH)	NP889967-NP714580
Seal (RH)	3459S
Cone/Cup (RH)	NP952605-JL69310P
Seal (RH)	3459S
Cone/Cup (RH) (Thru	
Mid 1997)	JL69348-JL69310
1995-1992 (A404 31TH)	
Seal	3459S[2]
Cone/Cup	JL69349CP-JL69310[2]
1991-1990 (A404)	
Seal	3459S[2]
Cone/Cup	JL69349H-JL69310[2]

Torque Converter

2002-1990	
Seal	331228H[2]
Repair Sleeve	KWK99149

²⁵New Item, Check For Availability⁴⁴Brg Flg Mtg Holes Threaded.⁵⁶Opt. Kit = Seal 3948 &⁶²Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing⁶³Kit = Plate, Gasket, 3

DODGE - Minivan (See also Plymouth) - Caravan, Grand Caravan (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Transfer Shaft**

2002-1997	(A404 31TH)(Prod. from mid 1997 on)
Cone/Cup (LH)	NP952605-JL69310P[2]
Cone/Cup (RH)	NP952605-JL69310P[2]
1997-1992	(A404 31TH)(Prod. thru mid 1997)
Cone/Cup (LH)	JL69349CP-JL69310P[2]
Cone/Cup (RH)	JL69349CP-JL69310P[2]
1991-1990	(A404)
Cone/Cup (LH)	JL69349H-JL69310[2]
Cone/Cup (RH)	JL69349H-JL69310[2]

Output Shaft

2002-1992	(A404 31TH)
Seal	3459S[2]
Cone/Cup	L68149P-L68111P[2]
1991-1990	(A404 31TH, A413)
Seal	3459S[2]
Set	SET17[2]

Manual Shaft

2002-1990	
Seal	8609[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2004-1997	(A604 41TE)(AWD)(Prod. from mid 1997 on)
Cone/Cup (LH)	NP889967-NP714580
Cone/Cup (RH)	LM503349-LM503310
2004-1997	(A604 41TE)(Prod. from mid 1997 on)
Cone/Cup (LH)	NP889967-NP714580
Cone/Cup (RH)	NP952605-JL69310P
1997	(A604 41TE)(AWD)(Prod. thru mid 1997)
Cone/Cup (LH)	NP889967-NP714580
Cone/Cup (RH)	JL69348-JL69310
1997-1996	(A604 41TE)(Prod. thru mid 1997)
Cone/Cup (LH)	NP889967-NP714580
Cone/Cup (RH)	JL69348-JL69310
1995-1994	(A604 41TE)(AWD)
Cone/Cup (LH)	JL69349-JL69310
Cone/Cup (RH)	LM503349-LM503310
1995-1990	(A604 41TE)
Set	SET11[2]
Seal	3459S[2]
Repair Sleeve	KWK99157[2]
1993-1991	(A604 41TE)(AWD)
Cone/Cup (LH)	JL69348-JL69310
Cone (RH)	LM503349

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2002-1990	
Seal	331228H
Repair Sleeve	KWK99149

Transfer Shaft

2004-2002	(A604, 41TE)
Cone/Cup (LH)	NP853895-NP352518[2]
Cone/Cup (RH)	NP716862-LM501310[2]
2001-1996	(A604, 41TE)
Cone/Cup (Inner)	NP853895-NP352518[2]
Set (Outer)	SET45[2]
1995-1991	(A604, 41TE)
Cone/Cup (Inner)	13687-13623X[2]
Set (Outer)	SET45[2]

Output Shaft

2000-1997	(A604 41TE)(AWD)(Prod. from mid 1997 on)
Seal (Outer)	3459S[2]
Cone/Cup (Outer)	LM300848-LM300911[2]
Cone/Cup (Inner)	NP952605-JL69310P[2]
2000-1997	(A604 41TE)(Prod. from mid 1997 on)
Seal (Outer)	3459S[2]
Cone/Cup (Outer)	LM300848-LM300911[2]
Cone/Cup (Inner)	NP952605-JL69310P[2]
1997-1991	(A604 41TE)(AWD)(Prod. thru mid 1997)
Seal (Outer)	3459S[2]
Cone/Cup (Outer)	LM300848-LM300811[2]
Cone/Cup (Inner)	JL69348-JL69310[2]
1997-1991	(A604 41TE)(Prod. thru mid 1997)
Seal (Outer)	3459S[2]
Cone/Cup (Outer)	LM300848-LM300811[2]
Cone/Cup (Inner)	JL69348-JL69310[2]
1990	(A604, A670)
Seal	3459S[2]
Set	SET17[2]

Manual Shaft

2007-1990	
Seal	8609

5-SPEED MANUAL TRANSAXLE**Differential**

1995-1990	(A465, A520, A523, A525, A555)
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - Minivan (See also Plymouth) - Caravan, Grand Caravan (cont.)**5-SPEED MANUAL TRANSAXLE****Input Shaft**

1995-1990 (A465, A520, A523, A525,
A555)
Seal (Frt) 3732S[2]
Set (Frt) SET4[2]
Set (Rr) SET5[2]

Selector Shaft Seal/Man. Shaft

2003-1990 (A465, A520, A523, A525,
A555)
Seal 3816[2]

CAMSHAFT SEAL**4 Cylinder**

2006-1996 148/2.4L (DOHC)
Seal Viton 320249[2]
Repair Sleeve KWK99139[2]
1995-1990 153/2.5L
Seal 3655S
Repair Sleeve KWK99139

6 Cylinder

2000-1990 181/3.0L
Seal 3771[2]
Repair Sleeve KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2007-1996 148/2.4L
Seal Viton 320348
Repair Sleeve KWK99128
1995-1990 153/2.5L
Seal 3638
Repair Sleeve KWK99112

6 Cylinder

2008-1990 201/3.3L, 230/3.8L
Seal 3638
Repair Sleeve KWK99112
2000-1990 181/3.0L
Seal 223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2007-1990 135/2.2L, 148/2.4L, 153/2.5L
Seal Viton 710056
Seal PTFE H/D 5279

6 Cylinder

2008-2001 201/3.3L, 230/3.8L
Seal Viton 710056
Seal PTFE H/D 5279
2000-1990 181/3.0L, 201/3.3L, 231/3.8L
Seal Viton 710056
Seal PTFE H/D 5279

DODGE - Lt Truck, SUV - Ram 50**FRONT WHEEL****RWD**

1993-1990
Seal (Inner) 225010[2]
Set (Inner) SET5[2]
Set (Outer) SET3[2]

FRONT WHEEL**4WD**

1993-1990
Seal (Inner) 225875[2]
Set (Inner) SET47[2]
Set (Outer) SET47[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - Lt Truck, SUV - Ram 50 (cont.)**REAR WHEEL****RWD**

1993-1990	
Seal (Inner)	4989[2]
Seal (Outer)	225110[2]
Bearing Assy (Outer)	30208M[2]

4WD

1993-1990	
Seal (Inner)	4989[2]
Seal (Outer)	225110[2]
Bearing Assy (Outer)	30208M[2]

4WD FRONT AXLE**Differential**

1993-1990	(4 Cyl.)
Seal	710335[2]
Cone/Cup	17887-17831[2]
1993-1990	(6 Cyl.)
Seal	710151[2]
Cone/Cup	17887-17831[2]

Pinion

1993-1990	(4 Cyl.)
Seal	224255
Cone/Cup (Outer)	M86649-M86610
Cone/Cup (Inner)	HM89449-HM89410
1993-1990	(6 Cyl.)
Seal	224570
Cone/Cup (Outer)	M88043-M88010
Cone/Cup (Inner)	HM89449-HM89410

Steering Knuckle

1993-1990	
Seal	710146[2]

REAR AXLE**Differential**

1993-1990	
Cone/Cup	17887-17831[2]

Pinion

1993-1990	(4 Cyl.)
Seal	224570
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177
1993-1990	(6 Cyl.)
Seal	224570
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177

TRANSFER CASE**Input Shaft**

1993-1990	(V4AC1 2, V5M21 2)
Seal	1992
Ball Bearing	5209W[2]
Repair Sleeve	KWK99177

Front Output Shaft

1993-1990	
Seal	223608
Ball Bearing	306TB[2]
Repair Sleeve	KWK99146

Rear Output Shaft

1993-1990	
Seal	224052
Ball Bearing	211TB[2]
Repair Sleeve	KWK99157

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993-1990	(A500)
Seal	331228H

Selector Shaft Seal/Man. Shaft

1993-1990	(A500)
Seal	8609

Output Shaft

1993-1990	(A500)
Seal Kit	5206 ⁶⁴
Repair Sleeve	KWK99149

CLUTCH**Pilot Bearing**

1992-1990	(6 Cyl.)
Ball Bearing	203FF
1992-1990	(4 Cyl.)
Ball Bearing	102CC

Release Bearing

1993-1990	Raider 4 Cyl. w/o 2.6 L. 4 Cyl. (Hyd. Mechanism)
Bearing Assy	614016
1992-1990	Raider 6 Cyl.
Bearing Assy	614107
1992-1990	50 Ser. Trucks 6 Cyl.
Bearing Assy	614107
1992-1990	50 Ser. Trucks 4 Cyl.(w/o 2.6 L. 4 Cyl.)(Hyd. Mechanism)
Bearing Assy	614016
1991-1990	Dakota
Bearing Assy	614054

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - Lt Truck, SUV - Ram 50 (cont.)**5-SPEED MANUAL TRANSMISSION****Front Input Shaft**

1993-1990	(M1S5)	
Seal		223255
Repair Sleeve		KWK99128
1993-1990	(w/o KM119, M1S5)	
Seal		223014
Ball Bearing		307L[2]
Repair Sleeve		KWK99114

Rear Output Shaft

1993-1990	(KM145 8)	
Seal		223608
Ball Bearing		511014[2]

DRIVESHAFT SUPPORT

1995-1990	Power Ram 50	
Hanger Bearing Assy		HB30[2]
1992-1990	Ram 50	
Hanger Bearing Assy		HB22[2]

OIL PUMP**4 Cylinder**

1993-1990	2351cc/ 2.4L	
Seal		222025
Repair Sleeve		KWK99078

CAMSHAFT SEAL**4 Cylinder**

1993-1990	1997cc/2.0L, 2346cc/2.3L, 2350cc/2.4L	
Seal		3771
Repair Sleeve		KWK99139

6 Cylinder

1993-1990	2972cc/3.0L	
Seal		3771
Repair Sleeve		KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

1993-1990	2350/2.4L (SOHC)	
Seal		224460

6 Cylinder

1991-1990	2972cc/3.0L	
Seal		223750

CRANKSHAFT REAR SEAL**4 Cylinder**

1993-1990	1997cc/2.0L, 2346cc/2.3L, 2350cc/2.4L, 2555cc/2.6L	
Seal Viton		228005
Repair Sleeve		KWK99315

6 Cylinder

2008-2004	226/3.7L	
Seal		710471
1991-1990	2972cc/3.0L	
Seal Viton		710056
Seal PTFE H/D		5279

8 Cylinder

2003-1998	360/5.9L	
Seal Split		5106
2000-1990	318/5.2L	
Seal		5414

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

DODGE - Lt Truck, SUV - Dakota, Durango, Nitro

FRONT WHEEL

RWD

2008-2007	Nitro	
Hub Unit Bearing	HA590245[2]	²⁵
2008-2006	Durango (4 Whl. ABS)	
Hub Unit Bearing	HA590244[2]	²⁵
2008-2005	Dakota (4 Whl. ABS)	
Hub Unit Bearing	HA590035[2]	
2008-2005	Dakota (Rr. Whl. ABS)	
Hub Unit Bearing	HA590034[2]	²⁵
2005-2004	Durango (4 Whl. ABS)	
Hub Unit Bearing	HA590033[2]	²⁵
2004-1997	Dakota (4 Whl. ABS)	
Hub Unit Bearing	HA599406[2]	
Set (Opt. Tapered Unit Brg.)	SET815[2]	
2004-1997	Dakota (Rr. Whl. ABS)	
Hub Unit Bearing	HA599528[2]	
Set (Opt. Tapered Unit Brg.)	SET815[2]	
2003-1999	Durango (4 Whl. ABS)	
Hub Unit Bearing	HA599406[2]	
Set (Opt. Tapered Unit Brg.)	SET815[2]	
2003-1999	Durango (Rr. Whl. ABS)	
Hub Unit Bearing	HA599528[2]	
Set (Opt. Tapered Unit Brg.)	SET815[2]	
1996-1990	Dakota	
Seal (Inner)	3087[2]	
Set (Inner)	SET11[2]	
Set (Outer)	SET16[2]	

4WD

2008-2007	Nitro	
Hub Unit Bearing	HA590245[2]	²⁵
2008-2006	Durango (4 Whl. ABS)	
Hub Unit Bearing	HA590244[2]	²⁵
2008-2005	Dakota (4 Whl. ABS)	
Hub Unit Bearing	HA590035[2]	
2008-2005	Dakota (Rr. Whl. ABS)	
Hub Unit Bearing	HA590034[2]	²⁵
2005-2004	Durango (4 Whl. ABS)	
Hub Unit Bearing	HA590033[2]	²⁵
2004-1997	Dakota (4 Whl. ABS)	
Hub Unit Bearing (RH)	SP450100	⁷⁸
Hub Unit Bearing (LH)	SP450101	⁷⁸
Sensor Kit (RH)	SK450100	³⁹
Sensor Kit (LH)	SK450101	³⁹
2004-1997	Dakota (Rr. Whl. ABS)	
Hub Unit Bearing	HA599361[2]	
2003-1998	Durango (4 Whl. ABS)	
Hub Unit Bearing (RH)	SP450100	⁷⁸
Hub Unit Bearing (LH)	SP450101	⁷⁸
Sensor Kit (RH)	SK450100	³⁹
Sensor Kit (LH)	SK450101	³⁹
2003-1998	Durango (Rr. Whl. ABS)	
Hub Unit Bearing	HA599361[2]	
1996-1990	Dakota	
Hub Unit Bearing	513109[2]	⁹⁰
1990	Dakota	
Hub Unit Bearing	513082[2]	⁴⁰

REAR WHEEL

RWD

2009	Nitro	
Seal	SL260004[2]	²⁵
Cylindrical Bearing	6410[2]	
2009-2004	Durango	
Seal	SL260004[2]	²⁵
Cylindrical Bearing	6410[2]	
2008-2007	Nitro	
Seal	SL260010[2]	
Cylindrical Bearing	6408[2]	
2008-1990	Dakota	
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹
2003-1998	Durango	
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹

4WD

2009	Nitro	
Seal	SL260004[2]	²⁵
Cylindrical Bearing	6410[2]	
2009-2004	Durango	
Seal	SL260004[2]	²⁵
Cylindrical Bearing	6410[2]	
2008-2007	Nitro	
Seal	SL260010[2]	
Cylindrical Bearing	6408[2]	
2008-1990	Dakota	
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹
2003-1998	Durango	
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹

4WD FRONT AXLE

Axle Shaft

2008-2000	(8" R.G.)	
Seal	710489[2]	²⁵

Differential Rebuild Kit

2008-2000	(8" R.G.)	
Kit	DRK305	²⁵
Kit	DRK305MK	²²
1999-1997	(Dana/Spicer 35 Axle)	
Kit	DRK335	
Kit	DRK335MK	
1996-1990	Dakota (7.25" R.G.)	
Kit	DRK302	
Kit	DRK302MK	²²

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²²Master Kit ²⁵New Item, Check For Availability
³⁹Opt. Kit = Cable, Screw, Grease. ⁴⁰5 Stud. ⁷⁸6 Stud, New Item. ⁹⁰6 Stud.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE - Lt Truck, SUV - Dakota, Durango, Nitro (cont.)**4WD FRONT AXLE****Pinion**

2008-2000	(8" R.G.)	
Seal	710476	
Cone/Cup (Inner)	M88048-M88010	
Cone/Cup (Outer)	NP722065-NP013743	
1999-1997	(Dana/Spicer 35 Axle)	
Seal Viton	714675	
Repair Sleeve	KWK99181	
Cone/Cup (Inner)	HM88648-HM88610	
Cone/Cup (Outer)	M86649-M86610	

Intermediate Shaft

1992-1990	(Chrysler 7.5" R.G.)	
Ndle Bearing (Pilot)	B2516	
Ndle Bearing	B5020	

REAR AXLE**Differential Rebuild Kit**

2008-2001	(9.25" R.G.)	
Kit	DRK304A ²⁵	
2008-1990	(8.25" R.G.)	
Kit	DRK303	
2000-1998	(9.25" R.G.)	
Kit	DRK304	
1996-1990	(7.25" R.G.)	
Kit	DRK302	

Differential

1996-1990	Dakota (7.25" R.G.)	
Set	SET45[2]	

Pinion

2008-2004	(9.25" R.G.)	
Seal	710480	
Cone/Cup (Inner)	NP524102-NP912904	
Cone/Cup (Outer)	M88048-M88010	
2008-2000	(8.25" R.G.)	
Seal	710480	
Cone/Cup (Inner)	M802048-M802011	
Cone/Cup (Outer)	M86649-M86610	
1999-1997	(8.25" R.G.)	
Seal	8516N	
Cone/Cup (Inner)	M802048-M802011	
Cone/Cup (Outer)	M86649-M86610	
Repair Sleeve	KWK99168	
1998-1990	Dakota (7.25" R.G.)	
Seal	8516N	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	

TRANSFER CASE REBUILD KIT

2008-2001	(233)	
Kit	TCRK233AA ²⁵	
2008-2000	(242, 244)(BD50-8 I/S Brg)	
Kit	TCRK242EE ²⁵	
2008-1994	(231)(6010n I/S Brg)	
Kit	TCRK231EE ²⁵	
1999-1997	(242)(6010N I/S Brg)	
Kit	TCRK242DD ²⁵	

TRANSFER CASE REBUILD KIT (cont.)

1993-1990	(231)(BD50-8 I/S Brg)	
Kit	TCRK231 ⁵¹	

TRANSFER CASE**Input Shaft**

2000-1990	(New Process 231D, 231DHD)	
Repair Sleeve	KWK99193	
Seal (Exc. 2.5L)	3173	
Seal (Opt)	710928	

Front Output Shaft

2008-1998	(New Process 242D)	
Seal	3946	
Repair Sleeve	KWK99187	
1997-1990	(New Process 231D, 231DHD)	
Seal	710046	
Repair Sleeve	KWK99155	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-1999	(A500, 42RH, 46RE)	
Seal	331228H	
Repair Sleeve	KWK99149	
2002-1990	(A518, 46RH)	
Seal	331227H	
Repair Sleeve	KWK99187	
1993-1990	(A500)	
Seal	331228H	
Repair Sleeve	KWK99149	

Rear Seal/Ext. Housing

1993-1990	(A500)(2wd)	
Seal	7300S	
Ball Bearing	207XLO[2]	
Seal Kit	5206 ⁶⁴	
1993-1990	(A500)(4WD)	
Seal	710058	
Ball Bearing	207XLO[2]	

Selector Shaft Seal/Man. Shaft

2003-1994	(42RE, 46RE)	
Seal	8609	
1993-1990	(A500)	
Seal	8609	

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2002-1999	(New Venture 1500)	
Kit	TRK1500D	
2002-1994	(New Venture 3500)	
Kit	TRK235C	
1999-1992	(Aisin AX15)	
Kit	TRKFT420	
1993-1990	(New Process A535, 2500)	
Kit	TRK535	

²⁵New Item, Check For Availability⁵¹BD50-8 I/S Brg.⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE - Lt Truck, SUV - Dakota, Durango, Nitro (cont.)**DRIVESHAFT SUPPORT**

2001-1990
 Hanger Bearing Assy HB88107A
 Ball Bearing 88107

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1996 150/2.5L
 Seal 321460
 Harmnc Balancer Slvs 88179
 Repair Sleeve KWK99179
 1995-1990 153/2.5L
 Seal 3638
 Repair Sleeve KWK99112

6 Cylinder

2008-2004 226/3.7L
 Seal 710472
 2003-1992 239/3.9L
 Seal Viton 713103
 Harmnc Balancer Slvs 88218
 Repair Sleeve KWK99218

8 Cylinder

2007-2000 287/4.7L
 Seal 722108
 2003-1992 318/5.2L, 360/5.9L
 Seal Viton 713103
 Repair Sleeve KWK99218

CRANKSHAFT FRONT SEAL (cont.)**8 Cylinder (cont.)**

1991-1990 318/5.2L
 Seal 3103
 Harmnc Balancer Slvs 88218
 Repair Sleeve KWK99218

CRANKSHAFT REAR SEAL**4 Cylinder**

1995-1990 135/2.2L, 153/2.5L
 Seal Viton 710056
 Seal PTFE H/D 5279

DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP**FRONT WHEEL****RWD**

2008 RAM 1500 (Rr. Whl. ABS)
 Hub Unit Bearing (LH) SP500101^{101 25}
 Hub Unit Bearing (RH) HA500100
 2008-2007 RAM 1500 (4 Whl. ABS)
 Hub Unit Bearing SP500101²⁵
 2008-2006 Ram 1500 (Mega Cab)
 Hub Unit Bearing SP550104[2]²⁵
 2007 RAM 1500 (Rr. Whl. ABS)(4.7L)
 Hub Unit Bearing HA500100[2]
 2007 RAM 1500 (Rr. Whl. ABS)(5.7L, 3.7L)
 Hub Unit Bearing (LH) SP500101^{101 25}
 Hub Unit Bearing (RH) HA500100
 2006 RAM 1500 (4 Whl. ABS)(Exc. SRT)
 Hub Unit Bearing SP500101[2]²⁵
 2006 RAM 1500 (Rr. Whl. ABS)(5.7L)
 Hub Unit Bearing (LH) SP500101²⁵
 Hub Unit Bearing (RH) HA500100
 2006 RAM 1500 (SRT)
 Hub Unit Bearing SP500101[2]²⁵
 2006-2004 RAM 1500 (Rr. Whl. ABS)(4.7L, 3.7L)
 Hub Unit Bearing HA500100[2]

FRONT WHEEL (cont.)**RWD (cont.)**

2005-2004 RAM 1500 (Rr. Whl. ABS)(5.7L)
 Hub Unit Bearing (LH) SP500100^{101 40}
 Hub Unit Bearing (RH) HA500100
 2005-2002 RAM 1500 Pickup (4 Whl. ABS)
 Hub Unit Bearing SP500100[2]⁴⁰
 2003-2002 RAM 1500 Pickup (Rr. Whl. ABS)
 Hub Unit Bearing HA500100[2]
 2003-1999 RAM 1500 Van
 Seal (Inner) 3087[2]
 Cone/Cup (Inner) NP952605-JL69310P[2]
 Set (Outer) SET16[2]
 2001-2000 RAM 1500 Pickup
 Hub Unit Bearing HA590001[2]
 Set (Opt. Tapered Unit Brg.) SET815[2]
 1999-1994 RAM 1500 Pickup
 Seal (Inner) 4739[2]
 Set (Inner) SET5[2]
 Set (Outer) SET3[2]

²⁵New Item, Check For Availability⁴⁰5 Stud.¹⁰¹Speed Sensor for Eng. Throttle Input

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP (cont.)					

FRONT WHEEL (cont.)**RWD (cont.)**

1998-1994	B150, B1500
Seal (Inner)	3087[2]
Cone/Cup (Inner)	NP952605-JL69310P[2]
Set (Outer)	SET16[2]
1993-1990	(5 Stud)
Seal (Inner)	3087[2]
Set (Inner)	SET11[2]
Set (Outer)	SET16[2]
1993-1990	(8 Stud)
Seal (Inner)	493291[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15101-15245[2]

4WD

2008	RAM 1500 (Rr. Whl. ABS)
Hub Unit Bearing (LH)	SP500101 ^{101 25}
Hub Unit Bearing (RH)	HA500100
2008-2007	RAM 1500 Ser. (4 Whl. ABS)
Hub Unit Bearing	SP500101[2] ²⁵
2008-2006	Ram 1500 (Mega Cab)
Hub Unit Bearing	HA590166[2]
2007	RAM 1500 (Rr. Whl. ABS)(4.7L)
Hub Unit Bearing	HA500100[2]
2007	RAM 1500 (Rr. Whl. ABS)(5.7L,3.7L)
Hub Unit Bearing (LH)	SP500101 ^{101 25}
Hub Unit Bearing (RH)	HA500100
2006	RAM 1500 (Rr. Whl. ABS)(5.7L)
Hub Unit Bearing (LH)	SP500101 ²⁵
Hub Unit Bearing (RH)	HA500100
2006-2004	RAM 1500 (Rr. Whl. ABS)(4.7L,3.7L)
Hub Unit Bearing	HA500100[2]
2006-2002	RAM 1500 (4 Whl. ABS)
Hub Unit Bearing	SP500100[2] ⁴⁰
2005-2004	RAM 1500 (Rr. Whl. ABS)(5.7L)
Hub Unit Bearing (LH)	SP500100 ^{101 40}
Hub Unit Bearing (RH)	HA500100
2003-2002	RAM 1500 (Rr. Whl. ABS)
Hub Unit Bearing	HA500100[2]
2001-2000	RAM 1500 Ser. (4 Whl. ABS)
Hub Unit Bearing	SP550102[2] ⁴⁰
2001-2000	RAM 1500 Ser. (Rr. Whl. ABS)
Hub Unit Bearing	HA599863[2]
1999-1997	RAM 1500 (4 Whl. ABS)
Hub Unit Bearing (RH)	SP550100 ⁴⁰
Hub Unit Bearing (LH)	SP550101 ⁴⁰
Sensor Kit (RH)	SK550100 ³⁹
Sensor Kit (LH)	SK550101 ³⁹
1999-1994	RAM 1500 (Rr. Whl. ABS)
Hub Unit Bearing	515006[2]
1993-1990	100/150 Ser. (Locking Hub)
Seal (Inner)	4250[2]
Cone/Cup (Inner)	LM104949-JLM104910[2]
Set (Outer)	SET45[2]

REAR WHEEL**RWD**

2009-2007	Ram 1500 (Exc. H/D)
Seal	SL260004[2] ²⁵
Cylindrical Bearing	6410[2]
2008-2006	(H/D Axle)
Seal	710067[2]
Cylindrical Bearing	R1561TV[2]
2008-2006	Ram 1500 (Mega Cab)
Cone/Cup (Inner)	28682-28622[2]
Set (Outer)	SET38[2]
2006-1990	Ram 1500 (Exc. H/D)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2002-1990	(H/D Axle)
Seal	710067[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TF01561R[2] ¹⁹

4WD

2009-2007	Ram 1500 (Exc. H/D)
Seal	SL260004 ²⁵
Cylindrical Bearing	6410[2]
2008-2006	(H/D Axle)
Seal	710067[2]
Cylindrical Bearing	R1561TV[2]
2008-2006	Ram 1500 (Mega Cab)
Cone/Cup (Inner)	28682-28622[2]
Set (Outer)	SET38[2]
2006-1990	Ram 1500 (Exc. H/D)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2002-1990	(H/D Axle)
Seal	710067[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TF01561R[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2008-2002	(C205F)
Seal	710489 ²⁵
2001-1994	(Dana/Spicer 44-3F Axle)
Seal (LH)	5131
Seal (RH)	710241
1998-1997	(Dana/Spicer 35IFS Axle)
Seal	4857[2]
Cylindrical Bearing	5707[2]
1997-1990	(Dana/Spicer 44F-BJ Axle)
Seal	5131[2]
Set	SET9[2]
Ndle Bearing (Pilot)	B228[2]
1996-1990	(7.25" R.G.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Ndle Bearing (Pilot)	B2516[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
 Cable, Screw, Grease. ⁴⁰5 Stud. ¹⁰¹Speed Sensor for Eng. Throttle Input

²⁵New Item, Check For Availability

³⁹Opt. Kit =

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP (cont.)					

4WD FRONT AXLE**Differential Rebuild Kit**

2008-1994	(Dana/Spicer 44 Axle)
Kit	DRK339C
1993-1990	(Dana/Spicer 44 Axle)
Kit	DRK339B

Differential

2007-2000	(8" R.G.)
Cone/Cup	LM102949-LM102911[2]
2001-1990	(Dana/Spicer 44 Axle)
Cone/Cup	25590-25523[2]

Pinion

2008-2003	(8" R.G.)
Seal	710476
Cone/Cup (Inner)	NP682887-NP307044
Cone/Cup (Outer)	NP270758-NP378971
Repair Sleeve	KWK99155
2008-2000	(Dana/Spicer M205 Axle)
Seal Viton	714675
Cone/Cup (Inner)	NP722065-NP013743
Cone/Cup (Outer)	M88048-M88010
2008-1994	(Dana/Spicer 44 Axle)
Seal	5778
Seal Viton (Opt)	5778V
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155
1993-1990	(Dana/Spicer 44 Axle)
Seal	5778
Seal Viton (Opt)	5778V
Cone/Cup (Inner)	31594-31520
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155

Spindle Kit

1993-1990	(Dana/Spicer 44 Axle)
Bearing & Seal Kit	SBK1[2] ³³

Spindle

1993-1990	(Dana/Spicer 44 Axle)
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

Intermediate Shaft

1993-1990	(Spicer 44 Ser.)(Inter. shaft)
Seal	710241[2]
Ndle Bearing	B5020[2]
Ndle Bearing (Pilot)	SCE108[2]

REAR AXLE**Differential Rebuild Kit**

2008-2001	(9.25" R.G.)
Kit	DRK304A ²⁵
2008-1990	(8.25", 8.375" R.G.)
Kit	DRK303

REAR AXLE (cont.)**Differential Rebuild Kit (cont.)**

2000-1990	(9.25" R.G.)
Kit	DRK304
1998-1990	(7.25" R.G.)
Kit	DRK302

Differential

2007-1990	(8.25", 8.375" R.G.)
Set	SET36[2]
2007-1990	(9.25" R.G.)
Cone/Cup	JLM704649-JLM704610[2]

Pinion

2008-2000	(9.25" R.G.)
Seal	710481
Cone/Cup (Inner)	NP524102-NP912904
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99189
2003-2000	(8.25" R.G.)
Seal	710480
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M86649-M86610
1999-1997	(9.25" R.G.)
Seal	5126
Cone/Cup (Inner)	NP524102-NP912904
Cone/Cup (Outer)	M88048-M88010
1999-1990	(8.25", 8.375" R.G.)
Seal	8516N
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M86649-M86610
1996-1990	(9.25" R.G.)
Seal	5126
Cone/Cup (Inner)	M804048-M804010
Cone/Cup (Outer)	M88048-M88010
1993-1990	(10.5" R.G.)
Seal Viton	719316

TRANSFER CASE REBUILD KIT

2003-1995	(New Process 241)
Kit	TCRK241D ¹⁶
2003-1994	(New Process 231)
Kit	TCRK231A ¹⁶
2003-1990	(New Process 205)
Kit	TCRK205D
1994-1993	(New Process 241)
Kit	TCRK241
1994-1990	(New Process 231)
Kit	TCRK231 ⁵¹
1992-1990	(New Process 241)
Kit	TCRK241A ¹⁶

TRANSFER CASE**Input Shaft**

2007-2006	(New Process 246)
Ball Bearing	110CB
Ndle Bearing (Rr)	B5020[2]
Ndle Bearing (Pilot)	FC66561

¹⁶Obsolete
722109.

²⁵New Item, Check For Availability
⁵¹BD50-8 I/S Brg.

³³Opt. Kit = Brg B2110, Seals 722108 &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP (cont.)					

TRANSFER CASE (cont.)**Input Shaft (cont.)**

2005-1994	(New Process 231, 241)
Seal (O.E.)	3173
Ball Bearing	110L
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561
1993-1990	(New Process 241)
Seal (O.E.)	3173
Ball Bearing	N5210KLB
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	SCH1810

Front Output Shaft

2007-2006	(New Process 243D)
Ball Bearing (Frt)	111TB
2007-2006	(New Process 246)
Ball Bearing	110CB
2005-2002	(New Process 241)
Seal	3946
Repair Sleeve	KWK99187
Ball Bearing	207XLO
Ndle Bearing (Pilot)	J2416
2001-1994	(New Process 231)
Seal	710046
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416
1993-1990	(New Process 241)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416

Rear Output Shaft

2007-2006	(New Process 246)
Seal	710496
Ndle Bearing (Rr)	B5020 ^[2]
Ndle Bearing (Frt)	J2416
2005-2002	(New Process 241)
Seal	4333N
Ball Bearing	207XLO
Repair Sleeve	KWK99187
2001-1994	(New Process 231)
Seal	4333N
Ball Bearing	207
Ndle Bearing (Pilot)	B5020
1993-1990	(New Process 241)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	B5020

Oil Pump Housing

2007-1990	(New Process)
Seal	341022
Repair Sleeve	KWK99225

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-1990	(A904, A998, A999, 31RH, 32RH, 36RH)
Seal	331228H
Repair Sleeve	KWK99149
2000-1990	(A727, 36RH)
Seal	331227H
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

2000-1990	(A727, 36RH)
Seal	7300S
Ball Bearing	207XLO ^[2]
Seal Kit	5206 ⁶⁴
2000-1990	(A998, A999, 31RH, 32RH)
Seal	2506
Ball Bearing	206LOE ^[2] ³⁸

Clutch Cam

1993-1990	(A727)
Ndle Bearing	W585Q ^[12]

Selector Shaft Seal/Man. Shaft

2003-2001	(32RH, 36RH)
Seal	8609
2000-1990	
Seal	8609

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(A500, 42RH, 46RE)
Seal	331228H
Repair Sleeve	KWK99149
2002-1990	(A518, 46RH)
Seal	331227H
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

2002-1990	(2WD)
Seal	7300S
Ball Bearing	207XLO ^[2]
Seal Kit	5206 ⁶⁴
2002-1990	(4WD)
Seal	710058
Ball Bearing	207XLO ^[2]

Selector Shaft Seal/Man. Shaft

2003-1990	
Seal	8609

³⁸Reuse Snap Ring.⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP (cont.)					

CLUTCH - 6 CYLINDER

Pilot Bearing

2001-1992	
Ndle Bearing	SCE1295
Ndle Bearing	FC69907
1991-1990	
Bushing H/D	PB286HD

CLUTCH - 8 CYLINDER

Pilot Bearing

2001-1992	
Ndle Bearing	SCE1295
Ndle Bearing	FC69907
1991-1990	
Bushing H/D	PB286HD

CLUTCH

Release Bearing

1998-1994 (4 Cyl.)	
Bearing Assy	614093
1998-1994 (8 Cyl.)	
Bearing Assy	614093
1998-1992 6 Cyl. (incl. Turbo Diesel)	
Bearing Assy	614093
1993-1992 (w/o Diesel)	
Bearing Assy	614093
1991-1990 100/150 Ser. (Hyd. Cl.)	
Bearing Assy	614054

4-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1990 (New Process 435)	
Kit	TRK127G ⁵³
2000-1990 (New Process 435)	
Kit	TRK127B ⁵⁴

Input Shaft

1993-1990 (New Process 435)	
Seal	9376[2]
Ball Bearing	308L[2]
1990 (New Process A833)	
Seal	9376
Ball Bearing	308LOE[2]

Mainshaft Pilot

1993-1990 (New Process 435, 445)	
Ndle Bearing	Q15902[14]
1990 (New Process A833)	
Ndle Bearing	QBR23549[16]

4-SPEED MANUAL TRANSMISSION

Countershaft

1993-1990 (New Process 435, 436)	
Ndle Bearing (Frt)	BCE2416[2]
Ndle Bearing (Rr)	B3216[2]
Ndle Bearing Thrust	NTA2031[2]

Reverse Idler

1993-1990 (New Process 435, 436)	
Ndle Bearing	C407Q[2]

Rear Output Shaft

1993-1990 (New Process 435)	
Seal	8160S
Ball Bearing	308L[2]
1990 (New Process A833)	
Seal	7300S
Ball Bearing	308LOE[2]
Seal Kit	5206 ⁶⁴

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2003-1994 (New Venture 3500)	
Kit	TRK235C
2002-1992 (New Venture 4500)	
Kit	TRK4500D
1993-1990 (New Process A535)	
Kit	TRK535

Front Input Shaft

2003-1994 (New Process 3500)	
Seal	4529N
Ball Bearing	307FFLS[2]
Repair Sleeve	KWK99138
2003-1992 (New Process 4500)	
Seal	714655
Cone/Cup	M802048CP-M802011AP[2]
Repair Sleeve	KWK99133
1993-1992 (Aisin)	
Seal	223253
Repair Sleeve	KWK99128
1993-1990 (New Process A535, 2500)	
Seal	9376
Ball Bearing	307LI[2]
Repair Sleeve	KWK99106

Countershaft

2003-1994 (New Process 3500)	
Ndle Bearing	FC68336[2]
2003-1992 (New Process 4500)	
Cone/Cup (Frt)	LM102949CP-LM102910P[2]
Cone/Cup (Rr)	LM501349HP-LM501310P[2]
1993-1992 (Aisin AX15)	
Cylindrical Bearing (Frt)	MSN5305GTBV[2] ²⁵
1993-1990 (New Process A535, 2500)	
Cone/Cup (Frt)	LM67048-LM67010BCE[2]
Set (Rr)	SET2[2]

²⁵New Item, Check For Availability Kit

⁵³Ball I/S Brg.

⁵⁴Tapered I/S Brg.

⁶⁴Seal & Bushing

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1/2 TON - B150, B1500 VANS, D150 PICKUP, Ram 1500 PICKUP, Ram 1500 VAN, Ramcharger, W150 PICKUP (cont.)					

5-SPEED MANUAL TRANSMISSION**Mainshaft Pilot**

1993-1990 (New Process A535, 2500)
Ndle Bearing QBR23549[16]

Mainshaft 1st Speed Gear

1993-1990 (New Process A535, 2500)
Ndle Bearing FW455017[2]

Rear Output Shaft

2003-1994 (New Process 3500)(4WD)
Seal 4532N
Ball Bearing 307FFTB[2]
2003-1994 (New Process 3500)(4WD)
Seal 2465
Ball Bearing 307FFTB[2]
2003-1994 (New Process 4500)(2WD)
Seal 2465
Cone/Cup M804049-M804010[2]
2002-1992 (New Process 4500)(4WD)
Seal 710058
Cone/Cup M804049-M804010[2]
1993-1992 (Aisin)(2WD)
Seal 710198
1993-1992 (Aisin)(4WD)
Seal 1209N
1993-1992 (New Process 4500)(2WD)
Seal 7300S
Cone/Cup M804049-M804010[2]
1993-1990 (A535, NP2500)(2WD)
Seal 2506
Ball Bearing 208[2]
1993-1990 (A535, NP2500)(4WD)
Seal 710058
Ball Bearing 208[2]

Extension Housing

1993-1990 (New Process A535, 2500)
Ball Bearing 1207L[2]

A/C COMPRESSOR

1993-1990 (Nippondenso)
Ball Bearing 5000KFF[2]

DRIVESHAFT SUPPORT

2002-1994 (3.375" Threaded Bracket)
Hanger Bearing Assy HB88108D²⁵
2001-1990 (1.378" 35mm Brg. I.D.)
Ball Bearing 88107[2]
Hanger Bearing Assy HB88107A[2]
Hanger Bearing Assy HB88107B[2]

POWER STEERING**Pump Shaft**

1993-1990
Seal 7013S

CAMSHAFT SEAL**4 Cylinder**

1995-1990 153/2.5L
Seal 3655S
Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2002 226/3.7L
Seal 710472
2003-1992 239/3.9L
Seal Viton 713103
Harmnc Balancer Slvs 88218
Repair Sleeve KWK99218

8 Cylinder

2003-1992 318/5.2L, 360/5.9L
Seal Viton 713103
Repair Sleeve KWK99218
1991-1990 318/5.2L, 360/5.9L, 383/6.3L
Seal 3103
Repair Sleeve KWK99218

10 Cylinder

2006-2004 505/8.3L
Seal Viton 471424V
Harmnc Balancer Slvs 88199
Repair Sleeve KWK99199

CRANKSHAFT REAR SEAL**4 Cylinder**

2002-1996 150/2.5L
Seal 3698

6 Cylinder

2006-2002 226/3.7L
Seal 710471
2003-1990 239/3.9L
Seal 5414

8 Cylinder

2006-2000 287/4.7L
Seal 231004
2003-1990 360/5.9L
Seal Split 5106
2003-1990 318/5.2L
Seal 5414

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500					

FRONT WHEEL

RWD

2008-2006	Ram 2500 (4 Whl. ABS)	
	Hub Unit Bearing	SP550104[2] ²⁵
2007-2003	Sprinter 2500	
	Set (Inner)	SET45[2]
	Bearing Assy (Outer)	32305[2]
2005-2003	Ram 2500 (4 Whl. ABS)	
	Hub Unit Bearing	SP550103[2]
2003-1998	B2500 (4000 lb. Axle)(8 Stud)	
	Seal (Inner)	493291[2]
	Cone/Cup (Inner)	NP566582-NP980884[2]
	Cone/Cup (Outer)	NP244401-NP111741[2]
2003-1994	B2500 (3500 lb. Axle)	
	Seal (Inner)	3087[2]
	Cone/Cup (Inner)	NP952605-JL69310P[2]
	Set (Outer)	SET16[2]
2002-2000	Ram 2500 (4 Whl. ABS)	
	Hub Unit Bearing	HA590000[2]
	Set (Opt. Tapered Unit Brg.)	SET814[2]
1999-1994	R2500 (4000 lb. Axle)(8 Stud)	
	Seal (Inner)	4740[2]
	Set (Inner)	SET45[2]
	Cone/Cup	15101-15245[2]
1997-1994	B2500 (4000 lb. Axle)(8 Stud)	
	Seal (Inner)	493291[2]
	Set (Inner)	SET45[2]
	Cone/Cup (Outer)	15101-15245[2]
1993-1990	(3300 lb. Axle)(5 & 8 Stud)	
	Seal (Inner)	3087[2]
	Set (Inner)	SET11[2]
	Set (Outer)	SET16[2]
1993-1990	(3700 lb. Axle)(8 Stud)	
	Seal (Inner)	3087[2]
	Set (Inner)	SET45[2]
	Cone/Cup (Outer)	15101-15245[2]

4WD

2008-2006	Ram 2500 (4 Whl. ABS)	
	Hub Unit Bearing	HA590166[2]
2005-2003	Ram 2500 Pickup (SRW)(8 Stud)(ABS)	
	Hub Unit Bearing	HA590032[2]
2002-2000	Ram 2500 (4 Whl. ABS)	
	Hub Unit Bearing	HA590203[2]
2002-2000	Ram 2500 (Rr. Whl. ABS)	
	Hub Unit Bearing	HA590503[2] ²⁵
1999-1998	Ram 2500 (SRW)(4 Whl. ABS)	
	Hub Unit Bearing (RH)	SP580100 ⁹⁵
	Hub Unit Bearing (LH)	SP580101 ⁹⁵
	Sensor Kit (RH)	SK580100 ³⁹
	Sensor Kit (LH)	SK580101 ³⁹
1999-1994	Ram 2500 (7500 G.V.W.)(Exc. Rotor)	
	Hub Unit Bearing (Speed Sensor on CV)	HA597851[2]
1999-1994	Ram 2500 (H/D 8800 G.V.W.)(Exc. Rotor)	
	Hub Unit Bearing (Speed Sensor on CV)	HA590020[2]

FRONT WHEEL (cont.)

4WD (cont.)

1993-1990	(Dana/Spicer 44F-BJ Axle)	
	Seal (Inner)	4250[2]
	Cone/Cup (Inner)	LM104949-JLM104910[2]
	Set (Outer)	SET45[2]
1993-1990	(Dana/Spicer 60F Axle)	
	Seal (Inner)	415009[2]
	Cone/Cup (Inner)	387A-382A[2]
	Set (Outer)	SET38[2]

REAR WHEEL

RWD

2008-2003	Ram 2500	
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2007-2003	Sprinter 2500 (DRW)	
	Bearing Assy (Inner)	32011XM[2]
	Bearing Assy (Outer)	32210M[2]
	Seal (Inner)	710462[2]
2007-2003	Sprinter 2500 (SRW)	
	Bearing Assy	516010[2] ²⁵
2003-2002	B2500 (9.25" R.G.)(H/D Axle)	
	Seal	710067[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2003-1995	B2500 (8.25" R.G.)(9.25" R.G.)(Exc. H/D Axle)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2002-1994	R2500 (Spicer 60 Axle)(13x2.5" Brks.)	
	Seal (Inner)	417158[2]
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2002-1990	(9.25" R.G.)(H/D Axle)	
	Seal	710067[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2002-1990	D200/250, W200/250 (9.25" R.G.)(Exc. H/D Axle)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2001-1994	R2500 (Spicer 80)(13x3.5" Brks.)	
	Seal (Inner)	4250[2]
	Cone/Cup (Inner)	39585-39520[2]
	Cone/Cup (Outer)	JLM506849-JLM506810[2]
1994-1990	B200/250 (8.25", 8.375" R.G.)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
1993-1990	D250, W250 (Spicer 70)(12x3" Brks.)(9000 GVW)	
	Seal (Inner)	417158[2]
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Cable, Screw, Grease. ⁹⁵8 Stud.

²⁵New Item, Check For Availability

³⁹Opt. Kit =

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

1993-1990	D200/250, W200/250 (Spicer 60H/D, 70, 71)(12x3" Brks.)(Exc. 9000 GVW)	
Seal (Inner)	.....	455086[2]
Cone/Cup (Inner)	.....	45291-45220[2]
Set (Outer)	.....	SET38[2]
1993-1990	D200/250, W200/250 (Spicer 60)(12x2.5" Brks.)	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET38[2]
Set (Outer)	.....	SET38[2]

4WD

2008-2003	Ram 2500	
Cone/Cup (Inner)	.....	28682-28622[2]
Set (Outer)	.....	SET38[2]
2007-2003	Sprinter 2500 (DRW)	
Bearing Assy (Inner)	.....	32011XM[2]
Bearing Assy (Outer)	.....	32210M[2]
Seal (Inner)	.....	710462[2]
2007-2003	Sprinter 2500 (SRW)	
Bearing Assy	.....	516010[2] ²⁵
2003-2002	B2500 (9.25" R.G.)(H/D Axle)	
Seal	.....	710067[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
2003-1995	B2500 (8.25" R.G.)(9.25" R.G.)(Exc. H/D Axle)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
2002-1994	R2500 (Spicer 60 Axle)(13x2.5" Brks.)	
Seal (Inner)	.....	417158[2]
Cone/Cup (Inner)	.....	28682-28622[2]
Set (Outer)	.....	SET38[2]
2002-1990	(9.25" R.G.)(H/D Axle)	
Seal	.....	710067[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
2002-1990	D200/250, W200/250 (9.25" R.G.)(Exc. H/D Axle)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
2001-1994	R2500 (Spicer 80)(13x3.5" Brks.)	
Seal (Inner)	.....	4250[2]
Cone/Cup (Inner)	.....	39585-39520[2]
Cone/Cup (Outer)	.....	JLM506849-JLM506810[2]
1994-1990	B200/250 (8.25", 8.375" R.G.)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹

REAR WHEEL (cont.)**4WD (cont.)**

1993-1990	D250, W250 (Spicer 70)(12x3" Brks.)(9000 GVW)	
Seal (Inner)	.....	417158[2]
Cone/Cup (Inner)	.....	28682-28622[2]
Set (Outer)	.....	SET38[2]
1993-1990	D200/250, W200/250 (Spicer 60H/D, 70, 71)(12x3" Brks.)(Exc. 9000 GVW)	
Seal (Inner)	.....	455086[2]
Cone/Cup (Inner)	.....	45291-45220[2]
Set (Outer)	.....	SET38[2]
1993-1990	D200/250, W200/250 (Spicer 60)(12x2.5" Brks.)	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET38[2]
Set (Outer)	.....	SET38[2]

4WD FRONT AXLE**Axle Shaft**

1998-1994	(Dana/Spicer 44-3F Axle)	
Seal (LH)	.....	5131[2]
Seal (RH)	.....	710241[2]
1993-1990	(Dana/Spicer 44F-BJ Axle)	
Seal	.....	5131[2]
Set	.....	SET9[2]
Ndle Bearing (Pilot)	.....	B228[2]

Differential Rebuild Kit

2008-1994	(Dana/Spicer 44 Axle)	
Kit	.....	DRK339C
1999-1990	(Dana/Spicer 60F Axle)	
Kit	.....	DRK331
1993-1990	(Dana/Spicer 44-3CF, 44-3CFHD, 44F-BJ Axles)	
Kit	.....	DRK339B

Differential

2005-2003	(9.25" R.G.)	
Set	.....	SET42[2]
2002-1990	(Dana/Spicer 60F, 70F Axles)	
Cone/Cup	.....	387A-382S[2]
1997-1990	(Dana/Spicer 44-3CF, 44-3CFHD, 44F-BJ Axles)	
Cone/Cup	.....	25590-25523[2]

Pinion

2009-2003	(9.25" R.G.)	
Seal	.....	710558
Cone/Cup (Inner)	.....	HM804846-HM804810
Cone/Cup (Outer)	.....	HM88649-HM88610

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)**4WD FRONT AXLE (cont.)****Pinion (cont.)****2002-1990**

Seal (Dana/Spicer 60)	9316
Seal Viton (Dana/Spice	
44 Axle)	5778V
Cone/Cup (Inner)	
(Dana/Spicer 60)	HM803146-HM803110
Cone/Cup (Outer)	
(Dana/Spicer 60)	HM88542-HM88510
Cone/Cup (Inner)	
(Dana/Spicer 44-3F	
Axle)	HM88649-HM88610
Cone/Cup (Inner)	
(Dana/Spicer 44F-BJ	
Axle)	31594-31520
Cone/Cup (Outer)	
(Dana/Spicer 44 Axle)	02872-02820

Spindle Kit**1997-1990 (Dana/Spicer 44F-BJ Axle)**

Bearing & Seal Kit	SBK1[2] ³³

Spindle**1998-1990 (Dana/Spicer 44F-BJ Axle)**

Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]
1993-1990 (Dana/Spicer 60F Axle)	
Seal (Inner)	710044[2]
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710045[2]

Steering Knuckle**1993-1990**

Seal (Upper)	710304[2]
Cone/Cup (Upper)	23100-23256[2]
Seal (Lower)	710385[2]
Cone/Cup (Lower)	23100-23256[2]

Intermediate Shaft**1993-1990 (Spicer 44FBJ)**

Seal	710241[2]
Ndle Bearing	B5020[2]
Ndle Bearing (Pilot)	SCE108[2]

REAR AXLE**Differential Rebuild Kit****2008-2001 (9.25" R.G.)**

Kit	DRK304A ²⁵

2008-1999 (8.25" R.G.)

Kit	DRK303

2008-1994 (Dana/Spicer 60, 60HD Axles)

Kit	DRK331A

2007-2003 (10.5" R.G.)

Kit	DRK325B

2002-1994 (Dana/Spicer 80 Axle)

Kit	DRK337

REAR AXLE (cont.)**Differential Rebuild Kit (cont.)****2002-1990 (Dana/Spicer 70U, 71 Axles)**

Kit	DRK332U

1998-1990 (8.25", 8.375" R.G.)

Kit	DRK303

1998-1990 (9.25" R.G.)

Kit	DRK304

1993-1990 (Dana/Spicer 60, 60HD Axles)

Kit	DRK331

Differential**2005-2003 (10.5" R.G.)**

Cone/Cup	387AS-382A[2]

2005-2003 (11.5" R.G.)

Cone/Cup	3984-3920[2]

2003-1990 (8.25", 8.375" R.G.)

Set	SET36[2]

2003-1990 (9.25" R.G.)

Cone/Cup	JLM704649-JLM704610[2]

2003-1990 (Dana/Spicer 60, 60HD, 70, 70U, 71 Axles)

Cone/Cup	387A-382S[2]

2002-1994 (Dana/Spicer 80 Axle)

Cone/Cup	469-453X[2]

Pinion**2009-2003**

Seal (10.5", 11.5" R.G.)	710508

Cone/Cup (Inner)	

(10.5" R.G.)	NP598002-NP284552

Cone/Cup (Inner)	

(11.5" R.G.)	HM807046-HM807010

Cone/Cup (Outer)	

(10.5", 11.5" R.G.)	NP457992-NP926068

2003-2000 (8.25" R.G.)

Seal	710480

Cone/Cup (Inner)	M802048-M802011

Cone/Cup (Outer)	M86649-M86610

2003-2000 (9.25" R.G.)

Seal	710481

Cone/Cup (Inner)	NP524102-NP912904

Cone/Cup (Outer)	M88048-M88010

2003-1990

Seal (Dana/Spicer 60, 70 Series)	9316

Cone/Cup (Inner)	

(Dana/Spicer 60,	

60HD)	HM803146-HM803110

Cone/Cup (Inner)	

(Dana/Spicer 70U, 71	

Axles)	HM803149-HM803110

Cone/Cup (Outer)	

(Dana/Spicer 60,	

60HD, 70U, 71 Axles)	HM88542-HM88510

2002-1994 (Dana/Spicer 80 Axle)

Seal Viton	4525V

Cone/Cup (Inner)	HM807046-HM807010

Cone/Cup (Outer)	M802048-M802011

²⁵New Item, Check For Availability³³Opt. Kit = Brg B2110, Seals 722108 & 722109.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)

REAR AXLE (cont.)

Pinion (cont.)

1999-1990	(8.25", 8.375" R.G.)	
Seal	.....	8516N
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M86649-M86610
1999-1990		
Seal (8.75", 9.25"		
R.G.)	.....	5126
Cone/Cup (Inner)		
(8.75", 9.25" R.G.)	.....	M804049-M804010
Cone/Cup (Outer)		
(8.75", 9.25" R.G.)	.....	M88048-M88010

TRANSFER CASE REBUILD KIT

2002-1995	(New Process 241)	
Kit	.....	TCRK241D ¹⁶
1997-1994	(New Process 231)	
Kit	.....	TCRK231A ¹⁶
1994-1993	(New Process 241)	
Kit	.....	TCRK241
1993-1990	(New Process 205)	
Kit	.....	TCRK205D
1992-1990	(New Process 241)	
Kit	.....	TCRK241A ¹⁶

TRANSFER CASE

Input Shaft

2005-2003	(New Process 271, 273)	
Ball Bearing	.....	211TB
2002-1993	(New Process 241)	
Seal (O.E.)	.....	3173
Ball Bearing	.....	110L
Seal (Opt)	.....	710928
Repair Sleeve	.....	KWK99193
Ndle Bearing (Pilot)	.....	FC66561
1992-1990	(New Process 241)	
Seal (O.E.)	.....	3173
Ball Bearing	.....	N5210KLB[2]
Seal (Opt)	.....	710928
Repair Sleeve	.....	KWK99193
Ndle Bearing (Pilot)	.....	SCH1810

Front Output Shaft

2005-2003	(New Process 271, 273)	
Ball Bearing	.....	111TB
2002-1994	(New Process 241)	
Seal	.....	3946
Ball Bearing	.....	207XLO
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	J2416
1993-1990	(New Process 205)	
Seal	.....	473313
Ball Bearing	.....	307L
Repair Sleeve	.....	KWK99174
Ndle Bearing (Pilot)	.....	M28161
1993-1990	(New Process 241)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	J2416

Rear Output Shaft

2002-1994	(New Process 241)	
Ball Bearing	.....	207XLO
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B5020
1993-1990	(New Process 241)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B5020
1993-1990	(New Process 205)	
Seal	.....	473468
Ball Bearing	.....	307L
Repair Sleeve	.....	KWK99212
Ndle Bearing (Pilot)	.....	B3216

Idler Shaft

1993-1990	(New Process 205)	
Cone/Cup	.....	2793-2720[2]

Low Gear Roller

1993-1990	(New Process 208)	
Ndle Bearing	.....	QBR23549[2]

Oil Pump Housing

2002-1990	(New Process 208, 241)	
Seal	.....	341022
Repair Sleeve	.....	KWK99225

Selector Shaft Seal/Man. Shaft

1993-1990	(New Process 205)	
Seal	.....	2287[2]
Repair Sleeve	.....	KWK99076[2]

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2000-1990	(A904, A998, A999, 31RH, 32RH)	
Seal	.....	331228H
Repair Sleeve	.....	KWK99149
2000-1990	(A727, 36RH)	
Seal	.....	331227H
Repair Sleeve	.....	KWK99187

Rear Seal/Ext. Housing

2000-1990	(A727, 36RH)	
Seal	.....	7300S
Ball Bearing	.....	207XLO[2]
Seal Kit	.....	5206 ⁶⁴
2000-1990	(A998, A999, 31RH, 32RH)	
Seal	.....	2506
Ball Bearing	.....	206LOE[2] ³⁸

¹⁶Obsolete³⁸Reuse Snap Ring.⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)

3-SPEED AUTOMATIC TRANSMISSION

Clutch Cam

1993-1990 (A727)
Ndle Bearing W585Q[12]

Selector Shaft Seal/Man. Shaft

2000-1990
Seal 8609

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002-1994 (46RH, 47RH)
Seal 331227H
Repair Sleeve KWK99187
2002-1990 (A500, 42RH, 46RE)
Seal 331228H
Repair Sleeve KWK99149
1993-1990 (A518)
Seal 331227H
Repair Sleeve KWK99187

Rear Seal/Ext. Housing

2002-1994 (42RH, 46RE, 46RH, 47RH)(2wd)
Seal 7300S
Ball Bearing 207XLO[2]
Seal Kit 5206⁶⁴
2002-1994 (42RH, 46RE, 46RH, 47RH)(4WD)
Seal 710058
Ball Bearing 207XLO[2]
1993-1990 (A500, A518, 42RH)(2WD)
Seal 7300S
Ball Bearing 207XLO[2]
Seal Kit 5206⁶⁴
1993-1990 (A500, A518, 42RH)(4WD)
Seal 710058
Ball Bearing 207XLO[2]

Selector Shaft Seal/Man. Shaft

2003-1990
Seal 8609

CLUTCH

Pilot Bearing

2004-2000 3.7L, 3.9L, 5.2L, 5.7L, 5.9L, 8.3L (w/o Diesel)
Ndle Bearing FC69907
2002-1990 359/5.9L (Diesel)
Ndle Bearing SCE1211
1999-1994 5.2L, 5.9L (w/o Diesel)
Ball Bearing S128
1998-1994 488/8.0L
Ndle Bearing SCE1211
1996-1992 (8 Cyl.)
Ndle Bearing SCE1295
1993-1992 239/3.9L
Ndle Bearing SCE1295

CLUTCH (cont.)

Pilot Bearing (cont.)

1991-1990
Bushing H/D PB286HD

Release Bearing

2004-1990 (Cummins Turbo Diesel)(Getrag 5 Spd.)
Bearing Assy 614070
2003-1992 (w/o Cummins Turbo Diesel, V10)
Bearing Assy 614093
1998-1994 488/8.0L
Bearing Assy 614114
1996-1994 (Cummins Turbo Diesel)(Getrag 5 Spd.)
Bearing Assy 614114
1991-1990 (w/o Cummins Turbo Diesel)
Bearing Assy 614054

4-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

1993-1990 (New Process 435)
Kit TRK127

Input Shaft

1993-1990 (New Process 435)
Seal 9376[2]
Ball Bearing 308L[2]
1990 (New Process A833)
Seal 9376
Ball Bearing 308LOE[2]

Mainshaft Pilot

1993-1990 (New Process 420, 435, 436, 445)
Ndle Bearing Q15902[14]

Countershaft

1993-1990 (New Process 435)
Ndle Bearing (Frt) BCE2416[2]
Ndle Bearing (Rr) B3216[2]
Ndle Bearing Thrust NTA2031[2]

Reverse Idler

1993-1990 (New Process 435, 436)
Ndle Bearing C407Q[2]

Rear Output Shaft

1993-1990 (New Process 435)
Seal 8160S
Ball Bearing 308L[2]
1990 (New Process A833)
Seal 7300S
Ball Bearing 308LOE[2]
Seal Kit 5206⁶⁴

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)					

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1997	(New Venture 4500)	
Kit	.....	TRK4500DNI
2000-1994	(New Process 3500)	
Kit	.....	TRK235C
1996-1992	(New Venture 4500)	
Kit	.....	TRK4500D

Front Input Shaft

2004-1992	(New Process 4500, 4500HD)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-M802011AP[2]
Repair Sleeve	.....	KWK99133
2000-1994	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138
1993-1992	(Aisin)	
Seal	.....	223253
Repair Sleeve	.....	KWK99128
1993-1990	(New Process A535, 2500)	
Seal	.....	9376
Ball Bearing	.....	307LI[2]
Repair Sleeve	.....	KWK99106

Countershaft

2004-1992	(New Process 4500)	
Cone/Cup (Frt)	.....	LM102949CP-LM102910P[2]
Cone/Cup (Rr)	.....	LM501349HP-LM501310P[2]
1993-1990	(New Process A535, 2500)	
Cone/Cup (Frt)	.....	LM67048-LM67010BCE[2]
Set (Rr)	.....	SET2[2]

Mainshaft Pilot

1993-1990	(New Process A535, 2500)	
Ndle Bearing	.....	QBR23549[16]

Mainshaft 1st Speed Gear

1993-1990	(New Process A535, 2500)	
Ndle Bearing	.....	FW455017[2]

Rear Output Shaft

2004-1994	(New Process 4500)(2WD)	
Seal	.....	2465
Cone/Cup	.....	M804049-M804010[2]
2003-1994	(New Process 4500HD)(2WD)	
Seal	.....	4741
Cone/Cup	.....	M804049-M804010[2]
2003-1992	(New Process 4500, 4500HD)(4WD)	
Seal	.....	710058
Cone/Cup	.....	M804049-M804010[2]
2000-1994	(New Process 3500)(4WD)	
Seal	.....	4532N
Ball Bearing	.....	307FFTB[2]
2000-1994	(New Process 3500)(4WD)	
Seal	.....	2465
Ball Bearing	.....	307FFTB[2]

5-SPEED MANUAL TRANSMISSION**(cont.)****Rear Output Shaft (cont.)**

1993-1992	(Aisin)(2WD)	
Seal	.....	710198
1993-1992	(Aisin)(4WD)	
Seal	.....	1209N
1993-1992	(New Process 4500)(2WD)	
Seal	.....	7300S
Cone/Cup	.....	M804049-M804010[2]
1993-1990	(New Process A536, 2500)(2WD)	
Seal	.....	2506
Ball Bearing	.....	208[2]
1993-1990	(New Process A536, 2500)(4WD)	
Seal	.....	710058
Ball Bearing	.....	208[2]

Extension Housing

1993-1990	(New Process 2500)	
Ball Bearing	.....	1207L[2]
1993-1990	(New Process A535)	
Ball Bearing	.....	207L[2]

DRIVESHAFT SUPPORT

2002-1994	(1.57" 40mm Brg. I.D.)	
Hanger Bearing Assy	.....	HB88108D ²⁵
2002-1990	(Spicer 1280, 1310)(1.3780" Brg. I.D.)	
Ball Bearing	.....	88107[2]
Hanger Bearing Assy	.....	HB88107A[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-1990	359/5.9L (Diesel)	
Seal	.....	39803
Repair Sleeve	.....	KWK99248
2001-1992	239/3.9L	
Seal Viton	.....	713103
Repair Sleeve	.....	KWK99218
Harmnc Balancer Slvs	.....	88218
1991-1990	239/3.9L	
Seal	.....	3103
Repair Sleeve	.....	KWK99218
Harmnc Balancer Slvs	.....	88218

8 Cylinder

2003-1992	318/5.2L, 360/5.9L	
Seal Viton	.....	713103
Repair Sleeve	.....	KWK99218
Harmnc Balancer Slvs	.....	88218
1991-1990	318/5.2L, 360/5.9L, 383/6.3L	
Seal	.....	3103
Repair Sleeve	.....	KWK99218
Harmnc Balancer Slvs	.....	88218

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 3/4 TON - Pickup, Van, 250 Series, 2500 Series, Sprinter 2500 (cont.)					

CRANKSHAFT FRONT SEAL

10 Cylinder

2003-1994	488/8.0L
Seal Viton	471424V
Repair Sleeve	KWK99199
Harmnc Balancer Slvs	88199

CRANKSHAFT REAR SEAL

6 Cylinder

2008-1998	359/5.9L (Diesel)
Seal	710473
2001-1990	239/3.9L
Seal	5414
1993-1990	359/5.9L (Diesel)
Seal	39805
Repair Sleeve	KWK99494

CRANKSHAFT REAR SEAL

8 Cylinder

2003-1990	360/5.9L
Seal Split	5106
2003-1990	318/5.2L
Seal	5414

DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500

FRONT WHEEL

RWD

2009-2006	RAM 3500
Hub Unit Bearing	SP550104[2] ²⁵
2007-2003	Sprinter 3500
Seal (Inner)	1989[2]
Set (Inner)	SET45[2]
Bearing Assy (Outer)	32305[2]
2005-2003	RAM 3500
Hub Unit Bearing	SP550103[2]
2003-1998	B3500 (3600 lb. Axle)(8 Stud)
Seal (Inner)	3087[2]
Set (Inner)	SET11[2]
Set (Outer)	SET16[2]
2003-1998	B3500 (4000 lb. Axle)(8 Stud)
Seal (Inner)	493291[2]
Cone/Cup (Inner)	NP566582-NP980884[2]
Cone/Cup (Outer)	NP244401-NP111741[2]
2002-2000	RAM 3500
Hub Unit Bearing	HA590000[2]
Set (Opt. Tapered Unit Brg.)	SET814[2]
1999-1994	RAM 3500 (Indp. Frt. Axle)
Seal (Inner)	4740[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15101-15245[2]
1999-1994	RAM 3500 (Solid Frt. Axle)(DRW)(Non-ABS)
Hub Unit Bearing	HA590018[2]
1997-1990	(4000 lb. Axle)(8 Stud)
Seal (Inner)	493291[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15101-15245[2]
1997-1990	B Ser. (3600 lb. Axle)(8 Stud)
Seal (Inner)	3087[2]
Set (Inner)	SET11[2]
Set (Outer)	SET16[2]

FRONT WHEEL (cont.)

RWD (cont.)

1993-1990	D350 (3300 lb. Axle)(5 Stud)
Seal (Inner)	3087[2]
Set (Inner)	SET11[2]
Set (Outer)	SET16[2]

4WD

2009-2006	RAM 3500
Hub Unit Bearing	HA590166[2]
2005-2003	RAM 3500
Hub Unit Bearing	HA590032[2]
2002-2000	RAM 3500
Hub Unit Bearing	HA590203[2]
1999-1998	RAM 3500 (DRW)(4 Whl. ABS)
Hub Unit Bearing (LH)	SP580103
Hub Unit Bearing (RH)	SP580102
1999-1994	RAM 3500 (DRW)(Rr. Whl. ABS)
Hub Unit Bearing	HA590018[2]
1993-1990	(Spicer 60F Axle)
Seal (Inner)	415009[2]
Cone/Cup (Inner)	387A-382A[2]
Set (Outer)	SET38[2]
1990	(4000 lb. Axle)(8 Stud)
Seal (Inner)	493291[2]
Set (Inner)	SET45[2]
Cone/Cup (Outer)	15101-15245[2]

REAR WHEEL

RWD

2008-2003	RAM 3500 (DRW)
Seal (Inner)	710563[2]
Cone/Cup (Inner)	45291-45220[2]
Set (Outer)	SET38[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500 (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

2008-2003	RAM 3500 (SRW)	
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2007-2003	Sprinter 3500 (DRW)	
	Bearing Assy (Inner)	32011XM[2]
	Bearing Assy (Outer)	32210M[2]
	Seal (Inner)	710462[2]
2007-2003	Sprinter 3500 (SRW)	
	Bearing Assy	516010[2] ²⁵
2003-1995	B3500 (Dana/Spicer 60)(12"x2.5" Brks.)	
	Seal (Inner)	4250[2]
	Set	SET38[4]
2003-1995	B3500 (Dana/Spicer 60)(12"x3" Brks.)(9000 GVW)	
	Seal (Inner)	417158[2]
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2003-1990	B3500 (9.25" R.G.)(Exc. H/D Axle)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2003-1990	B3500 (9.25" R.G.)(H/D Axle)	
	Seal	710067[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2002-1995	RAM 3500	
	Seal (Inner)	455086[2]
	Cone/Cup (Inner)	45291-45220[2]
	Set (Outer)	SET38[2]
1994-1990	(Spicer 60 Axle)(12x2.5" Brks.)	
	Seal (Inner)	4250[2]
	Set	SET38[4]
1994-1990	(Spicer 60HD, 70 Axle)(12x3" Brks.)	
	Seal (Inner) (9000 lb. GVW)	417158[2]
	Cone/Cup (Inner) (9000 lb. GVW)	28682-28622[2]
	Seal (Inner) (Exc. 9000 lb. GVW)	455086[2]
	Cone/Cup (Inner) (Exc. 9000 lb. GVW)	45291-45220[2]
	Set (Outer)	SET38[2]

4WD

2008-2003	RAM 3500 (DRW)	
	Seal	710563[2]
	Cone/Cup (Inner)	45291-45220[2]
	Set (Outer)	SET38[2]
2008-2003	RAM 3500 (SRW)	
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2007-2003	Sprinter 3500 (DRW)	
	Bearing Assy (Inner)	32011XM[2]
	Bearing Assy (Outer)	32210M[2]
	Seal (Inner)	710462[2]
2007-2003	Sprinter 3500 (SRW)	
	Bearing Assy	516010[2] ²⁵

REAR WHEEL (cont.)**4WD (cont.)**

2003-1995	B3500 (Dana/Spicer 60)(12"x2.5" Brks.)	
	Seal (Inner)	4250[2]
	Set	SET38[4]
2003-1995	B3500 (Dana/Spicer 60)(12"x3" Brks.)(9000 GVW)	
	Seal (Inner)	417158[2]
	Cone/Cup (Inner)	28682-28622[2]
	Set (Outer)	SET38[2]
2003-1990	B3500 (9.25" R.G.)(Exc. H/D Axle)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2003-1990	B3500 (9.25" R.G.)(H/D Axle)	
	Seal	710067[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2002-1995	RAM 3500	
	Seal (Inner)	455086[2]
	Cone/Cup (Inner)	45291-45220[2]
	Set (Outer)	SET38[2]
1994-1990	(Spicer 60 Axle)(12x2.5" Brks.)	
	Seal (Inner)	4250[2]
	Set	SET38[4]
1994-1990	(Spicer 60HD, 70 Axle)(12x3" Brks.)	
	Seal (Inner) (9000 lb. GVW)	417158[2]
	Cone/Cup (Inner) (9000 lb. GVW)	28682-28622[2]
	Seal (Inner) (Exc. 9000 lb. GVW)	455086[2]
	Cone/Cup (Inner) (Exc. 9000 lb. GVW)	45291-45220[2]
	Set (Outer)	SET38[2]

4WD FRONT AXLE**Axle Shaft**

1993-1990	(Dana/Spicer 60F Axle)	
	Seal	470682[2]

Differential Rebuild Kit

2005-2002	(9.25" R.G.)	
	Kit	DRK324G
2002-1990	(Dana/Spicer 60 Axle)	
	Kit	DRK331
2002-1990	(Dana/Spicer 44 Axle)	
	Kit	DRK339B

Differential

2006-2003	(9.25" R.G.)	
	Set	SET42[2]
	Seal	450094[2]
	Repair Sleeve	KWK99193[2]
2002-1990	(Dana/Spicer 60F, 70F Axles)	
	Cone/Cup	387A-382S[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500 (cont.)**4WD FRONT AXLE****Pinion**

2009-2003	(9.25" R.G.)	
Seal	710558	
Cone/Cup (Inner)	HM804846-HM804810	
Cone/Cup (Outer)	HM88649-HM88610	
2002-1990	(Dana/Spicer 60F Axle)	
Seal	9316	
Cone/Cup (Inner)	HM803146-HM803110	
Cone/Cup (Outer)	HM88542-HM88510	

Spindle Kit

1993-1990	(Dana/Spicer 60F Axle)	
Bearing & Seal Kit	SBK3[2]	³⁵

Spindle

1993-1990	(Dana/Spicer 60F Axle)	
Seal (Inner)	710044[2]	
Ndle Bearing (Inner)	B2414[2]	
Seal (Outer)	710045[2]	

REAR AXLE**Differential Rebuild Kit**

2008-2001	(9.25" R.G.)	
Kit	DRK304A	²⁵
2002-1994	(Dana/Spicer 80 Axle)	
Kit	DRK337	
2002-1990	(Dana/Spicer 60 Axle)	
Kit	DRK331	
2000-1990	(9.25" R.G.)	
Kit	DRK304	
1993-1990	(Dana/Spicer 70U, 71 Axles)	
Kit	DRK332U	

Differential

2006-2003	(11.5" R.G.)	
Cone/Cup	3984-3920[2]	
2003-1990	(9.25" R.G.)	
Cone/Cup	JLM704649-JLM704610[2]	
2002-1994	(Dana/Spicer 80 Axle)	
Cone/Cup	469-453X[2]	
2002-1990	(Dana/Spicer 60, 60HD, 70, 70U, 71 Axles)	
Cone/Cup	387A-382S[2]	

Pinion

2009-2003	(11.5" R.G.)	
Seal	710508	
Cone/Cup (Inner)	HM807046-HM807010	
Cone/Cup (Outer)	NP457992-NP926068	
2005-2003	(8.25" R.G.)	
Seal	710480	
Cone/Cup (Inner)	M802048-M802011	
Cone/Cup (Outer)	M86649-M86610	
2003-2002	(Dana/Spicer 60 Axle)	
Seal	100712V	
Cone/Cup (Inner)	HM803146-HM803110	
Cone/Cup (Outer)	HM88542-HM88510	

REAR AXLE (cont.)**Pinion (cont.)**

2003-2000	(9.25" R.G.)	
Seal	710481	
Cone/Cup (Inner)	NP524102-NP912904	
Cone/Cup (Outer)	M88048-M88010	
2002-1994	(Dana/Spicer 80 Axle)	
Seal Viton	4525V	
Cone/Cup (Inner)	HM807046-HM807010	
Cone/Cup (Outer)	M802048-M802011	
Repair Sleeve	KWK99253	
2001-1990	(Dana/Spicer 60, 60HD Axles)	
Seal Viton	719316	
Cone/Cup (Inner)	HM803146-HM803110	
Cone/Cup (Outer)	HM88542-HM88510	
Repair Sleeve	KWK99187	
1999-1990	(9.25" R.G.)	
Seal	5126	
Cone/Cup (Inner)	M804049-M804010	
Cone/Cup (Outer)	M88048-M88010	
Repair Sleeve	KWK99187	
1993-1990		
Seal (Dana/Spicer 70 Axle)(5380, 7270 Companion Yokes)	9316	
Cone/Cup (Inner) (Dana/Spicer 70 Axle)	HM803149-HM803110	
Cone/Cup (Inner) (5380, 7270 Companion Yokes)	HM807040-HM807010	
Cone/Cup (Outer) (Dana/Spicer 70 Axle)(5380, 7270 Companion Yokes)	HM88542-HM88510	

TRANSFER CASE REBUILD KIT

2002-1995	(New Process 241)	
Kit	TCRK241D	¹⁶
2002-1990	(New Process 205)	
Kit	TCRK205D	
1994-1993	(New Process 241)	
Kit	TCRK241	
1992-1990	(New Process 241)	
Kit	TCRK241A	¹⁶

TRANSFER CASE**Input Shaft**

2005-2003	(New Process 271, 273)	
Ball Bearing	211TB	
2002-1994	(New Process 241)	
Seal (O.E.)	3173	
Ball Bearing	110L	
Seal (Opt)	710928	
Repair Sleeve	KWK99193	
Ndle Bearing (Pilot)	FC66561	

¹⁶Obsolete²⁵New Item, Check For Availability³⁵Opt. Kit = Brg B2414, Seals 710044 &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500 (cont.)					

TRANSFER CASE (cont.)**Input Shaft (cont.)**

1993-1990	(New Process 205)
Seal (M/T)	3173[2]
Seal (M/T, Opt)	710928
Repair Sleeve (M/T)	KWK99193
Ball Bearing (M/T)	1210L
Ndle Bearing (Pilot)	
(A/T,M/T)	QAR29523[15]
Seal (A/T)	473468[2]
Repair Sleeve (A/T)	KWK99212[2]
Ball Bearing (A/T)	1307L[2]

Front Output Shaft

2005-2003	(New Process 271, 273)
Ball Bearing	111TB
2002-1994	(New Process 241)
Seal	3946
1993-1990	(New Process 205)
Seal	473468
Ball Bearing	307L
Repair Sleeve	KWK99174
Ndle Bearing (Pilot)	M28161

Rear Output Shaft

2002-1994	(New Process 241)
Seal	4333N
Ball Bearing	207XLO
Ndle Bearing (Pilot)	B5020
1993-1990	(New Process 205)
Seal	473468
Ball Bearing	307L
Repair Sleeve	KWK99212
Ndle Bearing (Pilot)	B3216

Idler Shaft

1993-1990	(New Process 205)
Cone/Cup	2793-2720[2]

Low Gear Roller

1993-1990	(New Process 205)
Ndle Bearing	QBR23549[2]

Oil Pump Housing

2002-1994	(New Process 241)
Seal	341022
Repair Sleeve	KWK99225

Selector Shaft Seal/Man. Shaft

1993-1990	(New Process 205)
Seal	2287[2]
Repair Sleeve	KWK99076

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(A727, 36RH)
Seal	331227H
Repair Sleeve	KWK99187

3-SPEED AUTOMATIC TRANSMISSION (cont.)**Torque Converter (cont.)**

2000-1990	(A904, A998, A999, 31RH, 32RH)
Seal	331228H
Repair Sleeve	KWK99149

Rear Seal/Ext. Housing

2002-1990	(A727, 36RH)
Seal	7300S
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴
2000-1990	(A998, A999, 31RH, 32RH)
Seal	2506
Ball Bearing	206LOE[2] ³⁸

Clutch Cam

1993-1990	(A727)
Ndle Bearing	W585Q[12]

Selector Shaft Seal/Man. Shaft

2000-1990	
Seal	8609

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(A500, 46RE)
Seal	331228H
Repair Sleeve	KWK99149
2002-1990	(A518, 46RH, 47RH)
Seal	331227H
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

2002-1990	(A500, A518, 46RE, 46RH, 47RH)(2 WD)
Seal	7300S
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴
2002-1990	(A500, A518, 46RE, 46RH, 47RH)(4 WD)
Seal	710058
Ball Bearing	207XLO[2]

Selector Shaft Seal/Man. Shaft

2008-2004	(47RE, 48RE)
Seal	8609
2003-1990	(A500, A518, 46RE, 46RH, 47RH)
Seal	8609

³⁸Reuse Snap Ring.⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500 (cont.)

CLUTCH

Pilot Bearing

2002-2000	(8 Cyl.)	
Ndle Bearing	.....	FC69907
1997-1994	488/8.0L	
Ndle Bearing	.....	SCE1211
1996-1992	(6 Cyl.)	
Ndle Bearing	.....	SCE1295
1996-1992	(8 Cyl.)	
Ndle Bearing	.....	SCE1295
1996-1990	(Cummins Turbo Diesel)	
Ndle Bearing	.....	SCE1211
1991-1990		
Bushing H/D	.....	PB286HD

Release Bearing

2002-1994	488/8.0L	
Bearing Assy	.....	614114
2002-1994	5.9L (6 Cyl. Dsl.)	
Bearing Assy	.....	614114
2002-1994	5.9L (V8 Gas)	
Bearing Assy	.....	614093
1996-1994	(Cummins Turbo Diesel)(Getrag 5 Spd.)	
Bearing Assy	.....	614114
1996-1992	(w/o Cummins Turbo Diesel and V10)	
Bearing Assy	.....	614093
1993-1990	(Cummins Turbo Diesel)(Getrag 5 Spd.)	
Bearing Assy	.....	614070
1991-1990	(w/o Cummins Turbo Diesel)	
Bearing Assy	.....	614054

4-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

1993-1990	(New Process 435)	
Kit (Ball Brg. I/S)	.....	TRK127G ⁵³
1993-1990	(New Process 435)	
Kit (Tapered Brg. I/S)	.....	TRK127B ⁵⁴

Input Shaft

1993-1990	(New Process 435)	
Seal	.....	9376[2]
Ball Bearing	.....	308L[2]
1990	(New Process A833)	
Seal	.....	9376
Ball Bearing	.....	308LOE[2]

Mainshaft Pilot

1993-1990	(New Process 420, 435, 445)	
Ndle Bearing	.....	Q15902[14]

4-SPEED MANUAL TRANSMISSION

Countershaft

1993-1990	(New Process 435)	
Ndle Bearing (Frt)	.....	BCE2416[2]
Ndle Bearing (Rr)	.....	B3216[2]
Ndle Bearing Thrust	.....	NTA2031[2]

Reverse Idler

1993-1990	(New Process 435)	
Ndle Bearing	.....	C407Q[2]

Rear Output Shaft

1993-1990	(New Process 435)	
Seal	.....	8160S
Ball Bearing	.....	308L[2]

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2004-1997	(New Venture 4500)	
Kit	.....	TRK4500DNI
2000-1994	(New Process 3500)	
Kit	.....	TRK235C
1996-1990	(New Venture 4500)	
Kit	.....	TRK4500DN
1991-1990	(Getrag G360)	
Kit	.....	TRK261

Front Input Shaft

2004-1992	(New Process 4500)	
Seal	.....	714655
Cone/Cup	.....	M802048CP-M802011AP[2]
Repair Sleeve	.....	KWK99133
2000-1994	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138
1993-1992	(Aisin)	
Seal	.....	223253
Repair Sleeve	.....	KWK99128
1993-1990	(New Process A536, 2500)	
Seal	.....	9376
Ball Bearing	.....	307LI[2]
Repair Sleeve	.....	KWK99106

Front Countershaft

2004-1992	(New Process 4500)	
Cone/Cup	.....	LM102949CP-LM102910P[2]

Rear Countershaft

2004-1992	(New Process 4500)	
Cone/Cup	.....	LM501349HP-LM501310P[2]

⁵³Ball I/S Brg.⁵⁴Tapered I/S Brg.

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

DODGE TRUCK - 1 TON - Motor Home, Pickup, Van, 350 Series, 3500 Series, Sprinter 3500 (cont.)

5-SPEED MANUAL TRANSMISSION

Rear Output Shaft

2004-1994	(New Process 4500)(2WD)	
Seal	2465	
Cone/Cup	M804049-M804010[2]	
2004-1992	(New Process 4500)(4WD)	
Seal	710058	
Cone/Cup	M804049-M804010[2]	
2002-1994	(New Process 3500)(4WD)	
Seal	4532N	
Ball Bearing	307FTB[2]	
2000-1994	(New Process 3500)(4WD)	
Seal	2465	
Ball Bearing	307FTB[2]	
1993-1992	(Aisin)(2WD)	
Seal	710198	
1993-1992	(Aisin)(4WD)	
Seal	1209N	
1993-1992	(New Process 4500)(2WD)	
Seal	7300S	
Cone/Cup	M804049-M804010[2]	
1993-1990	(New Process A536, 2500)(2WD)	
Seal	2506	
Ball Bearing	208[2]	
1993-1990	(New Process A536, 2500)(4WD)	
Seal	710058	
Ball Bearing	208[2]	

DRIVESHAFT SUPPORT

2003-1994	(1.57" 40mm Brg. I.D. 3.248" centerline)	
Hanger Bearing Assy	HB88108D ²⁵	
2002-1999	(1.57" 40mm Brg. I.D. 2.284" centerline)	
Hanger Bearing Assy	HB88508AB	
1998-1990	(Spicer)(1.3780" Brg. I.D.)	
Ball Bearing	88107[2]	
Hanger Bearing Assy	HB88107A[2]	
Hanger Bearing Assy	HB88107B[2]	

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-1994	359/5.9L (Diesel)	
Seal	39803	
Repair Sleeve	KWK99248	
1993-1990	359/5.9L (Diesel)	
Seal	39803	
Repair Sleeve	KWK99248	
1990	239/3.9L	
Seal	3103	
Harmnc Balancer Slvs	88218	

8 Cylinder

2003-1992	318/5.2L, 360/5.9L	
Seal Viton	713103	
Repair Sleeve	KWK99218	

CRANKSHAFT FRONT SEAL (cont.)

8 Cylinder (cont.)

1991-1990	318/5.2L, 360/5.9L, 383/6.3L	
Seal	3103	
Repair Sleeve	KWK99218	

10 Cylinder

2003-1994	488/8.0L	
Seal Viton	471424V	
Repair Sleeve	KWK99199	
Harmnc Balancer Slvs	88199	

CRANKSHAFT REAR SEAL

6 Cylinder

2008-1990	359/5.9L (Diesel)	
Seal	710473	
1990	239/3.9L	
Seal	5414	

8 Cylinder

2003-1990	360/5.9L	
Seal Split	5106	
2003-1990	318/5.2L	
Seal	5414	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
DODGE TRUCK - 1-1/2, 2, 2-1/2 TON - RAM4500, RAM5500					

FRONT WHEEL**RWD**

2008	RAM4500, RAM5500
Hub Unit Bearing	HA590273[2] ²⁵

4WD

2008	RAM4500, RAM5500
Hub Unit Bearing	HA590273[2] ²⁵

EAGLE - Premier, Summit, Talon, Vision, Vista, 2000 GTX**FRONT WHEEL****FWD**

1998-1995	Talon
Hub Unit Bearing	513157[2]
1997-1993	Vision
Hub Unit Bearing	513089[2]
1996-1993	Summit (Exc. Wagon)
Ball Bearing	510016[2]
Seal (Inner)	8430S[2]
Seal (Outer)	4898[2]
1996-1992	Summit Wagon
Seal (Inner)	225450[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]
1994-1990	Talon
Seal (Inner)	225450[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]
1993-1991	2000 GTX
Seal (Inner)	225450[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]
1992-1990	Summit
Seal	474134[2]
Set	SET41[2]
1992-1990	Premier
Ball Bearing	513144K[2]
1992-1990	Vista
Seal (Inner)	225082[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]
1992-1990	Vista (Canada)
Seal	474134[2]
Set	SET41[2]

4WD

1996-1993	Summit (Exc. Wagon)
Seal (Inner)	8430S[2]
Seal (Outer)	4898[2]
Ball Bearing	510016[2]
1996-1992	Summit Wagon
Seal (Inner)	225450[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]
1992	Summit (Exc. Wagon)
Seal	474134[2]
Set	SET41[2]

FRONT WHEEL**AWD**

1998-1995	Talon
Hub Unit Bearing	513157[2]
1994-1990	Talon
Seal (Inner)	225450[2]
Ball Bearing (Inner)	513036[2]
Seal (Outer)	225230[2]

REAR WHEEL**FWD**

1998-1995	Talon
Hub Unit Bearing	HA590306[2]
Bearing Module	512136[2]
1998-1993	Vision
Hub Unit Bearing	512029[2]
1996-1993	Summit (ABS)(Disc)
Hub Unit Bearing	512033[2]
1996-1993	Summit (Non-ABS)
Hub Unit Bearing	512148[2]
1996-1992	Summit Wagon (FWD)
Hub Unit Bearing	512040[2]
1994-1990	Talon (ABS)
Hub Unit Bearing	512011[2] ⁸¹
1994-1990	Talon (Non-ABS)
Hub Unit Bearing	512010[2]
1993-1991	2000 GTX (Disc)
Hub Unit Bearing	512158[2]
1993-1991	2000 GTX (Drum)
Seal (Inner)	1196
Set (Inner)	SET4[2]
Set (Outer)	SET1[2]
1992-1991	Summit (Diamond Star Drum Brks.)
Hub Unit Bearing	512037[2]
1992-1991	Summit (Mitsubishi Drum Brks.)
Seal (Inner)	1205N[2]
Bearing Assy (Inner)	516001WB[2]
Bearing Assy (Outer)	516001WB[2]
1992-1990	Premier (Non-ABS)(Drum)
Hub Unit Bearing	513070[2]
1990	Summit (2 Dr.)(Disc)
Seal (Inner)	1205N[2]
Bearing Assy (Inner)	516000[2]
Bearing Assy (Outer)	516000[2]
1990	Summit (2 Dr.)(Drum)
Seal (Inner)	1205N[2]
Bearing Assy (Inner)	516001WB[2]
Bearing Assy (Outer)	516001WB[2]

²⁵New Item, Check For Availability⁸¹Holes Exists For Tone Ring, Reuse Tone Ring.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

EAGLE - Premier, Summit, Talon, Vision, Vista, 2000 GTX (cont.)**REAR WHEEL (cont.)****FWD (cont.)**

1990	Summit (4 Dr.)	
Seal (Inner)	.....	1205N[2]
Bearing Assy (Inner)	.....	513029[2] ^z
Bearing Assy (Outer)	.....	513029[2] ^z

4WD

1996-1992	Summit Wagon	
Ball Bearing	.....	511013[2]

AWD

1998-1995	Talon	
Bearing Module	.....	512181[2]
1994-1990	Talon	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]

TRANSFER CASE**Front Output Shaft**

1998-1995	Talon	
Seal	.....	304505XX
Set	.....	SET6

CLUTCH**Release Bearing**

1998-1995	Talon (FWD)(w/o Turbo)	
Bearing Assy	.....	614121
1998-1991	Talon (AWD)	
Bearing Assy	.....	614099
1996-1993	Summit (AWD)	
Bearing Assy	.....	614099
1996-1990	Summit (FWD)	
Bearing Assy	.....	614126
1994-1990	Talon (FWD)	
Bearing Assy	.....	614126
1992-1990	Premier 3.0 V6	
Bearing Assy	.....	614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1996-1990	(KM171, F3A21 2, KM171 5)	
Ball Bearing	.....	207[2]

Torque Converter

1996-1990	(F3A22, F3A21 3, KM171 5, KM171)	
Seal	.....	320583
Repair Sleeve	.....	KWK99157

Transfer Shaft

1996-1991	(F3A21 2)	
Bearing Assy	.....	30207M[2]
1990	(KM171, KM171 5)	
Bearing Assy (Inner)	.....	30206M[2]
Bearing Assy (Outer)	.....	30304[2]

3-SPEED AUTOMATIC TRANSAXLE**Transfer Gear**

1996-1990	(KM171, F3A21 2, KM171 5)	
Ball Bearing (Inner)	.....	207[2]
Ball Bearing (Outer)	.....	306L[2]

Transfer Idler

1996-1991	(F3A21 2)	
Bearing Assy	.....	30206M[2]

Output Shaft

1996-1990	(F3A22, F3A21 3, KM171 5, KM171)	
Seal	.....	223543[2]
Repair Sleeve	.....	KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1998-1997	(A604 41TE)(AWD)(Prod. from mid 1997 on)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	NP952605-JL69310P
1998-1997	(A604 41TE)(Prod. from mid 1997 on)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	NP952605-JL69310P
1997	(A604 41TE)(AWD)(Prod. thru mid 1997)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	JL69348-JL69310
1997-1996	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (LH)	.....	NP889967-NP714580
Cone/Cup (RH)	.....	JL69348-JL69310
1997-1993	(A606, 42LE)	
Seal	.....	3459S[2]
Set	.....	SET36
Repair Sleeve	.....	KWK99157[2]
1995-1994	(A604 41TE)(AWD)	
Cone/Cup (LH)	.....	JL69349-JL69310
Cone/Cup (RH)	.....	LM503349-LM503310
1995-1991	(A604 41TE)	
Cone/Cup	.....	JL69348-JL69310
1993-1991	(A604 41TE)(AWD)	
Cone/Cup (LH)	.....	JL69348-JL69310
Cone (RH)	.....	LM503349
1992-1990	(ZF 4 HP18)	
Cone/Cup (LH)	.....	LM806649-LM806610
Cone/Cup (RH)	.....	LM300849-LM300811
1991-1990	(A604, A670)	
Set	.....	SET11[2]

Torque Converter / Frt Pump

1998-1993	(41TE, 42LE)	
Seal	.....	331228H[2]
Repair Sleeve	.....	KWK99149
1998-1990	(F4A21 2, F4A22 2, F4A33 1, KM176 5, KM175 5, W4A32 1, W4A33 1)	
Seal	.....	320583
Repair Sleeve	.....	KWK99157

^zNon-Cancellable/Non-Returnable

EAGLE - Premier, Summit, Talon, Vision, Vista, 2000 GTX (cont.)**4-SPEED AUTOMATIC TRANSAXLE****(cont.)****Torque Converter / Frt Pump (cont.)**

1992-1990 (ZF 4 HP18FL Premier)	
Seal	224510
Repair Sleeve	KWK99177

Transfer Shaft

1998-1996 (A604, 41TE)	
Cone/Cup (Inner)	NP853895-NP352518[2]
Set (Outer)	SET45[2]
1998-1993 (A606, 42LE)	
Cone/Cup (Outer)	26131H-26334[2]
Cone/Cup (Inner)	M802048-M802011[2]
1995-1990 (A604, 41TE)	
Cone/Cup (Inner)	13687-13623X[2]
Set (Outer)	SET45[2]

Output Shaft

1998-1993 (F4A33 1)	
Seal Viton	710259[2]
1998-1990 (W4A331)	
Seal (LH)	223543
Repair Sleeve	KWK99139
Seal (RH)	710199
Repair Sleeve	KWK99139
1997-1993 (42LE)	
Seal (LH)	4738N
Seal (RH)	4748N
1996-1990 (F4A21 2, F4A22 2)	
Seal	223543[2]
Repair Sleeve	KWK99139[2]
1992-1991 (F4A33 1)	
Seal	223543[2]
1992-1990 (ZF 4 HP18FL Premier)	
Seal (LH)	224462
Seal (RH)	710442

Pinion

1992-1990 (ZF 4 HP18FL Premier)	
Seal Viton	710279
Repair Sleeve	KWK99215

Extension Housing

1998-1990 (W4A32 1, W4A33 1)	
Seal	710317
Repair Sleeve	KWK99128

Manual Shaft

1998-1995 (41TE)	
Seal	8609
1992-1990 (A604, A604 41TE, A670)	
Seal	8609[2]

4-SPEED MANUAL TRANSAXLE**Differential**

1992-1990 (F4M21 1)	
Ball Bearing	207[2]

Input Shaft

1992-1990 (F4M21 1, KM200 0)	
Seal Viton	712007[2]
Repair Sleeve	KWK99098

Output Shaft

1992-1990 (F4M21 1, KM200 0)	
Seal	223543[2]
Bearing Assy	30206M[2]
Repair Sleeve	KWK99139[2]

Selector Shaft Seal/Man. Shaft

1992-1990 (F4M21 1, KM200 0)	
Seal	710222[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1998-1995 (A578)	
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]
1997-1990 (F5M21 1, F5M21 2, W5M31 2, W5M33 2, KM201 0, KM215 0)	
Ball Bearing	207[2]
1996-1990 (KM182 2, F5M22 2, KM182 0, KM206 0, KM206, KM221 1)	
Bearing Assy	30207M[2]

Input Shaft

1997-1990 (KM206, F5M21 1, F5M21 1, F5M21 2, F5M22 1, F5M22 2, W5M31 2, W5M33 2, KM215 0)	
Seal Viton	712007
Repair Sleeve	KWK99098[2]
1991-1990 (KM182 2, KM182 0)	
Seal Viton (Frt)	712007
Ball Bearing (Center)	304WB[2]
Bearing Assy (Rr)	30304[2]
Repair Sleeve	KWK99098[2]
1990 (KM201 0, KM206 0)	
Seal Viton (Frt)	712007[2]
Ball Bearing (Center)	304WB[2]
Ball Bearing (Rr)	108A[2]
Repair Sleeve	KWK99098[2]

Countershaft

1990 (KM201 0, KM206 0)	
Ball Bearing (Frt)	RW122[2]
Ball Bearing (Rr)	108A[2]

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

EAGLE - Premier, Summit, Talon, Vision, Vista, 2000 GTX (cont.)**5-SPEED MANUAL TRANSAXLE****Output Shaft**

1997-1993	(F5M33 2)	
Seal Viton	.....	710259[2]
1997-1990	(W5M33 2)	
Seal (LH)	.....	223543
Seal (RH)	.....	710199
Repair Sleeve	.....	KWK99139[2]
1996-1993	(F5M22 2)	
Seal	.....	223543[2]
Repair Sleeve	.....	KWK99139[2]
1996-1990	(F5M21 1, F5M21 2, F5M22 1, F5M22 2, KM201 0, KM206, KM206 0)	
Seal	.....	223543[2]
Bearing Assy	.....	30206M[2]
Repair Sleeve	.....	KWK99139[2]
1993-1992	(W5M31 2)	
Seal (LH)	.....	223543
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	1981
Repair Sleeve (RH)	.....	KWK99114
1992-1990	(F5M31 2, F5M33 1, KM215 0)	
Seal	.....	223543[2]
Repair Sleeve	.....	KWK99139[2]
1992-1990	(Renault UN1)	
Seal	.....	224235[2]
1991-1990	(KM182 2, KM182 0)	
Seal	.....	223543[2]
Repair Sleeve	.....	KWK99139[2]

Pinion

1997-1990	(W5M33 2)	
Seal	.....	223014
Repair Sleeve	.....	KWK99114

Selector Shaft Seal/Man. Shaft

1998-1995	(A578)	
Seal	.....	3816[2]
1996-1990	(F5M21 1, F5M21 2, F5M22 2, KM182 2, KM182 0, KM201 0, KM206 0)	
Seal	.....	710222

Extension Housing

1993-1992	(W5M33 2)	
Seal	.....	710317

OIL PUMP**4 Cylinder**

1998-1991	122/2.0L, 148/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078
1994-1993	1755cc/1.8L (SOHC)	
Seal	.....	221710
Repair Sleeve	.....	KWK99068

CAMSHAFT SEAL**4 Cylinder**

1998-1995	122/2.0L (DOHC)	
Seal Viton	.....	320249[2]
Repair Sleeve	.....	KWK99139[2]
1998-1995	1997cc/2.0L (TURBO)	
Seal	.....	3771
Repair Sleeve	.....	KWK99139
1996-1990	1468cc/1.5L, 1755cc/1.8L, 1834cc/1.8L, 2351cc/2.4L	
Seal	.....	3771
Repair Sleeve	.....	KWK99139
1994-1990	1595cc/1.6L (DOHC), 1997cc/2.0L (DOHC)	
Seal	.....	3771[2]
Repair Sleeve	.....	KWK99139[2]

6 Cylinder

1997-1993	215/3.5L	
Seal	.....	714655[2]
Repair Sleeve	.....	KWK99112[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1998-1994	122/2.0L (DOHC)	
Seal Viton	.....	320348
Repair Sleeve	.....	KWK99128
1996-1992	1834cc/1.8L	
Seal	.....	223750
Repair Sleeve	.....	KWK99145
1996-1990	1468cc/1.5L	
Seal	.....	223018
Repair Sleeve	.....	KWK99114
1996-1990	1595cc/1.6L (DOHC), 1597cc/1.6L, 1755cc/1.8L, 1997cc/2.0L, 2351cc/2.4L	
Seal	.....	224460

6 Cylinder

1997-1993	201/3.3L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112
1997-1993	3.5L	
Repair Sleeve	.....	KWK99139
1992-1990	2970cc/3.0L	
Seal Viton	.....	710196
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL**4 Cylinder**

1998-1995	2.0L Turbo	
Seal Viton	.....	710235
1998-1994	2.0L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279
1998-1990	150/2.5L	
Seal	.....	3698
Repair Sleeve	.....	KWK99294
1996-1990	1468cc/1.5L, 1755cc/1.8L	
Seal	.....	227235

EAGLE - Premier, Summit, Talon, Vision, Vista, 2000 GTX (cont.)**CRANKSHAFT REAR SEAL (cont.)****4 Cylinder (cont.)**

1996-1990 1595cc/1.6L (DOHC),
1997cc/2.0L (DOHC),
2351cc/2.4L

Seal Viton 228005
Repair Sleeve KWK99315

6 Cylinder

1997-1993 201/3.3L, 215/3.5L

Seal Viton 710056
Seal PTFE H/D 5279

1992-1990 2970cc/3.0L

Seal 228010
Repair Sleeve KWK99315

FERRARI - F40, Testarossa, 328GT, 348**FRONT WHEEL****RWD**

1995-1990 348

Set (Inner) SET5[2]
Set (Outer) SET16[2]

1993-1990 Mondial

Set (Inner) SET5[2]
Set (Outer) SET16[2]

1992-1990 F40

Set (Inner) SET5[2]
Set (Outer) SET16[2]

1992-1990 Testarossa

Set (Inner) SET5[2]
Set (Outer) SET16[2]

REAR AXLE**Differential**

1991-1990 (Exc. 412, GTO, Testarossa)

Cone/Cup 368A-362A[2]

1991-1990 GTO, Testarossa

Cone/Cup (LH) 368A-362A
Cone/Cup (RH) 28580-28521

Pinion

1991-1990 328 Ser.

Cone/Cup (Outer) 28158-28300

1991-1990 Testarossa

Cone/Cup (Outer) 28158-28300

REAR AXLE (cont.)**Pinion (cont.)**

1991-1990 412

Cone/Cup (Outer) 27880-27820

1991-1990

Cone/Cup (Inner) M802048-M802011 ¹⁴

FORD - FRONT DRIVE - Contour**FRONT WHEEL****FWD**

2000-1995

Ball Bearing 510029[2]

REAR WHEEL**FWD**

2000-1995

Hub Unit Bearing 512024[2]

¹⁴Special Deviation Code On Some Models.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD - FRONT DRIVE - Contour (cont.)					

CLUTCH**Release Bearing**

2000-1995	
Bearing Assy	614155

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2000-1995	(4HAT G)
Set	SET17[2]
2000-1995	(AX4, AXOD)
Ball Bearing	208[2]
1997-1995	(4EAT G)
Bearing Assy	32008XM[2]

Torque Converter / Frt Pump

2000-1995	(CD4E)
Seal	4635V

Output Shaft

2000-1995	(4EAT G, 4HAT G)
Seal (LH)	223543
Repair Sleeve (LH)	KWK99139
Seal (RH)	2007N
Repair Sleeve (RH)	KWK99139
2000-1995	(AX4, AXOD)
Seal	3622S[2]
Repair Sleeve	KWK99169[2]

5-SPEED MANUAL TRANSAXLE**Differential**

2000-1995	(MTX75)
Set	SET17[2]

Input Shaft

2000-1995	(MTX75)
Seal	222430
Repair Sleeve	KWK99098

Countershaft

2000-1995	(MTX75)
Bearing Assy (Frt)	32205[2]

Output Shaft

2000-1995	(MTX75)
Seal (LH)	223543
Repair Sleeve (LH)	KWK99139
Seal (RH)	2007N
Repair Sleeve (RH)	KWK99139

Selector Shaft Seal/Man. Shaft

2000-1995	(MTX75)
Seal	221620

CAMSHAFT SEAL**4 Cylinder**

2000-1995	121/2.0/L
Seal	3774S
Repair Sleeve	KWK99169

6 Cylinder

2000-1995	155/2.5L
Seal	471651
Repair Sleeve	KWK99106

CRANKSHAFT FRONT SEAL**4 Cylinder**

2000-1995	121/2.0/L
Seal	3771
Repair Sleeve	KWK99139

6 Cylinder

2000-1995	2540cc/2.5L (DOHC)
Seal	482041N
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL**4 Cylinder**

2000-1995	121/2.0/L
Seal	3772
Seal PTFE H/D (Opt)	5287

6 Cylinder

2000-1995	2540cc/2.5L (DOHC)
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99363

FORD - FRONT DRIVE - Escort**FRONT WHEEL****FWD**

2003-1991	
Seal	1932S[2]
Ball Bearing	510013[2]
1990 (From 2/1/83)	
Set	SET39[2]
Hub Unit Bearing	518503[2] ⁶⁵

REAR WHEEL**FWD**

2003-1994 (ABS)	
Hub Unit Bearing	512161[2]
2003-1990 (Non-ABS)(Drum)	
Hub Unit Bearing	513030[2]
1990	
Seal (Inner)	473677[2]
Set (Inner)	SET8[2]
Set (Outer)	SET12[2]

CLUTCH**Pilot Bearing**

2003-1991 1.9L, 2.0L Pony, LX Model	
Ndle Bearing	FC65354
1996-1990 1.8 (DOHC) Mazda GT Model	
Ball Bearing	202SS

Release Bearing

2003-1997 2.0 (DOHC)(Mazda)	
Bearing Assy	614155
1997-1991 1.8 (DOHC) Mazda	
Bearing Assy	614079
1996-1991 116/1.9L	
Bearing Assy	614128
1990	
Bearing Assy	614060
Bearing Assy	614118

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

1993-1990	
Seal	3622S[2]
Repair Sleeve	KWK99169[2]

Manual Shaft

1990	
Seal	342517
Repair Sleeve	KWK99101

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2003-1991 (4EAT-F, F4E-II)	
Set	SET17[2]
1997-1990 (4EAT-F, ATX)	
Bearing Assy	32008XM[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2002-1990 (4EAT-F, F4E-II)	
Seal	710446

Output Shaft

2002-1990 (4EAT-F, F4E-II)	
Seal (LH)	223543
Repair Sleeve	KWK99139
Seal (RH)	2007N
Repair Sleeve	KWK99139

4-SPEED MANUAL TRANSAXLE**Input Shaft**

1990 (MTX II)(2nd Design)	
Seal	3638
Cone/Cup	LM67049A-LM67010[2]
Repair Sleeve	KWK99112[2]

Output Shaft

1990 (MTX)	
Seal	3622S[2]
Set	SET30[2] ^z
Repair Sleeve	KWK99169[2]

Selector Shaft Seal/Man. Shaft

1990 (MTX)	
Seal Viton	710274

5-SPEED MANUAL TRANSAXLE**Differential**

2003-1997 (G5M)	
Bearing Assy	32008XM[2]
1996-1991 (G5M)	
Set	SET17[2]
1994-1990 (MTX)	
Set	SET45[2]

Input Shaft

2002-1991 (G5M)	
Seal	222430
Repair Sleeve	KWK99098
1995-1990 (MTX)	
Seal	3638
Cone/Cup	LM67049A-LM67010[2]
Repair Sleeve	KWK99112[2]

Countershaft

2002-1991 (G5M, MTX)	
Bearing Assy (Frt)	32205[2]
1995-1990 (G5M, MTX)	
Set	SET16[2]

^zNon-Cancellable/Non-Returnable⁶⁵Kit = Nut, Studded Spindle, Bearing, Snap Ring

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

FORD - FRONT DRIVE - Escort (cont.)

5-SPEED MANUAL TRANSAXLE

Output Shaft

2002-1991	(G5M, MTX)	
Seal (LH)	.....	223543
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	2007N
Repair Sleeve (RH)	.....	KWK99139
1994-1990	(G5M, MTX)	
Seal	.....	3622S[2]
Set	.....	SET30[2] ^z
Repair Sleeve	.....	KWK99169[2]

Selector Shaft Seal/Man. Shaft

2003-1991	(G5M)	
Seal	.....	221620
1994-1990	(MTX III)	
Seal Viton	.....	710274

DRIVESHAFT SUPPORT

1992-1990		
Ball Bearing	.....	206F

CAMSHAFT SEAL

4 Cylinder

2003-1997	2.0L (SOHC)(DOHC)	
Seal	.....	3774S
Repair Sleeve	.....	KWK99169
1996-1991	113/1.8L (DOHC)	
Seal	.....	223420
1996-1990	(1.6L, 1.9L)	
Seal	.....	3774S
Repair Sleeve	.....	KWK99169

CRANKSHAFT FRONT SEAL

4 Cylinder

2003-1997	(2.0L SOHC, 2.0L DOHC)	
Seal	.....	3771
Repair Sleeve	.....	KWK99139
1996-1991	113/1.8L (DOHC)	
Seal	.....	710355
Repair Sleeve	.....	KWK99145

CRANKSHAFT FRONT SEAL (cont.)

4 Cylinder (cont.)

1996-1990	(1.6L, 1.9L)	
Seal	.....	3771
Repair Sleeve	.....	KWK99139

CRANKSHAFT REAR SEAL

4 Cylinder

2003-1997	(2.0L SOHC, 2.0L DOHC)	
Seal	.....	3772
Seal PTFE H/D	.....	5287
1996-1991	113/1.8L (DOHC)	
Seal	.....	228250
Repair Sleeve	.....	KWK99328
1996-1990	(1.6L, 1.9L)	
Seal	.....	3772
Seal PTFE H/D	.....	5287

FORD - FRONT DRIVE - Freestyle

FRONT WHEEL

FWD

2007-2005		
Hub Unit Bearing	.....	HA590028[2] ²⁵

REAR WHEEL

FWD

2007-2005		
Hub Unit Bearing	.....	512299[2] ²⁵

CRANKSHAFT FRONT SEAL

6 Cylinder

2007-2005	3.0L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187

CRANKSHAFT REAR SEAL

6 Cylinder

2007-2005	3.0L	
Seal Viton	.....	3909
Seal PTFE H/D (Opt)	.....	5277
Repair Sleeve	.....	KWK99362

^zNon-Cancellable/Non-Returnable

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - FRONT DRIVE - Focus**FRONT WHEEL****FWD****2009-2008**Ball Bearing WB000029[2]²⁵**2007-2000**Hub Unit Bearing HA590263K[2]⁶⁹Ball Bearing (Opt) 510056[2]⁸⁰**REAR WHEEL****FWD****2009**Taprd Bearing Assy WB000030[2]²⁵

Seal SL260005[2]

2008-2000

Ball Bearing 516007[2]

Seal 100944[2]²⁵**5-SPEED MANUAL TRANSAXLE****Differential****2004 (IB5)**

Seal 224020[2]

Repair Sleeve KWK99157

2003-2000 (IB5)

Cone/Cup LM29749-LM29710[2]

CAMSHAFT SEAL**4 Cylinder****2004-2000 2.0L (SOHC)**

Seal 3774S

CRANKSHAFT FRONT SEAL**4 Cylinder****2004-2000 2.0L (SOHC)(DOHC)**

Seal 3771

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder****2004-2000 2.0L (SOHC)(DOHC)**

Seal 3772

FORD - FRONT DRIVE - Fusion**FRONT WHEEL****FWD****2009-2006**

Ball Bearing 510010[2]

4WD**2009-2006**

Ball Bearing 510010[2]

REAR WHEEL**FWD****2009-2006 (Non-ABS)**Hub Unit Bearing HA590095[2]²⁵**4WD****2009-2007**

Ball Bearing 510010[2]

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft****2008-2006**

Seal 2007N[2]

Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder****2009-2006 3.0L (DOHC)**

Seal 482041N

Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**6 Cylinder****2009-2006 3.0L**

Seal Viton 3909

Seal PTFE H/D (Opt) 5277

Repair Sleeve KWK99362

²⁵New Item, Check For Availability⁶⁹Kit = Flg, Brg, Nut, & Snap Ring. Black Side Toward Sensor⁸⁰Black Side Toward Sensor.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD - FRONT DRIVE - Probe**FRONT WHEEL****FWD****1997-1993**

Seal 1932S[2]

Ball Bearing 510010[2]

1992-1990

Seal 1932S[2]

Bearing Assy 513057[2]

REAR WHEEL**FWD****1997-1993 (ABS)**

Hub Unit Bearing 512118[2]

1997-1993 (Non-ABS)

Hub Unit Bearing 512119[2]

1992-1990

Seal 224235[2]

Bearing Assy 513055[2]

CLUTCH**Pilot Bearing****1993-1990**

Ball Bearing 202SS

Release Bearing**1997-1993 6 Cyl. 2.5 V6**

Bearing Assy 614060

Bearing Assy 614118

1997-1990 (2.0L DOHC, 2.2L Turbo, 3.0L)

Bearing Assy 614079

1992-1990 4 Cyl. 2.2

Bearing Assy 614067

4-SPEED AUTOMATIC TRANSAXLE**Differential****1997-1990 (4EAT-G, 4EAT-GF, CD4E)**

Ball Bearing 208[2]

Torque Converter / Frt Pump**1997-1990 (4EAT-G, 4EAT-GF, CD4E)**

Seal 4189H

Output Shaft**1997-1990 (4EAT-G, 4EAT-GF)**

Seal (LH) 223543

Seal (RH) 2007N

5-SPEED MANUAL TRANSAXLE**Differential****1997-1990 (MTX)**

Bearing Assy 32008XM[2]

5-SPEED MANUAL TRANSAXLE**Input Shaft****1997-1990 (MTX)**

Seal (Outer) 1990

Set (Outer) SET32[2]

Repair Sleeve KWK99106

Output Shaft**1997-1990 (MTX)**

Seal (LH) 223543

Repair Sleeve (LH) KWK99139

Seal (RH) 2007N

Repair Sleeve (RH) KWK99139

Selector Shaft Seal/Man. Shaft**1997-1990 (MTX)**

Seal 221620

DRIVESHAFT SUPPORT**1992-1990**

Ball Bearing 206F

CAMSHAFT SEAL**4 Cylinder****1997-1990 2.0L, 2.2L**

Seal 223420[2]

6 Cylinder**1997-1993 2497cc/2.5L**

Seal 223012[4]

Repair Sleeve KWK99114[4]

CRANKSHAFT FRONT SEAL**4 Cylinder****1997-1993 1991cc/2.0L**

Seal Viton 2012V

Repair Sleeve KWK99134

1992-1990 133/2.2L (Gas)

Seal 223420

Repair Sleeve KWK99134

6 Cylinder**1997-1993 2497cc/2.5L**

Seal Viton 2012V

Repair Sleeve KWK99166

1992-1990 183/3.0L

Seal (Frt Entry) 2692

Seal (Rr Entry) 2942

Repair Sleeve KWK99187

Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL**4 Cylinder****1997-1993 1991cc/2.0L**

Seal 229004

Repair Sleeve KWK99347

1992-1990 133/2.2L (Gas)

Seal 229010

Repair Sleeve KWK99354

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD - FRONT DRIVE - Probe (cont.)					

CRANKSHAFT REAR SEAL**6 Cylinder**

1997-1993	2497cc/2.5L
Seal	1019S
Repair Sleeve	KWK99298
1992-1990	183/3.0L
Seal	3772
Seal PTFE H/D (Opt)	5287

FORD - FRONT DRIVE - Taurus**FRONT WHEEL****FWD**

2009-2008	
Hub Unit Bearing	HA590028[2] ²⁵
2007-1996	
Hub Unit Bearing	513100[2]
1995-1991	(From 2/1/91)
Set	SET49[2]
Hub Unit Bearing	520100[2] ⁶⁵
1991-1990	(Thru 1/31/91)
Set	SET49[2]
Hub Unit Bearing	520000[2] ⁶⁷

REAR WHEEL**FWD**

2009-2008	
Hub Unit Bearing	512299[2] ²⁵
2007-2005	(ABS)(Disc)
Hub Unit Bearing	HA590038[2] ²⁵
2007-2001	(ABS)(Drum)
Hub Unit Bearing	512163[2]
2007-2001	(Non-ABS)(Drum)
Hub Unit Bearing	512164[2]
2004-1993	(Disc)
Hub Unit Bearing	512107[2]
2000	(ABS)(Drum)
Hub Unit Bearing	512162[2]
2000-1990	(Non-ABS)(Drum)
Hub Unit Bearing	512106[2]
1992-1990	(Disc)
Hub Unit Bearing	512105[2] ¹⁶

CLUTCH**Pilot Bearing**

1992-1990	
Ball Bearing	202SS

Release Bearing

1997-1996	3.4 8 Cyl. (SHO)
Bearing Assy	614118
1996-1993	3.0 6 Cyl.
Bearing Assy	614060
Bearing Assy	614118
1995-1990	3.0 DOHC 6 Cyl. (SHO)
Bearing Assy	614060
Bearing Assy	614118

CLUTCH (cont.)**Release Bearing (cont.)**

1992-1990	2.5 4 Cyl.
Bearing Assy	614060
Bearing Assy	614118
1992-1990	3.0 6 Cyl.
Bearing Assy	614079

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1994-1990	(ATX)
Ball Bearing	208[2]

Torque Converter

1994-1990	(ATX)
Seal	4539H
Repair Sleeve	KWK99235

Output Shaft

1994-1990	(ATX)
Seal	3622S[2]
Repair Sleeve	KWK99169[2]

Manual Shaft

1994-1990	(ATX)
Seal	342517
Repair Sleeve	KWK99101

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1990	(AX4, AXOD)
Ball Bearing	208[2]

Torque Converter / Frt Pump

2005-1990	(AX4, AXOD)
Seal	4189H

Output Shaft

2007-1990	
Seal	3622S[2]
Repair Sleeve	KWK99169[2]

¹⁶Obsolete²⁵New Item, Check For Availability⁶⁵Kit = Nut, Studded Spindle, Bearing, Snap Ring⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD - FRONT DRIVE - Taurus (cont.)**4-SPEED MANUAL TRANSAXLE****Input Shaft**

1990	(MTX II)	
Seal	.....	3638
Cone/Cup	LM67049A-LM67010[2]	
Repair Sleeve	KWK99112[2]	

Output Shaft

1990	(MTX II)	
Seal	.....	3622S[2]
Repair Sleeve	KWK99169[2]	

Selector Shaft Seal/Man. Shaft

1990	(MTX II)	
Seal Viton	.....	710274

5-SPEED MANUAL TRANSAXLE**Differential**

1995-1991	(Mazda F52)	
Set	.....	SET17[2]
1995-1990	(MTX III)	
Set	.....	SET45[2]

Input Shaft

1995-1991	(Mazda F52)	
Seal	.....	222430
Repair Sleeve	KWK99098	
1995-1990	(MTX III)	
Seal	.....	3638
Cone/Cup	LM67049A-LM67010[2]	
Repair Sleeve	KWK99112	

Countershaft

1995-1991	(Mazda F52)	
Bearing Assy (Frt)	.....	32205[2]
1995-1990	(MTX III)	
Set	.....	SET16[2]

Output Shaft

1995-1991	(Mazda F52)	
Seal (LH)	.....	223543
Repair Sleeve (LH)	KWK99139	
Seal (RH)	.....	2007N
Repair Sleeve (RH)	KWK99139	
1995-1990	(MTX III)	
Seal	.....	3622S[2]
Set	.....	SET30[2] ^z
Repair Sleeve	KWK99169[2]	

Selector Shaft Seal/Man. Shaft

1995-1990	(MTX III)	
Seal Viton	.....	710274

DRIVESHAFT SUPPORT

1992-1990		
Ball Bearing	.....	206F

CAMSHAFT SEAL**6 Cylinder**

2002-1990	182/3.0L (DOHC)	
Seal	.....	1213N[4]
Repair Sleeve	KWK99157[4]	
1995-1993	195/3.2L (DOHC)	
Repair Sleeve	KWK99157[4]	
Seal	.....	1213N[4]

8 Cylinder

2000-1996	206/3.4L (DOHC)	
Seal	.....	710444[2]
Repair Sleeve	KWK99157[2]	

CRANKSHAFT FRONT SEAL**4 Cylinder**

1991-1990	153/2.5L	
Seal	.....	714075
Repair Sleeve	KWK99177	

6 Cylinder

2009-2008	3498cc/3.5L (DOHC)	
Seal	.....	482041N
Repair Sleeve	KWK99187	
2007-1990	182/3.0L (OHV)	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	KWK99187	
2005-1996	182/3.0L (DOHC), 206/3.4L (DOHC)	
Seal	.....	482041N
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	.....	88187
1995-1993	195/3.2L (DOHC)	
Seal	.....	710220
1995-1990	182/3.0L (DOHC)	
Seal	.....	710220
1995-1990	232/3.8L	
Seal	.....	2692

8 Cylinder

1999-1996	206/3.4L (DOHC)	
Seal	.....	482041N
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990	153/2.5L	
Seal	.....	3772
Seal PTFE H/D (Opt)	.....	5287

6 Cylinder

2007-1990	182/3.0L (OHV)	
Seal	.....	3772
Seal PTFE H/D (Opt)	.....	5287
2005-1996	182/3.0L (DOHC)	
Seal Viton	.....	3909
Seal PTFE H/D (Opt)	.....	5277
Repair Sleeve	KWK99362	

^zNon-Cancellable/Non-Returnable

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - FRONT DRIVE - Taurus (cont.)**CRANKSHAFT REAR SEAL (cont.)****6 Cylinder (cont.)**

1995-1993	195/3.2L (DOHC)	
Seal	.....	710219
Repair Sleeve	.....	KWK99351
1995-1990	182/3.0L (DOHC)	
Seal	.....	710219
Repair Sleeve	.....	KWK99351
1995-1990	232/3.8L	
Seal Viton	.....	3909
Seal PTFE H/D (Opt)	.....	5277
Repair Sleeve	.....	KWK99363

CRANKSHAFT REAR SEAL**8 Cylinder**

2000-1996	206/3.4L (DOHC)	
Seal	.....	710219
Repair Sleeve	.....	KWK99351

FORD - FRONT DRIVE - Tempo**FRONT WHEEL****FWD**

1994-1990	(From 2/1/83)	
Set	.....	SET39[2]
Hub Unit Bearing	.....	518503[2] ⁶⁵

REAR WHEEL**FWD**

1994-1990		
Seal (Inner)	.....	473677[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET12F[2] ⁵⁹

DRIVESHAFT SUPPORT

1992-1990		
Ball Bearing	.....	206F

FORD - AWD - Five Hundred**FRONT WHEEL****FWD**

2007-2005		
Hub Unit Bearing	.....	HA590028[2] ²⁵

AWD

2007-2005		
Hub Unit Bearing	.....	HA590028[2] ²⁵

REAR WHEEL**FWD**

2007-2005		
Hub Unit Bearing	.....	512299[2] ²⁵

AWD

2007-2005		
Hub Unit Bearing	.....	HA590029[2] ²⁵

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-2005	3.0L (DOHC)	
Seal	.....	482041N

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-2005	183/3.0L	
Seal Viton	.....	3909
Repair Sleeve	.....	KWK99363

²⁵New Item, Check For Availability
Snap Ring⁵⁹O.E. Polymer Cage⁶⁵Kit = Nut, Studded Spindle, Bearing,

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - AWD - Freestyle**FRONT WHEEL****AWD**

2007-2005

Hub Unit Bearing HA590028[2]²⁵**REAR WHEEL****AWD**

2007-2005

Hub Unit Bearing HA590029[2]²⁵**CRANKSHAFT FRONT SEAL****6 Cylinder**

2007-2005 3.0L

Seal 482041N

Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-2005 3.0L

Seal Viton 3909

Seal PTFE H/D (Opt) 5277

Repair Sleeve KWK99362

FORD - AWD - Taurus**FRONT WHEEL****AWD**

2009-2008

Hub Unit Bearing HA590028[2]²⁵**REAR WHEEL****AWD**

2009-2008

Hub Unit Bearing HA590029[2]²⁵**CRANKSHAFT FRONT SEAL****6 Cylinder**

2009-2008 3498cc/3.5L (DOHC)

Seal 482041N

Repair Sleeve KWK99187

FORD - AWD - Tempo**FRONT WHEEL****AWD**

1994-1990 (From 2/1/83)

Set SET39[2]⁶⁵Hub Unit Bearing 518503[2]⁶⁵**REAR WHEEL****AWD**

1991-1990

Bearing Assy 513001[2]^z**REAR AXLE****Axle Shaft**

1991-1990

Seal 3543[2]

Repair Sleeve KWK99139[2]

REAR AXLE**Pinion**

1991-1990 (4.75" R.G.)

Seal 472258

Repair Sleeve KWK99139

TRANSFER CASE**Input Shaft**

1991-1990 (I/S)

Set SET2

Ball Bearing (Pilot) 206WB

Front Output Shaft

1991-1990 (Frt. O/S)

Cone/Cup M86647-M86610[2]

Rear Output Shaft

1991-1990 (Rr. O/S)

Cone/Cup M86649-M86610

Ndle Bearing (Pilot) SCH78

^zNon-Cancellable/Non-Returnable
Spindle, Bearing, Snap Ring²⁵New Item, Check For Availability⁶⁵Kit = Nut, Studded

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD - AWD - Tempo (cont.)					

CLUTCH**Release Bearing**

1994-1992	3.0 V6 Mazda	
Bearing Assy	.....	614079
1990		
Bearing Assy	.....	614060
Bearing Assy	.....	614118

5-SPEED MANUAL TRANSMISSION**Countershaft**

1994-1990	(MTX III)	
Set	.....	SET16[2]

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1994-1990	(ATX)	
Ball Bearing	.....	208[2]

Torque Converter

1994-1990	(ATX)	
Seal	.....	4539H
Repair Sleeve	.....	KWK99235

Output Shaft

1994-1990	(ATX)	
Seal	.....	3622S[2]
Repair Sleeve	.....	KWK99169[2]

Manual Shaft

1994-1990	(ATX)	
Seal	.....	342517
Repair Sleeve	.....	KWK99101

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1994-1990	(4EAT G, 4HAT G)	
Seal	.....	710446
1994-1990	(AX4, AXOD)	
Seal	.....	4189H

Output Shaft

1994-1990	(4EAT G, 4HAT G)	
Seal (LH)	.....	223543
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	2007N
Repair Sleeve (RH)	.....	KWK99139
1994-1990	(AX4, AXOD)	
Seal	.....	3622S[2]
Repair Sleeve	.....	KWK99169

4-SPEED MANUAL TRANSAXLE**Differential**

1990	(MTX II)(2 pinion)	
Set	.....	SET45[2]
1990	(MTX II)(4 pinion)	
Set	.....	SET37[2]

4-SPEED MANUAL TRANSAXLE**Input Shaft**

1990	(MTX II)(2nd Design)	
Seal	.....	3638
Cone/Cup	.....	LM67049A-LM67010[2]
Repair Sleeve	.....	KWK99112

Output Shaft

1990	(MTX)	
Seal (LH)	.....	3622S[2]
Set (LH)	.....	SET30[2] ^z
Repair Sleeve	.....	KWK99169[2]

Selector Shaft Seal/Man. Shaft

1990	(MTX)	
Seal Viton	.....	710274

5-SPEED MANUAL TRANSAXLE**Differential**

1994-1990	(MTX III)(RWB)(2 pinion)	
Set	.....	SET45[2]
1994-1990	(MTX III)(RWB)(4 pinion)	
Set	.....	SET37[2]

Input Shaft

1994-1990	(MTX III)	
Seal	.....	3638
Cone/Cup	.....	LM67049A-LM67010[2]
Repair Sleeve	.....	KWK99112

Output Shaft

1994-1990	(MTX III)	
Seal	.....	3622S[2]
Set	.....	SET30[2] ^z
Repair Sleeve	.....	KWK99169[2]

Selector Shaft Seal/Man. Shaft

1994-1990	(MTX III)	
Seal Viton	.....	710274

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1990	140/2.3L	
Seal	.....	714075
Repair Sleeve	.....	KWK99177

6 Cylinder

1994-1992	183/3.0L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1990	140/2.3L	
Seal	.....	3772
Seal PTFE H/D (Opt)	.....	5287

^zNon-Cancellable/Non-Returnable

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - AWD - Tempo (cont.)**CRANKSHAFT REAR SEAL****6 Cylinder**

1994-1992	183/3.0L	
Seal	.....	3772
Seal PTFE H/D (Opt)	.....	5287

FORD - REAR DRIVE - Country Squire, Crown Victoria, LTD**FRONT WHEEL****RWD**

2009-2005	(From 2/23/05)	
Hub Unit Bearing	.....	513230[2] ²⁵
2005-2003	(Thru 2/22/05)	
Hub Unit Bearing	.....	513196[2]
2002-1997	(From 4/1/97)	
Hub Unit Bearing	.....	513202[2]
1997-1992	(Thru 3/31/97)	
Hub Unit Bearing	.....	513104[2]
1991-1990		
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET11[2]
Set (Outer)	.....	SET12[2]

REAR WHEEL**RWD**

2009-1990		
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹

REAR AXLE**Differential Rebuild Kit**

2007-1990	(8.5", 8.8" R.G.)	
Kit	.....	DRK311

Differential

2007-1990	(8.5", 8.8" R.G.)	
Set	.....	SET36[2]

Pinion

2008-1990	(7.5", 8.5", 8.8" R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-1992	(AODE, AODEW, 4R70W)	
Seal	.....	710447
Repair Sleeve	.....	KWK99199
1993-1990	(AOT, AOD)	
Seal	.....	331107N
Repair Sleeve	.....	KWK99199

4-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2002-1995	(AODE)	
Seal	.....	4764
1994-1990	(AOT, AOD, AODE)	
Seal	.....	7692S
Seal Kit	.....	5202 ⁶⁴

Selector Shaft Seal/Man. Shaft

2007-1994	(AODE, AODEW, 4R70W)	
Seal	.....	7929S
2005-1990		
Seal	.....	240816
Repair Sleeve	.....	KWK99138

A/C COMPRESSOR

2002-1991	(Nippondenso FX 15)(Axial)	
Ball Bearing	.....	5106WCC[2]
1996-1990	(Nippondenso 6E171)(Axial)	
Ball Bearing	.....	5000KFF[2]
1990	(Ford FS6)(Axial)	
Ball Bearing	.....	5000KFF[2]
1990	(Frigidaire A6)(Axial)	
Ball Bearing	.....	907257[2]

ALTERNATOR

1991-1990	(Motorcraft)	
Ball Bearing (Rear End)	.....	MNJ471S
1991-1990	(Motorcraft)	
Ball Bearing (Drive End)	.....	203FF

POWER STEERING**Input Shaft**

1994-1990		
Seal	.....	471645
Ndle Bearing	.....	FC65753[2]

Pump Shaft

2001-1990		
Seal	.....	8773S

Worm Shaft

2001-1990		
Ball Bearing	.....	201CC[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Bushing Kit²⁵New Item, Check For Availability⁶⁴Seal &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - REAR DRIVE - Country Squire, Crown Victoria, LTD (cont.)**CRANKSHAFT FRONT SEAL****8 Cylinder**

2008-1992	281/4.6L	
Seal	482041N	
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	88187	
1991-1990	(w/o 281/4.6, 292/4.8)	
Seal (Frt Entry)	2692	
Seal (Rr Entry)	2942	
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	88187	

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-1990	281/4.6L, 302/5.0L	
Seal Viton	3909	
Seal PTFE H/D	5277	
Repair Sleeve	KWK99362	

CRANKSHAFT REAR SEAL (cont.)**8 Cylinder (cont.)**

1991-1990	351/5.8L (W)	
Seal Viton	2377	
Seal PTFE H/D	5278	
Repair Sleeve	KWK99372	

FORD - REAR DRIVE - Mustang; incl. Boss, Cobra, GT, Mach I, McLaren, Saleen, Shelby, SVO, SVT, Shelby GT500**FRONT WHEEL****RWD**

2009-2005	(ABS)	
Hub Unit Bearing	HA590017[2]	²⁵
2009-2005	(Non-ABS)	
Hub Unit Bearing	HA590026[2]	²⁵
2004-1994	(ABS, Non-ABS)	
Hub Unit Bearing	513115[2]	
1993-1990	(5.0L)	
Seal (Inner)	9150S[2]	
Set (Inner)	SET5[2]	
Set (Outer)	SET12F[2]	⁵⁹
1993-1990	(2.3L, 3.8L)(Exc. Turbo)	
Seal (Inner)	6815[2]	
Set (Inner)	SET17[2]	
Set (Outer)	SET12[2]	

REAR WHEEL**RWD**

2009-2005		
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹
2004-1999	(Indep. Rr. Susp.)	
Set	SET49[2]	
2004-1990	(Exc. Indep. Rr. Susp.)	
Seal	8660S[2]	
Cylindrical Bearing	5707[2]	
Bearing & Seal Kit	TRP1563TAV[2]	¹⁹

CLUTCH RELEASE**Diaphragm Clutches**

2002-1990	(8 Cyl.)	
Bearing Assy	614014	
1996-1990	(6 Cyl.)	
Bearing Assy	614014	

CLUTCH RELEASE (cont.)**Diaphragm Clutches (cont.)**

1992-1990	4 Cyl. (5 Spd.)	
Bearing Assy	614014	

REAR AXLE**Axle Shaft**

2008-2001	(7.5" R.G.)	
Seal Viton	714569[2]	
Repair Sleeve	KWK99157[2]	
2008-1999	(8.8" R.G.)(Indep. Rr. Susp.)	
Ndle Bearing	FC66998[2]	
Seal	100537[2]	

Differential Rebuild Kit

2007-1990	(7.5" R.G.)	
Kit	DRK315	
2006-1990	(8.8" R.G.)	
Kit	DRK311	

Differential

2006-1990	(8.8" R.G.)	
Set	SET36[2]	
2006-1990	(7.5" R.G.)(6.75" R.G.)	
Cone/Cup	LM501349-LM501314[2]	

Pinion

2009-2007	Shelby GT500	
Seal Viton	3604	
Cone/Cup (Inner)	NP159221-NP254157	
Cone/Cup (Outer)	M88048-M88010	

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Polymer Cage²⁵New Item, Check For Availability⁵⁹O.E.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD - REAR DRIVE - Mustang; incl. Boss, Cobra, GT, Mach I, McLaren, Saleen, Shelby, SVO, SVT, Shelby GT500 (cont.)					

REAR AXLE (cont.)**Pinion (cont.)**

2008-1990	(7.5" R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010
2008-1990	(8.8" R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-1994	(AODEW, 4R70W, 4R75W)	
Seal	.....	710447
Repair Sleeve	.....	KWK99199
2002-1992	(AODE)	
Seal	.....	3404
1997-1990	(A4LD, C3)	
Seal	.....	4143
1993-1990	(AOT, AOD)	
Seal	.....	331107N[2]
Repair Sleeve	.....	KWK99199

Rear Seal/Ext. Housing

2003-1995	(AODE W)	
Seal	.....	4764[2]
2003-1992	(AOD Booted)(AODE)	
Seal	.....	7692S[2]
Seal Kit	.....	5202 ⁶⁴
1997-1990	(A4LD, C3)	
Seal	.....	2655
Repair Sleeve	.....	KWK99138
1991-1990	(AOT, AOD)(long boot)	
Seal	.....	7692S[2]
Seal Kit	.....	5202 ⁶⁴

Selector Shaft Seal/Man. Shaft

2008-1990		
Seal	.....	7929S[2]

CLUTCH**Pilot Bearing**

2002-1996	8 Cyl. 281 (4.6)(SOHC and DOHC)	
Ndle Bearing	.....	FC68329
1995-1990	8 Cyl. 302 (5.0 L)(Prod. from 5/1974 on)	
Ndle Bearing	.....	FC65174
1995-1990	8 Cyl. 351	
Ndle Bearing	.....	FC65662
1993-1990	4 Cyl. 140 (2.3 L)(normally aspirated and Turbo)	
Ndle Bearing	.....	FC65354

CLUTCH**Release Bearing**

2004-1998		
Bearing Assy	.....	614014

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2002-1996	(Warner T45)	
Seal	.....	7412S
Cone/Cup	.....	M88048-M88010[2]
Repair Sleeve	.....	KWK99125
2002-1994	(Warner T5 World Class)	
Seal	.....	7412S
Set	.....	SET5[2]
Repair Sleeve	.....	KWK99125
Ndle Bearing	.....	FA55505[2]
1996-1990	(Tremec 3550)	
Seal	.....	3638
Cone/Cup	.....	355-354A[2]
Repair Sleeve	.....	KWK99112
1993-1990	(Warner T5 World Class)(L4)	
Seal	.....	7412S
Cone/Cup	.....	M88048-M88010[2]
Repair Sleeve	.....	KWK99125
Ndle Bearing	.....	FA55505[2]
1993-1990	(Warner T5 World Class)(V6)	
Seal	.....	7412S
Set	.....	SET5[2]
Repair Sleeve	.....	KWK99125
Ndle Bearing	.....	FA55505[2]

Countershaft

2004-1990	(Warner T5 World Class)	
Cone/Cup (Frt)	.....	LM67048-LM67010BCE[2]
Set (Rr)	.....	SET6[2]
Ndle Bearing Thrust	.....	NTA1423[2]
2002-1996	(Warner T45)	
Set (Frt)	.....	SET6[2]
Set (Rr)	.....	SET6[2]
1996-1990	(Tremec 3550)	
Cone/Cup (Frt)	.....	1380-1328[2]
Cone/Cup (Rr)	.....	1380-1328[2]

Mainshaft Pilot

2002-1996	(Warner T45)	
Set	.....	SET1[2]
2002-1996	(Warner T5 World Class)	
Ndle Bearing	.....	QBR23549[15]
1996-1990	(Tremec 3550)	
Ndle Bearing	.....	QBR23549[17]
1995-1993	(Warner T5 World Class)(Cobra)	
Set	.....	SET1[2]
1995-1993	(Warner T5 World Class)(Exc. Cobra)	
Ndle Bearing	.....	QBR23549[15]
1992-1990	(Warner T5 World Class)	
Ndle Bearing	.....	QBR23549[15]

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD - REAR DRIVE - Mustang; incl. Boss, Cobra, GT, Mach I, McLaren, Saleen, Shelby, SVO, SVT, Shelby GT500 (cont.)					

5-SPEED MANUAL TRANSMISSION

Mainshaft 1st Speed Gear

2002-1990 (Warner T5 World Class)
Ndle Bearing F218255[2]

Mainshaft 2nd Speed Gear

2002-1990 (Warner T5 World Class)
Ndle Bearing F93934[2]

Reverse Idler

2002-1996 (Warner T45)
Ball Bearing 207[2]
1996-1990 (Tremec 3550)
Ndle Bearing C407Q[44]

Rear Output Shaft

2002-1996 (Warner T45)
Seal 710426
Cone/Cup 25572-25520[2]
1996-1990 (Tremec 3550)
Seal 7692S
Seal Kit 5202⁶⁴
Ndle Bearing Thrust FA35688[2]

CAMSHAFT SEAL

4 Cylinder

1993-1990
Seal 2955

CRANKSHAFT FRONT SEAL

4 Cylinder

1993-1990
Seal 2955

6 Cylinder

2004 238/3.9L
Seal 712692
Harmnc Balancer Slvs 88187
2004-1990 232/3.8L
Seal (Frt) 2692
Seal (Rr) 2942
Repair Sleeve KWK99187
Harmnc Balancer Slvs 88187

8 Cylinder

2008-1996 281/4.6L (SOHC)(DOHC),
330/5.4L (DOHC)
Seal 482041N
Repair Sleeve KWK99187
Harmnc Balancer Slvs 88187
1995-1990 255/4.2L, 302/5.0L, 351/5.8L
(W)
Seal (Frt Entry) 2692
Seal (Rr Entry) 2942
Repair Sleeve KWK99187
Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL

4 Cylinder

1993-1990
Seal Viton 3909
Seal PTFE H/D (Opt) 5277
Repair Sleeve KWK99363

6 Cylinder

2008-2005 245/4.0L
Seal Viton 3393
Repair Sleeve KWK99238
2004-1990 232/3.8L from 12/31/82
Seal Viton 3909
Seal PTFE H/D (Opt) 5277
Repair Sleeve KWK99363

8 Cylinder

2008-1990 281/4.6L, 302/5.0L, 330/5.4L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99363
1996-1995 351/5.8L (W)
Seal Viton 2377
Seal PTFE H/D 5278
Repair Sleeve KWK99372

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD - REAR DRIVE - Thunderbird**FRONT WHEEL****RWD****2005-2002**

Hub Unit Bearing HA590213[2]

1997-1991

Hub Unit Bearing 513092[2]

1990 (ABS)

Hub Unit Bearing 513076[2]

1990 (Non-ABS)

Hub Unit Bearing 513077[2]

REAR WHEEL**RWD****2005-2002**

Ball Bearing 511032[2]

1997-1990

Set SET49[2]

REAR AXLE**Axle Shaft****2005-1990 (7.5", 8.8" R.G.)**

Seal Viton 714569[2]

Ndlle Bearing FC66998[2]

Repair Sleeve KWK99157[2]

Differential Rebuild Kit**1997-1990 (8.8" R.G.)**

Kit DRK311

1997-1990 (7.5" R.G.)

Kit DRK315

Differential**2005-2002 (8" R.G.)**

Set SET36[2]

1997-1990 (8.8" R.G.)

Set SET36[2]

1997-1990 (7.5" R.G.)

Cone/Cup LM501349-LM501314[2]

Pinion**2005-2002 (8" R.G.)**

Seal Viton 3604

Cone/Cup (Inner) NP559445-NP945727

Cone/Cup (Outer) M88048-M88010

1997-1990 (7.5" R.G.)

Seal Viton 3604

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

1997-1990 (8.8" R.G.)

Seal Viton 3604

Cone/Cup (Inner) M802048-M802011

Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter****1997-1994 (AODE, AOEW)**

Seal 710447

Repair Sleeve KWK99199

**4-SPEED AUTOMATIC TRANSMISSION
(cont.)****Torque Converter (cont.)****1993-1990 (AOT, AOD)**

Seal 331107N[2]

Repair Sleeve KWK99199

Rear Seal/Ext. Housing**1997-1994 (AODE)**

Seal 7692S[2]

Seal Kit 5202⁶⁴**1993-1990 (AOT, AOD)(long boot)**

Seal 7692S[2]

Seal Kit 5202⁶⁴**Selector Shaft Seal/Man. Shaft****1997-1990**

Seal 7929S

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft****2005-2002**

Seal 7929S

CLUTCH**Pilot Bearing****1995-1990 3.8 6 Cyl.**

Ndlle Bearing FC65174

5-SPEED MANUAL TRANSMISSION**Front Input Shaft****1997-1990 Mazda**

Seal 223012

Repair Sleeve KWK99114

Countershaft**1997-1990 (Mazda M5R2)**

Cylindrical Bearing

(Center) MR1207EL[2]

Ball Bearing (Rr) 304WB[2]

Extension Housing**1995-1990 (Mazda M5R2)**

Seal 710415

A/C COMPRESSOR**1997-1990 (Nippondenso FX 15)(Axial)**

Ball Bearing 5106WCC[2]

1990 (Ford FS6)(Axial)

Ball Bearing 5000KFF[2]

1990 (Nippondenso 6P148)(Axial)

Ball Bearing 5001KFF[2]

1990 (Frigidaire A6)(Axial)

Ball Bearing 907257[2]

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - REAR DRIVE - Thunderbird (cont.)

ALTERNATOR

1995-1994	Mitsubishi 110 Amp.	
	Ball Bearing (Drive End)	303CC
1993-1990	(Motorcraft)	
	Ball Bearing (Drive End)	203FF
1993-1990	(Motorcraft)	
	Ball Bearing (Rear End)	MNJ471S

POWER STEERING

Input Shaft

1993-1990	
Seal	471645
Ndle Bearing	FC65753[2]

Pump Shaft

1997-1990	
Seal	8773S

Worm Shaft

1997-1990	
Ball Bearing	201CC[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

1997-1990	232/3.8L
Seal (Frt)	2692
Seal (Rr)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

8 Cylinder

1997-1994	
Seal	482041N
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187
1993-1990	
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL

6 Cylinder

1997-1990	232/3.8L from 12/31/82
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99363

8 Cylinder

1997-1990	281/4.6L, 302/5.0L
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99363

FORD - Import - Aspire

FRONT WHEEL

FWD

1997-1994	
Seal (Inner)	4990[2]
Set (Inner)	SET11[2]
Seal (Outer)	710323[2]
Set (Outer)	SET11[2]

REAR WHEEL

FWD

1997-1994	
Seal (Inner)	1126S[2]
Set (Inner)	SET4[2]
Set (Outer)	SET1[2]

CLUTCH

Pilot Bearing

1997-1994	
Ball Bearing	202SS

Release Bearing

1997-1994	
Bearing Assy	614127

3-SPEED AUTOMATIC TRANSAXLE

Differential

1997-1994	(ATX)
Bearing Assy	32008XM[2]

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD - Import - Aspire (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Torque Converter**

1997-1994 (ATX)
 Seal 1012N
 Repair Sleeve KWK99177

Output Shaft

1997-1994 (ATX)
 Seal 2007N[2]
 Repair Sleeve KWK99139[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1997-1994 (MTX)
 Set SET13[2]

Input Shaft

1997-1994 (MTX)
 Seal (Frt) 222238
 Repair Sleeve KWK99085
 Ball Bearing (Rr) 304DD[2]

Output Shaft

1997-1994 (MTX)
 Seal (LH) 223543
 Set (LH) SET3[2]
 Repair Sleeve KWK99139
 Seal (RH) 2007N
 Bearing Assy (RH) 32204[2]
 Repair Sleeve KWK99139

Selector Shaft Seal/Man. Shaft

1997-1994 (MTX)
 Seal 221620

CAMSHAFT SEAL**4 Cylinder**

1997-1994 1324cc/1.3L
 Seal 223012
 Repair Sleeve KWK99114

CRANKSHAFT FRONT SEAL**4 Cylinder**

1997-1994 1324cc/1.3L
 Seal 710355
 Repair Sleeve KWK99145

CRANKSHAFT REAR SEAL**4 Cylinder**

1997-1994 1324cc/1.3L
 Seal 228250
 Repair Sleeve KWK99328

FORD - Import - Festiva**FRONT WHEEL****FWD**

1993-1990
 Seal (Inner) 4990[2]
 Set (Inner) SET11[2]
 Seal (Outer) 710323[2]
 Set (Outer) SET11[2]

REAR WHEEL**FWD**

1993-1990
 Seal (Inner) 1126S[2]
 Set (Inner) SET4[2]
 Set (Outer) SET1[2]

CLUTCH**Pilot Bearing**

1993-1990
 Ball Bearing 202SS

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD - Import - Festiva (cont.)**CLUTCH****Release Bearing**

1993-1990
 Bearing Assy 614127

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1993-1990 (ATX)
 Bearing Assy 32008XM[2]

Torque Converter

1993-1990 (ATX)
 Seal 1012N
 Repair Sleeve KWK99177

Output Shaft

1993-1990 (ATX)
 Seal 2007N[2]
 Repair Sleeve KWK99139[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1993-1990 (MTX)
 Set SET13[2]

Input Shaft

1993-1990 (MTX)
 Seal (Frt) 222238
 Repair Sleeve KWK99085
 Ball Bearing (Rr) 304DD[2]

Output Shaft

1993-1990 (MTX)
 Seal (LH) 223543
 Set (LH) SET3[2]
 Repair Sleeve KWK99139
 Seal (RH) 2007N
 Bearing Assy (RH) 32204[2]
 Repair Sleeve KWK99139

Selector Shaft Seal/Man. Shaft

1993-1990 (MTX)
 Seal 221620

CAMSHAFT SEAL**4 Cylinder**

1993-1990 1324cc/1.3L
 Seal 223012
 Repair Sleeve KWK99114

CRANKSHAFT FRONT SEAL**4 Cylinder**

1993-1990 1324cc/1.3L
 Seal 223012
 Repair Sleeve KWK99114

CRANKSHAFT REAR SEAL**4 Cylinder**

1993-1990 1324cc/1.3L
 Seal 228250
 Repair Sleeve KWK99328

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger					

FRONT WHEEL**RWD**

2009-2007	Explorer Sport Trac	
Hub Unit Bearing	.....	HA590156[2] ²⁵
2009-2006	Explorer	
Hub Unit Bearing	.....	HA590156[2] ²⁵
2009-1995	Ranger	
Seal (Inner)	.....	9150S[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET2[2]
2005-2002	Explorer	
Hub Unit Bearing (ABS Cable Included)	.....	SP470200[2]
Hub Unit Bearing	.....	SP470201[2] ⁰²
2005-2001	Explorer Sport Trac	
Seal (Inner)	.....	9150S[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET2[2]
2001-1995	Explorer	
Seal (Inner)	.....	9150S[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET2[2]
1997-1990	Aerostar	
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]
1994-1991	Explorer	
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]
1994-1990	Ranger	
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]

4WD

2009-2007	Explorer Sport Trac	
Hub Unit Bearing	.....	HA590156[2] ²⁵
2009-2006	Explorer	
Hub Unit Bearing	.....	HA590156[2] ²⁵
2009-2003	Ranger (4 Whl. ABS)	
Hub Unit Bearing	.....	SP450202[2]
2005-2003	Explorer Sport Trac	
Hub Unit Bearing	.....	SP450202[2]
2005-2002	Explorer (4 Whl. ABS)	
Hub Unit Bearing (ABS Cable Included)	.....	SP470200[2]
Hub Unit Bearing	.....	SP470201[2] ⁰²
2002-2001	Explorer Sport Trac	
Hub Unit Bearing	.....	SP450200[2] ⁴⁰
2002-2000	Ranger (ABS)(From 6/22/2000)	
Hub Unit Bearing	.....	SP450201[2] ⁴⁰
2001-1995	Explorer	
Hub Unit Bearing	.....	SP450200[2] ⁴⁰
2000	Ranger (2 Whl. ABS)(From 6/22/2000)	
Hub Unit Bearing	.....	515014[2]
2000-1998	Ranger (2 Whl. ABS)(To 6/21/2000)	
Hub Unit Bearing	.....	515026[2]

FRONT WHEEL (cont.)**4WD (cont.)**

2000-1998	Ranger (4 Whl. ABS)(To 6/21/2000)	
Hub Unit Bearing	.....	515027[2]
1997-1990	Aerostar	
Hub Unit Bearing	.....	515000[2]
1997-1990	Bronco II, Ranger (Dana/Spicer 28 Axle)	
Seal (Inner)	.....	8312S[2]
Set (Inner)	.....	SET45[2]
Set (Outer)	.....	SET45[2]
1997-1990	Bronco II, Ranger (Dana/Spicer 35 Axle)	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET37[2]
Set (Outer)	.....	SET37[2]
1994-1991	Explorer	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET37[2]
Set (Outer)	.....	SET37[2]

REAR WHEEL**RWD**

2009-2007	Explorer Sport Trac	
Hub Unit Bearing	.....	HA590259K[2] ⁶⁸
Bearing Assy	.....	516008[2] ²⁵
2009-2002	Explorer (Indep. Rr. Susp.)	
Hub Unit Bearing	.....	HA590259K[2] ⁶⁸
Bearing Assy (Opt)	.....	516008[2] ²⁵
2009-1990	Ranger (7.5" R.G.)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2005-2001	Explorer, Explorer Sport Trac (Exc. Indep. Rr. Susp.)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
2005-1990	Ranger (8.8" R.G.)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
2002-1998	Ranger (Elec.)	
Set	.....	SET49[2]
2001-1991	Explorer (Exc. Indep. Rr. Susp.)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
1997-1990	Aerostar (8.8" R.G.)	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
1997-1990	Aerostar (7.5" R.G.)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
1990	Aerostar (Dana/Spicer 30 Axle)	
Seal	.....	2146[2]
Set	.....	SET9[2]

⁰²Does Not Come w/ Sensor Cable.
Check For Availability ⁴⁰5 Stud.

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
⁶⁸Kit = Flg, Brg, & Snap Ring

²⁵New Item,

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

1990	Bronco II
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

4WD

2009-2007	Explorer Sport Trac
Hub Unit Bearing	HA590259K[2] ⁶⁸
Bearing Assy	516008[2] ²⁵
2009-2002	Explorer (Indep. Rr. Susp.)
Hub Unit Bearing	HA590259K[2] ⁶⁸
Bearing Assy (Opt)	516008[2] ²⁵
2009-1990	Ranger (7.5" R.G.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
2005-2001	Explorer, Explorer Sport Trac (Exc. Indep. Rr. Susp.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2005-1990	Ranger (8.8" R.G.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2002-1998	Ranger (Elec.)
Set	SET49[2]
2001-1991	Explorer (Exc. Indep. Rr. Susp.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
1997-1990	Aerostar (8.8" R.G.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
1990	Aerostar (Dana/Spicer 30 Axle)
Seal	2146[2]
Set	SET9[2]
1990	Bronco II
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2008-2002	(8.8" R.G.)(Indep. Frt. Susp.)
Ndle Bearing (Inner)	HK4012[2]
Ndle Bearing (Outer)	FC66998[2]
2001-1995	(Dana/Spicer 35 Axle)
Seal Viton (LH)	710429
Seal Viton (RH)	710428
1997-1990	(Dana/Spicer 35IFS Axle)
Seal (LH)	710043
Seal (RH)	470672
Cylindrical Bearing (RH)	5707[2]
1997-1990	(Dana/Spicer 28IFS Axle)
Seal (LH)	3543
Seal (RH)	710065

Differential Rebuild Kit

2007-1990	(Dana/Spicer 35 Axle)
Kit	DRK335
2003-2001	Explorer (Dana/Spicer Super 30 axle)
Kit	DRK334B
1999-1990	(Dana/Spicer 28 Axle)
Kit	DRK333

Differential

2007-1990	(Dana/Spicer 35 Axle)
Cone/Cup	LM501349-LM501314[2]
2003-2001	Explorer (Dana/Spicer Super 30 axle)
Cone/Cup	LM501349-LM501314[2]
1999-1990	(Dana/Spicer 28 Axle)
Cone/Cup	LM29749-LM29710[2]

Pinion

2008-2001	Explorer (Dana/Spicer Super 30 axle)
Seal Viton	714675
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	M86649-M86610
2008-2001	Ranger
Seal Viton (Outer)	714675
Cone/Cup (Inner)	HM88648-HM88610
Cone/Cup (Outer)	M86649-M86610
1999-1990	
Seal (Dana/Spicer 28 Axle)	4244
Cone/Cup (Inner) (Dana/Spicer 28 Axle)	M88048-M88010
Seal Viton (Dana/Spice 35 Axle)	714675
Cone/Cup (Inner) (Dana/Spicer 35 Axle)	HM88648-HM88610
Cone/Cup (Outer) (All)	M86649-M86610

Spindle Kit

1997-1990	(Dana/Spicer 35IFS Axle)
Bearing & Seal Kit	SBK4[2] ³⁶
1997-1990	(Dana/Spicer 28IFS Axle)
Bearing & Seal Kit	SBK2[2] ³⁴

Spindle

1997-1993	(Dana/Spicer 28IFS, 35IFS axle)
Seal (Inner)	710453[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722108[2]
Ndle Bearing Thrust	NTA1625[2]
1997-1990	(Dana/Spicer 35IFS Axle)
Seal (Inner)	722109[2]
Ndle Bearing	B2110[2]
Seal (Outer)	722108
1992-1990	(Dana/Spicer 28IFS Axle)
Seal (Inner)	340835[2]
Ndle Bearing (Inner)	SCE188[2]
Seal (Outer)	8314S[2]
Ndle Bearing Thrust (Outer)	NTA1625[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
Brg SCE148, Seal 8314S
³⁶Opt. Kit = Brg B2110, Seals 722108 & 722109, & Ring Brg, & Snap Ring

²⁵New Item, Check For Availability

³⁴Opt. Kit =
⁶⁸Kit = Flg,

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger (cont.)					

REAR AXLE**Axle Shaft**

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Ndle Bearing	.....	FC66998[2]
Seal	.....	100537[2]

Differential Rebuild Kit

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Kit	.....	DRK311A ²⁵
2008-1990	(Dana/Spicer 35 Axle)	
Kit	.....	DRK335
2008-1990	(7.5" R.G.)	
Kit	.....	DRK315
2003-1990	(Dana/Spicer 28 Axle)	
Kit	.....	DRK333
2001-1990	(8.8" R.G.)	
Kit	.....	DRK311

Differential

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Cone/Cup	.....	LM603049-LM603019[2]
2008-1990	(7.5 R.G.)(Dana/Spicer 30 Axle)	
Cone/Cup	.....	LM501349-LM501314[2]
2008-1990	(8.8" R.G.)	
Set	.....	SET36[2]

Pinion

2008-1990	(7.5", 8.8", 8.8" IRS R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010
Repair Sleeve	.....	KWK99181

TRANSFER CASE REBUILD KIT

2003-2001		
Kit (Borg Warner 1354)	.....	TCRK1354
2000-1998		
Kit (Borg Warner 4404)	.....	TCRK4404
Kit (Borg Warner 4405)	.....	TCRK4405
Kit (Borg Warner 1354)	.....	TCRK1354
1997-1996		
Kit (Borg Warner 4405)	.....	TCRK4405
Kit (Borg Warner 4404)	.....	TCRK4404
Kit (Dana/Spicer 28)	.....	TCRK28
1995-1991		
Kit (Dana/Spicer 28)	.....	TCRK28
Kit (Borg Warner 1354)	.....	TCRK1354
Kit (Borg Warner 4404)	.....	TCRK4404
Kit (Borg Warner 4405)	.....	TCRK4405

TRANSFER CASE REBUILD KIT (cont.)

1990		
Kit (Borg Warner 1359)	.....	TCRK1359
Kit (Borg Warner 1354)	.....	TCRK1354
Kit (Dana/Spicer 28)	.....	TCRK28

TRANSFER CASE**Input Shaft**

2008-1993		
Ball Bearing (Warner 4405)	.....	209LO
Seal (Warner 1354, 4405)	.....	710403
Ball Bearing (Warner 1354)	.....	109L
Repair Sleeve (Warner 1354, 4405)	.....	KWK99166
Ndle Bearing (Pilot) (Warner 1354, 4405)	.....	M18161
2008-1990	(Warner 1354)	
Seal (Pilot)	.....	4143
Ndle Bearing (Pilot)	.....	M18161
Seal	.....	710403
Ball Bearing	.....	109L
2001-1996	(Warner 4403, 4404)(w/o Boot)	
Seal	.....	3946
Repair Sleeve	.....	KWK99187
1998-1996	(Warner 4404)(booted)	
Seal	.....	4333N
1997-1990	(Spicer TC28)	
Seal	.....	710389
Ball Bearing	.....	209D
Repair Sleeve	.....	KWK99174
Ndle Bearing (Pilot)	.....	B2110
1990	(Warner 1350, 1359)	
Seal	.....	710062
Ball Bearing	.....	109FFL
Repair Sleeve	.....	KWK99175
Ndle Bearing (Pilot)	.....	M18161

Front Output Shaft

2008-1996	(Warner 4405, 4411, 4412)	
Ball Bearing (Inner)	.....	306H
Seal (Outer)	.....	710403
Ball Bearing (Outer)	.....	206WB
Seal	.....	KWK99166
2008-1990	(Warner 1354, 4410)	
Seal	.....	710403
Ball Bearing	.....	206WB
Repair Sleeve	.....	KWK99166
2001-1996	(Warner 4403, 4404)	
Ball Bearing (Inner)	.....	206WB
Seal (Outer)	.....	710403
Ball Bearing (Outer)	.....	207
Repair Sleeve	.....	KWK99166

²⁵New Item, Check For Availability

FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger (cont.)**TRANSFER CASE (cont.)****Front Output Shaft (cont.)**

2001-1996	(Warner 4405)	
Ball Bearing (Inner)	.....	306H
Seal (Outer)	.....	710403
Ball Bearing (Outer)	.....	206WB
Repair Sleeve	.....	KWK99166
Ndle Bearing (Pilot)	.....	FC67945 ¹⁶
1997-1990	(Spicer TC28)	
Seal	.....	710388
Ball Bearing	.....	209BB
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B2110
1992-1990	(Warner 1354)	
Seal	.....	4143
Ball Bearing	.....	206WB

Rear Output Shaft

2008-2002	(Warner 4410)	
Seal	.....	710403
Ball Bearing	.....	208SL
Repair Sleeve	.....	KWK99166
2008-1996	(Warner 4405, 4411, 4412)	
Seal	.....	710403
Ball Bearing	.....	306H
Repair Sleeve	.....	KWK99166
2008-1993	(Warner 1354)	
Seal	.....	710403
Ball Bearing	.....	206WB
Repair Sleeve	.....	KWK99166
2001-1999	(Warner 4403)	
Seal	.....	710403
Ball Bearing	.....	208
Repair Sleeve	.....	KWK99166
2001-1996	(Warner 4405)	
Seal	.....	710403
Ball Bearing	.....	306H
Repair Sleeve	.....	KWK99166
1998-1996	(Warner 4404)	
Ball Bearing (Inner)	.....	N1061
Seal (Outer)	.....	710403
Ball Bearing (Outer)	.....	208SL
Repair Sleeve	.....	KWK99166
1997-1990	(Spicer TC28)	
Seal	.....	710441
Ball Bearing	.....	209BB
Ndle Bearing (Pilot)	.....	B2110
1992-1990	(Warner 1350, 1354)	
Seal	.....	4143
Ball Bearing	.....	206WB
Ndle Bearing (Pilot)	.....	JH1612
1990	(Warner 1359)	
Seal	.....	4143
Ball Bearing	.....	206WB
Repair Sleeve	.....	KWK99175

Selector Shaft Seal/Man. Shaft

2008-1990	
Seal	330385

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2001-1996	(4R70W)	
Seal	.....	3404
1996-1990	(A4LD, 4R44E, 4R55E)	
Seal	.....	2658

Rear Seal/Ext. Housing

2002-1990	(A4LD, 4R44E, 4R55E)	
Seal	.....	2655
2001-1996	(4R70W)	
Seal	.....	4765

Selector Shaft Seal/Man. Shaft

2008-1990	
Seal	7929S

5-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2008-2002	(5R55W)(Non-Booted)	
Seal	.....	4764
2008-1997	(5R44E, 5R55E)	
Seal	.....	2655
2008-1996	(5R55S, 5R55W)(Booted)	
Seal	.....	4765

Selector Shaft Seal/Man. Shaft

2008-1997	(5R44E, 5R55E, 5R55S, 5R55W)	
Seal	.....	7929S

6- SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2006	(6R60)	
Seal	.....	710484

Rear Seal/Ext. Housing

2008-2006	(6R60)(2WD)	
Seal	.....	710487
2008-2006	(6R60)(4WD)	
Seal	.....	710486

CLUTCH**Pilot Bearing**

2002-1990	4 Cyl. (w/o Diesel)	
Ndle Bearing	.....	FC65354
2001-1990	6 Cyl. 3.0	
Ndle Bearing	.....	FC65354
1998-1992	6 Cyl. 2.9	
Ndle Bearing	.....	F33126
1998-1992	6 Cyl. 4.0	
Ndle Bearing	.....	F33126
1991-1990	6 Cyl. 4.0	
Ndle Bearing	.....	F33126
1991-1990	6 Cyl. 2.8, 2.9 (Mazda trans)	
Ndle Bearing	.....	F33126

¹⁶Obsolete

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger (cont.)					

CLUTCH (cont.)**Pilot Bearing (cont.)**

1991-1990	6 Cyl. 2.8, 2.9 (Mitsubishi trans)	
Bushing		PB52

Release Bearing

2001-1993	(Hyd.piston type)	
Bearing Assy		614169
1992-1990	(Hyd.piston type)	
Bearing Assy		614061

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2002-1990	(FM 146)	
Kit		TRK50
2002-1990	(M5R1)	
Kit		TRK247
2002-1990	(FM 145)	
Kit		TRK50

Front Input Shaft

2002-1990	(Mazda M5R1)	
Seal		1990
Repair Sleeve		KWK99106
1991-1990	Mitsubishi	
Seal		223014
Repair Sleeve		KWK99114

Countershaft

2004-1991	Mazda	
Ball Bearing (Rr)		304WB[2]
1991-1990	Mitsubishi	
Cone/Cup (Rr)		XAA30205-YAA30205[2]
Cone/Cup (Center)		XAA30205-YAA30205[2]

Rear Output Shaft

2002-1990	(Mazda M5R1)(2WD)	
Seal		7692S
2002-1990	(Mazda M5R1)(4WD)	
Seal		1981
1991-1990	Mitsubishi	
Seal		223608
Ball Bearing		206L[2]

DRIVESHAFT SUPPORT

1997-1990	Ranger (Spicer 1280)(1.1811" 30mm Brg. I.D.)	
Hanger Bearing Assy		HBD206FF[2]

AUXILIARY SHAFT**4 Cylinder**

2001-1990	122/2.0, 140/2.3, 150/2.5	
Seal		2955

CAMSHAFT SEAL**4 Cylinder**

2000-1990	122/2.0, 140/2.3, 150/2.5	
Seal		2955

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-2001	140/2.3L (DOHC)	
Seal		3771
Repair Sleeve		KWK99139
2001-1990	122/2.0L, 140/2.3L, 150/2.5L	
Seal		2955

6 Cylinder

2008-1990	183/3.0L	
Seal (Frt Entry)		2692
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187
2004-1990	171/2.8L, 177/2.9, 244/4.0L	
Seal Viton		2012V
Repair Sleeve		KWK99166

8 Cylinder

2008-2002	281/4.6L	
Seal		482041N
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187
2001-1996	302/5.0L	
Seal (Frt)		2692
Seal (Rr Entry)		2942
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187

CRANKSHAFT REAR SEAL**4 Cylinder**

2003-1990	122/2.0L, 140/2.3L, 150/2.5L	
Seal Viton		3909
Seal PTFE H/D		5277
Repair Sleeve		KWK99363

6 Cylinder

2008-1990	182/3.0L (OHV)	
Seal		3772
Seal PTFE H/D (Opt)		5287
2008-1990	171/2.8L, 177/2.9, 245/4.0L	
Seal Viton		3393
Seal PTFE H/D (Opt)		5288
Repair Sleeve		KWK99238
2002-1995	181/3.0L (DOHC)	
Seal Viton		3909
Seal PTFE H/D (Opt)		5277
Repair Sleeve		KWK99363

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - Lt Truck, SUV - Aerostar, Bronco II, Explorer, Explorer Sport Trac, Ranger (cont.)
CRANKSHAFT REAR SEAL
8 Cylinder
2008-2002 281/4.6L

Seal Viton 3909

Seal PTFE H/D 5277

Repair Sleeve KWK99362

2001-1996 302/5.0L

Seal Viton 3909

Seal PTFE H/D 5277

Repair Sleeve KWK99363

FORD TRUCK - Lt Truck, SUV - Edge
FRONT WHEEL
FWD
2009-2007

Ball Bearing 510063[2]

AWD
2009-2007

Ball Bearing 510063[2]

REAR WHEEL
FWD
2009

Hub Unit Bearing HA590335[2]

2008-2007

 Hub Unit Bearing HA590180[2]²⁵
AWD
2009-2007

 Hub Unit Bearing HA590183[2]²⁵
CRANKSHAFT FRONT SEAL
6 Cylinder
2008-2007 3496cc/3.5L

Seal 482041N

Repair Sleeve KWK99187

FORD TRUCK - Lt Truck, SUV - Escape, Escape Hybrid
FRONT WHEEL
FWD
2009-2001 Escape, Escape Hybrid

 Hub Unit Bearing HA590286K[2]⁶⁷

 Ball Bearing 510072[2]²⁵
4WD
2009-2001 Escape, Escape Hybrid

 Hub Unit Bearing HA590286K[2]⁶⁷

 Ball Bearing 510072[2]²⁵
REAR WHEEL
FWD
2009-2001 Escape, Escape Hybrid

Ball Bearing 510029[2]

REAR WHEEL
4WD
2009-2001 Escape, Escape Hybrid

Ball Bearing 510029[2]

4WD FRONT AXLE
Axle Shaft
2005-2001

Seal 3622S[2]

REAR AXLE
Axle Shaft
2008-2001

Seal Viton 710429[2]

²⁵New Item, Check For Availability

⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Lt Truck, SUV - Escape, Escape Hybrid (cont.)					

REAR AXLE**Differential**

2008-2001

Cone/Cup LM29749-LM29710[2]

Pinion

2008-2001 (Spicer 28)(6.85" R.G.)

Seal 100552

Cone/Cup (Inner) M86649-M86610

Cone/Cup (Outer) M88048-M88010

TRANSFER CASE**Rear Output Shaft**

2008-2001

Seal Viton 710429

CLUTCH - 4 CYLINDER**Pilot Bearing**

2004-2001 2.0L

Ndlle Bearing FC65354

CLUTCH**Release Bearing**

2006-2001

Bearing Assy 614079

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2004-2001 2.0L

Seal 342517

Repair Sleeve KWK99101

5-SPEED MANUAL TRANSAXLE**Differential**

2004-2001

Seal 2007N[2]

Repair Sleeve KWK99139

Bearing Assy 32008XM[2]

Output Shaft

2004-2001

Bearing Assy (Rr) 513185[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004-2001 121/2.0L (DOHC)

Seal 3771

Repair Sleeve KWK99139

6 Cylinder

2008-2001 181/3.0L

Seal 482041N

Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**4 Cylinder**

2004-2001 121/2.0L (DOHC)

Seal 3772

Seal PTFE H/D (Opt) 5287

6 Cylinder

2008-2001 182/3.0L

Seal Viton 3909

Seal PTFE H/D 5277

Repair Sleeve KWK99362

FORD TRUCK - Lt Truck, SUV - Flex**FRONT WHEEL****FWD**

2009

Hub Unit Bearing HA590261[2]²⁵**FRONT WHEEL****AWD**

2009

Hub Unit Bearing HA590261[2]²⁵²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - Lt Truck, SUV - Flex (cont.)**REAR WHEEL****FWD****2009**Hub Unit Bearing HA590261[2] ²⁵**AWD****2009**Hub Unit Bearing HA590261[2] ²⁵**FORD - Minivan - Freestar, Windstar****FRONT WHEEL****FWD****2007-2004 (ABS)**Hub Unit Bearing (LH) HA590024[2] ²⁵**2007-2004 (ABS)**Hub Unit Bearing (RH) HA590025[2] ²⁵**2003-1999**

Hub Unit Bearing 513156[2]

1998-1995

Set SET49[2]

REAR WHEEL**FWD****2007-2004 (ABS)**Hub Unit Bearing (LH) HA590021 ⁹⁴Hub Unit Bearing (RH) HA590022 ⁸³Hub Unit Bearing (RH) HA590021[2] ⁹⁴**2003-1997 (From 8/4/97)**

Hub Unit Bearing 512149[2]

1997-1995

Seal (Inner) 6815[2]

Set (Inner) SET6[2]

Set (Outer) SET12F[2] ⁵⁹**4-SPEED AUTOMATIC TRANSAXLE****Differential****2001-1995**

Ball Bearing 208[2]

Torque Converter / Frt Pump**2004-2001 (AF50N/AX4N)**

Seal 4189H

2000-1995 (AXODE, AX4S)

Seal 4189H

Output Shaft**2007-2001 (AF50N/AX4N)**

Seal 3622S[2]

Repair Sleeve KWK99169[2]

2000-1995 (AXODE, AX4S)

Seal 3622S[2]

Repair Sleeve KWK99169[2]

CRANKSHAFT FRONT SEAL**6 Cylinder****2007-2004 238/3.9L, 256/4.2L**

Seal (Frt) 2692

Repair Sleeve KWK99187

2003-1995 232/3.8L

Seal (Frt) 2692

Seal (Rr) 2942

Repair Sleeve KWK99187

Harmnc Balancer Slvs 88187

2000-1995 183/3.0L

Seal (Frt) 2692

Seal (Rr) 2942

Repair Sleeve KWK99187

Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL**6 Cylinder****2006-2004 239/3.9L, 256/4.2L**

Seal Viton 3909

Repair Sleeve KWK99362

2003-1995 232/3.8L

Seal Viton 3909

Seal PTFE H/D (Opt) 5277

Repair Sleeve KWK99363

2000-1995 182/3.0L

Seal 3772

Seal PTFE H/D (Opt) 5287

²⁵New Item, Check For Availability
⁹⁴HA590021 Will Service Both Sides.

⁵⁹O.E. Polymer Cage⁸³Deplete Inventory

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - Full Size SUV - Bronco - Full-Size					

FRONT WHEEL**4WD****1996-1995**

Seal (Inner)	4250[2]
Set (Inner)	SET37[2]
Set (Outer)	SET45[2]

1994-1990 (Auto Locking Hub)

Seal (Inner)	4250[2]
Set (Inner)	SET37[2]
Set (Outer)	SET45[2]

1994-1990 (Man. Locking Hub)

Seal (Inner)	710091[2]
Set (Inner)	SET38[2]
Set (Outer)	SET45[2]

REAR WHEEL**4WD****1996-1990 (8.8" R.G.)(Sterling Axle)**

Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹

4WD FRONT AXLE**Differential Rebuild Kit****1996-1990**

Kit	DRK339B

Differential**1996-1990**

Seal (Dana/Spicer 44 Axle)	2300[2]
Cone/Cup	25590-25523[2]

Pinion**1996-1990**

Seal	5778
Cone/Cup (Inner)	31594-31520
Cone/Cup (Outer)	02872-02820

Spindle Kit**1996-1990**

Bearing & Seal Kit	SBK4[2] ³⁶

Spindle**1996-1993 (Dana/Spicer 28IFS, 35IFS axle)**

Seal (Inner)	710453[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722108[2]
Ndle Bearing Thrust	NTA1625[2]

1992-1990

Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

REAR AXLE**Differential Rebuild Kit****1997-1990 (8.8" R.G.)**

Kit	DRK311

Differential**1996-1990 (8.8" R.G.)**

Set	SET36[2]

Pinion**1996-1990**

Seal Viton (8.8" R.G.)	3604
Seal (9" R.G.)	7044NA
Cone/Cup (Inner) (8.8" R.G.)	M802048-M802011
Cone/Cup (Inner) (9" R.G.)	M88048-M88010
Cone/Cup (Outer) (8.8" R.G.)	M88048-M88010
Cone/Cup (Outer) (9" R.G.)	M88048-M88010

TRANSFER CASE REBUILD KIT**1996-1990 (Warner 1356)**

Kit	TCRK1356

1991-1990 (Warner 1345)

Kit	TCRK1345

TRANSFER CASE**Input Shaft****1996 (Warner 4406)(Booted)**

Seal	4333N
Ball Bearing	211TB
Ndle Bearing (Pilot)	BK3026

1996 (Warner 4406)(w/o Boot)

Seal	3946
Ball Bearing	211TB
Seal	KWK99187

1996-1990 (Warner 1356)

Seal	714503
Ball Bearing	110CB
Ndle Bearing (Pilot)	BK3026

1990 (Warner 1345)

Seal	710062
Repair Sleeve	KWK99175

Front Output Shaft**1996 (Warner 4406)**

Seal	4333N
Ball Bearing	208

1996-1990 (Warner 1356)

Seal	714503
Ball Bearing	110CB
Ndle Bearing (Pilot)	BK3026

1990 (Warner 1345)

Seal	710062
Ball Bearing	207
Repair Sleeve	KWK99187

Rear Output Shaft**1996 (Warner 4406, 4416)**

Seal	4503N
Ball Bearing	207

1996-1990 (Warner 1356)(slip yoke)

Seal	4503N
Ball Bearing	207

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Ring³⁶Opt. Kit = Brg B2110, Seals 722108 & 722109, &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - Full Size SUV - Bronco - Full-Size (cont.)**TRANSFER CASE (cont.)****Rear Output Shaft (cont.)**

1996-1990	(Warner)(fixed yoke)	
Seal	4333N	
Ball Bearing	207	
1990	(Warner 1345)	
Seal	3946	
Ball Bearing	207	
Repair Sleeve	KWK99187	
Ndle Bearing (Pilot)	B2812	

Selector Shaft Seal/Man. Shaft

1996-1990	(Warner 1356)	
Seal	330385	

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990	(C4, C5, C6)	
Seal	331107N	
Repair Sleeve	KWK99199	

Rear Seal/Ext. Housing

1990	(C6)(3.066" O.D.)	
Seal	410308	

Selector Shaft Seal/Man. Shaft

1990	(C6)	
Seal	7929S	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1996-1990	(AODE, E4OD)	
Seal	3404	
1993-1990	(AOT, AOD)	
Seal	331107N	
Repair Sleeve	KWK99199	

Rear Seal/Ext. Housing

1996-1994	(AODE)	
Seal	4765	
1996-1990	(E4OD)	
Seal	7300S	
Seal Kit	5203 ⁶⁴	
1993-1990	(AOT, AOD)(long boot)	
Seal	7692S	
Seal Kit	5202 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1996-1990		
Seal	7929S	

CLUTCH**Pilot Bearing**

1996-1990		
Ndle Bearing	FC65662	

CLUTCH**Release Bearing**

1996-1993	(5 Spd.)(Hyd. piston type)	
Bearing Assy	614169	
1992-1990	(5 Spd.)(Hyd. piston type)	
Bearing Assy	614061	
1992-1990	(4 Spd.)	
Bearing Assy	614014[2]	

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1993-1990	(Warner T18)	
Seal	7412S	
Ball Bearing	308LTB[2]	
Repair Sleeve	KWK99125	

Rear Output Shaft

1993-1990	(Warner T18)(28 spline)	
Seal	7692S	
Ball Bearing	308LI[2]	
Seal Kit	5202 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1990		
Seal	313156	

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

1996-1990	(Mazda M5R2)	
Kit	TRK248	

Front Input Shaft

1996-1992	(ZF S5 42)	
Seal Viton	713771	
Cone/Cup	28580-28521[2]	
Repair Sleeve	KWK99139	
1996-1990	Mazda	
Seal	223012	
Repair Sleeve	KWK99114	

Front Input Shaft Pocket

1996-1992	(ZF S5 42)	
Cone	JH13349[2]	

Countershaft

1996-1992	(ZF S5 42)	
Cone/Cup	2580-2520[2]	

Rear Output Shaft

1996-1992	(ZF S5 42 application)(4WD)	
Seal	225010	
Cone/Cup	J28573-28521[2]	
1996-1992	(ZF S5 42)(4WD)	
Seal	1217	
Cone/Cup	J28573-28521[2]	
1996-1992	Mazda	
Seal	710415	

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - Full Size SUV - Bronco - Full-Size (cont.)**DRIVESHAFT SUPPORT**

1996-1990	(Spicer 1280 1310)(1.3780" Brg. I.D.)(slip yoke style)
Ball Bearing	88107[2]
Hanger Bearing Assy	HB88107A[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1992-1990	300/4.9L
Seal (Frt)	2692
Seal (Rr)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

8 Cylinder

1996-1990	351/5.8L
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187
1996-1990	302/5.0L
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL**6 Cylinder**

1992-1990	300/4.9L
Seal Viton	2377
Seal PTFE H/D	5278
Repair Sleeve	KWK99372

CRANKSHAFT REAR SEAL**8 Cylinder**

1996-1990	302/5.0L From 1/1/83
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99363
1996-1990	351/5.8L (W) From 7/10/83
Seal Viton	2377
Seal PTFE H/D	5278
Repair Sleeve	KWK99372

FORD TRUCK - Full Size SUV - Excursion**FRONT WHEEL****RWD**

2005-2000	
Seal (Inner)	4160[2]
Set (Inner)	SET47[2]
Cone/Cup (Outer)	15101-15245[2]

4WD

2005-2000	(Coarse Thread Wheel Studs)
Hub Unit Bearing	515020[2]
2005-2000	(Fine Thread Wheel Studs)
Hub Unit Bearing	SP580205[2] ²⁵

REAR WHEEL**RWD**

2005-2000	
Seal (Inner)	370247A[2] ⁸⁶
Cone/Cup (Inner)	NP114036-NP064306[2]
Set (Outer)	SET38[2]

FRONT AXLE**Steering Knuckle**

2004-2000	
Seal	710493[2] ²⁵

4WD FRONT AXLE**Axle Shaft**

2004-2000	
Seal (Outer)	710413[2]
Ndle Bearing	B2110[2]
2004-2000	
Seal (Inner)	710492[2] ²⁵

Differential Rebuild Kit

2005-2000	(Dana/Spicer 50)
Kit	DRK336A

²⁵New Item, Check For Availability⁸⁶Use RD247 to install seal number 370247A

FORD TRUCK - Full Size SUV - Excursion (cont.)**4WD FRONT AXLE****Differential**

2005-2000 (Dana/Spicer 50)
Cone/Cup JLM104948-LM104911A[2]

Pinion

2005-2000 (Dana/Spicer 50)
Seal 5778
Cone/Cup (Inner) HM88649-HM88610
Cone/Cup (Outer) 02872-02820
Repair Sleeve KWK99155

REAR AXLE**Differential Rebuild Kit**

2005-2000 (10.5" R.G.)
Kit DRK317

Differential

2005-2000 (10.5" R.G.)
Cone/Cup 469-453X[2]

Pinion

2005-2000 (10.5" R.G.)
Seal Viton 4278
Cone/Cup (Inner) NP504493-NP949481
Cone/Cup (Outer) HM89443-HM89411
Repair Sleeve KWK99181

TRANSFER CASE REBUILD KIT

2003-2000 (New Process 273)
Kit TCRK271

TRANSFER CASE**Input Shaft**

2003-2000 (New Process 273)
Ball Bearing 211TB[2]

Front Output Shaft

2003-2000 (New Process 273)
Ball Bearing 111TB[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-2000 (4R100)
Seal 3404

Rear Seal/Ext. Housing

2003-2000 (4R100)
Seal 100086

Selector Shaft Seal/Man. Shaft

2005-2000
Seal 7929S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2005-2000 330/5.4L
Seal 482041N
Repair Sleeve KWK99187
Harmnc Balancer Slvs 88187
2003-2000 446/7.3 (Diesel)
Seal 5066²⁶

10 Cylinder

2005-2000 415/6.8L
Seal 482041N
Repair Sleeve KWK99187
Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL**8 Cylinder**

2005-2000 330/5.4L (SOHC)
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99363
2003-2000 446/7.3 (Diesel)
Seal 5723

10 Cylinder

2005-2000 415/6.8L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99363

²⁶Opt. Kit = 3894V Seal & Sleeve

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - Full Size SUV - Expedition**FRONT WHEEL****RWD**

2008-2007	
Hub Unit Bearing	SP550211[2] ²⁵
2006-2003 (ABS)	
Hub Unit Bearing	SP550206[2] ²⁵
2002-1997	
Seal (Inner)	4148[2]
Cone/Cup (Inner)	JL69349P-JL69310P[2]
Set (Outer)	SET12FP[2] ⁶⁰

4WD

2008-2007	
Hub Unit Bearing	SP550210[2] ²⁵
2006-2003	
Hub Unit Bearing	SP550202[2]
2002-2000 (ABS)(M14 Bolts)	
Hub Unit Bearing	515031[2]
2000-1997 (ABS)(M12 Bolts)	
Hub Unit Bearing	SP550201[2] ⁴⁰

REAR WHEEL**RWD**

2008-2007	
Hub Unit Bearing	SP550209[2] ²⁵
2006-2003	
Hub Unit Bearing	SP550203[2]
2002-1997	
Seal Viton	100357[2]
Cylindrical Bearing	R1561TV[2]
Bearing & Seal Kit	TF01561R[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2008-1997 (8.8" R.G.)(Indep. Frt. Susp.)	
Ndle Bearing (Inner)	HK4012[2]
Ndle Bearing (Outer)	FC66998[2]

Differential Rebuild Kit

2006-1997 (8.8" R.G.)	
Kit	DRK311F

Differential

2006-2004	
Cone/Cup	LM603049-LM603019[2]
2003-1997	
Set	SET36[2]

Pinion

2006-1997	
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010

REAR AXLE**Axle Shaft**

2008-2002 (8.8" R.G.)(Indep. Rr. Susp.)	
Ndle Bearing	FC66998[2]
Seal	100537[2]

Differential Rebuild Kit

2008-2003 (8.8" R.G.)(Indep. Rr. Susp.)	
Kit	DRK311A ²⁵
2008-2000 (9.75" R.G.)	
Kit	DRK316A
2000-1997 (8.8" R.G.)	
Kit	DRK311
1999-1997 (9.75" R.G.)	
Kit	DRK316

Differential

2008-2003 (8.8" R.G.)(Indep. Rr. Susp.)	
Cone/Cup	LM603049-LM603019[2]
2008-1997 (9.75" R.G.)	
Cone/Cup	NP343847-NP372019[2]
2002-1997 (8.8" R.G.)	
Set	SET36[2]

Pinion

2008-2000 (9.75" R.G.)	
Seal Viton	4278
Cone/Cup (Inner)	NP576375-NP434567
Cone/Cup (Outer)	HM89443-HM89411
2008-1997 (8.8" R.G.)	
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
Repair Sleeve	KWK99181
1999-1997 (9.75" R.G.)	
Seal Viton	3604
Cone/Cup (Inner)	NP576375-NP434567
Cone/Cup (Outer)	M88048-M88010

TRANSFER CASE REBUILD KIT

2002-1997 (Warner 4406)	
Kit	TCRK4406

TRANSFER CASE**Input Shaft**

2008-2003 (Warner 4416)	
Seal	3946
Repair Sleeve	KWK99187
2002-1997 (Warner 4406)	
Ball Bearing	211TB
Ndle Bearing (Pilot)	BK3026
Seal (Non-Booted)	3946
Seal (Booted)	4333N
Repair Sleeve	KWK99187

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability⁴⁰5 Stud.⁶⁰O.E. Polymer Cage, Performance

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - Full Size SUV - Expedition (cont.)**TRANSFER CASE****Front Output Shaft**

2008-1997 (Warner)
 Seal 4333N
 Ball Bearing 208[2]

Rear Output Shaft

2002-1997 (Warner 4406, 4416)
 Seal 4503N
 Ball Bearing 207[2]

Selector Shaft Seal/Man. Shaft

2002-1997 (Warner)
 Seal 330385

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-1997 (E4OD, 4R100)
 Seal 3404

Rear Seal/Ext. Housing

2007-1999 (4R100, E4OD)(1.88)
 Seal 100086
 2007-1997 (4R100, E4OD)(1.68)
 Seal 7300S

Selector Shaft Seal/Man. Shaft

2006-1997
 Seal 7929S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008-1997 281/4.6L, 330/5.4L
 Seal 482041N
 Repair Sleeve KWK99187
 Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-1997 330/5.4L
 Seal Viton 3909
 Seal PTFE H/D 5277
 Repair Sleeve KWK99362
 2004-1997 281/4.6L
 Seal Viton 3909
 Seal PTFE H/D 5277
 Repair Sleeve KWK99363

FORD TRUCK - 1/2 TON - Econoline, E150, F100, F150**FRONT WHEEL****RWD**

2009 F150 (Base Pkg)(6 Stud)(From 7/23/08)
 Hub Unit Bearing SP550216[2]²⁵
 2009 F150 (HD)(7 Stud)(From 7/23/08)
 Hub Unit Bearing SP550215[2]²⁵
 2009-1990 E150
 Seal (Inner) 4148[2]
 Set (Inner) SET13[2]
 Set (Outer) SET12F[2]⁵⁹
 2008-2004 F150
 Set SET930[2]²⁵
 2004-1997 F150
 Seal (Inner) 4148[2]
 Set (Outer) SET12FP[2]⁶⁰
 Set (Inner) SET11[2]

FRONT WHEEL (cont.)**RWD (cont.)**

1996-1990 F150
 Seal (Inner) 4148[2]
 Set (Inner) SET13[2]
 Set (Outer) SET12F[2]⁵⁹

4WD

2009 F150 (Base)(6 Stud)(From 7/23/08)
 Hub Unit Bearing SP550214[2]²⁵
 2009 F150 (HD)(7 Stud)(From 7/23/08)
 Hub Unit Bearing SP550215[2]²⁵
 2008-2006 F150 (Base)(6 Stud)(From 12/5/05 to 7/23/08)
 Hub Unit Bearing SP550207[2]⁷⁸

²⁵New Item, Check For Availability⁵⁹O.E. Polymer Cage⁶⁰O.E. Polymer Cage, Performance⁷⁸6 Stud, New Item.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 1/2 TON - Econoline, E150, F100, F150 (cont.)**FRONT WHEEL (cont.)****4WD (cont.)**

2008-2005	F150 (HD)(7 Stud)(From 2/28/05 to 7/23/08)	
	Hub Unit Bearing	SP550208[2] ⁸²
2005-2004	F150 (Base)(6 Stud)(From 6/2/03 to 11/29/04)	
	Hub Unit Bearing	SP550212[2] ²⁵
2005-2004	F150 (HD)(7 Stud)(From 6/2/03 to 11/29/04)	
	Hub Unit Bearing	SP550213[2] ²⁵
2004-2001	F150 (4 Whl. ABS)(5 Stud)	
	Hub Unit Bearing	515029[2]
2004-2001	F150 (Rr. Whl. ABS)(5 Stud)	
	Hub Unit Bearing	515028[2]
2004-2000	F150 (4 Whl. ABS)(7 Stud)	
	Hub Unit Bearing	515030[2]
2004-2000	F150 (Rr. Whl. ABS)(7 Stud)	
	Hub Unit Bearing	515022[2]
2000	F150 (4 Whl. ABS)(5 Stud)(M14 Stud)	
	Hub Unit Bearing	515029[2]
2000	F150 (Rr. Whl. ABS)(5 Stud)(M14 Stud)	
	Hub Unit Bearing	515028[2]
2000-1997	F150 (4 Whl. ABS)(5 Stud)(M12 Stud)	
	Hub Unit Bearing	SP550200[2] ⁴⁰
2000-1997	F150 (Rr. Whl. ABS)(5 Stud)(M12 Stud)	
	Hub Unit Bearing	515017[2]
1996-1995		
	Seal (Inner)	710430[2]
	Set (Inner)	SET37[2]
	Set (Outer)	SET45[2]
1994-1990	(From 6/1/88)	
	Seal (Inner)	4250[2]
	Set (Inner)	SET37[2]
	Set (Outer)	SET45[2]

REAR WHEEL**RWD**

2008-2004	F150	
	Seal Viton	100357[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2008-1990	E100, E150	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2004	F150 Heritage (9.75", 10.25" R.G.)	
	Seal Viton	100357[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹
2004	F150 Heritage, SVT Lightning (8.8" R.G.)	
	Seal	8835S[2]
	Seal Viton	100357[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹

REAR WHEEL (cont.)**RWD (cont.)**

2004-1990	F100, F150 (8.8" R.G.)(Sterling Axle)	
	Seal	8835S[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
	Cylindrical Bearing	6408[2]
2003-1998	F150 (8.8" R.G.)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]
	Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2003-1998	F150 (9.75" R.G.)	
	Seal Viton	100357[2]
	Cylindrical Bearing	R1561TV[2]
	Bearing & Seal Kit	TF01561R[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2008-1997	(8.8" R.G.)(Indep. Frt. Susp.)	
	Ndle Bearing (Inner)	HK4012[2]
	Ndle Bearing (Outer)	FC66998[2]
1996-1990	(Dana/Spicer 44 IFS axle)	
	Seal (LH)	710043
	Seal (RH)	470672
	Cylindrical Bearing (RH)	5707[2]

Differential Rebuild Kit

2006-1997	(8.8" R.G.)	
	Kit	DRK311F
1997-1990	(Dana/Spicer 44 Axle)	
	Kit	DRK339B

Differential

2006-2003	(8.8" R.G.)	
	Cone/Cup	LM603049-LM603019[2]
2003-1997	(8.8" R.G.)	
	Set	SET36[2]
1997-1990	(Dana/Spicer 44 Axle)	
	Cone/Cup	25590-25523[2]

Pinion

2008-1997	(8.8" R.G.)	
	Seal Viton	3604
	Cone/Cup (Inner)	M802048-M802011
	Cone/Cup (Outer)	M88048-M88010
	Repair Sleeve	KWK99181
1997-1990	(Dana/Spicer 44 Axle)	
	Seal	5778
	Cone/Cup (Inner)	HM88649-HM88610
	Cone/Cup (Outer)	02872-02820

Spindle Kit

1997-1990		
	Bearing & Seal Kit	SBK4[2] ³⁶

Spindle

2002-1997	(8.8" R.G.)	
	Ndle Bearing	HK1816[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Brg B2110, Seals 722108 & 722109, & Ring

²⁵New Item, Check For Availability
⁴⁰5 Stud. ⁸²7 Stud, New Item.

³⁶Opt. Kit =

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

FORD TRUCK - 1/2 TON - Econoline, E150, F100, F150 (cont.)

4WD FRONT AXLE (cont.)

Spindle (cont.)

1996-1993	(Dana/Spicer 28IFS, 35IFS axle)
Seal (Inner)	710453[2]
Ndle Bearing (Inner)	B2110
Seal (Outer)	722108[2]
Ndle Bearing Thrust (Outer)	NTA1625[2]
1992-1990	
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

REAR AXLE

Axle Shaft

2002	(8.8" R.G.)
Ndle Bearing	FC66998[2]

Differential Rebuild Kit

2007-1990	(8.8" R.G.)
Kit	DRK311
2006-2000	(9.75" R.G.)
Kit	DRK316A
1999-1997	(9.75" R.G.)
Kit	DRK316

Differential

2008-2004	(10.25" R.G.)
Cone/Cup	469-453X[2]
2008-1997	(9.75" R.G.)
Cone/Cup	NP343847-NP372019[2]
2008-1990	(8.8" R.G.)
Set	SET36[2]

Pinion

2008-2000	(9.75" R.G.)
Seal Viton	4278
Cone/Cup (Inner)	NP576375-NP434567
Cone/Cup (Outer)	HM89443-HM89411
2008-1997	(8.8" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
2006-2004	(10.25" R.G.)
Seal Viton	4278
Cone/Cup (Inner)	NP504493-NP949481
Cone/Cup (Outer)	HM89443-HM89411
2004	(8.8" R.G.)(Non-Locking)
Seal Viton	3604
Cone/Cup (Inner)	NP576375-NP434567
Cone/Cup (Outer)	M88048-M88010
1999-1997	(9.75" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	NP576375-NP434567
Cone/Cup (Outer)	M88048-M88010
1999-1990	(8.8" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010

TRANSFER CASE REBUILD KIT

2002-1996	(Warner 4406)
Kit	TCRK4406
1997-1990	(Warner 1356)
Kit	TCRK1356
1991-1990	(Warner 1345)
Kit	TCRK1345

TRANSFER CASE

Input Shaft

2008-2003	(Warner 4416)
Seal	3946
Ball Bearing	211TB
Repair Sleeve	KWK99187
2007-1996	(Warner 4406)(Booted)
Seal	4333N
Ball Bearing	211TB
Ndle Bearing (Pilot)	BK3026
2007-1996	(Warner 4406)(w/o Boot)
Ball Bearing	211TB
Ndle Bearing (Pilot)	BK3026
Seal	3946
1995-1990	(Warner 1356)
Seal	714503
Ball Bearing	110CB
Ndle Bearing (Pilot)	BK3026
1990	(Warner 1345)
Seal	710062
Repair Sleeve	KWK99175

Front Output Shaft

2008-2003	(Warner 4416)
Seal	4503N
Ball Bearing (Inner)	107WB
Seal (Outer)	4333N
Ball Bearing (Outer)	208
2007-1996	(Warner 4406)
Seal	4333N
Ball Bearing	208
1996-1990	(Warner 1356)
Seal	714503
Ball Bearing	110CB
Ndle Bearing (Pilot)	BK3026
1990	(Warner 1345)
Seal	710062
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	B2012

Rear Output Shaft

2008-2003	(Warner 4416)
Seal	4503N
Ball Bearing (Inner)	307TB
Ball Bearing (Outer)	111TB
2007-1996	(Warner 4406)
Seal	4503N
Ball Bearing	207
Ndle Bearing Thrust	NTA2233
1996-1990	(Warner 1356)(fixed yoke)
Seal	4333N
Ball Bearing	207

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 1/2 TON - Econoline, E150, F100, F150 (cont.)**TRANSFER CASE (cont.)****Rear Output Shaft (cont.)**

1996-1990	(Warner 1356)(slip yoke)	
Seal	4503N	
Ball Bearing	207	
1990	(Warner 1345)	
Seal	3946	
Ball Bearing	207	
Repair Sleeve	KWK99187	
Ndle Bearing (Pilot)	B2812	

Selector Shaft Seal/Man. Shaft

2008-1990	(Warner)	
Seal	330385	

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990	(C4, C5, C6)	
Seal	331107N	
Repair Sleeve	KWK99199	

Rear Seal/Ext. Housing

1990	(C6)	
Seal	410308	

Selector Shaft Seal/Man. Shaft

1990	(C6)	
Seal	7929S	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(AODE E, E4OD, 4R70W, AODEW)	
Seal	3404	
1993-1990	(AOT, AOD)	
Seal	331107N	
Repair Sleeve	KWK99199	

Rear Seal/Ext. Housing

2007-1999	(4R100, E4OD)(1.88)	
Seal	100086	
2002-1994	(4R70W, AODEE, AODEW)	
Seal (Booted)	4765	
Seal (Non-Booted)	4764	
1999-1990	(E4OD)	
Seal	7300S	
Seal Kit	5203 ⁶⁴	
1993-1990	(AOT, AOD)(long boot)	
Seal	7692S	
Seal Kit	5202 ⁶⁴	

Selector Shaft Seal/Man. Shaft

2008-1990		
Seal	7929S	

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2004		
Seal	7929S	

CLUTCH - 6 CYLINDER**Pilot Bearing**

2002-1990	170/2.8L, 240/3.9L, 232/3.8L, 265/4.2L, 300/4.9L	
Ndle Bearing	FC65662	

CLUTCH - 8 CYLINDER**Pilot Bearing**

2002-1990	281/4.6L, 302/5.0L, 351/5.8L (M)(W)	
Ndle Bearing	FC65662	

CLUTCH**Release Bearing**

1999-1993	(5 Spd.)(Hyd. piston type)	
Bearing Assy	614169	
1992-1990	(5 Spd.)(Hyd. piston type)	
Bearing Assy	614061	
1992-1990	(4 Spd.)(cable mechanism)	
Bearing Assy	614014	

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1993-1990	(Warner T18)	
Seal	7412S	
Ball Bearing	308LTB[2]	
Repair Sleeve	KWK99125	
1990	(Tremec)	
Seal	3638	
Ball Bearing	308LTB[2]	
Repair Sleeve	KWK99112	

Rear Output Shaft

1993-1990	(Warner T18)(28 spline)	
Seal	7692S	
Ball Bearing	308LI[2]	
Seal Kit	5202 ⁶⁴	
1990	(Tremec)(2nd Design)	
Seal	7692S	
Ball Bearing	308L[2]	
Seal Kit	5202 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1990	(Tremec)	
Seal	313156	

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2001-1990	(Mazda M5R2)	
Kit	TRK248	

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - 1/2 TON - Econoline, E150, F100, F150 (cont.)

5-SPEED MANUAL TRANSMISSION

Front Input Shaft

2004-1990	(Mazda M5R2)	
Seal	223012	
Repair Sleeve	KWK99114	
2004-1990	(ZF S5 42)	
Seal Viton	713771	
Cone/Cup	28580-28521[2]	
Repair Sleeve	KWK99139	

Front Input Shaft Pocket

2000-1990	(ZF S5 42)	
Cone	JH13349[2]	

Countershaft

2004-1996	Mazda	
Cylindrical Bearing		
(Center)	MR1207EL[2]	
Ball Bearing (Rr)	304WB[2]	
2000-1990	(ZF S5 42)	
Cone/Cup	2580-2520[2]	

Rear Output Shaft

2001-1990	Mazda	
Seal	710415	
2000-1990	(ZF S5 42)(2WD)	
Seal	225010	
Cone/Cup	J28573-28521[2]	
2000-1990	(ZF S5 42)(4WD)	
Seal	1217	
Cone/Cup	J28573-28521[2]	

A/C COMPRESSOR

2002-1990	(Nippondenso FX 15)(Tecumseh, York)(Axial)	
Ball Bearing	5106WCC[2]	

DRIVESHAFT SUPPORT

1996-1993	F150	
Ball Bearing	88107[2]	
Hanger Bearing Assy	HB88107A[2]	
1992-1990	(Spicer 1280, 1310)(1.3780" Brg. I.D.)	
Ball Bearing	88107[2]	
Hanger Bearing Assy	HB88107A[2]	

POWER STEERING

Pump Shaft

1998-1990	(Ford pump)	
Seal	8773S	
1997-1990	(Saginaw pump)	
Seal	7013S	

MANUAL STEERING

Worm Shaft

1998-1990		
Seal	221922	

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-1990	232/3.8L, 256/4.2L, 300/4.9L	
Seal (Frt Entry)	2692	
Seal (Rr Entry)	2942	
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	88187	

8 Cylinder

2008-1997	281/4.6L, 330/5.4L	
Seal	482041N	
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	88187	
1996-1990	255/4.2L, 302/5.0L, 332/5.4L, 351/5.8L, 352/5.8L, 360/5.9L, 390/6.4L, 400/6.6L, 460/7.5L	
Seal (Frt Entry)	2692	
Seal (Rr Entry)	2942	
Repair Sleeve	KWK99187	
Harmnc Balancer Slvs	88187	

CRANKSHAFT REAR SEAL

6 Cylinder

2008-1997	256/4.2L	
Seal Viton	3909	
Seal PTFE H/D	5277	
Repair Sleeve	KWK99362	
1996-1990	240/3.9, 300/4.9L	
Seal Viton	2377	
Seal PTFE H/D	5278	
Repair Sleeve	KWK99372	

8 Cylinder

2008-1990	281/4.6L, 302/5.0L, 330/5.4L	
Seal Viton	3909	
Seal PTFE H/D	5277	
Repair Sleeve	KWK99362	
2001-1990	302/5.0L From 12/82	
Seal Viton	3909	
Seal PTFE H/D	5277	
Repair Sleeve	KWK99363	
1996-1990	351/5.8L (W) From 7/10/83	
Seal Viton	2377	
Seal PTFE H/D	5278	
Repair Sleeve	KWK99372	

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 3/4 TON - Econoline, E250, F250**FRONT WHEEL****RWD**

2009-2005	(Mono Beam Axle)	
Hub Unit Bearing	.....	SP940203[2] ²⁵
2009-1999	(Twin I-Beam Axle)	
Seal (Inner)	.....	4160[2]
Set (Inner)	.....	SET47[2]
Cone/Cup (Outer)	.....	15101-15245[2]
2009-1990	(Econoline)(From 11/4/80)	
Seal (Inner)	.....	4160[2]
Set (Inner)	.....	SET47[2]
Cone/Cup (Outer)	.....	15101-15245[2]
2004-1999	(Mono Beam Axle)	
Hub Unit Bearing	.....	HA590233[2] ²⁵
1999-1990	(L/D)(GVW Under 8,500 lb.)	
Seal (Inner)	.....	4148[2]
Cone/Cup (Inner)	.....	JL69349P-JL69310P[2]
Set (Outer)	.....	SET12FP[2] ⁶⁰
Cone/Cup (Outer)	.....	LM12749FP-LM12710P[2]
1998-1990	(H/D)(GVW Over 8,500 lb.)	
Seal (Inner)	.....	4160[2]
Set (Inner)	.....	SET47[2]
Cone/Cup (Outer)	.....	15101-15245[2]

4WD

2009-2005	(SRW)(ABS)	
Hub Unit Bearing	.....	SP940200[2] ²⁵
2004-1999	(SRW)(4 Whl. ABS)(Coarse Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	515020[2]
2004-1999	(SRW)(4 Whl. ABS)(Fine Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	SP580205[2] ²⁵
2004-1999	(SRW)(Rr. Whl. ABS)(From 3/22/99)	
Hub Unit Bearing	.....	515021[2]
1999	(DRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	HA590425[2]
1999	(SRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	SP580204[2] ²⁵
1999	(SRW)(Rr. Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	HA590132[2] ²⁵
1999-1997	(L/D)(4 Whl. ABS)(Thru 3/21/99)	
Hub Unit Bearing	.....	515030[2]
1999-1997	(L/D)(Rr. Whl. ABS)(Thru 3/21/99)	
Hub Unit Bearing	.....	515022[2]
1998-1995	(GVW Over 8,500 lb.)(Dana/Spicer 44 IFS H/D)	
Seal (Inner)	.....	710430[2]
Cone/Cup (Inner)	.....	LM104949-JLM104910[2]
Set (Outer)	.....	SET45[2]
1998-1990	(Dana/Spicer 50, 60 Ser. Axle)	
Seal (Inner)	.....	415960[2]
Cone/Cup (Inner)	.....	387A-382A[2]
Set (Outer)	.....	SET38[2]

FRONT WHEEL (cont.)**4WD (cont.)**

1994-1990	(Dana/Spicer 44 Axle)	
Seal (Inner)	.....	4250[2]
Cone/Cup (Inner)	.....	LM104949-JLM104910[2]
Set (Outer)	.....	SET45[2]

REAR WHEEL**RWD**

2008-1999	(10.25" R.G.)	
Seal (Inner)	.....	370247A[2] ⁸⁶
Cone/Cup (Inner)	.....	NP114036-NP064306[2]
Set (Outer)	.....	SET38[2]
2008-1990	(Spicer 60, 70 Axle)(Full Floating Axle)	
Seal (Inner) (Thru 12/2004)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
2008-1990	(Econoline)(Semi Floating Axle)(10.25" R.G.)	
Seal	.....	710067[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
1998	(Full Float Axle)(10.25" R.G.)(From 1/1/98)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3992-3920[2]
Set (Outer)	.....	SET38[2]
1998-1990	(Full Float Axle)(10.25" R.G.)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3994-3920[2]
Set (Outer)	.....	SET38[2]
1998-1990	(Spicer 60, 70 Axle)(Full Floating Axle)	
Seal (Inner)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
1998-1990	(Semi Floating Axle)(10.25" R.G.)	
Seal	.....	710067[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
1997-1994	(Full Floating Axle)(10.25" R.G.)(From 4/1/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3992-3920[2]
Set (Outer)	.....	SET38[2]
1994-1990	(Full Floating Axle)(10.25" R.G.)(Thru 3/31/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3994-3920[2]
Set (Outer)	.....	SET38[2]

FRONT AXLE**Spindle Kit**

1998-1990	(Spicer 44 IFS)(2nd Design)	
Bearing & Seal Kit	.....	SBK4[2] ³⁶
1995-1993	(Spicer 50.5)	
Bearing & Seal Kit	.....	SBK5[2] ³⁷
1992-1990	(Spicer 50.5)	
Bearing & Seal Kit	.....	SBK3[2] ³⁵

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal ²⁵New Item, Check For Availability ³⁵Opt. Kit = Brg B2414, Seals 710044 & 710045 ³⁶Opt. Kit = Brg B2110, Seals 722108 & 722109, & Ring
³⁷Opt. Kit = Brg B2414, Seals 710414 & 710413 ⁵⁷Oil Bath Seal ⁶⁰O.E. Polymer Cage, Performance ⁸⁶Use RD247 to install seal number 370247A

FORD TRUCK - 3/4 TON - Econoline, E250, F250 (cont.)

FRONT AXLE

Spindle

2004-1999	
Seal (Inner)	710413[2]
Ndle Bearing (Inner)	B2110[2]
1998-1993 (Spicer 50.5)	
Seal (Inner)	710413
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710414
1992-1990 (Spicer 50.5)	
Seal (Inner)	710044
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710045

4WD FRONT AXLE

Axle Shaft

2008-1999	
Seal (Inner)	710492[2] ²⁵
2004-1999	
Seal (Outer)	710413[2]
Ndle Bearing	B2110[2]
1997-1990 (Dana/Spicer 44 Ser., 50 Ser. axle)	
Seal (LH)	710043[2]
Seal (RH)	470672[2]
Cylindrical Bearing (RH)	5707[2]

Differential Rebuild Kit

2006-2002 (Dana/Spicer 60 Ser. Axle)	
Kit	DRK331A
2004-1998 (Dana/Spicer 50 Ser. Axle)	
Kit	DRK336A
1997-1990 (Dana/Spicer 50 Ser. Axle)	
Kit	DRK336
1997-1990 (Dana/Spicer 44 Axle)	
Kit	DRK339B

Differential

2006-2002 (Dana/Spicer 60 Axle)	
Cone/Cup	387A-382S[2]
2005-1996 (Dana/Spicer 50 Ser. Axle)	
Cone/Cup	JLM104948-LM104911A[2]
1998-1990 (Dana/Spicer 44 Axle)	
Cone/Cup	25590-25523[2]
1995-1990 (Dana/Spicer 50 Ser. Axle)	
Cone/Cup	JLM104948-LM104911A[2]

Pinion

2007-2002 (Dana/Spicer 60 Axle)	
Seal	100712V
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510
2004-1999 (Dana/Spicer 50 Ser. Axle)	
Seal	2506
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820

4WD FRONT AXLE (cont.)

Pinion (cont.)

1998-1990	
Seal (All)	5778
Cone/Cup (Inner)	
(Dana/Spicer 44 Axle)	31594-31520
Cone/Cup (Inner)	
(Dana/Spicer 50)	HM88649-HM88610
Cone/Cup (Outer) (All)	02872-02820

Spindle Kit

1998-1990 (Dana/Spicer 44 Axle)	
Bearing & Seal Kit	SBK4[2] ³⁶
1998-1990 (Dana/Spicer 50 Ser. Axle)	
Bearing & Seal Kit	SBK3[2] ³⁵

Spindle

1998-1990 (Dana/Spicer 50 Ser. Axle)	
Seal (Inner)	710044[2]
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710045[2]
1998-1990 (Dana/Spicer 44 Ser. axle from Ch. #B50000)	
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

Steering Knuckle

2004-1999	
Seal	710493[2] ²⁵
1997-1990 (Dana/Spicer 50 Ser. Axle)	
Seal	710304[2]
Cone/Cup	23100-23256[2]

REAR AXLE

Differential Rebuild Kit

2007-1998 (Spicer 60-1 9.75 RG)	
Kit	DRK331B
2006-1999 (10.5" R.G.)	
Kit	DRK317
1998-1990 (10.25" R.G.)	
Kit	DRK314
1998-1990 (Dana/Spicer 60, 61 Ser. Axles)	
Kit	DRK331

Differential

2006-1990 (10.25", 10,5" R.G.)	
Cone/Cup	469-453X[2]
2005-2004 (Spicer 60 Axle)	
Cone/Cup	NP197868-NP802507[2]
1999 (Dana/Spicer 60-1U Axle)	
Cone/Cup	NP197868-NP802507[2]
1998-1990 (Dana/Spicer 60, 61, 70 Ser. Axles)	
Cone/Cup	387A-382S[2]

²⁵New Item, Check For Availability ³⁵Opt. Kit = Brg B2414, Seals 710044 & 710045
Kit = Brg B2110, Seals 722108 & 722109, & Ring

³⁶Opt.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 3/4 TON - Econoline, E250, F250 (cont.)**REAR AXLE****Pinion**

2008-2007	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	 NP761271-NP998236	
Cone/Cup (Outer)	 HM89443-HM89411	
2008-1990	(Dana/Spicer 60-1U Axle)	
Seal Viton	.....	719316
Cone/Cup (Inner)	 HM803146-HM803110	
Cone/Cup (Outer)	 HM88542-HM88510	
2006-1999	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	 NP504493-NP949481	
Cone/Cup (Outer)	 HM89443-HM89411	
Repair Sleeve	.....	KWK99181
2005-2004	(Visteon 9.75" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Outer)	 HM89443-HM89411	
1998	(10.5" R.G.)(Prod. From 1/98 On)	
Seal Viton	.....	4278
Cone/Cup (Inner)	 HM807044-HM807010	
Cone/Cup (Outer)	 HM89443-HM89411	

TRANSFER CASE REBUILD KIT

1998-1990	(Warner 1356)	
Kit	.....	TCRK1356
1991-1990	(Warner 1345)	
Kit	.....	TCRK1345

TRANSFER CASE**Input Shaft**

2002-1999	(New Process)	
Ball Bearing	.....	211TB[2]
1999-1996	(Warner 4406, 4407)	
Seal	.....	4333N
Ball Bearing	.....	211TB
Ndle Bearing (Pilot)	.....	BK3026
1998-1996	(Warner 4406)(w/o Boot)	
Seal	.....	3946
Ball Bearing	.....	211TB
Repair Sleeve	.....	KWK99187
1998-1990	(Warner 1356)	
Seal	.....	714503
Ball Bearing	.....	110CB
Ndle Bearing (Pilot)	.....	BK3026
1990	(Warner 1345)	
Seal	.....	710062
Repair Sleeve	.....	KWK99175

Front Output Shaft

2008-1999	(New Process 271, 273)	
Ball Bearing	.....	111TB
Ndle Bearing (Pilot)	.....	J2416
1999-1996	(Warner 4407)	
Ball Bearing (Inner)	.....	207
Seal (Outer)	.....	4333N
Ball Bearing (Outer)	.....	208
Ndle Bearing (Pilot)	.....	B2012
1998-1996	(Warner 4406)	
Seal	.....	4333N
Ball Bearing	.....	208

TRANSFER CASE (cont.)**Front Output Shaft (cont.)**

1998-1990	(Warner 1356)	
Seal	.....	714503
Ball Bearing	.....	207
Ndle Bearing (Pilot)	.....	B2012
1990	(Warner 1345)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B2012

Rear Output Shaft

1999-1996	(Warner 4407)	
Seal	.....	4503N
Ball Bearing	.....	308WB
Ndle Bearing Thrust	.....	NTA2233
1998-1996	(Warner 4406)	
Seal	.....	4503N
Ball Bearing	.....	207
Ndle Bearing Thrust	.....	NTA2233
1998-1990	(Warner 1356)(fixed yoke)	
Seal	.....	4333N
Ball Bearing	.....	207
1998-1990	(Warner 1356)(slip yoke)	
Seal	.....	4503N
Ball Bearing	.....	207
Ndle Bearing Thrust	.....	NTA2233
1990	(Warner 1345)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B2812

Intermediate Shaft

1999-1996	(Warner 4407)	
Ball Bearing	.....	210S[2]

Oil Pump Housing

2008-1999	(New Process 271, 273)	
Seal	.....	341022
Repair Sleeve	.....	KWK99225

Selector Shaft Seal/Man. Shaft

1999-1990	(Warner)	
Seal	.....	330385
Repair Sleeve	.....	KWK99225

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1990	(C4, C5, C6)	
Seal	.....	331107N
Repair Sleeve	.....	KWK99199

FORD TRUCK - 3/4 TON - Econoline, E250, F250 (cont.)**3-SPEED AUTOMATIC TRANSMISSION****Rear Seal/Ext. Housing**

1990 (C6)
Seal 410308

Selector Shaft Seal/Man. Shaft

1990 (C6)
Seal 7929S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990 (4R70W, AODEW, E4OD)
Seal 3404
1993-1990 (AOT, AOD)
Seal 331107N
Repair Sleeve KWK99199

Rear Seal/Ext. Housing

2002-1994 (4R70W, AODE)
Seal 4765
2000-1990 (E4OD)
Seal 7300S
Seal Kit 5203⁶⁴
1993-1990 (AOT, AOD)(long boot)
Seal 7692S
Seal Kit 5202⁶⁴

Selector Shaft Seal/Man. Shaft

2008-1990
Seal 7929S

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2005 (5R110W) Torqshift
Seal 710485

Selector Shaft Seal/Man. Shaft

2008-2005
Seal 7929S

CLUTCH - 6 CYLINDER**Pilot Bearing**

1996-1990 6 Cyl. 300 (4.9)
Ndle Bearing FC65662

CLUTCH**Pilot Bearing**

2002-1990 8 Cyl. 444 (7.3)(Diesel)
Ndle Bearing FC65662
1997-1990 8 Cyl. 460 (7.5)
Ndle Bearing FC66067
1997-1990 8 Cyl. 302 (5.0)
Ndle Bearing FC65662
1997-1990 8 Cyl. 351 (5.8)
Ndle Bearing FC65662

CLUTCH**Release Bearing**

1998-1993 8 Cyl. 302 (5.0)(5 Spd.)(Hyd. Mechanism)
Bearing Assy 614169
1998-1993 8 Cyl. 351 (5.8)(5 Spd.)(Hyd. Mechanism)
Bearing Assy 614169
1997-1990 8 Cyl. 444 (7.3)(Diesel)
Bearing Assy 614062
1997-1990 8 Cyl. 420 (6.9)(Diesel)(5 Spd.)
Bearing Assy 614062
1997-1990 8 Cyl. 460 (7.5)(5 Spd.)
Bearing Assy 614062
1993-1990 6 Cyl. 300 (4.9)(4 Spd.)(mechanical mechanism)
Bearing Assy 614014
1993-1990 8 Cyl. 302 (5.0)(4 Spd.)(mechanical mechanism)
Bearing Assy 614014
1993-1990 8 Cyl. 351 (5.8)(4 Spd.)(mechanical mechanism)
Bearing Assy 614014
1993-1990 8 Cyl. 460 (7.5)(4 Spd.)
Bearing Assy 614014
1992-1990 8 Cyl. 302 (5.0)(5 Spd.)(Hyd. Mechanism)
Bearing Assy 614061
1992-1990 8 Cyl. 351 (5.8)(5 Spd.)(Hyd. Mechanism)
Bearing Assy 614061
1991-1990 6 Cyl. 300 (4.9)(5 Spd.)(Hyd. mechanism)
Bearing Assy 614061
Bearing Assy 614169

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1993-1990 (Warner T18)
Seal 7412S
Ball Bearing 308LTB[2]
Repair Sleeve KWK99125
1990 (Tremec)
Seal 3638
Ball Bearing 308LTB[2]
Repair Sleeve KWK99112

Rear Output Shaft

1993-1990 (Warner T18)(28 spline)
Seal 7692S
Ball Bearing 308LI[2]
Seal Kit 5202⁶⁴
1990 (Tremec)(2nd Design)
Seal 7692S
Ball Bearing 308LI[2]
Seal Kit 5202⁶⁴

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 3/4 TON - Econoline, E250, F250 (cont.)**4-SPEED MANUAL TRANSMISSION****Selector Shaft Seal/Man. Shaft**

1990 (Tremec)
Seal 313156

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1996 (ZF S5 47)
Kit TRK300ZF
1995-1990 (ZF S5 42)
Kit TRK300ZF

Front Input Shaft

2005-1990 (ZF S5 47)
Seal Viton 713771
Cone/Cup 28580-28521[2]
Repair Sleeve KWK99139
2002-1990 (ZF S5 42)
Seal Viton 713771
Cone/Cup 28580-28521[2]
Repair Sleeve KWK99139
1999-1990 (Mazda M5R2)
Seal 223012
Repair Sleeve KWK99114

Front Input Shaft Pocket

2004-1990 (ZF S5 47)
Cone JH13349[2]
2002-1990 (ZF S5 42)
Cone JH13349[2]

Countershaft

2005-1990 (ZF S5 47)
Cone/Cup 2580-2520[2]
2002-1990 (ZF S5 42)
Cone/Cup 2580-2520[2]

Rear Output Shaft

2004-1990 (ZF S5 47)(2WD)
Seal 225010
Cone/Cup J28573-28521[2]
2004-1990 (ZF S5 47)(4WD)
Seal 1217
Cone/Cup J28573-28521[2]
Repair Sleeve KWK99157
2002-1990 (ZF S5 42)(2WD)
Seal 225010
Cone/Cup J28573-28521[2]
2002-1990 (ZF S5 42)(4WD)
Seal 1217
Cone/Cup J28573-28521[2]
2001-1990 Mazda
Seal 710415

6-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1999 (ZF S6 650)
Kit TRKS6650ZF

Front Input Shaft

2004-1999 (ZF S6 650)
Cone/Cup NP007430-NP423135[2]

Front Input Shaft Pocket

2004-1999 (ZF S6 650)
Cone JH13349[2]

Main Shaft

2004-1999 (ZF S6 650)
Cone/Cup NP957859-NP771105[2]

Center Counter Shaft

2004-1999 (ZF S6 650)
Cone/Cup NP043905-NP547779[2]

Rear Output Shaft

2004-1999 (ZF S6 650)(2WD)
Seal 225010
Cone/Cup J28573-28521[2]
2004-1999 (ZF S6 650)(4WD)
Seal 1217
Cone/Cup J28573-28521[2]

A/C COMPRESSOR

2002-1990 (Nippondenso FX 15)(Axial)
Ball Bearing 5106WCC[2]
1996-1990 (Sanden SD 709)(Axial)
Ball Bearing 5001KFF[2]
1993-1990 (Ford FS6)(Axial)
Ball Bearing 5000KFF[2]

DRIVESHAFT SUPPORT

2007-1999 Spicer 1410 Series I.D.
1.5748" (40mm)
Hanger Bearing Assy HB88508A
2004-1999 Spicer 1310, 1330 Series (Slip
Yoke)
Hanger Bearing Assy HB88107A
Ball Bearing 88107
1997-1990 (Spicer 1410)(1.5748" 40mm
Brg. I.D. 2.25" height)
Hanger Bearing Assy HB88508A[2]
Ball Bearing 88508
1996-1993 (Spicer 1480)(1.5748" 40mm
Brg. I.D.)
Hanger Bearing Assy HB88508AA[2]
1992-1990 (Spicer 1260, 1280, 1310,
1410, 1480)(1.3780 Brg. I.D.)
Ball Bearing 88107[2]
Hanger Bearing Assy HB88107A[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - 3/4 TON - Econoline, E250, F250 (cont.)

POWER STEERING

Pump Shaft

1997-1990	(Saginaw pump)	
Seal	.....	7013S
1997-1990	(Ford pump)	
Seal	.....	8773S

MANUAL STEERING

Worm Shaft

1998-1990		
Seal	.....	221922

CRANKSHAFT FRONT SEAL

6 Cylinder

2003-1990	256/4.2L, 300/4.9L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187

8 Cylinder

2008-1997	281/4.6L, 330/5.4L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
2003-1990	420/6.9L, 444/7.3L (Diesel)	
Seal Viton	.....	3894V
Seal	.....	5066 ²⁶
1997-1990	302/5.0L, 332/5.4L, 351/5.8L, 352/5.8L, 360/5.9L, 390/6.4L, 400/6.6L, 460/7.5L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

10 Cylinder

2008-1997	415/6.8L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL

6 Cylinder

2003-1997	256/4.2L	
Seal	.....	39302
Seal PTFE H/D (Opt)	.....	5277
Repair Sleeve	.....	KWK99363
1998-1990	240/3.9, 300/4.9L	
Seal Viton	.....	2377
Seal PTFE H/D (Opt)	.....	5278
Repair Sleeve	.....	KWK99372

CRANKSHAFT REAR SEAL

8 Cylinder

2008-1990	281/4.6L, 302/5.0L, 330/5.4L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99362
2003-1994	444/7.3L (Diesel)	
Seal	.....	5723
1998-1990	351/5.8L	
Seal Viton	.....	2377
Seal PTFE H/D	.....	5278
Repair Sleeve	.....	KWK99372
1998-1990	460/7.5L	
Seal Rope	.....	5095
Seal Split	.....	5118
1994-1990	420/6.9L, 444/7.3L (Diesel)	
Seal Viton	.....	3893V
Repair Sleeve	.....	KWK99372

10 Cylinder

2008-1997	415/6.8L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99362

²⁶Opt. Kit = 3894V Seal & Sleeve

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - 1 TON - Econoline, E350, F350					

FRONT WHEEL**RWD**

2009-2005	(Mono Beam Axle)	
Hub Unit Bearing	.....	SP940203[2] ²⁵
2009-1990	(Twin I-Beam Axle)	
Seal (Inner)	.....	4160[2]
Set (Inner)	.....	SET47[2]
Cone/Cup (Outer)	.....	15101-15245[2]
2007-2004	(Stripped Chassis)	
Cone/Cup (Inner)	.....	45284-45220
Cone/Cup (Outer)	.....	25880-25820
2004-1999	(Mono Beam Axle)	
Hub Unit Bearing	.....	HA590233[2] ²⁵

4WD

2009-2008	(DRW)(Fat Boy)	
Hub Unit Bearing	.....	SP940204[2] ²⁵
2009-2005	(DRW)(ABS)	
Hub Unit Bearing	.....	SP940201[2] ²⁵
2009-2005	(SRW)(ABS)	
Hub Unit Bearing	.....	SP940200[2] ²⁵
2004-2000	(DRW)(4 Whl. ABS)	
Hub Unit Bearing	.....	515025[2]
2004-2000	(SRW)(4 Whl. ABS)(Coarse Thread Studs)	
Hub Unit Bearing	.....	515020[2]
2004-2000	(SRW)(4 Whl. ABS)(Fine Thread Studs)	
Hub Unit Bearing	.....	SP580205[2] ²⁵
2004-2000	(SRW)(Rr. Whl. ABS)	
Hub Unit Bearing	.....	515021[2]
1999	(DRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	HA590425[2]
1999	(DRW)(4 Whl. ABS)(From 3/22/99)	
Hub Unit Bearing	.....	515025[2]
1999	(SRW)(4 Whl. ABS)(Coarse Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	515020[2]
1999	(SRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	SP580204[2] ²⁵
1999	(SRW)(4 Whl. ABS)(Fine Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	SP580205[2] ²⁵
1999	(SRW)(Rr. Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	HA590132[2] ²⁵
1999	(SRW)(Rr. Whl. ABS)(From 3/22/99)	
Hub Unit Bearing	.....	515021[2]
1997-1990		
Seal (Inner)	.....	415960[2]
Cone/Cup (Inner)	.....	387A-382A[2]
Set (Outer)	.....	SET38[2]

REAR WHEEL**RWD**

2008-1999	(10.5" R.G.)	
Seal (Inner)	.....	370247A[2] ⁸⁶
Cone/Cup (Inner)	.....	NP114036-NP064306[2]
Set (Outer)	.....	SET38[2]
2008-1999	(DRW)(Dana 80 Axle)(11.25 R.G)	
Seal (Inner)	.....	710454[2]
Cone/Cup (Inner)	.....	33281-33462[2]
Cone/Cup (Outer)	.....	39250-39412[2]
2008-1990	(Econoline)	
Seal (Inner)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
1997-1994	(10.25", 10,5" R.G.)(From 4/1/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3992-3920[2]
Set (Outer)	.....	SET38[2]
1994-1990	(10.25" R.G.)(Thru 3/31/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3994-3920[2]
Set (Outer)	.....	SET38[2]
1993-1992	(Spicer 80 Ser. Axle)	
Seal (Inner)	.....	370018A[2] ⁵⁷
Cone/Cup (Inner)	.....	39585-39520[2]
Cone/Cup (Outer)	.....	JLM506849-JLM506810[2]
1993-1990	(Spicer 60, 70 Axle)	
Seal (Inner)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]

4WD

2008-1999	(10.5" R.G.)	
Seal (Inner)	.....	370247A[2] ⁸⁶
Cone/Cup (Inner)	.....	NP114036-NP064306[2]
Set (Outer)	.....	SET38[2]
2008-1999	(DRW)(Dana 80 Axle)(11.25 R.G)	
Seal (Inner)	.....	710454[2]
Cone/Cup (Inner)	.....	33281-33462[2]
Cone/Cup (Outer)	.....	39250-39412[2]
2008-1990	(Econoline)	
Seal (Inner)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
1997-1994	(10.25", 10,5" R.G.)(From 4/1/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3992-3920[2]
Set (Outer)	.....	SET38[2]
1994-1990	(10.25" R.G.)(Thru 3/31/94)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3994-3920[2]
Set (Outer)	.....	SET38[2]
1993-1992	(Spicer 80 Ser. Axle)	
Seal (Inner)	.....	370018A[2] ⁵⁷
Cone/Cup (Inner)	.....	39585-39520[2]
Cone/Cup (Outer)	.....	JLM506849-JLM506810[2]

²⁵New Item, Check For Availability⁵⁷Oil Bath Seal⁸⁶Use RD247 to install seal number 370247A

FORD TRUCK - 1 TON - Econoline, E350, F350 (cont.)**REAR WHEEL (cont.)****4WD (cont.)**

1993-1990	(Spicer 60, 70 Axle)
Seal (Inner)	9864S[2]
Cone/Cup (Inner)	387AS-382A[2]
Set (Outer)	SET38[2]

4WD FRONT AXLE**Axle Shaft**

2008-1999	
Seal (Inner)	710492[2] ²⁵
2004-1999	
Seal (Outer)	710413[2]
Ndle Bearing	B2110[2]
1997-1990	(Spicer 60 Axle)
Seal	470682[2]
1997-1990	(w/o Spicer 60)
Seal (Inner)	710414[2]
Seal (Outer)	710413[2]

Differential Rebuild Kit

2006-2000	(Dana/Spicer 60 Ser. Axle)
Kit	DRK331A
2004-1999	(Dana/Spicer 50 Ser. Axle)
Kit	DRK336A
1999-1990	(Dana/Spicer 60 Ser. Axle)
Kit	DRK331
1997-1990	(Dana/Spicer 50 Ser. Axle)
Kit	DRK336

Differential

2006-1990	(Dana/Spicer 60 Ser. Monobeam Axle)
Cone/Cup	387A-382S[2]
2004-1990	
Cone	
(Non-Independant Axle)	JLM104946[2]
Cone (Independant Axle)	JLM104948[2]
Cup (All)	LM104911A[2]

Pinion

2007-2002	(Dana/Spicer 60 Ser. Monobeam Axle)
Seal	100712V
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510
2004-1999	(Dana/Spicer 50 Ser. Axle)
Seal	2506
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155
1997-1990	(Dana/Spicer 60 Ser. Axle)
Seal Viton	719316
Cone/Cup (Inner)	HM803146-HM803110
Cone/Cup (Outer)	HM88542-HM88510
Repair Sleeve	KWK99187

4WD FRONT AXLE (cont.)**Pinion (cont.)**

1997-1990	(Dana/Spicer 50 Ser. Indep. Axle)
Seal	5778
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820

Spindle Kit

1997-1992	
Bearing & Seal Kit	SBK5[2] ³⁷
1991-1990	(Dana/Spicer 50, 60 Ser. Axle)
Bearing & Seal Kit	SBK3[2] ³⁵

Spindle

2004-1999	
Seal	710413[2]
Ndle Bearing	B2110[2]
1997-1992	
Seal (Inner)	710414[2]
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710413[2]
1991-1990	(Dana/Spicer 50, 60 Ser. Axle)
Seal (Inner)	710044[2]
Ndle Bearing (Inner)	B2414[2]
Seal (Outer)	710045[2]

Steering Knuckle

2004-1999	
Seal	710493[2] ²⁵
1998-1990	(Dana/Spicer 60-7 Axle)
Seal	710304[2]
Cone/Cup	23100-23256[2]

REAR AXLE**Differential Rebuild Kit**

2007-2004	(Spicer 60-1 9.75 RG)
Kit	DRK331B
2006-1999	(10.5" R.G.)
Kit	DRK317
2004-1998	(Dana/Spicer 80 Axle)
Kit	DRK337A
1998-1990	(Dana/Spicer 70 H/D Axle)
Kit	DRK332HD
1998-1990	(Dana/Spicer 70-2U, 70-U Axles)
Kit	DRK332U
1998-1990	(Dana/Spicer 60 Ser. Axle)
Kit	DRK331
1997-1990	(Dana/Spicer 80 Axle)
Kit	DRK337
1997-1990	(10.25" R.G.)
Kit	DRK314

Differential

2006-1999	(10.5" R.G.)
Cone/Cup	469-453X[2]

²⁵New Item, Check For Availability ³⁵Opt. Kit = Brg B2414, Seals 710044 & 710045
 Kit = Brg B2414, Seals 710414 & 710413

³⁷Opt.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 1 TON - Econoline, E350, F350 (cont.)**REAR AXLE (cont.)****Differential (cont.)**

2005-1990	(Dana/Spicer 80 Axle F Super Duty Ch.)(10.25", "10.5" R.G.)	
Cone/Cup	.....	469-453X[2]
2002-1999	(Dana/Spicer 60, 61, 70 Ser. Axles)	
Cone/Cup	.....	NP197868-NP802507[2]
1998-1990	(Dana/Spicer 70-D, 70-B, 70-U, 70-2U Axles)(Dana/Spicer 60,60-U, 60-1U, 61-1, 61 Axle)	
Cone/Cup	.....	387A-382S[2]
1995-1990	(Dana/Spicer 70 H/D, 70-1H/D, 70-2U, 80 Ser. Axles)(10.25" R.G.)	
Cone/Cup	.....	469-453X[2]

Pinion

2008-2007	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	.....	NP761271-NP998236
Cone/Cup (Outer)	.....	HM89443-HM89411
2008-1999	(Dana/Spicer 80 Axle)	
Seal	.....	100727
Cone/Cup (Inner)	.....	NP516549-NP673386
Cone/Cup (Outer)	.....	M802048-M802011
2008-1990	(Dana/Spicer 60-1U Axle)	
Seal Viton	.....	719316
Cone/Cup (Inner)	.....	HM803146-HM803110
Cone/Cup (Outer)	.....	HM88542-HM88510
2007-1990	(Dana/Spicer 70-2U Axle)	
Seal Viton	.....	719316
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM88542-HM88510
Repair Sleeve	.....	KWK99187
2006-1999	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	.....	NP504493-NP949481
Cone/Cup (Outer)	.....	HM89443-HM89411
2006-1999	(11.25" R.G.)	
Seal Viton	.....	4525V
Cone/Cup (Inner)	.....	NP516549-NP673386
Cone/Cup (Outer)	.....	M802048-M802011
1998-1990	(11.25" R.G.)	
Seal Viton	.....	4525V
Cone/Cup (Inner)	.....	HM807046-HM807010
Cone/Cup (Outer)	.....	M802048-M802011
1998-1990	(Dana/Spicer 80 Axle)	
Seal Viton	.....	4525V
Cone/Cup (Inner)	.....	HM807046-HM807010
Cone/Cup (Outer)	.....	M802048-M802011
1998-1990	(10.25", 10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	.....	HM807044-HM807010
Cone/Cup (Outer)	.....	HM89443-HM89411
1997-1990	(Dana/Spicer 70-1H/D, 70 H/D Axle)	
Seal Viton	.....	719316
Cone/Cup (Inner)	.....	HM807040-HM807010
Cone/Cup (Outer)	.....	HM88542-HM88510

TRANSFER CASE REBUILD KIT

1997-1990	(Warner 1356)(slip yoke)	
Kit	.....	TCRK1356
1990	(Warner 1345)	
Kit	.....	TCRK1345

TRANSFER CASE**Input Shaft**

2008-1999	(New Process 271, 273)	
Ball Bearing	.....	211TB[2]
1997-1996	(Warner 4407)	
Seal	.....	4333N
Ball Bearing	.....	211TB
Ndle Bearing (Pilot)	.....	BK3026
1997-1990	(Warner 1356)	
Seal	.....	714503
Ball Bearing	.....	110CB
Ndle Bearing (Pilot)	.....	BK3026
1990	(Warner 1345)	
Seal	.....	710062
Repair Sleeve	.....	KWK99175

Front Output Shaft

2008-1999	(New Process 271, 273)	
Ball Bearing	.....	111TB
Ndle Bearing (Pilot)	.....	J2416
1997-1996	(Warner 4407)	
Ball Bearing (Inner)	.....	207
Seal (Outer)	.....	4333N
Ball Bearing (Outer)	.....	208
Ndle Bearing (Pilot)	.....	B2012
1997-1990	(Warner 1356)	
Seal	.....	714503
Ball Bearing	.....	207
Ndle Bearing (Pilot)	.....	B2012
1990	(Warner 1345)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B2012

Rear Output Shaft

1997-1996	(Warner 4407)	
Seal	.....	4503N
Ball Bearing	.....	308WB
Ndle Bearing Thrust	.....	NTA2233[2]
1997-1990	(Warner 1356)(fixed yoke)	
Seal	.....	4333N
Ball Bearing	.....	207
1997-1990	(Warner 1356)(slip yoke)	
Seal	.....	4503N
Ball Bearing	.....	207
1990	(Warner 1345)(w/o boot)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	B2812

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - 1 TON - Econoline, E350, F350 (cont.)

TRANSFER CASE

Intermediate Shaft

1997-1996 (Warner 4407)
Ball Bearing 210S[2]

Oil Pump Housing

2008-1999 (New Process 271, 273)
Seal 341022
Repair Sleeve KWK99225

Selector Shaft Seal/Man. Shaft

1997-1990 (Warner 1356, 4407)
Seal 330385

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1997-1990 (C4, C5, C6)
Seal 331107N
Repair Sleeve KWK99199

Rear Seal/Ext. Housing

1997-1990 (C6)
Seal 410308

Selector Shaft Seal/Man. Shaft

1997-1990 (C6)
Seal 7929S

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2000-1990 (AODE, E4OD)
Seal 3404
1993-1990 (AOT, AOD)
Seal 331107N
Repair Sleeve KWK99199

Rear Seal/Ext. Housing

2000-1994 (AODE)
Seal 4765
2000-1990 (E4OD)
Seal 7300S
Seal Kit 5203⁶⁴
1993-1990 (AOT, AOD)(long boot)
Seal 7692S
Seal Kit 5202⁶⁴

Selector Shaft Seal/Man. Shaft

2005-1990
Seal 7929S

5-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2008-2006
Seal 7929S

CLUTCH

Pilot Bearing

2002-1999 330/5.4L (SOHC)
Ndle Bearing FC68329
2002-1990 8 Cyl. 444 (7.3)(Diesel)
Ndle Bearing FC65662
1998-1997 330/5.4L
Ndle Bearing FC65662
1997-1990 8 Cyl. 460 (7.5)
Ndle Bearing FC66067
1997-1990 8 Cyl. 302 (5.0)
Ndle Bearing FC65662
1997-1990 8 Cyl. 351 (5.8)
Ndle Bearing FC65662
1997-1990 6 Cyl. 300 (4.9)
Ndle Bearing FC65662

Release Bearing

2002-1999 330/5.4L, 445/7.3L
Bearing Assy 614175
1998-1997 330/5.4L (SOHC)
Bearing Assy 614169
1998-1993 6 Cyl. 300 (4.9)(5 Spd.)(Hyd.
piston type)
Bearing Assy 614169
1998-1993 8 Cyl. 351 (5.8)(5 Spd.)(Hyd.
piston type)
Bearing Assy 614169
1998-1990 8 Cyl. 444 (7.3)(Diesel)
Bearing Assy 614062
1998-1990 8 Cyl. 420 (6.9)(Diesel)(5 Spd.)
Bearing Assy 614062
1998-1990 8 Cyl. 460 (7.5)(5 Spd.)
Bearing Assy 614062
1993-1990 8 Cyl. 351 (5.8)(4
Spd.)(mechanical mechanism)
Bearing Assy 614014
1993-1990 6 Cyl. 300 (4.9)(4
Spd.)(mechanical mechanism)
Bearing Assy 614014
1993-1990 8 Cyl. 460 (7.5)(4 Spd.)
Bearing Assy 614014
1992-1990 6 Cyl. 300 (4.9)(5 Spd.)(Hyd.
piston type)
Bearing Assy 614061
1992-1990 8 Cyl. 351 (5.8)(5 Spd.)(Hyd.
piston type)
Bearing Assy 614061

4-SPEED MANUAL TRANSMISSION

Input Shaft

1993-1990 (Warner T18)
Seal 7412S
Ball Bearing 308LTB[2]
Repair Sleeve KWK99125
1990 (Tremec)
Seal 3638
Ball Bearing 308LTB[2]
Repair Sleeve KWK99112

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

FORD TRUCK - 1 TON - Econoline, E350, F350 (cont.)**4-SPEED MANUAL TRANSMISSION****Rear Output Shaft**

1993-1990	(Warner T18)(28 spline)	
Seal	7692S	
Ball Bearing	308LI[2]	
Seal Kit	5202 ⁶⁴	
1990	(Tremec)(2nd Design)	
Seal	7692S	
Ball Bearing	308LI[2]	
Seal Kit	5202 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1990	(Tremec)	
Seal	313156	

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1999	(ZF S5 47)	
Kit	TRK300ZF	
1995-1990	(ZF S5 42)	
Kit	TRK300ZF	

Front Input Shaft

2004-1999	(ZF S5 47)	
Seal Viton	713771	
Cone/Cup	28580-28521[2]	
Repair Sleeve	KWK99139	
1998-1990	(ZF S5 42, S5 47)	
Seal Viton	713771	
Cone/Cup	28580-28521[2]	
Repair Sleeve	KWK99139	
1990	Mazda	
Seal	223012	
Repair Sleeve	KWK99114	

Front Input Shaft Pocket

2004-1990	(ZF S5 47)	
Cone	JH13349[2]	
2002-1990	(ZF S5 42)	
Cone	JH13349[2]	

Countershaft

2005-1990	(ZF S5 47)	
Cone/Cup	2580-2520[2]	
2002-1990	(ZF S5 42)	
Cone/Cup	2580-2520[2]	

Rear Output Shaft

2004-1990	(ZF S5 47)(2WD)	
Seal	225010	
Cone/Cup	J28573-28521[2]	
2004-1990	(ZF S5 47)(4WD)	
Seal	1217	
Cone/Cup	J28573-28521[2]	
2002-1990	(ZF S5 42)(2WD)	
Seal	225010	
Cone/Cup	J28573-28521[2]	
2002-1990	(ZF S5 42)(4WD)	
Seal	1217	
Cone/Cup	J28573-28521[2]	

5-SPEED MANUAL TRANSMISSION (cont.)**Rear Output Shaft (cont.)**

1990	Mazda	
Seal	710415	

6-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1999	(ZF S6 650)	
Kit	TRKS6650ZF	

Front Input Shaft

2004-1999	(ZF S6 650)	
Cone/Cup	NP007430-NP423135[2]	

Front Input Shaft Pocket

2004-1999	(ZF S6 650)	
Cone	JH13349[2]	

Main Shaft

2004-1999	(ZF S6 650)	
Cone/Cup (Center)	NP957859-NP771105[2]	

Center Counter Shaft

2004-1999	(ZF S6 650)	
Cone/Cup	NP043905-NP547779[2]	

Rear Output Shaft

2004-1999	(ZF S6 650)(2WD)	
Seal	225010	
Cone/Cup	J28573-28521[2]	
2004-1999	(ZF S6 650)(4WD)	
Seal	1217	
Cone/Cup	J28573-28521[2]	

DRIVESHAFT SUPPORT

2007-1993	(Spicer 1480)(1.5748" 40mm Brg. I.D.)	
Hanger Bearing Assy	HB88508AA[2]	
Ball Bearing	88508	
2004-1999	Spicer 1310, 1330 Series (Slip Yoke)	
Hanger Bearing Assy	HB88107A	
Ball Bearing	88107	
2000-1997	E350	
Hanger Bearing Assy	HB88508G[2]	
1995-1990	(Spicer 1260, 1280, 1310, 1410, 1480)(1.3780" Brg. I.D.)	
Ball Bearing	88107[2]	
Hanger Bearing Assy	HB88107A[2]	

POWER STEERING**Pump Shaft**

1997-1992	(Ford pump)	
Seal	8773S	
1997-1990	E350 (Saginaw pump)	
Seal	7013S	
1991-1990	F Ser.	
Seal	8773S	

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

FORD TRUCK - 1 TON - Econoline, E350, F350 (cont.)**MANUAL STEERING****Worm Shaft**

1998-1990	E350	
Seal		221922

CRANKSHAFT FRONT SEAL**6 Cylinder**

1998-1990	240/3.9, 300/4.9L	
Seal (Frt Entry)		2692
Seal (Rr Entry)		2942
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187

8 Cylinder

2008-1997	330/5.4L	
Seal		482041N
Repair Sleeve		KWK99187
2003-1990	420/6.9L, 444/7.3L (Diesel)	
Seal Viton		3894V
Seal		5066 ²⁶
1997-1990	302/5.0L, 332/5.4L, 351/5.8L, 352/5.8L, 360/5.9L, 390/6.4L, 400/6.6L, 460/7.5L	
Seal (Frt Entry)		2692
Seal (Rr Entry)		2942
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187

10 Cylinder

2008-1997	415/6.8L	
Seal		482041N
Repair Sleeve		KWK99187
Harmnc Balancer Slvs		88187

CRANKSHAFT REAR SEAL**6 Cylinder**

1996-1990	240/3.9L, 300/4.9L	
Seal Viton		2377
Seal PTFE H/D		5278
Repair Sleeve		KWK99372

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-1997	330/5.4L	
Seal Viton		3909
Seal PTFE H/D		5277
Repair Sleeve		KWK99362
2003-1994	444/7.3L (Diesel)	
Seal		5723
1998-1990	351/5.8L	
Seal Viton		2377
Seal PTFE H/D		5278
Repair Sleeve		KWK99372
1998-1990	460/7.5L	
Seal Rope		5095
Seal Split		5118
1994-1990	420/6.9L, 444/7.3L (Diesel)	
Seal Viton		3893V
Repair Sleeve		KWK99372

10 Cylinder

2008-1997	415/6.8L	
Seal Viton		3909
Seal PTFE H/D		5277
Repair Sleeve		KWK99362

FORD TRUCK - 1-1/2, 2, 2-1/2 TON - Motor Home Chassis, 400, 450, F53, F59, 500, 550, 600, 700 Series**FRONT WHEEL****RWD**

2009-2005	Super Duty (Mono Beam Axle)	
Hub Unit Bearing		SP940203[2] ²⁵
2007-1999	Super Duty (Twin I-Beam Axle)	
Seal (Inner)		4160[2]
Set (Inner)		SET47[2]
Cone/Cup (Outer)		15101-15245[2]
2004-1999	Super Duty (Mono Beam Axle)	
Hub Unit Bearing		HA590233[2] ²⁵

FRONT WHEEL (cont.)**RWD (cont.)**

2003-2000	F650, F750 (9000 lb. Axle)(ABS)	
Seal (Inner)		370132A[2] ⁵⁷
Cone/Cup (Inner)		39581-39520[2]
Cone/Cup (Outer)		3585-3525[2]
2003-2000	F750 (12000 lb. Axle)(ABS)	
Seal (Inner)		370001A[2]
Cone/Cup (Inner)		HM212049-HM212011[2]
Cone/Cup (Outer)		3782-3720[2]

²⁵New Item, Check For Availability²⁶Opt. Kit = 3894V Seal & Sleeve⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - 1-1/2, 2, 2-1/2 TON - Motor Home Chassis, 400, 450, F53, F59, 500, 550, 600, 700 Series (cont.)					

FRONT WHEEL (cont.)**RWD (cont.)**

1999-1990	600, 700 Ser. (6000, 7000 lb. Axle)(Disc)	
Seal (Inner)	.....	2674[2]
Cone/Cup (Inner)	.....	45284-45220[2]
Cone/Cup (Outer)	.....	25880-25820[2]
1998-1990	F450 Super Duty, F53, F550 Super Duty	
Seal (Inner)	.....	4160[2]
Set (Inner)	.....	SET47[2]
Cone/Cup (Outer)	.....	15101-15245[2]
1997-1992	(10,000, 12,000 & 14,600 lb. Axles), (ABS)	
Seal (Inner)	.....	370001A[2]
Set (Inner)	.....	SET413[2]
Set (Outer)	.....	SET406[2]
1994-1990	600, 700 Ser. (7500, 9000, 12000 lb. Axle)	
Seal (Inner)	.....	370132A[2] ⁵⁷
Cone/Cup (Inner)	.....	39581-39520[2]
Cone/Cup (Outer)	.....	3585-3525[2]

4WD

2009-2005	F450, F550 Super Duty (DRW)	
Hub Unit Bearing	.....	SP940202[2] ²⁵
2004-2000	F450, F550 Super Duty (DRW)(4 Whl. ABS)	
Seal	.....	710413[2]
Hub Unit Bearing	.....	515025[2]
2004-2000	F450, F550 Super Duty (SRW)(4 Whl. ABS)(Coarse Thread Studs)	
Seal	.....	710413[2]
Hub Unit Bearing	.....	515020[2]
2004-2000	F450, F550 Super Duty (SRW)(4 Whl. ABS)(Fine Thread Studs)	
Seal	.....	710413[2]
Hub Unit Bearing	.....	SP580205[2] ²⁵
2004-2000	F450, F550 Super Duty (SRW)(Rr. Whl. ABS)	
Seal	.....	710413[2]
Hub Unit Bearing	.....	515021[2]
1999	F450, F550 Super Duty (DRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Seal	.....	710413[2]
Hub Unit Bearing	.....	HA590425[2]
1999	F450, F550 Super Duty (DRW)(4 Whl. ABS)(From 3/22/99)	
Hub Unit Bearing	.....	515025[2]
1999	F450, F550 Super Duty (SRW)(4 Whl. ABS)(Coarse Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	515020[2]
1999	F450, F550 Super Duty (SRW)(4 Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	SP580204[2] ²⁵

FRONT WHEEL (cont.)**4WD (cont.)**

1999	F450, F550 Super Duty (SRW)(4 Whl. ABS)(Fine Thread Studs)(From 3/22/99)	
Hub Unit Bearing	.....	SP580205[2] ²⁵
1999	F450, F550 Super Duty (SRW)(Rr. Whl. ABS)(Coarse Thread Studs)(Thru 3/21/99)	
Hub Unit Bearing	.....	HA590132[2] ²⁵
1999	F450, F550 Super Duty (SRW)(Rr. Whl. ABS)(From 3/22/99)	
Hub Unit Bearing	.....	515021[2]
1997-1990		
Seal (Inner)	.....	415960[2]
Cone/Cup (Inner)	.....	387A-382A[2]
Set (Outer)	.....	SET38[2]

REAR WHEEL**RWD**

2007-1999	F450, F550 Super Duty	
Seal (Inner)	.....	710454[2]
Cone/Cup (Inner)	.....	33281-33462[2]
Cone/Cup (Outer)	.....	39250-39412[2]
2005-1999	E450, E550	
Seal (Inner)	.....	9864S[2]
Cone/Cup (Inner)	.....	387AS-382A[2]
Set (Outer)	.....	SET38[2]
2004-2000	F650, F750 (17,000 lb. Axle)(Dayton Whl.)	
Seal (Inner)	.....	370024A[2] ⁵⁷
Set (Inner)	.....	SET411[2]
Set (Outer)	.....	SET408[2]
1999-1990	(15,000 lb. Axle)(15" x 5" Drum)(Dayton Whl.)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Seal (Inner)	.....	455858[2]
Cone/Cup (Inner)	.....	33287-33462[2]
Seal (Outer)	.....	5487[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1999-1990	(15,000 lb. Axle)(15" x 6" Drum)(Dayton Whl.)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Seal (Inner)	.....	455858[2]
Cone/Cup (Inner)	.....	33287-33462[2]
Seal (Outer)	.....	5487[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1998-1992	F450, F53, F59	
Seal (Inner)	.....	370018A[2] ⁵⁷
Cone/Cup (Inner)	.....	39590-39520[2]
Cone/Cup (Outer)	.....	JLM506849-JLM506810[2]
1992-1990	(17,500, 18,000 & 19,000 lb. Axles)(w/15"x7" & 16"x7" Brks.)	
Seal (Inner)	.....	370024A[2] ⁵⁷
Set (Inner)	.....	SET411[2]
Set (Outer)	.....	SET408[2]

²⁵New Item, Check For Availability⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - 1-1/2, 2, 2-1/2 TON - Motor Home Chassis, 400, 450, F53, F59, 500, 550, 600, 700 Series (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

1992-1990	(15,000 lb. Axle)(From Ch. # C42001)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Seal (Inner)	.....	455858[2]
Seal (Outer)	.....	5487[2]
Cone/Cup (Inner)	.....	33287-33462[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1991-1990	(Dana/Spicer 80 Axle)	
Seal (Inner)	.....	370018A[2] ⁵⁷
Cone/Cup (Inner)	.....	39585-39520[2]
Cone/Cup (Outer)	.....	368A-362A[2]
1991-1990	CF600 Ser. (20,000 lb., 23,000 lb. Axle)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1990	(13,000 lb. Axle)(13" x 5" Drum)(Budd Whl.)	
Seal (Inner)	.....	370047A[2] ⁵⁷
Cone/Cup (Inner)	.....	3984-3920[2]
Seal (Inner)	.....	455858[2]
Cone/Cup (Outer)	.....	462-453X[2]

FRONT AXLE**Differential**

2004-2001	(DRW)	
Cone/Cup	.....	387A-382S[2]
2004-1999	(SRW)	
Cone/Cup	.....	JLM104948-LM104911A[2]

Pinion

2004-2001	(DRW)	
Cone/Cup (Inner)	.....	HM88542-HM88510
Cone/Cup (Outer)	.....	HM803146-HM803110
2004-1999	(SRW)	
Cone/Cup (Inner)	.....	02872-02820
Cone/Cup (Outer)	.....	HM88649-HM88610
1997-1995	F450 Super Duty	
Seal Viton	.....	719316
Repair Sleeve	.....	KWK99187

Steering Knuckle

2004-1999		
Seal	.....	710493[2] ²⁵

4WD FRONT AXLE**Axle Shaft**

2008-1999		
Seal (Inner)	.....	710492[2] ²⁵
2004-1999		
Seal (Outer)	.....	710413[2]
Ndle Bearing	.....	B2110[2]

REAR AXLE**Differential Rebuild Kit**

2007-2003	(Spicer 60 1 Axle)	
Kit	.....	DRK331B
2006-1999	(10.5" R.G.)	
Kit	.....	DRK317
2004-1998	(Dana/Spicer 80 Axle)	
Kit	.....	DRK337A
1998-1990	(Dana/Spicer 80 Axle)	
Kit	.....	DRK337
1994-1990	(Rockwell 13120, 15120 Axles)	
Kit	.....	DRK218
1994-1990	(Rockwell 19220 Axle)	
Kit	.....	DRK216
1992-1990	(Rockwell 17140 Axle)	
Kit	.....	DRK215
1992-1990	(Rockwell 17220 Axle)	
Kit	.....	DRK216

Differential

2006-1999	(10.5"R.G.)(11.25"R.G.)	
Cone/Cup	.....	469-453X[2]
2004-1999	(14.24"R.G.)	
Cone/Cup	.....	3984-3920[2]
1994-1993	(Rockwell 19220 Axle)	
Cone/Cup	.....	42381-42584[2]
1994-1992	(Rockwell 19145 Axle)	
Cone/Cup	.....	JM716649-JM716610[2]
1994-1990	(Rockwell 13120, 15120 Axles)	
Cone/Cup (LH)	.....	3994-JM511910
Cone/Cup (RH)	.....	34306-34478
1994-1990	(Rockwell 15210 Axle)	
Cone/Cup (LH)	.....	JP10049-JP10010
Cone/Cup (RH)	.....	JLM714149-JLM714110
1994-1990	(Rockwell 17140, 21145 Axles)(3200-L-1676 Carrier)	
Cone/Cup	.....	JM716649-JM716610[2]
1994-1990	(Rockwell 17140, 21145 Axles)(3200-M-1547 Carrier)	
Cone/Cup (LH)	.....	JM716649-JM716610
Cone/Cup (RH)	.....	JP10049-JP10010
1994-1990	(Rockwell 21145 Axle)(3200-R-1500 Carrier)	
Bearing Assy	.....	32020X[2]
1994-1990	(Rockwell 21230 Axle)	
Cone/Cup (LH)	.....	52400-52618
Cone/Cup (RH)	.....	JM716649-JM716610
1994-1990	(Rockwell 23160 Axle)	
Bearing Assy	.....	32021X[2]
1994-1990	(Rockwell 23240 Axle)	
Cone/Cup (LH)	.....	JP12049-JP12010
Cone/Cup (RH)	.....	JM716649-JM716610
1993-1990	(Rockwell 23180 Axle)	
Cone/Cup (LH)	.....	JHM720249-JHM720210
Cone/Cup (RH)	.....	64450-64700
1992-1990	(Rockwell 17220, 19220 Axles)	
Cone/Cup (LH)	.....	42381-42584
Cone/Cup (RH)	.....	JLM714149-JLM714110

²⁵New Item, Check For Availability⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - 1-1/2, 2, 2-1/2 TON - Motor Home Chassis, 400, 450, F53, F59, 500, 550, 600, 700 Series (cont.)					

REAR AXLE**Pinion**

2008-2007	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	.....	NP761271-NP998236
Cone/Cup (Outer)	.....	HM89443-HM89411
2006-1999	(10.5" R.G.)	
Seal Viton	.....	4278
Cone/Cup (Inner)	.....	NP504493-NP949481
Cone/Cup (Outer)	.....	HM89443-HM89411
2004-1999	(14.24" R.G.)	
Cone/Cup (Rr)	.....	72225C-72487[2]
2004-1999	(Spicer 80 Ser. Axle)	
Seal Viton	.....	4525V
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	M802048-M802011
1994-1993	(Rockwell 19220 Axle)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	M804049-M804010
Cylindrical Bearing	.....	RU1570UM[2]
1994-1990	(Rockwell 15210 Axle)(Prod. From 12/1987 On)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	M804049-M804010
Cylindrical Bearing	.....	RU1570UM[2]
1994-1990	(Rockwell 13120, 15120 Axles)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	HM804846-HM804810
Cylindrical Bearing	.....	MUB1305UDM[2]
1994-1990	(Rockwell 19145, 21145 Axles)	
Seal	.....	3905
Cone/Cup (Inner)	.....	72212C-72487
Cone/Cup (Outer)	.....	55206C-55437
Cylindrical Bearing	.....	RU1570UM[2]
1994-1990	(Rockwell 21230 Axle)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	HM804846-HM804810
1994-1990	(Rockwell 23160 Axle)	
Seal	.....	417987N
Cone/Cup (Inner)	.....	9278-9220
Cone/Cup (Outer)	.....	HM813843-HM813810
1994-1990	(Rockwell 23240 Axle)	
Seal	.....	3905
Cone/Cup (Inner)	.....	78225C-78551
Cone/Cup (Outer)	.....	55206C-55437
1993-1990	(Rockwell 23180 Axle)	
Seal	.....	417987N
Cone/Cup (Inner)	.....	9278-9220
Cone/Cup (Outer)	.....	H715334-H715311
Cylindrical Bearing	.....	MUB7309UM[2]
1992-1990	(Rockwell 17140 Axle)(3200-L-1676 Carrier)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	M804049-M804010
Cylindrical Bearing	.....	RU1570UM[2]

REAR AXLE (cont.)**Pinion (cont.)**

1992-1990	(Rockwell 17220, 19220 Axles)	
Seal	.....	415082N
Cone/Cup (Inner)	.....	55200C-55437
Cone/Cup (Outer)	.....	M804049-M804010
Cylindrical Bearing	.....	RU1570UM[2]

TRANSFER CASE**Input Shaft**

2004-1999	F450, F550 Super Duty	
Ball Bearing	.....	211TB

Front Output Shaft

2004-1999	F450, F550 Super Duty	
Ball Bearing	.....	111TB

4-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2004-1999	F450, F550 Super Duty	
Seal	.....	7300S
Repair Sleeve	.....	KWK99168

Selector Shaft Seal/Man. Shaft

2004-1990		
Seal	.....	7929S

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2005	(5R110W) Torqshift	
Seal	.....	710485

Selector Shaft Seal/Man. Shaft

2008-2005		
Seal	.....	7929S

CLUTCH**Pilot Bearing**

2001-1999	F550 Super Duty	
Ndle Bearing	.....	FC65174
1992-1990	600 Ser. (Clark 5 Spd.)	
Ball Bearing	.....	206FF
1992-1990	700 Ser. (Clark 5 Spd.)	
Ball Bearing	.....	206FF
1992-1990	600 Ser. (Diesel)(Exc. 1986, 1992 Clark 5 Spd.)	
Ball Bearing	.....	205SS
1992-1990	600 Ser. (Gas)(single plate Cl.)(Exc. 1979, 1988, P600 Ser.)	
Ball Bearing	.....	202SS
1992-1990	600 Ser. 359, 361, 389, 391, 429	
Ball Bearing	.....	205SS

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
FORD TRUCK - 1-1/2, 2, 2-1/2 TON - Motor Home Chassis, 400, 450, F53, F59, 500, 550, 600, 700 Series (cont.)					

CLUTCH (cont.)

Pilot Bearing (cont.)

1992-1990	700 Ser. (Diesel)(Exc.1986, 1992 Clark 5 Spd.)	
	Ball Bearing	205SS
1992-1990	700 Ser. (Gas)(single plate Cl.)	
	Ball Bearing	202SS
1992-1990	700 Ser. 359, 361, 389, 391, 429	
	Ball Bearing	205SS

Release Bearing

2001-1999	F550 Super Duty	
	Bearing Assy	614175
1994-1993	(Dbl. plate Cl.)	
	Bearing Assy	614087
1994-1993	(single plate Cl.)	
	Bearing Assy	614058
1992-1990	700 Ser. (3208 Cat Diesel)(13" & 14" Dbl. plate Cl.)	
	Bearing Only	FA02256C
1992-1990	600, 700 Ser. (Diesel)(Dbl. plate Cl.)	
	Bearing Only	FB02256C
1992-1990	600, 700 Ser. (Diesel)(single plate Cl.)	
	Bearing Only	FA02256C
1992-1990	600, 700 Ser. (Gas)(Dbl. plate Cl.)	
	Bearing Only	FD02256C
1992-1990	600, 700 Ser. (Gas)(single plate Cl.)	
	Bearing Only	F01757C

DRIVESHAFT SUPPORT

2007-1999	(Spicer 1410)(1.5748" 40mm Brg. I.D. 2.25" height)	
	Hanger Bearing Assy	HB88508A
	Ball Bearing	88508
1996-1993	(Spicer 1480)(1.5748" 40mm Brg. I.D.)	
	Hanger Bearing Assy	HB88508AA
1993-1990	(Spicer 1410)(1.5748" 40mm Brg. I.D. 2.25" height)	
	Hanger Bearing Assy	HB88508A
1992-1990	(Spicer 1260, 1280, 1310, 1380, 1410, 1480)(1.3780" Brg. I.D.)	
	Ball Bearing	88107[2]
	Hanger Bearing Assy	HB88107A[2]

CRANKSHAFT FRONT SEAL

8 Cylinder

2005-2000	330/5.4L	
	Seal	482041N
2003-1990	7.3L (Diesel)	
	Seal Viton	3894V
	Seal	5066 ²⁶
1997-1990	460/7.5L	
	Seal	2692

10 Cylinder

2007-1999	415/6.8L	
	Seal	482041N

CRANKSHAFT REAR SEAL

8 Cylinder

2005-2000	330/5.4L	
	Seal Viton	3909
	Repair Sleeve	KWK99362
2003-1994	444/7.3L (Diesel)	
	Seal	5723
1997-1990	460/7.5L	
	Seal Rope	5095
	Seal Split	5118
1993-1990	420/6.9L, 444/7.3L (Diesel)	
	Seal Viton	3893V
	Repair Sleeve	KWK99372

10 Cylinder

2007-1997	6.8L	
	Seal Viton	3909
	Repair Sleeve	KWK99362

²⁶Opt. Kit = 3894V Seal & Sleeve

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

GEO - (See also Chevrolet Imports from 1998) - Metro, Prizm, Storm**FRONT WHEEL****FWD**

1997-1995	Metro	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710175[2]
Ball Bearing (Inner)	.....	510001[2]
1997-1993	Prizm	
Seal Kit	.....	5696[2] ¹²
Ball Bearing	.....	510007[2]
Hub Unit Bearing		
(Non-ABS)	.....	518507[2] ⁰⁶
Seal (Inner)	.....	1993[2]
Seal (Outer)	.....	4898[2]
1994-1992	Metro LSI	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710175[2]
Ball Bearing (Inner)	.....	510001[2]
1994-1992	Metro exc. LSI	
Seal (Inner)	.....	4904[2]
Ball Bearing (Inner)	.....	107DD[2]
Ball Bearing (Outer)	.....	107DD[2]
1993-1990	Storm	
Seal	.....	1953S[2]
Ball Bearing	.....	510033[2]
1993-1990	Storm GSi	
Seal (Inner)	.....	710194[2]
Bearing Assy (Inner)	.....	517005WB[2]
Seal (Outer)	.....	710192[2]
1992-1990	Prizm	
Seal (Inner)	.....	1993[2]
Ball Bearing (Inner)	.....	510007[2]
Seal (Outer)	.....	4898[2]
1991-1990	Metro	
Seal (Inner)	.....	4904[2]
Ball Bearing	.....	107DD[2]

REAR WHEEL**FWD**

1997-1996	Prizm (ABS)	
Hub Unit Bearing	.....	512184[2]
1997-1995	Metro (ABS)	
Hub Unit Bearing	.....	512204[2]
1997-1993	Prizm (Non-ABS)	
Hub Unit Bearing	.....	512018[2]
1997-1990	Metro (Non-ABS)	
Ball Bearing (Inner)	.....	205F[2]
Ball Bearing (Outer)	.....	204F[2]
1995-1993	Prizm (ABS)	
Hub Unit Bearing	.....	512019[2]
1993-1990	Storm	
Hub Unit Bearing	.....	512171[2]
1992-1990	Prizm	
Seal	.....	1180S[2]
Ball Bearing	.....	513031[2]

CLUTCH**Pilot Bearing**

1996-1990	3 Cyl. 1.0, (Turbo)	
Ball Bearing	.....	200CC
1996-1990	4 Cyl. 1.3	
Ball Bearing	.....	200CC

CLUTCH (cont.)**Pilot Bearing (cont.)**

1996-1990	4 Cyl. 1.6 (DOHC)	
Ball Bearing	.....	200CC

Release Bearing

1996-1995	Metro 1.3	
Bearing Assy	.....	614082
1996-1993	Prizm 1.8 (DOHC)	
Bearing Assy	.....	614152
1996-1992	Prizm 1.6 (DOHC)	
Bearing Assy	.....	614152
1996-1990	Metro 1.0	
Bearing Assy	.....	614082
1993-1990	Storm	
Bearing Assy	.....	614108
1991-1990	Prizm 1.6 (DOHC)	
Bearing Assy	.....	614043

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

1997-1990	(Aisin C51, C52)	
Seal	.....	1015N
1993-1990	(Isuzu MFD 5M)	
Seal	.....	3667

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1997-1992	(Aisin A210)	
Ball Bearing	.....	207[2]
1997-1990	(Aisin A131)	
Seal	.....	710416[2]
1992-1990	(Jatco F3A)	
Cone/Cup	.....	XAA32008X-Y32008X[2]
1991-1990	(Aisin A210)(w/o Turbo)	
Ball Bearing	.....	207S[2]

Torque Converter

1997-1990	Metro	
Seal	.....	223830
Repair Sleeve	.....	KWK99147
1997-1990	Prizm	
Seal	.....	223830
Repair Sleeve	.....	KWK99147
1993-1990	Storm	
Seal Viton	.....	710078
Repair Sleeve	.....	KWK99177

Output Shaft

1997-1990	Metro	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]
1997-1990	Prizm	
Seal	.....	710110[2]
1993-1990	Spectrum, Storm	
Seal	.....	223542[2]
Repair Sleeve	.....	KWK99139[2]

⁰⁶Kit = 2 Seals, Studded Spindle, Bearing, Plate¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.

GEO - (See also Chevrolet Imports from 1998) - Metro, Prizm, Storm (cont.)
3-SPEED AUTOMATIC TRANSAXLE
Manual Shaft

1997-1990	Metro	
Seal		710116
1997-1990	Prizm	
Seal		221207
Repair Sleeve		KWK99049

4-SPEED AUTOMATIC TRANSAXLE
Differential

1997-1993	(Aisin A245)	
Seal		710416[2]
1993-1990	(Jatco JF403)	
Seal (LH)		710109
Bearing Assy (LH)		30208M
Seal (RH)		710110
Bearing Assy (RH)		30208M

Torque Converter / Frt Pump

1997-1990	Prizm	
Seal		223830
Repair Sleeve		KWK99147
1993	Storm	
Seal		710114

Output Shaft

1997-1990	Prizm	
Seal (LH)		710109
Seal (RH)		710110
1993-1990	Storm	
Seal (LH)		710109
Seal (RH)		710110

Manual Shaft

1997-1990	Prizm	
Seal		221207
Repair Sleeve		KWK99049

ALTERNATOR

1997-1990	Metro	
Ball Bearing (Drive End)		302CC

OIL PUMP
4 Cylinder

1997-1990	1474cc/1.5L, 1600cc/1.6L(DOHC)	
Seal		223235
Repair Sleeve		KWK99128

CAMSHAFT SEAL
3 Cylinder

1997-1990	Metro 1.0	
Seal		710310
Repair Sleeve		KWK99128

CAMSHAFT SEAL
4 Cylinder

1997-1995	Metro 1.3	
Seal		710310
Repair Sleeve		KWK99128
1997-1990	Prizm	
Seal		1987S
Repair Sleeve		KWK99139
1993-1990	Storm	
Seal		1217

CRANKSHAFT FRONT SEAL
4 Cylinder

1997-1995	Metro	
Seal		710310
Repair Sleeve		KWK99128
1997-1990	Prizm	
Seal		223235
Repair Sleeve		KWK99128
1993-1990	Storm	
Seal		223220
Repair Sleeve		KWK99128

3 Cylinder

1997-1990	1.0L	
Seal		710310

CRANKSHAFT REAR SEAL
3 Cylinder

1997-1990	Metro 1.0	
Seal		710334

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

GEO - Import SUV - Tracker**FRONT WHEEL****RWD****1997-1990**

Seal (Inner) 710240[2]
 Bearing Assy (Inner) 517009[2]
 Seal (Outer) 710239[2]

4WD**1997-1990**

Seal (Inner) 710240[2]
 Bearing Assy (Inner) 517009[2]
 Seal (Outer) 710239[2]

REAR WHEEL**RWD****1997-1990**

Ball Bearing 511004[2]¹⁵

FRONT AXLE**Steering Knuckle****1997-1990**

Seal (Inner) 710255
 Seal (Outer) 710256

4WD FRONT AXLE**Axle Shaft****1997-1990**

Seal Viton 710331[2]
 Ball Bearing 206FF[2]

Differential**1997-1990**

Cone/Cup 17887-17831[2]

Pinion**1997-1990**

Bearing Assy (Inner) 30307M
 Seal (Outer) 710523
 Bearing Assy (Outer) 30306M

REAR AXLE**Differential****1997-1990**

Bearing Assy KC11445Y[2]

Pinion**1997-1990**

Seal (Outer) 710523
 Bearing Assy (Outer) 30306M
 Bearing Assy (Inner) 30307M

TRANSFER CASE**Input Shaft****1997-1990**

Seal 223540
 Repair Sleeve KWK99139

Front Output Shaft**1997-1990**

Seal 1213N
 Repair Sleeve KWK99157

3-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft****1995-1990**

Seal 8792S

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft****1997-1995**

Seal 8792S

CAMSHAFT SEAL**4 Cylinder****1997-1990**

Seal 710310

CRANKSHAFT FRONT SEAL**4 Cylinder****1997-1990 1.6L**

Seal 710310

CRANKSHAFT REAR SEAL**4 Cylinder****1993-1990 1.6 L**

Seal 710334

¹⁵New Bearing Design, Replaces Collar

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 4500 (Class 4), 5000, 5500 (Class 5), 6000, 6500 (Class 6), 7000, 7500 (Class 7)					

FRONT WHEEL

FWD

1999-1997	(12,000 lb. Axle W7R042HD)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1998-1997	(W6R042)
Seal Viton (Inner)	370199A[2] ⁵⁷
Cone (Inner)	JM205149[2]
Bearing Assy (Outer)	32207M[2]
1998-1997	(W7R042M)
Seal (Inner)	370211A[2] ⁵⁷
Bearing Assy (Inner)	32208M[2]
1998-1990	(16,000 lb. Axle C6H042, C7H042, C7H064)
Seal (Inner)	370182A[2] ⁵⁷
Cone/Cup (Inner)	6461A-6420[2]
Cone/Cup (Outer)	557S-552A[2]
1997-1993	(9,000 lb. Axle B6P042, C6D042)
Seal (Inner)	370211A[2] ⁵⁷
Bearing Assy (Inner)	33208[2]
1997-1990	(11,000 lb. Axle C6H042, C7H042, C7H064, W7R042HD)
Seal (Inner)	370211A[2] ⁵⁷
Bearing Assy (Outer)	33208[2]
1997-1990	(14,500 lb. Axle C6H042, C7H042, C7H064)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Cone/Cup (Outer)	JM205149-JM205110[2]
1997-1990	W5S042
Seal (Inner)	710087[2]
Bearing Assy (Inner)	513046[2]
Bearing Assy (Outer)	513045[2] ^z
1996-1991	(12,000 lb. Axle Late C6H042, C7H042, C7H064)
Seal (Inner)	370211A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1996-1990	(8,000 lb. Axle B7T042, C5H042, C6H042, C7H042, C7H064, P6S042)
Seal Viton (Inner)	370199A[2] ⁵⁷
Cone/Cup (Inner)	JM205149A-JM205110[2]
Bearing Assy (Outer)	32207M[2]
1996-1990	(W7R042M Hyd.Brks. Z06 Axle)
Seal (Inner)	710084[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^z
1996-1990	(W7R042)(HD Axle)
Seal (Inner)	710084[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^z
1996-1990	(W7R042M Hyd.Brks. Z05 Axle)
Seal (Inner)	710088[2]
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	4388-4335[2]

FRONT WHEEL (cont.)

FWD (cont.)

1994-1990	(W7R042T)
Seal (Inner)	710088[2]
Cone/Cup (Inner)	H414245X-H414210[2]
Bearing Assy (Outer)	513047[2] ^z
1991	(12,000 lb. Axle Early C6H042, C7H042, C7H064)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Bearing Assy (Outer)	33208[2]
1991-1990	(9,000 lb. Axle C7D064)
Seal (Inner)	370018A[2] ⁵⁷
Cone/Cup (Inner)	39581-39520[2]
Cone/Cup (Outer)	26878-26820[2]
1991-1990	(7,000 lb. Axle F070, B6P042, C5D042, C6D042, C7D042, C7D064, P4T042, P6T042)
Seal (Inner)	8976S[2]
Cone/Cup (Inner)	45284-45220[2]
Cone/Cup (Outer)	2796-2720[2]
1990	(14,000 lb. Axle C6H042, C7H042, C7H064)
Seal Viton (Inner)	370212A[2] ⁵⁷
Cone/Cup (Inner)	JF7049A-JF7010[2]
Cone/Cup (Outer)	JM205149-JM205110[2]
1990	(12,000 lb. Axle B6P042, C6D042, P6T042, S7T042)
Seal (Inner)	45282A[2]
Cone/Cup (Inner)	HM212047-HM212011[2]
Cone/Cup (Outer)	45282-45220[2]
1990	(5,000 lb. Axle F050, C5D042, C6D042, C7D042, P4T042)
Seal (Inner)	8975S[2]
Cone/Cup (Inner)	3578A-3525[2]
Cone/Cup (Outer)	15103S-15243[2]
1990	(5,500 lb. Axle F055, C5D042, C6D042, C7D042, P4T042)
Seal (Inner)	8975S[2]
Cone/Cup (Inner)	3578A-3525[2]
Cone/Cup (Outer)	15103S-15243[2]

REAR WHEEL

RWD

1998-1997	(Dana/Spicer S150S)(W6R042)
Seal (Inner)	370008A[2] ⁵⁷
Cone/Cup (Inner)	33287-33462[2]
Cone/Cup (Outer)	3982-3920[2]
1997-1990	(Eaton 21065 Axle)(B7T042, C6H042, C7H042)
Seal (Inner)	370003A[2] ⁵⁷
Cone/Cup (Inner)	594A-592A[2]
Cone/Cup (Outer)	580-572[2]
1997-1990	(Eaton 22065 Axle)(B7T042, C6H042, C7H042)
Seal (Inner)	370003A[2] ⁵⁷
Cone/Cup (Inner)	594A-592A[2]
Cone/Cup (Outer)	580-572[2]

^zNon-Cancellable/Non-Returnable

⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 4500 (Class 4), 5000, 5500 (Class 5), 6000, 6500 (Class 6), 7000, 7500 (Class 7) (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

1997-1990	(Eaton 23070 Axle)(B7T042, C6H042, C7H042)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1997-1990	(Eaton 23085 Axle)(B7T042, C6H042, C7H042)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1997-1990	(Eaton 23105 Axle)(B7T042, C6H042, C7H042)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1997-1990	(Eaton 26085 Axle)(B7T042, C6H042, C7H042)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1997-1990	(Eaton 15040 Axle)	
Seal (Inner)	.....	370008A[2] ⁵⁷
Cone/Cup (Inner)	.....	33287-33462[2]
Cone/Cup (Outer)	.....	3982-3920[2]
1996-1991	(Eaton 19050 Axle)(B7T042, P6S042)	
Seal (Inner)	.....	370024A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1996-1990	(Eaton 19050 Axle)(C6H042, C7H042)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1996-1990	(Eaton 19055 Axle)(C6H042, C7H042)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1996-1990	(Eaton DS341, DT341, DS402 Axle)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1996-1990	(Rockwell 23160 Axle)	
Seal (Inner)	.....	370003A[2] ⁵⁷
Cone/Cup (Inner)	.....	594A-592A[2]
Cone/Cup (Outer)	.....	580-572[2]
1996-1990	(Rockwell SL100P, SQ100P Axle)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	594-592A[2]
Cone/Cup (Outer)	.....	47686-47620[2]
1996-1990	(W6R042)	
Seal (Inner)	.....	710085[2]
Bearing Assy (Inner)	.....	32215[2]
Seal (Outer)	.....	710086[2]
Bearing Assy (Outer)	.....	32213M[2]

REAR WHEEL (cont.)**RWD (cont.)**

1994-1990	W5S042	
Seal (Inner)	.....	710085[2]
Bearing Assy (Inner)	.....	32215[2]
Seal (Outer)	.....	710086[2]
Bearing Assy (Outer)	.....	32213M[2]
1994-1990	(W7R042M)	
Bearing Assy (Inner)	.....	32216[2]
Bearing Assy (Outer)	.....	32215[2]
1994-1990	(W7R042T)	
Seal (Inner)	.....	710089[2]
Bearing Assy (Inner)	.....	32219M[2]
Seal (Outer)	.....	710090[2]
Bearing Assy (Outer)	.....	32218M[2]
1994-1990	(W7R042T)	
Seal (Inner)	.....	710089[2]
Bearing Assy (Inner)	.....	32219M[2]
Seal (Outer)	.....	710090[2]
Bearing Assy (Outer)	.....	32218M[2]
1993-1990	(13,500 lb. H135 Axle)	
Seal (Inner)	.....	370046A[2] ⁵⁷
Cone/Cup (Inner)	.....	3984-3920[2]
Cone/Cup (Outer)	.....	28682-28622A[2]
1993-1990	(15,000 lb. H150, T150 Axle)	
Seal (Inner)	.....	370009A[2] ⁵⁷
Cone/Cup (Inner)	.....	33287-33472[2]
Cone/Cup (Outer)	.....	3982-3925[2]
1992-1990	(17,500 lb. H175, T175 Axle)	
Seal (Inner)	.....	370009A[2] ⁵⁷
Cone/Cup (Inner)	.....	495AX-493[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1992-1990	(19,000 lb. Eaton 17121, 17221 Axle)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]
1990	(Eaton 19050 Axle)	
Seal (Inner)	.....	370023A[2] ⁵⁷
Cone/Cup (Inner)	.....	47686-47620[2]
Cone/Cup (Outer)	.....	39590-39520[2]

SINGLE REAR AXLE**Differential Rebuild Kit**

1997-1990	(Eaton 26085P, 26085T Axles)	
Kit	.....	DRK72A
1997-1990	(Eaton 19050T, 19055D, 19055S, 19055T axle)	
Kit	.....	DRK23D
1997-1990	(Eaton 15040T Axle)	
Kit	.....	DRK24
1997-1990	(Eaton 15101 Axle)	
Kit	.....	DRK24
1997-1990	(Eaton 23221 Axle)	
Kit	.....	DRK72A
1994-1990	(Dana/Spicer M185T, M190T, M220T Axles)	
Kit	.....	DRK214
1991-1990	(Eaton 17401 Axle)	
Kit	.....	DRK23B
1991-1990	(Eaton 16121 Axle)	
Kit	.....	DRK23B

⁵⁷Oil Bath Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 4500 (Class 4), 5000, 5500 (Class 5), 6000, 6500 (Class 6), 7000, 7500 (Class 7) (cont.)					

SINGLE REAR AXLE

Differential

1998-1990	(Rockwell 23160 Axle)
Bearing Assy	32021X[2]
1997-1990	(Eaton 15040T Axle)
Cone/Cup (LH)	498-493
Cone/Cup (RH)	33275-33472
1997-1990	(Eaton 26085P, 26085T axle)(130537 case)
Cone/Cup (LH)	68462-68712
Cone/Cup (RH)	42346-42584
1997-1990	(Eaton 26085P, 26085T axle)(27950 case)
Cone/Cup (LH)	68450-68712
Cone/Cup (RH)	42346-42584
1997-1990	(Eaton 15040S Axle)
Cone/Cup (LH)	3994-3920
Cone/Cup (RH)	497-493
1997-1990	(Eaton 19050S Axle)
Cone/Cup (LH)	3994-3920
Cone/Cup (RH)	497-493
1997-1990	(Eaton 19050T, 19055D, 19055S, 19055T axle)
Cone/Cup (LH)	42381-42584
Cone/Cup (RH)	495A-493
1997-1990	(Eaton 21065S, 23070S, 23105S Axles)
Cone/Cup (LH)	598-592A
Cone/Cup (RH)	497-493
1997-1990	(Eaton 21065T Axle)
Cone/Cup (LH)	56425-56650
Cone/Cup (RH)	497-493
1997-1990	(Eaton 23070P, 23070T Axles)
Cone/Cup (LH)	56425-56650
Cone/Cup (RH)	497-493
1997-1990	(Eaton 17200, 17220, 17221, 17800, 17801, 18221, 7800 Axles)
Cone/Cup (LH)	56425-56650
Cone/Cup (RH)	497-493
1996-1990	(Isuzu R077 Axle)
Bearing Assy	30214[2]
1995-1990	(Isuzu R065 Axle)
Cone/Cup	3984-3920[2]
1994-1990	(Isuzu R094 Axle)
Bearing Assy	32216[2]
1994-1990	(Dana/Spicer M185T, M190S, M190T, M220T Axles)
Cone/Cup (LH)	JM822049-JM822010
Cone/Cup (RH)	JM716649-JM716610
1992-1990	(H110 Axle)
Cone/Cup	395-394A[2]
1991-1990	(Eaton 17401 Axle)
Cone/Cup (LH)	567-563
Cone/Cup (RH)	3994-3920
1991-1990	(Eaton 16121 Axle)
Cone/Cup (LH)	567-563
Cone/Cup (RH)	3994-3920

SINGLE REAR AXLE

Pinion

1998-1990	(Eaton 21065S Axle)
Cone/Cup (Inner)	78215C-78551
Seal (Outer)	9773R[2]
Cone/Cup (Outer)	55200C-55437
Cylindrical Bearing	MUS1308UM[2]
1998-1990	(Rockwell 23160 Axle)
Cone/Cup (Inner)	9278-9220
Seal (Outer)	417987N
Cone/Cup (Outer)	HM813843-HM813810
1998-1990	(Eaton 19050T, 19055D, 19055S, 19055T Axle)(2.375" Pinion Shaft)
Cone/Cup (Inner)	55175C-55437
Seal (Outer)	475095N
Cone/Cup (Outer)	55175C-55437
Cylindrical Bearing	MUS1307UM[2]
1998-1990	(Eaton 19050T, 19055D, 19055S, 19055T)(2.625" pinion shaft)
Cone/Cup (Inner)	55175C-55437
Seal (Outer)	475095N
Cone/Cup (Outer)	55175C-55437
Cylindrical Bearing	MUS1307UM[2]
1998-1990	(Eaton 23070P, 23070T Axles)
Cone/Cup (Inner)	78215C-78551
Seal (Outer)	712937
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	MUB5207UM[2]
1998-1990	(Eaton 23070S Axle)
Cone/Cup (Inner)	H913842-H913810
Seal (Outer)	712937
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	MUS1308UM[2]
1998-1990	(Eaton 23105S axle)
Cone/Cup (Inner)	H913842-H913810
Seal (Outer)	712937
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	MUS1308UM[2]
1998-1990	(Eaton 21065T Axle)
Cone/Cup (Inner)	72200C-72487
Seal (Outer)	9773R[2]
Cone/Cup (Outer)	55200C-55437
Cylindrical Bearing	MUS1307UM[2]
1998-1990	(Eaton 23221, 23421, 26085P, 26085T axle)
Cone/Cup (Inner)	78215C-78551
Seal (Outer)	712937
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	MUS1308UM[2]
1997-1990	(Eaton 15040T Axle)
Cone/Cup (Inner)	HM903249-HM903210
Seal Kit (Outer)	722250S ²⁰
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MU1305TDM[2]
1997-1990	(Eaton 15040S Axle)
Cone/Cup (Inner)	55175C-55437
Seal (Outer)	9773R
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MUB1305UDM[2]

²⁰Seal Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 4500 (Class 4), 5000, 5500 (Class 5), 6000, 6500 (Class 6), 7000, 7500 (Class 7) (cont.)					

SINGLE REAR AXLE (cont.)**Pinion (cont.)**

1996-1990	(Eaton 19050S Axle)
Cone/Cup (Inner)	72200C-72487
Seal (Outer)	9773R
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	RUB1570UM[2]
1995-1990	(Isuzu R065 Axle)
Bearing Assy (Inner)	30310
Seal (Outer)	710276
Bearing Assy (Outer)	30309M
1995-1990	(Isuzu R077 Axle)
Bearing Assy (Inner)	30310
Seal (Outer)	710276
Bearing Assy (Outer)	30309M
1994-1990	(Dana/Spicer M220T axle)
Cone/Cup (Inner)	72225C-72487
Seal (Outer)	477163N
Cone/Cup (Outer)	55200C-55437
Cylindrical Bearing	MUS1308UM[2]
1994-1990	(Isuzu R094 Axle)
Bearing Assy (Inner)	30310
Seal (Outer)	710275
Bearing Assy (Outer)	30311
1994-1990	(Isuzu R105 Axle)
Bearing Assy (Inner)	30312
Seal (Outer)	710275
Cone/Cup (Outer)	580-572
1991-1990	(Eaton 17401 axle)(2.625" pinion shaft)
Cone/Cup (Inner)	HM903249-HM903210
Seal (Outer)	712625
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MUS1307UM[2]
1991-1990	(Eaton 16121, 16221, 16802)(2.375" pinion shaft)
Cone/Cup (Inner)	HM903249-HM903210
Seal (Outer)	712375
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MUS1307UM[2]
1991-1990	(Eaton 16121, 16221, 16802)(2.625" pinion shaft)
Cone/Cup (Inner)	HM903249-HM903210
Seal (Outer)	712625
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MUS1307UM[2]
1991-1990	(Eaton 17401 axle)(2.375" pinion shaft)
Cone/Cup (Inner)	HM903249-HM903210
Seal (Outer)	712375
Cone/Cup (Outer)	HM903249-HM903210
Cylindrical Bearing	MUS1307UM[2]

TANDEM REAR AXLE - FRONTMOST AXLE**Differential Rebuild Kit**

1997-1990	(Eaton DS341 Axle)
Kit	DRK196
1997-1990	(Eaton DT341, DS402, DT402 Axles)
Kit	DRK207

Differential

1998-1990	(Eaton DS341 Axle)
Cone/Cup (LH)	497-493
Cone/Cup (RH)	567-563
1998-1990	(Eaton DT341, DS402, DT402 Axles)
Cone/Cup (LH)	497-493
Cone/Cup (RH)	56425-56650
1998-1990	(Rockwell SL100P, SQ100P Axles)
Cone/Cup (LH)	JM716649-JM716610
Cone/Cup (RH)	JM716649-JM716610

Pinion

1998-1990	(Rockwell SL100P, SQ100P Axles)
Cone/Cup (Inner)	72212C-72487
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	RU1570UM[2]
1997-1990	(Eaton DS341 Axle)
Cone/Cup (Inner)	55200C-55437
Seal (Outer)	9773R
Cone/Cup (Outer)	55200C-55437
Cylindrical Bearing	MUS1307UM[2]
1997-1990	(Eaton DT341, DS402, DT402 Axles)
Cone/Cup (Inner)	72218C-72487
Cone/Cup (Outer)	HM807049-HM807010
Cylindrical Bearing	MUS1307UM[2]

TANDEM REAR AXLE - REARMOST AXLE**Differential Rebuild Kit**

1998-1990	(Eaton DT341, DS402, DT402 Axles)
Kit	DRK207
1996-1990	(Eaton DS341 Axle)
Kit	DRK196

Differential

1998-1990	(Eaton DS341 Axle)
Cone/Cup (LH)	497-493
Cone/Cup (RH)	567-563
1998-1990	(Eaton DT341, DS402, DT402 Axles)
Cone/Cup (LH)	497-493
Cone/Cup (RH)	56425-56650
1998-1990	(Rockwell SL100P, SL100Q Axles)
Cone/Cup (LH)	JM716649-JM716610
Cone/Cup (RH)	JM716649-JM716610

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
GMC TRUCK - 1-1/2, 2, 2-1/2 TON - 4500 (Class 4), 5000, 5500 (Class 5), 6000, 6500 (Class 6), 7000, 7500 (Class 7) (cont.)					

TANDEM REAR AXLE - REARMOST AXLE

Pinion

1998-1990	(Eaton DS341 Axle)
Cone/Cup (Inner)	55200C-55437
Seal (Outer)	9773R
Cone/Cup (Outer)	55200C-55437
Cylindrical Bearing	MUS1307UM[2]
1998-1990	(Eaton DT341, DS402, DT402 Axles)
Cone/Cup (Inner)	72218C-72487
Cone/Cup (Outer)	HM807049-HM807010
Cylindrical Bearing	MUS1307UM[2]
1998-1990	(Rockwell SL100P, SL100Q Axles)
Cone/Cup (Inner)	72212C-72487
Seal (Outer)	3905
Cone/Cup (Outer)	72212C-72487
Cylindrical Bearing	RU1570UM[2]

CLUTCH

Pilot Bearing

1997-1990	350, 366, 427, 4 53
Ball Bearing	205FF
1992-1990	(3208 Caterpillar Diesel)
Ball Bearing	305DD
1992-1990	8.2 L (Detroit Diesel)(2.44")
Ball Bearing	305DD
1992-1990	8.2 L (Detroit Diesel)(2.047")
Ball Bearing	205FF

Release Bearing

1997-1990	366 (Spicer 13" Cl.)
Bearing Assy	614057
1997-1990	427 (Spicer 13" Cl.)
Bearing Assy	614057
1994-1990	6 Cyl. 6.5 L (Turbo Diesel)
Bearing Only	613009
1992-1990	8.2 L (Detroit Diesel)(Lipe flywheel)
Bearing Only	GE2505C
1992-1990	8.2 L (Detroit Diesel)(flat flywheel)
Bearing Assy	614065
1992-1990	(w/o 292, 350, 8.2 L)
Bearing Assy	614024
1992-1990	292, 350 (12" Cl.)
Bearing Assy	614018 ⁴²
1990	427 (12" dual Disc Cl.)(Fuller Trans.)
Bearing Only	613007
1990	427 (12" dual Disc Cl.)(Spicer Trans.)
Bearing Assy	614019
1990	350 (12" Cl.)
Bearing Assy	614018 ⁴²

CRANKSHAFT FRONT SEAL

6 Cylinder

1996-1990	403/6.6L (Turbo Diesel)
Seal	3945
Repair Sleeve	KWK99233
1995-1990	5785cc/5.8L (Turbo Diesel)
	6494cc/6.5L (Diesel)
	6494cc/6.5L (Turbo Diesel)
Seal Viton	710350
Repair Sleeve	KWK99235

8 Cylinder

1996-1990	366/6.0L, 427/7.0L
Seal	3945
Repair Sleeve	KWK99233
1991-1990	500/8.2L (Diesel) 500/8.2L (Turbo Diesel)
Seal	473476
Repair Sleeve	KWK99250
1990	636/10.4L (Diesel) 636/10.4L (Turbo Diesel)
Seal	39802
Repair Sleeve	KWK99287
1990	636/10.4L Diesel (2.375" shaft)
Seal	480988H
Repair Sleeve	KWK99237

CRANKSHAFT REAR SEAL

6 Cylinder

1996-1990	403/6.6L (Turbo Diesel)
Seal Viton	2261
Repair Sleeve	KWK99435
1995-1990	5785cc/5.8L (Turbo Diesel)
	6494cc/6.5L (Diesel)
	6494cc/6.5L (Turbo Diesel)
Seal Viton	710349
Repair Sleeve	KWK99413

8 Cylinder

1996-1990	366/6.0L, 427/7.0L
Seal Viton	2261
Repair Sleeve	KWK99435
1991-1990	500/8.2L (Diesel) 500/8.2L (Turbo Diesel)
Seal	455956H
1990	636/10.4L (Diesel) 636/10.4L (Turbo Diesel)
Seal	39801
Repair Sleeve	KWK99499

⁴²Self-Aligning Brg

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

GRUMMAN - REAR DRIVE - Postal Vehicle**FRONT WHEEL****RWD****1995-1990**

Seal (Inner) 4739[2]

Set (Inner) SET6[2]

Set (Outer) SET34[2]

REAR WHEEL**RWD****1994-1990**

Cylindrical Bearing 513023[2]

Bearing & Seal Kit TRP57509[2]¹⁹**REAR AXLE****Differential Rebuild Kit****1995-1990**

Kit DRK320

HONDA - Accord**FRONT WHEEL****FWD****2008**Ball Bearing WB000019[2]²⁵**2007-2003**

Ball Bearing 510073[2]

2002-1998

Ball Bearing 510050[2]

1997-1995 (6 Cyl.)

Bearing Module 510038[2]

1997-1990 (4 Cyl.)

Bearing Module 513098[2]

1990 EX

Hub Unit Bearing HA594460K[2]

REAR WHEEL**FWD****2008**

Hub Unit Bearing HA590202[2]

2007-2003

Hub Unit Bearing 512188[2]

2002-1998 (4 Cyl.)(Disc)

Hub Unit Bearing 512178[2]

2002-1998 (4 Cyl.)(Drum)

Hub Unit Bearing 512176[2]

2002-1998 (6 Cyl.)(Rear Disc)

Hub Unit Bearing 512179[2]

1997-1995 (4 Cyl.)(Disc)

Hub Unit Bearing 512020[2]

1997-1995 (4 Cyl.)(Drum)

Hub Unit Bearing 513080[2]

1997-1995 (6 Cyl.)(Rear Disc)

Hub Unit Bearing 512172[2]

1997-1991 (Wagon)(Drum)

Hub Unit Bearing 512122[2]

1994 (Coupe)(Sedan)(ABS)(Disc)

Hub Unit Bearing 512020[2]

1994 (Wagon)(Disc)

Hub Unit Bearing 512172[2]

1994-1990 (Coupe)(Sedan)(Drum)

Hub Unit Bearing 513080[2]

1993-1992 (Coupe)(Sedan)(Disc)

Hub Unit Bearing 513081[2]

REAR WHEEL (cont.)**FWD (cont.)****1993-1991** (Wagon)(Disc)

Hub Unit Bearing 512032[2]

1991-1990 (ABS)(Disc)

Hub Unit Bearing 513081[2]

1991-1990 (Non-ABS)(Disc)

Hub Unit Bearing 513080[2]

CLUTCH**Release Bearing****2002-1990**

Bearing Assy 614072

4-SPEED AUTOMATIC TRANSAXLE**Differential****2000-1990**

Ball Bearing 208[2]

Torque Convertor / Frt Pump**2002-1990**

Seal 350609

Input Shaft**2002-1998**

Seal 220918

Output Shaft**2002-1998** (4 Cyl.)

Seal Viton (LH) 224026

Repair Sleeve (LH) KWK99157

Seal (RH) 224066

Repair Sleeve (RH) KWK99157

2002-1998 (6 Cyl.)

Seal (LH) 710199

Repair Sleeve (LH) KWK99076

Seal Viton (RH) 224026

Repair Sleeve (RH) KWK99157

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

HONDA - Accord (cont.)**4-SPEED AUTOMATIC TRANSAXLE****(cont.)****Output Shaft (cont.)**

1997-1995 (6 Cyl.)	
Seal (LH)	712551
Repair Sleeve (LH)	KWK99157
Seal (RH)	224066
Repair Sleeve (RH)	KWK99157
1997-1990 (4 Cyl.)	
Seal Viton (LH)	224026[2]
Seal (RH)	224066
Repair Sleeve	KWK99157[2]
1993-1992 (4 Cyl.)(MPWA)	
Seal (RH)	224025
Seal (LH)	710173
Repair Sleeve	KWK99196

Manual Shaft

2005-1990	
Seal	221207
Repair Sleeve	KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2007-2003	
Seal (RH)	710300
Seal (LH)	710217
Repair Sleeve	KWK99157

5-SPEED MANUAL TRANSAXLE**Differential**

2005-2004 (4 Cyl.)	
Ball Bearing	208S[2]

Input Shaft

2002-1994	
Seal	222830
Repair Sleeve	KWK99106
1993-1990	
Seal Viton	222742
Repair Sleeve	KWK99106

Output Shaft

2002-1994	
Seal (LH)	710315
Repair Sleeve (LH)	KWK99139
Seal (RH)	3459S
Repair Sleeve (RH)	KWK99157
1993-1990	
Seal (LH)	2007N
Repair Sleeve (LH)	KWK99139
Seal (RH)	3459S
Repair Sleeve (RH)	KWK99157

5-SPEED MANUAL TRANSAXLE**Selector Shaft Seal/Man. Shaft**

2002-1990	
Seal	221607

ALTERNATOR

2000-1990 (Nippondenso)	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	201CC
1998-1990 Mitsubishi	
Ball Bearing (Drive End)	303CC
Ball Bearing (Rear End)	201CC

OIL PUMP**4 Cylinder**

2002-1990	
Seal Viton	712009
Repair Sleeve	KWK99106

6 Cylinder

2008-1995	
Seal	711181

CAMSHAFT SEAL**4 Cylinder**

2005-1990	
Seal	712008
Repair Sleeve	KWK99111

6 Cylinder

2002-1998 3.0L	
Seal	710451[2]
Repair Sleeve	KWK99147[2]
1997-1995 2.7L	
Seal Viton	713771[2]
Repair Sleeve	KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1990 2156cc/2.2L, 2254cc/2.3L	
Seal	224015
Repair Sleeve	KWK99157

6 Cylinder

2002-1995	
Seal	1181
Repair Sleeve	KWK99162

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2003 2354cc/2.4L	
Seal Viton	228008
2002-1999	
Seal	228015
Repair Sleeve	KWK99315
1998-1990	
Seal	228015
Repair Sleeve	KWK99315

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HONDA - Accord (cont.)**CRANKSHAFT REAR SEAL****6 Cylinder**

2008-1995 2.7L, 3.0L, 3.5L

Seal Viton 228008

Repair Sleeve KWK99315

HONDA - Accord Hybrid**FRONT WHEEL****FWD**

2007-2005

Ball Bearing 510073[2]

REAR WHEEL**FWD**

2007-2005

Hub Unit Bearing HA590019[2]²⁵**HONDA - Civic, Civic Hybrid****FRONT WHEEL****FWD**

2009-2006 Hybrid

Bearing Assy 510089[2]²⁵

2008-2006 1.8L, Japan Built

Ball Bearing 510073[2]

2008-2006 1.8L, USA Built

Bearing Assy 510089[2]²⁵

2008-2006 2.0L

Ball Bearing 510073[2]

2005-2004 SI

Ball Bearing 510050[2]

2005-2003 Hybrid

Ball Bearing 510030[2]

2005-2001 DX, EX, HX, LX, SI

Ball Bearing 510030[2]

2000-1992 DX, HX

Ball Bearing 510015[2]

2000-1992 EX, SI

Ball Bearing 510030[2]

1991-1990

Ball Bearing 513024[2]

4WD

1991-1990

Ball Bearing 513024[2]

REAR WHEEL**FWD**

2009-2006 Hybrid

Hub Unit Bearing 512322[2]²⁵

2008-2006 Coupe, Sedan, (w/o GX)

Hub Unit Bearing HA590152[2]²⁵

2008-2006 Sedan (w/ GX)

Hub Unit Bearing 512322[2]²⁵**REAR WHEEL (cont.)****FWD (cont.)**

2007-2006 (Disc)

Hub Unit Bearing HA590164[2]²⁵

2005-2004 SI (ABS)

Hub Unit Bearing HA590005[2]

2005-2003 Hybrid

Hub Unit Bearing 512175[2]

2005-2001 DX, HX, LX (Non-ABS)

Hub Unit Bearing 512174[2]

2005-2001 EX

Hub Unit Bearing 512175[2]

2003-2002 SI (ABS)

Hub Unit Bearing HA590009[2]²⁵

2000-1995 (Disc)

Hub Unit Bearing 513105[2]

2000-1995 (Drum)(14" Wheel)

Hub Unit Bearing 513105[2]

2000-1992 (Non-ABS)(Drum)

Hub Unit Bearing 513035[2]

Seal 473367[2]

1991-1990 (Wagon)

Hub Unit Bearing 513033[2]

1991-1990

Hub Unit Bearing 513035[2]

Seal 473367[2]

4WD

1991-1990 (Wagon)(4WD)

Set SET35[2]

²⁵New Item, Check For Availability

HONDA - Civic, Civic Hybrid (cont.)**REAR AXLE****Differential**

1991-1990	(Wagon)(4WD)	
Seal	.....	710110[2]
Ball Bearing	.....	208[2]

Pinion

1991-1990	(Wagon)(4WD)	
Seal	.....	223843
Bearing Assy (Inner)	.....	32008XM
Bearing Assy (Outer)	.....	32306
Repair Sleeve	.....	KWK99147

CLUTCH**Pilot Bearing**

2005-1990		
Ball Bearing	.....	102CC

Release Bearing

2005-2000		
Bearing Assy	.....	614176
2003	Civic Hybrid	
Bearing Assy	.....	614122
2000-1992		
Bearing Assy	.....	614122
1991-1990	1.6, (2WD)	
Bearing Assy	.....	614146
1991-1990	1.6L, (4WD)	
Bearing Assy	.....	614031
1991-1990	1.5L	
Bearing Assy	.....	614146

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-2001	(MLYA)	
Ball Bearing	.....	208S[2]
2000-1990		
Ball Bearing	.....	208[2]

Torque Converter / Frt Pump

2005-1990		
Seal	.....	350609

Input Shaft

2002-2001	(MLYA)	
Ball Bearing	.....	305AG[2]

Output Shaft

2005-1996		
Seal (LH)	.....	710314
Seal (LH) (S4RA)	.....	710315
Seal (RH)	.....	1147
Repair Sleeve	.....	KWK99139
1995-1994		
Seal Viton (LH) (MPOA)	.....	224026
Seal (RH) (MPOA)	.....	224066
Repair Sleeve (MPOA)	.....	KWK99157

4-SPEED AUTOMATIC TRANSAXLE (cont.)**Output Shaft (cont.)**

1995-1990		
Seal (LH) (S24A)	.....	710314
Seal (LH) (A24A)(L4)	.....	223543
Seal (RH)	.....	1147
Repair Sleeve	.....	KWK99139

Manual Shaft

2008-1990		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

2000-1992	Civic	
Kit	.....	TRKH150

Differential

2005-1997		
Ball Bearing	.....	208S[2]
1996-1990		
Ball Bearing	.....	207[2]

Input Shaft

2002-1990		
Seal Viton	.....	222742
Repair Sleeve	.....	KWK99106

Output Shaft

2002-1990		
Seal (LH)	.....	710315
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	4901
Repair Sleeve (RH)	.....	KWK99139

Selector Shaft Seal/Man. Shaft

2002-1990		
Seal	.....	221607

ALTERNATOR

1993-1990	Mitsubishi	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC

CV JOINT HALF SHAFT

2000-1992		
Seal	.....	710300
1991-1990	(Wagon)(4WD)	
Seal (Inner)	.....	710161
Ball Bearing (Inner)	.....	108FFN
Seal (Outer)	.....	710147

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HONDA - Civic, Civic Hybrid (cont.)**CAMSHAFT SEAL****4 Cylinder**

2005-2001	1.7L	
Seal		320595
2002-1990	1.6L	
Seal		320595

CRANKSHAFT FRONT SEAL**4 Cylinder**

2005-2003	1.3L	
Seal		473677
2005-2001	1.7L	
Seal		320595
2000-1990	1493cc/1.5L, 1594cc/1.6L	
Seal		710332
Seal Viton		1121
Repair Sleeve		KWK99125

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2002	1.3L, 2.0L	
Seal Viton		228008
Repair Sleeve		KWK99315
2005-2001	1.7L	
Seal		228009
2000-1990	1.3L, 1.5L, 1.6L	
Seal		228015
Repair Sleeve		KWK99315

HONDA - CRX**REAR WHEEL****FWD**

1991-1990		
Seal		473677[2]
Hub Unit Bearing		513035[2]

CLUTCH**Pilot Bearing**

1991-1990		
Ball Bearing		102CC

Release Bearing

1991-1990		
Bearing Assy		614077

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1991-1990		
Ball Bearing		208[2]

Torque Converter / Frt Pump

1991-1990		
Seal		350609

Output Shaft

1991-1990		
Seal (LH)		4901
Repair Sleeve (LH)		KWK99139
Seal (RH)		1147
Repair Sleeve (RH)		KWK99139

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

1991-1990		
Seal		221207
Repair Sleeve		KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

1991-1990		
Ball Bearing (LH)		207
Ball Bearing (RH)		208

Input Shaft

1991-1990		
Seal Viton		222742
Repair Sleeve		KWK99106

Output Shaft

1991-1990	1.6L	
Seal (LH)		224025
Repair Sleeve (LH)		KWK99157
Seal (RH)		4901
Repair Sleeve (RH)		KWK99139
1991-1990	1.5L	
Seal (LH)		2007N
Seal (RH)		4901
Repair Sleeve (RH) (All)		KWK99139

Selector Shaft Seal/Man. Shaft

1991-1990		
Seal		710243
Repair Sleeve		KWK99058

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HONDA - CRX (cont.)					

ALTERNATOR

1991-1990	Mitsubishi	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC

CAMSHAFT SEAL**4 Cylinder**

1991-1990	1.6L	
Seal	.....	320595
Repair Sleeve	.....	KWK99112
1991-1990	1.5L	
Seal	.....	320595
Repair Sleeve	.....	KWK99112

CRANKSHAFT FRONT SEAL**4 Cylinder**

1991-1990	1.6L	
Seal	.....	710332
Seal Viton	.....	1121
Repair Sleeve	.....	KWK99125
1991-1990	1.5L	
Seal	.....	710332
Seal Viton	.....	1121
Repair Sleeve	.....	KWK99125

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990	1.6L	
Seal	.....	228015
1991-1990	1.5L	
Seal	.....	228015

HONDA - Del Sol**FRONT WHEEL****FWD**

1997-1994	(ABS)	
Ball Bearing	.....	510030[2]
1997-1993	(Non-ABS)	
Ball Bearing	.....	510015[2]

REAR WHEEL**FWD**

1997-1995	(ABS)(Disc)	
Hub Unit Bearing	.....	513105[2]
1997-1995	(Non-ABS)(Disc)	
Hub Unit Bearing	.....	513105[2]
1997-1993	(Drum)	
Hub Unit Bearing	.....	513035[2]
Seal	.....	473677[2]
1994-1993	(Disc)	
Hub Unit Bearing	.....	513105[2]

CLUTCH**Pilot Bearing**

1997-1993		
Ball Bearing	.....	102CC

Release Bearing

1997-1993		
Bearing Assy	.....	614122

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1997-1993		
Ball Bearing	.....	208[2]

Torque Converter / Frt Pump

1997-1993		
Seal	.....	350609

Output Shaft

1997-1993		
Seal (LH)	.....	223543
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	1147
Repair Sleeve (RH)	.....	KWK99139

Manual Shaft

1997-1993		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

1997-1993		
Ball Bearing	.....	207[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HONDA - Del Sol (cont.)					

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1997-1993	
Seal Viton	222742
Repair Sleeve	KWK99106

Output Shaft

1997-1993	S, SI
Seal (LH)	2007N
Repair Sleeve (LH)	KWK99139
Seal (RH)	4901
Repair Sleeve (RH)	KWK99139

Selector Shaft Seal/Man. Shaft

1997-1993	
Seal	221607

ALTERNATOR

1997-1993	Mitsubishi
Ball Bearing (Drive End)	303CC

CAMSHAFT SEAL**4 Cylinder**

1997-1993	
Seal	320595

CRANKSHAFT FRONT SEAL**4 Cylinder**

1997-1993	
Seal	710332
Seal Viton	1121
Repair Sleeve	KWK99123

CRANKSHAFT REAR SEAL**4 Cylinder**

1997-1993	
Seal	228015

HONDA - Fit**FRONT WHEEL****FWD**

2008-2007	
Bearing Assy	510091[2] ²⁵

REAR WHEEL**FWD**

2008-2007	
Hub Unit Bearing	512323[2] ²⁵

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2007	1.5L
Seal Viton	228008
Repair Sleeve	KWK99315

HONDA - Insight**FRONT WHEEL****FWD**

2006-2000	
Bearing Module	BM513161[2] ²⁵

REAR WHEEL**FWD**

2006-2000	
Hub Unit Bearing	HA590008[2] ²⁵

CLUTCH**Release Bearing**

2003-2000	
Bearing Assy	614122

5-SPEED MANUAL TRANSAXLE**Differential**

2004-2000	
Ball Bearing	207S[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HONDA - Insight (cont.)**5-SPEED MANUAL TRANSAXLE****Selector Shaft Seal/Man. Shaft**

2004-2000

Seal 221820

Repair Sleeve KWK99082

OIL PUMP**3 Cylinder**

2006-2000 1.0L

Seal 473677

Repair Sleeve KWK99157

CRANKSHAFT FRONT SEAL**3 Cylinder**

2005-2000

Seal 473677

HONDA - Prelude**FRONT WHEEL****FWD**

2001-1997

Ball Bearing 510039[2]

1996-1992

Ball Bearing 513052[2]

1991-1990

Ball Bearing 513241[2]

REAR WHEEL**FWD**

2001-1997

Hub Unit Bearing 512144[2]

1996-1992 (ABS)

Hub Unit Bearing 512022[2]

1996-1992 (Non-ABS)

Hub Unit Bearing 512242[2]

1991-1990

Ball Bearing 513182[2]

CLUTCH**Release Bearing**

2001-1990

Bearing Assy 614072

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1997

Bearing Assy (LH) 30208M

Cone/Cup (RH) 11157X-11300

1996-1992

Bearing Assy (LH) 33108

Bearing Assy (RH) 32008XM

1991-1990

Bearing Assy (LH) 30208M

Bearing Assy (RH) 32010X

Torque Converter / Frt Pump

2001-1990

Seal 350609

Output Shaft

2001-1992

Seal (LH) 224025

Repair Sleeve KWK99157

Seal (RH) 224066

Repair Sleeve KWK99157

1991-1990

Seal (LH) 2007N

Seal (RH) 224066

Repair Sleeve KWK99139

Manual Shaft

2001-1990

Seal 221207

Repair Sleeve KWK99049

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2001-1997 (SH)

Seal 224460

Repair Sleeve KWK99170

2001-1997 Base

Seal 2007N

Repair Sleeve KWK99139

1996-1990

Seal 222830

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

HONDA - Prelude (cont.)**5-SPEED MANUAL TRANSAXLE****Output Shaft**

2001-1997	(SH)	
Seal (LH)	.....	224460
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3459S
Repair Sleeve (RH)	.....	KWK99157
2001-1997	Base	
Seal (LH)	.....	2007N
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3459S
Repair Sleeve (RH)	.....	KWK99157
1996-1990		
Seal (LH)	.....	2007N
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	3459S
Repair Sleeve (RH)	.....	KWK99157

Selector Shaft Seal/Man. Shaft

2001-1990	
Seal	 221607

OIL PUMP**4 Cylinder**

2001-1992	2.2L (SOHC)(DOHC)(VTEC), 2.3L (DOHC)	
Seal Viton	.....	712009
Repair Sleeve	.....	KWK99106

CAMSHAFT SEAL**4 Cylinder**

2001-1993	2.2L VTEC	
Seal	.....	1989
1996-1992	2.2L (SOHC)	
Seal	.....	712008
Repair Sleeve	.....	KWK99111
1996-1992	2.3L (DOHC)	
Seal	.....	712008
Repair Sleeve	.....	KWK99111

CRANKSHAFT FRONT SEAL**4 Cylinder**

2001-1992	2.2L, 2.3L	
Seal	.....	224015
Repair Sleeve	.....	KWK99157

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

1991-1990	2.1L	
Seal Viton	.....	1120S
Repair Sleeve	.....	KWK99147
1991-1990	2.0L (SOHC)(DOHC)	
Seal Viton	.....	1120S
Repair Sleeve	.....	KWK99147

CRANKSHAFT REAR SEAL**4 Cylinder**

2001-1993	2.2L VTEC	
Seal	.....	228015
Repair Sleeve	.....	KWK99315
1996-1992	2.2L (SOHC)	
Seal	.....	228015
Repair Sleeve	.....	KWK99315
1996-1992	2.3L (DOHC)	
Seal	.....	228015
Repair Sleeve	.....	KWK99315
1991-1990	2.1L (DOHC)	
Seal	.....	228015
Repair Sleeve	.....	KWK99315
1991-1990	2.0L (SOHC)(DOHC)	
Seal	.....	228015
Repair Sleeve	.....	KWK99315

HONDA - S2000**FRONT WHEEL****RWD**

2009-2000	
Ball Bearing	 510050[2]

REAR WHEEL**RWD**

2009-2000	
Ball Bearing	 510050[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HONDA - S2000 (cont.)					

6-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2002-2000 (SCYM)
Seal 710157

Selector Shaft Seal/Man. Shaft

2002-2000 (SCYM)
Seal 710243

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-2000 2.0L, 2.2L
Seal 710159

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-2000 2.0L, 2.2L
Seal Viton 228008

HONDA - Minivan, SUV, Truck - CR-V**FRONT WHEEL****FWD**

2009-2007 Japan Built
Ball Bearing WB000011[2]²⁵
2009-2007 U.S Built
Bearing Assy WB000012[2]²⁵
2006
Ball Bearing 510074[2]
2005-2002
Ball Bearing 510039[2]
2001-1997
Ball Bearing 510039[2]

4WD

2009-2007 Japan Built
Ball Bearing WB000011[2]²⁵
2009-2007 U.S Built
Bearing Assy WB000012[2]²⁵
2006
Ball Bearing 510074[2]
2005-2002
Ball Bearing 510074[2]
2001-1997
Ball Bearing 510039[2]

REAR WHEEL**FWD**

2009-2007
Hub Unit Bearing HA590190[2]²⁵
2005-2002
Ball Bearing (Non-ABS) 510015[2]
Ball Bearing (ABS) 511029[2]
2001-1998
Bearing Module (RH) HA592210
Bearing Module (LH) 512166²⁵

4WD

2009-2007
Hub Unit Bearing HA590204[2]²⁵
2006-2002
Ball Bearing (ABS) 511029[2]
2001-1997
Bearing Module (RH) HA592210
Bearing Module (LH) 512166²⁵

TRANSFER CASE**Input Shaft**

2002-1994 (MUATC)
Seal 710247
Ball Bearing 207
Repair Sleeve KWK99149

Rear Output Shaft

2002-1994 (MUATC)
Ball Bearing 307TB

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2007-2005
Seal 221207
Repair Sleeve KWK99049

CLUTCH - 4 CYLINDER**Pilot Bearing**

2001-1997
Ball Bearing 102CC

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

HONDA - Minivan, SUV, Truck - CR-V (cont.)**CLUTCH - 4 CYLINDER****Release Bearing**

2001-1997

Bearing Assy 614072

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1998 (FWD)

Ball Bearing 208[2]

2001-1997 (4WD)

Ball Bearing 208[2]

Torque Converter / Frt Pump

2008-1997

Seal 350609

Output Shaft

2004-2002

Seal (LH) 710217

2001-1997

Seal (LH) 2007N

Repair Sleeve (LH) KWK99139

Seal (RH) 1036

Repair Sleeve (RH) KWK99157

Manual Shaft

2004-1997

Seal 221207

Repair Sleeve KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2007-2005

Seal (RH) 710217

Repair Sleeve KWK99139

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

2002-1997 (SBXM)

Kit TRKFH340

Differential

2005-2002

Ball Bearing 208S[2]

2001-1999

Bearing Assy (RH) 32008XM

1998

Bearing Assy (RH) 32008XM

Input Shaft

2005-2002

Seal 710157

Repair Sleeve KWK99111

2001-1998

Seal 222830

Repair Sleeve KWK99111

5-SPEED MANUAL TRANSAXLE**Output Shaft**

2001-1998

Seal (LH) 2007N

Repair Sleeve (LH) KWK99139

Seal (RH) 3459S

Repair Sleeve (RH) KWK99157

CAMSHAFT SEAL**4 Cylinder**

2001-1997

Seal 222743[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2001-1997 1972cc/2.0L

Seal 223802

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2002 2400cc/2.4L

Seal Viton 228008

2001-1997 1972cc/2.0L

Seal 228015

HONDA - Minivan, SUV, Truck - Element**FRONT WHEEL****FWD**

2008-2007	(SC)	
Bearing Assy	.....	WB000013[2] ²⁵
2008-2003	(ABS)	
Ball Bearing	.....	510074[2]
2005-2003	(Non-ABS)	
Ball Bearing	.....	510050[2]

4WD

2008-2007		
Bearing Assy	.....	WB000013[2] ²⁵
2008-2003	(ABS)	
Ball Bearing	.....	510074[2]
2005-2003	(Non-ABS)	
Ball Bearing	.....	510050[2]

REAR WHEEL**FWD**

2008-2006		
Bearing Module (RH)	.....	BM500003 ²⁵
Bearing Module (LH)	.....	BM500014 ²⁵
2005-2004	DX, LX	
Bearing Module	.....	BM500000[2] ²⁵
2005-2003	EX	
Bearing Module	.....	BM500003[2] ²⁵
2003	DX	
Bearing Module	.....	BM500002[2] ²⁵

4WD

2008-2006		
Bearing Module (RH)	.....	BM500003 ²⁵
Bearing Module (LH)	.....	BM500014 ²⁵
2005-2004	DX, LX	
Bearing Module	.....	BM500000[2] ²⁵
2005-2003	EX	
Bearing Module	.....	BM500003[2] ²⁵
2003	DX	
Bearing Module	.....	BM500002[2] ²⁵

4WD FRONT AXLE**Pinion**

2004-2002		
Seal (Outer)	.....	450803
Set (Outer)	.....	SET4

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2007-2003		
Seal (LH)	.....	710300
Repair Sleeve (LH)	.....	KWK99157

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2007-2003		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008		
Seal (LH)	.....	710300
Repair Sleeve (LH)	.....	KWK99157

Manual Shaft

2008		
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

2005-2003		
Ball Bearing	.....	208S[2]

Input Shaft

2005-2003		
Seal	.....	710157
Repair Sleeve	.....	KWK99111

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2003	2400cc/2.4L	
Seal Viton	.....	228008

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

HONDA - Minivan, SUV, Truck - Odyssey**FRONT WHEEL****FWD**

2009-2005	
Ball Bearing	WB000020[2] ²⁵
2004-1999	
Ball Bearing	510059[2]
1998-1995	
Bearing Module	510038[2]

REAR WHEEL**FWD**

2009-2005	
Hub Unit Bearing	HA590151[2] ²⁵
2004-1999	
Hub Unit Bearing	512180[2]
1998	
Hub Unit Bearing	512123[2]
1997-1995	
Hub Unit Bearing	512124[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1999	
Seal (LH)	710199
Repair Sleeve (LH)	KWK99139
Seal Viton (RH)	224026
Repair Sleeve (RH)	KWK99157
1998	
Seal (LH)	710315
Repair Sleeve (LH)	KWK99139
Seal (RH)	224066
Repair Sleeve (RH)	KWK99157
1997-1995	
Bearing Assy (LH)	30208M
Cone/Cup (RH)	11157X-11300

Torque Converter / Frt Pump

2002-1995	
Seal	350609

Output Shaft

2004-2002	
Seal (LH)	710199
Seal (RH)	710300
Repair Sleeve (LH)	KWK99157
Repair Sleeve (RH)	KWK99139
2001-1999	
Seal (LH)	710199
Seal Viton (RH)	224026
1998	
Seal (LH)	710315
Repair Sleeve (LH)	KWK99139
Seal (RH)	224066
Repair Sleeve (RH)	KWK99157
1997-1995	
Seal (LH)	2007N
Seal (RH)	224066
Repair Sleeve (LH)	KWK99139
Repair Sleeve (RH)	KWK99157

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2004-1995	
Seal	221207
Repair Sleeve	KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008-2005	
Seal (LH)	710199
Seal (RH)	710217
Repair Sleeve	KWK99139

Manual Shaft

2008-2005	
Seal	221207
Repair Sleeve	KWK99049

OIL PUMP**4 Cylinder**

1998-1995	2.2L, 2.3L
Seal Viton	712009
Repair Sleeve	KWK99106

6 Cylinder

2008-1999	3.5L
Seal	711181

CAMSHAFT SEAL**4 Cylinder**

1998	2.3 (SOHC)
Seal	712008
1997-1995	2.2L (SOHC)
Seal	712008

6 Cylinder

2004-1999	3.5L
Seal	710451[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1998	2.3 (SOHC)
Seal	224015
Repair Sleeve	KWK99157
1997-1995	2.2L
Seal	224015
Repair Sleeve	KWK99157

6 Cylinder

2001-1999	3.5L
Seal	1181
Repair Sleeve	KWK99162

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HONDA - Minivan, SUV, Truck - Odyssey (cont.)

CRANKSHAFT REAR SEAL

4 Cylinder

1998	2.3 (SOHC)	
Seal		228015
Repair Sleeve		KWK99315
1997-1995	2.2L (SOHC)	
Seal		228015

6 Cylinder

2008-1999	3.5L	
Seal Viton		228008
Repair Sleeve		KWK99315

HONDA - Minivan, SUV, Truck - Passport

FRONT WHEEL

4WD

2001-1994		
Seal (Inner)	710168[2]	
Cone/Cup (Inner)	NP697136-NP592766[2]	
Cone/Cup (Outer)	NP654538-NP177400[2]	

REAR WHEEL

RWD

2002-1998		
Seal	9912S[2]	
Cylindrical Bearing	RW131R[2]	
1997-1994		
Seal	710166[2]	
Cylindrical Bearing	5707[2]	

4WD

2002-1998		
Seal	9912S[2]	
Cylindrical Bearing	RW131R[2]	
1997-1994		
Seal	9912S[2]	
Set	SET10[2]	

FRONT AXLE

Differential

2002-1994	
Set	SET45[2]

Pinion

2002-1999	
Seal	710513
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	30306M
1998-1994	
Seal	474133
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	30306M
Repair Sleeve	KWK99157

FRONT AXLE

Steering Knuckle

1995-1994	(Except DX)
Seal	710527

REAR AXLE

Differential Rebuild Kit

2002-1999	(8.625" R.G.)
Kit	DRK321C
1998-1994	(7.625" R.G.)
Kit	DRK320

Differential

2002-1994	(7.5" R.G., 7.625" R.G.)
Seal	LM501349-LM501314[2]
1999-1994	(Spicer 44 3 axle)
Seal	25590-25523[2]

Pinion

2002-1999	(GM Axle)
Seal	710452
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
1999-1998	(Dana/Spicer 44-3 Axle)
Seal	710452
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820
1997-1994	(7.625" R.G.)
Cone/Cup (Inner)	HM89249-HM89210
Repair Sleeve	KWK99147
1997-1994	(Dana/Spicer 44-3 Axle)
Seal	5778
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155

TRANSFER CASE

Input Shaft

2002-1994	(MUATC)
Seal	710247
Ball Bearing	207
Repair Sleeve	KWK99149

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

HONDA - Minivan, SUV, Truck - Passport (cont.)

TRANSFER CASE

Rear Output Shaft

2002-1994 (MUATC)
Ball Bearing 307TB

4-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2002-1994
Seal 8792S

CLUTCH

Pilot Bearing

2002-1994 3.2L
Ball Bearing 203FFW
1997-1994 2.6L
Ball Bearing 203FF

Release Bearing

2002-1994 3.2L
Bearing Assy 614154
1996-1994 DX
Bearing Assy 614163

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1994 (RWD)
Kit TRKFI200
2002-1993 (4WD)
Kit TRKFI160
1996-1994 (Warner T5 World Class)
Kit TRK5W

Front Input Shaft

1997-1994 (4WD)
Seal 710157
Repair Sleeve KWK99103
1996-1994 DX
Seal 7412S

Rear Output Shaft

1997-1994 (4WD)
Seal 3459S
1996-1994 DX
Seal 710441

DRIVESHAFT SUPPORT

1997 (2WD)
Hanger Bearing Assy HB32
1997 (4WD)
Hanger Bearing Assy HB33

CAMSHAFT SEAL

4 Cylinder

1996-1994 2.6L
Seal 1981[2]
Repair Sleeve KWK99114[2]

CAMSHAFT SEAL

6 Cylinder

2002-1994 3.2L
Seal 1981[2]
Repair Sleeve KWK99114[2]

CRANKSHAFT FRONT SEAL

4 Cylinder

1996-1994 2.6L
Seal 224025
Repair Sleeve KWK99157

6 Cylinder

2002-1994 3.2L
Seal 224025
Repair Sleeve KWK99157

CRANKSHAFT REAR SEAL

4 Cylinder

1996-1994 2.6L
Seal 710060
Repair Sleeve KWK99364

6 Cylinder

2002-1994 3.2L
Seal 710060
Repair Sleeve KWK99364

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HONDA - Minivan, SUV, Truck - Pilot**FRONT WHEEL****FWD**

2008-2006

Ball Bearing 510085[2]

4WD

2008-2005

Ball Bearing 510085[2]

2004-2003

Ball Bearing 510011[2]

REAR WHEEL**FWD**

2008-2003

Ball Bearing 510039[2]

4WD

2008-2003

Ball Bearing 510039[2]

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008-2003

Seal (LH) 710300

Seal (RH) 710217

Repair Sleeve (LH) KWK99157

Repair Sleeve (RH) KWK99139

Manual Shaft

2005-2003

Seal 221207

Repair Sleeve KWK99049

OIL PUMP**6 Cylinder**

2008-2003 3.5L

Seal 711181

CAMSHAFT SEAL**6 Cylinder**

2004-2003 3.5L

Seal 710451[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2004-2003 3.5L

Seal Viton 2012V

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2003 3.5L

Seal Viton 228008

Repair Sleeve KWK99315

HONDA - Minivan, SUV, Truck - Ridgeline**FRONT WHEEL****AWD**

2009-2006

Bearing Assy WB000008[2]²⁵**REAR WHEEL****AWD**

2009-2006

Bearing Assy WB000009[2]²⁵**OIL PUMP****6 Cylinder**

2008-2006 3.5L

Seal 711181

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2006 3.5L

Seal Viton 228008

Repair Sleeve KWK99315

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

HUMMER - H1, H2**FRONT WHEEL****4WD**

2009-2008	H2	
Hub Unit Bearing	.....	SP580312[2] ²⁵
2007-2003	H2	
Hub Unit Bearing	.....	SP580304[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴
2006-2002	H1	
Cone/Cup (Inner)	.....	3490-3420[2]
Cone/Cup (Outer)	.....	3780-3720[2]
2001-1990		
Cone/Cup (Inner)	.....	3490-3420[2]
Cone/Cup (Outer)	.....	3780-3720[2]

AWD

2003	H2	
Hub Unit Bearing	.....	SP580304[2] ⁸³
Hub Unit Bearing	.....	SP580310[2] ⁸⁴

REAR WHEEL**4WD**

2009-2003	H2	
Seal	.....	710105[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹
2004-2002	H1	
Cone/Cup (Inner)	.....	3490-3420[2]
Cone/Cup (Outer)	.....	3780-3720[2]
2001-1992		
Cone/Cup (Inner)	.....	3490-3420[2]
Cone/Cup (Outer)	.....	3780-3720[2]

AWD

2003	H2	
Seal	.....	710105[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TGM1561R[2] ¹⁹

4WD FRONT AXLE**Differential Rebuild Kit**

2005-2003	H2	
Kit	.....	DRK324A
2001-1993	(AMC 20 Axle)	
Kit	.....	DRK311J

Differential

2005-2003	H2	
Seal	.....	450094[2]
Set	.....	SET42[2]
Repair Sleeve	.....	KWK99193[2]
2005-1993	(AMC 20 Axle)	
Set	.....	SET36[2]

4WD FRONT AXLE**Pinion**

2005-2003	H2	
Seal	.....	710281
Cone/Cup (Inner)	.....	HM804846-HM804810
Cone/Cup (Outer)	.....	HM88649-HM88610
2001-1993	(AMC 20 Axle)	
Seal	.....	470331N
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

REAR AXLE**Differential Rebuild Kit**

2007-2006	H3	
Kit	.....	DRK321C
2007-2003	H2	
Kit	.....	DRK324B
2006-1993	(AMC 20 Axle)	
Kit	.....	DRK311J

Differential

2005-2003	H2	
Set	.....	SET42[2]
2001-1993	(AMC 20 Axle)	
Set	.....	SET36[2]

Pinion

2005-2003	H2	
Seal	.....	710507
Cone/Cup (Inner)	.....	HM804846-HM804810
Cone/Cup (Outer)	.....	HM88649-HM88610
2001-1993	(AMC 20 Axle)	
Seal	.....	470331N
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

TRANSFER CASE REBUILD KIT

2001-1993	(New Venture 242)	
Kit	.....	TCRK242A ¹⁶

TRANSFER CASE**Input Shaft**

2001-1993	(New Process 242)	
Seal (O.E.)	.....	3173
Seal (Opt)	.....	710928
Repair Sleeve	.....	KWK99193
Ball Bearing (2nd Design)	.....	110L
Ball Bearing (1st Design)(Thru 94)	.....	N5210KLB
Ndle Bearing	.....	FC66561

Front Output Shaft

2006-1993	(New Process 242)	
Seal	.....	3946
Ball Bearing	.....	207
Repair Sleeve	.....	KWK99187
Ndle Bearing (Pilot)	.....	J2416

¹⁶Obsolete ¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
⁸³Deplete Inventory ⁸⁴Reorder

²⁵New Item, Check For Availability

HUMMER - H1, H2 (cont.)**TRANSFER CASE****Rear Output Shaft**

2001-1993	(New Process 242)	
Ball Bearing	206WB	
Ndle Bearing (Pilot)	J2416	

Oil Pump Housing

2001-1993	(New Process 242)	
Seal	341022	
Repair Sleeve	KWK99225	

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993	(3L80HD)	
Seal	6712NA	
Repair Sleeve	KWK99187	

Rear Seal/Ext. Housing

1993	(3L80HD)	
Seal	9449	
Seal Kit	5208 ⁶⁴	

Selector Shaft Seal/Man. Shaft

1994-1993	(3L80HD)	
Seal	8792S	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2001-1993	(4L80E)	
Seal	4598	
Repair Sleeve	KWK99199	

Rear Seal/Ext. Housing

2001-1993	(4L80E)	
Seal	9449	
Seal Kit	5208 ⁶⁴	

Selector Shaft Seal/Man. Shaft

2008-1993	(4L65E, 4L80E)	
Seal	8792S	

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2008	(6L80)	
Seal	710533	

A/C COMPRESSOR

2001-1993	(Frigidaire R4)	
Ball Bearing	907257[2]	
Ball Bearing (Frt Head)	S128	

ALTERNATOR

2001-1993	(Delco 124 Amp.)	
Ball Bearing (Rear End)	100CCAB	

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008	378/6.2L (Gas)	
Seal Viton	100470	
Repair Sleeve	KWK99210	
2007-2003	364/6.0L	
Seal Viton	100470	
Repair Sleeve	KWK99210	
2004-1992	6.2L (Diesel), 6.5L (Diesel, Turbo Diesel)	
Seal	3945	
Repair Sleeve	KWK99233	
1996-1995	350/5.7L	
Seal	9845	
Repair Sleeve	KWK99176	

CRANKSHAFT REAR SEAL**8 Cylinder**

2007-2003	364/6.0L	
Seal Viton	100470	
2006-1992	379/6.2L (Diesel) 395/6.5L (Diesel) 395/6.5L (Turbo Diesel) 6.6L (Diesel)	
Seal Viton	710258	
Repair Sleeve	KWK99452	
1996-1995	350/5.7L	
Seal Viton	4359V	
Seal PTFE H/D	5274	
Repair Sleeve	KWK99364	

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HUMMER - H3					

FRONT WHEEL**4WD**

2009-2006

Hub Unit Bearing SP550311[2]²⁵**REAR WHEEL****4WD**

2009-2006

Cylindrical Bearing 513067[2]

Seal 4762N[2]

4WD FRONT AXLE**Differential**

2006

Set SET36[2]

Pinion

2006

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

REAR AXLE**Differential**

2006

Set SET36[2]

REAR AXLE**Pinion**

2006

Seal 710506

Cone/Cup (Inner) HM89249-HM89210

Cone/Cup (Outer) M86649-M86610

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008 325/ 5.3L

Seal Viton 100470

Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL**8 Cylinder**

2008 5.3L

Seal 100085

HYUNDAI - FRONT DRIVE - Accent, Azera, Elantra, Excel, Scoupe, Sonata, Tiburon, XG300, XG350

FRONT WHEEL**FWD**

2009-2006 Azera

Ball Bearing 510084[2]

2009-2006 Tiburon (4 Cyl.)

Ball Bearing 510078[2]

2009-2006 Tiburon (6 Cyl.)

Ball Bearing 510076[2]

2009-2002 Sonata (From 1/3/02)

Ball Bearing 510034[2]

2009-2000 Accent

Ball Bearing 510055[2]

2008-2007 Elantra

Bearing Assy WB000014[2]²⁵

2006-2001 Elantra

Ball Bearing 510078[2]

2005-2003 Tiburon (4 Cyl.)

Ball Bearing 510078[2]

2005-2003 Tiburon (6 Cyl.)

Ball Bearing 510076[2]

2005-2003 XG300, XG350 (From 1/3/02)

Ball Bearing 510034[2]

2002-2001 XG300, XG350 (Thru 1/2/02)

Ball Bearing 510076[2]

2002-1999 Sonata (Thru 1/2/02)

Ball Bearing 510076[2]

2001-1997 Tiburon

Ball Bearing 510055[2]

FRONT WHEEL (cont.)**FWD (cont.)**

2000-1996 Elantra

Ball Bearing 510055[2]

1999-1995 Accent

Seal (Inner) 229522[2]

Set (Inner) SET41[2]

Seal (Outer) 229522[2]

Set (Outer) SET41[2]

1998-1995 Sonata

Ball Bearing 510075[2]

1995-1992 Elantra

Seal (Inner) 229522[2]

Set (Inner) SET41[2]

Seal (Outer) 229522[2]

Set (Outer) SET41[2]

1995-1991 SCoupe

Seal 229522[2]

Set SET41[2]

1994-1990 Sonata

Seal (Inner) 225082[2]

Ball Bearing (Inner) 513036[2]

Seal (Outer) 225230[2]

1994-1990 Excel

Seal 229522[2]

Set SET41[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HYUNDAI - FRONT DRIVE - Accent, Azera, Elantra, Excel, Scoupe, Sonata, Tiburon, XG300, XG350 (cont.)					

REAR WHEEL

FWD

2009	Sonata	
Hub Unit Bearing	HA590325[2] ²⁵	
2009-2008	Accent	
Hub Unit Bearing		
(Non-ABS)	HA590184[2] ²⁵	
Hub Unit Bearing		
(ABS)	512324[2] ²⁵	
2009-2007	Tiburon (ABS)	
Hub Unit Bearing	HA590200[2] ²⁵	
2009-2006	Azera	
Hub Unit Bearing	HA590179[2] ²⁵	
2008-2007	Elantra	
Hub Unit Bearing	512340[2] ²⁵	
2008-2006	Sonata (Electronic Stability)	
Hub Unit Bearing	512265[2] ²⁵	
2007-2006	Accent	
Hub Unit Bearing	HA590184[2] ²⁵	
2006-2003	Tiburon (ABS)	
Hub Unit Bearing	512198[2]	
2006-2001	Elantra (ABS)	
Hub Unit Bearing	512195[2]	
2006-2001	Elantra (Non-ABS)	
Hub Unit Bearing	512194[2]	
2005-2003	Tiburon (Non-ABS)	
Hub Unit Bearing	512199[2]	
2005-2001	XG300, XG350	
Hub Unit Bearing	512189[2]	
2005-2000	Accent (ABS)	
Hub Unit Bearing	512192[2]	
2005-2000	Accent (Non-ABS)	
Hub Unit Bearing	512193[2]	
2005-1999	Sonata (ABS)	
Hub Unit Bearing	512190[2]	
2005-1999	Sonata (Non-ABS)	
Hub Unit Bearing	512191[2]	
2001-1997	Tiburon	
Hub Unit Bearing	512160[2]	
2000-1996	Elantra	
Hub Unit Bearing	512160[2]	
1999-1997	Accent	
Hub Unit Bearing	512165[2]	
1998-1992	Sonata	
Hub Unit Bearing	512026[2]	
1996-1995	Accent	
Hub Unit Bearing	512027[2]	
1995-1992	Elantra	
Seal (Inner)	1196[2]	
Bearing Assy (Inner)	516000[2]	
Bearing Assy (Outer)	516000[2]	
1995-1991	SCoupe	
Seal (Inner)	710404[2]	
Bearing Assy (Inner)	516000[2]	
Bearing Assy (Outer)	516000[2]	
1994-1990	Excel	
Seal (Inner)	710404[2]	
Bearing Assy (Inner)	516000[2]	
Bearing Assy (Outer)	516000[2]	
1991-1990	Sonata	
Seal (Inner)	494122[2]	
Set (Inner)	SET6[2]	
Set (Outer)	SET2[2]	

CLUTCH - 4 CYLINDER

Release Bearing

2001-1990	(Exc. Tiburon)	
Bearing Assy	614126	

3-SPEED AUTOMATIC TRANSAXLE

Output Shaft

1994-1990	(KM170 1, KM171 1, KM171 5)	
Seal	223543[2]	
Repair Sleeve	KWK99139[2]	

4-SPEED AUTOMATIC TRANSAXLE

Differential

1999-1991	Accent, Excel	
Ball Bearing	207[2]	
1993-1990	(F4A23 2)	
Ball Bearing	206WB[2]	
1990	(F4A21 2, F4A22 2, F4A33 1)	
Ball Bearing	207[2]	

Torque Converter / Frt Pump

2001-1997	Tiburon	
Seal	320583	
Repair Sleeve	KWK99182	

Idler Shaft

1994-1991	(F4A21 2)	
Bearing Assy	30206M[2]	

Transfer Shaft

1995-1991	(F4A21 2)	
Bearing Assy	30207M[2]	

Output Shaft

2007-1997	Tiburon	
Seal Viton	710259[2]	
2007-1995	Accent	
Seal Viton	710259[2]	
2005-2002	Sonata	
Seal Viton	710259[2]	
Repair Sleeve	KWK99139[2]	
2000-1996	Elantra	
Seal Viton	710259[2]	
1998-1990	Sonata	
Seal Viton (F4A33-1)	710259[2]	
Repair Sleeve	KWK99139[2]	
Seal (F4A22-2)	223543[2]	
1995-1993	SCoupe	
Seal Viton	710259[2]	
1995-1992	Elantra	
Seal	223543[2]	
Repair Sleeve	KWK99139[2]	
1992-1991	SCoupe	
Seal	223543[2]	
Repair Sleeve	KWK99139[2]	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>HYUNDAI - FRONT DRIVE - Accent, Azera, Elantra, Excel, Scoupe, Sonata, Tiburon, XG300, XG350 (cont.)</i>					

4-SPEED MANUAL TRANSAXLE**Differential**

1991-1990 (F4M21 1)	
Ball Bearing	207[2]

Input Shaft

1991-1990 (F4M21 1, KM200 O)	
Seal Viton	712007
Repair Sleeve	KWK99098

Output Shaft

1991-1990 (F4M21 1, KM200 O)	
Seal	223543[2]
Bearing Assy	30206M[2]
Repair Sleeve	KWK99139[2]

Selector Shaft Seal/Man. Shaft

1991-1990	
Seal	710222

5-SPEED MANUAL TRANSAXLE**Differential**

2001-1997 Tiburon	
Bearing Assy	32207M[2]
1999-1995 Accent	
Ball Bearing	207[2]
1997-1995 Sonata	
Bearing Assy	32207M[2]
1995-1992 Elantra	
Bearing Assy	30207M[2]
1994-1991 Excel	
Ball Bearing	207[2]
1992-1991 (F5M21 1, KM210 O)	
Ball Bearing	207[2]
1990 (F5M21 1, KM201 O, KM210 O)	
Ball Bearing	207[2]

Input Shaft

1998-1990 (F5M21 1, F5M22 2)	
Seal Viton	712007
Repair Sleeve	KWK99098
1992-1990 (KM210 O)	
Seal Viton (Frt)	712007
Repair Sleeve	KWK99098
Ball Bearing (Center)	304WB[2]
Ball Bearing (Rr)	306F[2]

Output Shaft

2004-1995 Accent	
Seal	2007N[2]
2001-1997 Tiburon	
Seal	2007N[2]
1998-1990 (F5M21 1, F5M22 2, KM201 O, KM210 O)	
Seal	223543[2]
Bearing Assy	30206M[2]
Repair Sleeve	KWK99139[2]

5-SPEED MANUAL TRANSAXLE (cont.)**Output Shaft (cont.)**

1993-1990 (F5M22 2)	
Seal	223543[2]
Repair Sleeve	KWK99139[2]

Selector Shaft Seal/Man. Shaft

2007-1990	
Seal	710222

ALTERNATOR

1996-1995 Mitsubishi 110 Amp.	
Ball Bearing	303CC[2]

OIL PUMP**4 Cylinder**

2005-1990 1795cc/1.8L(DOHC), 1796cc/1.8L(DOHC), 1997cc/2.0L(DOHC), 2351cc/2.4L, 2351cc/2.4L(DOHC)	
Seal	222025
Repair Sleeve	KWK99078

BALANCE SHAFT**4 Cylinder**

1998-1992 1997cc/2.0L (DOHC)	
Seal Viton	712007
Repair Sleeve	KWK99098

CAMSHAFT SEAL**4 Cylinder**

2005-1992 1595cc/1.6L, 1795cc/1.8L, 1975cc/2.0L, 1997cc/2.0L, 2351cc/2.4L (DOHC)	
Seal	3771[2]
Repair Sleeve	KWK99139[2]
2002-1990 1468cc/1.5L, 1495cc/1.5L, 2351cc/2.4L (SOHC)	
Seal	3771
Repair Sleeve	KWK99139

6 Cylinder

2005-2002 3500cc/3.5L	
Seal (Rr)	710302
2001-2000 2493cc/2.5L	
Seal (Rr)	710302
1998-1990 2972cc/3.0L	
Seal	3771[2]
Repair Sleeve	KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2000 1.6L (DOHC)	
Seal	227235

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>HYUNDAI - FRONT DRIVE - Accent, Azera, Elantra, Excel, Scoupe, Sonata, Tiburon, XG300, XG350 (cont.)</i>					

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

2008-1994	1796cc/1.8L, 1975cc/2.0L, 1997cc/2.0L, 2351cc/2.4L	
Seal		224460
2004-2002	2.4L	
Seal Viton		712007
1999-1993	1468cc/1.5L, 1495cc/1.5L	
Seal		223018
Repair Sleeve		KWK99114
1998-1996	1.8L (DOHC)	
Seal		710531[2]
1996-1990	1595cc/1.6L, 1997cc/2.0L, 2351cc/2.4L	
Seal		224460
1995-1993	1.8L (DOHC)	
Seal		224460
1992-1990	1468cc/1.5L	
Seal		223018
Repair Sleeve		KWK99114

6 Cylinder

2008-2000	2.5L, 2.7L	
Seal		223750
2005-2001	3.0L, 3.5L	
Seal		223750
1998-1990	2972cc/3.0L	
Seal		223750
Repair Sleeve		KWK99145

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2006	2656cc/2.7L	
Seal Viton		229005
2008-1997	1796cc/1.8L, 1975cc/2.0L, 1997cc/2.0L, 2351cc/2.4L	
Seal Viton		228005
Repair Sleeve		KWK99315
2008-1993	1468cc/1.5L, 1495cc/1.5L, 1600cc/1.6L	
Seal		227235

CRANKSHAFT REAR SEAL (cont.)**4 Cylinder (cont.)**

1996-1990	1595cc/1.6L, 1997cc/2.0L, 2351cc/2.4L	
Seal Viton		228005
Repair Sleeve		KWK99315
1992-1990	1468cc/1.5L	
Seal		227235

6 Cylinder

2005-1999	2493cc/2.5L, 2656cc/2.7L, 3500cc/3.5L	
Seal Viton		710056
Seal PTFE H/D		5279
2001-1990	2972cc/3.0L	
Seal Viton		710056
Seal PTFE H/D		5279

HYUNDAI - FRONT DRIVE - Genesis**FRONT WHEEL****FWD**

2009		
Hub Unit Bearing	HA590324[2]	²⁵

REAR WHEEL**FWD**

2009		
Hub Unit Bearing	HA590326[2]	²⁵

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
HYUNDAI TRUCK - Minivan, SUV, Truck - Entourage					

FRONT WHEEL**FWD**

2009-2007

Hub Unit Bearing HA590206[2]²⁵**REAR WHEEL****FWD**

2009-2007

Hub Unit Bearing HA590016[2]²⁵**HYUNDAI TRUCK - Minivan, SUV, Truck - Sante Fe****FRONT WHEEL****FWD**

2009-2007

Hub Unit Bearing 513256[2]²⁵

2006-2001

Ball Bearing 510034[2]

4WD

2006-2001

Ball Bearing 510034[2]

AWD

2009-2007

Hub Unit Bearing 513256[2]²⁵**REAR WHEEL****FWD**

2009-2007

Hub Unit Bearing 512326[2]²⁵

2006-2001 (ABS)

Hub Unit Bearing 512196[2]

2006-2001 (Non-ABS)

Hub Unit Bearing 512197[2]

4WD

2006-2001

Set SET49[2]

AWD

2009-2008

Hub Unit Bearing 513256[2]²⁵

2007

Hub Unit Bearing 513256[2]²⁵**5-SPEED MANUAL TRANSMISSION****Selector Shaft Seal/Man. Shaft**

2001

Seal 710222

OIL PUMP**4 Cylinder**

2004-2001 2351cc/ 2.4L (DOCH)

Seal 222025

Repair Sleeve KWK99078

CAMSHAFT SEAL**4 Cylinder**

2005 1975cc/2.0L

Seal 3771[2]

2005-2003 3500cc/3.5L

Seal (Rr) 710302

2004-2001 2351cc/ 2.4L

Seal 3771[2]

Repair Sleeve KWK99139[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004-2001 2.4L

Seal 224460

6 Cylinder

2008-2001 2.7L, 3.5L

Seal 223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2004-2001 2351cc/ 2.4L

Seal Viton 710235

6 Cylinder

2008-2001 2656cc/2.7L, 3500cc/3.5L

Seal Viton 710056

Seal PTFE H/D 5279

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

HYUNDAI TRUCK - Minivan, SUV, Truck - Tucson**FRONT WHEEL****FWD**

2008-2005
Ball Bearing 510034[2]

4WD

2008-2005
Ball Bearing 510034[2]

REAR WHEEL**FWD**

2008-2005
Hub Unit Bearing 512267[2]²⁵

4WD

2008-2005
Bearing Assy 513058[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2005 1975cc/2.0L
Seal 710531

6 Cylinder

2008-2005 2656cc/2.7L
Seal 223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2005 1975cc/2.0L
Seal Viton 710235

6 Cylinder

2008-2005 2656cc/2.7L
Seal Viton 710056
Seal PTFE H/D 5279

HYUNDAI TRUCK - Minivan, SUV, Truck - Veracruz**FRONT WHEEL****FWD**

2009-2007
Hub Unit Bearing 513266[2]²⁵

AWD

2009-2007
Hub Unit Bearing 513266[2]²⁵

REAR WHEEL**FWD**

2009-2007
Hub Unit Bearing 512326[2]²⁵

REAR WHEEL**AWD**

2009-2007
Hub Unit Bearing 513256[2]²⁵

INFINITI - FRONT DRIVE - G20, I30, I35**FRONT WHEEL****FWD**

2004-2000 I30, I35
Hub Unit Bearing HA590600K[2]⁶⁷
Ball Bearing (Opt) 510060[2]²⁵

FRONT WHEEL (cont.)**FWD (cont.)**

2002-1991 G20
Seal (Inner) 710108[2]
Ball Bearing (Inner) 510009[2]
Seal (Outer) 710108[2]

²⁵New Item, Check For Availability⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
INFINITI - FRONT DRIVE - G20, I30, I35 (cont.)					

FRONT WHEEL (cont.)**FWD (cont.)**

1999-1996	I30	
Seal (Inner)	.....	710108[2]
Ball Bearing (Inner)	.....	510009[2]
Seal (Outer)	.....	710108[2]

REAR WHEEL**FWD**

2004-2000	I30, I35	
Hub Unit Bearing	.....	512203[2]
2002-1999	G20	
Hub Unit Bearing	.....	HA590123[2] ²⁵

CLUTCH - 4 CYLINDER**Pilot Bearing**

2002-1991	1998cc/2.0L (DOHC)	
Bushing	.....	PB22

CLUTCH - 6 CYLINDER**Pilot Bearing**

1999-1996	2988cc/3.0L (DOHC)	
Bushing	.....	PB22

CLUTCH - 4 CYLINDER**Release Bearing**

2002-1991	1998cc/2.0L (DOHC)	
Bearing Assy	.....	614047

CLUTCH - 6 CYLINDER**Release Bearing**

2001-1996	2988cc/3.0L (DOHC)	
Bearing Assy	.....	614049

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1991	(RL4F03A)	
Ball Bearing	.....	208[2]
2002-1991	(RL4F03V)	
Bearing Assy (LH)	.....	32008XM
2000-1996	(RE4F04A)	
Bearing Assy	.....	32009XM[2]
2000-1996	(RE4F04V)	
Bearing Assy (LH)	.....	32009XM
Bearing Assy (RH)	.....	32013X

Torque Converter / Frt Pump

2002-1991	(RL4F03A, RL4F03V)	
Seal	.....	710442
2000-1996	(RE4F04A, RE4F04V)	
Seal	.....	224663
Repair Sleeve	.....	KWK99181

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2004-1996	(RE4F04A)	
Seal (LH)	.....	710118
Seal (RH)	.....	710124
2002-1991	(RL4F03A)	
Seal Viton	.....	224026[2]
2002-1991	(RL4F03V)	
Seal (LH)	.....	710132
Seal (RH)	.....	710133
2001-1996	(RE4F04V)	
Seal (LH)	.....	710397
Seal (RH)	.....	710124

Oil Pump

2000-1996	(RE4F04A, RE4F04V)	
Seal	.....	224450
1995-1991	(RE4F02V)	
Seal	.....	224450

Manual Shaft

2002-1991	(RL4F03A, RL4F03V, RE4F04A, RE4F04V)	
Seal	.....	221207

5-SPEED MANUAL TRANSAXLE**Differential**

2002-1991	(RS5F32A)	
Bearing Assy	.....	32010X[2]
2002-1991	(RS5F32V)	
Bearing Assy (LH)	.....	32010X
2000-1996	(RS5F50A)	
Bearing Assy	.....	32009XM[2]
2000-1996	(RS5F50V)	
Bearing Assy (LH)	.....	32009XM
Bearing Assy (RH)	.....	32013X

Input Shaft

2002-1991	(RS5F32A)(RS5F32V)	
Seal	.....	710316
Ball Bearing	.....	305AG[2]
Repair Sleeve	.....	KWK99098
2000-1996	(RS5F50A)(RS5F50V)	
Seal	.....	710119
Ball Bearing	.....	108A[2]
Repair Sleeve	.....	KWK99111

Output Shaft

2000-1996	(RS5F50A)	
Seal (LH)	.....	710118
Bearing Assy (LH)	.....	32206M[2]
Seal (RH)	.....	710124
Bearing Assy (RH)	.....	30306M[2]
2000-1996	(RS5F50V)	
Seal (LH)	.....	710397
Seal (RH)	.....	710124
2000-1991	(RS5F32A)	
Seal (LH)	.....	710132
2000-1991	(RS5F32V)	
Seal (LH)	.....	710132
Seal (RH)	.....	710133

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

INFINITI - FRONT DRIVE - G20, I30, I35 (cont.)

ALTERNATOR

1997-1991 Hitachi 90 Amp.
Ball Bearing (Drive End) 303CC

CAMSHAFT SEAL

4 Cylinder

2002-1991 1998cc/2.0L (DOHC)
Seal 223420[2]
Repair Sleeve KWK99131

CRANKSHAFT FRONT SEAL

4 Cylinder

2002-1991 1998cc/2.0L (DOHC)
Seal 224650
Repair Sleeve KWK99181

6 Cylinder

2004-2002 3498cc/3.5L
Seal 710356
Repair Sleeve KWK99189
2001-1996 2988cc/3.0L (DOHC)
Seal 710356
Repair Sleeve KWK99189

CRANKSHAFT REAR SEAL

4 Cylinder

2002-1995 2.0L (DOHC)
Seal PTFE H/D 228411 ²⁵
1994-1991 1998cc/2.0L (DOHC)
Seal Viton 228410

6 Cylinder

2004-2002 3498cc/3.5L (DOHC)
Seal Viton 710363
2001-1996 2988cc/3.0L (DOHC)
Seal Viton 710363

INFINITI - REAR DRIVE - G35, G37, J30, M30, M35, M45, Q45

FRONT WHEEL

RWD

2009-2006 M35, M45
Hub Unit Bearing HA590176[2] ²⁵
2008 G35, G37
Hub Unit Bearing HA590176[2] ²⁵
2007 G35 Coupe
Hub Unit Bearing HA590027[2] ²⁵
2007 G35 Sedan
Hub Unit Bearing HA590176 ²⁵
2006-2003 G35
Hub Unit Bearing HA590027[2] ²⁵
2006-2002 Q45
Hub Unit Bearing HA590126[2] ²⁵
2004-2003 M45
Bearing Assy JRM3449-90UA1[2]
2003 G35 (Exc. Stability Control)
Hub Unit Bearing HA590127[2] ²⁵
2001-1997 Q45
Seal 710292[2]
Bearing Assy JRM3449-90UA1[2]
2001-1997 Q45
Seal 710292[2]
Bearing Assy JRM3449-90UA1[2]
1997-1993 J30
Seal 710292[2]
Bearing Assy JRM3449-90UA1[2]
1996-1990 Q45
Seal 710108[2]
Taprd Bearing Assy JRM3848-90UA1[2]
1992-1990 M30 (ABS)
Set (Inner) SET6[2]
Set (Outer) SET2[2]

FRONT WHEEL (cont.)

RWD (cont.)

1992-1990 M30 (Non-ABS)
Seal (Inner) 710126[2]
Set (Inner) SET6[2]
Set (Outer) SET2[2]

AWD

2009-2006 M35, M45
Hub Unit Bearing HA590226[2]
2008-2007 G35 Sedan
Hub Unit Bearing HA590226[2]
2006-2004 G35 Sedan
Bearing Module BM500013[2] ²⁵

REAR WHEEL

RWD

2009-2008 M35, M45
Hub Unit Bearing HA590255[2] ²⁵
2008 G35, G37
Hub Unit Bearing HA590255[2] ²⁵
2007 G35 Coupe
Bearing Module BM500006[2] ²⁵
2007 G35 Sedan
Hub Unit Bearing HA590255[2] ²⁵
2007 M45
Hub Unit Bearing HA590255[2] ²⁵
2007-2006 M35
Hub Unit Bearing HA590175[2] ²⁵
2006 M45
Hub Unit Bearing HA590171[2] ²⁵

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

INFINITI - REAR DRIVE - G35, G37, J30, M30, M35, M45, Q45 (cont.)**REAR WHEEL (cont.)****RWD (cont.)**

2006-2003	G35	
Bearing Module	.....	BM500006[2] ²⁵
2006-2002	Q45	
Bearing Module	.....	BM500004[2] ²⁵
2004-2003	M45	
Bearing Assy	.....	WB000002[2] ²⁵
2001-1997	Q45	
Seal	.....	710439[2]
Bearing Assy	.....	516004[2]
1997-1993	J30	
Seal	.....	710439[2]
Bearing Assy	.....	516004[2]
1996-1990	Q45	
Seal	.....	710130[2]
Bearing Module	.....	511011[2]
1992-1990	M30	
Seal (Inner)	.....	710131[2]
Ball Bearing (Inner)	.....	RW101[2]
Ball Bearing (Outer)	.....	RW132[2]

AWD

2009-2008	M35, M45	
Hub Unit Bearing	.....	HA590255[2] ²⁵
2008	G35, G37	
Hub Unit Bearing	.....	HA590255[2] ²⁵
2007	G35 Coupe	
Bearing Module	.....	BM500006[2] ²⁵
2007	G35 Sedan	
Hub Unit Bearing	.....	HA590255[2] ²⁵
2006-2004	G35	
Bearing Module	.....	BM500006[2] ²⁵

REAR AXLE**Differential**

2002-1990		
Seal	.....	223542[2]
Bearing Assy	.....	30209C[2]
Repair Sleeve	.....	KWK99139[2]

Pinion

2007-2003	(R230 Axle)	
Seal	.....	710117
Repair Sleeve	.....	KWK99196
2002-1990	(R200V)	
Seal	.....	712020
Set (Inner)	.....	SET43
Bearing Assy (Outer)	.....	32306C
Repair Sleeve	.....	KWK99157
1992-1990	(R200KV)	
Seal	.....	712020
Set (Inner)	.....	SET45
Bearing Assy (Outer)	.....	32306C
Repair Sleeve	.....	KWK99157

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2000-1990	(RE4R01A, RE4R03A)	
Seal	.....	224663
Repair Sleeve	.....	KWK99181

Rear Seal/Ext. Housing

2000-1990	(RE4R01A, RE4R03A)	
Seal	.....	223801

Selector Shaft Seal/Man. Shaft

2000-1990	(RE4R01A, RE4R03A)	
Seal	.....	2027

ALTERNATOR

1997-1990	Hitachi 90 Amp.	
Ball Bearing (Drive End)	.....	303CC
1997-1990	Hitachi 90 Amp.	
Ball Bearing (Rear End)	.....	201CC

DRIVESHAFT SUPPORT

1997-1990	J30, M30	
Hanger Bearing Assy	.....	HB6[2]

CAMSHAFT SEAL**6 Cylinder**

1997-1990	2960cc/3.0L (DOHC)	
Seal	.....	224052[4]
Repair Sleeve	.....	KWK99157[4]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2003	3498cc/3.5L	
Seal	.....	710356
Repair Sleeve	.....	KWK99189
1997-1990	2960cc/3.0L (DOHC)	
Seal	.....	223340

8 Cylinder

2007-1990	4130cc/4.1L (DOHC), 4494cc/4.5L (DOHC)	
Seal	.....	710354
Repair Sleeve	.....	KWK99196
2006-2002	4494cc/4.5L	
Seal	.....	710354

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2003	3498cc/3.5L (DOHC)	
Seal Viton	.....	710363
1997-1995	2960cc/3.0L (DOHC)	
Seal PTFE H/D	.....	228411 ²⁵
1994-1990	2960cc/3.0L (DOHC)	
Seal Viton	.....	228410

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

INFINITI - REAR DRIVE - G35, G37, J30, M30, M35, M45, Q45 (cont.)**CRANKSHAFT REAR SEAL****8 Cylinder**

2009-1995	4130cc/4.1L (DOHC), 4494cc/4.5L (DOHC)	
	Seal PTFE H/D	228411 ²⁵
1994-1990	4494cc/4.5L	
	Seal Viton	228410

INFINITI - SUV - EX35**FRONT WHEEL****RWD**

2009-2008		
	Hub Unit Bearing	HA590176[2] ²⁵

4WD

2009-2008		
	Hub Unit Bearing	HA590226[2]

REAR WHEEL**RWD**

2009-2008		
	Hub Unit Bearing	HA590255[2] ²⁵

4WD

2009-2008		
	Hub Unit Bearing	HA590255[2] ²⁵

CRANKSHAFT FRONT SEAL**6 Cylinder**

2009-2008	3498cc/3.5L (DOHC)	
	Seal	710356
	Repair Sleeve	KWK99189

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2008	3498cc/3.5L (DOHC)	
	Seal Viton	710363

INFINITI - SUV - FX35, FX45**FRONT WHEEL****RWD**

2008-2003		
	Hub Unit Bearing	HA590124[2] ²⁵

AWD

2008-2003		
	Hub Unit Bearing	HA590125[2] ²⁵

REAR WHEEL**RWD**

2008-2003		
	Bearing Module	BM500005[2] ²⁵

REAR WHEEL**AWD**

2008-2003		
	Bearing Module	BM500005[2] ²⁵

REAR AXLE**Pinion**

2007-2004	(R230 Axle)	
	Seal	710117
	Repair Sleeve	KWK99196

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-2003	3498cc/3.5L	
	Seal	710356

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

INFINITI - SUV - FX35, FX45 (cont.)**CRANKSHAFT FRONT SEAL****8 Cylinder****2007-2003**

Seal 224650

CRANKSHAFT REAR SEAL**6 Cylinder****2009-2003** 3498cc/3.5L (DOHC)

Seal Viton 710363

CRANKSHAFT REAR SEAL**8 Cylinder****2008-2003** 4494cc/4.5LSeal PTFE H/D 228411 ²⁵**INFINITI - SUV - QX4****FRONT WHEEL****RWD****2003-1997**

Seal (Inner) 710072[2]

Set (Inner) SET37[2]

Cone/Cup (Outer) LM300849-LM300811[2]

4WD**2003-1997**

Seal (Inner) 710072[2]

Set (Inner) SET37[2]

Cone/Cup (Outer) LM300849-LM300811[2]

REAR WHEEL**RWD****2003-1997**

Seal (Outer) 710176[2]

Bearing Assy (Inner) 516005[2]

4WD**2003-1997**

Seal 710176[2]

Bearing Assy 516005[2]

4WD FRONT AXLE**Axle Shaft****2002-1997** (R200A Axle)

Seal (Inner) 1181

Seal (Outer) 710398

Ball Bearing (Outer) RW114R[2]

Differential**2002-1997** (R200A Axle)

Seal 223542[2]

Bearing Assy 30209C[2]

Repair Sleeve KWK99139[2]

4WD FRONT AXLE**Pinion****2002-1997** (R200A Axle)

Seal 712020

Bearing Assy (Inner) 32307

Bearing Assy (Outer) 32306C

Repair Sleeve KWK99157

REAR AXLE**Differential****2002-1997** (H233BS Axle)

Cone/Cup 17887-17831[2]

Pinion**2003-1997** (H233BS Axle)

Seal 710245

Bearing Assy (Inner) 32308

Bearing Assy (Outer) 32306C

Repair Sleeve KWK99166

TRANSFER CASE REBUILD KIT**2003-1997**

Kit TRKFN510

TRANSFER CASE**Input Shaft****2003-1997** (TX10A)(M/T)

Seal 225030

Ball Bearing 306TB[2]

Repair Sleeve KWK99196

2000-1997 (TX10A)(A/T)

Seal 225035

Ball Bearing 306TB[2]

Repair Sleeve KWK99196

Front Output Shaft**2003-1997** (TX10A)

Seal 710113

Ball Bearing 212L[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

INFINITI - SUV - QX4 (cont.)**TRANSFER CASE****Rear Output Shaft**

2003-1997 (TX10A)
 Seal 224266
 Ball Bearing 213SL[2]
 Repair Sleeve KWK99166

Drive Sprocket

2003-1997 (TX10A)
 Ball Bearing 208[2]

Selector Shaft Seal/Man. Shaft

2003-1997 (TX10A)
 Seal 221710
 Repair Sleeve KWK99068

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2000-1997 (RE4R01A)
 Seal 224663
 Repair Sleeve KWK99181

Rear Seal/Ext. Housing

2000-1997 (RE4R01A)
 Seal 223801

Selector Shaft Seal/Man. Shaft

2000-1997 (RE4R01A)
 Seal 2027

CAMSHAFT SEAL**6 Cylinder**

2000-1997 3274cc/3.3L
 Seal 223420[2]
 Repair Sleeve KWK99134[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2003-2001 3498cc/3.5L
 Seal 710356

CRANKSHAFT FRONT SEAL (cont.)**6 Cylinder (cont.)**

2000-1997 3274cc/3.3L
 Seal 224052
 Repair Sleeve KWK99157

CRANKSHAFT REAR SEAL**6 Cylinder**

2003-2001 3498cc/3.5L (DOHC)
 Seal Viton 710363
 2000-1997 3274cc/3.3L
 Seal PTFE H/D 228411 ²⁵

INFINITI - SUV - QX56**FRONT WHEEL****RWD**

2009-2008
 Hub Unit Bearing SP500703[2] ²⁵
 2007-2004
 Hub Unit Bearing SP500701[2] ⁷⁸

4WD

2009-2008
 Hub Unit Bearing SP500703[2] ²⁵
 2007-2004
 Hub Unit Bearing SP500701[2] ⁷⁸

REAR WHEEL**RWD**

2009-2004
 Hub Unit Bearing SP500702[2] ⁷⁸

4WD

2009-2004
 Hub Unit Bearing SP500702[2] ⁷⁸

²⁵New Item, Check For Availability⁷⁸6 Stud, New Item.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

INFINITI - SUV - QX56 (cont.)**FRONT AXLE****Pinion**

2007-2004

Seal 710117

Repair Sleeve KWK99196

TRANSFER CASE**Front Output Shaft**

2006-2004

Seal 710113

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2004

Seal PTFE H/D 228411 ²⁵**INTERNATIONAL TRUCK - 1/2, 3/4, 1, 1-1/2, 2 TON - All Models - by axle designation****REAR AXLE****Differential**

1991-1990 (14038 Axle)

Bearing Assy 32218M[2]

Pinion

1991-1990 (14021, 14022 Axles)

Bearing Assy (Inner) 30311

Bearing Assy (Outer) 30309M

1991-1990 (14038 Axle)

Bearing Assy (Inner) 30311

ISOTTA FRASCHINI - ALL**FRONT WHEEL****RWD**

1999-1996 T8 spider

Ball Bearing 510019[2]

REAR WHEEL**RWD**

1999-1996 T8 spider

Ball Bearing 510019[2]

ISUZU - FRONT DRIVE - Impulse, Stylus**FRONT WHEEL****FWD**

1993-1991 Stylus (Exc. Turbo)

Seal (Inner) 710194[2]

Ball Bearing (Inner) 510033[2]

Seal (Outer) 1953S[2]

1993-1991 Stylus (Turbo)

Seal (Inner) 710194[2]

Bearing Assy (Inner) 517005WB[2]

Seal (Outer) 710192[2]

FRONT WHEEL (cont.)**FWD (cont.)**

1992-1990 Impulse (Exc. Turbo)

Ball Bearing 510033[2]

Seal 1953S[2]

1992-1990 Impulse (Turbo)

Seal (Inner) 710194[2]

Bearing Assy (Inner) 517005WB[2]

Seal (Outer) 710192[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU - FRONT DRIVE - Impulse, Stylus (cont.)					

FRONT WHEEL**AWD**

1992-1991	Impulse (Turbo)	
Seal (Inner)	.....	710194[2]
Bearing Assy (Inner)	.....	517005WB[2]
Seal (Outer)	.....	710192[2]

REAR WHEEL**FWD**

1993-1991	Stylus	
Hub Unit Bearing	.....	512171[2]
1992-1990	Impulse	
Hub Unit Bearing	.....	512171[2]

AWD

1992-1991	Impulse	
Hub Unit Bearing	.....	512171[2]

REAR AXLE**Differential**

1992-1991	Impulse (AWD)	
Cone/Cup	.....	LM501349-LM501314[2]

Pinion

1992-1991	Impulse (AWD)	
Cone/Cup (Inner)	.....	02475-02420
Seal (Outer)	.....	473258
Bearing Assy (Outer)	.....	30305M
Repair Sleeve	.....	KWK99139

CLUTCH**Pilot Bearing**

1997-1996	4 Cyl. 2.2	
Bushing H/D	.....	PB652HD
1996-1992	6 Cyl. 3.2 (SOHC)(DOHC)	
Ball Bearing	.....	203FFW
1995-1990	(4 Cyl.)	
Ball Bearing	.....	203FF
1994-1990	6 Cyl. 2.8	
Bushing H/D	.....	PB652HD
1994-1990	6 Cyl. 3.1	
Bushing H/D	.....	PB652HD

Release Bearing

1999-1998	4 Cyl. 2.2 (260mm Cl.)	
Bearing Assy	.....	614154
1998-1996	4 Cyl. 2.2 (Hyd.piston type)	
Bearing Assy	.....	614174
1998-1991	6 Cyl. 3.1 (260mm Cl.)	
Bearing Assy	.....	614154
1998-1991	6 Cyl. 3.2 (260mm Cl.)	
Bearing Assy	.....	614154
1998-1991	6 Cyl. 3.2 (DOHC)(260mm Cl.)	
Bearing Assy	.....	614154
1998-1991	6 Cyl. 3.5 (260mm Cl.)	
Bearing Assy	.....	614154
1997-1993	4 Cyl. 2.6 (260mm Cl.)(MUA Trans.)	
Bearing Assy	.....	614154

CLUTCH (cont.)**Release Bearing (cont.)**

1997-1993	4 Cyl. 2.6 (260mm Cl.)(Warner Trans.)	
Bearing Assy	.....	614163
1997-1993	6 Cyl. 3.2 (240mm Cl.)	
Bearing Assy	.....	614163
1995-1990	4 Cyl. 2.6 (246mm Cl.)	
Bearing Only	.....	613012
1995-1990	4 Cyl. 2.3 (215mm Cl.)	
Bearing Only	.....	01496
1994-1991	6 Cyl. 3.1 (246mm Cl.)	
Bearing Only	.....	613012
1993-1990	4 Cyl. 1.5 (Turbo)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (DOHC)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (DOHC)(Turbo)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.8 (DOHC)(215mm Cl.)	
Bearing Assy	.....	614108
1992-1991	6 Cyl. 3.1 (240mm Cl.)(MUA Trans.)	
Bearing Only	.....	613012
1992-1991	6 Cyl. 3.1 (240mm Cl.)(Warner Trans.)	
Bearing Assy	.....	614083
1991-1990	6 Cyl. 2.8 (235mm Cl.)	
Bearing Only	.....	613012

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1993-1990	(F3A)	
Bearing Assy	.....	32008XM[2]

Torque Converter

1993-1990	(F3A)	
Seal Viton	.....	710078
Repair Sleeve	.....	KWK99177

Output Shaft

1993-1990	Stylus, Imark (F3A)	
Seal	.....	223542[2]
Repair Sleeve	.....	KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1992-1990	Impulse (JF403)	
Bearing Assy	.....	30208M[2]

Torque Converter / Frt Pump

1992-1990	Impulse (JF403)	
Seal	.....	710114

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU - FRONT DRIVE - Impulse, Stylus (cont.)					

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

1993-1990 (MSG5G)
 Kit TRKF1120

Differential

1993-1990 (MFD5M)
 Bearing Assy 32008XM[2]
 1992-1990 (MFD5T)
 Bearing Assy (LH) 32008XM

Input Shaft

1993-1990 (MFD5M, MFD5T)
 Seal 222835
 Repair Sleeve KWK99111
 Bearing Assy (Frt) 32206M[2]
 Bearing Assy (Rr) 30306M[2]

Output Shaft

1993-1990 (MFD5M)
 Set (LH) SET5[2]
 Seal (RH) 223542
 Bearing Assy (RH) 32206M[2]
 Repair Sleeve KWK99139
 1992-1990 (MFD5T)
 Seal (LH) 3543
 Repair Sleeve (LH) KWK99139
 Seal Viton (RH) 710428
 Repair Sleeve (RH) KWK99210

Selector Shaft Seal/Man. Shaft

1993-1990 (MFD5M, MFD5T)
 Seal 3667

ALTERNATOR

1995-1990 Hitachi 60 Amp.
 Ball Bearing (Drive End) 303CC
 Ball Bearing (Rear End) 201CC

CAMSHAFT SEAL**4 Cylinder**

1993-1990 1588cc/1.6L (DOHC)
 Seal 710308[2]
 Repair Sleeve KWK99157[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1993-1990 1471cc/1.5L, 1471cc/1.5L
 (Turbo), 1588cc/1.6L,
 1588cc/1.6L (DOHC), 1808CC/
 1.8L (DOHC)
 Seal 223220
 Repair Sleeve KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder**

1993-1990 1471cc/1.5L, 1471cc/1.5L
 (Turbo), 1588cc/1.6L,
 1588cc/1.6L (DOHC), 1808CC/
 1.8L (DOHC)
 Seal 228700

ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS

FRONT WHEEL**FWD**

1999-1996 Oasis
 Bearing Module 510038[2]

FRONT WHEEL**RWD**

2008-2006 (Z85 Pkg.)
 Hub Unit Bearing (LH) HA590058⁰²
 Hub Unit Bearing (RH) HA590062⁰²
 2008-2006 (ZQ8 Pkg.)
 Hub Unit Bearing (LH) HA590054⁰²
 Hub Unit Bearing (RH) HA590059⁰²

⁰²Does Not Come w/ Sensor Cable.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

FRONT WHEEL (cont.)

RWD (cont.)

2008-2003	Ascender	
	Hub Unit Bearing	513188[2]
2004-2002	Axiom (From 11/1/01)	
	Hub Unit Bearing	HA590653[2]
2004-2002	Rodeo, Rodeo Sport	
	Hub Unit Bearing	HA590653[2]
2002	Axiom (Thru 10/31/01)	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2001-1995	Rodeo, Rodeo Sport	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2000-1998	Amigo	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2000-1996	Hombre	
	Seal (Inner)	4739[2]
	Set (Inner)	SET6[2]
	Set (Outer)	SET34[2]
1996-1995	Trooper	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
1994-1991	Rodeo	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	XAA32009X-Y32009X[2]
	Bearing Assy (Outer)	32008XM[2]
1994-1990	Amigo	
	Seal (Inner)	710168[2]
	Bearing Assy (Inner)	32009XM[2]
	Bearing Assy (Outer)	32008XM[2]
1994-1990	Pup, Pickup	
	Seal (Inner)	1974[2]
	Set (Inner)	SET5[2]
	Set (Outer)	SET3[2]
1994-1990	Trooper	
	Seal (Inner)	1974[2]
	Set (Inner)	SET5[2]
	Set (Outer)	SET3[2]

4WD

2008-2006	Pickup	
	Hub Unit Bearing (LH)	HA590060 ⁰²
	Hub Unit Bearing (RH)	HA590023 ⁰²
2008-2003	Ascender	
	Hub Unit Bearing	513188[2]
2002	Axiom (Thru 10/31/01)	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2002-1990	Trooper	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]

FRONT WHEEL (cont.)

4WD (cont.)

2001-1999	VehiCROSS	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2001-1995	Rodeo, Rodeo Sport	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2000-1998	Amigo	
	Seal (Inner)	710168[2]
	Cone/Cup (Inner)	NP697136-NP592766[2]
	Cone/Cup (Outer)	NP654538-NP177400[2]
2000-1998	Hombre	
	Hub Unit Bearing	513124[2]
1994-1991	Rodeo	
	Seal (Inner)	710168[2]
	Bearing Assy (Inner)	32009XM[2]
	Cone (Outer)	A140[2]
1994-1990	Amigo	
	Seal (Inner)	710168[2]
	Bearing Assy (Inner)	32009XM[2]
	Cone (Outer)	A140[2]
1994-1990	Pickup	
	Seal (Inner)	710168[2]
	Bearing Assy (Inner)	32009XM[2]
	Cone (Outer)	A140[2]

REAR WHEEL

FWD

1999-1996	Oasis	
	Hub Unit Bearing	512124[2]

RWD

2008-2006	Pickup	
	Seal	4762N[2]
	Cylindrical Bearing	513067[2]
2008-2003	Ascender	
	Seal	4762N[2]
	Cylindrical Bearing	513067[2]
	Bearing & Seal Kit	TRP59047[2] ¹⁹
2004-1998	Amigo, Axiom, Rodeo, Rodeo Sport	
	Seal	9912S[2]
	Cylindrical Bearing	RW131R[2]
2002-1990	Trooper, Trooper II (From 7/1/87)	
	Seal (Inner)	225230[2]
	Ball Bearing (Inner)	511016[2]
	Seal (Outer)	473179[2]
2001-1999	VehiCROSS	
	Seal (Inner)	225230[2]
	Ball Bearing (Inner)	511016[2]
	Seal (Outer)	473179[2]
2000-1996	Hombre (8.5 R.G.)	
	Seal	8835S[2]
	Cylindrical Bearing	6408[2]

⁰²Does Not Come w/ Sensor Cable.

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

REAR WHEEL (cont.)**RWD (cont.)**

2000-1996	Hombre (GM Axle)(7.625" R.G.)
	Cylindrical Bearing 5707[2]
	Seal (Axle Code C)(Mf
	In U.S.A.) 710166[2]
	Seal (Axle Code K)(Mf
	In Canada) 8660S[2]
1997-1991	Rodeo (GM Axle)(7.625" R.G.)
	Seal 710166[2]
	Cylindrical Bearing 5707[2]
	Bearing & Seal Kit TRP1563TAV[2] ¹⁹
1995-1994	Rodeo (6 Cyl.)
	Seal 9912S[2]
	Set SET10[2]
1995-1990	Pickup (2.3L)
	Seal (Inner) 473812[2]
	Bearing Assy (Inner) 30208M[2]
	Seal (Outer) 473179[2]
1995-1990	Pickup (2.6L)
	Seal (Inner) 225230[2]
	Ball Bearing (Inner) 511016[2]
	Seal (Outer) 473179[2]
1994-1990	Amigo (2.6L)
	Seal (Inner) 225230[2]
	Ball Bearing (Inner) 511016[2]
	Seal (Outer) 473179[2]
1993-1990	Amigo (2.3L)
	Seal (Inner) 473812[2]
	Bearing Assy (Inner) 30208M[2]
	Seal (Outer) 473179[2]

4WD FRONT AXLE**Axle Shaft**

2008-2003	(I-280, i-290, i-350, i-370, Ascender)
	Cylindrical Bearing 513067[2]
	Seal 710491[2]
2004-1996	(7.25" R.G.)
	Seal 710516[2]
2000-1998	
	Seal 710491[2]
1995-1990	Amigo, Pickup, Rodeo, Trooper, Trooper II
	Seal (Inner) 710169
	Ball Bearing (Inner) 106FL[2]
	Seal (Outer) 710170

Differential

2007-2006	Pickup
	Cone/Cup LM501349-LM501314[2]
2006-2003	Ascender
	Set SET11[2]
2004-1990	(10 Bolt Hsg. Cover)
	Set SET45[2]
2000-1998	Hombre (7.25" R.G.)
	Set SET11[2]
1999-1996	Oasis
	Bearing Assy (LH) 30208M

4WD FRONT AXLE**Pinion**

2007-2003	Ascender
	Seal 710474 ²⁵
	Cone/Cup (Inner) M88048-M88010
	Cone/Cup (Outer) M86649-M86610
2004-1999	(10 Bolt Hsg. Cover)
	Seal 710513
	Bearing Assy (Inner) 32307
	Bearing Assy (Outer) 30306M
2000-1998	Hombre (7.25" R.G.)
	Seal 8611N
	Cone/Cup (Inner) M88047-M88010
	Cone/Cup (Outer) M86649-M86610
1998-1990	(10 Bolt Hsg. Cover)
	Seal 474133
	Bearing Assy (Inner) 32307
	Bearing Assy (Outer) 30306M

Steering Knuckle

1995-1990	
	Seal 710527[2]

REAR AXLE**Differential Rebuild Kit**

2007-2006	(8" RG)
	Kit DRK320D
2007-1999	(8.625" R.G.)
	Kit DRK321C
2001	(7.625" R.G.)(1st Design)(1.5" Seal I.D.)
	Kit DRK320
2001	(7.625" R.G.)(2nd Design)(1.687" Seal I.D.)
	Kit DRK320B
2000-1999	Hombre (GM Axle)(7.625" R.G.)
	Kit DRK320C
2000-1991	(7.5" R.G., 7.625" R.G.)
	Kit DRK320
1997	(8.5" R.G.)(1st Design)
	Kit DRK321

Differential

2007-2006	Pickup
	Set SET36[2]
2006-2003	Ascender
	Set SET36[2]
2004-1996	(7.625", 8.50" R.G.)
	Cone/Cup LM501349-LM501314[2]
2004-1993	(Dana/Spicer 44-3 Axle)
	Cone/Cup 25590-25523[2]
1999-1990	(KS22, NPR, R040, Axles)
	Cone/Cup 29590-29522[2]
1995-1990	(10 Bolt Hsg. Cover)(2.6L Engine)
	Bearing Assy 30210M[2]
1994-1990	(10 Bolt Hsg. Cover)(2.3L Engine)
	Set SET45[2]

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

REAR AXLE

Pinion

2007-2003	Ascender
Cone/Cup (Inner) (All)	M802048-M802011
Cone/Cup (Outer) (5 Passenger)	M86649-M86610
Cone/Cup (Outer) (7 Passenger)	M88048-M88010
Seal (All)	710506
2007-1998	(GM Axle)(8.50" R.G.)
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
Seal	710506
2001	(7.625" R.G.)(1st Design)(1.5" Seal I.D.)
Seal (Inner)	HM89249-HM89210
Seal (Outer)	M86648A-M86610
Seal (Outer)	8610
2001	(7.625" R.G.)(2nd Design)(1.687" Seal I.D.)
Seal (Inner)	HM89249-HM89210
Seal (Outer)	M86649-M86610
Seal (Outer)	710474 ²⁵
2000-1990	Pickup (GM Axle)(7.625" R.G.)
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
Seal	8610
1996-1990	Rodeo (GM Axle)(7.625" R.G.)
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
Seal	8610
1995-1990	(10 Bolt Hsg. Cover)
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	30306M
Seal	474133

TRANSFER CASE REBUILD KIT

2001-1998	
Kit	TRKFI190

TRANSFER CASE

Input Shaft

2007-2003	(New Process 226C)
Ball Bearing	N5210KLB
2004-1998	(Borg Warner 4422)
Seal	224250
Ball Bearing	209L[2]
2004-1990	(MUATC)
Seal	710247
Ball Bearing	207[2]
Repair Sleeve	KWK99149
2001-1998	(New Process 233)
Seal	3173[2]
Ball Bearing	110L[2]
Seal (Opt)	710928
Repair Sleeve	KWK99193
Ndle Bearing (Pilot)	FC66561[2]

TRANSFER CASE

Front Output Shaft

2007-2003	(New Process 226C)
Ball Bearing	107WB
2004-1998	(Borg Warner 4422)
Ball Bearing	306TB
2001-1998	(New Process 233)
Seal Viton	4813V
Ball Bearing	206WB
Ndle Bearing (Pilot)	J2416

Rear Output Shaft

2004-1998	(Borg Warner 4422)
Ball Bearing	306TB
2004-1990	(MUATC)
Ball Bearing	307TB
2001-1998	(New Process 233)
Seal Kit	5200 ⁶⁴
Seal	9613S
Ball Bearing	206WB
Ndle Bearing (Pilot)	B5020

Oil Pump Housing

2001-1998	(New Process 233)
Seal	341022
Repair Sleeve	KWK99225

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002	Axiom
Seal	3459S
Repair Sleeve	KWK99157
2002-1991	(4L30E)(THM700R4)
Seal	3227
Repair Sleeve	KWK99174
2000-1996	(4L60, 4L60E, 4L65E)
Seal	4950
Repair Sleeve	KWK99174
2000-1993	(4L80E)
Seal	4598
Repair Sleeve	KWK99199
1994-1990	(Aisin 03 75, 03 80)
Seal	223830
Repair Sleeve	KWK99147

Rear Seal/Ext. Housing

2007-2003	(4L60E)(Booted)
Seal	4934
2007-2003	(4L60E)(Exc. Booted)
Seal	4583
2002-1991	(4L30E)(4L60E)(THM700R4)
Seal	9613S
Seal Kit	5200 ⁶⁴
2001-1999	VehiCROSS
Seal	3459S
Repair Sleeve	KWK99157
2001-1998	(4L60E)(Booted)
Seal	4934
2001-1996	(4L60E)(Exc. Booted)
Seal	4583

²⁵New Item, Check For Availability

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

4-SPEED AUTOMATIC TRANSMISSION (cont.)

Rear Seal/Ext. Housing (cont.)

2000-1993	(4L80E)	
Seal	.....	9449
Seal Kit	.....	5208 ⁶⁴
1998-1991	Trooper	
Seal	.....	3459S
Repair Sleeve	.....	KWK99157
1997-1996	(4L60E)(Booted)	
Seal	.....	9613S
1994-1990	(Aisin 03 75, 03 80)	
Seal	.....	710319

Selector Shaft Seal/Man. Shaft

2008-1991	(4L30E)(4L60E)(4L80E)(THM70 OR4)	
Seal	.....	8792S

CLUTCH

Pilot Bearing

2006	(2.8L DOHC)	
Ball Bearing	.....	302CC
2006	(5 cyl.)	
Ball Bearing	.....	302CC
2003-1990	(4 Cyl.)	
Ball Bearing	.....	203FF
2001-1996	4 Cyl. 2.2	
Bushing H/D	.....	PB652HD
2000-1999	4.3 V6	
Ball Bearing	.....	302CC
1998-1997	4.3 V6	
Ball Bearing	.....	57080
1998-1992	6 Cyl. 3.2 (SOHC)(DOHC)	
Ball Bearing	.....	203FFW
1994-1990	(6 Cyl.)	
Bushing H/D	.....	PB652HD

Release Bearing

2006	5 Cyl.	
Bearing Assy	.....	614174
2003-2000	2.2L (DOHC)	
Bearing Assy	.....	614163
2003-1996	4 Cyl. 2.2 (Hyd.piston type)	
Bearing Assy	.....	614174
2003-1991	6 Cyl. 3.2 (DOHC)(260mm Cl.)	
Bearing Only	.....	613012
2001-1997	6 Cyl. 4.3 (Hyd. Cl.)	
Bearing Assy	.....	614174
1999-1998	2.2 (240MM Clutch)	
Bearing Assy	.....	614163
1999-1993	6 Cyl. 3.2 (240mm Cl.)	
Bearing Assy	.....	614163
1998-1991	6 Cyl. 3.1 (260mm Cl.)	
Bearing Assy	.....	614154
1998-1991	6 Cyl. 3.2 (260mm Cl.)	
Bearing Assy	.....	614154
1998-1991	6 Cyl. 3.5 (260mm Cl.)	
Bearing Assy	.....	614154

CLUTCH (cont.)

Release Bearing (cont.)

1997-1993	4 Cyl. 2.6 (260mm Cl.)(MUA Trans.)	
Bearing Assy	.....	614154
1997-1993	4 Cyl. 2.6 (260mm Cl.)(Warner Trans.)	
Bearing Assy	.....	614163
1995-1990	4 Cyl. 2.6 (246mm Cl.)	
Bearing Only	.....	613012
1995-1990	4 Cyl. 2.3 (225mm Cl.)	
Bearing Assy	.....	614078
1995-1990	4 Cyl. 2.3 (215mm Cl.)	
Bearing Only	.....	01496
1994-1991	6 Cyl. 3.1 (246mm Cl.)	
Bearing Only	.....	613012
1993-1990	4 Cyl. 1.5 (Turbo)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (DOHC)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.6 (DOHC)(Turbo)(215mm Cl.)	
Bearing Assy	.....	614108
1993-1990	4 Cyl. 1.8 (DOHC)(215mm Cl.)	
Bearing Assy	.....	614108
1992-1991	6 Cyl. 3.1 (240mm Cl.)(MUA Trans.)	
Bearing Only	.....	613012
1992-1991	6 Cyl. 3.1 (240mm Cl.)(Warner Trans.)	
Bearing Assy	.....	614083
1991-1990	6 Cyl. 2.8 (235mm Cl.)	
Bearing Only	.....	613012

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1991	(MSG5F)	
Kit	.....	TRKFI160
2002-1991	(MSG5G)	
Kit	.....	TRKFI200
2002-1991	(Warner T5 World Class)	
Kit	.....	TRK5W
2000-1996	(New Venture 1500)	
Kit	.....	TRK1500GM
1991-1990	(MSG5F)	
Kit	.....	TRKFI130

Front Input Shaft

2004-1998	(AR-5)	
Seal	.....	223253
2004-1992	(MUA5C, MUA5CT)	
Ball Bearing	.....	308L
Seal	.....	710511
2001-1997	(New Process 3500)	
Seal	.....	4529N
Ball Bearing	.....	307FFLS[2]
Repair Sleeve	.....	KWK99138

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

5-SPEED MANUAL TRANSMISSION (cont.)

Front Input Shaft (cont.)

2001-1996	(New Process 1500)
Seal	223020
Ball Bearing	306VVL[2]
1999-1998	(Warner T5)
Seal	7412S
Set	SET5[2]
Repair Sleeve	KWK99125
Ndle Bearing	FA55505[2]
1994-1991	(Warner T5)
Seal	7412S
Set	SET5[2]
Repair Sleeve	KWK99125
Ndle Bearing	FA55505[2]
1994-1990	(MSG5A, MAG5C, MSG5T)
Seal	1990
Ball Bearing	208LO[2]
Repair Sleeve	KWK99106
1993-1990	(MSA5D, MSG5D, MSG5R)
Seal	1990
Repair Sleeve	KWK99106
1991-1990	(MUA5, MUA5T)
Seal	710157
Repair Sleeve	KWK99103

Countershaft

2004-1998	(AR-5)
Cylindrical Bearing (Frt)	MSN5305GTBV ²⁵
2000-1997	(New Process 3500)
Ndle Bearing	FC68336[2]
2000-1996	(New Process 1500)
Ndle Bearing (Frt)	FC68336[2]
Ball Bearing (Rr)	206FF[2]
1999-1998	(Warner T5)
Cone/Cup (Frt)	LM67048-LM67010BCE[2]
Set (Rr)	SET6[2]
Ndle Bearing Thrust	NTA1423[2]
1994-1991	(Warner T5)
Cone/Cup (Frt)	LM67048-LM67010BCE[2]
Set (Rr)	SET6[2]
Ndle Bearing Thrust	NTA1423[2]

Mainshaft Pilot

1999-1991	(Warner T5)
Ndle Bearing	QBR23549[15]

Mainshaft 1st Speed Gear

1999-1991	(Warner T5)
Ndle Bearing	F218255[2]

Mainshaft 2nd Speed Gear

1999-1991	(Warner T5)
Ndle Bearing	F93934[2]

5-SPEED MANUAL TRANSMISSION

Rear Output Shaft

2004-1998	(AR-5)(4WD)
Seal	1209N
2004-1998	(AR-5)(RWD)
Seal	710319
2004-1990	(MUA5, MSG5C, MUA5C, MSG5F)
Seal	710247
2002-1990	(MUA5T, MUA5CT)
Seal	224250
2001-1997	(New Process 3500)
Seal	416288
Ball Bearing	307FFTB[2]
2001-1996	(New Process 1500)
Seal	416288
Ball Bearing	306L[2]
1999-1991	(Warner T5)
Seal	710441
Cone/Cup	25877-25821[2]
1993-1990	(MSA5D)
Ball Bearing	308FFL[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

1997-1996	(MPJA)
Bearing Assy (LH)	30208M

Torque Convertor / Frt Pump

1999-1996	(MDWA, MPJA)
Seal	350609

Input Shaft

1999-1996	(MDWA, MPJA)
Seal	220918

Output Shaft

1999-1998	(MDWA)
Seal (LH)	710315
Repair Sleeve (LH)	KWK99139
Seal (RH)	224066
Repair Sleeve (RH)	KWK99157
1997-1996	(MPJA)
Seal (LH)	2007N
Repair Sleeve (LH)	KWK99139
Seal (RH)	224066
Repair Sleeve (RH)	KWK99157

Pinion

1997-1996	(MPJA)
Seal	222830
Repair Sleeve	KWK99111

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

1997-1996 (MPJA)	
Seal	221207
Repair Sleeve	KWK99049

ALTERNATOR

1997-1990 Hitachi 60 Amp.	
Ball Bearing (Drive End)	303CC
Ball Bearing (Rear End)	201CC

DRIVESHAFT SUPPORT

2001-1996 (Spicer 1280 1410)(1.3780" Brg. I.D.)	
Ball Bearing	88107[2]
Hanger Bearing Assy	HB88107A[2]
Hanger Bearing Assy	
Opt. w/ Slinger	HB88107E[2]
1997-1991 Rodeo (2WD)	
Hanger Bearing Assy	HB32[2]
1997-1991 Rodeo (4WD)	
Hanger Bearing Assy	HB33[2]

CV JOINT HALF SHAFT

1999-1996 Oasis	
Seal	710300

OIL PUMP**4 Cylinder**

1999-1996 2156cc/2.2L, 2253cc/2.3L(SOHC)	
Seal Viton	712009
Repair Sleeve	KWK99106

CAMSHAFT SEAL**4 Cylinder**

2003-2000 2180cc/2.2L (DOHC)	
Seal	710515
2000 2180cc/2.2L (OHV)	
Seal	712008
1997-1990 2254cc/2.3L, 2559cc/2.6L	
Seal	223014
Repair Sleeve	KWK99114

6 Cylinder

2004-1992 3165cc/3.2L, 3494cc/3.5L	
Seal	223014[2]
Repair Sleeve	KWK99114[2]
2000 4294cc/4.3L	
Seal	712008

CRANKSHAFT FRONT SEAL**8 Cylinder**

2006-2003 325/ 5.3L	
Seal Viton	100470

CRANKSHAFT FRONT SEAL**4 Cylinder**

2000-1996 134/2.2L	
Seal	9845
Repair Sleeve	KWK99176
1999-1998 2254cc/2.3L	
Seal	224015
Repair Sleeve	KWK99157
1997-1996 2156cc/2.2L	
Seal	224015
Repair Sleeve	KWK99157
1997-1990 2254cc/2.3L, 2559cc/2.6L	
Seal	224025
Repair Sleeve	KWK99157

6 Cylinder

2004-2000 3.2L, 3.5L	
Seal	224020
2000 4294cc/4.3L	
Seal	9845
1999-1992 3.2L, 3.5L	
Seal	224025
Repair Sleeve	KWK99157
1994-1990 173/2.8L, 189/3.1L	
Seal	9845
Repair Sleeve	KWK99176

CRANKSHAFT REAR SEAL**4 Cylinder**

2003-1998 2180cc/2.2L (DOHC)	
Seal Viton	710237
2000-1996 2180cc/2.2L (OHV)	
Seal	4307V
Seal PTFE H/D (Opt)	5273
1999-1996 2156cc/2.2L, 2254cc/2.3L	
Seal	228015
Repair Sleeve	KWK99315
1997-1990 2254cc/2.3L, 2559cc/2.6L	
Seal	710060
Repair Sleeve	KWK99364

6 Cylinder

2004-2003 3491cc/3.5L	
Seal	710060
Repair Sleeve	KWK99369
2004-1992 3165cc/3.2L	
Seal	710060
Repair Sleeve	KWK99369
2002-1998 3475cc/3.5L	
Seal	710060
Repair Sleeve	KWK99369
2000-1997 262/4.3L	
Seal Viton	4359V
Seal PTFE H/D	5274
1994-1990 173/2.8L, 189/3.1L	
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ISUZU TRUCK - Minivan, SUV, Truck - Amigo, Ascender, Axiom, Hombre, Oasis, Pickup, Rodeo, Rodeo Sport, Trooper, VehiCROSS (cont.)					

CRANKSHAFT REAR SEAL

8 Cylinder

2006-2003	325/ 5.3L
Seal	100085

JAGUAR - ALL

FRONT WHEEL

RWD

2009-2007	XK
Ball Bearing	510010[2]
2009-1999	XK8, XKR
Ball Bearing	510010[2]
2009-1996	Vanden Plas
Ball Bearing	510010[2]
2008-2004	XJ8, XJR
Hub Unit Bearing	HA590224
2006-2000	S Type
Hub Unit Bearing	HA590224[2]
2003-1999	XJ8, XJR
Ball Bearing	510010[2]
1998-1997	XK8
Set	SET49[2]
1997-1990	XJ6
Set (Inner)	SET17[2]
Set (Outer)	SET8[2]
1996-1993	XJS
Set (Inner)	SET17[2]
Set (Outer)	SET8[2]
1992-1990	XJS
Seal (Inner)	473454[2]
Set (Inner)	SET13[2]
Set (Outer)	SET12[2]

AWD

2007-2002	X Type
Ball Bearing (Replaces	
HA590225)	WB000003[2] ²⁵

REAR WHEEL

RWD

2008-2000	S Type, Super V8
Ball Bearing	511032[2]
2008-1993	XJ6, XJ12, XJR, XJS, XJ8,
	XK8, Vanden Plas
Set (Inner)	SET45[2]
Cone/Cup (Outer)	LM503349A-LM503310[2]
1992-1990	XJ12, XJS
Cone/Cup (Inner)	18590-18520[2]
Cone/Cup (Outer)	18690-18620[2]
1992-1990	XJ6, Sovereign, Vanden Plas
Set (Inner)	SET45[2]
Cone/Cup (Outer)	LM503349A-LM503310[2]

REAR WHEEL

AWD

2007-2002	X Type
Hub Unit Bearing	HA590174[2] ²⁵

REAR AXLE

Axle Shaft

2008-2000	
Seal Viton	714569[2]
Repair Sleeve	KWK99157[2]
1999-1990	(Salisbury axle)
Set	SET17[2]

Differential

2005-1992	
Cone/Cup	25577C-25523[2]
1991-1990	4HU
Cone/Cup	25577-25523[2]
1990	XJS Ser.
Taprd Bearing Assy	JRM3535-90U01[2]

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1995-1994	(4L80E)
Seal	4598
Repair Sleeve	KWK99199
1995-1990	(ZF 4HP 22, ZF 4HP 24)
Seal	224052

Rear Seal/Ext. Housing

1995-1994	(4L80E)
Seal	9449
Seal Kit	5208 ⁶⁴
1995-1990	(ZF 4HP 22, ZF 4HP 24)
Seal	224045

Selector Shaft Seal/Man. Shaft

1996-1994	(4L80E)
Seal	8792S

5-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002-1997	(ZF 5HP 24)
Seal	224015
Repair Sleeve	KWK99157

²⁵New Item, Check For Availability

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
JAGUAR - ALL (cont.)					

5-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2002-1997 (ZF 5HP 24)
Seal 224045

Selector Shaft Seal/Man. Shaft

2003-2000 (5R55N)
Seal 7929S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2000 152/2.5L, 182/3.0L
Seal 482041N
Harmnc Balancer Slvs 88187
Repair Sleeve KWK99187

12 Cylinder

1996-1990 5343cc/5.3L, 5994cc/6.0L
Seal 450867
Repair Sleeve KWK99212

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2000 2497cc/2.5L, 2967cc/3.0L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99363

JEEP - Liberty**FRONT WHEEL****RWD**

2008-2002 (ABS)
Hub Unit Bearing (LH) HA599455L
Hub Unit Bearing (RH) HA599455R
2005-2002 (Non-ABS)
Hub Unit Bearing HA599467[2]

4WD

2007-2002 (ABS)
Hub Unit Bearing (LH) HA599455L[2]
Hub Unit Bearing (RH) HA599455R[2]
2005-2002 (Non-ABS)
Hub Unit Bearing HA599467[2]

REAR WHEEL**RWD**

2009-2008
Seal SL260004[2]²⁵
Cylindrical Bearing 6410[2]
2007-2002 (Chrysler Axle)(8.25" R.G.)
Seal SL260010[2]
Cylindrical Bearing 6408[2]
Bearing & Seal Kit TRP1559TV[2]¹⁹
2002 (Dana/Spicer 35 Axle)
Seal 2146[2]
Bearing Assy NP182140-904A1[2]⁰⁸

4WD FRONT AXLE**Differential**

2005-2002
Cone/Cup LM501349-LM501314[2]

4WD FRONT AXLE**Pinion**

2008-2002
Cone/Cup (Inner) M802048-M802011
Cone/Cup (Outer) HM88649-HM88610
Seal 450303

REAR AXLE**Differential Rebuild Kit**

2007-2002 (8.25" R.G.)
Kit DRK303B²⁵
2004-2002 (Dana/Spicer 35 Axle)
Kit DRK335

Differential

2005-2002 (8.25" R.G.)
Set SET36[2]
2002 (Dana/Spicer 35 Axle)
Cone/Cup LM501349-LM501314[2]

Pinion

2008-2002 (8.25" R.G.)
Seal 710480
Cone/Cup (Inner) M802048-M802011
Cone/Cup (Outer) M86649-M86610
2002 (Dana/Spicer 35 Axle)
Seal Viton 714675
Cone/Cup (Inner) HM88648-HM88610
Cone/Cup (Outer) M86649-M86610

⁰⁸Locking Collar Not Included.
Check For Availability

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

²⁵New Item,

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

JEEP - Liberty (cont.)**TRANSFER CASE****Input Shaft**

2008-2002 (New Process 231, 242)
 Seal 3173
 Seal (Opt) 710928
 Repair Sleeve KWK99193
 Ball Bearing 110L
 Ndle Bearing (Pilot) FC66561

Front Output Shaft

2009-2002 (New Process 231)
 Seal Viton 710056
 Repair Sleeve KWK99155
 Ball Bearing 206WB
 Ndle Bearing (Pilot) J2416
 2009-2002 (New Process 242)
 Seal 3946
 Repair Sleeve KWK99187
 Ball Bearing 207XLO
 Ndle Bearing (Pilot) J2416

Rear Output Shaft

2005-2002 (New Process 231)
 Seal 4370N
 Repair Sleeve KWK99149
 Ball Bearing 206WB
 Ndle Bearing (Pilot) B5020
 2005-2002 (New Process 242)
 Ball Bearing 206WB
 Ndle Bearing (Pilot) C672Q¹⁶

Oil Pump Housing

2005-2002
 Seal 341022
 Repair Sleeve KWK99225

CAMSHAFT SEAL**4 Cylinder**

2004-2002 2.4L
 Seal Viton 320249

CRANKSHAFT FRONT SEAL**4 Cylinder**

2005-2002 148/2.4L
 Seal Viton 320348

6 Cylinder

2008-2002 226/3.7L
 Seal 710472

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-2002 148/2.4L
 Seal Viton 710056
 Repair Sleeve KWK99360

6 Cylinder

2009-2002 226/3.7L
 Seal 231004

JEEP - CUV - CROSSOVER / SPORT UTILITY - Compass, Patriot**FRONT WHEEL****FWD**

2008-2007 Compass, Patriot
 Bearing Assy 510090[2]²⁵

REAR WHEEL**RWD**

2008-2007 Compass, Patriot
 Hub Unit Bearing HA590216[2]²⁵

REAR WHEEL**4WD**

2008-2007 Compass, Patriot
 Hub Unit Bearing HA590230[2]²⁵

¹⁶Obsolete²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>JEEP - SUV - SPORT UTILITY VEHICLES - Cherokee, Commander, Grand Cherokee</i>					

FRONT WHEEL**RWD**

2008-2005	Commander, Grand Cherokee	
Hub Unit Bearing	HA590036[2]	²⁵
2004-1999	Grand Cherokee	
Hub Unit Bearing	HA598679[2]	
2001-2000	Cherokee (Cast Rotor)	
Hub Unit Bearing	HA597449[2]	
1999	Cherokee (Cast Rotor)	
Hub Unit Bearing	HA597449[2]	
1999-1990	Cherokee (Composite Rotor)	
Hub Unit Bearing	513084[2]	
1998-1993	Grand Cherokee	
Hub Unit Bearing	513084[2]	

4WD

2008-2005	Commander, Grand Cherokee	
Hub Unit Bearing	HA590036[2]	²⁵
2004-1999	Grand Cherokee	
Hub Unit Bearing	HA598679[2]	
2001-2000	Cherokee (Cast Rotor)	
Hub Unit Bearing	HA597449[2]	
1999	Cherokee (Cast Rotor)	
Hub Unit Bearing	HA597449[2]	
1999	Cherokee (Composite Rotor)	
Hub Unit Bearing	513084[2]	
1998-1990	Cherokee, Grand Cherokee	
Hub Unit Bearing	513084[2]	

REAR WHEEL**RWD**

2008-2005	Commander, Grand Cherokee	
Hub Unit Bearing	HA590141[2]	²⁵
2004-1998	WJ Grand Cherokee (Dana/Spicer 35,44 Axle)	
Seal	2146[2]	
Bearing Assy	NP182140-904A1[2]	⁰⁸
2001	KJ Cherokee (Dana/Spicer 35,44 Axle)	
Seal	2146[2]	
Bearing Assy	NP182140-904A1[2]	⁰⁸
2001-1998	XJ Cherokee (Dana/Spicer 35 Axle)	
Seal	8660S[2]	
Cylindrical Bearing	5707[2]	
2001-1991	Cherokee, Cherokee Sport (Chrysler Axle)(8.25" R.G.)	
Seal	8835S[2]	
Cylindrical Bearing	6408[2]	
Bearing & Seal Kit	TRP1559TV[2]	¹⁹
1997-1994	Grand Cherokee (Dana/Spicer 44)(Flg. Axle Shaft)	
Seal (Inner)	8660S[2]	
Set (Inner)	SET10[2]	
Seal (Outer)	4857[2]	
1997-1990	Cherokee, Grand Cherokee (Dana/Spicer 35 Axle)	
Seal	8660S[2]	
Cylindrical Bearing	5707[2]	

4WD FRONT AXLE**Axle Shaft**

2008-2005	(7.875" R.G.)	
Seal	710489	²⁵

Differential Rebuild Kit

2008-1999	(Dana/Spicer 30 Axle)	
Kit	DRK334C	
1998-1997	(Dana/Spicer 30 Axle)	
Kit	DRK334TJ	
1996-1990	(Dana/Spicer 30 Axle)	
Kit	DRK334	
1993-1990	(Dana/Spicer 44 Axle)	
Kit	DRK339B	

Differential

2004-1990	(Dana/Spicer 30, 35 Axles)	
Cone/Cup	LM501349-LM501314[2]	
1993-1990	(Dana/Spicer 44 Axle)	
Cone/Cup	25590-25523[2]	

Pinion

2008-2005	(7.875" R.G.)	
Cone/Cup (Inner)	HM803146-HM803110	
Seal (Outer)	710461	
Cone/Cup (Outer)	M88043-M88010	
2004-2002	(Dana/Spicer 35 Axle)	
Seal Viton	714675	
Cone/Cup (Inner)	HM88648-HM88610	
Cone/Cup (Outer)	M86649-M86610	
2001-1999	(Dana/Spicer 30 Axle)	
Seal	5778	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	
1998-1997	(Dana/Spicer 30 Axle)	
Seal	5778	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	
1996-1994	(Dana/Spicer 30 Axle)	
Seal	5778	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	02872-02820	
1993-1990		
Seal (All)	5778	
Cone/Cup (Inner)		
(Dana/Spicer 44 Axle)	31594-31520	
Cone/Cup (Inner)		
(Dana/Spicer 30 Axle)	HM88649-HM88610	
Cone/Cup (Outer) (All)	02872-02820	

Spindle Kit

1998-1990		
Bearing & Seal Kit	SBK1[2]	³³

Spindle

1998-1990		
Seal (Inner)	722108[2]	
Ndle Bearing (Inner)	B2110[2]	
Seal (Outer)	722109[2]	

⁰⁸Locking Collar Not Included.¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
Check For Availability³³Opt. Kit = Brg B2110, Seals 722108 & 722109.²⁵New Item,

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
JEEP - SUV - SPORT UTILITY VEHICLES - Cherokee, Commander, Grand Cherokee					
(cont.)					

4WD FRONT AXLE**Intermediate Shaft**

1993-1990	(Spicer 30 F)(Disconnect)	
Ndle Bearing		SCE108

REAR AXLE**Differential Rebuild Kit**

2008-2005	(Chrysler Axle)(8.25" R.G.)	
Kit		DRK303B ²⁵
2004-1999	(Dana/Spicer 44 Axle)	
Kit		DRK339B
2004-1992	(Dana/Spicer 35C Axle)	
Kit		DRK335C
2001-1997	(8.25" R.G.)	
Kit		DRK303A
1998-1990	(Dana/Spicer 44 Axle)	
Kit		DRK339B
1991-1990	(Dana/Spicer 35C Axle)	
Kit		DRK335F

Differential

2008-2005	(Chrysler C213R, C213RE)	
Set		SET36[2]
2008-1999	(Dana/Spicer 44-4 Axle)	
Set		SET36[2]
2004-1990	(Dana/Spicer 35C Axle)	
Cone/Cup		LM501349-LM501314[2]
1998-1991	(Chrysler Axle)(8.25" R.G.)	
Set		SET36[2]
1998-1990	(Dana/Spicer 44 Axle)	
Cone/Cup		25590-25523[2]

Pinion

2008-2000	(Chrysler Axle)(8.25" R.G.)	
Seal		710480
Cone/Cup (Inner)		M802048-M802011
Cone/Cup (Outer)		M86649-M86610
2008-1992	(Dana/Spicer 35C Axle)	
Seal Viton		714675
Cone/Cup (Inner)		HM88648-HM88610
Cone/Cup (Outer) (All)		M86649-M86610
2004-1999	(Dana/Spicer 44-4 Axle)	
Seal Viton (Outer)		719316
Cone/Cup (Inner)		M802048-M802011
Cone/Cup (Outer)		M88048-M88010
1999-1991	(Chrysler Axle)(8.25" R.G.)	
Seal		8516N
Cone/Cup (Inner)		M802048-M802011
Cone/Cup (Outer)		M86649-M86610
1998-1990	(Dana/Spicer 44 Axle)	
Seal		5778
Cone/Cup (Inner)		31594-31520
Cone/Cup (Outer)		02872-02820
1991-1990	(Dana/Spicer 35C Axle)	
Seal		470331N
Cone/Cup (Inner)		HM88648-HM88610
Cone/Cup (Outer)		M86649-M86610

TRANSFER CASE REBUILD KIT

2002-1994	(New Process 231)	
Kit		TCRK231A ¹⁶
1994-1990	(New Process 231)	
Kit		TCRK231 ⁵¹
1994-1990	(New Process 242)(Exc. cases 52098383/4/5)	
Kit		TCRK242
1991-1990	(New Process 228, 229)	
Kit		TCRK229

TRANSFER CASE**Input Shaft**

2005-1997		
Seal (N.P. 231,249)(O.E.)		3173
Seal (N.P. 231, 249)(Opt.)		710928
Repair Sleeve (N.P. 231, 242, 247, 249)		KWK99193
Ball Bearing (N.P. 231, 242, 247, 249)		110L
Ndle Bearing (Pilot) (N.P. 231, 242, 247, 249)		FC66561
1996-1990		
Seal (N.P. 231, 242, 247, 249)		3173
Ball Bearing (N.P. 231, 242, 247, 249)(1st Design)		N5210KLB
Ball Bearing (N.P. 231, 242, 247, 249)(2nd Design)		110L
Seal (Opt)		710928
Repair Sleeve (N.P. 231, 242, 247, 249)		KWK99193
Ndle Bearing (Pilot) (N.P. 242, 247, 249)		FC66561
Ndle Bearing (Pilot) (N.P. 231)		SCH1810
1991-1990		
Ndle Bearing (N.P. 207)		B3210
Ndle Bearing (N.P. 208, 219, 228, 229)		B5020
Seal (N.P. 207, 208, 219, 228, 229)		3173
Seal (Opt)		710928
Repair Sleeve (N.P. 207, 208, 219, 228, 229)		KWK99193
Ndle Bearing (Pilot) (N.P. 208, 219, 228, 229)		B2012
Ndle Bearing Thrust (N.P. 228, 229)		NTA3244
Ndle Bearing Thrust (N.P. 208, 219)		AXK5070

¹⁶Obsolete²⁵New Item, Check For Availability⁵¹BD50-8 I/S Brg.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>JEEP - SUV - SPORT UTILITY VEHICLES - Cherokee, Commander, Grand Cherokee</i>					
<i>(cont.)</i>					

TRANSFER CASE**Front Output Shaft**

2008-1993	(New Process 242,243,247,249)
Seal	3946
Ball Bearing	207XLO
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
2005-1990	(New Process 231)
Seal	710046
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416
1996-1990	(New Process 242)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
1991-1990	(New Process 208, 219, 228, 229)
Seal	3946
Ndle Bearing	B2816
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
Ndle Bearing Thrust	NTA2840

Rear Output Shaft

2005-1999	(New Process 242)
Ball Bearing	206WB
Ndle Bearing (Pilot)	C672Q ¹⁶
2005-1997	(New Process 231)
Seal	4370N
Ball Bearing	206WB
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	B5020
1998-1993	(New Process 242, 249)
Seal	4370N
Ball Bearing	206L
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	C672Q ¹⁶
1996-1990	(New Process 231)
Seal	2506
Ball Bearing	206WB
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	B5020
1991-1990	(New Process 228, 229)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	B3612
Ndle Bearing Thrust	TC2435

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1996-1994	(A904, A999, 30RH, 31RH, 32RH)
Seal	331228H[2]
Repair Sleeve	KWK99149
1991-1990	(A727)
Seal	331227H[2]
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

1996-1994	(30RH)
Seal	710058[2]
Ball Bearing	206LOE[2] ³⁸
1991-1990	(A727)
Seal	7300S[2]
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴

Selector Shaft Seal/Man. Shaft

2000-1990	(A904, A999, 30RH, 31RH, 32RH)
Seal	8609

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-1993	(42RE, 44RE, A500SE)
Seal	331228H[2]
Repair Sleeve	KWK99149
2000-1990	(Aisin 03 40)
Seal	223830[2]
Repair Sleeve	KWK99147
1995-1993	(A518, 46RH)
Seal	331227H[2]
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

2004-1993	(42RE, 44RE)(4WD)(1.687" shaft)
Seal	7300S[2]
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴
2000-1993	(42RE, 44RE)(4WD)(1.937" shaft)
Seal	710058[2]
Ball Bearing	207XLO[2]
2000-1990	(Aisin 30-40FL)
Seal	225005[2]
2000-1990	(Aisin 30-40LE)
Seal	710319[2]
1995-1993	(46RH)
Seal	710058[2]
Ball Bearing	207XLO[2]
1993	(A518, A500SE)(1.687" shaft)
Seal	7300S[2]
Ball Bearing	207XLO[2]
1993	(A518, A500SE)(1.937" shaft)
Seal	710058[2]
Ball Bearing	207XLO[2]

Selector Shaft Seal/Man. Shaft

2004-1993	(A518, 42RE, 44RE, 46RH, A500SE)
Seal	8609[2]
2001-1990	(Aisin 03 40)
Seal	221207[2]
Repair Sleeve	KWK99049

¹⁶Obsolete³⁸Reuse Snap Ring.⁶⁴Seal & Bushing Kit

**JEEP - SUV - SPORT UTILITY VEHICLES - Cherokee, Commander, Grand Cherokee
(cont.)****CLUTCH****Pilot Bearing**

2002-1992	6 Cyl. 242 (4.0)	
	Ndle Bearing	SCE1295
2000-1990	(4 Cyl.)	
	Ndle Bearing	FC65446
1991-1990	6 Cyl. 242 (4.0)	
	Ndle Bearing	FC66426

Release Bearing

2002-1994	6 Cyl. 242 (4.0)	
	Bearing Assy	614093
2000-1994	4 Cyl. 150 (2.5)	
	Bearing Assy	614093
1993	4 Cyl. 150 (2.5)(Hyd. piston type)	
	Hyd. Bearing Assy	619004
1993	6 Cyl. 242 (4.0)(Hyd. piston type)	
	Hyd. Bearing Assy	619004
1992-1991	4 Cyl. 150 (2.5)(Hyd. piston type)	
	Hyd. Bearing Assy	619001
1992-1991	6 Cyl. 242 (4.0)(Hyd. piston type)	
	Hyd. Bearing Assy	619003
1990	6 Cyl. 242 (4.0)(Hyd. piston type)	
	Hyd. Bearing Assy	619008
1990	4 Cyl. 150 (2.5)(Hyd. piston type)	
	Hyd. Bearing Assy	619007

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1993-1990	(Aisin AX4)	
	Seal	1981[2]
	Repair Sleeve	KWK99114

Rear Output Shaft

1993-1991	(Aisin AX4)(4WD)	
	Seal	710319[2]
	Ball Bearing	205BB[2]
1993-1990	(Aisin AX4)(4WD)	
	Seal	1209N[2]
	Ball Bearing	205BB[2]

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2001-1990	(Aisin AX5)	
	Kit	TRKFT160
2001-1990	(Aisin AX15)	
	Kit	TRKFT300

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2000-1990	(Aisin AX15)	
	Seal	223253[2]
	Repair Sleeve	KWK99128
2000-1990	(Aisin AX5)	
	Seal	1981[2]
	Repair Sleeve	KWK99114
1990	(Peugeot BA10/5)	
	Seal Viton	710164[2]
	Repair Sleeve	KWK99128

Rear Countershaft

2000-1990	(Aisin AX15)	
	Cylindrical Bearing (Frt)	MSN5305GTBV[2] ²⁵
2000-1990	(Aisin AX5)	
	Ball Bearing (Rr)	204[2]

Rear Output Shaft

2001-1990	(Aisin AX15)	
	Seal (2WD)	223840
	Seal (4WD)	1209N
2001-1990	(Aisin AX5)	
	Seal (2WD)	223840
	Seal (4WD)	1209N
	Ball Bearing	205BB

ALTERNATOR

1993-1991	78 Amp.	
	Ball Bearing (Rear End)	203FF
1993-1990	(Delco Remy 42, 56, 63, 66, 78 Amp.)(Type II)	
	Ball Bearing (Drive End)	203S
1990	(Delco Remy 42, 56, 63, 66, 78 Amp.)(Type II)	
	Ball Bearing (Drive End)	203F
1990	(Delco Remy 37, 42, 55, 63, 78 Amp.)	
	Ball Bearing (Rear End)	MNJ471S

CRANKSHAFT FRONT SEAL**4 Cylinder**

2000-1990	150/2.5L	
	Seal	321460
	Repair Sleeve	KWK99179

6 Cylinder

2008-2005	226/3.7L	
	Seal	710472
2004-1990	258/4.2L, 242/4.0L	
	Seal	321460
	Repair Sleeve	KWK99179

8 Cylinder

2001-1999	287/4.7L	
	Seal	3103
1998-1993	318/5.2L, 360/5.9L	
	Seal Viton	713103
	Repair Sleeve	KWK99218

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>JEEP - SUV - SPORT UTILITY VEHICLES - Cherokee, Commander, Grand Cherokee (cont.)</i>					

CRANKSHAFT REAR SEAL**4 Cylinder**

2000-1990	150/2.5L	
Seal	.....	3698
Repair Sleeve	.....	KWK99294

6 Cylinder

2009-2005	226/3.7L	
Seal	.....	231004
2004-1990	258/4.2L, 242/4.0L	
Seal	.....	5111S

8 Cylinder

2006-2002	285/4.7L	
Seal	.....	231004
2001-1999	287/4.7L	
Seal	.....	231004
1998	360/5.9L	
Seal Split	.....	5106
1998-1993	318/5.2L	
Seal	.....	5414

CRANKSHAFT REAR SEAL (cont.)**8 Cylinder (cont.)**

1991-1990	304/5.0L, 360/5.9L, 401/6.6L	
Seal	.....	472341
Repair Sleeve	.....	KWK99200

JEEP - LIGHT TRUCK - Sahara, TJ, Wrangler**FRONT WHEEL****RWD**

2008-2007	Wrangler, Sahara	
Hub Unit Bearing	.....	HA590242[2] ²⁵

4WD

2008-2007	Wrangler, Sahara	
Hub Unit Bearing	.....	HA590242[2] ²⁵
2006-2000	Wrangler, Sahara, TJ	
Hub Unit Bearing	.....	HA597449[2]
1999-1990	Wrangler, TJ	
Hub Unit Bearing	.....	513084[2]
Seal	.....	710068[2]

REAR WHEEL**RWD**

2008-1994	(Dana/Spicer 44)(Flg. Axle Shaft)	
Seal (Inner)	.....	9912S[2]
Set (Inner)	.....	SET10[2]
2006-1990	(Dana/Spicer 35 Axle)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]

4WD

2008-1994	(Dana/Spicer 44)(Flg. Axle Shaft)	
Seal (Inner)	.....	9912S[2]
Set (Inner)	.....	SET10[2]
2006-1990	(Dana/Spicer 35 Axle)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]

4WD FRONT AXLE**Axle Shaft**

2002-1994	(Spicer 30 F)	
Seal	.....	710068[2]
1993-1990	(Spicer 30 F)(Disconnect)	
Seal (LH)	.....	710068
Ndle Bearing (LH)	.....	BH208[2]
Seal (RH)	.....	710202
1993-1990	(Spicer 30 F)(w/o Disconnect)	
Seal	.....	710068[2]

Differential Rebuild Kit

2007-1997	(Dana/Spicer 30 Axle)	
Kit	.....	DRK334TJ
1995-1990	(Dana/Spicer 30 Axle)	
Kit	.....	DRK334

Differential

2005-2003	(Exc. Trulock Diff.)	
Cone/Cup	.....	LM501349-LM501314[2]
2005-2003	(Trulock Diff.)	
Cone/Cup	.....	25590-25523[2]
2002-1990	(Dana/Spicer 30 Axle)	
Cone/Cup	.....	LM501349-LM501314[2]

²⁵New Item, Check For Availability

JEEP - LIGHT TRUCK - Sahara, TJ, Wrangler (cont.)

4WD FRONT AXLE

Pinion

2005-2003	(Exc. Trulock Diff.)
Seal Viton	5778V
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99155
2005-2003	(Trulock Diff.)
Cone/Cup (Outer)	02872-02820
2002-1997	(Dana/Spicer 30 Axle)
Seal Viton	5778V
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99155
1996-1990	(Dana/Spicer 30 Axle)
Seal	5778
Seal Viton (Opt)	5778V
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155

Spindle Kit

2002-1990	(Spicer 30 F)
Bearing & Seal Kit	SBK1[2] ³³

Spindle

2002-1990	(Dana/Spicer 30 Axle)
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

Intermediate Shaft

1993-1990	(Spicer 30 F)(Disconnect)
Ndle Bearing	SCE108

REAR AXLE

Differential Rebuild Kit

2004-1992	(Dana/Spicer 35 Axle)
Kit	DRK335C
2004-1990	(Dana/Spicer 44-1HD Axle,44M)
Kit	DRK339B
1991-1990	(Dana/Spicer 35 Axle)
Kit	DRK335J ¹⁶

Differential

2005-1990	(Dana/Spicer 35C Axle)
Cone/Cup	LM501349-LM501314[2]
2005-1990	(Dana/Spicer 44-1HD Axle,44M)
Cone/Cup	25590-25523[2]

REAR AXLE

Pinion

2008-1992	(Dana/Spicer 35C Axle)
Seal Viton	714675
Cone/Cup (Inner)	HM88648-HM88610
Cone/Cup (Outer)	M86649-M86610
2004-2003	(Dana/Spicer 44-1HD Axle)
Seal Viton	5778V
Cone/Cup (Inner)	31593-31520
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155
2002-1990	(Dana/Spicer 44-1HD Axle)
Seal Viton	5778V
Cone/Cup (Inner)	31594-31520
Cone/Cup (Outer)	02872-02820
Repair Sleeve	KWK99155
1991-1990	(Dana/Spicer 35C Axle)
Seal	470331N
Cone/Cup (Inner)	HM88648-HM88610
Cone/Cup (Outer)	M86649-M86610

TRANSFER CASE REBUILD KIT

1995-1990	(New Process 231)
Kit	TCRK231 ⁵¹

TRANSFER CASE

Input Shaft

2008-1997	(New Process 231, 241)
Seal (O.E.)	3173
Seal (Opt)	710928
Repair Sleeve	KWK99193
Ball Bearing	110L
Ndle Bearing (Pilot)	FC66561[2]
1995-1990	(New Process 231)
Seal	3173
Seal (Opt)	710928
Repair Sleeve	KWK99193
Ball Bearing	N5210KLB
Ndle Bearing (Pilot)	SCH1810

Front Output Shaft

2009-1990	(New Process 231)
Seal	710046
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416

Rear Output Shaft

2005-1997	(New Process 231)
Seal	4370N
Ball Bearing	206WB
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	B5020

Oil Pump Housing

2005-1990	(New Process 207, 229, 231)
Seal	341022
Repair Sleeve	KWK99225

¹⁶Obsolete

³³Opt. Kit = Brg B2110, Seals 722108 & 722109.

⁵¹BD50-8 I/S Brg.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>JEEP - LIGHT TRUCK - Sahara, TJ, Wrangler (cont.)</i>					

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(A904, A999, 30RH, 31RH, 32RH)	
Seal	.....	331228H[2]
Repair Sleeve	.....	KWK99149

Rear Seal/Ext. Housing

2001-1994	(31RH, 32RH)	
Seal	.....	710058[2]
Ball Bearing	.....	206LOE[2] ³⁸
1993-1990	(A904, A999, 30RH)	
Seal	.....	2506[2]
Ball Bearing	.....	206LOE[2] ³⁸

Selector Shaft Seal/Man. Shaft

2002-1990	(A904, A999, 30RH, 31RH, 32RH)	
Seal	.....	8609[2]

CLUTCH - 4 CYLINDER**Pilot Bearing**

2002-1990	150/2.5L	
Ndle Bearing	.....	FC65446

CLUTCH - 6 CYLINDER**Pilot Bearing**

2004-2003		
Ndle Bearing	.....	FC69907
2002-1992	242/4.0L	
Ndle Bearing	.....	SCE1295
Ndle Bearing	.....	FC69907
1991-1990	242/4.0L, 258/4.2L	
Ndle Bearing	.....	FC66426

CLUTCH - 4 CYLINDER**Release Bearing**

2005-2003	148/2.4L (DOHC)	
Bearing Assy	.....	614093
2002-1997	150/2.5L	
Bearing Assy	.....	614093
1995-1994	150/2.5L	
Bearing Assy	.....	614093
1993	150/2.5L	
Hyd. Bearing Assy	.....	619004
1992-1991	150/2.5L	
Hyd. Bearing Assy	.....	619001
1990	150/2.5L	
Hyd. Bearing Assy	.....	619007

CLUTCH - 6 CYLINDER**Release Bearing**

2002-1997	242/4.0L	
Bearing Assy	.....	614093
1995-1994	242/4.0L	
Bearing Assy	.....	614093
1993	242/4.0L	
Hyd. Bearing Assy	.....	619004

CLUTCH - 6 CYLINDER (cont.)**Release Bearing (cont.)**

1992-1991	242/4.0L	
Hyd. Bearing Assy	.....	619003
1990	242/4.0L, 258/4.2L	
Hyd. Bearing Assy	.....	619008

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2002-1990	(Aisin AX5)	
Kit	.....	TRKFT160

Front Input Shaft

2002-1990	(Aisin AX5)	
Seal	.....	1981[2]
Repair Sleeve	.....	KWK99114
1997-1990	(Aisin AX15)	
Seal	.....	223253[2]
Repair Sleeve	.....	KWK99128
1990	(Peugeot BA10/5)	
Seal Viton	.....	710164[2]
Repair Sleeve	.....	KWK99128

Rear Countershaft

2002-1990	(Aisin AX5)	
Ball Bearing (Rr)	.....	204[2]
2001-1990	(Aisin AX15)	
Cylindrical Bearing (Frt)	.....	MSN5305GTBV[2] ²⁵

Rear Output Shaft

2002-1990	(Aisin AX5)	
Seal (2WD)	.....	223840
Seal (4WD)	.....	1209N
Ball Bearing	.....	205BB
2001-1990	(Aisin AX15)	
Seal (2WD)	.....	223840
Seal (4WD)	.....	1209N

ALTERNATOR

1990	(Leece Neville 35, 40, 55 Amp.)	
Ball Bearing (Rear End)	.....	MNJ471S
1990	(Delco Remy 42, 56, 63, 66, 78 Amp.)(Type II)	
Ball Bearing (Drive End)	.....	203F

CRANKSHAFT FRONT SEAL**4 Cylinder**

2006-2003	148/2.4L	
Seal Viton	.....	320348
2002-1990	150/2.5L	
Seal	.....	321460
Repair Sleeve	.....	KWK99179

6 Cylinder

2008-2007	231/3.8L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112
2006-1991	242/4.0L	
Seal	.....	321460
Repair Sleeve	.....	KWK99179

²⁵New Item, Check For Availability³⁸Reuse Snap Ring.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

JEEP - LIGHT TRUCK - Sahara, TJ, Wrangler (cont.)

CRANKSHAFT FRONT SEAL (cont.)

6 Cylinder (cont.)

1990	258/4.2L	
Seal	.....	321460
Repair Sleeve	.....	KWK99179

CRANKSHAFT REAR SEAL

4 Cylinder

2006-2003	148/2.4L	
Seal Viton	.....	710056
2002-1997	150/2.5L	
Seal	.....	3698
Repair Sleeve	.....	KWK99294
1995-1990	150/2.5L	
Seal	.....	3698
Repair Sleeve	.....	KWK99294

6 Cylinder

2009-2007	3.8L	
Seal Viton	.....	710056
2006-1991	242/4.0L	
Seal	.....	5111S

CRANKSHAFT REAR SEAL (cont.)

6 Cylinder (cont.)

1995-1990	258/4.2L	
Seal	.....	5111S

JEEP - FULL-SIZE WAGONEER, Grand Wagoneer, Wagoneer, Wagoneer Limited

FRONT WHEEL

4WD

1991-1990	
Seal (Inner)	 471271[2]
Cone/Cup (Inner)	 LM104949-JLM104910[2]
Set (Outer)	 SET45[2]

REAR WHEEL

RWD

1993-1990	(Dana/Spicer 35 Axle)
Seal	 8660S[2]
Cylindrical Bearing	 5707[2]
1993-1990	(Dana/Spicer 44 Axle)
Seal (Inner)	 481837[2]
Set (Inner)	 SET10[2]
Seal (Outer)	 9912S[2]

4WD

1993-1990	(Dana/Spicer 35 Axle)
Seal	 8660S[2]
Cylindrical Bearing	 5707[2]
1993-1990	(Dana/Spicer 44 Axle)
Seal (Inner)	 481837[2]
Set (Inner)	 SET10[2]
Seal (Outer)	 9912S[2]

4WD FRONT AXLE

Differential Rebuild Kit

1991-1990	(Dana/Spicer 30 Axle)
Kit	 DRK334
1991-1990	(Dana/Spicer 44 Axle)
Kit	 DRK339B

Differential

1991-1990	(Dana/Spicer 30 Axle)
Cone/Cup	 LM501349-LM501314[2]
1991-1990	(Dana/Spicer 44 Axle)
Cone/Cup	 25590-25523[2]

Pinion

1991-1990	(Dana/Spicer 30 Axle)
Seal	 5778
Cone/Cup (Inner)	 HM88649-HM88610
Cone/Cup (Outer)	 02872-02820
1991-1990	(Dana/Spicer 44 Axle)
Seal	 5778
Cone/Cup (Inner)	 31594-31520
Cone/Cup (Outer)	 02872-02820

Spindle Kit

1991-1990	
Bearing & Seal Kit	 SBK1[2] ³³

Spindle

1991-1990	
Seal (Inner)	 722108[2]
Ndle Bearing (Inner)	 B2110[2]
Seal (Outer)	 722109[2]

REAR AXLE

Differential

1991-1990	(Dana/Spicer 44 Axle)
Cone/Cup	 25590-25523[2]

³³Opt. Kit = Brg B2110, Seals 722108 & 722109.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

**JEEP - FULL-SIZE WAGONEER, Grand Wagoneer, Wagoneer, Wagoneer Limited
(cont.)****REAR AXLE****Pinion**

1991-1990	(Dana/Spicer 44 Axle)
Cone/Cup (Inner)	31594-31520
Cone/Cup (Outer)	02872-02820

TRANSFER CASE**Input Shaft**

1994-1990	
Seal	3173
Seal (Opt)	710928
Repair Sleeve	KWK99193
Ball Bearing (N.P. 231, 242, 249)(1st Design)	N5210KLB
Ndle Bearing (N.P. 208, 219, 228, 229)	B5020
Ndle Bearing (N.P. 207)	B3210
Ndle Bearing (Pilot) (N.P. 208, 219, 228, 229)	B2012
Ndle Bearing (Pilot) (N.P. 231)	SCH1810
Ndle Bearing Thrust (N.P. 228, 229)	NTA3244
Ndle Bearing Thrust (N.P. 208, 219)	AXK5070

Front Output Shaft

1991-1990	(New Process 242)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
1991-1990	(New Process 208, 219, 228, 229)
Seal	3946
Ndle Bearing	B2816
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
Ndle Bearing Thrust	NTA2840

Rear Output Shaft

1991-1990	(New Process 231)
Seal	2506
Ball Bearing	206WB
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	B5020
1991-1990	(New Process 228, 229)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	B3612
Ndle Bearing Thrust	TC2435

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1991-1990	(A727)
Seal	331227H[2]
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

1991-1990	(A727)
Seal	7300S[2]
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴

Selector Shaft Seal/Man. Shaft

1991-1990	(A904, A999, 30RH, 31RH, 32RH)
Seal	8609[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993	(A518, 46RH)
Seal	331227H[2]
Repair Sleeve	KWK99187
1991-1990	(Aisin 03 40)
Seal	223830[2]
Repair Sleeve	KWK99147

Rear Seal/Ext. Housing

1991-1990	(Aisin 30-40FL)
Seal	225005[2]
1991-1990	(Aisin 30-40LE)
Seal	710319[2]

Selector Shaft Seal/Man. Shaft

1991-1990	(Aisin 03 40)
Seal	221207[2]
Repair Sleeve	KWK99049

CLUTCH**Release Bearing**

1990	(8 Cyl.)
Bearing Assy	614115

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1991-1990	(Aisin AX4)
Seal	1981[2]
Repair Sleeve	KWK99114

Rear Output Shaft

1991	(Aisin AX4)(4WD)
Seal	710319[2]
Ball Bearing	205BB[2]
1991-1990	(Aisin AX4)(4WD)
Seal	1209N[2]
Ball Bearing	205BB[2]

⁶⁴Seal & Bushing Kit

JEEP - FULL-SIZE WAGONEER, Grand Wagoneer, Wagoneer, Wagoneer Limited (cont.)**5-SPEED MANUAL TRANSMISSION****Front Input Shaft**

1991-1990	(Aisin AX15)	
Seal	223253[2]	
Repair Sleeve	KWK99128	
1991-1990	(Aisin AX5)	
Seal	1981[2]	
Repair Sleeve	KWK99114	
1990	(Peugeot BA10/5)	
Seal Viton	710164[2]	
Repair Sleeve	KWK99128	

Rear Countershaft

1991-1990	(Aisin AX15)	
Cylindrical Bearing (Frt)	MSN5305GTBV[2]	²⁵
1991-1990	(Aisin AX5)	
Ball Bearing (Rr)	204[2]	

Rear Output Shaft

1991-1990	(Aisin AX15)	
Seal (2WD)	223840	
Seal (4WD)	1209N	
1991-1990	(Aisin AX5)	
Seal (2WD)	223840	
Seal (4WD)	1209N	
Ball Bearing	205BB	

ALTERNATOR

1993-1991	78 Amp.	
Ball Bearing (Rear End)	203FF	
1991-1990	(Delco Remy 37, 42, 55, 63, 78 Amp.)(Type I)	
Ball Bearing (Drive End)	203S	
1990	(Delco Remy 42, 56, 63, 66, 78 Amp.)(Type II)	
Ball Bearing (Drive End)	203F	
1990	(Delco Remy 37, 42, 55, 63, 78 Amp.)	
Ball Bearing (Rear End)	MNJ471S	

CRANKSHAFT FRONT SEAL**4 Cylinder**

1991-1990	150/2.5L	
Seal	321460	
Repair Sleeve	KWK99179	
Harmnc Balancer Slvs	88179	

6 Cylinder

1991-1990	232/3.8L, 242/4.0L, 258/4.2L	
Seal	321460	
Repair Sleeve	KWK99179	

8 Cylinder

1991-1990	304/5.0L, 360/5.9L, 401/6.6L	
Seal	472341	
Repair Sleeve	KWK99200	

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990	150/2.5L	
Seal	3698	
Repair Sleeve	KWK99294	

6 Cylinder

1991-1990	232/3.8L, 242/4.0L, 258/4.2L	
Seal	5115	

8 Cylinder

1991-1990	304/5.0L, 360/5.9L, 401/6.6L	
Seal	5112S ⁰³	

⁰³Optional²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
JEEP - TRUCK - Comanche					

FRONT WHEEL**RWD**

1992-1990 Comanche
Hub Unit Bearing 513084[2]

4WD

1992-1990 Comanche, Pickup (Dana/Spicer 30 Axle)
Hub Unit Bearing 513084[2]
1992-1990 (Dana/Spicer 44-1F Axle)
Seal (Inner) 471271[2]
Cone/Cup (Inner) LM104949-JLM104910[2]
Set (Outer) SET45[2]

REAR WHEEL**RWD**

1992-1990 Comanche (Dana/Spicer 35 Axle)
Seal 46485[2]
Cylindrical Bearing 5707[2]
1992-1990 (Dana/Spicer 60 Axle)(Tapered Axle Shaft)
Seal (Inner) 455860[2]
Cone/Cup (Inner) 28678-28622[2]
Cone/Cup (Outer) 18690-18620[2]
1992-1990 (Dana/Spicer 44)(Flg. Axle Shaft)
Seal 2689S[2]
Set SET10[2]

4WD FRONT AXLE**Axle Shaft**

1992-1990 (Spicer 30 F)(Disconnect)
Seal (LH) 710068
Ndl Bearing (LH) BH208[2]
Seal (RH) 710204
1992-1990 (Spicer 30 F)(w/o Disconnect)
Seal 710068[2]
1992-1990 (Spicer 44 1F)(2.250" O.D.)
Seal 5131[2]

Differential Rebuild Kit

1992-1990 (Dana/Spicer 30 Axle)
Kit DRK334
1992-1990 (Dana/Spicer 44 Axle)
Kit DRK339B

Differential

1992-1990 (Dana/Spicer 30 Axle)
Cone/Cup LM501349-LM501314[2]
1992-1990 (Dana/Spicer 44 Axle)
Cone/Cup 25590-25523[2]

4WD FRONT AXLE**Pinion**

1992-1990 (Dana/Spicer 27, 30 Axles)
Seal 5778
Cone/Cup (Inner) HM88649-HM88610
Cone/Cup (Outer) 02872-02820
1992-1990 (Dana/Spicer 44 Axle)
Seal 5778
Cone/Cup (Inner) 31594-31520
Cone/Cup (Outer) 02872-02820

Spindle Kit

1992-1990
Bearing & Seal Kit SBK1[2]³³

Spindle

1992-1990
Seal (Inner) 722108[2]
Ndl Bearing (Inner) B2110[2]
Seal (Outer) 722109[2]

Intermediate Shaft

1992-1990 (Spicer 30 F)(Disconnect)
Ndl Bearing SCE108

REAR AXLE**Differential Rebuild Kit**

1992-1991 (Chrysler Axle)(8.25" R.G.)
Kit DRK303
1992-1990 (Dana/Spicer 44 Axle)
Kit DRK339B
1991-1990 (Dana/Spicer 35 Axle)
Kit DRK335J¹⁶

Differential

1992-1991 (Chrysler Axle)(8.25" R.G.)
Set SET36[2]
1992-1990 (Dana/Spicer 35 Axle)
Cone/Cup LM501349-LM501314[2]
1992-1990 (Dana/Spicer 44 Axle)
Cone/Cup 25590-25523[2]

Pinion

1992 (Dana/Spicer 35 Axle)
Seal Viton 714675
Cone/Cup (Inner) HM88648-HM88610
Cone/Cup (Outer) M86649-M86610
1992-1991 (Chrysler Axle)(8.25" R.G.)
Seal 8516N
Cone/Cup (Inner) M802048-M802011
Cone/Cup (Outer) M86649-M86610
1992-1990 (Dana/Spicer 44 Axle)
Seal 5778
Cone/Cup (Inner) 31594-31520
Cone/Cup (Outer) 02872-02820
1991-1990 (Dana/Spicer 35 Axle)
Seal 470331N
Cone/Cup (Inner) HM88648-HM88610
Cone/Cup (Outer) M86649-M86610

¹⁶Obsolete³³Opt. Kit = Brg B2110, Seals 722108 & 722109.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

JEEP - TRUCK - Comanche (cont.)

TRANSFER CASE REBUILD KIT

1992-1990	(New Process 231)
Kit	TCRK231 ⁵¹
1992-1990	(New Process 242)(Exc. cases 52098383/4/5)
Kit	TCRK242
1991-1990	(New Process 228, 229)
Kit	TCRK229

TRANSFER CASE

Input Shaft

1992-1990	Seal (N.P. 231, 242, 249)	3173
	Ball Bearing (N.P. 231, 242, 249)	N5210KLB
	Seal (Opt)	710928
	Repair Sleeve (N.P. 231, 242, 249)	KWK99193
	Ndle Bearing (Pilot) (N.P. 231)	SCH1810
	Ndle Bearing (Pilot) (N.P. 242, 249)	FC66561
1991-1990	Seal (N.P. 208, 219, 228, 229)	3173
	Ndle Bearing (N.P. 208, 219, 228, 229)	B5020
	Seal (Opt)	710928
	Repair Sleeve (N.P. 208, 219, 228, 229)	KWK99193
	Ndle Bearing (Pilot) (N.P. 208, 219, 228, 229)	B2012
	Ndle Bearing Thrust (N.P. 228, 229)	NTA3244
	Ndle Bearing Thrust (N.P. 208, 219)	AXK5070

Front Output Shaft

1992-1990	(New Process 231)
Seal	710046
Ball Bearing	206WB
Repair Sleeve	KWK99155
Ndle Bearing (Pilot)	J2416
1992-1990	(New Process 242)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
1991-1990	(New Process 208, 219, 228, 229)
Seal	3946
Ndle Bearing	B2816
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	J2416
Ndle Bearing Thrust	NTA2840

TRANSFER CASE

Rear Output Shaft

1992-1990	(New Process 231)
Seal	2506
Ball Bearing	206WB
Repair Sleeve	KWK99149
Ndle Bearing (Pilot)	B5020
1991-1990	(New Process 228, 229)
Seal	3946
Ball Bearing	207
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	B3612
Ndle Bearing Thrust	TC2435

3-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1992-1990	(A727)
Seal	331227H[2]
Repair Sleeve	KWK99187

Rear Seal/Ext. Housing

1992-1990	(A727)
Seal	7300S[2]
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴

Selector Shaft Seal/Man. Shaft

1992-1990	(A904, A999, 30RH, 31RH, 32RH)
Seal	8609[2]

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1992-1990	(Aisin 03 40)
Seal	223830[2]
Repair Sleeve	KWK99147

Rear Seal/Ext. Housing

1992-1990	(Aisin 30-40FL)
Seal	225005[2]
1992-1990	(Aisin 30-40LE)
Seal	710319[2]

Selector Shaft Seal/Man. Shaft

1992-1990	(Aisin 03 40)
Seal	221207[2]
Repair Sleeve	KWK99049

CLUTCH

Pilot Bearing

1992-1990	4 Cyl. 150 (2.5)(AMC)
Ndle Bearing	FC65446
1991-1990	6 Cyl. 242 (4.0)
Ndle Bearing	FC66426
1991-1990	6 Cyl. 258 (4.2)
Ndle Bearing	FC66426

⁵¹BD50-8 I/S Brg.

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>JEEP - TRUCK - Comanche (cont.)</i>					

CLUTCH**Release Bearing**

1992-1991	4 Cyl. 150 (2.5)(Hyd. piston type)	
	Hyd. Bearing Assy	619001
1992-1991	6 Cyl. 242 (4.0)(Hyd. piston type)	
	Hyd. Bearing Assy	619003
1990	6 Cyl. 242 (4.0)(Hyd. piston type)	
	Hyd. Bearing Assy	619008
1990	4 Cyl. 150 (2.5)(Hyd. piston type)	
	Hyd. Bearing Assy	619007

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1992-1990	(Aisin AX4)	
	Seal	1981[2]
	Repair Sleeve	KWK99114

Rear Output Shaft

1992-1991	(Aisin AX4)(4WD)	
	Seal	710319[2]
	Ball Bearing	205BB[2]
1992-1990	(Aisin AX4)(4WD)	
	Seal	1209N[2]
	Ball Bearing	205BB[2]

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1992-1990	(Aisin AX15)	
	Seal	223253[2]
	Repair Sleeve	KWK99128
1992-1990	(Aisin AX5)	
	Seal	1981[2]
	Repair Sleeve	KWK99114
1990	(Peugeot BA10/5)	
	Seal Viton	710164[2]
	Repair Sleeve	KWK99128

Rear Countershaft

1992-1990	(Aisin AX15)	
	Cylindrical Bearing (Frt)	MSN5305GTBV[2] ²⁵
1992-1990	(Aisin AX5)	
	Ball Bearing (Rr)	204[2]

Rear Output Shaft

1992-1990	(Aisin AX15)	
	Seal (2WD)	223840
	Seal (4WD)	1209N
1992-1990	(Aisin AX5)	
	Seal (2WD)	223840
	Seal (4WD)	1209N
	Ball Bearing	205BB

CRANKSHAFT FRONT SEAL**4 Cylinder**

1992-1990	150/2.5L	
	Seal	321460
	Repair Sleeve	KWK99179

6 Cylinder

1992-1990	258/4.2L, 242/4.0L	
	Seal	321460
	Repair Sleeve	KWK99179

8 Cylinder

1992-1990	304/5.0L, 360/5.9L, 401/6.6L	
	Seal	472341
	Repair Sleeve	KWK99200

CRANKSHAFT REAR SEAL**4 Cylinder**

1992-1990	150/2.5L	
	Seal	3698
	Repair Sleeve	KWK99294

6 Cylinder

1992-1990	232/3.8L, 242/4.0L, 258/4.2L	
	Seal	5115

8 Cylinder

1992-1990	304/5.0L, 360/5.9L, 401/6.6L	
	Seal	5112S ⁰³

⁰³Optional²⁵New Item, Check For Availability

KIA - Amanti, Magentis, Optima, Rio, Rondo, Sedona, Sephia, Spectra**FRONT WHEEL****FWD**

2009-2007	Rondo	
Bearing Assy	WB000015[2]	²⁵
2009-2006	Rio	
Ball Bearing	510055[2]	
2009-2006	Sedona	
Hub Unit Bearing	HA590206[2]	²⁵
2009-2004	Amanti	
Ball Bearing	510084[2]	
2008-2004	Spectra New Style	
Ball Bearing	510078[2]	
2008-2003	Optima (From 1/3/02)	
Ball Bearing	510034[2]	
2005-2002	Sedona	
Set	SET49[2]	
2005-2001	Rio	
Seal (Inner)	4990[2]	
Set (Inner)	SET11[2]	
Seal (Outer)	710323[2]	
Set (Outer)	SET11[2]	
2004-2001	Spectra (Hatchback)	
Ball Bearing	510003[2]	
2004-2001	Spectra (Sedan)	
Ball Bearing	510010[2]	
2002-2001	Optima (To 1/2/02)	
Ball Bearing	510076[2]	
2001-1994	Sephia	
Seal	1932S[2]	
Ball Bearing	510003[2]	
2000	Spectra	
Ball Bearing	510010[2]	

REAR WHEEL**FWD**

2009-2008	Rondo	
Hub Unit Bearing	HA590052[2]	
2009-2007	Amanti	
Hub Unit Bearing	HA590179[2]	²⁵
2009-2006	Rio	
Hub Unit Bearing	HA590184[2]	²⁵
2009-2006	Sedona	
Hub Unit Bearing	HA590016[2]	²⁵
2008-2006	Optima New Style	
Hub Unit Bearing		
(ABS)	512265[2]	²⁵
Hub Unit Bearing		
(Non-ABS)	512266[2]	²⁵
2008-2004	Spectra New Style	
Hub Unit Bearing		
(ABS)	HA590194[2]	²⁵
Hub Unit Bearing		
(Non-ABS)	HA590188[2]	²⁵
2007	Rondo	
Hub Unit Bearing	HA590179[2]	²⁵
2006-2004	Amanti	
Hub Unit Bearing	HA590010[2]	²⁵
2006-2001	Optima Old Style	
Hub Unit Bearing		
(ABS)	512190[2]	
Hub Unit Bearing		
(Non-ABS)	512191[2]	

REAR WHEEL (cont.)**FWD (cont.)**

2005-2003	Sedona (ABS)(From 12/2/03)	
Hub Unit Bearing	HA590013[2]	²⁵
Cone/Cup (Outer)		
Optional	14585-14525[2]	
Cone/Cup (Inner)		
Optional	15578-15520[2]	
2005-2002	Sedona (Non-ABS)	
Hub Unit Bearing	HA590011[2]	²⁵
Cone/Cup (Outer)		
Optional	14585-14525[2]	
Cone/Cup (Inner)		
Optional	15578-15520[2]	
2005-2001	Rio	
Seal (Inner)	1126S	
Set (Inner)	SET2[2]	
Set (Outer)	SET4[2]	
2004-2000	Spectra (Drum)	
Hub Unit Bearing	512200[2]	
2003-2002	Sedona (ABS)(Thru 12/1/03)	
Hub Unit Bearing	HA590012[2]	²⁵
Cone/Cup (Outer)		
Optional	14585-14525[2]	
Cone/Cup (Inner)		
Optional	15578-15520[2]	
2001-2000	Sephia (Disc)	
Hub Unit Bearing	512251[2]	²⁵
2001-1994	Sephia (Drum)	
Hub Unit Bearing	512200[2]	

4WD FRONT AXLE**Differential**

2002-1995	Sportage	
Cone/Cup	XAA32008X-Y32008X[2]	

Pinion

2007-2003	Sorento	
Bearing Assy (Inner)	32207M	
Bearing Assy (Outer)	30307M	
2002-1995	Sportage	
Bearing Assy (Inner)	32207M	
Bearing Assy (Outer)	32206M	

REAR AXLE**Differential**

2007-2003	Sorento	
Bearing Assy	32210M[2]	
2002-1995	Sportage	
Cone/Cup	XAA32008X-Y32008X[2]	

Pinion

2007-2003	Sorento	
Bearing Assy (Inner)	32307	
Bearing Assy (Outer)	30307M	
2002-1995	Sportage	
Seal	1216N	
Bearing Assy (Inner)	32207M	
Bearing Assy (Outer)	32206M	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

KIA - Amanti, Magentis, Optima, Rio, Rondo, Sedona, Sephia, Spectra (cont.)
TRANSFER CASE REBUILD KIT

2002-1995	Spportage	
Kit		TRKFK100

4-SPEED AUTOMATIC TRANSMISSION
Torque Converter

2002-1995	(Aisin O3 72)	
Seal		223830
Repair Sleeve		KWK99147

Rear Seal/Ext. Housing

2004-2003	(Aisin O3 40)	
Seal		3459S
2002-1995	(Aisin O3 72)	
Seal		710319

5-SPEED AUTOMATIC TRANSMISSION
Torque Converter

2006-2004	(F5A51)	
Seal		320583
Repair Sleeve		KWK99157
2005-2002	Sedona	
Bearing Assy		32009XM[2]

CLUTCH
Pilot Bearing

2002-1994		
Ball Bearing		202SS

Release Bearing

2002-1995	Spportage	
Bearing Assy		614067
1999-1994	Sephia	
Bearing Assy		614128

5-SPEED MANUAL TRANSMISSION
Transmission Rebuild Kit

2002-1995	Spportage (4WD)	
Kit		TRKFK110

Front Input Shaft

2002-1995	(Getrag R15MXD)	
Seal		1970
Repair Sleeve		KWK99147

Rear Output Shaft

2002-1995	(Getrag R15MXD)	
Seal		710435

Selector Shaft Seal/Man. Shaft

2006-2004	(M5BF2)	
Seal		710222
1997-1995	(Mazda G25R-M)	
Seal		221620

4-SPEED AUTOMATIC TRANSAXLE
Differential

2005-2004	Spectra	
Bearing Assy		30207M[2]
2005-2001	Rio	
Set		SET17[2]
2004-2001	Optima	
Set		SET45[2]
2003-2000	Spectra	
Set		SET17[2]
2002-1994	(Jatco F4A EL)	
Set		SET17[2]
2001-1994	Sephia	
Set		SET17[2]

Torque Converter / Frt Pump

2007-2004	Amanti, Spectra	
Seal		320583
Repair Sleeve		KWK99182
2007-2001	Optima	
Seal		320583
Repair Sleeve		KWK99182
2005-1994	(Jatco F4A EL)	
Seal		710446
2001-1994	Sephia	
Seal		710446
Repair Sleeve		KWK99266

Output Shaft

2008-2006	(A4AF3)	
Seal Viton		710259[2]
2007-2001	(F4A42 1)	
Bearing Assy (Frt)		32009XM
Bearing Assy (Rr)		32006
2005-1994	(Jatco F4A EL)	
Seal (LH)		223543
Repair Sleeve (LH)		KWK99139
Seal (RH)		2007N
Repair Sleeve (RH)		KWK99139

5-SPEED MANUAL TRANSAXLE
Transaxle Rebuild Kit

2001-1995	1.8L	
Kit		TRKFMZ150
1997-1994	1.6 L	
Kit		TRKFMZ130

Differential

2007-2006	(M5GF2)	
Bearing Assy		32009XM[2]
2007-2001	Optima	
Set		SET45[2]
2006-2004	(M5BF2)	
Bearing Assy		30207M[2]
2003-2000	Spectra	
Bearing Assy		32008XM[2]
1997-1995	(Mazda G5M)	
Cone/Cup		XAA32008X-Y32008X[2]
1997-1994	(Mazda F52)	
Set		SET17[2]

KIA - Amanti, Magentis, Optima, Rio, Rondo, Sedona, Sephia, Spectra (cont.)

5-SPEED MANUAL TRANSAXLE

Input Shaft

2007-2006	(Hyundai M5CF1)	
Seal Viton	.....	712007
Repair Sleeve	.....	KWK99098
2007-2001	(Mazda M5BF2, M5GF1)	
Seal Viton	.....	712007
Repair Sleeve	.....	KWK99098
2004-1998	(Mazda G15M-R)	
Seal	.....	1990
Set	.....	SET32
Repair Sleeve	.....	KWK99106
1997-1995	(Mazda G5M)	
Bearing Assy (Inner)	.....	513185[2]
Seal (Outer)	.....	1990
Set (Outer)	.....	SET32[2]
Repair Sleeve	.....	KWK99106
1997-1994	(Mazda F52)	
Seal	.....	1990
Repair Sleeve	.....	KWK99106

Output Shaft

2006-2004	(M5BF2)	
Seal	.....	223543
Seal	.....	KWK99139
1997-1995	(Mazda G5M)	
Seal (LH)	.....	223543
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	2007N
Repair Sleeve (RH)	.....	KWK99139
1997-1994	(Mazda F52)	
Seal (LH)	.....	223543
Bearing Assy (LH)	.....	32205[2]
Repair Sleeve (LH)	.....	KWK99139
Seal (RH)	.....	2007N
Repair Sleeve (RH)	.....	KWK99139

Extension Housing

1997-1995	(Mazda G5M)	
Seal	.....	221620

OIL PUMP

4 Cylinder

2008-2001	2400cc/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078

CAMSHAFT SEAL

4 Cylinder

2007-2001	2351cc/ 2.4L	
Seal	.....	3771
Repair Sleeve	.....	KWK99139
2004-2000	1793cc/1.8L	
Seal	.....	710355
2002-1996	1998cc/2.0L (DOHC)	
Seal	.....	223420[2]
1997-1995	1597cc/1.6L (DOHC), 1839cc/1.8L (DOHC)	
Seal	.....	223420[2]
1995	1998cc/2.0L	
Seal	.....	223420

CAMSHAFT SEAL (cont.)

4 Cylinder (cont.)

1995-1993	1597cc/1.6L	
Seal	.....	223012
Repair Sleeve	.....	KWK99114

6 Cylinder

2007-2002	2656cc/2.7L, 3500cc/3.5L	
Seal (Frt)	.....	223010[4]
Repair Sleeve	.....	KWK99114
Seal (Rr)	.....	710302[4]
Repair Sleeve	.....	KWK99114

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2002	2.7L	
Seal	.....	710355
2006-2002	3.5L (DOHC)	
Seal	.....	710355

4 Cylinder

2008-2001	1493cc/1.5L, 1594cc/1.6L	
Seal	.....	710355
2008-2001	2.4L	
Seal	.....	224460
2007-2004	2.0L (DOHC)	
Seal	.....	710531
2004-2000	1793cc/1.8L	
Seal	.....	710355
2002-1995	1998/2.0L	
Seal	.....	223420
1997-1994	1597cc/1.6L, 1597cc/1.6L (DOHC), 1839cc/1.8L (DOHC)	
Seal	.....	710355
Repair Sleeve	.....	KWK99145

CRANKSHAFT REAR SEAL

4 Cylinder

2008-2001	1493cc/1.5L (DOHC), 1594cc/1.6L (DOHC)	
Seal	.....	228250
Repair Sleeve	.....	KWK99328
2008-2001	2.4L	
Seal Viton	.....	229005
2007-1994	1597cc/1.6L, 1597cc/1.6L (DOHC), 1839cc/1.8L (DOHC)	
Seal	.....	228250
Repair Sleeve	.....	KWK99328
2002-1995	1998/2.0L, 1998cc/2.0L (DOHC)	
Seal	.....	229010
Repair Sleeve	.....	KWK99354

6 Cylinder

2008-2001	2.5L, 2.7L, 3.5L	
Seal Viton	.....	229005

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

KIA - SUV - Borrego**FRONT WHEEL****RWD****2009**Hub Unit Bearing HA590329[2] ²⁵**4WD****2009**Hub Unit Bearing HA590327[2] ²⁵**REAR WHEEL****RWD****2009**Ball Bearing HA590328[2] ²⁵**REAR WHEEL****4WD****2009**Hub Unit Bearing HA590327[2] ²⁵**KIA - SUV - Sorento****FRONT WHEEL****FWD****2008-2003** SorentoBearing Assy WB000016[2] ²⁵**4WD****2008-2003** SorentoBearing Assy WB000016[2] ²⁵**REAR WHEEL****FWD****2008-2003** SorentoBall Bearing 516009[2] ²⁵

Seal 223840[2]

4WD**2008-2003** SorentoBall Bearing 516009[2] ²⁵

Seal 223840[2]

4WD FRONT AXLE**Axle Shaft****2008-2003**

Ball Bearing RW101[2]

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft****2004-2003**

Seal 221207

Repair Sleeve KWK99049

CRANKSHAFT FRONT SEAL**6 Cylinder****2006-2003** 3498cc/3.5L (DOHC)

Seal 223750

CRANKSHAFT REAR SEAL**6 Cylinder****2006-2003** 3498cc/3.5L (DOHC)

Seal Viton 229005

Repair Sleeve KWK99354

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

KIA - SUV - Sportage**FRONT WHEEL****FWD**

2009-2005 Sportage
Ball Bearing 510034[2]

RWD

2002-1995 Sportage
Seal (Inner) 710094[2]
Set (Inner) SET47[2]
Seal (Outer) 710093[2]
Set (Outer) SET11[2]

4WD

2009-2005 Sportage
Ball Bearing 510034[2]

REAR WHEEL**FWD**

2009-2005 Sportage
Hub Unit Bearing 512267[2] ²⁵

RWD

2002-1998 Sportage
Seal (Inner) 473823[2]
Set (Inner) SET2[2]
Set (Outer) SET9[2]
1997-1995 Sportage
Seal (Inner) 223240[2]
Seal (Outer) 710387[2]

4WD

2009-2005 Sportage
Set SET49[2]

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2002-1995
Seal 221122

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2005 2.0L (DOHC)
Seal 710531
2002-1995 2.0L (SOHC)(DOHC)
Seal 223420

6 Cylinder

2008-2005 2.7L
Seal 223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2005 1975cc/2.0L
Seal Viton 710235

6 Cylinder

2008-2005 2656cc/2.7L
Seal Viton 229005
Repair Sleeve KWK99354

LAFORZA - Other Applications**FRONT WHEEL****RWD**

1992-1990
Seal (Inner) 4250[2]
Set (Inner) SET37[2]
Set (Outer) SET45[2]

REAR WHEEL**RWD**

1992-1990
Seal 8835S[2]
Cylindrical Bearing 6408[2]
Bearing & Seal Kit TRP1559TV[2] ¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

LAMBORGHINI - ALL**REAR AXLE****Differential**

1993-1990 Countach
Cone/Cup JM207049-JM207010[2]

Pinion

1993-1990 Countach
Cone/Cup (Inner) M802048-M802011
Cone/Cup (Outer) HM88649-HM88610

LEXUS - FRONT DRIVE - ES250, ES300, ES330, ES350**FRONT WHEEL****FWD**

2009-2007 ES350
Ball Bearing 510063[2]
2006-2004 ES330
Ball Bearing 510063[2]
2003-1992
Ball Bearing 510006[2]
1991-1990
Seal (Inner) 4899[2]
Ball Bearing (Inner) 514002B[2]
Seal (Outer) 225220[2]
Seal 5700[2]

REAR WHEEL**FWD**

2009-2007 ES350
Hub Unit Bearing (LH) HA592460
Hub Unit Bearing (RH) HA592450
2006-2004 ES330
Hub Unit Bearing (LH) HA592460
Hub Unit Bearing (RH) HA592450
2003-2002 ES300
Hub Unit Bearing (LH) HA592460
Hub Unit Bearing (RH) HA592450
2001-1992
Bearing Module 512009[2]
1991-1990
Seal 224210
Ball Bearing 513022[2]

CLUTCH - 6 CYLINDER**Release Bearing**

1993-1990 2507cc./2.5L (DOHC),
2958cc./3.0L (DOHC)(236mm
Cl.)
Bearing Assy 614084

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2001-1990 (A540E, A541E)
Seal 223830
Repair Sleeve KWK99147

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2001-1990 (A540E, A541E)
Seal (LH) 712551
Seal (RH) 710112

Manual Shaft

2001-1990 (U140E, A540E, A541E)
Seal 221207
Repair Sleeve KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2003-2002 (U150E, U151E)
Seal 224020

Manual Shaft

2006-2002 (U150E, U151E)
Seal 221207
Repair Sleeve KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

1993-1992 (E53)
Bearing Assy (RH) 30210M
1991-1990 (E52)
Bearing Assy (RH) 30210M

Input Shaft

1993-1992 (E53)
Seal 223010
Repair Sleeve KWK99114
1991-1990 (E52)
Seal 223010
Repair Sleeve KWK99114

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

LEXUS - FRONT DRIVE - ES250, ES300, ES330, ES350 (cont.)

5-SPEED MANUAL TRANSAXLE

Output Shaft

1993-1992	(E53)	
Seal (LH)	.....	223540
Repair Sleeve (LH)	.....	KWK99139
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
1991-1990	(E52)	
Seal	.....	710112[2]
Repair Sleeve	.....	KWK99196[2]

Selector Shaft Seal/Man. Shaft

1993-1990	
Seal	1015N

OIL PUMP

6 Cylinder

2006-2004	3300cc/3.3L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157
2003-1994	2955cc/3.0L (DOHC)	
Seal	.....	224020
Repair Sleeve	.....	KWK99157

CAMSHAFT SEAL

6 Cylinder

2006-2004	3300cc/3.3L	
Seal	.....	224020
2003-1994	2995cc/3.0L (DOHC)	
Seal	.....	223801[2]
Repair Sleeve	.....	KWK99147[2]
1993-1992	2958cc/3.0L (DOHC)	
Seal	.....	223801[4]
Repair Sleeve	.....	KWK99147[4]
1991-1990	2507cc/2.5L (DOHC)	
Seal	.....	223801[2]
Repair Sleeve	.....	KWK99147[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

2006-2004	3300cc/3.3L	
Seal	.....	224020
2003-1992	2959cc/3.0L	
Seal	.....	224020
1991-1990	2507cc/2.5L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL

6 Cylinder

2006-2004	3300cc/3.3L	
Seal Viton	.....	229210
2003-1990	2507cc/2.5L, 2958cc/3.0L, 2995/3.0L (DOHC)	
Seal Viton	.....	229210

LEXUS - REAR DRIVE - GS300, GS350, GS400, GS430, GS450H, GS460, IS250, IS300, IS350, IS F, LS400, LS430, LS460, LS600H, SC300, SC400, SC430

FRONT WHEEL

RWD

2009-2006	GS300, GS350, GS430, GS450H, GS460	
Hub Unit Bearing (RH)	.....	HA590137 ²⁵
Hub Unit Bearing (LH)	.....	HA590138 ²⁵
2009-2006	SC430	
Seal	.....	1941
Ball Bearing	.....	510017[2]
2008-2007	LS460	
Hub Unit Bearing (RH)	.....	HA590265 ²⁵
Hub Unit Bearing (LH)	.....	HA590270 ²⁵
2008-2006	IS250, IS350, IS F	
Hub Unit Bearing (RH)	.....	HA590137 ²⁵
Hub Unit Bearing (LH)	.....	HA590138 ²⁵
2006-2001	LS430	
Hub Unit Bearing	.....	HA593550[2]

FRONT WHEEL (cont.)

RWD (cont.)

2005-2001	IS300	
Ball Bearing	.....	513150[2]
2005-1998	GS300, GS400, GS430, SC300, SC400, SC430	
Seal	.....	1941[2]
Ball Bearing	.....	510017[2]
2000-1998	LS400	
Ball Bearing	.....	510071[2]
1997-1990		
Seal	.....	1941[2]
Ball Bearing	.....	510017[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LEXUS - REAR DRIVE - GS300, GS350, GS400, GS430, GS450H, GS460, IS250, IS300, IS350, IS F, LS400, LS430, LS460, LS600H, SC300, SC400, SC430 (cont.)					

FRONT WHEEL**AWD**

2009-2008	LS600H	
Hub Unit Bearing	.....	HA590267[2] ²⁵
2008-2007	GS350	
Hub Unit Bearing (LH)	.....	HA590140 ²⁵
Hub Unit Bearing (RH)	.....	HA590139 ²⁵
2008-2006	IS250	
Hub Unit Bearing (LH)	.....	HA590140 ²⁵
Hub Unit Bearing (RH)	.....	HA590139 ²⁵
2006	GS300	
Hub Unit Bearing (LH)	.....	HA590140 ²⁵
Hub Unit Bearing (RH)	.....	HA590139 ²⁵

REAR WHEEL**RWD**

2009-2008	LS600H	
Hub Unit Bearing	.....	HA590268[2] ²⁵
2009-2006	GS300, GS350, GS430, GS450H, GS460	
Hub Unit Bearing	.....	HA590136[2] ²⁵
2009-2006	SC430	
Ball Bearing	.....	511028[2]
2008-2007	LS460	
Hub Unit Bearing	.....	HA590269[2] ²⁵
2008-2006	IS250, IS350, IS F	
Hub Unit Bearing	.....	HA590136[2] ²⁵
2006-2001	LS430	
Hub Unit Bearing	.....	HA591050[2]
2005-2001	IS300	
Ball Bearing	.....	511028[2]
2005-1998	GS300, GS400, GS430, SC430	
Ball Bearing	.....	511028[2]
2000-1998	LS400, SC300, SC400	
Seal (Inner)	.....	1928[2]
Ball Bearing (Inner)	.....	511007[2]
Seal (Outer)	.....	1935[2]
1997-1990		
Seal (Inner)	.....	1928[2]
Ball Bearing (Inner)	.....	511007[2]
Seal (Outer)	.....	1935[2]

AWD

2009-2008	LS600H	
Hub Unit Bearing	.....	HA590268[2] ²⁵
2009-2006	GS300, GS350, GS430, GS450H, GS460	
Hub Unit Bearing	.....	HA590136[2] ²⁵
2009-2006	SC430	
Ball Bearing	.....	511028[2]
2008-2007	LS460	
Hub Unit Bearing	.....	HA590269[2] ²⁵
2008-2006	IS250, IS350, IS F	
Hub Unit Bearing	.....	HA590136[2] ²⁵
2006-2001	LS430	
Hub Unit Bearing	.....	HA591050[2]
2005-2001	IS300	
Ball Bearing	.....	511028[2]
2005-1998	GS300, GS400, GS430, SC430	
Ball Bearing	.....	511028[2]

REAR WHEEL (cont.)**AWD (cont.)**

2000-1998	LS400, SC300, SC400	
Seal (Inner)	.....	1928[2]
Ball Bearing (Inner)	.....	511007[2]
Seal (Outer)	.....	1935[2]
1997-1990		
Seal (Inner)	.....	1928[2]
Ball Bearing (Inner)	.....	511007[2]
Seal (Outer)	.....	1935[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2000-1990	(A340E)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Rear Seal/Ext. Housing

2000-1990	(A340E)	
Seal	.....	3459S

Selector Shaft Seal/Man. Shaft

2000-1990	(A340E)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1996	(A650E)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Rear Seal/Ext. Housing

2002-1996	(A650E)	
Seal	.....	710142

Selector Shaft Seal/Man. Shaft

2006-1998	(A650E)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

CLUTCH**Pilot Bearing**

1996-1992	2997cc/3.0L (DOHC)	
Ball Bearing	.....	201CC

Release Bearing

1996-1992	(6 Cyl.)	
Bearing Assy	.....	614088

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2004-1992	(W55, W58)	
Seal	.....	1981
Repair Sleeve	.....	KWK99114

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LEXUS - REAR DRIVE - GS300, GS350, GS400, GS430, GS450H, GS460, IS250, IS300, IS350, IS F, LS400, LS430, LS460, LS600H, SC300, SC400, SC430 (cont.)					

5-SPEED MANUAL TRANSMISSION**Rear Output Shaft**

2004-1992 (W55, W58)
Seal 223840

OIL PUMP**6 Cylinder**

2006 2994cc/3.0L
Seal 224020
Repair Sleeve KWK99157

8 Cylinder

2000-1990 3969cc/4.0L (DOHC)
Seal 473677
Repair Sleeve KWK99157

CAMSHAFT SEAL**6 Cylinder**

2005-1992 2997cc/3.0L (DOHC)
Seal 710436[2]

8 Cylinder

2000-1990 3969cc/4.0L (DOHC)
Seal 223802
Repair Sleeve KWK99147[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-1992 2997cc/3.0L
Seal 224663
Repair Sleeve KWK99181

8 Cylinder

2006-2001 4294cc/4.3L
Seal 224020

CRANKSHAFT REAR SEAL**6 Cylinder**

2006 2994cc/3.0L
Seal Viton 229210
2006 3456cc/3.5L
Seal Viton 229210
2005-1992 2997cc/3.0L (DOHC)
Seal Viton 229005
Repair Sleeve KWK99354

8 Cylinder

2009-1990 3969cc/4.0L (DOHC),
4293cc/4.3L (DOHC)
Seal Viton 710352
Repair Sleeve KWK99364

LEXUS - SUV - GX470, LX450, LX470, LX570, RX300, RX330, RX350**FRONT WHEEL****FWD**

2009-2004 RX330, RX350
Ball Bearing 510063[2]
2003-1999 RX300
Ball Bearing 510006[2]

4WD

2009-2003 GX470
Bearing Module BM500007[2]²⁵
2008 LX570
Bearing Module BM500018[2]
2007-1998 LX470
Seal (Inner) 710456[2]
Set (Outer) SET47[2]
Cone/Cup (Inner) JLM506849A-JLM506810[2]

FRONT WHEEL (cont.)**4WD (cont.)**

1997-1996 LX450
Seal (Inner) 226285[2]
Cone/Cup (Inner) JLM104948-JLM104910[2]
Set (Outer) SET47[2]

REAR WHEEL**FWD**

2009-2004 RX330, RX350
Hub Unit Bearing (RH) HA592451²⁵
Hub Unit Bearing (LH) HA592461²⁵
2003-1999 RX300
Bearing Module 512009[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LEXUS - SUV - GX470, LX450, LX470, LX570, RX300, RX330, RX350 (cont.)					

REAR WHEEL**4WD**

2009-2004	RX330, RX350	
Hub Unit Bearing	HA590338[2] ²⁵	
2009-2003	GX470	
Bearing Module (LH)	HA594246	
Bearing Module (RH)	HA590050	
2007-1998	LX470	
Ball Bearing	510011[2]	
2003-1999	RX300	
Ball Bearing (Inner)	514002B[2]	
Seal (Outer)	225275	
1997-1996	LX450	
Seal (Inner)	226285[2]	
Cone/Cup (Inner)	JLM104948-JLM104910[2]	
Set (Outer)	SET47[2]	

4WD FRONT AXLE**Differential**

2002-1996	(8.875" R.G.)	
Bearing Assy	32010X[2]	

Pinion

2007-2003	(8" R.G.)	
Seal	710525	
Cone/Cup (Inner)	HM88649-HM88610	
2002-1996	(8.875" R.G.)	
Seal (Outer)	1177	
Bearing Assy (Inner)	35028	
Bearing Assy (Outer)	30306M	

REAR AXLE**Differential**

2002-1999	(6.7" R.G.)	
Seal	710419[2]	
Set	SET45[2]	
Repair Sleeve	KWK99139[2]	
2002-1996	(8.875" R.G.)	
Bearing Assy	32010X[2]	

Pinion

2007-2003	(8" R.G.)	
Seal	710525	
Cone/Cup (Inner)	HM88649-HM88610	
2006-1999	(6.7" R.G.)	
Seal (Outer)	1176S	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	
Repair Sleeve	KWK99147	
2002-1996	(8.875" R.G.)	
Seal (Outer)	1177	
Bearing Assy (Inner)	35028	
Bearing Assy (Outer)	30306M	

TRANSFER CASE**Input Shaft**

1997-1996	(HF2AV)	
Seal	224810	
Repair Sleeve	KWK99189	

Front Output Shaft

1997-1996	(HF2AV)	
Seal	224815	
Ball Bearing	208S[2]	
Repair Sleeve	KWK99189	

Rear Output Shaft

1997-1996	(HF2AV)	
Seal	710173	
Ball Bearing	110CB[2]	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2003-1998	(A343F)	
Seal	223830	
Repair Sleeve	KWK99147	
1997-1996	(A442F)	
Seal Viton	2025	
Repair Sleeve	KWK99169	

Rear Seal/Ext. Housing

2003-1998	(A343F)	
Seal	3459S	
1997-1996	(A442F)	
Seal	224820	

Selector Shaft Seal/Man. Shaft

2003-1999	(A140E, A140F)	
Seal	223540	
Repair Sleeve	KWK99139	
2003-1996	(A343F, A442F)	
Seal	221207	
Repair Sleeve	KWK99049	

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2003-1999	(U140E, U140F)	
Seal	710416[2]	

Torque Converter / Frt Pump

2003-1999	(U140E, U140F)	
Seal	223830	
Repair Sleeve	KWK99147	

Output Shaft

2003-1999	(U150E, U151E)	
Seal	223540[2]	
Repair Sleeve	KWK99139	

Manual Shaft

2003-1999	(U140E, U140F)	
Seal	221207	
Repair Sleeve	KWK99049	
2002-1996	(A343F)	
Seal	221207	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LEXUS - SUV - GX470, LX450, LX470, LX570, RX300, RX330, RX350 (cont.)					

5-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-2004	(U151E, U151F)	
Seal	.....	221207

ALTERNATOR

1997-1996	(Nippondenso 90)(Amp.)	
Ball Bearing (Drive End)	.....	302CC

POWER STEERING**Pump Shaft**

2002-1998	LX470	
Seal	.....	710412

OIL PUMP**6 Cylinder**

2006-2004	3300cc/3.3L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157
2003-1999	2995cc/3.0L (DOHC)	
Seal	.....	224020
Repair Sleeve	.....	KWK99157

8 Cylinder

2009-1998	4664cc/4.7L	
Seal	.....	473677
Repair Sleeve	.....	KWK99157

CAMSHAFT SEAL**6 Cylinder**

2003-1999	2995cc/3.0L (DOHC)	
Seal	.....	223801[2]
Repair Sleeve	.....	KWK99147[2]

8 Cylinder

2006-1998	4664cc/4.7L	
Seal	.....	223802[2]
Repair Sleeve	.....	KWK99147[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2006-2004	3300cc/3.3L	
Seal	.....	224020
2003-1999		
Seal	.....	224020
1997-1996	4476cc/4.5L	
Seal	.....	710187

8 Cylinder

2005-1998	4664cc/4.7L	
Seal	.....	224020

CRANKSHAFT REAR SEAL**6 Cylinder**

2006-2004	3300cc/3.3L	
Seal Viton	.....	229210
2003-1999	2997cc/3.0L	
Seal Viton	.....	229210
1997-1996	4476cc/4.5L	
Seal	.....	710526

8 Cylinder

2009-1998	4664cc/4.7L	
Seal Viton	.....	710352
Repair Sleeve	.....	KWK99364

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

LEXUS - SUV - RX400H**FRONT WHEEL****FWD**

2009-2006

Ball Bearing 510063[2]

REAR WHEEL**FWD**

2009-2006

Hub Unit Bearing (RH) HA592451 ²⁵Hub Unit Bearing (LH) HA592461 ²⁵**4WD**

2009-2006

Hub Unit Bearing HA590338[2] ²⁵**OIL PUMP****6 Cylinder**

2008-2007

Seal 224020

Repair Sleeve KWK99157

CAMSHAFT SEAL**6 Cylinder**

2008-2007

Seal 223801

Repair Sleeve KWK99147

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2007

Seal Viton 229210

LINCOLN - FRONT DRIVE - Continental**FRONT WHEEL****FWD**

2002-1995

Hub Unit Bearing 513100[2]

1994-1991 (From 2/1/91)

Set SET49[2]

Hub Unit Bearing 520100[2] ⁶⁵

1991-1990 (Thru 1/31/91)

Set SET49[2]

Hub Unit Bearing 520000[2] ⁶⁷**REAR WHEEL****FWD**

2002-1993

Hub Unit Bearing 512107[2]

1992-1990

Hub Unit Bearing 512105[2] ¹⁶**4-SPEED AUTOMATIC TRANSAXLE****Differential**

2002-1990

Ball Bearing 208[2]

Torque Convertor / Frt Pump

2002-1990

Seal 4189H

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2002-1990

Seal 3622S[2]

Repair Sleeve KWK99169[2]

ALTERNATOR

1990 (Motorcraft)

Ball Bearing (Drive End) 203FF

1990 (Motorcraft)

Ball Bearing (Rear End) MNJ471S

POWER STEERING**Input Shaft**

1995-1990

Seal 471645

Ndle Bearing FC65753[2]

Pitman Shaft

1992-1990

Seal 710504

Pump Shaft

2002-1990

Seal 8773S

Worm Shaft

1995-1990

Ball Bearing 201CC[2]

¹⁶Obsolete²⁵New Item, Check For Availability⁶⁷Kit = Flg, Brg, Nut, & Snap Ring⁶⁵Kit = Nut, Studded Spindle, Bearing, Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

LINCOLN - FRONT DRIVE - Continental (cont.)

CRANKSHAFT FRONT SEAL

6 Cylinder

1994-1990	232/3.8L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

8 Cylinder

2002-1995	281/4.6L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL

6 Cylinder

1994-1990	232/3.8L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99363

CRANKSHAFT REAR SEAL

8 Cylinder

2002-1995	281/4.6L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99362

LINCOLN - FRONT DRIVE - MKS

FRONT WHEEL

FWD

2009		
Hub Unit Bearing	.....	HA590261[2] ²⁵

AWD

2009		
Hub Unit Bearing	.....	HA590261[2] ²⁵

REAR WHEEL

FWD

2009		
Hub Unit Bearing	.....	HA590261[2] ²⁵

REAR WHEEL

AWD

2009		
Hub Unit Bearing	.....	HA590261[2] ²⁵

LINCOLN - FRONT DRIVE - Zephyr, MKZ

FRONT WHEEL

FWD

2009-2006		
Ball Bearing	.....	510010[2]

AWD

2009-2006		
Ball Bearing	.....	510010[2]

REAR WHEEL

FWD

2009-2006	(Non-ABS)	
Hub Unit Bearing	.....	HA590095[2] ²⁵
2006	(ABS)	
Hub Unit Bearing	.....	HA590100[2] ²⁵

AWD

2009-2007		
Ball Bearing	.....	510010[2]

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2006	3.0L, 3.5L (DOHC)	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LINCOLN - FRONT DRIVE - Zephyr, MKZ (cont.)					

CRANKSHAFT REAR SEAL**6 Cylinder**

2006	3.0L (DOHC)
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99363

LINCOLN - REAR DRIVE - Continental, LS, Mark Series, Town Car**FRONT WHEEL****RWD**

2009-2006	Town Car
Hub Unit Bearing	513230[2] ²⁵
2006-2000	LS
Hub Unit Bearing	HA590213[2]
2005-2003	Town Car
Hub Unit Bearing	513196[2]
2002-1997	Town Car (From 4/1/97)
Hub Unit Bearing	513202[2]
1998-1993	Mark VIII
Hub Unit Bearing	513092[2]
1997-1992	Town Car (Thru 3/31/97)
Hub Unit Bearing	513104[2]
1993-1990	(Exc. Town Car)
Seal (Inner)	9150S[2]
Set (Inner)	SET5[2]
Set (Outer)	SET12[2]
1991-1990	Town Car
Seal (Inner)	6815[2]
Set (Inner)	SET11[2]
Set (Outer)	SET12[2]

REAR WHEEL**RWD**

2009-1993	Continental, Town Car
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹
2009-1990	Town Car (Limo. Ch.)
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹
2006-2000	LS
Ball Bearing	511032[2]
1998-1993	Mark VIII
Set	SET49[2]
1992-1990	(Exc. Limo. Ch.)
Seal	8660S[2]
Cylindrical Bearing	5707[2]
Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

REAR AXLE**Axle Shaft**

2006-2000	(8.8" R.G.)(Indep. Rr. Susp.)
Seal Viton (Inner)	714569[2]
Ndle Bearing (Inner)	FC66998[2]
Repair Sleeve	KWK99157[2]

REAR AXLE (cont.)**Axle Shaft (cont.)**

1998-1990	(IRS 7.5" R.G., IRS 8.8" R.G.)
Seal Viton	714569[2]
Ndle Bearing	FC66998[2]
Repair Sleeve	KWK99157[2]

Differential Rebuild Kit

2008-1990	(8.5", 8.8" R.G.)
Kit	DRK311

Differential

2008-1990	Town Car
Set	SET36[2]
2006-2000	LS
Set	SET36[2]
1998-1993	Mark Ser.
Cone/Cup	LM501349-LM501314[2]

Pinion

2008-2000	(8" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	NP559445-NP945727
Cone/Cup (Outer)	M88048-M88010
2008-1999	(8.8" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
1998-1990	
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
Cylindrical Bearing	R1535TAV

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-1992	(AODE)
Seal	472341
Repair Sleeve	KWK99199
1991-1990	(AOT, AOD)
Seal	331107N
Repair Sleeve	KWK99199

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

LINCOLN - REAR DRIVE - Continental, LS, Mark Series, Town Car (cont.)

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2003-1995	(AODE)	
Seal	.....	4764
1994-1990	(AODE)	
Seal	.....	7692S
Seal Kit	.....	5202 ⁶⁴
1991-1990	(AOT, AOD)(long boot)	
Seal	.....	7692S
Seal Kit	.....	5202 ⁶⁴

Selector Shaft Seal/Man. Shaft

2006-1990		
Seal	.....	7929S
Repair Sleeve	.....	KWK99076

5-SPEED AUTOMATIC TRANSMISSION

Selector Shaft Seal/Man. Shaft

2006-2000		
Seal	.....	7929S

ALTERNATOR

1990	(Motorcraft)(w/o 95 Amp.)	
Ball Bearing (Drive End)	.....	203FF
1990	(Motorcraft)(w/o 95 Amp.)	
Ball Bearing (Rear End)	.....	MNJ471S

CRANKSHAFT FRONT SEAL

6 Cylinder

2005-2000	182/3.0L (DOHC)	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187
1994-1990	232/3.8L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

8 Cylinder

2008-1991	281/4.6L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT FRONT SEAL (cont.)

8 Cylinder (cont.)

1992-1990	302/5.0L, 351/5.8L, 400/6.6L, 460/7.5L	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL

6 Cylinder

2005-2000	182/3.0L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99363

8 Cylinder

2008-1990	281/4.6L, 302/5.0L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99362

LINCOLN - SUV, Truck - Aviator, Blackwood, Mark LT, Navigator

FRONT WHEEL

RWD

2009-2007	Navigator	
Hub Unit Bearing	.....	SP550211[2] ²⁵
2008-2006	Mark LT	
Set	.....	SET930[2] ²⁵
2006-2003	Navigator	
Hub Unit Bearing	.....	SP550206[2] ²⁵
2005-2003	Aviator	
Hub Unit Bearing	.....	HA590259K[2] ⁶⁸

FRONT WHEEL (cont.)

RWD (cont.)

2002	Blackwood	
Seal (Inner)	.....	4148[2]
Cone/Cup (Inner)	.....	JL69349P-JL69310P[2]
Set (Outer)	.....	SET12FP[2] ⁶⁰
2002-1998	Navigator	
Seal (Inner)	.....	4148[2]
Cone/Cup (Inner)	.....	JL69349P-JL69310P[2]
Set (Outer)	.....	SET12FP[2] ⁶⁰

²⁵New Item, Check For Availability

⁶⁰O.E. Polymer Cage, Performance

⁶⁴Seal & Bushing Kit

⁶⁸Kit = Flg, Brg, & Snap Ring

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

LINCOLN - SUV, Truck - Aviator, Blackwood, Mark LT, Navigator (cont.)**FRONT WHEEL****4WD**

2009-2007	Navigator	
Hub Unit Bearing	.....	SP550210[2] ²⁵
2008-2006	Mark LT	
Hub Unit Bearing	.....	SP550207[2] ⁷⁸
Hub Unit Bearing	.....	SP550208[2] ⁸²
2006-2003	Navigator	
Hub Unit Bearing	.....	SP550202[2]
2002-2000	(ABS)(M14 Bolts)	
Hub Unit Bearing	.....	515031[2]
2000-1998	(ABS)(M12 Bolts)	
Hub Unit Bearing	.....	SP550201[2] ⁴⁰

AWD

2005-2003	Aviator	
Hub Unit Bearing (ABS Cable Included)	.....	SP470200[2]
Hub Unit Bearing	.....	SP470201[2] ⁰²

REAR WHEEL**RWD**

2009-2007	Navigator	
Hub Unit Bearing	.....	SP550209[2] ²⁵
2008-2006	Mark LT	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
2006-2003	Navigator	
Hub Unit Bearing	.....	SP550203[2]
2005-2003	Navigator (Indep. Rr. Susp.)	
Ndle Bearing	.....	FC66998[2]
2002	Blackwood	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
2002-1998	Navigator (Exc. Indep. Rr. Susp.)	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹

4WD

2009-2007	Navigator	
Hub Unit Bearing	.....	SP550209[2] ²⁵
2008-2006	Mark LT	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
2006-2003	Navigator	
Hub Unit Bearing	.....	SP550203[2]
2005-2003	Navigator (Indep. Rr. Susp.)	
Ndle Bearing	.....	FC66998[2]
2002	Blackwood	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹
2002-1998	Navigator (Exc. Indep. Rr. Susp.)	
Seal Viton	.....	100357[2]
Cylindrical Bearing	.....	R1561TV[2]
Bearing & Seal Kit	.....	TF01561R[2] ¹⁹

REAR WHEEL**AWD**

2005-2003	Aviator	
Hub Unit Bearing	.....	HA590259K[2] ⁶⁸

4WD FRONT AXLE**Axle Shaft**

2008-1998	(8.8" R.G.)(Indep. Frt. Susp.)	
Ndle Bearing (Inner)	.....	HK4012[2]
Ndle Bearing (Outer)	.....	FC66998[2]

Differential Rebuild Kit

2007-1998	(8.8" R.G.)	
Kit	.....	DRK311F

Differential

2007-2003	(8.8" R.G.)	
Cone/Cup	.....	LM603049-LM603019[2]
2005-2003	Aviator	
Cone/Cup	.....	LM501349-LM501314[2]
2002-1998	(8.8" R.G.)	
Set	.....	SET36[2]

Pinion

2007-1998	(8.8" R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

REAR AXLE**Axle Shaft**

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Ndle Bearing	.....	FC66998[2]
Seal	.....	100537[2]

Differential Rebuild Kit

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Kit	.....	DRK311A ²⁵
2007-2006	(9.75" R.G.)	
Kit	.....	DRK316A
2001-1998	(8.8" R.G.)	
Kit	.....	DRK311

Differential

2008-2006	(10.25" R.G.)	
Seal	.....	469-453X[2]
2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)	
Cone/Cup	.....	LM603049-LM603019[2]
2008-1998	(9.75" R.G.)	
Cone/Cup	.....	NP343847-NP372019[2]
2001-1998	(8.8" R.G.)	
Set	.....	SET36[2]

⁰²Does Not Come w/ Sensor Cable.
Check For Availability ⁴⁰5 Stud.
⁸²7 Stud, New Item.

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

⁶⁸Kit = Flg, Brg, & Snap Ring

²⁵New Item,

⁷⁸6 Stud, New Item.

LINCOLN - SUV, Truck - Aviator, Blackwood, Mark LT, Navigator (cont.)

REAR AXLE

Pinion

2008-2006	(10.25" R.G.)	
Seal Viton	4278	
Cone/Cup (Inner)	NP504493-NP949481	
Cone/Cup (Outer)	HM89443-HM89411	
2008-2003	(9.75" R.G.)	
Seal Viton	4278	
Cone/Cup (Inner)	NP576375-NP434567	
Cone/Cup (Outer)	HM89443-HM89411	
2008-1998	(8.8" R.G.)	
Seal Viton	3604	
Cone/Cup (Inner)	M802048-M802011	
Cone/Cup (Outer)	M88048-M88010	
2002-1998	(9.75" R.G.)	
Seal Viton	3604	
Cone/Cup (Inner)	NP576375-NP434567	
Cone/Cup (Outer)	M88048-M88010	

TRANSFER CASE REBUILD KIT

2002-1998	(Warner 4406)	
Kit	TCRK4406	

TRANSFER CASE

Input Shaft

2008-2006	(Warner 4406)(Booted)	
Seal	4333N	
Ball Bearing	211TB	
Ndle Bearing (Pilot)	BK3026	
2008-2003	(Warner 4416)	
Seal	3946	
Ball Bearing	211TB	
Repair Sleeve	KWK99187	
2007-2006	(Warner 4406)(w/o Boot)	
Seal	3946	
Ball Bearing	211TB	
Repair Sleeve	KWK99187	
2005-2003	(Warner 4410)	
Seal	710403	
Ball Bearing	209LO	
Repair Sleeve	KWK99166	
2002-1998	(Warner 4406)(Booted)	
Seal	4333N	
Ball Bearing	211TB	
Ndle Bearing (Pilot)	BK3026	
2002-1998	(Warner 4406)(w/o Boot)	
Seal	3946	
Ball Bearing	211TB	
Ndle Bearing (Pilot)	BK3026	
Repair Sleeve	KWK99187	

Front Output Shaft

2008-2006	(Warner 4406)	
Seal	4333N	
Ball Bearing	208	
2008-2003	(Warner 4416)	
Ball Bearing (Inner)	107WB	
Seal (Outer)	4333N	
Ball Bearing (Outer)	208	
Seal	4333N	

TRANSFER CASE (cont.)

Front Output Shaft (cont.)

2005-2003	(Warner 4410)	
Seal	710403	
Ball Bearing	206WB	
Repair Sleeve	KWK99166	
2005-2003	(Warner 4410, 4411E)	
Seal	710403	
Repair Sleeve	KWK99166	
2002-1998	(Warner 4406, 4416)	
Seal	4333N	
Ball Bearing	208[2]	

Rear Output Shaft

2008-2002	(Warner 4416)	
Seal	4503N	
Ball Bearing (Inner)	307TB	
Ball Bearing (Outer)	111TB	
2007-2006	(Warner 4406)	
Seal	4503N	
Ball Bearing	207	
Ndle Bearing Thrust	NTA2233	
2005-2003	(Warner 4410)	
Seal	710403	
Ball Bearing	208SL	
Repair Sleeve	KWK99166	
2002-1998	(Warner 4406)	
Seal	4503N	
Ball Bearing	207[2]	
Ndle Bearing Thrust	NTA2233	

Selector Shaft Seal/Man. Shaft

2008-1998	(Warner 4406, 4416)	
Seal	330385	

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002-1998	(AODE)	
Seal	3404	

Rear Seal/Ext. Housing

2004-1998	(AODE)	
Seal	7300S	
Repair Sleeve	KWK99168	

Selector Shaft Seal/Man. Shaft

2006-1998		
Seal	7929S	

5-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2008-2007	(5R110W) Torqshift	
Seal	710485	

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
LINCOLN - SUV, Truck - Aviator, Blackwood, Mark LT, Navigator (cont.)					

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2003

Seal 7929S

POWER STEERING**Pump Shaft**

2001-1998

Seal 8773S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2008-1998 330/5.4L (SOHC)

Seal 482041N

Repair Sleeve KWK99187

Harmnc Balancer Slvs 88187

2005-2003 281/4.6L

Seal 482041N

2005-1998 330/5.4L (DOHC)

Seal 482041N

Repair Sleeve KWK99187

Harmnc Balancer Slvs 88187

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-1998 330/5.4L

Seal Viton 3909

Seal PTFE H/D 5277

Repair Sleeve KWK99362

2005-2003 281/4.6L

Seal Viton 3909

Seal PTFE H/D 5277

Repair Sleeve KWK99363

LINCOLN - SUV, Truck - MKX**FRONT WHEEL****FWD**

2009-2007

Ball Bearing 510063[2]

AWD

2009-2007

Ball Bearing 510063[2]

REAR WHEEL**FWD**

2009

Hub Unit Bearing HA590335[2]

2008-2007

Hub Unit Bearing HA590180[2]²⁵**AWD**

2009-2007

Hub Unit Bearing HA590183[2]²⁵**CRANKSHAFT FRONT SEAL****6 Cylinder**

2008-2007 3498cc/3.5L (DOHC)

Seal 482041N

Repair Sleeve KWK99187

MASERATI - ALL**FRONT WHEEL****RWD**

1992-1990 228

Set (Inner) SET6[2]

Set (Outer) SET2[2]

FRONT WHEEL (cont.)**RWD (cont.)**

1992-1990 430

Set (Inner) SET6[2]

Set (Outer) SET2[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MASERATI - ALL (cont.)

FRONT WHEEL (cont.)

RWD (cont.)

1991-1990	Spyder	
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]

REAR WHEEL

RWD

1993-1990	228	
Cone/Cup (Inner)	.....	LM78349-LM78310A[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
1993-1990	430	
Cone/Cup (Inner)	.....	LM78349-LM78310A[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
1992-1990	Spyder	
Cone/Cup (Inner)	.....	LM78349-LM78310A[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]

REAR AXLE

Differential

1993-1990	228, 430	
Cone/Cup	.....	LM501349-LM501311[2]

MAZDA - FRONT DRIVE - Mazda3, Mazda5, Mazda6, Millenia, MX-3, MX-6, Protege, 323, 626

FRONT WHEEL

FWD

2009	Mazda 6 (2.5L)	
Ball Bearing	.....	WB000026[2] ²⁵
2009	Mazda 6 (3.7L)	
Ball Bearing	.....	WB000025[2] ²⁵
2009-2006	Mazda5	
Ball Bearing	.....	510010[2]
2008-2006	Mazda Speed6	
Ball Bearing	.....	510063[2]
2008-2005	Mazda 3 (ABS)(From 1/05)	
Ball Bearing	.....	WB000033[2] ²⁵
2008-2005	Mazda 3 (Non- ABS)(From 1/05)	
Ball Bearing	.....	WB000032[2] ²⁵
2008-2003	Mazda6	
Ball Bearing	.....	510053[2]
2005-2004	Mazda3 (ABS)	
Hub Unit Bearing	.....	HA590097[2] ²⁵
2005-2004	Mazda3 (Non-ABS)	
Hub Unit Bearing	.....	HA590072[2] ²⁵
2003-1990	Protege	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]
2002-2001	Millenia (2.3L)	
Seal	.....	710392[2]
Ball Bearing	.....	511019[2]
2002-2001	Millenia (2.5L)	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
2002-1998	626	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]

FRONT WHEEL (cont.)

FWD (cont.)

2000-1997	Millenia	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1997-1993	626	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1997-1993	MX-6	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1996-1995	Millenia (2.3L)	
Ball Bearing	.....	510010[2]
1996-1995	Millenia (2.5L)	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1996-1992	MX-3	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]
1995-1990	323	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]
1992-1990	MX-6	
Seal	.....	1932S[2]
Bearing Assy	.....	513057[2]
1992-1990	626	
Seal	.....	1932S[2]
Bearing Assy	.....	513057[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - FRONT DRIVE - Mazda3, Mazda5, Mazda6, Millenia, MX-3, MX-6, Protege, 323, 626 (cont.)					

FRONT WHEEL**AWD**

2007-2006	Mazda6	
Ball Bearing	.....	510053[2]
1991-1990	Protege	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]

REAR WHEEL**FWD**

2009	Mazda6	
Hub Unit Bearing	.....	HA590336[2] ²⁵
2009-2006	Mazda5	
Hub Unit Bearing	.....	HA590099[2] ²⁵
2008-2004	Mazda3 (ABS)	
Hub Unit Bearing	.....	HA590099[2] ²⁵
2008-2003	Mazda6 (ABS)	
Hub Unit Bearing	.....	HA590100[2] ²⁵
2008-2003	Mazda6 (Non-ABS)	
Hub Unit Bearing	.....	HA590095[2] ²⁵
2006-2004	Mazda3 (Non-ABS)	
Hub Unit Bearing	.....	HA590098[2] ²⁵
2003-1990	Protege (Drum)	
Hub Unit Bearing	.....	513030[2]
2002-2001	Millenia (ABS)(Disc)	
Hub Unit Bearing	.....	513131[2]
2002-2001	Protege (ABS)(Disc)	
Hub Unit Bearing	.....	513131[2]
2002-1998	626 (ABS)	
Hub Unit Bearing	.....	512186[2]
2002-1993	626 (Non-ABS)	
Hub Unit Bearing	.....	512119[2]
2000-1995	Millenia	
Hub Unit Bearing	.....	512118[2]
2000-1995	Protege (Disc)	
Hub Unit Bearing	.....	512161[2]
1997-1993	626 (ABS)	
Hub Unit Bearing	.....	512118[2]
1997-1993	MX-6 (ABS)	
Hub Unit Bearing	.....	512118[2]
1997-1993	MX-6 (Non-ABS)	
Hub Unit Bearing	.....	512119[2]
1995-1990	323	
Hub Unit Bearing	.....	513030[2]
1994-1992	MX-3 (Disc)	
Hub Unit Bearing	.....	512161[2]
1994-1992	MX-3 (Non-ABS)	
Hub Unit Bearing	.....	513030[2]
1992-1990	626 (4 Whl. Steering)	
Seal	.....	710191[2]
Bearing Assy	.....	513245[2] ^z
1992-1990	626 (Exc. 4 Whl. Steering)	
Seal	.....	224235[2]
Bearing Assy	.....	513055[2]
1992-1990	MX-6 (4 Whl. Steering)	
Seal	.....	710191[2]
Bearing Assy	.....	513245[2] ^z
1992-1990	MX-6 (Exc. 4 Whl. Steering)	
Seal	.....	224235[2]
Bearing Assy	.....	513055[2]

REAR WHEEL**AWD**

2008-2003	Mazda6	
Ball Bearing	.....	510010[2]
1991-1990	Protege	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]

REAR AXLE**Pinion**

1991-1990	Protege (AWD), 323 (AWD)	
Bearing Assy (Inner)	.....	32206M
Seal (Outer)	.....	710217
Bearing Assy (Outer)	.....	32205
Repair Sleeve	.....	KWK99139

CLUTCH**Pilot Bearing**

1996-1990		
Ball Bearing	.....	202SS

Release Bearing

2002-2001	626, 2.0L	
Bearing Assy	.....	614067
2002-2001	Protege, 1.66L	
Bearing Assy	.....	614128
2002-2001	Protege, 2.0L	
Bearing Assy	.....	614067
1997-1993	626 4 Cyl.	
Bearing Assy	.....	614079
1997-1993	MX 6 4 Cyl.	
Bearing Assy	.....	614079
1996-1993	626 6 Cyl.	
Bearing Assy	.....	614079
1996-1993	MX 6 6 Cyl.	
Bearing Assy	.....	614079
1996-1990	Proteg (FWD)(SOHC)	
Bearing Assy	.....	614128
1995-1993	RX 7 (Twin Turbo)	
Bearing Assy	.....	614164
1995-1992	MX-3	
Bearing Assy	.....	614128
1993-1990	323 (SOHC)	
Bearing Assy	.....	614128
1993-1990	MX 6 (w/o Turbo)	
Bearing Assy	.....	614067
1992-1990	Proteg, (DOHC)	
Bearing Assy	.....	614067
1992-1990	MX 6 (Turbo)	
Bearing Assy	.....	614079
1992-1990	929	
Bearing Assy	.....	614079
1992-1990	626 (Turbo)	
Bearing Assy	.....	614079
1992-1990	626 (w/o Turbo)	
Bearing Assy	.....	614067
1992-1990	RX 7 (Turbo)	
Bearing Assy	.....	614079
1991-1990	Proteg, (4WD)	
Bearing Assy	.....	614079

^zNon-Cancellable/Non-Returnable²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MAZDA - FRONT DRIVE - Mazda3, Mazda5, Mazda6, Millenia, MX-3, MX-6, Protege, 323, 626 (cont.)

3-SPEED AUTOMATIC TRANSAXLE

Differential

1991-1990 (F3A)
Bearing Assy 32008XM[2]

Torque Converter

1991-1990 (F3A)
Seal 1012N
Repair Sleeve KWK99177

Output Shaft

1991-1990 (F3A)
Seal 223543[2]
Repair Sleeve KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

2002-1990 (F4A EL)
Set SET17[2]
2000-1995 (JF403)
Bearing Assy 30208M[2]
1997-1990 (G4A EL)
Bearing Assy 32008XM[2]

Torque Converter / Frt Pump

2002-1990 (F4A EL, G4A EL, G4A HL)
Seal 710446
2000-1995 (JF403)
Seal 710114

Output Shaft

2007-2006 (FS5A-EL)
Seal 2007N[2]
Repair Sleeve KWK99139
2002-1990 (F4A EL, G4A EL, G4A HL)
Seal (LH) 223543
Seal (RH) 2007N
Repair Sleeve KWK99139

5-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2002-1996
Seal 3622S[2]
Repair Sleeve KWK99169[2]

4-SPEED MANUAL TRANSAXLE

Differential

1991-1990 (F4A)
Set SET17[2]

Input Shaft

1991-1990 (F4A)
Seal 222430
Repair Sleeve KWK99098

4-SPEED MANUAL TRANSAXLE

Output Shaft

1991-1990 (F4A)
Seal (LH) 223543
Repair Sleeve (LH) KWK99139
Seal (RH) 2007N
Repair Sleeve (RH) KWK99139

5-SPEED MANUAL TRANSAXLE

Input Shaft

2002-1990 (F5A, F52, F501)
Seal 222430
Repair Sleeve KWK99098
2002-1990 (F5F, G5A, G5M, G5Y, H5Y, G501)
Seal (Outer) 1990
Set (Outer) SET32[2]
Repair Sleeve KWK99106

Countershaft

2002-1990 (F5A, F52, F501)
Bearing Assy (Frt) 32205[2]

Output Shaft

2002-1990 (F5A, F5F, F52, G5A, G5M, G5Y, H5Y, F501, G501)
Seal (LH) 223543
Repair Sleeve (LH) KWK99139
Seal (RH) 2007N
Repair Sleeve (RH) KWK99139

Selector Shaft Seal/Man. Shaft

2003-1990 (G5M, G5Y, H5Y)
Seal 221620

CV JOINT HALF SHAFT

1995-1992 MX 3 (1.6)
Seal (Inner) 710224
Seal (Outer) 710223
1992-1990 626
Seal 710253
Seal (Inner) 710224
Seal (Outer) 710223
1992-1990 MX-6
Seal 710253
Seal (Inner) 710224
Seal (Outer) 710223

OIL PUMP

6 Cylinder

1995-1990 2954/3.0L
Seal 710264

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - FRONT DRIVE - Mazda3, Mazda5, Mazda6, Millenia, MX-3, MX-6, Protege, 323, 626 (cont.)					

CAMSHAFT SEAL**4 Cylinder**

2003-1990	1489cc/1.5L, 1597cc/1.6L, 1839cc/1.8L, 1991cc/2.0L	
Seal		223420[2]
1995-1990	1597cc/1.6L, 1839cc/1.8L	
Seal		223012
1992-1990	1998cc/2.0L, 2184cc/2.2L	
Seal		223420

6 Cylinder

2002-1992	1844cc/1.8L, 2254cc/2.3L, 2497cc/2.5L	
Seal		223012[4]
Repair Sleeve		KWK99114[4]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-1994	2.0L (SOHC)(DOHC)	
Seal		223420
2001-1992	1489cc/1.5L, 1597cc/1.6L, 1839cc/1.8L	
Seal		710355
Repair Sleeve		KWK99145
1993	1991cc/2.0L From 3/13/93	
Seal		223420
1993	1991cc/2.0L, (Thru 3/12/93)	
Seal Viton		2012V
Repair Sleeve		KWK99166
1992-1990	1998cc/2.0L, 2184cc/2.2L	
Seal		223420
1991	1597cc/1.6L From 12/2/90	
Seal		710355
Repair Sleeve		KWK99145
1991	1597cc/1.6L To 12/1/90	
Seal		223012
Repair Sleeve		KWK99114
1991	1839cc/1.8L From 2/2/91	
Seal		710355
Repair Sleeve		KWK99145
1991	1839cc/1.8L To 2/1/91	
Seal		223012
Repair Sleeve		KWK99114
1990	1597cc/1.6L, 1839cc/1.8L	
Seal		223012
Repair Sleeve		KWK99114

6 Cylinder

2008-2003	2967cc/3.0L	
Seal		482041N
Repair Sleeve		KWK99187

CRANKSHAFT FRONT SEAL (cont.)**6 Cylinder (cont.)**

2002-1992	1844cc/1.8L, 2254cc/2.3L, 2497cc/2.5L	
Seal Viton		2012V
Repair Sleeve		KWK99166

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-1990	1489cc/1.5L, 1589cc/1.6L, 1839cc/1.8L	
Seal		228250
Repair Sleeve		KWK99328
2003-1993	2.0L (DOHC)	
Seal		229004
Repair Sleeve		KWK99347
1992-1990	1998cc/2.0L, 2184cc/2.2L	
Seal		229010
Repair Sleeve		KWK99354

6 Cylinder

2008-2003	2967cc/3.0L	
Seal Viton		3909
Repair Sleeve		KWK99362
2002-1992	1844cc/1.8L, 2254cc/2.3L, 2497cc/2.5L	
Seal		1019S
Repair Sleeve		KWK99298

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MAZDA - REAR DRIVE - MX-5 Miata, RX-7, RX-8, 626, 929

FRONT WHEEL

FWD

1995-1992	929	
Hub Unit Bearing	.....	513131[2]
1991-1990	929	
Seal	.....	1207N[2]
Ball Bearing	.....	510035[2]

RWD

2009-2006	MX-5 Miata (ABS)	
Hub Unit Bearing	.....	HA590205[2] ²⁵
2009-2006	MX-5 Miata (Non-ABS)	
Hub Unit Bearing	.....	HA590199[2] ²⁵
2008-2004	RX-8	
Hub Unit Bearing	.....	HA590096[2] ²⁵
2005-1991	MX-5 Miata (ABS)	
Hub Unit Bearing	.....	513155[2]
2005-1990	MX-5 Miata (Non-ABS)	
Hub Unit Bearing	.....	513152[2]
1995-1993	RX-7 (ABS)	
Hub Unit Bearing	.....	512118[2]
1991-1990	RX-7	
Seal (Inner)	.....	1975S[2]
Bearing Assy (Inner)	.....	32204[2]
Set (Outer)	.....	SET11[2]

REAR WHEEL

FWD

1995-1992	929	
Ball Bearing	.....	511019[2]
1991-1990	929	
Bearing Assy	.....	513057[2]

RWD

2009-2006	MX-5 Miata	
Ball Bearing	.....	510010[2]
2008-2004	RX-8	
Bearing Assy	.....	WB000007[2] ²⁵
2005-1990	MX-5 Miata	
Seal	.....	1932S[2]
Ball Bearing	.....	510003[2]
1995-1993	RX-7	
Ball Bearing	.....	511019[2]
1992-1990	RX-7	
Seal	.....	225872[2]
Ball Bearing	.....	510010[2]

REAR AXLE

Differential

2005-1990	MX-5 Miata	
Seal Viton	.....	710218[2]
Cone/Cup	.....	XAA32008X-Y32008X[2]
Repair Sleeve	.....	KWK99139[2]
1995-1990	929	
Seal	.....	223840[2]
Repair Sleeve	.....	KWK99147[2]
1992-1990	RX 7 (Exc. Locking Diff.)	
Seal	.....	2007N[2]
Cone/Cup	.....	XAA32008X-Y32008X[2]
Repair Sleeve	.....	KWK99139[2]

REAR AXLE (cont.)

Differential (cont.)

1992-1990	RX 7 (Locking Diff.)	
Seal Viton	.....	710218[2]
Repair Sleeve	.....	KWK99139[2]

Pinion

2005-1990	MX-5 Miata	
Seal	.....	2008S
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	32206M
Repair Sleeve	.....	KWK99128
1995-1993	RX-7	
Bearing Assy (Inner)	.....	32308
Bearing Assy (Outer)	.....	30306M
1995-1990	929	
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	30306M
1992-1990	RX 7 (Exc. Locking Diff.)	
Seal	.....	712010
Bearing Assy (Inner)	.....	32207M
Bearing Assy (Outer)	.....	32206M
Repair Sleeve	.....	KWK99189
1992-1990	RX 7 (Locking Diff.)	
Bearing Assy (Inner)	.....	32207M
Bearing Assy (Outer)	.....	30306M
Ball Bearing	.....	108TB

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1997-1990	(L4N71B)	
Seal Viton	.....	2025
Repair Sleeve	.....	KWK99166
1995-1992	(R4AEL)	
Seal	.....	224663
Repair Sleeve	.....	KWK99181
1991		
Seal	.....	1953S
Repair Sleeve	.....	KWK99169

Rear Seal/Ext. Housing

1997-1990	(L4N71B)	
Seal	.....	223801
1995-1993	(R4AEL)	
Seal	.....	710517

CLUTCH

Pilot Bearing

1996-1990	Rotary	
Ball Bearing	.....	152016
1996-1990	(w/o rotary)	
Ball Bearing	.....	202SS

CLUTCH - ROTARY

Release Bearing

1995-1993	1308cc./130L (Turbo)(240mm Cl.)	
Bearing Assy	.....	614164

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - REAR DRIVE - MX-5 Miata, RX-7, RX-8, 626, 929 (cont.)					

CLUTCH - ROTARY (cont.)**Release Bearing (cont.)**

1992-1990	1308cc./130L, 1308cc./130L (Turbo)(230mm Cl.)	
Bearing Assy		614079

CLUTCH - 4 CYLINDER**Release Bearing**

2003-1994	1839cc./1.8L (DOCH)(225mm Cl.)	
Bearing Assy		614120
1993-1990	1597cc./1.6L (200mm Cl.)	
Bearing Assy		614120

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1992-1990	(5D)	
Seal		1990
Ball Bearing		306L[2]
Repair Sleeve		KWK99106
1991-1990	(5HC)	
Seal		1990
Ball Bearing		108A[2]
Repair Sleeve		KWK99106

Countershaft

1992-1990	(5E)	
Ball Bearing (Frt)		5205KLE
Ball Bearing (Rr)		304WB
1991-1990	(5HC)	
Ball Bearing (Frt)		5205KLE

Intermediate Shaft

1992-1990	(w/o 5HC)	
Ball Bearing		306L[2]

Rear Output Shaft

1992-1990	(5D)	
Ball Bearing		305AG[2]

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2003-1999		
Seal		3622S[2]
Repair Sleeve		KWK99169[2]

ALTERNATOR

1999-1990	65 Amp.	
Ball Bearing (Drive End)		303CC
Ball Bearing (Rear End)		201CC
1993-1990	Exc. Navajo	
Ball Bearing (Drive End)		303CC

CAMSHAFT SEAL**4 Cylinder**

2005-1990	1597cc./1.6L, 1839cc./1.8L	
Seal (RH)		223420[2]

6 Cylinder

2002-2000	2497cc./2.5L	
Seal		223012
1995-1990	2954/3.0L (DOHC)	
Seal (LH)		226510[2]
Seal (RH)		710338[2]
1991-1990	2954/3.0L (SOHC)	
Seal		1940[2]

CRANKSHAFT FRONT SEAL**Rotary**

1995-1990	1146cc./1.1L, 1308cc./1.3L (225mm Cl.)	
Seal Viton		2025
Repair Sleeve		KWK99169

4 Cylinder

2005-1991	1597cc./1.6L (From 2/2/91), 1839cc./1.8L	
Seal		710355
Repair Sleeve		KWK99145
2002-2000	1991cc./2.0L	
Seal Viton		2012V
1991-1990	1597cc./1.6L (To 2/1/91)	
Seal		223012
Repair Sleeve		KWK99114

6 Cylinder

2002-2000	2497cc./2.5L	
Seal Viton		2012V
1995-1990	2954cc./3.0L	
Seal		224660
Repair Sleeve		KWK99181

CRANKSHAFT REAR SEAL**Rotary**

1995-1990	1146cc./1.1L, 1308cc./1.3L (225mm Cl.)	
Seal Viton		226840

4 Cylinder

2002-1990	1489cc./1.5L, 1597cc./1.6L, 1839cc./1.8L	
Seal		228250
Repair Sleeve		KWK99328

6 Cylinder

1995-1990	2954cc./3.0L	
Seal		1019S
Repair Sleeve		KWK99298

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute					

FRONT WHEEL

FWD

2009-2008	Tribute, Tribute (Hybrid)	
Ball Bearing	.....	510072[2]
2009-2007	CX-7	
Ball Bearing	.....	510063[2]
2009-2007	CX-9	
Ball Bearing	.....	510063[2]
2006-2001	Tribute	
Hub Unit Bearing	.....	HA590286K[2] ⁶⁷
Ball Bearing	.....	510072[2] ²⁵
2006-2000	MPV	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1998-1990	MPV	
Hub Unit Bearing	.....	513131[2]

RWD

2009-1995	B2300, B2500, B3000, B4000	
Seal (Inner)	.....	9150S[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET2[2]
2006-2000	MPV	
Seal	.....	1932S[2]
Ball Bearing	.....	510010[2]
1998-1990	MPV	
Hub Unit Bearing	.....	513131[2]
1994-1992	B2300, B3000, B4000	
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]
1994-1991	Navajo	
Seal (Inner)	.....	6815[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]
1993-1992	B2200, B2600	
Seal (Inner)	.....	225225[2]
Set (Inner)	.....	SET5[2]
Bearing Assy (Outer)	.....	30205M[2]
1991-1990	B2000, B2200, B2600	
Seal (Inner)	.....	225225[2]
Set (Inner)	.....	SET5[2]
Bearing Assy (Outer)	.....	30205M[2]

4WD

2009-2008	Tribute, Tribute (Hybrid)	
Ball Bearing	.....	510072[2]
2009-2003	B3000, B4000 (4 Whl. ABS)	
Hub Unit Bearing	.....	SP450202[2]
2009-2001	B3000, B4000 (2 Whl. ABS)(From 6/22/00)	
Hub Unit Bearing	.....	515014[2]
2004-2001	Tribute	
Hub Unit Bearing	.....	HA590286K[2] ⁶⁷
Ball Bearing	.....	510072[2] ²⁵
2002-2000	B3000, B4000 (4 Whl. ABS)(From 6/22/00)	
Hub Unit Bearing	.....	SP450201[2] ⁴⁰
Sensor Kit	.....	SK450201[2] ¹⁶
2000	B2000, B3000, B4000 (4 Whl. ABS)	
Hub Unit Bearing (Thru		

6/21/00)	.....	515027[2]
2000	B3000, B4000 (2 Whl. ABS)	
Hub Unit Bearing		
(From 6/22/00)	.....	515014[2]
Hub Unit Bearing (Thru		
6/21/00)	.....	515026[2]
2000-1998	B2500	
Hub Unit Bearing	.....	515026[2]
1999-1998	B2000, B3000, B4000 (4 Whl. ABS)(Thru 6/21/00)	
Hub Unit Bearing	.....	515027[2]
1999-1998	B3000, B4000 (2 Whl. ABS)(Thru 6/21/00)	
Hub Unit Bearing	.....	515026[2]
1998-1997	MPV	
Ball Bearing	.....	510053[2]
1998-1997	MPV	
Ball Bearing	.....	510053[2]
1997-1994	B4000	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET37[2]
Set (Outer)	.....	SET37[2]
1996-1994	B2300, B3000	
Seal (Inner)	.....	8312S[2]
Set (Inner)	.....	SET45[2]
Set (Outer)	.....	SET45[2]
1996-1990	MPV	
Seal (Inner)	.....	1932S[2]
Ball Bearing (Inner)	.....	510010[2]
Seal (Outer)	.....	710225[2]
1995-1990	MPV	
Seal (Inner)	.....	1932S[2]
Ball Bearing (Inner)	.....	510010[2]
Seal (Outer)	.....	710225[2]
1994-1991	Navajo	
Seal (Inner)	.....	4250[2]
Set (Inner)	.....	SET37[2]
Set (Outer)	.....	SET37[2]
1993-1990	B2600	
Seal (Inner)	.....	710094[2]
Set (Inner)	.....	SET47[2]
Seal (Outer)	.....	710093[2]
Set (Outer)	.....	SET11[2]

AWD

2009-2007	CX-7	
Ball Bearing	.....	510063[2]
2009-2007	CX-9	
Ball Bearing	.....	510063[2]
2006-2005	Tribute	
Hub Unit Bearing	.....	HA590286K[2] ⁶⁷
Ball Bearing	.....	510072[2] ²⁵

REAR WHEEL

FWD

2009-2008	Tribute, Tribute (Hybrid)	
Ball Bearing	.....	510029[2]
2009-2007	CX-7	
Hub Unit Bearing	.....	HA590195[2] ²⁵
2009-2007	CX-9	
Hub Unit Bearing	.....	HA590041[2] ²⁵

¹⁶Obsolete
Snap Ring

²⁵New Item, Check For Availability

⁴⁰5 Stud.

⁶⁷Kit = Flg, Brg, Nut, &

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute (cont.)					

REAR WHEEL (cont.)**FWD (cont.)**

2006-2001	Tribute	
Ball Bearing	.....	510029[2]
2006-2000	MPV (ABS)	
Hub Unit Bearing	.....	513131[2]
2006-2000	MPV (Non-ABS)	
Hub Unit Bearing	.....	512270[2] ²⁵
1998-1996	MPV	
Seal	.....	710320[2]
Ball Bearing	.....	511027[2]

RWD

2009-1994	B2300	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2009-1994	B3000	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2009-1994	B4000	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2006-2004	MPV (Disc)	
Hub Unit Bearing	.....	513131[2]
2006-2000	MPV (Drum)	
Hub Unit Bearing	.....	512270[2] ²⁵
(Non-ABS)	.....	512270[2] ²⁵
Hub Unit Bearing	.....	513131[2]
(ABS)	.....	513131[2]
2001-1998	B2500	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
1998-1996	MPV	
Ball Bearing	.....	511027[2]
Seal	.....	710320[2]
1998-1990	MPV (Drum)	
Seal (Inner)	.....	224820[2]
Ball Bearing (Inner)	.....	307FF[2]
Seal (Outer)	.....	710150[2]
1994-1991	Navajo	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
1993-1990	B2200	
Seal (Inner)	.....	223550[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	1994[2]
1993-1990	B2600	
Seal (Inner)	.....	223550[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	1994[2]

4WD

2009-2008	Tribute, Tribute (Hybrid)	
Ball Bearing	.....	510029[2]

REAR WHEEL (cont.)**4WD (cont.)**

2009-1994	B2300	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2009-1994	B3000	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
2009-1994	B4000	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
Bearing & Seal Kit	.....	TRP1559TV[2] ¹⁹
2004-2001	Tribute	
Ball Bearing	.....	510029[2]
2001-1998	B2500	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ¹⁹
1998-1996	MPV	
Seal	.....	710320[2]
Ball Bearing	.....	511027[2]
1995-1990	MPV	
Seal (Inner)	.....	224820[2]
Seal (Outer)	.....	710150[2]
1993-1990	B2200	
Seal (Inner)	.....	223550[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	1994[2]
1993-1990	B2600	
Seal (Inner)	.....	223550[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	1994[2]
1993-1990	B2600	
Seal (Inner)	.....	223550[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	1994[2]

AWD

2009-2007	CX-7	
Hub Unit Bearing	.....	HA590193[2] ²⁵
2009-2007	CX-9	
Hub Unit Bearing	.....	HA590056[2] ²⁵
2006-2005	Tribute	
Ball Bearing	.....	510029[2]

4WD FRONT AXLE**Axle Shaft**

2006-2001	Tribute	
Seal Viton	.....	710429[2]

Differential Rebuild Kit

2007-1998	(Dana/Spicer 35IFS Axle)	
Kit	.....	DRK335
1997-1991	(Dana/Spicer 28IFS Axle)	
Kit	.....	DRK333

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute (cont.)					

4WD FRONT AXLE

Differential

2007-1998	(Dana/Spicer 35IFS Axle)
Cone/Cup	LM501349-LM501314[2]
1997-1991	(Dana/Spicer 28IFS Axle)
Cone/Cup	LM29749-LM29710[2]

Pinion

2007-1991	Seal Viton (Dana/Spice 35 Axle)	714675
	Seal (Dana/Spicer 28 Axle)	4244
	Cone/Cup (Inner) (Dana/Spicer 35 Axle)	HM88648-HM88610
	Cone/Cup (Inner) (Dana/Spicer 28 Axle)	M88048-M88010
	Cone/Cup (Outer) (All)	M86649-M86610
1998-1995	MPV	
	Seal	712011
	Bearing Assy (Inner)	32207M
	Bearing Assy (Outer)	32206M

Spindle Kit

1998-1991	(Dana/Spicer 35IFS Axle)	
Bearing & Seal Kit	SBK4[2]	³⁶
1997-1994	(Dana/Spicer 28IFS Axle)	
Bearing & Seal Kit	SBK2[2]	³⁴

Spindle

1997-1993	(Dana/Spicer 28IFS, 35IFS axle)
Seal (Inner)	710453[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722108[2]
Ndle Bearing Thrust (Outer)	NTA1625[2]
1996-1994	(Dana/Spicer 28IFS Axle)
Seal (Inner)	8314S[2]
Ndle Bearing (Inner)	SCE188[2]
Seal (Outer)	340836[2]

REAR AXLE

Axle Shaft

2008-2001	Seal Viton	710429[2]

Differential Rebuild Kit

2007-1994	Ford (7.5" R.G.)
Kit	DRK315
2007-1991	Ford (8.8" R.G.)
Kit	DRK311

Differential

2008-2001	Tribute
Cone/Cup	LM29749-LM29710[2]
2007-2003	Ford (7.5" R.G.)
Cone/Cup	LM29749-LM29710[2]
2007-1991	Ford (8.8" R.G.)
Set	SET36[2]

REAR AXLE (cont.)

Differential (cont.)

2002-1994	Ford (7.5" R.G.)
Cone/Cup	LM501349-LM501314[2]
1993-1990	(Exc. Ford Axle)
Bearing Assy	32008XM[2]

Pinion

2008-2001	Tribute
Cone/Cup (Inner)	M86649-M86610
Cone/Cup (Outer)	M88048-M88010
Seal	100552
2007-1991	(Ford 7.5", 8.8" R.G. Axles)
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010
1998-1990	B2600, MPV
Seal	712011
Bearing Assy (Inner)	30307M
Bearing Assy (Outer)	30306M
Repair Sleeve	KWK99157
1993-1990	B2000, B2200
Seal	1216N
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	32206M
Repair Sleeve	KWK99157

TRANSFER CASE REBUILD KIT

2003-1991	(MPV)
Kit	TRKFMZ230
1996-1990	Pickup
Kit	TRKFMZ220

TRANSFER CASE

Input Shaft

2008-1993	(Warner 1354)
Seal	710403
Ball Bearing	109L
Ndle Bearing (Pilot)	M18161
Repair Sleeve	KWK99166
1998-1990	(R5MX)
Seal	710284
Repair Sleeve	KWK99157
1993-1990	(R5MXD)
Ball Bearing	209BB
1992-1991	(Warner 1354)
Seal	4143
Ball Bearing	109L
Ndle Bearing (Pilot)	M18161

Front Output Shaft

2008-1993	(Warner 1354)
Seal	710403
Ball Bearing	206WB[2]
Repair Sleeve	KWK99166
1998-1990	(R5MX)
Seal	710283
1993-1990	(R5MXD)
Ball Bearing	309

³⁴Opt. Kit = Brg SCE148, Seal 8314S

³⁶Opt. Kit = Brg B2110, Seals 722108 & 722109, & Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute (cont.)					

TRANSFER CASE (cont.)**Front Output Shaft (cont.)**

1992-1991	(Warner 1354)
Seal	4143
Ball Bearing	206WB[2]

Rear Output Shaft

2007-1993	(Warner 1354)
Seal	710403
Ball Bearing	206WB
Repair Sleeve	KWK99166
Ndle Bearing (Pilot)	JH1612
1993-1990	(R5MXD)
Ball Bearing	106WB
1992-1991	(Warner 1354)
Seal	4143
Ball Bearing	206WB
Ndle Bearing (Pilot)	JH1612

Selector Shaft Seal/Man. Shaft

2007-1991	(Warner 1354)
Seal	330385

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1999-1990	(Jatco R4AEL)
Seal	224663
Repair Sleeve	KWK99181
1997-1991	(A4LD)
Seal	2658
1995-1990	(Jatco N4A, L4N71B)
Seal Viton	2025
Repair Sleeve	KWK99166

Rear Seal/Ext. Housing

2002-1991	(4R44E, A4LD)
Seal	2655

Selector Shaft Seal/Man. Shaft

2002-1991	(4R44E, A4LD)
Seal	7929S

5-SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2002-1997	(Ford 5R55E)
Seal	2655

Selector Shaft Seal/Man. Shaft

2008-1997	(Ford 5R55E)
Seal	7929S

CLUTCH**Pilot Bearing**

2002-1994	4 Cyl. 2.0L, 2.3L, 2.5L
Ndle Bearing	FC65354
2002-1994	6 Cyl. 3.0
Ndle Bearing	FC65354
2002-1991	6 Cyl. 4.0
Ndle Bearing	F33126
1991-1990	6 Cyl. 3.0
Ball Bearing	202SS

Release Bearing

1998	B2500 truck (Hyd. Mechanism)
Bearing Assy	614169
1998-1994	B3000 truck (Hyd. Mechanism)
Bearing Assy	614169
1998-1993	B4000 truck (Hyd. Mechanism)
Bearing Assy	614169
1995-1994	B2300 truck (Hyd. Mechanism)
Bearing Assy	614169
1993-1990	B2600
Bearing Assy	614079
1993-1990	B2200
Bearing Assy	614079

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2003-1990	B5V
Kit	TRKFMZ210
2002-1990	(M5R1)
Kit	TRK247
1993-1990	B2600 pickup
Kit	TRKFMZ210
1993-1990	B2200 (Dbl. Ball Frt. C/S Brg.)
Kit	TRKFMZ200
1990	B2200 (Single Ball Frt. C/S Brg.)
Kit	TRKFMZ120

Front Input Shaft

2002-1994	(M5R1)
Seal	1990
Repair Sleeve	KWK99106
1993-1990	(5HC)
Seal	1990
Ball Bearing	108A[2]
Repair Sleeve	KWK99106
1993-1990	(5E, 5TB)
Seal	1990
Ball Bearing	306L[2]
Repair Sleeve	KWK99106

Countershaft

1993-1990	(5HC)
Ball Bearing (Frt)	5205KLE[2]
1993-1990	(5E, 5TB)
Ball Bearing (Frt)	5205KLE[2]
Ball Bearing (Rr)	304WB[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute (cont.)					

5-SPEED MANUAL TRANSMISSION**Intermediate Shaft**

1993-1990 (5E, 5TB)	
Ball Bearing	306L[2]

Rear Output Shaft

2002-1994 (M5R1)(2WD)	
Seal	7692S
2002-1994 (M5R1)(4WD)	
Seal	1981
1993-1990 (5D)	
Seal	2443
Ball Bearing	305AG[2]

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2001-2000 (GF4A-EL)	
Seal (LH)	223543
Seal (RH)	2007N
Repair Sleeve	KWK99139

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2002-2001 (C4DE)	
Seal (LH)	3622S
Repair Sleeve	KWK99169

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2002-2001 (G5M)	
Seal	1990
Set	SET32[2]
Repair Sleeve	KWK99106

Output Shaft

2002-2001 (G5M)	
Seal	2007N[2]
Repair Sleeve	KWK99139

ALTERNATOR

1993-1990 Exc. Navajo	
Ball Bearing (Drive End)	303CC

DRIVESHAFT SUPPORT

1995-1990 (.9843" Brg. I.D.)	
Ball Bearing	205F[2]
1994 B2300	
Hanger Bearing Assy	HBD206FF[2]
1994 B3000	
Hanger Bearing Assy	HBD206FF[2]
1994 B4000	
Hanger Bearing Assy	HBD206FF[2]
1992-1990 B2200	
Hanger Bearing Assy	HB29[2]

POWER STEERING**Input Shaft**

2002-1995 B2300, B3000, B4000	
Seal	471645
Ndle Bearing	FC65753[2]

Pump Shaft

2002 B2300	
Seal	8773S
2002 B3000, B4000 (Ford Pump)	
Seal	8773S

MANUAL STEERING**Sector Shaft**

1995-1994 B2300	
Seal	223010

Worm Shaft

1995-1994 B2300	
Seal	221922

OIL PUMP**6 Cylinder**

1998-1990 2954/3.0L	
Seal	710264

CAMSHAFT SEAL**4 Cylinder**

2001-2000 2492cc/2.5L	
Seal	2955

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004-2001 121/2.0L (DOHC), 140/2.3L (DOHC)	
Seal	3771
Repair Sleeve	KWK99139
2001-1994 140/2.3L, 150/2.5L	
Seal	2955
1995-1990 2606cc/2.6L	
Seal	224460
Repair Sleeve	KWK99181
1993-1990 1998cc/2.0L, 2184cc/2.2L	
Seal	223420

6 Cylinder

2007-2000 155/2.5L (DOHC), 181/3.0L (DOHC)	
Seal	482041N
Repair Sleeve	KWK99187
2007-1994 2954/3.0L	
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
2004-1991 244/4.0L	
Seal	473560N
Repair Sleeve	KWK99166

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MAZDA - SUV, Truck - B2200, B2300, B2500, B2600, B3000, B4000, CX-7, CX-9, MPV, Navajo, Tribute (cont.)

CRANKSHAFT FRONT SEAL (cont.)

6 Cylinder (cont.)

1993-1990 2954cc/3.0L
 Seal 224660
 Repair Sleeve KWK99181

CRANKSHAFT REAR SEAL

4 Cylinder

2005-1994 2.0L, 2.3L, 2.5L
 Seal Viton 3909
 Seal PTFE H/D 5277
 Repair Sleeve KWK99363
 1998-1990 2555cc/2.6L
 Seal Viton 228005
 Repair Sleeve KWK99315
 1995-1990 1998cc/2.0L, 2184cc/2.2L,
 2606cc/2.6L
 Seal 229010
 Repair Sleeve KWK99354

6 Cylinder

2008-1991 4016/4.0L
 Seal Viton 3393
 Seal PTFE H/D 5288
 Repair Sleeve KWK99237
 2007-1994 3.0 6 Cyl.
 Seal 3772

CRANKSHAFT REAR SEAL (cont.)

6 Cylinder (cont.)

2006-2000 2.5L, 3.0 L
 Seal Viton 3909
 Seal PTFE H/D 5277
 Repair Sleeve KWK99362
 1993-1990 2954cc/3.0L
 Seal 1019S
 Repair Sleeve KWK99298

MERCEDES BENZ - 100 SERIES

FRONT WHEEL

RWD

1993-1990 100 Ser. (Exc. 2.3L 16 Valve)
 Set (Inner) SET6[2]
 Set (Outer) SET1[2]

REAR WHEEL

RWD

1993-1990 100 Ser.
 Ball Bearing 513130[2]

DRIVESHAFT SUPPORT

1993-1990
 Ball Bearing 105CC

MERCEDES BENZ - 200 SERIES

FRONT WHEEL

RWD

2007-1994
 Seal (Inner) SL260011[2]
 Set (Inner) SET17[2]
 Set (Outer) SET12[2]

FRONT WHEEL

AWD

2009-2003
 Ball Bearing 513130[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCEDES BENZ - 200 SERIES (cont.)**REAR WHEEL****RWD**

2007-1994 C220, C230, C240, C240
4-MATIC, C280, C280
4-MATIC, SLK230, SLK280
Ball Bearing 513130[2]

DRIVESHAFT SUPPORT

1997-1994 (25mm bearing)
Ball Bearing 105CC
1997-1994 (30mm bearing)
Ball Bearing 106CC

MERCEDES BENZ - 300 SERIES**FRONT WHEEL****RWD**

2007-2003 CLK320, CLK350, C32 AMG,
C320, C320 4-MATIC, C350,
C350 4MATIC, SLK32 AMG,
SLK320, SLK350
Seal (Inner) SL260011[2]
Set (Inner) SET17[2]
Set (Outer) SET12[2]
2007-2003 E320, E350
Cone/Cup (Inner) XAA32008X-Y32008X[2]
Set (Outer) SET12[2]
2002-1996 CLK320, C32 AMG, C320, C36
AMG, E320, SLK32 AMG,
SL320, SLK320
Seal (Inner) SL260011[2]
Set (Inner) SET17[2]
Set (Outer) SET12[2]
1999-1996 E300
Cone/Cup (Inner) XAA32008X-Y32008X[2]
Set (Outer) SET2[2]
1999-1992 S320, S350, 300SD, 300SE,
300SEL
Cone/Cup (Inner) XAA32008X-Y32008X[2]
Bearing Assy (Outer) 33205[2]
1995 E300
Set (Inner) SET17[2]
Set (Outer) SET2[2]
1995-1993 300D, E, TE, E320 Sedan,
300CE Sedan
Set (Inner) SET6[2]
Set (Outer) SET2[2]
1995-1993 E320, 300CE Convertible
Set (Inner) SET17[2]
Set (Outer) SET12[2]
1995-1990 C36, SL320, 300SL
Seal (Inner) SL260011[2]
Set (Inner) SET17[2]
Set (Outer) SET12[2]
1992-1990 300CE, D, E, TD, TE
Set (Inner) SET6[2]
Set (Outer) SET2[2]

FRONT WHEEL (cont.)**RWD (cont.)**

1991-1990 300CDT, SD, SDL, SE, SEL,
350SD, SDL
Seal (Inner) 1960[2]
Set (Inner) SET5[2]
Set (Outer) SET3[2]

AWD

2009-2007 E Class
Ball Bearing 510083[2]
2009-2000 C Class
Ball Bearing 513130[2]

REAR WHEEL**RWD**

2006 S350
Ball Bearing 510083[2]
2005-2003 CLK320, C32 AMG, C320,
SLK32 AMG, SLK320, SLK350
Ball Bearing 513150[2]
2002-1992 300 Ser. (Exc. Convertible)
Ball Bearing 513130[2]
1999-1998 E320 (Wagon)
Ball Bearing 510083[2]
1993-1990 300TE
Bearing Assy JXC25469C-92UA3[2]
1991-1990 300CE, 300D, 300E, 300SL,
300TD, 350SDL
Ball Bearing 513130[2]
1991-1990 300SDL, 300SE, 300SEL
Seal (Inner) 1174S[2]
Cone/Cup (Inner) LM300849-LM300811[2]
Cone/Cup (Outer) LM503349A-LM503310[2]

DRIVESHAFT SUPPORT

1997-1994
Ball Bearing 106CC
1993-1990
Ball Bearing 106CC

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCEDES BENZ - 400 SERIES**FRONT WHEEL****RWD**

2003-1998	CLK430, C43, E430
Seal (Inner)	SL260011[2]
Set (Inner)	SET17[2]
Set (Outer)	SET12[2]
1997-1992	S420, 400SE, 400SEL
Cone/Cup (Inner)	XAA32008X-Y32008X[2]
Bearing Assy (Outer)	33205[2]
1995-1992	400E, E420
Set (Inner)	SET17[2]
Set (Outer)	SET12[2]
1991-1990	
Seal (Inner)	1960[2]
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]

AWD

2006-2003	E Class
Ball Bearing	510083[2]
2002-2000	E Class
Ball Bearing	513130[2]

REAR WHEEL**RWD**

2003-1999	CLK430, C43
Ball Bearing	513130[2]
1997-1992	
Ball Bearing	513130[2]

REAR WHEEL (cont.)**RWD (cont.)**

1991-1990	
Seal (Inner)	1174S[2]
Cone/Cup (Inner)	LM300849-LM300811[2]
Cone/Cup (Outer)	LM503349A-LM503310[2]

DRIVESHAFT SUPPORT**1997-1990**

Ball Bearing	106CC

MERCEDES BENZ - 500 SERIES**FRONT WHEEL****RWD**

2005	SLK55 AMG
Set (Inner)	SET17[2]
Set (Outer)	SET12[2]
2005-2004	E500, E55, SL500, SL55
Bearing Assy (Inner)	32008XM[2]
Set (Outer)	SET12[2]
2005-2004	G500, G55
Bearing Assy (Inner)	32010X[2]
Bearing Assy (Outer)	32011XM[2]
2002-2000	CL500, CLK500, CL55 AMG, CLK55 AMG, E500, 500E, SL500, 500SL, SLK55 AMG
Seal (Inner)	SL260011[2]
Set (Inner)	SET17[2]
Set (Outer)	SET12[2]
1999-1992	S500, 500SEC, 500SEL
Cone/Cup (Inner)	XAA32008X-Y32008X[2]
Bearing Assy (Outer)	33205[2]
1997-1990	E500, SL500, 500E, 500SL
Seal (Inner)	SL260011[2]
Set (Inner)	SET17[2]
Set (Outer)	SET12[2]
1991-1990	500SEC, 500SEL, 560SEC, 560SEL
Set (Inner)	SET5[2]
Set (Outer)	SET3[2]

AWD

2006-2003	E & S Class
Ball Bearing	510083[2]

REAR WHEEL**RWD**

2005-1992	CL500, CLK500, CL55 AMG, CLK55 AMG, E500, 500E, SL500, 500SL, SLK55 AMG
Ball Bearing	513130[2]
1991-1990	500SL
Ball Bearing	513130[2]
1991-1990	500SEC, 500SEL, 560SEC, 560SEL, 560SL
Seal (Inner)	1174S[2]
Cone/Cup (Inner)	LM300849-LM300811[2]
Cone/Cup (Outer)	LM503349A-LM503310[2]

DRIVESHAFT SUPPORT**1997-1990**

Ball Bearing	106CC

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCEDES BENZ - 600 SERIES**FRONT WHEEL****RWD**

2005-2004	SL600	
Bearing Assy (Inner)	.....	32008XM[2]
Set (Outer)	.....	SET12[2]
2002-1993	600SL, SL600	
Seal (Inner)	.....	SL260011[2]
Set (Inner)	.....	SET17[2]
Set (Outer)	.....	SET12[2]
1999-1992	600SEL, CL600, S600	
Bearing Assy (Inner)	.....	32008XM[2]
Bearing Assy (Outer)	.....	33205[2]

REAR WHEEL**RWD**

2005-2001	CL600, CL65 AMG	
Ball Bearing	.....	513130[2]
1998-1993	600SL, SL600	
Ball Bearing	.....	513130[2]

DRIVESHAFT SUPPORT**1997-1992**

Ball Bearing		106CC

MERCEDES BENZ - <ALL Non-Wheel End Systems>**REAR AXLE****Differential**

1997-1994	500 Ser.	
Cone/Cup	.....	387AS-382A[2]
1997-1992	600 Ser.	
Cone/Cup	.....	387AS-382A[2]
1993-1992	400SEL, 400SE	
Cone/Cup	.....	387AS-382A[2]
1993-1990	400E, 420SEL	
Cone/Cup	.....	LM806649-LM806610[2]
1993-1990	500 Ser.	
Cone/Cup	.....	LM806649-LM806610[2]

Pinion

1997-1992	600 Ser.	
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM88649-HM88610
1997-1990	500 Ser.	
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM88649-HM88610
1993-1992	400SEL, 400SE	
Cone/Cup (Inner)	.....	HM803149-HM803110
Cone/Cup (Outer)	.....	HM88649-HM88610
1993-1990	400E, 420SEL	
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M86649-M86610
1993-1990	190 Ser.	
Cone/Cup (Inner)	.....	HM88649-HM88610
Cone/Cup (Outer)	.....	M84548-M84510

CLUTCH**Release Bearing**

1991-1990	260E	
Bearing Assy	.....	614125
1991-1990	190 Ser.	
Bearing Assy	.....	614125

CLUTCH (cont.)**Release Bearing (cont.)**

1991-1990	300 Ser.	
Bearing Assy	.....	614125
1991-1990	280SE, (W126 Ch.)	
Bearing Assy	.....	614125
1990	240D, TD	
Bearing Assy	.....	614125

ALTERNATOR

1992-1990	(Bosch 90 Amp.)	
Ball Bearing (Drive End)	.....	303CC
1992-1990	(Bosch 55 Amp.)	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201S
1992-1990	(Bosch 65 Amp.)	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC
1992-1990	(Bosch 70 Amp.)	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC
1992-1990	(Motorola 55 Amp.)	
Ball Bearing (Drive End)	.....	203FF
1990	(Bosch 80 Amp.)	
Ball Bearing (Drive End)	.....	303CC

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004-2003	1796cc./1.8L	
Seal	.....	710289
Repair Sleeve	.....	KWK99177
2003-1994	2199cc/2.2L, 2295cc/2.3L	
Seal	.....	710289
Repair Sleeve	.....	KWK99177
1993-1991	2298cc/2.3L	
Seal	.....	710289
Repair Sleeve	.....	KWK99177

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCEDES BENZ - <ALL Non-Wheel End Systems> (cont.)**CRANKSHAFT FRONT SEAL****6 Cylinder**

1999-1994 2799cc/2.8L, 2696cc/3.0L
(Dsl.), 3199cc/3.2L (DOHC)

Seal 710289

Repair Sleeve KWK99177

1993-1990 2599cc/2.6L, 2797cc/2.8L,
2962cc/3.0L, 2997cc/3.0L,
3199cc/3.2L

Seal 710289

Repair Sleeve KWK99177

8 Cylinder

2001-1990 4196cc/4.2L(DOHC),
4973/5.0L(DOHC)

Seal 710289

Repair Sleeve KWK99177

12 Cylinder

1994-1992 5987cc/6.0L

Seal 710289

Repair Sleeve KWK99177

CRANKSHAFT REAR SEAL**4 Cylinder**

2003-1994 1796cc/1.8L, 2197cc/2.2L,
2295cc/2.3L

Seal 710288

6 Cylinder

1999-1990 2599cc/2.6L, 2797cc/2.8L,
2962cc/3.0L, 2997cc/3.0L,
3199cc/3.2L

Seal 710288

CRANKSHAFT REAR SEAL**8 Cylinder**

2008-1990 4966cc/5.0L, 4973cc/5.0L,
5547cc/5.6L

Seal Viton 710290

Repair Sleeve KWK99393

1999-1995 4196cc/4.2L

Seal Viton 710290

Repair Sleeve KWK99393

12 Cylinder

1999-1992 5987cc/6.0L

Seal 710288

MERCEDES BENZ - SUV - G500, ML320, ML350, ML500, ML55 AMG**FRONT WHEEL****4WD**

2006-1998 ML Series

Ball Bearing 510083[2]

2005-2002 G500, G55

Bearing Assy (Inner) 32010X[2]

Bearing Assy (Outer) 32011XM[2]

REAR WHEEL**RWD**

2008-1998 G500, G55

Seal 710468[2]

Bearing Assy 516010[2]²⁵

2005-1998 ML Series

Ball Bearing 510083[2]

²⁵New Item, Check For Availability

MERCURY - FRONT DRIVE - Capri**FRONT WHEEL****FWD**

1994-1991	
Seal (Inner)	4990[2]
Seal (Outer)	710323[2]
Set	SET11[2]

REAR WHEEL**FWD**

1994-1991	
Seal (Inner)	1213N[2]
Set (Inner)	SET8[2]
Set (Outer)	SET2[2]

CLUTCH**Pilot Bearing**

1994-1991	
Ball Bearing	202SS

Release Bearing

1994-1991	(Exc. Turbo)
Bearing Assy	614128
1994-1991	(Turbo)
Bearing Assy	614079

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1992-1991	(4HAT G)
Bearing Assy	32009XM[2]

Torque Converter / Frt Pump

1992-1991	(4HAT G)
Seal	710446[2]

Input Shaft

1994-1991	
Seal	710446
Repair Sleeve	KWK99266

Output Shaft

1994-1991	(4HAT G)
Seal (LH)	223543
Seal (RH)	2007N
Repair Sleeve	KWK99139[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1994-1991	(Exc. Turbo)
Set	SET17[2]
1994-1991	(Turbo)
Bearing Assy	32008XM[2]

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1994-1991	(Exc. Turbo)
Seal	222430[2]
Repair Sleeve	KWK99098
1994-1991	(Turbo)
Seal (Outer)	1990[2]
Set (Outer)	SET32[2]
Repair Sleeve	KWK99106

Output Shaft

1994-1991	
Seal (LH)	223543
Seal (RH)	2007N
Repair Sleeve	KWK99139[2]

ALTERNATOR

1994-1991	(Bosch 85 Amp.)
Ball Bearing (Drive End)	303CC
1994-1991	(Bosch 85 Amp.)
Ball Bearing (Rear End)	201S
1994-1991	(Mitsubishi 70 Amp.)
Ball Bearing (Drive End)	303CC

CAMSHAFT SEAL**4 Cylinder**

1994-1991	1597cc/1.6L
Seal	223420[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1991	1597cc/1.6L, (From 12/1/90)
Seal	710355
1991	1597cc/1.6L, (Thru 12/1/90)
Seal	223012
Repair Sleeve	KWK99114

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1991	1597cc/1.6L, (From 12/1/90)
Seal	228250
Repair Sleeve	KWK99328

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCURY - FRONT DRIVE - Cougar**FRONT WHEEL****FWD**

2002-1999

Ball Bearing 510029[2]

REAR WHEEL**FWD**

2002-1999

Hub Unit Bearing 512024[2]

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2002-1999

Seal 3622S[2]

Repair Sleeve KWK99169[2]

CAMSHAFT SEAL**4 Cylinder**

2002-1999 121/2.0L (DOHC)

Seal 3774S

6 Cylinder

2002-1999 2450cc/2.5L

Seal 471651

Repair Sleeve KWK99106

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1999 121/2.0/L (DOHC)

Seal Viton 713771

Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder**

2002-1999 155/2.5L

Seal 482041N

Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**4 Cylinder**

2002-1999 121/2.0L

Seal 3772

Seal PTFE H/D (Opt) 5287

6 Cylinder

2002-2000 2450cc/2.5L

Seal Viton 3909

Seal PTFE H/D (Opt) 5277

Repair Sleeve KWK99363

MERCURY - FRONT DRIVE - Mystique**FRONT WHEEL****FWD**

2000-1995

Ball Bearing 510029[2]

REAR WHEEL**FWD**

2000-1995

Hub Unit Bearing 512024[2]

CLUTCH**Release Bearing**

2000-1995

Bearing Assy 614128

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2000-1995 (4EAT F)

Set SET17[2]

4-SPEED AUTOMATIC TRANSAXLE**(cont.)****Differential (cont.)**

2000-1995 (AX4, AXOD)

Ball Bearing 208[2]

1997-1995 (4EAT G)

Bearing Assy 32008XM[2]

Torque Converter / Frt Pump

2000-1995 (4EAT G, 4HAT G)

Seal 710446

2000-1995 (AX4, AXOD)

Seal 4189H

2000-1995 (CD4E)

Seal 4635V

MERCURY - FRONT DRIVE - Mystique (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

2000-1995	(4EAT G, 4HAT G)	
Seal (LH)	.....	223543
Seal (RH)	.....	2007N
Repair Sleeve	.....	KWK99139[2]
2000-1995	(AX4, AXOD)	
Seal	.....	3622S[2]
Repair Sleeve	.....	KWK99169[2]

5-SPEED MANUAL TRANSAXLE**Differential**

2000-1995	(Mazda F52)	
Set	.....	SET17[2]

Input Shaft

2000-1995	(Mazda F52)	
Seal	.....	222430
Repair Sleeve	.....	KWK99098

Output Shaft

2000-1995	(Mazda F52)	
Seal (LH)	.....	223543
Seal (RH)	.....	2007N
Repair Sleeve	.....	KWK99139[2]

Selector Shaft Seal/Man. Shaft

2000-1995		
Seal	.....	221620

CAMSHAFT SEAL**4 Cylinder**

2000-1995	121/2.0/L	
Seal	.....	3774S
Repair Sleeve	.....	KWK99169

6 Cylinder

2000-1995	2450cc/2.5L	
Seal	.....	471651
Repair Sleeve	.....	KWK99106

CRANKSHAFT FRONT SEAL**4 Cylinder**

2000-1995	121/2.0/L	
Seal Viton	.....	713771
Repair Sleeve	.....	KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder**

2000-1995	2540cc/2.5L (DOHC)	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL**4 Cylinder**

2000-1995	121/2.0/L	
Seal	.....	3772
Seal PTFE H/D (Opt)	.....	5287

6 Cylinder

2000-1995	2540cc/2.5L	
Seal Viton	.....	3909
Repair Sleeve	.....	KWK99363
Seal PTFE H/D	.....	5277

MERCURY - FRONT DRIVE - Sable**FRONT WHEEL****FWD**

2009-2008		
Hub Unit Bearing	.....	HA590028[2] ²⁵
2005-1996		
Hub Unit Bearing	.....	513100[2]

FRONT WHEEL (cont.)**FWD (cont.)**

1995-1991	(From 2/1/91)	
Set	.....	SET49[2]
Hub Unit Bearing (Opt)	.....	520100[2] ⁶⁵

²⁵New Item, Check For Availability⁶⁵Kit = Nut, Studed Spindle, Bearing, Snap Ring

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCURY - FRONT DRIVE - Sable (cont.)**FRONT WHEEL (cont.)****FWD (cont.)**

1991-1990 (Thru 1/31/91)	
Set	SET49[2]
Hub Unit Bearing	520000[2] ⁶⁷

AWD

2009-2008	
Hub Unit Bearing	HA590028[2] ²⁵

REAR WHEEL**FWD**

2009-2008	
Hub Unit Bearing	512299[2] ²⁵
2005 (ABS)(Disc)	
Hub Unit Bearing	HA590038[2] ²⁵
2005-2001 (ABS)(Drum)	
Hub Unit Bearing	512163[2]
2005-2001 (Non-ABS)(Drum)	
Hub Unit Bearing	512164[2]
2004-1993 (Disc)	
Hub Unit Bearing	512107[2]
2000 (ABS)(Drum)	
Hub Unit Bearing	512162[2]
2000-1990 (Non-ABS)(Drum)	
Hub Unit Bearing	512106[2]
1992-1990 (Disc)	
Hub Unit Bearing	512105[2] ¹⁶

AWD

2009-2008	
Hub Unit Bearing	HA590029[2] ²⁵

CLUTCH**Pilot Bearing**

1993-1990	
Ball Bearing	202SS

Release Bearing

1993-1990	
Bearing Assy	614060
Bearing Assy	614118

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1990 (AX4, AXOD)	
Ball Bearing	208[2]

Torque Converter / Frt Pump

2005-1990 (AX4, AXOD)	
Seal	4189H

4-SPEED AUTOMATIC TRANSAXLE**Input Shaft**

2004-1992 (AXOD, AXODE, AX4N, AX4S)	
Seal	4189H
1992-1991 (Exc. AXOD)	
Seal	4539H
Repair Sleeve	KWK99235

Output Shaft

2005-1990	
Seal	3622S[2]
Repair Sleeve	KWK99169[2]

Manual Shaft

1992-1991 (Exc. AXOD)	
Seal	342517
Repair Sleeve	KWK99101

ALTERNATOR

1991-1990 (Motorcraft)	
Ball Bearing (Drive End)	203FF
1991-1990 (Motorcraft)	
Ball Bearing (Rear End)	MNJ471S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008 213/3.5L	
Seal	482041N
Repair Sleeve	KWK99187
2005-1996 182/3.0L (DOHC)	
Seal	482041N
Repair Sleeve	KWK99187
2005-1990 182/3.0L (OHV)	
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187
1995-1990 232/3.8L	
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL**6 Cylinder**

2005-1996 182/3.0L (DOHC)	
Seal Viton	3909
Seal PTFE H/D (Opt)	5277
Repair Sleeve	KWK99363
2005-1990 182/3.0L (OHV)	
Seal	3772
Seal PTFE H/D (Opt)	5287
1995-1990 232/3.8L	
Seal Viton	3909
Seal PTFE H/D (Opt)	5277
Repair Sleeve	KWK99363

¹⁶Obsolete²⁵New Item, Check For Availability⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCURY - FRONT DRIVE - Tracer

FRONT WHEEL

FWD

1999-1991	
Seal	1932S[2]
Ball Bearing	510013[2]

REAR WHEEL

FWD

1999-1994	(Disc)
Hub Unit Bearing	512161[2]
1999-1994	(Drum)
Hub Unit Bearing	
(Non-ABS)	513030[2]
Hub Unit Bearing	
(ABS)	512161[2]
1993-1991	
Hub Unit Bearing	513030[2]

CLUTCH - 4 CYLINDER

Pilot Bearing

1999-1997	1998cc/2.0L
Ndle Bearing	FC65354
1996-1991	113/1.8L (DOHC)
Ball Bearing	202SS
1996-1991	116/1.9L
Ndle Bearing	FC65354

CLUTCH

Release Bearing

1999-1997	1998cc/2.0L
Bearing Assy	614155
1996-1991	113/1.8L (DOHC)
Bearing Assy	614079
1996-1991	116/1.9L
Bearing Assy	614128

4-SPEED AUTOMATIC TRANSAXLE

Differential

1999-1991	(AX4, AXOD)
Ball Bearing	208[2]

Torque Converter / Frt Pump

1999-1991	(AX4, AXOD)
Seal	4189H

Output Shaft

1999-1991	
Seal (LH)	223543
Seal (RH)	2007N
Repair Sleeve	KWK99139[2]

5-SPEED MANUAL TRANSAXLE

Differential

1999-1991	(Mazda F52)
Set	SET17[2]
1994-1990	(MTX III)
Set	SET45[2]

Input Shaft

1999-1991	(Mazda F52)
Seal	222430
1994-1990	(MTX III)
Seal	3638
Cone/Cup	LM67049A-LM67010[2]
Repair Sleeve	KWK99112

Output Shaft

1999-1991	(Mazda F52)
Seal (LH)	223543
Seal (RH)	2007N
Repair Sleeve	KWK99139[2]
1994-1990	(MTX III)
Seal	3622S[2]
Set	SET30[2] ²
Repair Sleeve	KWK99169[2]

Selector Shaft Seal/Man. Shaft

1996-1991	(Mazda G5M)
Seal	221620
1994-1990	(MTX III)
Seal Viton	710274

ALTERNATOR

1991-1990	(Motorcraft)
Ball Bearing (Drive End)	203FF
1991-1990	(Motorcraft)
Ball Bearing (Rear End)	MNJ471S

CAMSHAFT SEAL

4 Cylinder

1999-1991	116/1.9L, 122/2.0L
Seal	3774S
Repair Sleeve	KWK99169
1996-1991	1839cc/1.8L
Seal	223420

CRANKSHAFT FRONT SEAL

4 Cylinder

1999-1997	122/2.0L
Seal	3771
Repair Sleeve	KWK99139
1996-1991	116/1.9L
Seal	3771
Repair Sleeve	KWK99139
1996-1991	1839cc/1.8L
Seal	710355
Repair Sleeve	KWK99145

CRANKSHAFT REAR SEAL

4 Cylinder

1999-1991	116/1.9L, 122/2.0L
Seal	3772
Seal PTFE H/D (Opt)	5287
1996-1991	1839cc/1.8L
Seal	228250
Repair Sleeve	KWK99328

²Non-Cancellable/Non-Returnable

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCURY - AWD - Milan**FRONT WHEEL****FWD**

2009-2006
Ball Bearing 510010[2]

AWD

2009-2006
Ball Bearing 510010[2]

REAR WHEEL**FWD**

2009-2006 (ABS)
Hub Unit Bearing HA590100[2]²⁵
2009-2006 (Non-ABS)
Hub Unit Bearing HA590095[2]²⁵

AWD

2009-2007
Ball Bearing 510010[2]

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008-2006
Repair Sleeve KWK99139[2]
Seal 2007N[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2006 182/3.0L (DOHC)
Seal 482041N
Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2006 182/3.0L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99362

MERCURY - AWD - Montego**FRONT WHEEL****FWD**

2007-2005
Hub Unit Bearing HA590028[2]²⁵

AWD

2007-2005
Hub Unit Bearing HA590028[2]²⁵

REAR WHEEL**FWD**

2007-2005
Hub Unit Bearing 512299[2]²⁵

AWD

2007-2005
Hub Unit Bearing HA590029[2]²⁵

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-2005 3.0L
Seal 482041N
Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-2005 183/3.0L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99362

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCURY - AWD - Topaz

FRONT WHEEL

FWD

1994-1990
 Set SET39[2]
 Hub Unit Bearing 518503[2]⁶⁵

AWD

1994-1990
 Set SET39[2]
 Hub Unit Bearing 518503[2]⁶⁵

REAR WHEEL

FWD

1994-1990
 Seal (Inner) 473677[2]
 Set (Inner) SET8[2]
 Set (Outer) SET12[2]

AWD

1991-1990
 Bearing Assy 513001[2]^z

REAR AXLE

Axle Shaft

1991-1990
 Seal 3543[2]
 Repair Sleeve KWK99139[2]

TRANSFER CASE

Input Shaft

1991-1990 (Spicer)
 Set SET2
 Ball Bearing (Pilot) 206WB

Front Output Shaft

1991-1990 (Spicer)
 Cone/Cup M86647-M86610[2]

Rear Output Shaft

1991-1990 (Spicer)
 Cone/Cup M86649-M86610
 Ndle Bearing (Pilot) SCH78

CLUTCH

Release Bearing

1994-1990
 Bearing Assy 614060
 Bearing Assy 614118

3-SPEED AUTOMATIC TRANSAXLE

Differential

1994-1990 (ATX)
 Ball Bearing 208[2]

3-SPEED AUTOMATIC TRANSAXLE

Torque Converter

1994-1990 (ATX)
 Seal 4539H[2]
 Repair Sleeve KWK99235

Input Shaft

1994-1991 (ATX)
 Seal 4539H
 Repair Sleeve KWK99235

Output Shaft

1994-1990 (ATX)
 Seal 3622S[2]
 Repair Sleeve KWK99169[2]

Manual Shaft

1994-1990 (ATX)
 Seal 342517
 Repair Sleeve KWK99101

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

1994-1992 (AXODE)
 Seal 3622S[2]
 Repair Sleeve KWK99169[2]

5-SPEED MANUAL TRANSAXLE

Differential

1994-1990 (MTX III)(2 pinion)
 Set SET45[2]
 1994-1990 (MTX III)(4 pinion)
 Set SET37[2]

Input Shaft

1994-1990 (MTX III)
 Seal 3638
 Cone/Cup LM67049A-LM67010[2]
 Repair Sleeve KWK99112

Countershaft

1994-1990 (MTX III)
 Set SET16[2]

Output Shaft

1994-1990 (MTX III)
 Seal 3622S[2]
 Set SET30[2]^z
 Repair Sleeve KWK99169[2]

Selector Shaft Seal/Man. Shaft

1994-1990 (MTX III)
 Seal Viton 710274
 Repair Sleeve KWK99059

^zNon-Cancellable/Non-Returnable

⁶⁵Kit = Nut, Studded Spindle, Bearing, Snap Ring

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCURY - AWD - Topaz (cont.)**ALTERNATOR**

1991-1990	Mazda 65 Amp.	
	Ball Bearing (Drive End)	303CC
1991-1990	(Motorcraft)	
	Ball Bearing (Drive End)	203FF
1991-1990	(Motorcraft)	
	Ball Bearing (Rear End)	MNJ471S

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1990	140/2.3L	
	Seal	714075
	Repair Sleeve	KWK99177

6 Cylinder

1994-1992	182/3.0L (OHV)	
	Seal (Frt Entry)	2692
	Seal (Rr Entry)	2942
	Repair Sleeve	KWK99187
	Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1990	140/2.3L	
	Seal	3772
	Seal PTFE H/D (Opt)	5287

6 Cylinder

1994-1992	183/3.0L	
	Seal	3772
	Seal PTFE H/D (Opt)	5287

MERCURY - REAR DRIVE - Grand Marquis, Marauder**FRONT WHEEL****RWD**

2009-2004	Grand Marquis, Marauder	
	Hub Unit Bearing	513230[2] ²⁵
2003	Grand Marquis, Marauder	
	Hub Unit Bearing	513196[2]
2002-1997	(From 4/1/97)	
	Hub Unit Bearing	513202[2]
1997-1992	(Thru 3/31/97)	
	Hub Unit Bearing	513104[2]
1991-1990		
	Seal (Inner)	6815[2]
	Set (Inner)	SET11[2]
	Set (Outer)	SET12[2]

REAR WHEEL**RWD**

2009-1990		
	Seal	8660S[2]
	Cylindrical Bearing	5707[2]
	Bearing & Seal Kit	TRP1563TAV[2] ¹⁹

REAR AXLE**Differential Rebuild Kit**

2008-1990	(8.5", 8.8" R.G.)	
	Kit	DRK311

REAR AXLE**Differential**

2008-1990	(8.5", 8.8" R.G.)	
	Set	SET36[2]

Pinion

2008-1999	(8.8" R.G.)	
	Seal Viton	3604
	Cone/Cup (Inner)	M802048-M802011
	Cone/Cup (Outer)	M88048-M88010
1998-1990	(7.5", 8.5", 8.8" R.G.)	
	Seal Viton	3604
	Cone/Cup (Inner)	M802048-M802011
	Cone/Cup (Outer)	M88048-M88010
	Repair Sleeve	KWK99181

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-1992	(AODE, 4R70W)	
	Seal	710447
	Repair Sleeve	KWK99199
1992-1990	(AOT, AOD)	
	Seal	331107N[2]
	Repair Sleeve	KWK99199

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal²⁵New Item, Check For Availability

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

MERCURY - REAR DRIVE - Grand Marquis, Marauder (cont.)

4-SPEED AUTOMATIC TRANSMISSION

Rear Seal/Ext. Housing

2002-1995 (AODE)	
Seal	4764[2]
1994-1992 (AODE)	
Seal	7692S[2]
Seal Kit	5202 ⁶⁴
1991-1990 (AOT, AOD)(long boot)	
Seal	7692S[2]
Seal Kit	5202 ⁶⁴
1991-1990 (AOT, AOD)(short boot)	
Seal	2194[2]

Selector Shaft Seal/Man. Shaft

2007-1990	
Seal	7929S
Repair Sleeve	KWK99076

4-SPEED MANUAL TRANSMISSION

Selector Shaft Seal/Man. Shaft

2004-2003 (AODE W)	
Seal	7929S

ALTERNATOR

1991-1990 (Motorcraft)	
Ball Bearing (Drive End)	203FF
1991-1990 (Motorcraft)	
Ball Bearing (Rear End)	MNJ471S

CRANKSHAFT FRONT SEAL

8 Cylinder

2008-1992 281/4.6L	
Seal	482041N
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187
1991-1990 (w/o 281/4.6, 292/4.8)	
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL

8 Cylinder

2006-1990 281/4.6L, 302/5.0L	
Seal Viton	3909
Seal PTFE H/D	5277
Repair Sleeve	KWK99362
1991-1990 351/5.8L (W)	
Seal Viton	2377
Seal PTFE H/D	5278
Repair Sleeve	KWK99372

MERCURY - REAR DRIVE - Cougar

FRONT WHEEL

RWD

1997-1993	
Hub Unit Bearing	513092[2]
1992-1991 (ABS, Non-ABS)	
Hub Unit Bearing	513092[2]
1990 (ABS)	
Hub Unit Bearing	513076[2]
1990 (Non-ABS)	
Hub Unit Bearing	513077[2]

REAR WHEEL

RWD

1997-1990	
Set	SET49[2]

CLUTCH RELEASE

Diaphragm Spring Pressure Plates

1996-1993 6 Cyl. (including Supercharged)	
Bearing Assy	614061
1992-1991 (8 Cyl.)	
Bearing Assy	614038
1992-1990 6 Cyl. (including Supercharged)	
Bearing Assy	614061

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCURY - REAR DRIVE - Cougar (cont.)**REAR AXLE****Axle Shaft**

1997-1990	(IRS 7.5" R.G., IRS 8.8" R.G.)	
Seal Viton	.....	714569[2]
Ndle Bearing	.....	FC66998[2]
Repair Sleeve	.....	KWK99157[2]

Differential Rebuild Kit

1997-1990	(8.8" R.G.)	
Kit	.....	DRK311
1997-1990	(7.5" R.G.)	
Kit	.....	DRK315

Differential

1997-1990	(7.5" R.G.)	
Cone/Cup	.....	LM501349-LM501314[2]
1997-1990	(8.8" R.G.)	
Set	.....	SET36[2]

Pinion

1997-1990	(7.5", 8.8" R.G.)	
Seal Viton	.....	3604
Cone/Cup (Inner)	.....	M802048-M802011
Cone/Cup (Outer)	.....	M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1997-1992	(AODE)	
Seal	.....	3404
1993-1990	(AOT, AOD)	
Seal	.....	331107N[2]
Repair Sleeve	.....	KWK99199

Rear Seal/Ext. Housing

1997-1994	(AODE W)	
Seal	.....	4764
1997-1994	(AODE)	
Seal	.....	7692S[2]
Seal Kit	.....	5202 ⁶⁴
1993-1990	(AOT, AOD)(long boot)	
Seal	.....	7692S[2]
Seal Kit	.....	5202 ⁶⁴
1993-1990	(AOT, AOD)(short boot)	
Seal	.....	2194[2]

Selector Shaft Seal/Man. Shaft

1997-1990		
Seal	.....	7929S
Repair Sleeve	.....	KWK99076

CLUTCH**Pilot Bearing**

1992-1990	(w/o 4.6 V8)	
Ndle Bearing	.....	FC65174

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1997-1990	(Mazda M5R2)	
Seal	.....	223012[2]
Repair Sleeve	.....	KWK99114

Countershaft

1995-1990	(Mazda M5R2)	
Cylindrical Bearing		
(Center)	.....	MR1207EL[2]
Ball Bearing (Rr)	.....	304WB[2]

Rear Output Shaft

1995-1990	(Mazda M5R2)	
Seal	.....	710414[2]

Extension Housing

1995-1990	(Mazda M5R2)	
Seal	.....	710415

ALTERNATOR

1993-1990	(Motorcraft)	
Ball Bearing (Drive End)	.....	203FF
1993-1990	(Motorcraft)	
Ball Bearing (Rear End)	.....	MNJ471S

CRANKSHAFT FRONT SEAL**8 Cylinder**

1997-1994	281/4.6L	
Seal	.....	482041N
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187
1993-1990	(w/o 281/4.6)	
Seal (Frt Entry)	.....	2692
Seal (Rr Entry)	.....	2942
Repair Sleeve	.....	KWK99187
Harmnc Balancer Slvs	.....	88187

CRANKSHAFT REAR SEAL**6 Cylinder**

1999	2540cc/2.5L (DOHC)	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99363
1997-1990	232/3.8L From 1/1/83	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99363

8 Cylinder

1997-1990	281/4.6L, 302/5.0L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99363

⁶⁴Seal & Bushing Kit

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

MERCURY - SUV - Mariner, Mariner Hybrid

FRONT WHEEL

FWD

2009-2005
 Hub Unit Bearing HA590286K[2]⁶⁷
 Ball Bearing 510072[2]²⁵

4WD

2009-2005
 Hub Unit Bearing HA590286K[2]⁶⁷
 Ball Bearing 510072[2]²⁵

REAR WHEEL

FWD

2009-2005
 Ball Bearing 510029[2]

4WD

2009-2005
 Ball Bearing 510029[2]

REAR AXLE

Axle Shaft

2008-2005
 Seal Viton 710429[2]

Differential

2008-2005
 Cone/Cup LM29749-LM29710[2]

REAR AXLE

Pinion

2008-2005
 Cone/Cup (Inner) M86649-M86610
 Cone/Cup (Outer) M88048-M88010
 Seal 100552

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2005 3.0L
 Seal 482041N

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2005 3.0L
 Seal Viton 3909
 Seal PTFE H/D 5277
 Repair Sleeve KWK99362

MERCURY - SUV - Mountaineer

FRONT WHEEL

RWD

2009-2006
 Hub Unit Bearing HA590156[2]²⁵
 2005-2002
 Hub Unit Bearing (ABS
 Cable Included) SP470200[2]
 Hub Unit Bearing SP470201[2]⁰²
 2001-1997
 Seal (Inner) 9150S[2]
 Set (Inner) SET5[2]
 Set (Outer) SET2[2]

4WD

2009-2006
 Hub Unit Bearing HA590156[2]²⁵
 2005-2002
 Hub Unit Bearing (ABS
 Cable Included) SP470200[2]
 Hub Unit Bearing SP470201[2]⁰²
 2001-1997
 Hub Unit Bearing SP450200[2]⁴⁰

FRONT WHEEL

AWD

2009-2006
 Hub Unit Bearing HA590156[2]²⁵
 2005-2002
 Hub Unit Bearing (ABS
 Cable Included) SP470200[2]
 Hub Unit Bearing SP470201[2]⁰²
 2001-1997
 Hub Unit Bearing SP450200[2]⁴⁰

REAR WHEEL

RWD

2009-2006
 Bearing Assy 516008[2]²⁵
 2005-2002
 Hub Unit Bearing HA590259K[2]⁶⁸
 2001-1997
 Seal 8835S[2]
 Cylindrical Bearing 6408[2]
 Bearing & Seal Kit TRP1559TV[2]¹⁹

⁰²Does Not Come w/ Sensor Cable.
 Check For Availability ⁴⁰5 Stud.
 Snap Ring

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

²⁵New Item,
⁶⁸Kit = Flg, Brg, &

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MERCURY - SUV - Mountaineer (cont.)**REAR WHEEL****4WD**

2009-2006	
Bearing Assy	516008[2] ²⁵
2005-2002	
Hub Unit Bearing	HA590259K[2] ⁶⁸
2001-1997	
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹

AWD

2009-2006	
Bearing Assy	516008[2] ²⁵
2005-2002	
Hub Unit Bearing	HA590259K[2] ⁶⁸
2001-1997	
Seal	8835S[2]
Cylindrical Bearing	6408[2]
Bearing & Seal Kit	TRP1559TV[2] ¹⁹

4WD FRONT AXLE**Axle Shaft**

2008-2002	(8.8" R.G.)(Indep. Frt. Susp.)
Ndle Bearing (Inner)	HK4012[2]
Ndle Bearing (Outer)	FC66998[2]
2001-1997	(Dana/Spicer 35 Axle)
Seal Viton (LH)	710429
Ndle Bearing (LH)	S268[2]
Seal (RH)	710248
Cylindrical Bearing (RH)	5707[2]

Differential Rebuild Kit

2001-1997	(Dana/Spicer 35 Axle)
Kit	DRK335

Differential

2007-2002	
Cone/Cup	LM501349-LM501314[2]
2001-1997	(Dana/Spicer 35 Axle)
Cone/Cup	LM501349-LM501314[2]

Pinion

2007-2002	
Seal Viton	714675
Cone/Cup (Inner)	HM88649-HM88610
Cone/Cup (Outer)	M86649-M86610
2001-1997	(Dana/Spicer 35 Axle)
Seal Viton	714675
Cone/Cup (Inner)	HM88648-HM88610
Cone/Cup (Outer)	M86649-M86610

Spindle Kit

2001-1997	(Dana/Spicer 35 Axle)
Bearing & Seal Kit	SBK1[2] ³³

4WD FRONT AXLE**Spindle**

2001-1997	(Dana/Spicer 35 Axle)
Seal (Inner)	722108[2]
Ndle Bearing (Inner)	B2110[2]
Seal (Outer)	722109[2]

REAR AXLE**Axle Shaft**

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)
Ndle Bearing	FC66998[2]
Seal	100537[2]

Differential Rebuild Kit

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)
Kit	DRK311A ²⁵
2001-1997	(8.8" R.G.)
Kit	DRK311

Differential

2008-2002	(8.8" R.G.)(Indep. Rr. Susp.)
Cone/Cup	LM603049-LM603019[2]
2001-1997	(8.8" R.G.)
Set	SET36[2]

Pinion

2007-1997	(8.8" R.G.)
Seal Viton	3604
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M88048-M88010

TRANSFER CASE REBUILD KIT

2002-1998	4.0L.
Kit	TCRK4405
2001-1997	5.0L
Kit	TCRK4404

TRANSFER CASE**Input Shaft**

2008-2002	(Warner 4410)
Seal	710403
Ball Bearing	209LO
Repair Sleeve	KWK99166
2008-1997	(Warner 4405, 4411, 4412)
Seal	710403
Ball Bearing	209LO
Repair Sleeve	KWK99166
Ndle Bearing (Pilot)	M18161
2001-1999	(Warner 4403)
Seal	3946
Ball Bearing	109TB
Repair Sleeve	KWK99187
1998	(Warner 4404)(booted)
Seal	4333N
Ball Bearing	109TB
Ndle Bearing (Pilot)	SCH1310

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal Brg B2110, Seals 722108 & 722109.²⁵New Item, Check For Availability⁶⁸Kit = Flg, Brg, & Snap Ring³³Opt. Kit =

MERCURY - SUV - Mountaineer (cont.)**TRANSFER CASE (cont.)****Input Shaft (cont.)**

1998	(Warner 4404)(w/o boot)
Seal	3946
Ball Bearing	109TB
Repair Sleeve	KWK99187
Ndle Bearing (Pilot)	SCH1310

Front Output Shaft

2008-2002	(Warner 4410)
Seal	710403
Ball Bearing	206WB
Repair Sleeve	KWK99166
2008-1997	(Warner 4405, 4411, 4412)
Ball Bearing (Inner)	306H[2]
Seal (Outer)	710403
Ball Bearing (Outer)	206WB[2]
Repair Sleeve	KWK99166
Ndle Bearing	FC67945[2] ¹⁶
2002-1998	(Warner 4403, 4404)
Ball Bearing (Inner)	206WB[2]
Seal (Outer)	710403
Ball Bearing (Outer)	207[2]
Repair Sleeve	KWK99166

Rear Output Shaft

2008-2002	(Warner 4410)
Seal	710403
Ball Bearing	208SL
Repair Sleeve	KWK99166
2008-1997	(Warner 4405, 4411, 4412)
Seal	710403
Ball Bearing	306H[2]
Repair Sleeve	KWK99166
2002-1999	(Warner 4403)
Seal	710403
Ball Bearing	208[2]
Repair Sleeve	KWK99166
1998	(Warner 4404)
Ball Bearing (Inner)	N1061[2]
Seal (Outer)	710403
Ball Bearing (Outer)	208SL[2]
Repair Sleeve	KWK99166

Selector Shaft Seal/Man. Shaft

2008-1997	(Warner 4403, 4404, 4405)
Seal	330385

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2001-1997	(4R70W)
Seal	3404

Rear Seal/Ext. Housing

2001-1997	(4R70W)
Seal	4765

4-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2001-1997	(4R70W)
Seal	7929S

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2002	(5R55E)
Seal	7929S

6- SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2006	(6R60)
Seal	710484

Rear Seal/Ext. Housing

2008-2006	(6R60)(2WD)
Seal	710487
2008-2006	(6R60)(4WD)
Seal	710486

ALTERNATOR

1998-1997	Mitsubishi 110 Amp.
Ball Bearing (Drive End)	303CC

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2002	281/4.6L
Seal	482041N
Repair Sleeve	KWK99187
2006-2004	244/4.0L
Seal Viton	2012V
2003-1998	244/4.0L
Seal	473560N
Repair Sleeve	KWK99166

8 Cylinder

2005-2002	281/4.6L
Seal	482041N
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187
2001-1997	302/5.0L
Seal (Frt Entry)	2692
Seal (Rr Entry)	2942
Repair Sleeve	KWK99187
Harmnc Balancer Slvs	88187

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-1998	244/4.0L
Seal Viton	3393
Seal PTFE H/D	5288
Repair Sleeve	KWK99238

¹⁶Obsolete

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MERCURY - SUV - Mountaineer (cont.)**CRANKSHAFT REAR SEAL****8 Cylinder**

2008-1997	281/4.6L, 302/5.0L	
Seal Viton	.....	3909
Seal PTFE H/D	.....	5277
Repair Sleeve	.....	KWK99362

MERCURY - Minivan - Villager**FRONT WHEEL****FWD**

2002-1993		
Ball Bearing	.....	510028[2]

REAR WHEEL**FWD**

2002-1997		
Hub Unit Bearing	.....	HA590057[2]
1996-1993		
Ball Bearing	.....	511008[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1993	(4F20E)	
Bearing Assy	.....	32009XM[2]

Torque Converter / Frt Pump

2002-1993	(4F20E)	
Seal	.....	224450

Output Shaft

2002-1993	(4F20E)	
Seal (LH)	.....	710118
Seal (RH)	.....	710124

Manual Shaft

2002-1993	(4F20E)	
Seal	.....	221207

A/C COMPRESSOR

1998-1993	(Cl. Pulley)(Nippondenso FX 15)	
Ball Bearing	.....	5106WCC[2]

ALTERNATOR

1998-1993	Mitsubishi 110 Amp.	
Ball Bearing (Drive End)	.....	303CC

CAMSHAFT SEAL**6 Cylinder**

2002-1999	3275/3.3L	
Seal	.....	224052[2]
Repair Sleeve	.....	KWK99157[2]
1998-1993	2960cc/3.0L	
Seal	.....	223420[2]
Repair Sleeve	.....	KWK99134[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2002-1999	3275/3.3L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157
1998-1993	2960cc/3.0L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL**6 Cylinder**

2002-1999	3275/3.3L	
Seal PTFE H/D	.....	228411 ²⁵
1998-1993	2960cc/3.0L	
Seal Viton	.....	228410

²⁵New Item, Check For Availability

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

MERCURY - Minivan - Monterey

FRONT WHEEL

FWD

2007-2004 (L.H.)(ABS)
Hub Unit Bearing HA590024[2] ²⁵
2007-2004 (R.H.)(ABS)
Hub Unit Bearing HA590025[2] ²⁵

REAR WHEEL

FWD

2007-2004 (ABS)
Hub Unit Bearing (LH) HA590021 ⁹⁴
Hub Unit Bearing (RH) HA590022 ⁸³
Hub Unit Bearing (RH)
(Reorder) HA590021[2] ⁹⁴

4-SPEED AUTOMATIC TRANSAXLE

Input Shaft

2007-2004 (AX4N)
Seal 4189H

Output Shaft

2007-2004 (AX4N)
Seal 3622S[2]
Repair Sleeve KWK99169

CRANKSHAFT FRONT SEAL

6 Cylinder

2007-2004 256/4.2L
Seal 712692
Repair Sleeve KWK99187

CRANKSHAFT REAR SEAL

6 Cylinder

2007-2004 256/4.2L
Seal Viton 3909
Seal PTFE H/D 5277
Repair Sleeve KWK99362

MERKUR - ALL

REAR WHEEL

RWD

1990
Seal 224252[2]
Set SET24[2]

CLUTCH

Pilot Bearing

1990 Scorpio
Ndle Bearing FC65354
1990 XR4Ti
Ndle Bearing FC65354

CLUTCH

Release Bearing

1990 Scorpio
Bearing Only F01267C
1990 XR4Ti
Bearing Assy 614014

MITSUBISHI - FRONT DRIVE - Diamante, Eclipse, Expo, Galant, Galant Sigma, Lancer, Mirage, Precis, 3000GT

FRONT WHEEL

FWD

2008 Lancer
Ball Bearing WB000021[2] ²⁵
2008-2007 Eclipse
Hub Unit Bearing HA590177[2] ²⁵
2008-2007 Galant 3.8L
Hub Unit Bearing HA590177[2] ²⁵
2008-2004 Galant 2.4L
Hub Unit Bearing 513157

FRONT WHEEL (cont.)

FWD (cont.)

2007-2006 Lancer ES, SE, OZ Rally, Ralliart
Ball Bearing 510079[2]
2006 Eclipse
Hub Unit Bearing HA590108[2] ²⁵
2006-2004 Galant 3.8L
Hub Unit Bearing HA590108[2] ²⁵
2005-2002 Lancer ES
Ball Bearing 510021[2]

²⁵New Item, Check For Availability

⁸³Deplete Inventory

⁹⁴HA590021 Will Service Both Sides.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MITSUBISHI - FRONT DRIVE - Diamante, Eclipse, Expo, Galant, Galant Sigma, Lancer, Mirage, Preci, 3000GT (cont.)					

FRONT WHEEL (cont.)**FWD (cont.)**

2005-2002	Lancer LS, O-Z Rally, Ralliart	
Ball Bearing	.....	510079[2]
2005-1995	Eclipse	
Hub Unit Bearing	.....	513157[2]
2004-1992	Diamante	
Seal (Inner)	.....	710182[2]
Ball Bearing (Inner)	.....	510034[2]
Seal (Outer)	.....	710183[2]
2003-1996	Galant	
Hub Unit Bearing (4 Stud)	.....	HA590240[2]
Hub Unit Bearing (5 Lug Whl.)	.....	513157[2]
Bearing Module (Opt)	.....	513135[2]
2002-2000	Mirage	
Ball Bearing	.....	510021[2]
1999-1993	Mirage	
Seal (Inner)	.....	8430S[2]
Ball Bearing	.....	510016[2]
Seal (Outer)	.....	4898[2]
1999-1991	3000GT	
Seal (Inner)	.....	710182[2]
Ball Bearing (Inner)	.....	510034[2]
Seal (Outer)	.....	710183[2]
1995-1994	Galant	
Hub Unit Bearing	.....	HA590240[2]
1995-1992	Expo	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1994-1990	Eclipse	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1994-1990	Precis	
Seal (Inner)	.....	229522[2]
Set (Inner)	.....	SET41[2]
Seal (Outer)	.....	229522[2]
Set (Outer)	.....	SET41[2]
1993-1990	Galant, Galant Sigma	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1992-1990	Mirage	
Seal (Inner)	.....	229522[2]
Set (Inner)	.....	SET41[2]
Seal (Outer)	.....	229522[2]
Set (Outer)	.....	SET41[2]

AWD

2008	Lancer Evolution	
Hub Unit Bearing	.....	HA590271[2] ²⁵
2006-2003	Lancer Evolution	
Hub Unit Bearing	.....	513133[2]
1999-1995	Eclipse	
Hub Unit Bearing	.....	513157[2]
1999-1991	3000GT	
Hub Unit Bearing	.....	513133[2]

FRONT WHEEL (cont.)**AWD (cont.)**

1995-1992	Expo	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1994-1990	Eclipse	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1992-1990	Galant	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]

REAR WHEEL**FWD**

2008-2006	Eclipse (ABS)	
Hub Unit Bearing	.....	HA590128[2] ²⁵
2006-2004	Galant (ABS)	
Hub Unit Bearing	.....	HA590128[2] ²⁵
2006-2004	Galant (Non-ABS)	
Hub Unit Bearing	.....	HA590129[2] ²⁵
2006-2004	Lancer Sedan (2.4L)	
Hub Unit Bearing	.....	HA590103[2] ²⁵
2006-2002	Lancer ES	
Hub Unit Bearing	.....	HA590104[2] ²⁵
2006-2002	Lancer LS, O-Z Rally	
Hub Unit Bearing	.....	HA590101[2] ²⁵
2005-1995	Eclipse	
Hub Unit Bearing	.....	HA590306[2]
Bearing Module	.....	512136[2]
2004-1997	Diamante (ABS)	
Hub Unit Bearing	.....	HA590107[2] ²⁵
2003-1996	Galant (ABS)(From 3/96)	
Hub Unit Bearing	.....	HA590306[2]
2003-1996	Galant (Non-ABS)(From 3/96)	
Bearing Module	.....	512136[2]
2002-1997	Mirage (ABS)	
Hub Unit Bearing	.....	512185[2]
2002-1993	Mirage (Non-ABS)	
Hub Unit Bearing	.....	512148[2]
1999-1991	3000GT	
Hub Unit Bearing	.....	512039[2]
1996-1994	Galant (To 3/96)	
Hub Unit Bearing	.....	512235[2]
1996-1992	Diamante (ABS)	
Hub Unit Bearing	.....	512011[2] ⁸¹
1996-1992	Diamante (Non-ABS)	
Hub Unit Bearing	.....	512010[2]
1995-1992	Expo	
Hub Unit Bearing	.....	512040[2]
1994-1990	Eclipse (ABS)	
Hub Unit Bearing	.....	512011[2] ⁸¹
1994-1990	Eclipse (Non-ABS)	
Hub Unit Bearing	.....	512010[2]
1994-1990	Precis	
Seal (Inner)	.....	710404[2]
Bearing Assy	.....	516000[2]
1993-1990	Galant (Disc)	
Hub Unit Bearing	.....	512158[2]

²⁵New Item, Check For Availability⁸¹Holes Exists For Tone Ring, Reuse Tone Ring.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

MITSUBISHI - FRONT DRIVE - Diamante, Eclipse, Expo, Galant, Galant Sigma, Lancer, Mirage, Preci, 3000GT (cont.)

REAR WHEEL (cont.)

FWD (cont.)

1993-1990	Galant (Drum)	
Seal (Inner)	.....	1196[2]
Set (Inner)	.....	SET4[2]
Set (Outer)	.....	SET1[2]
1992-1990	Mirage (Drum)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	516001WB[2]
1990	Mirage (Disc)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	516000[2]
1990	Galant Sigma	
Seal (Inner)	.....	494122[2]
Set (Inner)	.....	SET6[2]
Set (Outer)	.....	SET2[2]

AWD

2008	Lancer Evolution	
Hub Unit Bearing	.....	HA590275[2]
2006-2003	Lancer Evolution	
Bearing Module	.....	512181[2]
1999-1995	Eclipse	
Bearing Module	.....	512181[2]
1999-1991	3000GT	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]
1995-1992	Expo	
Ball Bearing	.....	511013[2]
1994-1990	Eclipse	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]
1992-1990	Galant	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]

REAR AXLE

Differential

1997-1991	(4WD) 3000GT	
Seal	.....	710208[2]
1995-1990	(4WD) Eclipse, Expo, Galant	
Seal	.....	710396[2]
Bearing Assy	.....	30207M[2]

CLUTCH

Pilot Bearing

1996-1990	6 Cyl. 3.0	
Ball Bearing	.....	203FF
1996-1990	4 Cyl. 2.0, 2.4, 2.6	
Ball Bearing	.....	102CC

CLUTCH

Release Bearing

2003-2000	Eclipse 2.4 (SOHC)(w/o Turbo)	
Bearing Assy	.....	614126
1999-1996	Eclipse (AWD)(Turbo) 2.4L (SOHC)	
Bearing Assy	.....	614099
1999-1996	Eclipse 2.0L (DOHC)	
Bearing Assy	.....	614121
1996-1992	Expo	
Bearing Assy	.....	614126
1996-1991	3000GT (AWD)(Turbo)	
Bearing Assy	.....	614099
1996-1991	3000GT (w/o AWD Turbo)	
Bearing Assy	.....	614126
1996-1991	Diamante	
Bearing Assy	.....	614126
1996-1990	Galant Ser. (FWD)	
Bearing Assy	.....	614126
1995	Eclipse (AWD)(Turbo)	
Bearing Assy	.....	614099[2]
1995	Eclipse (w/o Turbo)(w/o AWD)	
Bearing Assy	.....	614121
1995-1990	Mirage (FWD)	
Bearing Assy	.....	614126
1994-1990	Eclipse (AWD)(Turbo)	
Bearing Assy	.....	614099
1994-1990	Eclipse 2.0 (DOHC)(w/o Turbo)	
Bearing Assy	.....	614126
1992-1990	Precis	
Bearing Assy	.....	614126
1991-1990	Sigma	
Bearing Assy	.....	614126

3-SPEED AUTOMATIC TRANSAXLE

Differential

1996-1990	(F3A21 2)	
Ball Bearing	.....	207[2]

Torque Converter

1997-1990		
Seal	.....	320583
Repair Sleeve	.....	KWK99157

Idler Shaft

1997-1990	(F3A21 2)	
Bearing Assy	.....	30206M[2]

Transfer Shaft

1997-1990	(F3A21 2)	
Bearing Assy	.....	30207M[2]
1994-1990	(KM171 1, KM171 2, KM172 0, KM171 5)	
Bearing Assy (Inner)	.....	30206M[2]
Bearing Assy (Outer)	.....	30304[2]

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MITSUBISHI - FRONT DRIVE - Diamante, Eclipse, Expo, Galant, Galant Sigma, Lancer, Mirage, Preci, 3000GT (cont.)

3-SPEED AUTOMATIC TRANSAXLE

Output Shaft

1999-1990	
Seal	223543[2]
Repair Sleeve	KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

2005-2002	(F4A42 1)	
Bearing Assy		30207M[2]
1999-1997	(F4A21 2, F4A33 1)	
Ball Bearing		207[2]
1999-1995	(F4AC1)	
Seal		3459S[2]
Set		SET11[2]
Repair Sleeve		KWK99157[2]
1996-1990	(F4A21 2, F4A22 2, F4A33 1, KM176 5, KM177 0)	
Ball Bearing		207[2]
1990	(KM177 8)	
Ball Bearing		206WB[2]

Torque Converter / Frt Pump

2005-2000	(F4A42 1, F4A51 2)	
Seal		320583
1999-1997	(F4A21 2, F4A33 1, W4A33 1)	
Seal		320583
Repair Sleeve		KWK99157
1999-1995	(F4AC1)	
Seal		331228H
Repair Sleeve		KWK99149
1996-1990	(F4A21 2, F4A22 2, F4A33 1, KM176 5, KM175 5, KM177 0, KM177 8, W4A32 1, W4A33 1)	
Seal		320583
Repair Sleeve		KWK99157

Input Shaft

1995-1990	(W4A32 1)	
Seal		223014
Repair Sleeve		KWK99114

Idler Shaft

1997-1991	(F4A21 2)	
Bearing Assy		30206M[2]

Transfer Shaft

1999-1995	(F4AC1)	
Set		SET16[2]
1997-1991	(F4A21 2)	
Bearing Assy		30207M[2]

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2007-2000	(F4A41 1, F4A42 2, F4A4B 4)	
Bearing Assy (Frt)		32009XM[2]
Bearing Assy (Rr)		32006[2]
2006-1999	(F4A51 2)	
Bearing Assy (Frt)		32010X[2]
Bearing Assy (Rr)		32006[2]
1999-1993	(F4A33 1)	
Seal Viton		710259[2]
1999-1990	(W4A32 1, W4A33 1)	
Seal (LH)		223543
Seal (RH)		710199
Repair Sleeve		KWK99139[2]
1997	(F4A21 2)	
Seal		223543[2]
Repair Sleeve		KWK99139
1996-1993	(F4A21 2, F4A22 2)	
Seal		223543[2]
Repair Sleeve		KWK99139
1992-1990	(F4A21 2, F4A22 2, F4A33 1, KM176 5, KM175 5, KM177 0, KM177 8)	
Seal		223543[2]
Repair Sleeve		KWK99139

Manual Shaft

1999-1995	(F4AC1)	
Seal		8609

5-SPEED MANUAL TRANSAXLE

Transaxle Rebuild Kit

1994-1990	Precis	
Kit		TRKM100
1992-1990	Galant, Mirage	
Kit		TRKM100

Differential

2004-1999	(F5M42 1)	
Bearing Assy		30207M[2]
1997-1995	(A578)	
Set		SET11[2]

Input Shaft

2002-1999	(F5M42 1)	
Seal		222510
1999-1990	(F5M31 2, F5M33 1, W5M33 2)	
Seal Viton		712007

Output Shaft

1999-1990	(W5M33 2)	
Seal (LH)		223543
Seal (RH)		710199
Repair Sleeve		KWK99139[2]
1997-1995	(F5M31 2)	
Seal		2007N[2]
1997-1993	(F5M33 2)	
Seal		223543[2]
Repair Sleeve		KWK99139[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>MITSUBISHI - FRONT DRIVE - Diamante, Eclipse, Expo, Galant, Galant Sigma, Lancer, Mirage, Precis, 3000GT (cont.)</i>					

5-SPEED MANUAL TRANSAXLE**Selector Shaft Seal/Man. Shaft**

1999-1995	(A578)	
Seal	.....	3816
1997-1990	(F5M21 1, F5M21 2, F5M22 2, KM201 0, KM206 0)	
Seal	.....	710222

Extension Housing

1994-1991	(W5MG1)	
Seal	.....	224025
1993-1990	(W5M31 2)	
Seal	.....	710310
Repair Sleeve	.....	KWK99128

ALTERNATOR

1994-1991	110 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	65 Amp.	
Ball Bearing (Drive End)	.....	302CC

OIL PUMP**4 Cylinder**

2008-2005	2351cc/2.4L, 2378cc/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078
2004-1990	1997cc/2.0L, 2351cc/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078
1992-1990	1597cc/1.6L (DOHC)	
Seal	.....	222025
Repair Sleeve	.....	KWK99078

6 Cylinder

2003-2002	2972cc/3.0L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078

CAMSHAFT SEAL**4 Cylinder**

2002-1990	1500cc/1.5L, 1834cc/1.8L	
Seal	.....	3771

6 Cylinder

2006-1997		
Seal	.....	3771

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2001	2378cc/2.4L, 2350cc/2.4L	
Seal	.....	224460
2007-2002	2.0L (SOHC)(DOHC)	
Seal	.....	223750
2002-1992	1834cc/1.8L	
Seal	.....	223750
2002-1990	1468cc/1.5L	
Seal	.....	223018
Repair Sleeve	.....	KWK99114

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

2000-1990	1595cc/1.6L, 1755cc/1.8L, 1795cc/1.8L, 1997cc/2.0L, 2351cc/2.4L	
Seal	.....	224460

6 Cylinder

2008-1990	2972cc/3.0L, 3496cc/3.5L, 3828cc/3.8L	
Seal	.....	223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2003	2.0L(SOHC)(DOHC), 2.4L(SOHC)	
Seal Viton	.....	710235
2002-1992	1834cc/1.8L, 2350cc/2.4L(SOHC)	
Seal Viton	.....	710235
2002-1990	1468cc/1.5L, 1597cc/1.6L, 1755cc/1.8L	
Seal	.....	227235
2000-1990	1595cc/1.6L, 1795cc/1.8L, 1997cc/2.0L, 2351cc/2.4L	
Seal Viton	.....	228005
Repair Sleeve	.....	KWK99315
1999-1995	122/2.0L (DOHC)	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

6 Cylinder

2008-2004	3828/3.8L	
Seal Viton	.....	710056
2005-1990	2497cc/2.5L, 2967cc/3.0L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279
2004-1997	3496cc/3.5L	
Seal Viton	.....	710056

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

MITSUBISHI - Minivan, SUV, Truck - Endeavor, Mighty Max, Montero, Montero Sport, Outlander, Raider PU, Van

FRONT WHEEL

FWD

2009-2007	Outlander	
Ball Bearing	.....	WB000021[2] ²⁵
2009-2006	Endeavor (From 11/05)	
Hub Unit Bearing	.....	HA590177[2] ²⁵
2006-2004	Endeavor (Thru 10/05)	
Hub Unit Bearing	.....	HA590108[2] ²⁵
2006-2003	Outlander	
Ball Bearing	.....	510079[2]

RWD

2008-2006	Raider PU (2W-ABS)	
Hub Unit Bearing	.....	HA590034[2] ²⁵
2008-2006	Raider PU (4W-ABS)	
Hub Unit Bearing	.....	HA590035[2]
2000-1997	Montero, Montero Sport	
Seal (Inner)	.....	225875[2]
Set	.....	SET47[2]
1996-1990		
Seal (Inner)	.....	225010[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]

4WD

2009-2007	Outlander	
Ball Bearing	.....	WB000021[2] ²⁵
2008-2006	Raider PU (2W-ABS)	
Hub Unit Bearing	.....	HA590034[2] ²⁵
2008-2006	Raider PU (4W-ABS)	
Hub Unit Bearing	.....	HA590035[2]
2006-2001	Montero	
Hub Unit Bearing	.....	HA590145[2] ²⁵
2004-2001	Montero Sport	
Seal (Inner)	.....	225875[2]
Set (Inner)	.....	SET47[2]
Set (Outer)	.....	SET47[2]
2000-1990		
Seal (Inner)	.....	225875[2]
Set (Inner)	.....	SET47[2]
Set (Outer)	.....	SET47[2]

AWD

2009-2007	Outlander	
Ball Bearing	.....	WB000021[2] ²⁵
2009-2006	Endeavor (From 11/05)	
Hub Unit Bearing	.....	HA590177[2] ²⁵
2006	Raider PU (2W-ABS)	
Hub Unit Bearing	.....	HA590034[2] ²⁵
2006	Raider PU (4W-ABS)	
Hub Unit Bearing	.....	HA590035[2]
2006-2004	Endeavor (Thru 10/05)	
Hub Unit Bearing	.....	HA590108[2] ²⁵
2006-2003	Outlander	
Ball Bearing	.....	510079[2]

REAR WHEEL

FWD

2009-2008	Outlander (2.4L)	
Hub Unit Bearing	.....	HA590256[2] ²⁵
2009-2007	Outlander (3.0L)	
Hub Unit Bearing	.....	HA590247[2] ²⁵
2009-2004	Endeavor (ABS)	
Hub Unit Bearing	.....	HA590143[2] ²⁵
2006-2005	Outlander LS	
Hub Unit Bearing	.....	HA590103 ²⁵
2005-2004	Endeavor (Non-ABS)	
Hub Unit Bearing	.....	HA590144[2] ²⁵
2004-2003	Outlander	
Hub Unit Bearing	.....	HA590103[2] ²⁵

RWD

2007-2006	Raider PU	
Seal	.....	8835S[2]
Cylindrical Bearing	.....	6408[2]
2004-2001	Montero Sport (Exc. Locking Diff.)	
Seal (Inner)	.....	4989[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	225010[2]
2004-2001	Montero Sport (Locking Diff.)	
Seal (Inner)	.....	4989[2]
Ball Bearing (Inner)	.....	516006[2]
Seal (Outer)	.....	710437[2]
1996-1992	Mighty Max	
Seal (Inner)	.....	4989[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	225010[2]
1991-1990	Mighty Max	
Seal (Inner)	.....	4989[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	225010[2]
1990	Van Wagon	
Seal (Inner)	.....	223550[2]
Cone/Cup (Inner)	.....	LM29749-LM29710[2]
Seal (Outer)	.....	224510[2]

4WD

2006-2001	Montero	
Hub Unit Bearing	.....	HA590039[2] ²⁵
2004-2001	Montero Sport (Exc. Locking Diff.)	
Seal (Inner)	.....	4989[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	225010[2]
2004-2001	Montero Sport (Locking Diff.)	
Seal (Inner)	.....	4989[2]
Ball Bearing (Inner)	.....	516006[2]
Seal (Outer)	.....	710437[2]
2000-1992	Montero	
Seal (Inner)	.....	4989[2]
Ball Bearing (Inner)	.....	516006[2]
Seal (Outer)	.....	710437[2]
1994-1992	Mighty Max	
Seal (Inner)	.....	4989[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	225010[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>MITSUBISHI - Minivan, SUV, Truck - Endeavor, Mighty Max, Montero, Montero Sport, Outlander, Raider PU, Van (cont.)</i>					

REAR WHEEL (cont.)

4WD (cont.)

1991-1990	Mighty Max, Montero
Seal (Inner)	4989[2]
Bearing Assy (Inner)	30208M[2]
Seal (Outer)	225010[2]

AWD

2009-2008	Outlander (2.4L)
Hub Unit Bearing	HA590258[2] ²⁵
2009-2007	Outlander (3.0L)
Hub Unit Bearing	HA590249[2] ²⁵
2009-2004	Endeavor
Hub Unit Bearing	HA590120[2] ²⁵
2007-2006	Raider PU
Seal	8835S[2]
Cylindrical Bearing	6408[2]
2004-2003	Outlander
Ball Bearing	511013[2]

FRONT AXLE

Differential

2008-2006	(C205F)
Cone/Cup	LM102949-LM102911[2]
2003-1994	
Seal	710151[2]
Cone/Cup	17887-17831[2]
1993-1990	(4 Cyl.)
Seal	710335[2]
Cone/Cup	17887-17831[2]
Repair Sleeve	KWK99139[2]
1993-1990	(6 Cyl.)
Seal	710151[2]
Cone/Cup	17887-17831[2]

Pinion

2008-2006	(C205F)
Seal	710476
Cone/Cup (Inner)	M88048-M88010
2003-1994	
Seal	224570
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99169
1993-1991	(6 Cyl.)
Seal	224570
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99169
1993-1990	(4 Cyl.)
Seal	224255
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M86649-M86610
Repair Sleeve	KWK99169
1990	(6 Cyl.)
Seal	1943
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99169

FRONT AXLE

Steering Knuckle

1993-1990	
Seal	710146[2]

4WD FRONT AXLE

Axle Shaft

2008-2006	Raider PU
Seal	710489[2] ²⁵

REAR AXLE

Differential Rebuild Kit

2007-2006	Raider PU
Kit	DRK304A ²⁵

Differential

2008-2006	(9.25" R.G.)
Cone/Cup	JLM704649-JLM704610[2]
2005-2003	Outlander
Seal	223543[2]
Bearing Assy	30207M[2]
2003-2001	Montero
Cone/Cup	17887-17831[2]
2000-1990	
Cone/Cup	17887-17831[2]

Pinion

2008-2006	(8.25" R.G.)
Seal	710480
Cone/Cup (Inner)	M802048-M802011
Cone/Cup (Outer)	M86649-M86610
2008-2006	(9.25" R.G.)
Seal	710481
Cone/Cup (Inner)	M804049-M804010
Cone/Cup (Outer)	M88048-M88010
2005-2003	Outlander
Seal	471847N
Bearing Assy (Inner)	32207M
Bearing Assy (Outer)	30305C
2004-2001	Montero
Seal	224570
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177
2000-1994	Mighty Max, Montero
Seal	224570
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177
1993-1990	Mighty Max, Montero (4 Cyl.)
Seal	224570
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
MITSUBISHI - Minivan, SUV, Truck - Endeavor, Mighty Max, Montero, Montero Sport, Outlander, Raider PU, Van (cont.)					

REAR AXLE (cont.)**Pinion (cont.)**

1993-1990	Mighty Max, Montero (6 Cyl.)
Seal (All)	224570
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177
1990	Van Wagon
Seal	224570
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88043-M88010
Repair Sleeve	KWK99177

TRANSFER CASE REBUILD KIT

2002-1991	(KM120)
Kit	TRKFM220
1996-1990	(KM100)
Kit	TRKFM230

TRANSFER CASE**Input Shaft**

2008-2006	(New Process 243)
Ndle Bearing (Pilot)	FC66561
2003-1990	(V4AC1, V4AW2, V5M21)
Seal	1992
Repair Sleeve	KWK99177
Ball Bearing	5209W
1997-1990	(V5MT1)
Seal	224560
Repair Sleeve	KWK99177
Ball Bearing	5209W

Front Output Shaft

2008-2006	(New Process 244HD)
Seal	3946
Repair Sleeve	KWK99187
2006-1990	
Seal	223608
Repair Sleeve	KWK99146
Ball Bearing	306TB

Rear Output Shaft

2003-1990	
Seal	224052
Repair Sleeve	KWK99157
Ball Bearing	211TB

Drive Sprocket

2003-1990	
Ball Bearing	307TB

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2002-1990	(Aisin)
Seal	223830
Repair Sleeve	KWK99147
1996-1990	(A500)
Seal	331228H
Repair Sleeve	KWK99149

Rear Seal/Ext. Housing

2002-1995	(Aisin 03 40)
Seal	225005
1996-1990	(A500)(4WD)
Seal	710058
Ball Bearing	207XLO[2]
1996-1990	(A500)(RWD)
Seal	7300S
Ball Bearing	207XLO[2]
Seal Kit	5206 ⁶⁴
1994-1990	(Aisin 03 72)
Seal	710319

Selector Shaft Seal/Man. Shaft

2003-1995	(Aisin 03 40)
Seal	221207
Repair Sleeve	KWK99049
1996-1990	(A500)
Seal	8609

CLUTCH**Pilot Bearing**

1996-1990	6 Cyl. 3.0
Ball Bearing	203FF
1996-1990	4 Cyl. 2.0, 2.4, 2.6
Ball Bearing	102CC

Release Bearing

1999-1990	2972cc/3.0L
Bearing Assy	614107
1999-1990	2350cc/2.4L
Bearing Assy	614016

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2001-1990	(V5MT1 2)
Kit	TRKFM200
2000-1990	Montero (4WD)(V6)
Kit	TRKFM200
1999-1990	(R5M21)
Kit	TRKFM130

Front Input Shaft

1996-1990	
Seal	223014
Ball Bearing	307L[2]
Repair Sleeve	KWK99114

Countershaft

1996-1990	(KM132 1)
Bearing Assy	30205M[2]
1993-1990	(KM132 E, KM132 9, KM145 2, KM145 4, KM145 8)
Cone/Cup	XAA30205-YAA30205[2]

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>MITSUBISHI - Minivan, SUV, Truck - Endeavor, Mighty Max, Montero, Montero Sport, Outlander, Raider PU, Van (cont.)</i>					

5-SPEED MANUAL TRANSMISSION

Rear Output Shaft

1996-1990	(KM132 1, KM145 8, KM145 9)	
Seal	.....	223608
Ball Bearing	.....	511014[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2004-2003	(F4A42 2, W4A42 2)	
Seal	.....	320583

ALTERNATOR

1994-1991	110 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	65 Amp.	
Ball Bearing (Drive End)	.....	302CC

DRIVESHAFT SUPPORT

1994-1992	Mighty Max	
Hanger Bearing Assy	.....	HB22
1991-1990	Mighty Max (2WD)	
Hanger Bearing Assy	.....	HB14
1991-1990	Mighty Max (4WD)	
Hanger Bearing Assy	.....	HB30[2]

OIL PUMP

4 Cylinder

2006-2003	2351cc/2.4L, 2378cc/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078
1999-1990	2351cc/ 2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078

CAMSHAFT SEAL

4 Cylinder

2006-2003	2.4L	
Seal	.....	3771
1999-1990	2000/2.0L, 2300/2.3L (Diesel), 2350/2.4L	
Seal	.....	3771
Repair Sleeve	.....	KWK99139

6 Cylinder

2006-2004	230/3.8L (SOHC)	
Seal	.....	3771
2004-1997	215/3.5L (SOHC)	
Seal	.....	3771
2003-1990	2972cc/3.0L	
Seal	.....	3771[2]
Repair Sleeve	.....	KWK99139[2]
2002-1994	3500/3.5L (DOHC)	
Seal (Frt)	.....	223010[2]
Seal (Rr)	.....	710302[2]
Repair Sleeve	.....	KWK99114[4]

CRANKSHAFT FRONT SEAL

4 Cylinder

2006-2003	2.4L	
Seal	.....	224460
1999-1990	2000/2.0L, 2300/2.3L (Diesel), 2350/2.4L	
Seal	.....	224460

6 Cylinder

2008-2006	226/3.7L	
Seal	.....	710472
2006-2003	3828/3.8L	
Seal	.....	223750
2004-1994	3500/3.5L (DOHC)	
Seal	.....	223750
2003-1990	2972cc/3.0L	
Seal	.....	223750

CRANKSHAFT REAR SEAL

4 Cylinder

2006-2003	2.4L	
Seal Viton	.....	710235
1999-1990	2000/2.0L, 2300/2.3L (Diesel), 2350/2.4L	
Seal Viton	.....	228005
Repair Sleeve	.....	KWK99315

6 Cylinder

2008-2006	226/3.7L	
Seal	.....	710471
2006-1994	3500/3.5L, 3797 3.8L	
Seal Viton	.....	710056
2003-1990	2972cc/3.0L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - FRONT WHEEL DRIVE - Altima, Axxess, Maxima, NX, Pulsar, Sentra, Stanza, Versa					

FRONT WHEEL**FWD**

2009	Maxima	
	Hub Unit Bearing	HA590252[2] ²⁵
2009-2007	Altima (2.5L)(ABS), Hybrid	
	Hub Unit Bearing	HA590250[2] ²⁵
2009-2007	Altima (3.5L)(ABS)	
	Hub Unit Bearing	HA590252[2] ²⁵
2009-2007	Sentra (Non-ABS)	
	Hub Unit Bearing	HA590276[2] ²⁵
2009-2007	Sentra S, SL (ABS)	
	Hub Unit Bearing	HA590277[2] ²⁵
2009-2007	Versa	
	Hub Unit Bearing	HA590285[2] ²⁵
2008-2007	Sentra SE-R (ABS)	
	Hub Unit Bearing	HA590278[2] ²⁵
2008-2000	Maxima	
	Hub Unit Bearing	HA590600K[2] ⁶⁷
	Ball Bearing (Opt)	510060[2] ²⁵
2007	Altima (2.5L)(Non-ABS)	
	Hub Unit Bearing	HA590251[2] ²⁵
2006-2002	Altima (2.5L)	
	Ball Bearing	510060[2]
2006-2002	Altima (3.5L)	
	Hub Unit Bearing	HA590600K[2] ⁶⁷
	Ball Bearing (Opt)	510060[2] ²⁵
2006-2000	Sentra	
	Ball Bearing	510061[2]
2001-1998	Altima (Non-ABS)	
	Ball Bearing (Inner)	510068[2]
	Seal	710108[2]
2001-1993	Altima (ABS)	
	Ball Bearing (Inner)	510009[2]
	Seal	710108[2]
1999-1991	Sentra	
	Seal (Inner)	710127[2]
	Ball Bearing (Inner)	514002B[2]
	Seal (Outer)	710125[2]
1999-1990	Maxima	
	Ball Bearing	510009[2]
	Seal	710108[4]
1998-1995	200SX	
	Seal (Inner)	710127[2]
	Ball Bearing (Inner)	514002B[2]
	Seal (Outer)	710125[2]
1993-1991	NX	
	Seal (Inner)	710127[2]
	Ball Bearing (Inner)	514002B[2]
	Seal (Outer)	710125[2]
1992-1990	Axxess	
	Ball Bearing (Inner)	510009[2]
	Seal	710108[2]
1992-1990	Stanza	
	Ball Bearing	510009[2]
	Seal	710108[4]
1990	Micra, Multi Wagon, Multi Wagon	
	Ball Bearing	510054[2]
1990	Pulsar	
	Seal	710107[2]
	Ball Bearing	510008[2]

FRONT WHEEL (cont.)**FWD (cont.)**

1990	Sentra	
	Seal	710107[2]
	Ball Bearing	510008[2]

AWD

1990	Axxess	
	Ball Bearing	510009[2]
	Seal	710108[4]

REAR WHEEL**FWD**

2009	Maxima	
	Hub Unit Bearing	HA590253[2] ²⁵
2009-2007	Altima (ABS), Hybrid	
	Hub Unit Bearing	HA590253[2] ²⁵
2009-2007	Sentra (Non-ABS)	
	Hub Unit Bearing	HA590279[2] ²⁵
2009-2007	Sentra S, SL (ABS)	
	Hub Unit Bearing	HA590280[2]
2009-2007	Sentra SE-R (ABS)	
	Hub Unit Bearing	HA590281[2] ²⁵
2009-2007	Versa (ABS)	
	Hub Unit Bearing	HA590288[2] ²⁵
2009-2007	Versa (Non-ABS)	
	Hub Unit Bearing	HA590286[2] ²⁵
2008-2004	Maxima	
	Hub Unit Bearing	HA590111[2] ²⁵
2007	Altima (2.5L)(Non-ABS)	
	Hub Unit Bearing	HA590254[2] ²⁵
2006-2002	Altima (ABS)	
	Hub Unit Bearing	512201[2]
2006-2002	Altima (Non-ABS)	
	Hub Unit Bearing	512202[2]
2006-2000	Sentra (ABS)	
	Hub Unit Bearing	HA590110[2] ²⁵
2003-2000	Maxima	
	Hub Unit Bearing	512203[2]
2001-1998	Altima (ABS)(Disc)	
	Hub Unit Bearing	HA590047[2] ²⁵
2001-1998	Altima (ABS)(Drum)	
	Hub Unit Bearing	HA590043[2] ²⁵
2001-1998	Altima (Non-ABS)	
	Hub Unit Bearing	512016[2]
1999-1997	Maxima (ABS)	
	Hub Unit Bearing	HA590153[2] ²⁵
1999-1995	Maxima (Non-ABS)	
	Hub Unit Bearing	HA590154[2] ²⁵
1999-1991	Sentra (Non-ABS)	
	Hub Unit Bearing	512025[2]
1998-1995	200SX (Non-ABS)	
	Hub Unit Bearing	512025[2]
1997-1993	Altima	
	Hub Unit Bearing	
	(ABS, Non-ABS)	512016[2]
1995-1990	Axxess	
	Hub Unit Bearing	512016[2]
1992-1990	Stanza (Non-ABS)	
	Hub Unit Bearing	512016[2]

²⁵New Item, Check For Availability⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

NISSAN/DATSUN - FRONT WHEEL DRIVE - Altima, Axxess, Maxima, NX, Pulsar, Sentra, Stanza, Versa (cont.)

REAR WHEEL (cont.)

FWD (cont.)

1990	Pulsar	
Ball Bearing	.....	513071[2]
1990	Sentra	
Ball Bearing	.....	513071[2]

4WD

1995-1990	Axxess	
Ball Bearing (Inner)	.....	510009[2]
Seal	.....	710108[2]

AWD

1990	Axxess	
Ball Bearing (Inner)	.....	510009[2]
Seal	.....	710108[2]

TRANSFER CASE REBUILD KIT

1995-1990	(TY10B)	
Kit	.....	TRKFN500 ²⁵

TRANSFER CASE

Input Shaft

1990	(TX10)	
Seal	.....	225035

Front Output Shaft

1990		
Seal	.....	226018
Repair Sleeve	.....	KWK99235

Selector Shaft Seal/Man. Shaft

1992-1990	(TY10)	
Seal	.....	710243
Repair Sleeve	.....	KWK99098

CLUTCH - 4 CYLINDER

Pilot Bearing

2002-1990		
Bushing	.....	PB22

CLUTCH - 6 CYLINDER

Pilot Bearing

2002-1990		
Bushing	.....	PB22

CLUTCH - 4 CYLINDER

Release Bearing

2001-1991	1998cc./2.0L (DOHC)(215mm Cl.)	
Bearing Assy	.....	614047
1999-1990	1597cc./1.6L (190mm Cl.)	
Bearing Assy	.....	614047
1992-1990	2389cc./2.4L (225mm Cl.)	
Bearing Assy	.....	614157

CLUTCH - 6 CYLINDER

Release Bearing

1992-1990	2960cc/3.0L, 2988cc/3.0 (DOHC)	
Bearing Assy	.....	614049

3-SPEED AUTOMATIC TRANSAXLE

Differential

1992-1990	(RL3F01A, RN3F01A)	
Bearing Assy (LH)	.....	32013X
Bearing Assy (RH)	.....	30208M

Torque Converter

1992-1990	(RL3F01A, RN3F01A)	
Seal	.....	224979

Output Shaft

1992-1990	(RL3F01A)	
Seal Viton	.....	224026[2]
Repair Sleeve	.....	KWK99157[2]
Bearing Assy (RH)	.....	32006[2]
Bearing Assy (LH)	.....	32007X[2]
1990	(RN3F01A)	
Seal	.....	710122[2]
Bearing Assy (RH)	.....	32006[2]
Bearing Assy (LH)	.....	32007X[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

2005-1992	(RE4F04A)	
Bearing Assy	.....	32009XM[2]
2002-1998	(RL4F03V)	
Bearing Assy (LH)	.....	32008XM
2002-1991	(RL4F03A, RE4F03A)	
Ball Bearing	.....	208[2]
2001-2000	(RE4F03B)	
Bearing Assy	.....	32008XM[2]
2001-1992	(RE4F04V)	
Bearing Assy (LH)	.....	32009XM
Bearing Assy (RH)	.....	32013X
1994-1991	(RL4F03V)	
Bearing Assy (LH)	.....	32008XM
1994-1990	(RE4F02A, RL4F02A)	
Bearing Assy (LH)	.....	32013X
Bearing Assy (RH)	.....	30208M
1992-1990	(RE4F02V)	
Bearing Assy (LH)	.....	32010X
Bearing Assy (RH)	.....	32013X

Torque Converter / Frt Pump

2002-1991	(RL4F03A, RE4F03A, RL4F03V)	
Seal	.....	710442
2001-1990	(RE4F02A, RE4F02V, RL4F02A, RE4F04A, RE4F04V)	
Seal	.....	224663
Repair Sleeve	.....	KWK99181

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

NISSAN/DATSUN - FRONT WHEEL DRIVE - Altima, Axxess, Maxima, NX, Pulsar, Sentra, Stanza, Versa (cont.)

4-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2006-1992	(RE4F04A, RE4F04B)	
Seal (LH)	.....	710118
Seal (RH)	.....	710124
2001-1992	(RE4F04V)	
Seal (LH)	.....	710397
Seal (RH)	.....	710124
2001-1991	(RL4F03A, RE4F03A)	
Seal Viton	.....	224026[2]
2001-1991	(RL4F03V)	
Seal (LH)	.....	710132
Seal (RH)	.....	710133
1994-1990	(RE4F02A, RE4F02V)	
Seal (LH)	.....	710123
Seal (RH)	.....	710124
1992-1990	(RL4F02A)(4WD)	
Seal	.....	226018[2]

Manual Shaft

2006-1991	
Seal	 221207

5-SPEED AUTOMATIC TRANSAXLE

Torque Converter

2007-2004	(RE5F22A)	
Seal	.....	222830
Repair Sleeve	.....	KWK99147

Output Shaft

2007-2004	(RE5F22A)	
Seal	.....	4764[2]

Manual Shaft

2007-2004	(RE5F22A)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

4-SPEED MANUAL TRANSAXLE

Differential

1990	(RN4F31A)	
Bearing Assy	.....	30208M[2]

Input Shaft

1990	(RN4F31A)	
Seal	.....	710316
Ball Bearing	.....	305AG[2]
Repair Sleeve	.....	KWK99098

Output Shaft

1990	(RN4F31A)	
Seal Viton	.....	224026[2]
Repair Sleeve	.....	KWK99157[2]

5-SPEED MANUAL TRANSAXLE

Differential

2002-1991	(RS5F32V)	
Bearing Assy (LH)	.....	32010X
2002-1990	(RS5F31A)(RS5F32A)	
Bearing Assy	.....	32010X[2]
2001-1990	(RS5F50A)	
Bearing Assy	.....	32009XM[2]
2001-1990	(RS5F50V)	
Bearing Assy (LH)	.....	32009XM
Bearing Assy (RH)	.....	32013X
1991-1990	(RS5F30A)	
Bearing Assy	.....	30208M[2]

Input Shaft

2002-1991	(RS5F32A)(RS5F32V)	
Seal	.....	710316
Ball Bearing	.....	305AG[2]
Repair Sleeve	.....	KWK99098
2001-1990	(RS5F50A)(RS5F50V)	
Seal	.....	710119
Ball Bearing	.....	108A[2]
Repair Sleeve	.....	KWK99111
1999-1990	(RS5F30A)(RS5F31A)	
Seal	.....	710316
Ball Bearing	.....	305AG[2]
Repair Sleeve	.....	KWK99098

Output Shaft

2002-1998	(RS5F32A)	
Seal	.....	710132[2]
2002-1991	(RS5F32V)	
Seal (LH)	.....	710132
Seal (RH)	.....	710133
2001-1990	(RS5F50A)	
Seal (LH)	.....	710118
Bearing Assy (LH)	.....	32206M[2]
Seal (RH)	.....	710124
Bearing Assy (RH)	.....	30306M[2]
2001-1990	(RS5F50V)	
Seal (LH)	.....	710397
Seal (RH)	.....	710124
1999-1990	(RS5F31A)	
Seal (LH)	.....	225210
Seal (RH)	.....	710134
1991-1990	(RS5F30A)	
Seal Viton	.....	224026[2]
Bearing Assy	.....	30304[2]
Repair Sleeve	.....	KWK99157[2]

ALTERNATOR

1994-1992	Mitsubishi 110 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	Hitachi 70, 80, 90 Amp.	
Ball Bearing (Drive End)	.....	303CC

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

NISSAN/DATSUN - FRONT WHEEL DRIVE - Altima, Axxess, Maxima, NX, Pulsar, Sentra, Stanza, Versa (cont.)

BALANCE SHAFT

4 Cylinder

1990	1597cc/1.6L	
Seal		710415
Repair Sleeve		KWK99128

CAMSHAFT SEAL

4 Cylinder

2001-1991	1597cc/1.6L (DOHC), 1998cc/2.0 (DOHC)	
Seal		223420[2]
Repair Sleeve		KWK99134[2]
1990	1487cc/1.5L, 1597cc/1.6L	
Seal		224020
Repair Sleeve		KWK99157

6 Cylinder

1994-1992	2960cc/3.0L (DOHC)	
Seal		224052[4]
Repair Sleeve		KWK99157[4]
1994-1990	2960cc/3.0L	
Seal		224052[2]
Repair Sleeve		KWK99157[2]

CRANKSHAFT FRONT SEAL

4 Cylinder

2008-2002	2488cc/2.5L	
Seal		224650
Repair Sleeve		KWK99181
2006-2000	1800/1.8L	
Seal		224052
2001-1991	1998cc/2.0L	
Seal		224650
Repair Sleeve		KWK99181
2001-1990	2389cc/2.4L	
Seal		224650
1999-1991	1600/ 1.6L (DOHC)	
Seal		710308
Repair Sleeve		KWK99157
1993-1990	1600/ 1.6L (SOHC)	
Seal		223602
Repair Sleeve		KWK99146

6 Cylinder

2008-2004	3498cc/3.5L (DOHC)	
Seal		710356
2003-2002	3498cc/3.5L (DOHC)	
Seal		710356
2001-1995	2988cc/3.0L	
Seal		710356
Repair Sleeve		KWK99189

CRANKSHAFT REAR SEAL

4 Cylinder

2008-1995	1597cc/1.6L(DOHC), 1769cc/1.8L(DOHC), 1998cc/2.0L(DOHC), 2488cc/2.5L(DOHC)	
Seal PTFE H/D		228411 ²⁵
2001-1991	2389cc/2.4L	
Seal		228009
Repair Sleeve		KWK99315
1994-1990	1597cc/1.6L, 1598cc/1.6L, 1680cc/1.7L, 1809cc/1.8L, 1974cc/2.0L, 1998cc/2.0L	
Seal Viton		228410

6 Cylinder

2008-2002	3498cc/3.5L (DOHC)	
Seal Viton		710363
2001-1995	2988cc/3.0L	
Seal Viton		710363
1995-1990	2960cc/3.0L	
Seal Viton		228410

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - REAR WHEEL DRIVE - Maxima, 240SX, 240Z, 300ZX, 350Z					

FRONT WHEEL**RWD**

2009-2003	350Z	
Hub Unit Bearing	HA590027[2]	²⁵
1998-1990	240SX	
Ball Bearing	510031[2]	
1996-1990	300ZX	
Seal	710108[2]	
Bearing Assy	513244[2]	

REAR WHEEL**RWD**

2009-2003	350Z	
Bearing Module	BM500006[2]	²⁵
1998-1990	240SX	
Bearing Module	512014[2]	
1996-1991	300ZX (Exc. Turbo)	
Seal	710129[2]	
Bearing Module (1.675" Bore)	511011[2]	
1996-1990	300ZX (Turbo)	
Seal	710130[2]	
1993-1991	NX1600, NX2000	
Ball Bearing	513071[2]	
1990	300ZX (Exc. Turbo)(Thru 2/90)	
Seal	710129[2]	
Bearing Module	512014[2]	

REAR AXLE**Differential**

2002-1998	(C200B Axle)	
Bearing Assy	30209C[2]	
2002-1990	(H233, H233B, H233BS Axles)	
Cone/Cup	17887-17831[2]	
1998-1990	(R230 Axle)	
Seal	710135[2]	
Bearing Assy	32211M[2]	
1998-1990	(R200, R200A, R200KV, R200V Axles)	
Seal	223542[2]	
Bearing Assy	30209C[2]	
1995-1990	(H190, H190A, H190B Axles)	
Seal	1167S[2]	
Bearing Assy	30208M[2]	
1995-1990	(R180, R180A Axles)	
Seal	1167S[2]	
Bearing Assy	30208M[2]	
1993-1990	(C200, C200B Axles)	
Bearing Assy	30209C[2]	

Pinion

2002-1998	(C200B Axle)	
Seal	710245	
Bearing Assy (Outer)	32306C	
Repair Sleeve	KWK99166	
2002-1998	(H233BS Axle)	
Bearing Assy (Inner)	32308	
Seal (Outer)	710245	
Bearing Assy (Outer)	32306C	
Repair Sleeve	KWK99166	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1996-1990	(RE4R01A, RE4R03A)	
Seal	224450	
Repair Sleeve	KWK99181	

Rear Seal/Ext. Housing

1996-1990	(E4N71B, RE4R01A, RE4R03A)	
Seal	223801	

Selector Shaft Seal/Man. Shaft

1996-1990	(RE4R01A, RE4R03A)	
Seal	2027	

CLUTCH**Pilot Bearing**

1996-1990	(6 Cyl.)	
Bushing	PB22	
1995-1990	4 Cyl. (1.6 and larger)	
Bushing	PB22	
1995-1990	4 Cyl. (under 1.6)	
Bushing	PB21	

Release Bearing

1998-1990	240SX	
Bearing Only	613015	
1997-1990	300ZX	
Bearing Only	613015	
1996-1995	200SX SE R	
Bearing Assy	614047	
1996-1994	200SX	
Bearing Assy	614047	
1993-1991	NX 1600, 2000	
Bearing Assy	614047	

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

1996-1990	(FS5R30A)	
Kit	TRKFN150	
1996-1990	(FS5W71H, FS5W71M, FS5W71N, FS5W71S)	
Kit	TRKFN110	

Front Input Shaft

1998-1995	(FS5W71C)	
Seal	1981	
Repair Sleeve	KWK99114	
1998-1990	(FS5R30A)	
Seal	1981	
Ball Bearing	1308L[2]	
Repair Sleeve	KWK99114	
1994-1990	(FS5W71A, FS5W71B, FS5W71C)	
Seal	1981	
Ball Bearing	306LO[2]	
Repair Sleeve	KWK99114	

²⁵New Item, Check For Availability

NISSAN/DATSUN - REAR WHEEL DRIVE - Maxima, 240SX, 240Z, 300ZX, 350Z (cont.)**5-SPEED MANUAL TRANSMISSION****Countershaft**

1998-1990	(FS5W71A, FS5W71B, FS5W71C)	
Ball Bearing (Center)	.....	305AG[2]
Ball Bearing (Rr)	.....	204[2]

Rear Output Shaft

1998-1990	(FS5R30A)	
Seal	.....	224215
Ball Bearing	.....	307L[2]
1998-1990	(FS5W71A, FS5W71B, FS5W71C)	
Seal	.....	710324
Ball Bearing	.....	306TB[2]

Extension Housing

1998-1990	(FS5W71A, FS5W71B, FS5W71C)	
Ball Bearing	.....	205BB[2]
1994-1990	(FS5R30A)	
Ball Bearing	.....	307L[2]

ALTERNATOR

1994-1992	Mitsubishi 110 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	Hitachi 70 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	Hitachi 80 Amp.	
Ball Bearing (Drive End)	.....	303CC
1994-1990	Hitachi 90 Amp.	
Ball Bearing (Drive End)	.....	303CC

DRIVESHAFT SUPPORT

1998-1990	240SX	
Hanger Bearing Assy	.....	HB6[2]
Ball Bearing	.....	206FF[2]

CAMSHAFT SEAL**6 Cylinder**

1996-1990	2960cc/3.0L (DOHC)	
Seal	.....	224052[4]
Repair Sleeve	.....	KWK99157[4]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1990	1998cc/2.0L, 2389cc/2.4L	
Seal	.....	224650
Repair Sleeve	.....	KWK99181
2001-1990	1597cc/1.6L	
Seal	.....	710308
Repair Sleeve	.....	KWK99157

6 Cylinder

2008-2003	3498cc/3.5L	
Seal	.....	710356

CRANKSHAFT FRONT SEAL (cont.)**6 Cylinder (cont.)**

2002-1990	2960cc/3.0L, 3274cc/3.3L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157
2001-1995	2988cc/3.0L (DOHC)	
Seal	.....	710356
Repair Sleeve	.....	KWK99189
1996-1990	2960cc/3.0L (VG30, VG30E, VG30T)	
Seal	.....	223340

CRANKSHAFT REAR SEAL**4 Cylinder**

2002-1990	2389cc/2.4L	
Seal	.....	228009
Repair Sleeve	.....	KWK99315
2001-1990	1597cc/1.6L, 1598cc/1.6L, 1680cc/1.7L, 1809cc/1.8L, 1974cc/2.0L, 1998cc/2.0L	
Seal Viton	.....	228410

6 Cylinder

2008-2003	3498cc/3.5L (DOHC)	
Seal Viton	.....	710363
2002-1996	3274cc/3.3L	
Seal Viton	.....	228410
2001-1995	2988cc/3.0L	
Seal Viton	.....	710363
1996-1995	2960cc/3.0L	
Seal PTFE H/D	.....	228411[2] ²⁵
1994-1990	2960cc/3.0L	
Seal Viton	.....	228410

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - AWD/FWD - CUV, Minivan, SUV - Murano, Rogue, Quest					

FRONT WHEEL**FWD**

2009	Murano	
Hub Unit Bearing	.....	HA590236[2] ²⁵
2009-2008	Rogue	
Hub Unit Bearing	.....	HA590239[2] ²⁵
2009-2004	Quest	
Hub Unit Bearing	.....	HA590046[2] ²⁵
2008-2003	Murano	
Hub Unit Bearing	.....	HA590046[2] ²⁵
2002-1993	Quest	
Ball Bearing	.....	510028[2]

AWD

2009	Murano	
Hub Unit Bearing	.....	HA590236[2] ²⁵
2009-2008	Rogue	
Hub Unit Bearing	.....	HA590239[2] ²⁵
2008-2003	Murano	
Hub Unit Bearing	.....	HA590046[2] ²⁵

REAR WHEEL**FWD**

2009	Murano	
Hub Unit Bearing	.....	HA590237[2] ²⁵
2009-2008	Rogue	
Hub Unit Bearing	.....	HA590241[2] ²⁵
2009-2004	Quest	
Hub Unit Bearing	.....	HA590109[2] ²⁵
2007-2003	Murano	
Hub Unit Bearing	.....	HA590045[2] ²⁵
2002-1999	Quest	
Hub Unit Bearing	.....	HA590057[2]
1998-1993		
Ball Bearing	.....	511008[2]

AWD

2009	Murano	
Hub Unit Bearing	.....	HA590238[2] ²⁵
2009-2008	Rogue	
Hub Unit Bearing	.....	HA590235[2] ²⁵
2007-2003	Murano	
Hub Unit Bearing	.....	HA590044[2] ²⁵

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1993	(RE4F04A)	
Bearing Assy	.....	32009XM[2]

Torque Converter / Frt Pump

2002-1993	(RE4F04A)	
Seal	.....	224663

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2006-1993	(RE4F04A, RE4F04B)	
Seal (LH)	.....	710118
Seal (RH)	.....	710124

Oil Pump

2002-1993	(RE4F04A)	
Seal	.....	224450

Manual Shaft

2002-1993	(RE4F04A)	
Seal	.....	221207

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2007-2004	(RE5F22A)	
Seal	.....	222830
Repair Sleeve	.....	KWK99147

Output Shaft

2007-2004	(RE5F22A)	
Seal	.....	4764

Manual Shaft

2007-2004	(RE5F22A)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

A/C COMPRESSOR

1998-1993	(Cl. Pulley)(Nippondenso FX 15)	
Ball Bearing	.....	5106WCC[2]

ALTERNATOR

1998-1993	Mitsubishi 110 Amp.	
Ball Bearing (Drive End)	.....	303CC

CAMSHAFT SEAL**6 Cylinder**

2002-1999	3275/3.3L	
Seal	.....	224052[2]
Repair Sleeve	.....	KWK99157[2]
1998-1993	2960cc/3.0L	
Seal	.....	223420[2]
Repair Sleeve	.....	KWK99134[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008	2488cc/2.5L	
Seal	.....	224650
Repair Sleeve	.....	KWK99181

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - AWD/FWD - CUV, Minivan, SUV - Murano, Rogue, Quest (cont.)					

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-2003	3498cc/3.5L	
Seal	.....	710236
Repair Sleeve	.....	KWK99189
2002-1999	3275/3.3L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157
1998-1993	2960cc/3.0L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL**4 Cylinder**

2008	2488cc/2.5L	
Seal PTFE H/D	.....	228411 ²⁵

CRANKSHAFT REAR SEAL**6 Cylinder**

2007	3498cc/3.5L	
Seal Viton	.....	710363
2002-1999	3275/3.3L	
Seal PTFE H/D	.....	228411 ²⁵
1998-1993	2960cc/3.0L	
Seal Viton	.....	228410

NISSAN/DATSUN - 4WD/RWD - SUV, Truck - Armada, D21, Frontier, Pathfinder, Titan, Xterra, X-Trail

FRONT WHEEL**RWD**

2009	Armada	
Hub Unit Bearing	.....	HA590284[2] ²⁵
2009	Titan PU	
Hub Unit Bearing	.....	HA590284[2] ²⁵
2009-2005	Frontier	
Hub Unit Bearing	.....	SP450702[2] ⁷⁸
2009-2005	Pathfinder	
Hub Unit Bearing	.....	SP450702[2] ⁷⁸
2009-2005	Xterra	
Hub Unit Bearing	.....	SP450702[2] ⁷⁸
2008	Armada	
Hub Unit Bearing	.....	SP500703[2] ²⁵
2008-2004	Titan PU	
Hub Unit Bearing	.....	SP500701[2] ⁷⁸
2007-2004	Armada	
Hub Unit Bearing	.....	SP500701[2] ⁷⁸
2004-2000	Frontier (6 Cyl.)	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
2004-2000	Xterra	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300848-LM300811[2]
2004-1998	Frontier (4 Cyl.)	
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]
Seal	.....	710478 ²⁵
2004-1990	Pathfinder	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
1997-1990	D21 Hardbody	
Seal (Inner)	.....	710073[2]
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]

4WD

2009	Armada	
Hub Unit Bearing	.....	HA590284[2] ²⁵
2009	Titan PU	
Hub Unit Bearing	.....	HA590284[2] ²⁵
2009-2005	Frontier	
Hub Unit Bearing	.....	SP450701[2] ⁷⁸
2009-2005	Pathfinder	
Hub Unit Bearing	.....	SP450701[2] ⁷⁸
2009-2005	Xterra	
Hub Unit Bearing	.....	SP450701[2] ⁷⁸
2008	Armada	
Hub Unit Bearing	.....	SP500703[2] ²⁵
2008-2004	Titan PU	
Hub Unit Bearing	.....	SP500701[2] ⁷⁸
2007-2004	Armada	
Hub Unit Bearing	.....	SP500701[2] ⁷⁸
2004-2000	Frontier (4 Cyl.)	
Set (Inner)	.....	SET5[2]
Set (Outer)	.....	SET3[2]
2004-2000	Xterra, Frontier (6 Cyl)	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
2004-1990	Pathfinder	
Set (Inner)	.....	SET37[2]
Seal (Outer)	.....	710072[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
1999-1998	Frontier	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]
1997-1990	D21 Hardbody	
Seal (Inner)	.....	710072[2]
Set (Inner)	.....	SET37[2]
Cone/Cup (Outer)	.....	LM300849-LM300811[2]

²⁵New Item, Check For Availability⁷⁸6 Stud, New Item.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - 4WD/RWD - SUV, Truck - Armada, D21, Frontier, Pathfinder, Titan, Xterra, X-Trail (cont.)					

REAR WHEEL**RWD**

2009	Titan PU	
Set	.....	SET80[2] ^z
2009-2005	Pathfinder	
Hub Unit Bearing	.....	HA500701[2] ⁷⁸
2009-2005	Xterra	
Bearing Module	.....	BM500022[2] ²⁵
Seal	.....	710479[2]
2008-2006	Frontier (Stand Trans, Off Road)	
Set	.....	SET10[2]
2008-2005	Frontier (Auto Trans)	
Bearing Module	.....	BM500022[2] ²⁵
Seal	.....	710479[2]
2008-2004	Armada	
Hub Unit Bearing	.....	SP500702[2] ⁷⁸
2008-2004	Titan PU	
Set	.....	SET10[2]
2004-2000	Xterra (4 Cyl.)	
Seal	.....	710305[2]
Bearing Assy	.....	513246[2]
2004-2000	Xterra (6 Cyl.)	
Seal	.....	710176[2]
Bearing Assy	.....	516005[2]
2004-1999	Frontier (4 Cyl.)	
Seal	.....	710305[2]
Bearing Assy	.....	513246[2]
2004-1998	Frontier (6 Cyl.)	
Seal	.....	710176[2]
Bearing Assy	.....	516005[2]
2004-1996	Pathfinder	
Seal	.....	710176[2]
Bearing Assy	.....	516005[2]
1997-1990	D21 Hardbody Pickup (SRW)	
Seal (Inner)	.....	473823[2]
Bearing Assy	.....	30208M[2]
Seal (Outer)	.....	710305[2]
1995-1990	Pathfinder (Disc)	
Seal	.....	710176[2]
Bearing Assy	.....	513246[2]
1995-1990	Pathfinder (Drum)	
Seal (Inner)	.....	473823[2]
Bearing Assy (Inner)	.....	30208M[2]
Seal (Outer)	.....	710305[2]
1995-1990	D21 Hardbody Pickup (DRW.)	
Seal (Inner)	.....	226530[2]
Seal (Outer)	.....	223400[2]
Bearing Assy	.....	32010X[2]

FRONT AXLE**Differential**

2004-1999	Xterra 2.4L	
Bearing Assy	.....	30209C[2]
2004-1999	Xterra 3.3L	
Bearing Assy	.....	30208M[2]
2002-1999	Frontier 3.3L	
Bearing Assy	.....	30208M[2]
2002-1998	Frontier 2.4L	
Bearing Assy	.....	30209C[2]

FRONT AXLE (cont.)**Differential (cont.)**

2002-1990	(R200, R200A Axles)	
Seal	.....	223542[2]
Bearing Assy	.....	30209C[2]
Repair Sleeve	.....	KWK99139
2002-1990	(R180, R180A Axles)	
Seal	.....	1167S[2]
Bearing Assy	.....	30208M[2]
Repair Sleeve	.....	KWK99128

Pinion

2005-1990		
Seal (R180 Axles)	.....	2011S
Bearing Assy (Inner)	.....	
(All)	.....	32307
Bearing Assy (Outer)	.....	
(R180 Axles)	.....	32305
Repair Sleeve (R180 Axles)	.....	KWK99139
Ball Bearing (Pilot)	.....	
(R180 Axles)	.....	30565
Seal (R200A Axle)	.....	712020
Repair Sleeve (R200A Axle)	.....	KWK99157

REAR AXLE**Differential**

2004-1990	(H233, H233B, H233BS Axles)	
Cone/Cup	.....	17887-17831[2]
2002-1998	(C200B Axle)	
Bearing Assy	.....	30209C[2]
2002-1990	(H190, H190A, H190B Axles)	
Seal	.....	1167S[2]
Bearing Assy	.....	30208M[2]
1998-1990	(R230 Axle)	
Seal	.....	710135[2]
Bearing Assy	.....	32211M[2]
1995-1990	(R180, R180A Axles)	
Seal	.....	1167S[2]
Bearing Assy	.....	30208M[2]
1993-1990	(C200, C200B Axles)	
Bearing Assy	.....	30209C[2]

Pinion

2004-1998	(H233BS Axle)	
Seal	.....	710245
Bearing Assy (Inner)	.....	32308
Bearing Assy (Outer)	.....	32306C
Repair Sleeve	.....	KWK99166
2004-1990	(C200B Axle)	
Seal	.....	710245
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	32306C
Repair Sleeve	.....	KWK99166
2002-1990	(H190, H190A, H190B Axles)	
Seal	.....	1979
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	30306M

^zNon-Cancellable/Non-Returnable²⁵New Item, Check For Availability⁷⁸6 Stud, New Item.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

NISSAN/DATSUN - 4WD/RWD - SUV, Truck - Armada, D21, Frontier, Pathfinder, Titan, Xterra, X-Trail (cont.)

REAR AXLE (cont.)

Pinion (cont.)

1992-1990 (R180 Axle)	
Seal	1173
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	32305
Repair Sleeve	KWK99139

TRANSFER CASE REBUILD KIT

2002-1990 (TX10)	
Kit	TRKFN240

TRANSFER CASE

Input Shaft

2004-1990 (TX10, TX10A)(A/T)	
Seal	225035
Ball Bearing	306TB[2]
Repair Sleeve	KWK99196
2004-1990 (TX10, TX10A)(M/T)	
Seal	225030
Ball Bearing	306TB[2]
Repair Sleeve	KWK99196
1992-1990 (TY10A)	
Seal	224150

Front Output Shaft

2008-2004 (Fuji TX14B)	
Seal	710113
2004-1990 (TX10, TX10A)	
Seal	710113
Ball Bearing	212L[2]
1992-1990 (TY10A)	
Seal	226018
Repair Sleeve	KWK99235

Rear Output Shaft

2004-1990 (TX10, TX10A)	
Seal	224266
Ball Bearing	213SL[2]
Repair Sleeve	KWK99166
1992-1990 (TY10A)	
Seal	710214

Drive Sprocket

2004-1990 (TX10, TX10A)	
Ball Bearing	208[2]

Selector Shaft Seal/Man. Shaft

2004-1990 (TX10, TX10A)	
Seal	221710
Repair Sleeve	KWK99068
1992-1990 (TY10, TY10A)	
Seal	710243
Repair Sleeve	KWK99098

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002-1990 (RE4R01A, RL4R01A)	
Seal	224663
Repair Sleeve	KWK99181

Rear Seal/Ext. Housing

2002-1990 (RL4R01A)	
Seal	224464
2002-1990 (E4N71B, RE4R01A)	
Seal	223801

Selector Shaft Seal/Man. Shaft

2002-1990 (RE4R01A, RL4R01A)	
Seal	2027

CLUTCH - 4 CYLINDER

Release Bearing

2004-1996 2.4L (DOHC)	
Bearing Only	613015
2004-1996 3.3 L	
Bearing Only	613015
2003-2001 3.5L	
Bearing Only	613015
1995-1990 3.0 6 Cyl.	
Bearing Assy	DNE01576C
Bearing Only	01576
1995-1990 2.4L	
Bearing Assy	DNE01576C
Bearing Only	01576

5-SPEED MANUAL TRANSMISSION

Transmission Rebuild Kit

2002-1990 (FS5R30A)	
Kit	TRKFN150
2002-1990 (FS5W71C)	
Kit	TRKFN110
1997-1990 (FS5W71G)	
Kit	TRKFN190
1997-1990 (FS5R30A, FS5R30B)	
Kit	TRKFN150
1997-1990 (FS5W71E)	
Kit	TRKFN110

Front Input Shaft

2002-1995 (FS5W71C)	
Seal	1981
Repair Sleeve	KWK99114
2002-1990 (FS5R30A)	
Seal	1981
Ball Bearing	1308L[2]
Repair Sleeve	KWK99114
1994-1990 (FS5W71A, FS5W71B, FS5W71C)	
Seal	1981
Ball Bearing	306LO[2]
Repair Sleeve	KWK99114

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
NISSAN/DATSUN - 4WD/RWD - SUV, Truck - Armada, D21, Frontier, Pathfinder, Titan, Xterra, X-Trail (cont.)					

5-SPEED MANUAL TRANSMISSION**Countershaft**

2002-1990	(FS5W71A, FS5W71B, FS5W71C)	
Ball Bearing (Center)	.....	305AG[2]
Ball Bearing (Rr)	.....	204[2]

Rear Output Shaft

2002-1990	(FS5R30A)	
Seal	.....	224215
Ball Bearing	.....	1308L[2]
2002-1990	(FS5W71A, FS5W71B, FS5W71C)	
Seal	.....	710324
Ball Bearing	.....	306TB[2]

Extension Housing

2002-1990	(FS5R30A)	
Seal	.....	224215
Ball Bearing	.....	307L[2]
2002-1990	(FS5W71A, FS5W71B, FS5W71C)	
Seal	.....	3771
Ball Bearing	.....	205BB[2]

DRIVESHAFT SUPPORT

2004-1998	Frontier (RWD)	
Hanger Bearing Assy	.....	HB6
1997-1990	Pathfinder, Pickup (RWD)	
Hanger Bearing Assy	.....	HB6[2]
Ball Bearing	.....	206FF[2]
1995-1990	Hardbody Pickup (4WD)(V6)	
Hanger Bearing Assy	.....	HB13[2]
Ball Bearing	.....	206FF[2]

CAMSHAFT SEAL**6 Cylinder**

2004-1999	3275/3.3L	
Seal	.....	223420
1998-1990	2960cc/3.0L	
Seal	.....	223420[2]
Repair Sleeve	.....	KWK99134[2]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2005	2500cc/2.5L	
Seal	.....	224650
Repair Sleeve	.....	KWK99181
2004-1994	2389cc/2.4L	
Seal	.....	224650
Repair Sleeve	.....	KWK99181

6 Cylinder

2008-2005	3954cc/4.0L	
Seal	.....	710356
2004-2001	3498cc/3.5L	
Seal	.....	710356
Repair Sleeve	.....	KWK99189

CRANKSHAFT FRONT SEAL (cont.)**6 Cylinder (cont.)**

2004-1996	3275/3.3L	
Seal	.....	224052
Repair Sleeve	.....	KWK99157
1996-1990	2960cc/3.0L	
Seal	.....	223340

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2005	2500cc/2.5L	
Seal PTFE H/D	.....	228411 ²⁵
2004-1990	2389cc/2.4L	
Seal	.....	228009
Repair Sleeve	.....	KWK99315

6 Cylinder

2008-2005	3954cc/4.0L	
Seal PTFE H/D	.....	228411 ²⁵
2004-2001	3498cc/3.5L	
Seal Viton	.....	710363
2004-1996	3275/3.3L	
Seal PTFE H/D	.....	228411 ²⁵
1996-1990	2960cc/3.0L	
Seal Viton	.....	228410

8 Cylinder

2008-2004	5552cc/5.6L	
Seal PTFE H/D	.....	228411 ²⁵

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

OLDSMOBILE - FRONT DRIVE - Achieva, Alero, Cutlass Calais, Cutlass Supreme**FRONT WHEEL****FWD**

2004-1999	Alero	
Hub Unit Bearing	.....	513137[2]
1998-1992	Achieva	
Hub Unit Bearing	.....	513017K[2] ⁶¹
1997	Cutlass Supreme	
Hub Unit Bearing	.....	513044[2]
1996-1990	Cutlass Supreme	
Hub Unit Bearing	.....	513044[2]
1991-1990	Cutlass Calais	
Hub Unit Bearing	.....	513017K[2] ⁶¹

REAR WHEEL**FWD**

2004-1999	Alero	
Hub Unit Bearing	.....	512152[2]
1999-1998	Cutlass	
Hub Unit Bearing	.....	512150[2] ⁸³
Hub Unit Bearing	.....	512237[2] ⁸⁴
1998-1992	Achieva	
Hub Unit Bearing	.....	512001[2]
1997	Cutlass, Cutlass Supreme	
Hub Unit Bearing	.....	512151[2]
1996-1992	Cutlass Supreme (ABS)	
Hub Unit Bearing	.....	512004[2]
1994-1990	Cutlass Supreme (Non-ABS)	
Hub Unit Bearing	.....	513018[2]
1991	Calais (ABS)	
Hub Unit Bearing	.....	512001[2]
1991	Calais (Non-ABS)	
Hub Unit Bearing	.....	513012[2]
1991-1990	Cutlass Supreme (ABS)	
Hub Unit Bearing	.....	513042[2]
1990	Calais (Exc. Stabilizer Bar)	
Hub Unit Bearing	.....	513012[2]
1990	Calais (Stabilizer Bar)	
Hub Unit Bearing	.....	512001[2]

CLUTCH**Release Bearing**

2001-1995	(5 Spd.)(Isuzu Trans.)(Hyd. piston type)	
Hyd. Bearing Assy	.....	619006
1994-1992	4 Cyl. 2.3 (DOHC)(T550 Trans.)(Hyd. piston type)(5 Spd.)	
Hyd. Bearing Assy	.....	619005
1994-1992	4 Cyl. 2.3 (SOHC)(5 Spd.)(Isuzu Trans.)	
Bearing Assy	.....	614108
1994-1992	Quad4 (5 Spd.)(Isuzu Trans.)	
Bearing Assy	.....	614108
1992-1991	3.4 V6 (5 Spd.)(Isuzu Trans.)	
Bearing Assy	.....	614108
1992-1990	Quad4 (5 Spd.)(Muncie Trans.)	
Bearing Assy	.....	614069
1992-1990	4 Cyl. (w/o Quad4)(5 Spd.)	
Bearing Assy	.....	614108
1990	6 Cyl. (5 Spd.)	
Bearing Assy	.....	614069

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1996-1990	(HM3T40)	
Seal	.....	4072N[2]
1996-1990	(THM125)	
Seal	.....	4072N[2]

Output Shaft

1996-1990	(THM125)(3T40)	
Seal	.....	3543[2]
Repair Sleeve	.....	KWK99139[2]

Manual Shaft

1996-1990		
Seal	.....	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2004-1999	(4T40E, 4T45E, 4T60E)	
Seal	.....	4072N
Repair Sleeve	.....	KWK99172
2001-1990	(THM440 T4, 4T60, 4T60 E, 4T40)	
Seal	.....	4072N[2]

Output Shaft

2004-1997	(4T40E)	
Seal	.....	SL260001[2] ²⁵
1999-1997	(4T60E)	
Seal (LH)	.....	710096
Repair Sleeve (RH)	.....	KWK99139
Seal	.....	3543
Repair Sleeve (RH)	.....	KWK99139
1998-1990	(THM440 T4, 4T60, 4T60 E)	
Seal (LH)	.....	710096[2]
Seal (RH)	.....	3543[2]
Repair Sleeve	.....	KWK99139[2]

Manual Shaft

2004-1990	(4T40E, 4T45E, 4T60E)	
Seal	.....	8792S

5-SPEED MANUAL TRANSAXLE**Differential**

1999-1991	(Getrag 284)	
Cone/Cup	.....	LM503349P-LM503310P[2]
1998-1990	(Isuzu)	
Bearing Assy	.....	32008XM[2]
1994-1992	(New Process)	
Set	.....	SET11[2]
1990	(Getrag)	
Set	.....	SET11[2]

²⁵New Item, Check For Availability⁶¹Kit = Seal, Hub Nut, & Brg Unit⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

OLDSMOBILE - FRONT DRIVE - Achieva, Alero, Cutlass Calais, Cutlass Supreme (cont.)**5-SPEED MANUAL TRANSAXLE****Input Shaft**

1998-1995	(Isuzu)	
Seal	222835	
Bearing Assy	30306M	
Repair Sleeve	KWK99111	
1994-1990	(Isuzu)	
Seal	222835	
Repair Sleeve	KWK99111	
1991-1990	(Getrag)	
Ball Bearing	305DD[2]	

Output Shaft

1999-1991	(Getrag 284)	
Seal	2003N[2]	
Repair Sleeve	KWK99146[2]	
Cone/Cup (RH)	LM503349P-LM503310P[2]	
Set (LH)	SET5	
1998-1990	(Isuzu)	
Seal	3543[2]	
Repair Sleeve	KWK99139[2]	
Bearing Assy (RH)	32206M[2]	
Set (LH)	SET5[2]	
1994-1993	(New Process T550)	
Seal	3543[2]	
Repair Sleeve	KWK99139[2]	
1991-1990	(Getrag)	
Seal	3543[2]	
Repair Sleeve	KWK99139[2]	

Selector Shaft Seal/Man. Shaft

1998-1990	
Seal	710243

POWER STEERING**Pump Shaft**

2001-1992	
Seal	7013S
1991-1990	(integral reservoir)
Seal	221925
Ball Bearing	203FF[2]

Worm Shaft

1990	
Seal	222510

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004-2002	2.2L (DOHC)	
Seal	9845	
Repair Sleeve	KWK99176	
2001-1990	2.3L (DOHC), 2.4L (DOHC)	
Seal Viton	320259	
Repair Sleeve	KWK99199	
1991-1990	112/1.8L, 121/2.0L, 134/2.2L, 151/2.5L	
Seal	9845	
Repair Sleeve	KWK99176	
Harmnc Balancer Slvs	88176	

6 Cylinder

2004-1990	173/2.8L, 189/3.1L, 207/3.4L	
Seal	9845	
Repair Sleeve	KWK99176	
1993-1990	181/3.0L, 204/3.3L	
Seal Viton	710162	
Repair Sleeve	KWK99193	

CRANKSHAFT REAR SEAL**4 Cylinder**

2004-2002	2.2L (DOHC)	
Seal Viton	710237	
2001-1990	138/2.3L, 146/2.4L	
Seal	40375	
1999-1990	3.1L	
Seal	4307V	
1996-1993	134/2.2L	
Seal	4307V	
Repair Sleeve	KWK99298	
Seal PTFE H/D	5273	
1991-1990	151/2.5L	
Seal	3698	

6 Cylinder

2004-1990	173/2.8L, 189/3.1L, 207/3.4L	
Seal	4307V	
Seal PTFE H/D	5273	
Repair Sleeve	KWK99298	
1993-1990	204/3.3L, 231/3.8L	
Seal Viton	320691	
Repair Sleeve	KWK99328	
1993-1990	204/3.3L, 231/3.8L	
Seal Viton	320691	
Repair Sleeve	KWK99328	

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

OLDSMOBILE - FRONT DRIVE - Aurora**FRONT WHEEL****FWD**

2003-2001 (2nd Design)
 Hub Unit Bearing 513179[2]⁷³
 2001-1997 (1st Design)
 Hub Unit Bearing 513121[2]⁷²
 1996-1995
 Hub Unit Bearing 513087[2]⁴⁵

REAR WHEEL**FWD**

2003-1995
 Hub Unit Bearing 512003[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2003-2001 (4T65 E)
 Seal 4072N
 Repair Sleeve KWK99172
 2001-1995 (4T80 E)
 Seal 224840
 Repair Sleeve KWK99189

Output Shaft

2003-2001 (4T65 E)
 Seal (LH) (Yellow) 100165
 Repair Sleeve (LH) KWK99139
 Seal (RH) (Green) 3543
 Repair Sleeve (RH) KWK99139
 2001-1995 (4T80 E)
 Seal (LH) 714679
 Seal (RH) 4674N

Manual Shaft

2003-1995 (4T65E, 4T80E)
 Seal 8792S
 Repair Sleeve KWK99050

POWER STEERING**Pump Shaft**

2001-1995
 Ball Bearing 203FF[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2002-2001 212/3.5L
 Seal 470163

8 Cylinder

2002-1995 244/4.0L
 Seal Viton 710263

CRANKSHAFT REAR SEAL**6 Cylinder**

2003-1995 3.5L (DOHC), 4.1L (DOHC)
 Seal Viton 710262

8 Cylinder

2003-1995 244/4.0L
 Seal Viton 710262

OLDSMOBILE - FRONT DRIVE - Cutlass Ciera, Cutlass Cruiser**FRONT WHEEL****FWD**

1996-1994
 Hub Unit Bearing 513087[2]⁴⁵
 1993-1990
 Hub Unit Bearing 513016K[2]⁶¹

REAR WHEEL**FWD**

1996-1994
 Hub Unit Bearing 512078[2]
 1993-1990
 Hub Unit Bearing 513018[2]

⁴⁵Brg Flg Mtg Holes Non-Threaded. ⁶¹Kit = Seal, Hub Nut, & Brg Unit ⁷²Steel Wire Clip. Brg
 Flg Mtg Holes Threaded. ⁷³Plastic Wire Clip.

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

OLDSMOBILE - FRONT DRIVE - Cutlass Ciera, Cutlass Cruiser (cont.)**CLUTCH****Release Bearing**

1993-1992	Quad4 (5 Spd.)(Isuzu Trans.)	
	Bearing Assy	614108
1992-1990	Quad4 (5 Spd.)(Muncie Trans.)	
	Bearing Assy	614069
1992-1990	6 Cyl. (5 Spd.)	
	Bearing Assy	614069
1992-1990	4 Cyl. (w/o Quad4)(5 Spd.)	
	Bearing Assy	614108

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1996-1990		
	Seal	4072N

Output Shaft

1996-1990	(THM125)(3T40)	
	Seal	3543[2]
	Repair Sleeve	KWK99138[2]

Manual Shaft

1996-1990		
	Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1996-1994	(4T60E)	
	Seal	4072N
	Repair Sleeve	KWK99172

Output Shaft

1996-1990	(4T60E)	
	Seal (LH)	710096
	Seal (RH)	3543
	Repair Sleeve	KWK99139[2]

Manual Shaft

1996-1994	(4T60E)	
	Seal	8792S
	Repair Sleeve	KWK99049

POWER STEERING**Pump Shaft**

1996-1990		
	Seal	480821

CRANKSHAFT FRONT SEAL**4 Cylinder**

1996-1990	134/2.2L, 151/2.5L	
	Seal	9845
	Repair Sleeve	KWK99176

CRANKSHAFT FRONT SEAL**6 Cylinder**

1996-1990	173/2.8L, 189/3.1L	
	Seal	9845
	Repair Sleeve	KWK99176
1993-1990	204/3.3L, 231/3.8L	
	Seal Viton	710162
	Repair Sleeve	KWK99193

CRANKSHAFT REAR SEAL**4 Cylinder**

1996-1993	134/2.2L	
	Seal	4307V
	Seal PTFE H/D	5273
	Repair Sleeve	KWK99298
1992-1990	151/2.5L	
	Seal	3698

6 Cylinder

1996-1990	173/2.8L, 189/3.1L	
	Seal	4307V
	Seal PTFE H/D	5273
	Repair Sleeve	KWK99298
1993-1990	204/3.3L	
	Seal Viton	320691

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

OLDSMOBILE - FRONT DRIVE - Eighty-Eight, LSS, Ninety-Eight, Touring Sedan**FRONT WHEEL****FWD**

1999-1996	
Hub Unit Bearing	513121[2] ⁷²
1999-1992 (ABS)	
Hub Unit Bearing	513087[2] ⁴⁵
1993-1992 Eighty-Eight (Non-ABS)	
Hub Unit Bearing	513088[2]
1991 Eighty-Eight, Ninety-Eight (ABS)	
Hub Unit Bearing	513016K[2] ⁶¹
1991-1990 Eighty-Eight, Ninety-Eight (Non-ABS)	
Hub Unit Bearing	513016K[2] ⁶¹
1990 Eighty-Eight, Ninety-Eight, Touring Sedan (ABS)	
Hub Unit Bearing	513016K[2] ⁶¹

REAR WHEEL**FWD**

1999-1994	
Hub Unit Bearing	513062[2]
1993-1992 Eighty-Eight (Non-ABS)	
Hub Unit Bearing	513018[2]
1993-1991 Eighty-Eight, Ninety-Eight (ABS)	
Hub Unit Bearing	513062[2]
1991-1990 Eighty-Eight, Ninety-Eight (Non-ABS)	
Hub Unit Bearing	513018[2]
1990 Eighty-Eight, Ninety-Eight, Touring Sedan (ABS)	
Hub Unit Bearing	513041[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1999-1990 (4T60E, 4T65E)	
Seal	4072N[2]

Output Shaft

1999-1994 (4T65 E)	
Seal (LH) (Yellow)	100165
Repair Sleeve (LH)	KWK99139
Seal (RH) (Green)	3543
Repair Sleeve (RH)	KWK99139
1997-1990 (4T60E)	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve	KWK99139

Manual Shaft

1999-1990 (4T60E, 4T65E)	
Seal	8792S

POWER STEERING**Pump Shaft**

1999-1990	
Seal	480821

POWER STEERING**Worm Shaft**

1999-1990	
Seal	222510

CRANKSHAFT FRONT SEAL**6 Cylinder**

1999-1990	
Seal Viton	710162
Repair Sleeve	KWK99193

CRANKSHAFT REAR SEAL**6 Cylinder**

1999-1991	
Seal Viton	320691
Repair Sleeve	KWK99328
1990	
Seal	5591
Seal PTFE H/D	5291

⁴⁵Brg Flg Mtg Holes Non-Threaded.
Flg Mtg Holes Threaded.

⁶¹Kit = Seal, Hub Nut, & Brg Unit

⁷²Steel Wire Clip. Brg

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

OLDSMOBILE - FRONT DRIVE - Intrigue**FRONT WHEEL****FWD**

2002-2001	(2nd Design)	
Hub Unit Bearing	.....	513179[2] ⁷³
2001-1998	(1st Design)	
Hub Unit Bearing	.....	513121[2] ⁷²

REAR WHEEL**RWD**

2002-1998		
Hub Unit Bearing	.....	512150[2] ⁸³
Hub Unit Bearing	.....	512237[2] ⁸⁴

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2002-1998	(4T65 E)	
Seal	.....	4072N
Repair Sleeve	.....	KWK99172

Output Shaft

2002-1998	(4T65 E)	
Seal (LH) (Yellow)	.....	100165
Repair Sleeve (LH)	.....	KWK99139
Seal (RH) (Green)	.....	3543
Repair Sleeve (RH)	.....	KWK99139

Manual Shaft

2002-1998	(4T65 E)	
Seal	.....	8792S

POWER STEERING**Pump Shaft**

2002-1999	212/3.5L	
Seal	.....	7013S
Ball Bearing	.....	203FF[2]
1999-1998	231/3.8L	
Seal	.....	7013S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2002-1999	212/3.5L	
Seal Viton	.....	710263
1999-1998	231/3.8L	
Seal Viton	.....	710162
Repair Sleeve	.....	KWK99193

CRANKSHAFT REAR SEAL**6 Cylinder**

2002-1999	212/3.5L	
Seal Viton	.....	710262
1999-1998	231/3.8L	
Seal Viton	.....	320691
Repair Sleeve	.....	KWK99328

OLDSMOBILE - FRONT DRIVE - Toronado**FRONT WHEEL****FWD**

1992		
Hub Unit Bearing	.....	513087[2] ⁴⁵
1991-1990		
Hub Unit Bearing	.....	513059[2]

REAR WHEEL**FWD**

1992		
Hub Unit Bearing	.....	512003[2]
1991		
Hub Unit Bearing	.....	512003[2]
1990	(ABS)	
Hub Unit Bearing	.....	513041[2]

REAR WHEEL (cont.)**FWD (cont.)**

1990	(Non-ABS)	
Hub Unit Bearing	.....	513018[2]

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1992-1990		
Seal	.....	4072N[2]

⁴⁵Brg Flg Mtg Holes Non-Threaded.
Wire Clip.⁸³Deplete Inventory⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.
⁸⁴Reorder⁷³Plastic

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

OLDSMOBILE - FRONT DRIVE - Toronado (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

1992-1990	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve (RH)	KWK99138

Manual Shaft

1992-1990	
Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1992-1990	
Seal	4072N

Output Shaft

1992-1990	
Seal (Pass Side)	3543
Seal (Driver Side)	710096

Manual Shaft

1992-1990	
Seal	8792S

ALTERNATOR

1992-1990	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

POWER STEERING**Pump Shaft**

1992	
Seal	7013S
Ball Bearing	203FF[2]
1991-1990	
Seal	22192S
Ball Bearing	203FF[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

1992-1990	231/3.8L	
Seal Viton		710162
Repair Sleeve		KWK99193

CRANKSHAFT REAR SEAL**6 Cylinder**

1992-1991	231/3.8L	
Seal Viton		320691
Repair Sleeve		KWK99328
1990		
Seal		5591
Seal PTFE H/D		5291

OLDSMOBILE - REAR DRIVE - Cruiser Wagon, Custom Cruiser, Eighty-Eight, Ninety-Eight**FRONT WHEEL****RWD**

1992-1991	
Seal (Inner)	4739[2]
Set (Inner)	SET6[2]
Set (Outer)	SET3[2]
1990	
Seal (Inner)	8871[2]
Set (Inner)	SET6[2]
Set (Outer)	SET3[2]

REAR WHEEL**RWD**

1992-1990	(Wagon or Pontiac Axle)	
Seal		8835S[2]
Cylindrical Bearing		6408[2]
Bearing & Seal Kit		TRP1559TV[2] ¹⁹

REAR AXLE**Differential Rebuild Kit**

1996-1990	(8.5" R.G.)	
Kit		DRK321
1990	(7.5" R.G.)	
Kit		DRK320

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

OLDSMOBILE - REAR DRIVE - Cruiser Wagon, Custom Cruiser, Eighty-Eight, Ninety-Eight (cont.)

REAR AXLE

Differential

1996-1990 (B, C, G, K, O Axles)
Cone/Cup LM501349-LM501314[2]

Pinion

1996-1990 (8.5" R.G.)
Seal 2043
Cone/Cup (Inner) M802048-M802011
Cone/Cup (Outer) M88048-M88010

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

1992-1990
Seal 3227[2]
Repair Sleeve KWK99174

Rear Seal/Ext. Housing

1992-1990
Seal 9613S[2]
Repair Sleeve KWK99149
Seal Kit 5200⁶⁴

POWER STEERING

Pitman Shaft

1992-1990
Seal Kit PSK1²⁴

Pump Shaft

1992-1990 (Saginaw)
Seal 7013S

CRANKSHAFT FRONT SEAL

8 Cylinder

1992-1991
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
1990
Seal 472082
Repair Sleeve KWK99199
Harmnc Balancer Slvs 88199

CRANKSHAFT REAR SEAL

8 Cylinder

1992 5.7L
Seal Viton 4359V
1992-1991 305/5.0L
Seal Viton 4359V
Seal PTFE H/D 5274
Repair Sleeve KWK99364
1990 307/5.0L
Seal 5419

OLDSMOBILE - Minivan, SUV - Bravada

FRONT WHEEL

4WD

2004-2002
Hub Unit Bearing 513188[2]
2001-1997
Hub Unit Bearing 513124[2]
1996-1991
Hub Unit Bearing 513061[2]

REAR WHEEL

4WD

2004-2002
Seal 4762N
Cylindrical Bearing 513067[2]
2001-1991
Seal 710166[2]
Cylindrical Bearing 5707[2]
Bearing & Seal Kit TRP1563TAV[2]¹⁹

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal
⁶⁴Seal & Bushing Kit

²⁴Opt. Kit = Seals 5683 & 5684. Not Sold Separately

OLDSMOBILE - Minivan, SUV - Bravada (cont.)**4WD FRONT AXLE****Axle Shaft**

2004-1998	
Seal	710491[2]
Ndle Bearing	HK4012[2]
1997	
Seal	223255[2]
Ndle Bearing	B2010[2]
Seal	710491[2]
1996	
Ndle Bearing	HK4012[2]
Seal	710491[2]
1994-1991	
Seal	223255[2]
Ndle Bearing	B2010[2]

Differential Rebuild Kit

2004-1991	(7.25" R.G.)
Kit	DRK320A

Differential

2004-1991	(7.25" R.G.)
Set	SET11[2]

Pinion

2004-1991	
Seal	8611N
Cone/Cup (Inner) (O.E.)	M88048S-M88010
Cone/Cup (Outer)	M86649-M86610

REAR AXLE**Differential Rebuild Kit**

2001-1999	
Kit	DRK320C
1998-1991	
Kit	DRK320

Differential

2004-2002	(8.5", 8.625" R.G.)
Set	SET36[2]
2004-1991	(7.5" R.G., 7.625" R.G.)
Cone/Cup	LM501349-LM501314[2]

Pinion

2004-2002	(8.5", 8.625" R.G.)(113" W/B)
Seal	8610
Cone/Cup (Inner)	NP457992-NP926068
Cone/Cup (Outer)	M86649-M86610
2001-1999	
Seal	8610
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610
1998-1991	
Seal	8610
Cone/Cup (Inner)	HM89249-HM89210
Cone/Cup (Outer)	M86649-M86610

TRANSFER CASE REBUILD KIT

1997-1996	(Warner 4472)
Kit	TCRK1372

TRANSFER CASE REBUILD KIT (cont.)

1994-1991	(Warner 4472)
Kit	TCRK1372

TRANSFER CASE**Input Shaft**

2001-1998	(New Process 136C)
Ndle Bearing (Pilot)	FC66561
Seal	472636
Ball Bearing	110CB
Ball Bearing (Frt)	207
1997-1996	(Warner 4472)
Seal (O.E.)	710062
Ball Bearing	109TB
Repair Sleeve	KWK99175
Ndle Bearing (Pilot)	SCH1310
1994-1991	(Warner 4472)
Seal (O.E.)	710062
Ball Bearing	109TB
Repair Sleeve	KWK99175
Ndle Bearing (Pilot)	SCH1310

Front Output Shaft

2001-1998	(New Process 136C)
Ball Bearing	110CB
Ball Bearing (Frt)	207
1997-1991	(Warner 4472)
Seal (Frt)	714503
Ball Bearing (Frt)	207
Ndle Bearing (Pilot)	JH1612

Rear Output Shaft

2001-1998	(New Process 136C)
Seal	710496
1997-1996	(Warner 4472)(booted)
Seal	4503N
Ball Bearing	208SL[2]
1997-1996	(Warner 4472)(w/o boot)
Seal	714503
Ball Bearing	208SL[2]
1994-1991	(Warner 4472)(booted)
Seal	4503N
Ball Bearing	208SL[2]
1994-1991	(Warner 4472)(w/o boot)
Seal	714503
Ball Bearing	208SL[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-1993	
Seal	3227
Repair Sleeve	KWK99174
1992-1991	
Seal	3227
Repair Sleeve	KWK99174

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

OLDSMOBILE - Minivan, SUV - Bravada (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Rear Seal/Ext. Housing**

2004-1991

Seal 9613S
 Repair Sleeve KWK99149
 Seal Kit 5200⁶⁴

Selector Shaft Seal/Man. Shaft

2004-1991

Seal 8792S
 Repair Sleeve KWK99050

DRIVESHAFT SUPPORT

2001-1991

Hanger Bearing Assy HB88107A
 Ball Bearing 88107

CRANKSHAFT FRONT SEAL**6 Cylinder**

2001-1991 262/4.3L

Seal 9845
 Repair Sleeve KWK99176

CRANKSHAFT REAR SEAL**6 Cylinder**

2004-1991 262/4.3L

Seal Viton 4359V
 Seal PTFE H/D 5274
 Repair Sleeve KWK99364

OLDSMOBILE - Minivan, SUV - Silhouette**FRONT WHEEL****FWD**

2004-2001 (2nd Design)

Hub Unit Bearing 513179[2]⁷³

2001-1997 (1st Design)

Hub Unit Bearing 513121[2]⁷²

1996-1992

Hub Unit Bearing 513087[2]⁴⁵

1991-1990

Hub Unit Bearing 513016K[2]⁶¹**AWD**

2004-2002 (2nd Design)

Hub Unit Bearing 513179[2]⁷³**REAR WHEEL****FWD**

2004-2002

Hub Unit Bearing 512078[2]

2001-1992

Hub Unit Bearing 512078[2]

1991-1990

Hub Unit Bearing 513018[2]

AWD

2004-2002

Hub Unit Bearing 513121[2]⁷²**3-SPEED AUTOMATIC TRANSAXLE****Torque Converter**

1996-1990 (THM125C)

Seal 4072N

Output Shaft

1996-1990 (THM125C)

Seal 3543[2]
 Repair Sleeve KWK99138[2]

Manual Shaft

1996-1990 (THM125C)

Seal 8792S
 Repair Sleeve KWK99050

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2004-1990 (4T60E, 4T65E)

Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2004-1999 (4T65 E)

Seal (LH) (Yellow) 100165
 Repair Sleeve (LH) KWK99139
 Seal (RH) (Green) 3543
 Repair Sleeve (RH) KWK99139

1998-1992 (4T60E)

Seal (LH) 710096
 Repair Sleeve KWK99139
 Seal (RH) 3543
 Repair Sleeve KWK99139

⁴⁵Brg Flg Mtg Holes Non-Threaded.⁶¹Kit = Seal, Hub Nut, & Brg Unit⁶⁴Seal & Bushing Kit⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁷³Plastic Wire Clip.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

OLDSMOBILE - Minivan, SUV - Silhouette (cont.)

4-SPEED AUTOMATIC TRANSAXLE

Manual Shaft

2004-1992	(4T60E, 4T65E)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

CRANKSHAFT FRONT SEAL

6 Cylinder

2004-1996	207/3.4L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
1995-1992	231/3.8L	
Seal Viton	.....	710162
Repair Sleeve	.....	KWK99193
1994-1990	189/3.1L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176

CRANKSHAFT REAR SEAL

6 Cylinder

2004-1990	189/3.1L, 207/3.4L	
Seal	.....	4307V
Seal PTFE H/D	.....	5273
Repair Sleeve	.....	KWK99298
1995-1992	231/3.8L	
Seal Viton	.....	320691
Repair Sleeve	.....	KWK99328

PEUGEOT - ALL

FRONT WHEEL

FWD

1992-1990	405	
Ball Bearing	.....	513073[2]

RWD

1991-1990	505 (2.8L)	
Ball Bearing	.....	513051[2]
1991-1990	505 (Exc. 2.8)	
Seal (Inner)	.....	224520[2]
Set (Inner)	.....	SET33[2] ^z
Bearing Assy (Outer)	.....	32005X[2]

REAR WHEEL

FWD

1992-1990	405 (w/o ABS)	
Hub Unit Bearing	.....	512017[2]

RWD

1992-1990	505 Sedan	
Seal (Inner)	.....	225460[2]
Ball Bearing (Inner)	.....	513151[2]
Seal (Outer)	.....	557008XX[2]

REAR AXLE

Differential

1992-1990	504, 505, 604	
Set	.....	SET37[2]

REAR AXLE

Pinion

1991-1990	(404L, U6, U8, U10, 504, 505, 604)	
Seal	.....	1012N
Cone/Cup (Inner)	.....	HM89449-HM89410
Cone/Cup (Outer)	.....	M88048-M88010

CLUTCH

Pilot Bearing

1990	4 Cyl. 2.5 (Turbo Diesel)	
Ball Bearing	.....	103CC
1990	4 Cyl. (Gas Turbo)	
Ball Bearing	.....	103CC
1990	4 Cyl. (w/o Gas Turbo)	
Bushing	.....	PB38 ¹⁶
1990	4 Cyl. (w/o Turbo Diesel)	
Bushing	.....	PB38 ¹⁶
1990	4 Cyl. 2.2 (Turbo Diesel)	
Bushing	.....	PB38 ¹⁶

ALTERNATOR

1991-1990	(Motorola 70 Amp.)	
Ball Bearing (Drive End)	.....	203FF
Ball Bearing (Rear End)	.....	200CC

CRANKSHAFT FRONT SEAL

4 Cylinder

1991-1990	1905cc/1.9L (SOHC)(DOHC)	
Seal	.....	223605
Repair Sleeve	.....	KWK99146
1991-1990	1971cc/2.0L, 2155cc/2.2L, 2165cc/2.2L	
Seal Viton	.....	225020
Repair Sleeve	.....	KWK99196

^zNon-Cancellable/Non-Returnable

¹⁶Obsolete

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PEUGEOT - ALL (cont.)**CRANKSHAFT FRONT SEAL****6 Cylinder**

1990 2849cc/2.8L

Seal 224252

Repair Sleeve KWK99169

CRANKSHAFT REAR SEAL**4 Cylinder**1991-1990 1905cc/1.9, 1905cc/1.9
(DOHC), 1971cc/2.0,
2155cc/2.2 (Turbo),
2165cc/2.2

Seal Viton 229005

Repair Sleeve KWK99354

CRANKSHAFT REAR SEAL**6 Cylinder**

1990 2849cc/2.8L

Seal 228010

Repair Sleeve KWK99315

PLYMOUTH - FRONT DRIVE - Acclaim, Sundance**FRONT WHEEL****FWD**

1995-1991 Acclaim, Sundance

Hub Unit Bearing 513075[2]

1990

Seal 5604[2] ⁵⁶

Ball Bearing 513006[2]

Hub Unit Bearing (4

Stud) 518501[2] ⁶²

Hub Unit Bearing (5

Lug Whl.) 518502[2] ⁶³**REAR WHEEL****FWD**

1995-1990

Seal (Inner) 4099[2]

Set (Inner) SET46[2]

Set (Outer) SET16[2]

CLUTCH**Release Bearing**

1995-1990 (4 Cyl.)

Bearing Assy 614092

1994-1991 6 Cyl. 3.0, 3.2

Bearing Assy 614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**1995-1990 (A404, A413, A470, A670,
31TH)

Seal 3459S[2]

Set SET11[2]

Repair Sleeve (Opt) KWK99157[2]

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1995-1990

Seal 331228H[2]

Repair Sleeve KWK99149

Transfer Shaft1995-1990 (A404, A413, A470, A670,
31TH)

Set SET11[2]

Output Shaft

1995-1990 (A404, A413, A470, A670)

Seal 3459S[2]

Set SET17[2]

Repair Sleeve KWK99157[2]

Manual Shaft1995-1990 (A404, A413, A470, A670,
31TH)

Seal 8609

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1995-1990 (A604, 41TE)

Seal 3459S[2]

Set SET11[2]

Repair Sleeve KWK99157[2]

Torque Converter / Frt Pump

1995-1990 (A604, 41TE)

Seal 331228H

Repair Sleeve KWK99149

⁵⁶Opt. Kit = Seal 3948 & Sleeve⁶²Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PLYMOUTH - FRONT DRIVE - Acclaim, Sundance (cont.)

4-SPEED AUTOMATIC TRANSAXLE

Transfer Shaft

1995-1992	(41TE)	
Set (RH)	.....	SET45[2]
1991-1990	(A604 41TE)	
Set	.....	SET11[2]

Output Shaft

1995-1990	(A604 41TE)	
Seal	.....	3459S[2]
Set	.....	SET17[2]
Repair Sleeve	.....	KWK99157[2]

Manual Shaft

1995-1990	(A604, 41TE)	
Seal	.....	8609

5-SPEED MANUAL TRANSAXLE

Differential

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal	.....	3459S[2]
Set	.....	SET11[2]
Repair Sleeve	.....	KWK99157[2]

Input Shaft

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal (Frt)	.....	3732S
Set (Frt)	.....	SET4[2]
Repair Sleeve	.....	KWK99106
Set (Rr)	.....	SET5[2]

Selector Shaft Seal/Man. Shaft

1995-1990	(A465, A520, A523, A525, A543, A555, A568)	
Seal	.....	3816

CAMSHAFT SEAL

4 Cylinder

1995-1990	135/2.2L, 153/2.5L	
Seal	.....	3655S
Repair Sleeve	.....	KWK99139

6 Cylinder

1995-1990	181/3.0L	
Seal	.....	3771[2]
Repair Sleeve	.....	KWK99139[2]

INTERMEDIATE SHAFT

4 Cylinder

1995-1990	135/2.2L, 153/2.5L	
Seal	.....	3655S

CRANKSHAFT FRONT SEAL

4 Cylinder

1995-1990	135/2.2L, 153/2.5L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112
1994-1990	135/2.2L	
Seal	.....	3638
Repair Sleeve	.....	KWK99112

6 Cylinder

1995-1990	181/3.0L	
Seal	.....	223750

CRANKSHAFT REAR SEAL

4 Cylinder

1995-1990	135/2.2L, 153/2.5L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

6 Cylinder

1995-1990	181/3.0L	
Seal Viton	.....	710056
Seal PTFE H/D	.....	5279

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PLYMOUTH - FRONT DRIVE - Breeze**FRONT WHEEL****FWD****2000-1996**

Hub Unit Bearing 513138[2]

REAR WHEEL**FWD****2000-1998 (ABS)**

Hub Unit Bearing 512220[2]

2000-1996 (Non-ABS)

Hub Unit Bearing 512154[2]

1997-1996 (ABS)

Hub Unit Bearing 512133[2]

CLUTCH**Release Bearing****2000-1996**

Bearing Assy 614121

4-SPEED AUTOMATIC TRANSAXLE**Differential****2000-1997 (A604 41TE)(Prod. from mid 1997 on)**

Cone/Cup (LH) NP889967-NP714580

Cone/Cup (RH) NP952605-JL69310P

1997-1996 (A604 41TE)(Prod. thru mid 1997)

Cone/Cup (LH) NP889967-NP714580

Cone/Cup (RH) JL69348-JL69310

Torque Converter / Frt Pump**2000-1996**

Seal 331228H

Repair Sleeve KWK99149

Transfer Shaft**2000-1996 (A604, 41TE)**

Cone/Cup (Inner) NP853895-NP352518[2]

Set (Outer) SET45[2]

Output Shaft**2000-1997 (A604 41TE)(Prod. from mid 1997 on)**

Seal (Outer) 3459S[2]

Cone/Cup (Outer) LM300848-LM300911[2]

Cone/Cup (Inner) NP952605-JL69310P[2]

1997-1996 (A604 41TE)(Prod. thru mid 1997)

Seal (Outer) 3459S[2]

Cone/Cup (Outer) LM300848-LM300811[2]

Cone/Cup (Inner) JL69348-JL69310[2]

Manual Shaft**2000-1996 (41TE)**

Seal 8609

5-SPEED MANUAL TRANSAXLE**Differential****2000-1996**

Seal 3459S[2]

Set SET11[2]

Repair Sleeve KWK99157[2]

Input Shaft**2000-1996**

Seal (Frt) 3732S

Set (Frt) SET4[2]

Repair Sleeve KWK99106

Set (Rr) SET5[2]

Selector Shaft Seal/Man. Shaft**2000-1996**

Seal 3816

CAMSHAFT SEAL**4 Cylinder****2000-1996 122/2.0L (SOHC), 148/2.4L (DOHC)**

Seal Viton 320249

Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder****2000-1996 122/2.0L (SOHC), 148/2.4L (DOHC)**

Seal Viton 320348

Repair Sleeve KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder****2000-1996 122/2.0L**

Seal Viton 710056

Seal PTFE H/D 5279

2000-1996 148/2.4L

Seal Viton 710056

Seal PTFE H/D 5279

PLYMOUTH - FRONT DRIVE - Horizon**FRONT WHEEL****FWD**

1990	
Seal	5604[2] ⁵⁶
Ball Bearing	B39[2]
Hub Unit Bearing	518500[2] ⁶²

REAR WHEEL**FWD**

1990	
Seal (Inner)	4099[2]
Set (Inner)	SET46[2]
Set (Outer)	SET16[2]

CLUTCH**Release Bearing**

1991-1990	6 Cyl. 3.0, 3.2
Bearing Assy	614092
1990	(4 Cyl.)
Bearing Assy	614092

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1990	(A404, A413, A470, A670, 31TH)
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve (Opt)	KWK99157[2]

Torque Converter

1990	
Seal	331228H[2]
Repair Sleeve	KWK99149

Transfer Shaft

1990	(A404, A413, A470, A670, 31TH)
Set	SET11[2]

Output Shaft

1990	(A404, A413, A470, A670)
Seal	3459S[2]
Set	SET17[2]
Repair Sleeve	KWK99157[2]

Manual Shaft

1990	(A404, A413, A470, A670, 31TH)
Seal	8609

5-SPEED MANUAL TRANSAXLE**Differential**

1990	
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]

Input Shaft

1990	
Seal (Frt)	3732S
Set (Frt)	SET4[2]
Repair Sleeve	KWK99106
Set (Rr)	SET5[2]

Selector Shaft Seal/Man. Shaft

1990	
Seal	3816

CAMSHAFT SEAL**4 Cylinder**

1990	135/2.2L
Seal (Frt)	3655S
Repair Sleeve	KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

1990	135/2.2L
Seal	3638
Repair Sleeve	KWK99112

CRANKSHAFT REAR SEAL**4 Cylinder**

1990	135/2.2L
Seal Viton	710056
Seal PTFE H/D	5279

⁵⁶Opt. Kit = Seal 3948 & Sleeve⁶²Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PLYMOUTH - FRONT DRIVE - Neon					

FRONT WHEEL**FWD**

2001-2000	
Ball Bearing	510057[2]
1999-1995	
Ball Bearing	510032[2]
Hub Unit Bearing (4	
Stud)	HA590181K[2] ⁶⁸
Hub Unit Bearing (5	
Lug Whl.)	HA590182K[2] ⁶⁸

REAR WHEEL**FWD**

2001-2000	
Hub Unit Bearing	512167[2]
1999-1998	
Hub Unit Bearing	512013[2]
1997-1996	
Hub Unit Bearing	512023[2]
1995	
Hub Unit Bearing (4	
Stud)	512021[2]
Hub Unit Bearing (5	
Lug Whl.)	512023[2]

CLUTCH**Release Bearing**

2002-1995	
Bearing Assy	614121

3-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1997	(A404 31TH)(Prod. from mid 1997 on)
Seal (LH)	3459S
Cone/Cup (LH)	NP889967-NP714580
Seal (RH)	3459S
Cone/Cup (RH)	NP952605-JL69310P
1997-1996	(A404 31TH)(Prod. thru mid 1997)
Seal (LH)	3459S
Cone/Cup (LH)	NP889967-NP714580
Seal (RH)	3459S
Cone/Cup (RH)	JL69348-JL69310
1995	(A404 31TH)
Seal	3459S[2]
Cone/Cup	JL69349CP-JL69310[2]

Torque Converter

2001-1995	(A404, 31TH)
Seal	331228H[2]
Repair Sleeve	KWK99149

3-SPEED AUTOMATIC TRANSAXLE**Transfer Shaft**

2001-1995	(A404 31TH)
Cone/Cup (LH)	NP952605-JL69310P[2]
Cone/Cup (RH)	NP952605-JL69310P[2]

Output Shaft

2001-1995	(A404 31TH)
Seal	3459S[2]
Cone/Cup	L68149P-L68111P[2]
Repair Sleeve	KWK99157[2]

Manual Shaft

2001-1995	(A404, 31TH)
Seal	8609

5-SPEED MANUAL TRANSAXLE**Differential**

2001-1996	(A578)
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve	KWK99157[2]

Input Shaft

2001-1995	(A578)
Seal (Frt)	3732S
Set (Frt)	SET4[2]
Repair Sleeve	KWK99106
Set (Rr)	SET5[2]

Selector Shaft Seal/Man. Shaft

2001-1995	(A578)
Seal	3816

CAMSHAFT SEAL**4 Cylinder**

2001-1995	122/2.0L
Seal Viton	320249
Repair Sleeve	KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2001-1995	122/2.0L
Seal Viton	320348
Repair Sleeve	KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder**

2001-1995	122/2.0L
Seal Viton	710056
Seal PTFE H/D	5279

⁶⁸Kit = Flg, Brg, & Snap Ring

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PLYMOUTH - REAR DRIVE - Prowler**FRONT WHEEL****RWD**

2001-1997

Hub Unit Bearing 513123[2]

REAR WHEEL**RWD**

2001-1997

Hub Unit Bearing 513089[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2001-1997 (A606, 42LE)

Seal 3459S[2]

Set SET36[2]

Repair Sleeve KWK99157[2]

Torque Convertor / Frt Pump

2001-1997 (A606, 42LE)

Seal 331228H[2]

Repair Sleeve KWK99149

Transfer Shaft

2001-1997 (A606, 42LE)

Cone/Cup (Outer) 26131H-26334[2]

Cone/Cup (Inner) M802048CP-M802011AP[2]

Output Shaft

2001 (A606, 42LE)

Seal (LH) 4738N

Seal (RH) 4748N

Cone/Cup (Inner) NP117885-LM300811[2]

Cone/Cup (Outer) NP952605-JL69310P[2]

2000-1997 (A606 42LE)(Prod. from mid 1997 on)

Seal (LH) 4738N

Seal (RH) 4748N

Cone/Cup (Inner) LM300848-LM300811[2]

Cone/Cup (Outer) NP952605-JL69310P[2]

1997 (A606 42LE)(Prod. thru mid 1997)

Seal (LH) 4738N

Seal (RH) 4748N

Cone/Cup (Inner) LM300848-LM300811[2]

Cone/Cup (Outer) JL69348-JL69310P[2]

Manual Shaft

2001-1997 (A606, 42LE)

Seal 8609[2]

CAMSHAFT SEAL**6 Cylinder**

2001-1997 215/3.5L

Seal 714655[2]

Repair Sleeve KWK99112[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2001-1997 215/3.5L

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**6 Cylinder**

2001-1997 215/3.5L

Seal Viton 710056

Seal PTFE H/D 5279

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PLYMOUTH - Import - Colt, Laser					

FRONT WHEEL**FWD**

1994-1993	Colt	
Seal (Inner)	.....	8430S[2]
Ball Bearing (Inner)	.....	510016[2]
Seal (Outer)	.....	4898[2]
1994-1990	Laser	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]
1992-1990	Colt	
Seal	.....	229522[2]
Set	.....	SET41[2]
1991-1990	Colt Vista	
Seal	.....	229522[2]
Set	.....	SET41[2]

4WD

1991-1990	Colt Vista	
Seal (Inner)	.....	225082[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]

AWD

1994-1992	Colt	
Seal (Inner)	.....	8430S[2]
Ball Bearing (Inner)	.....	510016[2]
Seal (Outer)	.....	4898[2]
1994-1992	Laser	
Seal (Inner)	.....	225450[2]
Ball Bearing (Inner)	.....	513036[2]
Seal (Outer)	.....	225230[2]

REAR WHEEL**FWD**

1994-1993	Colt (ABS)	
Hub Unit Bearing	.....	512033[2]
1994-1993	Colt (Non-ABS)	
Hub Unit Bearing	.....	512148[2]
1994-1992	Colt Vista	
Hub Unit Bearing	.....	512040[2]
1994-1990	Laser (ABS)	
Hub Unit Bearing	.....	512011[2] ⁸¹
1994-1990	Laser (Non-ABS)	
Hub Unit Bearing	.....	512010[2]
1992-1991	Colt (Drum)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	516001WB[2]
1991-1990	Colt Vista	
Seal (Inner)	.....	1196[2]
Set (Inner)	.....	SET4[2]
Set (Outer)	.....	SET1[2]
1990	Colt (2Dr.)(Disc)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	516000[4]
1990	Colt (2Dr.)(Drum)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	516001WB[4]
1990	Colt (4Dr.)	
Seal (Inner)	.....	1205N[2]
Bearing Assy	.....	513029[4] ^z

4WD

1991-1990	Colt Vista	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]
1990	Colt Vista	
Seal (Inner)	.....	1955[2]

AWD

1994-1992	Colt Vista	
Ball Bearing	.....	511013[2]
1994-1992	Laser	
Seal (Inner)	.....	710152[2]
Ball Bearing (Inner)	.....	511014[2]
Ball Bearing (Outer)	.....	511015[2]

REAR AXLE**Differential**

1994-1990	Colt Ser. (AWD)	
Seal	.....	710396[2]
Bearing Assy	.....	30207M[2]
Repair Sleeve	.....	KWK99139[2]
1994-1990	Laser (AWD)	
Seal	.....	710396[2]
Bearing Assy	.....	30207M[2]
Repair Sleeve	.....	KWK99139[2]

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1991-1990		
Seal	.....	320583
Repair Sleeve	.....	KWK99157

CLUTCH**Release Bearing**

1994-1990	Laser (AWD)(Turbo)	
Bearing Assy	.....	614099
1994-1990	Laser (w/o AWD)(w/o Turbo)	
Bearing Assy	.....	614126
1994-1990	Colt	
Bearing Assy	.....	614126
1991-1990	Colt Vista	
Bearing Assy	.....	614126

3-SPEED AUTOMATIC TRANSAXLE**Differential**

1996-1990	(w/o KM172 0, KM172 5)	
Ball Bearing	.....	207[2]
1990	(KM172 0, KM172 5)	
Bearing Assy	.....	30207M[2]

Torque Converter

1996-1990		
Seal	.....	320583
Repair Sleeve	.....	KWK99157

^zNon-Cancellable/Non-Returnable⁸¹Holes Exists For Tone Ring, Reuse Tone Ring.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PLYMOUTH - Import - Colt, Laser (cont.)

3-SPEED AUTOMATIC TRANSAXLE

Output Shaft

1996-1990
 Seal 223543[2]
 Repair Sleeve KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE

Differential

1996-1990 (F4A21 2, F4A22 2, F4A33 1, KM176 5)
 Ball Bearing 207[2]

Torque Convertor / Frt Pump

1996-1990
 Seal 320583
 Repair Sleeve KWK99157

Output Shaft

1996-1993 (F4A21 2, F4A22 2)
 Seal 223543[2]
 Repair Sleeve KWK99139[2]
 1996-1993 (F4A33 1)
 Seal Viton 710259[2]
 1996-1992 (W4A32 1)
 Seal (LH) 223543
 Seal (RH) 710199
 Repair Sleeve KWK99139[2]
 1992-1990 (F4A21 2, F4A22 2, F4A33 1, KM176 5)
 Seal 223543[2]
 Repair Sleeve KWK99139[2]

4-SPEED MANUAL TRANSAXLE

Differential

1992-1990 (F4M21 1)
 Ball Bearing 207[2]

Input Shaft

1992-1990 (F4M21 1, KM200 0)
 Seal Viton 712007
 Repair Sleeve KWK99098

Output Shaft

1992-1990 (F4M21 1, KM200 0)
 Seal 223543[2]
 Bearing Assy 30206M[2]
 Repair Sleeve KWK99139[2]

Selector Shaft Seal/Man. Shaft

1992-1990 (KM160 2)
 Seal 710222

5-SPEED MANUAL TRANSAXLE

Differential

1996-1990 (KM182 2, F5M22 2, KM182 0, KM206 0, KM221 1)
 Bearing Assy 30207M[2]
 1996-1990 (F5M21 1, F5M21 2, W5M31 2, W5M33 2, KM162 0, KM162 0, KM163 0, KM201 0)
 Ball Bearing 207[2]

Input Shaft

1996-1990 (F5M21 1, F5M21 2, F5M22 2, F5M33 2W5M31 2, W5M33 2)
 Seal Viton 712007
 Repair Sleeve KWK99098
 1994-1991 (Getrag)
 Seal Viton 712007
 Repair Sleeve KWK99098
 1991-1990 (KM182 2, KM182 0, KM221 1)
 Seal Viton 712007
 Ball Bearing (Center) 304WB[2]
 Bearing Assy (Rr) 30304[2]
 Repair Sleeve KWK99098

Countershaft

1991-1990 (KM182 0, KM182 2, KM221 1)
 Bearing Assy 30304[2]
 1990 (KM201 0, KM206 0)
 Ball Bearing (Frt) RW122[2]
 Ball Bearing (Rr) 108A[2]

Output Shaft

1996-1993 (F5M33 1)
 Seal Viton 710259[2]
 1996-1992 (W5M33 2)
 Seal (LH) 223543
 Seal (RH) 710199
 Repair Sleeve KWK99139[2]
 1996-1990 (F5M21 1, F5M21 2, F5M22 2, KM201 0, KM206 0)
 Seal 223543[2]
 Bearing Assy 30206M[2]
 Repair Sleeve KWK99139[2]
 1996-1990 (KM182 2, KM162 0, KM163 0, KM221 1, F5M31 2, F5M33 2)
 Seal 223543[2]
 Repair Sleeve KWK99139[2]
 1994-1993 (Getrag)
 Seal Viton 710259[2]
 1993-1992 (W5M31 2)
 Seal (LH) 223543
 Repair Sleeve (LH) KWK99139
 Seal (RH) 1981
 Repair Sleeve (RH) KWK99114
 1992-1991 (Getrag)
 Seal 223543[2]
 Repair Sleeve KWK99139[2]

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PLYMOUTH - Import - Colt, Laser (cont.)					

5-SPEED MANUAL TRANSAXLE**Pinion**

1996-1990	(W5M31 2, W5M33 2)	
Seal	.....	223014
Repair Sleeve	.....	KWK99114

Selector Shaft Seal/Man. Shaft

1996-1990	(KM162 0)	
Seal	.....	710222

Extension Housing

1993-1992	(W5M31 2)	
Seal	.....	710317
1991-1990	(KM182 0, KM182 2, KM221 1)	
Seal	.....	223240
Bearing Assy	.....	30206M[2]
Repair Sleeve	.....	KWK99128

DRIVESHAFT SUPPORT

1991-1990	Colt Vista (4WD)	
Hanger Bearing Assy	.....	HB25[2]

OIL PUMP**4 Cylinder**

1994-1992	2351cc/ 2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078
1994-1990	1755cc/1.8L (SOHC)	
Seal	.....	221710
Repair Sleeve	.....	KWK99068
1994-1990	1597cc/1.6L, 1997cc/2.0L, 2351cc/2.4L	
Seal	.....	222025
Repair Sleeve	.....	KWK99078

CAMSHAFT SEAL**4 Cylinder**

1996-1990	1410cc/1.4L, 1468cc/1.5L, 1597cc/1.6L, 1755cc/1.8L, 1834cc/1.8L, 1997cc/2.0L, 2351cc/2.4L	
Seal	.....	3771
Repair Sleeve	.....	KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

1996-1992	1834cc/1.8L	
Seal	.....	223750
Repair Sleeve	.....	KWK99145
1996-1990	1468cc/1.5L	
Seal	.....	223018
Repair Sleeve	.....	KWK99114

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

1996-1990	1595cc/1.6L (DOHC), 1597cc/1.6L, 1755cc/1.8L, 1997cc/2.0L, 2351cc/2.4L	
Seal	.....	224460

CRANKSHAFT REAR SEAL**4 Cylinder**

1996-1990	1595cc/1.6L (DOHC), 1834cc/1.8L, 1997cc/2.0L (DOHC), 2351cc/2.4L	
Seal Viton	.....	228005
Repair Sleeve	.....	KWK99315
1996-1990	1410cc/1.4L, 1468cc/1.5L, 1597cc/1.6L, 1755cc/1.8L0L	
Seal	.....	227235
1991-1990	1997cc/2.0L (SOHC), 156/2.6L	
Seal Viton	.....	228005
Repair Sleeve	.....	KWK99315

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PLYMOUTH - Minivan - (See also Chrysler) - Grand Voyager, Voyager**FRONT WHEEL****FWD**

2000-1996 (14" Whl.)	
Hub Unit Bearing	513122[2]
2000-1996 (15", 16", 17" Whl.)	
Hub Unit Bearing	513123[2]
1995-1991 (14" Whl.)	
Hub Unit Bearing	513075[2]
1995-1990 (15" Whl.)	
Hub Unit Bearing	513074[2] ⁴⁴
1990 (14" Whl.)	
Seal	5604[2] ⁵⁶
Ball Bearing	513006[2]
Hub Unit Bearing (4	
Stud)	518501[2] ⁶²
Hub Unit Bearing (5	
Lug Whl.)	518502[2] ⁶³

AWD

1995-1991	
Hub Unit Bearing	513074[2] ⁴⁴

REAR WHEEL**FWD**

2000-1996 (Drum)	
Hub Unit Bearing (14"	
Whl.)	512155[2]
Hub Unit Bearing (15",	
16", & 17" Whl)	512156[2]
1995-1990	
Seal (Inner)	4249[2]
Set (Inner)	SET17[2]
Set (Outer)	SET16[2]

AWD

1995-1991	
Hub Unit Bearing	512125[2]

AWD REAR AXLE**Differential**

2000-1994	
Cone/Cup	JL69349H-JL69310[2]

Pinion

2000-1994	
Set (Inner)	SET45
Set (Outer)	SET17

TRANSFER CASE**Input Shaft**

2000-1991	
Seal	710501

TRANSFER CASE**Front Output Shaft**

2000-1991	
Seal	3459S
Repair Sleeve	KWK99157
Ball Bearing	106WB

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

1995-1990	
Seal	3816

3-SPEED AUTOMATIC TRANSAXLE**Differential**

2000-1997 31TH	
Seal (LH)	3459S
Cone/Cup (LH)	NP889967-NP714580
Seal (RH)	3459S
Cone/Cup (RH)	NP952605-JL69310P
1996-1990 (A413, A670, 31TH)	
Seal	3459S[2]
Set	SET11[2]
Repair Sleeve (Opt)	KWK99157[2]
1995-1992 (A404 31TH)	
Seal	3459S[2]
Cone/Cup	JL69349CP-JL69310P[2]
1991-1990	
Seal	3459S[2]
Cone/Cup	JL69349H-JL69310[2]

Torque Converter

2000-1990 (A413, 31TH)	
Seal	331228H[2]
Repair Sleeve	KWK99149

Transfer Shaft

2000-1990 (A413, A670, 31TH)	
Set	SET11[2]

Output Shaft

2000-1992 31TH	
Seal	3459S[2]
Cone/Cup	L68149P-L68111P[2]
Repair Sleeve (RH)	KWK99157[2]
Seal (RH)	L68149P-L68111P
1991-1990 (A413, 31TH)	
Seal	3459S[2]
Set	SET17[2]
Repair Sleeve	KWK99157[2]

Manual Shaft

2000-1990 (A413, 31TH)	
Seal	8609[2]

⁴⁴Brg Flg Mtg Holes Threaded.
Studded Spindle, Seal, & Bearing

⁵⁶Opt. Kit = Seal 3948 & Sleeve ⁶²Kit = Plate, Gasket, 3 Bolts,
⁶³Kit = Plate, Gasket, 3 Bolts, Studded Spindle, Seal, & Bearing

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PLYMOUTH - Minivan - (See also Chrysler) - Grand Voyager, Voyager (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Differential**

2000-1997	(A604 41TE)(AWD)(Prod. from mid 1997 on)	
Cone/Cup (LH)	NP889967-NP714580	
Cone/Cup (RH)	NP952605-JL69310P	
2000-1997	(A604 41TE)(Prod. from mid 1997 on)	
Cone/Cup (LH)	NP889967-NP714580	
Cone/Cup (RH)	NP952605-JL69310P	
1997	(A604 41TE)(AWD)(Prod. thru mid 1997)	
Cone/Cup (LH)	NP889967-NP714580	
Cone/Cup (RH)	JL69348-JL69310	
1997-1996	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (LH)	NP889967-NP714580	
Cone/Cup (RH)	JL69348-JL69310	
1995-1994	(A604 41TE)(AWD)	
Cone/Cup (LH)	JL69348-JL69310	
Cone/Cup (RH)	LM503349-LM503310	
1995-1991	(A604 41TE)	
Cone/Cup	JL69348-JL69310[2]	
1993-1991	(A604 41TE)(AWD)	
Cone/Cup (LH)	JL69348-JL69310	
Cone (RH)	LM503349	
1990	(A604, A670)	
Set	SET11[2]	

Torque Converter / Frt Pump

2000-1990	(A604, A604, A670, 41TE)(incl. AWD)	
Seal	331228H[2]	

Transfer Shaft

2000-1996	(A604, 41TE)	
Cone/Cup (Inner)	NP853895-NP352518[2]	
Set (Outer)	SET45[2]	
1995-1991	(A604, 41TE)	
Cone/Cup (Inner)	13687-13623X[2]	
Set (Outer)	SET45[2]	

Output Shaft

2000-1997	(A604 41TE)(AWD)(Prod. from mid 1997 on)	
Cone/Cup (Outer)	LM300848-LM300911[2]	
Cone/Cup (Inner)	NP952605-JL69310P[2]	
Seal	3459S[2]	
Repair Sleeve	KWK99157[2]	
2000-1997	(A604 41TE)(Prod. from mid 1997 on)	
Cone/Cup (Outer)	LM300848-LM300911[2]	
Cone/Cup (Inner)	NP952605-JL69310P[2]	
Seal	3459S[2]	
Repair Sleeve	KWK99157[2]	
1997-1991	(A604 41TE)(AWD)(Prod. thru mid 1997)	
Cone/Cup (Outer)	LM300848-LM300811[2]	
Cone/Cup (Inner)	JL69348-JL69310[2]	
Seal	3459S[2]	
Repair Sleeve	KWK99157[2]	

4-SPEED AUTOMATIC TRANSAXLE**(cont.)****Output Shaft (cont.)**

1997-1991	(A604 41TE)(Prod. thru mid 1997)	
Cone/Cup (Outer)	LM300848-LM300811[2]	
Cone/Cup (Inner)	JL69348-JL69310[2]	
Seal	3459S[2]	
Repair Sleeve	KWK99157[2]	
1990	(A604)	
Seal	3459S[2]	
Set	SET17[2]	
Repair Sleeve	KWK99157[2]	

Manual Shaft

2000-1990	(A604, 41TE)	
Seal	8609[2]	

CAMSHAFT SEAL**4 Cylinder**

2000-1996	148/2.4L	
Seal Viton	320249[2]	
Repair Sleeve	KWK99139[2]	
1995-1990	153/2.5L	
Seal	3655S	
Repair Sleeve	KWK99139	

6 Cylinder

2000-1990	2972cc/3.0L	
Seal	3771[2]	
Repair Sleeve	KWK99139[2]	

INTERMEDIATE SHAFT**6 Cylinder**

2000-1990	201/3.3L, 230/3.8L	
Seal	3655S	

CRANKSHAFT FRONT SEAL**4 Cylinder**

2000-1996	148/2.4L	
Seal Viton	320348	
Repair Sleeve	KWK99128	
1995-1990	153/2.5L	
Seal	3638	
Repair Sleeve	KWK99112	

6 Cylinder

2000-1990	201/3.3L, 230/3.8L	
Seal	3638	
Repair Sleeve	KWK99112	
2000-1990	2972cc/3.0L	
Seal	223750	

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

PLYMOUTH - Minivan - (See also Chrysler) - Grand Voyager, Voyager (cont.)

CRANKSHAFT REAR SEAL

4 Cylinder

2000-1990 135/2.2L, 153/2.5L, 181/3.0L,
201/3.3L, 229/3.8L

Seal Viton 710056
Seal PTFE H/D 5279

6 Cylinder

2000-1990 2972cc/3.0L, 201/3.3L,
231/3.8L

Seal Viton 710056
Seal PTFE H/D 5279

PONTIAC - FRONT DRIVE - Bonneville

FRONT WHEEL

FWD

2005-2004 GXP
Hub Unit Bearing HA590093[2]⁴⁰
2005-2001 SE, SLE, SSEi (2nd Design)
Hub Unit Bearing 513179[2]⁷³
2001-2000 (1st Design)
Hub Unit Bearing 513121[2]⁷²
1999-1992 (ABS)
Hub Unit Bearing 513087[2]⁴⁵
1992 (Non-ABS)
Hub Unit Bearing 513088[2]
1991-1990
Hub Unit Bearing 513016K[2]⁶¹

REAR WHEEL

FWD

2005-2000
Hub Unit Bearing 512003[2]
1999-1991 (ABS)
Hub Unit Bearing 513062[2]
1992-1990 (Non-ABS)
Hub Unit Bearing 513018[2]
1990 (ABS)
Hub Unit Bearing 513041[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2005-2004 (4T80 E)
Seal 224840
Repair Sleeve KWK99189
2005-1990 (4T60E, 4T65E)
Seal 4072N
Repair Sleeve KWK99172

Output Shaft

2005-2004 (4T80 E)
Seal (LH) 714679
Seal (RH) 4674N
2005-1998 (4T65 E)
Seal (LH) (Yellow) 100165
Seal (RH) (Green) 3543
Repair Sleeve KWK99139[2]

4-SPEED AUTOMATIC TRANSAXLE (cont.)

Output Shaft (cont.)

1997-1990
Seal (LH) 710096
Seal (RH) 3543
Repair Sleeve KWK99139[2]

Manual Shaft

2005-1992 (4T60E, 4T65E, 4T80E)
Seal 8792S

ALTERNATOR

1997-1990 (Delco)
Ball Bearing (Rear End) 100CCAB
Ball Bearing (Drive End) 203FF

POWER STEERING

Pump Shaft

2000-1992
Seal 7013S

CRANKSHAFT FRONT SEAL

6 Cylinder

2005-1990 231/3.8L
Seal Viton 710162
Repair Sleeve KWK99193

CRANKSHAFT REAR SEAL

6 Cylinder

2005-1991 3.8L
Seal Viton 320691
Seal PTFE H/D 5291
1990 231/3.8L
Seal 5591

⁴⁰5 Stud. ⁴⁵Brg Flg Mtg Holes Non-Threaded.

⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.

⁶¹Kit = Seal, Hub Nut, & Brg Unit

⁷³Plastic Wire Clip.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC - FRONT DRIVE - Bonneville (cont.)**CRANKSHAFT REAR SEAL****8 Cylinder**

2005-2004 4.6L (DOHC)

Seal Viton 710262

PONTIAC - FRONT DRIVE - G5, Pursuit**FRONT WHEEL****FWD**

2009-2007 (ABS)(15" Whl)

Hub Unit Bearing HA590068[2]

2009-2007 (ABS)(16" & 17" Whls)

Hub Unit Bearing HA590086[2]

2009-2007 (Non-ABS)

Hub Unit Bearing HA590069[2]

REAR WHEEL**FWD**

2009-2007 (ABS)(Drum)

Hub Unit Bearing (4
Stud) HA590066[2]Hub Unit Bearing (5
Lug Whl.) HA590088[2]

2009-2007 (Disc)

Hub Unit Bearing HA590088[2]

2009-2007 (Non-ABS)(Drum)

Hub Unit Bearing HA590067[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2008-2007 (4T45E)

Seal 4072N

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-2007 (4T45E)

Seal 8792S

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2005

Seal Viton 710237

Repair Sleeve KWK99354

PONTIAC - FRONT DRIVE - G6**FRONT WHEEL****FWD**

2008-2006 (Non-ABS)

Hub Unit Bearing HA590071[2]

2008-2005 (ABS)

Hub Unit Bearing HA590070[2]

REAR WHEEL**FWD**

2008-2005 (ABS)

Hub Unit Bearing HA590080[2]

2008-2005 (Non-ABS)

Hub Unit Bearing HA590081[2]

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2008-2006 (4T45E, 4T65E)

Seal 4072N

Repair Sleeve KWK99172

Output Shaft

2008-2005 (4T40E)

Seal SL260001[2]²⁵

Repair Sleeve KWK99139[2]

2006 (4T65 E)

Seal (LH) (Yellow) 100165

Repair Sleeve (LH) KWK99139

Seal (RH) (Green) 3543

Repair Sleeve (RH) KWK99139

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - FRONT DRIVE - G6 (cont.)					

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-2005	(4T45E, 4T65E)	
Seal		8792S

CRANKSHAFT FRONT SEAL**4 Cylinder**

2009-2006	2.4L (DOHC)	
Seal Viton		710237

6 Cylinder

2008-2005	213/3.5L, 237/3.9L	
Seal		9845
Repair Sleeve		KWK99176
Harmnc Balancer Slvs		88176

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2005	3.5L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

CRANKSHAFT REAR SEAL (cont.)**6 Cylinder (cont.)**

2006	3.9L	
Seal		4307V
Seal PTFE H/D		5273
Repair Sleeve		KWK99298

PONTIAC - FRONT DRIVE - Grand Am**FRONT WHEEL****FWD**

2005-1999		
Hub Unit Bearing		513137[2]
1998-1990		
Hub Unit Bearing		513017K[2] ⁶¹
Seal Kit		5697[2] ¹²

REAR WHEEL**FWD**

2005-2001		
Hub Unit Bearing		512152[2]
2000-1999	(Disc)	
Hub Unit Bearing		512152[2]
2000-1999	(Drum)	
Hub Unit Bearing		512003[2]
1998-1991		
Hub Unit Bearing		512001[2]
1990		
Hub Unit Bearing		513012[2]

CLUTCH**Pilot Bearing**

1991-1990	(4 Cyl.)	
Bushing		PB650

Release Bearing

2001-2000	146/2.4L	
Hyd. Bearing Assy		619006

CLUTCH (cont.)**Release Bearing (cont.)**

1999-1995	(5 Spd.)(Isuzu Trans.)(Hyd. piston type)	
Hyd. Bearing Assy		619006
1994-1992	4 Cyl. 2.3 (DOHC)(T550 Trans.)(Hyd. piston type)	
Hyd. Bearing Assy		619005
1994-1992	4 Cyl. 2.3 (SOHC)(5 Spd.)(Isuzu Trans.)	
Bearing Assy		614108
1994-1992	Quad4 (5 Spd.)(Isuzu Trans.)	
Bearing Assy		614108
1992-1990	Quad4 (5 Spd.)(Muncie Trans.)	
Bearing Assy		614069
1992-1990	6 Cyl. (5 Spd.)	
Bearing Assy		614069
1992-1990	4 Cyl. (w/o Quad4)(5 Spd.)	
Bearing Assy		614108

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1995-1990	(THM125C)	
Seal		4072N

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PONTIAC - FRONT DRIVE - Grand Am (cont.)**3-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

1995-1990 (THM125C)
 Seal 3543[2]
 Repair Sleeve KWK99139[2]

Manual Shaft

1995-1990 (THM125C)
 Seal 8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2005-1990 (4T40E, 4T45E, 4T60E)
 Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2005-1996 (4T40E, 4T45E)
 Seal SL260001[2]²⁵
 1998-1990 (4T60E)
 Seal (LH) 710096
 Repair Sleeve (LH) KWK99139
 Seal (RH) 3543
 Repair Sleeve (RH) KWK99139

Manual Shaft

2005-1990 (4T40E, 4T45E, 4T60E)
 Seal 8792S

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2004-1990
 Seal 222835
 Ball Bearing 306VVL[2]
 Repair Sleeve KWK99111

Output Shaft

2004-1990
 Seal 3543[2]
 Repair Sleeve KWK99139[2]
 Bearing Assy (RH) 32206M[2]
 Set (LH) SET5[2]

Selector Shaft Seal/Man. Shaft

2004-1990
 Seal 8792S

ALTERNATOR

1992-1990 (Delco)
 Ball Bearing (Drive End) 203FF
 Ball Bearing (Rear End) 100CCAB

POWER STEERING**Pump Shaft**

2000-1992
 Seal 7013S

CAMSHAFT SEAL**4 Cylinder**

1995-1990 138/2.3L (DOHC)
 Seal Viton 713771
 Repair Sleeve KWK99139
 1994-1992 138/2.3L (SOHC)
 Seal Viton 713771
 Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2001-1996 2.4L (DOHC)
 Seal Viton 320259
 1995-1990 138/2.3L (DOHC)
 Seal Viton 320259
 1994-1992 138/2.3L (SOHC)
 Seal Viton 320259
 1991-1990 151/2.5L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

6 Cylinder

2005-1999 201/3.4L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176
 1998-1994 189/3.1L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176
 1993-1992 3300/3.3L
 Seal Viton 710162
 Repair Sleeve KWK99193

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-2002 2.2L (DOHC)
 Seal Viton 710237
 2001-1996 146/2.4L
 Seal 40375
 1995-1990 138/2.3L (DOHC)
 Seal 40375
 1994-1992 138/2.3L (SOHC)
 Seal 40375
 1991-1990 151/2.5L
 Seal 3698

6 Cylinder

2005-1999 201/3.4L
 Seal 4307V
 Seal PTFE H/D 5273
 Repair Sleeve KWK99298
 1998-1994 189/3.1L
 Seal 4307V
 Seal PTFE H/D 5273
 Repair Sleeve KWK99298
 1993-1992 3300/3.3L
 Seal Viton 320691
 Repair Sleeve KWK99328

²⁵New Item, Check For Availability

PONTIAC - FRONT DRIVE - Grand Prix**FRONT WHEEL****FWD**

2008-2004 (ABS)	
Hub Unit Bearing	HA590093[2] ⁴⁰
2008-2004 (Non-ABS)	
Hub Unit Bearing	HA590085[2] ⁸⁴
2003-2001 (2nd Design)	
Hub Unit Bearing	
(ABS)	513179[2] ⁷³
Hub Unit Bearing	
(Non-ABS)	HA590085[2] ⁸⁴
2001-1997 (1st Design)	
Hub Unit Bearing	513121[2] ⁷²
1996-1990	
Hub Unit Bearing	513044[2]

REAR WHEEL**FWD**

2008-2004 (ABS)	
Hub Unit Bearing	HA590092[2]
2008-2004 (Non-ABS)	
Hub Unit Bearing	HA590074[2]
2003 (ABS)	
Hub Unit Bearing	512237[2] ⁸⁴
2003 (Non-ABS)	
Hub Unit Bearing	512221[2]
2002-1997	
Hub Unit Bearing	512150[2] ⁸³
Hub Unit Bearing	512237[2] ⁸⁴
1996-1992 (ABS)	
Hub Unit Bearing	512004[2]
1996-1990 (Non-ABS)	
Hub Unit Bearing	513018[2]
1991-1990 (ABS)	
Hub Unit Bearing	513042[2]

CLUTCH**Release Bearing**

1996-1995 (5 Spd.)(Isuzu Trans.)(Hyd. piston type)	
Hyd. Bearing Assy	619006
1994-1992 Quad4 (5 Spd.)(Isuzu Trans.)	
Bearing Assy	614108
1992-1991 3.4 V6 (5 Spd.)(pull type Cl.)	
Bearing Assy	614108
1992-1990 4 Cyl. (w/o Quad4 & Turbo)(5 Spd.)	
Bearing Assy	614108
1992-1990 6 Cyl. (5 Spd.)	
Bearing Assy	614069
1992-1990 Quad4 (5 Spd.)(Muncie Trans.)	
Bearing Assy	614069

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1993-1990	
Seal	4072N

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

1993-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

1993-1990	
Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2008-1990 (4T60E, 4T65E)	
Seal	4072N
Repair Sleeve	KWK99172

Output Shaft

2008-1997 (4T65 E)	
Seal (LH) (Yellow)	100165
Repair Sleeve (LH)	KWK99139
Seal (RH) (Green)	3543
Repair Sleeve (RH)	KWK99139
2000-1990 (THM440 T4, 4T60, 4T60 E)	
Seal (LH)	710096
Repair Sleeve (LH)	KWK99139
Seal (RH)	3543
Repair Sleeve (RH)	KWK99139

Manual Shaft

2008-1990	
Seal	8792S

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2000-1990	
Seal	222835
Ball Bearing	306VVL[2]
Repair Sleeve	KWK99111

Output Shaft

2000-1990	
Seal (LH)	3543[2]
Repair Sleeve	KWK99139[2]
Bearing Assy (RH)	32206M[2]
Set (LH)	SET5[2]

Selector Shaft Seal/Man. Shaft

2001-1990	
Seal	3667

ALTERNATOR

2002-1990 (Delco)	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	100CCAB

⁴⁰5 Stud.
Inventory⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.
⁸⁴Reorder⁷³Plastic Wire Clip.⁸³Deplete

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PONTIAC - FRONT DRIVE - Grand Prix (cont.)**CRANKSHAFT FRONT SEAL****4 Cylinder**

1991-1990 138/2.3L
Seal Viton 320259

6 Cylinder

2005-1997 231/3.8L
Seal Viton 710162
Repair Sleeve KWK99193
2003-1990 173/2.8L, 189/3.1L, 207/3.4L
Seal 9845
Repair Sleeve KWK99176

8 Cylinder

2007-2005 325/ 5.3L
Seal Viton 100470
Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990 138/2.3L
Seal 40375

6 Cylinder

2008-1997 3.8L
Seal Viton 320691
Repair Sleeve KWK99322

CRANKSHAFT REAR SEAL (cont.)**6 Cylinder (cont.)**

2003-1990 189/3.1L, 207/3.4L
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298

8 Cylinder

2008-2005 5.3L
Seal 100085

PONTIAC - FRONT DRIVE - Sunbird**FRONT WHEEL****FWD**

1994-1990
Hub Unit Bearing 513017K[2]⁶¹

REAR WHEEL**FWD**

1994-1992
Hub Unit Bearing 512001[2]
1991-1990
Hub Unit Bearing 513012[2]

CLUTCH**Release Bearing**

1994-1991 6 Cyl. (5 Spd.)
Bearing Assy 614069
1994-1990 4 Cyl. 2.0 (Turbo)(5 Spd.)
Bearing Assy 614069
1993-1990 4 Cyl. (w/o Quad4 & Turbo)(5
Spd.)
Bearing Assy 614108
1991-1990 4 Cyl. 1.8 (Turbo)(5 Spd.)
Bearing Assy 614108

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1994-1990 (THM125C)
Seal 4072N

Output Shaft

1994-1990 (THM125C)
Seal 3543[2]
Repair Sleeve KWK99139[2]

Manual Shaft

1994-1990 (THM125C)
Seal 8792S

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1994-1990
Seal 222835
Ball Bearing 306VVL[2]
Repair Sleeve KWK99111

⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC - FRONT DRIVE - Sunbird (cont.)**5-SPEED MANUAL TRANSAXLE****Output Shaft**

1994-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]
Bearing Assy (RH)	32206M[2]
Set (LH)	SET5[2]

Selector Shaft Seal/Man. Shaft

1994-1990	
Seal	3667

ALTERNATOR

1992-1990	(Delco)
Ball Bearing (Rear End)	100CCAB
1992-1990	(Delco)
Ball Bearing (Drive End)	203FF

CRANKSHAFT FRONT SEAL**4 Cylinder**

1994-1990	112/1.8L, 122/2.0L, 151/2.5L
Seal	9845
Repair Sleeve	KWK99176

6 Cylinder

1994-1991	189/3.1L
Seal	9845
Repair Sleeve	KWK99176

CRANKSHAFT REAR SEAL**4 Cylinder**

1994-1990	122/2.0L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

6 Cylinder

1994-1991	189/3.1L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

PONTIAC - FRONT DRIVE - Sunfire**FRONT WHEEL****FWD**

2005-1995	
Hub Unit Bearing	513017K[2] ⁶¹

REAR WHEEL**FWD**

2005-2003	(Non-ABS)
Hub Unit Bearing	513012[2]
2005-1995	(ABS)
Hub Unit Bearing	512001[2]

CLUTCH**Release Bearing**

1999-1995	
Hyd. Bearing Assy	619006

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2000-1995	(THM125C)
Seal	4072N

3-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2000-1995	(THM125C)
Seal	3543[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

2001-1995	(THM125C)
Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2005-1995	(4T40E)
Seal	4072N
Repair Sleeve	KWK99172

Output Shaft

2005-1995	(4T40E)
Seal	SL260001[2] ²⁵

²⁵New Item, Check For Availability⁶¹Kit = Seal, Hub Nut, & Brg Unit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - FRONT DRIVE - Sunfire (cont.)					

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2005-1995 (4T40E)
Seal 8792S

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2005-1995
Seal 222835
Ball Bearing 306VVL[2]
Repair Sleeve KWK99111

Output Shaft

2005-1995
Seal 3543[2]
Repair Sleeve KWK99139[2]
Bearing Assy (RH) 32206M[2]
Set (LH) SET5[2]

Selector Shaft Seal/Man. Shaft

2005-1995
Seal 8792S

CAMSHAFT SEAL**4 Cylinder**

1995 138/2.3L (DOHC)
Seal Viton 713771
Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2002-1996 2.4L (DOHC)
Seal Viton 320259
2002-1995 2.2L (OHV)
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

1995 2.3L (DOHC), 2.4L (DOHC)
Seal Viton 320259

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-2002 2.2L (DOHC)
Seal Viton 710237
2002-1995 138/2.3L, 146/2.4L
Seal 40375
2002-1995 2.2L (OHV)
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298

PONTIAC - FRONT DRIVE, AWD - 6000**FRONT WHEEL****FWD**

1991-1990
Hub Unit Bearing 513016K[2]⁶¹

AWD

1990
Hub Unit Bearing 513016K[2]⁶¹

REAR WHEEL**FWD**

1991-1990 (Non-ABS)
Hub Unit Bearing 513018[2]
1990 (ABS)(JL9 Brks.)
Hub Unit Bearing 513039[2]

AWD

1990
Hub Unit Bearing 513016K[2]⁶¹
Seal Kit 5698[2]¹²

REAR AXLE**Axle Shaft**

1990
Seal 3543[2]

Differential Rebuild Kit

1990
Kit DRK320A

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.⁶¹Kit = Seal, Hub Nut, & Brg Unit

PONTIAC - FRONT DRIVE, AWD - 6000 (cont.)**AWD REAR AXLE****Differential**

1990 (AWD)
Set SET11[2]

Pinion

1990 (AWD)
Cone/Cup (Inner) M88048S-M88010
Cone/Cup (Outer) M86649-M86610
Seal 710532
Repair Sleeve KWK99152

TRANSFER CASE**Input Shaft**

1990
Bearing Assy 32205B[2]

Front Output Shaft

1990
Cone/Cup M88048-M88010[2]

Rear Output Shaft

1990
Cone/Cup M86649-M86610[2]

CLUTCH**Release Bearing**

1991-1990 6 Cyl. (5 Spd.)
Bearing Assy 614069
1991-1990 4 Cyl. (w/o Quad4 & Turbo)(5
Spd.)
Bearing Assy 614108

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1991-1990 (THM125C)
Seal 4072N

Output Shaft

1991-1990
Seal 3543[2]
Repair Sleeve KWK99139[2]

Manual Shaft

1991-1990
Seal 8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

1991-1990 (THM440 T4)
Seal 4072N

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

1991-1990 (THM440 T4, 4T60, 4T60 E)
Seal (LH) 710096
Seal (RH) 3543
Repair Sleeve KWK99139[2]

Manual Shaft

1991-1990
Seal 8792S

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1991-1990
Seal 222835
Ball Bearing 306VVL[2]
Repair Sleeve KWK99111

Output Shaft

1991-1990
Seal 3543[2]
Set (LH) SET5[2]
Bearing Assy (RH) 32206M[2]
Repair Sleeve KWK99139[2]

Selector Shaft Seal/Man. Shaft

1991-1990
Seal 3667

ALTERNATOR

1991-1990 (Delco)
Ball Bearing (Drive End) 203FF
Ball Bearing (Rear End) 100CCAB

CRANKSHAFT FRONT SEAL**4 Cylinder**

1991-1990 151/2.5L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

6 Cylinder

1991-1990 173/2.8L, 189/3.1L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990 151/2.5L
Seal 3698

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - FRONT DRIVE, AWD - 6000 (cont.)					

CRANKSHAFT REAR SEAL**6 Cylinder**

1991-1990	173/2.8L, 189/3.1L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

PONTIAC - FRONT DRIVE, AWD - Vibe**FRONT WHEEL****FWD**

2009	1.8L
Ball Bearing	510070[2]
2009	2.4L
Ball Bearing	510063[2]
2008-2003	
Ball Bearing	510070[2]

AWD

2009	2.4L
Ball Bearing	510063[2]
2006-2003	
Ball Bearing	510070[2]

REAR WHEEL**FWD**

2009	(Non GT)(1.8L)
Hub Unit Bearing 1.8L	HA590305[2] ²⁵
2009	(Non GT)(2.4)
Hub Unit Bearing 2.4L	HA590311[2] ²⁵
2009	GT
Hub Unit Bearing	HA590310[2] ²⁵
2008-2003	(ABS)
Hub Unit Bearing	512215[2] ¹⁶
Hub Unit Bearing	512217[2] ⁸⁴
2008-2003	(Non-ABS)
Hub Unit Bearing	512218[2] ⁸⁴

AWD

2009	
Hub Unit Bearing	HA590294[2] ²⁵
2006-2003	(ABS)
Hub Unit Bearing	HA590002[2]

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2003	
Seal	1015N

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2008-2007	(Aisin U240E)
Seal	223540[2]
Repair Sleeve	KWK99139[2]
2006-2003	(Aisin A246E)
Seal (LH)	710109
Seal (RH)	710110

4-SPEED AUTOMATIC TRANSAXLE**(cont.)****Output Shaft (cont.)**

2006-2003	(Aisin U240E, U341F)
Seal	223540[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

2006-2003	(Aisin A246E)
Seal	221207
Repair Sleeve	KWK99049

5-SPEED MANUAL TRANSAXLE**Input Shaft**

2006-2003	
Seal	320603

6-SPEED MANUAL TRANSAXLE**Input Shaft**

2006-2003	
Seal	320603

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2003	1794cc/1.8L, 1796cc/1.8L
Seal	223800
Repair Sleeve	KWK99147

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2003	1.8L (DOHC)(w/ H.O.)
Seal	716102
2009-2003	1.8L (DOHC)(w/o H.O.)
Seal	3698

¹⁶Obsolete²⁵New Item, Check For Availability⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC - REAR DRIVE - G8**FRONT WHEEL****RWD**

2009-2008

Hub Unit Bearing HA590299[2]²⁵**REAR WHEEL****RWD**

2009-2008

Ball Bearing WB000027[2]²⁵**5-SPEED AUTOMATIC TRANSMISSION****Selector Shaft Seal/Man. Shaft**

2008 (5L40E)

Seal 8792S

6- SPEED AUTOMATIC TRANSMISSION**Rear Seal/Ext. Housing**

2008 (6L80)

Seal 710533

6-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008 (6L80)

Seal 8792S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2009-2008 364/6.0L

Seal Viton 100470

Repair Sleeve KWK99210

CRANKSHAFT REAR SEAL**8 Cylinder**

2009-2008 6.0L

Seal 100085

PONTIAC - REAR DRIVE - Grand Am, Grand Prix, GTO**3-SPEED AUTOMATIC TRANSMISSION****Selector Shaft Seal/Man. Shaft**

1993-1990

Seal 8792S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1993-1990

Seal 4072N

Selector Shaft Seal/Man. Shaft

2005-1990

Seal 8792S[2]

PONTIAC - REAR DRIVE - GTO (04 +)**FRONT WHEEL****RWD**

2006-2004

Hub Unit Bearing (LH) HA590007²⁵Hub Unit Bearing (RH) HA590006²⁵**REAR WHEEL****RWD**

2006-2004

Bearing Only 511035[2]²⁵²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - REAR DRIVE - GTO (04+) (cont.)					

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-2004	(4L60, 4L60E, 4L65E)	
Seal	.....	3227
Repair Sleeve	.....	KWK99174

Rear Seal/Ext. Housing

2006-2004	(4L60, 4L60E, 4L65E)	
Seal	.....	9613S
Seal Kit	.....	5200 ⁶⁴
Repair Sleeve	.....	KWK99149

Selector Shaft Seal/Man. Shaft

2006-2004	(4L60, 4L60E, 4L65E)	
Seal	.....	8792S
Repair Sleeve	.....	KWK99050

6-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2006-2004	(Tremec T56)	
Seal	.....	7412S

CRANKSHAFT FRONT SEAL**8 Cylinder**

2006-2005	6.0L	
Seal Viton	.....	100470
Repair Sleeve	.....	KWK99210
2004	5.7L	
Seal Viton	.....	100470
Repair Sleeve	.....	KWK99210

CRANKSHAFT REAR SEAL**8 Cylinder**

2006-2004	5.7L, 6.0L	
Seal	.....	100085

PONTIAC - REAR DRIVE - Firebird**FRONT WHEEL****RWD**

2002-1993		
Hub Unit Bearing	.....	513090[2]
1992-1990		
Seal (Inner)	.....	8871[2]
Set (Inner)	.....	SET6[2]
Set (Outer) (Exc.		
Performance Pkg,		
Trans Am, GTA)	.....	SET34[2]
Set (Outer)		
(Performance Pkg,		
Trans Am, GTA)	.....	SET3[2]

REAR WHEEL**RWD**

2002-1992		
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ⁹³ ₁₉
1991-1990	(7.75" R.G.)	
Set	.....	SET9[2]
Seal (RH)	.....	710179[2]
Seal (LH)	.....	224255[2]

REAR WHEEL (cont.)**RWD (cont.)**

1991-1990	(Exc. 7.75" R.G.)	
Seal	.....	8660S[2]
Cylindrical Bearing	.....	5707[2]
Bearing & Seal Kit	.....	TRP1563TAV[2] ⁹³ ₁₉

REAR AXLE**Differential Rebuild Kit**

2002-2001	(7.625" R.G.)(2nd Design)(1.687" Seal I.D.)	
Kit	.....	DRK320C
2001-1999	(7.625" R.G.)(1st Design)(1.5" Seal I.D.)	
Kit	.....	DRK320
1998-1990	(7.5" R.G.)	
Kit	.....	DRK320

¹⁹Opt. Axle Rpr Brg. Replaces O.E. Brg & Seal⁶⁴Seal & Bushing Kit⁹³Non-Traction Control.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC - REAR DRIVE - Firebird (cont.)

REAR AXLE

Differential

2002-1990 (7.5", 7.625", 8.5" R.G.)(B, C, G, K, O Axle)
 Cone/Cup LM501349-LM501314[2]
 1991-1990 (7.75" R.G.)
 Set SET47[2]

Pinion

2002-1990 (7.5" R.G., 7.625" R.G.)
 Seal 8610
 Cone/Cup (Inner) HM89249-HM89210
 Cone/Cup (Outer) M86649-M86610
 1991-1990 (7.75" R.G.)
 Seal 7457N
 Cone/Cup (Inner) HM89446-HM89410
 Cone/Cup (Outer) M86649-M86610

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2002-1994
 Seal 3227
 Repair Sleeve KWK99174
 1993-1990
 Seal 3227
 Repair Sleeve KWK99174

Rear Seal/Ext. Housing

2002-1990
 Seal 9613S
 Repair Sleeve KWK99149
 Seal Kit 5200⁶⁴

Selector Shaft Seal/Man. Shaft

2002-1990
 Seal 8792S

CLUTCH

Pilot Bearing

1999-1994 (8 Cyl.)
 Ball Bearing 57080
 1996-1990 (6 Cyl.)
 Bushing H/D PB652HD
 1993-1990 (8 Cyl.)
 Bushing H/D PB656HD

CLUTCH - 6 CYLINDER

Release Bearing

2002-1996 231/3.8L
 Bearing Assy 614174
 1995-1990 173/2.8L, 189/3.1L, 231/3.8L, 207/3.4L
 Bearing Assy 614083

CLUTCH - 8 CYLINDER

Release Bearing

2002-1998 346/5.7L (GEN II)
 Bearing Assy 614174

CLUTCH - 8 CYLINDER (cont.)

Release Bearing (cont.)

1997-1993 350/5.7L
 Bearing Assy 614116
 1992-1990 305/5.0L
 Bearing Assy 614083

5-SPEED MANUAL TRANSMISSION

Front Input Shaft

2001-1990
 Seal 7412S[2]
 Set SET5[2]
 Repair Sleeve KWK99125
 Ndle Bearing FA55505[2]

Countershaft

2000-1990
 Cone/Cup (Frt) LM67048-LM67010BCE[2]
 Set (Rr) SET6[2]
 Ndle Bearing Thrust NTA1423[2]

Rear Output Shaft

1996-1990
 Seal 9613S[2]
 Cone/Cup 25877-25821[2]
 Seal Kit 5200⁶⁴

6-SPEED MANUAL TRANSMISSION

Front Input Shaft

2001-1993
 Seal 7412S
 Repair Sleeve KWK99125

Rear Output Shaft

2001-1993
 Seal 9613S
 Seal Kit 5200⁶⁴

ALTERNATOR

2001-1992 (Delco 140 Amp.)
 Ball Bearing (Rear End) 100CCAB
 1990 (Delco)
 Ball Bearing (Drive End) 203FF

CRANKSHAFT FRONT SEAL

6 Cylinder

2002-1990 231/3.8L
 Seal Viton 710162
 Repair Sleeve KWK99193
 1995-1993 201/3.4L
 Seal 9845
 Repair Sleeve KWK99176
 1995-1990 173/2.8L, 189/3.1L, 207/3.4L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - REAR DRIVE - Firebird (cont.)					

CRANKSHAFT FRONT SEAL**8 Cylinder**

2002-1998	346/5.7L (GEN III)	
Seal Viton	100470	
Repair Sleeve	KWK99210	
1997-1990	305/5.0L, 350/5.7L	
Seal	9845	
Repair Sleeve	KWK99176	
Harmnc Balancer Slvs	88176	

CRANKSHAFT REAR SEAL**6 Cylinder**

2002-1995	3.8L	
Seal Viton	320691	
Repair Sleeve	KWK99328	
1995-1990	3.1L, 3.4L	
Seal	4307V	
1995-1990	173/2.8L (2nd Design)	
Seal	4307V	
Repair Sleeve	KWK99298	
Seal PTFE H/D	5273	

CRANKSHAFT REAR SEAL**8 Cylinder**

2002-1998	346/5.7L (GEN III)	
Seal	100085	
1997-1990	305/5.0L, 350/5.7L	
Seal Viton	4359V	
Repair Sleeve	KWK99364	
Seal PTFE H/D	5274	

PONTIAC - REAR DRIVE - Solstice**FRONT WHEEL****RWD**

2008-2007	(Non-ABS)	
Hub Unit Bearing	HA590185[2] ²⁵	
2008-2006	(ABS)	
Hub Unit Bearing	HA590186[2] ²⁵	

REAR WHEEL**RWD**

2008-2007	(Non-ABS)	
Hub Unit Bearing	HA590185[2] ²⁵	
2008-2006	(ABS)	
Hub Unit Bearing	HA590186[2] ²⁵	

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2008-2006	(5L40E)	
Seal	8792S	

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2006		
Seal Viton	710237	

PONTIAC - Import- FRONT DRIVE - Firefly (Canada), Optima**FRONT WHEEL****FWD**

1994-1990	Firefly	
Seal (Inner)	710394[2]	
Ball Bearing (Inner)	510001[2]	
Seal (Outer)	710175[2]	

REAR WHEEL**FWD**

1991-1990	Firefly	
Ball Bearing (Inner)	205F[2]	
Ball Bearing (Outer)	204F[2]	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC - Import- FRONT DRIVE - Firefly (Canada), Optima (cont.)**CLUTCH****Release Bearing**

1991-1990	Firefly (Canada)	
Bearing Assy	.....	614082
1991-1990	Optima (5 Spd.)	
Bearing Assy	.....	614171

ALTERNATOR

1997-1990	(Nippondenso)	
Ball Bearing (Drive End)	.....	302CC
Ball Bearing (Rear End)	.....	201CC
1991-1990	(Bosch)	
Ball Bearing (Drive End)	.....	203FF
Ball Bearing (Rear End)	.....	201CC

CAMSHAFT SEAL**3 Cylinder**

2000-1990	993cc/1.0L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128

4 Cylinder

2000-1992	1324cc/1.3L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128
1991-1990	1598cc/1.6	
Seal Viton	.....	1108
Repair Sleeve	.....	KWK99139
1990	1998cc/2.0L	
Seal Viton	.....	1108
Repair Sleeve	.....	KWK99139

CRANKSHAFT FRONT SEAL**3 Cylinder**

2000-1990	993cc/1.0L	
Seal	.....	710310

4 Cylinder

2000-1992	1324cc/1.3L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128
1991-1990	1598cc/1.6	
Seal	.....	710399
Repair Sleeve	.....	KWK99166

CRANKSHAFT FRONT SEAL (cont.)**4 Cylinder (cont.)**

1990	1998cc/2.0L	
Seal Viton	.....	710164
Repair Sleeve	.....	KWK99128

CRANKSHAFT REAR SEAL**3 Cylinder**

2000-1990	993cc/1.0L	
Seal	.....	710334

4 Cylinder

2000-1992	1324cc/1.3L	
Seal	.....	710334
1991-1990	1598cc/1.6	
Seal Viton	.....	228008
Repair Sleeve	.....	KWK99315
1990	1998cc/2.0L	
Seal Viton	.....	710237
Repair Sleeve	.....	KWK99354

PONTIAC - Import- FRONT DRIVE - LeMans**FRONT WHEEL****FWD**

1993-1991		
Set	.....	SET35[2]
1990	1.6 L	
Ball Bearing	.....	513113[2]
1990	2.0L	
Set	.....	SET35[2]

REAR WHEEL**FWD**

1993-1990		
Seal (Inner)	.....	4175[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET1[2]

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

PONTIAC - Import- FRONT DRIVE - LeMans (cont.)**CLUTCH****Release Bearing**

1993-1990 (4 Spd.)	
Bearing Assy	614172
1993-1990 (5 Spd.)	
Bearing Assy	614171

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1993-1990	
Seal	4072N

Output Shaft

1993-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

1993-1990	
Seal	8792S

4-SPEED MANUAL TRANSAXLE**Output Shaft**

1993-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

5-SPEED MANUAL TRANSAXLE**Output Shaft**

1993-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

ALTERNATOR

1997-1990 (Nippondenso)	
Ball Bearing (Drive End)	302CC
Ball Bearing (Rear End)	201CC
1991-1990 (Bosch)	
Ball Bearing (Drive End)	203FF
Ball Bearing (Rear End)	201CC

CAMSHAFT SEAL**4 Cylinder**

1993-1990	
Seal Viton	1108
Repair Sleeve	KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

1993-1990 1598cc/1.6	
Seal	710399
Repair Sleeve	KWK99166
1990 1998cc/2.0L	
Seal Viton	710164
Repair Sleeve	KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder**

1993-1990 1598cc/1.6	
Seal Viton	228008
Repair Sleeve	KWK99315
1990 1998cc/2.0L	
Seal Viton	710237
Repair Sleeve	KWK99354

PONTIAC TRUCK - SUV - Aztek**FRONT WHEEL****FWD**

2005-2003 (Non-ABS)	
Hub Unit Bearing	HA590048[2] ⁸³
Hub Unit Bearing	HA590085[2] ⁸⁴
2005-2001 (ABS)	
Hub Unit Bearing	513187[2]

AWD

2005-2003 (Non-ABS)	
Hub Unit Bearing	HA590048[2] ⁸³
Hub Unit Bearing	HA590085[2] ⁸⁴
2005-2001 (ABS)	
Hub Unit Bearing	513187[2]

⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PONTIAC TRUCK - SUV - Aztek (cont.)**REAR WHEEL****FWD**

2005-2003 (Non-ABS)
 Hub Unit Bearing 512221[2]
 2005-2001 (ABS)
 Hub Unit Bearing 512237[2]⁸⁴

AWD

2005-2001
 Hub Unit Bearing 513121[2]⁷²

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

2005-2001 (4T65 E)
 Seal 4072N
 Repair Sleeve KWK99172

Output Shaft

2005-2001 (4T65 E)
 Seal (LH) (Yellow) 100165
 Repair Sleeve KWK99139
 Seal (RH) (Green) 3543
 Repair Sleeve KWK99139

Manual Shaft

2005-2001 (4T65 E)
 Seal 8792S

POWER STEERING**Pump Shaft**

2003-2001
 Seal 7013S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-2001 207/3.4L
 Seal 9845
 Repair Sleeve KWK99176
 Harmnc Balancer Slvs 88176

CRANKSHAFT REAR SEAL**6 Cylinder**

2005-2001 207/3.4L
 Seal 4307V
 Seal PTFE H/D 5273
 Repair Sleeve KWK99298

PONTIAC TRUCK - SUV - Torrent**FRONT WHEEL****FWD**

2009-2007
 Hub Unit Bearing HA590262[2]²⁵
 2006 (ABS)
 Hub Unit Bearing 513189[2]
 2006 (Non-ABS)
 Hub Unit Bearing 513190[2]

AWD

2009-2007
 Hub Unit Bearing HA590262[2]²⁵
 2006 (ABS)
 Hub Unit Bearing 513189[2]
 2006 (Non-ABS)
 Hub Unit Bearing 513190[2]

REAR WHEEL**FWD**

2007-2006 (ABS)
 Hub Unit Bearing 512229[2]
 2007-2006 (Non-ABS)
 Hub Unit Bearing 512230[2]

AWD

2009-2007
 Hub Unit Bearing HA590264[2]²⁵
 2006
 Hub Unit Bearing 512229[2]

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2007-2006 (Aisin AF33-5)
 Seal 221207
 Repair Sleeve KWK99049

²⁵New Item, Check For Availability⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded.⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC TRUCK - SUV - Torrent (cont.)					

5-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2007-2006 (Aisin AF33-5)	
Seal	4764[2]

CRANKSHAFT FRONT SEAL**6 Cylinder**

2008-2006 207/3.4L	
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2006 3.4L	
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

PONTIAC - Minivan - Montana, Trans Sport**FRONT WHEEL****FWD**

2005-2003 (Non-ABS)	
Hub Unit Bearing	513160[2] ⁸³
Hub Unit Bearing	HA590085[2] ⁸⁴
2005-2001 (2nd Design)(ABS)	
Hub Unit Bearing	513179[2] ⁷³
2001-1997 (1st Design)(ABS)	
Hub Unit Bearing	513121[2] ⁷²
1996-1992	
Hub Unit Bearing	513087[2] ⁴⁵
1991-1990	
Hub Unit Bearing	513016K[2] ⁶¹
Seal Kit	5698[2] ¹²

AWD

2005-2002 (2nd Design)(ABS)	
Hub Unit Bearing	513179[2] ⁷³

REAR WHEEL**FWD**

2005 (Drum ~ Rear Wheel)	
Hub Unit Bearing	512150[2] ⁸³
Hub Unit Bearing	512237[2] ⁸⁴
2004-1997 (Drum ~ Rear Wheel)	
Hub Unit Bearing	512078[2]
2003-1997 (Disc ~ Rear Wheel)	
Hub Unit Bearing	512150[2] ⁸³
Hub Unit Bearing	512237[2] ⁸⁴
1996-1992 (Drum Brks.)(Auto Level)	
Hub Unit Bearing	512078[2]
1991-1990	
Hub Unit Bearing	513018[2]

REAR WHEEL**AWD**

2005-2002	
Hub Unit Bearing	513121[2] ⁷²

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1995-1990	
Seal	4072N

Output Shaft

1995-1990	
Seal	3543[2]
Repair Sleeve	KWK99139[2]

Manual Shaft

1995-1990	
Seal	8792S

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2007-1992 (4T65 E)	
Seal	4072N
Repair Sleeve	KWK99172

Output Shaft

2005-1999 (4T65 E)	
Seal (LH) (Yellow)	100165
Repair Sleeve (LH)	KWK99139
Seal (RH) (Green)	3543
Repair Sleeve (RH)	KWK99139
1998-1992 (4T40E, 4T60E)	
Seal (LH)	710096
Seal (RH)	3543
Repair Sleeve	KWK99139[2]

¹²Opt = Seal & O-Ring. Incl w/ Hub Unit. ⁴⁵Brg Flg Mtg Holes Non-Threaded. ⁶¹Kit = Seal, Hub Nut, & Brg Unit
⁷²Steel Wire Clip. Brg Flg Mtg Holes Threaded. ⁷³Plastic Wire Clip.
⁸³Deplete Inventory ⁸⁴Reorder

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

PONTIAC - Minivan - Montana, Trans Sport (cont.)

4-SPEED AUTOMATIC TRANSAXLE

Manual Shaft

2006-1992 (4T65 E)
Seal 8792S

ALTERNATOR

1999-1992 (Delco)
Ball Bearing (Rear End) 100CCAB
1991-1990 (Delco)
Ball Bearing (Drive End) 203FF

CRANKSHAFT FRONT SEAL

6 Cylinder

2006-2005 213/3.5L (OHV), 237/3.9L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
2005-1990 189/3.1L, 207/3.4L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
1995-1992 231/3.8L
Seal Viton 710162
Repair Sleeve KWK99193

CRANKSHAFT REAR SEAL

6 Cylinder

2005-1990 189/3.1L, 207/3.4L
Seal 4307V
Seal PTFE H/D 5273
Repair Sleeve KWK99298
1995-1992 231/3.8L
Seal Viton 320691
Repair Sleeve KWK99328

PONTIAC - Minivan - Montana SV6

FRONT WHEEL

FWD

2006
Hub Unit Bearing HA590157[2]²⁵
2005
Hub Unit Bearing HA590093[2]⁴⁰

AWD

2006
Hub Unit Bearing HA590157[2]²⁵
2005
Hub Unit Bearing HA590093[2]⁴⁰

REAR WHEEL

FWD

2006-2005 (Exc. Indep. Rr.
Susp.)(Rectangular Flange)
Hub Unit Bearing HA590092[2]²⁵
2006-2005 (Indep. Rr. Susp.)(Triangular
Flange)
Hub Unit Bearing HA590091[2]

AWD

2006
Hub Unit Bearing HA590157[2]²⁵
2005
Hub Unit Bearing HA590093[2]⁴⁰

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2006-2005 (4T65 E)
Seal 4072N

Output Shaft

2007-2005 (4T65 E)
Seal (LH) (Yellow) 100165
Repair Sleeve (LH) KWK99139
Seal (RH) (Green) 3543
Repair Sleeve (RH) KWK99139

Manual Shaft

2006-2005 (4T65 E)
Seal 8792S

CRANKSHAFT FRONT SEAL

6 Cylinder

2006 3.9L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176
2006-2005 3.5L
Seal 9845
Repair Sleeve KWK99176
Harmnc Balancer Slvs 88176

²⁵New Item, Check For Availability

⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PONTIAC - Minivan - Montana SV6 (cont.)					

CRANKSHAFT REAR SEAL**6 Cylinder**

2006-2005	3.5L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298
2006-2005	3.9L
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

PORSCHE - ALL**FRONT WHEEL****RWD**

2009-2002	911
Ball Bearing	WB000017[2] ²⁵
2008-2006	Cayman
Ball Bearing	WB000017[2] ²⁵
2008-2005	Boxster
Ball Bearing	WB000017[2] ²⁵
2004-1997	Boxster
Ball Bearing	513106[2]
1995-1992	968
Seal (Inner)	1012N[2]
Set (Inner)	SET17[2]
Set (Outer)	SET3[2]
1995-1990	928 (From Ch. # 861000)
Seal (Inner)	1012N[2]
Set (Inner)	SET17[2]
Set (Outer)	SET3[2]
1991-1990	944
Seal (Inner)	1012N[2]
Set (Inner)	SET17[2]
Set (Outer)	SET3[2]

AWD

2009-2005	911
Ball Bearing	WB000017[2] ²⁵
2005-1999	911
Ball Bearing	513106[2]

REAR WHEEL**RWD**

2009-2005	911
Ball Bearing	WB000018[2] ²⁵
2008-2006	Cayman
Ball Bearing	WB000017[2] ²⁵
2008-2005	Boxster
Ball Bearing	WB000017[2] ²⁵
2004-2001	Boxster S
Ball Bearing	513180[2]
2004-1997	Boxster
Ball Bearing	513106[2]
2004-1990	911
Ball Bearing	513180[2]
1994-1991	968
Ball Bearing	513180[2]
1991-1990	944 Ser.
Ball Bearing	513180[2]

AWD

2009-2005	911
Ball Bearing	WB000018[2] ²⁵
2004-1990	911
Ball Bearing	513180[2]

FRONT AXLE**Differential**

2000-1990	911 Carrera 4
Cone/Cup (LH)	XAC32010X-Y32010X
Bearing Assy (RH)	30210M

Pinion

2000-1990	911 Carrera 4
Cone/Cup (Inner)	HM89449-HM89410
Cone/Cup (Outer)	M88048-M88010

REAR AXLE**Differential**

1993-1992	968 (A/T)
Cone/Cup (LH)	LM806649-LM806610
Cone/Cup (RH)	LM300849-LM300811
1993-1992	968 (M/T)
Cone/Cup (LH)	LM501344-LM501310
Cone/Cup (RH)	LM300849-LM300811
1993-1990	911 C2 Coupe, C4 Coupe
Bearing Assy (LH)	30210M
1993-1990	911 Ser.
Cone/Cup	XAA32010XM-Y32010XM[2]
1993-1990	928
Cone/Cup	XAA32010XM-Y32010XM[2]
1991-1990	944
Set (LH)	SET45
Cone/Cup (RH)	LM300849-LM300811
1990	924 (5 Spd. Man.)
Set (LH)	SET45
Cone/Cup (RH)	LM300849-LM300811
1990	924 (A/T)
Cone/Cup (LH)	LM300849-LM300811

CLUTCH**Release Bearing**

1994-1992	968
Bearing Assy	614132 ³⁰

²⁵New Item, Check For Availability³⁰Ball Brg Replaces Carbon Brg.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
PORSCHE - ALL (cont.)					

CLUTCH (cont.)

Release Bearing (cont.)

1994-1990	911 6 Cyl.	
Bearing Assy	.....	614137 ³⁰
1991-1990	944	
Bearing Assy	.....	614132 ³⁰

3-SPEED AUTOMATIC TRANSAXLE

Differential

1991-1990		
Cone/Cup	.....	LM300849-LM300811[2]

Torque Converter

1991-1990		
Seal	.....	3083
Repair Sleeve	.....	KWK99169

Output Shaft

1991-1990		
Seal	.....	224520[2]
Repair Sleeve	.....	KWK99177

Pinion

1991-1990		
Seal (Frt)	.....	222820
Cone/Cup (Frt)	.....	M88048-M88010
Repair Sleeve (Frt)	.....	KWK99111
Seal (Rr)	.....	1012N
Cone/Cup (Rr)	.....	M86649-M86610
Repair Sleeve (Rr)	.....	KWK99177

5-SPEED AUTOMATIC TRANSAXLE

Output Shaft

2008-1996	(ZF5HP19HLA)	
Seal	.....	223510[2]
Repair Sleeve	.....	KWK99139[2]

5-SPEED MANUAL TRANSAXLE

Differential

1997-1990	(Getrag G28, G50, G64)	
Bearing Assy	.....	32010X[2]

Input Shaft

1995-1990	(VW 016)	
Seal	.....	222540
Repair Sleeve	.....	KWK99098

Output Shaft

1997-1990	(Getrag G50, G64)	
Seal	.....	224560[2]
Repair Sleeve	.....	KWK99177
1995-1990	(VW 016)	
Seal	.....	224520[2]
Repair Sleeve	.....	KWK99177
1991-1990	(Getrag G28)	
Seal	.....	224820[2]
Repair Sleeve	.....	KWK99189

CAMSHAFT SEAL

4 Cylinder

1995-1990	2474cc/2.5L, 2980cc/3.0L	
Seal	.....	223020
Repair Sleeve	.....	KWK99114

8 Cylinder

1995-1990	4957cc/5.0L, 5397cc/5.4L	
Seal	.....	223020
Repair Sleeve	.....	KWK99114

CRANKSHAFT FRONT SEAL

6 Cylinder

2008-2000	2687cc/2.7L (DOHC), 3387cc/2.7L (DOHC)	
Seal Viton	.....	710196
Repair Sleeve	.....	KWK99157
1999-1997	2480cc/2.5L	
Seal Viton	.....	710196
Repair Sleeve	.....	KWK99157
1993-1990	3164cc/3.2L, 3299cc/3.3L	
Seal	.....	226020
Repair Sleeve	.....	KWK99235

8 Cylinder

1995-1990	4474cc/4.5L, 4670cc/4.7L, 4957cc/5.0L, 5397cc/5.4L	
Seal	.....	60X85X8
Repair Sleeve	.....	KWK99235

CRANKSHAFT REAR SEAL

4 Cylinder

1995-1990	2474cc/2.5L, 2980cc/3.0L	
Seal	.....	229010
Repair Sleeve	.....	KWK99354

6 Cylinder

2002-2001	3608cc/3.6L	
Seal	.....	229010
Repair Sleeve	.....	KWK99354
1999-1997	2480cc/2.5L	
Seal	.....	716102
Repair Sleeve	.....	KWK99333
1998-1990	2994cc/3.0L, 3164cc/3.2L, 3299cc/3.3L, 3608cc/3.6L	
Seal	.....	229010
Repair Sleeve	.....	KWK99354

8 Cylinder

1995-1990	4474cc/4.5L, 4670cc/4.7L, 4957cc/5.0L, 5397cc/5.4L	
Seal	.....	229010
Repair Sleeve	.....	KWK99354

³⁰Ball Brg Replaces Carbon Brg.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

PORSCHE - SUV - Cayenne**FRONT WHEEL****AWD****2009-2003**Ball Bearing 510082[2] ²⁵**REAR WHEEL****AWD****2009-2003**Ball Bearing 510082[2] ²⁵**ROLLS ROYCE - ALL (includes BENTLEY chassis)****FRONT WHEEL****RWD****1992-1990** Silver Spur

Cone/Cup (Inner) LM29749-LM29710[2]

Set (Outer) SET4[2]

1992-1990 Silver Spirit

Cone/Cup (Inner) LM29749-LM29710[2]

Set (Outer) SET4[2]

1992-1990 Corniche

Cone/Cup (Inner) LM29749-LM29710[2]

Set (Outer) SET4[2]

REAR WHEEL**RWD****1992-1990** Corniche I, II, III

Cone/Cup (Inner) 18790-18720[2]

Cone/Cup (Outer) 18690-18620[2]

1990 Silver Spur I, II

Cone/Cup (Inner) 18790-18720[2]

Cone/Cup (Outer) 18690-18620[2]

1990 Silver Spirit I, II

Cone/Cup (Inner) 18790-18720[2]

Cone/Cup (Outer) 18690-18620[2]

REAR AXLE**Differential****1992-1990**

Cone/Cup (LH) 29590-29520

Cone/Cup (RH) 368A-362A

Pinion**1990** Corniche

Cone/Cup (Inner) 18790-18720

Cone/Cup (Outer) 18690-18620

1990 Silver Spur

Cone/Cup (Inner) 18790-18720

Cone/Cup (Outer) 18690-18620

1990 Silver Spirit

Cone/Cup (Inner) 18790-18720

Cone/Cup (Outer) 18690-18620

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter****1990** (THM400)

Seal 6712NA

Repair Sleeve KWK99187

Rear Seal/Ext. Housing**1990** (THM400)

Seal 9449

Seal Kit 5208 ⁶⁴**Selector Shaft Seal/Man. Shaft****1990** (THM400)

Seal 8792S

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter****1992-1991** (4L80E)

Seal 4598

Repair Sleeve KWK99199

Rear Seal/Ext. Housing**1992-1991** (4L80E)

Seal 9449

Seal Kit 5208 ⁶⁴**Selector Shaft Seal/Man. Shaft****1992-1991** (4L80E)

Seal 8792S

²⁵New Item, Check For Availability⁶⁴Seal & Bushing Kit

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

ROVER - SUV - Defender 90, Defender 110, Discovery, LR2, LR3, Range Rover**FRONT WHEEL****4WD**

2008-2006	Range Rover Sport	
Hub Unit Bearing	HA500601[2]	
2008-2005	LR3 (T5 Platform)	
Hub Unit Bearing	HA500601[2]	
2008-2003	Range Rover	
Ball Bearing	510082[2]	²⁵
2002-1999	Range Rover	
Cone	NP275832-9FUA1[2]	²⁵
1998-1994	Discovery	
Set	SET37[4]	
1998-1990	Range Rover	
Set	SET37[2]	
1997-1993	Defender 90, 110	
Set	SET37[2]	

AWD

2005-2002	Freelander	
Ball Bearing	510087[2]	²⁵

REAR WHEEL**4WD**

2008-2006	Range Rover Sport	
Taprd Bearing Assy	WB000036[2]	
2008-2005	LR3 (T5 Platform)	
Taprd Bearing Assy	WB000036[2]	
2008-2003	Range Rover	
Ball Bearing	510082[2]	²⁵
2002-1999	Range Rover	
Cone	NP275832-9FUA1[2]	²⁵
1998-1994	Discovery	
Set	SET37[2]	
1997-1993	Defender 90, 110	
Set	SET37[2]	
1994-1990	Range Rover	
Set	SET37[2]	

AWD

2008	LR2	
Ball Bearing	510087[2]	²⁵
2005-2002	Freelander	
Ball Bearing	510087[2]	²⁵

4WD FRONT AXLE**Differential**

1997-1994		
Set	SET47[2]	
1993		
Set (From Mid Year)	SET47[2]	
Set (To Mid Year)	SET45[2]	
1992-1990		
Set	SET45[2]	

4WD FRONT AXLE**Pinion**

2002-1990		
Cone/Cup (Inner)	HM801346X-HM801310	
Cone/Cup (Outer)	M88046-M88010	

Steering Knuckle

2002-1990		
Cone/Cup	11590-11520[2]	

REAR AXLE**Differential**

1997-1994		
Set	SET47[2]	
1993		
Set (From Mid Year)	SET47[2]	
Set (To Mid Year)	SET45[2]	
1992-1990		
Set	SET45[2]	

Pinion

2002-1990		
Cone/Cup (Inner)	HM801346X-HM801310	
Cone/Cup (Outer)	M88046-M88010	

TRANSFER CASE REBUILD KIT

1996-1990	Range Rover	
Kit	TCRK1361	

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2004-1990	(ZF 4HP 22, ZF 4HP 24)	
Seal	224052	
Repair Sleeve	KWK99157	

Rear Seal/Ext. Housing

2004-1990	(ZF 4HP 22, ZF 4HP 24)	
Seal	710140	

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2005-2003	(5L40E)	
Seal	710559	

Selector Shaft Seal/Man. Shaft

2005-2003	(5L40E)	
Seal	8792S	

CRANKSHAFT FRONT SEAL**8 Cylinder**

2005-2003	(4.4L)(DOHC)	
Seal Viton	716484	
Repair Sleeve	KWK99189	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
ROVER - SUV - Defender 90, Defender 110, Discovery, LR2, LR3, Range Rover (cont.)					

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-2005 (4.0L)
Seal Viton 3393

8 Cylinder

2005-2003 (4.4L)(DOHC)
Seal 231003[2]
Repair Sleeve KWK99393[2]

SAAB - 9-2X, 9-3, 9-5, 9-7X, 900, 9000**FRONT WHEEL****FWD**

2008-2003 9-3
Hub Unit Bearing 513191[2]
2008-2002 9-5
Hub Unit Bearing 513192[2]
2003 9-3 (Convertible)
Ball Bearing 510052[2]
2003 9-3 (Sedan)
Hub Unit Bearing 513191[2]
2002 9-3
Ball Bearing 510052[2]
2001-1999 9-5
Ball Bearing 510052[2]
1998-1994 900
Ball Bearing 510052[2]
1998-1990 9000
Hub Unit Bearing 513126[2]
1993-1990 900
Ball Bearing 513106[2]

AWD

2009-2008 9-3
Hub Unit Bearing 513191[2]
2008-2005 9-7X
Hub Unit Bearing 513188[2]
2006-2005 9-2X
Bearing Assy 517008[2]

REAR WHEEL**FWD**

2008-2003 9-3
Hub Unit Bearing HA590290[2]²⁵
2008-2000 9-5
Hub Unit Bearing 512232[2]
2002-1999 9-3
Hub Unit Bearing 512145[2]
1999 9-5
Hub Unit Bearing 512145[2]
1998-1994 900
Hub Unit Bearing 512145[2]
1998-1990 9000
Hub Unit Bearing 512146[2]¹⁶
1993-1990 900
Hub Unit Bearing 512146[2]¹⁶

AWD

2009-2008 9-3
Hub Unit Bearing HA590290[2]²⁵
2009-2005 9-7X
Seal 4762N[2]
Cylindrical Bearing 513067[2]
2006-2005 9-2X Aero
Bearing Assy 516003[2]
2006-2005 9-2X Linear
Bearing Assy 513248[2]

FRONT AXLE**Pinion**

1993-1990
Seal Viton 483230V
Repair Sleeve KWK99162

4WD FRONT AXLE**Axle Shaft**

2008-2005
Seal 710491[2]

REAR AXLE**Differential Rebuild Kit**

2008-2005 (8" R.G.)
Kit DRK320D
2007-2005 (8.625" R.G.)
Kit DRK321C

Pinion

2008-2005
Seal (Rear Axle) 710506
2006-2005
Seal 1173
Repair Sleeve KWK99139

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2008-2005 (4L60E, 4L70E)
Seal 4950
Repair Sleeve KWK99174

¹⁶Obsolete²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

SAAB - 9-2X, 9-3, 9-5, 9-7X, 900, 9000 (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Selector Shaft Seal/Man. Shaft**

2008-2005	(4L60E, 4L70E)	
Seal		8792S

CLUTCH**Pilot Bearing**

2005	(4 Cyl.)	
Ball Bearing		201CC
1992-1990	900	
Ball Bearing		202FF

Release Bearing

2005	(4 Cyl.)	
Bearing Assy		614159
1990	900, 9000	
Bearing Assy		614080

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2005	(TZ1A2)	
Bearing Assy		30208M[2]
1997-1990	(ZF 4HP 14, 4HP 18Q)	
Cone/Cup (LH)		LM806649-LM806610
Cone/Cup (RH)		LM300849-LM300811

Torque Converter / Frt Pump

2006-2005	(TZ1A2)	
Seal		225010
Repair Sleeve		KWK99196
2002-1994	(Aisin 50 40, 50 42)	
Seal		223830
Repair Sleeve		KWK99147
1994-1990	(ZF 4HP 14)	
Seal		225110
Repair Sleeve		KWK99187

Output Shaft

2006-2005	(TZ1A2)	
Seal		223050
Repair Sleeve		KWK99114
2003-1994	(Aisin 50 40, 50 42)	
Seal		4764[2]

Oil Pump

2006-2005	(TZ1A2)	
Seal		710265

Manual Shaft

2002-1994	(Aisin 50 40, 50 42)	
Seal		221207
Repair Sleeve		KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2008	9-3, 9-5	
Seal		222830
Repair Sleeve		KWK99147

Output Shaft

2008	9-3, 9-5	
Seal		4764[2]

Manual Shaft

2008	9-3, 9-5	
Seal		221207
Repair Sleeve		KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

1993-1990	9000	
Cone/Cup (LH)		LM300849-LM300811
Set (RH)		SET45
1992-1990	900	
Seal		223510[2]
Set		SET45[2]
Repair Sleeve		KWK99139

Input Shaft

1993-1990	9000	
Set (Frt)		SET4[2]
Cone/Cup (Rr)		15106-15245[2]
1992-1990	900	
Cone/Cup		M84548-M84510[2]

Output Shaft

1993-1990	9000	
Bearing Assy (LH)		32008XM[2]
Cone/Cup (RH)		15106-15245[2]

Pinion

1992-1990	900	
Cone/Cup (Frt)		HM88649-HM88610
Cone/Cup (Rr)		M88048-M88010

OIL PUMP**4 Cylinder**

2006-2005	1995cc/2.0L, 2458cc/2.5L	
Seal		710236

CAMSHAFT SEAL**6 Cylinder**

2002-1994	2498cc/2.0L, 2962cc/3.0L	
Seal		714436
Repair Sleeve		KWK99139

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
SAAB - 9-2X, 9-3, 9-5, 9-7X, 900, 9000 (cont.)					

CRANKSHAFT FRONT SEAL**4 Cylinder**

2007-2003	1985cc/2.0L, 2290cc/2.3L
Seal	331227H
Harmnc Balancer Slvs	88187
Repair Sleeve	KWK99187
2002-1990	1985cc/2.0L, 2119cc/2.1L, 2290cc/2.3L
Seal	331227H
Repair Sleeve	KWK99187

8 Cylinder

2008-2005	325/5.3L, 364/6.0L
Seal Viton	100470
Repair Sleeve	KWK99210

CRANKSHAFT REAR SEAL**4 Cylinder**

2007-2004	1985cc/2.0L, 2290cc/2.3L
Seal Viton	710237
Repair Sleeve	KWK99354
2006-2005	1995cc/2.0L, 2458cc/2.5L
Seal Viton	710235
2003-1990	1985cc/2.0L, 2119cc/2.1L, 2290cc/2.3L
Seal	3772

CRANKSHAFT REAR SEAL**6 Cylinder**

2007-1994	2498cc/2.5L, 2792cc/2.8L, 2962cc/3.0L
Seal Viton	710237
Repair Sleeve	KWK99354

8 Cylinder

2008-2005	325/5.3L, 364/6.0L
Seal	100085

SATURN - Astra, Aura, Ion, L Series, S Series**FRONT WHEEL****FWD**

2009-2008	Astra
Hub Unit Bearing	HA590297[2] ²⁵
2009-2007	Aura
Hub Unit Bearing	HA590070[2]
2007-2004	Ion (Red Line)
Hub Unit Bearing	HA590086[2]
2007-2003	Ion (ABS)(Exc. Red Line)
Hub Unit Bearing	HA590068[2]
2007-2003	Ion (Exc. Red Line)(Non-ABS)
Hub Unit Bearing	HA590069[2]
2005-2000	L Ser.
Ball Bearing	510052[2]
2002-1994	S Ser.
Ball Bearing	510024[2]
Hub Unit Bearing	HA590156K[2] ⁶⁷
1993-1991	
Ball Bearing	510024[2]
Hub Unit Bearing	HA590155K[2]

REAR WHEEL**FWD**

2009-2008	Astra
Ball Bearing	510029[2]
2009-2007	Aura
Hub Unit Bearing	HA590081[2]
2007-2004	Ion (Red Line)(Disc)
Hub Unit Bearing	HA590088[2]

REAR WHEEL (cont.)**FWD (cont.)**

2007-2003	Ion (ABS)(Exc. Red Line)(Drum)
Hub Unit Bearing	HA590066[2]
2007-2003	Ion (Exc. Red Line)(Non-ABS)(Drum)
Hub Unit Bearing	HA590067[2]
2005-2000	L Ser. (ABS)
Hub Unit Bearing	512238[2]
2005-2000	L Ser. (Non-ABS)
Hub Unit Bearing	512239[2]
2002-1991	S Ser. (ABS)
Hub Unit Bearing	512002[2]
2002-1991	S Ser. (Non-ABS)
Hub Unit Bearing	512000[2]

CLUTCH**Release Bearing**

1997-1991	
Bearing Assy	614161

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1991	(TAAT)
Seal Viton	714616[2]
Ball Bearing	208[2]

²⁵New Item, Check For Availability⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

SATURN - Astra, Aura, Ion, L Series, S Series (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Torque Convertor / Frt Pump**

2008-1991	(4T40E, 4T45E)	
Seal	.....	4072N
Repair Sleeve	.....	KWK99172

Input Shaft

2003-2002		
Ball Bearing	.....	FC69598[2]

Output Shaft

2007-2000	(4T40E)	
Seal	.....	SL260001[2] ²⁵
2002-1991	(TAAT)	
Seal (LH)	.....	4613N
Seal (RH)	.....	4614N

Manual Shaft

2008-2001	(4T40E, 4T45E)	
Seal	.....	8792S
2002-1995	(TAAT)	
Seal	.....	4701N
1994	(TAAT)(1st Design)	
Seal	.....	718610
1994	(TAAT)(2nd Design)	
Seal	.....	4701N
1993-1991	(TAAT)	
Seal	.....	718610

5-SPEED AUTOMATIC TRANSAXLE**Differential**

1996-1991	(TAMT)	
Ball Bearing	.....	208[2]

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

2002-1991	(S Ser.)	
Kit	.....	TRKFG120

Differential

2002-1991	(TAMT)	
Ball Bearing	.....	208[2]

Output Shaft

2002-1991	(TAMT)	
Seal (LH)	.....	4613N
Seal (RH)	.....	4614N
Ndle Bearing (RH)	.....	F213118 ¹⁶

POWER STEERING**Pump Shaft**

1999-1991	(Saginaw pump)	
Seal	.....	7013S

CAMSHAFT SEAL**6 Cylinder**

2005-2000	2962cc/3.0L	
Seal	.....	714436
Repair Sleeve	.....	KWK99139

CRANKSHAFT FRONT SEAL**4 Cylinder**

2004	2198cc/2.2L ION	
Seal	.....	9845
2002-1991	116/1.9L	
Seal Viton	.....	324204

6 Cylinder

2008-2007	213/3.5L	
Seal	.....	9845
Repair Sleeve	.....	KWK99176
2005-2000	2962cc/3.0L	
Seal	.....	223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2007	2.4L	
Seal Viton	.....	710237
2007-2004	2.0L, 2.2L	
Seal Viton	.....	710237
2006-2000	2.2L (DOHC)	
Seal Viton	.....	710237
2002-1991	116/1.9L	
Seal Viton	.....	327995
Seal PTFE H/D	.....	5273
Repair Sleeve	.....	KWK99298

6 Cylinder

2008-2007	3.5L	
Seal	.....	4307V
2005-2000	3.0L (DOHC)	
Seal Viton	.....	710237

¹⁶Obsolete²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
SATURN - Sky					

FRONT WHEEL**RWD**

2009-2007

Hub Unit Bearing HA590186[2]²⁵**REAR WHEEL****RWD**

2009-2007

Hub Unit Bearing HA590186[2]²⁵**5-SPEED AUTOMATIC TRANSMISSION****Selector Shaft Seal/Man. Shaft**

2008-2007 (5L40E)

Seal 8792S

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2007 2.0L

Seal Viton 710237

2009-2007 2.4L

Seal Viton 710237

SATURN TRUCK - Minivan, SUV - Outlook**FRONT WHEEL****FWD**

2009-2007

Hub Unit Bearing HA590227[2]²⁵**AWD**

2009-2007

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****FWD**

2009-2007

Hub Unit Bearing HA590227[2]²⁵**REAR WHEEL****AWD**

2009-2007

Hub Unit Bearing HA590227[2]²⁵**SATURN TRUCK - Minivan, SUV - Relay****FRONT WHEEL****FWD**

2007-2006

Hub Unit Bearing HA590157[2]²⁵

2005

Hub Unit Bearing HA590093[2]⁴⁰**AWD**

2007-2006

Hub Unit Bearing HA590157[2]²⁵

2005

Hub Unit Bearing HA590093[2]⁴⁰**REAR WHEEL****FWD**

2007-2006

Hub Unit Bearing HA590116[2]²⁵

2005

(Exc. Indep. Rr.
Susp.)(Rectangular Flange)

Hub Unit Bearing HA590092[2]

REAR WHEEL (cont.)**FWD (cont.)**2005 (Indep. Rr. Susp.)(Triangular
Flange)

Hub Unit Bearing HA590091[2]

AWD

2006

Hub Unit Bearing HA590157[2]²⁵

2005

Hub Unit Bearing HA590093[2]⁴⁰**4-SPEED AUTOMATIC TRANSAXLE****Torque Converter / Frt Pump**

2007-2005 (4T65 E)

Seal 4072N

Repair Sleeve KWK99172

²⁵New Item, Check For Availability⁴⁰5 Stud.

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

SATURN TRUCK - Minivan, SUV - Relay (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

2008-2005 (4T65 E)	
Seal (LH) (Yellow)	100165
Repair Sleeve (LH)	KWK99139
Seal (RH) (Green)	3543
Repair Sleeve (RH)	KWK99139

Manual Shaft

2006-2005 (4T65 E)	
Seal	8792S

CRANKSHAFT FRONT SEAL**6 Cylinder**

2007-2006 3.9L	
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176
2006-2005 3.5L	
Seal	9845
Repair Sleeve	KWK99176
Harmnc Balancer Slvs	88176

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2006 3.9L	
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298
2006-2005 3.5L	
Seal	4307V
Seal PTFE H/D	5273
Repair Sleeve	KWK99298

SATURN TRUCK - Minivan, SUV - VUE**FRONT WHEEL****FWD**

2009-2008	
Hub Unit Bearing	HA590262[2] ²⁵
2007-2002 (ABS)	
Hub Unit Bearing	513189[2]
2007-2002 (Non-ABS)	
Hub Unit Bearing	513190[2]

AWD

2009-2008	
Hub Unit Bearing	HA590262[2] ²⁵
2007-2002 (ABS)	
Hub Unit Bearing	513189[2]
2007-2002 (Non-ABS)	
Hub Unit Bearing	513190[2]

REAR WHEEL**FWD**

2009-2008	
Hub Unit Bearing	HA590264[2] ²⁵
2007-2002 (ABS)	
Hub Unit Bearing	512229[2]
2007-2002 (Non-ABS)	
Hub Unit Bearing	512230[2]

AWD

2009-2008	
Hub Unit Bearing	HA590264[2] ²⁵
2007-2002 (ABS)	
Hub Unit Bearing	512229[2]
2007-2002 (Non-ABS)	
Hub Unit Bearing	512230[2]

REAR AXLE**Pinion**

2005-2002	
Cone/Cup (Inner)	M88048-M88010
Cone/Cup (Outer)	M86649-M86610

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2006-2002 (AF33)	
Seal	222830
Repair Sleeve	KWK99147

Output Shaft

2007-2002 (AF33)	
Seal	4764[2]

Manual Shaft

2008 (4T45E)	
Seal	8792S

5-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2007-2002 (AF33)	
Seal	221207

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>SATURN TRUCK - Minivan, SUV - VUE (cont.)</i>					

OIL PUMP**6 Cylinder**

2007-2004 3471cc/3.5L
Seal 711181

CRANKSHAFT FRONT SEAL**6 Cylinder**

2003-2002 2962cc/3.0L
Seal 223750

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2007 2.4L
Seal Viton 710237
2007-2002 2.2L (DOHC)
Seal Viton 710237

CRANKSHAFT REAR SEAL**6 Cylinder**

2009-2004 3.5L
Seal Viton 228008
2003-2002 3.0L (DOHC)
Seal Viton 710237

SCION - xA, xB, tC**FRONT WHEEL****FWD**

2009-2005 tC
Ball Bearing 510070[2]
2009-2004 xA, xB
Hub Unit Bearing HA590165[2]²⁵
Ball Bearing Optional 510062[2]

REAR WHEEL**FWD**

2009-2005 tC
Hub Unit Bearing HA590040[2]²⁵
2009-2004 xA, xB
Hub Unit Bearing HA594245[2]

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2006-2004
Seal 1015N

4-SPEED AUTOMATIC TRANSAXLE**Output Shaft**

2006-2004 (U241E, U340E)
Seal 223540[2]
Repair Sleeve KWK99139[2]

OIL PUMP**4 Cylinder**

2009-2005 2362cc/2.4L(DOHC)
Seal 221820
2006-2004 1496cc/1.5L(DOHC)
Seal 710450
Repair Sleeve KWK99078

CRANKSHAFT FRONT SEAL**4 Cylinder**

2009-2005 2.4L
Seal Viton 2025
Repair Sleeve KWK99166
2006-2004 1.5L
Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-2005 2.4L
Seal Viton 710189
2006-2004 1.5L
Seal 228015

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

STERLING - Honda automobiles - England**FRONT WHEEL****FWD**

1991-1990 825, 827
Ball Bearing 513052[2]

REAR WHEEL**FWD**

1991-1990 825, 827
Ball Bearing 513051[2]

CLUTCH**Release Bearing**

1991-1990 827SLi
Bearing Assy 614068

4-SPEED AUTOMATIC TRANSAXLE**Differential**

1991-1990 (PL5X)
Bearing Assy 30208M[2]

Torque Converter / Frt Pump

1991-1990 (G4)
Seal 350609

Output Shaft

1991-1990 (G3T4, G4)
Seal Viton 224026[2]
Repair Sleeve KWK99157

Manual Shaft

1991-1990 (G3T4, G4)
Seal 221207
Repair Sleeve KWK99049

5-SPEED MANUAL TRANSAXLE**Differential**

1991-1990 (G3T4, C3P4)
Cone/Cup (LH) XAA32008X-Y32008X
Bearing Assy (RH) 32010X

Output Shaft

1991-1990 (G3T4, C3P4)
Seal Viton 224026[2]
Repair Sleeve KWK99157

A/C COMPRESSOR

1990 (Nippondenso 10P15)(Axial)
Ball Bearing 5000KFF[2]
1990 (Nippondenso 10P17)(Axial)
Ball Bearing 5000KFF[2]

ALTERNATOR

1990 (Nippondenso)
Ball Bearing (Drive End) 203FF
Ball Bearing (Rear End) 201CC

POWER STEERING**Pump Shaft**

1991-1990 827 Ser.
Seal 221620

OIL PUMP**6 Cylinder**

1991-1990 2494cc/2.5L, 2675cc/2.7L
Seal 711181

CAMSHAFT SEAL**6 Cylinder**

1991-1990 2494cc/2.5L, 2675cc/2.7L
Seal Viton 713771
Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder**

1991-1990 2494cc/2.5L, 2675cc/2.7L
Seal 711181

CRANKSHAFT REAR SEAL**6 Cylinder**

1991-1990 2494cc/2.5L, 2675cc/2.7L
Seal Viton 228008
Repair Sleeve KWK99315

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

SUBARU AWD - Impreza, Justy, Legacy, Loyale, Outback, SVX, XT**FRONT WHEEL****FWD**

2008-2005	Legacy, Outback	
Hub Unit Bearing	HA590118[2]	²⁵
2004-1990	Legacy	
Seal (Inner)	1993[2]	
Seal (Outer)	225650[2]	
Bearing Assy	517008[2]	
1997-1993	Impreza	
Seal (Inner)	225673[2]	
Seal (Outer)	710393[2]	
Bearing Assy	517008[2]	
1997-1992	SVX	
Seal (Inner)	710229[2]	
Seal (Outer)	710231[2]	
Bearing Assy	517007[2]	
1994-1990	Loyale	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Ball Bearing	207[2]	
1994-1990	Justy	
Seal (Inner)	1974[2]	
Seal (Outer)	224462[2]	
Ball Bearing	206WB[2]	
1992-1990	XT6	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Bearing Assy	513015[2]	
1991-1990	XT Ser. (Exc. XT6)	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Ball Bearing	207[2]	

4WD

1993-1990	Loyale	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Ball Bearing	207[2]	
1992-1990	XT6	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Bearing Assy	513015[2]	
1991-1990	XT Ser. (Exc. XT6)	
Seal (Inner)	710230[2]	
Seal (Outer)	225230[2]	
Ball Bearing	207[2]	

AWD

2009-2008	Impreza (Exc. WXR STI)	
Hub Unit Bearing	HA590315[2]	²⁵
2009-2008	Impreza (WXR STI)	
Hub Unit Bearing	HA590316[2]	²⁵
2008-2005	Legacy, Outback	
Hub Unit Bearing	HA590118[2]	²⁵
2006-1993	Impreza	
Seal (Inner)	1993[2]	
Bearing Assy (Inner)	517008[2]	
Seal (Outer)	225650[2]	
2004-2000	Outback	
Seal (Inner)	1993[2]	
Bearing Assy (Inner)	517008[2]	
Seal (Outer)	225650[2]	

FRONT WHEEL (cont.)**AWD (cont.)**

2004-1990	Legacy	
Seal (Inner)	1993[2]	
Bearing Assy (Inner)	517008[2]	
Seal (Outer)	225650[2]	
1997-1992	SVX	
Seal (Inner)	710229[2]	
Bearing Assy (Inner)	517007[2]	
Seal (Outer)	710231[2]	
1994	Loyale	
Ball Bearing	207[2]	
Seal (Outer)	225230[2]	
Seal (Inner)	710230[2]	

REAR WHEEL**FWD**

1997-1993	Impreza (ABS)	
Hub Unit Bearing	512036[2]	
1997-1991	Legacy (ABS)	
Hub Unit Bearing	512036[2]	
1996-1993	Impreza (Non-ABS)	
Hub Unit Bearing	512036[2]	
1996-1990	Legacy (Non-ABS)	
Hub Unit Bearing	512036[2]	
1995-1990	Justy	
Seal (Inner)	223830[2]	
Bearing Assy (Inner)	30205M[2]	
Bearing Assy (Outer)	30204M[2]	
1993-1990	Loyale	
Seal (Inner)	1984[2]	
Bearing Assy (Inner)	30206M[2]	
Bearing Assy (Outer)	30204M[2]	

4WD

1995-1990	Justy	
Seal (Inner)	710228[2]	
Ball Bearing (Inner)	305AG[2]	
Seal (Outer)	710227[2]	
Ball Bearing (Outer)	206WB[2]	
1993-1990	Loyale	
Seal (Inner)	224015[2]	
Bearing Assy (Inner)	513056[2]	
Seal (Outer)	225005[2]	
1991-1990	XT	
Seal (Inner)	224015[2]	
Bearing Assy (Inner)	513056[2]	
Seal (Outer)	225005[2]	

AWD

2009-2008	Impreza (Exc. WXR STI)	
Hub Unit Bearing	HA590313[2]	²⁵
2009-2008	Impreza (WXR STI)	
Hub Unit Bearing	HA590314[2]	²⁵
2009-2005	Legacy, Outback	
Hub Unit Bearing	HA590119[2]	²⁵
2007-2004	Impreza (Exc. WXR STI)	
Bearing Assy	513248[2]	
Ball Bearing (Opt)	511023[2]	
Seal (Inner)	710226	
Seal (Intermediate)	225005	
Seal Viton (Outer)	710259	

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>SUBARU AWD - Impreza, Justy, Legacy, Loyale, Outback, SVX, XT (cont.)</i>					

REAR WHEEL (cont.)

AWD (cont.)

2006-2004	Impreza (WXR STI)
Bearing Assy	516003[2]
Seal (Inner)	710226
Seal (Intermediate)	225673
Seal (Outer)	710393
2004-2000	Legacy
Bearing Module	512183[2]
2004-2000	Outback
Bearing Module	512183[2]
2003-1993	Impreza
Bearing Assy	513248[2]
Ball Bearing (Opt)	511023[2]
Seal (Inner)	710226
Seal (Intermediate)	225005
Seal Viton (Outer)	710259
1999-1990	Legacy
Bearing Assy	513248[2]
Ball Bearing (Opt)	511023[2]
Seal (Inner)	710226
Seal (Intermediate)	225005
Seal (Outer)	710529
1997-1992	SVX
Bearing Assy	516003[2]
1994	Loyale
Seal (Inner)	224015[2]
Bearing Assy (Inner)	513056[2]
Seal (Outer)	225005[2]

REAR AXLE

Differential

1997-1990	Exc. Justy (4WD)
Seal	223255[2]
Bearing Assy	30208M[2]
1994-1990	Justy (4WD)
Seal	222745[2]
Bearing Assy	32007X[2]

Pinion

2008-1998	Impreza (4WD)
Seal	1173
1997-1990	Exc. Justy (4WD)
Seal	1173
Bearing Assy (Inner)	32306
Bearing Assy (Outer)	32305
1994-1990	Justy (4WD)
Seal	710267
Bearing Assy (Inner)	30206M

CLUTCH

Pilot Bearing

2002-1990	(4WD)
Ball Bearing	201CC

CLUTCH - 3 CYLINDER

Release Bearing

1994-1991	1189cc/1.2
Bearing Assy	614160

CLUTCH - 4 CYLINDER

Release Bearing

2002-1990	1820cc/1.8, 2212cc/2.2, 2457cc/2.5
Bearing Assy	614159
1992-1990	1781cc/1.8L, 1781cc/1.8L (Turbo)
Bearing Assy	614059

CLUTCH - 6 CYLINDER

Release Bearing

1991-1990	2672CC/2.7L
Bearing Assy	614059

3-SPEED AUTOMATIC TRANSAXLE

Torque Converter

1994-1990	(TA86, TX86, T71T, T81M, T81T, T81X)
Seal Viton	2025
Repair Sleeve	KWK99169

Output Shaft

1994-1990	(TA86, TX86, T71T, T81M, T81T, T81X)
Seal	222745[2]
Repair Sleeve	KWK99106

4-SPEED AUTOMATIC TRANSAXLE

Differential

2002-1990	(TZ1A2, TZ102)
Bearing Assy	30208M[2]

Torque Converter / Frt Pump

2002-1990	(TZ1A2, TA102, TZ102)
Seal	225010
Repair Sleeve	KWK99196

Output Shaft

2008-1990	(TZ1A2, TA102, TZ102)
Seal	223050[2]
Repair Sleeve	KWK99114

Oil Pump

2002-1990	(TZ1A2, TA102, TZ102)
Seal	710265

Extension Housing

1996-1995	(TA102)
Seal	3771
Repair Sleeve	KWK99139
1994-1990	(TA102, TZ102)
Seal	3771
Repair Sleeve	KWK99139

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

SUBARU AWD - Impreza, Justy, Legacy, Loyale, Outback, SVX, XT (cont.)**5-SPEED MANUAL TRANSAXLE****Differential**

2002-1998	(TY752, TY754)	
Bearing Assy	.....	30208M[2]
1994-1990	(TM64F, TW64F)	
Ball Bearing (LH)	.....	207S[2]
Ball Bearing (RH)	.....	207[2]

Input Shaft

2002-1999	(TY754)	
Seal	.....	222558
Repair Sleeve	.....	KWK99098
2002-1990	(TM702, TM752)	
Seal	.....	222240
Repair Sleeve	.....	KWK99085
1994-1990	(TM64F, TW64F)	
Seal	.....	222030
Ball Bearing	.....	205BB[2]
Repair Sleeve	.....	KWK99078
1994-1990	(TW75F, TY75F)	
Seal	.....	222558
Ball Bearing	.....	305AG[2]
Repair Sleeve	.....	KWK99098

Output Shaft

2002-1999	(TY754)	
Seal	.....	223050[2]
Repair Sleeve	.....	KWK99114
2002-1990	(TY752)	
Seal	.....	223050[2]
Repair Sleeve	.....	KWK99114
1996-1990	(TM50F, TM55F, TM60F, TM64F, TW64F, TM70F)	
Seal	.....	222745[2]
Repair Sleeve	.....	KWK99106
1996-1990	(TM702, T71G, T71W, T72G, TM75F, TW75F, TM752, T81G)	
Seal	.....	222745[2]
Repair Sleeve	.....	KWK99106

Extension Housing

1994-1990	(TM50F, TM60F, TM70F, T71G, T72G, TM75F, TW75F, T81G)	
Seal	.....	221820
1994-1990	(TM55F, T71W, TY75F, TY752)	
Seal	.....	3771
Repair Sleeve	.....	KWK99139

ALTERNATOR

1992-1990	Hitachi 50, 55, 60, 65 Amp.	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC

OIL PUMP**4 Cylinder**

2008-2000	1995cc/2.0L, 2458cc/2.5L	
Seal	.....	710236

OIL PUMP (cont.)**4 Cylinder (cont.)**

1999-1990	1820cc/1.8, 2212cc/2.2, 2457cc/2.5	
Seal	.....	710238

6 Cylinder

2007-2001	2999cc/3.0L	
Seal	.....	710236
1997-1992	3318cc/3.3L	
Seal	.....	710236

CAMSHAFT SEAL**3 Cylinder**

1994-1990	1189cc/1.2	
Seal	.....	223018
Repair Sleeve	.....	KWK99114

4 Cylinder

2005-1996	2457cc/2.5L	
Seal	.....	223230
Repair Sleeve	.....	KWK99128
2001-1990	1820cc/1.8L, 2212cc/2.2L	
Seal	.....	223230
Repair Sleeve	.....	KWK99128
1994-1990	1781cc/1.8L, 1781cc/1.8L (Turbo)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

6 Cylinder

2002-2001	2999cc/3.0L	
Seal	.....	223230
Repair Sleeve	.....	KWK99128
1996-1992	3318cc/3.3L	
Seal	.....	223230
Repair Sleeve	.....	KWK99128
1991-1990	2672cc/2.7L	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

CRANKSHAFT FRONT SEAL**3 Cylinder**

1994-1990	1189cc/1.2	
Seal	.....	710233

4 Cylinder

2006-1998	2458cc/2.5L	
Seal	.....	710236
2005-2002	1994cc/2.0L	
Seal	.....	710236
2001-1995	1781cc/1.8L, 2212cc/2.2L	
Seal	.....	710236
1994-1990	1781cc/1.8L	
Seal	.....	1038
Repair Sleeve	.....	KWK99147

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>SUBARU AWD - Impreza, Justy, Legacy, Loyale, Outback, SVX, XT (cont.)</i>					

CRANKSHAFT FRONT SEAL

6 Cylinder

2006-2001	2999cc/3.0L	
Seal		710236
1991-1990	2672cc/2.7L	
Seal		223230
Repair Sleeve		KWK99147

CRANKSHAFT REAR SEAL

3 Cylinder

1994-1990	1189cc/1.2	
Seal		710234

4 Cylinder

2008-2004	1995cc/2.0L, 2458cc/2.5L	
Seal Viton		710235
2003-1990	1820cc/1.8, 2212cc/2.2, 2457cc/2.5	
Seal Viton		710235
1994-1990	1781cc/1.8L, 1781cc/1.8L (Turbo)	
Seal		1019S
Repair Sleeve		KWK99298

CRANKSHAFT REAR SEAL

6 Cylinder

2008-2001	2999cc/3.0L	
Seal Viton		710235
1997-1992	3318cc/3.3L	
Seal Viton		710235
1991-1990	2672cc/2.7L	
Seal		1019S
Repair Sleeve		KWK99298

SUBARU TRUCK - SUV, Truck - B9 Tribeca, Baja, Forester

FRONT WHEEL

AWD

2009	Forester	
Hub Unit Bearing		HA590315[2] ²⁵
2009-2006	B9 TRIBECA	
Hub Unit Bearing		HA590150[2] ²⁵
2008-1998	Forester	
Seal (Inner)		1993[2]
Seal (Outer)		225650[2]
Bearing Assy		517008[2]
2006-2003	Baja	
Seal (Inner)		1993[2]
Seal (Outer)		225650[2]
Bearing Assy		517008[2]

REAR WHEEL

AWD

2009	Forester	
Hub Unit Bearing		HA590313[2] ²⁵
2009-2008	B9 TRIBECA	
Hub Unit Bearing		HA590169[2] ²⁵
2008-1998	Forester	
Bearing Assy		513248[2]
Ball Bearing (Opt)		511023[2]
Seal (Inner)		710226[2]
Seal (Intermediate)		225005
Seal (Outer)		710529
2007-2006	B9 TRIBECA	
Hub Unit Bearing		HA590150[2] ²⁵
2006-2003	Baja	
Bearing Module		512183[2]

REAR AXLE

Differential

2002-1998	Forester (Exc. Locking Diff.)	
Bearing Assy		32007X[2]
2002-1998	Forester (Locking Diff.)	
Seal		223255[2]
Bearing Assy		30208M[2]

Pinion

2008-1998	Forester	
Seal		1173
Bearing Assy (Inner)		
(Limited Slip)		32306
Bearing Assy (Inner)		
(Exc. Limited Slip)		32206M
Bearing Assy (Outer)		32305
Ball Bearing (Pilot)		30565
2006-2003	Baja (Auto Trans)	
Bearing Assy (Inner)		32206M
Seal		1173
2006-2003	Baja (Manual Trans)	
Seal		1173
Bearing Assy (Inner)		32306
Bearing Assy (Outer)		32305

CLUTCH

Pilot Bearing

2002-1998	Forester	
Ball Bearing		201CC

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

SUBARU TRUCK - SUV, Truck - B9 Tribeca, Baja, Forester (cont.)**CLUTCH - 4 CYLINDER****Release Bearing**

2002-1998 2457cc/2.5L

Bearing Assy 614159

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2004-1998 (TZ1A2, TZ102)

Bearing Assy 30208M[2]

Torque Converter / Frt Pump

2004-1998 (TZ1A2, TZ102)

Seal 225010

Repair Sleeve KWK99196

Output Shaft

2008-1998 (TZ1A2, TA102, TZ102)

Seal 223050[2]

Repair Sleeve KWK99114

Oil Pump

2004-1998 (TZ1A2, TA102, TZ102)

Seal 710265

5-SPEED MANUAL TRANSAXLE**Differential**

2004-1998 (TY752, TY754)

Bearing Assy 30208M[2]

Input Shaft

2004-1998 (TY752, TY754)

Seal 222558

Repair Sleeve KWK99098

Output Shaft

2004-1998 (TY752, TY754)

Seal 223050[2]

Repair Sleeve KWK99114

OIL PUMP**4 Cylinder**

2009-1998 2457cc/2.5L

Seal 710236

6 Cylinder

2007-2006 2474cc/2.5L, 2980cc/3.0L

Seal 710236

CAMSHAFT SEAL**4 Cylinder**

2006-2004 2457cc/2.5L (DOHC)

Seal Viton (Intake) 2012V

2006-1999 2457cc/2.5L (SOHC)

Seal 223230[4]

Repair Sleeve KWK99128[4]

CRANKSHAFT FRONT SEAL**4 Cylinder**

2006-1998 2457cc/2.5L

Seal 710236

CRANKSHAFT REAR SEAL**4 Cylinder**

2009-1998 2457cc/2.5L

Seal Viton 710235

6 Cylinder

2007-2006 2999cc/3.0L

Seal Viton 710235

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
SUZUKI - FRONT DRIVE - Aerio, Esteem, Forenza, Reno, Swift, SX4, Verona					

FRONT WHEEL

FWD

2009-2007	SX4	
Ball Bearing	.....	WB000035[2] ²⁵
2008-2005	Forenza	
Ball Bearing	.....	510052[2]
2008-2005	Reno	
Ball Bearing	.....	510052[2]
2007-2002	Aerio	
Ball Bearing	.....	510077[2]
2006-2004	Verona (ABS)	
Hub Unit Bearing	.....	HA590115[2] ²⁵
2006-2004	Verona (Non-ABS)	
Hub Unit Bearing	.....	HA590131[2] ²⁵
2004	Forenza	
Ball Bearing	.....	510052[2]
2002-1995	Esteem	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710393[2]
Ball Bearing	.....	510018[2]
2001-1995	Swift	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710175[2]
Ball Bearing	.....	510001[2]
1994-1990	Swift (Exc. GT, GTI)	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710175[2]
Ball Bearing	.....	510001[2]
1994-1990	Swift (GT, GTI)	
Seal (Inner)	.....	710394[2]
Seal (Outer)	.....	710393[2]
Ball Bearing	.....	510018[2]

AWD

2009-2007	SX4	
Ball Bearing	.....	WB000035[2] ²⁵
2007-2002	Aerio	
Ball Bearing	.....	510077[2]

REAR WHEEL

FWD

2009-2007	SX4	
Hub Unit Bearing	.....	HA590330[2] ²⁵
2008-2005	Reno (ABS)	
Hub Unit Bearing	.....	HA590112[2] ²⁵
2008-2005	Reno (Non-ABS)	
Hub Unit Bearing	.....	HA590113[2] ²⁵
2008-2004	Forenza (Non-ABS)	
Hub Unit Bearing	.....	HA590113[2] ²⁵
2008-2004	Forenza, Verona (ABS)	
Hub Unit Bearing	.....	HA590112[2] ²⁵
2007-2002	Aerio (ABS)	
Hub Unit Bearing	.....	HA590295[2] ²⁵
2006-2004	Verona (Non-ABS)	
Hub Unit Bearing	.....	HA590113[2] ²⁵
2005-2002	Aerio (Non-ABS)	
Hub Unit Bearing	.....	HA590160[2]
2002-1995	Esteem (Non-ABS)	
Hub Unit Bearing	.....	HA590160[2]
2001-1995	Swift (ABS)	
Hub Unit Bearing	.....	512204[2]

REAR WHEEL (cont.)

FWD (cont.)

2001-1995	Swift (Non-ABS)	
Ball Bearing (Inner)	.....	205F[2]
Ball Bearing (Outer)	.....	204F[2]
1994-1990	Swift (Exc. GT & Gti)	
Ball Bearing (Inner)	.....	205F[2]
Ball Bearing (Outer)	.....	204F[2]
1994-1990	Swift GT & GTi	
Hub Unit Bearing	.....	512182[2]

AWD

2009-2007	SX4	
Hub Unit Bearing	.....	HA590331[2] ²⁵
2007-2002	Aerio	
Seal	.....	1188S
Ball Bearing	.....	511034[2] ²⁵

CLUTCH - 4 CYLINDER

Pilot Bearing

2002-1990		
Ball Bearing	.....	200CC

Release Bearing

2002-1990		
Bearing Assy	.....	614082

3-SPEED AUTOMATIC TRANSAXLE

Differential

2001-1995	(Aisin A210)	
Ball Bearing	.....	207[2]
1994-1990	(Aisin A210)(DOHC)	
Ball Bearing	.....	207[2]
1994-1990	(Aisin A210)(SOHC)	
Ball Bearing	.....	207S[2]

Torque Converter

2001-1990	(Aisin A210)	
Seal	.....	223830
Repair Sleeve	.....	KWK99177

Output Shaft

2001-1990	(Aisin A210)	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]

Manual Shaft

2001-1990	(Aisin A210)	
Seal	.....	710116

4-SPEED AUTOMATIC TRANSAXLE

Differential

2002-1995	(Aisin 60 42)	
Ball Bearing	.....	207[2]

²⁵New Item, Check For Availability

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

**SUZUKI - FRONT DRIVE - Aerio, Esteem, Forenza, Reno, Swift, SX4, Verona
(cont.)****4-SPEED AUTOMATIC TRANSAXLE****Torque Converter / Frt Pump**

2002-1999	(Aisin 60 40)	
Seal	.....	710254
2002-1995	(Aisin 60 42)	
Seal	.....	223830
Repair Sleeve	.....	KWK99177

Output Shaft

2007-2004	(42LE)	
Seal	.....	4764[2]

Manual Shaft

2008-2007	(Aisin 60 40)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049
2007-1995	(Aisin 60 42)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

2002-1995	Esteem	
Kit	.....	TRKFS110
2001-1990	Swift	
Kit	.....	TRKFS110

Differential

2002-1990	(MX1)	
Ball Bearing (LH)	.....	207
Ball Bearing (RH)	.....	107WB

Input Shaft

2001-1990	(MX1)	
Seal (RH)	.....	222030
Bearing Assy (RH)	.....	32204[2]
Repair Sleeve	.....	KWK99078

Output Shaft

2002-1990	(MX1)	
Seal (LH)	.....	223552
Seal (RH)	.....	223535
Repair Sleeve	.....	KWK99139[2]

ALTERNATOR

1992-1990		
Ball Bearing (Drive End)	.....	202FF

CAMSHAFT SEAL**4 Cylinder**

2002-1999	1800cc/1.8L (DOHC)	
Seal	.....	710334[2]
Repair Sleeve	.....	KWK99128[2]
2001-1990	1300cc/1.3L	
Seal	.....	710310[2]
Repair Sleeve	.....	KWK99128[2]

CAMSHAFT SEAL (cont.)**4 Cylinder (cont.)**

2000-1992	1590cc/1.6L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-2007	1995cc/2.0L (DOHC)	
Seal	.....	710521
Repair Sleeve	.....	KWK99177
2006-2004	2300/2.3L	
Seal	.....	710521
2003-2002	2000cc/2.0L	
Seal	.....	710521
Repair Sleeve	.....	KWK99177
2002-1999	1800cc/1.8L (DOHC)	
Seal	.....	710521
Repair Sleeve	.....	KWK99177
2001-1992	1590cc/1.6L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128
2001-1990	1300cc/1.3L	
Seal	.....	710310
Repair Sleeve	.....	KWK99128

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2004	1995cc/2.0, 2290cc/2.3L	
Seal	.....	710520
2008-2004	1998cc/2.0L, 2000cc/2.0L	
Seal Viton	.....	710237
2002-1999	1800cc/1.8L (DOHC)	
Seal	.....	710520
2001-1992	1590cc/1.6L	
Seal	.....	710334
2001-1990	1300cc/1.3L	
Seal	.....	710334

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

SUZUKI - SUV - Grand Vitara, Samurai, Sidekick, Vitara, X90, XL7

FRONT WHEEL

FWD

2009-2007 XL7
Hub Unit Bearing HA590332[2] ²⁵

RWD

2009-2007 XL7
Hub Unit Bearing HA590333[2]
2008-2006 Grand Vitara
Hub Unit Bearing HA590178[2] ²⁵
2005-2001 Vitara, Grand Vitara
Hub Unit Bearing 513193[2]
2005-2001 XL7
Hub Unit Bearing 513193[2]
2000-1999 Vitara, Grand Vitara
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]
1999-1996 X90
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]
1998-1990 Sidekick
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]
1995-1990 Samurai
Seal (Inner) 1948[2]
Cone/Cup LM300849-LM300811[4] ³²

4WD

2008-2006 Grand Vitara
Hub Unit Bearing HA590178[2] ²⁵
2006-2001 XL7
Hub Unit Bearing 513193[2]
2005-2001 Vitara, Grand Vitara
Hub Unit Bearing 513193[2]
2000-1999 Vitara, Grand Vitara
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]
1998-1996 X90
Seal (Inner) 710255[2]
Seal (Outer) 710256[2]
Bearing Assy 517009[2]
1998-1990 Sidekick
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]
1995-1990 Samurai
Seal (Inner) 1948[2]
Cone/Cup LM300849-LM300811[4] ³²

AWD

2009-2007 XL7
Hub Unit Bearing HA590332[2] ²⁵
2000 Grand Vitara
Seal (Inner) 710240[2]
Seal (Outer) 710239[2]
Bearing Assy 517009[2]

REAR WHEEL

FWD

2009-2007 XL7
Hub Unit Bearing HA590333[2]

RWD

2008-2006 Grand Vitara
Hub Unit Bearing HA590178[2] ²⁵
2006-2001 XL7
Ball Bearing 511030[2]
2005-1999 Vitara, Grand Vitara
Seal 710522[2]
Ball Bearing 511024[2]
1998-1996 X90
Seal (Inner) 224820[2]
Seal (Outer) 710193[2]
Ball Bearing 511004[2] ¹⁵
1998-1990 Sidekick
Seal (Inner) 224820[2]
Seal (Outer) 710193[2]
Ball Bearing 511004[2] ¹⁵
1995-1990 Samurai
Seal 224820[2]
Ball Bearing 511002[2]

4WD

2008-2006 Grand Vitara
Hub Unit Bearing HA590178[2] ²⁵
2005-1999 Vitara, Grand Vitara
Seal 710522[2]
Ball Bearing 511024[2]
1998-1996 X90
Seal (Inner) 224820[2]
Seal (Outer) 710193[2]
Ball Bearing 511004[2] ¹⁵
1998-1990 Sidekick
Seal (Inner) 224820[2]
Seal (Outer) 710193[2]
Ball Bearing 511004[2] ¹⁵
1995-1990 Samurai
Seal 224820[2]
Ball Bearing 511002[2]

AWD

2009-2007 XL7
Hub Unit Bearing HA590333[2]
2000 Grand Vitara
Seal 710522[2]
Ball Bearing 511024[2]

FRONT AXLE

Steering Knuckle

2007-1990
Seal (Inner) 710255
Seal (Outer) 710256

¹⁵New Bearing Design, Replaces Collar
Replaces Inner & Outer Brg.

²⁵New Item, Check For Availability

³²2 Cups & 2 Cones,

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

SUZUKI - SUV - Grand Vitara, Samurai, Sidekick, Vitara, X90, XL7 (cont.)**4WD FRONT AXLE****Axle Shaft**

1998-1990	(SJF, SKF)	
Seal	710330[2]	
Ball Bearing	206FF[2]	

Differential

2005-1990		
Cone/Cup	17887-17831[2]	

Pinion

2007-1999	Grand Vitara	
Seal	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
2006-2004	XL7	
Seal	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
2004-1999	Vitara	
Seal	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
1998-1990		
Seal Viton (SJF)	350572	
Seal (SKF)	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
Repair Sleeve	KWK99147	

Steering Knuckle

1998-1990	(SJF, SKF)	
Seal (Inner)	710255	
Seal (Outer)	710256	

REAR AXLE**Differential**

2005-1990		
Cone/Cup	17887-17831[2]	

Pinion

2005-1999		
Seal	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
1998-1990		
Seal Viton (SJR)	350572	
Seal (SKR)	710523	
Bearing Assy (Inner)	30307M	
Bearing Assy (Outer)	30306M	
Repair Sleeve	KWK99147	

TRANSFER CASE REBUILD KIT

1998-1990	Sidekick	
Kit	TRKFS140	
1990	Samurai	
Kit	TRKFS120	

TRANSFER CASE**Input Shaft**

2005-1990	Sidekick, Vitara	
Seal	223540	
Ball Bearing	207[2]	
Repair Sleeve	KWK99139	
1998-1996	X90	
Seal	223540	
Repair Sleeve	KWK99139	
1995-1990	Samurai	
Seal (Outer)	223843	
Ball Bearing (Outer)	RW122[2]	
Repair Sleeve	KWK99147	

Front Output Shaft

2005-1990	Sidekick, Vitara	
Ball Bearing (Inner)	306L[2]	
Seal (Outer)	1213N	
Ball Bearing (Outer)	RW122[2]	
Repair Sleeve	KWK99157	
1998-1996	X90	
Seal	1213N	
Repair Sleeve	KWK99157	
1995-1990	Samurai	
Ball Bearing (Inner)	306L[2]	
Seal Viton (Outer)	1965	
Ball Bearing (Outer)	RW122[2]	

Rear Output Shaft

1998-1996	X90	
Seal	1213N	
Repair Sleeve	KWK99157	
1998-1990	Sidekick	
Seal	1213N	
Ball Bearing	RW122[2]	
Repair Sleeve	KWK99157	
1995-1990	Samurai	
Seal Viton	1965	
Ball Bearing	RW122[2]	
Repair Sleeve	KWK99147	

3-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1992-1990	(3L30)	
Seal	6712NA	
Repair Sleeve	KWK99187	

Rear Seal/Ext. Housing

1992-1990	(3L30)	
Seal	473823	

Selector Shaft Seal/Man. Shaft

1995-1990	(3L30)	
Seal	8792S	

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

SUZUKI - SUV - Grand Vitara, Samurai, Sidekick, Vitara, X90, XL7 (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Torque Converter**

1998-1992	(Aisin O3 72)	
Seal		223830
Repair Sleeve		KWK99147

Rear Seal/Ext. Housing

1998-1992	(Aisin O3 72)	
Seal		710319

Selector Shaft Seal/Man. Shaft

2006-1996	(Aisin O3 72)	
Seal		221207
Repair Sleeve		KWK99049

CLUTCH - 4 CYLINDER**Pilot Bearing**

1998-1990		
Ball Bearing		200CC

Release Bearing

1998-1990		
Bearing Assy		614056
Bearing Only		01496

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

1998-1996	X90	
Kit		TRKFS130
1998-1990	Sidekick	
Kit		TRKFS130
1995-1990	Samurai	
Kit		TRKFS100

Front Input Shaft

2002-1999	Vitara	
Seal		1981
1998-1990	Sidekick	
Seal		222535
Repair Sleeve		KWK99098

Countershaft

1995-1990	Samurai	
Ball Bearing (Rr)		304WB[2]

Rear Output Shaft

1998-1990	Sidekick	
Seal		222580
Repair Sleeve		KWK99098
1995-1990	Samurai	
Ball Bearing (Rr)		305AG[2]

5-SPEED MANUAL TRANSMISSION**Extension Housing**

1995-1990	Samurai	
Seal		223215

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2008-2007	(AF33)	
Seal		222830
Repair Sleeve		KWK99147

Output Shaft

2007	(AF33)	
Seal		4764[2]

Manual Shaft

2008-2007	(AF33)	
Seal		221207
Repair Sleeve		KWK99049[2]

A/C COMPRESSOR

1992-1990	(Nippondenso)(Axial)	
Ball Bearing		5000KFF[2]

ALTERNATOR

2001-1994	(Nippondenso)	
Ball Bearing (Drive End)		303CC
1991-1990		
Ball Bearing (Drive End)		202FF

CAMSHAFT SEAL**4 Cylinder**

2003-1990	1590cc/1.6L	
Seal		710310
Repair Sleeve		KWK99128
1995-1990	1300cc/1.3L	
Seal		710310
Repair Sleeve		KWK99128

CRANKSHAFT FRONT SEAL**4 Cylinder**

2003-1999	2000cc/2.0L	
Seal		710521
Repair Sleeve		KWK99177
2001-1990	1590cc/1.6L	
Seal		710310
Repair Sleeve		KWK99128
1998-1996	1800cc/1.8L (DOHC)	
Seal		710521
Repair Sleeve		KWK99177
1995-1990	1300cc/1.3L	
Seal		710310
Repair Sleeve		KWK99128

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
SUZUKI - SUV - Grand Vitara, Samurai, Sidekick, Vitara, X90, XL7 (cont.)					

CRANKSHAFT FRONT SEAL**6 Cylinder**

2006-2001	2700cc/2.7L (DOHC)	
Seal	.....	710521
2005-1999	2494cc/2.5L (DOHC)	
Seal	.....	710521
Repair Sleeve	.....	KWK99177

CRANKSHAFT REAR SEAL**4 Cylinder**

2003-1999	1995cc/2.0L (DOHC)	
Seal	.....	710520
2002-1990	1590cc/1.6L	
Seal	.....	710334
1998-1996	1800cc/1.8L (DOHC)	
Seal	.....	710520
1995-1990	1300cc/1.3L	
Seal	.....	710334

CRANKSHAFT REAR SEAL**6 Cylinder**

2006-2001	2700cc/2.7L (DOHC)	
Seal	.....	710520
2005-1999	2494cc/2.5L (DOHC)	
Seal	.....	710520

TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris

FRONT WHEEL**FWD**

2009	Matrix	
Ball Bearing	.....	510070[2]
2009	Matrix	
Ball Bearing	.....	510063[2]
2009-2007	Camry	
Ball Bearing	.....	510063[2]
2009-2006	Yaris (ABS)	
Bearing Assy	.....	WB000004[2] ²⁵
2009-2005	Avalon	
Ball Bearing	.....	510063[2]
2009-2004	Prius	
Hub Unit Bearing	.....	HA590064[2] ²⁵
2009-2003	Corolla	
Ball Bearing	.....	510070[2]
2008-2004	Solara	
Ball Bearing	.....	510063[2]
2008-2003	Matrix	
Ball Bearing	.....	510070[2]
2007-2006	Yaris (Non-ABS)	
Bearing Assy	.....	WB000005[2] ²⁵
2006-2004	Camry	
Ball Bearing	.....	510063[2]
2005-2000	Celica	
Ball Bearing	.....	510070[2]
2005-2000	Echo	
Ball Bearing	.....	510062[2]
2004-1995	Avalon	
Ball Bearing	.....	510006[2]
2003-2001	Prius	
Ball Bearing	.....	510070[2]
2003-1999	Solara	
Ball Bearing	.....	510006[2]
Hub Unit Bearing	.....	HA590302K[2] ⁶⁷
2003-1992	Camry (4 Cyl.)	
Ball Bearing	.....	510006[2]
Hub Unit Bearing	.....	HA590303K[2] ⁶⁷

FRONT WHEEL (cont.)**FWD (cont.)**

2003-1992	Camry (6 Cyl.)	
Ball Bearing	.....	510006[2]
Hub Unit Bearing	.....	HA590302K[2] ⁶⁷
2002-1993	Corolla (ABS)	
Seal (Inner)	.....	225673[2]
Seal (Outer)	.....	4898[2]
Hub Unit Bearing (Kit)	.....	518507[2] ⁰⁶
Ball Bearing	.....	510007[2]
2002-1993	Corolla (Non-ABS)	
Seal (Inner)	.....	1993[2]
Seal (Outer)	.....	4898[2]
Hub Unit Bearing (Kit)	.....	518507[2] ⁰⁶
Ball Bearing	.....	510007[2]
1999-1993	Paseo, Tercel	
Seal (Inner)	.....	712938[2]
Seal (Outer)	.....	225410[2]
Ball Bearing	.....	510002[2]
1999-1990	Celica	
Seal (Inner)	.....	4899[2]
Seal (Outer)	.....	225220[2]
Ball Bearing	.....	514002B[2]
1992-1991	Paseo	
Seal (Inner)	.....	225673[2]
Ball Bearing (Inner)	.....	510002[2]
Seal (Outer)	.....	225410[2]
1992-1990	Corolla	
Seal (Inner)	.....	1993[2]
Seal (Outer)	.....	4898[2]
Hub Unit Bearing (Kit)	.....	518507[2] ⁰⁶
Seal Kit (Kit)	.....	5696[2] ¹²
Ball Bearing	.....	510007[2]
1992-1990	Tercel	
Seal (Inner)	.....	225673[2]
Seal (Outer)	.....	225410[2]
Ball Bearing	.....	510002[2]

⁰⁶Kit = 2 Seals, Studded Spindle, Bearing, Plate ¹²Opt = Seal & O-Ring. Incl w/ Hub Unit.²⁵New Item, Check For Availability ⁶⁷Kit = Flg, Brg, Nut, & Snap Ring

Mfg./Year Model & Location Part No. Mfg./Year Model & Location Part No.

TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)

FRONT WHEEL (cont.)

FWD (cont.)

1991-1990	Camry	
Seal (Inner)	.....	4899[2]
Seal (Outer)	.....	225220[2]
Hub Unit Bearing	.....	518506[2] ⁰⁵
Ball Bearing	.....	514002B[2]

AWD

2009	Matrix	
Ball Bearing	.....	510063[2]
2006-2003	Matrix	
Ball Bearing	.....	510070[2]
1993-1990	Celica	
Seal (Inner)	.....	4899[2]
Seal (Outer)	.....	225220[2]
Ball Bearing	.....	514002B[2]
1992-1990	Corolla	
Seal Kit (Kit)	.....	5696[2] ¹²
Seal (Inner)	.....	1993[2]
Seal (Outer)	.....	4898[2]
Hub Unit Bearing (Kit)	.....	518507[2] ⁰⁶
Ball Bearing	.....	510007[2]
1991-1990	Camry	
Seal (Inner)	.....	4899[2]
Seal (Outer)	.....	225220[2]
Hub Unit Bearing	.....	518506[2] ⁰⁵
Ball Bearing	.....	514002B[2]

REAR WHEEL

FWD

2009	Corolla	
Hub Unit Bearing	.....	HA590305[2] ²⁵
2009	Matrix Base	
Hub Unit Bearing	.....	HA590305[2] ²⁵
2009	Matrix S, XR	
Hub Unit Bearing	.....	HA590311[2] ²⁵
2009	Matrix XRS	
Hub Unit Bearing	.....	HA590310[2] ²⁵
2009-2007	Camry	
Hub Unit Bearing (LH)	.....	HA592460
Hub Unit Bearing (RH)	.....	HA592450
2009-2007	Yaris (ABS)	
Hub Unit Bearing	.....	HA590170[2] ²⁵
2009-2007	Yaris (Non-ABS)	
Hub Unit Bearing	.....	HA590172[2] ²⁵
2009-2005	Avalon	
Hub Unit Bearing (LH)	.....	HA592460
Hub Unit Bearing (RH)	.....	HA592450
2009-2004	Prius	
Hub Unit Bearing	.....	HA590055[2] ²⁵
2008-2004	Solara	
Hub Unit Bearing (LH)	.....	HA592460
Hub Unit Bearing (RH)	.....	HA592450
2008-2003	Corolla (ABS)	
Hub Unit Bearing	.....	512217[2] ⁸⁴
2008-2003	Corolla (Non-ABS)	
Hub Unit Bearing	.....	512218[2] ⁸⁴
2008-2003	Matrix (ABS)	
Hub Unit Bearing	.....	512217[2] ⁸⁴

REAR WHEEL (cont.)

FWD (cont.)

2008-2003	Matrix (Non-ABS)	
Hub Unit Bearing	.....	512218[2] ⁸⁴
2006-2002	Camry (ABS)	
Hub Unit Bearing (LH)	.....	HA592460
Hub Unit Bearing (RH)	.....	HA592450
2005-2000	Celica (ABS)	
Hub Unit Bearing	.....	HA590040[2] ²⁵
2005-2000	Celica (Non-ABS)	
Hub Unit Bearing	.....	512218[2] ⁸⁴
2005-2000	Echo (ABS)	
Hub Unit Bearing	.....	HA594245[2]
2005-2000	Echo (Non-ABS)	
Hub Unit Bearing	.....	HA592410[2]
2004-2002	Camry (Non-ABS)	
Hub Unit Bearing	.....	HA596030[2]
2004-1995	Avalon	
Hub Unit Bearing		
(ABS, Non-ABS)	.....	HA590370[2] ²⁵
Hub Unit Bearing		
(Non-ABS)	.....	HA590371[2] ⁸³
Bearing Module	.....	512009[2]
2003-2001	Prius	
Hub Unit Bearing	.....	HA590063[2] ²⁵
2003-1999	Solara	
Hub Unit Bearing		
(ABS, Non-ABS)	.....	HA590370[2] ²⁵
Hub Unit Bearing		
(Non-ABS)	.....	HA590371[2] ⁸³
Bearing Module	.....	512009[2]
2002-1996	Corolla (ABS)	
Hub Unit Bearing	.....	512184[2]
2002-1993	Corolla (Non-ABS)	
Hub Unit Bearing	.....	512018[2]
2001-1992	Camry	
Hub Unit Bearing		
(ABS, Non-ABS)	.....	HA590370[2] ²⁵
Hub Unit Bearing		
(Non-ABS)	.....	HA590371[2] ⁸³
Bearing Module	.....	512009[2]
1999-1994	Celica	
Bearing Module	.....	512137[2]
1999-1992	Paseo	
Seal (Inner)	.....	1174S[2]
Set (Outer)	.....	SET1[2]
Cone	.....	A149[2]
1999-1991	Tercel	
Seal (Inner)	.....	1174S[2]
Set (Outer)	.....	SET1[2]
Cone	.....	A149[2]
1995-1993	Corolla (ABS)	
Hub Unit Bearing	.....	512019[2]
1993-1990	Celica	
Seal	.....	224210
Ball Bearing	.....	513022[2]
1992-1990	Corolla	
Seal	.....	1180S
Ball Bearing	.....	513031[2]
1991-1990	Camry	
Seal	.....	224210
Ball Bearing	.....	513022[2]

⁰⁵Kit = 2 Seals, Studded Spindle, Bearing, Plate ⁰⁶Kit = 2 Seals, Studded Spindle, Bearing, Plate
¹²Opt = Seal & O-Ring. Incl w/ Hub Unit. ²⁵New Item, Check For Availability ⁸³Deplete
422 Inventory ⁸⁴Reorder

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)

REAR WHEEL (cont.)

FWD (cont.)

1991-1990	Camry Wagon	
Seal	.....	224210
Bearing Module	.....	512009[2]
1990	Tercel	
Seal (Inner)	.....	223605
Bearing Assy (Inner)	.....	32005X[2]
Seal (Outer)	.....	225775
Set (Outer)	.....	SET1

4WD

1991-1990	Camry	
Seal (Inner)	.....	4899[2]
Seal (Outer)	.....	225275[2]
Ball Bearing	.....	514002B[2]

AWD

2009	Matrix (ABS)	
Hub Unit Bearing	.....	HA590294[2] ²⁵
2006-2003	Matrix (ABS)	
Hub Unit Bearing	.....	HA590002[2]
1993-1990	Celica	
Seal (Inner)	.....	225775[2]
Seal (Outer)	.....	225275[2]
Ball Bearing	.....	514002B[2]
1992-1990	Corolla	
Seal	.....	224210
Ball Bearing	.....	88506BR[2]

REAR AXLE

Differential

1993-1990	Corolla (All Trac)(4WD)	
Set	.....	SET45[2]

Pinion

1993-1990	Camry (All Trac)(4WD)	
Cone/Cup	.....	HM88649-HM88610
Seal (Outer)	.....	1176S
1993-1990	Celica (All Trac)(4WD)	
Cone/Cup	.....	HM88649-HM88610
Seal (Outer)	.....	1176S
1993-1990	Corolla (All Trac)(4WD)	
Cone/Cup	.....	HM88649-HM88610
Seal (Outer)	.....	1176S
Repair Sleeve	.....	KWK99147

TRANSFER CASE REBUILD KIT

1993-1990	S100	
Kit	.....	TRKFT740
1993-1990	S125	
Kit	.....	TRKFT750
1993-1990	S110	
Kit	.....	TRKFT740
1992-1990	S120	
Kit	.....	TRKFT750

TRANSFER CASE

Input Shaft

1992-1990		
Seal (47MM Shaft)	.....	710143
Seal (61MM Shaft)	.....	710528

Rear Output Shaft

1993-1990	S100, S110, S120	
Seal	.....	1175
Repair Sleeve	.....	KWK99147

Idler Shaft

1992-1990	S110, S120	
Seal (LH)	.....	710528
Seal (RH)	.....	710527

Side Gear

1993-1990	S100	
Seal	.....	710143
1992-1990	S110, S120 (A/T)	
Seal	.....	710137
1992-1990	S110, S120 (M/T)	
Seal	.....	710143

CLUTCH - 4 CYLINDER

Pilot Bearing

2002-1998	1496cc/1.5L, 1794cc/1.8L, 1796cc/1.8L	
Cylindrical Bearing	.....	MSN5305GTBV ²⁵
1997-1990	1456cc/1.5L, 1496/1.5L, 1587cc/1.6L, 1762cc/1.8L	
Cylindrical Bearing	.....	MSN5305GTBV ²⁵

Release Bearing

2002-2000	1587cc./1.6L, 1762cc./1.8L, 1794cc./1.8L (200mm Cl.)	
Bearing Assy	.....	614152
2002-1992	1587cc/1.6L, 1762cc/1.8L	
Bearing Assy	.....	614152
2001-1992	2164cc./2.2L (225mm Cl.)	
Bearing Assy	.....	614091
1999-1990	2164cc./2.2L (232mm Cl.)	
Bearing Assy	.....	614091
1999-1990	1456cc./1.5L, 1496/1.5L (190mm Cl.)	
Bearing Assy	.....	614043
1998-1990	1998cc./2.0L (DOHC & TURBO)(235mm Cl.)	
Bearing Assy	.....	614084
1994-1992	1453cc./1.5L, (200mm Cl.)	
Bearing Assy	.....	614043
1993-1990	1998cc./2.0L (DOHC & TURBO)(225mm Cl.)	
Bearing Assy	.....	614167
1992-1990	1587cc./1.6L, (225mm Cl.)	
Bearing Assy	.....	614084
1991	1456cc./1.5L, 1587cc./1.6L (200mm Cl.)	
Bearing Assy	.....	614043

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)					

CLUTCH - 4 CYLINDER (cont.)

Release Bearing (cont.)

1991-1990	1998cc./2.0L (DOHC)(235mm Cl.)	
Bearing Assy	.....	614084
1991-1990	1998cc./2.0L (DOHC)(225mm Cl.)	
Bearing Assy	.....	614147
1990	1456cc./1.5L, (212mm Cl.)	
Bearing Assy	.....	614043
1990	1587cc./1.6L, (200mm Cl.)	
Bearing Assy	.....	614043

CLUTCH - 6 CYLINDER

Release Bearing

2001-1992	2958cc./3.0L, 2995cc./3.0L, (225mm Cl.)	
Bearing Assy	.....	614167
1991-1990	2507cc./2.5L, (235mm Cl.)	
Bearing Assy	.....	614084

3-SPEED AUTOMATIC TRANSAXLE

Differential

2002-1990	(A130L, A131L, A132L)	
Seal	.....	710416[2]

Torque Converter

2002-1990	(A55, A55F, A130L, A131L, A132L)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Output Shaft

2002-1990	(A130L, A131L, A132L)	
Seal	.....	710110[2]

Pinion

1998-1990	(A132L)	
Bearing Assy (Rr)	.....	30208M

Manual Shaft

2002-1990	(A130L, A131L, A132L)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

4-SPEED AUTOMATIC TRANSAXLE

Differential

2006-1990	(A140E, A140L, A242L, A245E)	
Seal	.....	710416[2]

4-SPEED AUTOMATIC TRANSAXLE

Torque Converter / Frt Pump

2006-1990	(A140E, A140L, A240E, A240L, A241E, A241H, A241L, A242L, A243L, A244E, A245E, A246E, A540E, A540H, A541E)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Input Shaft

2006-1990	(A240E, A240L, A241E, A241H, A241L, A242L, A243L, A244E, A246E)	
Seal	.....	710138
Repair Sleeve	.....	KWK99139

Output Shaft

2008-2002	(U240E, U241E, U340E, U341E, U341F)	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]
2008-1990	(A240E, A240L, A241E, A241H, A241L, A242L, A243L, A244E, A245E, A246E)	
Seal (LH)	.....	710109
Seal (RH)	.....	710110
2004-1992	(A540E, A541E)	
Seal (LH)	.....	710112
Seal (LH)	.....	712551
2001-1990	(A140E, A140L, U241E)	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]

Pinion

1997-1995	(A242L)	
Bearing Assy (Rr)	.....	30208M

Manual Shaft

2003-1990	(A140E, A140L, A240E, A240L, A241E, A241H, A241L, A242L, A243L, A244E, A245E, A246E, A540E, A540H, A541E)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED AUTOMATIC TRANSAXLE

Manual Shaft

2007-2004	(U151E)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)					

4-SPEED MANUAL TRANSAXLE**Differential**

1999-1990	(C141)	
Bearing Assy (LH)	.....	32207M
1990	(Z41, Z42, Z44, Z46)	
Bearing Assy	.....	32007C[2] ¹⁶

Input Shaft

1996-1990	(C140, C141)	
Seal	.....	320603
Ball Bearing	.....	101SS[2]
Repair Sleeve	.....	KWK99098

Output Shaft

1996-1990	(C140, C141)	
Seal (LH)	.....	710109
Seal (RH)	.....	710110

Selector Shaft Seal/Man. Shaft

1996-1990	(C140, C141)	
Seal	.....	1015N
Repair Sleeve	.....	KWK99085

5-SPEED MANUAL TRANSAXLE**Differential**

2004	(C50)	
Cone/Cup (RH)	.....	NP258107-NP773051
2003-1997	(C50)	
Cone/Cup (RH)	.....	NP861151-NP666842
2001-1990	(C150, C151)	
Bearing Assy (LH)	.....	32207M

Input Shaft

2005-2000	(C56)	
Seal	.....	320603
Repair Sleeve	.....	KWK99098
2004-1990	(C50, C51, C52, C150, C151)	
Seal	.....	320603
Ball Bearing	.....	101SS[2]
Repair Sleeve	.....	KWK99098
2001-1990	S50, S51, E53, S53	
Seal	.....	223010
Repair Sleeve	.....	KWK99114
1999-1990	(E50F2, E55F2, E55F5, E56F2, E56F5, E57F5, E150F, S54)	
Seal Viton	.....	710172
Repair Sleeve	.....	KWK99123

Output Shaft

2002-1990	(C50, C51, C52, C150, C151)	
Seal (LH)	.....	710109
Seal (RH)	.....	710110
2001-1990	S50, S51, S53, S54	
Seal	.....	223540[2]
Repair Sleeve	.....	KWK99139[2]

5-SPEED MANUAL TRANSAXLE (cont.)**Output Shaft (cont.)**

1993-1992	(E53)	
Seal (LH)	.....	223540
Repair Sleeve (LH)	.....	KWK99139
Seal Viton (RH)	.....	224026
Repair Sleeve (RH)	.....	KWK99157
1993-1990	(E50F2, E55F2, E55F5)(ABS)	
Seal (LH)	.....	710112
Seal (RH)	.....	710143
1993-1990	(E50F2, E55F2, E55F5)(w/o ABS)	
Seal (LH)	.....	710115
Seal (RH)	.....	710143
1992-1990	(E56F2, E56F5, E57F5)	
Seal (LH)	.....	710115
Seal (RH)	.....	710143
1991-1990	(E52, E150F)	
Seal	.....	710112[2]

Selector Shaft Seal/Man. Shaft

2008-1990	(Exc. S50, S51, S53, S54)	
Seal	.....	1015N
Repair Sleeve	.....	KWK99085
2001-1990	S50, S51, S53, S54	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

Extension Housing

1993-1990	(E50F2, E55F2, E55F5, E56F2, E56F5, E57F5, E150F)	
Seal	.....	1175

6-SPEED MANUAL TRANSAXLE**Input Shaft**

2002-2000		
Seal	.....	320603

ALTERNATOR

1997-1990	(Nippondenso 70 Amp.)	
Ball Bearing (Rear End)	.....	302CC

POWER STEERING**Pitman Shaft**

2002-2000	Corolla	
Seal	.....	221510
1999-1998	Celica, Corolla	
Seal	.....	221510
1997	Celica, Corolla, Paseo, Tercel	
Seal	.....	221510
1996-1990	Camry, Celica, Corolla, Paseo, Tercel, Wagon	
Seal	.....	221510

¹⁶Obsolete

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)					

POWER STEERING

Pump Shaft

2002-1997	Avalon, Camry, Corolla	
Seal	.....	710412
1999-1997	Celica	
Seal	.....	710156
1997	Paseo, Tercel	
Seal	.....	710151
1996-1990	Avalon, Corolla	
Seal	.....	710412
1996-1990	Camry, Celica, Corolla, Paseo, Tercel, Wagon	
Seal	.....	710156

Sector Shaft

1996-1990	Camry	
Seal	.....	222820

Worm Shaft

2002-1993	Corolla	
Seal	.....	222630
1999-1990	Celica	
Seal	.....	710303
1992-1990	Corolla	
Seal (Lower)	.....	710155
Seal (Upper)	.....	710154

OIL PUMP

4 Cylinder

2009-2002	2362cc/2.4L	
Seal	.....	221820
2008-1990	1456cc/1.5L, 1497/1.5L	
Seal	.....	710450
2001-1990	1995cc/2.0L, 1998cc/2.0L, 2164cc/2.2L	
Seal	.....	221820
1997-1990	1587cc/1.6L	
Seal	.....	223235

6 Cylinder

2008-1994	2995cc/3.0L	
Seal	.....	224040
Repair Sleeve	.....	KWK99157

CAMSHAFT SEAL

4 Cylinder

2004-1990	1497cc/1.5L, 1587cc/1.6L, 1762cc/1.8L	
Seal	.....	1987S
Repair Sleeve	.....	KWK99139
2001-1990	2164cc/2.2L	
Seal	.....	223801
Repair Sleeve	.....	KWK99147
1994-1990	1452cc/1.5L, 1456cc/1.5L	
Seal	.....	1987S
Repair Sleeve	.....	KWK99139
1993-1990	1998cc/2.0L (Turbo)	
Seal	.....	1987S
Repair Sleeve	.....	KWK99139

CAMSHAFT SEAL (cont.)

4 Cylinder (cont.)

1993-1990	1998cc/2.0L (w/o Turbo)	
Seal	.....	223801
Repair Sleeve	.....	KWK99147

6 Cylinder

2006-2004	3300cc/3.3L	
Seal	.....	223802
2006-1994	2995cc/3.0L	
Seal	.....	223801
Repair Sleeve	.....	KWK99147
1993-1992	2958cc/3.0L	
Seal	.....	223801
Repair Sleeve	.....	KWK99147
1991-1990	2507cc/2.5L	
Seal	.....	223801
Repair Sleeve	.....	KWK99147

CRANKSHAFT FRONT SEAL

4 Cylinder

2009-2002	2362cc/2.4L	
Seal	.....	223802
2008-1990	1456cc/1.5L, 1497/1.5L	
Seal	.....	1987S
Repair Sleeve	.....	KWK99139
2007-1998	1794cc/1.8L, 1796cc/1.8L	
Seal	.....	223800
Repair Sleeve	.....	KWK99147
2001-1992	2164cc/2.2L	
Seal	.....	1953S
Seal Viton	.....	2025
Repair Sleeve	.....	KWK99166
1997-1993	1762cc/1.8L	
Seal	.....	223235
Repair Sleeve	.....	KWK99128
1997-1990	1587cc/1.6L	
Seal	.....	223235
1993-1990	1839cc/1.8L, 1974cc/2.0L, 1995cc/2.0L, 1998cc/2.0L	
Seal	.....	1953S
Seal Viton	.....	2025
Repair Sleeve	.....	KWK99169

6 Cylinder

2006-2004	3300cc/3.3L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157
2004-1992	2959cc/3.0L, 2995cc/3.0L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157
1993-1990	2507cc/2.5L, 2958cc/3.0L	
Seal	.....	224020
Repair Sleeve	.....	KWK99157

CRANKSHAFT REAR SEAL

4 Cylinder

2009-2002	2362cc/2.4L	
Seal Viton	.....	710189

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA - FRONT DRIVE - Avalon, Camry, Celica, Corolla, Echo, Matrix, Paseo, Prius, Solara, Tercel, Yaris (cont.)					

CRANKSHAFT REAR SEAL (cont.)**4 Cylinder (cont.)**

2008-2005	1497cc/1.5L (DOHC)	
Seal	.....	228009
2008-1998	1794cc/1.8L 1ZZ-FE	
Seal	.....	710465
2006-2000	1795cc/1.8L GTS / 2ZZGE	
Seal	.....	716102
2004-1990	1456cc/1.5L, 1497/1.5L	
Seal	.....	228015
Repair Sleeve	.....	KWK99315
2001-1990	1998cc/2.0L, 2164cc/2.2L	
Seal	.....	716102
Repair Sleeve	.....	KWK99333
1998-1990	1452cc/1.5L, 1587cc/1.6L, 1762cc/1.8L	
Seal	.....	227045
Repair Sleeve	.....	KWK99272
1993-1990	1998cc/2.0L (Turbo)	
Seal Viton	.....	710189
Repair Sleeve	.....	KWK99349

CRANKSHAFT REAR SEAL**6 Cylinder**

2008-1990	2507cc/2.5L, 2958cc/3.0L, 2995cc/3.0L, 3311cc/3.3L, 3456cc/3.5L	
Seal Viton	.....	229210

TOYOTA - REAR DRIVE - Cressida, MR2, Supra**FRONT WHEEL****RWD**

2005-1999	MR2	
Hub Unit Bearing	.....	HA595017[2]
1998-1990	Supra	
Seal	.....	1941
Ball Bearing	.....	510017[2]
1995-1990	MR2	
Seal	.....	224210
Ball Bearing	.....	513022[2]
1992-1990	Cressida	
Seal	.....	224870
Ball Bearing	.....	513150[2]

REAR WHEEL**RWD**

2005-2000	MR2	
Ball Bearing	.....	510070[2]
1998-1990	Supra	
Seal (Inner)	.....	1935[2]
Seal (Outer)	.....	1928[2]
Ball Bearing	.....	511007[2]
1995-1990	MR2	
Ball Bearing	.....	510006[2]
1992-1990	Cressida	
Seal (Inner)	.....	1935[2]
Seal (Outer)	.....	1928[2]
Ball Bearing	.....	511007[2]

REAR AXLE**Differential Rebuild Kit**

1995-1990	(7.5" R.G.)(Exc. Turbo)	
Kit	.....	DRK350

Differential

1992-1990	(7.8" R.G.)	
Seal	.....	710142[2]

Pinion

1998-1993	(7.8" R.G.)	
Seal	.....	710525
1992-1990	(7.8" R.G.)	
Seal	.....	11177
Bearing Assy (Inner)	.....	35028
Bearing Assy (Outer)	.....	30306M
1992-1990	(7.3" R.G.)	
Seal	.....	11177
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	30306M
1992-1990	(7.1" R.G.)	
Seal	.....	11177
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	30306M
1992-1990	(7.5" R.G.)	
Seal	.....	11177
Bearing Assy (Inner)	.....	32307
Bearing Assy (Outer)	.....	30306M

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

1998-1994	(A340E)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147
1992-1990	(A40D, A42DL, A43D, A43DL, A43DE, A340E)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

TOYOTA - REAR DRIVE - Cressida, MR2, Supra (cont.)**4-SPEED AUTOMATIC TRANSMISSION****Rear Seal/Ext. Housing**

1998-1994	(A340E)	
Seal		3459S
1992-1990	(A340E)	
Seal		3459S

Selector Shaft Seal/Man. Shaft

1998-1994	(A340E)	
Seal		221207
Repair Sleeve		KWK99049
1992-1990	(A340E)	
Seal		221207
Repair Sleeve		KWK99049

CLUTCH - 6 CYLINDER**Pilot Bearing**

1998-1994	2997cc/3.0L	
Ball Bearing		201CC
1992-1990	2954/3.0L	
Ball Bearing		201CC
1992-1990	2759cc/2.8L	
Ball Bearing		201CC

CLUTCH - 4 CYLINDER**Release Bearing**

1995-1990	1998cc/2.0L	
Bearing Assy		614167
1995-1990	2164cc/2.2L	
Bearing Assy		614091

CLUTCH - 6 CYLINDER**Release Bearing**

1998-1994	2997cc/3.0L	
Bearing Assy		614088
1992-1990	2954cc./3.0L (236mm Cl.)	
Bearing Assy		614088
1992-1990	2954cc./3.0L (DOHC & TURBO)(240mm Cl.)	
Bearing Assy		614085

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2000-1990	(W55, W56, W58 EFI Motor)	
Kit		TRKFT150

Front Input Shaft

2001-1991	E153	
Seal		710143
1998-1994	(W58)	
Seal		1981
Repair Sleeve		KWK99114
1992-1990	(R154)	
Seal		223253
1992-1990	(W50, W55, W58)	
Seal		1981
Repair Sleeve		KWK99114

5-SPEED MANUAL TRANSMISSION**Rear Output Shaft**

1998-1994	(W58)	
Seal		223840
1992-1990	(R154)	
Seal		3459S
1992-1990	(W55, W58)	
Seal		223840

6-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1998-1994	(Getrag V160)	
Seal		223608

Rear Output Shaft

1998-1994	(Getrag V160)	
Seal		710364

4-SPEED AUTOMATIC TRANSAXLE**Torque Convertor / Frt Pump**

1995-1990	(A141E, A240E, A241E)	
Seal		223830
Repair Sleeve		KWK99147

Input Shaft

1995-1990	(A240E, A241E)	
Seal		710138
Repair Sleeve		KWK99139

Output Shaft

1995-1990	(A141E, A240E, A241E)	
Seal (LH)		710109
Seal (RH)		710110

Manual Shaft

1995-1990	(A141E, A240E, A241E)	
Seal		221207
Repair Sleeve		KWK99049

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1995-1990	E153	
Seal		710143
1995-1990	S54	
Seal Viton		710172
Repair Sleeve		KWK99172

Output Shaft

1995-1990	E153	
Seal		710112[2]
1995-1990	S54	
Seal		223540[2]
Repair Sleeve		KWK99139

Mfg./Year Model & Location

Part No.

Mfg./Year

Model & Location

Part No.

TOYOTA - REAR DRIVE - Cressida, MR2, Supra (cont.)**5-SPEED MANUAL TRANSAXLE****Selector Shaft Seal/Man. Shaft**

1995-1990	S54	
Seal	221207	
Repair Sleeve	KWK99049	
1995-1990	(C52)	
Seal	1015N	
1995-1990	E153	
Seal	1015N	

ALTERNATOR

1995-1990	(Nippondenso 70 Amp.)	
Ball Bearing (Rear End)	302CC	
1992-1990	(Nippondenso 100 Amp.)	
Ball Bearing (Rear End)	302CC	
1992-1990	(Nippondenso 80 Amp.)	
Ball Bearing (Rear End)	302CC	

OIL PUMP**4 Cylinder**

1995-1990	1998cc/2.0L, 2164cc/2.2L	
Seal	221820	

CAMSHAFT SEAL**4 Cylinder**

1995-1991	1998cc/2.0L (Turbo)	
Seal	1987S	
Repair Sleeve	KWK99139	
1995-1991	2164cc/2.2L	
Seal	223800	
Repair Sleeve	KWK99147	

6 Cylinder

1998-1993	2997cc/3.0L	
Seal	710436	
1992-1990	2954/3.0L	
Seal	1987S	
Repair Sleeve	KWK99139	

CRANKSHAFT FRONT SEAL**4 Cylinder**

2005-2000	1796cc./1.8L	
Seal	223802	
1995-1991	2164cc/2.2L	
Seal Viton	2025	
Repair Sleeve	KWK99166	
1995-1990	1998cc/2.0L (DOHC & TURBO)	
Seal Viton	2025	
Repair Sleeve	KWK99166	

6 Cylinder

1998-1993	2997cc/3.0L (DOHC & TURBO)	
Seal	224663	
Repair Sleeve	KWK99181	
1992-1990	2954cc/3.0L (DOHC & TURBO)	
Seal	710187	

CRANKSHAFT REAR SEAL**4 Cylinder**

2005-2000	1794cc/1.8L 1ZZ-FE	
Seal	710465	
1995-1991	1998cc/2.0L (Turbo)	
Seal Viton	710189	
Repair Sleeve	KWK99349	
1995-1991	2164cc/2.2L	
Seal	716102	
Repair Sleeve	KWK99333	

6 Cylinder

1998-1993	2997cc/3.0L (DOHC & TURBO)	
Seal Viton	229005	
Repair Sleeve	KWK99354	
1992-1990	2954cc/3.0L (DOHC & TURBO)	
Seal	228010	
Repair Sleeve	KWK99315	

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner					

FRONT WHEEL

FWD

2009-2008	Highlander	
Ball Bearing	WB000024[2]	²⁵
2009-2006	RAV4 (L4)	
Hub Unit Bearing	HA590165[2]	²⁵
2009-2006	RAV4 (V6)	
Hub Unit Bearing	HA590168[2]	²⁵
2008-2004	Sienna	
Ball Bearing	510063[2]	
2007-2001	Highlander	
Ball Bearing	510063[2]	
2005-2001	RAV4	
Ball Bearing	510006[2]	
2003-1998	Sienna	
Ball Bearing	510006[2]	
2000-1996	RAV4 (ABS)	
Seal (Inner)	4899[2]	
Seal (Outer)	225220[2]	
Seal (Intermediate)	5686[2]	²⁰
Ball Bearing	514002B[2]	
2000-1996	RAV4 (Non ABS)	
Seal (Inner)	4899[2]	
Seal (Outer)	225220[2]	
Seal (Intermediate)	5694[2]	²⁰
Ball Bearing	514002B[2]	

RWD

2009-2008	Sequoia	
Bearing Module	BM500017[2]	²⁵
2009-2007	FJ Cruiser	
Bearing Module	BM500007[2]	²⁵
2008-2007	Tundra	
Bearing Module	BM500017[2]	²⁵
2008-2005	Tacoma (Exc. PreRunner)	
Taprd Bearing Assy	WB000001[2]	²⁵
2008-2005	Tacoma (PreRunner)	
Bearing Module	BM500009[2]	²⁵
2008-2003	4Runner	
Bearing Module	BM500007[2]	²⁵
2007-2001	Sequoia	
Set	SET29[2]	
2006-2000	Tundra	
Set	SET29[2]	
2004-1998	Tacoma (PreRunner)	
Set	SET29[2]	
2004-1995	Tacoma (Exc. PreRunner)	
Seal (Inner)	1948[2]	
Set (Inner)	SET5[2]	
Set (Outer)	SET3[2]	
2002-1996	4Runner	
Set	SET29[2]	
1998-1993	T100	
Seal (Inner)	1948[2]	
Cone/Cup (Inner)	M38549H-M38510[2]	
Cone/Cup (Outer)	1380H-1328X[2]	
1997-1991	Previas	
Seal (Inner)	225678[2]	
Seal (Outer)	226150[2]	
Bearing Assy	517003[2]	

FRONT WHEEL (cont.)

RWD (cont.)

1995-1990	4Runner	
Seal (Inner)	710092[2]	
Cone/Cup (Inner)	JLM104948-JLM104910[2]	
Set (Outer)	SET47[2]	
1995-1990	Pickup (Exc. T100)	
Seal (Inner)	1948[2]	
Set (Inner)	SET5[2]	
Set (Outer)	SET3[2]	
1990	Van Wagon	
Seal (Inner)	224820[2]	
Set (Inner)	SET6[2]	
Set (Outer)	SET2[2]	

4WD

2009-2007	FJ Cruiser	
Bearing Module	BM500007[2]	²⁵
2009-2006	RAV4 (L4)	
Hub Unit Bearing	HA590165[2]	²⁵
2009-2006	RAV4 (V6)	
Hub Unit Bearing	HA590168[2]	²⁵
2008	Land Cruiser	
Bearing Module	BM500018[2]	
2008	Sequoia	
Bearing Module	BM500017[2]	²⁵
2008-2007	Tundra	
Bearing Module	BM500017[2]	²⁵
2008-2005	Tacoma	
Bearing Module	BM500009[2]	²⁵
2008-2003	4Runner	
Bearing Module	BM500007[2]	²⁵
2007-2001	Sequoia	
Set	SET29[2]	
2007-1998	Land Cruiser	
Seal (Inner)	710456[2]	
Cone/Cup (Inner)	JLM506849A-JLM506810[2]	
Set (Outer)	SET47[2]	
2006-2000	Tundra	
Set	SET29[2]	
Seal (Outer)	1956S[2]	
2004-1995	Tacoma	
Set	SET29[2]	
2002-1996	4Runner	
Set	SET29[2]	
1997-1993	T100	
Seal (Inner)	710092[2]	
Cone/Cup (Inner)	JLM104948-JLM104910[2]	
Seal (Outer)	710266[2]	
Set (Outer)	SET47[2]	
1997-1991	Previas	
Seal (Inner)	225678[2]	
Seal (Outer)	226150[2]	
Bearing Assy	517003[2]	
1997-1990	Land Cruiser	
Seal (Inner)	226285[2]	
Cone/Cup (Inner)	JLM104948-JLM104910[2]	
Set (Outer)	SET47[2]	

²⁰Seal Kit ²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

FRONT WHEEL (cont.)**4WD (cont.)**

1995-1990	4Runner
Seal (Inner)	710092[2]
Cone/Cup (Inner)	JLM104948-JLM104910[2]
Set (Outer)	SET47[2]
1995-1990	Pickup (Exc. T100)
Seal (Inner)	710092[2]
Cone/Cup (Inner)	JLM104948-JLM104910[2]
Set (Outer)	SET47[2]
1990	Van
Seal (Inner)	226610[2]
Set (Outer)	SET47[2]
Bearing Assy	517012[2] ^z

AWD

2009-2008	Highlander
Ball Bearing	WB000024[2] ²⁵
2009-2004	Sienna
Ball Bearing	510063[2]
2007-2001	Highlander
Ball Bearing	510063[2]
2005-2001	RAV4
Ball Bearing	510006[2]
2000-1996	RAV4 (ABS)
Seal (Inner)	4899[2]
Seal (Outer)	225220[2]
Seal (Intermediate)	5694[2] ²⁰
Ball Bearing	514002B[2]
2000-1996	RAV4 (Non ABS)
Seal (Inner)	4899[2]
Seal (Outer)	225220[2]
Seal (Intermediate)	5686[2] ²⁰
Ball Bearing	514002B[2]
1997-1991	Previa
Seal (Inner)	225678[2]
Seal (Outer)	226150[2]
Bearing Assy	517003[2]

REAR WHEEL**FWD**

2009-2008	Highlander
Hub Unit Bearing	HA590287[2] ²⁵
2009-2006	RAV4 (ABS)
Hub Unit Bearing	HA590173[2] ²⁵
2008-2004	Sienna
Hub Unit Bearing	512280[2] ²⁵
2007-2004	Highlander
Hub Unit Bearing (LH)	HA592461 ²⁵
Hub Unit Bearing (RH)	HA592451 ²⁵
2005-1998	RAV4 (ABS)
Hub Unit Bearing	HA594504[2]
2005-1997	RAV4 (Non ABS)
Hub Unit Bearing	HA594241[2]
2003-2001	Highlander
Hub Unit Bearing (LH)	HA592460
Hub Unit Bearing (RH)	HA592450
2003-1998	Sienna (ABS)
Hub Unit Bearing	512041[2]

REAR WHEEL**RWD**

2009-2007	FJ Cruiser
Bearing Module (LH)	HA594246
Bearing Module (RH)	HA590050
2008	Sequoia
Bearing Module	BM500019[2] ²⁵
2008-2007	Tundra
Bearing Module (LH)	BM500016 ²⁵
Bearing Module (RH)	BM500015 ²⁵
2008-2005	Tacoma
Hub Unit Bearing (LH)	512294 ²⁵
Hub Unit Bearing (RH)	512295 ²⁵
2008-2003	4Runner
Bearing Module (LH)	HA594246
Bearing Module (RH)	HA590050
2007-2001	Sequoia
Hub Unit Bearing	HA594301[2]
2006-2000	Tundra
Seal (Inner)	1960[2]
Seal (Outer)	SL260003[2] ²⁵
Ball Bearing	511031[2]
2004-2001	Tacoma
Seal (Inner)	1960[2]
Ball Bearing	511031[2]
Seal (Outer)	SL260003[2] ²⁵
2002-2001	4Runner
Seal (Inner)	1960[2]
Seal (Outer)	SL260003[2] ²⁵
Ball Bearing	511031[2]
2000-1996	4Runner (ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	511021[2]
2000-1995	Tacoma (ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	511021[2]
2000-1995	Tacoma (Non-ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	RW130R[2]
2000-1990	4Runner (Non-ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	RW130R[2]
1998-1993	T100 (ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	511021[2]
1998-1993	T100 (Non-ABS)
Seal (Inner)	1960[2]
Seal (Outer)	1956S[2]
Ball Bearing	RW130R[2]
1997-1991	Previa (ABS)(Disc)
Seal (Inner)	710178[2]
Seal (Outer)	1955[2]
Ball Bearing	510005[2]
1997-1991	Previa (Non-ABS)(Drum)
Seal (Inner)	710178[2]
Seal (Outer)	1955[2]
Ball Bearing	511001[2]

^zNon-Cancellable/Non-Returnable²⁰Seal Kit²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

REAR WHEEL (cont.)

RWD (cont.)

1995-1991	Pickup (SRW)(ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
1995-1990	4Runner (ABS ~ 2 Wheel)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
1995-1990	Pickup (DRW)(Full Floating Axle)	
Seal (Inner)	.....	226285[2]
Cone/Cup (Inner)	.....	JLM104948-JLM104910[2]
Seal (Outer)	.....	710076[2]
Set (Outer)	.....	SET47[2]
1995-1990	Pickup (SRW)(Semi Floating Axle)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	RW130R[2]

4WD

2009-2007	FJ Cruiser	
Bearing Module (LH)	.....	HA594246
Bearing Module (RH)	.....	HA590050
2009-2006	RAV4	
Hub Unit Bearing	.....	HA590201[2] ²⁵
2008	Land Cruiser	
Bearing Module (LH)	.....	BM500029 ²⁵
Bearing Module (RH)	.....	BM500030 ²⁵
2008	Sequoia	
Bearing Module	.....	BM500019[2] ²⁵
2008-2007	Tundra	
Bearing Module (LH)	.....	BM500016 ²⁵
Bearing Module (RH)	.....	BM500015 ²⁵
2008-2005	Tacoma	
Hub Unit Bearing (LH)	.....	512294 ²⁵
Hub Unit Bearing (RH)	.....	512295 ²⁵
2008-2003	4Runner	
Bearing Module (LH)	.....	HA594246
Bearing Module (RH)	.....	HA590050
2007-2001	Sequoia	
Hub Unit Bearing	.....	HA594301[2]
2007-1998	Land Cruiser	
Ball Bearing	.....	510011[2]
2006-2000	Tundra	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	SL260003[2] ²⁵
Ball Bearing	.....	511031[2]
2004-2001	Tacoma	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	SL260003[2] ²⁵
Ball Bearing	.....	511031[2]
2002-2001	4Runner	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	SL260003[2] ²⁵
Ball Bearing	.....	511031[2]
2000-1996	4Runner (ABS ~ 4 Wheel)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]

REAR WHEEL (cont.)

4WD (cont.)

2000-1995	Tacoma (ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
2000-1995	Tacoma (Non-ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	RW130R[2]
2000-1990	4Runner (Non-ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	RW130R[2]
1998-1993	T100 (ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
1998-1993	T100 (Non-ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	RW130R[2]
1997-1991	Previa (ABS)(Disc)	
Seal (Inner)	.....	710178[2]
Seal (Outer)	.....	1955[2]
Ball Bearing	.....	510005[2]
1997-1991	Previa (Non-ABS)(Drum)	
Seal (Inner)	.....	710178[2]
Seal (Outer)	.....	1955[2]
Ball Bearing	.....	511001[2]
1997-1990	Land Cruiser (Semi Floating Axle)	
Seal	.....	1959
Cylindrical Bearing	.....	513008[2]
1997-1990	Land Cruiser (Full Floating Axle)	
Seal (Inner)	.....	226285
Cone/Cup (Inner)	.....	JLM104948-JLM104910[2]
Seal (Outer)	.....	710076
Set (Outer)	.....	SET47[2]
1995-1991	Pickup (SRW)(ABS)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
1995-1990	4Runner (ABS ~ 2 Wheel)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	511021[2]
1995-1990	Pickup (DRW)(Full Floating Axle)	
Seal (Inner)	.....	226285
Cone/Cup (Inner)	.....	JLM104948-JLM104910[2]
Seal (Outer)	.....	710076
Set (Outer)	.....	SET47[2]
1990	Pickup (SRW)(Semi Floating Axle)	
Seal (Inner)	.....	1960[2]
Seal (Outer)	.....	1956S[2]
Ball Bearing	.....	RW130R[2]

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

REAR WHEEL**AWD**

2009-2004	Highlander	
Hub Unit Bearing	HA590338[2]	²⁵
2009-2004	Sienna	
Hub Unit Bearing	HA591080[2]	
2005-2001	RAV4	
Hub Unit Bearing	HA594505[2]	²⁵
2003-2001	Highlander	
Seal (Outer)	225275[2]	
Ball Bearing	514002B[2]	
2000-1996	RAV4	
Bearing Module	512038[2]	
1997-1991	Previa (ABS)(Disc)	
Seal (Inner)	710178[2]	
Seal (Outer)	1955[2]	
Ball Bearing	510005[2]	
1997-1991	Previa (Non-ABS)(Drum)	
Seal (Inner)	710178[2]	
Seal (Outer)	1955[2]	
Ball Bearing	511001[2]	

4WD FRONT AXLE**Axle Shaft**

2002-1990	(IFS 7.5", 6.7" R.G.)	
Ball Bearing	B30[2]	

Differential Rebuild Kit

2003-1995	Tacoma (Exc. Locking Diff.)	
Kit	DRK355A	
2003-1990	Pickup (7.5" R.G.)	
Kit	DRK350	
2002-1990	4Runner (7.5" R.G.)	
Kit	DRK350	
1997-1990	Land Cruiser (FJ80)(Exc. Locking Diff.)	
Kit	DRK356A	
1997-1990	Land Cruiser (FJ80)(Locking Diff.)	
Kit	DRK356	

Differential

2002-1991	(8.875" R.G.)	
Bearing Assy	32010X[2]	
1990		
Seal	710419[2]	
Cone/Cup	17887-17831[2]	

Pinion

2008-2005	(8" R.G.)	
Seal	710525	
2004-1990		
Seal (All)	1177	
Bearing Assy (Inner)		
(7.5" & 7.8" R.G.)	32307	
Bearing Assy (Outer)		
(7.5", 7.8" & 9.5" R.G.)	30306M	
Bearing Assy (Inner)		
(9.25" R.G.)	31308A	⁸³

(9.25" R.G.)	31308	⁸⁴
1997-1990	(6.7" R.G.)	
Seal	1176S	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	

Steering Knuckle

1990	(9.25", 9.5" R.G.)	
Bearing Assy	30303[2]	

REAR AXLE**Differential Rebuild Kit**

2008-1996	Tacoma (Locking Diff Prod. From 9/96 On)	
Kit	DRK354A	
2008-1995	T100, Tacoma, Tundra (Exc. Locking Diff.)	
Kit	DRK355	
2003-1990	Pickup (8" R.G.)	
Kit	DRK351	
2000-1990	4Runner (8" R.G.)	
Kit	DRK351	
1997-1990	Land Cruiser (FJ80)(Exc. Locking Diff.)	
Kit	DRK357A	
1997-1990	Land Cruiser (FJ80)(Locking Diff.)	
Kit	DRK357	
1996-1995	Tacoma (Locking Diff Prod. From 9/95 To 9/96)	
Kit	DRK354	
1995-1990	Pickup (7.5" R.G.)(6 Cyl.)	
Kit	DRK350	

Differential

2005-1996	(6.7" R.G.)	
Seal	710419[2]	
Set	SET45[2]	
2005-1991	(8.875" R.G.)	
Bearing Assy	32010X[2]	
1995-1990	(7.1", 7.8", 9.5" R.G.)	
Cone/Cup	17887-17831[2]	

Pinion

2008-2005	(8" R.G.)	
Seal	710525	
2008-1996	(6.7" R.G.)	
Seal	1176S	
Cone/Cup (Inner)	HM88649-HM88610	
Cone/Cup (Outer)	M86649-M86610	
2002-1993	(8.25" R.G.)	
Seal	710525	
Cone/Cup (Outer)	HM88649-HM88610	
2002-1991	(8.875" R.G.)	
Seal	1177	
Bearing Assy (Inner)	35028	
Bearing Assy (Outer)	30306M	
1995-1990	(7.8" R.G.)	
Seal	1177	
Bearing Assy (Inner)	32307	
Bearing Assy (Outer)	30306M	

²⁵New Item, Check For Availability⁸³Deplete Inventory⁸⁴Reorder

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

REAR AXLE (cont.)

Pinion (cont.)

1990	(7.1" R.G.)
Seal	1177
Bearing Assy (Inner)	32307
Bearing Assy (Outer)	30306M
1990	(9.5" R.G.)
Seal	1177
Bearing Assy (Inner)	35028
Bearing Assy (Outer)	30306M

TRANSFER CASE REBUILD KIT

2003-1990	Land Cruiser
Kit	TRKFT500

TRANSFER CASE

Input Shaft

2004-1990	(RF1A)(M/T)
Ball Bearing	307L[2]
1997-1990	(HF2A, HF2AV)
Seal	224810
Repair Sleeve	KWK99189

Front Output Shaft

2004-1990	(VF1A)
Seal (A/T)	710140
Seal (M/T)	710114
2002-1990	
Seal (RF1A)(A/T)	225874
Seal (RF1A)(M/T)	223840
Ball Bearing (RF1A)(M/T)	308L[2]
1997-1991	(TF1AV)
Seal	710319
1997-1990	(HF2A, HF2AV)
Seal	224815
Ball Bearing	208S
Repair Sleeve	KWK99189

Rear Output Shaft

2004-1990	(RF1A)
Seal	223840
2002-1990	(VF1A)(A/T)
Seal	710140
2002-1990	(VF1A)(M/T)
Seal	710114
1997-1991	(TF1AV)
Seal	710254
1997-1990	(HF2A, HF2AV)
Seal	710173
Ball Bearing	110CB[2]

Idler Shaft

2004-1990	(RF1A)(M/T)
Ball Bearing	306L[2]

4-SPEED AUTOMATIC TRANSMISSION

Torque Converter

2003-2000	(A46DE, A46DF, A44DL, A45DL, A340E, A340H, A343F)
Seal	223830
Repair Sleeve	KWK99147
1999-1990	(A46DE, A46DF, A44DL, A45DL, A340E, A340H, A343F)
Seal	223830
Repair Sleeve	KWK99147
1997-1990	(A440H, A440L, A442F)
Seal Viton	2025
Repair Sleeve	KWK99169

Rear Seal/Ext. Housing

2003-1990	(A340E, A340F, A340H, A343F)
Seal	3459S
1997-1990	(A440H, A440L, A442F)
Seal	224820
1997-1990	(A46DE, A46DF, A44DL, A45DL)
Seal	710319

Selector Shaft Seal/Man. Shaft

2008-1990	
Seal	221207
Repair Sleeve	KWK99049

CLUTCH

Pilot Bearing

2002-2001	Highlander
Ball Bearing	201CC
2002-2001	Sequoia
Ball Bearing	201CC
2002-2000	Tundra
Ball Bearing	201CC
2002-1998	Sienna
Ball Bearing	201CC
2002-1996	RAV4
Ball Bearing	201CC
2002-1995	Pickup, Tacoma
Ball Bearing	201CC
2002-1990	Land Cruiser (Gas)
Ball Bearing	201CC
2002-1990	4Runner
Ball Bearing	201CC
1998-1993	T100
Ball Bearing	201CC
1994-1990	Pickup
Ball Bearing	201CC

Release Bearing

2003-2000	Tundra
Bearing Assy	614162
2002-2001	Sequoia
Bearing Assy	614162

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

CLUTCH (cont.)**Release Bearing (cont.)**

2002-1998	Land Cruiser	
	Bearing Assy	614162
2002-1998	Sienna	
	Bearing Assy	614086
2002-1996	4Runner V6	
	Bearing Assy	614162
2002-1996	RAV4	
	Bearing Assy	614084
2002-1995	Pickup, Tacoma L4	
	Bearing Assy	614088
2002-1995	Pickup, Tacoma V6	
	Bearing Assy	614162
2000-1990	4Runner L4	
	Bearing Assy	614088
1998-1995	T100 V6	
	Bearing Assy	614162
1998-1994	T100 L4	
	Bearing Assy	614088
1995-1990	Pickup (2WD)	
	Bearing Assy	614086
1995-1990	Pickup (4WD)	
	Bearing Assy	614086
1995-1990	4Runner V6	
	Bearing Assy	614086
1994-1993	T100 V6	
	Bearing Assy	614086
1993-1990	Land Cruiser (Gas)	
	Bearing Assy	614086

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1995-1990	(G40, N40, W42, W46)	
	Seal	1981
	Repair Sleeve	KWK99114

Rear Output Shaft

1995-1990	(G40, W46)	
	Seal	223840

5-SPEED MANUAL TRANSMISSION**Transmission Rebuild Kit**

2004-1994	(R150, R151)(From 8/94 On)	
	Kit	TRKFT340
2003-1995	(W59)	
	Kit	TRKFT210
1995-1990	(G57, G59)	
	Kit	TRKFT190
1994-1993	(R150, R151)(Thru 7/94)	
	Kit	TRKFT200

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

2002-1995	(W55, W56, G58, W58, W59)	
	Seal	1981
	Repair Sleeve	KWK99114
2002-1990	(R150, R150F, R151F, R154)	
	Seal	223253
1994-1990	(G50, G52, G53, G54, G57, G58, G59, W50, W52, W55, W56, W58)	
	Seal	1981
	Repair Sleeve	KWK99114

Countershaft

1995-1990	(R154)	
	Cylindrical Bearing (Frt)	MSN5305GTBV[2] ²⁵

Rear Output Shaft

2002-1995	(W55, W56, G58, W58, W59)	
	Seal	223840
2002-1990	(R150, R150F, R151F, R154)	
	Seal	3459S
1994-1990	(G50, G52, G53, G54, G57, G58, G59, W50, W52, W55, W56, W58)	
	Seal	710319

Selector Shaft Seal/Man. Shaft

2003-1996		
	Seal	1015N

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2002-1996		
	Seal	223830
	Repair Sleeve	KWK99147

Input Shaft

2002-1996	(A240E, A241E)	
	Seal	710138
	Repair Sleeve	KWK99139

Output Shaft

2008-2001	(U241E)	
	Seal	223540[2]
	Repair Sleeve	KWK99139[2]
2008-2000	(A540E)	
	Seal (LH)	710112
	Seal (RH)	712551
2002-1996	(A241E, A247E, A540E)	
	Seal (LH)	710109
	Seal (RH)	710110
2002-1996	(A540E, A540H)	
	Seal (LH)	712551
	Seal (RH)	710112

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-1996

Seal 221207

Repair Sleeve KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-2005 (U151E, U151F)

Seal 221207

Repair Sleeve KWK99049

5-SPEED MANUAL TRANSAXLE**Transaxle Rebuild Kit**

2003-1996 E250

Kit TRKFT410

DRIVESHAFT SUPPORT

2003-2000 Tundra (4WD)

Hanger Bearing Assy HB26[2]

2003-1995 Tacoma (RWD)

Hanger Bearing Assy HB26

2002-1995 Tacoma (PreRunner, 4WD)

Hanger Bearing Assy HB31

1998-1993 T100 (2WD)

Hanger Bearing Assy HB26[2]

1998-1993 T100 (4WD)

Hanger Bearing Assy HB28[2]

1995-1990 Pickup, 4Runner (4WD)

Hanger Bearing Assy HB24[2]

1995-1990 Pickup, 4Runner (RWD)

Hanger Bearing Assy

(1 Ton) HB27

Hanger Bearing Assy

(1/2 Ton) HB9

POWER STEERING**Pump Shaft**

2002-1998 Land Cruiser, Sienna

Seal 710412

2001-1996 Tacoma, T100, 4Runner (L4 Eng)

Seal 710251

2001-1996 Tacoma, T100, 4Runner (V6 Eng)

Seal 710412

2000-1996 RAV4

Seal 710156

1997-1991 Previa

Seal 710251

1995 4Runner

Seal 710156

1995-1993 Tacoma, T100 (L4 Eng)

Seal 710251

1995-1993 Tacoma, T100 (V6 Eng)

Seal 710412

1994-1990 Land Cruiser, Pickup, 4Runner

Seal 710156

Sector Shaft

1991-1990 Pickup

Seal 223400

1991-1990 Land Cruiser

Seal 223210

Worm Shaft

2000-1996 RAV4

Seal (Lower) 710155

Seal (Upper) 710154

MANUAL STEERING**Pitman Shaft**

1997-1993 Tacoma, T100

Seal 221510

1991-1990 Land Cruiser, Pickup, 4Runner

Seal 710343

Sector Shaft

1991-1990 4Runner

Seal 223400

1991-1990 Pickup

Seal 223400

OIL PUMP**6 Cylinder**

2008-1998 2995cc/3.0L, 3311cc/3.3L

3378cc/3.4L

Seal 224020

Repair Sleeve KWK99157

8 Cylinder

2008-1998 4664cc/4.7L

Seal 224020

CAMSHAFT SEAL**4 Cylinder**

2003-1996 1998cc/2.0L (DOHC)

Seal 1987S

Repair Sleeve KWK99139

6 Cylinder

2006-1996 2995cc/3.0L, 3311cc/3.3L

3378cc/3.4L

Seal 223802

Repair Sleeve KWK99147

1995-1990 2958cc/3.0L

Seal 224205

8 Cylinder

2006-1998 4664cc/4.7L

Seal 223801

Repair Sleeve KWK99147

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
TOYOTA TRUCK - Minivan, SUV, Truck - FJ Cruiser, Highlander, Landcruiser, Pickup, Previa, RAV4, Sequoia, Sienna, Tacoma, Tundra, T100, 4Runner (cont.)					

CRANKSHAFT FRONT SEAL**4 Cylinder**

2008-1996	1998cc/2.0L, 2362cc/2.4L (DOHC)	
Seal Viton	2025	
Repair Sleeve	KWK99166	
2008-1991	2438cc/2.4L, 2694cc/2.7L	
Seal	224840	
Repair Sleeve	KWK99189	
2003-2001	2398cc/2.4L	
Seal	223802	
1995-1990	2366cc/2.4L	
Seal	710345	
Repair Sleeve	KWK99177	
1990	2237cc / 2.2L (4YEC)	
Seal Viton	2025	
Repair Sleeve	KWK99169	

6 Cylinder

2007-2006	3955cc/4.0L	
Seal	710472	
2006-2004	3300cc/3.3L	
Seal	224020	
2004-1990	2958cc/3.0L, 3378cc/3.4L	
Seal	224020	
Repair Sleeve	KWK99157	
1997-1993	4477cc/4.5L	
Seal	710187	
1992-1990	3955cc/4.0L, 4230cc/4.2L	
Seal	710345	
Repair Sleeve	KWK99177	

8 Cylinder

2006-2000	285/4.7L	
Seal	224020	

CRANKSHAFT REAR SEAL**4 Cylinder**

2008-2001	2362cc/2.4L	
Seal Viton	710189	
2008-1991	2438cc/2.4L, 2694cc/2.7L	
Seal Viton	710188	
2003-2001	1998cc/2.0L	
Seal Viton	710189	
2000-1996	1998cc/2.0L	
Seal	716102	

CRANKSHAFT REAR SEAL (cont.)**4 Cylinder (cont.)**

1995-1990	1858cc/1.9L, 1968cc/2.0L, 2189cc/2.2L, 2237cc/2.2L, 2366cc/2.4L	
Seal	228010	
Repair Sleeve	KWK99315	

6 Cylinder

2008-2004	3300cc/3.3L	
Seal Viton	229210	
2004-1990	2958cc/3.0L, 2995cc/3.0L, 3378cc/3.4L	
Seal Viton	229210	
Repair Sleeve	KWK99360	
1997-1993	4476cc/4.5L	
Seal	231004	
1992-1990	3955cc/4.0L	
Seal	231052 ¹⁶	
Repair Sleeve	KWK99413	

8 Cylinder

2008-1998	4664cc/4.7L	
Seal Viton	710352	
Repair Sleeve	KWK99364	

VOLKSWAGEN - Cabrio, Cabriolet, Corrado, EOS, Fox, Golf, GTI, Jetta, New Beetle, Passat, R32, Rabbit

FRONT WHEEL**FWD**

2009-2008	R32	
Hub Unit Bearing	513262[2] ²⁵	
2009-2007	EOS	
Hub Unit Bearing	513262[2] ²⁵	

FRONT WHEEL (cont.)**FWD (cont.)**

2009-2006	Jetta	
Hub Unit Bearing (From 1/2005)	HA590106[2] ²⁵	

¹⁶Obsolete²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

VOLKSWAGEN - Cabrio, Cabriolet, Corrado, EOS, Fox, Golf, GTI, Jetta, New Beetle, Passat, R32, Rabbit (cont.)
FRONT WHEEL (cont.)**FWD (cont.)**

2009-2006	Rabbit / GTI	
Hub Unit Bearing	.....	513262[2] ²⁵
Ball Bearing Optional	.....	510003[2]
2009-2005	Passat	
Hub Unit Bearing	.....	HA590106[2] ²⁵
2008-1998	New Beetle	
Ball Bearing	.....	510003[2]
2005-2000	Golf	
Ball Bearing	.....	510003[2]
2005-1999	Jetta	
Ball Bearing (Thru 12/2004)	.....	510003[2]
2004-1998	Passat (4 Cyl.)	
Ball Bearing	.....	510020[2]
2004-1998	Passat (6 Cyl.)	
Ball Bearing	.....	510019[2]
2002-1995	Cabrio	
Ball Bearing	.....	510004[2]
1999-1995	Golf (4 Cyl.)	
Ball Bearing	.....	510003[2]
1999-1995	Golf (6 Cyl.)	
Ball Bearing	.....	510004[2]
1998-1990	Jetta (From 8/1987)(Ch. # J010565)	
Ball Bearing	.....	510004[2]
1997-1990	Passat	
Ball Bearing	.....	510004[2]
1994-1990	Corrado	
Ball Bearing	.....	510004[2]
1994-1990	Golf, GTI (From Ch. # 17J013200)	
Ball Bearing	.....	510004[2]
1993-1990	Fox	
Set	.....	SET39[2]
1993-1990	Cabriolet	
Set	.....	SET35[2]

AWD

2008-2005	Passat	
Hub Unit Bearing	.....	HA590106[2] ²⁵
2004	Golf	
Ball Bearing	.....	510003[2]
2004-2000	Passat (6 Cyl.)	
Ball Bearing	.....	510019[2]

REAR WHEEL**FWD**

2009-2007	EOS	
Hub Unit Bearing	.....	HA590159[2] ²⁵
2009-2006	Jetta	
Hub Unit Bearing	.....	512319[2] ²⁵
2009-2006	Passat	
Hub Unit Bearing	.....	512319[2] ²⁵
2009-2006	Rabbit / GTI	
Hub Unit Bearing (VIN Code J)	.....	512012[2]
Hub Unit Bearing (VIN Code K)	.....	HA590159[2] ²⁵

REAR WHEEL (cont.)**FWD (cont.)**

2008-1998	New Beetle	
Hub Unit Bearing	.....	512012[2]
2005	Golf	
Hub Unit Bearing	.....	512012[2]
2005-1999	Jetta	
Hub Unit Bearing	.....	512012[2]
2004	Golf (Exc. R32)	
Hub Unit Bearing	.....	512012[2]
2004	Golf (R32)	
Ball Bearing	.....	510003[2]
2004-1998	Passat	
Hub Unit Bearing	.....	512187[2]
2003-1999	Golf	
Hub Unit Bearing	.....	512012[2]
2002-1995	Cabrio	
Seal (Inner)	.....	1962[2]
Set (Outer)	.....	SET1[2]
Set	.....	SET8[2]
1998	Golf, Jetta	
Seal (Inner)	.....	1962
Set (Outer)	.....	SET1[2]
Set	.....	SET8[2]
1997-1990	(Exc. Fox & Synchro Models)	
Seal (Inner)	.....	1962[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET1[2]
1993-1990	Fox	
Seal (Inner)	.....	1174S[2]
Set (Inner)	.....	SET8[2]
Set (Outer)	.....	SET1[2]

AWD

2009-2008	R32	
Hub Unit Bearing	.....	HA590106[2] ²⁵
2008-2006	Passat	
Hub Unit Bearing	.....	HA590106[2] ²⁵
2004	Golf	
Ball Bearing	.....	510003[2]
2000	Passat	
Ball Bearing	.....	510019[2]

REAR AXLE**Differential**

2002-2001	Passat (AWD)	
Seal (RH)	.....	224520
Cone/Cup (LH)	.....	LM300849-LM300811
Set (RH)	.....	SET45
Repair Sleeve	.....	KWK99177

Pinion

2002-2001	Passat (AWD)	
Cone/Cup (Inner)	.....	HM801346X-HM801310
Cone/Cup (Outer)	.....	M88048-M88010
1993-1990	Fox	
Seal (Front Audi 089)	.....	222535
Seal (Rear Audi 089)	.....	239146

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
VOLKSWAGEN - Cabrio, Cabriolet, Corrado, EOS, Fox, Golf, GTI, Jetta, New Beetle, Passat, R32, Rabbit (cont.)					

REAR AXLE (cont.)**Pinion (cont.)**

1992-1990	(Cabriolet, Jetta, Rabbit, Golf)
Seal (Rear VW 010)	1174S
Seal (Front VW 010)	223010

CLUTCH - 4 CYLINDER**Pilot Bearing**

2002-1990	
Ndle Bearing	F85265

CLUTCH - 6 CYLINDER**Pilot Bearing**

2002-1998	
Bearing Only	F212285

CLUTCH**Release Bearing**

2002	4 Cyl. 1.8 (220mm Cl.)
Bearing Assy	614111
2002-2001	4 Cyl. 1.9 (220mm Cl.)
Bearing Assy	614111
2002-1998	4 Cyl. 1.8 (DOHC)(215mm Cl.)
Bearing Assy	614111
2002-1998	4 Cyl. 1.8 (DOHC)(228mm Cl.)
Bearing Assy	614073
2002-1998	4 Cyl. 1.9 (215mm Cl.)
Bearing Assy	614111
2002-1998	4 Cyl. 2.0 (215mm Cl.)
Bearing Assy	614111
2002-1993	4 Cyl. 2.0 (210mm Cl.)
Bearing Assy	614041
2002-1992	6 Cyl. 2.8 (DOHC)(VR6)(228mm Cl.)
Bearing Assy	614111
1998	4 Cyl. 1.9 (228mm Cl.)
Bearing Assy	614073
1993-1990	4 Cyl. 2.0 (DOHC)(228mm Cl.)
Bearing Assy	614111
1993-1990	4 Cyl. 1.8 (210mm Cl.)(VW014)
Bearing Assy	614015
1992-1990	4 Cyl. 1.8 (SOHC)(228mm Cl.)
Bearing Assy	614111
1992-1990	4 Cyl. 1.6 (Diesel)(210mm Cl.)
Bearing Assy	614041
1992-1990	4 Cyl. 1.8 (210mm Cl.)(w/o VW014)
Bearing Assy	614041
1992-1990	4 Cyl. 2.0 (DOHC)(210mm Cl.)
Bearing Assy	614041
1992-1990	4 Cyl. 1.8 (DOHC)(210mm Cl.)
Bearing Assy	614041
1992-1990	Fox (4 Spd.)
Bearing Only	VW1339C
1991-1990	4 Cyl. 2.0 (228mm Cl.)
Bearing Assy	614015

5-SPEED MANUAL TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2005-1995	
Seal	221820

3-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

1997-1990	
Seal	3083
Repair Sleeve	KWK99169

Output Shaft

2005-1998	(01V)
Seal	223510[2]
Repair Sleeve	KWK99139[2]
1993-1990	(087, 089)
Seal	224520[2]
Repair Sleeve	KWK99177[2]
1992-1990	(010)
Seal	225010[2]
Repair Sleeve	KWK99196[2]

4-SPEED AUTOMATIC TRANSAXLE**Differential**

2002-1993	(096)
Cone/Cup	LM29749-LM29710[2]
1997-1993	(097)
Cone/Cup	LM503349A-LM503310[2]
1997-1990	(095)
Cone/Cup (LH)	LM300849-LM300811[2]

Torque Converter / Frt Pump

2002-1990	(095, 096)
Seal	225110
Repair Sleeve	KWK99177
1997-1990	(010, 087, 089, 089E)
Seal	3083
Repair Sleeve	KWK99169

Output Shaft

1997-1990	(095)
Seal	225010[2]
Repair Sleeve	KWK99196[2]

Pinion

1997-1993	(097)
Cone/Cup (Frt)	LM29749-LM29710
Bearing Assy (Rr)	513185

5-SPEED AUTOMATIC TRANSAXLE**Torque Converter**

2002-1998	(ZF5HP19)
Seal	224052
Repair Sleeve	KWK99157

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

VOLKSWAGEN - Cabrio, Cabriolet, Corrado, EOS, Fox, Golf, GTI, Jetta, New Beetle, Passat, R32, Rabbit (cont.)
4-SPEED MANUAL TRANSAXLE
Differential

2002-1990	(020)	
Cone/Cup		LM29749-LM29710[2]
1993-1990	(014)	
Cone/Cup		LM300849-LM300811[2]

Input Shaft

2002-1990	(020)	
Seal		222240
Repair Sleeve		KWK99085
1993-1990	(014)	
Seal		222030
Repair Sleeve		KWK99078

Mainshaft

2002-1990	(020)	
Set (RH)		SET8[2]

Output Shaft

2002-1990	(020)	
Seal Viton		1965[2]
Repair Sleeve		KWK99146[2]
1993-1990	(014)	
Seal		224052[2]
Repair Sleeve		KWK99157[2]

Selector Shaft Seal/Man. Shaft

2002-1990	(020)	
Seal		221820

5-SPEED MANUAL TRANSAXLE
Differential

2002-1998	(01A, 012)	
Set (LH)		SET45[2]
Cone/Cup (RH)		LM300849-LM300811[2]
2002-1990	(02A, 02J)	
Cone/Cup		LM300849-LM300811[2]

Input Shaft

2002-1990	(01A, 012, 093)	
Seal		222540
Repair Sleeve		KWK99098

Output Shaft

2005-1990	(01A, 012, 093)	
Seal		224520[2]
Repair Sleeve		KWK99177[2]
2002-1998	(02J)	
Seal		1181[2]
Repair Sleeve		KWK99189[2]
1998-1990	(02A)	
Seal		710147[2]
Repair Sleeve		KWK99157[2]

CAMSHAFT SEAL
4 Cylinder

2002-1990	
Seal	3476S[2]
Repair Sleeve	KWK99128[2]

6 Cylinder

2002-1998	2771cc/2.8L
Seal	3476S[2]
Repair Sleeve	KWK99128[2]
2002-1992	2792cc/2.8L (DOHC)
Seal	3476S[4]
Repair Sleeve	KWK99128[4]

CRANKSHAFT FRONT SEAL
4 Cylinder

2006-1990	1781cc/1.8L, 1896cc/1.9L, 1984cc/2.0L
Seal	3476S
Repair Sleeve	KWK99128

6 Cylinder

2005-1992	2771cc/2.8L, 2792cc/2.8L (DOHC)
Seal Viton	1108
Repair Sleeve	KWK99139

CRANKSHAFT REAR SEAL
4 Cylinder

2006-1993	1.9L Diesel
Seal	716102
2005-2004	2.0L Diesel
Seal	716102
2005-2003	2.0L Gas
Seal	716102
2005-1990	1.8L (DOHC)
Seal	716102
Repair Sleeve	KWK99333

6 Cylinder

2005-1992	2771cc/2.8L, 2792cc/2.8L (DOHC)
Seal	716102
Repair Sleeve	KWK99333

8 Cylinder

2004-2002	4.0L
Seal	716102

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

VOLKSWAGEN - Phaeton**FRONT WHEEL****4WD****2006-2004**Bearing Module BM500012[2]²⁵**REAR WHEEL****4WD****2006-2004**Bearing Module BM500012[2]²⁵**6-SPEED AUTOMATIC TRANSAXLE****Torque Converter****2006-2004**

Seal 224510

Repair Sleeve KWK99177

Output Shaft**2006-2004 (09L)**

Seal 223510[2]

Repair Sleeve KWK99139[2]

CRANKSHAFT FRONT SEAL**8 Cylinder****2005-2004 4172cc/4.2L**

Seal Viton 1108

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**8 Cylinder****2006-2004 4.2L**

Seal 716102

VOLKSWAGEN - EuroVan, Transporter, Van, Vanagon**FRONT WHEEL****FWD****2003-1998 EuroVan**

Ball Bearing 510051[2]

1991-1990 Vanagon

Seal (Inner) 225500[2]

Cone/Cup (Inner) LM300849-LM300811[2]

Set (Outer) SET12[2]

4WD**1991-1990 Vanagon**

Seal 226515[2]

Ball Bearing 513180[2]

REAR WHEEL**RWD****2003-1992 EuroVan**

Ball Bearing 510051[2]

1991-1990

Seal 1208S[2]

Ball Bearing (Outer) RW111[2]

Ball Bearing (Inner) 207[2]

CLUTCH**Release Bearing****1991-1990 4 Cyl. 2.0 (228mm Cl.)**

Bearing Assy 614015

3-SPEED AUTOMATIC TRANSAXLE**Differential****1991-1990 (003, 090)**

Cone/Cup LM300849-LM300811[2]

Torque Converter**1991-1990 (003, 090)**

Seal 3051N

Repair Sleeve KWK99169

Output Shaft**1991-1990 (003, 090)**

Seal 224520[2]

Repair Sleeve KWK99177[2]

Pinion**1991-1990 (003, 090)**

Cone/Cup M86649-M86610[2]

Seal (Rr) 239146

Seal (Frt) 223010

Repair Sleeve KWK99114

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump****2003-1993 (098, 01P)**

Seal 225110

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

VOLKSWAGEN - EuroVan, Transporter, Van, Vanagon (cont.)**4-SPEED AUTOMATIC TRANSAXLE****Output Shaft**

2003-1993 (098, 01P)
 Seal 224520[2]

5-SPEED MANUAL TRANSAXLE**Differential**

1991-1990 (094)
 Bearing Assy 32010X[2]

Input Shaft

1991-1990 (094)
 Seal 222050
 Repair Sleeve KWK99085

Output Shaft

1991-1990 (094)
 Seal 1943[2]
 Repair Sleeve KWK99177[2]

DRIVESHAFT SUPPORT

1991-1990 Vanagon
 Ball Bearing (Frt) 107WB[2]
 Ball Bearing (Rr) 206WB[2]

CAMSHAFT SEAL**4 Cylinder**

1991-1990 1.5L, 1.6L, 1.7L (Incl. Diesels),
 2.0L
 Seal 3476S
 Repair Sleeve KWK99128

5 Cylinder

1996-1992 2.5L
 Seal 3476S
 Repair Sleeve KWK99128

6 Cylinder

2002-1997 2.8L
 Seal 3476S[2]
 Repair Sleeve KWK99128[2]

CRANKSHAFT FRONT SEAL**5 Cylinder**

1996-1992 2.5L
 Seal Viton 1108
 Repair Sleeve KWK99139

CRANKSHAFT FRONT SEAL**6 Cylinder**

2003-1997 2.8L
 Seal Viton 1108
 Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**4 Cylinder**

1991-1990 1.8L, 1.9L, 2.0L, 2.1L
 Seal 227530
 Repair Sleeve KWK99294

6 Cylinder

2003-1997 2.8L
 Seal 716102
 Repair Sleeve KWK99333

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
VOLKSWAGEN - SUV - Touareg					

FRONT WHEEL**AWD**

2006-2004

Ball Bearing 510082[2]²⁵**REAR WHEEL****AWD**

2006-2004

Ball Bearing 510082[2]²⁵**CRANKSHAFT FRONT SEAL****8 Cylinder**

2007-2004 4172cc/4.2L

Seal Viton 1108

Repair Sleeve KWK99139

CRANKSHAFT REAR SEAL**8 Cylinder**

2007-2005 4.2L

Seal 716102

VOLVO - ALL**FRONT WHEEL****FWD**

2009-2008 C30

Hub Unit Bearing HA590212[2]²⁵

2009-2008 V70

Hub Unit Bearing HA590234[2]²⁵

2009-2007 S80

Hub Unit Bearing HA590234[2]²⁵

2009-2006 C70

Hub Unit Bearing HA590323[2]²⁵

2009-2006 S60

Hub Unit Bearing HA590187[2]²⁵

2009-2005 V50

Hub Unit Bearing HA590212[2]²⁵

2009-2004 S40 (New Style)

Hub Unit Bearing HA590323[2]²⁵

2007-2000 V70

Hub Unit Bearing 513175[2]

2005-1999 S60, S80 Ser.

Hub Unit Bearing 513194[2]

2004-2000 S40, V40 (Old Style)

Ball Bearing 510029[2]

2004-1999 C70, S70, Ser.

Hub Unit Bearing 513175[2]

1998 C70, S70, V70

Hub Unit Bearing HA594181[2]

1997-1994 850

Hub Unit Bearing HA594181[2]

1993 850

Hub Unit Bearing HA595894[2]

RWD

1998-1994 960 Ser., S90, V90

Hub Unit Bearing HA590241K[2]

1995-1991 940 (Non-ABS)

Hub Unit Bearing 513128[2]

1994-1990 760, 780, 940 Ser. (ABS)

Hub Unit Bearing HA590056K[2]⁷¹**FRONT WHEEL (cont.)****RWD (cont.)**

1993-1990 240, 260 Ser.

Seal (Inner) 482126[2]

Set (Inner) SET17[2]

Set (Outer) SET16[2]

1992-1991 740 (Non-ABS)

Hub Unit Bearing 513128[2]

1991-1990 780 (Non-ABS)

Hub Unit Bearing 513128[2]

1990 740 Ser.

Seal (Inner) 710215[2]

Set (Inner) SET17[2]

Set (Outer) SET16[2]

1990 760 (Non-ABS)

Hub Unit Bearing 513128[2]

AWD

2009-2008 XC70

Hub Unit Bearing HA590234[2]²⁵

2009-2007 S80

Hub Unit Bearing HA590234[2]²⁵

2009-2006 S60

Hub Unit Bearing HA590187[2]²⁵

2009-2005 S40 (New Style)

Hub Unit Bearing HA590323[2]²⁵

2009-2005 V50

Hub Unit Bearing HA590323[2]²⁵

2007-2000 V70, XC70

Hub Unit Bearing 513194[2]

2005-2004 S60, S80 Ser.

Hub Unit Bearing 513194[2]

2000-1999 V70

Hub Unit Bearing 513175[2]

1998 V70

Hub Unit Bearing HA594181[2]

1997 850

Hub Unit Bearing HA594181[2]

²⁵New Item, Check For Availability⁷¹Kit = Brg, 48 Tooth Ring, Dust Cap, & Nut

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>VOLVO - ALL (cont.)</i>					

REAR WHEEL**FWD**

2009	C70	
Hub Unit Bearing	HA590322[2]	²⁵
2009	S40 (New Style)	
Hub Unit Bearing	HA590322[2]	²⁵
2009	V50	
Hub Unit Bearing	HA590322[2]	²⁵
2009-2008	C30	
Hub Unit Bearing	HA590192[2]	²⁵
2009-2008	V70	
Hub Unit Bearing	HA590337[2]	
2009-2007	S80	
Hub Unit Bearing	HA590337[2]	
2009-2001	S60	
Hub Unit Bearing	HA590389[2]	
2008-2006	C70	
Hub Unit Bearing	HA590192[2]	²⁵
2008-2005	V50	
Hub Unit Bearing	HA590192[2]	²⁵
2008-2004	S40 (New Style)	
Hub Unit Bearing	HA590192[2]	²⁵
2006-1999	S80	
Hub Unit Bearing	HA590389[2]	
2004-2001	C70	
Hub Unit Bearing	HA597957[2]	
2003-2000	S40, V40 (Old Style)	
Hub Unit Bearing	HA590257[2]	
2000-1993	C70, S70, Ser.	
Hub Unit Bearing	HA597957[2]	
1997-1993	850	
Hub Unit Bearing	HA597957[2]	

RWD

1998	S90, V90	
Hub Unit Bearing	512234[2]	¹⁶
Ball Bearing	513130[2]	
1997-1995	960 Ser.	
Hub Unit Bearing	512234[2]	¹⁶
Ball Bearing	513130[2]	
1995	940 Ser.	
Ball Bearing	513130[2]	
1994-1991	940 Ser., 960 Ser.	
Seal	473238[2]	
Cylindrical Bearing	RW131R[2]	
1993-1990	240 Ser.	
Seal (Inner)	1955[2]	
Seal (Outer)	9912S[2]	
1992-1990	740 (Exc. Traction Control)	
Seal (Inner)	1176S[2]	
Seal (Outer)	9912S[2]	
1992-1990	740 Ser. (Traction Control)	
Seal (Inner)	1955[2]	
Seal (Outer)	9912S[2]	
1990	760	
Ball Bearing	513130[2]	

AWD

2009-2008	XC70	
Hub Unit Bearing	HA590220[2]	²⁵
2009-2005	S40 (New Style)	
Hub Unit Bearing	HA590321[2]	²⁵

REAR WHEEL (cont.)**AWD (cont.)**

2009-2005	V50	
Hub Unit Bearing	HA590321[2]	²⁵
2009-2002	S60	
Hub Unit Bearing	HA590218[2]	²⁵
2007	S80	
Hub Unit Bearing	HA590220[2]	²⁵
2007-2001	V70	
Hub Unit Bearing	HA590218[2]	²⁵
2006-2004	S80	
Hub Unit Bearing	HA590218[2]	²⁵
2000-1997	S70, V70, 850	
Ball Bearing	513130[2]	

REAR AXLE**Differential Rebuild Kit**

1993-1990	(1030 Axle)	
Kit	DRK338	

Differential

1997-1990	(1045 Axle)	
Set	SET45[2]	
1997-1990	(Exc. 1045 Axle)	
Cone/Cup	LM501349-LM501314[2]	

Pinion

2001-1999	(AWD)	
Seal Viton	4941V	
1998-1990		
Seal (All)	5778	
Cone/Cup (Inner)		
(Dana/Spicer M27,		
M30, 1030)	HM88649-HM88610	
Cone/Cup (Inner)		
(1031, 1041, 1045		
Axle)	HM89449-HM89410	
Cone/Cup (Outer) (All)	M86647-M86610	
Repair Sleeve (All)	KWK99155	

CLUTCH - 4 CYLINDER**Pilot Bearing**

1996-1990		
Ball Bearing	202FF	

CLUTCH - 6 CYLINDER**Pilot Bearing**

1997-1992		
Ball Bearing	202FF	

CLUTCH - 4 CYLINDER**Release Bearing**

1995-1990	240 Ser. 740 Ser. 940	
Bearing Assy	614039	

¹⁶Obsolete²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
VOLVO - ALL (cont.)					

CLUTCH - 6 CYLINDER**Release Bearing**

1990	740 GLE, 760 GLE	
Bearing Assy	.....	614039

4-SPEED MANUAL TRANSMISSION**Input Shaft**

1996-1990	(M45)	
Seal	.....	222820
Ball Bearing	.....	207SL[2]
Repair Sleeve	.....	KWK99111

Countershaft

1996-1990	(M45)	
Set	.....	SET4[2]

Rear Output Shaft

1996-1990	(M45)	
Seal	.....	224010

5-SPEED MANUAL TRANSMISSION**Front Input Shaft**

1996-1990		
Seal	.....	222820
Repair Sleeve	.....	KWK99111

Countershaft

1996-1990		
Set (Center)	.....	SET4[2]
Set (Rr)	.....	SET17[2]

Rear Output Shaft

1996-1990		
Seal	.....	1962

4-SPEED AUTOMATIC TRANSAXLE**Torque Converter / Frt Pump**

2006-1999	(4T65 E)	
Seal	.....	4072N
Repair Sleeve	.....	KWK99328
2002-1993	(Aisin)	
Seal	.....	223830
Repair Sleeve	.....	KWK99147

Output Shaft

2006-1999	(4T65 E)	
Seal (LH)	.....	100165
Seal (RH)	.....	3543
Repair Sleeve	.....	KWK99139
2002-1993	(Aisin)	
Seal (LH)	.....	224025
Seal (RH)	.....	710112

4-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2006-1999	(4T65 E)	
Seal	.....	8792S
2004-1992	(Aisin)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED AUTOMATIC TRANSAXLE**Manual Shaft**

2008-2001	(Aisin 55-51SN)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1997-1993		
Bearing Assy (Inner)	.....	32005X[2]
Bearing Assy (Outer)	.....	32007X[2]

Output Shaft

1997-1993		
Seal	.....	224040[2]
Repair Sleeve	.....	KWK99157[2]

A/C COMPRESSOR

1990	(A6)(Axial)	
Ball Bearing	.....	907257[2]

ALTERNATOR

1992-1990	(Bosch 70 Amp.)	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC
1990	(Bosch 90 Amp.)	
Ball Bearing (Drive End)	.....	303CC
Ball Bearing (Rear End)	.....	201CC

DRIVESHAFT SUPPORT

1996-1994		
Ball Bearing	.....	109FF[2]
1993-1990	(Type 03 driveshaft)	
Ball Bearing	.....	109FF[2]
1993-1990	240 & 260 Ser. (45mm driveshaft)	
Ball Bearing	.....	109FF[2]
1992-1990	(Type 03 driveshaft)	
Ball Bearing	.....	107DD[2]

MANUAL STEERING**Pitman Shaft**

1990	(Saginaw pump)	
Seal	.....	7013S

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.

VOLVO - ALL (cont.)

AUXILIARY SHAFT

4 Cylinder

2002-2000 1948cc/1.9L (DOHC)(Turbo)
 Seal 223020
 Repair Sleeve KWK99114
 1995-1990 1780cc/1.8L, 1990cc/2.0L,
 2127cc/2.1L, 2316cc/2.3L
 Seal 1172S
 Repair Sleeve KWK99139

CAMSHAFT SEAL

4 Cylinder

2002-2000 1948cc/1.9L (DOHC)(Turbo)
 Seal 321460
 Repair Sleeve KWK99179
 1996-1990 2127cc/2.1L, 2316cc/2.3L
 Seal 1172S
 Repair Sleeve KWK99139

5 Cylinder

2002-1993 2319cc/2.3L, 2435cc/2.4L
 Seal (Frt) 321460[2]
 Repair Sleeve (Frt) KWK99179[2]
 Seal (Rr) 223020[2]
 Repair Sleeve (Rr) KWK99114[2]

6 Cylinder

2002-1992 2922cc/2.9L (DOHC)
 Seal (Frt) 321460[2]
 Repair Sleeve (Frt) KWK99179[2]
 Seal (Rr) 223020[2]
 Repair Sleeve (Rr) KWK99114[2]

CRANKSHAFT FRONT SEAL

4 Cylinder

2004-2000 1948cc/1.9L
 Seal 223601
 Repair Sleeve KWK99146
 1996-1990 2127cc/2.1L, 2316cc/2.3L
 Seal Viton 710190
 1995-1994 2320cc/2.3L (SOHC)
 Seal Viton 710190

5 Cylinder

2008-1993 2319cc/2.3L, 2435cc/2.4L
 Seal 223601
 Repair Sleeve KWK99146

CRANKSHAFT FRONT SEAL

6 Cylinder

2005-1992 2917cc/2.9L (DOHC)
 Seal 223601
 Repair Sleeve KWK99146

CRANKSHAFT REAR SEAL

4 Cylinder

1996-1990 1780cc/1.8L, 1990cc/2.0L,
 2127cc/2.1L, 2316cc/2.3L
 Seal Viton 229210

5 Cylinder

2008-2005 2401cc/2.4 (DOHC),
 2435cc/2.4 (DOHC),
 2500cc/2.5 (DOHC)
 Seal Viton 229210

6 Cylinder

1990 2849cc/2.8L
 Seal 228010
 Repair Sleeve KWK99315

VOLVO - SUV - XC90

FRONT WHEEL

FWD

2009-2007 (From Ch. # 354877)
 Hub Unit Bearing HA590312[2]²⁵
 2007-2003 (Thru Ch. # 354876)
 Hub Unit Bearing HA590223[2]²⁵

FRONT WHEEL

AWD

2009-2007 (From Ch. # 354877)
 Hub Unit Bearing HA590312[2]²⁵
 2007-2003 (Thru Ch. # 354876)
 Hub Unit Bearing HA590223[2]²⁵

²⁵New Item, Check For Availability

Mfg./Year	Model & Location	Part No.	Mfg./Year	Model & Location	Part No.
<i>VOLVO - SUV - XC90 (cont.)</i>					

REAR WHEEL**FWD**

2009-2006	(From Ch. # 254382)	
Hub Unit Bearing	.....	HA590289[2] ²⁵
2006-2003	(Thru Ch. # 254381)	
Hub Unit Bearing	.....	HA590218[2] ²⁵

AWD

2009-2003		
Hub Unit Bearing	.....	HA590232[2] ²⁵

4-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2006-2003	(4T65 E)	
Seal	.....	4072N

Selector Shaft Seal/Man. Shaft

2007-2003	(4T65 E)	
Seal	.....	8792S

Output Shaft

2007-2003	(4T65 E)	
Seal (LH)	.....	100165
Seal (RH)	.....	3543
Repair Sleeve	.....	KWK99139

5-SPEED AUTOMATIC TRANSMISSION**Torque Converter**

2007-2003	(Aisin 55-51SN)	
Seal	.....	222830

5-SPEED AUTOMATIC TRANSMISSION**Selector Shaft Seal/Man. Shaft**

2007-2003	(Aisin 55-51SN)	
Seal	.....	221207
Repair Sleeve	.....	KWK99049

CRANKSHAFT FRONT SEAL**6 Cylinder**

2005-2003	2922cc/2.9L (DOHC)	
Seal	.....	223601
Repair Sleeve	.....	KWK99146

YUGO - ALL**FRONT WHEEL****FWD**

1992-1990		
Ball Bearing	.....	513116[2]

REAR WHEEL**FWD**

1992-1990		
Ball Bearing	.....	513116[2]

CLUTCH**Release Bearing**

1992-1990		
Bearing Only	.....	FI1710C

5-SPEED MANUAL TRANSAXLE**Input Shaft**

1992-1990		
Seal	.....	222240
Repair Sleeve	.....	KWK99085

5-SPEED MANUAL TRANSAXLE**Output Shaft**

1992-1990		
Ball Bearing (Drive End)	.....	203S[2]
Ball Bearing (Rear End)	.....	201SS[2]
Seal	.....	222510[2]
Repair Sleeve	.....	KWK99098

ALTERNATOR

1992-1990		
Ball Bearing (Drive End)	.....	203S
1992-1990		
Ball Bearing (Rear End)	.....	201SS

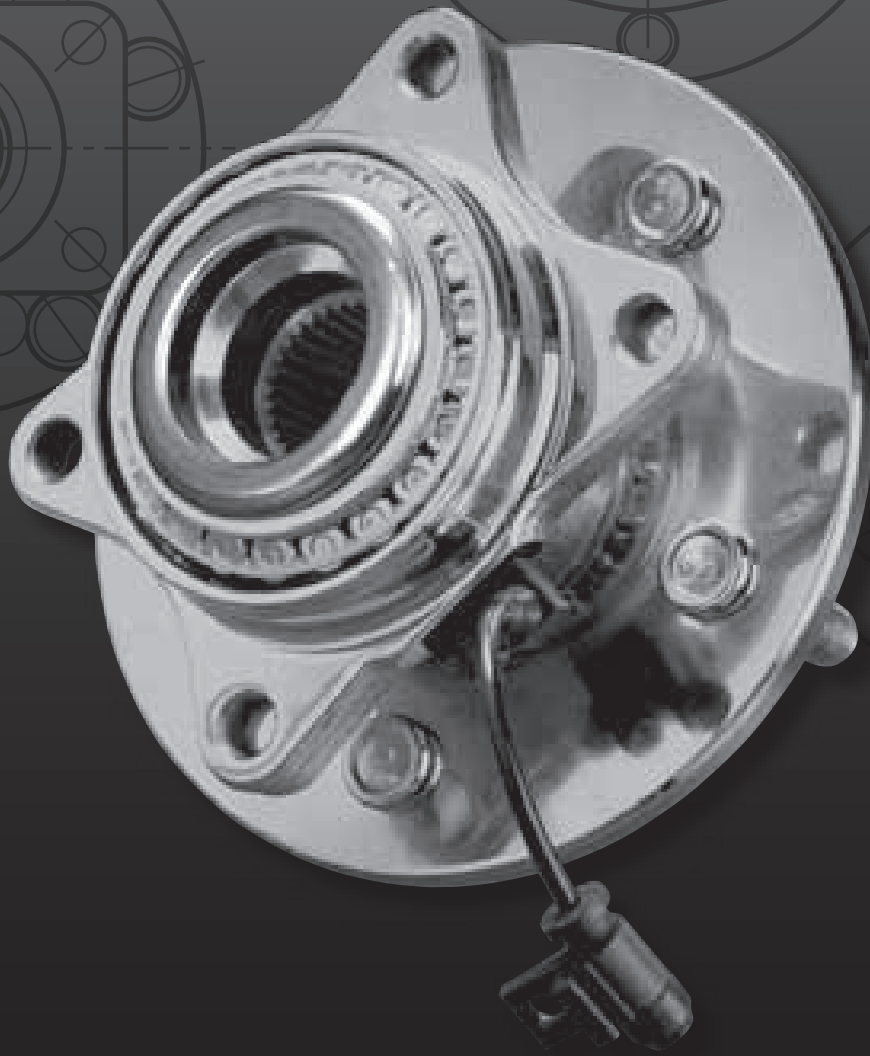
CRANKSHAFT FRONT SEAL**4 Cylinder**

1992-1990		
Seal		224025
Repair Sleeve		KWK99157

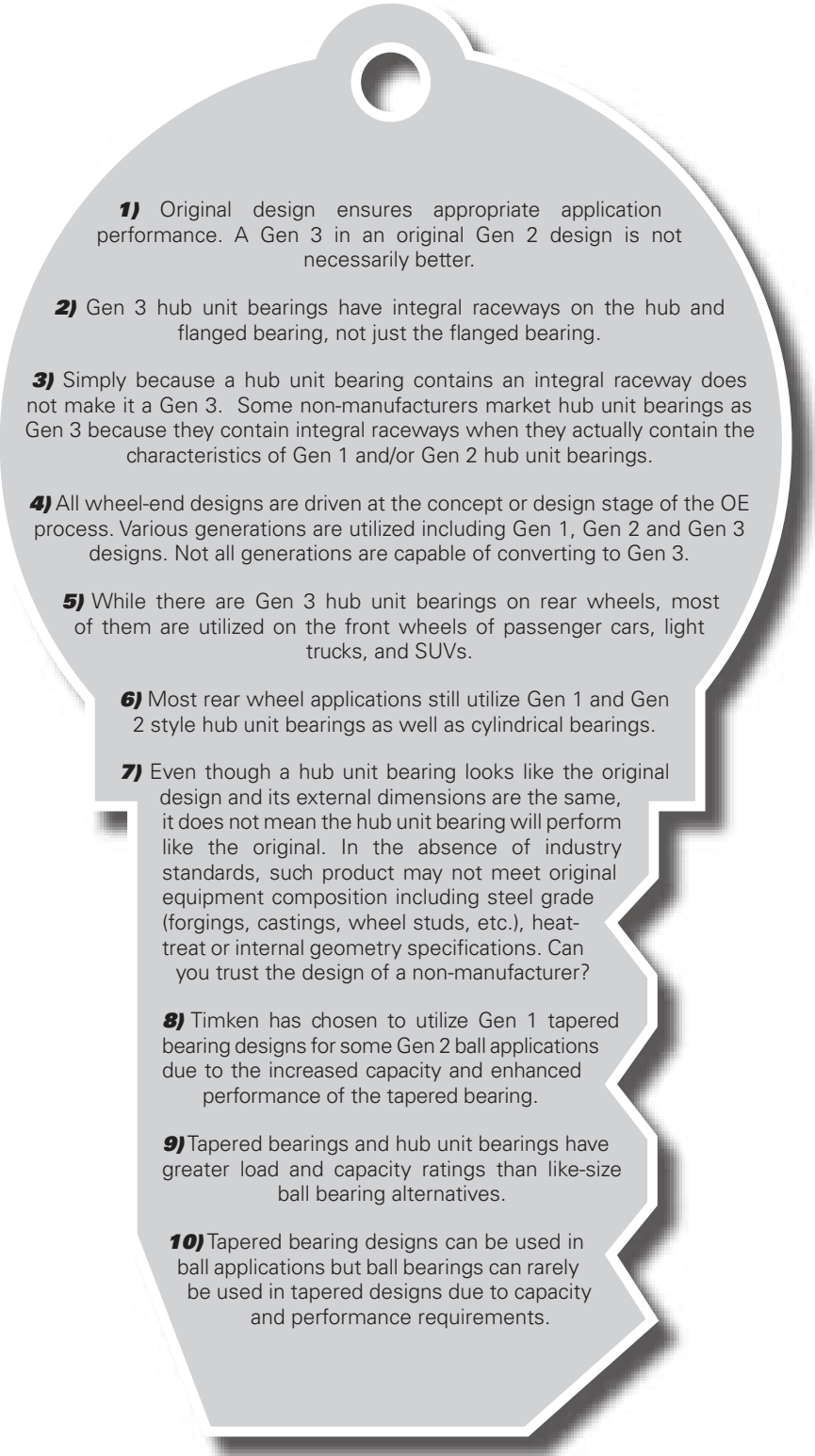
²⁵New Item, Check For Availability

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HUB UNIT BEARING / BEARING MODULE TECHNOLOGY SECTION



KEYS TO CHOOSING THE RIGHT HUB UNIT BEARING / BEARING MODULE

- 
- 1)** Original design ensures appropriate application performance. A Gen 3 in an original Gen 2 design is not necessarily better.
 - 2)** Gen 3 hub unit bearings have integral raceways on the hub and flanged bearing, not just the flanged bearing.
 - 3)** Simply because a hub unit bearing contains an integral raceway does not make it a Gen 3. Some non-manufacturers market hub unit bearings as Gen 3 because they contain integral raceways when they actually contain the characteristics of Gen 1 and/or Gen 2 hub unit bearings.
 - 4)** All wheel-end designs are driven at the concept or design stage of the OE process. Various generations are utilized including Gen 1, Gen 2 and Gen 3 designs. Not all generations are capable of converting to Gen 3.
 - 5)** While there are Gen 3 hub unit bearings on rear wheels, most of them are utilized on the front wheels of passenger cars, light trucks, and SUVs.
 - 6)** Most rear wheel applications still utilize Gen 1 and Gen 2 style hub unit bearings as well as cylindrical bearings.
 - 7)** Even though a hub unit bearing looks like the original design and its external dimensions are the same, it does not mean the hub unit bearing will perform like the original. In the absence of industry standards, such product may not meet original equipment composition including steel grade (forgings, castings, wheel studs, etc.), heat-treat or internal geometry specifications. Can you trust the design of a non-manufacturer?
 - 8)** Timken has chosen to utilize Gen 1 tapered bearing designs for some Gen 2 ball applications due to the increased capacity and enhanced performance of the tapered bearing.
 - 9)** Tapered bearings and hub unit bearings have greater load and capacity ratings than like-size ball bearing alternatives.
 - 10)** Tapered bearing designs can be used in ball applications but ball bearings can rarely be used in tapered designs due to capacity and performance requirements.

HUB UNIT BEARING GENERATIONS: BALL BEARING TYPE

GEN 1

Double-Row Angular Contact Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral double outer race

Benefits:

- Eliminates pre-load adjustment at installation
- Minimizes axial space requirements
- Compact / reduced envelope dimension
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space



GEN 2

Single-Flange Angular Contact Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral raceways in outer ring
- Flanged outer ring

Benefits:

- Easier installation
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Compact / reduced space
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space



GEN 2

Double-Flange Angular Contact Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral outer ring / raceways
- Flanged inner and outer rings

Benefits:

- Easier installation
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Compact / reduced space
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space



GEN 3

Double-Flange Angular Contact Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral inner ring / outboard raceway
- Flanged inner and outer rings

Benefits:

- Easier installation
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Compact / reduced space
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space



HUB UNIT BEARING GENERATIONS: TAPERED ROLLER BEARING TYPE

GEN 1

Double-Row Tapered Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral double cup

Benefits:

- Eliminates pre-load adjustment at installation
- Minimizes axial space requirements
- Compact / reduced envelope dimension
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space
- Greater load and capacity ratings than ball versions



GEN 2

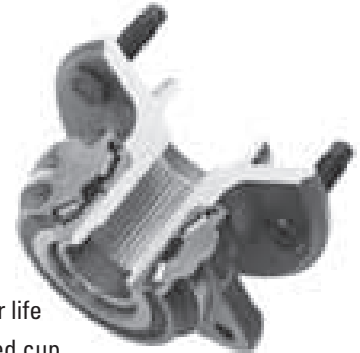
Double-Flange Tapered Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral raceways in flanged cup

Benefits:

- Ease of installation – bolts direct to knuckle
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Compact / reduced space
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space
- Greater load and capacity ratings than ball versions



GEN 2.5

Double-Flange Tapered Bearing

Features:

- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral raceways in flanged cup
- FORMED HUB™ – patented technology

Benefits:

- Ease of installation – bolts direct to knuckle
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Compact / reduced space
- Pre-clamped / self-retained
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space
- Greater load and capacity ratings than ball versions



GEN 3

Double-Flange Tapered Bearing

Features:

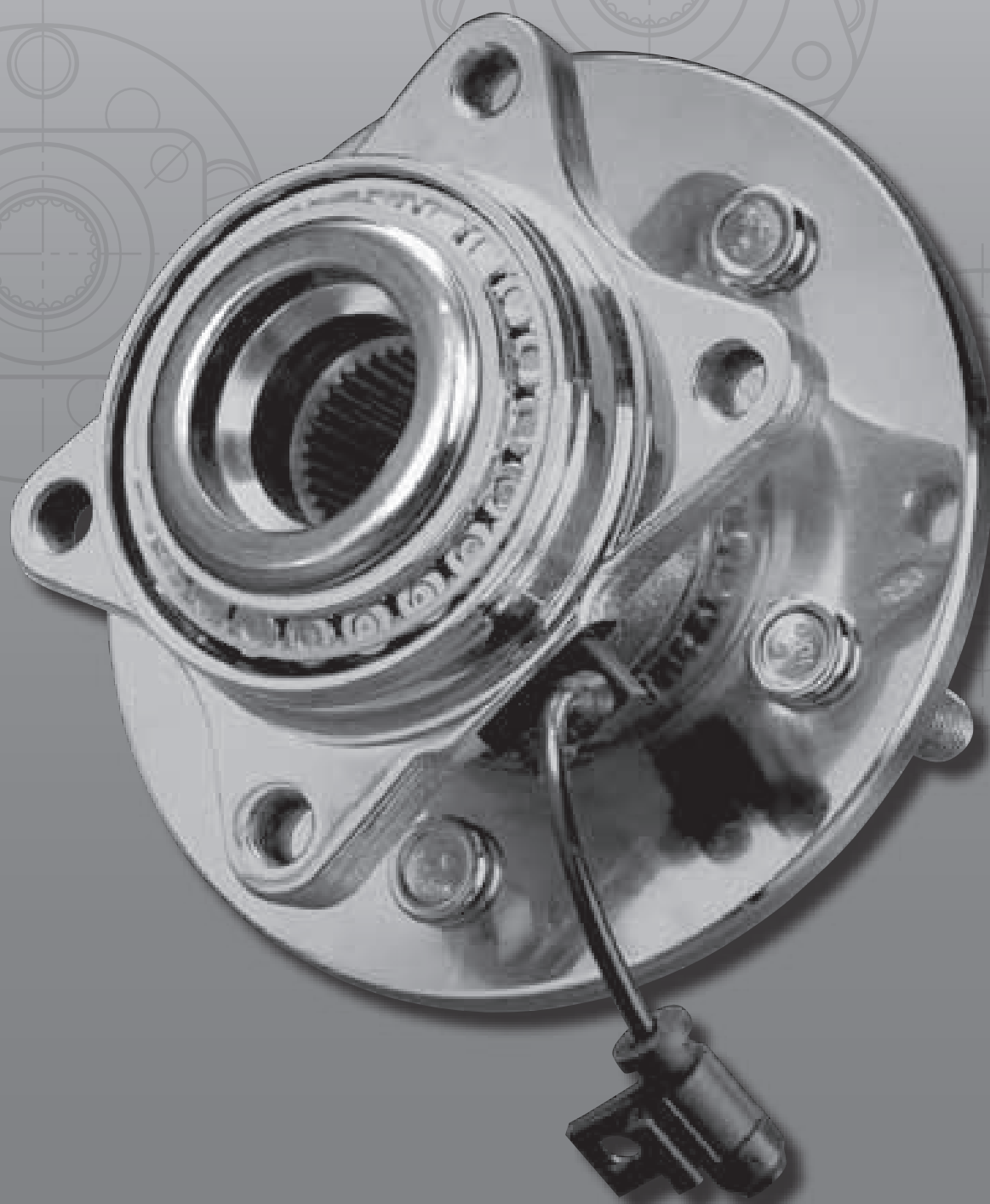
- Pre-set internal clearance / pre-load
- Pre-lubricated
- Integrated seal – sealed for life
- Integral raceways in flanged cup
- Integral outboard raceway on hub
- Flanged inner and outer ring
- FORMED HUB™ – patented technology

Benefits:

- Ease of installation – bolts direct to knuckle
- Eliminates pre-load adjustment at assembly
- Minimizes axial space requirements
- Pre-clamped / self-retained
- Compact / reduced space
- Maintenance free – self-contained
- Optimizes bearing life and rigidity within the available space
- Greater load and capacity ratings than ball versions



HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE



HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

Federal Mogul Number	Timken Number	Part Description
510038	510038	Bearing Module
511010	511010	Bearing Module
511011	511011	Bearing Module
511012	511012	Bearing Module
511037	HA590241	Hub Unit Bearing
511038	HA590235	Hub Unit Bearing
512000	512000	Hub Unit Bearing
512001	512001	Hub Unit Bearing
512002	512002	Hub Unit Bearing
512003	512003	Hub Unit Bearing
512004	512004	Hub Unit Bearing
512005	512005	Hub Unit Bearing
512006	512006	Hub Unit Bearing
512007	512007	Hub Unit Bearing
512008	512008	Hub Unit Bearing
512009	512009	Bearing Module
512010	512010	Hub Unit Bearing
512011	512011	Hub Unit Bearing
512012	512012	Hub Unit Bearing
512013	512013	Hub Unit Bearing
512014	512014	Bearing Module
512016	512016	Hub Unit Bearing
512017	512017	Hub Unit Bearing
512018	512018	Hub Unit Bearing
512019	512019	Hub Unit Bearing
512020	512020	Hub Unit Bearing
512021	512021	Hub Unit Bearing
512022	512022	Hub Unit Bearing
512023	512023	Hub Unit Bearing
512024	512024	Hub Unit Bearing
512025	512025	Hub Unit Bearing
512026	512026	Hub Unit Bearing
512027	512027	Hub Unit Bearing
512028	512028	Hub Unit Bearing
512029	512029	Hub Unit Bearing
512030	512029	Hub Unit Bearing
512030	512030	Hub Unit Bearing
512031	512031	Hub Unit Bearing
512032	512032	Hub Unit Bearing
512033	512033	Hub Unit Bearing
512034	513105	Hub Unit Bearing
512036	512036	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
512037	512037	Hub Unit Bearing
512038	512038	Bearing Module
512039	512039	Hub Unit Bearing
512040	512040	Hub Unit Bearing
512041	512041	Hub Unit Bearing
512078	512078	Hub Unit Bearing
512105	512105	Hub Unit Bearing
512106	512106	Hub Unit Bearing
512107	512107	Hub Unit Bearing
512118	512118	Hub Unit Bearing
512119	512119	Hub Unit Bearing
512120	512120	Hub Unit Bearing
512121	512121	Hub Unit Bearing
512122	512122	Hub Unit Bearing
512123	512123	Hub Unit Bearing
512124	512124	Hub Unit Bearing
512125	512125	Hub Unit Bearing
512133	512133	Hub Unit Bearing
512136	HA590306	Hub Unit Bearing
512137	512137	Bearing Module
512140	512140	Hub Unit Bearing
512144	512144	Hub Unit Bearing
512145	512145	Hub Unit Bearing
512146	512146	Hub Unit Bearing
512147	512147	Hub Unit Bearing
512148	512148	Hub Unit Bearing
512149	512149	Hub Unit Bearing
512150	512150	Hub Unit Bearing
512151	512151	Hub Unit Bearing
512152	512152	Hub Unit Bearing
512153	512153	Hub Unit Bearing
512154	512154	Hub Unit Bearing
512155	512155	Hub Unit Bearing
512156	512156	Hub Unit Bearing
512157	512157	Hub Unit Bearing
512158	512158	Hub Unit Bearing
512159	512159	Hub Unit Bearing
512160	512160	Hub Unit Bearing
512161	512161	Hub Unit Bearing
512162	512162	Hub Unit Bearing
512163	512163	Hub Unit Bearing
512164	512164	Hub Unit Bearing

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
512165	512165	Hub Unit Bearing
512166	512166	Bearing Module
512167	512167	Hub Unit Bearing
512168	512168	Hub Unit Bearing
512169	512169	Hub Unit Bearing
512170	512170	Hub Unit Bearing
512171	512171	Hub Unit Bearing
512172	512172	Hub Unit Bearing
512173	512173	Hub Unit Bearing
512174	512174	Hub Unit Bearing
512175	512175	Hub Unit Bearing
512176	512176	Hub Unit Bearing
512177	512177	Hub Unit Bearing
512178	512178	Hub Unit Bearing
512179	512179	Hub Unit Bearing
512180	512180	Hub Unit Bearing
512181	512181	Bearing Module
512182	512182	Hub Unit Bearing
512183	512183	Bearing Module
512184	512184	Hub Unit Bearing
512185	512185	Hub Unit Bearing
512186	512186	Hub Unit Bearing
512187	512187	Hub Unit Bearing
512188	512188	Hub Unit Bearing
512189	512189	Hub Unit Bearing
512190	512190	Hub Unit Bearing
512191	512191	Hub Unit Bearing
512192	512192	Hub Unit Bearing
512193	512193	Hub Unit Bearing
512194	512194	Hub Unit Bearing
512195	512195	Hub Unit Bearing
512196	512196	Hub Unit Bearing
512197	512197	Hub Unit Bearing
512198	512198	Hub Unit Bearing
512199	512199	Hub Unit Bearing
512200	512200	Hub Unit Bearing
512201	512201	Hub Unit Bearing
512202	512202	Hub Unit Bearing
512203	512203	Hub Unit Bearing
512204	512204	Hub Unit Bearing
512205	HA591050	Hub Unit Bearing
512206	HA592460	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
512207	HA592450	Hub Unit Bearing
512208	HA596030	Hub Unit Bearing
512209	HA594245	Hub Unit Bearing
512210	HA592410	Hub Unit Bearing
512211	HA594301	Hub Unit Bearing
512212	HA594504	Hub Unit Bearing
512213	HA594241	Hub Unit Bearing
512215	512215	Hub Unit Bearing
512216	512216	Hub Unit Bearing
512217	512217	Hub Unit Bearing
512218	512218	Hub Unit Bearing
512219	HA590057	Hub Unit Bearing
512220	512220	Hub Unit Bearing
512221	512221	Hub Unit Bearing
512222	512222	Hub Unit Bearing
512223	512223	Hub Unit Bearing
512225	512225	Hub Unit Bearing
512226	BM500010	Bearing Module
512227	HA594246	Bearing Module
512228	HA590050	Bearing Module
512229	512229	Hub Unit Bearing
512230	512230	Hub Unit Bearing
512231	512231	Hub Unit Bearing
512232	512232	Hub Unit Bearing
512233	HA590389	Hub Unit Bearing
512234	512234	Hub Unit Bearing
512235	512235	Hub Unit Bearing
512236	512236	Hub Unit Bearing
512237	512237	Hub Unit Bearing
512238	512238	Hub Unit Bearing
512239	512239	Hub Unit Bearing
512240	HA592210	Bearing Module
512241	HA590160	Hub Unit Bearing
512242	512242	Hub Unit Bearing
512243	HA590079	Hub Unit Bearing
512244	HA590092	Hub Unit Bearing
512245	HA590074	Hub Unit Bearing
512246	HA590091	Hub Unit Bearing
512247	HA590066	Hub Unit Bearing
512248	HA590067	Hub Unit Bearing
512249	HA590082	Hub Unit Bearing
512250	HA590088	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
512251	512251	Hub Unit Bearing
512252	HA590257	Hub Unit Bearing
512253	HA590218	Hub Unit Bearing
512254	HA597957	Hub Unit Bearing
512255	512255	Hub Unit Bearing
512256	HA590164	Hub Unit Bearing
512257	HA590152	Hub Unit Bearing
512258	HA590009	Hub Unit Bearing
512259	HA590005	Hub Unit Bearing
512260	BM500003	Bearing Module
512261	BM500003	Bearing Module
512262	BM500002	Bearing Module
512263	BM500000	Bearing Module
512264	HA590008	Hub Unit Bearing
512265	512265	Hub Unit Bearing
512266	512266	Hub Unit Bearing
512267	512267	Hub Unit Bearing
512268	HA590109	Hub Unit Bearing
512269	513131	Hub Unit Bearing
512270	512270	Hub Unit Bearing
512271	HA590100	Hub Unit Bearing
512271	HA590095	Hub Unit Bearing
512272	HA590095	Hub Unit Bearing
512273	HA590232	Hub Unit Bearing
512274	HA590128	Hub Unit Bearing
512275	HA590129	Hub Unit Bearing
512276	HA590104	Hub Unit Bearing
512277	HA590101	Hub Unit Bearing
512280	512280	Hub Unit Bearing
512281	HA591080	Hub Unit Bearing
512282	HA592461	Hub Unit Bearing
512283	HA592451	Hub Unit Bearing
512284	HA590338	Hub Unit Bearing
512285	HA590080	Hub Unit Bearing
512286	HA590010	Hub Unit Bearing
512287	HA590081	Hub Unit Bearing
512288	HA590209	Hub Unit Bearing
512289	HA590143	Hub Unit Bearing
512290	HA590144	Hub Unit Bearing
512291	HA590120	Hub Unit Bearing
512292	HA590111	Hub Unit Bearing
512293	HA590119	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
512294	512294	Hub Unit Bearing
512295	512295	Hub Unit Bearing
512296	HA590038	Hub Unit Bearing
512299	512299	Hub Unit Bearing
512300	HA590029	Hub Unit Bearing
512301	HA590031	Hub Unit Bearing
512302	HA590141	Hub Unit Bearing
512303	HA590110	Hub Unit Bearing
512304	HA590161	Hub Unit Bearing
512305	512305	Bearing Module
512306	HA590174	Hub Unit Bearing
512308	HA590116	Hub Unit Bearing
512309	HA590158	Hub Unit Bearing
512310	HA590370	Hub Unit Bearing
512311	HA590371	Hub Unit Bearing
512313	HA590022	Hub Unit Bearing
512314	HA590149	Hub Unit Bearing
512315	HA590089	Hub Unit Bearing
512316	HA590112	Hub Unit Bearing
512317	HA590113	Hub Unit Bearing
512320	HA590151	Hub Unit Bearing
512321	HA590146	Hub Unit Bearing
512322	512322	Hub Unit Bearing
512323	512323	Hub Unit Bearing
512325	HA590184	Hub Unit Bearing
512326	512326	Hub Unit Bearing
512327	HA590019	Hub Unit Bearing
512328	HA590169	Hub Unit Bearing
512329	HA590040	Hub Unit Bearing
512331	HA590221	Hub Unit Bearing
512332	HA590216	Hub Unit Bearing
512333	HA590230	Hub Unit Bearing
512334	HA590180	Hub Unit Bearing
512335	HA590183	Hub Unit Bearing
512336	HA590159	Hub Unit Bearing
512337	HA590136	Hub Unit Bearing
512339	HA590103	Hub Unit Bearing
512340	512340	Hub Unit Bearing
512341	HA590179	Hub Unit Bearing
512344	HA590190	Hub Unit Bearing
512347	HA590099	Hub Unit Bearing
512349	HA590195	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
512353	HA590202	Hub Unit Bearing
513003	513003	Hub Unit Bearing
513004K	513004K	Hub Unit Bearing
513009	513009	Hub Unit Bearing
513010	513010	Hub Unit Bearing
513011K	513011K	Hub Unit Bearing
513012	513012	Hub Unit Bearing
513013	513013	Hub Unit Bearing
513016K	513016K	Hub Unit Bearing
513017K	513017K	Hub Unit Bearing
513018	513018	Hub Unit Bearing
513019	513019	Hub Unit Bearing
513020	513020	Hub Unit Bearing
513030	513030	Hub Unit Bearing
513033	513033	Hub Unit Bearing
513034	513034	Hub Unit Bearing
513035	513035	Hub Unit Bearing
513038	513038	Hub Unit Bearing
513039	513039	Hub Unit Bearing
513040	513040	Hub Unit Bearing
513041	513041	Hub Unit Bearing
513042	513042	Hub Unit Bearing
513044	513044	Hub Unit Bearing
513048	513048	Hub Unit Bearing
513049	513049	Hub Unit Bearing
513050	513050	Hub Unit Bearing
513059	513059	Hub Unit Bearing
513061	513061	Hub Unit Bearing
513062	513062	Hub Unit Bearing
513063	513063	Hub Unit Bearing
513070	513070	Hub Unit Bearing
513072	513072	Hub Unit Bearing
513074	513074	Hub Unit Bearing
513075	513075	Hub Unit Bearing
513076	513076	Hub Unit Bearing
513077	513077	Hub Unit Bearing
513078	513078	Hub Unit Bearing
513079	513080	Hub Unit Bearing
513080	513080	Hub Unit Bearing
513081	513081	Hub Unit Bearing
513082	513082	Hub Unit Bearing
513084	513084	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
513085	513085	Hub Unit Bearing
513087	513087	Hub Unit Bearing
513088	513088	Hub Unit Bearing
513089	513089	Hub Unit Bearing
513090	513090	Hub Unit Bearing
513091	513092	Hub Unit Bearing
513092	513092	Hub Unit Bearing
513093	513093	Bearing Module
513094	513094	Hub Unit Bearing
513095	513095	Hub Unit Bearing
513096	513096	Hub Unit Bearing
513098	513098	Bearing Module
513099	513099	Bearing Module
513100	513100	Hub Unit Bearing
513104	513104	Hub Unit Bearing
513105	513105	Hub Unit Bearing
513107	513107	Hub Unit Bearing
513109	513109	Hub Unit Bearing
513111	513111	Hub Unit Bearing
513114	513131	Hub Unit Bearing
513115	513115	Hub Unit Bearing
513117	513138	Hub Unit Bearing
513121	513121	Hub Unit Bearing
513122	513122	Hub Unit Bearing
513123	513123	Hub Unit Bearing
513124	513124	Hub Unit Bearing
513125	513125	Hub Unit Bearing
513125	HA590308	Hub Unit Bearing
513126	513126	Hub Unit Bearing
513127	513127	Hub Unit Bearing
513128	513128	Hub Unit Bearing
513129	HA590177	Hub Unit Bearing
513131	513131	Hub Unit Bearing
513132	513132	Hub Unit Bearing
513133	513133	Hub Unit Bearing
513135	513135	Bearing Module
513137	513137	Hub Unit Bearing
513138	513138	Hub Unit Bearing
513139	513139	Hub Unit Bearing
513142	513142	Hub Unit Bearing
513152	513152	Hub Unit Bearing
513153	513131	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
513155	513155	Hub Unit Bearing
513156	513156	Hub Unit Bearing
513157	513157	Hub Unit Bearing
513158	HA597449	Hub Unit Bearing
513159	HA598679	Hub Unit Bearing
513160	513160	Hub Unit Bearing
513161	BM513161	Bearing Module
513162	HA595017	Hub Unit Bearing
513163	HA593550	Hub Unit Bearing
513164	HA596467	Hub Unit Bearing
513165	HA590653	Hub Unit Bearing
513166	HA590644	Hub Unit Bearing
513167	HA590213	Hub Unit Bearing
513169	HA590224	Hub Unit Bearing
513170	HA590056K	Hub Unit Bearing
513171	HA592519	Hub Unit Bearing
513172	HA593427	Hub Unit Bearing
513173	513173	Hub Unit Bearing
513174	HA594181	Hub Unit Bearing
513175	513175	Hub Unit Bearing
513176	HA599455L	Hub Unit Bearing
513177	HA599455R	Hub Unit Bearing
513178	HA599467	Hub Unit Bearing
513179	513179	Hub Unit Bearing
513183	513094	Hub Unit Bearing
513186	513186	Hub Unit Bearing
513187	513187	Hub Unit Bearing
513188	513188	Hub Unit Bearing
513189	513189	Hub Unit Bearing
513190	513190	Hub Unit Bearing
513191	513191	Hub Unit Bearing
513192	513192	Hub Unit Bearing
513193	513193	Hub Unit Bearing
513194	513194	Hub Unit Bearing
513195	HA590241K	Hub Unit Bearing
513196	513196	Hub Unit Bearing
513197	HA590077	Hub Unit Bearing
513198	HA590078	Hub Unit Bearing
513199	HA590093	Hub Unit Bearing
513200	SP450300	Hub Unit Bearing
513201	HA590208	Hub Unit Bearing
513202	513202	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
513203	HA590085	Hub Unit Bearing
513204	HA590068	Hub Unit Bearing
513205	HA590069	Hub Unit Bearing
513206	HA590086	Hub Unit Bearing
513207	HA590033	Hub Unit Bearing
513208	HA590223	Hub Unit Bearing
513209	513209	Hub Unit Bearing
513210	513210	Hub Unit Bearing
513211	HA590097	Hub Unit Bearing
513212	HA590072	Hub Unit Bearing
513213	HA590055K	Hub Unit Bearing
513214	HA590070	Hub Unit Bearing
513215	HA590071	Hub Unit Bearing
513216	HA595894	Hub Unit Bearing
513217	HA590006	Hub Unit Bearing
513218	HA590007	Hub Unit Bearing
513219	HA590108	Hub Unit Bearing
513220	HA590118	Hub Unit Bearing
513221	HA590017	Hub Unit Bearing
513222	HA590026	Hub Unit Bearing
513223	HA590028	Hub Unit Bearing
513224	HA590030	Hub Unit Bearing
513225	HA590142	Hub Unit Bearing
513226	513226	Hub Unit Bearing
513227	BM500012	Bearing Module
513228	HA590034	Hub Unit Bearing
513229	HA590035	Hub Unit Bearing
513230	513230	Hub Unit Bearing
513231	HA590197	Hub Unit Bearing
513232	HA590024	Hub Unit Bearing
513233	HA590025	Hub Unit Bearing
513234	HA590036	Hub Unit Bearing
513235	HA590048	Hub Unit Bearing
513236	HA590157	Hub Unit Bearing
513237	HA590087	Hub Unit Bearing
513238	HA590049	Hub Unit Bearing
513239	HA590150	Hub Unit Bearing
513250	HA590115	Hub Unit Bearing
513251	HA590131	Hub Unit Bearing
513252	HA590147	Hub Unit Bearing
513253	HA590106	Hub Unit Bearing
513254	HA590162	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
513255	513255	Hub Unit Bearing
513255	HA590212	Hub Unit Bearing
513257	HA590165	Hub Unit Bearing
513258	HA590168	Hub Unit Bearing
513259	HA590186	Hub Unit Bearing
513260	HA590185	Hub Unit Bearing
513261	HA590217	Hub Unit Bearing
513262	513262	Hub Unit Bearing
513263	HA590219	Hub Unit Bearing
513264	HA590214	Hub Unit Bearing
513265	HA590064	Hub Unit Bearing
513266	513266	Hub Unit Bearing
515000	515000	Hub Unit Bearing
515001	515001	Hub Unit Bearing
515002	515002	Hub Unit Bearing
515003	SP450200	Hub Unit Bearing
515004	SP550201	Hub Unit Bearing
515005	515005	Hub Unit Bearing
515006	515006	Hub Unit Bearing
515007	HA599361	Hub Unit Bearing
515008	SP450101	Hub Unit Bearing
515009	SP450100	Hub Unit Bearing
515010	SP550200	Hub Unit Bearing
515011	HA597851	Hub Unit Bearing
515012	HA590020	Hub Unit Bearing
515013	SP450201	Hub Unit Bearing
515014	515014	Hub Unit Bearing
515015	SP580301	Hub Unit Bearing
515016	SP580300	Hub Unit Bearing
515017	515017	Hub Unit Bearing
515018	HA591339	Hub Unit Bearing
515019	SP550302	Hub Unit Bearing
515019	SP550303	Hub Unit Bearing
515019	SP550308	Hub Unit Bearing
515020	515020	Hub Unit Bearing
515021	515021	Hub Unit Bearing
515022	515022	Hub Unit Bearing
515023	SP550100	Hub Unit Bearing
515024	SP550300	Hub Unit Bearing
515024	SP550301	Hub Unit Bearing
515024	SP550307	Hub Unit Bearing
515025	515025	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
515026	515026	Hub Unit Bearing
515027	515027	Hub Unit Bearing
515028	515028	Hub Unit Bearing
515029	515029	Hub Unit Bearing
515030	515030	Hub Unit Bearing
515031	515031	Hub Unit Bearing
515032	HA599528	Hub Unit Bearing
515033	HA599406	Hub Unit Bearing
515034	SP580101	Hub Unit Bearing
515035	SP580100	Hub Unit Bearing
515036	SP500300	Hub Unit Bearing
515037	HA591339	Hub Unit Bearing
515038	HA599863	Hub Unit Bearing
515039	SP550102	Hub Unit Bearing
515040	BM500007	Bearing Module
515041	SP580303	Hub Unit Bearing
515041	SP580302	Hub Unit Bearing
515042	SP550206	Hub Unit Bearing
515043	SP550202	Hub Unit Bearing
515044	HA590307	Hub Unit Bearing
515046	SP550207	Hub Unit Bearing
515047	SP550208	Hub Unit Bearing
515048	SP580302	Hub Unit Bearing
515049	SP550101	Hub Unit Bearing
515050	SP470201	Hub Unit Bearing
515051	SP450202	Hub Unit Bearing
515052	SP450202	Hub Unit Bearing
515053	SP550305	Hub Unit Bearing
515054	SP550306	Hub Unit Bearing
515056	SP580205	Hub Unit Bearing
515057	515025	Hub Unit Bearing
515058	SP580304	Hub Unit Bearing
515059	HA590352	Hub Unit Bearing
515059	HA590227	Hub Unit Bearing
515060	HA590353	Hub Unit Bearing
515061	HA590032	Hub Unit Bearing
515062	HA590503	Hub Unit Bearing
515063	HA590203	Hub Unit Bearing
515064	SP450702	Hub Unit Bearing
515065	SP450701	Hub Unit Bearing
515066	SP500701	Hub Unit Bearing
515067	HA500601	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - FM TO TIMKEN

continued

Federal Mogul Number	Timken Number	Part Description
515068	SP580103	Hub Unit Bearing
515069	SP580102	Hub Unit Bearing
515070	HA590018	Hub Unit Bearing
515071	SP450301	Hub Unit Bearing
515072	HA500100	Hub Unit Bearing
515073	SP500100	Hub Unit Bearing
515074	HA590145	Hub Unit Bearing
515075	SP580204	Hub Unit Bearing
515076	HA590132	Hub Unit Bearing
515077	HA590425	Hub Unit Bearing
515078	HA590156	Hub Unit Bearing
515079	SP550207	Hub Unit Bearing
515080	SP550208	Hub Unit Bearing
515081	SP940200	Hub Unit Bearing
515082	SP940201	Hub Unit Bearing
515083	SP940202	Hub Unit Bearing
515084	HA590001	Hub Unit Bearing
515085	SP580307	Hub Unit Bearing
515086	SP580305	Hub Unit Bearing
515087	SP580308	Hub Unit Bearing
515087	SP580311	Hub Unit Bearing
515088	SP580311	Hub Unit Bearing
515088	SP580309	Hub Unit Bearing
515089	SP550103	Hub Unit Bearing
515090	HA590206	Hub Unit Bearing
518500	518500	Hub Unit Bearing
518501	518501	Hub Unit Bearing
518502	518502	Hub Unit Bearing
518503	518503	Hub Unit Bearing
518504	518504	Hub Unit Bearing
518505	518505	Hub Unit Bearing
518506	518506	Hub Unit Bearing
518507	518507	Hub Unit Bearing
518508	HA590303K	Hub Unit Bearing
518509	HA590302K	Hub Unit Bearing
518510	HA590263K	Hub Unit Bearing
518511	HA590181K	Hub Unit Bearing
518512	HA590182K	Hub Unit Bearing
518513	HA590155K	Hub Unit Bearing
518514	HA590156K	Hub Unit Bearing
518515	HA590286K	Hub Unit Bearing
520000	520000	Hub Unit Bearing

Federal Mogul Number	Timken Number	Part Description
520100	520100	Hub Unit Bearing
521000	HA590259K	Hub Unit Bearing
541001	SP550203	Hub Unit Bearing
541002	BM500005	Bearing Module
541003	HA500701	Hub Unit Bearing
541004	SP500702	Hub Unit Bearing
541005	HA590003	Hub Unit Bearing
541006	HA590004	Hub Unit Bearing
541007	HA590016	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

SKF Number	Timken Number	Part Description
BR930000	518500	Hub Unit Bearing
BR930001	518501	Hub Unit Bearing
BR930002	518502	Hub Unit Bearing
BR930003	513077	Hub Unit Bearing
BR930004	513076	Hub Unit Bearing
BR930007	513070	Hub Unit Bearing
BR930007	513078	Hub Unit Bearing
BR930008	513082	Hub Unit Bearing
BR930010	513033	Hub Unit Bearing
BR930012	512015	Hub Unit Bearing
BR930013	513075	Hub Unit Bearing
BR930014	513084	Hub Unit Bearing
BR930016	513003	Hub Unit Bearing
BR930017	512037	Hub Unit Bearing
BR930021K	513074	Hub Unit Bearing
BR930022K	513016K	Hub Unit Bearing
BR930023	513019	Hub Unit Bearing
BR930024	513020	Hub Unit Bearing
BR930025	513049	Hub Unit Bearing
BR930026	513018	Hub Unit Bearing
BR930026	512221	Hub Unit Bearing
BR930026	HA590074	Hub Unit Bearing
BR930027	513048	Hub Unit Bearing
BR930028K	513017K	Hub Unit Bearing
BR930029	513038	Hub Unit Bearing
BR930030	513039	Hub Unit Bearing
BR930032	513050	Hub Unit Bearing
BR930033	513035	Hub Unit Bearing
BR930034K	513004K	Hub Unit Bearing
BR930035	515002	Hub Unit Bearing
BR930037	512011	Hub Unit Bearing
BR930038	512010	Hub Unit Bearing
BR930039	513040	Hub Unit Bearing
BR930040	513107	Hub Unit Bearing
BR930043	513030	Hub Unit Bearing
BR930045	513109	Hub Unit Bearing
BR930048	513092	Hub Unit Bearing
BR930049	513041	Hub Unit Bearing
BR930050	513111	Hub Unit Bearing
BR930050	513095	Hub Unit Bearing
BR930052K	513013	Hub Unit Bearing
BR930053	512000	Hub Unit Bearing
BR930054	513128	Hub Unit Bearing
BR930055K	HA590055K	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930056K	HA590056K	Hub Unit Bearing
BR930057	HA590057	Hub Unit Bearing
BR930059	512033	Hub Unit Bearing
BR930060	513104	Hub Unit Bearing
BR930061	513059	Hub Unit Bearing
BR930064	513061	Hub Unit Bearing
BR930065	513085	Hub Unit Bearing
BR930066	512157	Hub Unit Bearing
BR930067	512156	Hub Unit Bearing
BR930068	513062	Hub Unit Bearing
BR930069	512155	Hub Unit Bearing
BR930070	512001	Hub Unit Bearing
BR930071	512179	Hub Unit Bearing
BR930072	513063	Hub Unit Bearing
BR930073	512005	Hub Unit Bearing
BR930074	512003	Hub Unit Bearing
BR930075	512237	Hub Unit Bearing
BR930075	512150	Hub Unit Bearing
BR930075	HA590092	Hub Unit Bearing
BR930076	513087	Hub Unit Bearing
BR930077	513088	Hub Unit Bearing
BR930078	512078	Hub Unit Bearing
BR930079	512144	Hub Unit Bearing
BR930080	513137	Hub Unit Bearing
BR930081	512223	Hub Unit Bearing
BR930083K	513044	Hub Unit Bearing
BR930087	513042	Hub Unit Bearing
BR930088	513009	Hub Unit Bearing
BR930089	512002	Hub Unit Bearing
BR930090	513010	Hub Unit Bearing
BR930091K	513011K	Hub Unit Bearing
BR930093	513012	Hub Unit Bearing
BR930094	515001	Hub Unit Bearing
BR930096	512004	Hub Unit Bearing
BR930097	513124	Hub Unit Bearing
BR930098	512152	Hub Unit Bearing
BR930099	513139	Hub Unit Bearing
BR930100	513127	Hub Unit Bearing
BR930101	512146	Hub Unit Bearing
BR930102	HA590102	Hub Unit Bearing
BR930103	512147	Hub Unit Bearing
BR930105	512105	Hub Unit Bearing
BR930106	512106	Hub Unit Bearing
BR930106	512164	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

continued

SKF Number	Timken Number	Part Description
BR930107	HA590038	Hub Unit Bearing
BR930107	512107	Hub Unit Bearing
BR930108	512012	Hub Unit Bearing
BR930113	513105	Hub Unit Bearing
BR930114	513131	Hub Unit Bearing
BR930115	512182	Hub Unit Bearing
BR930116	515000	Hub Unit Bearing
BR930118	512118	Hub Unit Bearing
BR930119	512119	Hub Unit Bearing
BR930120	513080	Hub Unit Bearing
BR930120	512122	Hub Unit Bearing
BR930122	512031	Hub Unit Bearing
BR930123	512008	Hub Unit Bearing
BR930124	513081	Hub Unit Bearing
BR930126	512032	Hub Unit Bearing
BR930127	512034	Hub Unit Bearing
BR930128	513034	Hub Unit Bearing
BR930129	512020	Hub Unit Bearing
BR930130	512016	Hub Unit Bearing
BR930134	512025	Hub Unit Bearing
BR930136	512172	Hub Unit Bearing
BR930138	513138	Hub Unit Bearing
BR930143	513152	Hub Unit Bearing
BR930144	HA593427	Hub Unit Bearing
BR930144	HA593247	Hub Unit Bearing
BR930145	512151	Hub Unit Bearing
BR930148	513187	Hub Unit Bearing
BR930150	512024	Hub Unit Bearing
BR930151K	520000	Hub Unit Bearing
BR930152K	520100	Hub Unit Bearing
BR930153K	518503	Hub Unit Bearing
BR930154K	518504	Hub Unit Bearing
BR930155K	HA590155K	Hub Unit Bearing
BR930156K	HA590156K	Hub Unit Bearing
BR930159	512180	Hub Unit Bearing
BR930160	HA590160	Hub Unit Bearing
BR930161	513125	Hub Unit Bearing
BR930162	513096	Hub Unit Bearing
BR930163	513094	Hub Unit Bearing
BR930164	HA592519	Hub Unit Bearing
BR930165	512200	Hub Unit Bearing
BR930166K	518505	Hub Unit Bearing
BR930167	512176	Hub Unit Bearing
BR930168	513202	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930169	HA596467	Hub Unit Bearing
BR930170	512039	Hub Unit Bearing
BR930171	512181	Bearing Module
BR930172	512136	Bearing Module
BR930172	HA590306	Hub Unit Bearing
BR930173	512167	Hub Unit Bearing
BR930174	512120	Hub Unit Bearing
BR930175	512027	Hub Unit Bearing
BR930175	512165	Hub Unit Bearing
BR930176	512133	Hub Unit Bearing
BR930178	512124	Hub Unit Bearing
BR930179	513100	Hub Unit Bearing
BR930180	512028	Hub Unit Bearing
BR930181K	HA590181K	Hub Unit Bearing
BR930182K	HA590182K	Hub Unit Bearing
BR930183	512242	Hub Unit Bearing
BR930183	512022	Hub Unit Bearing
BR930184	HA590085	Hub Unit Bearing
BR930184	513160	Hub Unit Bearing
BR930185	512123	Hub Unit Bearing
BR930186	513090	Hub Unit Bearing
BR930188	512030	Hub Unit Bearing
BR930189	512029	Hub Unit Bearing
BR930190K	513089	Hub Unit Bearing
BR930191	512006	Hub Unit Bearing
BR930192	513072	Hub Unit Bearing
BR930193	512125	Hub Unit Bearing
BR930194	512154	Hub Unit Bearing
BR930195	512021	Hub Unit Bearing
BR930196	512023	Hub Unit Bearing
BR930197	HA590197	Hub Unit Bearing
BR930198	512153	Hub Unit Bearing
BR930199	512220	Hub Unit Bearing
BR930200K	518506	Hub Unit Bearing
BR930202	512137	Bearing Module
BR930203	HA590203	Hub Unit Bearing
BR930204	SP450101	Hub Unit Bearing
BR930205	SP450100	Hub Unit Bearing
BR930206	512013	Hub Unit Bearing
BR930207	HA599361	Hub Unit Bearing
BR930208	SP550201	Hub Unit Bearing
BR930209	SP550308	Hub Unit Bearing
BR930209	SP550303	Hub Unit Bearing
BR930209	SP550302	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

continued

SKF Number	Timken Number	Part Description
BR930210	512235	Hub Unit Bearing
BR930212	512036	Hub Unit Bearing
BR930213	HA590213	Hub Unit Bearing
BR930214	513157	Hub Unit Bearing
BR930215	513123	Hub Unit Bearing
BR930216	513122	Hub Unit Bearing
BR930218	515017	Hub Unit Bearing
BR930219	HA597449	Hub Unit Bearing
BR930220	513135	Bearing Module
BR930222	512162	Hub Unit Bearing
BR930223	512149	Hub Unit Bearing
BR930224	HA599455L	Hub Unit Bearing
BR930225	HA599455R	Hub Unit Bearing
BR930226	513126	Hub Unit Bearing
BR930227	512145	Hub Unit Bearing
BR930228	512232	Hub Unit Bearing
BR930229	512121	Hub Unit Bearing
BR930230	512168	Hub Unit Bearing
BR930231	512171	Hub Unit Bearing
BR930232	HA596030	Hub Unit Bearing
BR930233	512186	Hub Unit Bearing
BR930234	512177	Hub Unit Bearing
BR930235	512173	Hub Unit Bearing
BR930236	515031	Hub Unit Bearing
BR930237	513155	Hub Unit Bearing
BR930238	512158	Hub Unit Bearing
BR930240	HA590240	Hub Unit Bearing
BR930241K	HA590241K	Hub Unit Bearing
BR930242	HA597957	Hub Unit Bearing
BR930243	512161	Hub Unit Bearing
BR930245	HA595894	Hub Unit Bearing
BR930246	513156	Hub Unit Bearing
BR930247K	HA594460K	Hub Unit Bearing
BR930248	HA590248	Hub Unit Bearing
BR930249	HA594181	Hub Unit Bearing
BR930250	513115	Hub Unit Bearing
BR930252	SP450200	Hub Unit Bearing
BR930253	512191	Hub Unit Bearing
BR930254	512174	Hub Unit Bearing
BR930255	512175	Hub Unit Bearing
BR930256	515006	Hub Unit Bearing
BR930257	HA590257	Hub Unit Bearing
BR930258	512040	Hub Unit Bearing
BR930259K	HA590259K	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930260	512195	Hub Unit Bearing
BR930261	513142	Hub Unit Bearing
BR930262	HA590188	Hub Unit Bearing
BR930263K	HA590263K	Hub Unit Bearing
BR930265	515005	Hub Unit Bearing
BR930266	HA592450	Hub Unit Bearing
BR930267	HA592460	Hub Unit Bearing
BR930268	512185	Hub Unit Bearing
BR930269	513175	Hub Unit Bearing
BR930271	512148	Hub Unit Bearing
BR930272	513131	Hub Unit Bearing
BR930273	512160	Hub Unit Bearing
BR930275	512026	Hub Unit Bearing
BR930276	512178	Hub Unit Bearing
BR930277	513194	Hub Unit Bearing
BR930278	512169	Hub Unit Bearing
BR930279	512170	Hub Unit Bearing
BR930280	512193	Hub Unit Bearing
BR930281	512192	Hub Unit Bearing
BR930282	512190	Hub Unit Bearing
BR930283	512191	Hub Unit Bearing
BR930284	HA500100	Hub Unit Bearing
BR930285	SP500100	Hub Unit Bearing
BR930286	HA590286K	Hub Unit Bearing
BR930287	512189	Hub Unit Bearing
BR930288	512194	Hub Unit Bearing
BR930289	513209	Hub Unit Bearing
BR930290	512187	Hub Unit Bearing
BR930291	HA595017	Hub Unit Bearing
BR930292	HA594301	Hub Unit Bearing
BR930293	HA593550	Hub Unit Bearing
BR930294	HA591050	Hub Unit Bearing
BR930295	HA590201	Hub Unit Bearing
BR930296	HA594504	Hub Unit Bearing
BR930298	513186	Hub Unit Bearing
BR930298	512222	Hub Unit Bearing
BR930299	512239	Hub Unit Bearing
BR930300K	518507	Hub Unit Bearing
BR930301K	HA590301K	Hub Unit Bearing
BR930302K	HA590302K	Hub Unit Bearing
BR930303K	HA590303K	Hub Unit Bearing
BR930304	SP500300	Hub Unit Bearing
BR930305	SP550102	Hub Unit Bearing
BR930306	513196	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

continued

SKF Number	Timken Number	Part Description
BR930307	HA590307	Hub Unit Bearing
BR930308	513193	Hub Unit Bearing
BR930309	512216	Hub Unit Bearing
BR930310	512215	Hub Unit Bearing
BR930311	512238	Hub Unit Bearing
BR930312	512236	Hub Unit Bearing
BR930313	HA590077	Hub Unit Bearing
BR930314	HA590071	Hub Unit Bearing
BR930315	HA590069	Hub Unit Bearing
BR930316	HA590068	Hub Unit Bearing
BR930317	HA590070	Hub Unit Bearing
BR930318	SP550200	Hub Unit Bearing
BR930319	BM500003	Bearing Module
BR930320	512267	Hub Unit Bearing
BR930321	512265	Hub Unit Bearing
BR930323	513190	Hub Unit Bearing
BR930324	HA590040	Hub Unit Bearing
BR930324	512217	Hub Unit Bearing
BR930325	HA599467	Hub Unit Bearing
BR930326	513189	Hub Unit Bearing
BR930327	512229	Hub Unit Bearing
BR930328	512230	Hub Unit Bearing
BR930329	512218	Hub Unit Bearing
BR930334	HA590184	Hub Unit Bearing
BR930335	HA598679	Hub Unit Bearing
BR930336	512018	Hub Unit Bearing
BR930337	512019	Hub Unit Bearing
BR930338	HA590338	Hub Unit Bearing
BR930339	512041	Hub Unit Bearing
BR930339	HA591080	Hub Unit Bearing
BR930340	HA590152	Hub Unit Bearing
BR930341	515026	Hub Unit Bearing
BR930342	515027	Hub Unit Bearing
BR930343	SP450201	Hub Unit Bearing
BR930344	515014	Hub Unit Bearing
BR930346	SP550300	Hub Unit Bearing
BR930346	SP550307	Hub Unit Bearing
BR930346	SP550301	Hub Unit Bearing
BR930347	HA590010	Hub Unit Bearing
BR930349	HA590308	Hub Unit Bearing
BR930350	513132	Hub Unit Bearing
BR930352	HA590352	Hub Unit Bearing
BR930353	HA590353	Hub Unit Bearing
BR930354	513133	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930355	HA590208	Hub Unit Bearing
BR930356	HA590209	Hub Unit Bearing
BR930357	HA592410	Hub Unit Bearing
BR930358	HA594245	Hub Unit Bearing
BR930359	HA590030	Hub Unit Bearing
BR930360	HA599406	Hub Unit Bearing
BR930361	HA599528	Hub Unit Bearing
BR930362	512202	Hub Unit Bearing
BR930362	512201	Hub Unit Bearing
BR930364	HA590067	Hub Unit Bearing
BR930365	HA590066	Hub Unit Bearing
BR930366	512163	Hub Unit Bearing
BR930367	512196	Hub Unit Bearing
BR930368	HA590082	Hub Unit Bearing
BR930369	HA590081	Hub Unit Bearing
BR930370	HA590370	Hub Unit Bearing
BR930371	HA590371	Hub Unit Bearing
BR930372	HA590007	Hub Unit Bearing
BR930373	HA590006	Hub Unit Bearing
BR930374	513226	Hub Unit Bearing
BR930375	HA590161	Hub Unit Bearing
BR930376	HA592461	Hub Unit Bearing
BR930377	HA592451	Hub Unit Bearing
BR930378	512197	Hub Unit Bearing
BR930379	HA590110	Hub Unit Bearing
BR930380	HA590008	Hub Unit Bearing
BR930381	HA590009	Hub Unit Bearing
BR930382	HA590005	Hub Unit Bearing
BR930383	512188	Hub Unit Bearing
BR930384	HA590290	Hub Unit Bearing
BR930386	512270	Hub Unit Bearing
BR930388	513173	Hub Unit Bearing
BR930389	HA590218	Hub Unit Bearing
BR930390	HA590644	Hub Unit Bearing
BR930391	HA590653	Hub Unit Bearing
BR930392	HA590389	Hub Unit Bearing
BR930394	513192	Hub Unit Bearing
BR930395	513191	Hub Unit Bearing
BR930396	513210	Hub Unit Bearing
BR930397	513188	Hub Unit Bearing
BR930398	512198	Hub Unit Bearing
BR930399	512199	Hub Unit Bearing
BR930400	HA597851	Hub Unit Bearing
BR930401	512295	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

continued

SKF Number	Timken Number	Part Description
BR930402	512294	Hub Unit Bearing
BR930403	HA590111	Hub Unit Bearing
BR930403	512203	Hub Unit Bearing
BR930404	SP580303	Hub Unit Bearing
BR930405	HA590020	Hub Unit Bearing
BR930406	HA591339	Hub Unit Bearing
BR930407	SP580101	Hub Unit Bearing
BR930408	SP580100	Hub Unit Bearing
BR930409	HA599863	Hub Unit Bearing
BR930410	SP550100	Hub Unit Bearing
BR930411	HA590100	Hub Unit Bearing
BR930412	HA590095	Hub Unit Bearing
BR930413	HA590108	Hub Unit Bearing
BR930413	HA590177	Hub Unit Bearing
BR930414	HA590120	Hub Unit Bearing
BR930415	SP550101	Hub Unit Bearing
BR930416	SP580304	Hub Unit Bearing
BR930417	SP550305	Hub Unit Bearing
BR930417	SP450301	Hub Unit Bearing
BR930418	515022	Hub Unit Bearing
BR930419	515030	Hub Unit Bearing
BR930420	515020	Hub Unit Bearing
BR930421	515025	Hub Unit Bearing
BR930422	515028	Hub Unit Bearing
BR930423	515029	Hub Unit Bearing
BR930424	515021	Hub Unit Bearing
BR930425	HA590425	Hub Unit Bearing
BR930426	SP580204	Hub Unit Bearing
BR930427	HA590132	Hub Unit Bearing
BR930428	HA590233	Hub Unit Bearing
BR930430	HA590080	Hub Unit Bearing
BR930431	HA590143	Hub Unit Bearing
BR930432	HA590144	Hub Unit Bearing
BR930434	HA592210	Bearing Module
BR930435	HA590024	Hub Unit Bearing
BR930436	512184	Hub Unit Bearing
BR930437	512280	Hub Unit Bearing
BR930438	SP580205	Hub Unit Bearing
BR930439	HA590104	Hub Unit Bearing
BR930440	HA590101	Hub Unit Bearing
BR930441	HA590145	Hub Unit Bearing
BR930444	512166	Bearing Module
BR930445	512231	Hub Unit Bearing
BR930446	HA590031	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930447	HA590142	Hub Unit Bearing
BR930448	HA590029	Hub Unit Bearing
BR930449	512299	Hub Unit Bearing
BR930450	HA590028	Hub Unit Bearing
BR930451	HA590018	Hub Unit Bearing
BR930452	SP450202	Hub Unit Bearing
BR930453	SP550202	Hub Unit Bearing
BR930456	SP470201	Hub Unit Bearing
BR930457	SP550206	Hub Unit Bearing
BR930459	SP550208	Hub Unit Bearing
BR930461	HA590141	Hub Unit Bearing
BR930463	HA590109	Hub Unit Bearing
BR930464	HA590131	Hub Unit Bearing
BR930465	HA590025	Hub Unit Bearing
BR930466	HA590115	Hub Unit Bearing
BR930467	HA590113	Hub Unit Bearing
BR930469	HA590112	Hub Unit Bearing
BR930470	513188	Hub Unit Bearing
BR930471	HA590149	Hub Unit Bearing
BR930472	HA590048	Hub Unit Bearing
BR930473	HA590118	Hub Unit Bearing
BR930474	HA590119	Hub Unit Bearing
BR930475	SP550103	Hub Unit Bearing
BR930476	HA590000	Hub Unit Bearing
BR930479	512266	Hub Unit Bearing
BR930488	HA590088	Hub Unit Bearing
BR930489	HA590021	Hub Unit Bearing
BR930490	HA590021	Hub Unit Bearing
BR930490	HA590022	Hub Unit Bearing
BR930491	SP580103	Hub Unit Bearing
BR930492	SP580102	Hub Unit Bearing
BR930493	HA590017	Hub Unit Bearing
BR930494	HA590026	Hub Unit Bearing
BR930497	SP450300	Hub Unit Bearing
BR930498	HA590129	Hub Unit Bearing
BR930499	HA590128	Hub Unit Bearing
BR930500	512251	Hub Unit Bearing
BR930502	HA590032	Hub Unit Bearing
BR930503	HA590503	Hub Unit Bearing
BR930504	HA590223	Hub Unit Bearing
BR930505	HA590232	Hub Unit Bearing
BR930506	513230	Hub Unit Bearing
BR930507	HA590166	Hub Unit Bearing
BR930508	HA590273	Hub Unit Bearing

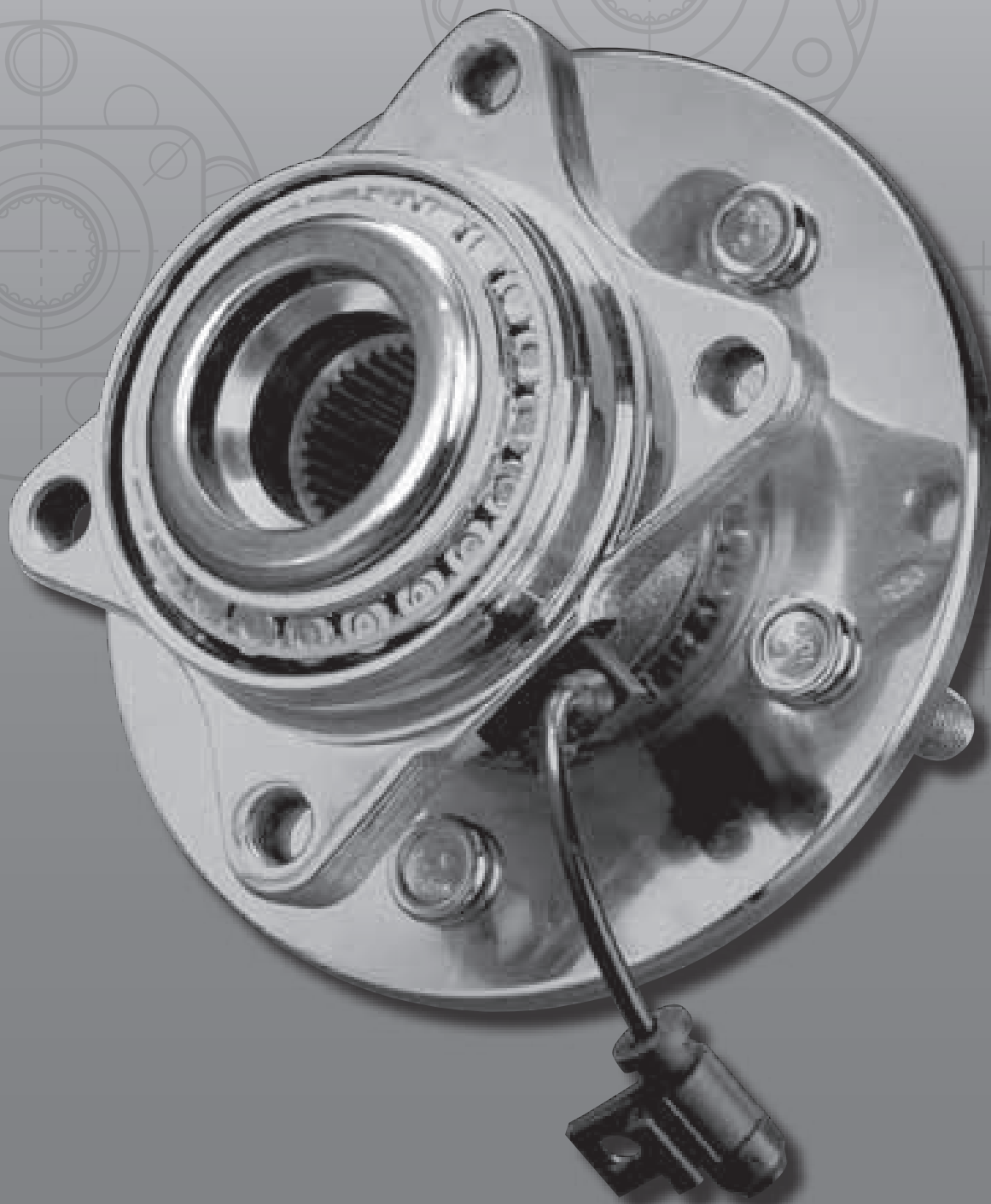
HUB UNIT BEARING / BEARING MODULE - CROSS REFERENCE - SKF TO TIMKEN

continued

SKF Number	Timken Number	Part Description
BR930512	512159	Hub Unit Bearing
BR930513	HA590033	Hub Unit Bearing
BR930514	HA590035	Hub Unit Bearing
BR930515	HA590034	Hub Unit Bearing
BR930522	HA590174	Hub Unit Bearing
BR930523	HA590244	Hub Unit Bearing
BR930532	HA590227	Hub Unit Bearing
BR930548K	HA590093	Hub Unit Bearing
BR930548K	513179	Hub Unit Bearing
BR930548K	513121	Hub Unit Bearing
BR930600K	HA590600K	Hub Unit Bearing
BR930604	HA500601	Hub Unit Bearing
BR930605	HA500701	Hub Unit Bearing
BR930609	HA590216	Hub Unit Bearing
BR930611	HA590001	Hub Unit Bearing
BR930613	512323	Hub Unit Bearing
BR930620	512255	Hub Unit Bearing
BR930622	513262	Hub Unit Bearing
BR930623	HA590159	Hub Unit Bearing
BR930625	SP500702	Hub Unit Bearing
BR930627	HA590157	Hub Unit Bearing
BR930629	512322	Hub Unit Bearing
BR930633	HA590103	Hub Unit Bearing
BR930634	HA590036	Hub Unit Bearing
BR930635	SP550203	Hub Unit Bearing
BR930636	HA590183	Hub Unit Bearing
BR930637	SP500701	Hub Unit Bearing
BR930638	SP450702	Hub Unit Bearing
BR930640	HA590136	Hub Unit Bearing
BR930641	HA590064	Hub Unit Bearing
BR930642	HA590186	Hub Unit Bearing
BR930643	HA590185	Hub Unit Bearing
BR930644	HA590217	Hub Unit Bearing
BR930645	HA590274	Hub Unit Bearing
BR930646	512326	Hub Unit Bearing
BR930647	HA590052	Hub Unit Bearing
BR930648	HA590221	Hub Unit Bearing
BR930649	HA590230	Hub Unit Bearing
BR930650	HA590204	Hub Unit Bearing
BR930652	512340	Hub Unit Bearing
BR930653	HA590179	Hub Unit Bearing
BR930655	HA590250	Hub Unit Bearing
BR930656	HA590251	Hub Unit Bearing
BR930657	HA590045	Hub Unit Bearing

SKF Number	Timken Number	Part Description
BR930659	SP450702	Hub Unit Bearing
BR930664	HA590279	Hub Unit Bearing
BR930671	SP550309	Hub Unit Bearing
BR930675	HA590212	Hub Unit Bearing
BR930678	HA590150	Hub Unit Bearing
BR930679	HA590027	Hub Unit Bearing
BR930683	HA590276	Hub Unit Bearing
FW142	513093	Bearing Module
FW156	513098	Bearing Module
FW158	513099	Bearing Module
FW179	512305	Bearing Module
FW182	513135	Bearing Module
FW184	510038	Bearing Module
FW194	BM500007	Bearing Module
FW195	BM513161	Bearing Module
FWB29	513077	Hub Unit Bearing
GRW100	512038	Bearing Module
GRW160	512014	Bearing Module
GRW168	512009	Bearing Module
GRW176	512181	Bearing Module
GRW219	512234	Hub Unit Bearing
GRW233	511012	Bearing Module
GRW241	512183	Bearing Module
GRW270	HA590050	Bearing Module
GRW271	HA594246	Bearing Module
GRW272	BM500004	Bearing Module
GRW273	BM500005	Bearing Module
GRW309	511011	Bearing Module
GRW310	511010	Bearing Module
GRW311	511011	Bearing Module
GRW494	BM500010	Bearing Module
GRW495	512225	Hub Unit Bearing

HUB UNIT BEARING / BEARING MODULE - BUYER'S GUIDE



POPULARITY (POP) CODE DEFINITIONS

Code	Description	Code	Description	Code	Description
A	Fast	FW	Fleet Warehouse	TA	Tractor Fast
B	Good	IA	Import Fast	TB	Tractor Good
C	Medium	IB	Import Good	TC	Tractor Medium
D	Fair	IC	Import Medium	TD	Tractor Fair
F	Fleet	ID	Import Fair	TN	Tractor New
FA	Fleet Fast	IW	Import Warehouse	TW	Tractor Warehouse
FB	Fleet Good	N	New*	W	Warehouse
FC	Fleet Medium	O	Obsolete*	Z	Non-Cancellable, Non-Returnable*
FD	Fleet Fair	S	Superseded		

* Check for Availability

ABBREVIATIONS USED TO INDICATE CAR AND TRUCK MANUFACTURERS

ACU Car:	Acura Car AWD/FWD	BUI SUV:	Buick SUV AWD/FWD/RWD	DEL:	Delorean RWD
ACU SUV:	Acura SUV AWD/FWD	CAD Car FD:	Cadillac Car FWD	DES:	Desoto RWD
ALF Car:	Alfa Romeo Car RWD	CAD Car RD:	Cadillac Car AWD/RWD	DOD Car FD:	Dodge Car AWD/FWD
AMC Car:	American Motors-Eagle Car RWD	CAD TK:	Cadillac SUV, Truck AWD/RWD	DOD Car RD:	Dodge Car AWD/RWD
AST Car:	Aston Martin Car RWD	CHK Car:	Checker Car RWD	DOD IM Car:	Dodge Import Car AWD/FWD/RWD
AUD Car:	Audi Car AWD/FWD/RWD	CHE Car FD:	Chevy Car FWD	DOD MVan:	Dodge Minivan AWD/FWD
AUD SUV:	Audi SUV AWD/FWD	CHE Car RD:	Chevy Car RWD	DOD LT:	Dodge Lt Truck, SUV 4WD/RWD
AUS Car:	Austin Car RWD	CHE IM Car:	Chevy Import Car FWD	DOD CUV:	Dodge CUV AWD/FWD
AUH Car:	Austin Healey Car RWD	CHE IM SUV:	Chevy Import SUV 4WD/RWD	DOD TK 1/2:	Dodge Truck 1/2 Ton 4WD/RWD
AVA Car:	Avanti II Car RWD	CHE LT:	Chevy Lt Truck 4WD/AWD/FWD/RWD	DOD TK 3/4:	Dodge Truck 3/4 Ton 4WD/RWD
BEN Car:	Bentley Car RWD	CHE TK 1/2:	Chevy Truck 1/2 Ton 4WD/AWD/RWD	DOD TK 1:	Dodge Truck 1 Ton 4WD/RWD
MIN Car:	Mini Cooper Car FWD	CHE TK 3/4:	Chevy Truck 3/4 Ton 4WD/RWD	DOD TK 1+:	Dodge Truck 1 1/2 - 2 1/2 Ton 4WD/RWD
BMW1 Car:	BMW 1 & 2 Series Car RWD	CHE TK 1:	Chevy Truck 1Ton 4WD/RWD	EAG:	Eagle 4WD/AWD/FWD
BMW3 Car:	BMW 3 Series Car AWD/RWD	CHE TK 1+:	Chev Truck 1 1/2 - 2 1/2 Ton 4WD/RWD	FER:	Ferrari RWD
BMW4 Car:	BMW 4 Series Car RWD	CHR Car FD:	Chrysler Car AWD/FWD	FIA:	Fiat FWD/RWD
BMW5 Car:	BMW 5 Series Car AWD/RWD	CHR Car RD:	Chrysler Car AWD/RWD	FOR Car FD:	Ford Car FWD
BMW6 Car:	BMW 6 Series Car AWD/RWD	CHR IM Car:	Chrysler Import Car FWD	FOR Car AD:	Ford Car AWD
BMW7 Car:	BMW 7 Series Car RWD	CHR CUV:	Chrysler CUV AWD/FWD	FOR Car RD:	Ford Car RWD
BMW8 Car:	BMW 8 Series Car RWD	CHR MVan:	Chrysler Minivan AWD/FWD	FOR ANT:	Ford Antique RWD
BMW SUV:	BMW SUV AWD	DAE Car:	Daewoo Car FWD	FOR IM Car:	Ford Import Car FWD
BUI Car FD:	Buick Car FWD	DAI Car:	Daihatsu Car FWD	FOR LT:	Ford Lt Truck, Lt SUV 4WD/AWD/FWD/RWD
BUI Car RD:	Buick Car RWD	DAI SUV:	Daihatsu SUV 4WD	FOR MVan:	Ford Minivan FWD
BUI MVan:	Buick Minivan AWD/FWD				

FOR FSUV:	Ford Full Size SUV 4WD/RWD	LOT:	Lotus RWD	PON Car RD:	Pontiac Car RWD
FOR TK 1/2:	Ford Truck 1/2 Ton 4WD/RWD	MAS:	Maserati RWD	PON IM:	Pontiac Import FWD
FOR TK 3/4:	Ford Truck 3/4 Ton 4WD/RWD	MAZ Car FD:	Mazda Car FWD	PON SUV:	Pontiac SUV AWD/FWD
FOR TK 1:	Ford Truck 1 Ton 4WD/RWD	MAZ Car RD:	Mazda Car RWD	PON MVan:	Pontiac Minivan AWD/FWD
FOR TK 1+:	Ford Truck 1 1/2 - 2 1/2 Ton 4WD/RWD	MAZ TK:	Mazda SUV, Truck 4WD/AWD/RWD	POR:	Porsche Car AWD/RWD
GEO Car:	Geo Cars FWD	MER Car:	Mercedes Benz Car AWD/RWD	POR SUV:	Porsche SUV AWD
GEO TK:	Geo SUV, 4WD/RWD	MER SUV:	Mercedes Benz SUV 4WD/AWD	REL:	Reliant RWD
GMC TK:	GMC Truck 1 1/2 - 2 1/2 Ton 4WD/RWD	MRC Car FD:	Mercury Car FWD	REN:	Renault FWD
GRU:	Grumman RWD	MRC Car AD:	Mercury Car AWD	ROL:	Rolls Royce RWD
HEN:	Henry J	MRC Car RD:	Mercury Car RWD	ROV SUV:	Rover SUV 4WD/AWD
HON Car:	Honda Car 4WD/FWD/RWD	MRC SUV:	Mercury SUV 4WD/AWD/RWD	SAA:	Saab AWD/FWD
HON TK:	Honda Truck, Minivan, SUV 4WD/AWD/FWD/RWD	MRC Mvan:	Mercury Minivan FWD	SAT Car:	Saturn Car FWD/RWD
HUD:	Hudson RWD	MRK:	Merkur RWD	SAT SUV:	Saturn SUV AWD/FWD
HUM:	Hummer 4WD/RWD	MET:	Metropolitan RWD	SCI:	Scion FWD
HYU Car FD:	Hyundai Car FWD	MG:	M.G. RWD	SIM:	Simca RWD
HYU Car RD:	Hyundai Car RWD	MIT Car FD:	Mitsubishi Car AWD/FWD	STU Car:	Studebaker Car RWD
HYU TK:	Hyundai Truck, Minivan, SUV 4WD/AWD/FWD/RWD	MIT Car RD:	Mitsubishi Car RWD	STU TK:	Studebaker Truck RWD
INF Car FD:	Infiniti Car FWD	MIT TK:	Mitsubishi Minivan, SUV, Truck AWD/FWD	SUB Car AD:	Subaru Car 4WD/AWD/FWD
INF Car RD:	Infiniti Car RWD/AWD	MOR:	Morgan RWD	SUB TK AD:	Subaru Truck 4WD/AWD
INF SUV:	Infiniti SUV 4WD/AWD/RWD	MRR:	Morris RWD	SUN:	Sunbeam RWD
INT SUV:	International SUV 4WD/RWD	NAS:	Nash RWD	SUZ Car:	Suzuki Car AWD/FWD
INT TK:	International Truck 4WD/RWD	NIS Car FD:	Nissan Car 4WD/AWD/FWD	SUZ SUV:	Suzuki SUV 4WD/AWD/FWD/RWD
ISU Car FD:	Isuzu Car FWD	NIS Car RD:	Nissan Car RWD	TOY Car FD:	Toyota Car AWD/FWD
ISU Car RD:	Isuzu Car RWD	NIS TK:	Nissan CUV, Minivan, SUV AWD/FWD	TOY Car RD:	Toyota Car RWD
ISU TK:	Isuzu Truck, Minivan, SUV 4WD/FWD/RWD	NIS TK PU:	Nissan Truck 4WD/RWD	TOY TK:	Toyota Minivan, SUV, Truck 4WD/AWD/FWD/RWD
JAG:	Jaguar AWD/RWD	OLD Car FD:	Oldsmobile Car FWD/RWD	TRI:	Triumph RWD
JEE:	Jeep 4WD/RWD	OLD Car RD:	Oldsmobile Car RWD	VKS Car:	Volkswagen Car 4WD/AWD/FWD/RWD
KIA Car:	Kia Car FWD	OLD TK:	Oldsmobile Minivan, SUV 4WD/AWD/FWD	VKS SUV:	Volkswagen SUV AWD
KIA SUV:	Kia SUV 4WD/RWD	PAC:	Packard RWD	VLV:	Volvo AWD/FWD/RWD
LAM:	Lamborghini RWD	PEU:	Peugeot FWD/RWD	VLV SUV:	Volvo SUV AWD/FWD
LAN:	Lancia FWD/RWD	PLY Car FD:	Plymouth Car FWD	YUG:	Yugo FWD
LEX Car FD:	Lexus Car FWD	PLY Car RD:	Plymouth Car RWD		
LEX Car RD:	Lexus Car RWD	PLY IM:	Plymouth Import		
LEX SUV:	Lexus SUV 4WD/FWD	PLY MVan:	Plymouth Minivan AWD/FWD		
LIN Car FD:	Lincoln Car FWD	PLY TK:	Plymouth Truck 1 1/2 - 1 Ton 4WD/RWD		
LIN Car RD:	Lincoln Car RWD	PON Car FD:	Pontiac Car FWD		
LIN TK:	Lincoln Truck 4WD/AWD/RWD	PON Car AD:	Pontiac Car AWD/FWD		

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
SP450100			1	FRONT WHEEL-4WD DOD LT (1997-04)
SP450101			1	FRONT WHEEL-4WD DOD LT (1997-04)
SP450200			2	FRONT WHEEL-4WD FOR LT (1995-02), MRC SUV (1997-01), FRONT WHEEL-AWD MRC SUV (1997-01)
SP450201			2	FRONT WHEEL-4WD FOR LT (2000-02), MAZ TK (2000-02)
SP450202			2	FRONT WHEEL-4WD FOR LT (2003-08), MAZ TK (2003-09)
SP450300			2	FRONT WHEEL-RWD CHE LT (1998-05)
SP450301			2	FRONT WHEEL-RWD CAD TK (2002-05), CHE TK1/2 (1999-07), CHE TK3/4 (2003-05)
SP450303		N	2	FRONT WHEEL-RWD CAD TK (2007-08), CHE TK1/2 (2007-08)
SP450701			2	FRONT WHEEL-4WD NIS TK PU (2005-08)
SP450702			2	FRONT WHEEL-RWD NIS TK PU (2005-08)
SP470200		N	2	FRONT WHEEL-RWD FOR LT (2002-05), FRONT WHEEL-4WD FOR LT (2002-05), FRONT WHEEL-AWD LIN TK (2003-05), FRONT WHEEL-RWD MRC SUV (2002-05), FRONT WHEEL-4WD MRC SUV (2002-05), FRONT WHEEL-AWD MRC SUV (2002-05)
SP470201			2	FRONT WHEEL-RWD FOR LT (2002-05), FRONT WHEEL-4WD FOR LT (2002-05), FRONT WHEEL-AWD LIN TK (2003-05), FRONT WHEEL-RWD MRC SUV (2002-05), FRONT WHEEL-4WD MRC SUV (2002-05), FRONT WHEEL-AWD MRC SUV (2002-05)
BM500000			2	REAR WHEEL-FWD HON TK (2003-05), REAR WHEEL-4WD HON TK (2003-05)
BM500001		N	2	REAR WHEEL-RWD BMW6 Car (2006-07)
BM500002			2	REAR WHEEL-FWD HON TK (2003-03), REAR WHEEL-4WD HON TK (2003-03)
BM500003			2	REAR WHEEL-FWD HON TK (2004-08), REAR WHEEL-4WD HON TK (2004-08)
BM500004			2	REAR WHEEL-RWD INF Car RD (2002-06)
BM500005		N	2	REAR WHEEL-RWD INF SUV (2003-08), REAR WHEEL-AWD INF SUV (2003-08)
BM500006			2	REAR WHEEL-RWD INF Car RD (2003-07), NIS Car RD (2003-06), REAR WHEEL-AWD INF Car RD (2004-07)
BM500007			2	FRONT WHEEL-RWD TOY TK (2003-09), FRONT WHEEL-4WD TOY TK (2003-09), LEX SUV (2003-08)
BM500009		N	2	FRONT WHEEL-RWD TOY TK (2005-06), FRONT WHEEL-4WD TOY TK (2005-06)
BM500010			2	REAR WHEEL-RWD BMW5 Car (2006-08), BMW6 Car (2004-07), BMW7 Car (2002-08), REAR WHEEL-AWD BMW5 Car (2006-09), BMW SUV (2000-09)
BM500012		N	2	FRONT WHEEL-AWD AUD Car (2002-09), REAR WHEEL-FWD AUD Car (2006-06), REAR WHEEL-AWD AUD Car (2004-09), FRONT WHEEL-4WD VKS Car (2004-06), REAR WHEEL-4WD VKS Car (2004-06)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
BM500013		N	2	FRONT WHEEL-AWD INF Car RD (2004-06)
BM500014		N	1	REAR WHEEL-FWD HON TK (2006-08), REAR WHEEL-4WD HON TK (2006-08)
BM500015		N	1	REAR WHEEL-RWD TOY TK (2007-08), REAR WHEEL-4WD TOY TK (2007-08)
BM500016		N	1	REAR WHEEL-RWD TOY TK (2007-08), REAR WHEEL-4WD TOY TK (2007-08)
BM500017		N	2	FRONT WHEEL-RWD TOY TK (2007-08), FRONT WHEEL-4WD TOY TK (2007-08)
BM500018		N	2	FRONT WHEEL-4WD TOY TK (2008-08), LEX SUV (2008-08)
BM500019		N	2	REAR WHEEL-RWD TOY TK (2008-08), REAR WHEEL-4WD TOY TK (2008-08)
BM500022		N	2	REAR WHEEL-RWD NIS TK PU (2005-08)
BM500029		N	1	REAR WHEEL-4WD TOY TK (2008-08)
BM500030		N	1	REAR WHEEL-4WD TOY TK (2008-08)
HA500100			1	FRONT WHEEL-RWD DOD TK1/2 (2002-08), FRONT WHEEL-4WD DOD TK1/2 (2002-08)
SP500100			2	FRONT WHEEL-RWD DOD TK1/2 (2002-08), FRONT WHEEL-4WD DOD TK1/2 (2002-08)
SP500101			2	FRONT WHEEL-RWD DOD TK1/2 (2002-08), FRONT WHEEL-4WD DOD TK1/2 (2006-08)
SP500300		N	2	FRONT WHEEL-RWD CAD TK (2006-06), FRONT WHEEL-4WD CAD TK (2002-06), CHE TK1/2 (1999-08), FRONT WHEEL-AWD CAD TK (2002-06), CHE TK1/2 (2001-09), REAR WHEEL-AWD CHE TK1/2 (1999-06)
SP500301		N	2	FRONT WHEEL-4WD CHE TK1/2 (2007-08), FRONT WHEEL-AWD CAD TK (2007-09), CHE TK1/2 (2007-07)
HA500601			2	FRONT WHEEL-4WD ROV SUV (2005-07)
HA500701			2	REAR WHEEL-RWD NIS TK PU (2005-08)
SP500701			2	FRONT WHEEL-RWD NIS TK PU (2004-08), FRONT WHEEL-4WD NIS TK PU (2004-07), FRONT WHEEL-RWD INF SUV (2004-07), FRONT WHEEL-4WD INF SUV (2004-07)
SP500702			2	REAR WHEEL-RWD NIS TK PU (2004-08), INF SUV (2004-08), REAR WHEEL-4WD INF SUV (2004-09)
SP500703		N	2	FRONT WHEEL-RWD NIS TK PU (2008-08), FRONT WHEEL-4WD NIS TK PU (2008-08), FRONT WHEEL-RWD INF SUV (2008-09), FRONT WHEEL-4WD INF SUV (2008-09)
512000		D	2	REAR WHEEL-FWD SAT Car (1991-02)
512001		B	2	REAR WHEEL-FWD BUI Car FD (1991-98), CHE Car FD (1992-05), OLD Car FD (1985-98), PON Car FD (1991-05)
512002			2	REAR WHEEL-FWD SAT Car (1991-02)
512003			2	REAR WHEEL-FWD BUI Car FD (1991-05), CAD Car FD (1991-05), CHE Car FD (1997-01), OLD Car FD (1991-03), PON Car FD (1999-05)
512005		O	2	REAR WHEEL-FWD CAD Car FD (1990-93)

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

HUB UNIT BEARING / BEARING MODULE - BUYER'S GUIDE *continued*

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512006			2	REAR WHEEL-FWD CAD Car FD (1993-02)
512008			2	REAR WHEEL-FWD ACU Car (1991-95)
512009		IW	2	REAR WHEEL-FWD LEX Car FD (1992-01), TOY Car FD (1987-04), LEX SUV (1999-03)
512010		W	2	REAR WHEEL-FWD EAG (1990-94), MIT Car FD (1990-96), PLY IM (1990-94)
512011		W	2	REAR WHEEL-FWD EAG (1990-94), MIT Car FD (1960-96), PLY IM (1990-94)
512012			2	REAR WHEEL-FWD AUD Car (2000-06), VKS Car (1998-06)
512013			2	REAR WHEEL-FWD PLY Car FD (1998-99), DOD Car FD (1998-99)
512014			2	REAR WHEEL-RWD NIS Car RD (1989-98)
512016		IW	2	REAR WHEEL-FWD NIS Car FD (1990-01)
512017			2	REAR WHEEL-FWD PEU (1989-92)
512018		D	2	REAR WHEEL-FWD CHE IM Car (1998-02), GEO Car (1993-97), TOY Car FD (1993-02)
512019		O	2	REAR WHEEL-FWD GEO Car (1993-95), TOY Car FD (1993-95)
512020			2	REAR WHEEL-FWD HON Car (1994-97)
512021			2	REAR WHEEL-FWD PLY Car FD (1995-95), DOD Car FD (1995-97)
512022			2	REAR WHEEL-FWD HON Car (1992-96)
512023			2	REAR WHEEL-FWD PLY Car FD (1995-97), DOD Car FD (1995-97)
512024			2	REAR WHEEL-FWD FOR Car FD (1995-00), MRC Car FD (1995-02)
512025		IW	2	REAR WHEEL-FWD NIS Car FD (1991-99)
512026			2	REAR WHEEL-FWD HYU Car FD (1992-98)
512027			2	REAR WHEEL-FWD HYU Car FD (1995-96)
512029			2	REAR WHEEL-FWD CHR Car FD (1993-04), EAG (1993-98), DOD Car FD (1993-04)
512031			2	REAR WHEEL-FWD ACU Car (1992-94)
512032			2	REAR WHEEL-FWD HON Car (1991-93)
512033			2	REAR WHEEL-FWD DOD IM Car (1993-95), EAG (1993-96), PLY IM (1993-94)
512036			2	REAR WHEEL-FWD SUB Car AD (1990-97)
512037			2	REAR WHEEL-FWD EAG (1991-92)
512038			2	REAR WHEEL-AWD TOY TK (1996-00)
512039			2	REAR WHEEL-FWD DOD IM Car (1991-96), MIT Car FD (1991-98)
512040			2	REAR WHEEL-FWD EAG (1992-96), MIT Car FD (1992-95), PLY IM (1992-94)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512041			2	REAR WHEEL-FWD TOY TK (1998-03)
512078		W	2	REAR WHEEL-FWD BUI Car FD (1994-96), CHE LT (1992-05), OLD Car FD (1994-96), OLD TK (1992-04), PON MVan (1992-04)
512105			2	REAR WHEEL-FWD FOR Car FD (1990-92), LIN Car FD (1990-92), MRC Car FD (1990-92)
512106		W	2	REAR WHEEL-FWD FOR Car FD (1990-00), MRC Car FD (1990-00)
512107		D	2	REAR WHEEL-FWD FOR Car FD (1993-04), LIN Car FD (1993-02), MRC Car FD (1993-04)
512118			2	FRONT WHEEL-RWD MAZ Car RD (1993-95), REAR WHEEL-FWD FOR Car FD (1993-97), MAZ Car FD (1993-00)
512119			2	REAR WHEEL-FWD FOR Car FD (1993-97), MAZ Car FD (1993-02)
512120			2	REAR WHEEL-FWD ACU Car (1995-98)
512121			2	REAR WHEEL-FWD ACU Car (1996-98)
512122			2	REAR WHEEL-FWD HON Car (1991-97)
512123			2	REAR WHEEL-FWD ACU Car (1996-04), HON TK (1998-98)
512124			2	REAR WHEEL-FWD HON TK (1995-97), ISU TK (1996-99)
512125			2	REAR WHEEL-AWD CHR MVan (1992-95), DOD MVan (1991-93), PLY MVan (1991-95)
512133			2	REAR WHEEL-FWD CHR Car FD (1995-97), PLY Car FD (1996-97), DOD Car FD (1995-97)
512136			2	REAR WHEEL-FWD CHR Car FD (1996-05), EAG (1995-98), MIT Car FD (1995-05), DOD Car FD (1995-05)
512137			2	REAR WHEEL-FWD TOY Car FD (1994-99)
512144			2	REAR WHEEL-FWD HON Car (1997-01)
512145			2	REAR WHEEL-FWD SAA (1994-02)
512146		O	2	REAR WHEEL-FWD SAA (1990-98)
512147			2	REAR WHEEL-FWD SAA (1982-87)
512148			2	REAR WHEEL-FWD DOD IM Car (1993-95), EAG (1993-96), MIT Car FD (1993-02), PLY IM (1993-94)
512149			2	REAR WHEEL-FWD FOR MVan (1997-03)
512150		S	2	REAR WHEEL-FWD BUI Car FD (1997-02), CHE LT (1997-05), OLD Car FD (1998-99), PON Car FD (1997-02), REAR WHEEL-RWD OLD Car FD (1998-02), REAR WHEEL-FWD PON MVan (1997-05)
512151			2	REAR WHEEL-FWD BUI Car FD (1996-03), CHE Car FD (1997-01), OLD Car FD (1997-97)
512152			2	REAR WHEEL-FWD CHE Car FD (2002-05), OLD Car FD (1999-04), PON Car FD (1999-05)
512153			2	REAR WHEEL-RWD CHE Car RD (1997-08), CAD Car RD (2004-08)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512154			2	REAR WHEEL-FWD CHR Car FD (1995-06), PLY Car FD (1996-00), DOD Car FD (1995-06)
512155			2	REAR WHEEL-FWD CHR MVan (1996-00), DOD MVan (1996-00), PLY MVan (1996-00)
512156			2	REAR WHEEL-FWD CHR MVan (1996-00), DOD MVan (1996-00), PLY MVan (1996-00)
512157			2	REAR WHEEL-AWD CHR MVan (1997-04), DOD MVan (1996-04)
512158			2	REAR WHEEL-FWD EAG (1991-93), MIT Car FD (1989-93)
512159			2	REAR WHEEL-FWD DAE Car (1999-02)
512160			2	REAR WHEEL-FWD HYU Car FD (1996-01)
512161			2	REAR WHEEL-FWD FOR Car FD (1994-03), MAZ Car FD (1992-00), MRC Car FD (1994-99)
512162			2	REAR WHEEL-FWD FOR Car FD (2000-00), MRC Car FD (2000-00)
512163			2	REAR WHEEL-FWD FOR Car FD (2001-07), MRC Car FD (2001-05)
512164			2	REAR WHEEL-FWD FOR Car FD (2001-07), MRC Car FD (2001-05)
512165			2	REAR WHEEL-FWD HYU Car FD (1997-99)
512166		N	1	REAR WHEEL-FWD HON TK (1998-01), REAR WHEEL-4WD HON TK (1997-01)
512167			2	REAR WHEEL-FWD CHR Car FD (2000-02), CHR MVan (2001-08), PLY Car FD (2000-01), DOD Car FD (2000-05)
512168			2	REAR WHEEL-FWD CHR MVan (2001-02)
512169			2	REAR WHEEL-FWD CHR MVan (2001-07), DOD MVan (2001-07)
512170			2	REAR WHEEL-FWD CHR MVan (2001-07), DOD MVan (2001-07)
512171			2	REAR WHEEL-FWD GEO Car (1990-93), ISU Car FD (1990-93), REAR WHEEL-AWD ISU Car FD (1991-92)
512172			2	REAR WHEEL-FWD ACU Car (1997-99), HON Car (1994-97)
512173			2	REAR WHEEL-FWD ACU Car (2001-03)
512174			2	REAR WHEEL-FWD HON Car (2001-05)
512175			2	REAR WHEEL-FWD HON Car (2001-05)
512176			2	REAR WHEEL-FWD HON Car (1998-02)
512178			2	REAR WHEEL-FWD HON Car (1998-02)
512179			2	REAR WHEEL-FWD ACU Car (1999-03), HON Car (1998-02)
512180			2	REAR WHEEL-FWD HON TK (1999-04)
512181			2	REAR WHEEL-AWD EAG (1995-98), MIT Car FD (1995-06)
512182			2	REAR WHEEL-FWD SUZ Car (1989-94)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512183			2	REAR WHEEL-AWD SUB Car AD (2000-04), SUB TK AD (2003-06)
512185			2	REAR WHEEL-FWD MIT Car FD (1997-02)
512186			2	REAR WHEEL-FWD MAZ Car FD (1998-02)
512187			2	REAR WHEEL-FWD VKS Car (1998-04)
512188			2	REAR WHEEL-FWD ACU Car (2004-08), HON Car (2003-07)
512189			2	REAR WHEEL-FWD HYU Car FD (2001-05)
512190			2	REAR WHEEL-FWD HYU Car FD (1999-05), KIA Car (2001-06)
512191			2	REAR WHEEL-FWD HYU Car FD (1999-05), KIA Car (2001-06)
512192			2	REAR WHEEL-FWD HYU Car FD (2000-05)
512193			2	REAR WHEEL-FWD HYU Car FD (2000-05)
512194			2	REAR WHEEL-FWD HYU Car FD (2001-06)
512195			2	REAR WHEEL-FWD HYU Car FD (2001-06)
512196			2	REAR WHEEL-FWD HYU TK (2001-06)
512197			2	REAR WHEEL-FWD HYU TK (2001-06)
512198			2	REAR WHEEL-FWD HYU Car FD (2003-06)
512199			2	REAR WHEEL-FWD HYU Car FD (2003-05)
512200			2	REAR WHEEL-FWD KIA Car (1994-04)
512201			2	REAR WHEEL-FWD NIS Car FD (2002-06)
512202			2	REAR WHEEL-FWD NIS Car FD (2002-06)
512203			2	REAR WHEEL-FWD INF Car FD (2000-04), NIS Car FD (2000-03)
512204			2	REAR WHEEL-FWD CHE IM Car (1998-01), GEO Car (1995-97), SUZ Car (1995-01)
512215		S	2	REAR WHEEL-FWD PON Car AD (2003-07)
512217			2	REAR WHEEL-FWD PON Car AD (2003-08), TOY Car FD (2003-08)
512218			2	REAR WHEEL-FWD PON Car AD (2003-07), TOY Car FD (2000-08)
512220			2	REAR WHEEL-FWD CHR Car FD (1998-06), PLY Car FD (1998-00), DOD Car FD (1998-06)
512221			2	REAR WHEEL-FWD BUI Car FD (2003-05), CHE Car FD (2000-05), PON Car FD (2003-03), PON SUV (2003-05)
512222			2	REAR WHEEL-FWD BUI SUV (2002-07)
512223			2	REAR WHEEL-RWD CAD Car RD (2003-08)
512225			2	REAR WHEEL-RWD BMW5 Car (1997-08), REAR WHEEL-AWD BMW5 Car (2006-09)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512229			2	REAR WHEEL-FWD CHE LT (2005-06), PON SUV (2006-07), SAT SUV (2002-07), REAR WHEEL-AWD CHE LT (2005-06), PON SUV (2006-06), SAT SUV (2002-07)
512230			2	REAR WHEEL-FWD CHE LT (2005-06), PON SUV (2006-07), SAT SUV (2002-07), REAR WHEEL-AWD SAT SUV (2002-07)
512231			2	REAR WHEEL-FWD AUD Car (2002-08), REAR WHEEL-AWD AUD Car (2005-06)
512232			2	REAR WHEEL-FWD SAA (2000-07)
512234		O	2	REAR WHEEL-RWD VLV (1995-98)
512235			2	REAR WHEEL-FWD MIT Car FD (1994-96)
512236			2	REAR WHEEL-FWD BUI SUV (2003-07)
512237			2	REAR WHEEL-FWD BUI Car FD (1997-05), CHE Car FD (2000-05), CHE LT (1997-05), OLD Car FD (1998-99), PON Car FD (1997-03), PON SUV (2001-05), REAR WHEEL-RWD OLD Car FD (1998-02), REAR WHEEL-FWD PON MVan (1997-05)
512238			2	REAR WHEEL-FWD SAT Car (2000-04)
512239			2	REAR WHEEL-FWD SAT Car (2000-04)
512242			2	REAR WHEEL-FWD HON Car (1992-96)
512251			2	REAR WHEEL-FWD KIA Car (2000-01)
512255		N	2	REAR WHEEL-FWD ACU Car (1997-01)
512265		N	2	REAR WHEEL-FWD HYU Car FD (2006-08), KIA Car (2006-07)
512266		N	2	REAR WHEEL-FWD HYU Car FD (2006-08), KIA Car (2006-07)
512267			2	REAR WHEEL-FWD HYU TK (2005-08), KIA SUV (2005-09)
512270			2	REAR WHEEL-FWD MAZ TK (2000-06), REAR WHEEL-RWD MAZ TK (2000-06)
512280		N	2	REAR WHEEL-FWD TOY TK (2004-05)
512294			2	REAR WHEEL-RWD TOY TK (2005-06), REAR WHEEL-4WD TOY TK (2005-06)
512295			2	REAR WHEEL-RWD TOY TK (2005-06), REAR WHEEL-4WD TOY TK (2005-06)
512299		N	2	REAR WHEEL-FWD FOR Car FD (2005-08), FOR Car AD (2005-07), MRC Car FD (2008-09), MRC Car AD (2005-07)
512305		N	2	FRONT WHEEL-FWD AUD Car (2000-08), FRONT WHEEL-AWD AUD Car (2000-09)
512319		N	2	REAR WHEEL-FWD AUD Car (2008-09), VKS Car (2006-09)
512322		N	2	REAR WHEEL-FWD HON Car (2006-08)
512323		N	2	REAR WHEEL-FWD HON Car (2007-08)
512324		N	2	REAR WHEEL-FWD HYU Car FD (2008-08)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
512326		N	2	REAR WHEEL-FWD HYU TK (2007-08)
512340		N	2	REAR WHEEL-FWD HYU Car FD (2007-08)
513003			2	REAR WHEEL-FWD BUI Car FD (1982-89), CHE Car FD (1982-89), OLD Car FD (1980-89), PON Car AD (1982-89)
513004K		Z	2	FRONT WHEEL-FWD BUI Car FD (1982-84), CAD Car FD (1982-84), CHE Car FD (1982-84), OLD Car FD (1982-84), PON Car FD (1982-84)
513010		O	2	REAR WHEEL-FWD BUI Car FD (1979-85), OLD Car FD (1979-85)
513011K		D	2	FRONT WHEEL-FWD BUI Car FD (1980-89), CHE Car FD (1980-89), OLD Car FD (1980-89), PON Car FD (1980-84), PON Car AD (1982-89), REAR WHEEL-RWD PON Car RD (1984-88)
513012		D	2	REAR WHEEL-FWD BUI Car FD (1980-91), CAD Car FD (1982-88), CHE Car FD (1980-05), OLD Car FD (1982-91), PON Car FD (1980-05)
513013		D	2	FRONT WHEEL-FWD BUI Car FD (1979-85), CAD Car FD (1979-85), OLD Car FD (1979-85), FRONT WHEEL-4WD CHE LT (1983-93)
513016K		B	2	FRONT WHEEL-FWD BUI Car FD (1983-93), CAD Car FD (1985-93), CHE Car FD (1983-90), CHE LT (1990-91), OLD Car FD (1980-93), PON Car FD (1987-91), PON Car AD (1982-91), FRONT WHEEL-AWD PON Car AD (1989-90), REAR WHEEL-AWD PON Car AD (1989-90), FRONT WHEEL-FWD OLD TK (1990-91), PON MVan (1990-91)
513017K		A	2	FRONT WHEEL-FWD BUI Car FD (1984-98), CAD Car FD (1984-88), CHE Car FD (1984-05), OLD Car FD (1984-98), PON Car FD (1984-05)
513018		C	2	REAR WHEEL-FWD BUI Car FD (1983-93), CAD Car FD (1985-93), CHE Car FD (1983-02), CHE LT (1990-91), OLD Car FD (1983-94), PON Car FD (1987-96), PON Car AD (1983-91), OLD TK (1990-91), PON MVan (1990-91)
513019			2	FRONT WHEEL-RWD CHE Car RD (1984-90)
513020		W	2	REAR WHEEL-RWD CHE Car RD (1984-96)
513030		D	2	REAR WHEEL-FWD FOR Car FD (1990-03), MAZ Car FD (1990-03), MRC Car FD (1991-99)
513033		ID	2	REAR WHEEL-FWD ACU Car (1990-93), HON Car (1986-91)
513034			2	REAR WHEEL-FWD HON Car (1984-84)
513035		IC	2	REAR WHEEL-FWD HON Car (1985-00)
513038		O	2	REAR WHEEL-FWD CAD Car FD (1986-86)
513039			2	REAR WHEEL-FWD PON Car AD (1989-90)
513041		W	2	REAR WHEEL-FWD BUI Car FD (1987-90), CAD Car FD (1987-90), OLD Car FD (1987-90), PON Car FD (1987-90)
513042			2	REAR WHEEL-FWD BUI Car FD (1988-91), OLD Car FD (1988-91), PON Car FD (1988-91)
513044		A	2	FRONT WHEEL-FWD BUI Car FD (1988-96), CHE Car FD (1990-01), OLD Car FD (1988-97), PON Car FD (1988-96)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
513049			2	REAR WHEEL-FWD ACU Car (1987-90)
513050			2	REAR WHEEL-FWD ACU Car (1986-89)
513059		D	2	FRONT WHEEL-FWD BUI Car FD (1989-91), CAD Car FD (1989-92), OLD Car FD (1989-91)
513061		C	2	FRONT WHEEL-4WD CHE LT (1991-97), FRONT WHEEL-AWD CHE LT (1991-92), FRONT WHEEL-4WD OLD TK (1991-96)
513062		W	2	REAR WHEEL-FWD BUI Car FD (1991-99), CAD Car FD (1991-93), OLD Car FD (1991-99), PON Car FD (1991-99)
513063			2	FRONT WHEEL-FWD CAD Car FD (1990-93)
513070		W	2	REAR WHEEL-FWD EAG (1989-92), DOD Car FD (1990-91)
513074		C	2	FRONT WHEEL-FWD CHR MVan (1990-95), DOD MVan (1989-95), FRONT WHEEL-AWD DOD MVan (1991-93), FRONT WHEEL-FWD PLY MVan (1989-95), FRONT WHEEL-AWD PLY MVan (1991-95)
513075		B	2	FRONT WHEEL-FWD CHR Car FD (1989-95), CHR MVan (1991-95), DOD MVan (1991-95), PLY Car FD (1991-95), FRONT WHEEL-AWD DOD MVan (1991-93), FRONT WHEEL-FWD DOD Car FD (1989-95), PLY MVan (1991-95)
513076			2	FRONT WHEEL-RWD FOR Car RD (1989-90), MRC Car RD (1989-90)
513077		W	2	FRONT WHEEL-RWD FOR Car RD (1989-90), MRC Car RD (1989-90)
513080		ID	2	REAR WHEEL-FWD HON Car (1990-97)
513081		W	2	REAR WHEEL-FWD HON Car (1990-93)
513082		D	2	FRONT WHEEL-4WD DOD LT (1987-90)
513084		C	2	FRONT WHEEL-RWD JEE (1989-99), FRONT WHEEL-4WD JEE (1990-99)
513085			2	FRONT WHEEL-RWD CHE Car RD (1991-96)
513087		B	2	FRONT WHEEL-FWD BUI Car FD (1992-99), CAD Car FD (1992-96), CHE LT (1992-96), OLD Car FD (1992-99), PON Car FD (1992-99), OLD TK (1992-96), PON MVan (1992-96)
513088		D	2	FRONT WHEEL-FWD BUI Car FD (1992-92), CAD Car FD (1992-93), OLD Car FD (1992-93), PON Car FD (1992-92)
513089		C	2	FRONT WHEEL-FWD CHR Car FD (1993-04), EAG (1993-97), REAR WHEEL-RWD CHR Car RD (2001-02), PLY Car RD (1997-01), FRONT WHEEL-FWD DOD Car FD (1993-04) ABS tone ring on halfshaft assy, not on bearing. 93-04 New shaft with tone ring required. TT9000077 (tech tip)
513090		W	2	FRONT WHEEL-RWD AVA Car (2001-04), CHE Car RD (1993-02), PON Car RD (1993-02)
513092		D	2	FRONT WHEEL-RWD FOR Car RD (1991-97), LIN Car RD (1993-98), MRC Car RD (1991-97)
513093		IW	2	FRONT WHEEL-FWD ACU Car (1992-94)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
513094			2	FRONT WHEEL-RWD BMW3 Car (1988-91), BMW5 Car (1982-88), BMW6 Car (1983-89), BMW7 Car (1986-87)
513096			2	FRONT WHEEL-RWD BMW5 Car (1989-93), BMW7 Car (1987-91), BMW8 Car (1991-92)
513098		IA	2	FRONT WHEEL-FWD ACU Car (1997-99), HON Car (1990-97)
513099			2	FRONT WHEEL-RWD ACU Car (1991-05)
513100		A	2	FRONT WHEEL-FWD FOR Car FD (1996-07), LIN Car FD (1995-02), MRC Car FD (1996-05)
513104		C	2	FRONT WHEEL-RWD FOR Car RD (1992-97), LIN Car RD (1992-97), MRC Car RD (1992-97)
513105		IW	2	REAR WHEEL-FWD ACU Car (1990-01), HON Car (1993-00)
513107		B	2	FRONT WHEEL-4WD JEE (1984-89)
513109			2	FRONT WHEEL-RWD DOD Car RD (1992-95), FRONT WHEEL-4WD DOD LT (1990-96), REAR WHEEL-RWD DOD Car RD (1992-08)
513111		ID	2	FRONT WHEEL-RWD BMW3 Car (1984-91)
513115		W	2	FRONT WHEEL-RWD FOR Car RD (1994-04)
513121			2	FRONT WHEEL-FWD BUI Car FD (1997-02), CAD Car FD (1997-01), CHE Car FD (2000-01), CHE LT (1997-01), OLD Car FD (1996-01), PON Car FD (1997-01), REAR WHEEL-AWD BUI SUV (2002-06), CHE LT (2002-05), PON SUV (2001-05), FRONT WHEEL-FWD OLD TK (1997-01), PON MVan (1997-01), REAR WHEEL-AWD OLD TK (2002-04), PON MVan (2002-05)
513122			2	FRONT WHEEL-FWD CHR MVan (1996-00), DOD MVan (1996-00), PLY MVan (1996-00)
513123			2	FRONT WHEEL-FWD CHR MVan (1996-07), DOD MVan (1996-07), FRONT WHEEL-RWD CHR Car RD (2001-02), PLY Car RD (1997-01), FRONT WHEEL-FWD PLY MVan (1996-00)
513124		W	2	FRONT WHEEL-4WD CHE LT (1997-05), ISU TK (1998-00), FRONT WHEEL-AWD CHE LT (1997-97), FRONT WHEEL-4WD OLD TK (1997-01)
513125			2	FRONT WHEEL-RWD BMW3 Car (1992-05), BMW5 Car (1991-95), BMW7 Car (1992-94), BMW8 Car (1992-97)
513126			2	FRONT WHEEL-FWD SAA (1990-98)
513127			2	FRONT WHEEL-FWD SAA (1986-89)
513128			2	FRONT WHEEL-RWD VLV (1988-95)
513131			2	FRONT WHEEL-FWD MAZ Car RD (1992-95), MAZ TK (1989-98), FRONT WHEEL-RWD MAZ TK (1989-98), REAR WHEEL-FWD MAZ Car FD (2001-02), MAZ TK (2000-06), REAR WHEEL-RWD MAZ TK (2000-06)
513132			2	FRONT WHEEL-RWD DOD Car RD (1996-08)
513133			2	FRONT WHEEL-AWD DOD IM Car (1991-96), MIT Car FD (1991-06)
513135			2	FRONT WHEEL-FWD MIT Car FD (1996-03)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
513137			2	FRONT WHEEL-FWD CHE Car FD (1997-05), OLD Car FD (1999-04), PON Car FD (1999-05)
513138			2	FRONT WHEEL-FWD CHR Car FD (1995-06), PLY Car FD (1996-00), DOD Car FD (1995-06)
513139			2	FRONT WHEEL-RWD CHE Car RD (1997-08), CAD Car RD (2004-08)
513142			2	REAR WHEEL-FWD EAG (1988-89)
513152			2	FRONT WHEEL-RWD MAZ Car RD (1990-05)
513155			2	FRONT WHEEL-RWD MAZ Car RD (1991-05)
513156			2	FRONT WHEEL-FWD FOR MVan (1999-03)
513157			2	FRONT WHEEL-FWD CHR Car FD (1995-05), EAG (1995-98), MIT Car FD (1995-07), FRONT WHEEL-AWD EAG (1995-98), MIT Car FD (1995-99), FRONT WHEEL-FWD DOD Car FD (1995-05)
513160		S	2	FRONT WHEEL-FWD BUI Car FD (2003-04), CHE Car FD (1997-05), CHE LT (2003-05), PON MVan (2003-03)
BM513161			2	FRONT WHEEL-FWD HON Car (2000-06)
513161				
513173			2	FRONT WHEEL-RWD BMW7 Car (2002-08)
513175			2	FRONT WHEEL-FWD VLV (1999-07), FRONT WHEEL-AWD VLV (1999-00)
513179			2	FRONT WHEEL-FWD BUI Car FD (2001-05), CAD Car FD (2001-05), CHE Car FD (2002-05), CHE LT (2001-05), OLD Car FD (2001-03), PON Car FD (2001-05), OLD TK (2001-04), PON MVan (2001-05), FRONT WHEEL-AWD OLD TK (2002-04), PON MVan (2002-05)
513186			2	FRONT WHEEL-RWD CAD Car RD (2003-08)
513187			2	FRONT WHEEL-FWD BUI SUV (2002-07), CHE LT (2002-04), PON SUV (2001-05), FRONT WHEEL-AWD PON SUV (2001-05)
513188			2	FRONT WHEEL-RWD BUI SUV (2004-07), CHE LT (2002-07), ISU TK (2003-08), FRONT WHEEL-4WD CHE LT (2002-09), ISU TK (2003-08), FRONT WHEEL-AWD BUI SUV (2004-07), SAA (2005-08), FRONT WHEEL-4WD OLD TK (2002-04)
513189			2	FRONT WHEEL-FWD CHE LT (2005-06), PON SUV (2006-07), SAT SUV (2002-07), FRONT WHEEL-AWD CHE LT (2005-06), PON SUV (2006-06), SAT SUV (2002-07)
513190			2	FRONT WHEEL-FWD CHE LT (2005-06), PON SUV (2006-07), SAT SUV (2002-07), FRONT WHEEL-AWD CHE LT (2005-06), PON SUV (2006-06), SAT SUV (2002-07)
513191			2	FRONT WHEEL-FWD SAA (2003-06), FRONT WHEEL-AWD SAA (2008-09)
513192			2	FRONT WHEEL-FWD SAA (2002-07)
513193			2	FRONT WHEEL-RWD SUZ SUV (2001-05), FRONT WHEEL-4WD SUZ SUV (2001-06), FRONT WHEEL-RWD CHE IM SUV (2001-04), FRONT WHEEL-4WD CHE IM SUV (2001-04)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
513194			2	FRONT WHEEL-FWD VLV (1999-07), FRONT WHEEL-AWD VLV (2000-07)
513196			2	FRONT WHEEL-RWD FOR Car RD (2003-05), LIN Car RD (2003-05), MRC Car RD (2003-03)
513202			2	FRONT WHEEL-RWD FOR Car RD (1997-02), LIN Car RD (1997-02), MRC Car RD (1997-02)
513209		N	2	FRONT WHEEL-RWD BMW5 Car (2000-03)
513210		N	2	FRONT WHEEL-RWD BMW5 Car (2004-08), BMW6 Car (2004-08), FRONT WHEEL-AWD BMW5 Car (2006-09)
513226		N	2	FRONT WHEEL-FWD MIN Car (2002-08)
513230		N	2	FRONT WHEEL-RWD FOR Car RD (2005-08), LIN Car RD (2006-08), MRC Car RD (2004-08)
513256		N	2	FRONT WHEEL-FWD HYU TK (2007-08), FRONT WHEEL-AWD HYU TK (2007-09), REAR WHEEL-AWD HYU TK (2007-09)
513262		N	2	FRONT WHEEL-FWD AUD Car (2009-09), FRONT WHEEL-AWD AUD Car (2006-09), FRONT WHEEL-FWD VKS Car (2006-09)
513266		N	2	FRONT WHEEL-FWD HYU TK (2007-08), FRONT WHEEL-AWD HYU TK (2007-09)
515000		D	2	FRONT WHEEL-4WD FOR LT (1990-97)
515001		C	2	FRONT WHEEL-4WD CHE TK1/2 (1988-94), CHE TK3/4 (1988-94)
515002		B	2	FRONT WHEEL-4WD CHE TK1/2 (1988-91)
515005			2	FRONT WHEEL-AWD CHE LT (1990-94)
515006		B	2	FRONT WHEEL-4WD DOD TK1/2 (1994-99)
515014			2	FRONT WHEEL-4WD FOR LT (2000-08), MAZ TK (2000-08)
515017			2	FRONT WHEEL-4WD FOR TK1/2 (1997-00)
515020			2	FRONT WHEEL-4WD FOR FSUV (2000-05), FOR TK3/4 (1999-04), FOR TK1 (1999-04), FOR TK1+ (1999-04)
515021			2	FRONT WHEEL-4WD FOR TK3/4 (1999-04), FOR TK1 (1999-04), FOR TK1+ (1999-04)
515022			2	FRONT WHEEL-4WD FOR TK1/2 (2000-03), FOR TK3/4 (1997-99)
515025			2	FRONT WHEEL-4WD FOR TK1 (1999-04), FOR TK1+ (1999-04)
515026			2	FRONT WHEEL-4WD FOR LT (1998-00), MAZ TK (1998-00)
515027			2	FRONT WHEEL-4WD FOR LT (1998-00), MAZ TK (1998-00)
515028			2	FRONT WHEEL-4WD FOR TK1/2 (2000-03)
515029			2	FRONT WHEEL-4WD FOR TK1/2 (2000-03)
515030		B	2	FRONT WHEEL-4WD FOR TK1/2 (2000-03), FOR TK3/4 (1997-99)
515031			2	FRONT WHEEL-4WD FOR FSUV (2000-02), LIN TK (2000-02)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
518500		D	2	FRONT WHEEL-FWD CHR Car FD (1982-83), PLY Car FD (1978-90), DOD Car FD (1979-90)
518501		D	2	FRONT WHEEL-FWD CHR Car FD (1984-90), CHR IM Car (1989-91), CHR MVan (1988-90), DOD MVan (1984-90), PLY Car FD (1984-90), DOD Car FD (1984-90), PLY MVan (1984-90)
518502		C	2	FRONT WHEEL-FWD CHR Car FD (1984-90), CHR IM Car (1989-91), CHR MVan (1988-90), DOD MVan (1984-90), PLY Car FD (1984-90), DOD Car FD (1984-90), PLY MVan (1984-90)
518503		C	2	FRONT WHEEL-FWD FOR Car FD (1983-94), FRONT WHEEL-AWD FOR Car AD (1983-94), FRONT WHEEL-FWD MRC Car FD (1983-87), MRC Car AD (1984-94), FRONT WHEEL-AWD MRC Car AD (1984-94)
518504		W	2	FRONT WHEEL-FWD HON Car (1981-83)
518505			2	FRONT WHEEL-FWD HON Car (1986-89)
518506			2	FRONT WHEEL-FWD TOY Car FD (1983-91), FRONT WHEEL-AWD TOY Car FD (1983-91)
518507			2	FRONT WHEEL-FWD CHE IM Car (1998-02), GEO Car (1993-97), TOY Car FD (1988-02), FRONT WHEEL-AWD TOY Car FD (1988-92)
520000		C	2	FRONT WHEEL-FWD FOR Car FD (1986-91), LIN Car FD (1988-91), MRC Car FD (1986-91)
520100		D	2	FRONT WHEEL-FWD FOR Car FD (1991-95), LIN Car FD (1991-94), MRC Car FD (1991-95)
SP550100			1	FRONT WHEEL-4WD DOD TK1/2 (1997-99)
SP550101			1	FRONT WHEEL-4WD DOD TK1/2 (1997-99)
SP550102			2	FRONT WHEEL-4WD DOD TK1/2 (2000-01)
SP550103			2	FRONT WHEEL-RWD DOD TK3/4 (2003-05), DOD TK1 (2003-05)
SP550104		N	2	FRONT WHEEL-RWD DOD TK1/2 (2006-08), DOD TK3/4 (2006-08), DOD TK1 (2006-08)
SP550200			2	FRONT WHEEL-4WD FOR TK1/2 (1997-00)
SP550201			2	FRONT WHEEL-4WD FOR FSUV (1997-00), LIN TK (1998-00)
SP550202			2	FRONT WHEEL-4WD FOR FSUV (2003-06), LIN TK (2003-06)
SP550203			2	REAR WHEEL-RWD FOR FSUV (2003-06), LIN TK (2003-06), REAR WHEEL-4WD LIN TK (2003-06)
SP550206		N	2	FRONT WHEEL-RWD FOR FSUV (2003-06), LIN TK (2003-06)
SP550207		N	2	FRONT WHEEL-4WD FOR TK1/2 (2004-05), LIN TK (2006-08)
SP550208		N	2	FRONT WHEEL-4WD FOR TK1/2 (2005-08), LIN TK (2006-08)
SP550209		N	2	REAR WHEEL-RWD FOR FSUV (2007-08), LIN TK (2007-08), REAR WHEEL-4WD LIN TK (2007-09)
SP550210		N	2	FRONT WHEEL-4WD FOR FSUV (2007-08), LIN TK (2007-08)
SP550211		N	2	FRONT WHEEL-RWD FOR FSUV (2007-08), LIN TK (2007-08)

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SP550212		N	2	FRONT WHEEL-4WD FOR TK1/2 (2004-05)
SP550213		N	2	FRONT WHEEL-4WD FOR TK1/2 (2004-05)
SP550214		N	2	FRONT WHEEL-4WD FOR TK1/2 (2009-09)
SP550215		N	2	FRONT WHEEL-RWD FOR TK1/2 (2009-09), FRONT WHEEL-4WD FOR TK1/2 (2009-09)
SP550216		N	2	FRONT WHEEL-RWD FOR TK1/2 (2009-09)
SP550300		S	2	FRONT WHEEL-RWD CAD TK (1999-00), FRONT WHEEL-4WD CAD TK (1999-00), CHE TK3/4 (1995-00)
SP550301		S	2	FRONT WHEEL-4WD CAD TK (1999-00), CHE TK3/4 (1995-00)
SP550305		S	2	FRONT WHEEL-RWD CAD TK (2002-05), CHE TK1/2 (2000-07), CHE TK3/4 (2003-05)
SP550307			2	FRONT WHEEL-RWD CAD TK (1999-00), FRONT WHEEL-4WD CAD TK (1999-06), CHE TK1/2 (1995-99), FRONT WHEEL-AWD CAD TK (2006-06), FRONT WHEEL-4WD CHE TK3/4 (1995-00)
SP550308			2	FRONT WHEEL-AWD CHE LT (1995-02)
SP550309			1	FRONT WHEEL-AWD CHE LT (2003-05)
SP550310			1	FRONT WHEEL-AWD CHE LT (2003-05)
SP550311		N	2	FRONT WHEEL-4WD HUM (2006-07)
SP580100			1	FRONT WHEEL-4WD DOD TK3/4 (1998-99)
SP580101			1	FRONT WHEEL-4WD DOD TK3/4 (1998-99)
SP580102			1	FRONT WHEEL-4WD DOD TK1 (1998-99)
SP580103			1	FRONT WHEEL-4WD DOD TK1 (1998-99)
SP580204			2	FRONT WHEEL-4WD FOR TK3/4 (1999-99), FOR TK1 (1999-99), FOR TK1+ (1999-99)
SP580205			2	FRONT WHEEL-4WD FOR FSUV (2000-05), FOR TK3/4 (1999-04), FOR TK1 (1999-04), FOR TK1+ (1999-04)
SP580300			2	FRONT WHEEL-4WD CHE TK1 (1995-95), CHE TK3/4 (1995-95)
SP580301			2	FRONT WHEEL-4WD CHE TK1 (1995-95), CHE TK3/4 (1995-95)
SP580302			2	FRONT WHEEL-4WD CHE TK1/2 (1996-99), CHE TK1 (1996-00), CHE TK3/4 (1996-00)
SP580303			2	FRONT WHEEL-4WD CHE TK1/2 (1996-99), CHE TK1 (1996-00), CHE TK3/4 (1996-00)
SP580304		S	2	FRONT WHEEL-4WD CHE TK1/2 (2001-07), CHE TK1 (2004-07), HUM (2003-07), FRONT WHEEL-AWD HUM (2003-03), FRONT WHEEL-4WD CHE TK3/4 (1999-07)
SP580305		S	2	FRONT WHEEL-RWD CHE TK3/4 (2001-07)
SP580306		S	2	FRONT WHEEL-RWD CHE TK3/4 (2001-06)
SP580307		S	2	FRONT WHEEL-RWD CHE TK3/4 (1999-00)

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Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
SP580308		S	2	FRONT WHEEL-RWD CHE TK1 (2001-07)
SP580309		S	2	FRONT WHEEL-4WD CHE TK1 (2001-06)
SP580310		N	2	FRONT WHEEL-RWD CHE TK1/2 (2001-07), FRONT WHEEL-4WD CHE TK1/2 (2001-07), CHE TK1 (2004-07), HUM (2003-07), FRONT WHEEL-AWD HUM (2003-03), FRONT WHEEL-RWD CHE TK3/4 (2001-07), FRONT WHEEL-4WD CHE TK3/4 (1999-09)
SP580311		N	2	FRONT WHEEL-RWD CHE TK1 (2001-07), FRONT WHEEL-4WD CHE TK1 (2001-07)
SP580312		N	2	FRONT WHEEL-4WD HUM (2008-09), FRONT WHEEL-RWD CHE TK3/4 (2008-08), FRONT WHEEL-4WD CHE TK3/4 (2008-08)
SP580313		N	2	FRONT WHEEL-RWD CHE TK1 (2008-08), FRONT WHEEL-4WD CHE TK1 (2008-08)
HA590000			2	FRONT WHEEL-RWD DOD TK3/4 (2000-02), DOD TK1 (2000-02)
HA590001			2	FRONT WHEEL-RWD DOD TK1/2 (2000-01)
HA590002			2	REAR WHEEL-AWD PON Car AD (2003-06), TOY Car FD (2003-06)
HA590003		N	2	REAR WHEEL-RWD CHE TK1/2 (2002-05)
HA590004			2	REAR WHEEL-RWD CHE TK3/4 (2003-05), REAR WHEEL-4WD CHE TK3/4 (2003-05)
HA590005			2	REAR WHEEL-FWD ACU Car (2002-06), HON Car (2004-05)
HA590006			2	FRONT WHEEL-RWD PON Car RD (2004-06) R . H . Application FRONT WHEEL
HA590007			2	FRONT WHEEL-RWD PON Car RD (2004-06) L . H . Application FRONT WHEEL
HA590009			2	REAR WHEEL-FWD HON Car (2002-03)
HA590010			2	REAR WHEEL-FWD KIA Car (2004-06)
HA590011			2	REAR WHEEL-FWD KIA Car (2002-05)
HA590012			2	REAR WHEEL-FWD KIA Car (2002-03)
HA590013			2	REAR WHEEL-FWD KIA Car (2003-05)
HA590016		N	2	REAR WHEEL-FWD KIA Car (2006-08), HYU TK (2007-08)
HA590017			2	FRONT WHEEL-RWD AVA Car (2005-07), FOR Car RD (2005-08)
HA590018			2	FRONT WHEEL-RWD DOD TK1 (1994-99), FRONT WHEEL-4WD DOD TK1 (1994-99)
HA590019			2	REAR WHEEL-FWD ACU Car (2004-08), HON Car (2005-07)
HA590020			2	FRONT WHEEL-4WD DOD TK3/4 (1994-99)
HA590021			2	REAR WHEEL-FWD FOR MVan (2004-07), MRC Mvan (2004-07)
HA590022		S	1	REAR WHEEL-FWD FOR MVan (2004-07), MRC Mvan (2004-07)
HA590023			1	FRONT WHEEL-4WD CHE LT (2004-08), ISU TK (2006-08)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590024			2	FRONT WHEEL-FWD FOR MVan (2004-07), MRC Mvan (2004-07)
HA590025			2	FRONT WHEEL-FWD FOR MVan (2004-07), MRC Mvan (2004-07)
HA590026			2	FRONT WHEEL-RWD FOR Car RD (2005-08)
HA590027			2	FRONT WHEEL-RWD INF Car RD (2003-07), NIS Car RD (2003-08)
HA590028			2	FRONT WHEEL-FWD FOR Car FD (2005-08), FOR Car AD (2005-07), FRONT WHEEL-AWD FOR Car AD (2005-09), FRONT WHEEL-FWD MRC Car FD (2008-08), MRC Car AD (2005-07), FRONT WHEEL-AWD MRC Car FD (2008-09), MRC Car AD (2005-07)
HA590029			2	REAR WHEEL-4WD FOR Car FD (2005-08), REAR WHEEL-AWD FOR Car AD (2005-09), MRC Car FD (2008-09), MRC Car AD (2005-07)
HA590030			2	FRONT WHEEL-RWD CHR Car RD (2005-08), DOD Car RD (2005-08)
HA590032			2	FRONT WHEEL-4WD DOD TK3/4 (2003-05), DOD TK1 (2003-05)
HA590033			2	FRONT WHEEL-RWD DOD LT (2004-05), FRONT WHEEL-4WD DOD LT (2004-05)
HA590034			2	FRONT WHEEL-RWD DOD LT (2005-08), MIT TK (2006-08), FRONT WHEEL-4WD DOD LT (2005-08), MIT TK (2006-08), FRONT WHEEL-AWD MIT TK (2006-06)
HA590035			2	FRONT WHEEL-RWD DOD LT (2005-08), MIT TK (2006-08), FRONT WHEEL-4WD DOD LT (2005-08), MIT TK (2006-08), FRONT WHEEL-AWD MIT TK (2006-06)
HA590036			2	FRONT WHEEL-RWD JEE (2005-08), FRONT WHEEL-4WD JEE (2005-08)
HA590038			2	REAR WHEEL-FWD FOR Car FD (2005-07), MRC Car FD (2005-05)
HA590039			2	REAR WHEEL-4WD MIT TK (2001-06)
HA590040			2	REAR WHEEL-FWD SCI (2005-07), TOY Car FD (2000-05)
HA590041		N	2	REAR WHEEL-FWD MAZ TK (2007-08)
HA590043			2	REAR WHEEL-FWD NIS Car FD (1998-01)
HA590044			2	REAR WHEEL-AWD NIS TK (2003-07)
HA590045			2	REAR WHEEL-FWD NIS TK (2003-07)
HA590046			2	FRONT WHEEL-FWD NIS TK (2003-08), FRONT WHEEL-AWD NIS TK (2003-08)
HA590047			2	REAR WHEEL-FWD NIS Car FD (1998-01)
HA590048		S	2	FRONT WHEEL-FWD BUI SUV (2003-07), PON SUV (2003-05), FRONT WHEEL-AWD PON SUV (2003-05)
HA590049			2	FRONT WHEEL-RWD CAD Car RD (2005-07), FRONT WHEEL-AWD CAD Car RD (2005-09)
HA590050			2	REAR WHEEL-RWD TOY TK (2003-09), REAR WHEEL-4WD TOY TK (2003-09), LEX SUV (2003-08)

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HA590052		N	2	REAR WHEEL-FWD KIA Car (2008-08)
HA590053			2	FRONT WHEEL-RWD CHE LT (2004-08)
HA590054			2	FRONT WHEEL-RWD CHE LT (2004-08), ISU TK (2006-08)
HA590055			2	REAR WHEEL-FWD TOY Car FD (2004-06)
HA590055K			2	FRONT WHEEL-RWD VLV (1988-88)
HA590056		N	2	REAR WHEEL-AWD MAZ TK (2007-09)
HA590056K			2	FRONT WHEEL-RWD VLV (1989-94)
HA590057			2	REAR WHEEL-FWD MRC Mvan (1997-02), NIS TK (1999-02)
HA590058			2	FRONT WHEEL-RWD CHE LT (2004-08), ISU TK (2006-08)
HA590059			2	FRONT WHEEL-RWD CHE LT (2004-08), ISU TK (2006-08)
HA590060			1	FRONT WHEEL-4WD CHE LT (2004-08), ISU TK (2006-08)
HA590061			2	FRONT WHEEL-RWD CHE LT (2004-08)
HA590062			2	FRONT WHEEL-RWD CHE LT (2004-08), ISU TK (2006-08)
HA590063			2	REAR WHEEL-FWD TOY Car FD (2001-03)
HA590064			2	FRONT WHEEL-FWD TOY Car FD (2004-06)
HA590066			2	REAR WHEEL-FWD CHE Car FD (2005-08), PON Car FD (2007-08), SAT Car (2003-07)
HA590067			2	REAR WHEEL-FWD CHE Car FD (2005-08), PON Car FD (2007-08), SAT Car (2003-07)
HA590068			2	FRONT WHEEL-FWD CHE Car FD (2005-08), PON Car FD (2007-08), SAT Car (2003-07)
HA590069			2	FRONT WHEEL-FWD CHE Car FD (2005-08), PON Car FD (2007-08), SAT Car (2003-07)
HA590070			2	FRONT WHEEL-FWD CHE Car FD (2004-08), PON Car FD (2005-08), SAT Car (2007-09)
HA590071			2	FRONT WHEEL-FWD CHE Car FD (2004-08), PON Car FD (2006-07)
HA590072			2	FRONT WHEEL-FWD MAZ Car FD (2004-06)
HA590074			2	REAR WHEEL-FWD BUI Car FD (2005-08), CHE Car FD (2006-07), PON Car FD (2004-08)
HA590077			2	FRONT WHEEL-RWD CAD TK (2004-09), CAD Car RD (2004-08), FRONT WHEEL-AWD CAD Car RD (2005-09)
HA590078			2	FRONT WHEEL-AWD CAD TK (2004-09)
HA590079			2	REAR WHEEL-RWD CAD TK (2004-09), REAR WHEEL-AWD CAD TK (2004-09), REAR WHEEL-RWD CAD Car RD (2005-08)
HA590080			2	REAR WHEEL-FWD CHE Car FD (2004-08), PON Car FD (2005-08)
HA590081			2	REAR WHEEL-FWD CHE Car FD (2004-07), PON Car FD (2005-08), SAT Car (2007-09)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590082			2	REAR WHEEL-RWD CAD Car RD (2004-07)
HA590085			2	FRONT WHEEL-FWD BUI Car FD (2003-08), BUI SUV (2003-07), CHE Car FD (1997-07), CHE LT (2003-05), PON Car FD (2001-08), PON SUV (2003-05), FRONT WHEEL-AWD PON SUV (2003-05), FRONT WHEEL-FWD PON MVan (2003-03)
HA590086			2	FRONT WHEEL-FWD CHE Car FD (2005-08), CHE LT (2006-08), PON Car FD (2007-08), SAT Car (2004-07)
HA590087			2	FRONT WHEEL-FWD CHE LT (2006-08)
HA590088			2	REAR WHEEL-FWD CHE Car FD (2005-09), CHE LT (2006-08), PON Car FD (2007-09), SAT Car (2004-07)
HA590089			2	REAR WHEEL-FWD CHE LT (2006-08)
HA590091			2	REAR WHEEL-FWD BUI MVan (2005-05), CHE LT (2005-05), SAT SUV (2005-05), PON MVan (2005-06)
HA590092			2	REAR WHEEL-FWD BUI Car FD (2005-08), BUI MVan (2005-05), CHE Car FD (2006-07), CHE LT (2005-05), PON Car FD (2004-08), SAT SUV (2005-05), PON MVan (2005-06)
HA590093			2	FRONT WHEEL-FWD BUI Car FD (2005-08), BUI MVan (2005-05), CAD Car FD (2006-08), CHE Car FD (2006-08), CHE LT (2005-05), PON Car FD (2004-08), SAT SUV (2005-05), FRONT WHEEL-AWD BUI MVan (2005-05), CHE LT (2005-05), SAT SUV (2005-05), REAR WHEEL-AWD BUI MVan (2005-05), CHE LT (2005-05), SAT SUV (2005-05), FRONT WHEEL-FWD PON MVan (2005-05), FRONT WHEEL-AWD PON MVan (2005-05), REAR WHEEL-AWD PON MVan (2005-05)
HA590095			2	REAR WHEEL-FWD FOR Car FD (2006-09), LIN Car FD (2006-08), MAZ Car FD (2005-08), MRC Car AD (2006-09)
HA590096			2	FRONT WHEEL-RWD MAZ Car RD (2004-08)
HA590097			2	FRONT WHEEL-FWD MAZ Car FD (2004-08)
HA590098			2	REAR WHEEL-FWD MAZ Car FD (2004-06)
HA590099			2	REAR WHEEL-FWD MAZ Car FD (2004-08)
HA590100			2	REAR WHEEL-FWD LIN Car FD (2006-08), MAZ Car FD (2003-08), MRC Car AD (2006-09)
HA590101			2	REAR WHEEL-FWD MIT Car FD (2002-06)
HA590102		0	2	REAR WHEEL-FWD SAA (1986-89)
HA590103			2	REAR WHEEL-FWD MIT Car FD (2004-06), MIT TK (2003-06)
HA590104			2	REAR WHEEL-FWD MIT Car FD (2002-06)
HA590106		N	2	FRONT WHEEL-FWD AUD Car (2008-09), FRONT WHEEL-AWD AUD Car (2008-09), REAR WHEEL-AWD AUD Car (2008-09), FRONT WHEEL-FWD VKS Car (2005-09), FRONT WHEEL-AWD VKS Car (2005-08), REAR WHEEL-AWD VKS Car (2006-09)
HA590107			2	REAR WHEEL-FWD MIT Car FD (1997-04)

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HA590108			2	FRONT WHEEL-FWD MIT Car FD (2004-08), MIT TK (2004-09), FRONT WHEEL-AWD MIT TK (2004-06)
HA590109			2	REAR WHEEL-FWD NIS TK (2004-08)
HA590110			2	REAR WHEEL-FWD NIS Car FD (2000-06)
HA590111			2	REAR WHEEL-FWD NIS Car FD (2004-08)
HA590112			2	REAR WHEEL-FWD SUZ Car (2004-08)
HA590113			2	REAR WHEEL-FWD SUZ Car (2004-08)
HA590115			2	FRONT WHEEL-FWD SUZ Car (2004-05)
HA590116		N	2	REAR WHEEL-FWD BUI MVan (2007-07), CHE LT (2006-06), SAT SUV (2006-07)
HA590118			2	FRONT WHEEL-FWD SUB Car AD (2005-08), FRONT WHEEL-AWD SUB Car AD (2005-08)
HA590119			2	REAR WHEEL-AWD SUB Car AD (2005-09)
HA590120			2	REAR WHEEL-AWD MIT TK (2004-09)
HA590123			2	REAR WHEEL-FWD INF Car FD (1999-02)
HA590124			2	FRONT WHEEL-RWD INF SUV (2003-08)
HA590125			2	FRONT WHEEL-AWD INF SUV (2003-08)
HA590126			2	FRONT WHEEL-RWD INF Car RD (2002-06)
HA590127			2	FRONT WHEEL-RWD INF Car RD (2003-03)
HA590128			2	REAR WHEEL-FWD MIT Car FD (2004-07)
HA590129		N	2	REAR WHEEL-FWD MIT Car FD (2004-06)
HA590131		N	2	FRONT WHEEL-FWD SUZ Car (2004-05)
HA590132			2	FRONT WHEEL-4WD FOR TK3/4 (1999-99), FOR TK1 (1999-99), FOR TK1+ (1999-99)
HA590136		N	2	REAR WHEEL-RWD LEX Car RD (2006-08), REAR WHEEL-AWD LEX Car RD (2006-09)
HA590137		N	2	FRONT WHEEL-RWD LEX Car RD (2006-08)
HA590138		N	2	FRONT WHEEL-RWD LEX Car RD (2006-08)
HA590139		N	2	FRONT WHEEL-AWD LEX Car RD (2006-08)
HA590140		N	2	FRONT WHEEL-AWD LEX Car RD (2006-08)
HA590141			2	REAR WHEEL-RWD JEE (2005-08)
HA590142			2	FRONT WHEEL-AWD CHR Car RD (2005-09), DOD Car RD (2005-08), REAR WHEEL-RWD CHR Car RD (2005-08), DOD Car RD (2005-08), REAR WHEEL-AWD CHR Car RD (2005-09), DOD Car RD (2005-08)
HA590143		N	2	REAR WHEEL-FWD MIT TK (2004-09)
HA590144		N	2	REAR WHEEL-FWD MIT TK (2004-05)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590145			2	FRONT WHEEL-4WD MIT TK (2001-06)
HA590146			2	REAR WHEEL-AWD ACU Car (2005-08)
HA590147			2	FRONT WHEEL-AWD ACU Car (2005-08)
HA590149		N	2	REAR WHEEL-FWD BUI Car FD (2006-08), CAD Car FD (2006-08)
HA590150		N	2	FRONT WHEEL-AWD SUB TK AD (2006-09), REAR WHEEL-AWD SUB TK AD (2006-07)
HA590151		N	2	REAR WHEEL-FWD HON TK (2005-08)
HA590152		N	2	REAR WHEEL-FWD HON Car (2006-08)
HA590153		N	2	REAR WHEEL-FWD NIS Car FD (1997-99)
HA590154		N	2	REAR WHEEL-FWD NIS Car FD (1995-99)
HA590155K			2	FRONT WHEEL-FWD SAT Car (1991-93)
HA590156		N	2	FRONT WHEEL-RWD FOR LT (2006-08), FRONT WHEEL-4WD FOR LT (2006-08)
HA590156K			2	FRONT WHEEL-FWD SAT Car (1994-02)
HA590156		N	2	FRONT WHEEL-RWD MRC SUV (2006-08), FRONT WHEEL-4WD MRC SUV (2006-08), FRONT WHEEL-AWD MRC SUV (2006-09)
HA590157		N	2	FRONT WHEEL-FWD BUI MVan (2006-07), CHE LT (2006-08), SAT SUV (2006-07), FRONT WHEEL-AWD BUI MVan (2006-06), CHE LT (2006-08), SAT SUV (2006-07), REAR WHEEL-AWD BUI MVan (2006-06), CHE LT (2006-06), SAT SUV (2006-06), FRONT WHEEL-FWD PON MVan (2006-06), FRONT WHEEL-AWD PON MVan (2006-06), REAR WHEEL-AWD PON MVan (2006-06)
HA590158		N	2	REAR WHEEL-FWD BUI MVan (2006-06), CHE LT (2006-08)
HA590159		N	2	REAR WHEEL-FWD AUD Car (2006-09), VKS Car (2006-09)
HA590160			2	REAR WHEEL-FWD SUZ Car (1995-05)
HA590161		N	2	REAR WHEEL-FWD MIN Car (2002-08)
HA590162		N	2	FRONT WHEEL-RWD BMW3 Car (2006-08), BMW1 Car (2008-08)
HA590163		N	2	FRONT WHEEL-RWD BMW5 Car (2006-08), BMW6 Car (2006-08)
HA590164		N	2	REAR WHEEL-FWD HON Car (2006-07)
HA590165		N	2	FRONT WHEEL-FWD SCI (2004-09), TOY TK (2006-07), FRONT WHEEL-4WD TOY TK (2006-07)
HA590166		N	2	FRONT WHEEL-4WD DOD TK1/2 (2006-08), DOD TK3/4 (2006-08), DOD TK1 (2006-08)
HA590167		N	2	FRONT WHEEL-RWD CAD Car RD (2006-08)
HA590168		N	2	FRONT WHEEL-FWD TOY TK (2006-07), FRONT WHEEL-4WD TOY TK (2006-07)
HA590169		N	2	REAR WHEEL-AWD SUB TK AD (2008-09)

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HA590170		N	2	REAR WHEEL-FWD TOY Car FD (2007-07)
HA590171		N	2	REAR WHEEL-RWD INF Car RD (2006-06)
HA590172		N	2	REAR WHEEL-FWD TOY Car FD (2007-07)
HA590173		N	2	REAR WHEEL-FWD TOY TK (2006-07)
HA590174		N	2	REAR WHEEL-AWD JAG (2002-07)
HA590175		N	2	REAR WHEEL-RWD INF Car RD (2006-07)
HA590176		N	2	FRONT WHEEL-RWD INF Car RD (2006-08), INF SUV (2008-08)
HA590177		N	2	FRONT WHEEL-FWD MIT Car FD (2006-08), MIT TK (2005-07), FRONT WHEEL-AWD MIT TK (2006-09)
HA590178		N	2	FRONT WHEEL-RWD SUZ SUV (2006-08), FRONT WHEEL-4WD SUZ SUV (2006-07), REAR WHEEL-RWD SUZ SUV (2006-07), REAR WHEEL-4WD SUZ SUV (2006-08)
HA590179		N	2	REAR WHEEL-FWD HYU Car FD (2006-08), KIA Car (2007-09)
HA590180		N	2	REAR WHEEL-FWD FOR LT (2007-08), LIN TK (2007-08)
HA590181K			2	FRONT WHEEL-FWD PLY Car FD (1995-99), DOD Car FD (1995-99)
HA590182K			2	FRONT WHEEL-FWD PLY Car FD (1995-99), DOD Car FD (1995-99)
HA590183		N	2	REAR WHEEL-AWD FOR LT (2007-09), LIN TK (2007-09)
HA590184		N	2	REAR WHEEL-FWD HYU Car FD (2006-08), KIA Car (2006-09)
HA590185		N	2	FRONT WHEEL-RWD PON Car RD (2007-08), REAR WHEEL-RWD PON Car RD (2007-08)
HA590186		N	2	FRONT WHEEL-RWD PON Car RD (2006-08), SAT Car (2007-08), REAR WHEEL-RWD PON Car RD (2006-08), SAT Car (2007-08)
HA590187		N	2	FRONT WHEEL-FWD VLV (2006-08), FRONT WHEEL-AWD VLV (2006-09)
HA590188		N	2	REAR WHEEL-FWD KIA Car (2004-08)
HA590190		N	2	REAR WHEEL-FWD HON TK (2007-08)
HA590192		N	2	REAR WHEEL-FWD VLV (2004-08)
HA590193		N	2	REAR WHEEL-AWD MAZ TK (2007-09)
HA590194		N	2	REAR WHEEL-FWD KIA Car (2004-08)
HA590195		N	2	REAR WHEEL-FWD MAZ TK (2007-08)
HA590197			2	FRONT WHEEL-FWD CHR MVan (1988-88), DOD MVan (1988-88), PLY MVan (1988-88)
HA590198		N	2	FRONT WHEEL-FWD AUD Car (2006-08)
HA590199		N	2	FRONT WHEEL-RWD MAZ Car RD (2006-08)
HA590200		N	2	REAR WHEEL-FWD HYU Car FD (2007-08)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590201		N	2	REAR WHEEL-4WD TOY TK (2006-07)
HA590203			2	FRONT WHEEL-4WD DOD TK3/4 (2000-02), DOD TK1 (2000-02)
HA590204		N	2	REAR WHEEL-4WD HON TK (2007-08), REAR WHEEL-AWD ACU SUV (2007-08)
HA590205		N	2	FRONT WHEEL-RWD MAZ Car RD (2006-08)
HA590206		N	2	FRONT WHEEL-FWD KIA Car (2006-08), HYU TK (2007-08)
HA590208			2	FRONT WHEEL-FWD CHR CUV (2004-06), FRONT WHEEL-AWD CHR CUV (2004-06)
HA590209			2	REAR WHEEL-FWD CHR CUV (2004-06), REAR WHEEL-AWD CHR CUV (2004-06)
HA590212		N	2	FRONT WHEEL-FWD VLV (2005-09)
HA590213			2	FRONT WHEEL-RWD FOR Car RD (2002-05), LIN Car RD (2000-06)
HA590214		N	2	FRONT WHEEL-FWD CHR Car FD (2007-08), DOD Car FD (2008-08)
HA590216		N	2	REAR WHEEL-FWD CHR Car FD (2007-08), REAR WHEEL-RWD JEE (2007-08), REAR WHEEL-FWD DOD Car FD (2007-08), REAR WHEEL-AWD DOD Car FD (2008-08)
HA590217		N	2	FRONT WHEEL-FWD CHR CUV (2007-08), FRONT WHEEL-AWD CHR CUV (2007-08)
HA590218		N	2	REAR WHEEL-AWD VLV (2001-09), REAR WHEEL-FWD VLV SUV (2003-06)
HA590219		N	2	FRONT WHEEL-FWD CHR Car FD (2007-08), DOD Car FD (2008-08), FRONT WHEEL-AWD DOD Car FD (2008-08)
HA590220		N	2	REAR WHEEL-AWD VLV (2007-09)
HA590221		N	2	REAR WHEEL-FWD CHR Car FD (2007-08), DOD Car FD (2007-08)
HA590223		N	2	FRONT WHEEL-FWD VLV SUV (2003-07), FRONT WHEEL-AWD VLV SUV (2003-07)
HA590224		O	1	FRONT WHEEL-RWD JAG (2000-06)
HA590226		N	2	FRONT WHEEL-AWD INF Car RD (2006-09), FRONT WHEEL-4WD INF SUV (2008-08)
HA590227		N	2	FRONT WHEEL-FWD BUI SUV (2008-08), CHE LT (2007-08), SAT SUV (2007-09), FRONT WHEEL-AWD BUI SUV (2008-09), CHE LT (2007-08), SAT SUV (2007-09), REAR WHEEL-FWD BUI SUV (2008-09), CHE LT (2007-08), SAT SUV (2007-08), REAR WHEEL-AWD BUI SUV (2008-09), CHE LT (2007-08), SAT SUV (2007-09)
HA590228		N	2	FRONT WHEEL-AWD ACU SUV (2007-08)
HA590229		N	2	REAR WHEEL-AWD ACU SUV (2007-08)
HA590230		N	2	REAR WHEEL-4WD JEE (2007-08), REAR WHEEL-AWD DOD Car FD (2007-08)
HA590232		N	2	REAR WHEEL-AWD VLV SUV (2003-09)
HA590233		N	2	FRONT WHEEL-RWD FOR TK3/4 (1999-04), FOR TK1 (1999-04), FOR TK1+ (1999-04)

HUB UNIT BEARING / BEARING MODULE - BUYER'S GUIDE *continued*

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590234		N	2	FRONT WHEEL-FWD VLV (2007-09), FRONT WHEEL-AWD VLV (2007-09)
HA590235		N	2	
HA590236		N	2	FRONT WHEEL-FWD NIS TK (2009-09), FRONT WHEEL-AWD NIS TK (2009-09)
HA590237		N	2	REAR WHEEL-FWD NIS TK (2009-09)
HA590238		N	2	REAR WHEEL-AWD NIS TK (2009-09)
HA590239		N	2	FRONT WHEEL-FWD NIS TK (2008-09), FRONT WHEEL-AWD NIS TK (2008-09)
HA590240			2	FRONT WHEEL-FWD MIT Car FD (1994-03)
HA590241		N	2	REAR WHEEL-FWD NIS TK (2008-09)
HA590241K			2	FRONT WHEEL-RWD VLV (1994-98)
HA590242		N	2	FRONT WHEEL-RWD JEE (2007-08), FRONT WHEEL-4WD JEE (2007-08)
HA590243		N	2	FRONT WHEEL-FWD CHR MVan (2008-08), DOD MVan (2008-08)
HA590244		N	2	FRONT WHEEL-RWD CHR MVan (2007-09), DOD LT (2006-08), FRONT WHEEL-4WD CHR MVan (2007-09), DOD LT (2006-08)
HA590245		N	2	FRONT WHEEL-RWD DOD LT (2007-08), FRONT WHEEL-4WD DOD LT (2007-08)
HA590247		N	2	REAR WHEEL-FWD MIT TK (2007-09)
HA590250		N	2	FRONT WHEEL-FWD NIS Car FD (2007-08)
HA590251		N	2	FRONT WHEEL-FWD NIS Car FD (2007-08)
HA590252		N	2	FRONT WHEEL-FWD NIS Car FD (2007-09)
HA590253		N	2	REAR WHEEL-FWD NIS Car FD (2007-09)
HA590254		N	2	REAR WHEEL-FWD NIS Car FD (2007-07)
HA590255		N	2	REAR WHEEL-RWD INF Car RD (2007-08), REAR WHEEL-AWD INF Car RD (2007-09), REAR WHEEL-RWD INF SUV (2008-08), REAR WHEEL-4WD INF SUV (2008-09)
HA590256		N	2	REAR WHEEL-FWD MIT TK (2008-09)
HA590257			2	REAR WHEEL-FWD VLV (2000-04)
HA590258		N	2	REAR WHEEL-AWD MIT TK (2008-09)
HA590259K			2	FRONT WHEEL-RWD LIN TK (2003-05), REAR WHEEL-RWD FOR LT (2002-08), REAR WHEEL-4WD FOR LT (2002-08), REAR WHEEL-AWD LIN TK (2003-05), REAR WHEEL-RWD MRC SUV (2002-05), REAR WHEEL-4WD MRC SUV (2002-05), REAR WHEEL-AWD MRC SUV (2002-05)
HA590260		N	2	FRONT WHEEL-RWD CAD Car RD (2008-09), FRONT WHEEL-AWD CAD Car RD (2008-09), REAR WHEEL-RWD CAD Car RD (2008-08)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590261		N	2	FRONT WHEEL-FWD FOR LT (2009-09), LIN Car FD (2009-09), FRONT WHEEL-AWD FOR LT (2009-09), LIN Car FD (2009-09), REAR WHEEL-FWD FOR LT (2009-09), LIN Car FD (2009-09), REAR WHEEL-AWD FOR LT (2009-09), LIN Car FD (2009-09)
HA590262		N	2	FRONT WHEEL-FWD CHE LT (2007-09), PON SUV (2007-09), SAT SUV (2008-09), FRONT WHEEL-AWD CHE LT (2007-09), PON SUV (2007-09), SAT SUV (2008-09)
HA590263K			2	FRONT WHEEL-FWD FOR Car FD (2000-08)
HA590264		N	2	REAR WHEEL-FWD CHE LT (2007-09), SAT SUV (2008-09), REAR WHEEL-AWD CHE LT (2007-09), PON SUV (2007-09), SAT SUV (2008-09)
HA590265		N	1	FRONT WHEEL-RWD LEX Car RD (2007-08)
HA590267		N	2	FRONT WHEEL-AWD LEX Car RD (2008-09)
HA590268		S	2	REAR WHEEL-RWD LEX Car RD (2008-09), REAR WHEEL-AWD LEX Car RD (2008-09)
HA590269		N	2	REAR WHEEL-RWD LEX Car RD (2007-08), REAR WHEEL-AWD LEX Car RD (2007-08)
HA590270		N	1	FRONT WHEEL-RWD LEX Car RD (2007-08)
HA590271		N	2	FRONT WHEEL-AWD MIT Car FD (2008-08)
HA590273		N	2	FRONT WHEEL-RWD DOD TK1+ (2008-08), FRONT WHEEL-4WD DOD TK1+ (2008-08)
HA590274		N	2	REAR WHEEL-FWD CHR CUV (2007-08), REAR WHEEL-AWD CHR CUV (2007-08)
HA590275		N	2	REAR WHEEL-AWD MIT Car FD (2008-08)
HA590276		N	2	FRONT WHEEL-FWD NIS Car FD (2007-08)
HA590277		N	2	FRONT WHEEL-FWD NIS Car FD (2007-08)
HA590278		N	2	FRONT WHEEL-FWD NIS Car FD (2007-08)
HA590279		N	2	REAR WHEEL-FWD NIS Car FD (2007-08)
HA590280		N	2	REAR WHEEL-FWD NIS Car FD (2007-08)
HA590281		N	2	REAR WHEEL-FWD NIS Car FD (2007-08)
HA590284		N	2	FRONT WHEEL-RWD NIS TK PU (2009-09), FRONT WHEEL-4WD NIS TK PU (2009-09)
HA590285		N	2	FRONT WHEEL-FWD NIS Car FD (2007-09)
HA590286		N	2	REAR WHEEL-FWD NIS Car FD (2007-09)
HA590286K		N	2	FRONT WHEEL-FWD FOR LT (2001-08), MAZ TK (2001-08), FRONT WHEEL-4WD FOR LT (2001-08), MAZ TK (2001-08), FRONT WHEEL-AWD MAZ TK (2005-06), FRONT WHEEL-FWD MRC SUV (2005-08), FRONT WHEEL-4WD MRC SUV (2005-09)
HA590287		N	2	REAR WHEEL-FWD TOY TK (2008-09)
HA590288		N	2	REAR WHEEL-FWD NIS Car FD (2007-09)
HA590289		O	2	REAR WHEEL-FWD VLV SUV (2006-09)

HUB UNIT BEARING / BEARING MODULE - BUYER'S GUIDE *continued*

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590290		N	2	REAR WHEEL-FWD SAA (2003-08), REAR WHEEL-AWD SAA (2008-09)
HA590294		N	2	REAR WHEEL-AWD PON Car AD (2009-09), TOY Car FD (2009-09)
HA590295		N	2	REAR WHEEL-FWD SUZ Car (2002-07)
HA590297		N	2	FRONT WHEEL-FWD SAT Car (2008-09)
HA590299		N	2	FRONT WHEEL-RWD PON Car RD (2008-09)
HA590300		N	2	FRONT WHEEL-RWD CHE LT (2004-09)
HA590301K			2	FRONT WHEEL-FWD TOY Car FD (1987-88)
HA590302K			2	FRONT WHEEL-FWD TOY Car FD (1992-03)
HA590303K			2	FRONT WHEEL-FWD TOY Car FD (1992-03)
HA590304		N	2	FRONT WHEEL-4WD CHE LT (2004-09)
HA590305		N	2	REAR WHEEL-FWD PON Car AD (2009-09), TOY Car FD (2009-09)
HA590306			2	REAR WHEEL-FWD CHR Car FD (1996-05), EAG (1995-98), MIT Car FD (1995-05), DOD Car FD (1995-05)
HA590307			2	FRONT WHEEL-RWD CHE LT (2003-05)
HA590308			2	FRONT WHEEL-RWD BMW3 Car (1998-00), BMW4 Car (2003-08)
HA590310		N	2	REAR WHEEL-FWD PON Car AD (2009-09), TOY Car FD (2009-09)
HA590311		N	2	REAR WHEEL-FWD PON Car AD (2009-09), TOY Car FD (2009-09)
HA590312		N	2	FRONT WHEEL-FWD VLV SUV (2007-09), FRONT WHEEL-AWD VLV SUV (2007-09)
HA590313		N	2	REAR WHEEL-AWD SUB Car AD (2008-09), SUB TK AD (2009-09)
HA590314		N	2	REAR WHEEL-AWD SUB Car AD (2008-09)
HA590315		N	2	FRONT WHEEL-AWD SUB Car AD (2008-09), SUB TK AD (2009-09)
HA590316		N	2	FRONT WHEEL-AWD SUB Car AD (2008-09)
HA590317		N	2	REAR WHEEL-FWD CHR MVan (2008-08), DOD MVan (2008-09)
HA590321		N	2	REAR WHEEL-AWD VLV (2004-09)
HA590322		N	2	REAR WHEEL-FWD VLV (2009-09)
HA590323		N	2	FRONT WHEEL-FWD VLV (2004-08), FRONT WHEEL-AWD VLV (2004-09)
HA590324		N	2	FRONT WHEEL-FWD HYU Car FD (2009-09)
HA590325		N	2	REAR WHEEL-FWD HYU Car FD (2009-09)
HA590326		N	2	REAR WHEEL-FWD HYU Car FD (2009-09)
HA590327		N	2	FRONT WHEEL-4WD KIA SUV (2009-09), REAR WHEEL-4WD KIA SUV (2009-09)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA590328		N	2	REAR WHEEL-RWD KIA SUV (2009-09)
HA590329		N	2	FRONT WHEEL-RWD KIA SUV (2009-09)
HA590330		N	2	REAR WHEEL-FWD SUZ Car (2007-09)
HA590331		N	2	REAR WHEEL-AWD SUZ Car (2007-09)
HA590332		N	2	FRONT WHEEL-FWD SUZ SUV (2007-09), FRONT WHEEL-AWD SUZ SUV (2007-09)
HA590333		N	2	FRONT WHEEL-RWD SUZ SUV (2007-09), REAR WHEEL-FWD SUZ SUV (2007-09), REAR WHEEL-AWD SUZ SUV (2007-09)
HA590335		N	2	REAR WHEEL-FWD FOR LT (2009-09), LIN TK (2009-09)
HA590336		N	2	REAR WHEEL-FWD MAZ Car FD (2009-09)
HA590337		N	2	REAR WHEEL-FWD VLV (2007-09)
HA590338			2	REAR WHEEL-AWD TOY TK (2004-09), REAR WHEEL-4WD LEX SUV (2004-08)
HA590352			2	FRONT WHEEL-RWD CHE TK1 (2003-09), CHE TK3/4 (1999-09)
HA590353			2	FRONT WHEEL-RWD CHE TK1 (2003-06)
HA590370			2	REAR WHEEL-FWD TOY Car FD (1992-04)
HA590371		N	2	REAR WHEEL-FWD TOY Car FD (1992-04)
HA590389			2	REAR WHEEL-FWD VLV (1999-08)
HA590425			2	FRONT WHEEL-4WD FOR TK3/4 (1999-99), FOR TK1 (1999-99), FOR TK1+ (1999-99)
HA590503			2	FRONT WHEEL-4WD DOD TK3/4 (2000-02)
HA590600K		N	2	FRONT WHEEL-FWD INF Car FD (2000-04), NIS Car FD (2000-08)
HA590644		O	2	FRONT WHEEL-4WD HON TK (2002-02), ISU TK (2002-04)
HA590653			2	FRONT WHEEL-RWD ISU TK (2002-04)
HA591050			2	REAR WHEEL-RWD LEX Car RD (2001-06), REAR WHEEL-AWD LEX Car RD (2001-06)
HA591080			2	REAR WHEEL-AWD TOY TK (2004-09)
HA591339			2	FRONT WHEEL-4WD CHE TK1 (1988-94), CHE TK3/4 (1987-94)
HA592210			1	REAR WHEEL-FWD HON TK (1998-01), REAR WHEEL-4WD HON TK (1997-01)
HA592410			2	REAR WHEEL-FWD TOY Car FD (2000-05)
HA592450			1	REAR WHEEL-FWD LEX Car FD (2002-08), TOY Car FD (2002-09), TOY TK (2001-03)
HA592451			2	REAR WHEEL-FWD TOY TK (2004-07), LEX SUV (2004-08)
HA592460			2	REAR WHEEL-FWD LEX Car FD (2002-08), TOY Car FD (2002-09), TOY TK (2001-03)
HA592461			2	REAR WHEEL-FWD TOY TK (2004-07), LEX SUV (2004-08)

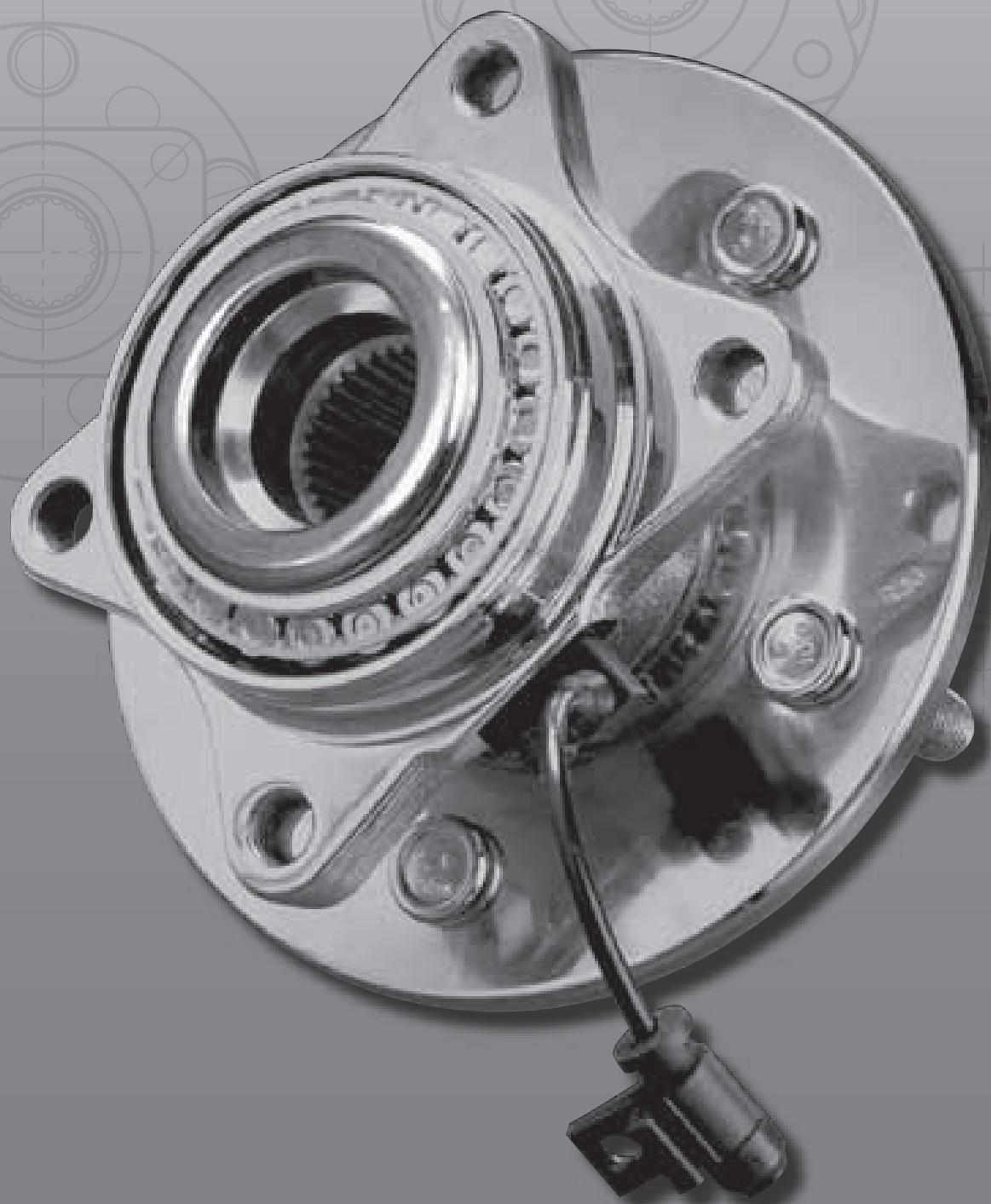
HUB UNIT BEARING / BEARING MODULE - BUYER'S GUIDE *continued*

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
HA592519			2	FRONT WHEEL-RWD BMW7 Car (1995-01)
HA593427			2	FRONT WHEEL-RWD BMW5 Car (1997-05), BMW8 Car (2000-03)
HA593550			2	FRONT WHEEL-RWD LEX Car RD (2001-06)
HA594181			2	FRONT WHEEL-FWD VLV (1994-98), FRONT WHEEL-AWD VLV (1997-98)
HA594241			2	REAR WHEEL-FWD TOY TK (1997-05)
HA594245			2	REAR WHEEL-FWD SCI (2004-06), TOY Car FD (2000-05)
HA594246			2	REAR WHEEL-RWD TOY TK (2003-09), REAR WHEEL-4WD TOY TK (2003-09), LEX SUV (2003-08)
HA594301			2	REAR WHEEL-RWD TOY TK (2001-06), REAR WHEEL-4WD TOY TK (2001-07)
HA594460K			2	FRONT WHEEL-FWD HON Car (1988-90)
HA594504			2	REAR WHEEL-FWD TOY TK (1998-05)
HA594505			2	REAR WHEEL-AWD TOY TK (2001-05)
HA595017			2	FRONT WHEEL-RWD TOY Car RD (1999-05)
HA595894			2	FRONT WHEEL-FWD VLV (1993-93)
HA596030			2	REAR WHEEL-FWD TOY Car FD (2002-04)
HA596467			2	FRONT WHEEL-RWD CAD Car RD (1997-01)
HA597449			2	FRONT WHEEL-RWD JEE (1999-01), FRONT WHEEL-4WD JEE (1999-06)
HA597851			2	FRONT WHEEL-4WD DOD TK3/4 (1994-99)
HA597957			2	REAR WHEEL-FWD VLV (1993-04)
HA598679			2	FRONT WHEEL-RWD JEE (1999-04), FRONT WHEEL-4WD JEE (1999-04)
HA599361			2	FRONT WHEEL-4WD DOD LT (1997-04)
HA599406			2	FRONT WHEEL-RWD DOD LT (1997-04)
HA599455L			2	FRONT WHEEL-RWD JEE (2002-08), FRONT WHEEL-4WD JEE (2002-07)
HA599455R			2	FRONT WHEEL-RWD JEE (2002-08), FRONT WHEEL-4WD JEE (2002-07)
HA599467			2	FRONT WHEEL-RWD JEE (2002-05), FRONT WHEEL-4WD JEE (2002-05)
HA599528			2	FRONT WHEEL-RWD DOD LT (1997-04)
HA599863			2	FRONT WHEEL-4WD DOD TK1/2 (2000-01)
SP940200		N	2	FRONT WHEEL-4WD FOR TK3/4 (2005-08), FOR TK1 (2005-08)
SP940201		N	2	FRONT WHEEL-4WD FOR TK1 (2005-08)
SP940202		N	2	FRONT WHEEL-4WD FOR TK1+ (2005-08)

Timken Part No.	On Hand	Pop Code	Per Car Qty	Application
SP940203		N	2	FRONT WHEEL-RWD FOR TK3/4 (2005-09), FOR TK1 (2005-09), FOR TK1+ (2005-08)
SP940204		N	2	FRONT WHEEL-4WD FOR TK1 (2008-08)

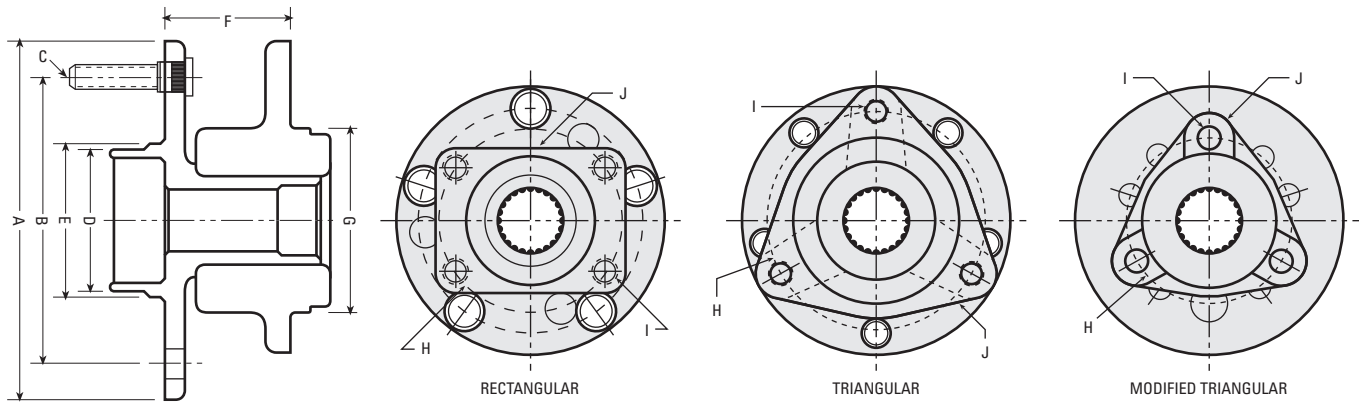
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HUB UNIT BEARING / BEARING MODULE - DIAGRAMS AND SPECIFICATIONS

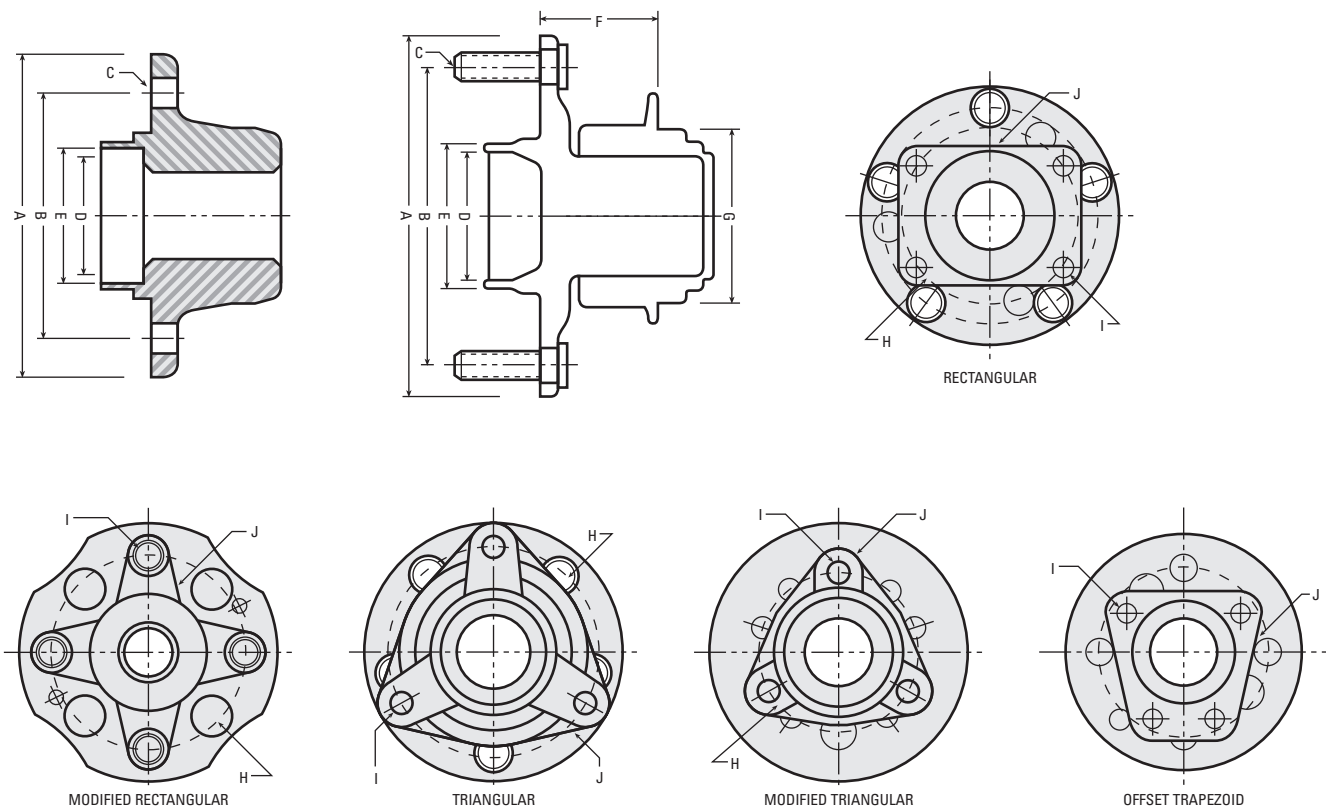


HUB UNIT BEARING DIAGRAMS

DRIVEN HUB UNIT BEARINGS



NON-DRIVEN HUB UNIT BEARINGS



HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
510038	*	-	-	-	-	-	-	3.39	4.13	M10x1.25 (4)	Modified Trapezoid	-	N
		-	-		-	-	-	86.00	105.00				
511010	*	-	-	-	-	-	-	3.19	-	- (4)	Modified Rectangle	-	-
		-	-		-	-	-	81.00	-				
511011	*	-	-	-	-	-	-	3.19	4.33	M12X1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	-	81.00	110.00				
511012	*	-	-	-	-	-	-	3.54	5.96	- (4)	Modified Rectangle	-	N
		-	-		-	-	-	90.00	151.38				
512000		5.43	3.94	M12x1.5 (4)	2.24	2.26	2.56	2.40	-	0.43 11.00(4)	Modified Trapezoid	-	N
		138.00	100.00		57.00	57.49	65.14	61.00	-				
512001		5.43	3.94	M12x1.5 (5)	2.24	2.26	2.56	2.40	-	0.43 11.00(4)	Modified Trapezoid	-	Y
		138.00	100.00		57.00	57.49	65.14	61.00	-				
512002		5.43	3.94	M12x1.5 (4)	2.24	2.26	2.56	2.40	-	0.43 11.00(4)	Modified Trapezoid	-	Y
		138.00	100.00		57.00	57.49	65.14	61.00	-				
512003		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512004		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512005		6.14	4.53	M12x1.5 (5)	2.76	2.78	2.72	2.83	-	0.47 11.94(4)	Rectangle	-	N
		156.00	115.00		70.14	70.63	69.10	71.80	-				
512006		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512007		5.55	3.94	M12x1.5 (4)	1.89	2.20	2.24	-	-	-	-	-	N
		141.00	100.00		48.00	56.00	57.00	-	-				
512008		5.77	4.50	M12x1.5 (5)	2.76	2.76	2.44	-	-	-	-	-	Y
		146.50	114.30		70.00	70.00	62.00	-	-				
512009	*	-	-	-	-	-	2.04	-	3.90	0.41 10.50(4)	Modified Trapezoid	-	N
		-	-		-	-	51.80	-	99.00				
512010		5.51	4.50	M12x1.5 (5)	2.64	3.54	-	-	-	-	-	-	N
		140.00	114.30		67.00	90.00	-	-	-				
512011		5.51	4.50	M12x1.5 (5)	2.64	3.55	-	-	-	-	-	-	Y
		140.00	114.30		67.00	90.00	-	-	-				
512012		4.72	3.94	M14x1.5 (5)	2.24	2.56	1.61	-	-	-	-	-	Y
		120.00	100.00		57.00	65.00	41.00	-	-				
512013		5.31	3.94	M12X1.5 (5)	2.24	2.26	2.06	-	-	-	-	-	Y
		135.00	100.00		56.90	57.30	52.40	-	-				
512014	*	-	-	-	-	-	1.77	3.19	4.33	M12x1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	45.00	81.00	110.00				
512015		5.83	4.50	- (5)	2.60	2.68	2.54	-	-	-	-	-	N
		148.00	114.30		66.00	68.00	64.50	-	-				

*Denotes a Bearing Module

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512016		5.83	4.50	M12x1.25 (4)	2.60	2.68	1.93	2.83	-	-	-	-	N
		148.00	114.30		66.00	68.00	49.00	72.00	-				
512017		5.08	4.25	M12x1.25 (4)	2.56	2.80	1.65	3.01	-	-	-	-	N
		129.10	108.00		64.98	71.03	42.00	76.50	-				
512018		5.51	3.94	M12x1.5 (4)	2.13	2.17	2.94	-	3.82	0.41 10.50(4)	Modified Trapezoid	-	N
		140.00	100.00		54.00	55.00	74.70	-	97.00				
512019		5.51	3.94	M12x1.5 (4)	2.13	2.17	2.94	-	3.82	0.413 10.49(4)	Modified Trapezoid	-	Y
		140.00	100.00		54.00	55.00	74.70	-	97.00				
512020		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512021		5.31	3.94	M12x1.5 (4)	2.24	2.26	2.06	-	-	-	-	-	Y
		135.00	100.00		56.90	57.35	52.40	-	-				
512022		5.47	4.50	M12x1.5 (4)	2.52	2.52	2.35	-	-	-	-	-	Y
		139.00	114.30		64.00	64.00	59.70	-	-				
512023		5.31	3.94	M12x1.5 (5)	2.24	2.26	2.06	-	-	-	-	-	Y
		135.00	100.00		56.90	57.35	52.40	-	-				
512024		5.35	4.25	M12x1.5 (4)	2.49	2.50	2.03	3.27	-	-	-	-	Y
		135.00	108.00		63.20	63.50	51.50	83.00	-				
512025		5.28	3.94	0.551 14(4)	2.32	2.68	2.07	-	-	-	-	-	N
		134.00	100.00		59.00	68.00	52.50	-	-				
512026		5.47	4.50	M12x1.5 (4)	2.64	3.54	1.99	-	-	-	-	-	Y
		139.00	114.30		67.00	90.00	50.50	-	-				
512027		5.47	4.50	M12x1.5 (4)	2.64	3.54	1.99	-	-	-	-	-	Y
		139.00	114.30		67.00	90.00	50.50	-	-				
512029		5.51	4.50	M12x1.5 (5)	2.81	2.88	1.63	-	-	-	-	-	Y
		140.00	114.30		71.37	73.41	41.15	-	-				
512031		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.80	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	71.00	-	-				
512032		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512033		4.92	3.94	M12x1.5 (4)	2.20	2.52	2.22	-	-	-	-	-	N
		125.00	100.00		56.00	64.00	56.50	-	-				
512036		4.96	3.94	M12x1.25 (5)	2.20	2.28	2.54	2.48	-	-	-	-	N
		126.00	100.00		56.00	58.00	64.50	63.00	-				
512037		5.51	4.50	M12x1.5 (4)	-	-	2.22	-	-	-	-	-	N
		140.00	114.30		-	-	56.50	-	-				
512038	*	-	-	-	-	-	2.16	-	4.17	0.41 10.50(4)	Modified Trapezoid	-	N
		-	-		-	-	54.80	-	106.00				
512039		5.51	4.50	M12x1.5 (5)	2.64	2.64	2.24	3.03	-	-	-	-	N
		140.00	114.30		67.00	67.00	57.00	77.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512040		5.52	4.50	-	2.64	2.64	2.22	2.62	-	-	-	-	Y
		140.20	114.30		67.00	67.00	56.50	66.50	-				
512041		6.02	4.50	M12x1.5 (5)	2.36	2.44	3.09	3.30	-	0.41 10.50(4)	Modified Trapezoid	-	Y
		153.00	114.30		60.00	62.00	78.60	83.88	-				
512078		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512105		5.49	4.25	M12x1.5 (5)	2.49	2.54	2.29	-	-	-	-	-	Y
		139.50	107.95		63.26	64.42	58.06	-	-				
512106		5.47	4.25	M12x1.5 (5)	2.49	2.54	2.27	2.91	-	-	-	-	N
		139.00	107.95		63.22	64.38	57.76	74.00	-				
512107		5.47	4.25	M12x1.5 (5)	2.49	2.53	2.15	-	-	-	-	-	Y
		139.00	107.95		63.22	64.38	54.58	-	-				
512118		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.32	2.80	-	-	-	-	Y
		140.00	114.30		67.00	72.00	59.00	71.00	-				
512119		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.32	2.80	-	-	-	-	N
		140.00	114.30		67.00	72.00	59.00	71.00	-				
512120		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.80	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	71.00	-	-				
512121		5.98	4.50	M12x1.5 (5)	2.52	2.52	2.80	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	71.00	-	-				
512122		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	2.80	-	-	-	-	N
		152.00	114.30		64.00	64.00	56.00	71.00	-				
512123		5.77	4.50	M12x1.5 (5)	2.52	2.76	2.44	-	-	-	-	-	Y
		146.50	114.30		64.00	70.00	62.00	-	-				
512124		5.77	4.50	M12x1.5 (5)	2.52	2.76	2.44	-	-	-	-	-	Y
		146.50	114.30		64.00	70.00	62.00	-	-				
512125		5.45	4.50	M12x1.5 (5)	2.81	2.83	2.33	3.39	4.25	-	-	-	N
		138.43	114.30		71.83	71.83	59.11	85.98	108.12				
512133		5.32	3.74	M12x1.5 (5)	2.24	2.28	-	2.60	-	-	-	-	Y
		135.20	95.07		56.90	58.01	-	66.04	-				
512136	*	-	-	-	-	-	-	2.68	3.54	M10x1.25 (4)	Modified Trapezoid	-	N
		-	-		-	-	-	68.00	90.00				
512137	*	-	-	-	-	-	-	2.56	3.90	0.413 10.49(4)	Modified Trapezoid	-	N
		-	-		-	-	-	65.00	99.00				
512144		5.98	4.50	M12x1.5 (5)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512145		5.51	4.13	-	2.58	2.56	-	-	4.14	0.41 10.34(4)	-	-	Y
		140.00	105.00		65.43	65.10	-	-	105.23				
512146		5.15	4.27	-	2.55	2.68	-	-	-	-	-	-	Y
		130.84	108.52		64.77	67.95	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512147		5.37	4.51	1/2-20 (4)	2.81	3.38	2.26	-	-	-	-	-	N
		136.27	114.52		71.37	85.85	57.46	-	-				
512148		4.92	3.94	M12x1.5 (4)	2.20	2.52	2.22	-	-	-	-	-	N
		125.00	100.00		56.00	64.00	56.50	-	-				
512149		5.47	4.25	M12x1.5 (5)	2.49	2.54	2.15	2.91	-	-	-	-	Y
		139.00	107.95		63.22	64.38	54.58	74.00	-				
512150		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512151		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512152		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512153		5.73	4.75	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	120.65		70.10	70.60	42.06	91.42	116.00				
512154		5.32	3.74	M12x1.5 (5)	2.24	2.25	-	2.60	-	-	-	-	N
		135.20	95.07		56.90	57.25	-	66.04	-				
512155		4.96	3.94	M12x1.5 (5)	2.24	2.26	1.89	3.39	-	M12x1.5 (4)	Modified Rectangle	-	Y
		126.00	100.00		56.80	57.30	48.00	86.00	-				
512156		5.51	4.50	M12x1.5 (5)	2.81	2.83	1.89	3.39	-	M12x1.5 (4)	Modified Rectangle	-	Y
		140.00	114.30		71.40	71.90	48.00	86.00	-				
512157		5.46	4.26	M12x1.35 (5)	2.78	2.82	1.88	3.38	3.51	0.41 10.41(4)	Modified Rectangle	-	N
		138.87	108.38		70.73	71.62	47.94	85.95	89.15				
512158		5.51	4.50	M12x1.5 (4)	2.64	2.64	2.55	3.03	-	-	-	-	N
		140.00	114.30		67.00	67.00	64.70	77.00	-				
512159		5.47	4.50	M12x1.5 (5)	2.23	2.23	2.45	2.64	-	-	-	-	Y
		139.00	114.30		56.51	56.51	62.20	67.00	-				
512160		5.47	4.50	M12x1.5 (4)	2.64	2.99	1.92	2.64	-	-	-	-	Y
		139.00	114.30		67.00	76.00	48.80	67.00	-				
512161		4.80	3.94	M12x1.5 (4)	2.13	2.17	2.20	-	-	-	-	-	Y
		122.00	100.00		54.00	55.00	56.00	-	-				
512162		5.47	4.25	M12x1.5 (5)	2.49	2.54	2.27	-	-	-	-	-	Y
		139.00	107.95		63.22	64.38	57.76	-	-				
512163		5.47	4.25	M12x1.5 (5)	2.49	2.53	2.15	-	-	-	-	-	Y
		139.00	107.95		63.22	64.38	54.58	-	-				
512164		5.47	4.25	M12x1.5 (5)	2.49	2.53	2.15	2.91	-	-	-	-	N
		139.00	107.95		63.22	64.38	54.58	74.00	-				
512165		5.47	4.50	M12x1.5 (4)	2.64	2.99	1.99	-	-	-	-	-	Y
		139.00	114.30		67.00	76.00	50.50	-	-				
512166		-	4.17	M10x1.25 -	3.17	3.17	-	-	-	-	Modified Polygon	-	N
		-	106.00		80.60	80.60	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512167		5.31	3.94	-	2.24	2.26	2.26	-	-	-	-	-	Y
		135.00	100.00		56.90	57.35	57.50	-	-				
512168		5.31	3.94	-	2.24	2.26	2.26	-	-	-	-	-	Y
		135.00	100.00		56.90	57.35	57.50	-	-				
512169		5.51	4.50	M12x1.5 (5)	2.81	2.83	1.89	3.39	-	M12x1.5 (4)	Modified Rectangle	-	Y
		140.00	114.30		71.40	71.90	48.00	86.00	-				
512170		5.51	4.50	M12x1.5 (5)	2.81	2.83	1.89	3.39	-	M12x1.5 (4)	Modified Rectangle	-	N
		140.00	114.30		71.40	71.90	48.00	86.00	-				
512171		4.80	3.94	M12x1.5 (4)	2.22	2.24	2.52	-	3.06	M10x1.25 (4)	Square	-	N
		122.00	100.00		56.50	57.00	64.00	-	77.78				
512172		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512173		5.98	4.50	M12x1.5 (5)	2.52	2.52	2.48	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	63.00	-	-				
512174		5.47	3.94	M12x1.5 (4)	2.20	2.40	2.20	2.60	-	-	-	-	N
		139.00	100.00		56.00	61.00	56.00	66.00	-				
512175		5.47	3.94	M12x1.5 (4)	2.20	2.40	2.20	-	-	-	-	-	Y
		139.00	100.00		56.00	61.00	56.00	-	-				
512176		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	2.60	-	-	-	-	N
		152.00	114.30		64.00	64.00	56.00	66.00	-				
512177		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512178		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512179		5.98	4.50	M12x1.5 (5)	2.52	2.52	2.20	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	-	-				
512180		5.98	4.50	-	2.52	2.52	2.44	2.87	-	-	-	-	Y
		152.00	114.30		64.00	64.00	62.00	73.00	-				
512181	*	-	-	-	-	-	-	3.31	4.07	M10x1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	-	84.00	103.32				
512182		5.28	4.50	M12x1.25 (4)	2.36	2.52	1.95	2.48	-	-	-	-	N
		134.00	114.30		60.00	64.00	49.50	63.00	-				
512183	*	-	-	-	-	-	-	3.31	4.21	M12x1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	-	84.00	106.96				
512184		5.51	3.94	M12x1.5 (4)	2.13	2.17	2.94	2.40	3.82	-	Modified Trapezoid	-	Y
		140.00	100.00		54.00	55.00	74.70	60.96	97.00				
512185		4.92	-	-	2.28	2.52	2.22	2.10	-	-	-	-	N
		125.00	-		58.00	64.00	56.50	57.30	-				
512186		5.51	4.50	-	2.64	2.84	2.33	2.80	-	-	-	-	Y
		140.00	114.30		67.00	72.00	59.21	71.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512187		5.16	4.41	-	2.24	2.68	2.76	-	3.74	-	Modified Pentagon	-	N
		131.00	112.00		57.00	68.00	70.00	-	95.00				
512188		5.49	4.50	M12X1.5 (5)	2.52	2.52	2.21	-	-	-	-	-	Y
		139.50	114.30		64.00	64.00	56.00	-	-				
512189		5.83	4.50	M12x1.5 (5)	2.64	2.99	2.32	2.60	3.94	M10x1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	66.00	100.00				
512190		5.83	4.50	M12x1.5 (4)	2.64	2.99	2.32	2.60	3.94	M10x1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	66.00	100.00				
512191		5.83	4.50	M12x1.5 (4)	2.64	2.99	2.32	2.60	3.94	M10x1.25 (4)	Modified Rectangle	-	N
		148.00	114.30		67.00	76.00	59.00	66.00	100.00				
512192		5.51	3.94	M12x1.5 (4)	2.13	2.46	-	2.76	-	-	-	-	Y
		140.00	100.00		54.00	62.50	-	70.00	-				
512193		5.51	3.94	M12x1.5 (4)	2.13	2.46	1.99	2.76	-	-	-	-	N
		140.00	100.00		54.00	62.50	50.50	70.00	-				
512194		5.47	4.50	M12x1.5 (4)	2.64	2.99	2.00	2.91	-	-	-	-	N
		139.00	114.30		67.00	76.00	50.50	74.00	-				
512195		5.47	4.50	M12x1.5 (4)	2.64	2.99	2.00	2.91	-	-	-	-	Y
		139.00	114.30		67.00	76.00	50.50	74.00	-				
512196		5.83	4.50	M12x1.5 (5)	2.64	2.99	-	3.07	-	-	-	-	Y
		148.00	114.30		67.00	76.00	-	78.00	-				
512197		5.83	4.50	M12x1.5 (5)	2.64	2.99	-	3.07	-	-	-	-	N
		148.00	114.30		67.00	76.00	-	78.00	-				
512198		5.47	4.50	M12x1.5 (5)	2.64	2.99	-	2.91	-	-	-	-	Y
		139.00	114.30		67.00	76.00	-	74.00	-				
512199		5.47	4.50	M12x1.5 (5)	2.64	2.99	-	2.91	-	-	-	-	N
		139.00	114.30		67.00	76.00	-	74.00	-				
512200		4.79	3.95	M12x1.5 (4)	2.20	2.27	-	2.64	-	-	-	-	N
		121.62	100.27		55.94	57.68	-	67.09	-				
512201		5.83	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.35	4.21	M12X1.25 (4)	Modified Trapezoid	-	Y
		148.00	114.30		66.00	68.00	69.00	85.20	107.00				
512203		5.83	4.50	M12X1.25 (5)	2.60	2.68	-	-	-	-	-	-	N
		148.00	114.30		66.00	68.00	-	-	-				
512204		5.28	4.50	M12X1.25 (4)	2.36	2.52	1.89	2.36	-	-	-	-	Y
		134.00	114.30		60.00	64.00	48.00	60.00	-				
512215		5.31	3.94	M12x1.5 (5)	2.13	2.17	2.15	2.91	3.66	-	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	54.50	74.00	93.00				
512216		5.31	3.94	M12x1.5 (5)	2.13	2.17	2.15	2.91	3.66	-	Modified Trapezoid	-	N
		135.00	100.00		54.00	55.00	54.50	74.00	93.00				
512217		5.31	3.94	M12x1.5 (5)	2.13	2.17	2.15	2.91	3.66	M10x1.25 (4)	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	54.50	74.00	93.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512218		5.31	3.94	M12x1.5 (5)	2.13	2.17	2.15	2.91	3.66	M10x1.25 (4)	Modified Trapezoid	-	N
		135.00	100.00		54.00	55.00	54.50	74.00	93.00				
512219		5.87	4.30	M12x1.5 (5)	2.60	2.91	-	-	-	-	-	-	Y
		148.97	109.11		65.91	73.85	-	-	-				
512220		5.33	3.98	M12x1.5 (5)	2.24	2.33	-	-	-	-	-	-	Y
		135.31	101.08		56.90	59.15	-	-	-				
512221		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	N
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512222		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
512223		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
512229		5.91	4.53	M12x1.5 (5)	2.76	2.78	3.25	3.11	-	M10x1.5 (4)	Rectangle	33	Y
		150.00	115.00		70.10	70.60	82.60	79.00	-				
512230		5.91	4.53	M12x1.5 (5)	2.76	2.78	3.25	3.11	-	M10x1.5 (4)	Rectangle	33	N
		150.00	115.00		70.10	70.60	82.60	79.00	-				
512232		5.51	4.13	- (5)	2.58	2.56	-	-	-	-	-	-	Y
		140.00	105.00		65.43	65.10	-	-	-				
512235		5.52	4.46	M12x1.5 (4)	2.64	3.55	-	2.82	-	-	-	-	Y
		140.11	113.33		66.93	90.12	-	71.66	-				
512236		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	N
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
512237		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
512238		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.07	2.36	-	M10x1.25 (4)	Modified Trapezoid	-	Y
		140.00	110.00		64.99	65.47	78.00	60.00	-				
512239		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.07	2.36	-	M10x1.25 (4)	Modified Trapezoid	-	N
		140.00	110.00		64.99	65.47	78.00	60.00	-				
512242		5.47	4.50	M12x1.5 (4)	2.52	2.52	2.35	2.60	-	-	-	-	N
		139.00	114.30		64.00	64.00	59.70	66.00	-				
512255		5.47	4.50	M12x1.5 (5)	2.52	2.52	2.21	-	-	-	-	-	Y
		139.00	114.30		64.00	64.00	56.00	-	-				
512265		5.83	4.50	M12x1.5 (5)	2.64	2.99	2.32	2.87	3.94	M10x1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	73.00	100.00				
512270		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.40	3.07	-	-	-	-	N
		140.00	114.30		67.00	72.00	61.00	78.00	-				
512280		5.98	4.50	M12x1.5 (5)	2.36	2.44	2.72	3.31	4.09	0.414 10.52(4)	Offset Trapezoid	-	Y
		152.00	114.30		60.00	62.00	69.00	84.00	104.00				
512299		5.74	4.50	1/2-20 (5)	2.49	2.68	1.71	3.43	4.43	M12x1.75 (4)	Modified Rectangle	-	Y
		145.70	114.30		63.24	67.96	43.50	87.20	112.48				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
512305	*	-	-	-	-	-	-	1.76	4.21	M12X1.5 (4)	Modified Rectangle	-	N
		-	-		-	-	-	44.68	107.00				
512322		5.98	4.50	M12X1.5 (5)	2.52	2.52	2.30	2.76	3.94	M10X1.25 (4)	Modified Trapezoid	-	Y
		152.00	114.30		64.00	64.00	58.50	70.00	100.00				
512323		5.47	3.94	M12X1.5 (4)	2.21	61.00	2.21	-	-	-	-	-	Y
		139.00	100.00		56.00	2.40	56.00	-	-				
512324		5.53	3.92	M12X1.5 (4)	2.12	2.46	2.28	2.64	3.63	M10X1.25 (4)	Modified Rectangle	-	Y
		140.02	99.68		53.94	62.47	57.98	66.92	92.08				
512326		5.47	4.50	M12X1.5 (5)	2.64	2.72	2.10	3.62	4.50	M12X1.25 (4)	Modified Square	-	Y
		139.00	114.30		67.00	69.00	53.40	92.00	114.30				
512340		5.83	4.50	M12X1.5 (5)	2.64	2.99	2.32	2.87	3.94	M10X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	73.00	100.00				
513003		5.43	3.94	M12x1.5 (5)	2.24	2.26	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	N
		138.00	100.00		57.00	57.49	65.14	71.80	100.60				
513004K		4.92	3.94	M12x1.5 (5)	2.24	2.30	1.70	2.89	3.86	0.43 11.00(3)	Modified Triangle	33	N
		125.00	100.00		57.00	58.33	43.18	73.50	98.00				
513010		5.77	4.75	M12x1.5 (5)	2.76	2.78	2.72	2.83	-	0.47 11.91(4)	Rectangle	-	N
		146.56	120.65		71.10	70.60	69.00	71.80	-				
513011K		4.94	3.94	M12x1.5 (5)	2.25	2.27	1.65	2.80	4.02	0.5 12.70(3)	Modified Triangle	33	N
		125.40	100.00		57.02	57.73	41.91	71.00	102.01				
513012		5.43	3.94	M12x1.5 (5)	2.24	2.26	2.55	2.40	-	0.42 10.75(4)	Offset Trapezoid	-	N
		138.00	100.00		56.96	57.46	64.76	60.92	-				
513013		5.69	4.75	M12x1.5 (5)	2.76	2.78	1.86	3.21	4.75	M12x1.75 (3)	Modified Triangle	27	N
		144.50	120.65		70.10	70.60	47.28	81.50	120.65				
513016K		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.55	4.57	0.51 12.96(3)	Modified Triangle	27	N
		145.50	115.00		70.10	70.60	42.18	90.05	116.00				
513017K		4.92	3.94	M12x1.5 (5)	2.24	2.30	1.75	2.89	3.86	0.51 12.96(3)	Modified Triangle	33	N
		125.00	100.00		57.00	58.33	44.43	73.50	98.00				
513018		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	N
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513019		5.79	4.75	M12x1.5 (5)	2.76	2.78	2.72	2.83	3.96	0.46 11.69(4)	Rectangle	-	Y
		147.00	120.65		70.10	70.60	68.95	71.76	100.60				
513020		5.59	4.75	M12x1.5 (5)	2.76	2.78	1.86	3.62	4.75	M12x1.75 (3)	Modified Triangle	27	N
		142.10	120.65		70.10	70.60	47.28	91.98	120.65				
513030		4.80	3.94	M12x1.5 (4)	2.13	2.17	2.20	2.56	-	-	-	-	N
		122.00	100.00		54.00	55.00	56.00	65.00	-				
513033		5.35	3.94	M12x1.5 (4)	2.21	2.40	-	2.60	-	-	-	-	N
		136.00	100.00		56.00	61.00	-	66.00	-				
513034		5.28	3.94	M12x1.5 (4)	2.20	2.40	1.95	2.36	-	-	-	-	N
		134.00	100.00		56.00	61.00	49.50	60.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
513035		5.28	3.94	M12x1.5 (4)	2.20	2.40	1.95	2.46	-	-	-	-	N
		134.00	100.00		56.00	61.00	49.50	62.50	-				
513038		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513039		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513041		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513042		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513044		5.69	4.53	M12x1.5 (5)	2.76	2.78	1.77	4.69	5.75	M10x1.5 (4)	Modified Trapezoid	33	N
		144.50	115.00		70.14	70.63	45.02	119.04	146.00				
513049		5.47	4.50	M12x1.5 (4)	2.52	2.52	2.17	2.80	-	-	-	-	Y
		139.00	114.30		64.00	64.00	55.00	71.00	-				
513050		5.28	3.94	M12x1.5 (4)	2.20	2.40	1.95	2.46	-	-	-	-	N
		134.00	100.00		56.00	61.00	49.50	62.50	-				
513059		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.55	4.57	0.51 12.96(3)	Modified Triangle	33	N
		145.50	115.00		70.10	70.60	42.18	90.05	116.00				
513061		5.69	4.75	M12x1.5 (5)	2.76	2.78	1.86	3.21	4.75	M12x1.75 (3)	Modified Triangle	27	Y
		144.50	120.65		70.10	70.60	47.28	81.50	120.65				
513062		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.80	100.60				
513063		5.77	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.55	4.57	0.51 12.95(3)	Modified Rectangle	33	N
		146.51	115.01		70.13	70.64	42.16	90.04	116.00				
513070		5.24	4.25	M12x1.5 (5)	2.36	2.60	-	2.80	-	-	-	-	N
		133.00	107.95		60.00	66.00	-	71.00	-				
513074		5.51	4.50	M12x1.5 (5)	2.81	2.89	1.47	3.40	4.41	M10x1.5 (4)	Modified Rectangle	26	N
		140.00	114.30		71.30	73.32	37.50	86.45	112.00				
513075		4.97	3.94	M12x1.5 (5)	2.24	2.40	1.48	3.43	4.41	M10x1.5 (4)	Rectangle	26	N
		126.25	100.00		56.90	60.93	37.60	87.05	112.00				
513076		5.48	4.25	M12x1.5 (5)	2.49	2.53	-	-	-	-	-	-	Y
		139.00	107.95		63.20	64.30	-	-	-				
513077		-	4.25	M12x1.5 (5)	2.49	2.53	-	-	-	-	-	-	N
		-	107.95		63.20	64.28	-	-	-				
513078		5.24	3.94	M12x1.5 (4)	2.36	2.60	-	2.80	-	-	Rectangle	-	N
		133.00	100.00		60.00	66.00	-	71.00	-				
513080		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	2.60	-	-	-	-	N
		152.00	114.30		64.00	64.00	56.00	66.00	-				
513081		5.98	4.50	M12x1.5 (4)	2.52	2.52	2.20	2.60	-	-	-	-	Y
		152.00	114.30		64.00	64.00	56.00	66.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
513082		5.70	4.50	1/2-20 (5)	2.81	2.88	2.12	3.39	4.50	1/2-20 (4)	Circular	26	N
		144.78	114.30		71.32	73.25	53.72	85.98	114.30				
513084		6.06	4.50	1/2-20 (5)	2.81	2.83	2.13	3.94	4.75	M12x1.75 (3)	Modified Triangle	27	N
		153.97	114.30		71.42	71.88	54.18	100.13	120.65				
513085		5.79	4.75	M12x1.5 (5)	2.76	2.78	2.71	2.83	3.96	0.47 11.94(4)	Rectangle	-	Y
		147.00	120.65		70.10	70.60	68.95	71.76	100.60				
513087		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	0.51 12.96(3)	Modified Triangle	33	Y
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
513088		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	0.51 12.96(3)	Modified Triangle	33	N
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
513089		5.73	4.50	M12x1.5 (5)	2.81	2.89	1.66	3.58	4.57	M12x1.75 (3)	Modified Triangle	33	N
		145.50	114.30		71.42	73.28	42.06	91.00	116.00				
513090		5.79	4.75	M12x1.5 (5)	2.76	2.78	2.71	2.82	3.96	M10x1.5 (4)	Rectangle	-	Y
		147.00	120.65		70.10	70.60	68.72	71.72	100.60				
513092		5.47	4.25	M12x1.5 (5)	2.49	2.80	1.87	-	-	-	-	-	Y
		139.00	107.95		63.26	71.00	47.60	-	-				
513093	*	-	4.02	-	-	-	-	3.27	-	M10x1.25 (4)	Modified Trapezoid	-	N
		-	102.00		-	-	-	83.00	-				
513094		5.63	4.72	M12x1.5 (5)	2.85	2.95	-	-	-	-	Circle	-	Y
		143.00	120.00		72.50	75.00	-	-	-				
513096		5.47	4.72	M12x1.5 (5)	2.85	3.10	-	-	-	-	-	-	Y
		139.00	120.00		72.44	78.79	-	-	-				
513098	*	-	-	-	-	-	-	3.27	4.02	M10x1.25 (4)	Modified Trapezoid	-	N
		-	-		-	-	-	83.00	102.00				
513099	*	-	-	-	-	-	-	3.31	4.17	M10x1.25 (4)	Modified Trapezoid	-	N
		-	-		-	-	-	84.00	106.00				
513100		5.47	4.25	M12x1.5 (5)	2.49	2.79	1.41	3.37	4.41	M12x1.75 (3)	Modified Triangle	26	N
		139.00	107.95		63.23	70.97	35.90	85.50	112.00				
513104		5.94	4.50	1/2-20 (5)	2.77	2.82	2.05	3.07	-	-	-	-	Y
		151.00	114.30		70.47	71.63	52.00	78.00	-				
513105		5.35	3.94	M12x1.5 (4)	2.20	2.40	2.17	-	-	-	-	-	Y
		136.00	100.00		56.00	61.00	55.00	-	-				
513107		5.67	4.50	1/2-20 (5)	2.81	2.83	1.81	3.94	4.75	M12x1.75 (3)	Modified Triangle	27	N
		144.00	114.30		71.30	71.83	46.00	100.00	120.65				
513109		5.68	4.50	1/2-20 (6)	2.82	2.88	2.11	3.82	4.50	1/2-20 (4)	Rectangle	31	N
		144.00	114.30		71.43	73.00	54.00	97.00	114.30				
513111		4.72	3.94	-	2.24	2.60	1.65	2.60	-	-	-	-	Y
		120.00	100.00		57.00	66.00	42.00	66.00	-				
513114		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.40	3.07	-	-	-	-	Y
		140.00	114.30		67.00	72.00	61.00	78.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
513115		5.47	4.50	1/2-20 (5)	2.78	2.80	1.87	3.15	-	-	-	-	Y
		139.00	114.30		70.50	71.00	47.60	80.00					
513121		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.59	4.57	M12x1.75 (3)	Modified Triangle	33	Y
		145.50	115.00		70.10	70.60	42.06	91.25	116.00				
513122		4.96	3.94	M12x1.5 (5)	2.24	2.40	1.47	3.43	4.41	M10x1.5 (4)	Rectangle	26	N
		26.00	100.00		56.80	60.80	37.30	87.00	112.00				
513123		5.49	4.50	M12x1.5 (5)	2.81	2.88	1.47	3.43	4.41	M10x1.5 (4)	Rectangle	26	N
		139.32	114.30		71.32	73.25	37.50	87.00	112.00				
513124		5.69	4.75	M12x1.5 (5)	2.76	2.78	1.85	3.62	4.75	M12x1.75 (3)	Modified Triangle	27	Y
		144.50	120.65		70.10	70.60	47.00	91.98	120.65				
513125		5.63	4.72	M12x1.5 (5)	2.83	3.11	-	-	-	-	-	48	Y
		143.00	120.00		72.00	79.00	-	-	-				
513126		5.14	4.27	0.492 12.50(4)	2.68	2.56	1.46	3.26	4.06	0.334 8.48(4)	Rectangle	26	N
		130.58	108.36		67.95	64.90	37.01	82.88	103.23				
513127		5.18	4.23	-	2.56	2.67	1.46	3.18	4.06	0.41 10.54(4)	Rectangle	26	N
		131.47	107.54		64.92	67.92	37.11	80.84	103.23				
513128		5.39	4.25	M12x1.5 (5)	2.56	2.68	-	-	-	-	-	-	N
		136.86	107.95		64.97	67.95	-	-	-				
513131		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.40	3.07	-	-	-	-	Y
		140.00	114.30		67.00	72.00	61.00	78.00	-				
513132		5.47	4.50	M12x1.5 (6)	2.81	2.90	1.50	3.43	4.41	0.314 7.98(4)	Rectangle	-	N
		138.99	114.30		71.32	73.56	38.10	87.02	111.88				
513133		5.47	4.50	M12x1.5 (5)	2.72	2.72	1.52	3.43	4.41	M12x1.25 (4)	Modified Rectangle	27	N
		139.00	114.30		69.00	69.00	38.50	87.00	112.00				
513135	*	-	-	-	-	-	-	3.23	4.17	M12x1.25 (4)	Modified Trapezoid	-	N
		-	-		-	-	-	82.00	106.00				
513137		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.46	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	37.10	91.42	116.00				
513138		4.96	3.94	M12x1.5 (5)	2.24	2.40	1.48	3.43	4.33	M12x1.75 (3)	Modified Triangle	26	N
		125.91	100.00		56.79	60.83	37.47	87.00	110.01				
513139		5.73	4.75	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	120.65		70.10	70.60	42.18	91.42	116.00				
513142		5.24	3.94	M12x1.5 (4)	2.36	2.60	-	2.79	-	-	-	-	N
		132.99	100.00		59.99	65.99	-	70.76	-				
513152		4.80	3.94	M12x1.5 (4)	2.13	2.17	2.13	2.40	-	-	-	-	N
		122.00	100.00		54.00	55.00	54.00	61.00	-				
513153		5.51	4.50	M12x1.5 (5)	2.64	2.83	2.40	3.07	-	-	-	-	Y
		140.00	114.30		67.00	72.00	61.00	78.00	-				
513155		4.80	3.94	M12x1.5 (4)	2.13	2.17	2.13	-	-	-	-	-	Y
		122.00	100.00		54.00	55.00	54.00	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
513156		5.47	4.25	M12x1.5 (5)	2.49	2.77	1.63	3.29	4.49	M12x1.75 (3)	Modified Triangle	26	N
		139.00	107.95		63.23	70.37	41.45	83.50	114.00				
513157		5.59	4.50	M12x1.5 (5)	2.63	2.71	1.60	2.52	4.17	M12x1.25 (4)	Modified Trapezoid	-	N
		142.00	114.30		66.90	68.88	40.62	64.00	106.00				
513160		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	33	N
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
513178		6.04	4.47	M12x1.5 (5)	2.81	2.86	2.12	3.74	4.63	-	Modified Triangle	-	N
		153.47	113.47		71.42	72.64	53.87	94.89	117.58				
513179		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	33	Y
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
513186		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	115.00		70.10	70.60	42.18	91.42	116.00				
513187		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	33	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
513188		5.94	5.00	M12x1.5 (6)	3.06	3.11	1.85	3.62	4.75	M12x1.75 (3)	Modified Triangle	27	Y
		150.75	127.00		77.78	78.98	47.00	91.98	120.65				
513189		5.91	4.53	M12x1.5 (5)	2.76	2.78	2.99	3.59	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		150.00	115.00		70.10	70.60	76.01	91.25	116.00				
513190		5.91	4.53	M12x1.5 (5)	2.76	2.78	2.99	3.59	4.57	M12x1.75 (3)	Modified Triangle	-	N
		150.00	115.00		70.10	70.60	76.01	91.25	116.00				
513193		6.69	5.50	M12x1.5 (5)	4.13	4.26	-	3.10	-	-	-	-	Y
		170.00	139.70		105.00	108.25	-	78.65	-				
513194		5.34	4.08	-	2.55	2.70	1.69	3.44	4.08	-	Modified Rectangle	-	N
		135.64	103.58		64.82	68.58	43.00	87.43	103.68				
513196		5.95	4.45	-	2.75	2.98	1.41	3.43	3.86	-	Modified Rectangle	-	Y
		151.00	112.92		69.93	75.58	35.76	87.06	98.08				
513202		5.96	4.25	M12x2.4 (5)	2.77	2.83	2.17	-	-	-	-	-	Y
		151.53	107.95		70.51	71.90	55.32	-	-				
513226		5.41	3.94	M12x1.5 (4)	2.21	2.52	1.73	3.19	4.02	M10x1.5 (4)	Modified Trapezoid	26	Y
		137.50	100.00		56.00	64.00	44.00	81.00	102.00				
513230		5.95	4.50	1/2-20 (5)	2.77	2.82	1.50	3.52	4.40	M12x1.75 (4)	Modified Rectangle	-	Y
		151.18	114.30		70.46	71.70	37.99	89.45	111.66				
513256		5.47	4.50	M12x1.5 (5)	2.64	2.72	2.10	3.62	4.50	M12x1.25 (4)	Modified Rectangle	-	N
		139.00	114.30		67.00	69.00	53.40	92.00	114.30				
513266		139.00	4.50	M12x1.5 (5)	2.64	2.72	2.10	3.62	4.50	M12x1.25 (4)	Modified Square	-	N
		5.47	114.30		67.00	69.00	53.40	92.00	114.30				
515000		5.69	4.50	1/2-20 (5)	2.51	2.54	2.02	3.94	4.75	M12x1.75 (3)	Modified Triangle	26	N
		144.50	114.30		63.80	64.40	51.30	100.00	120.60				
515001		7.16	5.50	M14x1.5 (6)	3.06	3.08	2.23	3.91	4.96	0.58 14.73(3)	Modified Triangle	33	N
		181.76	139.70		77.60	78.11	56.74	99.31	125.98				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
515002		7.17	5.50	M14x1.5 (6)	3.06	3.08	1.99	3.91	4.96	0.58 14.73(3)	Modified Triangle	33	N
		181.99	139.70		77.60	78.11	50.55	99.31	125.98				
515005		6.72	5.00	1/2-20 (5)	3.06	3.09	2.93	3.85	4.96	0.58 14.73(3)	Modified Triangle	33	Y
		170.69	127.00		77.60	78.36	74.30	97.71	125.98				
515006		6.78	5.50	1/2-20 (5)	3.06	3.09	2.03	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	N
		172.09	139.70		77.72	78.49	51.44	99.31	125.98				
515014		5.88	4.50	1/2-20 (5)	2.77	2.82	2.21	3.94	4.74	M12X1.75 (3)	Modified Triangle	27	N
		149.40	114.30		70.36	71.62	56.13	100.00	120.40				
515017		7.17	5.32	M12X1.75 (5)	3.42	3.54	1.94	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	N
		181.99	135.03		86.74	89.97	49.28	99.31	125.88				
515020		7.99	6.69	M14X2 (8)	4.92	5.08	2.15	4.48	5.51	M14X1.5 (4)	Square	55	Y
		203.00	170.00		124.97	129.01	54.50	113.90	140.00				
515021		7.99	6.69	M14x2 (8)	4.92	5.08	2.15	4.48	5.51	M14x1.5 (4)	Square	55	N
		203.00	170.00		124.97	129.01	54.50	113.90	140.00				
515022		7.13	5.91	M12X1.75 (7)	3.41	3.64	1.95	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	N
		181.00	150.00		86.72	92.35	49.65	99.34	126.00				
515025		7.99	6.69	M14X2 (8)	4.92	5.08	2.15	4.48	5.51	M14X1.5 (4)	Square	55	Y
		203.00	170.00		124.97	129.01	54.50	113.90	140.00				
515026		5.88	4.50	1/2-20 (5)	2.78	2.84	2.21	3.94	4.75	M12X1.75 (3)	Modified Triangle	42	N
		149.40	114.30		70.61	72.14	56.13	100.08	120.65				
515027		5.88	4.50	1/2-20 (5)	2.78	2.84	2.21	3.94	4.75	M12X1.75 (3)	Modified Triangle	42	Y
		149.40	114.30		70.61	72.14	56.13	100.08	120.65				
515028		7.13	5.31	M14X2 (5)	3.42	3.42	1.95	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	N
		181.00	135.00		86.87	86.87	49.53	99.31	125.98				
515029		7.13	5.32	M14X2 (5)	3.41	3.54	1.96	3.91	4.96	M14X1.5 (3)	Modified Triangle	33	Y
		181.00	135.00		86.72	89.90	49.65	99.34	126.00				
515030		7.14	5.91	M12X1.75 (7)	3.42	3.63	1.94	3.91	4.96	- (3)	Modified Triangle	33	Y
		181.35	150.00		86.74	92.20	49.28	99.31	126.00				
515031		7.13	5.31	M14X2.0 (5)	3.41	3.64	1.95	3.91	4.96	- (3)	Modified Triangle	33	Y
		181.00	135.00		86.72	92.35	49.56	99.34	126.00				
518500		4.80	3.94	M12x1.5 (4)	2.24	2.40	-	2.99	3.70	M8x1.25 (3)	-	26	N
		122.00	100.00		56.85	60.87	-	76.00	94.00				
518501		4.96	3.94	M12x1.5 (4)	2.24	2.40	-	2.99	4.46	M8x1.25 (3)	-	26	N
		126.00	100.00		56.85	60.87	-	76.00	113.00				
518502		4.96	3.94	M12x1.5 (5)	2.24	2.40	-	2.99	4.46	M8x1.25 (3)	-	26	N
		126.00	100.00		56.85	60.87	-	76.00	113.00				
518503		2.49	4.25	M12x1.5 (4)	2.49	2.49	3.06	-	-	-	-	26	N
		63.35	107.95		63.12	63.35	77.72	-	-				
518504		4.72	3.94	M12x1.5 (4)	2.20	2.93	-	-	-	-	-	24	N
		120.00	100.00		55.84	60.80	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
518505		4.80	3.94	M12x1.5 (4)	2.21	2.42	-	-	-	-	-	-	N
		122.00	100.00		56.23	61.44	-	-	-				
518506		4.88	3.94	M12x1.5 (5)	2.13	-	-	1.49	-	-	-	26	N
		123.95	100.00		53.98	-	-	37.99	-				
518507		4.88	3.94	M12x1.5 (4)	2.13	2.19	-	-	-	-	-	26	N
		123.95	100.00		54.05	54.97	-	-	-				
520000		5.49	4.25	M12x1.5 (5)	2.50	2.54	2.40	-	-	-	-	26	N
		139.32	107.95		63.37	64.39	60.99	-	-				
520100		5.49	4.25	M12x1.5 (5)	2.49	2.79	2.23	-	-	-	-	26	N
		139.32	107.95		63.25	70.94	56.67	-	-				
BM500000	*	-	-	-	-	-	-	3.17	4.72	M10X1.25 (3)	Modified Polygon	-	Y
		-	-		-	-	-	80.60	120.00				
BM500001	*	-	-	-	-	-	-	3.54	4.17	M12X1.5 (4)	Modified Square	-	Y
		-	-		-	-	-	90.00	106.00				
BM500002	*	-	-	-	-	-	-	3.17	4.72	M10X1.25 (3)	Modified Polygon	-	Y
		-	-		-	-	-	80.60	120.00				
BM500003	*	-	-	-	-	-	-	3.17	4.72	M10X1.25 (3)	Modified Polygon	-	Y
		-	-		-	-	-	80.60	120.00				
BM500005	*	-	-	-	-	-	-	3.30	4.21	M12X1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	-	83.86	106.96				
BM500006	*	-	-	-	-	-	-	3.31	4.21	-	(4) Modified Trapezoid	-	Y
		-	-		-	-	-	84.00	107.00				
BM500007	*	-	-	-	-	-	-	3.78	5.20	0.492 (4)	Rectangle	-	-
		-	-		-	-	-	96.00	132.00				
BM500009	*	-	-	-	-	-	-	3.78	5.21	0.49 12.45(4)	Square	-	Y
		-	-		-	-	-	95.98	132.40				
BM500012	*	-	-	-	-	-	-	3.62	4.50	M12X1.5 (4)	Modified Rectangle	-	Y
		-	-		-	-	-	91.98	114.30				
BM500014	*	-	-	-	-	-	-	3.17	4.70	M10X1.25 (3)	Modified Polygon	-	N
		-	-		-	-	-	80.55	119.45				
BM500015	*	-	-	-	-	-	-	3.94	5.55	0.47 11.35(4)	Modified Polygon	-	Y
		-	-		-	-	-	99.94	141.06				
BM500016	*	-	-	-	-	-	-	3.93	5.55	0.474 12.04(4)	Modified Polygon	-	Y
		-	-		-	-	-	99.92	141.06				
BM500017	*	-	-	-	-	-	-	4.17	5.72	0.489 12.42(4)	Modified Square	-	Y
		-	-		-	-	-	105.99	145.24				
BM500018	*	-	-	-	-	-	-	4.17	5.71	0.500 12.7(4)	Modified Square	-	Y
		-	-		-	-	-	106.00	145.00				
BM500019	*	-	-	-	-	-	-	4.17	5.55	M12X1.25 (4)	Modified Square	-	Y
		-	-		-	-	-	106.00	141.00				

*Denotes a Bearing Module

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
BM500022	*	-	-	-	-	-	-	3.43	4.50	0.409 10.4(4)	Modified Rectangle	-	N
		-	-		-	-	-	87.00	114.30				
BM500029	*	-	-	-	-	-	-	3.94	5.51	0.477 12.12(4)	Modified Trapezoid	-	Y
		-	-		-	-	-	100.00	140.00				
BM500030	*	-	-	-	-	-	-	3.94	5.51	0.472 12(4)	Modified Trapezoid	-	Y
		-	-		-	-	-	100.00	140.00				
BM513161	*	-	-	-	-	-	-	2.72	3.66	M10X1.25 (4)	Modified Rectangle	-	N
		-	-		-	-	-	69.00	93.00				
HA500100		7.22	5.50	9/16-18 (5)	3.06	3.09	1.85	3.54	4.96	M14x1.5 (3)	Modified Triangle	33	N
		183.30	139.70		77.76	78.42	47.08	90.04	126.00				
HA500701		5.83	4.50	- (6)	2.60	2.68	2.72	3.50	4.49	M12X1.25 (4)	Modified Rectangle	32	N
		148.00	114.30		65.91	67.95	69.00	89.00	114.00				
HA590001		7.10	5.50	1/2-20 (5)	3.06	3.13	-	-	-	-	-	-	Y
		180.41	139.71		77.78	79.60	-	-	-				
HA590002		5.32	3.93	M12x1.5 (5)	2.13	2.18	2.18	2.91	3.65	M10x1.25 (4)	Modified Rectangle	26	N
		135.00	99.76		54.03	55.30	55.40	73.96	92.68				
HA590003		7.12	5.50	M14x1.5 (6)	2.90	3.08	2.15	4.17	5.51	- (4)	Square	37	N
		180.78	139.70		73.75	78.26	54.65	105.91	140.00				
HA590004		7.85	6.50	M14x1.5 (8)	4.44	4.61	2.40	4.17	5.73	M12x1.75	-	37	N
		199.40	165.10		112.73	117.00	60.98	105.87	145.56				
HA590005		5.98	4.50	M12X1.5 (5)	2.52	2.52	-	-	-	-	-	-	Y
		152.00	114.30		64.00	64.00	-	-	-				
HA590006		5.51	4.72	(5) -	2.74	2.82	1.69	2.99	4.25	M12X1.75 (3)	Modified Circle	-	Y
		140.00	120.00		69.50	71.50	43.00	76.00	108.00				
HA590008		5.28	3.94	M12x1.5 (4)	2.21	2.40	-	-	-	-	-	-	Y
		134.00	100.00		56.00	61.00	-	-	-				
HA590009		5.47	3.94	M12x1.5 (4)	2.21	2.40	2.21	-	-	-	-	-	Y
		139.00	100.00		56.06	61.00	56.00	-	-				
HA590010		5.83	4.50	M12x1.5 (5)	2.64	2.99	2.52	2.83	3.94	M12x1.25 (4)	Modified Trapezoid	-	Y
		148.00	114.30		67.00	76.00	64.00	72.00	100.00				
HA590012		5.63	4.50	M12x1.5 (5)	2.64	2.80	-	-	-	-	-	-	Y
		143.00	114.30		66.95	71.00	-	-	-				
HA590013		5.63	4.50	M12x1.5 (5)	2.64	2.80	-	-	-	-	-	-	Y
		143.00	114.30		66.93	71.07	-	-	-				
HA590014		5.51	4.50	M12x1.5 (5)	2.64	2.83	-	-	-	-	-	-	Y
		140.00	114.30		67.00	72.00	-	-	-				
HA590016		6.35	5.49	M12x1.5 (6)	3.63	3.79	-	3.30	4.24	-	Trapezoid	-	Y
		161.35	139.49		92.28	96.28	-	83.85	107.79				
HA590017		5.83	4.50	1/2-20 (5)	2.77	2.80	-	-	-	-	-	-	Y
		148.00	114.30		70.48	71.12	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590018		8.19	6.50	9/16-18 (8)	4.59	-	2.69	4.48	5.51	M14X1.5 (4)	Rectangle	33	N
		208.00	165.10		116.64		68.25	113.86	140.00				
HA590019		5.49	4.50	M12x1.5 (5)	2.52	2.52	2.32	2.91	3.94	M10x1.25 (4)	Modified Trapezoid	-	Y
		139.50	114.30		64.00	64.00	58.80	74.00	100.00				
HA590020		8.42	6.50	0.60 15.24(8)	4.77	-	2.97	4.48	5.50	M14x1.5 (4)	Square	33	N
		213.87	165.10		121.16	-	75.31	113.89	139.70				
HA590021		6.14	4.50	1/2-20 (5)	2.49	2.54	2.40	2.91	4.28	M12x1.75 (4)	Offset Trapezoid	-	Y
		156.00	114.30		63.22	64.38	60.83	74.00	108.81				
HA590022		6.15	4.50	1/2-20 (5)	2.49	2.54	2.41	2.91	4.24	M12X1.75 (4)	Offset Trapezoid	-	Y
		156.20	114.30		63.26	64.62	61.13	73.96	107.58				
HA590023		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.41	M12x1.75 (4)	Rectangle	27	Y
		184.16	139.70		99.50	100.01	67.23	84.97	112.06				
HA590024		6.15	4.50	1/2-20 (5)	2.49	2.80	1.64	3.60	4.57	M12x1.75 (3)	Modified Triangle	26	Y
		156.20	114.30		63.27	71.17	41.63	91.52	116.14				
HA590025		6.14	4.50	1/2-20 (5)	2.49	2.81	1.68	3.60	4.53	M12X1.75 (3)	Modified Triangle	26	Y
		156.00	114.30		63.32	71.46	42.76	91.50	115.06				
HA590026		5.83	4.50	1/2-20 (5)	2.78	2.84	-	3.15	-	-	-	-	N
		148.00	114.30		70.61	72.14	-	80.04	-				
HA590027		5.35	4.50	M12x1.25 (5)	2.60	2.68	1.61	3.31	4.21	M12x1.25 (4)	Rectangle	-	Y
		136.00	114.30		66.00	68.00	40.85	84.00	107.00				
HA590028		5.75	4.50	1/2-20 (5)	2.49	2.68	1.69	3.37	4.41	M12x1.75 (4)	Modified Rectangle	38	Y
		146.00	114.30		63.23	68.00	43.00	85.50	112.00				
HA590029		5.75	4.50	1/2-20 (5)	2.49	2.68	2.32	-	4.45	M12X1.75 (4)	Modified Trapezoid	38	Y
		146.00	114.30		63.23	68.00	58.90	-	113.00				
HA590030		5.90	4.53	M14x1.5 (5)	2.81	2.86	-	-	-	-	-	-	Y
		149.85	115.00		71.42	72.77	-	-	-				
HA590032		8.08	6.50	9/16-18 (8)	4.77	4.81	2.15	4.49	5.59	M14x1.5 (4)	Square	33	Y
		205.17	165.10		121.07	122.30	54.60	114.17	141.99				
HA590033		7.20	5.50	9/16x18 (5)	3.06	3.09	1.94	4.13	5.24	M14x1.5 (3)	Modified Triangle	33	Y
		183.00	139.70		77.66	78.37	49.15	105.00	133.00				
HA590034		7.21	5.50	9/16-18 (5)	3.06	3.09	1.94	4.13	5.31	M14x1.5 (3)	Modified Triangle	33	N
		183.00	139.70		77.67	78.38	49.35	105.02	134.88				
HA590035		7.21	5.50	9/16-18 (5)	3.06	3.09	1.93	4.14	5.30	M14x1.5 (3)	Modified Triangle	33	Y
		183.00	139.70		77.67	78.40	48.95	105.04	134.66				
HA590036		6.48	5.00	1/2-20 (5)	2.81	2.83	2.04	3.94	4.83	M12x1.75 (3)	Modified Triangle	29	Y
		164.67	127.00		71.41	71.96	51.90	100.12	122.79				
HA590038		5.47	4.25	M12x1.5 (5)	2.49	2.53	-	-	-	-	-	-	Y
		139.00	107.95		63.22	64.38	-	-	-				
HA590039		6.66	5.50	M12x1.5 (6)	2.63	3.70	2.43	3.59	4.63	M12x1.25 (4)	Modified Rectangle	33	N
		169.19	139.70		66.86	93.98	61.78	91.06	117.57				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590040		5.32	3.94	M12x1.5 (5)	2.13	2.17	2.17	2.91	3.66	M10x1.25 (4)	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	54.50	74.00	93.00				
HA590041		5.50	4.50	M12x1.5 (5)	2.64	2.84	2.48	3.08	4.26	M14x1.5 (4)	Offset Trapezoid	-	Y
		139.78	114.30		67.00	72.00	62.94	78.10	108.28				
HA590043		5.83	4.50	M12x1.25 (4)	2.60	2.68	-	-	-	-	-	-	Y
		148.00	114.30		65.94	68.03	-	-	-				
HA590044		5.83	4.50	M12x1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12x1.25 (4)	Rectangle	29	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590045		5.83	4.50	M12x1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12x1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590046		5.35	4.50	M12x1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12x1.25 (4)	Rectangle	29	Y
		136.00	114.30		65.95	68.12	40.72	92.98	119.88				
HA590047		5.83	4.50	M12x1.25 (4)	2.60	2.68	-	-	-	-	-	-	Y
		148.00	114.30		66.05	68.10	-	-	-				
HA590048		5.73	4.54	M12x1.5 (5)	2.76	2.78	1.66	3.59	4.62	M12x1.75 (3)	Modified Triangle	33	N
		145.50	115.25		70.23	70.61	42.10	91.19	117.36				
HA590049		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590050	*	-	-	-	-	-	-	3.94	5.51	12.8(2)-12(2) (4)	Trapezoid	-	Y
		-	-		-	-	-	100.00	140.00				
HA590052		5.82	4.50	M12x1.5 (5)	2.64	2.99	2.33	2.87	3.94	M10x1.75 (4)	Modified Rectangle	-	Y
		147.82	114.30		67.00	76.00	59.05	72.96	100.00				
HA590053		7.25	5.50	M12x1.5 (6)	3.91	3.93	2.65	3.35	4.44	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.43	99.94	67.35	85.08	112.73				
HA590054		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.45	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.51	100.18	67.42	84.97	113.04				
HA590055		5.31	3.94	M12x1.5 (5)	2.13	2.17	2.15	2.91	3.73	M10x1.25 (4)	Offset Trapezoid	-	Y
		134.92	100.00		54.02	54.98	54.50	73.97	94.77				
HA590055K		5.39	4.25	M12x1.5 (5)	2.56	2.68	-	1.40	-	-	-	-	Y
		136.86	107.95		64.97	67.95	-	35.43	-				
HA590056		5.50	4.50	M12x1.5 (5)	2.64	2.84	2.48	3.07	4.27	M14x1.5 (4)	Offset Trapezoid	28	N
		139.76	114.30		67.00	72.00	62.95	78.00	108.44				
HA590056K		5.39	4.25	M12x1.5 (5)	2.56	2.68	-	-	-	-	-	-	Y
		136.86	107.95		64.97	67.95	-	-	-				
HA590057		6.00	4.50	M12x1.25 (5)	2.60	2.91	-	-	-	-	-	-	Y
		152.50	114.30		65.95	73.95	-	-	-				
HA590058		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.43	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.53	100.03	67.35	84.98	112.60				
HA590059		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.64	3.35	4.42	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.50	100.02	67.12	85.05	112.25				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590060		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.44	M12x1.75 (4)	Rectangle	27	Y
		184.16	139.70		99.52	100.08	67.40	85.02	112.73				
HA590061		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.44	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.56	100.13	67.30	84.99	112.70				
HA590062		7.25	5.50	M12x1.5 (6)	3.92	3.94	2.65	3.35	4.45	M12x1.75 (4)	Rectangle	-	Y
		184.16	139.70		99.53	100.09	67.26	85.02	113.04				
HA590063		5.32	3.94	M12x1.5 (4)	2.13	2.17	2.15	2.91	3.72	M10x1.25 (4)	Modified Trapezoid	-	Y
		135.00	100.00		54.02	55.02	54.60	73.94	94.40				
HA590064		4.92	3.94	M12x1.5 (5)	2.13	2.17	1.65	3.07	4.06	M10x1.25 (4)	Modified Trapezoid	26	N
		125.00	100.00		54.00	55.00	42.00	78.00	103.00				
HA590065		5.69	4.75	M12x1.5 (5)	2.76	2.78	1.85	3.62	4.75	M12x1.75 (3)	Modified Triangle	27	N
		144.50	120.65		70.10	70.60	47.00	91.98	120.65				
HA590066		5.51	3.94	M12x1.5 (4)	2.22	2.24	3.08	2.36	-	M10x1.5 (4)	Modified Trapezoid	-	Y
		140.00	100.00		56.49	56.96	78.35	60.00	-				
HA590067		5.51	3.94	M12x1.5 (4)	2.22	2.24	3.08	2.36	-	M10x1.5 (4)	Modified Trapezoid	-	N
		140.00	100.00		56.49	56.96	78.35	60.00	-				
HA590068		5.20	3.94	M12x1.5 (4)	2.22	2.36	1.53	3.35	4.33	M12x1.75 (3)	Modified Triangle	33	Y
		132.13	100.00		56.49	59.95	38.95	85.00	110.00				
HA590069		5.20	3.94	M12x1.5 (4)	2.22	2.36	1.53	3.35	4.33	M12x1.75 (3)	Modified Triangle	33	N
		132.13	100.00		56.49	59.95	38.95	85.00	110.00				
HA590070		5.39	4.33	M12x1.5 (5)	2.56	2.58	1.54	3.54	4.49	-	Modified Triangle	30	Y
		137.00	110.00		64.97	65.45	39.00	90.00	114.00				
HA590071		5.39	4.33	M12x1.5 (5)	2.56	2.58	1.54	3.54	4.49	M12x1.75 (3)	Modified Triangle	30	N
		137.00	110.00		64.97	65.45	39.00	90.00	114.00				
HA590072		5.43	4.50	M12x1.5 (5)	2.63	2.84	-	-	-	-	-	36	N
		138.00	114.30		66.92	72.01	-	-	-				
HA590074		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.55	2.83	3.96	-	Rectangle	-	N
		150.50	115.00		70.10	70.60	64.76	71.76	100.60				
HA590077		5.73	4.53	M12x1.5 (6)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590078		5.73	4.53	M12x1.5 (6)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590079		5.73	4.53	M12x1.5 (6)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590080		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.09	2.36	-	M10x1.5 (4)	Modified Trapezoid	-	Y
		140.00	110.00		64.97	65.45	78.50	60.00	-				
HA590081		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.09	2.36	3.31	M10x1.5 (4)	Offset Trapezoid	-	N
		140.00	110.00		64.97	65.45	78.50	60.00	84.00				
HA590082		5.73	4.53	M12x1.5 (6)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590083		5.73	4.75	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	120.65		70.10	70.60	42.06	91.42	116.00				
HA590084		5.73	4.75	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	120.65		70.10	70.60	42.06	91.42	116.00				
HA590085		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	33	N
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590086		5.39	4.33	M12x1.5 (5)	2.56	2.58	1.53	3.35	4.33	M12x1.75 (3)	Modified Triangle	33	Y
		137.00	110.00		64.97	65.45	38.95	85.00	110.00				
HA590087		5.39	4.33	M12x1.5 (5)	2.56	2.58	1.53	3.35	4.33	M12x1.75 (3)	Modified Triangle	33	N
		137.00	110.00		64.97	65.45	38.95	85.00	110.00				
HA590088		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.09	2.36	3.31	M10x1.5 (4)	Modified Trapezoid	-	Y
		140.00	110.00		64.97	65.45	78.36	60.00	84.05				
HA590089		5.51	4.33	M12x1.5 (5)	2.56	2.58	3.09	2.36	3.31	M10x1.5 (4)	Modified Trapezoid	-	N
		140.00	110.00		64.97	65.45	78.36	60.00	84.05				
HA590090		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	30	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590091		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.60	4.57	M12x1.75 (3)	Modified Triangle	-	Y
		145.50	115.00		70.10	70.60	42.06	91.42	116.00				
HA590092		5.93	4.53	M12x1.5 (5)	2.76	2.78	2.55	2.83	3.96	0.46 11.69(4)	Rectangle	-	Y
		150.50	115.00		70.10	70.60	65.14	71.76	100.60				
HA590093		5.73	4.53	M12x1.5 (5)	2.76	2.78	1.66	3.59	4.57	M12x1.75 (3)	Modified Triangle	33	Y
		145.50	115.00		70.10	70.60	42.06	91.25	116.00				
HA590095		5.50	4.50	M12x1.5 (5)	2.64	2.84	-	-	-	-	-	-	N
		140.00	114.30		67.00	72.00	-	-	-				
HA590096		5.51	4.50	M12x1.5 (5)	2.64	2.84	2.15	2.91	3.75	M10x1.25 (4)	Modified Trapezoid	-	Y
		140.00	114.30		67.02	72.12	54.71	73.94	95.28				
HA590097		5.43	4.50	M12x1.5 (5)	2.64	2.83	-	-	-	-	-	36	Y
		138.00	114.30		67.08	71.97	-	-	-				
HA590098		5.59	4.53	M12x1.5 (5)	2.64	2.84	2.48	2.91	3.88	M10x1.25 (4)	Modified Trapezoid	-	N
		142.00	115.00		67.00	72.00	63.10	74.00	98.48				
HA590099		5.59	4.50	M12x1.5 (5)	2.64	2.84	2.48	2.91	3.82	M10x1.25 (4)	Modified Trapezoid	-	Y
		142.00	114.30		67.00	72.00	63.10	74.00	96.96				
HA590100		5.51	4.50	M12x1.5 (5)	2.64	2.84	-	-	-	-	-	-	Y
		140.00	114.30		67.00	72.00	-	-	-				
HA590101		5.43	4.50	M12x1.5 (4)	2.64	3.54	-	-	-	-	-	-	Y
		138.00	114.30		66.95	90.03	-	-	-				
HA590102		5.15	-	(4)	2.55	2.67	-	-	-	-	-	-	N
		130.71	-		64.85	67.84	-	-	-				
HA590103		5.41	4.50	M12x1.5 (5)	3.32	3.54	-	-	-	-	-	-	Y
		137.50	114.30		67.00	90.00	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590104		4.84	3.94	M12x1.5 (4)	2.21	2.52	-	-	-	-	-	-	Y
		123.00	100.00		56.00	64.00	-	-	-				
HA590106		5.39	4.48	M14x1.5 (5)	2.24	2.56	1.89	3.35	4.22	M12x1.5 (4)	Modified Rectangle	36	Y
		136.83	113.83		57.00	65.00	48.00	85.00	107.27				
HA590107		5.39	4.50	M12x1.5 (5)	2.64	3.54	2.35	2.60	3.56	M10x1.25 (4)	Modified Trapezoid	-	Y
		137.00	114.30		66.94	89.99	59.70	66.03	90.30				
HA590108		5.59	4.50	M12x1.5 (5)	2.64	2.72	1.60	3.43	4.42	M12x1.25 (4)	Modified Rectangle	27	N
		142.00	114.30		67.00	69.00	40.60	87.00	112.30				
HA590109		5.83	4.50	M12x1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12x1.25 (4)	Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590110		5.83	4.50	0.52 13.20(4)	2.60	2.68	-	-	-	-	-	-	N
		148.00	114.30		66.01	67.96	-	-	-				
HA590111		5.83	4.50	M12x1.25 (5)	2.60	2.68	2.72	3.35	4.21	M12x1.25 (4)	Modified Trapezoid	-	Y
		148.00	114.30		66.00	68.00	69.00	85.20	107.00				
HA590112		5.47	4.50	M12x1.5 (4)	2.22	2.36	2.48	2.59	3.39	M10x1.25 (4)	Modified Trapezoid	-	Y
		139.00	114.30		56.46	59.94	62.98	65.85	86.22				
HA590113		5.47	4.50	M12x1.5 (4)	2.22	2.36	2.48	2.59	3.45	M10x1.25 (4)	Modified Trapezoid	-	N
		139.00	114.30		56.50	59.96	63.05	65.82	87.58				
HA590114		5.47	4.50	M12x1.5 (4)	2.22	2.36	2.51	2.60	3.45	M10x1.25 (4)	Modified Trapezoid	-	N
		139.00	114.30		56.47	59.97	63.70	65.92	87.52				
HA590115		5.47	4.50	M12x1.5 (4)	2.23	2.36	1.46	3.59	4.50	M12x1.5 (3)	Modified Triangle	28	Y
		139.00	114.30		56.58	60.03	37.05	91.29	114.25				
HA590116		5.93	4.53	M12x1.5 (6)	2.76	2.78	2.56	2.83	3.97	-	Rectangle	-	Y
		150.59	115.02		70.00	70.61	65.00	71.80	100.70				
HA590118		4.88	3.94	M12x1.25 (5)	2.22	2.28	1.93	2.99	-	M12x1.25 (4)	Modified Trapezoid	27	Y
		124.05	100.00		56.32	58.02	49.08	75.93	-				
HA590119		4.88	3.93	M12x1.25 (5)	2.21	2.28	2.58	3.31	4.21	M12x1.25 (4)	Rectangle	25	Y
		124.05	99.93		56.03	57.98	65.60	83.98	106.88				
HA590120		5.43	4.50	M12x1.5 (5)	2.64	2.72	2.33	3.47	4.41	M12x1.25 (4)	Modified Trapezoid	25	N
		138.00	114.30		67.00	69.00	59.20	88.00	112.00				
HA590122		5.58	4.50	M12x1.25 (5)	2.59	2.67	-	-	-	-	-	-	Y
		141.73	114.30		65.90	67.94	-	-	-				
HA590123		5.83	4.50	M12x1.25 (4)	2.60	2.68	-	-	-	-	-	-	Y
		148.00	114.30		65.93	67.95	-	-	-				
HA590124		5.35	4.50	M12x1.25 (5)	2.60	2.67	1.61	3.66	4.71	M12x1.25 (4)	Rectangle	-	Y
		136.00	114.30		65.95	67.92	40.77	92.97	119.58				
HA590125		5.35	4.50	M12x1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12x1.25 (4)	Rectangle	27	Y
		136.00	114.30		65.96	67.95	40.65	92.96	119.85				
HA590126		5.51	4.50	M12x1.25 (5)	2.59	2.68	-	-	-	-	-	-	Y
		140.00	114.30		65.89	67.95	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590127		5.35	4.50	M12x1.25 (5)	2.60	2.68	1.60	3.31	4.21	M12x1.25 (4)	Modified Trapezoid	-	Y
		136.00	114.30		66.00	68.00	40.75	84.00	107.00				
HA590128		5.43	4.50	M12x1.5 (5)	2.67	2.72	2.32	2.56	3.54	M10x1.25 (4)	Modified Trapezoid	-	Y
		138.00	114.30		67.00	69.00	59.00	65.00	90.00				
HA590129		5.43	4.50	M12x1.5 (5)	2.64	2.72	2.32	-	-	M10x1.25 (4)	Modified Rectangle	-	N
		138.00	114.30		67.00	69.00	59.00	-	-				
HA590131		5.48	4.50	M12x1.5 (4)	2.22	2.36	1.46	3.57	4.50	M12x1.5 (3)	Triangle	28	N
		139.08	114.30		56.50	59.95	37.18	90.67	114.30				
HA590132		7.99	6.69	M14x2 (8)	4.92	5.08	2.03	4.48	5.51	M14x1.5 (4)	Square	55	N
		203.00	170.00		124.97	129.01	51.50	113.90	140.00				
HA590136		6.07	4.50	M12x1.5 (5)	2.36	2.44	2.66	3.31	4.38	M12x1.25 (4)	Modified Trapezoid	30	Y
		154.24	114.23		60.04	61.98	67.43	83.97	111.34				
HA590137		5.51	4.51	M12x1.5 (5)	2.36	2.44	2.17	2.91	4.46	M12x1.25 (4)	Modified Trapezoid	-	Y
		139.87	114.50		60.01	61.99	55.00	73.90	113.40				
HA590138		5.51	4.51	M12x1.5 (5)	2.36	2.44	2.17	2.91	4.46	M12x1.25 (4)	Modified Trapezoid	-	Y
		139.97	114.60		60.03	61.98	55.10	73.92	113.28				
HA590139		5.51	4.50	M12x1.5 (5)	2.36	2.44	1.97	3.54	5.20	M12x1.25 (4)	Modified Trapezoid	30	Y
		140.00	114.19		60.00	62.00	50.00	90.00	132.00				
HA590140		5.51	4.50	M12x1.5 (5)	2.36	2.44	1.97	3.54	6.06	M12x1.25 (4)	Modified Trapezoid	30	Y
		140.00	114.30		60.00	62.00	50.00	90.00	154.00				
HA590142		5.91	4.53	M14x1.5 (5)	2.81	2.85	2.37	3.56	4.33	M10x1.5 (4)	Modified Rectangle	27	N
		150.00	115.00		71.40	72.50	60.30	90.40	110.00				
HA590143		5.43	4.50	M12x1.5 (5)	2.64	2.72	2.33	3.47	4.41	M12x1.25 (4)	Modified Trapezoid	-	Y
		138.00	114.30		67.00	59.00	59.20	88.00	112.00				
HA590144		5.43	4.50	M12x1.5 (5)	2.64	2.72	2.33	3.47	4.41	M12x1.25 (4)	Modified Trapezoid	-	N
		138.00	114.30		67.00	69.00	59.20	88.00	112.00				
HA590145		6.66	5.50	M12x1.5 (6)	2.64	3.70	1.48	3.39	4.39	M12x1.25 (4)	Modified Square	30	N
		169.24	139.78		67.00	94.00	37.53	86.00	111.55				
HA590146		6.00	4.72	M14x1.5 (5)	2.52	2.76	2.40	3.21	4.29	M12x1.25 (4)	Modified Rectangle	28	Y
		152.50	120.00		64.00	70.00	60.90	81.60	109.00				
HA590147		6.00	4.72	M14x1.5 (5)	2.52	2.76	1.87	3.59	5.08	M12x1.25 (4)	Offset Trapezoid	30	Y
		152.50	120.00		64.00	70.00	47.50	91.10	129.00				
HA590149		5.93	4.52	M12x1.5 (5)	2.76	2.78	2.56	2.83	3.96	-	Rectangle	-	Y
		150.73	114.80		70.00	70.60	65.00	71.75	100.56				
HA590150		5.43	4.50	M12x1.25 (5)	2.21	2.28	1.83	3.31	-	M12x1.25 (4)	Offset Trapezoid	27	Y
		138.00	114.30		56.00	58.00	46.50	84.00	-				
HA590151		6.30	4.72	M14x1.5 (5)	2.52	2.76	2.45	3.47	4.41	M12x1.25 (4)	Modified Rectangle	-	N
		160.00	120.00		64.00	70.00	62.20	88.00	112.00				
HA590152		5.49	4.50	M12x1.5 (5)	2.52	2.52	2.17	2.76	3.40	M10x1.25 (4)	Modified Rectangle	-	Y
		139.50	114.30		64.00	64.00	55.10	70.00	100.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590153		5.83	4.50	M12X1.5 (5)	2.60	2.68	-	2.64	-	-	-	-	Y
		148.00	114.30		66.00	68.00	-	67.00	-				
HA590154		5.83	4.50	M12X1.25 (5)	2.60	2.68	-	2.64	-	-	-	-	N
		148.00	114.30		66.00	68.00	-	67.00	-				
HA590155K		5.43	3.94	M12x1.5 (4)	2.24	2.35	-	1.54	-	-	-	31	N
		137.87	100.00		56.90	59.69	-	39.07	-				
HA590156		6.30	4.50	1/2-20 (5)	2.77	3.23	1.92	3.35	4.45	(3)	Triangle	27	Y
		160.00	114.30		70.45	82.00	48.80	85.00	113.00				
HA590156K		5.43	3.94	M12x1.5 (4)	2.24	2.35	-	1.54	-	-	-	33	N
		137.92	100.00		56.99	59.74	-	39.00	-				
HA590158		5.73	4.50	M12X1.5 (6)	2.76	2.78	1.65	3.59	4.63	M12X1.75 (3)	Modified Triangle	-	Y
		145.42	114.34		70.02	70.54	42.00	91.28	117.48				
HA590159		-	-	-	-	-	-	-	4.46	M14X1.5 (5)	Circle	-	Y
		-	-		-	-	-	-	113.20				
HA590160		5.12	3.94	M12X1.25mm (4)	2.13	2.28	-	-	-	-	-	-	N
		130.00	100.00		54.00	58.00	-	-	-				
HA590161		5.41	3.94	M12X1.5 (4)	2.21	2.52	2.22	2.91	3.70	M10X1.5 (4)	Modified Square	-	Y
		137.29	100.00		56.00	64.00	56.47	74.00	94.00				
HA590162		5.79	4.75	M12X1.5 (5)	2.85	3.11	2.01	3.54	4.16	M12X1.5 (4)	Modified Square	-	N
		146.98	120.58		72.48	79.02	51.08	89.94	105.77				
HA590163		5.63	4.74	- (5)	2.86	3.11	2.00	3.54	4.16	M12X1.5 (4)	Modified Square	-	Y
		143.00	120.32		72.54	79.00	50.86	90.00	105.76				
HA590164		5.49	4.50	M12X1.5 (5)	2.52	2.52	2.17	2.76	3.94	M10X1.25 (4)	Modified Rectangle	-	Y
		139.50	114.30		64.00	64.00	55.10	70.00	100.00				
HA590165		5.47	4.50	M12X1.5 (5)	2.36	2.44	1.87	3.54	4.56	M12X1.25 (4)	Modified Trapezoid	26	Y
		139.00	114.30		60.00	62.00	47.50	90.00	115.72				
HA590166		8.07	6.49	9/16-18 (8)	4.76	4.80	2.16	4.48	5.53	M14X1.5 (4)	Modified Square	33	Y
		205.00	164.78		121.00	122.00	54.85	113.83	140.49				
HA590167		5.72	4.54	M12X1.5 (6)	2.75	2.78	1.67	3.59	4.66	M12X1.75 (3)	Modified Triangle	30	Y
		145.18	115.26		70.18	70.70	42.30	91.30	118.46				
HA590168		5.47	4.50	M12X1.5 (5)	2.36	2.44	1.87	3.54	4.56	M12X1.25 (4)	Modified Trapezoid	30	Y
		138.87	114.30		60.00	62.00	47.48	90.00	115.89				
HA590169		5.43	4.50	M12X1.25 (5)	2.21	2.28	2.50	3.31	4.33	M12X1.25 (4)	Modified Rectangle	27	Y
		138.00	114.30		56.00	58.00	63.45	84.00	110.00				
HA590170		5.32	3.94	M12X1.5 (4)	2.13	2.17	-	2.91	3.80	0.489 12.43(4)	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	-	74.00	96.50				
HA590171		5.83	4.50	M12X1.25 (5)	2.60	2.68	2.68	3.31	4.23	M12X1.25 (4)	Modified Rectangle	32	N
		148.00	114.30		66.00	68.00	69.17	84.00	107.38				
HA590172		5.32	3.94	M12X1.5 (4)	2.13	2.17	2.36	2.91	3.84	0.489 12.42(4)	Modified Trapezoid	-	N
		135.00	100.00		54.00	55.00	60.00	74.00	97.66				

*Denotes a Bearing Module

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590173		5.98	4.46	M12X1.5 (5)	2.36	2.44	2.36	2.99	3.87	M12X1.25 (4)	Offset Trapezoid	-	Y
		151.90	113.20		60.03	62.02	59.96	75.87	98.20				
HA590174		5.35	4.25	M12X1.5 (5)	2.49	2.50	2.48	3.27	4.50	0.43 10.8(4)	Modified Trapezoid	26	N
		136.00	108.00		63.24	63.49	63.00	83.00	114.30				
HA590175		2.58	2.68	M12X1.25 (5)	2.60	2.64	1.15	3.31	4.21	M12X1.25 (4)	Modified Rectangle	29	N
		147.58	68.00		66.00	67.00	29.21	84.00	107.00				
HA590176		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.61	3.66	4.72	M12X1.25 (4)	Modified Rectangle	-	Y
		136.00	114.30		66.00	68.00	41.00	93.00	120.00				
HA590177		5.59	4.50	M12X1.5 (5)	2.64	2.72	1.61	3.43	4.41	M12X1.25 (4)	Modified Rectangle	27	N
		142.00	114.30		67.00	69.00	41.00	87.00	112.00				
HA590178		5.67	4.50	M12X1.25 (5)		2.44	2.11	3.31	4.32	M10X1.25 (4)	Modified Rectangle	28	Y
		144.00	114.30			62.00	53.50	84.00	109.80				
HA590179		5.83	4.50	M12X1.5 (5)	2.64	2.99	2.32	2.95	3.94	M10X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	73.00	100.00				
HA590180		5.51	4.50	1/2-20 (5)	2.78	2.84	2.48	3.07	4.23	M14X2 (4)	Modified Trapezoid	-	Y
		140.00	114.30		70.62	72.00	63.00	78.00	107.35				
HA590181K		4.95	3.94	M12x1.5 (4)	2.24	2.40	-	-	-	-	-	23	N
		125.80	100.00		56.90	60.90	-	-	-				
HA590182K		4.95	3.94	M12x1.5 (5)	2.24	2.40	-	-	-	-	-	23	N
		125.80	100.00		56.90	60.90	-	-	-				
HA590183		5.50	4.50	1/2-20 (5)	2.77	2.84	2.48	3.07	4.22	M14X2 (4)	Modified Trapezoid	28	N
		139.73	114.30		70.47	72.00	63.00	78.00	107.30				
HA590184		5.51	3.94	M12X1.5 (4)	2.13	2.46	2.28	2.64	3.62	- (4)	Modified Rectangle	-	N
		140.00	100.00		54.00	62.50	58.00	67.00	92.00				
HA590185		5.40	4.33	M12X1.5 (5)	2.56	2.76	1.54	3.54	4.64	M12X1.75 (3)	Modified Triangle	30	N
		137.11	110.00		65.00	70.00	39.00	90.00	117.80				
HA590186		5.39	4.33	M12X1.5 (5)	2.56	2.76	1.54	3.54	4.57	M12X1.75 (3)	Modified Triangle	30	Y
		137.00	110.00		65.00	70.00	39.00	90.00	116.00				
HA590187		5.34	4.26	M14X1.5 (5)	2.56	2.68	1.69	3.44	4.44	M12X1.75 (4)	Modified Rectangle	36	N
		135.62	108.11		65.00	68.00	43.00	87.41	112.68				
HA590188		5.47	4.50	M12X1.5 (4)	2.64	2.99	1.99	2.91	-	-	-	-	N
		139.00	114.30		67.00	76.00	50.50	74.00	-				
HA590190		5.98	4.50	M12X1.5 (5)	2.52	3.20	2.42	3.22	4.11	M12X1.5 (4)	Modified Square	-	Y
		151.81	114.30		64.00	81.30	61.42	81.84	104.28				
HA590192		5.35	4.24	M12X1.5 (5)	2.50	2.49	2.48	2.91	3.86	M10X1.5 (4)	Modified Square	-	Y
		136.00	107.72		63.49	63.23	63.00	74.00	98.00				
HA590193		5.51	4.50	-	2.64	2.84	2.48	3.07	4.17	M12X1.25 (4)	Offset Trapezoid	-	N
		140.00	114.30		67.00	72.00	63.00	78.00	106.00				
HA590194		5.47	4.50	M12X1.5 (4)	2.64	2.99	-	-	-	-	-	-	Y
		139.00	114.30		67.00	76.00	-	-	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590195		5.51	4.50	-	2.64	2.84	2.48	3.07	4.17	M12X1.25 (4)	Offset Trapezoid	-	Y
		140.00	114.30		67.00	72.00	63.00	78.00	106.00				
HA590197		5.50	4.50	M12x1.5 (5)	2.81	2.89	1.48	3.43	4.41	-	Modified Rectangle	26	N
		139.70	114.30		71.37	73.28	37.47	87.00	112.01				
HA590198		5.37	4.44	M14X1.5 (5)	2.24	2.56	1.89	3.15	4.10	M12X1.5 (3)	Triangle	36	Y
		136.36	112.69		57.00	65.00	48.00	80.00	104.22				
HA590199		5.50	4.50	M12X1.5 (5)	2.64	3.20	2.15	2.91	3.70	M10X1.5 (4)	Modified Trapezoid	-	N
		139.81	114.30		67.00	81.30	54.50	74.00	94.00				
HA590200		5.51	4.50	M12X1.5 (5)	2.64	2.99	-	-	-	-	-	-	Y
		140.00	114.30		67.00	76.00	-	-	-				
HA590201		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.36	2.99	3.87	M12X1.25 (4)	Offset Trapezoid	26	Y
		152.00	114.30		60.00	62.00	60.00	76.00	98.23				
HA590202		5.49	4.50	M12X1.5 (5)	2.52	2.52	2.33	2.84	4.00	M12X1.25 (4)	Modified Square	-	Y
		139.50	114.30		64.00	64.00	58.80	72.00	101.60				
HA590203		8.08	6.50	9\16-18 (8)	4.82	4.81	2.14	4.49	5.50	M14X1.5 (4)	Modified Rectangle	33	Y
		205.18	165.10		121.00	122.18	54.33	114.00	139.70				
HA590204		5.98	4.50	M12X1.5 (5)	2.52	2.52	2.42	3.23	4.12	M12X1.25 (4)	Modified Square	28	Y
		152.00	114.30		64.00	64.00	61.40	82.00	104.65				
HA590205		5.51	4.50	M12X1.5 (5)	2.64	2.84	2.15	2.91	3.71	M10X1.25 (4)	Modified Trapezoid	-	Y
		140.00	114.30		67.00	72.00	54.48	74.00	94.30				
HA590206		6.35	5.51	M12X1.5 (6)	3.63	3.79	1.91	3.50	4.85	M14X1.5 (3)	Modified Triangle	31	N
		161.32	139.85		92.21	96.30	48.40	89.00	123.14				
HA590207		5.35	4.26	M12X1.5 (5)	2.49	2.50	2.49	2.91	7.78	M10X1.5 (4)	Modified Square	-	Y
		136.00	108.13		63.14	63.42	63.14	74.00	97.67				
HA590208		6.59	5.00	M12X1.5 (5)	2.81	3.22	1.91	3.35	4.33	M10X1.5 (4)	Modified Rectangle	-	Y
		167.45	127.00		71.43	81.90	48.60	85.00	110.00				
HA590209		6.59	5.00	M12x1.5 (5)	2.81	3.22	1.91	3.35	4.33	M10X1.5 (4)	Rectangle	-	Y
		157.45	127.00		71.43	81.90	48.60	85.00	110.00				
HA590212		5.17	4.25	M12X1.5 (5)	2.49	2.50	-	-	-	-	-	36	Y
		131.34	107.00		63.15	63.48	-	-	-				
HA590214		5.56	4.50	M12X1.5 (5)	2.64	2.72	1.92	3.35	4.33	M10X1.5 (4)	Modified Trapezoid	32	N
		141.33	114.30		67.00	69.00	48.63	85.00	110.00				
HA590216		5.51	4.50	M12X1.5 (5)	2.64	3.15	2.39	2.91	3.89	M12X1.25 (4)	Modified Rectangle	-	Y
		140.00	114.30		67.00	80.00	60.60	74.00	98.83				
HA590217		6.59	5.00	M12X1.5 (5)	2.81	3.22	1.91	3.35	4.33	M10X1.5 (4)	Modified Rectangle	32	Y
		167.45	127.00		71.43	81.90	48.50	85.00	110.00				
HA590218		5.34	4.26	M14X1.5 (5)	2.64	2.68	2.33	3.44	4.50	M12X1.75 (4)	Offset Trapezoid	34	Y
		135.72	108.19		67.00	68.00	59.18	87.41	114.30				
HA590219		5.56	4.50	M12X1.5 (5)	2.64	2.72	1.92	3.35	4.33	M10X1.5 (4)	Modified Rectangle	32	Y
		141.30	114.30		67.00	69.00	48.67	85.00	110.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590220		5.35	4.21	M14X1.5 (5)	2.49	2.50	2.48	3.20	4.40	M12X1.5 (4)	Modified Rectangle	36	N
		136.00	107.00		63.23	63.49	63.00	81.38	111.63				
HA590221		5.51	4.50	M12X1.5 (5)	2.64	3.15	2.39	2.91	3.90	M12X1.25 (4)	Modified Rectangle	-	N
		140.00	114.30		67.00	80.00	60.60	74.00	99.00				
HA590222		5.35	4.25	M14X1.5 (5)	2.49	2.50	2.52	3.20	4.41	M12X1.5 (4)	Modified Rectangle	-	Y
		136.00	108.00		63.24	63.48	64.00	81.34	111.88				
HA590223		5.34	4.26	M14X1.5 (5)	2.64	2.68	1.70	3.54	4.40	M12X1.75 (4)	Modified Rectangle	36	N
		135.72	108.17		67.00	68.00	43.15	90.00	111.77				
HA590226		5.35	4.50	M12X1.25 (5)	2.68	2.60	1.60	3.66	4.74	M12X1.25 (4)	Modified Rectangle	27	Y
		136.00	114.30		68.00	66.00	40.68	93.00	120.37				
HA590227		6.65	5.20	M14X1.5 (6)	2.93	2.97	1.86	3.74	4.76	M12X1.75 (3)	Modified Triangle	33	Y
		168.83	132.00		74.34	75.55	47.15	95.00	120.82				
HA590228		5.98	4.72	M14X1.5 (5)	2.52	2.76	1.86	3.50	4.92	M12X1.25 (4)	Modified Rectangle	30	Y
		152.00	120.00		64.00	70.00	47.20	88.80	124.96				
HA590229		6.30	4.72	M12X1.25 (5)	2.52	2.76	2.45	3.51	4.41	M12X1.25 (4)	Modified Rectangle	28	Y
		160.00	120.00		64.00	70.00	62.20	89.20	112.00				
HA590230		5.51	4.50	M12X1.5 (5)	2.64	3.15	2.39	2.91	3.90	M12X1.25 (4)	Modified Rectangle	25	Y
		140.00	114.30		67.00	80.00	60.60	74.00	99.00				
HA590232		5.35	4.23	M14X1.5 (5)	2.64	2.68	2.32	3.44	4.47	M12X1.75 (4)	Modified Trapezoid	36	Y
		135.76	107.42		67.00	68.00	58.80	87.44	113.51				
HA590233		7.99	6.69	M14X2 (8)	4.91	5.08	2.17	4.49	5.50	M14X1.5 (4)	Modified Square	-	Y
		203.00	169.80		124.82	129.00	55.14	114.00	139.78				
HA590234		5.37	4.24	M14X1.5 (5)	2.49	2.50	-	-	-	-	-	40	Y
		136.46	107.69		63.30	63.46	-	-	-				
HA590235		5.78	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	25	N
		146.81	114.30		66.00	68.00	69.00	84.00	107.00				
HA590236		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12X1.25 (4)	Modified Rectangle	32	Y
		136.00	114.30		66.00	68.00	40.68	93.00	120.00				
HA590237		5.83	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590238		5.83	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.31	4.25	M12X1.25 (4)	Modified Rectangle	29	Y
		148.00	114.30		66.00	68.00	69.00	84.00	106.84				
HA590239		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.15	4.06	M12X1.25 (4)	Modified Rectangle	29	Y
		136.00	114.30		66.00	68.00	40.66	80.00	103.00				
HA590240		5.63	4.50	M12X1.5 (4)	2.63	2.71	1.60	3.31	4.17	M12X1.25 (4)	Modified Rectangle	25	N
		143.00	114.30		66.80	68.88	40.59	84.00	106.00				
HA590241		5.83	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590241K		5.35	4.04	-	2.55	2.69	-	2.93	-	-	-	-	Y
		135.79	102.45		64.80	68.38	-	74.42	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590242		6.36	4.98	1/2-20 (5)	2.81	2.80	1.91	3.94	4.81	M12X1.75 (4)	Modified Triangle	32	Y
		161.52	126.48		71.45	71.00	48.56	100.15	122.15				
HA590243		6.37	5.00	M12X1.5 (5)	2.81	2.85	1.92	3.35	4.34	M10X1.5 (4)	Modified Rectangle	32	Y
		161.74	127.00		71.41	72.44	48.68	85.00	110.20				
HA590244		7.21	5.50	9/16-18 (5)	3.06	3.09	1.92	4.15	5.25	M14X1.5 (3)	Modified Triangle	33	Y
		183.00	139.68		77.74	78.40	48.69	105.36	133.28				
HA590245		6.08	4.50	1/2-20 (5)	2.81	2.84	1.91	3.62	4.77	M12X1.5 (3)	Modified Triangle	33	Y
		154.36	114.30		71.40	72.00	48.60	92.00	121.10				
HA590247		5.53	4.50	M12X1.5 (5)	2.64	3.20	2.33	2.28	4.39	M12X1.25 (4)	Modified Rectangle	-	Y
		140.52	114.30		67.00	81.30	59.13	58.00	111.54				
HA590248		5.47	4.75	M12x2 (5)	2.80	2.89	1.48	3.43	4.25	-	Rectangle	26	N
		139.00	120.65		71.12	73.41	37.59	87.00	107.95				
HA590249		5.53	4.50	M12X1.5 (5)	2.21	3.15	2.33	3.47	4.41	M12X1.25 (4)	Modified Rectangle	27	Y
		140.51	114.30		56.00	80.00	59.14	88.00	112.00				
HA590250		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12X1.25 (4)	Modified Rectangle	29	Y
		136.00	114.30		66.00	68.00	40.70	93.00	120.00				
HA590251		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12X1.25 (4)	Rectangle	29	N
		136.00	114.30		66.00	68.00	40.70	93.00	120.00				
HA590252		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.66	4.72	M12X1.25 (4)	Modified Rectangle	32	Y
		136.00	114.30		66.00	68.00	40.70	93.00	120.00				
HA590253		5.83	4.50	M12X1.5 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590254		5.83	4.50	M12X1.5 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		66.00	68.00	69.00	84.00	107.00				
HA590255		5.73	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.70	4.20	M12X1.25 (4)	Modified Rectangle	32	N
		145.56	114.30		66.00	68.00	69.00	94.00	106.65				
HA590256		5.53	4.50	M12X1.5 (5)	2.64	3.15	2.39	2.91	3.88	M12X1.25 (4)	Modified Rectangle	-	Y
		140.55	114.30		67.00	80.00	60.58	74.00	98.55				
HA590257		5.52	3.14	M12X1.5 (4)	2.64	2.72	-	2.75	-	-	-	-	N
		140.18	79.87		66.99	69.00	-	69.81	-				
HA590258		5.53	4.50	M12X1.5 (5)	2.64	3.15	2.39	2.91	3.88	M12X1.25 (4)	Modified Rectangle	25	Y
		140.52	114.30		67.00	80.00	60.58	74.00	98.56				
HA590259K		6.30	4.49	1/2-20 (5)	2.77	3.22	-	-	-	-	-	-	N
		160.00	114.00		70.47	81.90	-	-	-				
HA590260		6.18	4.73	M14X1.5 (5)	2.63	2.65	1.65	3.59	4.63	M12X1.75 (3)	Modified Triangle	30	Y
		157.00	120.11		66.82	67.32	41.94	91.24	117.52				
HA590261		5.74	4.50	1/2-20 (5)	2.49	2.28	1.69	3.63	4.71	M12X1.5 (4)	Modified Rectangle	38	Y
		145.77	114.30		63.25	58.00	42.95	92.12	119.59				
HA590262		5.95	4.50	M12X1.5 (5)	2.76	2.78	1.65	3.59	4.50	M12X1.75 (3)	Modified Triangle	30	Y
		151.00	114.30		70.00	70.59	42.02	91.17	114.30				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590263K		5.17	4.25	M12X1.5 (4)	2.49	2.50	-	-	-	-	-	-	Y
		131.30	108.00		63.25	63.50	-	-	-				
HA590264		5.95	4.50	M12X1.5 (5)	2.76	2.78	2.55	3.30	4.18	M10X1.5 (4)	Modified Square	30	Y
		151.00	114.30		70.00	70.56	64.78	83.92	106.09				
HA590265		6.22	4.72	M14X1.5 (5)	2.36	2.44	1.65	3.07	4.33	M12X1.25 (4)	Modified Rectangle	-	Y
		157.90	120.00		60.00	62.00	42.00	77.84	110.00				
HA590267		6.22	4.72	M14X1.5 (5)	2.36	2.44	2.05	3.74	5118.00	M12X1.25 (4)	Modified Trapezoid	30	Y
		158.00	120.00		60.00	62.00	52.12	95.00	130.00				
HA590269		6.22	4.72	M14X1.5 (5)	2.36	2.44	2.71	3.44	4.41	M12X1.25 (4)	Modified Square	30	Y
		158.00	120.00		60.00	62.00	68.80	87.36	112.00				
HA590270		6.22	4.72	M14X1.5 (5)	2.36	2.44	1.65	3.07	4.33	M12X1.25 (4)	Modified Trapezoid	-	Y
		158.00	120.00		60.00	62.00	41.95	77.84	110.00				
HA590271		5.47	4.50	M12X1.5 (5)	2.60	2.72	1.52	3.43	4.41	M12X1.25 (4)	Modified Square	29	Y
		139.00	114.30		66.00	69.00	38.50	87.00	112.00				
HA590273		7.88	6.69	M14X1.5 (10)	4.75	4.92	2.23	4.72	6.50	M14X1.5 (4)	Modified Square	35	Y
		200.00	170.00		120.65	125.00	56.70	120.00	165.10				
HA590274		6.59	5.00	M12X1.5 (5)	2.81	3.22	1.91	3.35	4.33	M10X1.5 (4)	Modified Rectangle	32	Y
		167.49	127.00		71.43	81.86	48.60	85.00	110.00				
HA590275		5.53	4.50	M12X1.5 (5)	2.64	3.15	2.33	3.47	4.41	M12X1.25 (4)	Modified Trapezoid	27	Y
		140.50	114.30		67.00	80.00	59.18	88.00	112.00				
HA590276		5.37	4.50	M12X1.25 (4)	2.60	2.60	1.60	3.15	4.06	M12X1.25 (4)	Modified Rectangle	29	N
		136.29	114.30		66.00	66.00	40.70	80.00	103.00				
HA590277		5.35	4.50	M12X1.25 (4)	2.60	2.68	1.60	3.15	4.06	M12X1.25 (4)	Modified Rectangle	29	Y
		136.00	114.30		66.00	68.00	40.60	80.00	103.00				
HA590278		5.35	4.50	M12X1.25 (5)	2.60	2.68	1.60	3.15	4.06	M12X1.25 (4)	Modified Rectangle	29	Y
		136.00	114.30		66.00	68.00	40.70	80.00	103.00				
HA590279		5.82	4.50	M12X1.25 (4)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	N
		147.80	114.30		66.00	68.00	69.00	84.00	107.00				
HA590280		5.82	4.50	M12X1.25 (4)	2.60	2.68	2.72	3.31	4.25	M12X1.25 (4)	Modified Rectangle	-	Y
		147.79	114.30		66.00	68.00	69.00	84.00	108.00				
HA590281		5.84	4.50	M12X1.25 (5)	2.60	2.68	2.72	3.31	4.21	M12X1.25 (4)	Modified Rectangle	-	Y
		148.44	114.30		66.00	68.00	69.00	84.00	107.00				
HA590282		6.73	5.50	M12X1.25 (6)	3.06	3.54	1.79	3.50	4.75	M14X1.5 (3)	Triangle	29	Y
		171.00	139.70		77.68	90.00	45.42	89.00	120.66				
HA590284		6.73	5.50	M12X1.25 (6)	3.06	3.54	1.79	3.50	4.75	M14X1.5 (3)	Triangle	29	Y
		171.00	139.70		77.67	90.00	45.44	89.00	120.65				
HA590285		5.35	4.50	M12X1.25 (4)	2.60	2.68	1.60	3.15	4.13	M12X1.25 (3)	Modified Triangle	25	N
		136.00	114.30		66.00	68.00	40.68	80.00	104.78				
HA590286		5.83	4.50	M12X1.25 (4)	2.60	2.68	2.72	2.72	3.62	M10X1.25 (4)	Modified Trapezoid	-	N
		148.11	114.30		66.00	68.00	68.96	69.00	92.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590286K		5.50	4.51	M12X1.5 (5)	2.64	2.83	-	-	-	-	-	28	N
		139.68	114.53		66.98	71.97	-	-	-				
HA590287		5.98	4.50	M12X1.5 (5)	2.44	2.44	2.84	3.30	4.33	0.492 12.50(4)	Modified Trapezoid	-	Y
		151.85	114.30		62.00	62.00	72.06	83.91	110.00				
HA590288		5.83	4.50	M12X1.25 (4)	2.60	2.68	2.72	2.72	3.58	M10X1.25 (4)	Modified Trapezoid	-	Y
		148.00	114.30		66.00	68.00	69.00	69.00	91.00				
HA590289		5.35	4.25	M14X1.5 (5)	2.64	2.68	2.32	3.44	4.50	M12X1.75 (4)	Modified Trapezoid	-	Y
		135.78	108.00		67.00	68.00	59.00	87.42	114.30				
HA590297		5.50	4.50	M12X1.5 (5)	2.64	2.84	-	-	-	-	-	-	N
		139.70	114.30		67.02	72.00	-	-	-				
HA590299		5.69	4.72	M14X1.5 (5)	2.63	2.65	1.65	3.58	4.53	M12X1.75 (3)	Modified Triangle	-	Y
		144.50	120.00		66.81	67.31	42.00	91.00	115.00				
HA590300		7.25	5.51	M12X1.5 (6)	3.91	3.94	2.65	3.35	4.41	M12X1.75 (4)	Modified Rectangle	-	Y
		184.16	140.00		99.42	100.00	67.20	85.00	112.00				
HA590301K		5.00	3.60	M12x1.5 (4)	2.13	2.13	-	-	-	-	-	26	N
		127.00	91.44		53.98	53.98	-	-	-				
HA590302K		5.47	4.50	M12X1.5 (5)	2.36	2.43	-	-	-	-	-	30	N
		139.00	114.30		59.90	61.80	-	-	-				
HA590303K		5.47	4.50	M12X1.5 (5)	2.36	2.43	-	-	-	-	-	26	N
		139.00	114.30		59.90	61.80	-	-	-				
HA590304		7.25	5.51	M12X1.5 (6)	3.92	3.94	2.65	3.35	4.41	M12X1.75 (4)	Modified Rectangle	27	Y
		184.12	140.00		99.54	100.00	67.24	85.00	112.00				
HA590305		5.32	3.94	M12X1.5 (5)	2.13	2.17	2.36	2.91	3.94	M12X1.25 (4)	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	60.00	74.00	100.00				
HA590306		5.43	4.50	M12X1.5 (5)	2.60	3.54	2.40	2.60	3.54	M10X1.25 (4)	Modified Rectangle	-	Y
		138.00	114.30		66.04	89.92	60.96	66.04	90.00				
HA590308		5.63	4.72	M12X1.5 (5)	2.85	3.11	-	-	-	-	-	-	Y
		143.00	120.00		72.50	79.00	-	-	-				
HA590310		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.36	2.91	3.62	M10X1.25 (4)	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	60.00	74.00	92.00				
HA590311		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.36	2.91	3.90	M12X1.25 (4)	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	60.00	74.00	99.00				
HA590312		5.35	4.25	M14X1.5 (5)	2.64	2.68	1.69	3.54	4.41	M12X1.75 (4)	Modified Rectangle	40	N
		135.76	108.00		67.00	68.00	43.00	90.00	112.00				
HA590313		4.88	3.94	M12X1.25 (5)	2.21	2.28	2.62	3.31	4.33	M12X1.25 (4)	Modified Rectangle	27	Y
		124.00	100.00		56.00	58.00	66.46	84.00	110.00				
HA590314		5.43	4.50	M12X1.25 (5)	2.21	2.28	2.62	3.31	4.33	M12X1.25 (4)	Modified Rectangle	27	Y
		138.00	114.30		56.00	58.00	66.53	84.00	110.00				
HA590315		4.88	3.94	M12X1.25 (5)	2.21	2.28	1.93	2.99	-	M12X1.25 (4)	Modified Trapezoid	27	Y
		124.00	100.00		56.00	58.00	49.00	76.00	-				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA590316		5.43	4.50	M12X1.25 (5)	2.21	2.28	1.83	3.31	-	M12X1.25 (4)	Modified Trapezoid	27	Y
		138.00	114.30		56.00	58.00	46.43	84.00	-				
HA590317		6.37	5.00	M12X1.5 (5)	2.81	2.85	1.91	3.35	4.33	M10X1.5 (4)	Modified Rectangle	-	Y
		161.77	127.00		71.43	72.44	48.50	85.00	110.00				
HA590321		5.35	4.25	M12X1.2 (5)	2.49	2.50	2.48	3.27	4.41	0.425 10.8(4)	Modified Trapezoid	36	Y
		135.82	108.00		63.25	63.50	63.00	83.00	112.00				
HA590322		5.35	3.85	M12X1.5 (5)	2.49	2.50	2.49	2.91	3.84	M10X1.5 (4)	Modified Square	-	Y
		136.00	97.75		63.20	63.50	63.12	74.00	97.49				
HA590323		5.17	4.25	M12X1.5 (5)	2.49	2.50	-	-	-	-	-	36	Y
		131.37	108.00		63.20	63.50	-	-	-				
HA590324		5.47	4.50	M12X1.5 (5)	2.64	2.72	2.10	3.15	4.42	M12X1.25 (4)	Modified Rectangle	-	Y
		139.00	114.30		67.00	69.00	53.25	80.00	112.20				
HA590325		5.83	4.50	M12X1.5 (5)	2.64	2.99	2.32	2.87	3.94	M10X1.25 (4)	Modified Rectangle	-	Y
		148.00	114.30		67.00	76.00	59.00	73.00	100.00				
HA590326		5.47	4.50	M12X1.5 (5)	2.64	2.72	2.09	3.54	4.50	M12X1.25 (4)	Modified Rectangle	30	N
		139.00	114.30		67.00	69.00	53.15	90.00	114.30				
HA590327		5.49	4.50	M12X1.5 (6)	2.64	2.72	2.10	3.62	4.50	M12X1.25 (4)	Modified Rectangle	30	N
		139.44	114.30		67.00	69.00	53.31	92.00	114.30				
HA590335		5.50	4.50	1/2-20 (5)	2.77	2.84	2.48	3.07	4.15	1/2-13 (4)	Modified Trapezoid	-	Y
		139.70	114.30		70.42	72.00	63.00	78.00	105.48				
HA590336		5.50	4.50	M12X1.5 (5)	2.64	2.84	2.48	3.07	4.17	M12X1.25 (4)	Modified Trapezoid	-	Y
		139.76	114.30		67.00	72.00	63.00	78.00	106.00				
HA590337		5.35	4.25	M14X1.5 (5)	2.49	2.50	2.48	3.20	4.41	M12X1.5 (4)	Modified Rectangle	-	Y
		136.00	108.00		63.24	63.50	63.00	81.36	112.00				
HA590352		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.57	4.16	5.51	M14X1.5 (4)	Modified Square	-	Y
		199.30	165.10		116.64	117.84	65.35	105.68	140.00				
HA590353		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.57	4.17	5.51	M14X1.5 (4)	Modified Square	-	Y
		199.30	165.10		116.64	117.84	65.35	105.79	140.00				
HA590370		5.98	4.53	M12X1.5 (5)	2.36	2.44	2.94	-	3.90	0.413 10.5(4)	Offset Trapezoid	-	Y
		151.90	115.00		59.97	61.93	74.69	-	99.00				
HA590371		5.98	4.50	M12X1.5 (5)	2.37	2.44	2.94	-	3.87	0.398 10.11(4)	Modified Trapezoid	-	N
		151.90	114.18		60.10	61.98	74.68	-	98.16				
HA590425		7.99	6.69	M14X2 (8)	4.92	5.08	2.03	4.48	5.51	M14X1.5 (4)	Square	55	Y
		203.00	170.00		124.91	129.01	51.50	113.80	140.00				
HA590653		6.54	5.50	M12x1.5 (6)	3.94	3.98	3.01	3.27	4.49	M12x1.25 (4)	Modified Rectangle	-	Y
		166.00	139.70		100.00	101.00	76.50	83.00	113.00				
HA591050		6.06	4.50	M12x1.5 (5)	2.36	2.44	2.66	3.31	4.41	M12x1.25 (4)	Rectangle	-	N
		154.00	114.30		60.00	62.00	67.50	84.00	112.00				
HA591080		5.98	4.50	-	2.36	2.44	2.72	3.31	4.17	0.421 10.7(4)	Modified Trapezoid	26	N
		152.00	114.30		60.00	62.00	69.00	84.00	106.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA591339		8.19	6.50	.600 15.24(8)	4.59	-	2.69	4.17	-	M14x1.5 (4)	Modified Square	33	N
		208.00	165.10		116.59	-	68.33	105.79	-				
HA592210	*	-	-	-	-	-	-	3.31	4.72	M12X1.25 (3)	Modified Polygon	-	N
		-	-		-	-	-	84.00	120.00				
HA592410		5.32	3.94	M12X1.5 (4)	2.13	2.17	2.15	2.64	-	M10X1.25 (4)	Offset Trapezoid	-	N
		135.00	100.00		54.00	55.00	54.50	67.00	-				
HA592450		5.98	4.50	-	2.36	2.44	2.93	2.91	3.90	0.413 10.50(4)	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	74.50	74.00	99.00				
HA592451		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.84	3.30	4.36	-	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	72.06	83.79	110.61				
HA592460		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.93	2.91	3.90	0.413 10.50(4)	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	74.50	74.00	99.00				
HA592461		5.98	4.50	M12X1.5 (5)	2.37	2.44	2.84	3.30	4.34	-	Modified Trapezoid	-	Y
		151.88	114.32		60.31	62.07	72.04	83.82	110.14				
HA592519		5.47	4.72	M12x1.5 (5)	2.85	3.11	1.77	3.22	-	-	-	-	N
		139.00	120.00		72.50	79.00	45.00	81.70	-				
HA593427		5.47	4.72	M12x1.5 (5)	2.91	3.11	2.00	3.54	-	M12x1.5 (4)	-	-	N
		139.00	120.00		74.00	79.00	50.75	90.00	-				
HA593550		5.51	4.50	M12x1.5 (5)	2.36	2.44	2.17	2.91	4.41	M12x1.25 (4)	Modified Rectangle	-	Y
		140.00	114.30		60.00	62.00	55.00	74.00	112.00				
HA594181		5.35	4.25	M12 (5)	2.56	2.68	1.69	3.29	4.06	M12 (4)	Modified Rectangle	-	N
		136.00	108.00		65.00	68.00	43.00	83.50	103.00				
HA594241		5.98	4.50	-	2.36	2.44	2.72	3.31	4.17	0.42 10.70(4)	Modified Trapezoid	-	N
		152.00	114.30		60.00	62.00	69.00	84.00	106.00				
HA594245		5.31	3.94	M12x1.5 (4)	2.13	2.17	2.15	2.64	3.62	M10x1.25 (4)	Modified Trapezoid	-	Y
		135.00	100.00		54.00	55.00	54.50	67.00	92.00				
HA594246	*	-	-	-	-	-	-	3.94	5.51	-	Modified Trapezoid	-	N
		-	-		-	-	-	100.00	140.00				
HA594301	*	-	-	-	-	-	-	4.17	5.51	0.47,0.50 12(2),12.8(2)	Offset Trapezoid	-	N
		-	-		-	-	-	106.00	140.00				
HA594460K		5.45	3.94	M12x1.5 (4)	2.21	2.39	-	-	-	-	-	26	N
		138.50	100.00		56.08	60.86	-	-	-				
HA594504		5.98	4.50	-	2.36	2.44	2.72	3.31	4.17	0.42 10.70(4)	Modified Trapezoid	-	Y
		152.00	114.30		60.00	62.00	69.00	84.00	106.00				
HA594505		5.98	4.49	M12X1.5 (5)	2.36	3.20	2.72	3.30	4.27	0.417 10.60(4)	Modified Trapezoid	26	N
		151.98	114.16		60.02	81.30	69.00	83.87	108.36				
HA595017		4.92	3.94	-	2.13	2.17	2.19	2.64	3.62	M10x1.25 (4)	Modified Rectangle	-	Y
		125.00	100.00		54.00	55.00	55.50	67.00	92.00				
HA595894		5.35	4.25	M12 (4)	2.56	2.68	1.69	3.27	4.06	M12 (4)	Modified Rectangle	-	N
		136.00	108.00		65.00	68.00	43.00	83.00	103.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

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Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
HA596030		5.98	4.50	M12X1.5 (5)	2.36	2.44	2.93	2.91	3.90	0.413 10.49(4)	Modified Trapezoid	-	N
		152.00	114.30		60.00	62.00	74.50	74.00	99.00				
HA596060	*	-	-	-	-	-	-	3.78	5.20	0.49 12.45(4)	Rectangle	-	N
		-	-		-	-	-	96.00	132.00				
HA596467		5.39	4.33	M12X1.5 (5)	2.56	2.76	-	2.99	-	-	-	-	Y
		137.00	110.00		65.00	70.00	-	76.00	-				
HA597060	*	-	-	-	-	-	-	3.78	5.20	0.492 12.5(4)	Rectangle	-	N
		-	-		-	-	-	96.00	132.00				
HA597449		5.98	4.50	1/2-20 (5)	2.81	2.83	1.91	3.70	4.75	M12x1.75 (3)	Modified Triangle	27	N
		152.00	114.30		71.43	71.93	48.46	94.00	120.65				
HA597851		8.19	6.50	.600 15.24(8)	4.77	-	2.20	3.91	-	M14x1.5 (3)	Modified Triangle	33	N
		208.00	165.10		121.06	-	55.88	99.19	-				
HA597957		5.35	4.25	.394 10.01(5)	2.56	2.69	-	3.01	-	-	-	-	Y
		135.99	107.95		64.97	68.40	-	76.38	-				
HA598679		6.49	5.00	1/2-20 (5)	2.81	2.83	2.12	3.94	4.75	M12x1.75 (3)	Modified Triangle	27	N
		164.75	127.00		71.43	71.93	53.80	100.13	120.65				
HA599361		6.31	4.50	- (6)	2.81	2.89	2.11	3.50	-	M14x1.5 (3)	Modified Triangle	31	N
		160.27	114.30		71.37	73.41	53.49	88.90	-				
HA599406		6.31	4.50	1/2-20 (6)	2.81	2.89	2.27	-	-	-	-	-	Y
		160.27	114.30		71.37	73.28	57.68	-	-				
HA599455L		-	-	1/2-20 (5)	-	-	-	3.94	-	M12x1.75 (3)	Modified Triangle	-	Y
		-	-		-	-	-	100.13	-				
HA599455R		-	-	1/2-20 (5)	-	-	-	3.94	-	M12x1.75 (3)	Modified Triangle	-	Y
		-	-		-	-	-	100.13	-				
HA599467		-	-	1/2-20 (5)	-	-	-	3.94	-	M12x1.75 (3)	Modified Triangle	-	N
		-	-		-	-	-	100.13	-				
HA599528		6.31	4.50	1/2-20 (6)	2.81	2.89	2.27	-	-	-	-	-	N
		160.27	114.30		71.37	73.28	57.68	-	-				
HA599863		7.20	5.50	1/2-20 (5)	3.06	3.09	1.99	3.91	4.96	M14X1.5 (3)	Modified Triangle	33	N
		183.00	139.70		77.66	78.40	50.64	99.30	126.00				
SP450100		6.31	4.50	- (6)	2.81	2.89	2.11	3.50	-	M14x1.5 (3)	Modified Triangle	31	Y
		160.27	114.30		71.37	73.41	53.49	88.90	-				
SP450101		6.31	4.50	- (6)	2.81	2.89	2.11	3.50	-	M14x1.5 (3)	Modified Triangle	31	Y
		160.27	114.30		71.37	73.41	53.49	88.90	-				
SP450200		5.93	4.50	1/2-20 (5)	2.77	2.83	2.22	3.94	4.75	M12x1.75 (3)	Modified Triangle	27	Y
		150.50	114.30		70.46	71.88	56.26	100.08	120.65				
SP450201		5.88	4.50	M12X1.75 (5)	2.77	2.83	2.21	3.94	5.23	1/2-20 (3)	Modified Triangle	-	Y
		149.40	114.30		70.40	71.88	56.10	100.10	132.86				
SP450202		5.88	4.50	1/2-20 (5)	2.77	2.84	2.22	3.94	5.23	M12x1.75 (3)	Modified Triangle	27	Y
		149.44	114.30		70.40	72.11	56.38	100.10	132.86				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
SP450300		5.76	4.75	M12x1.5 (5)	2.76	2.78	1.86	3.51	4.75	- (3)	Modified Triangle	-	Y
		146.40	120.65		70.16	70.63	47.21	89.08	120.65				
SP450301		7.06	5.50	M14X1.5 (6)	3.07	3.09	1.98	3.91	4.96	M14X1.5 (3)	Triangle	-	Y
		179.30	139.70		77.90	78.45	50.18	99.34	126.00				
SP450303		7.03	5.50	M14X1.5 (6)	3.06	3.09	1.98	3.91	4.96	M14X1.5 (3)	Triangle	-	Y
		178.50	139.70		77.81	78.44	50.18	99.34	126.00				
SP450701		5.51	4.50	- (6)	2.60	2.68	1.82	3.66	4.72	M12X1.25 (4)	Modified Rectangle	29	Y
		140.00	114.30		65.91	67.95	46.10	93.00	120.00				
SP450702		5.51	4.50	- (6)	2.60	2.68	1.82	3.66	4.72	M12X1.25 (4)	Modified Rectangle	-	Y
		140.00	114.30		65.91	67.95	46.10	93.00	120.00				
SP470200		6.30	4.50	1/2-20 (5)	2.78	3.23	1.93	3.35	4.33	M12X1.75 (3)	Modified Triangle	27	Y
		160.00	114.30		70.51	81.94	48.95	85.08	110.00				
SP470201		6.30	4.50	1/2-20 (5)	2.78	3.23	1.93	3.35	4.33	M12X1.75 (3)	Modified Triangle	27	Y
		160.00	114.30		70.51	81.94	48.95	85.08	110.00				
SP500100		7.22	5.50	9/16-18 (5)	3.06	3.09	1.85	3.54	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		183.30	139.70		77.76	78.42	47.08	90.04	126.00				
SP500101		7.21	5.50	9/16-18 (5)	3.06	3.09	1.84	3.54	4.96	M14X1.5 (3)	Modified Triangle	33	Y
		183.04	139.70		77.75	78.36	46.71	90.02	126.00				
SP500300		7.09	5.50	M14x1.5 (6)	3.06	3.09	1.96	3.91	4.06	M14x1.5 (3)	Modified Triangle	33	Y
		180.00	139.70		77.84	78.36	50.00	99.31	103.12				
SP500301		5.50	5.50	M14X1.5 (6)	3.06	3.09	1.98	3.91	4.96	M14X1.5 (3)	Triangle	33	Y
		139.70	139.70		77.81	78.40	50.18	99.34	126.00				
SP500701		6.75	6.75	- (6)	3.06	3.23	1.80	3.50	4.75	M14X1.5 (3)	Triangle	29	Y
		171.50	171.50		77.70	82.04	45.80	89.04	120.65				
SP500702		6.75	5.50	M12X1.25 (6)	3.06	3.23	2.23	3.50	4.49	M12X1.75 (4)	Modified Square	32	Y
		171.50	139.70		77.70	82.04	56.74	89.04	114.00				
SP500703		6.75	5.50	M12X1.25 (6)	3.06	3.55	1.80	3.51	4.75	M14X1.5 (3)	Modified Triangle	29	Y
		171.50	139.70		77.70	90.04	45.80	89.04	120.65				
SP550100		6.78	5.50	1/2-20 (5)	3.06	3.09	2.01	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		172.00	139.70		77.72	78.49	50.98	99.31	125.98				
SP550101		6.78	5.50	1/2-20 (5)	3.06	3.09	2.01	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		172.00	139.70		77.72	78.49	50.98	99.31	125.98				
SP550102		7.20	5.50	1/2-20 (5)	3.06	3.09	2.23	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		183.00	139.70		77.66	78.37	56.64	99.31	126.00				
SP550103		8.09	6.50	9/16-18 (8)	4.77	4.81	1.98	3.91	4.96	M14X1.5 (3)	Triangle	-	Y
		205.50	165.10		121.08	122.28	50.18	99.34	126.00				
SP550104		8.08	6.48	9/16-18 (8)	4.77	4.81	1.99	3.91	5.04	M14X1.5 (3)	Modified Triangle	-	Y
		205.18	164.67		121.03	122.23	50.45	99.30	128.00				
SP550200		7.17	5.32	- (5)	3.42	3.54	1.94	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		182.00	135.03		86.74	89.97	49.28	99.31	125.88				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
SP550201		7.13	5.32	-	3.42	3.64	1.96	3.91	4.96	M14x1.5 (3)	Modified Triangle	33	Y
		181.20	135.03		86.74	92.33	49.71	99.31	125.88				
SP550202		7.20	5.28	M14x2.0 (6)	3.42	3.54	1.79	3.90	6.32	M14x1.5 (4)	Square	-	Y
		183.00	134.00		86.80	90.00	45.50	99.00	160.50				
SP550203		7.20	5.31	M14x2.0 (6)	3.43	3.54	2.19	3.91	5.38	M14x1.5 (4)	Rectangle	33	Y
		182.84	134.76		87.03	90.01	55.75	99.35	136.76				
SP550206		7.22	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	-	Y
		183.50	135.00		86.80	90.03	46.00	99.34	160.00				
SP550207		7.21	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		183.00	135.00		86.80	90.03	46.00	99.34	160.00				
SP550208		7.48	5.91	M14X2 (7)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		190.00	150.00		86.80	90.03	46.00	99.34	160.00				
SP550209		7.20	5.32	M14X2 (6)	3.42	3.54	2.19	3.91	5.37	M14X1.5 (4)	Modified Rectangle	33	Y
		182.83	135.21		86.98	89.98	55.56	99.35	136.29				
SP550210		7.21	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		183.00	135.00		86.80	90.03	46.00	99.34	160.00				
SP550211		7.21	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	-	Y
		183.00	135.00		86.80	90.03	46.00	99.34	160.00				
SP550212		7.21	5.32	M14X2 (6)	3.42	3.55	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		183.00	135.00		86.80	90.26	46.00	99.34	160.00				
SP550213		7.48	5.91	M14X2 (7)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		190.00	150.00		86.80	90.03	46.00	99.34	160.00				
SP550214		7.21	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		183.00	135.00		86.80	90.03	46.00	99.34	160.00				
SP550215		7.48	5.91	M14X2 (7)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	45	Y
		190.00	150.00		86.80	90.03	46.00	99.34	160.00				
SP550216		7.21	5.32	M14X2 (6)	3.42	3.54	1.81	3.91	6.30	M14X1.5 (4)	Modified Square	-	Y
		183.00	135.00		86.80	90.03	46.00	99.34	160.00				
SP550307		7.17	5.50	M14x1.5 (6)	3.06	3.09	2.23	3.91	5.00	-	Modified Triangle	33	Y
		181.99	139.70		77.60	78.37	56.64	99.31	127.00				
SP550308		6.31	5.00	M14x1.5 (5)	3.06	3.09	2.94	3.91	5.00	-	Modified Triangle	33	Y
		160.27	127.00		77.66	78.37	74.68	99.31	127.00				
SP550309		7.09	5.50	M14x1.5 (6)	3.08	3.09	1.97	3.91	4.91	M14x1.5 (3)	Modified Triangle	33	Y
		180.00	139.70		78.24	78.46	50.09	99.35	124.80				
SP550310		7.09	5.50	M14x1.5 (6)	3.08	3.09	1.96	3.91	4.94	M14x1.5 (3)	Modified Triangle	33	Y
		180.00	139.70		78.32	78.60	49.90	99.32	125.42				
SP550311		7.04	5.50	M12X1.5 (6)	3.94	3.96	1.98	3.91	4.96	M14X1.5 (3)	Modified Triangle	33	Y
		178.70	139.70		99.99	100.67	50.20	99.34	126.00				
SP580100		8.37	6.50	9/16x18 (8)	4.77	-	2.97	4.48	5.51	M14x1.5 (4)	Rectangle	33	Y
		212.50	165.10		121.04	-	75.52	113.86	140.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
SP580101		8.37	6.50	9/16x18 (8)	4.77	-	2.97	4.48	5.51	M14x1.5 (4)	Rectangle	33	Y
		212.50	165.10		121.04	-	75.52	113.86	140.00				
SP580102		8.19	6.50	9/16x18 (8)	4.59	-	2.69	4.48	5.51	M14x1.5 (4)	Rectangle	33	Y
		208.00	165.10		116.64	-	68.25	113.86	140.00				
SP580103		8.19	6.50	9/16x18 (8)	4.59	-	2.69	4.48	5.51	M14x1.5 (4)	Rectangle	33	Y
		208.00	165.10		116.64	-	68.25	113.86	140.00				
SP580204		7.99	6.69	M14x2 (8)	4.92	5.08	2.03	4.48	5.51	M14x1.5 (4)	Square	55	Y
		203.00	170.00		124.97	129.01	51.50	113.90	140.00				
SP580205		7.99	6.69	M14x1.5 (8)	4.92	5.08	2.15	4.48	5.51	M14x1.5 (4)	Square	55	Y
		203.00	170.00		124.97	129.01	54.50	113.90	140.00				
SP580300		8.19	6.50	0.6 15.24(8)	4.59	-	2.69	4.17	5.51	M14x1.5 (4)	Rectangle	33	Y
		208.03	165.10		116.59	-	68.33	105.79	140.00				
SP580301		8.19	6.50	0.6 15.24(8)	4.59	-	2.69	4.17	-	M14x1.5 (4)	Rectangle	33	Y
		208.03	165.10		116.59	-	68.33	105.79	-				
SP580302		8.19	6.50	0.6 15.24(8)	4.59	-	2.69	4.17	-	M14x1.5 (4)	Rectangle	33	Y
		208.03	165.10		116.59	-	68.33	105.79	-				
SP580303		8.19	6.50	0.6 15.24(8)	4.59	-	2.69	4.17	-	M14x1.5 (4)	Rectangle	33	Y
		208.03	165.10		116.59	-	68.33	105.79	-				
SP580304		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.68	4.17	5.51	-	Rectangle	33	Y
		208.00	165.10		116.64	118.11	68.00	105.80	140.00				
SP580305		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.31	4.17	5.51	M14x1.5 (4)	Square	-	Y
		199.40	165.10		116.64	118.11	58.60	105.80	140.00				
SP580306		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.30	4.17	5.51	M14x1.5 (4)	Square	-	Y
		199.40	165.10		116.64	118.11	58.35	105.80	140.00				
SP580307		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.58	4.17	5.51	M14x1.5 (4)	Modified Square	-	Y
		199.40	165.10		116.64	118.11	65.55	105.80	140.00				
SP580308		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.28	4.17	5.51	M14x1.5 (4)	Square	-	Y
		199.40	165.10		116.64	118.11	57.94	105.80	140.00				
SP580309		7.85	6.50	M14x1.5 (8)	4.59	4.65	2.29	4.17	5.51	M14x1.5 (4)	Square	33	Y
		199.40	165.10		116.64	118.11	58.25	105.80	140.00				
SP580310		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.30	4.17	5.51	M14x1.5 (4)	Modified Square	33	Y
		199.30	165.10		116.69	117.89	58.35	105.84	140.00				
SP580311		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.30	4.17	5.51	M14x1.5 (4)	Modified Square	33	Y
		199.30	165.10		116.69	117.89	58.35	105.84	140.00				
SP580312		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.30	4.17	5.51	M14x1.5 (4)	Modified Square	33	Y
		199.30	165.10		116.69	117.89	58.35	105.84	140.00				
SP580313		7.85	6.50	M14x1.5 (8)	4.59	4.64	2.30	4.17	5.51	M14x1.5 (4)	Modified Square	33	Y
		199.30	165.10		116.69	117.89	58.35	105.84	140.00				
SP940200		7.99	6.69	M14x1.5 (8)	4.92	5.08	1.83	5.51	6.50	M14x1.5 (4)	Square	32	Y
		203.00	170.00		125.00	129.05	46.50	140.04	165.00				

*Denotes a Bearing Module

HUB UNIT BEARING / BEARING MODULE - NUMERICAL LISTING

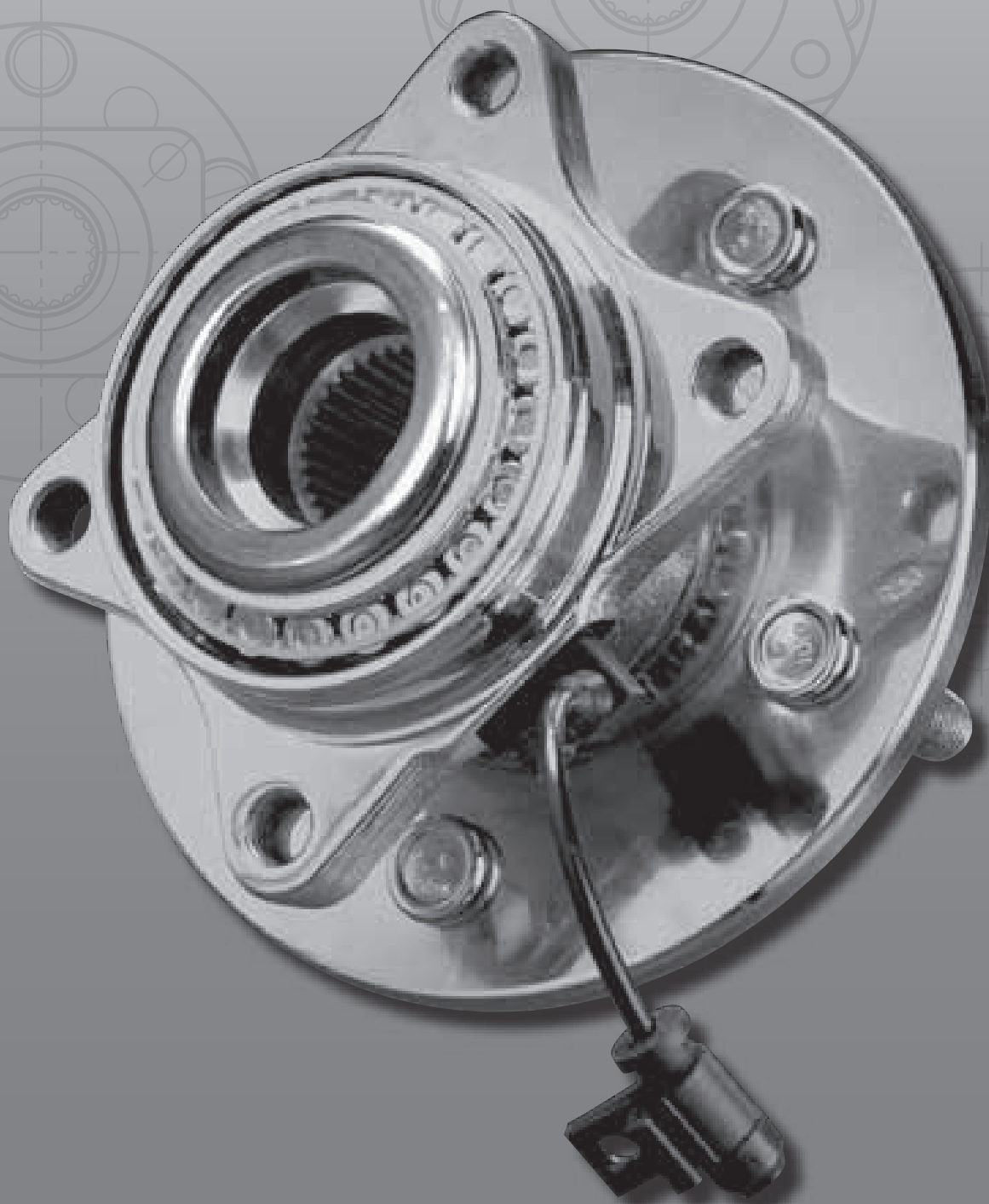
continued

Timken Part No.		Flange Dia	Bolt Circle Dia	Bolt Size (Qty)	Wheel Pilot Dia	Brake Pilot Dia	Flange Offset	Hub Pilot Dia	Bolt Circle Dia	Bolt Hole Size (Qty)	Flange Shape	No. Of Spline	ABS (Y/N)
		A	B	C	D	E	F	G	H	I	J		
SP940201		7.99	6.69	M14X2 (8)	4.92	5.08	1.83	5.51	6.50	M14X1.5 (4)	Square	32	Y
		203.00	170.00		125.00	129.05	46.50	140.04	165.00				
SP940202		7.99	6.69	M14X2 (10)	4.92	5.08	1.83	5.51	6.50	M14X1.5 (4)	Square	32	Y
		203.00	170.00		125.00	129.05	46.50	140.04	165.00				
SP940203		7.99	6.69	M14X2 (10)	4.92	5.08	46.50	5.51	6.50	M14X1.5 (4)	Square	-	Y
		203.00	170.00		125.00	129.05	1.83	140.04	165.00				
SP940204		7.99	6.69	M14X2 (8)	4.92	5.08	1.83	5.51	6.50	M14X1.5 (4)	Square	32	Y
		203.00	170.00		125.00	129.05	46.50	140.04	165.00				

*Denotes a Bearing Module

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HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS



HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

This section provides image references for part identification and also shows the 'skill level' required for each part installation. Some hub unit bearings and bearing modules require special tools and/or equipment such as a hydraulic press, which may not be found in the standard shop environment. In the example below, the 'skill level' is shown at the bottom right of the image.

Detailed product specifications for each hub unit bearing and bearing module contained in this section are available in the Hub Unit Bearing/Bearing Module – Diagrams and Specifications Section.

Example of how to use this section:

SP580310



Skill Level A

High, professional technician and/or previous repair experience - may require special tools, equipment or processes.

Skill Level B

Moderate, above average mechanical skills.

Skill Level C

Low, basic automotive repair experience - average mechanical skills.

⚠ WARNING *Failure to observe the following warnings could create a risk of serious injury.*

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

Never spin a bearing with compressed air. The rollers may be forcefully expelled.

Do not attempt to disassemble and reassemble hub unit bearings and bearing modules. Improper reassembly could lead to failure.

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

510038	511011	511012
		
Skill Level A	Skill Level A	Skill Level A
512000	512001	512002
		
Skill Level B	Skill Level B	Skill Level B
512003	512004	512006
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512008	512009	512010
		
Skill Level B	Skill Level A	Skill Level B
512011	512012	512013
		
Skill Level B	Skill Level B	Skill Level B
512014	512016	512017
		
Skill Level A	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

512018	512019	512020
		
Skill Level B	Skill Level B	Skill Level B
512021	512022	512023
		
Skill Level B	Skill Level B	Skill Level B
512024	512025	512026
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512027	512029	512031
		
Skill Level B	Skill Level B	Skill Level B
512032	512033	512036
		
Skill Level B	Skill Level B	Skill Level B
512037	512038	512039
		
Skill Level B	Skill Level A	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

512040	512041	512078
		
Skill Level B	Skill Level B	Skill Level B
512105	512106	512107
		
Skill Level B	Skill Level B	Skill Level B
512118	512119	512120
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512121	512122	512123
		
Skill Level B	Skill Level B	Skill Level B
512124	512125	512133
		
Skill Level B	Skill Level B	Skill Level B
512136	512137	512140
		
Skill Level A	Skill Level A	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

512144	512145	512147
		
Skill Level B	Skill Level B	Skill Level B
512148	512149	512151
		
Skill Level B	Skill Level B	Skill Level B
512152	512153	512154
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512155	512156	512157
 Skill Level B	 Skill Level B	 Skill Level B
512158	512159	512160
 Skill Level B	 Skill Level B	 Skill Level B
512161	512162	512163
 Skill Level B	 Skill Level B	 Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

512164	512165	512166
		
Skill Level B	Skill Level B	Skill Level A
512167	512168	512169
		
Skill Level B	Skill Level B	Skill Level B
512170	512171	512172
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512173	512174	512175
		
Skill Level B	Skill Level B	Skill Level B
512176	512177	512178
		
Skill Level B	Skill Level B	Skill Level B
512179	512180	512181
		
Skill Level B	Skill Level B	Skill Level A

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

512182	512183	512184
		
Skill Level B	Skill Level A	Skill Level B
512185	512186	512187
		
Skill Level B	Skill Level B	Skill Level B
512188	512189	512190
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512191	512192	512193
		
Skill Level B	Skill Level B	Skill Level B
512194	512195	512196
		
Skill Level B	Skill Level B	Skill Level B
512197	512198	512199
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

512200	512201	512202
		
Skill Level B	Skill Level B	Skill Level B
512203	512204	512217
		
Skill Level B	Skill Level B	Skill Level B
512218	512220	512221
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512222	512223	512225
		
Skill Level B	Skill Level B	Skill Level B
512229	512230	512231
		
Skill Level B	Skill Level B	Skill Level B
512232	512235	512236
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

512237	512238	512239
		
Skill Level B	Skill Level B	Skill Level B
512242	512251	512265
		
Skill Level B	Skill Level B	Skill Level B
512267	512270	512280
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

512294	512295	512299
		
Skill Level A	Skill Level A	Skill Level B
512305	512322	512323
		
Skill Level A	Skill Level B	Skill Level B
512324	512326	512340
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

513003	513004K	513011K
		
Skill Level B	Skill Level B	Skill Level B
513012	513013	513016K
		
Skill Level B	Skill Level B	Skill Level B
513017K	513018	513019
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

513020	513030	513033
		
Skill Level B	Skill Level B	Skill Level B
513034	513035	513039
		
Skill Level B	Skill Level B	Skill Level B
513041	513042	513044
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

513049	513050	513059
		
Skill Level B	Skill Level B	Skill Level B
513061	513062	513063
		
Skill Level B	Skill Level B	Skill Level B
513070	513074	513075
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

513076	513077	513078
		
Skill Level B	Skill Level B	Skill Level B
513080	513081	513082
		
Skill Level B	Skill Level B	Skill Level B
513084	513085	513087
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

513088	513089	513090
		
Skill Level B	Skill Level B	Skill Level B
513092	513093	513094
		
Skill Level B	Skill Level A	Skill Level B
513096	513098	513099
		
Skill Level B	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

513100	513104	513105
		
Skill Level B	Skill Level B	Skill Level B
513107	513109	513111
		
Skill Level B	Skill Level B	Skill Level B
513115	513121	513122
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

513123	513124	513125
		
Skill Level B	Skill Level B	Skill Level B
513126	513127	513128
		
Skill Level B	Skill Level B	Skill Level B
513131	513132	513133
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

513135	513137	513138
		
Skill Level A	Skill Level B	Skill Level B
513139	513142	513152
		
Skill Level B	Skill Level B	Skill Level B
513155	513156	513157
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

513173	513175	513179
		
Skill Level B	Skill Level B	Skill Level B
513186	513187	513188
		
Skill Level B	Skill Level B	Skill Level B
513189	513190	513191
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

513192	513193	513194
		
Skill Level B	Skill Level B	Skill Level B
513196	513202	513226
		
Skill Level B	Skill Level B	Skill Level B
513230	513256	513266
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

515000	515001	515002
		
Skill Level B	Skill Level B	Skill Level B
515005	515006	515014
		
Skill Level B	Skill Level B	Skill Level B
515017	515020	515021
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

515022	515025	515026
		
Skill Level B	Skill Level B	Skill Level B
515027	515028	515029
		
Skill Level B	Skill Level B	Skill Level B
515030	515031	518500
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

518501	518502	518503
		
Skill Level B	Skill Level B	Skill Level A
518504	518505	518506
		
Skill Level A	Skill Level A	Skill Level A
518507	520000	520100
		
Skill Level A	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

BM500000	BM500001	BM500002
		
Skill Level A	Skill Level A	Skill Level A
BM500003	BM500004	BM500005
		
Skill Level A	Skill Level A	Skill Level A
BM500006	BM500007	BM500009
		
Skill Level A	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

BM500010	BM500012	BM500013
		
Skill Level A	Skill Level A	Skill Level A
BM500014	BM500015	BM500016
		
Skill Level A	Skill Level A	Skill Level A
BM500017	BM500018	BM500019
		
Skill Level A	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

BM500022	BM500029	BM500030
		
Skill Level A	Skill Level A	Skill Level A
BM513161	HA500100	HA500601
		
Skill Level A	Skill Level B	Skill Level B
HA500701	HA590000	HA590001
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

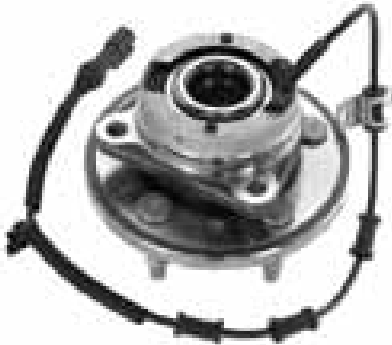
HA590002	HA590003	HA590004
		
Skill Level B	Skill Level B	Skill Level B
HA590005	HA590006	HA590007
		
Skill Level B	Skill Level B	Skill Level B
HA590008	HA590009	HA590010
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590012	HA590013	HA590014
		
Skill Level B	Skill Level B	Skill Level B
HA590016	HA590017	HA590018
		
Skill Level B	Skill Level B	Skill Level B
HA590019	HA590020	HA590021
		
Skill Level B	Skill Level A	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590022  Skill Level B	HA590023  Skill Level B	HA590024  Skill Level B
HA590025  Skill Level B	HA590026  Skill Level B	HA590027  Skill Level B
HA590028  Skill Level B	HA590029  Skill Level B	HA590030  Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590031	HA590032	HA590033
		
Skill Level B	Skill Level B	Skill Level B
HA590034	HA590035	HA590036
		
Skill Level B	Skill Level B	Skill Level B
HA590038	HA590039	HA590040
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590041	HA590043	HA590044
		
Skill Level B	Skill Level B	Skill Level B
HA590045	HA590046	HA590047
		
Skill Level B	Skill Level B	Skill Level B
HA590048	HA590049	HA590050
		
Skill Level B	Skill Level B	Skill Level A

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590052	HA590053	HA590054
		
Skill Level B	Skill Level B	Skill Level B
HA590055	HA590055K	HA590056
		
Skill Level B	Skill Level B	Skill Level B
HA590056K	HA590057	HA590058
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590059	HA590060	HA590061
		
Skill Level B	Skill Level B	Skill Level B
HA590062	HA590063	HA590064
		
Skill Level B	Skill Level B	Skill Level B
HA590065	HA590066	HA590067
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590068	HA590069	HA590070
		
Skill Level B	Skill Level B	Skill Level B
HA590071	HA590072	HA590074
		
Skill Level B	Skill Level A	Skill Level B
HA590075	HA590077	HA590078
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590079	HA590080	HA590081
		
Skill Level B	Skill Level B	Skill Level B
HA590082	HA590084	HA590085
		
Skill Level B	Skill Level B	Skill Level B
HA590086	HA590087	HA590088
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590089	HA590091	HA590092
		
Skill Level B	Skill Level B	Skill Level B
HA590093	HA590095	HA590096
		
Skill Level B	Skill Level B	Skill Level B
HA590097	HA590098	HA590099
		
Skill Level A	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590100	HA590101	HA590103
		
Skill Level B	Skill Level B	Skill Level B
HA590104	HA590106	HA590107
		
Skill Level B	Skill Level B	Skill Level B
HA590108	HA590109	HA590110
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590111	HA590112	HA590113
		
Skill Level B	Skill Level B	Skill Level B
HA590114	HA590115	HA590116
		
Skill Level B	Skill Level B	Skill Level B
HA590118	HA590119	HA590120
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590123	HA590124	HA590125
		
Skill Level B	Skill Level B	Skill Level B
HA590126	HA590127	HA590128
		
Skill Level B	Skill Level B	Skill Level B
HA590129	HA590131	HA590132
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590136	HA590137	HA590138
		
Skill Level B	Skill Level B	Skill Level B
HA590139	HA590140	HA590141
		
Skill Level B	Skill Level B	Skill Level B
HA590142	HA590143	HA590144
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590145	HA590146	HA590147
 Skill Level B	 Skill Level B	 Skill Level B
HA590149	HA590150	HA590151
 Skill Level B	 Skill Level B	 Skill Level B
HA590152	HA590153	HA590154
 Skill Level B	 Skill Level B	 Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590155	HA590155K	HA590156
		
Skill Level B	Skill Level A	Skill Level B
HA590156K	HA590157	HA590158
		
Skill Level A	Skill Level B	Skill Level B
HA590159	HA590160	HA590161
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590162	HA590163	HA590164
		
Skill Level B	Skill Level B	Skill Level B
HA590165	HA590166	HA590167
		
Skill Level B	Skill Level B	Skill Level B
HA590168	HA590169	HA590170
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590171	HA590172	HA590173
		
Skill Level B	Skill Level B	Skill Level B
HA590174	HA590175	HA590176
		
Skill Level B	Skill Level B	Skill Level B
HA590177	HA590178	HA590179
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590180	HA590181K	HA590182K
 Skill Level B	 Skill Level A	 Skill Level A
HA590183	HA590184	HA590185
 Skill Level B	 Skill Level B	 Skill Level B
HA590186	HA590187	HA590188
 Skill Level B	 Skill Level B	 Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590190	HA590192	HA590193
		
Skill Level B	Skill Level B	Skill Level B
HA590194	HA590195	HA590197
		
Skill Level B	Skill Level B	Skill Level B
HA590198	HA590199	HA590200
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

**HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS**

HA590201	HA590202	HA590203
 Skill Level B	 Skill Level B	 Skill Level B
HA590204	HA590205	HA590206
 Skill Level B	 Skill Level B	 Skill Level B
HA590207	HA590208	HA590209
 Skill Level B	 Skill Level B	 Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590212	HA590213	HA590214
		
Skill Level A	Skill Level B	Skill Level B
HA590216	HA590217	HA590218
		
Skill Level B	Skill Level B	Skill Level B
HA590219	HA590220	HA590221
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

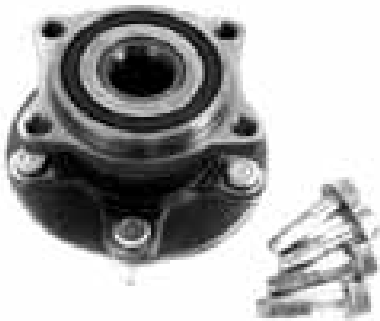
HA590222	HA590223	HA590224
		
Skill Level B	Skill Level B	Skill Level B
HA590226	HA590227	HA590228
		
Skill Level B	Skill Level B	Skill Level B
HA590229	HA590230	HA590231
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590232	HA590233	HA590234
		
Skill Level B	Skill Level B	Skill Level A
HA590235	HA590236	HA590237
		
Skill Level B	Skill Level B	Skill Level B
HA590238	HA590239	HA590240
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590241	HA590241K	HA590242
		
Skill Level B	Skill Level B	Skill Level B
HA590243	HA590244	HA590245
		
Skill Level B	Skill Level B	Skill Level B
HA590247	HA590249	HA590250
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590251	HA590252	HA590253
		
Skill Level B	Skill Level B	Skill Level B
HA590254	HA590255	HA590256
		
Skill Level B	Skill Level B	Skill Level B
HA590257	HA590258	HA590259K
		
Skill Level B	Skill Level B	Skill Level A

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590260	HA590261	HA590262
		
Skill Level B	Skill Level B	Skill Level B
HA590263K	HA590264	HA590265
		
Skill Level A	Skill Level B	Skill Level B
HA590267	HA590269	HA590270
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590271	HA590273	HA590274
		
Skill Level B	Skill Level B	Skill Level B
HA590275	HA590276	HA590277
		
Skill Level A	Skill Level B	Skill Level B
HA590278	HA590279	HA590280
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590281	HA590284	HA590285
		
Skill Level B	Skill Level B	Skill Level B
HA590286	HA590286K	HA590287
		
Skill Level B	Skill Level A	Skill Level B
HA590288	HA590289	HA590299
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590300	HA590301K	HA590302K
 Skill Level B	 Skill Level A	 Skill Level A
HA590303K	HA590304	HA590305
 Skill Level A	 Skill Level B	 Skill Level B
HA590306	HA590307	HA590308
 Skill Level B	 Skill Level B	 Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590310	HA590311	HA590312
		
Skill Level B	Skill Level B	Skill Level B
HA590313	HA590314	HA590315
		
Skill Level B	Skill Level B	Skill Level B
HA590316	HA590317	HA590321
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590322	HA590323	HA590324
		
Skill Level B	Skill Level A	Skill Level B
HA590325	HA590326	HA590327
		
Skill Level B	Skill Level B	Skill Level B
HA590335	HA590336	HA590337
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA590338	HA590352	HA590353
		
Skill Level B	Skill Level B	Skill Level B
HA590370	HA590371	HA590389
		
Skill Level B	Skill Level B	Skill Level B
HA590425	HA590503	HA590644
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA590653	HA591050	HA591080
		
Skill Level B	Skill Level B	Skill Level B
HA591339	HA592210	HA592410
		
Skill Level A	Skill Level A	Skill Level B
HA592450	HA592451	HA592460
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

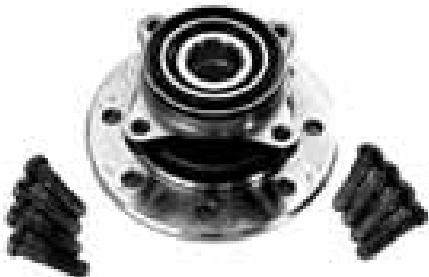
HA592461	HA592519	HA593427
		
Skill Level B	Skill Level B	Skill Level B
HA593550	HA594181	HA594241
		
Skill Level B	Skill Level B	Skill Level B
HA594245	HA594246	HA594301
		
Skill Level B	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA594460K	HA594504	HA594505
		
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HA595017	HA595894	HA596030
		
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HA596467	HA597449	HA597851
		
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HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

HA597957	HA598679	HA599138
		
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HA599361	HA599406	HA599455L
		
Skill Level B	Skill Level B	Skill Level B
HA599455R	HA599467	HA599528
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

HA599863	SP450100	SP450101
		
Skill Level B	Skill Level B	Skill Level B
SP450200	SP450201	SP450202
		
Skill Level B	Skill Level B	Skill Level B
SP450203	SP450300	SP450301
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

SP450701	SP450702	SP470201
		
Skill Level B	Skill Level B	Skill Level B
SP500100	SP500101	SP500300
		
Skill Level B	Skill Level B	Skill Level B
SP500701	SP500702	SP500703
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

SP550100	SP550101	SP550102
		
Skill Level B	Skill Level B	Skill Level B
SP550103	SP550104	SP550200
		
Skill Level B	Skill Level B	Skill Level B
SP550201	SP550202	SP550203
		
Skill Level B	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

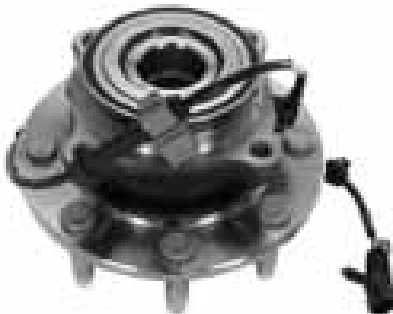
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SP550209  Skill Level B	SP550210  Skill Level B	SP550211  Skill Level B
SP550212  Skill Level B	SP550214  Skill Level B	SP550215  Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

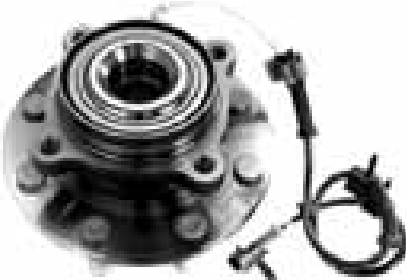
SP550216	SP550307	SP550308
		
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SP550309	SP550310	SP550311
		
Skill Level B	Skill Level B	Skill Level B
SP580100	SP580101	SP580102
		
Skill Level A	Skill Level A	Skill Level A

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

HUB UNIT BEARING / BEARING MODULE - PHOTOS AND INSTALLATION SKILL LEVELS

SP580103	SP580204	SP580205
		
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SP580300	SP580301	SP580302
		
Skill Level A	Skill Level A	Skill Level A
SP580303	SP580304	SP580310
		
Skill Level A	Skill Level B	Skill Level B

HUB UNIT BEARING / BEARING MODULE -
PHOTOS AND INSTALLATION SKILL LEVELS

SP580311	SP580312	SP580313
		
Skill Level B	Skill Level B	Skill Level B
SP940200	SP940201	SP940202
		
Skill Level B	Skill Level B	Skill Level B
SP940203	SP940204	
		
Skill Level B	Skill Level B	

HUB UNIT BEARING / BEARING MODULE TECHNOLOGY

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REMOVING AND INSTALLING A HUB UNIT BEARING



Timken continues to lead the hub evolution by manufacturing hub unit bearings that are uncompromised in quality, reliability and consistency. Proper hub unit bearing removal and installation procedures can enhance the performance and life of hubs, axles, wheels, brakes and other components. Following are general recommendations for removing and installing hub unit bearings.

Hub Unit Bearing Removal

1. Raise vehicle and remove lug nuts and wheel.



2. Remove the brake caliper and rotor. The brake caliper should be supported, not hanging freely.

3. Remove the axle nut using an axle nut socket. Use the vehicle manufacturer's instructions regarding nut replacement.



4. If applicable, disconnect the ABS sensor wire from its mating connector point usually located in the wheel well or on the chassis frame. Also, disconnect the sensor wire from the clips that are used to properly position the

sensor wire in the wheel well or frame. Before removing, make a note of the proper orientation and positioning of the sensor wire and bearing.

5. Remove the bolts that attach the bearing to the steering knuckle. A puller may be required to remove the hub unit bearing from the knuckle. Care should be taken not to damage the knuckle or axle shaft.
6. Clean and inspect the steering knuckle. Use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.

continued

Hub Unit Bearing Installation



1. First, insert the new hub unit bearing into the steering knuckle. Check the positioning of the splines on the axle shaft as the hub unit bearing is inserted into the knuckle.

Note: Carefully position the

two components so the splines are not damaged during this process. Never force the hub assembly on the shaft or strike with a hammer.

2. Torque the knuckle-bearing mounting bolts to the vehicle manufacturer's specification using a torque wrench. An impact wrench is not recommended because it does not reliably impart the proper torque.

3. If applicable, connect the new ABS sensor that comes already attached to the new bearing to its mating connection point and clips in the wheel well and frame area.



impart the proper torque.

4. Install the axle nut. Tighten the nut to the vehicle manufacturer's torque specification using a torque wrench. An impact wrench is not recommended because it does not reliably



5. Replace the brake rotor and brake caliper. All components should be clean from debris and burrs.

6. Replace the wheel and torque the lug nuts. Follow the vehicle manufacturer's

recommendations regarding torque specification and retorquing requirements.

⚠ WARNING Failure to observe the following warnings could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.
Never spin a bearing with compressed air. The rolling elements may be forcefully expelled.

*This information is not intended to substitute for the specific recommendations of your equipment suppliers.
Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.*

This information was originally presented in Automotive TechTips Volume 1, Issue 1 (2008).

REMOVIENDO E INSTALANDO UN ENSAMBLE DE MAZA



Timken se mantiene como líder en la evolución de la maza diseñando y manufacturando ensambles que destacan por su calidad, confiabilidad y desempeño. El correcto procedimiento de montaje y desmontaje ayuda a mejorar la vida desempeño de las mazas, ejes, llantas, frenos y algunos otros componentes que forman parte del sistema de las ruedas. A continuación te presentamos algunas recomendaciones generales para remover e instalar adecuadamente los ensambles de mazas.

Desmontaje De La Maza

1. Levanta el vehículo y retira los birlos y la llanta.



2. Retira el rotor y el caliper de los frenos, el caliper del freno debe quedar sujetado y no colgando.

3. Remueve la tuerca del eje utilizando una llave de tuercas

para eje. Revisa las recomendaciones del fabricante respecto al reemplazo de tuercas.



4. Si aplica, desconecta el cable del sensor del sistema ABS de su punto conector, generalmente localizado en el soporte de la rueda o en el

marco del chasis. También desconecta el cable del sensor de los clips que se utilizan para posicionarlo correctamente en el soporte de la rueda o en el marco. Antes de retirarlo, revisa la orientación correcta y posicionamiento del cable del sensor y del rodamiento.

5. Retira los tornillos que sujetan el rodamiento al manguito de la dirección. Ayúdase con un extractor para remover la maza del manguito. Ten mucho cuidado de no dañar al manguito o a la flecha del eje.

6. Limpia bien el manguito de la dirección de cualquier rebaba o basura.

continued

Instalación De La Maza



1. Inserta el ensamble de maza nuevo dentro del manguito de dirección. Revisa la posición de las ranuras longitudinales en la flecha del eje mientras insertas la maza. Coloca los dos componentes para que

las ranuras longitudinales no se dañen durante la instalación de la maza. Importante: nunca forces la maza para meterla en el eje y mucho menos la golpees con un martillo.

2. Aprieta los tornillos de montaje del rodamiento en el manguito de acuerdo a las especificaciones descritas por el fabricante del vehículo. No uses llaves de impacto (pistolas neumáticas), se requiere el torque adecuado recomendado por el fabricante.

3. Si aplica, conecta el nuevo sensor del sistema de frenos ABS que ya viene junto con el en su punto de contacto correspondiente y fija al soporte de la rueda.



torque adecuado recomendado por el fabricante.



4. Instala la tuerca del eje. Aprieta la tuerca conforme a las especificaciones del fabricante utilizando una llave torquímetro. No uses llaves de impacto (pistolas neumáticas), se requiere el

5. Coloca el rotor y el caliper del freno. Antes de reinstalar cualquier componente debes de limpiarlos bien y retirar toda rebaba y basura.

6. Coloca la llanta y ajusta sus tuercas. Sigue las recomendaciones del fabricante respecto a las especificaciones de apriete.

ADVERTENCIA Ignorar estas advertencias puede crear el riesgo de daños severos

Las prácticas de manejo y mantenimiento son críticas. Siga siempre las instrucciones de instalación y mantenga la lubricación apropiada. Nunca gire un rodamiento con aire comprimido. Los elementos rodantes pueden salir expulsados.

Esta información no pretende sustituir las recomendaciones específicas de los proveedores de sus equipos.

Hemos hecho un gran esfuerzo para asegurar la exactitud de la información contenida en el presente, sin embargo, no nos hacemos responsables por errores, omisiones o por cualquier otra razón.

Esta información fue originalmente presentada en el TechTips Automotriz Volumen 1, Número 1 (2008).

CHECKING A HUB UNIT BEARING



It can be a challenging task to properly diagnose a damaged hub unit bearing. This information will help you to recognize common causes of noise generation and know how to examine a hub unit bearing.

Sources of Unfamiliar Noises:

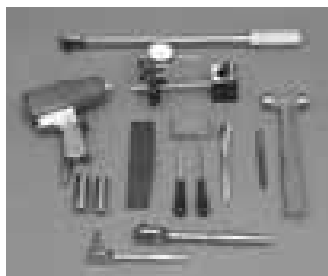


Roads with uneven characteristics



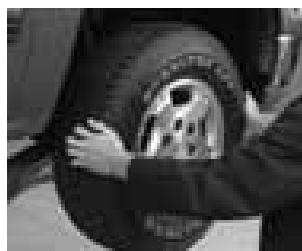
Tread design

Often this can be attributed to road surface conditions such as newly paved roads or roads with uneven surface characteristics, which can cause unusual and intensified noises. The tread design, composition and wear patterns of vehicle tires can be another source of unfamiliar noise. Unusual wear patterns are generally caused by lack of tire rotation, poor alignment, improper pressure or worn suspension parts. After eliminating noise generation caused by road surface conditions, tire design and wear patterns, it's time to make a more detailed examination of the wheel assemblies as well as the hub unit bearings.

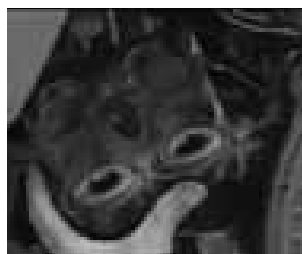


1. The first step is to verify the source of any unfamiliar noise. Often this can be attributed to road surface conditions such as newly paved roads or roads with uneven surface characteristics, which can cause unusual and intensified noises. The tread design,

2. Prior to checking a hub unit bearing, make sure you have the proper tools.



3. Perform a hand rotation check on the wheel. Next, grasp the wheel at the 3 o'clock and 9 o'clock positions. Push while oscillating and also pull while oscillating the wheel. Perform a second check, following this same procedure, grasping the wheel at the 12 and 6 o'clock positions. In addition, listen and feel for roughness. After making all preliminary inspections, check the hub unit bearing more precisely.



4. If applicable, remove the wheel cover to access the lug nuts. Remove the lug nuts and the wheel and tire assembly. Next, remove the caliper from the caliper mounting bracket. To prevent damage to the brake line due to the weight of the caliper, make sure the caliper is properly supported with either an "S" hook or a piece of wire.



5. Remove the caliper mounting bracket and then remove the brake rotor.

continued



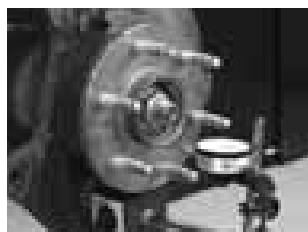
6. Rotate the hub unit bearing by hand. Bearings normally do not loosen up under typical use. If the hub unit bearing appears to be loose the bearing may be damaged, the axle nut may have backed off, or the axle nut may not have been

properly clamped. Any roughness, looseness or noise from the bearing is an indication that the bearing is damaged and needs to be replaced.



7. To check a hub unit bearing's internal clearance, a dial indicator with a magnetic base is required. To obtain accurate readings from the dial indicator it is important to thoroughly clean and smooth the surfaces where the dial

indicator base and tip will be placed. Carefully use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.



8. The dial indicator base should be placed rigidly on the knuckle or a secure portion of the suspension. When setting the dial indicator tip, the indicator itself should have

ample travel for the variation around the face. Position the indicator tip perpendicular on the wheel pilot as close to the center of the hub unit bearing as possible. This will provide the most accurate results.



9. Grasp the wheel flange at the 3 o'clock and 9 o'clock positions, and push while oscillating the hub unit bearing approximately 90° side-to-side at least five times. Set the dial indicator to zero. Next, pull while oscillating the hub unit

bearing approximately 90° side-to-side at least five times. Proper loading and oscillation is necessary in order to fully seat the bearings.



10. Observe the total indicator movement. If it exceeds 0.004", replace the hub unit bearing.

⚠ WARNING Failure to observe the following warnings could create a risk of serious injury.

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Never spin a bearing with compressed air. The rolling elements may be forcefully expelled.

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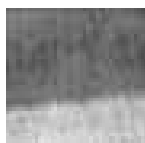
This information was originally presented in Automotive TechTips Volume 3, Issue 1 (2004).

REVISANDO UN ENSAMBLE DE MAZA



Diagnosticar apropiadamente un ensamble de maza dañado puede ser todo un reto. Esta información le ayudará a reconocer las causas comunes generadoras de ruidos y aprenderá a examinar correctamente un ensamble de maza.

1. El primer paso es detectar el origen de cualquier ruido que Fuentes de ruidos extraños:



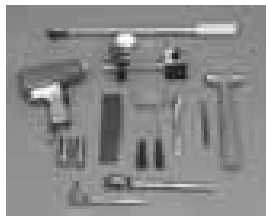
Pavimentos con superficies irregulares



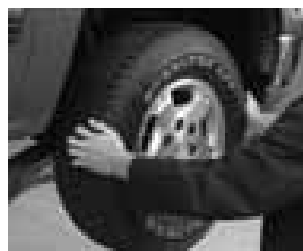
Dibujo de la llanta

no sea familiar. Comúnmente, se atribuye a las condiciones del pavimento, como calles recién pavimentadas o irregularidades en la superficie que provocan ruidos inusuales y bastante notorios. El dibujo de las llantas, su composición y

patrones de desgaste son también fuente de ruidos extraños. El patrón irregular de una llanta es causado, generalmente, por falta de rotación de la rueda, mala alineación, presión incorrecta o desgaste en alguno de los componentes de la suspensión. Después de eliminar éstas causas como generadoras de ruido, es necesario examinar detalladamente el sistema de la rueda y el ensamble de la maza.



2. Antes de iniciar la revisión de la maza asegúrese de tener a la mano la herramienta adecuada.



la rueda en las posiciones de las 12:00 y las 6:00. Revise que no haya resistencia o que no raspen los componentes. Después de esta inspección preliminar proceda a examinar el ensamble de la maza.



3. Realice una rotación manual de la llanta. Sujete la llanta colocando las manos en las posiciones de las 3:00 y las 9:00 de las manecillas del reloj. Empuje y jale la llanta mientras la gira. Haga una segunda revisión, pero ahora sujetando

4. Quite el tapón de la rueda, saque los birlos y retire la llanta. Quite el caliper de su soporte. Para no dañar el cable del freno con el peso del caliper, sujételo con un gancho "S" o con un pedazo de alambre.



5. Retire el soporte del caliper y después el rotor del freno.

continued



6. Gire con la mano el ensamble de la maza. Normalmente el rodamiento de la maza no se afloja con el uso común. Si se encuentra flojo, puede ser que esté dañado, que la tuerca del eje se haya barrido o que haya sido

apretada incorrectamente. Cualquier roce, ruido o aflojamiento en el rodamiento indica que se encuentra dañado y que necesita reemplazarse.



7. Para revisar el juego lateral del rodamiento de la maza se necesita un calibrador de base magnética. Para obtener lecturas precisas, es indispensable que las superficies donde se colocará el calibrador estén limpias. Cuidadosamente,

con una lija fina, un cepillo suave de alambre o una piedra pómez, elimine toda rebaba, astilla o muesca que pueda existir.



8. La base del calibrador debe colocarse firmemente en la base de la maza o en alguna parte fija de la suspensión. Cuando fije la punta del sensor, asegúrese que tenga suficiente carrera para cubrir

la medición. Coloque la punta del sensor lo más cerca posible del centro de la maza y de manera perpendicular a la cara del disco. Esto brindará resultados más precisos.



9. Sujete la orilla de la maza en las posiciones de las 3:00 y las 9:00, empuje mientras la oscila aproximadamente a 90° de lado a lado, repítalo cinco veces. Después, jale la maza mientras la gira también a 90° de lado a lado, cinco veces. La

oscilación y la carga apropiada son necesarias para asentar los rodamientos.



10. Observe el movimiento del indicador, si excede los 0.004", reemplace la maza por una nueva.

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REMOVING A HUB UNIT BEARING AND STEERING KNUCKLE

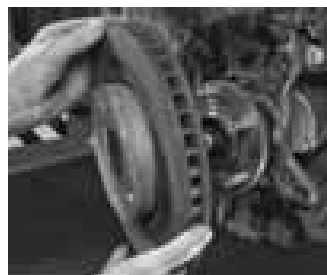
Guidelines for a Passenger Car Front Wheel-End Application



Timken continues to lead the hub unit bearing evolution by providing assemblies that are uncompromised in quality, reliability and consistency. Proper hub unit bearing removal and installation procedures can enhance the performance and life of hub unit bearings, axles, wheels, brakes and other components. Following are guidelines for removing and installing a hub unit bearing on a passenger car front wheel-end application.



1. Raise the vehicle. If applicable, remove the wheel cover to access the lug nuts. Remove the lug nuts and the wheel and tire assembly.



3. Remove the brake rotor. Follow the vehicle manufacturer's recommendations for rotor inspection and reuse.

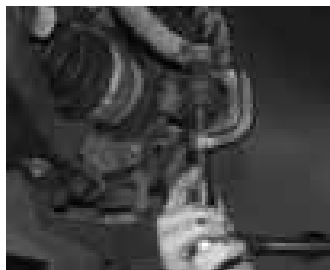


2. Next, remove the caliper and the caliper mounting bracket. To prevent damage to the brake line due to the weight of the caliper, make sure the caliper is properly supported with either an "S" hook or a piece of wire.



4. Using an axle nut socket, remove the axle nut. Always refer to the vehicle manufacturer's instructions regarding nut replacement.

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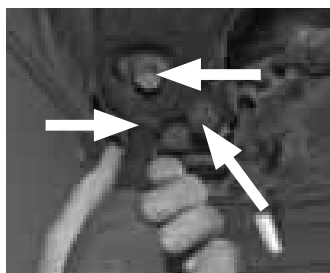
5. Remove the upper tie rod using the proper tool.



6. If applicable, disconnect the ABS sensor wire from its mating connector point and secure the sensor cable to prevent it from being damaged.



7. Remove strut mounting bolts.



8. Remove the lower ball joint bolts.



9. A puller may be necessary to separate the axle shaft from the hub unit bearing and remove the knuckle assembly from the vehicle.

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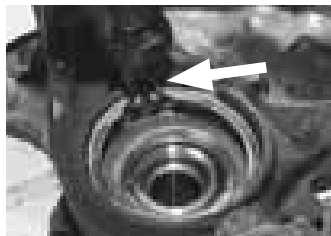
BEARING REMOVAL AND INSTALLATION

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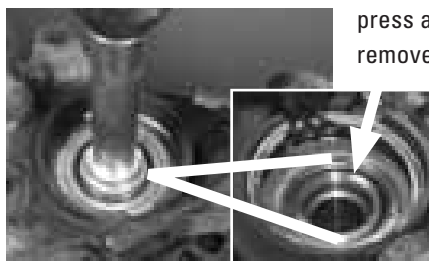
Removal



1. Using a pair of snap ring pliers, remove the bearing retaining snap ring from the steering knuckle.



3. Remove the disk brake dust cover.



2. Using an appropriate press and support fixture, remove the hub stud from the bearing.



4. Using an appropriate press and support fixture, remove the bearing from the steering knuckle.

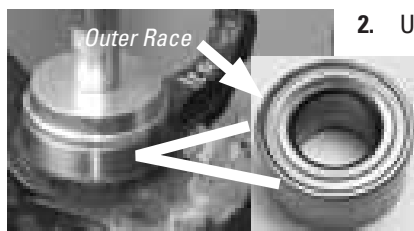
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Installation



1. Clean the steering knuckle of any debris or burrs. Carefully use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.

Inspect the surfaces against which the new bearing will seat for wear and burrs.

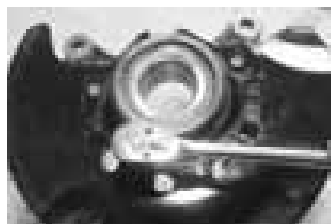


2. Using an appropriate press and support fixture, press the new bearing into the steering knuckle. The outside diameter of the tooling surface

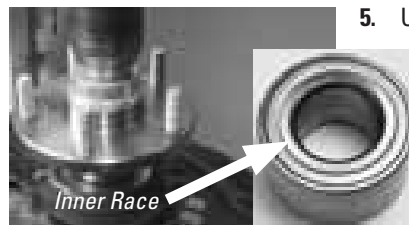
must be large enough to support the outer race of the bearing assembly when applying force.



3. Using a pair of snap ring pliers, install the new bearing retaining snap ring into the steering knuckle.



4. Install the disc brake dust cover. Torque the bolts to the vehicle manufacturer's specifications using a torque wrench.



5. Using an appropriate press and support fixture, press the new hub stud assembly (supplied with the kit) into the new bearing assembly.

NOTE: The bearing inner race must be supported when pressing the new hub stud assembly into the new bearing assembly. Failure to follow this note could cause damage to the bearing rolling elements and raceways.

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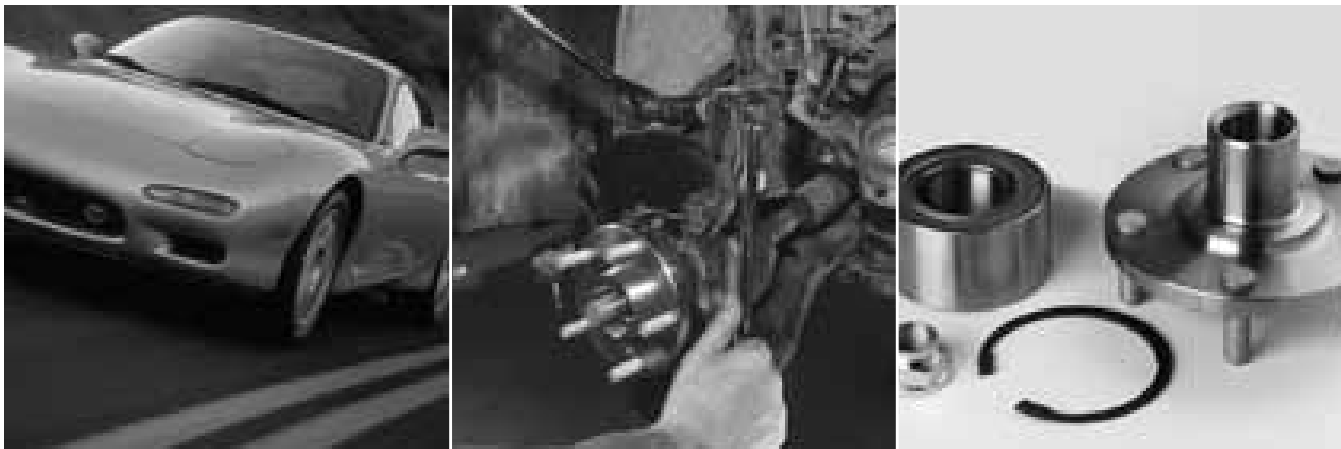
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INSTALLING A HUB UNIT BEARING AND STEERING KNUCKLE

Guidelines for a Passenger Car Front Wheel-End Application



Timken continues to lead the hub unit bearing evolution by providing assemblies that are uncompromised in quality, reliability and consistency. Proper hub unit bearing removal and installation procedures can enhance the performance and life of hub unit bearings, axles, wheels, brakes and other components. Following are guidelines for removing and installing a hub unit bearing on a passenger car front wheel-end application.

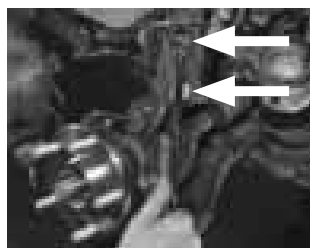


1. Inspect the surface of the axle shaft, spline teeth and tone wheel for wear. Use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.

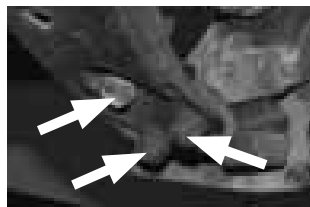


2. Carefully check the positioning of the splines on the axle shaft while installing the steering knuckle. The proper positioning of these two components is critical so that the splines are not damaged.

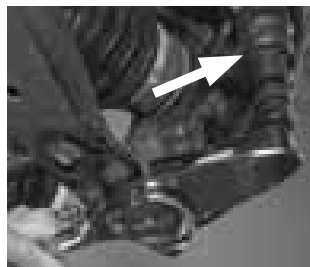
NOTE: Never force the hub unit bearing onto the shaft or strike with a hammer.



3. Install the strut mounting bolts that attach the steering knuckle to the strut assembly and torque them to the vehicle manufacturer's specifications using a torque wrench.



4. Install the bolts that attach the lower ball joint to the lower control arm and torque them to the vehicle manufacturer's specifications using a torque wrench.



5. Attach the lower ball joint to the lower control arm and install the nut. Torque the nut to the vehicle manufacturer's specifications using a torque wrench.

continued



6. Secure the nut using a new cotter pin.



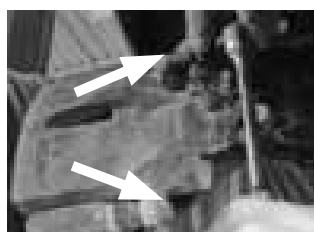
7. If applicable, be sure to properly attach the ABS sensor cable to the vehicle. Connect the sensor to its mating connection point.



8. Ensure that the brake rotor, caliper mounting bracket and caliper are free of debris and burrs. Install the brake rotor. Follow the vehicle manufacturer's recommendations for rotor inspection and reuse.



9. Install the caliper mounting bracket. Torque the bolts to the vehicle manufacturer's specifications.

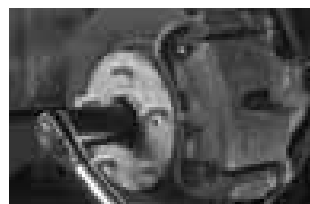


10. Next, install the caliper on the caliper mounting bracket, being careful not to damage the rubber boots. Place the manufacturer's recommended lubricant on the caliper bolts. Install the bolts to the vehicle manufacturer's torque specifications.



11. Prior to installing the axle nut, apply the brake to prevent axle rotation or damage to transmission and transaxle components. This can be accomplished by using either

a brake pedal depressor or having an assistant depress the brake pedal.



12. Install the axle nut. Follow the vehicle manufacturer's instructions for proper tightening of the axle nut.



13. Secure the axle nut with the locking procedure specified by the vehicle manufacturer.



14. Replace the wheel and tire assembly. Install the lug nuts. Follow the vehicle manufacturer's instructions for lug nut tightening sequence, torque specifications and, if applicable, retorquing requirements.

⚠ WARNING Failure to observe the following warnings could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

Never spin a bearing with compressed air. The rolling elements may be forcefully expelled.

This information is not intended to substitute for the specific recommendations of your equipment suppliers.

Every reasonable effort has been made to ensure the accuracy of the information contained in this writing, but no liability is accepted for errors, omissions or for any other reason.

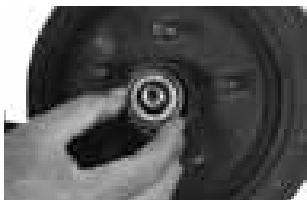
This information was originally presented in Automotive TechTips Volume 6, Issue 4 (2008).

WHEEL BEARING REPLACEMENT



Proper wheel bearing removal and installation is essential in avoiding premature damage to bearings and surrounding components. The following are the steps for replacing tapered single-row wheel bearings in passenger cars and light trucks.

1. Wheel end disassembly



Follow the vehicle manufacturer's recommended procedure to remove the tire and wheel assembly, disk brake caliper, dust cap, cotter pin, adjusting nut and washers.

Pull the rotor/hub assembly toward you to loosen the outer bearing cone assembly. Then remove the outer bearing cone assembly. Pull the rotor/hub assembly off the spindle; the inner bearing cone assembly, inner cup, outer cup and seal will come with it.

Before removing the inner bearing cone assembly from the rotor/hub assembly, use a seal puller to remove the seal. Discard the seal after removal. Remove the inner cup and the outer cup from the housing with a cup driver or mild steel bar.

2. Clean and inspect hubs and spindles



Remove all old lubricant from the rotor/hub assembly and spindle, then clean the rotor/hub assembly and spindle with kerosene or mineral oil. Inspect the spindle for wear.

Use a fine file, wire brush, emery cloth or honing stone as appropriate to remove any debris, nicks or burrs.

Follow the vehicle manufacturer's recommendation for permissible spindle wear. A light grease coating on the cone seats will make installation easier and prevent fretting.

3. Install cups



Use a cup driver or mild steel bar to press or drive the new inner cup and outer cup into the hub/rotor assembly until they are solidly seated against the hub shoulders. Be careful not to damage the cup surfaces. Never use a bearing cone assembly to drive a cup.

4. Lubricate



Pack the inner bearing cone assembly with grease. A mechanical grease packer is recommended. Place the bearing cone assembly, small end down, into the grease packer funnel. Plug the bore

continued

of the large end of the bearing cone assembly with the conical retainer. Firmly press down on the conical retainer. This enables the grease to be forced between the rollers, cage and cone. Smear excess grease on the outside of the bearing cone assembly.

Pack grease in the hub cavity between the inner and outer cups. Also, liberally coat the hub cap inner wall with grease; this layer combats moisture and retains the grease in the inner and outer bearing cone assemblies.

5. Install grease seal



The grease seal must be replaced when it leaks or when bearings are being repacked or replaced. Install the inner bearing cone assembly in the hub, then the new seal. Make sure the seal lips are pointed

in the right direction following the vehicle manufacturer's specification. Use the proper seal installation tool.

6. Install rotor/hub assembly



Slide the rotor/hub assembly back over the spindle, being careful not to damage the seal against the spindle. Pack the outer bearing cone assembly with grease following the procedure outlined in the first

paragraph of Step 4. Install the outer bearing cone assembly, washer and adjusting nut on the spindle.

7. Bearing adjustment



Use a torque wrench to tighten the adjusting nut to 50 ft. lbs. while turning the rotor. Back off the adjusting nut 1 full turn. Then retorque the nut to 10 ft. lbs. while turning the rotor. Next, back off the adjusting nut

¼ turn. Lock the nut with a new cotter pin.

8. Check bearing adjustment



Use a dial indicator to measure end play. Mount the indicator base as close to the center of the hub/rotor as possible. With the indicator tip against the end of the spindle, set the indicator at zero. Grasp the rotor at 3 o'clock and

9 o'clock. Push the rotor in while oscillating and read the dial indicator. Then pull the rotor out while oscillating and read the dial indicator again. The bearing end-play is equal to the total indicator movement, which should be between 0.001" and 0.007". If not, repeat steps 7 and 8. Reinstall all components as the vehicle manufacturer recommends.

⚠ WARNING Failure to observe the following warnings could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

Never spin a bearing with compressed air. The rollers may be forcefully expelled.

Failure to back off the adjusting nut may cause the bearing to run hot and be damaged, which could cause wheel to lock or come off during operation.

⚠ CAUTION Failure to follow this caution could create a risk of injury.

If a hammer and bar are used for installation or removal of a part, use a mild steel bar (e.g., 1010 or 1020 grade). Mild steel bars are less likely to cause release of high speed fragments from the hammer or bar or the part being removed.

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This information was originally presented in Automotive TechTips Volume 1, Issue 3 (2008).

SEAL AND SHAFT INSTALLATION PROCEDURES

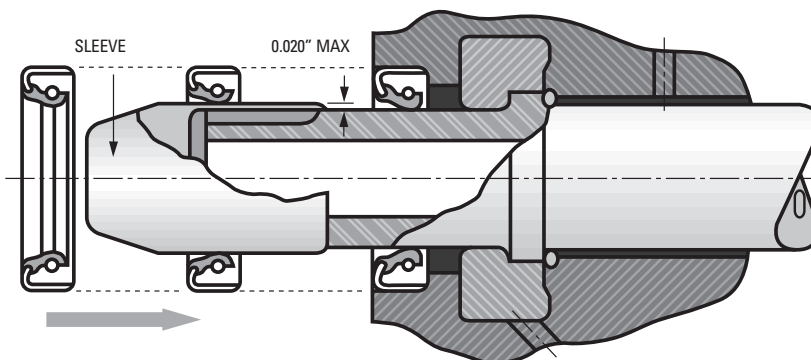


The subject of installation is commonly overlooked when selecting a seal for an application. Improper installation is one of the major causes of premature seal failure. To assist the installation, the seal should be prelubricated with grease or oil to reduce sliding friction of contact surfaces. This also helps protect the seal lips during initial run-in. An installation tool should always be used when installing a seal. Using a tool improves ease of installation and reduces the possibility of seal cocking (non-perpendicular to shaft). A hydraulic or pneumatic press is recommended to supply the necessary force to install the seal. Following are examples of both recommended and improper installation methods.

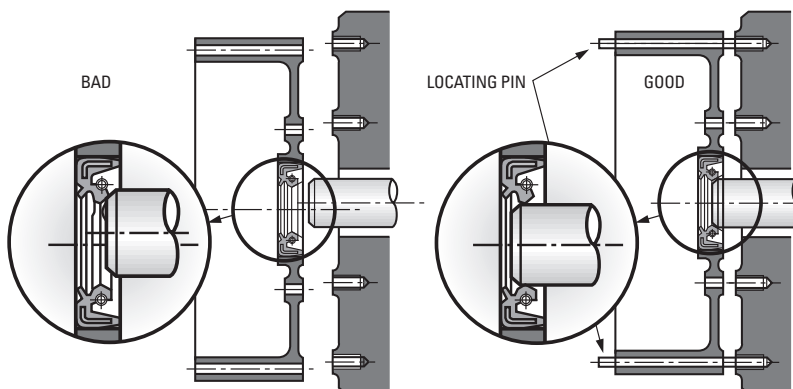
Shaft Installation

To help minimize possible damage to the seal, the advisable sequence of installation is to install the seal over the shaft and then into the housing bore. *Note: A shaft with the proper chamfer angle also will help to minimize possible damage to the seal.* When installing a seal over a keyway or spline, employ a sleeve to protect the seal lip from cuts.

Seal Installation Over Shaft Splines

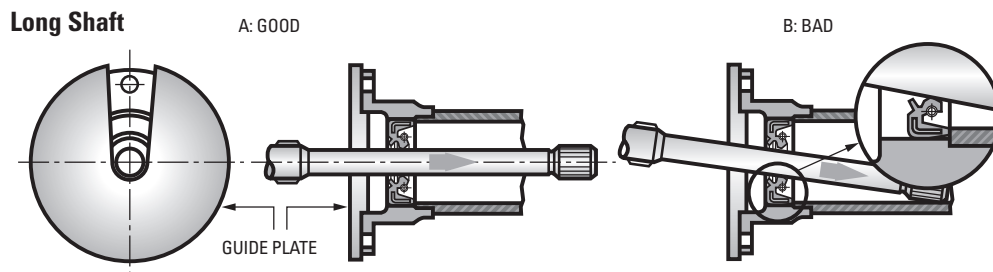


Heavy Weight Housing



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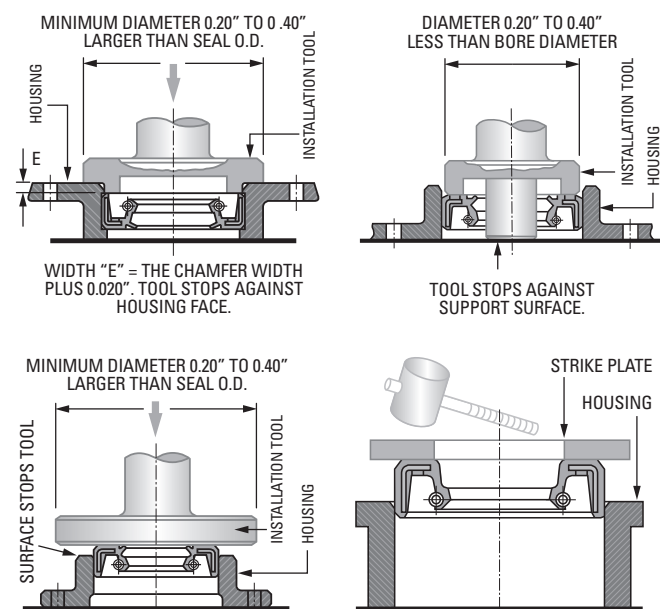
Where the shaft must be installed through the seal, centering guides for the shaft help to prevent lip deformation and dislodging of the spring. When possible, the shaft should be rotated as it passes through the seal to reduce sliding friction.



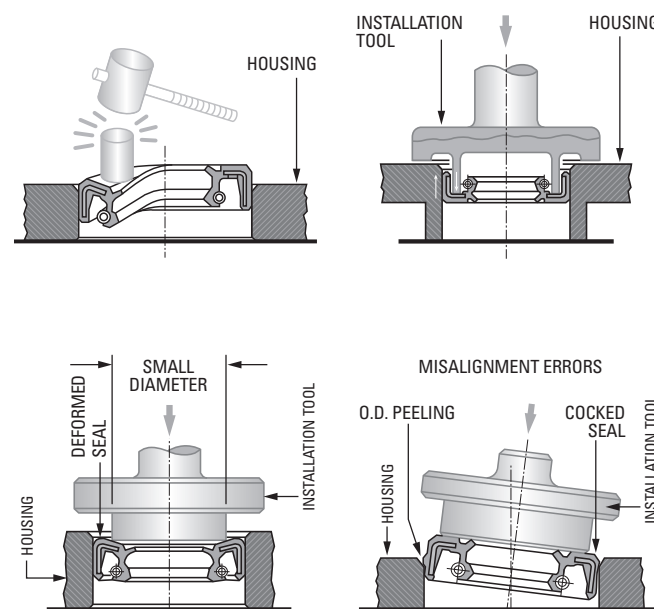
Seal Installation

In each preferred method, installation load is absorbed by either the housing or the bottom plate to prevent seal damage and to assist in locating the seal properly within the bore.

Acceptable



Improper



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⚠ WARNING Failure to observe the following warning could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

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This information was originally presented in Automotive TechTips Volume 1, Issue 2 (2003).

REAR WHEEL REPAIR PACKAGE BEARINGS

Timken® Rear Wheel Repair Package Bearings are designed to replace the original bearings and seals on axles that are still in good operating condition, but whose original bearings and/or seal contact paths are not suitable for continued use. The extra-wide repair bearing repositions the rollers and seal to ride on unworn portions of the axle, closer to the flange. Lubrication is accomplished through the axle tube by differential fluid, just as in the original equipment design. These bearings are more economical than replacing the shaft and feature:

- A compact bearing design, which allows for a high load capacity.
- Simplified mounting.



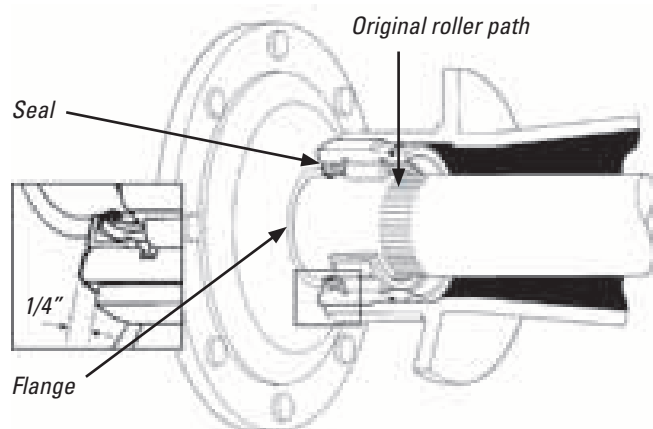
Six Part Numbers Available (Cylindrical Roller Bearings)

Timken Part Number	
TF01561R	Replaces R1561TV bearing and seal used on Ford and Dodge 1.700" axles.
TGM1561R	Replaces R1561TV bearing and seal used on GM 1.700" axles.
TRP1559TV	Replaces R1559TV bearing and seal used on GM, Ford and Chrysler 1.618" axles, with a 12-bolt differential cover.
TRP1563TAV	Replaces R1563TAV bearing and seal used on GM, Ford and Chrysler 1.399" axles, with a 10-bolt differential cover.
TRP57509	Replaces 513023 bearing and seal used on a variety of GM axles.
TRP59047	Replaces 513067 bearing and seal used on a variety of GM axles with a 8.5" ring gear.

Cross Reference

Timken Part Number	Federal-Mogul Part Number	SKF Part Number
TF01561R	RP 1561-FO	R15651-F
TGM1561R	RP 1561-GM	R1561-G
TRP1559TV	RP 6408	R1559
TRP1563TAV	RP 5707	R1563
TRP57509	RP 5130123	R57509
TRP59047	RP 513067	R59407

INSTALLATION INSTRUCTIONS - REAR WHEEL REPAIR PACKAGE BEARINGS



Before Installation

Assess the axle shaft's general condition; not all axles are fit for reuse. Look for any signs of damage or wear.

DO NOT REUSE axles that exhibit the following conditions:

- BENT OR DISTORTED AXLES, even if they could be straightened.
- DISCOLORED AXLES. Discoloration (usually blue or black) may result from overheating while in operation.
- AXLES WITH SURFACE CRACKS. Surface cracks may indicate impending failure; cracks may grow and cause weakening of the axle or complete breakage.
- NOTICEABLE WEAR ON AXLES at the original bearing path. Wear may be indicated by a worn groove, heavy corrosion or surface spalling. NOTE: *Axles unfit for reuse are not limited to those exhibiting these conditions; other conditions of distress may also render an axle unfit for reuse.*

Installation Procedure

1. Follow the vehicle manufacturer's procedures for disassembling the axle, seal and bearing.
2. Clean and polish the axle between the flange and the original roller path using a fine grade emery paper. Smooth any nicks or burrs. The repair bearing and seal will ride on this area. Check the axle housing and clean it as necessary. NOTE: *DO NOT reuse any axles which are distorted or bent, discolored, have surface cracks or have noticeable wear at the original bearing path.*
3. Remove the replacement bearing from its box and remove its protective wrapping.
4. Install the bearing in the axle housing with the seal facing out. Use an installation tool that rides on the face of the bearing. If you use the wrong installation tool, you will damage the seal, which may cause a failure. No force should be applied to the seal. Once an axle shaft seal has been removed, never reuse it.
5. Reinstall the axle following the vehicle manufacturer's assembly procedures.
6. Finally, fill the differential with fluid to the level recommended by the vehicle manufacturer.

⚠ WARNING Failure to observe the following warnings could create a risk of serious injury.

Proper maintenance and handling procedures are critical. Always follow installation instructions and maintain proper lubrication.

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TRAILER WHEEL BEARING KITS

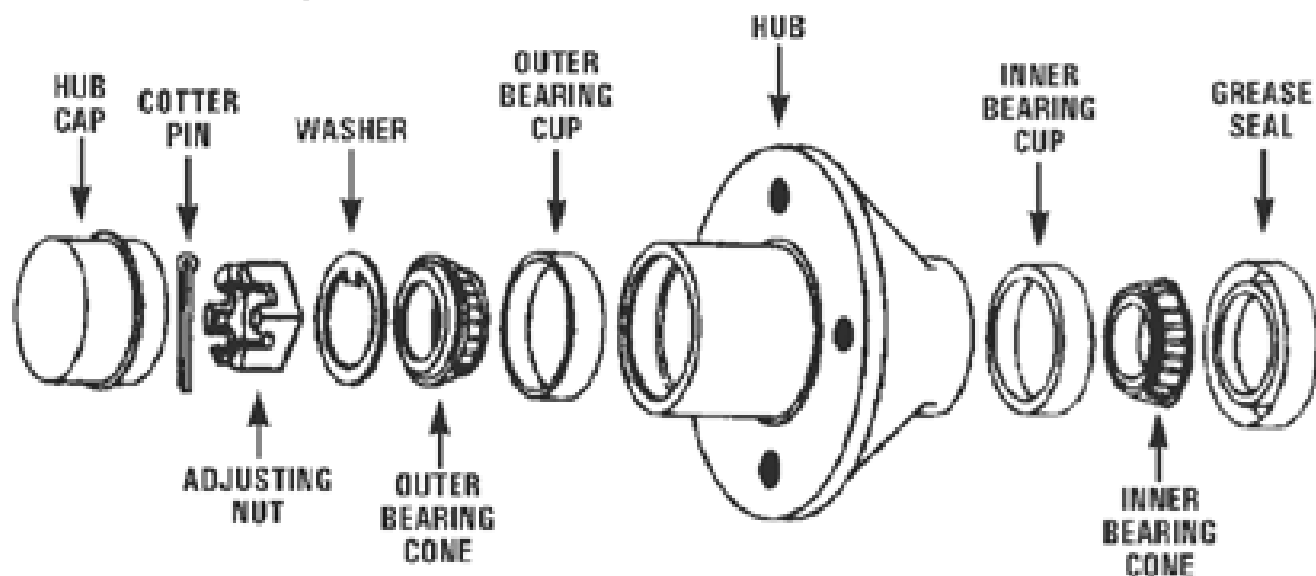
Everything You Need in One Package

With constant exposure to elements like water, mud, grime and rough road conditions, your trailer wheel bearings can take a real beating. Corrosion and improper maintenance can dramatically decrease bearing life, leading to expensive damage to equipment, as well as lost work or leisure time. Don't take chances – replace your trailer wheel bearings before you have problems.

Timken® Trailer Wheel Bearing Kits provide everything you need to install a new wheel bearing in one convenient package. Two quality Timken® bearings, a grease seal, cotter pin and petroleum-based bearing grease are included in a complete kit to help assure durability and performance reliability.

Timken Trailer Wheel Bearing Kits are available for the axle sizes shown in the chart on the right.

Trailer Hub Assembly



TRAILER WHEEL BEARING KITS

Axle Size	Timken Kit Number	Component Description	Bore	O.D.	Width	Qty
1" Straight Axle	BT100	SET14				2
		L44643 (Cone)	1.000		0.580	
		L44610 (Cup)		1.980	0.420	
		203025 (Seal)	1.218	1.983	0.406	1
		Cotter Pin				1
		Grease Pack				1
1" Straight Axle	BT101	SET14				2
		L44643 (Cone)	1.000		0.580	
		L44610 (Cup)		1.980	0.420	
		7781S (Seal)	1.250	1.987	0.250	1
		Cotter Pin				1
		Grease Pack				1
1-1/4" Straight Axle	BT114	SET6				2
		LM67048 (Cone)	1.250		0.660	
		LM67010 (Cup)		2.328	0.465	
		203013 (Seal)	1.500	2.332	0.406	1
		Cotter Pin				1
		Grease Pack				1
1-1/16" Straight Axle	BT116	SET4				2
		L44649 (Cone)	1.0625		0.580	
		L44610 (Cup)		1.980	0.420	
		203029 (Seal)	1.250	1.983	0.406	1
		Cotter Pin				1
		Grease Pack				1
3/4" Straight Axle	BT134	SET2				2
		LM11949 (Cone)	0.750		0.655	
		LM11910 (Cup)		1.781	0.475	
		204020 (Seal)	1.125	1.785	0.468	1
		Cotter Pin				1
		Grease Pack				1
1-1/4" x 3/4" Tapered Axle	BT214	SET6				1
		LM67048 (Cone)	1.250		0.660	
		LM67010 (Cup)		2.328	0.465	
		SET2				1
		LM11949 (Cone)	0.750		0.655	
		LM11910 (Cup)		1.781	0.475	
		203013 (Seal)	1.500	2.332	0.406	1
		Cotter Pin				1
1-1/16" x 3/4" Tapered Axle	BT216	SET4				1
		L44649 (Cone)	1.0625		0.580	
		L44610 (Cup)		1.980	0.420	
		SET2				1
		LM11949 (Cone)	0.750		0.655	
		LM11910 (Cup)		1.781	0.475	
		203029 (Seal)	1.250	1.983	0.406	1
		Cotter Pin				1
1-3/8" x 1-1/16" Tapered Axle	BT238	SET17				1
		L68149 (Cone)	1.377		0.660	
		L68111 (Cup)		2.3612	0.470	
		SET4				1
		L44649 (Cone)	1.0625		0.580	
		L44610 (Cup)		1.980	0.420	
		204502 (Seal)	1.750	2.565	0.250	1
		Cotter Pin				1
		Grease Pack				1

MILEMATE®

ONE SIMPLE GOAL: Keep Your Trucks Up and Moving

Timken® MileMate® sets – the original matched wheel bearing sets – are designed to keep your trucks up and moving. Our 44 matched cup and cone sets are built for superior results and less downtime. When you use the original MileMate sets from Timken, you know you're getting bearing sets specifically designed for your application that meet or exceed the original equipment manufacturer's specifications. This includes the ConMet® PreSet® and Spicer® LMS™, as well as the new wide single tire applications.



Features

- Made from quality Timken certified steel
- Perfectly matched sets for correct installation every time
- Original equipment technology

Benefits

- Matched sets mean less inventory and the correct bearing parts to perform the job all in one box
- Lengthens maintenance intervals
- Optimizes bearing performance
- Allows bearings to carry evenly distributed loads
- Original equipment on ConMet PreSet and Spicer LMS enhances performance

Timken Proprietary "NP" Part Numbers

Meeting the growing original and aftermarket performance demands.

Features

- Enhanced surfaces
- Proprietary Timken design
- More precise internal bearing geometry
- Exceed industry standards

Benefits

- Designed to provide longer life and reliability
- Many heavy-duty, pre-adjusted hubs are serviceable such as ConMet PreSet and Spicer LMS
- Rebuilding with Timken proprietary parts ensures you get all the advantages that were originally engineered into the heavy-duty, pre-adjusted hub systems
- Specifically designed to handle the 2" outset loads of the Michelin® X One™ and Bridgestone® Greatec™ wide single tires

Timken Set Number	Timken Part Number	Popular Manufacturers
SET401	580 / 572	ArvinMeritor / Dana / IHC / Mack / WhiteGMC
SET402	582 / 572	ArvinMeritor / Dana / Mack
SET403	594A / 592A	ArvinMeritor / Dana / IHC
SET404	598A / 592A	ArvinMeritor / Dana / Mack / WhiteGMC
SET405	663 / 653	ArvinMeritor / Clark / Dana / IHC / Mack / Standard / Volvo
SET406	3782 / 3720	ArvinMeritor / Dana / Ford / IHC / WhiteGMC
SET407	28682 / 28622	Dana / IHC
SET408	39590 / 39520	ArvinMeritor / Dana / IHC
SET409	45280 / 45220	Mack
SET410	45284 / 45220	ArvinMeritor / Dodge / Ford / GMC
SET411	47686 / 47620	ArvinMeritor / Dana / FWD / IHC
SET412	HM212047 / HM212011	ArvinMeritor / Dodge / Ford / GMC / Isuzu
SET413	HM212049 / HM212011	ArvinMeritor / Clark / Dana / Fruehauf / Hendrickson / IHC / IMT / Mack / Standard / WhiteGMC
SET414	HM218248 / HM218210	ArvinMeritor / Dana / Hendrickson / IMT / Kay-Brunner / Standard
SET415	HM518445 / HM518410	ArvinMeritor / Dana / Fruehauf / Hendrickson / MIT
SET416	45291 / 45220	ArvinMeritor / Dana
SET417	47890 / 47820	ArvinMeritor / IHC / Oshkosh / Standard
SET418	H715334 / H715311	ArvinMeritor / Oshkosh
SET419	H715343 / H715311	ArvinMeritor / IHC / Oshkosh
SET420	H715345 / H715311	ArvinMeritor / IHC / Mack / WhiteGMC
SET421	HM516449A / HM516410	Mack
SET422	HM516449C / HM516410	Mack
SET423	6461A / 6420	ArvinMeritor / Dana / Dodge / Ford / Mack
SET424	555-S / 552A	ArvinMeritor / Dana / Dodge / Ford / IHC / Mack
SET425	567 / 563	ArvinMeritor / Dana / Dodge / Ford / IHC / Iveco / Mack / Oshkosh / Standard
SET426	47679 / 47620	Mack
SET427*	NP899357 / NP026773	ConMet PreSet Steer / N Trailer
SET428*	NP874005 / NP435398	ConMet PreSet Steer
SET429*	NP034946 / NP363298	ConMet PreSet Drive
SET430*	NP840302 / NP053874	ConMet PreSet Drive
SET431*	NP965350 / NP503727	ConMet PreSet N Trailer
SET432*	NP174964 / NP593561	ConMet PreSet P Trailer
SET433*	NP431952 / NP378092	Dana LMS Steer / N Trailer
SET434*	NP555065 / NP720703	Dana LMS Steer
SET435*	NP568900 / NP107783	Dana LMS Drive
SET436*	NP577914 / NP975161	Dana LMS Drive
SET437*	NP022333 / NP250023	Dana LMS N Trailer
SET438*	NP417549 / NP156827	Dana LMS P Trailer
SET439	HM212049X / HM212011	Volvo Steer
SET440*	NP454049 / NP454011	ArvinMeritor / Dana / Hendrickson / IMT
SET441*	NP454248 / NP454210	ArvinMeritor / Dana / Hendrickson / IMT
SET442*	NP454580 / NP454572	ArvinMeritor / Dana / Hendrickson / IMT
SET443*	NP454594 / NP454592	ArvinMeritor / Dana / Hendrickson / IMT
SET444*	NP454445 / NP454410	ArvinMeritor / Dana / Hendrickson / IMT

* Proprietary Timken Part Numbers



MILEMATE®: FRENCH CANADIAN

UN OBJECTIF SIMPLE : Maintenir vos camions en bon état de marche

Les ensembles de roulements de roues assortis originaux Timken® MileMate® sont conçus pour maintenir vos camions en bon état de marche. Nos 44 ensembles de cuvettes et de cônes assortis vous offrent des performances exceptionnelles et réduisent les temps d'arrêts. Les ensembles de roulements MileMate de Timken sont spécifiquement conçus pour vos applications et respectent, ou même dépassent, les spécifications du fabricant d'équipement. Cela couvre les moyeux ConMet® PreSet® et Spicer® LMS™, ainsi que les nouveaux roulements pour pneus uniques à bande large.



Caractéristiques

- Fabriqués en acier certifié Timken de qualité
- Les ensembles sont parfaitement assortis pour être toujours correctement installés
- Technologie d'équipement originale

Avantages

- Les roulements assortis sont fournis dans le même emballage et vous permettent de réduire vos inventaires
- Intervalles de maintenance moins fréquentes
- Optimisation de la performance des roulements
- Les roulements peuvent supporter des charges mieux réparties
- L'équipement d'origine des ensembles ConMet PreSet et Spicer LMS améliore la performance

Numéros de pièces « NP » exclusifs de Timken

Pour satisfaire les besoins croissants en performance des marchés d'origine et secondaires

Caractéristiques

- Surfaces améliorées
- Conception exclusive de Timken
- Une géométrie de roulement interne plus précise
- Dépassent les normes de l'industrie

Avantages

- Conçus pour une plus grande fiabilité et durée de vie
- De nombreux moyeux industriels préréglés, tels que ConMet PreSet et Spicer LMS, peuvent être réparés
- En rebâtissant avec des pièces exclusives Timken, vous profitez des avantages d'origine des systèmes de moyeux industriels préréglés
- Conçus spécifiquement pour permettre un déport externe de 2 po des pneus à bande large Michelin® X One™ et Bridgestone® Greatec™

MILEMATE®: SPANISH

UNA META SIMPLE: Mantener a sus camiones en movimiento

Los sets Timken® MileMate® – conjuntos de rodamientos para ruedas con especificaciones de Equipo Original – están diseñados para mantener a sus camiones en movimiento. Nuestros 44 sets de cono y taza, están diseñados para ofrecer resultados superiores y menores tiempos muertos. Cuando usted utiliza los sets originales MileMate de Timken, sabe que está obteniendo conjuntos de rodamientos específicamente diseñados para sus aplicaciones, y que cumplen o exceden las especificaciones del fabricante de equipo original. Entre éstas, se incluyen aquellas para las mazas ConMet® PreSet® y Spicer® LMS™, así como las nuevas aplicaciones de neumáticos anchos.



Características

- Fabricados con acero de calidad certificado por Timken
- Conjuntos perfectamente emparejados para obtener siempre una instalación correcta
- Tecnología de Equipo Original

Beneficios

- Los sets favorecen un menor inventario ya que incluyen ambas partes en un mismo empaque
- Prolongan el intervalo entre mantenimientos
- Optimizan el rendimiento de los rodamientos
- Permiten al rodamiento la distribución uniforme de la carga
- Aumentan el rendimiento de equipos originales con ConMet PreSet y Spicer LMS

Números de parte “NP” exclusivos de Timken

Cumpliendo con las exigencias de desempeño de Equipo Original y del mercado de repuesto.

Características

- Superficies mejoradas
- Diseño exclusivo de Timken
- Geometría interna del rodamiento más precisa
- Superan los estándares de la industria

Beneficios

- Diseñados para ofrecer confiabilidad y mayor vida útil
- Muchas de las mazas pre ajustadas para servicio pesado ConMet PreSet y Spicer LMS son susceptibles de mantenimiento
- Las reparaciones con piezas originales Timken aseguran que obtenga todas las ventajas que ofrecen los sistemas de mazas pre ajustadas para servicio pesado con ingeniería de Equipo Original
- Específicamente diseñados para manejar las cargas con 2” fuera de su centro, de los neumáticos anchos Michelin® X One™ y Bridgestone® Greatec™

DRIVELINE CENTER SUPPORT BEARINGS

Timken® Driveline Center Support Bearings are interchangeable with all major truck applications. The part numbers listed below can equip the most popular light-duty pickups, vans, mid-size trucks, school buses and heavy-duty highway vehicles.

Timken Driveline Center Support Bearings are constructed with frames made from reinforced heavy-gauge, cold-rolled steel for added strength, which helps increase durability and service life. The bearing inserts are pre-greased and sealed, with a second grease barrier applied between the sealed bearing and dust shield to help maximize protection.



Cross Reference						
Timken Part Number	DT Components Part Number	Dana-Spicer® Part Number	Federal Mogul Part Number	Meritor® Part Number	NEAPCO® Part Number	SKF Part Number
HB206FF	HB210527-X	210527-X	HB206-FF	CB210527-X	210527-X	HB206-FF
HB88107B	HB210088-1X	210088-1X	HB88107-B	CB210088-1X	21008-1X	HB88107-B
HB88107C	HB210090-1X	210090-1X	HB88107-C	CB210090-1X	210090-1X	HB88107-C
HB88107D	HB210367-1X	210367-1X	HB88107-D	CB210367-1X	210367-1X	HB88107-D
HB88107E	HB210370-1X	210370-1X	HB88107-E	CB210370-1X	210370-1X	HB88107-E
HB88508AB	HB210866-1X	210866-1X	HB88508-AB	CB210866-1X	210866-1X	HB88508-AB
HB88508B	HB210433-1X	210433-1X	HB88508-B	CB210433-1X	210433-1X	HB88508-B
HB88508C	HB210140-1X	210140-1X	HB88508-C	CB210140-1X	210140-1X	HB88508-C
HB88508D	HB210144-1X	210144-1X	HB88508-D	CB210144-1X	210144-1X	HB88508-D
HB88508E	HB210391-1X	210391-1X	HB88508-E	CB210391-1X	210391-1X	HB88508-E
HB88509A	HB210084-2X	210084-2X	HM88509-A	CB210084-2X	210084-2X	HB88509-A
HB88509C	HB210207-1X	210207-1X	HB88509-C	CB210207-1X	210207-1X	HB88509-C
HB88510	HB210121-1X	210121-1X	HB88510	CB210121-1X	210121-1X	HB88510
HB88510S	HB210881-1X	210881-1X	HB88510-S	CB210881-1X	210881-1X	HB88510-S
HB88512AHD	HB210661-1X	210661-1X	HB88512-AHD	CB210661-1X	210661-1X	HB88512-A
HB88512ASHD	HB210875-1X	210875-1X	HB88512-AS	CB210875-1X	210875-1X	HB88512-AS

SUPERSEDED PART NUMBERS

Old Number	New Number	Old Number	New Number	Old Number	New Number	Old Number	New Number
1577	613002	510066	SET35	HA590048	HA590085	SP550306	SP450301
1697C	614037	511010	511011	HA590073	HA590092	SP580304	SP580310
2012S	2012V	512030	512029	HA590075	HA590093	SP580305	SP580310
223250	710414	512215	512217	HA590083	513139	SP580306	SP580310
223430	710417	512216	512218	HA590114	HA590113	SP580307	HA590352
223610	710197	513091	513092	HA590225	WB000003	SP580308	SP580311
30211	30211M	513160	HA590085	HA590248	513123	SP580309	SP580311
30310A	30310	614071	614009	HA590268	HA590269	SP580306	SP580310
32014	32014XM	6808N	9316	HA590494	BM500010	SP580307	HA590352
32309	32309M	710335	471847N	MSNB5305GTBV	MSN5305GTBV	SP580308	SP580311
33213	33213M	716445	3698	SP450203	SP450202	SP580309	SP580311
450009	471466	BM500011	WB000003	SP470200	SP470201		
455369	416273	FC1723C	1773	SP550304	SP500300		
4635	4635V	HA590031	HA590142	SP550305	SP450301		

OBSOLETE PART NUMBERS

204BBAG	513010	B33	SP580308
205RRUN	513038	C672Q	SP580309
2061	513072	DRK335J	T47R
221925	513091	DS210TTF	TCRK231A
222242	513151	F213118	TCRK233
231052	5690	F47R	TCRK241A
307LI	5957S	FC67945	TCRK241D
32007C	614026	HA590102	TCRK242A
5068	614096	HA590224	TCRK243
511005	614098	HA590289	TCRK241A
512005	614123	HA590644	TCRK241D
512019	614166	LM48510P	TCRK242A
512105	710422	PB38	TCRK243
512146	8537	Q13367	
512234	88131R	SK450201	

NON-CANCELLABLE, NON-RETURNABLE PART NUMBERS

02830	47622BW	BT134A	KA11424Z
14120A	47622W	BT214	KA11820Z
14C	49520W	BT216	KA11950Z
15115	49522	C5107EV	KA11985Z
1530	49580	CTL3500	KB11786Y
16150	513001	H913843	L44600LB-902A3
17481-90010	513004K	H914841	LM11749
17481-90011	513029	HH506349	LM11919
1780	513045	HH914447	LM48511A
17883	513047	HM212049A	LM48514
18352	513245	HM801311	LM48548C
23691	517004WB	HM804849	LM67047
24	517006	HM807048	LM814845
25576	517012	HM88644A	M201047S
26822A	5521	HM903244	M514546
26880	5557	HM903249A	M533310
26882T	5577	JL69345	M533349S
2789	562	JL69349A	M802047
28622A	575	JLM104942A	M86648
30313	5752	JLM104945	M88040
31590	593X	JLM503319	NP174964
32219	594R	JLM508710	NP503727
32312B	613S	JLM508748	NP593561
33018	623S	JLM603013Z	SET21
36990	65501	JLM603048F	SET22
36X	66585	JLM67042	SET251
3733	66588	JM205149AS	SET27
3820W	66589	JM511910	SET28
3822RB-90030	683XA	JM714210	SET30
385AX	68709	JP10049	SET33
38A	750A	JP12049	SET48
39575	752A	JW4549	SET80
40	754W	JW6010	SET92
416	774BW	JW6049	WB108AT
42350	78250AC	JXC25743C	WB133AT
42590	9180	JXC25743D	X33208
45285-90011	9181	KA11020Z	XAB33212
452B	9221B	KA11035Z	Y32009X
453XB	B12235YK	KA11360Z	Y32207
455A	BT114A	KA11410Z	Y33208

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NOTES

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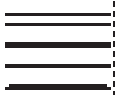


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SET INTERCHANGE

Interchange Data			
Bearing Set Numbers			Bearing Numbers
Timken	SKF	Federal Mogul	Cone / Cup
SET1	BR1	A-1	LM11749 / LM11710
SET2	BR2	A-2	LM11949 / LM11910
SET3	BR3	A-3	M12649 / M12610
SET4	BR4	A-4	L44649 / L44610
SET5	BR5	A-5	LM48548 / LM48510
SET6	BR6	A-6	LM67048 / LM67010
SET7	BR7	A-7	M201047 / M201011 with locking collar
SET8	BR8	A-15	L45449 / L45410
SET9	BR9	A-9	U298 / U261L with locking collar
SET10	BR10	A-10	U399 / U360L with locking collar
SET11	BR11	A-18	JL69349 / JL69310
SET12	BR12	A-12	LM12749 / LM12710
SET12F	NA	NA	LM12749F / LM12710
SET12FP	NA	NA	LM12749FP / LM12710P
SET13	BR13	A-13	L68149 / L68110
SET14	BR14	A-14	L44643 / L44610
SET15	BR15	A-19	07100 / 07196
SET16	BR16	A-16	LM12749 / LM12711
SET17	BR17	A-17	L68149 / L68111
SET20	BR20	A-20	U399A / U365L with locking collar and seal
SET21	BR21	A-21	1988 / 1922
SET22	BR22	A-29	2 of (LM67045) / 2 of (LM67010-Z)
SET23	BR23	A-23	LM104949E-904A2

Interchange Data			
Bearing Set Numbers			Bearing Numbers
Timken	SKF	Federal Mogul	Cone / Cup
SET24	BR24	A-31	JL68145 / JL68111-Z - Sold as set only
SET25	BR25	A-22	JLM506848E-90K02
SET26	BR26	A-40	JLM104946 / JLM104910-Z
SET27	BR31	A-24	Components - Not sold separately
SET28	BR28	A-28	J15585 / 15520
SET30	BR30	A-30	JLM67042 / LM67010 Sold as set only
SET32	BR32	A-32	Components - Not sold separately
SET33	BR33	A-33	Components - Not sold separately
SET34	BR34	A-34	LM12748F / LM12710
SET35	B35	B35	JRM3534-90U01
SET36	BR36	A-36	LM603049 / LM603012
SET37	BR37	A-37	LM603049 / LM603011
SET38	BR38	A-38	LM104949 / LM104911
SET39	FW113	B38	JRM3939-90U08
SET40	B39	B39	JRM4040A-90U02 - When depleted use B39
SET41	BR41	A-41	Components - Not sold separately
SET42	BR42	A-42	JLM506849A / JLM506811
SET43	BR43	A-43	Components - Not sold separately
SET45	BR35	A-35	LM501349 / LM501310
SET46	BR39	A-39	JL26749F / JL26710
SET47	BR50	NA	LM102949 / LM102910
SET48	B42	513006	JRM4042-90UA1 - When depleted use 513006
SET49	FW115	513058	JRM4249-90UA1

MILEMATE® MATCHED WHEEL BEARING SETS

Timken Set Number	Timken Part Number	Timken Set Number	Timken Part Number	Timken Set Number	Timken Part Number
SET401	580 / 572	SET416	45291 / 45220	SET431*	NP965350 / NP503727
SET402	582 / 572	SET417	47890 / 47820	SET432*	NP174964 / NP593561
SET403	594A / 592A	SET418	H715334 / H715311	SET433*	NP431952 / NP378092
SET404	598A / 592A	SET419	H715343 / H715311	SET434*	NP555065 / NP720703
SET405	663 / 653	SET420	H715345 / H715311	SET435*	NP568900 / NP107783
SET406	3782 / 3720	SET421	HM516449A / HM516410	SET436*	NP577914 / NP975161
SET407	28682 / 28622	SET422	HM516449C / HM516410	SET437*	NP022333 / NP250023
SET408	39590 / 39520	SET423	6461A / 6420	SET438*	NP417549 / NP156827
SET409	45280 / 45220	SET424	555-S / 552A	SET439*	HM212049X / HM212011
SET410	45284 / 45220	SET425	567 / 563	SET440*	NP454049 / NP454011
SET411	47686 / 47620	SET426	47679 / 47620	SET441*	NP454248 / NP454210
SET412	HM212047 / HM212011	SET427*	NP899357 / NP026773	SET442*	NP454580 / NP454572
SET413	HM212049 / HM212011	SET428*	NP874005 / NP435398	SET443*	NP454594 / NP454592
SET414	HM218248 / HM218210	SET429*	NP034946 / NP363298	SET444*	NP454445 / NP454410
SET415	HM518445 / HM518410	SET430*	NP840302 / NP053874		

* Proprietary Timken Part Numbers

US \$15

PRODUCT OFFERING

HUB UNIT BEARINGS

- *ABS Hub Unit Bearings*
- *ABS Hub Unit Bearings with SENSOR-PAC™ Bearings*
- *Non-ABS Hub Unit Bearings*
- *Non-ABS Hub Unit Bearings with UNIPAC™ Bearings*
- *Non-ABS Hub Unit Bearings with UNIPAC-PLUS™ Bearings*

BEARINGS

- *Ball Bearings*
- *Clutch Release Bearings*
- *Cylindrical Bearings*
- *Cylindrical Axle Repair Bearings*
- *Driveline Center Support Bearings*
- *Needle Bearings*
- *Tapered Bearings*

SEALS

- *Automotive*
- *Industrial*
- *Light- and Heavy-Duty Oil Bath Seals*
- *Metric*

SPECIALTY KITS

- *KWIK-SLEEVES™ Shaft Repair Kits*
- *Sensor Kits*
- *DT Components® Drivetrain Products*
- *Differential Kits*
- *MileMate® Matched Wheel Bearing Sets*
- *Transmission Kits*
- *Transaxle & Transfer Case Kits*
- *Trailer Kits with Standard Bearings*
- *Automotive Wheel Bearing Grease*
- *Set-Right™ Heavy-Duty Hub Rebuild Kits*



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