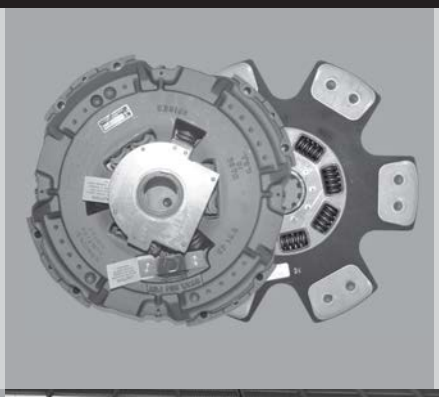
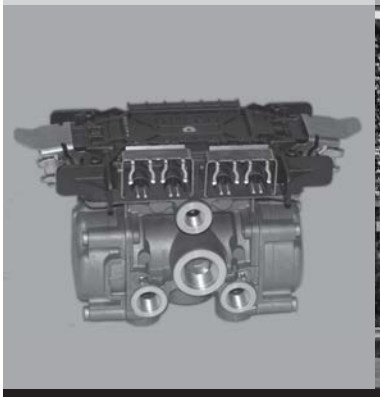
Remanufactured Products Catalog





L20287 Rev. 3-15

REMANUFACTURED

- Anti-Lock Braking Systems (ABS)
- Actuators
- Air Dryer / Air Line
- Air Wiper Motors
- Clutches
- Compressors
- Electrical
- Fan Clutches
- Hydraulic Brake Calipers
- Power Steering Gears
- Power Steering Pumps
- Vacuum / Hydraulic
- Valves
- Water Pumps

Haldex

Innovative Vehicle Solutions

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Reman

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RN12106K	S	279	RP30302X	S	472	RP70204X	S	470	RS150002X	S	320
RN26A	S	280	RP30303X	S	472	RP70205X	S	471	RS150003X	S	320
RN26A	O	280	RP30304X	S	472	RP70301X	S	471	RS150004X	S	320
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RN26DW	S	287	RP30306X	S	472	RP80101X	S	476	RS150011X	S	320
RN26DW	O	287	RP30307X	S	472	RP80102X	S	476	RS150012X	S	320
RN26GV	S	272	RP40101X	S	466	RP80301X	S	477	RS150013X	S	320
RN26GV	O	272	RP40102X	S	466	RP80302X	S	477	RS150015X	S	320
RN26ND	S	277	RP40103X	S	466	RP80304X	S	477	RS272000X	S	323
RP10401X	S	479	RP40104X	S	466	RP90102X	S	486	RS312700X	S	324
RP10501X	S	479	RP40105X	S	466	RP90105X	S	486	RS312800X	S	324
RP11001X	S	487	RP40106X	S	466	RP90106X	S	486	RS331811X	S	321
RP11004X	S	488	RP40122X	S	466	RS111000X	S	309	RS331813X	S	322
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RP11006X	S	488	RP40203X	S	467	RS112000X	S	309	RV12379X	S	501
RP11007X	S	488	RP40204X	S	467	RS112001X	S	309	RV129000K	S	519
RP11008X	S	488	RP40205X	S	467	RS113000X	S	309	RV18001047X	S	513
RP11009X	S	488	RP40206X	S	467	RS114000X	S	309	RV18001072X	S	513
RP11010X	S	487	RP40207X	S	467	RS114001X	S	309	RV18001810X	S	513
RP11011X	S	487	RP40301X	S	468	RS114002RX	S	309	RV18003144X	S	513
RP11012X	S	488	RP40302X	S	468	RS114003RX	S	309	RV18003998X	S	513
RP11013X	S	488	RP40303X	S	466	RS119000X	S	308	RV18006974X	S	513
RP11014X	S	487	RP500K	S	422	RS119001X	S	308	RV18014080X	S	513
RP11015X	S	488	RP50101X	S	483	RS127000X	S	310	RV18015776X	S	513
RP11016X	S	487	RP50102X	S	483	RS128000X	S	311	RV20001K	S	514
RP11018X	S	488	RP50103X	S	483	RS128002X	S	311	RV2500517X	S	509
RP11019X	S	487	RP50105X	S	483	RS128010X	S	311	RV2500660X	S	509

Type "O" = OEM P/N, Type "S" = Service P/N

If OEM part # is not found on page listed, refer to the MCR for applicable cross reference.

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RV2503151X	S	509	RW1119RX	S	647	RW1409X	S	659	RW4123RX	S	649
RV2503259X	S	509	RW1119X	S	647	RW1438	S	678	RW4123X	S	649
RV2504102X	S	509	RW1120RX	S	647	RW1463	S	660	RW4124X	S	649
RV2504105X	S	509	RW1120X	S	647	RW1559	S	659	RW4125PRX	S	649
RV2504113X	S	509	RW1160RX	S	649	RW1652	S	679	RW4125PX	S	649
RV2509426X	S	511	RW1160X	S	649	RW1694	S	680	RW4126X	S	649
RV2511170X	S	507	RW1162	S	627	RW1747	S	669	RW4209X	S	662
RV2512059X	S	507	RW1162RX	S	627	RW1747X	S	669	RW4210X	S	662
RV2512060X	S	508	RW1162X	S	627	RW1757	S	669	RW4215X	S	661
RV2512061X	S	508	RW1170	S	636	RW1757RX	S	669	RW4217X	S	663
RV2512062X	S	507	RW1170RX	S	636	RW1757X	S	669	RW4218X	S	663
RV2512063X	S	507	RW1170X	S	636	RW1760RX	S	656	RW4219X	S	661
RV2512065X	S	507	RW1171	S	638	RW1760X	S	656	RW4220X	S	663
RV2512066X	S	507	RW1171RX	S	638	RW1761RX	S	656	RW4221X	S	663
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RV2513815X	S	512	RW1175X	S	645	RW1908	S	677	RW6014X	S	629
RV2765110X	S	512	RW1176	S	636	RW1910	S	674	RW6015	S	626
RV2770255X	S	516	RW1176RX	S	636	RW1912	S	666	RW6016	S	626
RV2770256X	S	516	RW1176X	S	636	RW1917	S	658	RW6063	S	640
RV2770317X	S	515	RW1177RX	S	636	RW1923	S	655	RW6066	S	635
RV2770433X	S	515	RW1177X	S	636	RW1935	S	660	RW6067	S	636
RV2770454X	S	516	RW1178RX	S	639	RW1939	S	679	RW6068	S	639
RV2771117X	S	515	RW1178X	S	639	RW1994	S	643	RW6069	S	635
RV2771118X	S	515	RW1179X	S	640	RW2000X	S	661	RW6070	S	645
RV2771173X	S	515	RW1180X	S	648	RW2001	S	662	RW6071	S	645
RV2771250X	S	515	RW1181	S	652	RW2001X	S	662	RW6073	S	640
RV2771494X	S	517	RW1181RX	S	652	RW2002	S	662	RW6074	S	645
RV2771544X	S	517	RW1181X	S	652	RW2002X	S	662	RW6075	S	633
RV2772181X	S	516	RW1182RX	S	652	RW2005	S	662	RW6075RX	S	633
RV2772184X	S	516	RW1182X	S	652	RW2005X	S	662	RW6075X	S	633
RV347201X	S	499	RW1183X	S	648	RW2006X	S	662	RW6076	S	639
RV349201X	S	499	RW1184X	S	651	RW2008X	S	664	RW6077	S	633
RV349601X	S	499	RW1185X	S	651	RW2009X	S	664	RW6077RX	S	633
RV350001X	S	500	RW1186X	S	651	RW2044	S	666	RW6077X	S	633
RV350002X	S	500	RW1187X	S	651	RW2052	S	671	RW6078	S	645
RV350301X	S	500	RW1188X	S	653	RW2060	S	644	RW6078X	S	645
RV350701X	S	499	RW1189RX	S	653	RW3000	S	636	RW6079	S	634
RV351001X	S	500	RW1189X	S	653	RW4001X	S	627	RW6079RX	S	634
RV374750X	S	511	RW1190	S	667	RW4005X	S	625	RW6079X	S	634
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RV404402X	S	503	RW1194BPK	S	632	RW4016X	S	626	RW6307	S	667
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RV4056X	S	505	RW1194PX	S	629	RW4018X	S	626	RW6311	S	667
RV408401X	S	503	RW1195X	S	640	RW4019X	S	631	RW6313	S	667
RV408402X	S	503	RW1196X	S	651	RW4054X	S	640	RW6314	S	656
RV408403X	S	503	RW1197X	S	652	RW4055X	S	640	RW6352	S	672
RV408404X	S	503	RW1198RX	S	640	RW4068X	S	635	RW6355	S	666
RV408405X	S	503	RW1198X	S	640	RW4069X	S	635	RW852	S	659
RV46201X	S	504	RW1199	S	672	RW4070RX	S	645	RW885	S	656
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If OEM part # is not found on page listed, refer to the MCR for applicable cross reference.

PURPOSE OF THIS CATALOG

This catalog is designed as a reference for Haldex remanufactured air brake system components and accessories, sold under the Midland product name. Remanufactured products can be identified by the "X" at the end of the part number; comparable new service numbers are also listed if available and do not have the "X" at the end. Products described include all pertinent information needed to replace an OEM installed component, or to help design an original installation.

DESIGN FLEXIBILITY

The products presented in this section are described by function and usage. Technical data and mounting configurations are also provided. Throughout this section, reference is made to numerous specific OEM applications. This section is not, however, intended to be a mutually exclusive listing of all part numbers and designs available. Should the need for a design not presented occur, contact your Haldex sales representative for additional information.

WARRANTY INFORMATION

Proper service and repair are important to the safe, reliable operation of any motor vehicle. To prevent personal injury and/or vehicle damage, careful and cautious service procedures recommended by the vehicle manufacturer should be followed by anyone servicing a motor vehicle. For details on warranty of Haldex air brake system components and accessories, refer to L20221 Aftermarket Warranty Policy. For warranty returns, use L90005 Warranty Adjustment Form. Further information is also available on the Haldex Brake Products North American website (www.haldex.com/en/North−America/Applications−Products/Product−categories/Brake−Suspension−Systems/) click on Warranty button.

ORDERING PROCEDURE

Most customers can place electronic orders on the www.haldex.com website by obtaining a username and password or by using EDI. For additional information about electronic orders or to place an order by phone or fax, contact Customer Service in U.S. or Canada at numbers listed below:

U.S. Customer Service:

Phone: 800−643−2374

Fax: 800−533−1941

Mail: Haldex Brake Products Corportation
Attn: Customer Service Department
10930 N. Pomona Ave.
Kansas City, MO 64153

Canada Customer Service:

Phone: 800−267−9247

Fax: 519−621−3924

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The data listed herein is correct to the best of Haldexs knowledge and belief, having been compiled from reliable and official sources of information. However, HALDEX CANNOT ASSUME ANY RESPONSIBILITY for possible error or misapplication of the product. Final determination of the suitability of the products for the use contemplated by the Buyer is the sole responsibility of the Buyer. Haldex shall have no responsibility in connection with this suitability. It is not our intention to imply that any of the components in this catalog in connection with an engine make or model are made by any engine manufacturer.

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Kansas City, MO 64153

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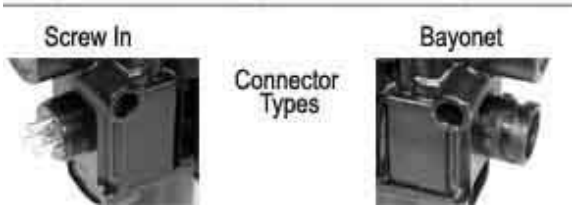
Notes

Meritor WABCO Style Converter Cables

SKU#	Product Description	Length
8946011322K	Meritor/WABCO Style Converter Cable	Bayonet to Screw In Converter − 6"
8946011332K	Meritor/WABCO Style Converter Cable	Screw In to Bayonet Converter − 6"

Rear Axle Valve Packs



Features:

- Combines two ABS modulator valves and one service brake relay valve
- Usually attached to a frame cross−member
- Compatible with C, D and E versions of Meritor WABCO Style ECUs
- For a tandem drive axle, both wheels on the same side are typically controlled by the same valve

Specifications:

Voltage	12
Modulator Valve Ports	1/2" − 14 NPT
Application	Rear Axle ABS Valve Packs

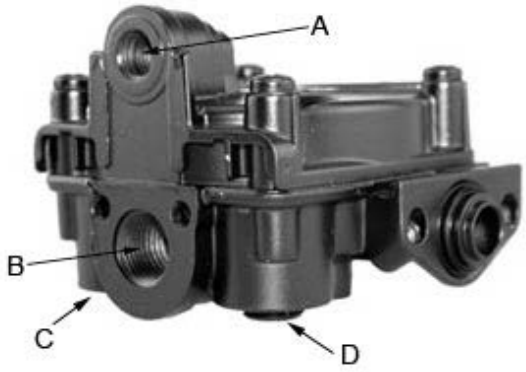
Notes:

1) Use the following converter cables to switch connector styles:
Screw to Bayonet (**8946011322K**)
Bayonet to Screw (**8946011332K**)

SKU#	Product Description	Crack Pressure	System Config.	Valve Package Contains	Connector Type	Core Group
4725001000X	Reman. Rear Axle Valve Pack	4 psi	4S/4M	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9730110210X Relay Valve 4 psi	Screw In	ABS5
4725001010X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9730110220X Relay Valve 5.5 psi	Screw In	ABS5
4725001020X	Reman. Rear Axle Valve Pack	4 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve−Left (1) 4721950830X Modulator Valve−Right (1) 9730110210X Relay Valve 4 psi	Screw In	ABS5
4725001030X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve−Left (1) 4721950830X Modulator Valve−Right (1) 9730110220X Relay Valve 5.5 psi	Screw In	ABS5
4725001200X	Reman. Rear Axle Valve Pack	4 psi	4S/4M	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9730110210X Relay Valve 4 psi	Bayonet	ABS5
4725001210X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9730110220X Relay Valve 5.5 psi	Bayonet	ABS5

4725001220X	Reman. Rear Axle Valve Pack	4 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110210X Relay Valve 4 psi	Bayonet	ABS5
4725001230X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110220X Relay Valve 5.5 psi	Bayonet	ABS5
4725001240X	Reman. Rear Axle Valve Pack	4 psi	6S/6M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110230X Relay Valve 4 psi	Bayonet	ABS5
4725001250X	Reman. Rear Axle Valve Pack	5.5 psi	6S/6M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110240X Relay Valve 5.5 psi	Bayonet	ABS5
4725002030X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve−Left (1) 4721950830X Modulator Valve−Right (1) 9730110260X Relay Valve 5.5 psi (1) 4721707910X ATC Valve	Screw In	ABS5
4725002220X	Reman. Rear Axle Valve Pack with ATC Valve	4 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110250X Relay Valve 4 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002230X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110260X Relay Valve 5.5 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002240X	Reman. Rear Axle Valve Pack with ATC Valve	4 psi	6S/6M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110270X Relay Valve 4 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002250X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	6S/6M	(1) 4721950780X Modulator Valve−Left (1) 4721950790X Modulator Valve−Right (1) 9730110280X Relay Valve 5.5 psi (1) 4721707970X ATC Valve	Bayonet	ABS5

Relay Valve for Valve Pack



Specifications:

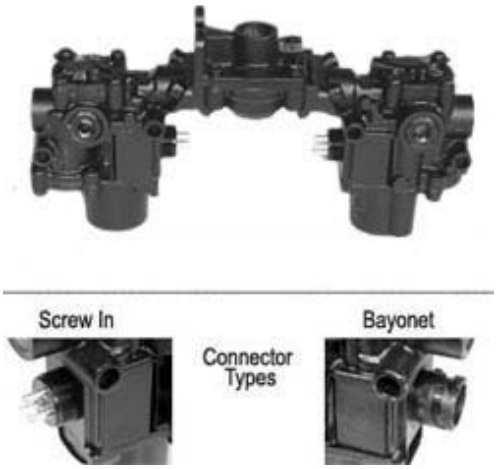
Application Rear Axle ABS Valve Packs

Notes:

1) Each individual valve includes (2) o−rings, (4) mounting bolts and grease pack.

SKU#	Product Description	Crack Pressure	System Configuration	Control (A)	Supply (B)	Delivery (C)	Delivery (D)	Core Group
9730110210X	Reman. Service Brake Relay Valve for Valve Pack	4 psi	4S/4M or 6S/4M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	N/A	ABS11
9730110220X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	4S/4M or 6S/4M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	N/A	ABS11
9730110230X	Reman. Relay Valve for Valve Pack	4 psi	6S/6M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110240X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	6S/6M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110250X	Reman. Service Brake Relay Vavle for Valve Pack	4 psi	4S/4M or 6S/4M	non−threaded	non−threaded	3/8" − 18 NPTF	N/A	ABS11
9730110260X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	4S/4M or 6S/4M	non−threaded	non−threaded	3/8" − 18 NPTF	N/A	ABS11
9730110270X	Reman. Relay Valve for Valve Pack	4 psi	6S/6M	non−threaded	non−threaded	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110280X	Reman. Relay Valve for Valve Pack	5.5 psi	6S/6M	non−threaded	non−threaded	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11

Front Axle Valve Packs



Features:

- Combines two ABS modulator valves and one quick release valve
- Usually attached to a frame cross−member
- Compatible with C, D and E versions of Meritor/WABCO ECUs

Specifications:

Voltage	12
Modulator Valve Ports	1/2" − 14 NPT
Application	Truck/Tractor/Bus

Notes:

1) Use the following converter cables to switch connector styles:
Screw to Bayonet (**8946011322K**)
Bayonet to Screw (**8946011332K**)

SKU#	Product Description	Crack Pressure	System Configuration	Valve Package Contains	Connector Type	Core Group
4725003000X	Reman. Front Axle Valve Pack	1 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001040X Quick Release Valve 1 psi	Screw In	ABS13
4725003010X	Reman. Front Axle Valve Pack	3 − 4 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001050X Quick Release Valve 3 − 4 psi	Screw In	ABS13
4725003020X	Reman. Front Axle Valve Pack	6 − 8 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001060X Quick Release Valve 6 − 8 psi	Screw In	ABS13
4725003200X	Reman. Front Axle Valve Pack	1 psi	Various	(1) 4721950760XModulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001040X Quick Release Valve 1 psi	Bayonet	ABS13
4725003210X	Reman. Front Axle Valve Pack	3 − 4 psi	Various	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001050XQuick Release Valve 3 − 4 psi	Bayonet	ABS13
4725003220X	Reman. Front Axle Valve Pack	6 − 8 psi	Various	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001060X Quick Release Valve 6 − 8 psi	Bayonet	ABS13

Quick Release Valve for Valve Pack

Specifications:

Application Front Axle ABS Valve Packs

Notes:

1) Each individual valve includes (2) o−rings, (4) mounting bolts and grease pack.

SKU#	Product Description	Crack Pressure	System Configuration	Supply	Core Group
9735001040X	Reman. Quick Release Valve for Valve Pack	1 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12
9735001050X	Reman. Quick Release Valve for Valve Pack	3 − 4 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12
9735001060X	Reman. Quick Release Valve for Valve Pack	6 − 8 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12

Modulator Valves

Features:

- Regulates air pressure to each ABS controlled brake
- Compatible with all versions of Meritor WABCO Style ECUs

Specifications:

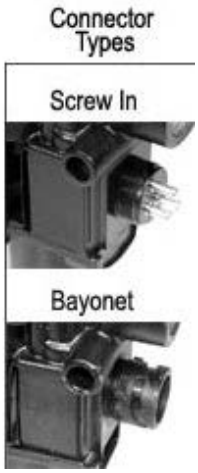
Voltage	12
Modulator Valve Ports	1/2" − 14 NPT
Application	Truck/Tractor/Bus

Notes:

1) Each individual modulator valve includes (1) o−ring, (2) mounting bolts and grease pack.

SKU#	Product Description	System Configuration	Connector Type	Core Group
4721950050X	Reman. Modulator Valve − In Line Style	One Delivery 180° from Supply	Screw In	ABS1
4721950520X	Reman. Modulator Valve − In Line Style	One Delivery 180° from Supply	Bayonet	ABS1
4721950760X	Reman. Modulator Valve − Left	4S/4M	Bayonet	ABS7
4721950770X	Reman. Modulator Valve − Right	4S/4M	Bayonet	ABS7
4721950780X	Reman. Modulator Valve − Left	4S/4M, 6S/4M or 6S/6M	Bayonet	ABS7
4721950790X	Reman. Modulator Valve − Right	4S/4M, 6S/4M or 6S/6M	Bayonet	ABS7
4721950800X	Reman. Modulator Valve − Left	4S/4M	Screw In	ABS7
4721950810X	Reman. Modulator Valve − Right	4S/4M	Screw In	ABS7
4721950820X	Reman. Modulator Valve − Left	4S/4M, 6S/4M or 6S/6M	Screw In	ABS7
4721950830X	Reman. Modulator Valve − Right	4S/4M, 6S/4M or 6S/6M	Screw In	ABS7

Remanufactured Meritor WABCO Style ATC Valves



Specifications:

Voltage 12
Application ABS Rear Axle Valve Packs

SKU#	Product Description	Connector Type	System Configuration	Core Group
4721707910X	Reman. Automatic Traction Control Valve	Screw In	Compatible with Version D & E ECU's	ABS15
4721707970X	Reman. Automatic Traction Control Valve	Bayonet	Compatible with Version D & E ECU's	ABS15

Remanufactured Trailer ABS WABCO

Features:

- ABS Valve and ECU included
- For all trailers manufactured after March 1, 2001

Specifications:

Voltage 12V
Application Trailers and Dollies

Notes:

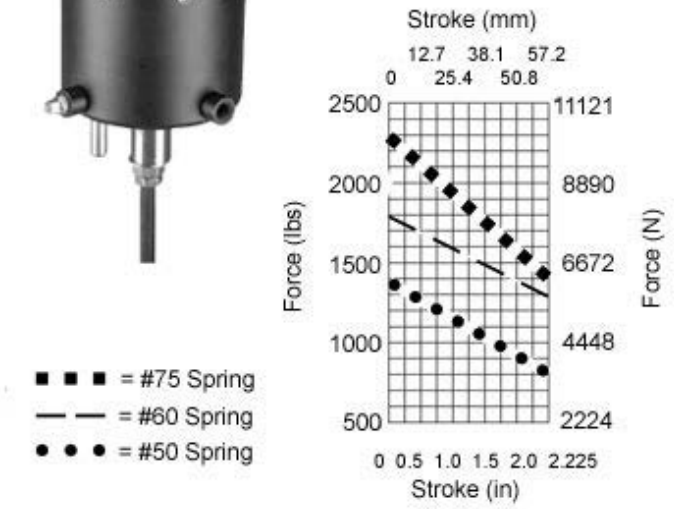
1) Cable number 8946062752 for 4005001010 and 4005001040

SKU#	Product Description	Control port	Delivery port	Supply port	Exhaust port	Core group
4005001010KX	Remanufactured Wabco 2S/1M Trailer ABS assembly including cable	3/8"−18	3/8"−18	3/4"−14	not threaded	ABS20
4005001010X	Remanufactured Premium Wabco Trailer ABS assembly	3/8"−18	3/8"−18	3/4"−14	not threaded	ABS20
4005001020X	Remanufactured Wabco 2S/2M Trailer ABS assembly	1/4−18	3/8−18	3/4−14	not threaded	ABS21
4005001030X	Remanufactured Premium Wabco Trailer ABS assembly	1/4−18	3/8−18	3/4−14	not threaded	ABS21
4005001040X	Remanufactured Wabco 2S/1M Trailer ABS assembly	3/4" −18	3/8"−18	3/4"−14	not threaded	ABS20
4008506020X	Remanufactured WABCO ABS Valve 2M (valve only)	1/4" − 18	3/8" − 18	3/4" − 14	not threaded	ABS23
4721950330X	Remanufactured WABCO ABS Valve 1M (valve only)	1/4" − 18	3/8" − 18	3/4" − 14	not threaded	ABS22

Notes

MAXIBRAKE® I−Series Spring Brakes

Type 24 MAXIBRAKE® I Series Spring Brake



Features:

- All steel housing provide strength, durability and extra corrosion resistance.
- Aluminum piston and nylon bearing provide maximum guidance stability that diffuses lateral and twisting motion.
- Steel alloy springs are epoxy coated to protect against rust and corrosion.
- Deeper spring cavities and optional spring force outputs offer uniform output and longer service life.
- Unit cannot be released manually, making it inoperative. This insures the vehicle cannot be moved until the air supply is at a safe level.

Specifications:

Maximum Air Pressure 125 psi

Notes:

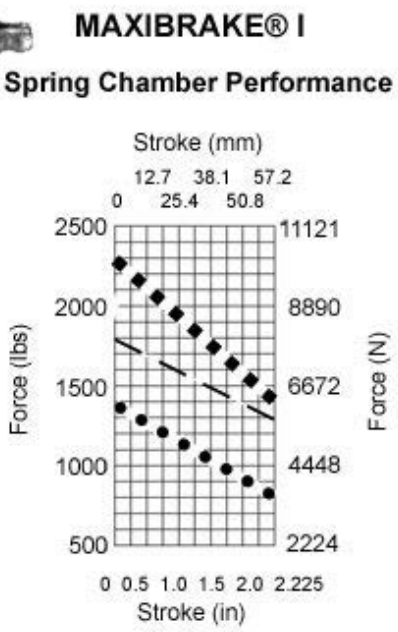
1) Single Pack − 1 per Box.

2) Replacement Parts listed later in this section.

SKU#	Product Description	Spring	Push Rod	OEM Part Number	Core Group
MA15773	MAXIBRAKE® 2450 Universal Spring Brake − I Series 24"	50#	Universal 8"	KSM2450KC800NN	−
MA15774	MAXIBRAKE® 2460 Universal Spring Brake − I Series	60#	Universal 8"	KSM2460KC800NN	−
MA15774X	Remanufactured MAXIBRAKE® 2460 Universal Spring Brake − I Series 24"	60#	Universal 8"	KSM2460KC800NN	MX024

MAXIBRAKE® I−Series Spring Brakes

Type 30 MAXIBRAKE® I Series Spring Brake



Features:

- All steel housing provide strength, durability and extra corrosion resistance.
- Aluminum piston and nylon bearing provide maximum guidance stability that diffuses lateral and twisting motion.
- Steel alloy springs are epoxy coated to protect against rust and corrosion.
- Deeper spring cavities and optional spring force outputs offer uniform output and longer service life.
- Unit cannot be released manually, making it inoperative. This insures the vehicle cannot be moved until the air supply is at a safe level.

Specifications:

Maximum Air Pressure 125 psi

Notes:

1) Single Pack − 1 per Box.

2) Replacement Parts listed later in this section.

SKU#	Product Description	Spring	Push Rod	OEM Part Number	Core Group
MA15776	MAXIBRAKE® 3060 Universal Spring Brake − I Series 30"	60#	Universal 8"	KSM3060KC800NN	−
MA15777	MAXIBRAKE® 3075 Universal Spring Brake − I Series 30"	75#	Universal 8"	KSM3075KC800NN	−
MA46141X	Remanufactured MAXIBRAKE® I Series 30" Spring Brake	60#, Boot	9.34−9.63"	KSM3060JCS46141	MX030

MAXIBRAKE® H−Series Spring Brakes

Features:

- All steel housing provide strength, durability and extra corrosion resistance.
- Aluminum piston and nylon bearings provide maximum guidance stability that diffuses lateral and twisting motion.
- Steel alloy springs are epoxy coated to protect against rust and corrosion.
- Deeper spring cavities and optional spring force outputs offer uniform output and longer service life.
- The Maxibrake® H−Series Air and Hydraulic Spring−Set Parking Brake release mechanisms are housed inside the unit making them readily available for use.
- Stamped steel piston with 360° heavy duty plastic bushing and o−ring seal.

Specifications:

Maximum Pressure (Air/Hydraulic) 125 psi

Notes:

1) Single Pack − 1 per Box.

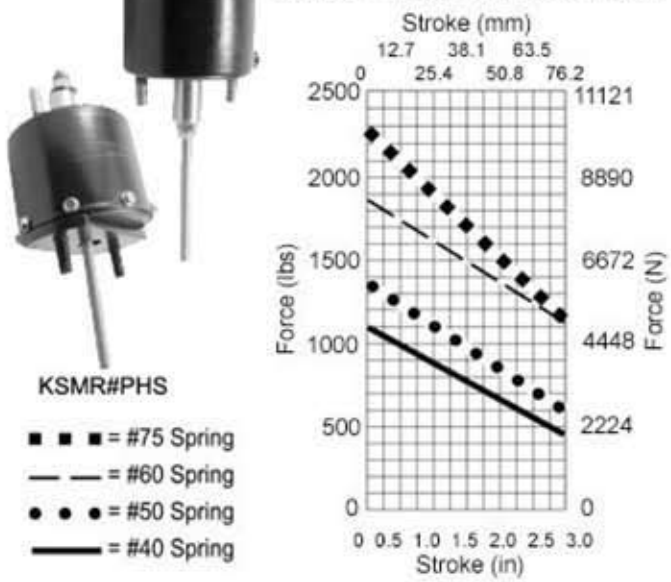
2) Replacement Parts listed later in this section.

3) Hydraulic Unit compatible with ATF; **DO NOT USE BRAKE FLUID**

SKU#	Product Description	Notes	OEM Part Number	Core Group
MA15500	MAXIBRAKE® H−Series Hydraulic Spring−Set Parking Brake	Complete Unit	KSH101E	−
MA15500X	Remanufactured MAXIBRAKE® H−Series Hydraulic Spring−Set Parking Brake	Complete Unit	KSH101E	MX101
MA15502	MAXIBRAKE® H−Series Hydraulic Spring−Set Parking Brake	Complete Unit with optional Fluid Inlet Elbow	KSH101F	−
MA15502X	Remanufactured MAXIBRAKE® H−Series Hydraulic Spring−Set Parking Brake	Complete Unit with optional Fluid Inlet Elbow	KSH101F	MX101
MA15504X	Remanufactured MAXIBRAKE® H−Series Air Spring−Set Parking Brake	Complete Unit with 3/8" NPT Air Inlet	KSH202C	MX202
MA15514	MAXIBRAKE® H−Series Air Spring−Set Parking Brake	Complete Unit with 3/8" NPT Air Inlet Vented rod socket	KSH202CS007	−

MAXIBRAKE® R–Series Spring Brake

MAXIBRAKE® R–Series Push Type Spring Brake



Features:

- All steel housing provide strength, durability and extra corrosion resistance.
- Aluminum piston and nylon bearings provide maximum guidance stability that diffuses lateral and twisting motion.
- Steel alloy springs are epoxy coated to protect against rust and corrosion.
- Deeper spring cavities and optional spring force outputs offer uniform output and longer service life.
- Unit cannot be released manually, making it inoperative. This insures the vehicle cannot be moved until the air supply is at a safe level.

Specifications:

Maximum Air Pressure 125 PSI

Notes:

1) Single Pack – 1 per Box.
2) Replacement Parts listed later in this section.

SKU#	Product Description	Stroke	Spring	Push Rod	OEM Part Number	Core Group
MA15600	MAXIBRAKE® R–Series – Air Application – Push Type	1.38"	#40	8"	KSMR0PH40–800NN	–
MA15601	MAXIBRAKE® R–Series – Air Application – Push Type	1.38"	#50	8"	KSMR0PH50–800NN	–
MA15603	MAXIBRAKE® R–Series – Air Application – Push Type	1.38"	#75	8"	KSMR0PH75–800NN	–
MA15605	MAXIBRAKE® R–Series – Air Application – Push Type	1.38"	#75	8"	KSMR0PHS75–800NN	–
MA15606	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#40	8"	KSMR1PH40–800NN	–
MA15607	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#50	8"	KSMR1PH50–800NN	–
MA15608	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#60	8"	KSMR1PH60–800NN	–
MA15609	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#75	8"	KSMR1PH75–800NN	–
MA15610	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#50	8"	KSMR1PHS50–800NN	–
MA15612	MAXIBRAKE® R–Series – Air Application – Push Type	2.25"	#75	8"	KSMR1PHS75–800NN	–
MA15614	MAXIBRAKE® R–Series – Air Application – Push Type	2.62"	#50	8"	KSMR2PH50–800NN	–
MA15615	MAXIBRAKE® R–Series – Air Application – Push Type	2.62"	#60	8"	KSMR2PH60–800NN	–

SKU#	Product Description	Stroke	Spring	Push Rod	OEM Part Number	Core Group
MA15616	MAXIBRAKE® R-Series - Air Application - Push Type	2.62"	#75	8"	KSMR2PH75-800NN	-
MA15617	MAXIBRAKE® R-Series - Air Application - Push Type	2.62"	#50	8"	KSMR2PHS50-800NN	-
MA15618	MAXIBRAKE® R-Series - Air Application - Push Type	2.62"	#60	8"	KSMR2PHS60-800NN	-
MA15619	MAXIBRAKE® R-Series - Air Application - Push Type	2.62"	#75	8"	KSMR2PHS75-800NN	-
MA15621	MAXIBRAKE® R-Series - Air Application - Push Type	3.00"	#50	8"	KSMR3PH50-800NN	-
MA15622	MAXIBRAKE® R-Series - Air Application - Push Type	3.00"	#60	8"	KSMR3PH60-800NN	-
MA15623	MAXIBRAKE® R-Series - Air Application - Push Type	3.00"	#75	8"	KSMR3PH75-800NN	-
MA15623X	Remanufactured MAXIBRAKE® R-Series - Air Application - Push Type	3.00"	#75	8"	KSMR3PH75-800NN	MXR1
MA15624	MAXIBRAKE® R-Series - Air Application - Push Type	3.00"	#50	8"	KSMR3PHS50-800NN	-

Notes

Haldex (New/Remanufactured)

Pure Air PlusB™ Air Dryer

Features:

- Compact and lightweight.
- Built−in Turbo−SaverÂ™ Valve reduces engine horsepower loss for improved fuel mileage.
- Replaceable Coalescing Filter features advanced state−of−the−art filtration system to remove even the smallest oil particles and contaminants.
- Fast, easy, economical on−vehicle servicing.

Specifications:

Length	15.1"
Maximum Width	9.31"
Heater	95 Watt Thermostatic
Primary Material	Aluminum
Drying Method	Coalescence/Desiccant
Burst Rating	300 PSI
Mounting	Bracket with Stainless Steel Clamp Band
Mounting Position	Vertical
Maximum Compressor Capacity	25 SCFM

Notes:

1) Mounting Hardware not included except on **DA33100BX**.

2) Pure Air PlusÂ™ Repair Kits and Replacement Parts listed later in this section.

SKU#	Product Description	Heater Voltage	Canister Size	Inlet Port	Outlet Port	Governor Port	Exhaust Port	Approx. Weight	Notes	Core Group
DA33100BX	Remanufactured Pure Air PlusÂ™ Air Dryer	12 Volt	2 lbs.	1/2"	1/2"	1/8"	1" Hose	22.0 lbs.	Standard − Mounting Bracket Included	330
DA33100X	Remanufactured Pure Air PlusÂ™ Air Dryer	12 Volt	2 lbs.	1/2"	1/2"	1/8"	1" Hose	21.9 lbs.	Standard	330
DA33110X	Remanufactured Pure Air PlusÂ™ Air Dryer	24 Volt	2 lbs.	1/2"	1/2"	1/8"	1" Hose	22.5 lbs.	Standard	330
DA33140X	Remanufactured Pure Air PlusÂ™ Air Dryer	12 Volt	3 lbs.	1/2"	1/2"	1/8"	1" Hose	27.1 lbs.	Holset − Heavy Duty	330
DA33200X	Remanufactured Pure Air PlusÂ™ Air Dryer	12 Volt	2 lbs.	1/2"	1/2"	1/8"	1" Hose	22.6 lbs.	Standard for Applications with Holset "E" Type Compressor	330
DA33240X	Remanufactured Pure Air PlusÂ™ Air Dryer	12 Volt	3 lbs.	1/2"	1/2"	1/8"	1" Hose	28.0 lbs.	Standard for Applications with Holset "E" Type Compressor	330

Haldex (New/Remanufactured)

Safety Valve − Pure AirB™/Pure Air PlusB™, PURest, ModulAir®

SKU#	Product Description	Body Style	Thread Size	PSI	Notes	OEM Part Number
KN31250	Pressure Relief Valve	Short	3/8"	150	Pure Air	N1178BB
KN31527	Pressure Relief Valve	Closed	3/8"	175	Pure Air Plus, PURest, ModulAir®	N1178EE
KN31529	Pressure Relief Valve	Closed	3/8"	200	Pure Air Plus, PURest, ModulAir® − fit and functionally the same as KN31527 but has a higher pressure setting. Has felt sleeve (not shown) to protect vent holes from road debris.	N1178EH

Competitive (New/Remanufactured)

WABCO SS1200

Features:

- Lightweight
- Compact 1200 Series
- Replaceable Spin−On Cartridge
- Metri−Pack Type Heater Connector

Specifications:

Height 11.2"

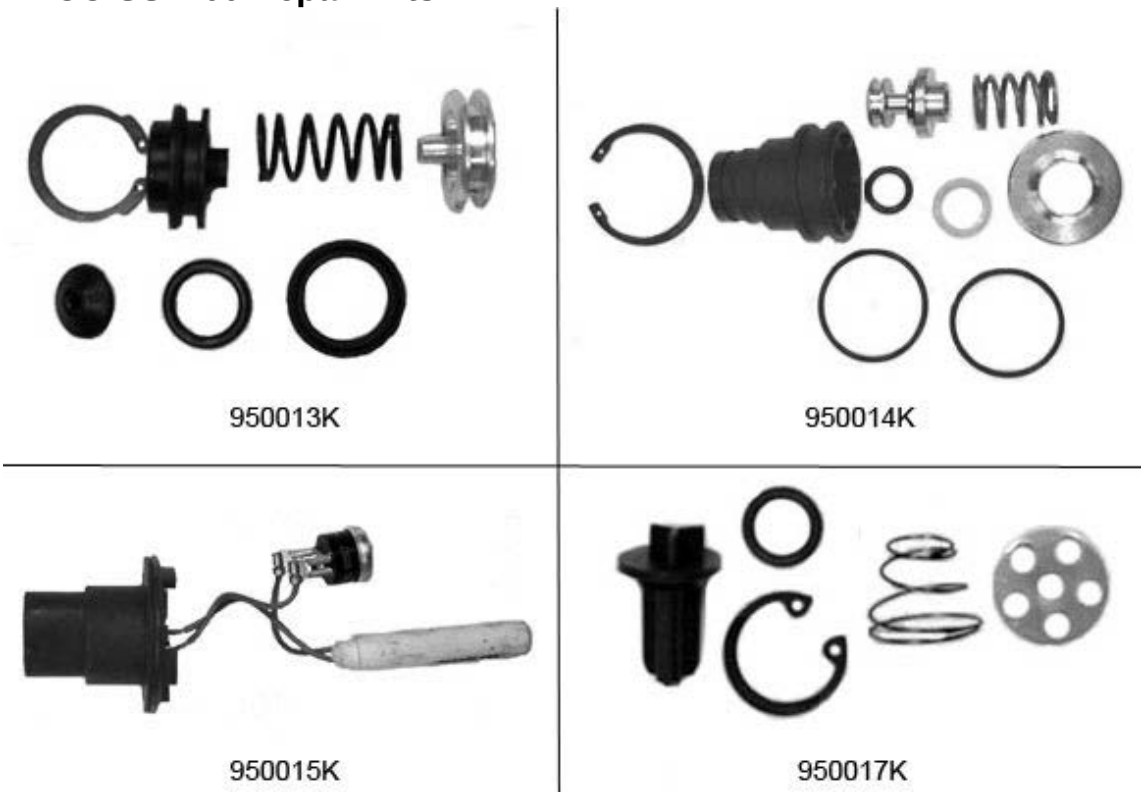
Notes:

1) **955300X** does not have a Regeneration Valve.

SKU#	Product Description	MFG. #	Heater Voltage	Supply	Delivery	Control	Approx. Weight	Core Group
955205	New WABCO SS1200 Air Dryer	R955205 R955005	12 Volt	1/2" − 14 FPT	1/2" − 14 FPT	1/4" − 18 FPT	15 lbs.	−
955205X	Remanufactured WABCO SS1200 Air Dryer	R955205 R955005	12 Volt	1/2" − 14 FPT	1/2" − 14 FPT	1/4" − 18 FPT	15 lbs.	165WAB
955206X	Remanufactured WABCO SS1200 Air Dryer	R955206	24 Volt	1/2" − 14 FPT	1/2" − 14 FPT	1/4" − 18 FPT	11.1 lbs.	165WAB
955300X	Remanufactured WABCO SS1200P Air Dryer − requires an External Purge Tank (not supplied)	955300	12 Volt	1/2" − 14 FPT	1/2" − 14 FPT	1/4" − 18 FPT	15 lbs.	166WAB

Competitive (New/Remanufactured)

WABCO SS1200 Repair Kits



SKU#	Product Description	Application
950013K	Turbo Cut−Off Valve Kit for WABCO SS1200 Air Dryer	955205X, 955206X
950014K	Purge Valve Kit for WABCO SS1200 Air Dryer	955205X, 955206X
950015K	Heater Kit 12 Volt for WABCO SS1200 Air Dryer	955205X, 955206X
950017K	Outlet Check Valve Kit for WABCO SS1200 Air Dryer	955205X, 955206X

Competitive (New/Remanufactured)

Bendix® AD−2

Features:

- Desiccant type.
- In−line filtration system.
- Automatic drain valve which is controlled by the governor.

Specifications:

Approximate Weight 25 lbs.

Notes:

1) Air Dryer not supplied with mounting bracket.

SKU#	Product Description	Heater Voltage	Inlet Port	Outlet Port	Plugged Port	Core Group
286934X	Remanufactured Bendix® AD−2 Air Dryer	12 Volt	1/2"	1/2"	1/2"	153AD2

Competitive (New/Remanufactured)

Bendix® AD−4

Features:

- Desiccant type.
- In−line filtration system.
- Automatic drain valve which is controlled by the governor.

Specifications:

Approximate Weight 32.6 lbs.

Notes:

1) Air Dryer not supplied with mounting bracket.

SKU#	Product Description	Heater Voltage	Heater Watts	Supply Port	Delivery Port	Control Port	Core Group
65041X	Remanufactured Bendix® AD−4 Air Dryer	12 Volt	60 Watt	1/2"	1/2"	1/4"	154AD4

Competitive (New/Remanufactured)

Bendix® AD−9

Features:

- Desiccant type.
- In−line filtration system.
- Automatic drain valve which is controlled by the governor.

Specifications:

Approximate Weight 28 lbs.

SKU#	Product Description	Heater Voltage	Heater Watts	Supply	Delivery	Control	Notes	Core Group
109685HX	Reman. Bendix® AD−9 Air Dryer with Bracket and Wiring Harness	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Includes Wiring Harness and Mounting Bracket Replaces Bendix part number 5009378	157AD9
109685X	Reman. Bendix® AD−9 Air Dryer	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Replaces 65225X	157AD9
109687X	Reman. Bendix® AD−9 Air Dryer	12 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Replaces 65226	157AD9
109688HX	Reman. Bendix® AD−9 Air Dryer with Extended Purge, Bracket and Harness	24 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Extended Purge Volume	157AD9
109688X	Reman. Bendix® AD−9 Air Dryer with Extended Purge	24 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Extended Purge Volume	157AD9
109689X	Reman. Bendix® AD−9 Air Dryer with Soft Seat Purge	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Soft Seat	157AD9
65224	New Bendix® AD−9 Air Dryer with Soft Seat Purge	24 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Includes Wiring Harness and Mounting Bracket	157AD9
65224X	Reman. Bendix® AD−9 Air Dryer with Soft Seat Purge	24 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Not supplied with Mounting Bracket	157AD9
65225	New Bendix® AD−9 Air Dryer	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Includes Wiring Harness and Mounting Bracket	−
65228X	Reman. Bendix® AD−9 Air Dryer with Extended Purge	12 Volt	75 Watt	3/4" PT	3/4" PT	1/4" PT	Extended Purge Volume	157AD9

65499X	Reman. Bendix® AD−9 Air Dryer − Discharge Line Unloader (DLU)	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Discharge Line Unloader (DLU)	157AD9
65605X	Reman. Bendix® AD−9 Air Dryer − Discharge Line Unloader (DLU)	24 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Discharge Line Unloader (DLU)	157AD9
65647WX	Reman. Bendix® AD−9 Air Dryer − Drop In, Holset QE Applications with Port Plugged	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Drop In, Holset QE Applications with Port Plugged	157AD9
65647X	Reman. Bendix® AD−9 Air Dryer − Drop In, Holset QE Applications	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Drop In, Holset QE Applications	157AD9
65650	New Bendix® AD−9 Air Dryer with Soft Seat Purge	12 Volt	75 Watt	1/2" PT	1/2" PT	1/4" PT	Soft Seat Includes Wiring Harness and Mounting Bracket	−
65650N	New Bendix® AD − dryer with Soft Seat Purge	12 volt	75	1/2	1/2	1/4	Soft Seat, does not include wiring harness and mounting bracket	−

Competitive (New/Remanufactured)

Bendix® AD−IP

Features:

- Desiccant Type
- In−line Filtration System
- Automatic Drain Valve which is controlled by the Governor

Specifications:

Height 12.5"
Width 9.25"

SKU#	Product Description	Heater Voltage	Supply	Delivery	Control	Approx. Weight	Notes	Core Group
109477RX	Remanufactured Bendix® AD−IP Air Dryer − CoreFreeÂ™	12 Volt	1/2"	1/2"	1/4"	26.2 lbs.	Does not include Mounting Bracket or Wiring Harness.	161ADIP
109477X	Remanufactured Bendix® AD−IP Air Dryer	12 Volt	1/2"	1/2"	1/4"	26.2 lbs.	Does not include Mounting Bracket or Wiring Harness.	161ADIP
109478X	Remanufactured Bendix® AD−IP Air Dryer	24 Volt	1/2"	1/2"	1/4"	27.0 lbs.	Does not include Mounting Bracket or Wiring Harness.	161ADIP
5000709X	Remanufactured Bendix® AD−IP Air Dryer − Drop In	12 Volt	1/2"	1/2"	1/4"	27.0 lbs.	Drop−in unit for Cummins Econ application	161ADIP
5000985X	Remanufactured Bendix® AD−IP Air Dryer	12 Volt	1/2"	1/2"	1/4"	26.2 lbs.	With Econ Port plugged.	161ADIP
5005556X	Remanufactured Bendix® AD−IP Aire Dryer with extended Purge	12 Volt	1/2"	1/2"	1/4"	26.2 lbs.	Does not include Mounting Bracket or Wiring Harness.	161ADIP
5018227X	Remanufactured Bendix® AD−IP Air Dryer	12 Volt	1/2"	1/2"	1/4"	26.2 lbs.	Discharge Line Unloader (DLU) Style Purge Assembly	161ADIP

Competitive (New/Remanufactured)

Bendix® AD−IS

5004050X

5010696X

SKU#	Product Description	MFG. #	Heater Voltage	Heater Wattage	Supply	Delivery	Control	Approx. Weight	Core Group
5004050X	Remanufactured Bendix® AD−IS Air Dryer used on Dryer Reservoir Module (DRMÂ™)	5004050	12 Volt	90 Watt	1/4"	1/4"	1/4"	15 lbs.	168ADIS
5010696X	Remanufactured Bendix® AD−IS Air Dryer with Extra Purge Volume	5010696	12 Volt	90 Watt	1/4"	1/4"	1/4"	15 lbs.	168ADIS

Competitive (New/Remanufactured)

Bendix® AD−SP

Features:

• System Purge

Specifications:

Height 11.07"
Width 5.62"

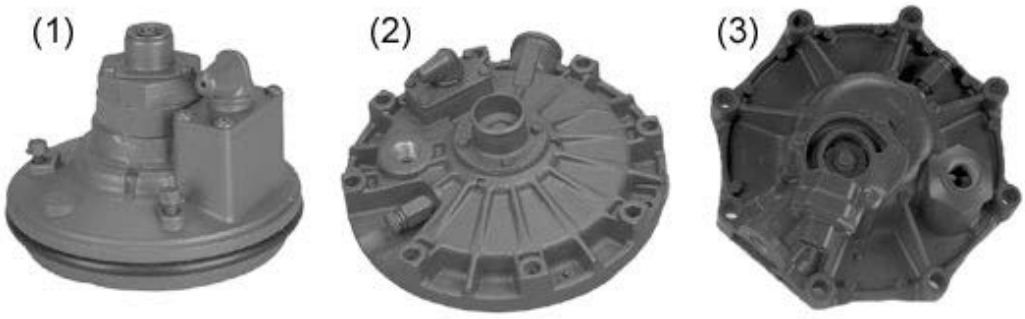
Notes:

1) **DO NOT** remove rear cover, components under cover are not serviceable.

SKU#	Product Description	MFG. #	Heater Voltage	Heater Wattage	Supply	Delivery	Control	Approx. Weight	Core Group
109991	New Bendix® AD−SP Air Dryer	109991 065691	12 Volt	90 Watt	1/2"	1/2"	1/4"	10.5 lbs.	−
109991X	Remanufactured Bendix® AD−SP Air Dryer	109991 065691	12 Volt	90 Watt	1/2"	1/2"	1/4"	11.4 lbs.	164ADSP
109992X	Remanufactured Bendix® AD−SP Air Dryer	109992 065694	24 Volt	90 Watt	1/2"	1/2"	1/4"	10.5 lbs.	164ADSP
800973X	Remanufactured Bendix® AD−SP Drop−In Air Dryer for Holsets QE Application	800973	12 Volt	90 Watt	1/2"	1/2"	1/4"	12 lbs.	164ADSP

Competitive (New/Remanufactured)

Bendix® End Cover Assembly



SKU#	Product Description	Voltage	Watts	Supply	Delivery	Approximate Weight	Picture	Core Group
103980K	Bendix® AD−4 End Cover Repair Kit	12 Volt	−	1/2"	1/2"	6.3 lbs.	2	−
286875RX	Remanufactured Bendix® AD−2 End Cover Assembly CorefreeÂ™	12 Volt	−	−	−	2.2 lbs.	1	−
286875X	Remanufactured Bendix® AD−2 End Cover Assembly	12 Volt	−	−	−	2.2 lbs.	1	149AD2
65044X	Remanufactured Bendix® AD−4 End Cover Assembly	12 Volt	−	1/2"	1/2"	6.3 lbs.	2	155AD4
65229X	Remanufactured Bendix® AD−9 End Cover Assembly	24 volt	−	3/4	3/4	6.7 lbs.	3	160AD9
65231X	Remanufactured Bendix® AD−9 End Cover Assembly	12 Volt	75 Watt	1/2"	1/2"	6.7 lbs.	3	160AD9
65454X	Remanufactured Bendix® AD−9 End Cover Assembly	24 Volt	−	1/2"	1/2"	6.7 lbs.	3	160AD9
65654X	Remanufactured Bendix® AD−9 End Cover Assembly with Soft Seat Purge	12 Volt	75 Watt	1/2"	1/2"	6.7 lbs.	3	160AD9

Competitive (New/Remanufactured)

Bendix® Repair Kits

Product Image Not Available

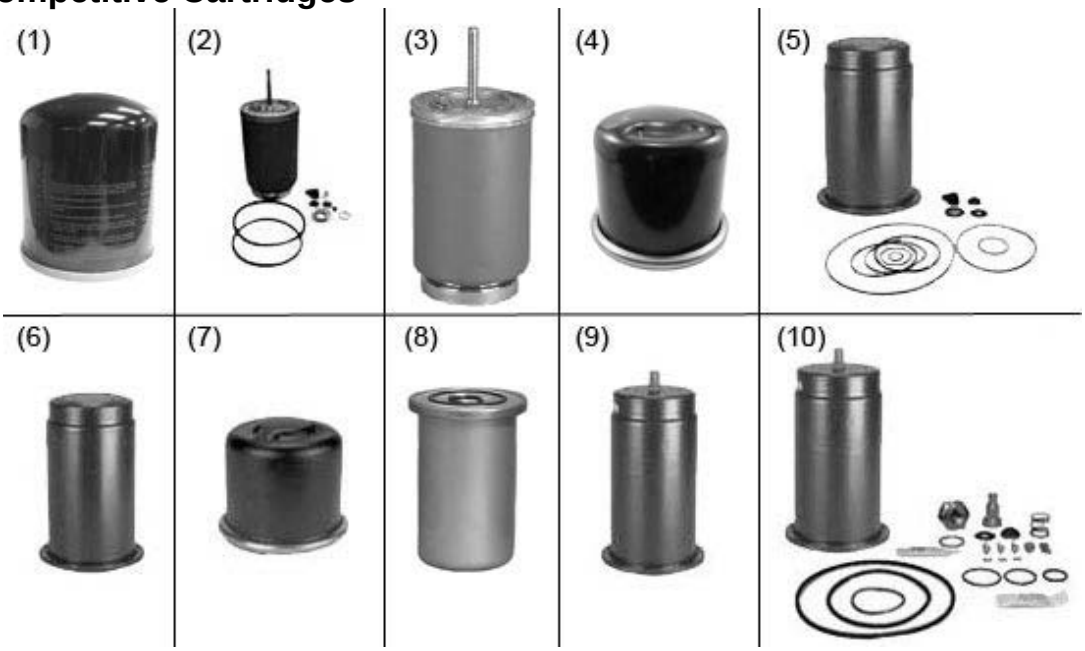
Notes:

1) **5003547K, 5005037K, 5005893K** Purge Piston Retainer Shoulder Bolt not supplied. Must utilize old bolt when rebuilding purge valve assembly.

SKU#	Product Description	Application	Core Group
102657K	Thermostat for AD−2 and AD−4 Air Dryer	286934X, 286936X, 65041X	−
103818K	Purge Valve Repair Kit for AD−4 Air Dryer	65041X	−
103879K	Check Valve/Seal Repair Kit for AD−4 Air Dryer	65041X	−
104027K	Mounting Bracket for AD−4 Air Dryer	65041X	−
107695K	Mounting Bracket for AD−9 Air Dryer	109685X, 109689X, 65224X	−
107798K	Purge Valve (Minor) Maintenance Kit for AD−9 Air Dryer	109685X, 109685HX, 65224X, 65647X	−
107800K	Check Valve Repair Kit for AD−9 Air Dryer	109685X, 109689X, 65224X	−
109494K	Delivery Check Valve Kit for AD−IP Air Dryer	109477X, 5000709X	−
109495K	12 Volt Heater and Thermostat for AD−IP and AD−IS Air Dryer	109477X, 5000709X	−
109498K	Cartridge Bolt Kit for AD−IP Air Dryer	109477X, 5000709X	−
109569K	Purge Valve and Heater/Thermostat Repair Kit for AD−9 (12 V) Air Dryer	109685X	−
109578K	Heater and Thermostat Kit for AD−9 (12 V) Air Dryer	109685X, 109689X	−
109579K	Heater and Thermostat Kit for AD−9 (24 V) Air Dryer	65224X	−
109686X	Remanufactured Purge Valve and Heater/Thermostat Repair Kit for AD−9 (12 V) Air Dryer	109685X	167AD9
109869K	Wire Harness and Connector Repair Kit for AD−9 Air Dryer	109685X, 109689X, 65224X	−
109871K	Wiring Harness and Splice Kit for AD−IP Air Dryer	109477X, 5000709X	−
109993K	Turbo Cutoff Kit for AD−SP Air Dryer	109991X, 109992X	−
109995K	Purge Valve Kit for AD−SP Air Dryer	109991X, 109992X	−
287053K	Purge Valve Repair Kit for AD−2 Air Dryer	286934X, 286936X	−
287298K	Check Valve Repair Kit for AD−2 Air Dryer	286934X, 286936X	−
5001247K	Mounting Bracket Kit for AD−IP Air Dryer	109477X, 5000709X	−
5003547K	Purge Valve Repair Kit for AD−IP Air Dryer	109477X, 5000709X, 5000985X see notes**	−
5004338K	Purge Valve and Heater/Thermostat Repair Kit for AD−9 (24 V) Air Dryer	65224X	−
5004341X	Remanufactured Purge Valve Assembly (Soft Seat Purge) with 12 V Heater for AD−9 Air Dryer	109689X	167AD9
5004342X	Remanufactured Purge Valve Assembly (Soft Seat Purge) with 24 V Heater for AD−9 Air Dryer	65605X	167AD9
5005037K	Purge Valve Maintenance Kit (Major Hard Seat) for AD−9 Air Dryer	109685X, 109685HX, 65224X, 65647X see Notes**	−
5005893K	Purge Valve Maintenance Kit (Soft Seat) for AD−9 Air Dryer	109689X, ** see notes	−
800404K	Service Purge Valve for AD−IP and AD−IS Air Dryer	109477X, 5000709X	−
K022105K	Purge Valve Assembly Kit for Air Dryer	AD−IP/AD−IS (Dual U−Cup)	−

Competitive (New/Remanufactured)

Competitive Cartridges



SKU#	Product Description	Application	Approx. Weight	Pic. #	Core Group
101900MKX	Bendix® Desiccant Cartridge, Purge and Check Valve Kit	AD−2 Air Dryer	9.0 lbs.	2	148AD2
101900X	Remanufactured Bendix® Cartridge	AD−2 Air Dryer	7.8 lbs.	3	148AD2
104358MKX	Bendix® Desiccant Cartridge, Purge and Check Valve Kit	AD−4 Air Dryer	10.4 lbs.	5	150AD4
104358X	Remanufactured Bendix® Cartridge	AD−4 Air Dryer	9.7 lbs.	6	150AD4
107794MKX	Bendix® Desiccant Cartridge, Purge and Check Valve Kit	AD−9 Air Dryer	10.7 lbs.	10	158AD9
107794RX	Remanufactured Bendix0174® Desiccant Cartridge − CoreFreeÂ™	AD−9	9.7 lbs.	9	−
107794X	Remanufactured Bendix® Cartridge	AD−9 Air Dryer	9.7 lbs.	9	158AD9
107796	New Bendix® AD−9 Desiccant Cartridge	AD−9 Air Dryer	9.7 lbs.	9	−
109493RX	Remanufactured Bendix® Desiccant Cartridge − CoreFreeÂ™	AD−IP Air Dryer	15.9 lbs.	7	−
109493X	Remanufactured Bendix® Desiccant Cartridge	AD−IP Air Dryer	15.9 lbs.	7	159ADIP
109994K	New Bendix® Desiccant Cartridge	AD−SP and AD−IS Air Dryer	6.6 lbs.	1	−
5008414K	New Bendix® Desiccant Cartridge	AD−IS Air Dryer	7.0 lbs.	1	−
65624K	New AD−IP Bendix® Desiccant Cartridge for Air Dryers	AD−IP Air Dryer	15.9 lbs.	4	−
950011K	New WABCO Type Air Dryer Cartridge	WABCO SS1200 Air Dryer	6.6 lbs.	1	−
CART224	New Chicago Rawhide Desiccant Cartridge	C/R Turbo 2000 Air Dryer	9.9 lbs.	8	−

WARRANTY

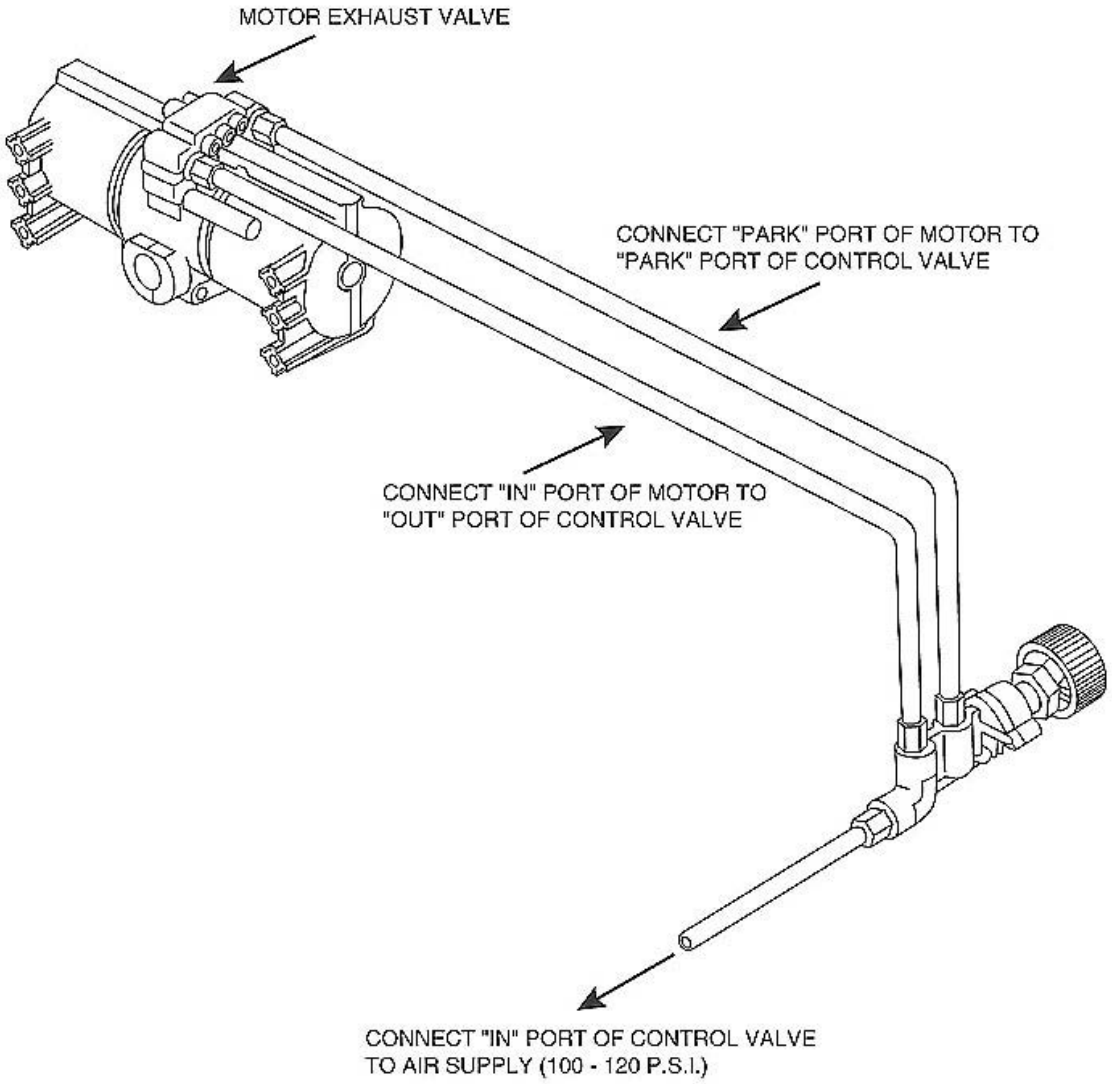
Remanufactured Heavy Duty Air Wiper Motors have a twelve (12) month, 3,600 hour (whichever comes first) warranty. For further details refer to L20221, Aftermarket Warranty Policy. For warranty returns, use L90005 Warranty Adjustment Form.

SPECIAL NOTES

1. Proper service and repair is important to the safe, reliable operation of all motor vehicles. To prevent personal injury and/or vehicle damage, careful and cautious service procedures recommended by the manufacturer should be followed by anyone servicing a motor vehicle. All information, illustrations, specifications and schematics contained in this section are based on the latest information available at the time of publication. Haldex reserves the right to make changes at any time without notice to the customer.

2. When replacing a TRICO Air Motor you must replace the Air Control Valve also.

3. Call the Haldex Technical Services line at 1−800−643−2374 to special order any air wiper motor or control valve not listed in this catalog.


MOTOR EXHAUST VALVE
CONNECT "PARK" PORT OF MOTOR TO
"PARK" PORT OF CONTROL VALVE
CONNECT "IN" PORT OF MOTOR TO
"OUT" PORT OF CONTROL VALVE
CONNECT "IN" PORT OF CONTROL VALVE
TO AIR SUPPLY (100 - 120 P.S.I.)

Sprague Compatible

RM1000001
RM1135001
RM1137001

RM1105001
RM1107001

RM1112001
RM1113001
RM1115001
RM1116001
RM1117001

RM1165001
RM1225001

RM1500001

RM1506001

RM1507001

RM2000001

SKU#	Product Description	Sprague #
RM1000001	End Port Air Control Valve for Air Wiper Motor	GK−1
RM1105001	Side Port Air Control Valve for Air Wiper Motor	K−110−5
RM1107001	Side Port Air Control Valve for Air Wiper Motor	K−110−7
RM1112001	End Port Air Control Valve for Air Wiper Motor	K−111−2
RM1113001	End Port Air Control Valve for Air Wiper Motor	K−111−3
RM1115001	End Port Air Control Valve for Air Wiper Motor	K−111−5
RM1116001	End Port Air Control Valve for Air Wiper Motor	K−111−6
RM1117001	End Port Air Control Valve for Air Wiper Motor	K−111−7
RM1135001	End Port Air Control Valve for Air Wiper Motor	K−113−5
RM1137001	End Port Air Control Valve for Air Wiper Motor	K−113−7
RM1165001	Side Port Air Control Valve for Air Wiper Motor	K−116−5
RM1225001	Side Port Air Control Valve for Air Wiper Motor	K−122−5
RM1500001	End Port Air Control Valve for Air Wiper Motor	GK−15
RM1506001	Wipe/Wash Air Control Valve for Air Wiper Motor	K−150−6
RM1507001	Wipe/Wash Air Control Valve for Air Wiper Motor − without Knob	K−150−7−B
RM2000001	Wash Air Control Valve for Air Wiper Motor	K−2
RM4000001	Side Port Wash/Wipe Air Control Valve for Air Wiper Motor	GK−4

Trico Compatible

SKU#	Product Description	Trico Number
RM1720161	End Port Air Control Valve − Trico Compatible for Air Wiper Motor	F−1720−16NS
RM1720221	End Port Air Control Valve − Trico Compatible for Air Wiper Motor	F−1720−22NS
RM7547001	Side Port Air Control Valve − Trico Compatible for Air Wiper Motor	75470−138
RM7547004	Side Port Air Control Valve − Trico Compatible for Air Wiper Motor	75470−70
RM7547005	Side Port Air Control Valve − Trico Compatible for Air Wiper Motor	75470−82

HP−100 Motor Series

Features:

- HP−100, HP−125, HP−130, HP−135 and HP−150

Notes:

1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Application/Notes	Approx. Weight	Core Group
RM2070001X	Remanufactured HP−100 Motor Series	RM1135001	GS−2070−1	K−113−5	76−85 Peterbilt	2.0 lbs.	AM1001
RM2160001X	Remanufactured HP−100 Motor Series	RM4000001	GS−2160	GK−4	−	2.6 lbs.	AM1001
RM2281001X	Remanufactured HP−100 Motor Series	RM1506001	GS−2281	K−150−6	Original Equipment	3.7 lbs.	AM1001
RM2447001X	Remanufactured HP−100 Motor Series	RM1135001	GS−2447	GK−14	69−81 Kenworth	2.4 lbs.	AM1001
RM2500001X	Remanufactured HP−100 Motor Series	RM1115001	GS−2500	K−111−5	Motor only − use existing bracket	1.6 lbs.	AM1001
RM2540001X	Remanufactured HP−100 Motor Series	RM1506001	GS−2540−1	K−150−6	Original Equipment	3.6 lbs.	AM1001
RM2631001X	Remanufactured HP−100 Motor Series	RM1000001	GS−2631	GK−1	−	3.2 lbs.	AM1001
RM3495001X	Remanufactured HP−100 Motor Series	RM1225001	GS−3495	K−122−5	−	2.2 lbs.	AM1001

HP−200 Motor Series

Features:

- HP−200 and HP−225
- Replacement for Air Push II Motor Series

Notes:

1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Application/Notes	Approx. Weight	Core Group
RM1300201X	Remanufactured HP−200 Motor Series	RM1107001	A21−13002−1	K−110−7	Motor Only	3.0 lbs.	AM1001
RM1851002X	Remanufactured HP−200 Motor Series	RM1117001	GS−1851−2	K−111−7	1979−81 Kenworth	2.5 lbs.	AM1001
RM1853601X	Remanufactured HP−200 Motor Series	RM1117001	GS−1853−6−L	K−111−7	−	2.5 lbs.	AM1001
RM1853602X	Remanufactured HP−200 Motor Series	RM1117001	GS−1853−6−R	K−111−7	−	2.4 lbs.	AM1001
RM2598001X	Remanufactured HP−200 Motor Series	RM1500001	GS−2598	GK−15	−	4.0 lbs.	AM1001
RM3165001X	Remanufactured HP−200 Motor Series	RM1165001	GS−3165	K−116−5	Single Motor System	4.3 lbs.	AM1001
RM3250001X	Remanufactured HP−200 Motor Series	RM1137001	GS−3250	K−113−7	Single Motor System	5.1 lbs.	AM1001

Super Challenger Motor Series

Features:

- M−555−DEG and MD−713−DEG

Notes:

1) When replacing a Trico Air Motor you must replace the Air Control Valve also.

SKU#	Product Description	Control Valve Number	Sprague Air Wiper Motor Number	Sprague Control Valve Number	Approx. Weight	Core Group
RM1576001X	Remanufactured Super Challenger Motor Series Air Wiper Motor	RM1225001	GS−1576	K−122−5	2.8 lbs.	AM1001

WINDSHIELD WIPER SYSTEM

PROBLEM	PROBABLE CAUSE	SOLUTION
Motor fails to start.	1. Compressor malfunction. 2. Air line leak or break. 3. Control valve contaminated. 4. Motor valve malfunction. 5. Linkage binding or worn.	1. Repair compressor. 2. Secure or replace. 3. Clean and lubricate valve. 4. Replace motor. 5. Free up or replace.
Air to motor, but shaft immobile.	1. Broken driver loose or cracked.	1. Replace.
Motor and shaft operable, but arm stationary.	1. Arm driver loose or cracked.	1. Secure or replace.
Slow motor operation.	1. Air line leak or break. 2. Control valve contaminated. 3. Internal pressure loss. 4. Motor valve malfunction.	1. Secure or replace. 2. Clean and lubricate valve. 3. Replace motor. 4. Replace motor.
Erratic motor operation.	1. Valve pin off center or short. 2. Tee binding on reverser rod. 3. Main "O"Rings worn or dry. 4. Cylinder wall contaminated or scoured. 5. Exhaust ports clogged. 6. Unused parking end plate closed. 7. Motor valve malfunction.	1. Replace motor. 2. Replace motor. 3. Replace motor. 4. Replace motor. 5. Clean. 6. Remove restriction. 7. Replace motor.
Slam action operation.	1. Internal pressure loss. 2. Air port clogged. 3. Motor valve malfunction.	1. Replace motor. 2. Replace motor. 3. Replace motor.
Short sweep operation.	1. Valve pin off center. 2. Motor valve malfunction. 3. Internal pressure loss. 4. Tight main bearings.	1. Replace motor. 2. Replace motor. 3. Replace motor. 4. Replace motor.
Over sweep operation.	1. Worn gear and rack. 2. Worn or broken piston stops. 3. Loose main bearings. 4. Worn arm pivot.	1. Replace motor. 2. Replace motor. 3. Replace motor. 4. Replace motor.

AIR FILTER

It is desirable to have a small air filter for the wiper system. The filter should be the "absorption" type for use with hydrocarbon gases, vapors and varnish solids. The filter should be placed in air line leading to control valves.

IN LINE OILER

These units will act as an air filter as well as keeping a supply of oil going to the wiper system. Unit should have a drain and oil change at least twice a year.

ALCOHOL INJECTOR

These units are very useful for vehicles operating in severe cold conditions. Precautions should be taken to keep sufficient lubricant in the motor as alcohol will tend to wash it away. If used heavily, it may be necessary to remove the motor valve and manually regrease unit.

PREVENTATIVE MAINTENANCE − Windshield Wiper Motors

These instructions are included to help you increase the service life of a new or rebuilt wiper motor unit. Applicable motors are the Power Plus Challenger, Power Plus Super Challenger and Air Push II. HP−100 Series & HP−200 Series.

One of the best preventative actions one can take is not to let the wiper system sit too long without operation. An active truck wiper system should run every other day, if only for a few cycles. This action will keep the lubricant and "O"rings moveable and less likely to take a set. This is very important on older vehicles or systems which pass along a large amount of air line contamination. Contaminants tend to thin lubricant so as to wash it from the motor valve. It can be strong enough to attach "O"rings, causing swelling and deterioration. The most common failure is that fluid enters the motor, washes away lubricant and dries on the "O"rings causing them to stick. This is why an active motor is less likely to fail. Several additional steps can be taken to prevent this failure and prolong the life of the motor.

PREVENTATIVE MAINTENANCE − Additional Lubricants Added To the Motor

Additional lubricants can be used as a preventative maintenance or as a field fix for sticky units. If "O"rings are not damaged and the motor is not frozen, lubricant injected into the air lines will keep a motor running. We recommend that one half ounce be injected into each motor at a location as close to the motor valve as possible. Allow motor to run fifteen minutes (remove arm or place a rag under blade) to work the lubricant through the valve.

On an average system, lubricating in this manner every six months is sufficient. Where heavy contamination is present, more frequent applications may be required. This is not a substitute for proper maintenance but can give relief for most contaminated systems.

A light viscosity, wax−free oil is recommended. Do not use any type of penetrating fluid or oil. While these will free a motor, they may do more harm than good. They will break down lubricants in the motor and attack "O"rings. Most are not intended for pneumatic use. Only under emergency situations should these be used and shoud be followed by the addition of lubricating oil and possibly a breakdown and manual regreasing of the motor.

Notes

This section is intended to assist in determining the proper replacement clutch assembly for your specific application. Please follow the steps below to assure that you take full advantage of the information provided.

CUSTOMER REQUIRED INFORMATION

BASIC VEHICLE INFORMATION

1. MAKE:
2. MODEL:
3. YEAR:

ENGINE DATA

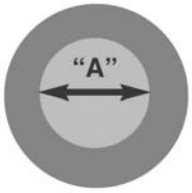
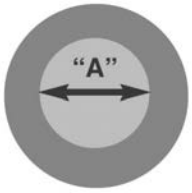
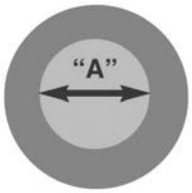
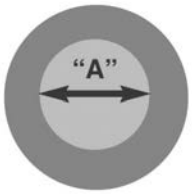
1. MAKE:	Caterpillar Cummins Detroit Diesel Mack Etc.
2. FLYWHEEL:	a.) Flat or POT (if POT, Depth) b.) Counter Bore (for Disc) (See Counter Bore Information pages) c.) Bolt Circle
3. MODEL/SERIES:	
4. HORSEPOWER:	(See Application pages at end of section)
5. TORQUE RATING:	(See Application pages at end of section)
6. INPUT SHAFT SPLINE SIZE:	SAE 2"−10, 1−3/4"−10, etc.

CLUTCH DATA

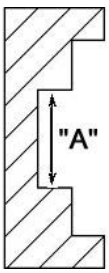
1. CLUTCH SIZE:	11", 12", 13", 14", 15−1/2" (O.D. of Clutch Disc Assembly)
2. CLUTCH TYPE:	Push or Pull
3. CLUTCH MANUFACTURER:	Lipe Spicer Rockwell Eaton Valeo Etc.
4. SPLINE SIZE:	2"−10, 1−3/4"−10, etc.
5. DISC TYPE:	Spring Dampened Rigid Organic Facing Ceramic Facing
6. COVER BOLT CIRCLE:	(To match Flywheel B.C.)

FLYWHEEL COUNTER BORE INFORMATION

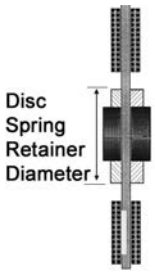
IMPORTANT: What is the flywheel counter bore on the vehicle?

	4 Standard SAE Sizes ("A")	Typical Application Information
	**7.09" − 7.25"**	Standard discs with 7" spring retainers. *
	**8.62" − 8.76"**	10 spring discs and standard discs with 7" spring retainers will usually work
	**9.28" − 9.38"**	Disc spring retainer diameter usually needs to be minimum 8.5" to work
	**10.1" − 10.14"**	6, 7, 9 spring discs. 9" − 10" disc spring retainers needed

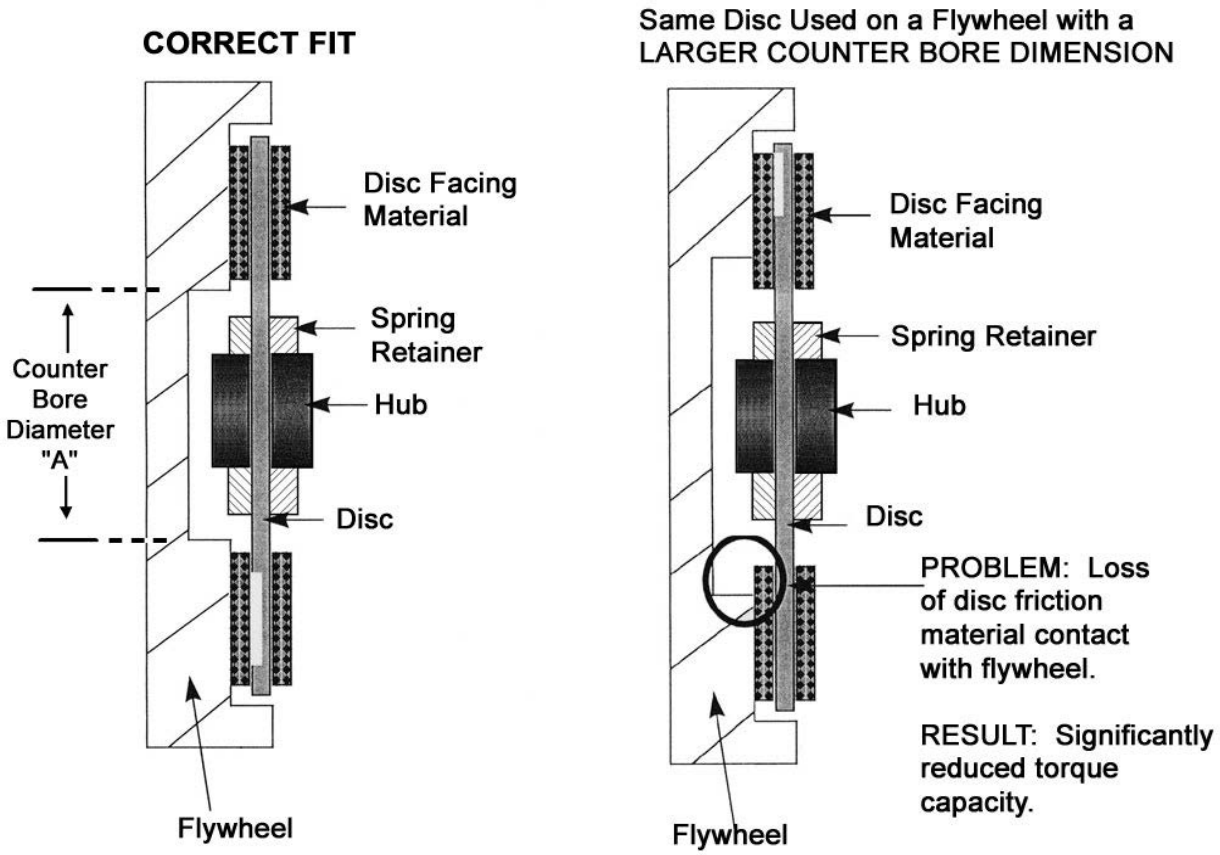
Flywheel Cross−Section



* Disc Cross−Section

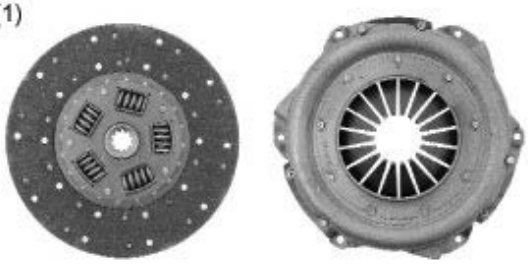


FLYWHEEL COUNTER BORE INFORMATION

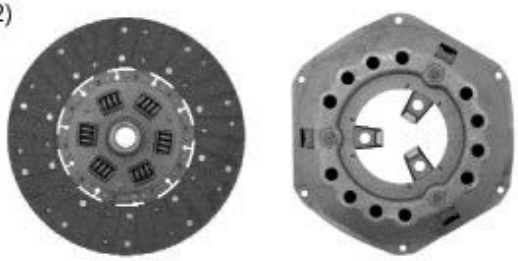


Push Type, Single Plate

(1)



(2)



Notes:

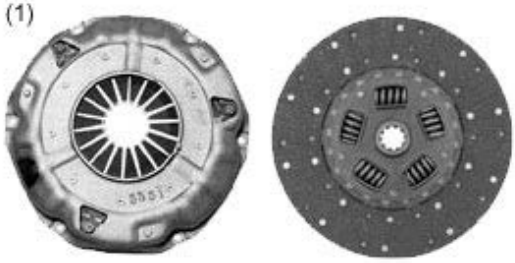
1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Pic. #	Core Group
RC10091023X	Remanufactured Single Plate, (Cone Diaphragm) Push Type Clutch Pack	RCA1009X	RCD1023RX	Damp Organic	1−1/16" − 10T	30 lbs.	Ford	1	CA1101
RC18574018X	Remanufactured Single Plate, Push Type Clutch Pack	RCA1857X	RCD4018RX	Damp Organic	1" − 23T	30 lbs.	Dodge	2	CA1101

Push Type, Single Plate

(1)



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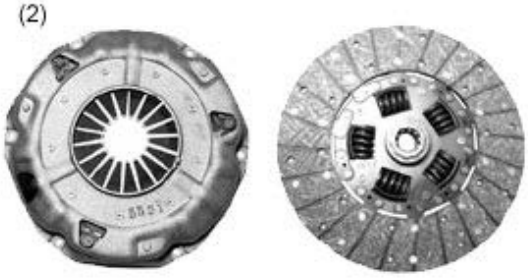


Features:

- Diaphragm Style Cover

Specifications:

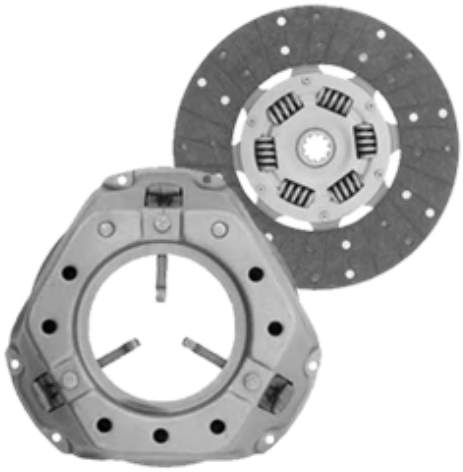
Approximate Weight 28 lbs.

Notes:

1) Discs are remanufactured.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Diaphragm	Application	Pic. #	Core Group
RC54733735X	Reman. Single Plate, Push Type Clutch Pack	RCA5473X	RCD3735RX	Damp Organic	1−1/8" − 10T	Flat	Chevrolet − GMC	1	CA1101
RC55511011X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5505X	RCD1011RX	Damp Organic	1−1/16" − 10T	Cone	Special	2	CA1101
RC55513348X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5551X	RCD3348RX	Damp Organic	1−1/8" − 10T	Crown	Chevrolet − GMC	2	CA1101
RC55514148X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5551X	RCD4148RX	Damp Organic	1−1/8" − 26T	Crown	Chevrolet − GMC	2	CA1101

Push Type, Single Plate



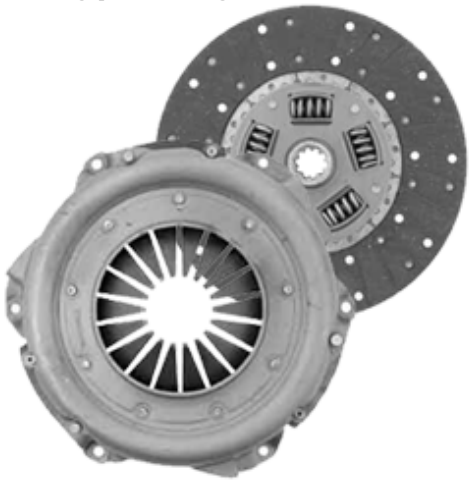
Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC04650872X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0465X	RCD0872RX	Damp Organic	1−1/16" − 10T	23 lbs.	Ford	CA1101

Push Type, Single Plate

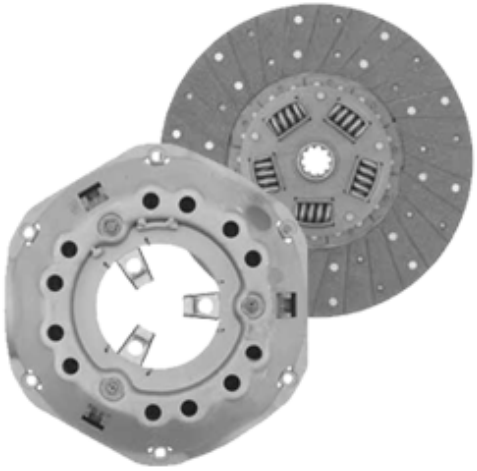


Notes:

1) Discs are remanufactured.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC00331011X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0033X	RCD1011RX	Damp Organic	1−1/16" − 10T	30 lbs.	Ford	CA1101
RC00491023X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0049X	RCD1023RX	Damp Organic	1−1/16" − 10T	30 lbs.	Ford	CA1101

Push Type, Single Plate



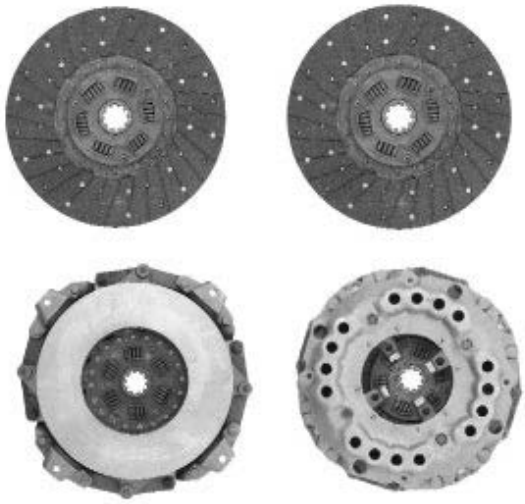
Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC18653904X	Remanufactured Single Plate, Push Type Clutch Pack	RCA1865X	RCD3904RX	Damp Organic	1−1/8" − 10T	28 lbs.	Chevrolet−GMC (Gas)	CA1201

Push Type, Two Plate



Notes:	
1)	Discs are remanufactured.

SKU#	Product Description	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC12663368X	Remanufactured Two Plate, Push Type Clutch Pack	Damp Organic (2)	1−1/2" − 10T	59 lbs.	Chevrolet−GMC	CA1201

Push Type, Single Plate

Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC19093904X	Remanufactured Single Plate, (Bent Diaphragm) Push Type Clutch Pack	RCA1909X	RCD3904RX	Damp Organic	1−1/8" − 10T	28 lbs.	Chevrolet−GMC (Gas)	CA1201
RC19094195X	Remanufactured Single Plate, (Bent Diaphragm) Push Type Clutch Pack	RCA1909X	RCD4195RX	Damp Organic	1−1/8" − 10T	28 lbs.	Chevrolet−GMC (Diesel)	CA1201

Push Type, Single Plate

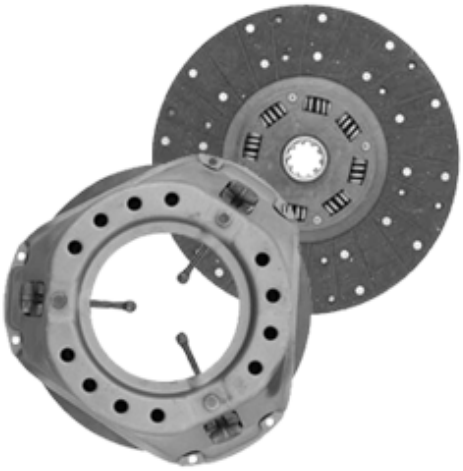
Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC06281251X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0628X	RCD1251RX	Damp Ceramic	1−3/8" − 10S	42 lbs.	Timberjack	LP1201

Push Type, Single Plate



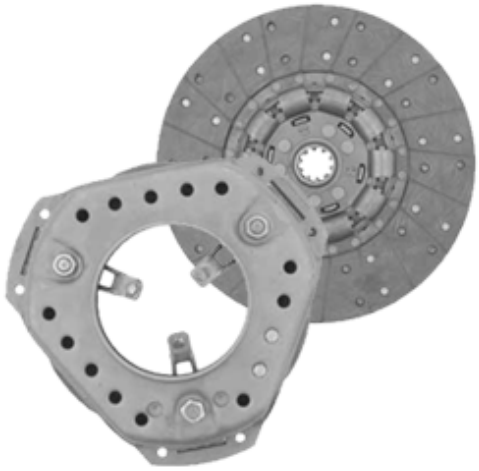
Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC02630568X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0263X`	RCD0568RX	Damp Organic	1−3/8" − 10T	30 lbs.	Ford	CA1201

Push Type, Single Plate



Notes:

1) Discs are remanufactured.

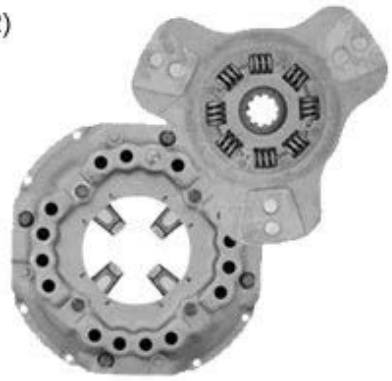
2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC54295121X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5429X	RCD5121RX	Damp Organic	1−1/4" − 10T	34 lbs.	International	CA1201

Push Type, Single Plate

(1)

(2)



(3) Diaphragm Style Cover (not illustrated)

Notes:

1) Discs are remanufactured.

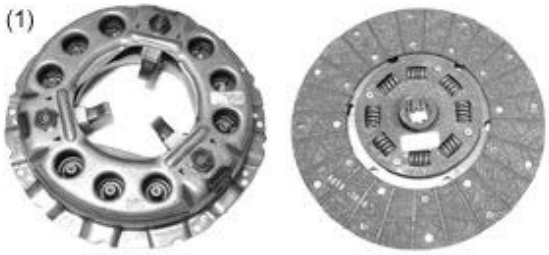
2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Pic. #	Core Group
RC18662824X	Remanufactured Single Plate, Push Type Clutch Pack	RCA1866X	RCD2824RX	Damp Organic	1−1/2" − 10T	35 lbs.	Chevrolet−GMC	1	CA1301
RC18662942X	Remanufactured Single Plate, Push Type Clutch Pack	RCA1866X	RCD2942RX	Damp Organic	1−3/8" − 10T	35 lbs.	Dodge	1	CA1301
RC18664182X	Remanufactured Single Plate, Push Type Clutch Pack	RCA1882X	RCD4182RX	Damp Ceramic	1−1/2" − 10T	33 lbs.	Chevrolet−GMC	2	CA1301
RC19191027X	Remanufactured Single Plate, Push Type Clutch Pack − Diaphragm	RCA1919X	N/A	Damp Ceramic	1−1/2" − 10T	45 lbs.	Chevrolet−GMC	3	CA1301

Push Type, Single Plate

Flat Flywheel, 1.25"−10 Spline

(1)



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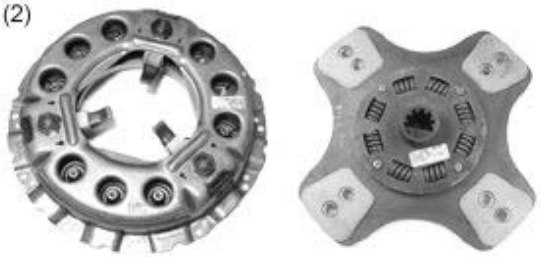


Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

Specifications:

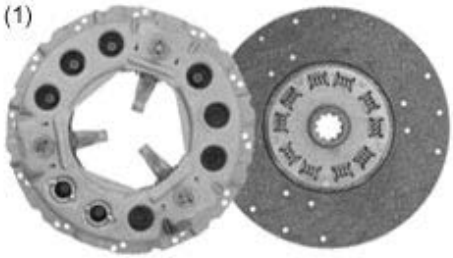
Approximate Weight 35 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Picture Number	Core Group
RC1933114X	Reman. Push Type, Single Plate, Flat Flywheel, 1.25"−10 Spline	RC3301933X	1300091802	Damp Organic	350	14.125 14.625	Perkins Navistar	1	LP3301
RC1933117X	Reman. Push Type, Single Plate, Flat Flywheel, 1.25"−10 Spline	RC3301933X	1300091902	Damp Ceramic	600	14.125 14.625	Navistar	2	LP3301

Push Type, Single Plate

Flat Flywheel, 1.38"−10 Spline

(1)



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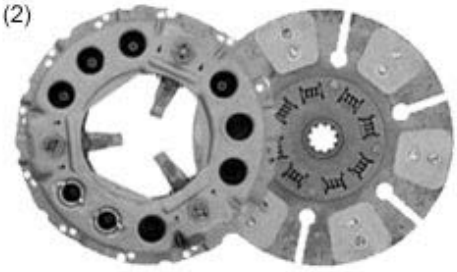


Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

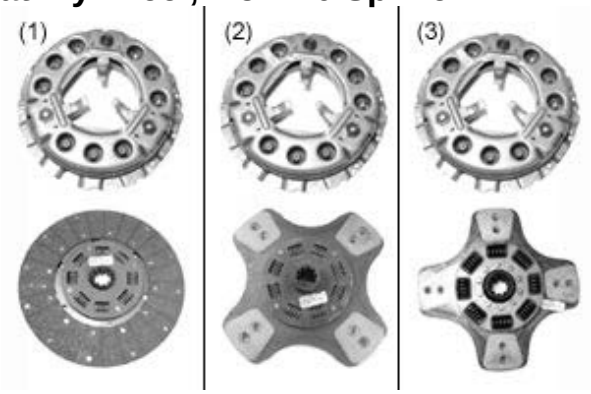
Specifications:

Approximate Weight 44 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Pic. #	Core Group
RC1938124X	Reman. Push Type, Single Plate, Flat Flywheel, 1.38"−10 Spline	RC3301938X	1300091803	Damp Organic	350	14.125 14.625	Ford/Dodge	1	LP3301
RC1938127X	Reman. Push Type, Single Plate, Flat Flywheel, 1.38"−10 Spline	RC3301938X	1300091903	Damp Ceramic	350	14.125 14.625	Ford/Dodge	2	LP3301

Push Type, Single Plate

Flat Flywheel, 1.5"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

Specifications:

Approximate Weight 45 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Pic. #	Core Group
RC1933134X	Reman. Push Type, Single Plate, Flat Flywheel	RC3301933X	1300091135	Damp Organic	350	14.125 14.625	Perkins	1	LP3301
RC1935136X	Reman. Push Type, Single Plate, Flat Flywheel	RC3301935X	3300091865	Damp Ceramic	500	375 mm 14.764	Renault	2	LP3301
RC1938134X	Reman. Push Type, Single Plate, Flat Flywheel	RC3301938X	1300091135	Damp Organic	350	14.125 14.625	Chevrolet GMC	1	LP3301
RC1938137X	Reman. Push Type, Single Plate, Flat Flywheel	RC3301938X	1300091904	Damp Ceramic	500	14.125 14.625	Chevrolet GMC	2	LP3301
RC2077136X	Reman. Push Type, Single Plate, Flat Flywheel	RC3302077X	3300092078	Damp Ceramic	500	14.125 14.625	CAT 3116 Engine CAT 3126 Engine	3	LP3301

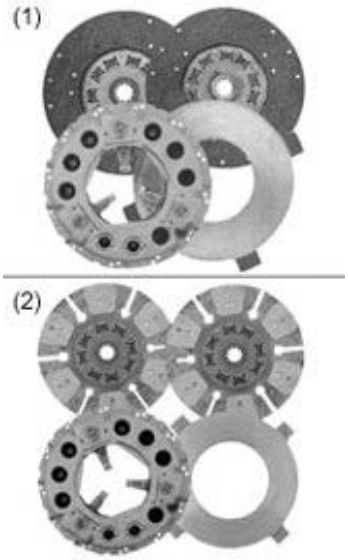
Push Type, Single Plate

Flat Flywheel, 1.75"−10 Spline

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Approx. Weight	Core Group
RC2416146X	Reman. Push Type, Single Plate, Flat Flywheel, 1.75"−10 Spline, 13" Lipe Clutch Pack	3300612416	3300092425	Damp Ceramic	500	375mm 14.764	Various	46 lbs.	LP3301

Push Type, Two Plate

1.062 Recess Flywheel, 1.5"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assembly and new intermediate plate.

Specifications:

Approximate Weight 68 lbs.

Notes:

1) ** For Flat Flywheel must use **AK−315** Adapter Kit.

2) *** For Flat Flywheel must use **AK−316** Adapter Kit.

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torq.	Bolt Circle	Application	Pic. #	Core Group
RC1931134X	Reman. Push Type, Two Plate, 1.062** Recess Flywhl.	RC3301931X	1300091134 (FWS) 1300091135 (PPS)	C025−0094	Damp Organic	600	14.125 14.625	Cummins	1	LP3301
RC1937134X	Reman. Push Type, Two Plate, 1.062*** Recess Flywhl.	RC3301937X	1300091134 (FWS) 1300091135 (PPS)	C025−0094	Damp Organic	600	14.125 14.625	Chev−GMC Cummins	1	LP3301
RC1989134X	Reman. Push Type, Two Plate, 1.062** Recess Flywhl.	RC3301989X	1300091134 (FWS) 1300091135 (PPS)	C025−0094	Damp Organic	600	14.125 14.625	Navistar Ford	1	LP3301
RC1989138X	Reman. Push Type, Two Plate, 1.062** Recess Flywhl.	RC3301989X	1300091530 (FWS) 1300091531 (PPS)	C025−0094	Damp Ceramic	750	14.125 14.625	Navistar Ford	2	LP3301

Push Type, Two Plate

1.062 Recess Flywheel, 1.75"−10 Spline

Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assembly and new intermediate plate.

Specifications:

Approximate Weight 70 lbs.

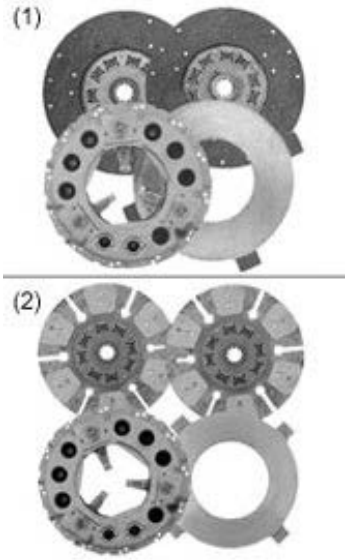
Notes:

1) ****** For Flat Flywheel must use **AK−315** Adapter Kit.

SKU#	Product Description	Cover Assembly	Disc Assemblies	Intermediate Plate	Disc Type	Max. Torque	Bolt Circle	Application	Core Group
RC1931144X	Reman. Push Type, Two Plate, 1.062** Recess Flywheel, 1.75"−10 Spline	RC3301931X	1300091136 (FWS) 1300091137 (PPS)	C025−0094	Damp Organic	600	14.125 14.625	Cummins	LP3301

Push Type, Two Plate

1.478 Recess Flywheel, 1.5"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assembly and new intermediate plate.

Specifications:

Approximate Weight 81 lbs.

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torque	Bolt Circle	Application	Pic. #	Core Group
RC1940132X	Reman. Push Type, Two Plate, 1.478 Recess Flywheel, 1.5"−10 Spline	RC3301940X	1300060830	C025−0096	Rigid Organic	−	−	Ford Gas	1	LP3301
RC1940136X	Reman. Push Type, Two Plate, 1.478 Recess Flywheel, 1.5"−10 Spline	RC3301940X	1300091530 (FWS) 1300091531 (PPS)	C025−0096	Damp Ceramic	−	−	Ford Gas	2	LP3301
RC1941134X	Reman. Push Type, Two Plate, 1.478 Recess Flywheel, 1.5"−10 Spline	RC3301941X	1300091134 (FWS) 1300091135 (PPS)	C025−0094	Damp Organic	600	14.500	Cat 3208	1	LP3301

Pull Type, Two Plate

Flat Flywheel, 1.75"−10 Spline

Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.

Specifications:

Application CAT 3116 Engine (215 HP and up) and CAT 3126 Engine

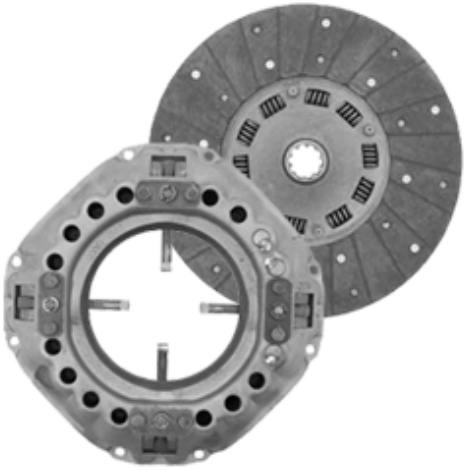
Notes:

1) *** Original installation requires AK−313 Adapter Kit.

2) **LP2070546** and **RC2070546X** includes AK313 adapter ring.

SKU#	Product Description	Cover Assembly	Disc Assemblies	Intermediate Plate	Disc Type	Max. Torque	Bolt Circle	Approximate Weight	Core Group
RC2070146X	Reman. Pull Type, Two Plate, Flat*** Flywheel. 1.75−10 Spline	RC3302070X	3300092073M (FWS) 3300092074M (PPS)	C0250094	Damp Ceramic	750	14.125 14.625	77 lbs.	LP3302

Push Type, Single Plate



Features:

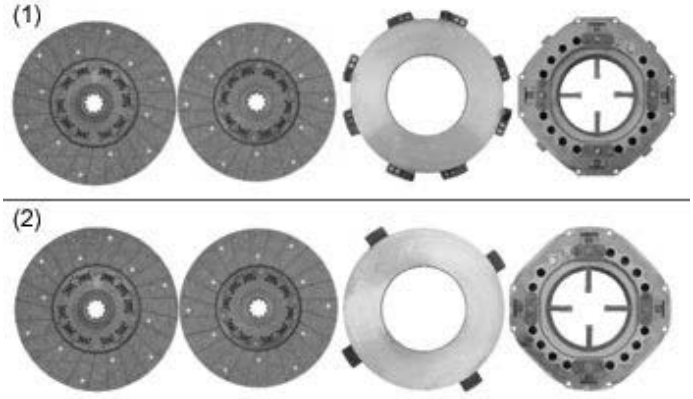
- Remanufactured

Notes:

1) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC03860629KX	Remanufactured Single Plate, Push Type Clutch Pack	RCA0386X	RCD0629RX	Damp Kevlar	1−3/8" − 10T	34 lbs.	Ford	CA1301
RC05390094X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0539X	RCD0094RX	Damp Organic	1−1/8" − 10T	35 lbs.	Chevrolet−GMC	CA1301
RC05390629X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0539X	RCD0629RX	Damp Organic	1−3/8" − 10T	34 lbs.	Ford	CA1301

Push Type, Two Plate



Specifications:

Reman. Cover Assembly RCA1014X

Notes:

1) **RC7040999X** requires AK313 adapter ring.

SKU#	Product Description	Disc Type	Spline Size	Approx. Weight	Application	Pic. #	Core Group
RC1014766X	Remanufactured Two Plate, Push Type Clutch Pack	Damp Organic (2)	1−1/2" − 10T	70 lbs.	Ford Gas, Flywheel Depth 1.477"	1	MU1303
RC7040999X	Remanufactured Two Plate, Push Type Clutch Pack	Damp Organic (2)	1−1/2" − 10T	59 lbs.	Ford, Cat Engine	2	MU1303

Push Type, Single Plate

Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC54355123X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5435X	RCD5123RX	Damp Organic	1−1/2" − 10T	49 lbs.	Navistar	CA1301
RC54355210X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5435X	RCD5210RX	Damp Organic	1−1/4" − 10T	49 lbs.	Navistar	CA1301

Standard

HN10723722 Shown

Features:

- All components are 100% new
- Current Spicer style throw out bearing collar
- 6 coil spring with 3 assist spring technology
- Course thread adjusting ring
- Spring style adjustment
- Fully indexable intermediate plate
- Strap Drive Technology

Specifications:

Disc Facing CB Ceramic Button

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10723710	14" New Standard Clutch Pack 1.75"−10 Spline	2	2800	8	3 Pad VTL CER	860	7"	125
HN10723722	14" New Standard Clutch Pack 1.75"−10 Spline	2	2800	8	3 Pad CB	860	7"	125
HN10734224	14" Standard Clutch Pack 2.0" − 10 Spline	2	2800	8	4 Pad CB	900	7"	125
HN1076835	14" New Standard Clutch Pack 1.75"−10 Spline	1	3200	8	3 Pad CB	620	7"	80
HN10770116	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 1.75" Spline	2	2800	8	Organic	800	7"	125
HN10770316	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 2.0" − 10 Spline	2	2800	8	Organic	800	7"	125
HN10803553	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 1.75" − Spline	2	3600	8	Organic	1150	7"	125

EZ–Pedal Replacement

HN10892582 Shown

Features:

- All components are 100% new
- Current Spicer style throw out bearing collar
- Dual grease ports on all 15–1/2" Clutches
- 6 coil spring with 3 assist spring technology
- Course thread adjusting ring
- Spring style adjustment
- Fully indexable intermediate plate
- Strap Drive Technology

Specifications:

Disc Facing CB Ceramic Button

Notes:

1) EZ–PedalÅ™ – Trademarked by Eaton Corporation

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10803582	14" 1.75" 10 EZ–Pedal Replacement	2	3600	8	Organic	1150	7"	112
HN10805059	14" New EZ–Pedal Replacement 2.0"–10 Spline	2	3600	8	4 Pad CB	1400	7"	112
HN10806359	14" 1.75"–10 EZ–Pedal Replacement	2	3600	8	4 Pad–CB	1250	7"	112
HN10839174	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline	2	4000	10	4 Pad CB	1650	8–1/2"	140
HN10839178	15.5" 2" X 10 EZ–Pedal Replacement	2	4000	10	Organic	1450	8–1/2"	140
HN10839181	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline	2	4000	8	4 Pad CB	1400	7"	130
HN10839182	15.5" 2"–10 E–Z Pedal Replacement	2	4000	8	Organic	1400	7"	130
HN10839193H	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline	2	4000	10	6 Pad CB	1860	8–1/2"	148
HN10892520TM	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	1860	10"	146
HN10892525HTM	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	2250	10"	148
HN10892525TM	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	2050	10"	148
HN10892582	15.5" New EZ–Pedal Replacement 2.0"–10 Spline	2	4000	7	Organic	1400	10"	143
HN10892582H	15–1/2" New EZ–Pedal Replacement 2.0"–10 Spline	2	4000	7	6 Pad CB	1700	10"	148

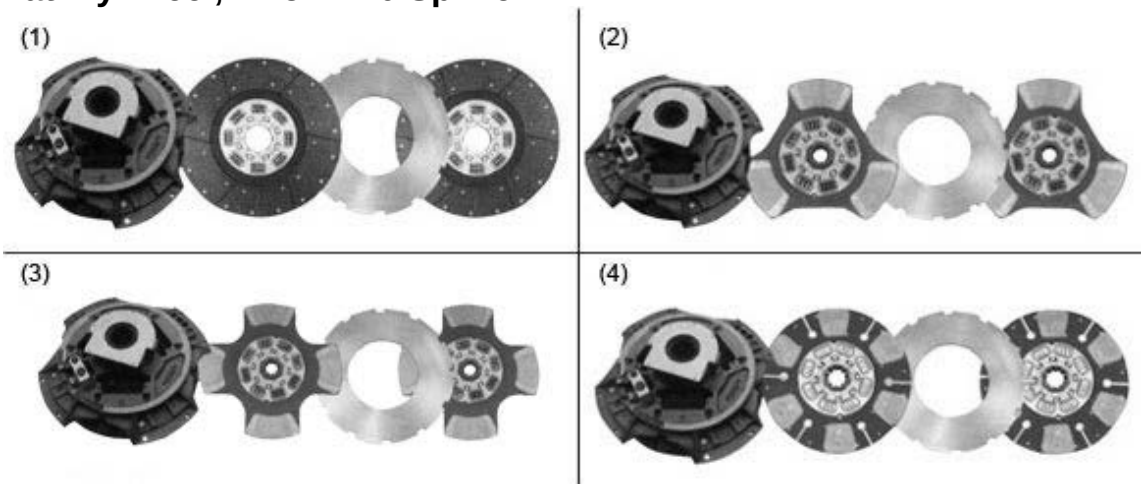
SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10893551	15-1/2" New EZ-Pedal Replacement 2.0"-10 Spline - Mack Only	2	4000	9	4 Pad CB	1650	10"	143
HN10893551H	15-1/2" New EZ-Pedal Replacement 2.0"-10 Spline - Mack Only	2	4000	9	6 Pad CB	1760	10"	148
HN10893592HTM	15-1/2" New EZ-Pedal Replacement 2.0"-10 Spline (TORQUEMONSTER) - Mack Only	2	4000	9	6 Pad CB	2250	10"	150

Pull Type, Single Plate

SKU#	Product Description	Disc Type	Spline Size	Approximate Weight	Application	Core Group
RC1477583X	Remanufactured Single Plate, (Diaphragm) Pull Type Clutch Pack	Damp Ceramic	1−3/4" − 10T	63 lbs.	Ford 7.8 L.	CA1402

Pull Type Two Plate

Flat Flywheel, 1.75" − 10 Spline



Note: Carbotic (Wellman Friction Products)
Clutches are a direct replacement for Eaton/Spicer® EX Pedal®

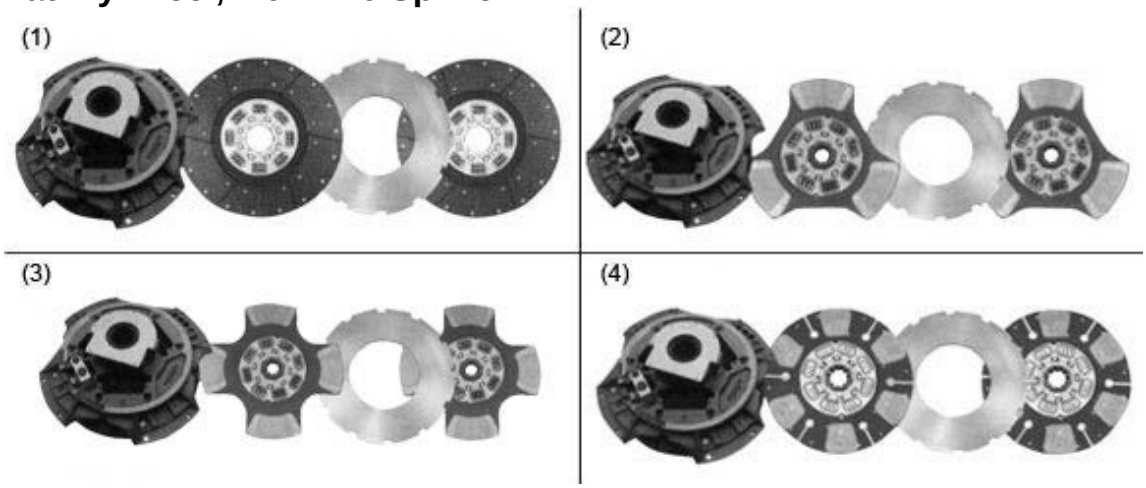
Features:

- All components are 100% new
- Current Spicer style throw out bearing collar
- 6 coil spring with 3 assist spring technology
- Course thread adjusting ring
- Spring style adjustment
- Fully indexable intermediate plate
- Strap Drive Technology

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10803582	14" 1.75" 10 EZ−Pedal Replacement	2	3600	8	Organic	1150	7"	112
HN10806359	14" 1.75"−10 EZ−Pedal Replacement	2	3600	8	4 Pad−CB	1250	7"	112

Pull Type Two Plate

Flat Flywheel, 2.0" − 10 Spline



Carbotic® Wellman Friction Products
Clutches are a direct replacement for Eaton/Spicer® EZ Pedal®

Features:

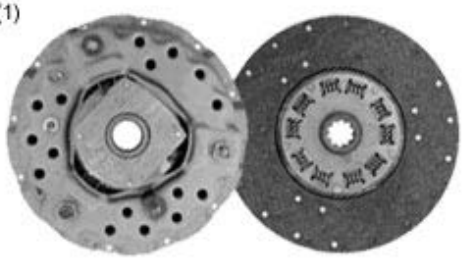
- All components are 100% new
- Current Spicer style throw out bearing collar
- 6 coil spring with 3 assist spring technology
- Course thread adjusting ring
- Spring style adjustment
- Fully indexable intermediate plate
- Strap Drive Technology

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10805059	14" New EZ−Pedal Replacement 2.0"−10 Spline	2	3600	8	4 Pad CB	1400	7"	112

Pull Type, Single Plate

Flat Flywheel, 1.75"−10/2.0"−10 Spline

(1)



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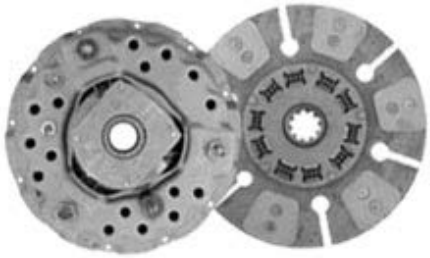


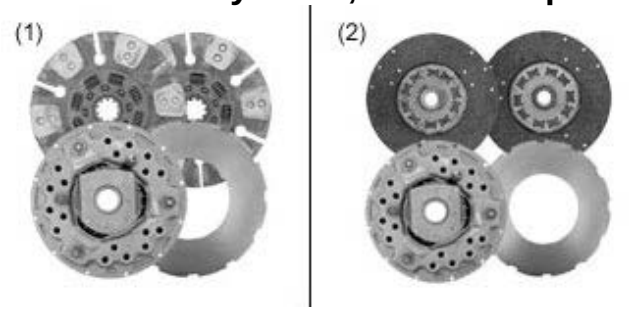
Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Approx. Weight	Application	Pic. #	Core Group
RC1760646X	Reman. 14" Pull Type, Single Plate, Flat Flywheel, 2"−10 Spline	RC141760X	1400092302	Damp Ceramic	650	15.500	51 lbs.	Various	2	LP1402
RC1854604X	Reman. Pull Type, Single Plate, Flat Flywheel, 1.75"−10 Spline	RC141854X	1400092213	Damp Organic	500	15.500	70 lbs.	Various	1	LP1402
RC1854618X	Reman. Pull Type, Single Plate, Flat Flywheel, 1.75"−10 Spline	RC141854X	1400092211	Damp Ceramic	650	15.500	66 lbs.	Various	2	LP1402

Pull Type, Two Plate

2.937 Recess Flywheel, 1.75"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assemblies and new intermediate plate.

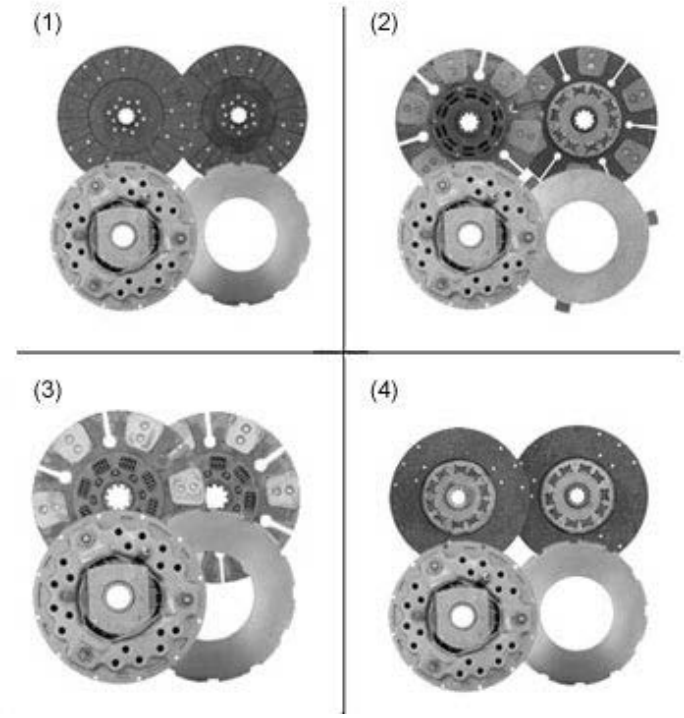
Specifications:

Approximate Weight 100 lbs.

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torq.	Bolt Circle	App.	Pic. #	Core Group
RC1707607X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 1.75"−10 Spline	RC141707X	1400092212 1400092213	C0250070	Damp Organic	1350	15.500	Chevrolet GMC Ford Navistar	2	LP1402
RC1777607X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 1.75"−10 Spline	RC141777X	1400092303 1400092304	C0250070	Damp Organic	1300	15.500	Chevrolet GMC Ford Navistar	2	LP1402
RC1777608X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 1.75"−10 Spline	RC141777X	1400092299 1400092300	C0250070	Damp Ceramic	1300	15.500	Chevrolet GMC Ford Navistar	1	LP1402

Pull Type, Two Plate

2.937 Recess Flywheel, 2.0"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assemblies and new intermediate plate.

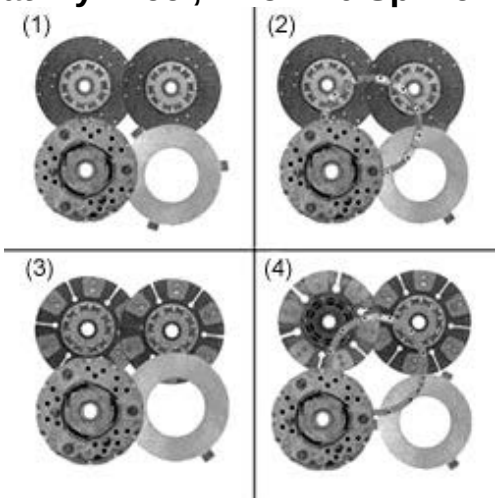
Specifications:

Bolt Circle 15.500

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torq.	Approx. Weight	App.	Pic. #	Core Group
RC1760706X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	RC141778X	1400092301 1400092302	C0250082	Damp Cer.	1200	51 lbs.	DDC	2	LP1402
RC1767608X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	RC141767X	1400092301 1400092302	C0250070	Damp Cer.	1300	51 lbs.	Chev. GMC Ford Nav.	3	LP1402
RC1778607X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	RC141778X	1400092305 1400092306	C0250070	Damp Org.	900	97 lbs.	Chev. GMC Ford Nav.	4	LP1402
RC1778608X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	RC141778X	1400092301 1400092302	C0250070	Damp Cer.	1300	96 lbs.	Chev. GMC Ford Nav.	3	LP1402
RC1778641X	Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	RC141778X	DK241	C0250070	Spline Saver (Rigid Org.)	900	56 lbs.	Chev. GMC Ford Nav.	1	LP1402

Pull Type, Two Plate

Flat Flywheel, 1.75"−10 Spline



Features:

- Remanufactured Lipe Clutch Packs contain a remanufactured cover assembly, new disc assemblies and new intermediate plate.

Specifications:

Approximate Weight 107 lbs.

Notes:

1) **Flat Flywheel application requires **AK−285** Adapter Kit.

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torq.	Bolt Circle	App.	Pic. #	Core Group
RC1714604X	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline	RC141714X	1400092212 (FWS) 1400092213 (PPS)	C0250082	Damp Organic	1440	−	Chevrolet GMC Ford Navistar	1	LP1402
RC1714618X	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline	RC141714X	1400092210 (FWS) 1400092211 (PPS)	C0250082	Damp Ceramic	1850	−	Chevrolet GMC Ford Navistar	3	LP1402
RC1714704X	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline with Adapter Ring AK285	RC141714X	1400092212 (FWS) 1400092213 (PPS)	C0250082	Damp Organic	1440	−	Chevrolet GMC Ford Navistar	2	LP1402
RC1714718X	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline with Adapter Ring AK285	RC141714X	1400092210 (FWS) 1400092211 (PPS)	C0250082	Damp Ceramic	1850	−	Chevrolet GMC Ford Navistar	4	LP1402

Push Type, Single Plate

1.187 Recess Flywheel, 1.5"−10 Spline

Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

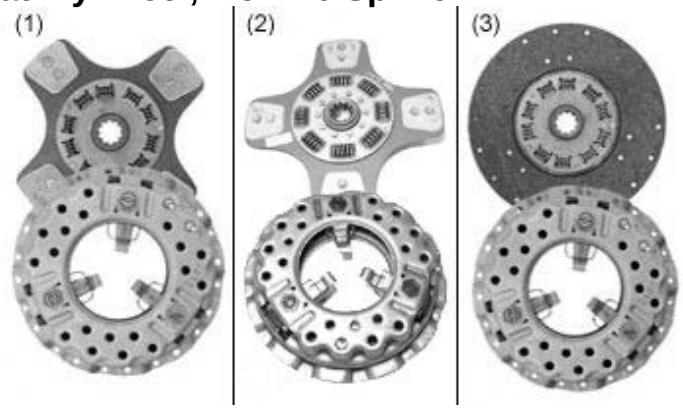
Specifications:

Approximate Weight 51 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Core Group
RC1076604X	Reman. Push Type, Single Plate, 1.187 Recess Flywheel, 1.5"−10 Spline	RC141076X	1400091027	Damp Organic	500	14.750	Ford−Mack	LP1401

Push Type, Single Plate

Flat Flywheel, 1.5"−10 Spline



Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

Specifications:

Approximate Weight 55 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Picture Number	Core Group
RC1047604X	Reman. Push Type, Single Plate, Flat Flywheel, 1.5"−10 Spline	RC141047X	1400091027	Damp Organic	500	15.500	Chevrolet GMC Ford	3	LP1401
RC1086604X	Reman. Push Type, Single Plate, Flat Flywheel, 1.5"−10 Spline	RC141086X	1400091027	Damp Organic	500	15.500	Navistar	3	LP1401
RC1686607X	Reman. Push Type, Single Plate, Flat Flywheel, 1.5"−10 Spline	RC141686X	1400092208	Damp Ceramic	500	15.500	Chevrolet GMC Diesel	2	LP1401
RC1686640X	Reman. Push Type, Single Plate, Flat Flywheel, 1.5"−10 Spline	RC141686X	1400091998	Damp Ceramic	550	15.500	Chevrolet GMC Gas	1	LP1401

Push Type, Single Plate

Flat Flywheel, 1.75"−10 Spline

Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly and new disc assembly.
- Replacement disc assemblies available in new only.

Specifications:

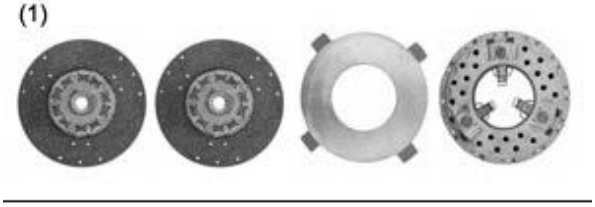
Approximate Weight 57 lbs.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Max. Torque	Bolt Circle	Application	Pic. #	Core Group
RC1113646X	Reman. Push Type, Single Plate, Flat Flywheel, 1.75"−10 Spline	RC141113X	1400092211	Damp Ceramic	500	15.500	Chevrolet−GMC, 3116 Cat	4	LP1401

Push Type, Two Plate

1.062 Recess Flywheel, 1.5"−10 Spline

(1)



(2)

Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly, new disc assemblies and new intermediate plate.

Specifications:

Application	Ford
Approximate Weight	87 lbs.

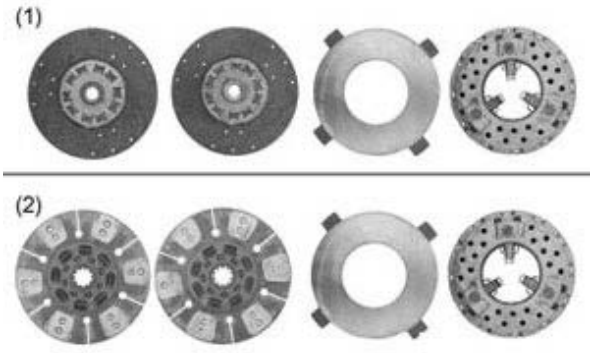
Notes:

1) ** For Flat Flywheel must use **AK−208** Adapter Kit.

SKU#	Product Description	Cover Assembly	Disc Assemblies	Intermediate Plate	Disc Type	Max. Torque	Bolt Circle	Pic. #	Core Group
RC1072604X	Reman. Push Type, Two Plate, 1.062** Recess Flywheel, 1.50"−10 Spline	RC141072X	1400092355 (FWS) 1400092356 (PPS)	C0250100	Damp Organic	600	15.500	1	LP1401
RC1072607X	Reman. Push Type,Two Plate, 1.062** Recess Flywheel, 1.5"−10 Spline	RC141072X	1400092357 (FWS) 1400092208 (PPS)	C0250100	Damp Ceramic	900	15.500	2	LP1401

Push Type, Two Plate

1.093 Recess Flywheel, 1.75"−10 Spline



Features:

- Reman. Lipe Clutch Packs contain a remanufactured cover assembly, new disc assemblies and new intermediate plate.

Specifications:

Approximate Weight 88 lbs.

Notes:

1) ** For Flat Flywheel must use **AK−208** Adapter Kit.

SKU#	Product Description	Cover Assy.	Disc Assy.	Intermed. Plate	Disc Type	Max. Torque	Bolt Circle	Application	Pic. #	Core Group
RC1067645X	Reman. Push Type, Two Plate, 1.093** Recess Flywheel	RC141067X	1400092303 (FWS) 1400092304 (PPS)	C0250100	Damp Organic	1000	15.625	Various Crane	1	LP1401
RC1067646X	Reman. Push Type, Two Plate, 1.093** Recess Flywheel	RC141067X	1400092299 (FWS) 1400092300 (PPS)	C0250100	Damp Ceramic	1200	15.625	Various Crane	2	LP1401
RC1113604X	Reman. Push Type, Two Plate, 1.093** Recess Flywheel	RC141113X	1400092212 (FWS) 1400092213 (PPS)	C0250100	Damp Organic	750	15.500	Chevrolet GMC	1	LP1401
RC1113606X	Reman. Push Type, Two Plate, 1.093** Recess Flywheel	RC141113X	1400092210 (FWS) 1400092211 (PPS)	C0250100	Damp Ceramic	1000	15.500	Chevrolet GMC	2	LP1401
RC1113649X	Reman. Push Type, Two Plate, 1.093** Recess Flywheel	RC141113X	1400092303 (FWS) 1400092304 (PPS)	C0250100	Damp Organic	750	15.500	Caterpillar	1	LP1401

Push Type, Single Plate

Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC06321001X	Remanufactured Single Plate, Push Type Clutch Pack	RCA0632X	RCD1001RX	Rigid Organic	1−1/2" − 10T	35 lbs.	Ford	CA1402

Push Type, Two Plate

Typical

SKU#	Product Description	Disc Type	Spline Size	Approximate Weight	Application	Core Group
RC0588756X	Remanufactured Two Plate, Push Type Clutch Pack	Damp Organic	1−1/2" − 10T	87 lbs.	Ford, Cat Engine	CA1402

Push Type, Single Plate

Notes:

1) Discs are remanufactured.

2) Discs purchased separately are outright. No core charge/return applicable.

SKU#	Product Description	Cover Assembly	Disc Assembly	Disc Type	Spline Size	Approx. Weight	Application	Core Group
RC54245139X	Remanufactured Single Plate, Push Type Clutch Pack	RCA5424X	RCD5139RX	Damp Organic	1−1/2" − 10T	50 lbs.	Navistar, Dodge	CA1402

Pull Type, Single Plate

Flat Flywheel, 1.75"−10 Spline

(1)

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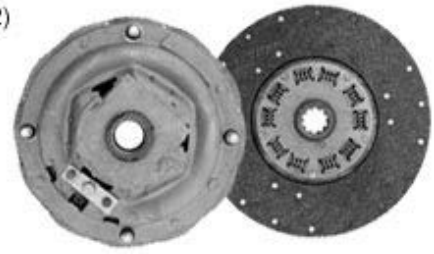


Notes:

1) Spicer Type "RC" Clutch Packs contain remanufactured cover assembly, new disc assemblies and resurfaced intermediate plate.

SKU#	Product Description	Disc Facing	Plate Load	Approximate Weight	Max Torque (lbs. ft.)	Picture	Core group
HN1076835SS	14" Spicer Type Stamped Steel Clutch Pack, Pull Type Single Plate, Flat Flywheel, 1.75" − 10 Spline	3 Pad CB	3200		620	7"	n/a
RC747DCX	Reman. Pull Type, Single Plate, Flat Flywheel, 1.75"−10 Spline	Damp Ceramic	900	70 lbs.	Ford Navistar	1	MU1404
RC747DOX	Reman. Pull Type, Single Plate, Flat Flywheel, 1.75"−10 Spline	Damp Organic	800	72 lbs.	Ford Navistar	2	MU1404

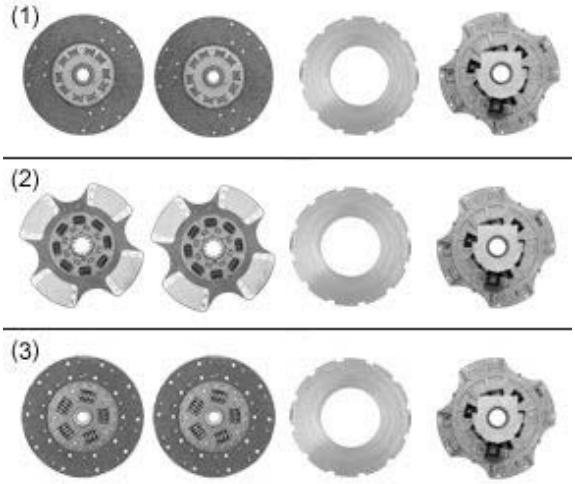
Pull Type, Two Plate

Flat Flywheel, 1.75"−10 Spline

SKU#	Product Description	Plate Load	Disc Spring	Disc Facing	Max Torque (lbs. ft.)	Bore Size
HN10723710SS	14" Spicer Type Stamped Steel Clutch Pack, Pull Type Two Plate, Flat Flywheel 1.75" − 10 Spline	2800	8	3 Pad VTL	860	7"
HN10723722SS	14" Spicer Type Stamped Steel Clutch Pack, Pull Type Single Plate, Flat Flywheel, 1.75" − 10 Spline	2800	8	3 Pad CB	860	7"
LP044ALDC	Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline, New Aluminum	Damp Ceramic	1375	110 lbs.	Ford Navistar	−
RC044STDCX	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline	Damp Ceramic	1375	110 lbs.	Ford Navistar	MU1404
RC044STDKX	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline	Damp Kevlar	1375	110 lbs.	Ford Navistar	MU1404
RC044STDOX	Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"−10 Spline	Damp Organic	1250	110 lbs.	Ford Navistar	MU1404
RC055STDCX	Reman. Pull Type Two Plate, Flat Flywheel, 2.0"−10 Spline	Damp Ceramic	1375	110 lbs.	Ford Navistar	MU1404
RC055STDOX	Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	Damp Organic	1250	110 lbs.	Ford Navistar	MU1404

Pull Type, Two Plate

2.937 Recess Flywheel, 1.75"−10 Spline



Features:

- Easy−PedalÂ™ designated by EZ in Part Number

Specifications:

Cover Type Cast
Application Various

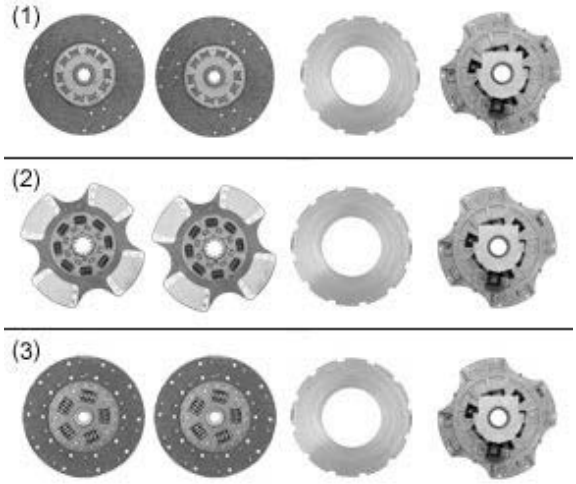
Notes:

1) Contains remanufactured cover assembly, new disc assemblies and resurfaced intermediate plate.

SKU#	Product Description	Max. Torque	Disc Type	Approx. Weight	Pic. #	Core Group
RC400DCX	Standard Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1400	Damp Ceramic	104 lbs.	2	MU1403
RC400DOX	Standard Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1150	Damp Organic	103 lbs.	1	MU1403
RC400EZDCX	Standard Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1400	Damp Ceramic	105 lbs.	2	MU1405
RC400EZDOX	Standard Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1150	Damp Organic	109 lbs.	1	MU1405
RC400ROX	Standard Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1000	Rigid Organic	96 lbs.	3	MU1403

Pull Type, Two Plate

2.937 Recess Flywheel, 2.0"−10 Spline



Features:

- Carbotic® (Wellman Friction Products)
- Kevlar® (Dupont Corporation)
- Easy−PedalÂ™ designated by EZ in Part Number

Specifications:

Cover Type Cast
Application Various

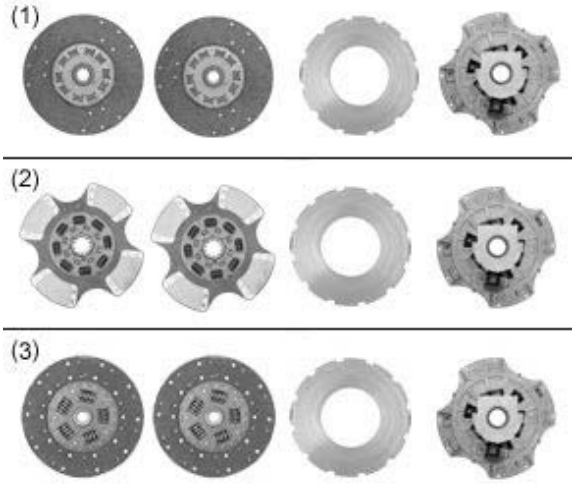
Notes:

1) Remanufactured clutch packs contains remanufactured cover assembly, new disc assemblies and resurfaced intermediate plate.

SKU#	Product Description	Max. Torque (lbs. ft.)	Disc Facing	Wt.	Picture	Core Group
HN10803482	14" Spicer Type Clutch Packs − Standard, Pull Type, 2.937 Recess Flywheel, 2.0" − 10 Spline	1150	Organic	112	2	−
RC390CX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1400	Damp Carbotic	103 lbs.	2	MU1403
RC390DCX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1400	Damp Ceramic	103 lbs.	2	MU1403
RC390DOX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1150	Damp Organic	104 lbs.	1	MU1403
RC390EZCX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1400	Damp Carbotic	104 lbs.	2	MU1405
RC390EZDCX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1400	Damp Ceramic	108 lbs.	2	MU1405
RC390EZDOX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1150	Damp Organic	106 lbs.	1	MU1405
RC390EZKX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	−	Damp Kevlar	103 lbs.	2	MU1405
RC390KX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	−	Damp Kevlar	103 lbs.	2	MU1403
RC390ROX	Standard Reman. Pull Type, Two Plate, 2.937 Recess Flywheel, 2.0"−10 Spline	1000	Rigid Organic	98 lbs.	3	MU1403

Pull Type, Two Plate

2.937 Recess Flywheel, 1.75"−10 Spline



Specifications:

Application Various

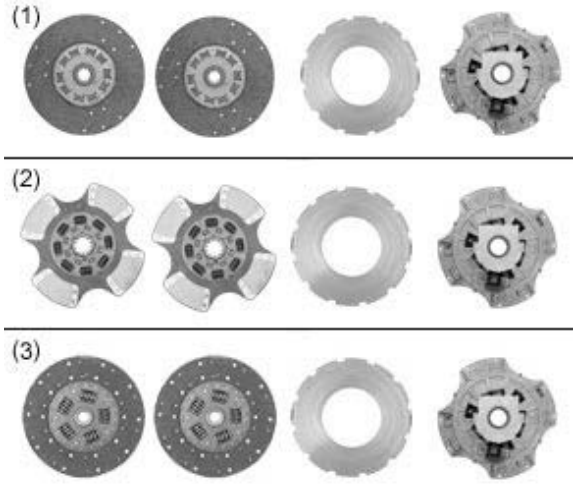
Notes:

1) Contains remanufactured cover assembly, new premium disc assemblies and new intermediate plate.

SKU#	Product Description	Max. Torque	Disc Type	Approx. Weight	Picture Number	Core Group
MU400DCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1400	Damp Ceramic	104 lbs.	2	MU1403
MU400DOX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1150	Damp Organic	102 lbs.	1	MU1403
MU400ROX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1000	Rigid Organic	102 lbs.	3	MU1403
MU400SSCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1150	Rigid Ceramic Spline Saver	100 lbs.	2	MU1403
MU400SSOX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 1.75"−10 Spline	1000	Rigid Organic Spline Saver	100 lbs.	3	MU1403

Pull Type, Two Plate

2.937 Recess Flywheel, 2.0"−10 Spline



Features:

- Carbotic® (Wellman Friction Products)
- Kevlar® (Dupont Corporation)
- Easy−PedalÂ™ designated by EZ in Part Number

Specifications:

Application Various

Notes:

1) Contains remanufactured cover assembly, new premium disc assemblies and new intermediate plate.

SKU#	Product Description	Max. Torque	Disc Type	Approx. Weight	Picture Number	Core Group
MU390CX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1400	Damp Carbotic	103 lbs.	2	MU1403
MU390DCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1400	Damp Ceramic	102 lbs.	2	MU1403
MU390DOX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1150	Damp Organic	102 lbs.	1	MU1403
MU390EZCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1400	Damp Carbotic	108 lbs.	2	MU1405
MU390EZDCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1400	Damp Ceramic	106 lbs.	2	MU1405
MU390EZDOX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1150	Damp Organic	106 lbs.	1	MU1405
MU390EZKX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	−	Damp Kevlar	108 lbs.	2	MU1405
MU390KX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	−	Damp Kevlar	103 lbs.	2	MU1403
MU390ROX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1000	Rigid Organic	102 lbs.	3	MU1403
MU390SSCX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1150	Rigid Ceramic Spline Saver	100 lbs.	2	MU1403
MU390SSOX	Premium Reman. Pull Type, Two Plate, 2.937" Recess Flywheel, 2.0"−10 Spline	1000	Rigid Organic Spline Saver	100 lbs.	3	MU1403

Pull Type Single Plate

Flat Flywheel 1.75" − 10 Spline

(1)

(2)

(3)

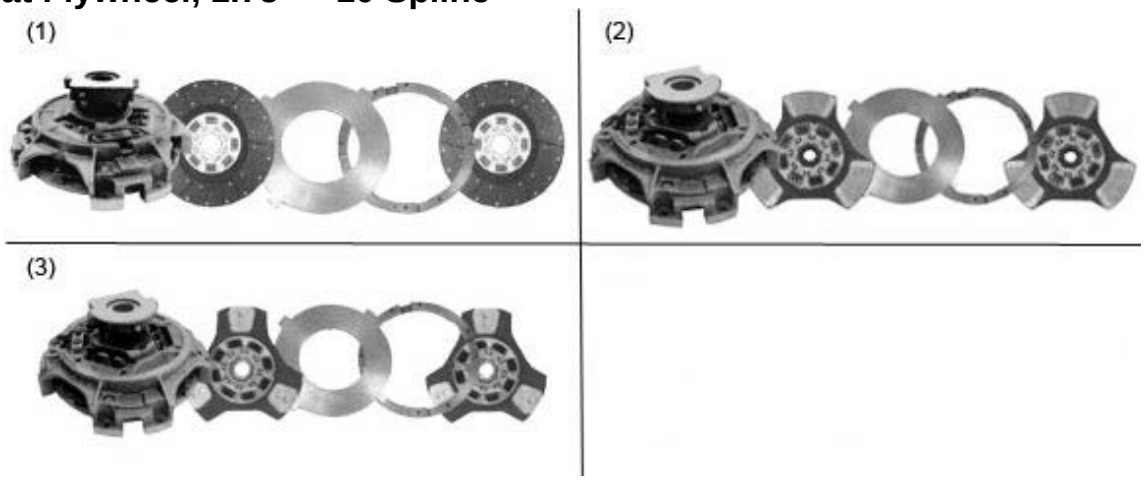
Features:

- All components are 100% new
- Currenct Spicer style throw out bearing collar
- 6 coil spring with 3 assist spring technology
- Fully indexable intermediate plate
- Strap Drive Technology

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN1076835	14" New Standard Clutch Pack 1.75"−10 Spline	1	3200	8	3 Pad CB	620	7"	80
HN1079151	14" New Standard Clutch Pack 1.75" − 10 Spline	1	3200	8	4 Pad CB	650	7"	80

Pull Type Two Plate

Flat Flywheel, 1.75" − 10 Spline

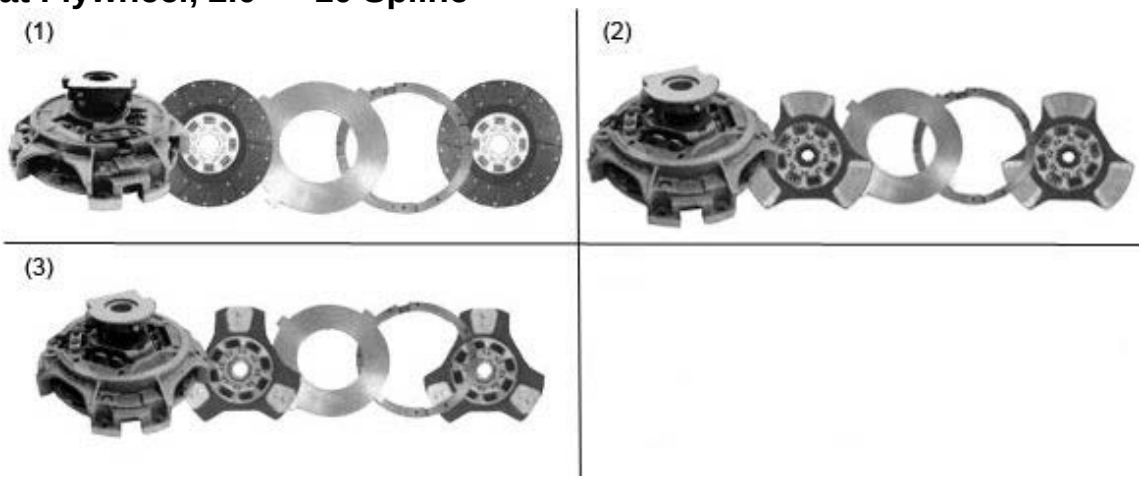


Includes Adaptor Ring and Center Plate

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10770116	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 1.75" Spline	2	2800	8	Organic	800	7"	125
HN10803553	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 1.75" − Spline	2	3600	8	Organic	1150	7"	125

Pull Type Two Plate

Flat Flywheel, 2.0" − 10 Spline

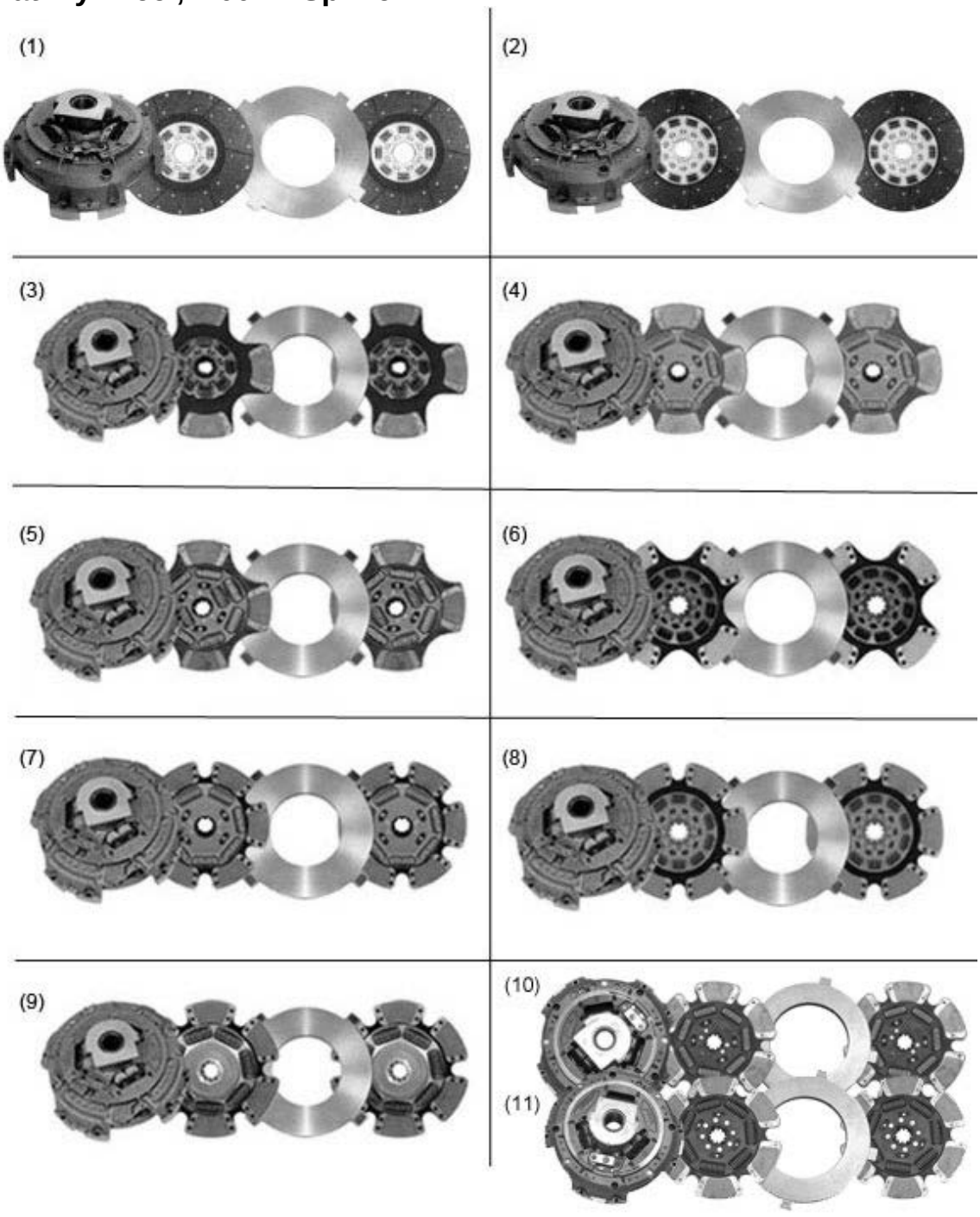


Includes Adaptor Ring and Center Plate

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10734224	14" Standard Clutch Pack 2.0" − 10 Spline	2	2800	8	4 Pad CB	900	7"	125
HN10770316	14" Standard Clutch Pack − Spicer Type, Pull Type Two Plate, Flat Flywheel, 2.0" − 10 Spline	2	2800	8	Organic	800	7"	125

Pull Type Two Plate

Flat Flywheel, 2.00" − Spline



Features:

- All components are 100% new
- Current Spicer style throw out bearing collar
- 6 coil spring with 3 assist spring technology
- Spring style adjustment
- Fully indexable intermediate plate
- Strap Drive Technology

SKU#	Product Description	# of Discs	Plate Load	Disc Spring	Disc Facing	Max. Torque (lbs. ft.)	Bore Size	Wt.
HN10839174	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline	2	4000	10	4 Pad CB	1650	8−1/2"	140
HN10839178	15.5" 2" X 10 EZ−Pedal Replacement	2	4000	10	Organic	1450	8−1/2"	140
HN10839181	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline	2	4000	8	4 Pad CB	1400	7"	130
HN10839182	15.5" 2"−10 E−Z Pedal Replacement	2	4000	8	Organic	1400	7"	130
HN10839193H	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline	2	4000	10	6 Pad CB	1860	8−1/2"	148
HN10892520TM	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	1860	10"	146
HN10892525HTM	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	2250	10"	148
HN10892525TM	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline (TORQUEMONSTER)	2	4000	7 NVL	6 Pad CB	2050	10"	148
HN10892582H	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline	2	4000	7	6 Pad CB	1700	10"	148
HN10893551	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline − Mack Only	2	4000	9	4 Pad CB	1650	10"	143
HN10893551H	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline − Mack Only	2	4000	9	6 Pad CB	1760	10"	148
HN10893592HTM	15−1/2" New EZ−Pedal Replacement 2.0"−10 Spline (TORQUEMONSTER) − Mack Only	2	4000	9	6 Pad CB	2250	10"	150

Pull Type, Two Plate

Flat Flywheel, 1.75"–10/2.0"–10 Spline

(1)

(2)

(3)

(4)

Features:

- Kevlar® (Dupont Corporation)
- Carbotic® (Wellman Friction Products)
- Easy-PedalÅ™ designated by EZ in Part Number

Specifications:

Cover Type Cast

Notes:

1) Rigid discs not recommended.
2) Typical application could vary depending upon vehicle.
3) Remanufactured Clutch Packs contain remanufactured cover assembly, new disc assemblies and resurfaced intermediate plate.

SKU#	Product Description	Maximum Torque Pounds–Feet (Pack)	Disc Springs	Disc Type	Approx. Weight	Typical Application	Required Flywheel Bore Diameter	Pic. #	Core Group
RC018CX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Springs	Damp Carbotic	143 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
RC018DOX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Springs	Damp Organic	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	1	MU1502
RC018EZCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Springs	Damp Carbotic	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
RC018EZDOX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1200	10 Springs	Damp Organic	138 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	1	MU1505
RC018EZHTX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1860	10 Springs	Damp Ceramic 6 Button	147 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
RC018EZKX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Springs	Damp Kevlar	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
RC018EZX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Springs	Damp Ceramic	143 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505

SKU#	Product Description	Maximum Torque Pounds–Feet (Pack)	Disc Springs	Disc Type	Approx. Weight	Typical Application	Required Flywheel Bore Diameter	Pic. #	Core Group
RC018KX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Springs	Damp Kevlar	143 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
RC018X	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Springs	Damp Ceramic	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
RC476DCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1450	–	Damp Ceramic	138 lbs.	Various	7"	2	MU1502
RC476DOX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1200	–	Damp Organic	138 lbs.	Various	7"	1	MU1502
RC476ROX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1000	–	Rigid Organic	135 lbs.	Various	7"	3	MU1502
RC597CX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	–	Damp Carbotic	139 lbs.	Various	7"	2	MU1502
RC597DCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	–	Damp Ceramic (Lipe Style Discs)	137 lbs.	Various	7"	2	MU1502
RC597DOX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1200	–	Damp Organic	139 lbs.	Various	7"	1	MU1502
RC597EZCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	–	Damp Carbotic	141 lbs.	Various	7"	2	MU1505
RC597EZDCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	–	Damp Ceramic (Lipe Style Discs)	144 lbs.	Various	7"	2	MU1505
RC597EZDOX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1200	–	Damp Organic	141 lbs.	Various	7"	1	MU1505
RC597EZKX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	–	Damp Kevlar	135 lbs.	Various	7"	2	MU1505
RC597ROX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1000	–	Rigid Organic	134 lbs.	Various	7"	3	MU1502
RC698CX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	9 Springs	Damp Carbotic	144 lbs.	Late Mack E6/E7	10"	2	MU1502
RC698EZCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	9 Springs	Damp Carbotic	147 lbs.	Late Mack E6/E7	10"	2	MU1505

RC698EZHTX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1860	9 Springs	Damp Ceramic 6 Button	146 lbs.	Late Mack E6/E7	10"	2	MU1505
RC698EZKX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	−	9 Springs	Damp Kevlar	144 lbs.	Late Mack E6/E7	10"	2	MU1505
RC698EZX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	9 Springs	Damp Ceramic	146 lbs.	Late Mack E6/E7	10"	2	MU1505
RC698X	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	9 Springs	Damp Ceramic	144 lbs.	Late Mack E6/E7	10"	2	MU1502
RC700EZCX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Springs	Damp Carbotic	146 lbs.	Cummins N−14	10"	2	MU1505
RC700EZHTX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1700	7 Springs	Damp Ceramic 6 Button	146 lbs.	Cummins N−14	10"	2	MU1505
RC700EZKX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	−	7 Springs	Damp Kevlar	142 lbs.	Cummins N−14	10"	2	MU1505
RC700EZX	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Springs	Damp Ceramic	142 lbs.	Cummins N−14	10"	2	MU1505
RC700X	Standard Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Springs	Damp Ceramic	143 lbs.	Cummins N−14	10"	2	MU1502
RC892520EZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	1860	7NVL	6 Pad − CB	−	−	10"	4	MU1505
RC892525EZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	2050	7NVL	6 Pad − CB	−	−	10"	4	MU1505
RC892525HEZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	2250	7NVL	6 Pad − CB	−	−	10"	4	MU1505
RC892530EZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	1860	7 PDHT	6 Pad − CB	−	−	10"	4	MU1505
RC892535EZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	2050	7 PDHT	6 Pad − CB	−	−	10"	4	MU1505
RC892535HEZX	TORQUEMONSTER Reman. Two Plate, 2.0"−10 Spline	2250	7 PDHT	6 Pad − CB	−	−	10"	4	MU1505
RC893592HEZX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	2250	9 Springs	Damp Ceramic 6 Button	146 lbs.	Late Mack E6/E7	10"	2	MU1505

Pull Type, Two Plate

Flat Flywheel, 1.75"–10/2.0"–10 Spline

(1)

(2)

(3)

Features:

- Kevlar® (Dupont Corporation)
- Carbotic® (Wellman Friction Products)
- Easy-PedalÅ™ designated by EZ in Part Number

Specifications:

Cover Type Cast

Notes:

1) Rigid discs not recommended.
2) Typical application could vary depending upon vehicle.
3) Remanufactured Clutch Packs contain remanufactured cover assembly, new disc assemblies and new intermediate plate.

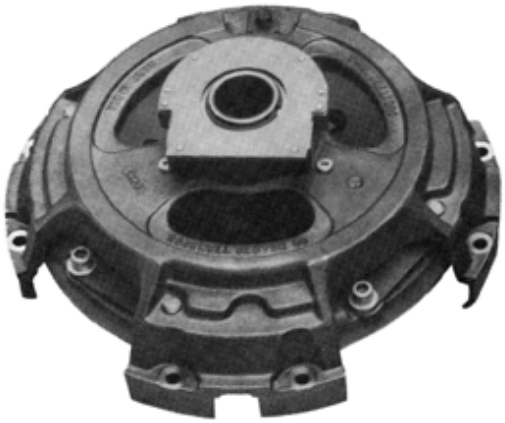
SKU#	Product Description	Max. Torque	Disc Type	Approx. Weight	Typical Application	Required Flywheel Bore Diameter	Pic. #	Core Group
MU018CX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Spring Carbotic	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
MU018EZCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Spring Carbotic	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
MU018EZHTX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline, High Torque	1860	10 Spring Ceramic 6 Button	147 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
MU018EZKX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Spring Kevlar	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
MU018EZX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Spring Ceramic	144 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1505
MU018KX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	10 Spring Kevlar	140 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
MU018X	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	10 Spring Ceramic	144 lbs.	Cat 3406B/E DDA 60 Series Early Mack	8.5"	2	MU1502
MU476DCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1450	Damp Ceramic	137 lbs.	Various	7"	2	MU1502

SKU#	Product Description	Max. Torque	Disc Type	Approx. Weight	Typical Application	Required Flywheel Bore Diameter	Pic. #	Core Group
MU476DOX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1200	Damp Organic	139 lbs.	Various	7"	1	MU1502
MU476ROX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 1.75"–10 Spline	1000	Rigid Organic	137 lbs.	Various	7"	3	MU1502
MU597CX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	Damp Carbotic	137 lbs.	Various	7"	2	MU1502
MU597DCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	Damp Ceramic (Lipe Style Discs)	148 lbs.	Various	7"	2	MU1502
MU597DOX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1200	Damp Organic	139 lbs.	Various	7"	1	MU1502
MU597EZCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	Damp Carbotic	144 lbs.	Various	7"	2	MU1505
MU597EZDCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1450	Damp Ceramic (Lipe Style Discs)	143 lbs.	Various	7"	2	MU1505
MU597EZDOX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1200	Damp Organic	141 lbs.	Various	7"	1	MU1505
MU597EZKX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	Damp Kevlar	144 lbs.	Various	7"	2	MU1505
MU597KX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	–	Damp Kevlar	137 lbs.	Various	7"	2	MU1502
MU597ROX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1000	Rigid Organic	137 lbs.	Various	7"	3	MU1502
MU597SSCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1150	Rigid Ceramic Spline Saver	138 lbs.	Various	7"	not shown	MU1502
MU597SSOX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1000	Rigid Organic Spline Saver	87 lbs.	Various	7"	not shown	MU1502
MU698CX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	9 Spring Carbotic	146 lbs.	Late Mack E6/E7	10"	2	MU1502
MU698EZCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"–10 Spline	1650	9 Spring Carbotic	146 lbs.	Late Mack E6/E7	10"	2	MU1505

MU698EZHTX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline, High Torque	1860	9 Spring Ceramic 6 Button	147 lbs.	Late Mack E6/E7	10"	2	MU1505
MU698EZKX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	−	9 Spring Kevlar	148 lbs.	Late Mack E6/E7	10"	2	MU1505
MU698EZX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	9 Spring Ceramic	147 lbs.	Late Mack E6/E7	10"	2	MU1505
MU698X	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	9 Spring Ceramic	147 lbs.	Late Mack E6/E7	10"	2	MU1505
MU700CX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Spring Carbotic	147 lbs.	Cummins N−14	10"	2	MU1502
MU700EZCX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Spring Carbotic	147 lbs.	Cummins N−14	10"	2	MU1505
MU700EZHTX	Heavy Duty Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline, High Torque	2050	7 Spring Ceramic 6 Button	147 lbs.	Cummins N−14	10"	2	MU1505
MU700EZKX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	−	7 Spring Kevlar	147 lbs.	Cummins N−14	10"	2	MU1505
MU700EZX	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	1650	7 Spring Ceramic	147 lbs.	Cummins N−14	10"	2	MU1505
MU700X	Premium Reman. Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	−	7 Spring Ceramic	147 lbs.	Cummins N−14	10"	2	MU1502

Pull Type, Two Plate

Flat Flywheel, 2.0"−10 Spline



Features:

- Quality remanufactured cover
- New discs tested to five million cycles for maximum durabiltiy

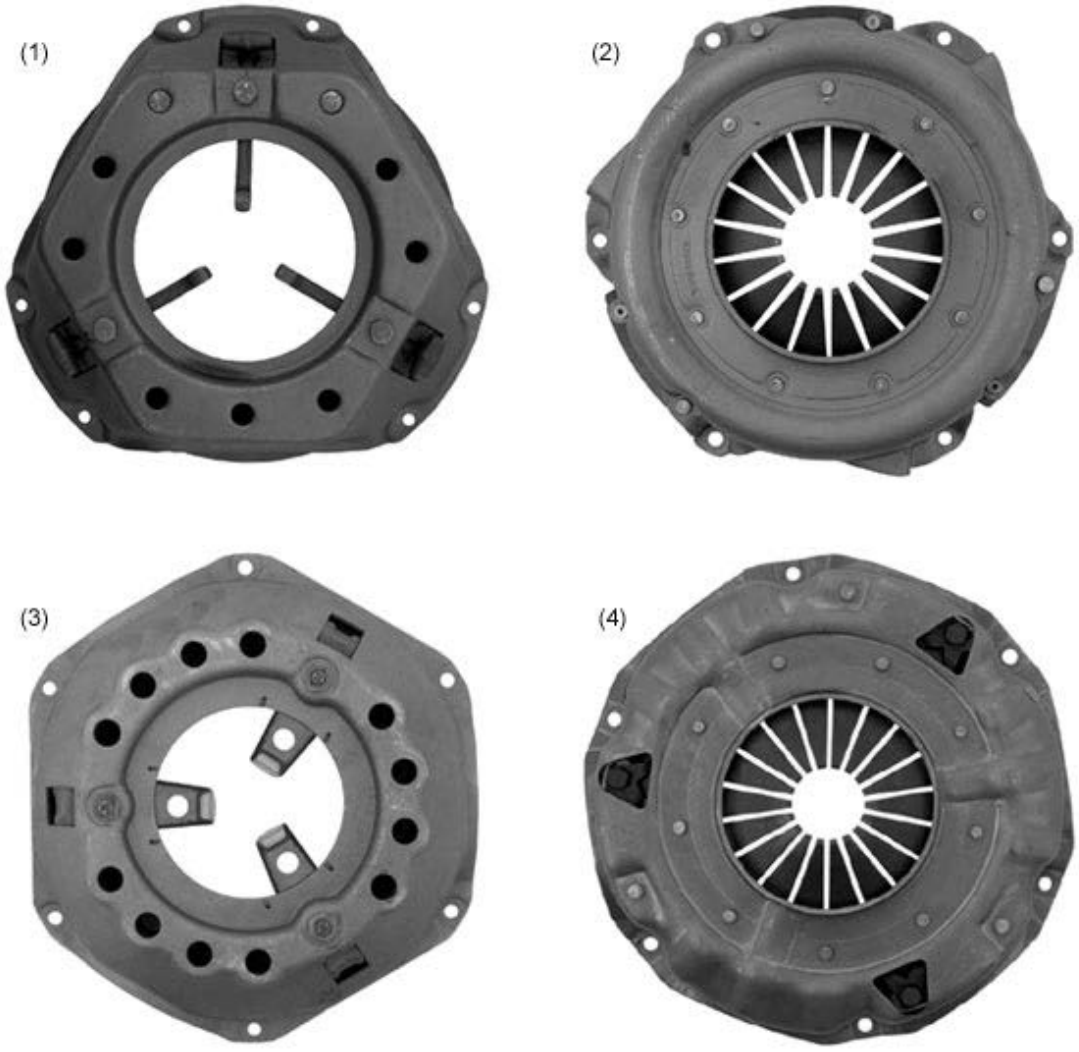
Specifications:

Application Various

SKU#	Product Description	Meritor Part Number	Max. Torque	Plate Load	Disc Type	Required Flywheel Bore Diameter	Approx. Weight	Core Group
RC141101X	Reman. 14" Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	HC14C2200NN32	1400	3200	8 Spring Damp Ceramic	7"	105 lbs.	R1401
RC151406X	Reman. 15−1/2" Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	HC15C2200TN36	1730	3600	8 Spring Damp Ceramic	8.5"	140 lbs.	R1501
RC152705X	Reman. 15−1/2" Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	HC15L2200NW36	1730	3600	7 Spring Damp Ceramic	10"	142 lbs.	R1501
RC152725X	Reman. 15−1/2" Pull Type, Two Plate, Flat Flywheel, 2.0"−10 Spline	HC15L2200ZN36	1730	3600	7 Spring Damp Ceramic	10"	142 lbs.	R1501

Cover Assemblies

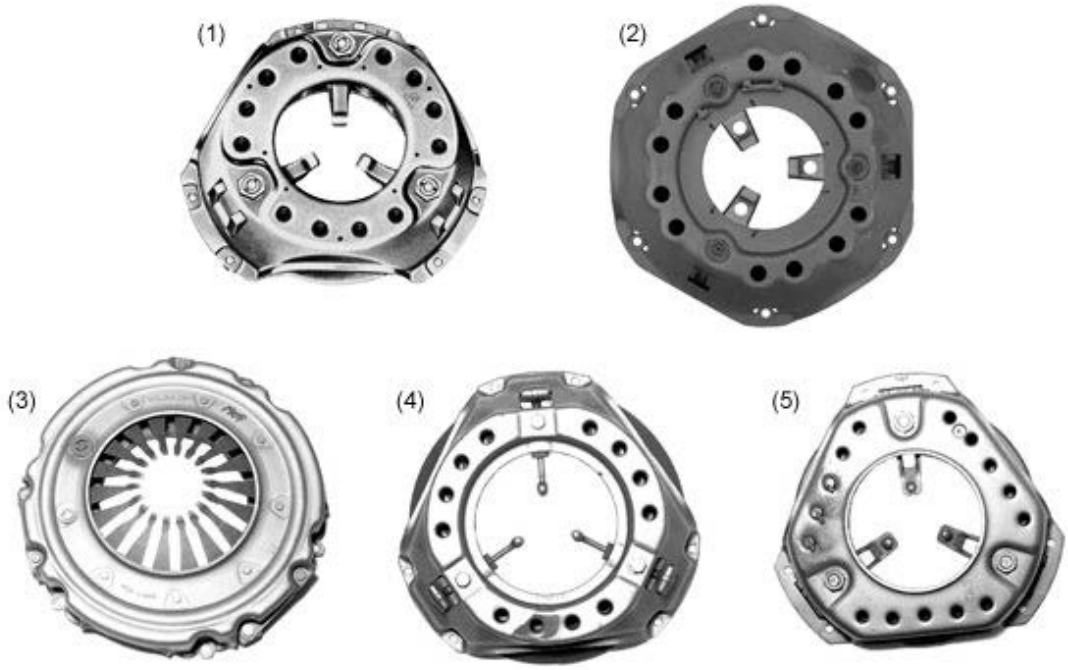
for 11" Clutch



SKU#	Product Description	Pic. #	Core Group
RCA0033X	Remanufactured 11" LUK Cover Assembly	2	CA1101
RCA0049X	Remanufactured 11" LUK Cover Assembly	2	CA1101
RCA0465X	Remanufactured 11" Long Cover Assembly	1	CA1101
RCA1009X	Remanufactured 11" Borg & Beck − LUK Cover Assembly	2	CA1101
RCA1857X	Remanufactured 11" Borg & Beck Cover Assembly	3	CA1101
RCA5473X	Remanufactured 11" GMC Cover Assembly	4	CA1101
RCA5505X	Remanufactured 11" GMC Cover Assembly	4	CA1101
RCA5551X	Remanufactured 11" GMC Cover Assembly	4	CA1101

Cover Assemblies

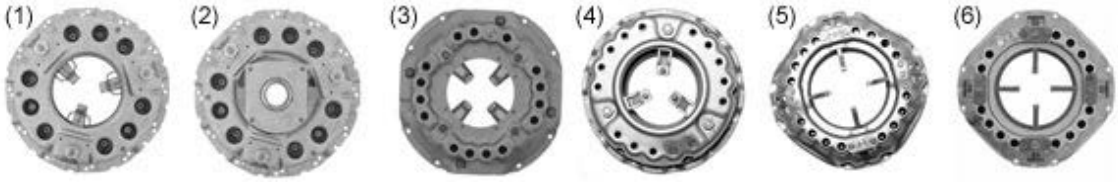
for 12" Clutch



SKU#	Product Description	Pic. #	Core Group
RCA0263X	Remanufactured 12" Long Cover Assembly	4	CA1201
RCA0628X	Remanufactured 12" Lipe Cover Assembly	1	LP1201
RCA1865X	Remanufactured 12" Borg & Beck Cover Assembly	2	CA1201
RCA1909X	Remanufactured 12" Borg & Beck − LUK Cover Assembly	3	CA1201
RCA5429X	Remanufactured 12" Rockford Cover Assembly	5	CA1201

Cover Assemblies

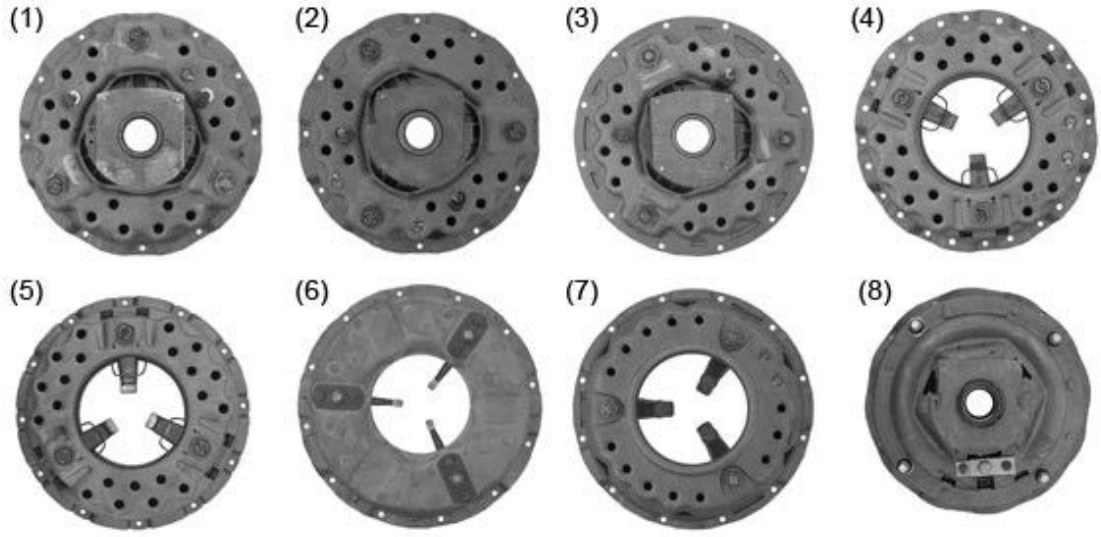
for 13" Clutch



SKU#	Product Description	Picture Number	Core Group
RC3301931X	Remanufactured 13" Lipe	1	LP3301
RC3301933X	Remanufactured 13" Lipe	1	LP3301
RC3301935X	Remanufactured 13" Lipe	1	LP3301
RC3301937X	Remanufactured 13" Lipe	1	LP3301
RC3301938X	Remanufactured 13" Lipe	1	LP3301
RC3301940X	Remanufactured 13" Lipe	1	LP3301
RC3301941X	Remanufactured 13" Lipe	1	LP3301
RC3301989X	Remanufactured 13" Lipe	1	LP3301
RC3302077X	Remanufactured 13" Lipe	1	LP3301
RCA0539X	Remanufactured 13" Long	5	CA1301
RCA1014X	Remanufactured 13" Long	6	MU1303
RCA1866X	Remanufactured 13" Borg & Beck	3	CA1301
RCA1882X	Remanufactured 13" Borg & Beck	3	CA1301
RCA5435X	Remanufactured 13" Rockford	4	CA1301

Cover Assemblies

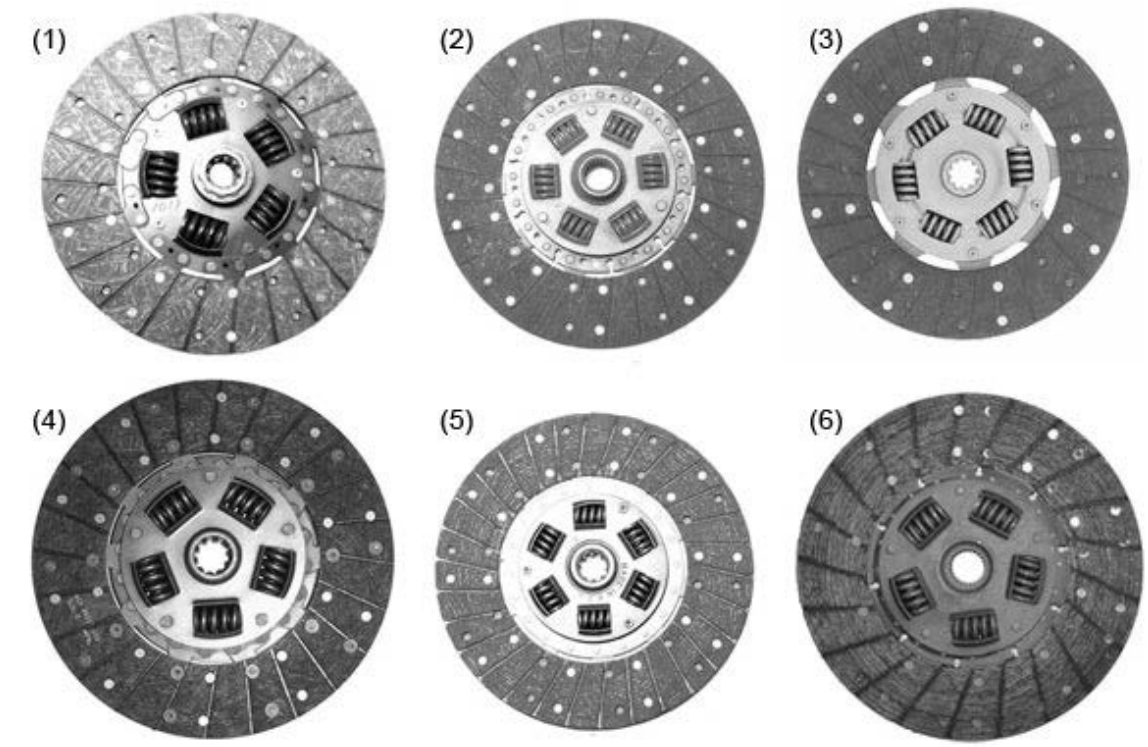
for 14" Clutch



SKU#	Product Description	Picture Number	Core Group
CA044X	Remanufactured 14" Spicer	8	MU1404
RC141047X	Remanufactured 14" Lipe	4	LP1401
RC141072X	Remanufactured 14" Lipe	5	LP1401
RC141076X	Remanufactured 14" Lipe	4	LP1401
RC141086X	Remanufactured 14" Lipe	4	LP1401
RC141098X	Remanufactured 14" Lipe	4	LP1401
RC141113X	Remanufactured 14" Lipe	5	LP1401
RC141686X	Remanufactured 14" Lipe	4	LP1401
RC141707X	Remanufactured 14" Lipe	3	LP1402
RC141714X	Remanufactured 14" Lipe	2	LP1402
RC141767X	Remanufactured 14" Lipe	3	LP1402
RC141777X	Remanufactured 14" Lipe	3	LP1402
RC141778X	Remanufactured 14" Lipe	3	LP1402
RC141854X	Remanufactured 14" Lipe	1	LP1402
RCA0632X	Remanufactured 14" Long	6	CA1402
RCA5424X	Remanufactured 14" Rockford	7	CA1402

Disc Assemblies

for 11" Clutch

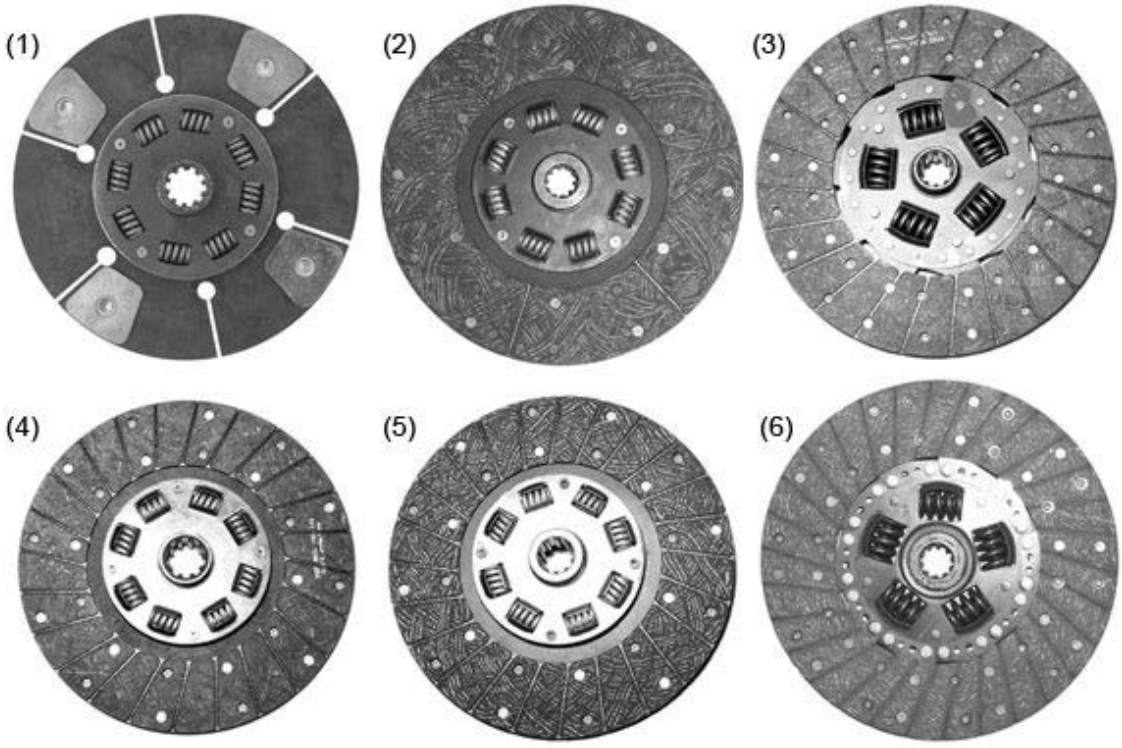


Discs purchased separately are outright.
No core charge/return applicable.

SKU#	Product Description	Pic. #
RCD0872RX	Remanufactured Disc Assembly for 11" Long Clutch	3
RCD1011RX	Remanufactured Disc Assembly for 11" GMC, LUK Clutch	1
RCD1023RX	Remanufactured Disc Assembly for 11" Borg & Beck, LUK Clutch	5
RCD3348RX	Remanufactured Disc Assembly for 11" GMC Clutch	4
RCD3735RX	Remanufactured Disc Assembly for 11" GMC Clutch	4
RCD4018RX	Remanufactured Disc Assembly for 11" Borg & Beck Clutch	2
RCD4148RX	Remanufactured Disc Assembly for 11" GMC Clutch	6

Disc Assemblies

for 12" Clutch

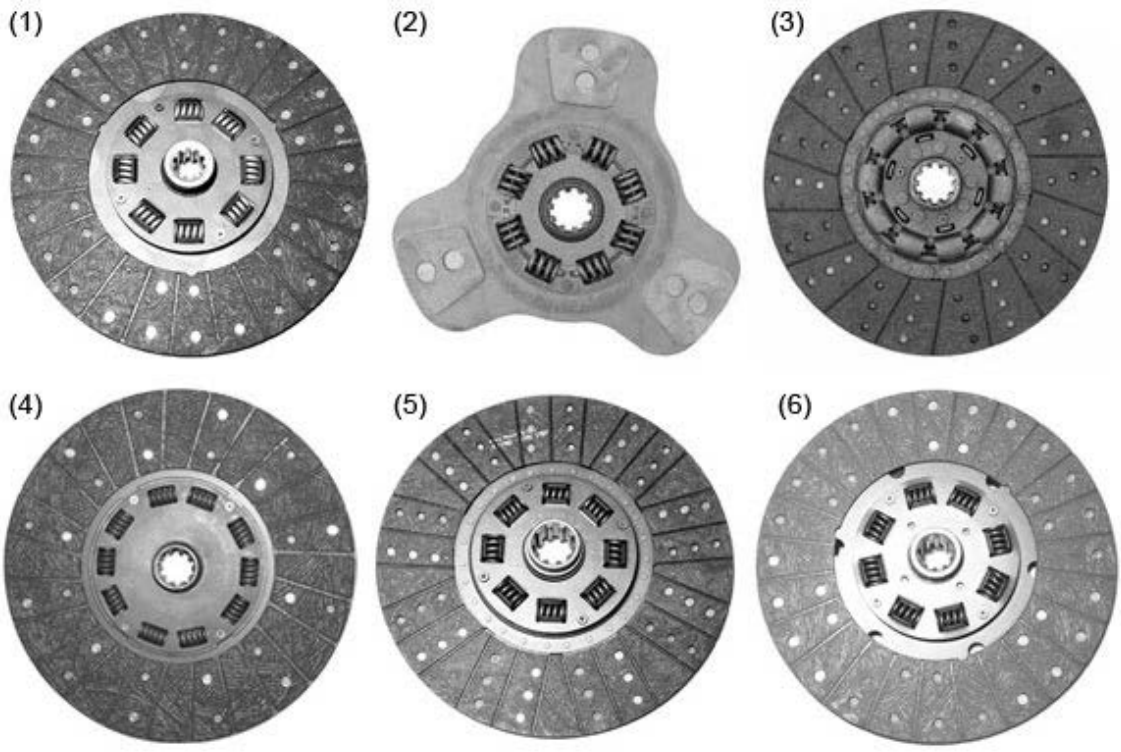


Discs purchased separately are outright.
No core charge/return applicable.

SKU#	Product Description	Pic. #
RCD0134RX	Remanufactured Disc Assembly for 12" Lipe Clutch	2
RCD0568RX	Remanufactured Disc Assembly for 12" Long Clutch	4
RCD1110RX	Remanufactured Disc Assembly for 12" Lipe Clutch	2
RCD1251RX	Remanufactured Disc Assembly for 12" Lipe Clutch	1
RCD3904RX	Remanufactured Disc Assembly for 12" Borg & Beck, Borg & Beck−LUK Clutch	3
RCD4195RX	Remanufactured Disc Assembly for 12" Borg & Beck−LUK Clutch	6
RCD5121RX	Remanufactured Disc Assembly for 12" Rockford Clutch	5

Disc Assemblies

for 13" Clutch



Remanufactured Discs purchased separately are outright.
No core charge/return applicable.

SKU#	Product Description	Picture Number
RCD0094RX	Remanufactured Disc Assembly for 13" Long Clutch	1
RCD0629RX	Remanufactured Disc Assembly for 13" Long Clutch	4
RCD2824RX	Remanufactured Disc Assembly for 13" Borg & Beck Clutch	5
RCD2942RX	Remanufactured Disc Assembly for 13" Borg & Beck Clutch	2
RCD4182RX	Remanufactured Disc Assembly for 13" Borg & Beck Clutch	2
RCD5123RX	Remanufactured Disc Assembly for 13" Rockford Clutch	3
RCD5210RX	Remanufactured Disc Assembly for 13" Rockford Clutch	6

Disc Assemblies

for 14" Clutch

8 Spring - Organic

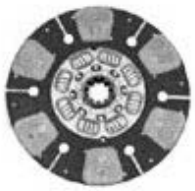
RCD1001RX

RCD5139RX

8 Spring
3 Pad VTL - Ceramic

8 Spring
3 Pad - Ceramic

8 Spring
4 Pad - Ceramic


8 Spring
6 Pad - Ceramic

Remanufactured Discs purchased separately are outright.
No core charge/return applicable.

SKU#	Product Description	Disc Springs	Disc Facing	Side
N127261	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	Organic	Flywheel
N127262	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	Organic	Pressure Plate
N127273	New 14" x 2" Disc Assembly − Eaton Style	8	Organic	Flywheel
N127274	New 14" x 2" Disc Assembly − Eaton Style	8	Organic	Pressure Plate
N127404	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	4 Pad − CB	Flywheel
N127405	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	4 Pad − CB	Pressure Plate
N128101	New 14" x 2" Disc Assembly − Eaton Style	8	6 Pad − CB	Flywheel
N128102	New 14" x 2" Disc Assembly − Eaton Style	8	6 Pad − CB	Pressure Plate
N128229	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Flywheel
N128229C	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Flywheel
N128230	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Pressure Plate
N128230C	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Pressure Plate
N128231	New 14" x 2" Disc Assembly − Eaton Style	8	3 Pad − CB	Flywheel
N128232	New 14" x 2" Disc Assembly − Eaton Style	8	3 Pad − CB	Pressure Plate
N128238	New 14" x 2" Disc Assembly − Eaton Style	8	Organic	Flywheel
N128239	New 14" x 2" Disc Assembly − Eaton Style	8	Organic	Pressure Plate
N128275	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	3 Pad − CB	Flywheel
N128276	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	3 Pad − CB	Pressure Plate
N128521	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Flywheel
N128521C	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Flywheel
N128522	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Pressure Plate

N128522C	New 14" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Pressure Plate
N128574	New 14" x 2" Disc Assembly − Eaton Style	8	6 Pad − CB	Flywheel
N128575	New 14" x 2" Disc Assembly − Eaton Style	8	6 Pad − CB	Pressure Plate
N128578	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	3 Pad VTL − CB	Flywheel
N128579	New 14" x 1−3/4" Disc Assembly − Eaton Style	8	3 Pad VTL − CB	Pressure Plate
RCD1001RX	Remanufactured Disc Assembly for 14" Long Clutch	−	Organic	−
RCD5139RX	Remanufactured Disc Assembly for 14" Rockford Clutch	−	Organic	−

Disc Assemblies

for 15−1/2" Clutch

7 Spring
4 Pad - Ceramic

7 Spring
6 Pad - Ceramic

8 Spring
Organic

8 Spring
4 Pad - Ceramic

9 Spring
4 Pad - Ceramic

9 Spring
6 Pad - Ceramic

10 Spring
Organic

10 Spring
4 Pad - Ceramic

10 Spring
6 Pad - Ceramic

SKU#	Product Description	Disc Springs	Disc Facing	Side
N127817	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	Organic	Flywheel
N127818	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	Organic	Pressure Plate
N128215	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Flywheel
N128215C	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Flywheel
N128216	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	4 Pad − CB	Pressure Plate
N128216C	New 15−1/2" x 2" Disc Assembly − Eaton Style	8	4 Pad − Carbotic	Pressure Plate
N128257	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	4 Pad − CB	Flywheel
N128257C	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	4 Pad − Carbotic	Flywheel
N128258	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	4 Pad − CB	Pressure Plate
N128258C	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	4 Pad − Carbotic	Pressure Plate
N128362	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	4 Pad − CB	Flywheel
N128362C	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	4 Pad − Carbotic	Flywheel
N128363	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	4 Pad − CB	Pressure Plate
N128363C	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	4 Pad − Carbotic	Pressure Plate
N128445	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	Organic	Flywheel
N128446	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	Organic	Pressure Plate
N128462	New 15−1/2" x 2" Disc Assembly − Eaton Style	7	4 Pad − CB	−
N128462C	New 15−1/2" x 2" Disc Assembly − Eaton Style	7	4 Pad − Carbotic	−
N128537	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	6 Pad − CB	Flywheel
N128537C	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	6 Pad − Carbotic	Flywheel
N128538	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	6 Pad − CB	Pressure Plate
N128538C	New 15−1/2" x 2" Disc Assembly − Eaton Style	9	6 Pad − Carbotic	Pressure Plate
N128539	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	6 Pad − CB	Flywheel

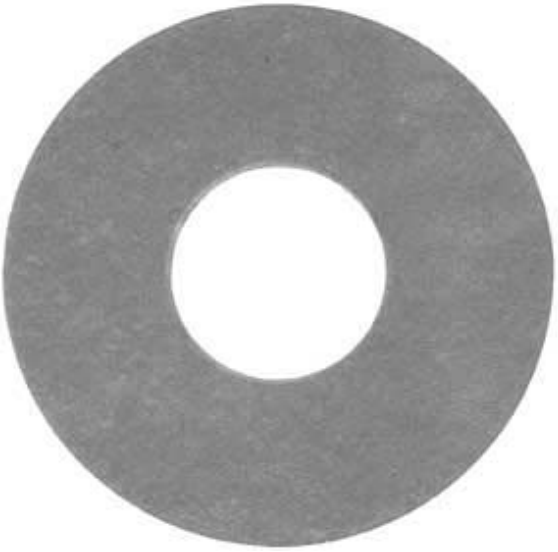
N128539C	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	6 Pad − Carbotic	Flywheel
N128540	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	6 Pad − CB	Pressure Plate
N128540C	New 15−1/2" x 2" Disc Assembly − Eaton Style	10	6 Pad − Carbotic	Pressure Plate
N128541	New 15−1/2" x 2" Disc Assembly − Eaton Style	7	6 Pad − CB	−
N128541C	New 15−1/2" x 2" Disc Assembly − Eaton Style	7	6 Pad − Carbotic	−
N128604C	New 15−1/2" x 2" Disc Assembly − Eaton Style	7 4	6 Pad − Carbotic	−

Intermediate Plates

For Spicer Clutch Pack

SKU#	Product Description	Application
CP044	Intermediate Plate 044ST	RC044STDCX, RC044STDOX

Clutch Brake Spacer



SKU#	Product Description	Outside Diameter	Spline Size
RC2504LK	Clutch Brake Spacer	4−1/8"	1−3/4"
RC2540K	Clutch Brake Washer	4−1/8"	2"

Drive Pins

SKU#	Product Description	Standard Pack	Application
RC183145K	Clutch Drive Pin	8	Mack 15" (Threaded)
RC2523XK	Clutch Drive Pin	6	Lipe & Spicer

Clutch Related Tools

SKU#	Product Description	Comments
RC5362K	Clutch Tool	1−3/8" − 10 Spline
RC5409K	Clutch Tool	1−1/4" − 10 Spline
TCT017	Drive Pin Alignment Gauge & Tool	Lipe Application Replaces T−10670A, TCT−1
TCT5044	Manual Adjuster with Lock for EZÂ™ Pedal and/or Self−Adjust Eaton−Style Cover	−

Installation Kits

N2468K

N3600K

SKU#	Product Description	Input Shaft Size	Application
N2468K	New Clutch Installation Kit	2" x 10 Tooth x 18 Spline	RT Series
N3600K	Eaton K−3600 Series Clutch Installation Kit	2" x 10 Tooth x 26 Spline	Eaton FR Transmission Series

Adjusting Ring: Adjusts release bearing clearance. Clearance must be adjusted periodically to compensate for the wearing away of disc linings.

Angle Spring Clutch: A conventional clutch that uses a set of six coil springs set at an angle to the input shaft. The springs apply pressure to the pressure plate, engaging the clutch discs and forcing them to engage the flywheel.

Bell Housing (or Clutch Housing): The casing that houses the clutch that attaches to the transmission. (SAE #1, #2 & #3)

Center Plate: The plate that is connected by the flywheel or clutch cover (depending on clutch design) and separates the driven discs, increasing clutch capacity by providing additional friction area between the driven discs.

Ceramic Friction Material: A metallic based friction material found on driven discs. It is the most common friction material with the highest longevity.

Clamping Force: The amount of pressure exerted by the spring or springs to engage the clutch.

Clutch Brake: A device on the input shaft of non−synchronized transmissions that stops gears from rotating so that first and reverse gear may be engaged at a standstill.

Coaxial Coil Springs: Springs inside springs in the driven disc that increase capacity and help to neutralize engine torsion vibrations.

Dampened Discs: Discs that have vibration absorbing qualities that extend drivetrain component life.

Driven Discs: Contain the friction material and are splined to the transmissions input shaft, connecting the flywheel to the transmission.

Driveshaft: The shaft or shafts leading from the transmission that connect to the axle differential to supply power from the engine.

Flywheel: Connects the engine to the transmission via the clutch assembly. The driven discs of the clutch ride on the transmission input shaft and are clamped by the pressure plate to the flywheel, which is turned by the engine, powering the drive wheels.

Input Shaft: The splined shaft on the front of the transmission. It is attached to the transmission drive gear, and rests in the pilot bearing in the center of the flywheel. The splined shafts of the driven discs ride on the input shaft, causing it to rotate when they are clamped to the flywheel by the pressure plate.

Levers: Parts that multiply and transfer the force of the diaphragm spring from the retainer to the pressure plate in diaphragm−spring clutches.

Linkage: Components that link the clutch pedal to the clutch assembly, allowing the driver to engage or disengage the clutch.

Organic Friction Material: Non−asbestos substances that are used on clutch discs. They are softer and smoother than most ceramic facings, resulting in smoother, softer clutch engagement.

Pilot Bearing: Bearing in the center of the flywheel. The end of the input shaft rides here, allowing the shaft to stop rotating−−despite the rotation of the flywheel−−when the pressure plate is retracted and the Clutch Brake is applied.

Pressure Plate Assembly: Applies the force of the diaphragm or springs to the pressure plate, clamping the clutch discs between the pressure plate, center plate and flywheel. Also houses the adjusting ring and parts of the release bearing engagement.

Release Bearing Assembly: Transfers the movement of the clutch linkage to engage and disengage the clutch.

Straps: Connect the cover to the pressure plate, transmitting engine torque through the rotation of the flywheel and the clutch cover to the disc.

Rigid Discs: Have no vibration absorption qualities; usually contribute to increased wear on drivetrain components.

Torsion Vibration: Vibration at the flywheel created by the engine cylinder pressure pulses during fuel burning.

There is a difference between remanufacturing and rebuilding. Rebuilding can mean anything from a wash job to complete inspection and component replacement. With Midland remanufactured clutches, we completely disassemble the clutch cover and perform the following inspections.

PRESSURE PLATE

1. The overall thickness of the pressure plate is checked and replaced if it does not meet Midland specifications.
2. Friction surfaces are inspected to ensure flatness and machined to a microfinish.
3. If drive lug surfaces are not parallel, metal is added and they are machined back to OEM Specifications.
4. The fulcrum ring surface is inspected for flatness, overall height and to ensure that it is parallel to the pressure plate friction surface.

RELEASE LEVER

Each lever is inspected for wear points and to assure that proper contact is made with internal release linkages. If levers are worn, they are replaced with new parts.

RELEASE SLEEVE RETAINER

Sleeve retainers are inspected for thickness and parallel drive sides. Any retainer that does not meet Midland specifications is replaced with a new retainer.

COVER

Covers are inspected for wear, internal threads and external wear or cracks. Covers that do not meet OEM Specifications are replaced.

All major components are inspected to meet OEM Specifications. When component parts cannot be machined to meet these specifications, they are replaced with new parts. As a result, only the highest−quality components are used in the Spicer Style Remanufactured Clutch

If drive slot shoulders are not parallel, Midland either reworks and machines to OEM Specifications, or replaces.

DISC
All Remanufactured Spicer Style Clutch Packs are supplied with New Clutch Discs.

RELEASE BEARING HOUSING

1. New yoke wear pads are installed.
2. Bearing outer race supports are inspected and repaired to OEM Specifications.

ADJUSTING RING
All rings are inspected for damage and thread wear. Worn or damaged rings are reworked or replaced with new.

For additional details regarding Spicer Style Remanufactured Clutches, please contact your Haldex Brake Products District Manager or Technical Services at: Phone: 800−643−2374 or Fax: 816−891−7334.

The clutch linkage is probably the most misunderstood component of the vehicle, and yet it is one of the simplest. Let us now look at what functions the linkage provides and how it relates to the pedal position.

There are four sections/zones to the clutch linkage. They are:

Zone (A) Clutch Pedal Free−Play. This free−play in the clutch linkage is actually clearance between the clutch release bearing and the release levers of the clutch cover (on a Push Type clutch). For a Pull Type clutch the clearance is between the yoke release cams and the release bearing housing. This zone should be approximately 1−3/4 in length. (Figures 1 and 2)

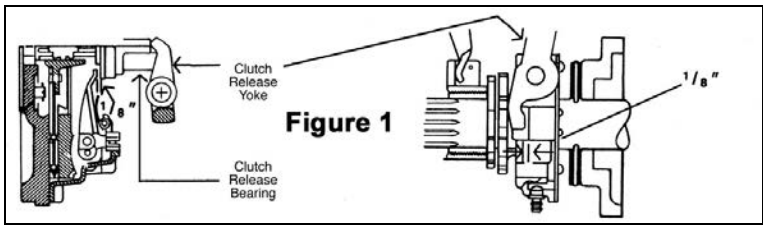


Figure 1

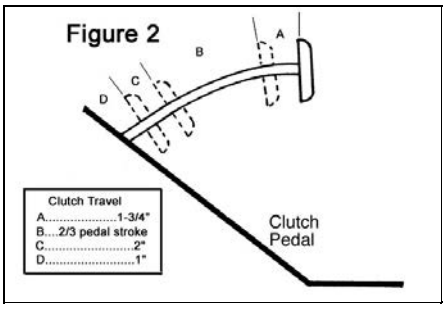


Figure 2

Zone (B) Engagement and Disengagement Zone. his section starts at the point where you will notice a decrease in engine R.P.M. without the vehicle moving to the point on the pedal where the clutch is completely engaged. This zone (pedal travel) should be approximately 2/3 of the total pedal travel. For example, if the total pedal travel (from the floor to pedal rest position) is 9, then the engage−disengage zone should be as close as possible to 6 for smooth engagement. (Figure 2)

Zone (C) Complete Disengagement Zone. An area within the clutch linkage travel allowing the driver to change gears without encountering gear clash. This zone should be approximately 2 in length. (Figure 2)

Zone (D) the Clutch Brake. This area is for Pull Type clutch assemblies only. The clutch release bearing should contact the clutch brake when the clutch pedal is approximately 1 from the floor. (Figures 2 and 3)

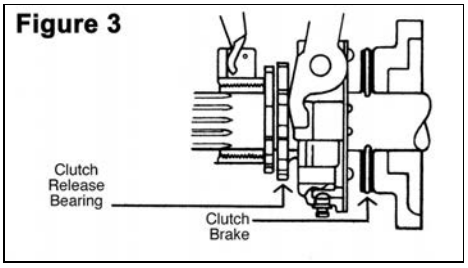


Figure 3

Always Remember:

1. That the clutch assembly job is to transmit engine torque without slipping and provide complete disengagement for gear changes (the rate of engagement or disengagement is a function of the linkage.)
2. In order to obtain complete clutch disengagement, the release bearing must move the release levers 1/2.

ADJUSTMENT PROCEDURE FOR 14" AND 15−1/2" ANGLE SPRING 2−PLATE CLUTCHES (MANUAL CLUTCHES)

STEP 1: Establish Bearing Position

Set the distance between the bearing and the clutch brake between .500" and .562" (1/2" and 9/16"). (See Figure 1)

In order to move the bearing, you must rotate the adjusting ring inside the clutch cover. Light pressure applied to the clutch linkage will insure that the release bearing is stretched to provide the most accurate reading. (See Figure 2)

Important: The release bearing must move a minimum of .500" (1/2") to achieve "full clutch release".

Figure 1

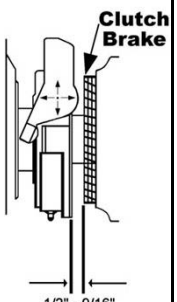
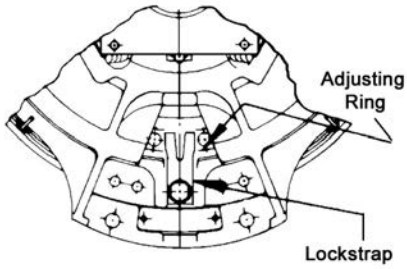


Figure 2



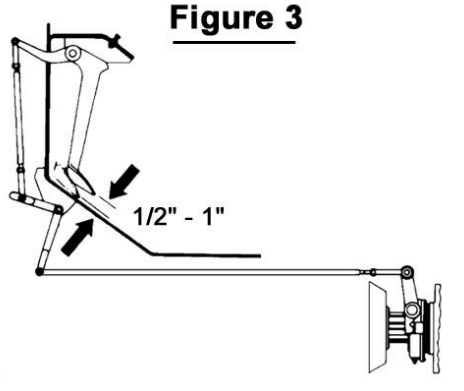
STEP 2: Adjust Clutch Brake

Proper adjustment of the brake is achieved by shortening or lengthening the external truck linkage rod.

1. Insert a .010 feeler gauge between the release bearing and clutch brake. Push the clutch pedal down to verify clutch brake squeeze.

2. The linkage should be adjusted to allow clamp up of the feeler gauge when the pedal is within .500 (1/2)from the floor and to release the feeler gauge when the pedal is 1 or less from the floor. (See Figure 3)

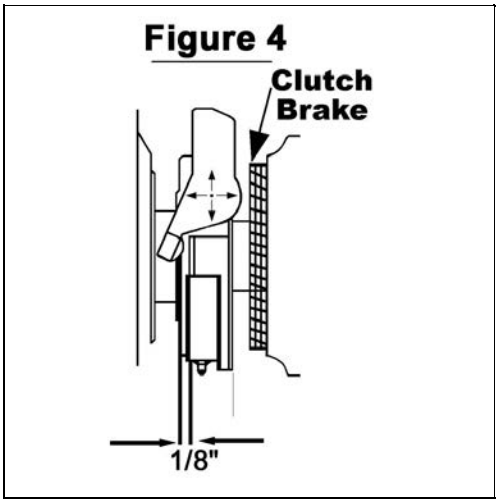
Figure 3



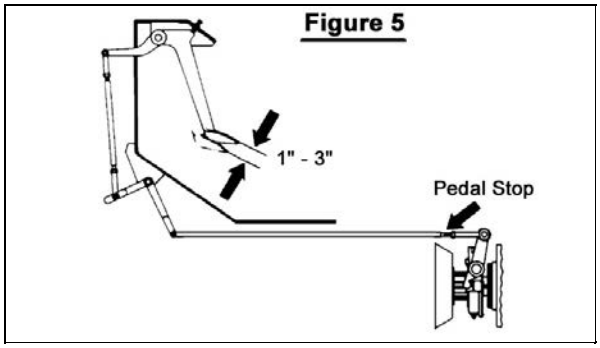
STEP 3: Check Free Pedal

The fingers on the release yoke should be approximately .125 (1/8) from the release bearing wear pads. (See Figure 4) This should equal about 1 − 3 of free pedal in the cab.(See Figure 5)

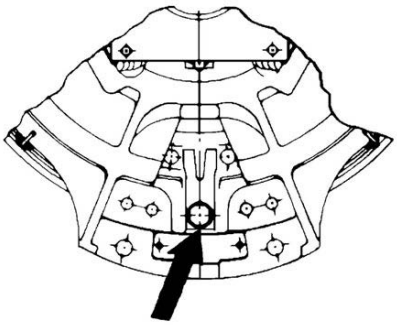
1. Routine clutch adjustment should occur when the free pedal is about half (1/2) of new installation free pedal. For example; if free pedal is set at 3 upon installation of the new clutch, clutch adjustment should occur at approximately 1.5 of free travel.



Important: If the bearing is the correct distance from the clutch brake and proper free pedal or clutch brake squeeze cannot be achieved, the truck does not have enough stroke to move the yoke the required distance. The pedal stroke in the cab must be increased by adjusting or modifying the upper pedal stop to raise the pedal and increase the pedal movement.(See Figure 5)



STEP 4: Reinstall the Lockstrap



INSTALLATION INSTRUCTIONS

1. Remove protective coating from pressure plate and intermediate plate.

2. CA new pilot bearing should be used with a new or remanufactured clutch. If the old bearing is reused, clean and check the bearing thoroughly. Repack with lubricant.

3. Check condition of the flywheel. If it is cracked or warped, refer to the manufacturers recommendations concerning replacement or rebuilding.

4. Check condition of transmission input shaft spline. Use hand stone if necessary to dull the sharp edges of splines. If splines are worn excessively or notched, driven discs will not slide and either a Lipe Spline−Saver should be installed or the input shaft should be replaced.

5. Make sure drive pin heads are square with flywheel friction face. Most vehicles use one or more setscrews per drive pin to lock the drive pin in position. **These set−screws must be loosened or removed to turn or replace drive pins.**

6. New drive pins should be installed any time the clutch is replaced. Worn or damaged drive pins can cause faulty clutch operation. Minimum clearance between drive pin and intermediate plate slot should be .006. Whenever a flywheel is being installed it is suggested that it be inspected for misalignment.

7. Install flywheel side disc, intermediate plate. See illustration for typical positioning of driven discs. Always refer to instructions printed on disc assemblies for proper installation.

8. Place the pressure plate side disc on the spline aligning tool. Insert spline aligning tool through the fly wheel side disc assembly and into the pilot bearing.

9. Carefully slide the clutch assembly over the spline aligning tool. Position on the flywheel and start the cap screws. Note: On Lipe Rebuilt Dana−Type clutches, the lockstrap must be aligned with the access hole in the bell housing.

10. Tighten cap screws progressively and evenly to pull the cover assembly into its proper position in the flywheel pilot. Recommended torque 35−45 ft./lbs.(3/8−16UNC) and 45−55 ft./lbs. (7/16−14UNC).

11. Remove the wood blocks or hold down bolts then remove spline aligning tool.

12. If clutch brake is to be used, place brake parts on the input shaft of the transmission and shift transmission into gear.

13. Rotate clutch release bearing housing so that flat section is on top. (If cross shaft is below center, rotate bearing housing 180).

14. Rotate clutch release yoke so that release yoke fingers clear the pads on the release bearing housing.

15. Use a release or transmission jack to support and maintain the engine−to−transmission alignment while installing the transmission. Use care to avoid hanging the weight of the transmission into the clutch or forcing the transmission into the clutch or flywheel housing.

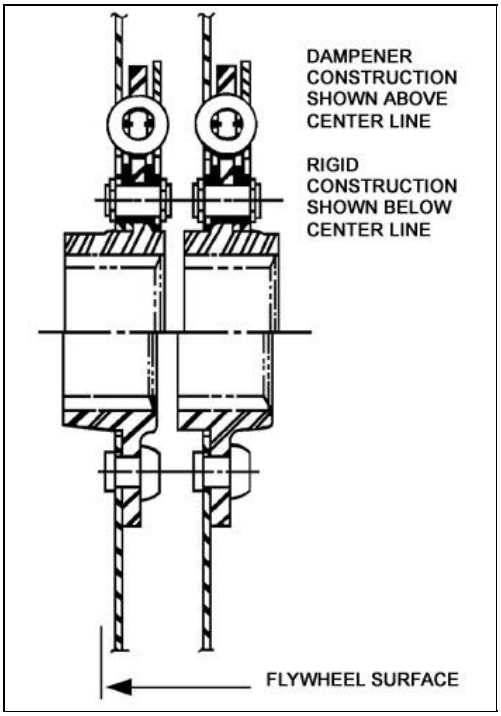
15. cont'd.
Either of these abuses can cause bent or "sprung" driven discs and prevent the clutch from releasing. Rotate clutch release yoke into proper position as transmission is moved into place.

16. Start all transmission bell housing cap screws and tighten progressively around the housing to torque recommended by vehicle manufacturer.

17. Connect clutch release linkage and check release bearing travel for approximately 1 1/2" pedal free travel. Refer to steps 1 through 4 on opposite side.

TYPICAL POSITIONING OF FRONT AND REAR DRIVEN DISCS IN INSTALLATION

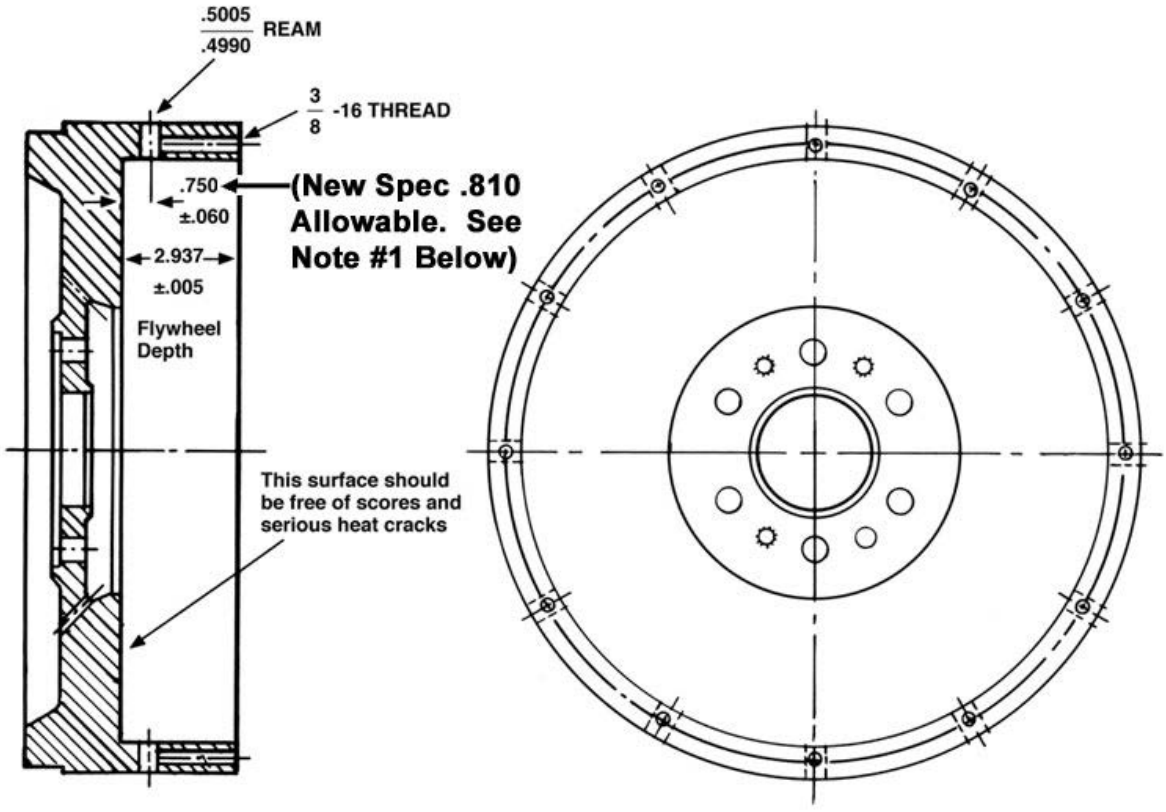
Illustration is a typical disc installation. Do not use as installation instructions. **Important: Always refer to instructions printed on discs for proper installation position.**



LUBRICATION INSTRUCTIONS WARNING

1. Only high−temperature greases should be used in release bearing housing. Chassis lube or allpurpose lubricants are not recommended.
2. Add lubricant at each chassis lubrication period or more often if service is extreme.
3. To assure adequate distribution of the grease throughout the bearing, engine should be running while grease is being added.

Proper Flywheel Machining Dimensions for Lipe Type 14" − 2 PT or Spicer Flywheels



1) If the distance between the drive pin hole (centerline) and flywheel friction face exceeds .810 the flywheel needs to be replaced.

2) In applications that have experienced severe drive pin wear, it is recommended you use 12 drive pins in place of the standard 6.

Driver Tips
on How to Improve Clutch Performance

1. **Don't rest your foot on the clutch pedal while the vehicle is in motion.** This practice leads to: (a) premature release bearing failure because the bearing is contantly turning and (b) accelerated clutch disc friction facing wear due to clutch slippage.

2. **Don't allow the engine to lug.** A lugging engine creates damaging torsional vibrations that can destroy the driveline of a vehicle. Always keep your engine working within the recommended operating range (usually between 1500 to 1950 rpm).

3. **Don't overload the vehicle.** The vehicle's driveline, suspension, and brakes were designed for a specific capacity. When this capacity is exceeded, the life expectancy of these components will be decreased.

4. **Don't hold the vehicle on a hill by slipping the clutch.** The clutch was designed for short slip cycles and transmitting torque. Long periods of constant clutch slippage will create excessive heat and wear on the clutch disc friction facing causing premature failure.

5. **Don't coast with the clutch disengaged.** As a vehicle descends a grade it will increase in speed causing the disc assembly to rotate faster. If the disc is spun too fast, the friction facing will explode due to centrifugal force.

6. **Don't use any other gear except first (or low) to start the vehicle in motion.** Starting the vehicle in second gear requires approximately twice the slip cycle time that would be required for a first gear start, resulting in rapid facing wear and extreme heat.

7. **Don't allow irregular clutch action to go unreported.** Submit a drivers report after each trip and keep the maintenance director informed of possible problems. Your report could prevent a road service call or an expensive tow bill.

8. **Don't hold the clutch pedal to the floor while waiting for a traffic light to change or in a traffic jam.** Give the clutch release bearing a rest by putting the vehicle in neutral and letting the clutch pedal rise. This will allow the bearing to separate from the clutch release levers and stop turning (prolonging its life).

9. **Don't excessively slip the clutch when a vehicle is stuck.** Rocking the vehicle by quickly changing gears (reverse to first) or excessive clutch slippage, can cause extreme damage to the driveline. A tow charge would be less expensive than replacing the clutch, transmission, driveline, or a ring and pinion in the rear axle assembly.

10. **Don't allow an untrained driver to operate your vehicles.** Insist on a driver training program. It will save you and your fleet down time and maintenance costs.

Problem	Remedy
Chatter	
1. Loose, broken or worn engine mounts.	1. Tighten or replace.
2. Pedal linkage worn.	2. Replace linkage.
3. Loose or cracked clutch housing.	3. Tighten or replace.
4. Spring shackles and mountings loose, worn or broken.	4. Tighten or replace.
5. Misalignment.	5. Realign.
6. Oil or grease on facings.	6. Install new facings or disc assembly.
7. Warped or bent driven disc assembly.	7. Install driven disc assembly.
8. Improper disc facing thickness.	8. Install proper disc assembly.
9. Worn pilot bearing.	9. Replace.
10. Wrong spring pressure in cover assembly.	10. Replace with proper cover assembly.
11. Improper "A" dimension (type ML only).	11. Refer to "A" dimension chart for Type ML. Adjust to correct setting.
12. Unequal quantity of shims under straps of MP clutch.	12. Use same quantity of shims under each strap.
13. Release levers not parallel.	13. Recheck installation.
Aggressive	
1. Release sleeve dry.	1. Lubricate release sleeve.
2. Worn or loose pedal linkage.	2. Replace or tighten.
3. Excessive backlash in power train.	3. Adjust or replace worn parts.
4. Warped driven disc.	4. Install new disc assembly.
5. Worn hub splines.	5. Install new disc assembly.
6. Worn splines on spline shaft.	6. Replace shaft or install Lipe Spline−Saver disc kit.
7. Improper facing material.	7. Install proper driven disc assembly.
Insufficient Release	
1. Broken or loose motor mounts.	1. Replace or tighten.
2. Worn or loose pedal linkage.	2. Replace or tighten.
3. Excessive idling speed.	3. Adjust to factory specs.
4. Loose or worn facings.	4. Replace facings or install new driven disc assembly.
5. Improper facing thickness.	5. Install proper driven disc assembly(s).
6. Warped or bent driven disc assembly.	6. Install recommended driven disc assembly properly.
7. Lever settings wrong.	7. Refer to "A" dimension chart & re−check install.
8. Worn splines.	8. Replace with new driven disc. assembly.
9. Worn or rusty splines on splined shaft.	9. Repair, replace or install Lipe Spline−Saver disc kit.
10. Worn pilot bearing	10. Replace.

Problem	Remedy
Hard Pedal	
1. Worn pedal linkage.	1. Replace with new linkage.
2. Binding in pedal linkage.	2. Lubricate and adjust.
3. Excessive spring pressure in cover assembly.	3. Install proper cover assembly.
4. Contact pad of release bearing carrier worn by shifter yoke.	4. Replace carrier and shifter yoke. Also check for proper hook−up to provide best linkage operating positions.
Slippage	
1. Oil or grease on facings.	1. Replace facings or install new driven disc assembly. Correct oil leak.
2. Loose or worn facings.	2. Replace facings or install new driven disc assembly.
3. Flywheel burned, checked or cracked.	3. Replace or regrind.
4. Insufficient plate pressure.	4. Install new cover assembly.
5. Improper "A" dimension (type ML only).	5. Refer to "A" dimension chart for Type ML. Adjust to correct setting.
6. Binding in pedal linkage	6. Lubricate and adjust.
7. Improper facing material.	7. Use correct facing or replace disc assembly.
Vibration	
1. All or part of power train out of balance.	1. Check each unit individually and re−check as a complete assembly.
2. One or more units in power train out of alignment.	2. Check and align (replace faulty component).
3. Worn spline shaft.	3. Replace.
4. Worn crankshaft bearings.	4. Replace.
5. Worn or loose engine mounts.	5. Replace or tighten.
6. Loose or out of balance universal joint.	6. Tighten or replace − check for balance.
7. Clutch out of balance.	7. Install balanced unit.
8. Worn disc splines.	8. Replace disc.

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM		TORQUE/@RPM	
CAT3116	185	2600	520	1560
CAT3116	185	2200	520	1560
CAT3116	195	2200	521	1560
CAT3116	215	2200	605	1560
CAT3116	230	2200	660	1560
CAT3116	250	2200	660	1560
CAT3116	275	2200	750	1560
CAT3116 (GM−MD)	250	2600	650	1560
CAT3116 (GM−MD)	300	2600	732	1560
CAT3116 (GM 91−UP)	215	2600	605	1560
CAT3116 (GM 91−UP)	215	2600	550	1560
CAT3116 (GM−MD)	275	2450	735	1560
CAT3116 (HEU1)	170	2200	420	1560
CAT3116 (MD)	170	2600	420	1560
CAT3116 (MD)	200	2600	520	1560
CAT3116 G	185	2600	495	1560
CAT3126	175	2400	420	1440
CAT3126	190	2200	520	1440
CAT3126	210	2200	605	1440
CAT3126	210	2400	520	1440
CAT3126	230	2200	660	1440
CAT3126	250	2200	660	1440
CAT3126	250	2200	800	1440
CAT3126	275	2200	800	1440
CAT3126	275	2200	860	1440
CAT3126	300	2200	800	1440
CAT3126	300	2200	860	1440
CAT3176 ATMC	230	1800	975	1100
CAT3176 ATMC	250	2100	975	1300
CAT3176 ATMC	275	1800	1050	1100
CAT3176 ATMC	275	2100	1050	1200
CAT3176 ATMC	300	1800	1150	1100
CAT3176 ATMC	300	2100	1150	1300
CAT3176 ATMC	325	1900	1225	1200
CAT3176 ATMC	325	2100	1225	1300
CAT3176B	275	1800	1050	1100
CAT3176B	300	1800	1050	1100
CAT3176B	325	1800	1250	1200
CAT3176B	350	1800	1350	1200
CAT3176 ELEC	275	1800	1050	1100
CAT3176 ELEC	275	1800	975	1100
CAT3176 ELEC	300	1800	1050	1100
CAT3176 ELEC	300	1800	975	1100

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM		TORQUE/@RPM	
CAT3208T (MD)	200	2000	620	1400
CAT3208T (MD)	200	2600	495	1560
CAT3208T (MD)	200	2600	520	1560
CAT3208T (MD)	250	2600	640	1400
CAT3306	245	2200	820	1300
CAT3306	245	2100	860	1350
CAT3306	250	1800	860	1350
CAT3306	260	1900	860	1350
CAT3306	270	2200	775	1400
CAT3306C	300	1900	1150	1200
CAT3406	250	1600	1000	1200
CAT3406	280	2100	1015	1200
CAT3406	290	1800	1000	1200
CAT3406	300	2100	1054	1200
CAT3406	310	1800	1090	1200
CAT3406	310	2100	1139	1100
CAT3406	310	1800	1140	1100
CAT3406	325	2100	1050	1200
CAT3406	330	1600	1320	1200
CAT3406	380	2100	1285	1200
CAT3406	400	1900	1450	1250
CAT3406	455	2100	1650	1200
CAT3406	455	1800	1460	1200
CAT3406	475	2100	1650	1750
CAT3406	500	2100	1450	1200
CAT3406	500	2100	1850	1200
CAT3406	550	2100	1850	1200
CAT3406	435	1800	1550	1650
CAT3406	500	2100	1450	1850
CAT3406 510	510	1600	1850	1200
CAT3406B	350	2100	1320	1200
CAT3406B	400	2100	1375	1260
CAT3406B	425	2100	1450	1200
CAT3406BEC	350	1800	1320	1200
CAT3406BEC	400	2100	1265	1300
CAT3406BEC	400	1800	1375	1260
CAT3406C	350	1800	1350	1200
CAT3406C	350	1800	1350	1200
CAT3406C	425	1800	1550	1200
CAT3406C	425	1900	1650	1200
CAT3406E	310	1800	1150	1200
CAT3406E	310	1800	1250	1200
CAT3406E	330	1800	1350	1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM	TORQUE/@RPM
CAT 3406E	375 1800	1450 1200
CAT 3406E	410 1800	1450 1200
CAT 3406E	435 1800	1550 1200
CAT 3406E	435 2100	1650 1200
CAT 3406E	435 2100	1550 1200
CAT 3406E	475 2100	1650 1200
CAT 3406E	475 1800	1650 1200
CAT 3406E	475 1800	1750 1200
CAT 3406E	475 2100	1750 1200
CAT 3406E	550 1800	1850 1200
CAT 3406E(94)	355 1800	1350 1200
CAT 3406E(94)	355 1800	1450 1200
CAT 3406E(94)	375 1800	1550 1200
CAT 3406E(94)	410 1800	1550 1200
CAT 3406E(94)	435 1800	1650 1200
CAT 3406E(94)	475 1800	1750 1200
CAT 3406E(94)	500 1800	1850 1200
CAT 3406E MULTI TQ	310 1800	1150/1350 1200
CAT 3406E MULTI TQ	355 1800	1350/1450 1200
CAT 3406E MULTI TQ	375 1800	1450/1550 1200
CAT 3406E MULTI TQ	375/435 1800	1450/1550 1200
CAT 3408	420 1900	1460 1200
CAT 3408	450 2100	1350 1500
CAT 3408	450 2100	1460 1200
CAT 6CTA−250	250 2200	720 1300
CAT C−10	280 1800	1050 1100
CAT C−10	280 2100	975 1100
CAT C−10	305 1800	1150 1100
CAT C−10	305 2100	1150 1100
CAT C−10	325 2100	1250 1200
CAT C−10	335 1800	1250 1200
CAT C−10	335 1800	1350 1200
CAT C−10	350 1800	1350 1200
CAT C−10	370 1800	1350 1200
CAT C−10 MULTI	335/370 1800	1250/1350 1200
CAT C−12	355 1800	1350 1200
CAT C−12	360 2100	1350 1200
CAT C−12	380 1800	1450 1200
CAT C−12	390 2100	1450 1200
CAT C−12	410 1800	1450 1200
CAT C−12	410 1800	1550 1200
CAT C−12	410 2100	1550 1200
CAT C−12 MULTI TQ	355/410 1800	1350/1450 1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM	TORQUE/@RPM
CAT C−12 MULTI TQ	355/410 1800	1350/1450 1200
CAT C−12 MULTI TQ	380/410 1800	1450/1550 1200
CAT C−12 RCV/BUS	425 2100	1450 1200
CAT G3306 CNG/LNG	235 2100	800 1200
CAT G3306 LPG (HD5)	250 2100	820 1200
CUM 444	444 2100	1400 1500
CUM 4BT3.9	105 2500	260 1700
CUM 4BTA3.9	120 2500	304 1700
CUM 6BT55.9	160 2500	400 1700
CUM 6BTA5.9	190 2500	475 1600
CUM 6BTA5.9	210 2500	520 1600
CUM 6BTA5.9	230 2500	605 1600
CUM 6CT8.3	210 2200	605 1500
CUM 6CTA8.3	240 2200	645 1500
CUM 6CTA8.3	250 2200	728 1500
CUM FLEET 270	270 1600	1020 1100
CUM FLEET 285	285 1600	1150 1100
CUM FLT 300	300 1700	1150 1100
CUM FORM−300	300 1800	1000 1300
CUM FORM−L10−240	240 1400	858 1300
CUM FORM−VT−350	300 2100	860 1400
CUM FORM 240	240 1800	870 1300
CUM FORM 270	270 1800	1000 1300
CUM FORM 315	315 1800	1150 1300
CUM FORM 350(90)	350 1800	1175 1300
CUM FORM 350(90)	350 1800	1200 1300
CUM FORM 365(90)	365 1800	1325 1300
CUM FORM 400	400 1800	1250 1300
CUM FORM 450	450 1900	1420 1300
CUM KT 450	450 2100	1350 1500
CUM KT 525	525 2100	1650 1300
CUM KTA 600	600 2100	1650 1600
CUM L−10	260 1800	975 1200
CUM L−10	270 1900	858 1300
CUM L−10	270 2100	858 1400
CUM L−10	280 1800	1050 1200
CUM L−10	300 2100	950 1300
CUM L−10 240	240 1900	870 1300
CUM L−10 240/250PT	240−2100 250−2200	900 1300
CUM L−10 285PT	285 2200	1020 1300
CUM L−10 310	310 1800	1150 1200
CUM L−10 330E	330 1800	1250 1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM	TORQUE/@RPM
CUM L−10 FORM	300 1900	950 1300
CUM L−10 FORM 240	240 1900	860 1300
CUM L−10 STC 12 CGC	280 1600	1050 1200
CUM L−10 STC 12 CGD	280 1700	1050 1200
CUM L−10 STC 12 CGH	300 1700	1150 1200
CUM L−10 STC 12CGA	260 1600	975 1200
CUM L−10 STC 12CGB	260 1700	975 1200
CUM L−10 STC 12CGG	310 1600	1150 1200
CUM M11	400 1800	1450 1200
CUM M11 280E	280 1800	1050 1200
CUM M11 280E	280 2000	1050 1200
CUM M11 280E CELECT	280 2000	1050 1200
CUM M11 280E CELECT	280 1800	1050 1200
CUM M11 31 OE	310 2000	1150 1200
CUM M11 31 OE	310 1800	1150 1200
CUM M11 330E	330 2000	1350 1200
CUM M11 330E	330 800	1350 1200
CUM M11 350E	350 1800	1350 1200
CUM M11 350E	350−390 2000	1350 1200
CUM M11 370	370 1800	1350 1200
CUM M11 370	370 2000	1350 1200
CUM M11 ESP1	280−330 1800	1050−1250 1200
CUM M11 ESP11	310−370 1800	1150 1350
CUM N14 12 CEC	370 1600	1400 1200
CUM N14 12 CED	370 1600	1400 1200
CUM N14 310	310 1800	1150 1350
CUM N14 330E	330 2100	1350 1200
CUM N14 330E	330 600	1350 1200
CUM N14 350E	350 2100	1400 1200
CUM N14 350E	350 1800	1400 1200
CUM N14 370E	370 2100	1450 1200
CUM N14 370E	370 1800	1450 1200
CUM N14 410E	410 2100	1450 1200
CUM N14 410E	410 1800	1450 1200
CUM N14 435E	435 2100	1650 1200
CUM N14 435E	435 2100	1550 1200
CUM N14 435E	435 1800	1450 1200
CUM N14 469E	460 2100	1650 1200
CUM N14 500	500 1800	1750 1200
CUM N14 500E	500 2100	1750 1200
CUM N14 500E	500 2100	1650 1200
CUM N14 500E	500 1750	1650 1600
CUM N14 525	525 1800	1850 1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM		TORQUE/@RPM	
CUM N14 CELECT 12 CDB	370	1600	1400	1100
CUM N14 CELECT 12 CDC	430	1700	1450	1100
CUM N14 CELECT 12 CDI	350	1600	1400	1100
CUM N14 CELECT 12 CDI	350	1600	1350	1100
CUM N14 CELECT 12 CDJ	460	1700	1550	1100
CUM N14 CELECT 12 CDK	310	1600	1250	1300
CUM N14 CELECT 12 CDR	310	1699	1450	1200
CUM N14 CELECT 12 CDS	330	1600	1350	1100
CUM N14 CELECT 12 CDS	370	1600	1550	1200
CUM N14 CELECT 12 CEN	410	1600	1450	1200
CUM N14 CELECT 12 CEP	430	1700	1550	1300
CUM N14 EAP1	310−390	1800	1250	1450
CUM N14 ESP11	350	1800	1350	1500
CUM N14 ESP3	400−460	1800	1450	1650
CUM N14 STC 12 CEE	410	1600	1450	1200
CUM N14 STC 12 CEG	410	1600	1450	1200
CUM N14 STC 12 CEH	310	1600	1250	1100
CUM N14 STC 12 CEJ	350	1600	1400	1100
CUM N14 STC 12 CEK	350	1600	1350	1100
CUM NHTC−220	220	2100	644	1500
CUM NTC−FORM 400	400	1800	1325	1300
CUM NTC 315	315	1800	1150	1300
CUM NTC 350	350	2100	1120	1300
CUM NTC 365	365	1800	1320	1300
CUM NTC 400	400	2100	1250	1300
CUM NTC 475	475	2100	1430	1400
CUM NTC 300	300	2100	1000	1300
CUM NTC 350(90)	350	2100	1200	1300
CUM NTC 444NT	444	2100	1400	1500
CUM PT−240	240	2100	900	1300
CUM PT 270	270	1800	1000	1300
CUM STC 12 CEA	330	1600	1350	1100
CUM STC 12 CEB	330	1600	1350	1100
CUM TWIN TURBO	475	2100	1430	1400
CUM V−903C	295	2600	1000	1800
DD 11.1L	250	1800	970	1200
DD 11.1L	300	1800	1150	1200
DD 11.1L	330	1800	1150	1200
DD 11.1L	330	1800	1250	1200
DD 11.1L	330	1800	1250	1200
DD 11.1L	350	1800	1250	1200
DD 11.1L	350	1800	1250	1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM	TORQUE/@RPM
DD 11.1L	350 1800	1350 1200
DD 11.1L	365 1800	1350 1200
DD 11.1L	220-365 1800	1350 1200
DD 11.1L	300-330 1800	1150 1200
DD 11.1L	330-350 1800	1350 1200
DD 12.7L	350 2100	1400 1200
DD 12.7L	370 1800	1450 1200
DD 12.7L	370 2100	1450 1200
DD 12.7L	400 1800	1450 1200
DD 12.7L	400 2100	1450 1200
DD 12.7L	425 2100	1400 1200
DD 12.7L	430 1800	1450 1200
DD 12.7L	430 1800	1450 1200
DD 12.7L	430 2100	1450 1200
DD 12.7L	430 1800	1550 1200
DD 12.7L	430 2100	1550 1200
DD 12.7L	470 2100	1450 1200
DD 12.7L	470 1800	1550 1200
DD 12.7L	470 2100	1550 1200
DD 12.7L	500 1800	1550 1200
DD 12.7L	500 2100	1550 1200
DD 12.7L	370-400 1800	1450 1200
DD 12.7L	370-430 1800	1450 1200
DD 12.7L	430-470 1800	1550 1200
DD 6-71	230 2100	611 1600
DD 6-71T	275 2100	853 1200
DD 6-71T	300 2100	830 1400
DD 6-71TAC	270 2100	786 1200
DD 6V92TA	330 2100	963 1200
DD 6V92TA	350 2100	1020 1200
DD 6V92TA	445 2100	1250 1300
DD 8V71	304 2100	818 1400
DD 8V92TAC	440 2100	1250 1300
DD 8V92TA	400 1800	1250 1200
DD 8V92TA	475 2100	1330 1300
DD SERIES 50 8.5L-1L-4	250 2100	780 1200
DD SERIES 50 8.5L-1L-4	275 2100	890 1200
DD SERIES 50 8.5L-1L-4	300 1800/2100	1000 1200
DD SERIES 50 8.5L-1L-4L	315 1950/2100	1150 1200
DD SERIES 55 12L-1L-6	300 1800	1150 1100
DD SERIES 55 12L-1L-6	330 1800/2000	1250 1100
DD SERIES 55 12L-1L-6	350 1800/2000	1250/1350 1100

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM	TORQUE/@RPM
DD SERIES 55 12L−1L−6	350 1800/2200	1350 1100
DD SERIES 55 12L−1L−6	365 1800/2000	1450 1100
DD SERIES 55 12L−1L−6	330/350 1800	1250 1100
DD SERIES 55 12L−1L−6	330/350 1800	1350 1100
DD SERIES 55 12L−1L−6	365/400 1800	1450 1100
DD SERIES 60 11.1L−1L−6	300 1800	1150 1200
DD SERIES 60 11.1L−1L−6	330 1800	1150 1200
DD SERIES 60 11.1L−1L−6	330 1800	1150 1200
DD SERIES 60 11.1L−1L−6	350 1800	1250 1200
DD SERIES 60 11.1L−1L−6	350 2100	1250 1200
DD SERIES 60 11.1L−1L−6	350 2100	1250 1200
DD SERIES 60 11.1L−1L−6	365 1800	1350 1200
DD SERIES 60 11.1L−1L−6	300/330 1800	1150 1200
DD SERIES 60 11.1L−1L−6	330/350 1800	1250 1200
DD SERIES 60 11.1L−1L−6	330/365 1800	1350 1200
DD SERIES 60 12.7−1L−6	400 1800	1450 1200
DD SERIES 60 12.7−1L−6	400 2100	1450 1200
DD SERIES 60 12.7−1L−6	370/400 1800	1450 1200
DD SERIES 60 12.7L−1L−6	370 1800	1450 1200
DD SERIES 60 12.7L−1L−6	370 2100	1450 1200
DD SERIES 60 12.7L−1L−6	430 1800	1450 1200
DD SERIES 60 12.7L−1L−6	430 2100	1450 1200
DD SERIES 60 12.7L−1L−6	470 1800	1550 1200
DD SERIES 60 12.7L−1L−6	470 2100	1450/1550 1200
DD SERIES 60 12.7L−1L−6	500 1800	1550 1200
DD SERIES 60 12.7L−1L−6	500 2100	1450/1550 1200
DD SERIES 60 12.7L−1L−6	370/430 1800	1450 1200
DD SERIES 60 12.7L−1L−6	370/430 2100	1450 1200
DD SERIES 60 12.7L−1L−6	430/470 1800	1550 1200
DD SERIES 60 12.7L−1L−6	430/470 2100	1550 1200
DD SERIES 92 12.1L−V−8	400 2100	1330 1200
DD SERIES 92 12.1L−V−8	450 2100	1425 1200
DD SERIES 92 12.1L−V−8	500 2100	1470 1200
DD SERIES 92 9.05L−V−6	300 2100	975 1200
DD SERIES 92 9.05L−V−6	350 2100	1020 1200
FORD FD−1060	160 2500	400 1600
FORD FD−1060	175 2500	420 1600
FORD FD−1060	190 2500	475 1600
FORD FD−1060	210 2500	485 1600
FORD FD−1060	210 2300	520 1600
FORD FD−1060	230 2300	605 1600
FORD FD−1460	210 2200	605 1300
FORD FD−1460	225 2200	660 1300

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM		TORQUE/@RPM	
FORD FD−1460	250	2200	660	1300
FORD FD−1460	250	2000	800	1300
FORD FD−1460	275	2000	800	1300
FORD FD−1460	275	1800	860	1300
FORD 7.3L HI−ALT	165	3000	325	1600
FORD 7.3L NATASP	185	3000	360	1400
FORD 7.3L TURBO	190	3000	395	1400
GM 6.5L NATASP	155	3600	275	1700
GM 6.5L NATASP	160	3400	290	1700
GM 6.5L TURBO	180	3400	360	1700
GM 6.5L TURBO	190	3400	385	1700
INTL 530	250	2200	800	1300
INTL 530	275	2000	950	1300
INTL 530	275	2200	860	1300
INTL 530	300	2200	950	1300
INTL 530	300	2000	1050	1300
INTL DT−408	190	2600	485	1800
INTL DT−408	210	2600	520	1800
INTL DT−408	230	2600	605	1800
INTL DT−408	175	2600	430	1800
INTL DT−466	195	2400	520	1600
INTL DT−466	210	2400	605	1600
INTL DT−466	230	2400	660	1600
INTL DT−466	250	2400	660	1600
INTL DT−466	275	2400	800	1600
INTL T444E	160	2600	400	1500
INTL T444E	175	2600	430	1500
INTL T444E	190	2600	485	1500
MACK E3−190 (MECH) CAT	190	2500	475	1300
MACK E3−220 (MECH)	220	2350	627	1400
MACK E6−250	250	2100	750	1500
MACK E6−275	275	2100	1020	1200
MACK E6−300	300	1700	1112	1200
MACK E6−350	350	1800	1277	1250
MACK EM6−250	250	2100	940	1260
MACK EM6−250L	250	1750	1190	1020
MACK EM6−275	275	2100	1038	1260
MACK EM6−275L	275	1750	1305	1020
MACK EM6−300L	300	1750	1425	1020
MACK E7−250 (MECH)	250	1950	975	1200

ENGINE HORSEPOWER/TORQUE RATINGS BY ENGINE MANUFACTURER

ENGINE	HP/@RPM		TORQUE/@RPM	
MACK E7−300 (MECH)	300	1950	1083	1200
MACK E7−300 (V−MAC)	300	1700	1160	1200
MACK E7−325 VMAC	325	1800	1260	1250
MACK E7−350	350	1800	1277	1250
MACK E7−350 VMAC	350	1800	1250	1250
MACK E7−375 VMAC	375	1800	1460	1250
MACK E7−400	400	1800	1460	1250
MACK E7−427	427	1800	1560	1250
MACK E7−454	454	1800	1560	1250
MACK EM7−250 (MECH)	250	1750	1190	1020
MACK EM7−250L	250	1750	1190	1020
MACK EM7−275 (MECH)	275	1750	1305	1250
MACK EM7−275 (V−MAC)	275	1750	1305	1250
MACK EM7−300 (MECH)	300	1750	1425	1020
MACK EM7−300VMAC	300	1750	1425	1020
MACK E9	550	2100	1660	1300
MACK E9 450	450	1900	1495	1300
MACK E9 500	500	1900	1660	1300
VOLVO 260E/300AE	260	2100	800	1080
VOLVO 280G/330BE	280	1700	925	1200
VOLVO 300−A360CE	300	2100	925	1200
VOLVO 300CC/410DE	300	2100	955	1200
VOLVO 310B	310	1900	985	1200

Notes

EL850 Compressors

- Single cylinder air compressor with a rated displacement of 8.5 CFM (Cubit Feet per Minute) at 1250 rpm.
- Offered in air cooled or water cooled versions and accommodates belt−driven or gear−driven mounting requirements for wide range of gasoline and diesel engines.
- Built to FMVSS−121 criteria for medium and heavy duty vehicles.
- Lightweight and compact allowing for easy installation.
- Head can be rotated in 90? increments, allowing four porting options.
- Better buy for mid−range applications. For quality, for performance, for reduced operating costs, specify the EL850.

EL1300 Compressors

- Recognized by fleet operators as the new line haul standard for air braked vehicles
- Water cooled, two−cylinder, reciprocating piston−type compressor is designed to provide efficient performance with maximum durability for extended life.
- Compatible with most engine configurations and are interchangeable with competitive mounting and plumbing patterns.
- Head can be rotated 180?, allowing two porting options.

EL1600 Compressors

- Identical benefits of the EL1300 compressor with increased stroke achieved by increasing the crankshaft throw.
- Height of compressor increased by .19 inches.
- High−capacity performer. Valuable option for operations that require above normal air supplies such as bottom dumps, doubles operations, loggers, and bus operations.

EL3200 Compressors

- Designed for use on vehicles with high air volume requirement due to special accessory equipment requirements beyond the air brake system.
- To achieve high air volume requirement, compressor uses two twin−cylinder EL1600 air compressors assembled in−line.
- Special intake and exhaust manifold assemblies are provided to simplify installation.

EL1300/1600/3200/850
SPECIFICATIONS

	EL850	EL1300	EL1600	EL3200
Bore (inches diameter).....	3.15	2.75	2.75	2.75
Stroke (inches).....	1.50	1.50	1.87	1.87
Turbo−Charge Pressure (Max PSI).....	25	35	35	35
Rated Displacement @ 1250 RPM (CFM)..	8.5	12.9	16.1	32.2

Compressors are listed by mounting or engine application. The head on any Haldex or Midland compressor may be rotated unless otherwise noted. When determining inlet port location, always point crankshaft towards you.

Haldex (New and Remanufactured)

EL740 Base Mount

Features:

- Pulley drive.

Specifications:

Approximate Weight 32 lbs.

Notes:

1) Port orientation viewed from front.

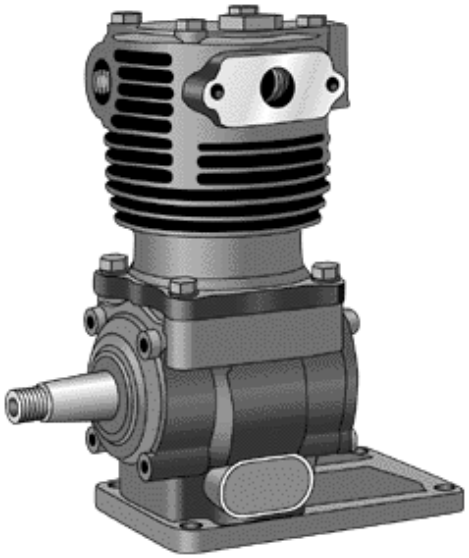
2)

Compressor Kits	
Part Number	**Repair Kit Description**
102368BM	Gasket-Crankcase To Block
102368BA	Gasket-Crankcase To Front Bearing Cap
102368BC	Gasket-Crankcase To Rear Bearing Cap
102368BG	Gasket-Cylinder Head
102368BJ	Gasket-Cylinder Head
RN26GV	Gasket Kit
SN144AB	Installation Kit
EQ2670	Ring Kit - Standard
EQ2672	Ring Kit .020 OS
N13799K	Unloader Kit
RN33C	Unloader Kit

SKU#	Product Description	Cooling	Inlet Port	Outlet Port	Discharge Type	Notes	Core Group
KN7041X	Remanufactured 4−Hole, Base Mount	Air/Water	Left	Left	Flange	Special Bottom Plate For Ford	700

Haldex (New and Remanufactured)

EL850 4−Hole Base Mount, Water Or Air Cooled



Torque Nut to 80−100 ft. lbs

Compressor Kits	
Part Number	**Repair Kit Description**
EQ2621	Connecting Rod & Bearing - .010 US
EQ2622	Connecting Rod & Bearing - .020 US
EQ2620	Connecting Rod & Bearing - Std
EQ2631	Connecting Rod Bearing - .010 US
EQ2632	Connecting Rod Bearing - .020 US
EQ2630	Connecting Rod Bearing - Std
RN26JG	Gasket/Seal Kit
RN26JH	Gasket/Seal Kit
102368CE	Gasket-Bottom Plate
102368BR	Gasket-Crankcase to Block
102368BL	Gasket-Cylinder Head
102368BD	Gasket-End Cap to Crankcase
KNT17300	Head Assembly - Air Cooled
KNT17300X	Head Assembly - Air Cooled - Reman
KNT17400	Head Assembly - Water Cooled
KNT17400X	Head Assembly - Water Cooled - Reman
RNT26JA	Head Repair Kit
SN144R	Installation Kit
EQ2640	Piston Kit - Standard
EQ2650	Ring Kit - Standard
RNT26JB	Unloader Kit

Features:

- Belt Drive
- End Cap Oil Feed
- Base Oil Drain

Specifications:

Overall Height	11.00 in
Overall Width	4.78 in.
Overall Length	10.08 in.
External Shaft Length	2.22 in.
Bore Diameter	3.15 in.
Stroke	1.50 in.
Rated Displacement	8.5 CFM @ 1250 RPM
Approximate Weight	24 lbs.

Notes:

1) Changeover/Installation Instructions − L31043

2) Service/Repair Instructions For Cylinder Head − L31059.

3) Service Units are furnished without governors and manifolds and may require head rotation before installation or changeover.

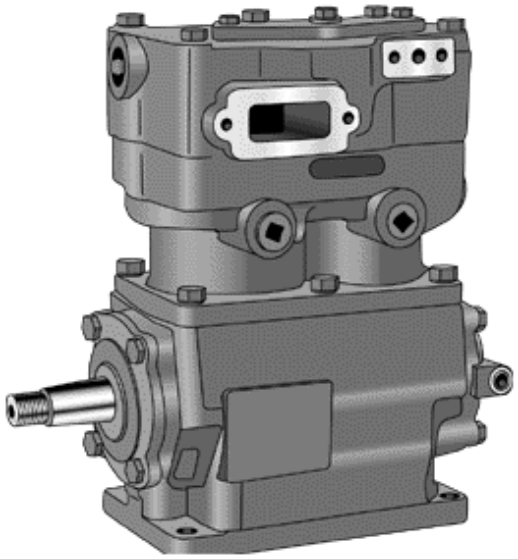
4) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

5) Port orientation viewed from front.

SKU#	Product Description	Intake Manifold Position	Discharge Type	Application	OEM Part Number	Core Group
KN85020	EL850 4−Hole Base Mount	Right	Front−Threaded	Air Cooled Single Cylinder	N7502 Exact Replacement	−
KN85020X	Reman. EL850 4−Hole Base Mount	Right	Front−Threaded	Air Cooled Single Cylinder	N7502 Exact Replacement	850
KN85021	EL850 4−Hole Base Mount	Left	−	GM − Air Cooled	N7502D	−
KN85022X	Reman. EL850 4−Hole Base Mount	Rear	Rear−Threaded	Air Cooled Single Cylinder	N7502C	850
KN86020	EL850 4−Hole Base Mount	Right	Front−Threaded	Water Cooled Single Cylinder	N7602 Exact Replacement	−
KN86020X	Reman. EL850 4−Hole Base Mount	Right	Front−Threaded	Water Cooled Single Cylinder	N7602 Exact Replacement	850

Haldex (New and Remanufactured)

EL1300 4−Hole Base Mount



Torque Nut to 80−100 ft. lbs.

Compressor Kits	
Part Number	**Repair Kit Description**
EQ2621	Connecting Rod & Bearing - .010 US
EQ2622	Connecting Rod & Bearing - .020 US
EQ2620	Connecting Rod & Bearing - Std
EQ2631	Connecting Rod Bearing - .010 US
EQ2632	Connecting Rod Bearing - .020 US
EQ2630	Connecting Rod Bearing - Std
E172051	Front Shaft Oil Seal
RN26GW	Gasket & Seal Kit
102368BP	Gasket-Crankcase to Block
E172006	Gasket-Crankcase to Bottom Cover Plate
E172000	Gasket-Cylinder Head
102368BE	Gasket-End Cap To Crankcase
E172001	Gasket-Unloader Cover To Head
KNT17090	Head Assembly Kit
KNT17090X	Head Assembly Kit - Reman
RNT26	Head Repair Kit
SN144	Installation Kit for EL13020, EL13021X
SN144A	Installation Kit for EL13022, EL13022X
SN144BL	Installation Kit for EL13023, EL13023X
EQ2604	Piston Kit - Standard
EQ2606	Piston Kit .020 OS
EQ2614	Ring Kit - Standard
EQ2616	Ring Kit .020 OS
RNT26A	Unloader Kit

Features:

- Belt Drive
- End Cap Oil Feed
- Base Oil Drain
- Top/Flange Discharge Type

Specifications:

Overall Height	11.42 in.
Overall Width	4.79 in.
Overall Length	8.93 in.
External Shaft Length	2.14 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Turbo−Charge Pressure	35 Max PSI
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	44 lbs.

Notes:

1) EL13020 Changeover/Installation Instructions: L31040

2) EL13022 Changeover/Installation Instructions: L31024

3) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

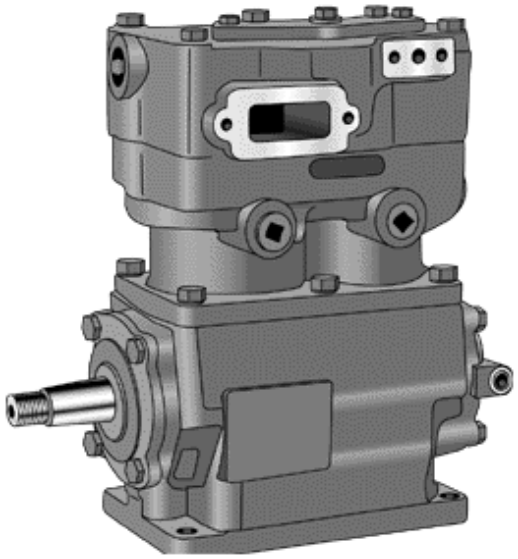
4) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

5) Port orientation viewed from front.

SKU#	Product Description	Head Rotation	Block Rotation	Notes	OEM Part Number	Core Group
EL13020	4−Hole Base Mount	Right	Right	High Capacity Replacement EL16020	N7002A Exact Replacement	−
EL13020X	Remanufactured 4−Hole Base Mount	Right	Right	High Capacity Replacement EL16020X	N7002A Exact Replacement	1301
EL13021X	Remanufactured 4−Hole Base Mount	Left	Left	−	−	1301
EL13022	4−Hole Base Mount	Left	Right	Ford, bottom cover with oil drain	−	−
EL13022RX	4−Hole Base Mount − CoreFreeÂ™	Left	Right	Ford, bottom cover with oil drain	−	−
EL13022X	Remanufactured 4−Hole Base Mount	Left	Right	Ford, bottom cover with oil drain.	N7002Z Exact Replacement	1301
EL13023	4−Hole Base Mount	Right	Left	GM15060936	NT7002AS	−
EL13023X	Remanufactured 4−Hole Base Mount	Right	Left	−	NT7002AS	1301

Haldex (New and Remanufactured)

EL1600 4−Hole Base Mount



Torque Nut to 80−100 ft. lbs.

Compressor Kits	
Part Number	**Repair Kit Description**
EQ2621	Connecting Rod & Bearing - .010 US
EQ2622	Connecting Rod & Bearing - .020 US
EQ2620	Connecting Rod & Bearing - Std
EQ2631	Connecting Rod Bearing - .010 US
EQ2632	Connecting Rod Bearing - .020 US
EQ2630	Connecting Rod Bearing - Std
E172051	Front Shaft Oil Seal
RN26GW	Gasket & Seal Kit
102368BP	Gasket-Crankcase to Block
E172006	Gasket-Crankcase to Bottom Cover Plate
E172000	Gasket-Cylinder Head
102368BE	Gasket-End Cap To Crankcase
E172001	Gasket-Unloader Cover To Head
KNT17090	Head Assembly Kit
KNT17090X	Head Assembly Kit - Reman
RNT26	Head Repair Kit
SN144	Installation Kit
EQ2604	Piston Kit - Standard
EQ2606	Piston Kit .020 OS
EQ2614	Ring Kit - Standard
EQ2616	Ring Kit .020 OS
RNT26A	Unloader Kit

Features:

- End Cap Oil Feed
- Belt Drive
- Base Oil Drain
- Top/Flange Discharge Type

Specifications:

Overall Height	11.60 in.
Overall Width	4.79 in.
Overall Length	8.93 in.
External Shaft Length	2.14 in.
Bore Diameter	2.75 in.
Stroke	1.87 in.
Turbo−Charge Pressure	35 Max PSI
Rated Displacement	16.1 CFM @ 1250 RPM
Approximate Weight	44 lbs.

Notes:

1) EL16020 Changeover/Installation Instructions: L31040

2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

4) Port orientation viewed from front.

SKU#	Product Description	Head Rotation	Block Rotation	Notes	OEM Part Number	Core Group
EL16020	4−Hole Base Mount	Right	Right	High Capacity	N7202 Exact Replacement	−
EL16020X	Remanufactured 4−Hole Base Mount	Right	Right	High Capacity	N7202 Exact Replacement	1601

Haldex (New and Remanufactured)

EL1300/EL1600 4−Hole Base Mount, Belt Drive, Base Oil

Torque Nut to 80−100 ft. lbs.
EL16060 Shown

Compressor Kits	
Part Number	**Repair Kit Description**
EQ2621	Connecting Rod & Bearing - .010 US
EQ2622	Connecting Rod & Bearing - .020 US
EQ2620	Connecting Rod & Bearing - Std
EQ2631	Connecting Rod Bearing - .010 US
EQ2632	Connecting Rod Bearing - .020 US
EQ2630	Connecting Rod Bearing - Std
E172051	Front Shaft Oil Seal
RN26GW	Gasket & Seal Kit
102368BP	Gasket-Crankcase to Block
E172006	Gasket-Crankcase to Bottom Cover Plate
E172000	Gasket-Cylinder Head
102368BE	Gasket-End Cap To Crankcase
E172001	Gasket-Unloader Cover To Head
KNT17090	Head Assembly Kit
KNT17090X	Head Assembly Kit - Reman
RNT26	Head Repair Kit
SN144D	Installation Kit
EQ2604	Piston Kit - Standard
EQ2606	Piston Kit .020 OS
EQ2614	Ring Kit - Standard
EQ2616	Ring Kit .020 OS
RNT26A	Unloader Kit

Features:

- Belt Drive
- Base Oil Feed
- Base Oil Drain
- Water Cooled

Specifications:

Overall Height	11.41 in. (EL1300) or 11.60 in (EL1600)
Overall Width	4.84 in.
Overall Length	11.20 in.
External Shaft Length	2.14 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) or 1.87 in. (EL1600)
Turbo−Charge Pressure	35 Max PSI
Rated Displacement	13.0 CFM (EL1300) or 16.1 CFM (EL1600) @1250 RPM
Approximate Weight	45 lbs.

Notes:

1) Changeover/Installation instructions − L31030.

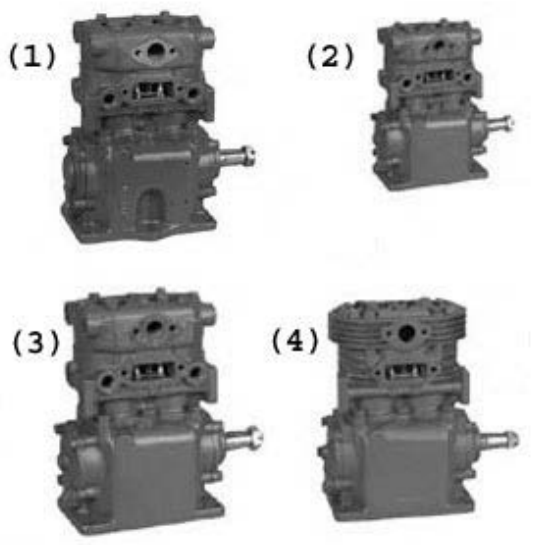
2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Port orientation viewed from front.

SKU#	Product Description	Head Rotation	Block Rotation	Discharge Type	Notes	OEM Part Number	Core Group
EL13060	4−Hole Base Mount	Right	Right	Top/Flange	High Capacity Replacement EL16060	N7006C	−
EL13060X	Remanufactured 4−Hole Base Mount	Right	Right	Top/Flange	Base Oil Feed Option	N7006C	1301
EL16060	4−Hole Base Mount	Right	Right	Top/Flange	End cap plugged High Capacity	N7206 Exact Replacement	−
EL16060X	Remanufactured 4−Hole Base Mount	Right	Right	Top/Flange	High Capacity	N7206 Exact Replacement	1601

Competitive (Remanufactured)

Bendix® TF400 4−Hole Base Mount



Features:

- Pulley Drive
- Flange Discharge Type

Specifications:

Approximate Weight 34 lbs.

Notes:

1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
280511K	Gasket Kit
282764K	Insert Kit - .010
282765K	Insert Kit - .020
282766K	Insert Kit - .030
282763K	Insert Kit - Standard
BN144A	Installation Kit for 101242X, 227400, 01, 02, 03, 06X, 229154X, 275317X, 289823X
BN144C	Installation Kit for 289688X
BN144J	Installation Kit for 101142X
289439K	Piston Kit - .010
289440K	Piston Kit - .020
289441K	Piston Kit - .030
226722K	Ring Set - .010
226723K	Ring Set - .020
226724K	Ring Set - .030
279614K	Unloader Kit

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Picture	Core Group
101142X	TF400 4−Hole Base Mount	Water	Left	Left	Wide Base	1	400B
101242X	TF400 4−Hole Base Mount	Water	Left	Left	Rear Oil Inlet	3	400B
227400X	TF400 4−Hole Base Mount	Water	Left	Left	Base Oil Inlet	3	400B
227401X	TF400 4−Hole Base Mount	Water	Right	Right	Base Oil Inlet	3	400B
227402X	TF400 4−Hole Base Mount	Water	Left	Left	Non Oiler	3	400B
227403X	TF400 4−Hole Base Mount	Water	Right	Right	Non Oiler	3	400B

227406X	TF400 4−Hole Base Mount	Air	Left	Left	−	4	400B
227407X	TF400 4−Hole Base Mount	Air	Right	Right	−	4	400B
229154X	TF400 4−Hole Base Mount	Air	Left	Left	with Ball	4	400B
275317X	TF400 4−Hole Base Mount	Water	Left	Left	−	3	400B
289688X	TF400 4−Hole Base Mount	Water	Right	Right	Bottom Plate, Base Drain	2	400B
289823X	TF400 4−Hole Base Mount	Water/Air	Left	Left	−	−	400B

Competitive (Remanufactured)

Bendix® TF500/TF600 4−Hole Base Mount

Features:

• Pulley Drive

Specifications:

Approximate Weight 46 lbs.

Notes:

1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
280512K	Gasket Kit
282768K	Insert Kit - .010
282767K	Insert Kit - Standard
BN144A	Installation Kit
289929K	Piston Kit - .010
289930K	Piston Kit - .020
289931K	Piston Kit - .030
225516K	Ring Set - .020
225517K	Ring Set - .030
279615K	Unloader Kit

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
227320X	TF500 4−Hole Base	Water	Left	Left	Flange	Base Oil Option	500A
227321X	TF500 4−Hole Base	Water	Right	Right	Flange	−	500A
227322X	TF500 4−Hole Base	Water	Right	Right	Flange	Base Oil Option	500A
227323X	TF500 4−Hole Base	Water	Left	Left	Flange	−	500A
228141X	TF500 4−Hole Base	Air	Left	Left	Flange	−	500A
228479X	TF500 4−Hole Base	Water	Left	Left	Flange	Thru−Drive Base Oil Option	500A
275990X	TF500 4−Hole Base	Water	Right	Right	Flange	Thru−Drive Base Oil Option	500A
276836X	TF500 4−Hole Base	Air	Right	Right	Flange	−	500A
277694X	TF500 4−Hole Base	Water	Left	Top	Threaded	−	500A
279356X	TF500 4−Hole Base	Water	Left	Left	Flange	Base Oil Option	500A
280453X	TF500 4−Hole Base	Water	Right	Top	Flange	R & R Only Call for Availability	500A

280602X	TF600 4−Hole Base	Water	Left	Left	Flange	Base Oil Option	500A
280603X	TF600 4−Hole Base	Water	Right	Right	Flange	−	500A
280604X	TF600 4−Hole Base	Water	Right	Right	Flange	Base Oil Option	500A
280613X	TF600 4−Hole Base	Water	Left	Left	Flange	−	500A
282076X	TF500 4−Hole Base	Water	Right	Top	Threaded	−	500A
283690X	TF500 4−Hole Base	Water	Left	Top	Threaded	Base Oil Option	500A

Competitive (Remanufactured)

Bendix® TF501 (Style A, B and No Base) Base Mount

Base Style A Base Style B

Features:

- Pulley Drive
- Water and Air Cooled

Specifications:

Approximate Weight 40 lbs.

Notes:

1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
101558K	Gasket Kit
286255K	Insert Kit - .010
286256K	Insert Kit - .020
286257K	Insert Kit - .030
286254K	Insert Kit - Standard
BN144A	Installation Kit for 286526, 27, 28, 29, 60, 82, 86, 89, 91, 95X
BN144C	Installation Kit for 102698X
BN144S	Installation Kit for 286567, 80, 92X
289114K	Piston Kit - .010
289115K	Piston Kit - .020
289116K	Piston Kit - .030
279615K	Unloader Kit

SKU#	Product Description	Category	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
102698X	TF501 Base Mount	Base Style A	Left	Left	Flange	3 Front Cover Studs	501B
286526X	TF501 Base Mount	Base Style A	Left	Left	Flange	–	501B
286527X	TF501 Base Mount	Base Style A	Right	Right	Flange	–	501B
286528RX	TF501 Base Mount – CoreFreeÂ™	Base Style A	Left	Top	Threaded	–	–
286528X	TF501 Base Mount	Base Style A	Left	Top	Threaded	–	501B
286529RX	TF501 Base Mount – CoreFreeÂ™	Base Style A	Right	Top	Threaded	–	–
286529X	TF501 Base Mount	Base Style A	Right	Top	Threaded	–	501B

286560X	TF501 Base Mount	Base Style A	Left	Top	Threaded	4 Front Cover Studs	501B
286567X	TF501 Base Mount	No Base	Right	Top	Threaded	–	501B
286580X	TF501 Base Mount	No Base	Left	Left	Flange	–	501B
286582X	TF501 Base Mount	Base Style A	Left	Top	Threaded	3 Front Cover Studs	501B
286586X	TF501 Base Mount	Base Style A	Left	Left	Flange	–	501B
286589X	TF501 Base Mount	Base Style A	Right	Right	Flange	–	501B
286591X	TF501 Base Mount	Base Style B	Right	Right	Flange	Special Base Drain	501B
286592X	TF501 Base Mount	No Base	Right	Right	Flange	–	501B
286595X	TF501 Base Mount	Base Style B	Right	Top	Threaded	Special Base Drain	501B

Competitive (Remanufactured)

Bendix® TF501/TF700 4−Hole Base Mount

Features:

- Pulley Drive

Notes:

1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
101558K	Gasket Kit for TF501
101559K	Gasket Kit for TF700
286255K	Insert Kit - .010 for TF501
286256K	Insert Kit - .020 for TF501
286257K	Insert Kit - .030 for TF501
286254K	Insert Kit - .Standard for TF501
282769K	Insert Kit - .020 for TF700
282770K	Insert Kit - .030 for TF700
BN144A	Installation Kit
289114K	Piston Kit - .010 for TF501
289115K	Piston Kit - .020 for TF501
289116K	Piston Kit - .030 for TF501
282526K	Ring Set - .010 for TF700
282527K	Ring Set - .020 for TF700
282528K	Ring Set - .030 for TF700
279615K	Unloader Kit

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Core Group
101256X	TF700 4−Hole Base Mount	Water	Right	Right/Top	Optional Top or Left	46 lbs.	−	501B
286530X	TF501 4−Hole Base Mount	Water/Air	Left	Left	Flange	40 lbs.	Thru−Drive Base Oil Feed	501B
286532X	TF501 4−Hole Base Mount	Water/Air	Left	Top	Threaded	40 lbs.	Thru−Drive Base Oil Feed	501B

286533X	TF501 4−Hole Base Mount	Water/Air	Right	Right	Flange	40 lbs.	Thru−Drive Base Oil Feed	501B
289350X	TF700 4−Hole Base Mount	Water	Left	Left/Top	Optional Top or Left	46 lbs.	−	501B

Competitive (Remanufactured)

Bendix® TF550 4−Hole Base Mount

Features:

- Pulley Drive
- Water and Air Cooled

Specifications:

Approximate Weight 53 lbs.

Notes:

1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
298715K	Gasket Kit
298718X	Head Assembly
BN144A	Installation Kit
550010K	Piston Kit - .010
550020K	Piston Kit - .020
550030K	Piston Kit - .030
550040K	Piston Kit - .040
107640K	Ring Set - .010
107641K	Ring Set - .020
107642K	Ring Set - .030
107515K	Unloader Kit

SKU#	Product Description	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
107514X	TF550 4−Hole Base Mount	Left	Top/Left	Threaded/Flange	−	550A
107866X	TF550 4−Hole Base Mount	Right	Top/Right	Threaded	Special Base For Ford	550A
108066X	TF550 4−Hole Base Mount	Left	Top/Left	Threaded	GMC 530	550A
108110X	TF550 4−Hole Base Mount	Left	Top/Left	Threaded	Navistar Studs	550A

Competitive (Remanufactured)

Bendix® BX2150 4−Hole Base Mount

Features:

- Pulley Drive
- Threaded Discharge

Specifications:

Approximate Weight 35 lbs.

Notes:

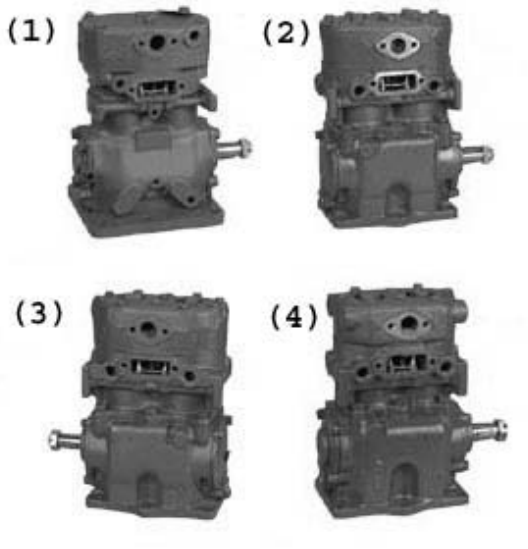
1) Port orientation viewed from rear.

Compressor Kits	
Part Number	**Repair Kit Description**
BN144R	Installation Kit
108848K	Unloader Kit for 1/4"
108847K	Unloader Kit for 3/8"

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Core Group
104039X	BX2150 4−Hole Base Mount	Water/Air	Left	Optional	**May Have Old Style Head**	2150
104041X	BX2150 4−Hole Base Mount	Water/Air	Left	Optional	Low Profile Case **May Have Old Style Head**	2150
106985X	BX2150 4−Hole Base Mount	Water/Air	Left	Optional	Base Oil Drain New Style Head	2150
107221X	BX2150 4−Hole Base Mount	Water/Air	Left	Optional	New Style Head	2150

Competitive (Remanufactured)

Bendix® 6−Hole Base Mount



Features:

- Pulley Drive

Notes:

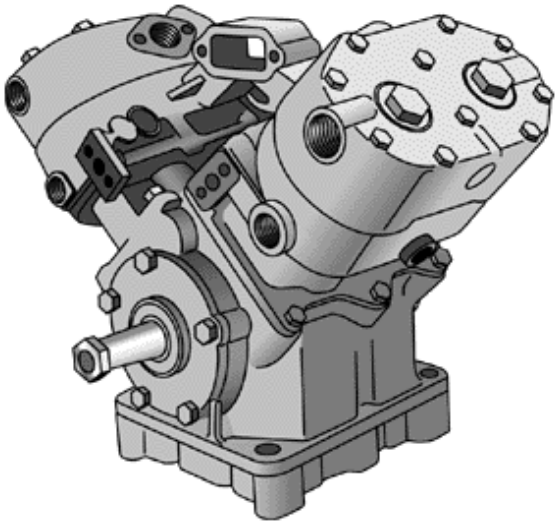
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Picture	Core Group
102598X	TF700 6−Hole	Water	Left	Left	Optional Top or Side	46 lbs.	Base Oil Option	3	501B
102989X	TF501 6−Hole	Water/Air	Right	Right	Flange	40 lbs.	Wide Base for Ford	1	501B
227331X	TF500 6−Hole	Water	Left	Left	Flange	46 lbs.	Base Oil Option	3	500A
227332X	TF500 6−Hole	Water	Right	Right	Flange	46 lbs.	Base Oil Option	3	500A
227409X	TF400 6−Hole	Water	Left	Left	Flange	34 lbs.	Base Oil Option	4	400B
227410X	TF400 6−Hole	Water	Right	Right	Flange	34 lbs.	Base Oil Option	4	400B
280610X	TF600 6−Hole	Water	Left	Left	Flange	46 lbs.	Base Oil Option	3	500A
280611X	TF600 6−Hole	Water	Right	Right	Flange	46 lbs.	Base Oil Option	3	500A
286535X	TF501 6−Hole	Water/Air	Right	Right	Flange	40 lbs.	−	1	501B
286536X	TF501 6−Hole	Water/Air	Right	Top	Threaded	40 lbs.	−	1	501B
286537X	TF501 6−Hole	Water/Air	Left	Top	Threaded	40 lbs.	−	1	501B
286576X	TF501 6−Hole	Water/Air	Right	Right	Flange	40 lbs.	−	1	501B
286578X	TF501 6−Hole	Water/Air	Left	Left	Flange	40 lbs.	Oil Port Reversed	1	501B
286585X	TF501 6−Hole	Water/Air	Left	Left	Flange	40 lbs.	Wide Base for Ford	1	501B
289924X	TF700 6−Hole	Water	Right	Right/Top	Optional Top or Left	46 lbs.	Base Oil Option	2	501B

Competitive (Remanufactured)

Bendix® Base Mount − Twin



Features:

- Pulley Drive
- Water Cooled
- Flange Discharge Type

Specifications:

Approximate Weight 80 lbs.

Notes:

1) Port orientation viewed from rear.

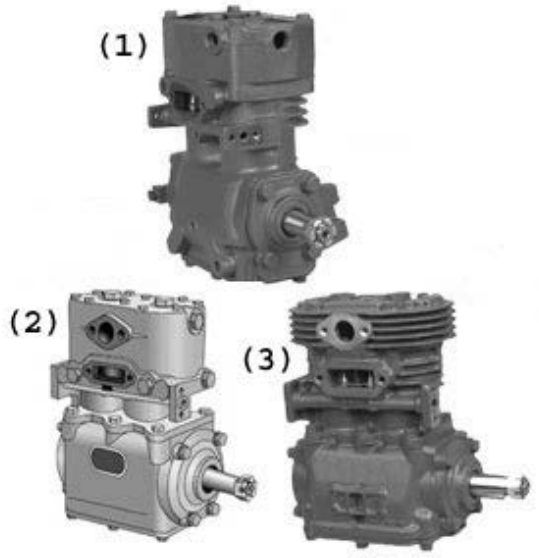
2) Intake and Discharge Manifold Not Supplied.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Category	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
229990X	TF1000 Base Mount	Vertical Mount	Middle	Middle	Flange	Need one of each kit (BN144A and BN144C) for installation.	1001

Competitive (Remanufactured)

Bendix® Side Mount



Features:

- Pulley Drive

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Picture	Core Group
102734X	TF501 Side Mount−Right	Water	Left	Left	Flange	40 lbs.	Drain In Rear	1	501B
228366X	TF500 Side Mount−Left	Water	Right	Right	Flange	46 lbs.	Ford Drain In Rear	2	500A
279037X	TF400 Side Mount−Left	Air	Right	Right	Flange	34 lbs.	Drain In Rear	3	400B
279712X	TF400 Side Mount	Air	Left	Left	Flange	34 lbs.	Drain In Rear	3	400B
283506X	TF400 Side Mount	Air	Left	Left	Flange	34 lbs.	Drain In Front	3	400B
283514X	TF500 Side Mount	Water	Left	Left	Flange	46 lbs.	Ford Drain In Front	2	500A
283585X	TF500 Side Mount	Water	Right	Right	Flange	46 lbs.	Ford Drain In Front	2	500A
286556X	TF501 Side Mount−Left	Water	Right	Right	Flange	40 lbs.	Drain In Front	1	501B
286557X	TF501 Side Mount−Left	Water	Right	Top	Threaded	40 lbs.	Drain In Front	1	501B
286564X	TF501 Side Mount−Right	Water	Left	Left	Flange	40 lbs.	No Bottom Plate	1	501B
286565X	TF501 Side Mount−Left	Water	Right	Right	Flange	40 lbs.	Drain In Front	1	501B

Competitive (Remanufactured)

Bendix® Slant Mount

Features:

- Pulley Drive
- Threaded Discharge Type

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
229077X	TF400 Slant Mount	Water	Left	Top	34 lbs.	Mount Right	3	400B
229078X	TF500 Slant Mount−Right	Water	Left	Top	46 lbs.	−	2	500A
283505X	TF400 Slant Mount	Water	Right	Top	34 lbs.	Mount Right	3	400B
283513X	TF500 Slant Mount−Right	Water	Right	Top	46 lbs.	−	2	500A
286558X	TF501 Slant Mount−Right	Water/Air	Right	Top	40 lbs.	Base Oil Option	1	501B
286561X	TF501 Slant Mount−Right	Water/Air	Left	Top	40 lbs.	Base Oil Option	1	501B
286562X	TF501 Slant Mount−Right	Water/Air	Left	Top	40 lbs.	Base Oil Option	1	501B

Haldex (New and Remanufactured)

EL740 2−Hole Flange Mount

Features:

- Engine Drive
- Top/Flange Discharge Type

Specifications:

Approximate Weight 31 lbs.

Notes:

1) Core Group 700.

2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

Compressor Kits	
Part Number	**Repair Kit Description**
102368BM	Gasket-Crankcase To Block
102368BA	Gasket-Crankcase To Front Bearing Cap
102368BC	Gasket-Crankcase To Rear Bearing Cap
102368BJ	Gasket-Cylinder Head
102368BG	Gasket-Cylinder Head
102368CN	Installation Kit
EQ2670	Ring Kit - Standard
EQ2672	Ring Kit .020 OS
N13799K	Unloader Kit
RN33C	Unloader Kit

SKU#	Product Description	Cooling	Head Rotation	Block Rotation	Notes	Core Group
KN7190X	Remanufactured 2−Hole, Flange Mount − Caterpillar Application	Water	Right	Right	NT5506 − Head Rotatable	700

Haldex (New and Remanufactured)

EL1300/EL1600 Caterpillar 1673−74

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain
- Water Cooled

Specifications:

Overall Height	12.00 in.
Overall Width	5.44 in.
Overall Length	11.31 in.
External Shaft Length	2.00 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300). 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	45 lbs.

Notes:

1) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

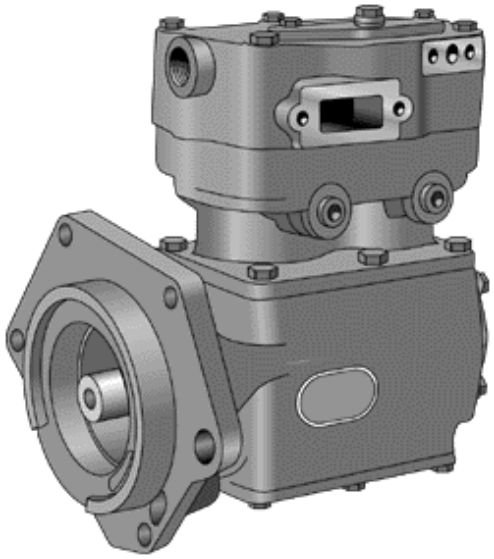
2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13080X	Remanufactured Caterpillar Flange Mount	Right	Right	Caterpillar 1673−1674 Engines	Tapered Shaft	−	1300
EL16080X	Remanufactured Caterpillar 3−Hole Flange Mount	Right	Right	Caterpillar 1673−1674 Engines	Tapered Shaft	−	1600

Haldex (New and Remanufactured)

EL1300 Caterpillar 3306 Engine



Torque Nut to 80−100 ft. lbs

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- Flange Oil Drain
- End Cap Oil Feed
- Water Cooled

Specifications:

Overall Height	11.62 in.
Overall Width	8.34 in.
Overall Length	10.93 in.
External Shaft Length	.72 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Turbo−Charge Pressure	35 Max PSI
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	51 lbs.

Notes:

1) Changeover/Installation Instructions: L31037

2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

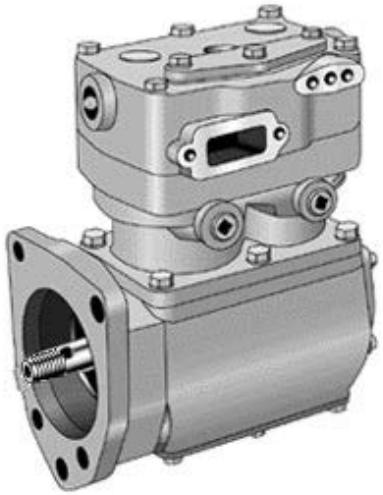
3) Port orientation viewed from front.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	OEM Part Number	Core Group
EL13151RX	Remanufactured Caterpillar Flange Mount − CoreFreeÂ™	Right	Right	Caterpillar 3306 Engines Spline Shaft	NT7015B Exact Replacement	−
EL13151X	Remanufactured Caterpillar Flange Mount	Right	Right	Caterpillar 3306 Engines Spline Shaft	NT7015B Exact Replacement	1300

Haldex (New and Remanufactured)

EL1300 Caterpillar 3406E Engine



Typical − Torque Nut to 80 − 100 ft. lbs.

Features:

- End Cap Oil Feed
- Flange Oil Drain
- Flange Mount, Gear Drive

Specifications:

Overall Height	12.00 in.
Overall Width	5.44 in.
Overall Length	11.06 in.
External Shaft Length	1.26 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Turbo−Charge Pressure	35 Max PSI
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	46 lbs.

Notes:

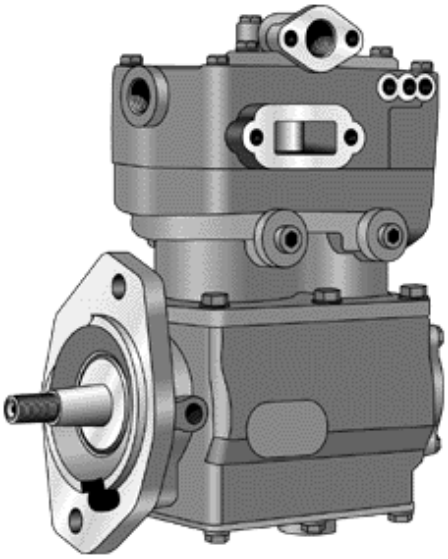
1) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Notes	OEM Part Number	Core Group
EL13330X	Remanufactured Caterpillar 3406E Engine, Straight Keyed Shaft	Right	Right	Straight Keyed Shaft	NT7033D	1300

Haldex (New and Remanufactured)

EL1300 2−Hole Flange, Tapered Shaft



Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Side Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.51 in.
Overall Width	7.66 in.
Overall Length	11.80 in.
External Shaft Length	2.23 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	54 lbs.

Notes:

1) Changeover/installation instructions − L31050.

2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM #	Core Group
EL13280X	Remanufactured Caterpillar 2−Hole Flange Tapered Shaft	Right	Right	Caterpillar #145−2906	Thru−Drive	NT7028C	1300

Haldex (New and Remanufactured)

EL1300 3−Hole Flange

Torque Nut to 80−100 ft. lbs.
EL13120X Shown

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- Flange Oil Drain
- End Cap Oil Feed

Specifications:

Overall Height	12.00 in.
Overall Width	5.44 in.
Overall Length	11.31 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Rated Displacement	13.0 CFM @1250 RPM
Approximate Weight	45 lbs.

Notes:

1) EL13120/EL16120 Changeover/Installation Instructions: L31036

2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

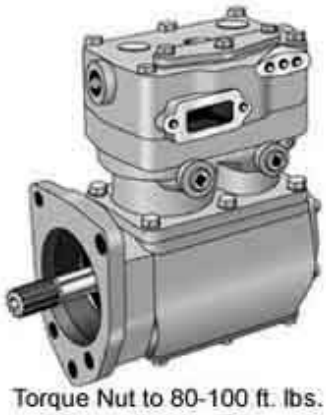
3) Port orientation viewed from front.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	External Shaft Length	Application	Notes	OEM Part Number	Core Group
EL13081X	Reman. Flange Mount	Left	Left	2.00 in.	Caterpillar 3406B Engines	−	−	1300
EL13120RX	Reman. 3−Hole Flange Mount − CoreFreeÂ™	Right	Right	2.45 in.	Caterpillar 3406A Engines	Spline Shaft Base Drain	NT7012B Exact Replacement	−
EL13120X	Reman. 3−Hole Flange Mount	Right	Right	2.45 in.	Caterpillar 3406A Engines	Spline Shaft Base Drain	NT7012B Exact Replacement	1300
EL13170X	Reman. 3−Hole Flange Mount	Right	Right	1.65 in.	Older 3406 Engines	Tapered Shaft with Threaded Flange	NT7017	1300
EL13200RX	Reman. 3−Hole Flange Mount − CoreFreeÂ™	Right	Right	2.00 in.	Caterpillar 3406B Engine	Tapered Shaft with Threaded Flange	NT7020 Exact Replacement	−
EL13200X	Reman. 3−Hole Flange Mount	Right	Right	2.00 in.	Caterpillar 3406B Engine	Tapered Shaft with Threaded Flange	NT7020 Exact Replacement	1300

Haldex (New and Remanufactured)

EL1600 3−Hole Flange



EL16280 - CAT 3116

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.19 in.
Overall Width	5.44 in.
Overall Length	11.31 in.
Bore Diameter	2.75 in.
Stroke	1.87 in.
Rated Displacement	16.1 CFM @ 1250 RPM
Approximate Weight	45 lbs.

Notes:

1) EL13120/EL16120 Changeover/Installation Instructions: L31036

2) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Port orientation viewed from front.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	External Shaft Length	Application	Notes	OEM Part Number	Core Group
EL16120X	Reman. 3−Hole Flange Mount	Right	Right	2.45 in.	Caterpillar 3406A Engines	High Capacity	NT7212	1600
EL16200X	Reman. 3−Hole Flange Mount	Right	Right	2.00 in.	Caterpillar 3406B Engine	High Capacity Tapered Shaft Threaded Mounting Holes	NT7220 Exact Replacement	1600
EL16280	3−Hole Flange Mount	Right	Right	1.85 in.	Caterpillar 3116 Engine	Comes with Drive−Thru Adapter	NT7228A	−

Haldex (New and Remanufactured)

EL1300 3−Hole Flange, Spline Shaft

Features:

- Flange Mount, Spline Shaft
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.02 in.
Overall Width	5.45 in.
Overall Length	9.79 in.
External Shaft Length	.86 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	49 lbs.

Notes:

1) Core Group 1300.

2) Changeover/Installation Instructions − L31069.

3) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

4) Port orientation viewed from front.

5) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	OEM Part Number	Core Group
EL13301X	Remanufactured Caterpillar, 3−Hole Flange, 22 Spline Shaft	Right	Right	Caterpillar 3176B Engine	NT7030 Exact Replacement	1300

Haldex (New and Remanufactured)

EL365 Caterpillar Compressor

3−hole mount shown

Features:

- Naturally aspirated or Turbocharged
- High Air Output
- High Thru−drive torque (150 ft−lb)
- Overall Height: 12.22"
- Overall Width: 5.43"
- Overall Length: 12.11"
- Weight: 47 lbs

Notes:

1) Includes pressure relief valve

2) Service units are supplied without governors

SKU#	Product Description	Head rotation	Block rotation	OEM#	Core Group
EL365007X	Reman Cat EL365 2 hole mount Compressor	Rear	Right	N7212FM	3652
EL365131X	Reman Cat EL365 3 hole mount compressor C13 (pre 2007)	Rear	Right	N7212FP	3653
EL365132X	Reman Cat EL365 3 Hole Mount Compressor C13 (2007−after)	Rear	Right	N7212FP	3653
EL365151X	Reman Cat EL365 3 hole mount Compressor C15 (pre−2007)	Rear	Right	N7212FP	3653
EL365152X	Reman Cat EL365 3 Hole Mount Compressor C15 (2007−after)	Rear	Right	N7212FP	3653

Competitive (Remanufactured)

Bendix® TF400

Features:

- Engine Drive
- Water Cooled

Specifications:

Approximate Weight 46 lbs.

Notes:

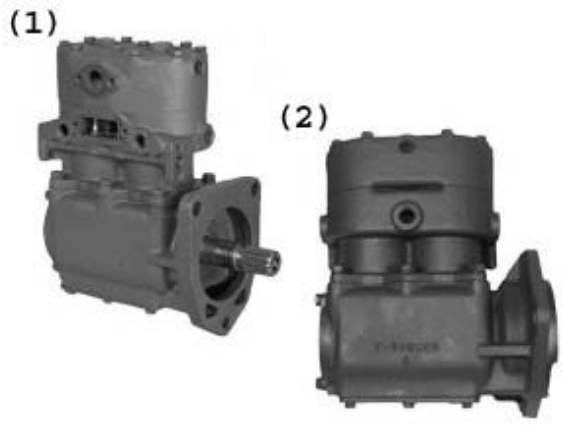
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
283533X	TF400 Flange Mount − Caterpillar	Left	Left	Flange	Spline Shaft	400B

Competitive (Remanufactured)

Bendix® TF500/TF600



Features:

- Engine Drive
- Water Cooled
- Flange Discharge Type

Notes:

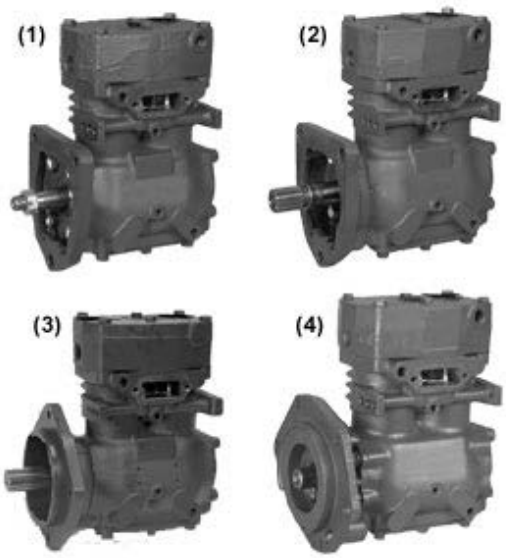
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
277730X	TF500 Flange Mount − Caterpillar	Right	Right	46 lbs.	Spline Shaft	1	500A
277731X	TF500 Flange Mount − Caterpillar	Left	Left	46 lbs.	Spline Shaft	1	500A
279995X	TF500 Flange Mount − Caterpillar 3406	Left	Left	46 lbs.	Tapered Shaft	1	500A
280556X	TF600 Flange Mount − Caterpillar 3406	Left	Left	46 lbs.	Tapered Shaft	1	500A
280774X	TF600 Flange Mount − Caterpillar 3406	Left	Left	46 lbs.	Tapered Shaft	1	500A
281157X	TF600 Flange Mount − Caterpillar 3406	Right	Right	46 lbs.	Tapered Shaft	1	500A
282025X	TF500 Flange Mount − Caterpillar	Left	Left	46 lbs.	Spline Shaft	1	500A
284310X	TF500 Flange Mount − Caterpillar 3406	Right	Top	46 lbs.	Tapered Shaft	1	500A
284790X	TF500 Flange Mount − Caterpillar Special Application	Left	Top	50 lbs.	Spline Shaft	2	500A

Competitive (Remanufactured)

Bendix® TF501



Features:

- Engine Drive

Notes:

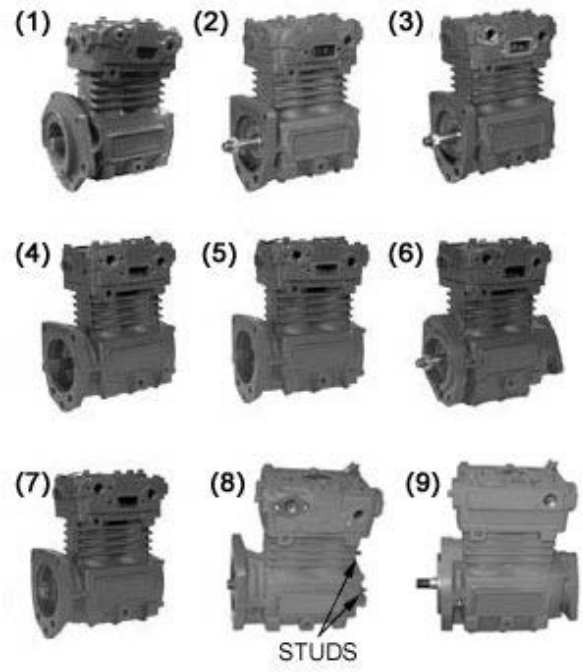
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Picture	Core Group
102742X	TF501 Flange Mount − Caterpillar 3512	Water/Air	Left	Top	Threaded	46 lbs.	Spline Shaft	3	501T
103274X	TF501 Flange Mount − Caterpillar 3406B	Water/Air	Left	Top	Threaded	40 lbs.	Tapered Shaft 2−3° Tilt	1	501F
286546X	TF501 Flange Mount − Caterpillar 3406	Water/Air	Left	Top	Threaded	44 lbs.	Spline Shaft Rear Oil Inlet Base Oil Drain	2	501F
286550X	TF501 Flange Mount − Caterpillar 3406	Water/Air	Left	Left	Flange	40 lbs.	Tapered Shaft	1	501F
286551X	TF501 Flange Mount − Caterpillar 3406	Water/Air	Right	Top	Threaded	40 lbs.	Tapered Shaft	1	501F
286552X	TF501 Flange Mount − Caterpillar 3406	Water/Air	Left	Top	Threaded	40 lbs.	Tapered Shaft	1	501F
286566X	TF501 Flange Mount − Caterpillar 3406	Water/Air	Right	Top	Threaded	40 lbs.	Tapered Shaft	1	501F
286584X	TF501 Flange Mount − Caterpillar 3306	Water/Air	Left	Top	Threaded	46 lbs.	Spline Shaft 22 Tooth	4	501F
286594x	TF501 Flange Mount − Caterpillar 3306	Water/Air	Left	Top	Threaded	46 lbs.	Spline Shaft 22 Tooth	4	501F

Competitive (Remanufactured)

Bendix® TF550/TF750



Features:

- Engine Drive
- Optional Top or Left Discharge Type

Notes:

1) Port orientation viewed from rear.

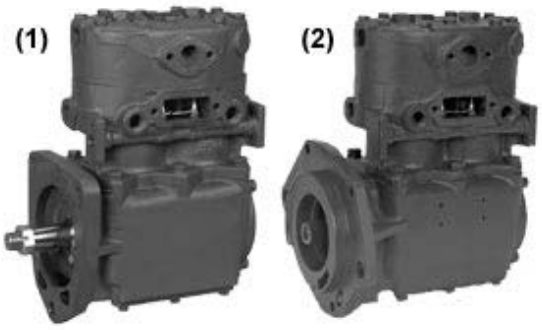
2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Wt.	Pic.	Core Group
107023X	TF750 Flange Mount − Caterpillar 3406B−3176	Water/Air	Left	Left/Top	Splined Shaft 22 Tooth	53 lbs.	4	750F
107508X	TF750 Flange Mount − Caterpillar 3406B−3176 − 2.5° Tilt	Water/Air	Left	Left/Top	Tapered Shaft	53 lbs.	2	750B
107509X	TF550 Flange Mount − Caterpillar 3406B−3176 − 2.5° Tilt	Water/Air	Left	Left/Top	Tapered Shaft	53 lbs.	3	550B
107917X	TF550 Flange Mount − Caterpillar 3406B−3176	Water/Air	Left	Left/Top	Spline Shaft 22 Tooth	53 lbs.	5	550G
107981X	TF550 Flange Mount − Caterpillar 3116 − 31.5° Tilt	Water	Left	Left/Top	Spline Shaft 11 Tooth	60 lbs.	6	550M
108990X	TF550 Flange Mount − Caterpillar 0° Tilt	Water/Air	Left	Top	Mack Style	53 lbs.	5	550I
108992X	TF750 Flange Mount − Caterpillar 0° Tilt	Water/Air	Left	Top	Mack Style	53 lbs.	5	750I
109088X	TF550 Flange Mount − Caterpillar 7° Tilt	Water	Left	Left/Top	Tapered Shaft 11 Tooth Accessory Drive Navistar	60 lbs.	6	550N
109111X	TF750 Flange Mount − Caterpillar 7° Tilt	Water	Left	Left/Top	Tapered Shaft 11 Tooth Accessory Drive Navistar	59 lbs.	6	750N
109139X	TF550 Flange Mount − Caterpillar 3406, C10, C12, C15, C16	Water	Left	Left/Top	Crankshaft Thread	53 lbs.	7	550L

109142X	TF750 Flange Mount − Caterpillar 3406E	Water	Left	Left/Top	Crankshaft Thread Mack Style	53 lbs.	7	750L
109251X	TF550 Flange Mount − Caterpillar 3306	Water/Air	Left	Left/Top	Spline Shaft 22 Tooth	55 lbs.	1	550J
109287X	TF750 Flange Mount − Caterpillar 3306	Water/Air	Left	Left/Top	Spline Shaft 22 Tooth	55 lbs.	1	750K
109659X	TF750 Flange Mount − Caterpillar 3500 Series	Water/Air	Left	Left/Top	Splined Shaft 22 Tooth Oil Base Drain	52 lbs.	4	750F
5001940X	TF550 Flange Mount − Caterpillar	Water/Air	Top	Top	Flange 31.5°	62 lbs.	9	550M
5002713X	TF750 Flange Mount − Caterpillar 3406, C10, C12, C15, C16	Water	Left	Left/Top	Crankshaft Thread Mack Style Identical to 109142X except has End Cover Studs	54 lbs.	8	750L
5004118X	TF750 Flange Mount − Caterpillar 3116, 3126, C7 Acert, C9 Acert	Water	Top	Top	Removeable Rear Flange Cover	53 lbs.	9	750T
5004613X	TF550 Flange Mount − Caterpillar 0° Tilt − Non−Keyed Crankshaft	Water	Left	Left/Top	Spline Shaft 11 Tooth − Navistar	58 lbs.	6	550N
5004614X	TF750 Flange Mount − Caterpillar 0° Tilt − Non−Keyed Crankshaft	Water	Left	Left/Top	Navistar Does Not Include Drive Gear	58 lbs.	6	750N
5005790X	TF550 Flange Mount − Caterpillar 3176, C15, C16	Water	Left	Top	−	53 lbs.	7	550L
5008249X	TF550 Flange Mount − Caterpillar 3116, 3126, C7 Acert, C9 Acert	Water	Top	Top	High Torque Thru Drive Removable Rear Flange Cover	53 lbs.	9	550M
5011016X	TF550 Flange Mount − Caterpillar 3116, 3126, C7 Acert, C9 Acert	Water	Top	Top	Removeable Rear Flange Cover	53 lbs.	9	550M

Competitive (Remanufactured)

Bendix® TF700



Features:

- Engine Drive
- Optional Top or Left Discharge Type

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
103278X	TF700 Flange Mount − Caterpillar 3406B	Water	Left	Left/Top	46 lbs.	Tapered Shaft 2−1/2° Tilt	1	501F
289336X	TF700 Flange Mount − Caterpillar 3306	Water	Left	Left/Top	51 lbs.	−	2	501K
289349X	TF700 Flange Mount − Caterpillar 3408	Water	Left	Left/Top	46 lbs.	No Crankshaft Key	1	501F
289744X	TF700 Flange Mount − Caterpillar 3408	Water	Left	Left/Top	46 lbs.	Tapered Shaft	1	501F

Competitive (Remanufactured)

Bendix® BX2150

104042X

107526X

Engine Drive
Water and Air Cooled
Threaded Discharge Type
Port orientation viewed from rear

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Core Group
104042X	BX2150 Flange Mount − Caterpillar 3306	Optional Top or Left	Optional Top or Left	42 lbs.	May have old style head.	2150
107526X	BX2150 Flange Mount − Caterpillar 3116	Left	Top	35 lbs.	Tapered Shaft Thru−Drive	2150

Competitive (Remanufactured)

Bendix® BA921

5012533X Shown

Features:

- Engine Drive
- Water and Air Cooled

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Core Group
5010806X	BA921 Flange Mount − Caterpillar C7, C9	Top	Rear	44 lbs.	2 Bolt Mount	921C
5012533X	BA921 Flange Mount − Caterpillar Acert, C15 and C18 Engines	Top	Side	45 lbs.	Mounting seal not included.	921A
5014428X	BA921 Flange Mount − Caterpillar C11, C13 Engines	Top	Side	46 lbs.	42 tooth, with oil pump, external oil return	921A

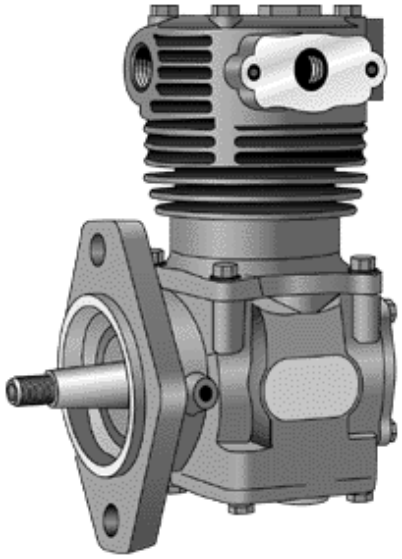
Competitive (Remanufactured)

Bendix®BA922

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Picture	Core Group
5013058X	BA922 Flange Mount − Caterpillar C11/C13 Acert	Water/Air	Top	Top	Threaded	42 tooth drive gear / 4.7" diameter	1	922B
5013059X	BA922 Flange Mount − Caterpillar C15 / C18 Acert	Water/Air	Top	Top	Threaded	40 tooth drive gear / 4.5" Diameter	1	922B

Haldex (New and Remanufactured)

EL850 2−Hole Flange, Tapered Shaft, Water Or Air Cooled



Torque Nut to 80−100 ft. lbs

Compressor Kits	
Part Number	**Repair Kit Description**
102368BD	End Cap to Crankcase Gasket
102368BL	Cylinder Head Gasket
102368BR	Crankcase to Block Gasket
SN144AM	Installation Kit
EQ2640	Piston Kit - Standard
EQ2650	Ring Kit - Standard
EQ2620	Connecting Rod & Bearing Kit - Std
EQ2621	Connecting Rod & Bearing Kit - .010 US
EQ2622	Connecting Rod & Bearing Kit - .020 US
RNT26JA	Head Repair Kit
KNT17300	Head Assembly - Air Cooled
KNT17300X	Head Assembly - Reman - Air Cooled
KNT17400	Head Assembly - Water Cooled
KNT17400X	Head Assembly - Reman - Water Cooled
RNT26JB	Unloader Kit

Features:

- Flange Mount, Gear Drive
- Front−Threaded Discharge Type
- Side Oil Feed, Thru−Drive Available
- Base Oil Drain

Specifications:

Overall Height	11.44 in.
Overall Width	4.76 in.
Overall Length	8.86 in.
External Shaft Length	2.22 in.
Bore Diameter	3.15 in.
Stroke	1.50 in.
Turbo−Charge Pressure	25 Max PSI
Rated Displacement	8.5 CFM @ 1250 RPM
Approximate Weight	31 lbs.

Notes:

1) Installation Instructions For Cummins B & C Series Thru−Drive Conversion − L31078. Installation Instructions For Cummins B Series − L31105.

2) Svc/Repair Instructions For Cylinder Head − L31059.

3) Service Units are furnished without governors and manifolds and may require head rotation before installation or changeover.

4) Thru−drive units must not exceed 65 ft. of transmitted torque.

5) Service Units require the purchase of thru−drive kit SN3072BW for thru−drive applications.

6) Port orientation viewed from front.

SKU#	Product Description	Intake Manifold Position	Application	Notes	OEM Part Number	Core Group
KNT85230	EL850 2−Hole Flange/Taper Shaft	Right	Cummins Type B−Engines	Turbocharged Air Cooled	NT7523 Exact Replacement	−
KNT85230X	Remanufactured EL850 2−Hole Flange/Taper Shaft	Right	Cummins Type B−Engines	Turbocharged Air Cooled	NT7523 Exact Replacement	850
KNT86230	EL850 2−Hole Flange/Taper Shaft	Right	Cummins Type B−Engines	Turbocharged Water Cooled	NT7623 Exact Replacement	−
KNT86230RX	Remanufactured EL850 2−Hole Flange/Taper Shaft − CoreFreeÂ™	Right	Cummins Type B−Engines	Turbocharged Water Cooled	NT7623 Exact Replacement	−

KNT86230X	Remanufactured EL850 2−Hole Flange/Taper Shaft	Right	Cummins Type B−Engines	Turbocharged Water Cooled	NT7623 Exact Replacement	850

Haldex (New and Remanufactured)

EL1300/EL1600 2−Hole Flange, Tapered Shaft

Torque Nut to 80−100 ft. lbs

Features:

- Flange Mount, Gear Drive
- Flange Discharge Type
- Side Oil Feed
- Flange Oil Drain
- Water Cooled

Specifications:

Overall Height	12.51 in.
Overall Width	7.66 in.
Overall Length	11.80 in.
External Shaft Length	2.23 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	50 lbs.

Notes:

1) Changeover/Installation Instructions − L31050

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Service units require the purchase of thru−drive kit SN3072BW for thru−drive applications.

4) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

5) Port orientation viewed from front.

6) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13220X	Remanufactured Cummins 2−Hole Flange Mount, Tapered Shaft	Right	Right	Cummins C−Series Engines	Thru−Drive	NT7022E Exact Replacement	1300

Haldex (New and Remanufactured)

EL1300/EL1600 Cummins In−Line Engines

Torque Nut to 100−135 ft. lbs.

Features:

- Top/Flange Discharge Type
- Double Flange Mount, Gear Drive
- Flange Oil Feed, Side Option on Service Units

Specifications:

Overall Height	12.38 in (EL1300), 12.57 in. (EL1600)
Overall Width	5.68 in.
Overall Length	9.09 in.
External Shaft Length	.54 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	50 lbs.

Notes:

1) Changeover/Installation Instructions: Bendix to Midland − L31025, Cummins to Midland − L31026, Cummins Long to Midland − L31027.

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover. Service and remanufactured units have a 1 inch oil drain port with no threads.

3) When replacing a Cummins−built compressor you must purchase an SN3502 Waterline Kit, SN3711AK Intake Manifold Kit and an SN3711K or L (low profile) Discharge Manifold Kit.

4) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

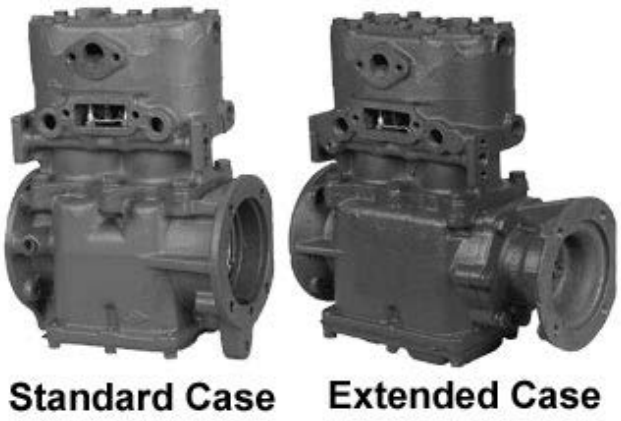
5) Port orientation viewed from front.

6) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13040X	Remanufactured Cummins In−Line	Right	Right	Cummins In−Line Engines	High Capacity Replacement EL16040	NT7004B Exact Replacement	1300
EL16040X	Remanufactured Cummins In−Line	Right	Right	Cummins In−Line Engines	High Capacity	NT7204 Exact Replacement	1600

Competitive (Remanufactured)

Bendix® TF500/TF600



Features:

- Engine Drive

Specifications:

Approximate Weight 46 lbs.

Notes:

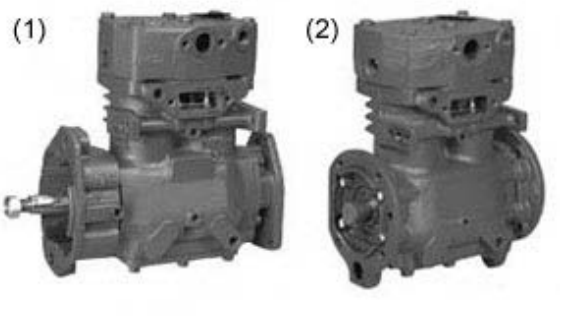
1) Port orientation viewed from rear.

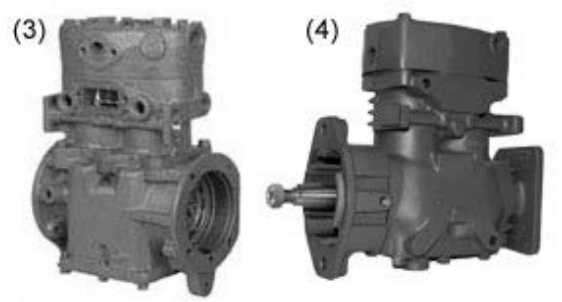
2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Core Group
228443X	TF500 Flange Mount − Cummins Extended Case	Water	Left	Left	Flange	Long Case	500A
229525X	TF500 Flange Mount − Cummins Extended Case	Water	Left	Top	Threaded	Long Case	500A
276974X	TF500 Flange Mount − Cummins Extended Case	Water	Left	Left	Flange	Long Case	500A
280622X	TF600 Flange Mount − Cummins Extended Case	Water	Left	Left	Flange	Long Case	500A
280626X	TF600 Flange Mount − Cummins Extended Case	Water	Left	Top	Threaded	Long Case	500A
284699X	TF500 Flange Mount − Cummins Standard Case	Water	Left	Left	Flange	−	500A
284714X	TF600 Flange Mount − Cummins Standard Case	Water	Left	Left	Flange	−	500A
284718X	TF500 Flange Mount − Cummins Standard Case	Water	Left	Top	Threaded	−	500A
284959X	TF500 Flange Mount − Cummins Standard Case	Air	Left	Left	Flange	−	500A

Competitive (Remanufactured)

Bendix® TF501/TF700





Features:

- Engine Drive

Notes:

1) Port orientation viewed from rear.

2) 108269X has Right Degree Flange, 1/7 Clock.

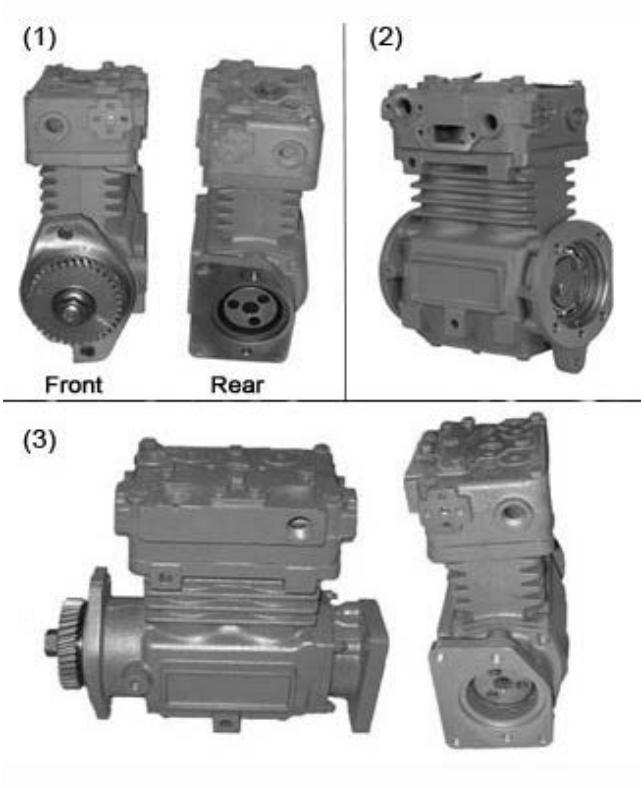
3) 108273X and 109073X has Left Degree Flange, 11/5 Clock.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Picture	Core Group
107296X	TF501 Flange Mount	Water/Air	Left	Top	Threaded Top	46 lbs.	Thru−Drive	−	501Q
108269X	TF501 Flange Mount − Cummins "B"	Water/Air	Left	Left	Flange	46 lbs.	Thru−Drive	1	501Q
108270X	TF501 Flange Mount	Water/Air	Left	Left	Flange	46 lbs.	16° Flange Right	−	501Q
108273X	TF501 Flange Mount − Cummins "B"	Water/Air	Left	Left	Flange	46 lbs.	Thru−Drive 2 Bolt Rear Adapter	1	501S
109073X	TF501 Flange Mount − Cummins "B"	Water/Air	Left	Top	Threaded	46 lbs.	Thru−Drive 4 Bolt Rear Adapter	4	501S
286554X	TF501 Flange Mount − Cummins Standard Flange	Water/Air	Left	Left	Flange	44 lbs.	Includes the Drive Gear.	2	501K
286618x	TF501 Flange Mount − Cummins Standard Flange	Water/Air	Left	Top	Threaded	44 lbs.	Includes the Drive Gear. Replaces Bendix 286555X	2	501K
289339X	TF700 Flange Mount − Cummins Standard Flange	Water	Left	Left/Top	Optional Top or Left	46 lbs.	−	3	501K

Competitive (Remanufactured)

Bendix® TF550/TF750



Features:

- Engine Drive
- Water Cooled

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Pic. #	Core Group
107506X	TF550 Flange Mount − Cummins Standard Flange	Left	Optional Top or Left	53 lbs.	Supplied with Gears	2	550C
107507RX	TF750 Flange Mount − Cummins Standard Case − CoreFreeÂ™	Left	Optional Top or Left	53 lbs.	Supplied with Gears	2	−
107507X	TF750 Flange Mount − Cummins Standard Case	Left	Optional Top or Left	53 lbs.	Supplied with Gears	2	750C
108804X	TF550 Flange Mount − Cummins ISB & C	Top	Optional Top or Left	66 lbs.	Spline Adapter 11 Tooth	1	550H
109382X	TF750 Flange Mount − Cummins ISB & C	Top	Optional Top or Left	66 lbs.	Spline Adapter 11 Tooth	1	750S
109653X	TF550 Flange Mount − Cummins ISB & C	Left	Optional Top or Left	66 lbs.	Spline Adapter 11 Tooth	1	550H
5002178X	TF550 Flange Mount − Cummins ISB & C	Optional Top or Left	Top	50 lbs.	−	3	550H

Competitive (Remanufactured)

Bendix® BX2150

Features:

- Engine Drive
- Threaded Discharge Type

Specifications:

Approximate Weight 42 lbs.

Notes:

1) Port orientation viewed from rear.

2) Cylinder head can be installed in any one of four different positions 90° apart.

3) An additional Head Gasket is required (not supplied) when rotating the head.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Inlet Port Location	Outlet Port Location	Notes	Core Group
104103X	BX2150 Flange Mount − without Thru−Drive adapter, Old style head	Water/Air	Optional	Optional	−	2150A
108261X	BX2150 Flange Mount − Cummins B Series without Thru−Drive adapter, New Style head	Water/Air	Left	Top/Rear	Base Oil Drain	2150A
108854X	BX2150 Flange Mount − Cummins B Series	Water/Air	Left	Top/Rear	Base Oil Drain with Drive Hub	2150A
109079X	BX2150 Flange Mount − Cummins B Series	Water/Air	Left	Top/Rear	Base Oil Drain	2150A

Competitive (Remanufactured)

Cummins/Holset Model SS296/SS296E/SS338E

Features:

- Engine Drive
- Flange Mount
- Water Cooled

Specifications:

Approximate Weight 36 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Unloader Port/Type	Application/Notes	Core Group
3018527X	Cummins Standard Case − Type SS296	13.2	SS296 Super Single Cylinder	Left	Rear	Left/Remote	For L/K/N Engines	CUM−1
3018543X	Cummins Standard Case − Type SS296	13.2	SS296 Super Single Cylinder	Left	Rear	Left/Direct	For L/K/N Engines	CUM−1
3047440X	Cummins Standard Case − Type SS296	13.2	SS296 Super Single Cylinder	Rear	Rear	Left/Direct	For L/K/N Engines	CUM−1
3049186X	Cummins Standard Case − Type SS296	13.2	SS296 Super Single Cylinder	Left	Rear	Left/Direct	Square Flange Crankcase	CUM−1
3558020X	Cummins Standard Case − Type SS338E	15	SS338E Super Single Cylinder	Left	Rear	Left/Direct	NT Engine E Unloader	CUM−1
3558044X	Cummins Standard Case − Type SS296E	13.2	SS296E Super Single Cylinder	Rear	Rear	Left/Direct	L10/NT Engines E Unloader version of 3047440	CUM−1
3558045X	Cummins Standard Case − Type SS296E	13.2	SS296E Super Single Cylinder	Left	Rear	Left/Direct	NT Engine E Unloaded version of 3049186	CUM−1

Competitive (Remanufactured)

Cummins/Holset Model SS296BE/SS296C/SS296CE/SS338CE

Features:

- Threaded Discharge Type
- Flange Mount
- Engine Drive
- Water Cooled

Specifications:

Approximate Weight 44 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Spline	Application/Notes	Core Group
3558005X	Cummins C−Series − Type SS296C	13.2	SS296C Super Single Cylinder	Left	Front	9 Tooth	Thru−Drive for power steering pump	CUM−4
3558006X	Cummins C−Series − Type SS296C	13.2	SS296C Super Single Cylinder	Left	Front	11 Tooth	Thru−Drive for power steering pump	CUM−4
3558021X	Cummins C−Series − Type SS338CE	15	SS338CE Super Single Cylinder	Left	Front	11 Tooth	E Type Unloader	CUM−4
3558022X	Cummins C−Series − Type SS296CE	13.2	SS296CE Super Single Cylinder	Left	Front	11 Tooth	E Type Unloader Thru−Drive	CUM−4
3558204X	Cummins Type SS296BE	13.1	SS296BE Super Single Cylinder	Rear	Front	11 Tooth	E Type Unloader Thru−Drive	CUM−4

Competitive (Remanufactured)

Cummins/Holset Model ST676

Features:

- Flange Mount
- Engine Drive
- Water Cooled
- Threaded Discharge

Specifications:

Approximate Weight 75 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Application/Notes	Core Group
3048680X	Cummins Standard Case − Type ST676	30	Model ST676 Super Twin Cylinder	Left	Rear	L10/K/N14 Engines	CUM−2

Competitive (Remanufactured)

Cummins/Holset Model QE296/QE338

Features:

- Flange Mount
- Engine Drive
- Water Cooled
- Threaded Discharge

Specifications:

Approximate Weight 42 lbs.

Notes:

1) Port orientation viewed from rear.

2) Unloader/Inlet Assembly not included.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Application/Notes	Core Group
3558072X	Cummins L10/N14 − Type QE296	13.2	QE296 Quiet Economy Single Cylinder	Left	Rear	Iron Head/Cover Intake Valve Retainer	CUM−1
3558074X	Cummins E Type/Standard Case − QE338	15	QE338 Quiet Economy Single Cylinder	Left	Rear	Iron Head/Cover Intake Valve Retainer	CUM−1

Competitive (Remanufactured)

Cummins/Holset Model QE296B/QE338B/HD850B

Features:

- Flange Mount
- Engine Drive
- Water Cooled
- Threaded Discharge

Specifications:

Approximate Weight 48 lbs.

Notes:

1) Port orientation viewed from rear.

2) Unloader/Inlet Assembly not included.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Spline	Application/Notes	Core Group
3558049X	Cummins B−Series − Type QE296B	13.2	QE296B Quiet Economy Single Cylinder	Rear	Front	11 Tooth	Cummins B Engine Iron Head/Cover Thru−Drive, 35° Tilt	CUM−4
3558050X	Cummins B−Series − Type QE338B	N/A	QE338B Quiet Economy Single Cylinder	Rear	Front	11 Tooth	Thru−Drive	CUM−4
3558097X	Cummins B−Series − Type QE296B	13.2	QE296B Quiet Economy Single Cylinder	Front	Rear	11 Tooth	Cummins B Engine Thru−Drive	CUM−4
3558098X	Cummins B−Series − Type QE338B	N/A	QE338B Quiet Economy Single Cylinder	Front	Rear	11 Tooth	Thru−Drive	CUM−4
3558206X	Cummins B−Series − Type QE296EB	13.2	QE296EB Quiet Economy Single Cylinder	Rear	Front	11 Tooth	Cummins B Engine Thru−Drive	CUM−4
3558208X	Cummins B−Series − Type QE296B	13.2	QE296EB Quiet Economy Single Cylinder	Rear	Front	11 Tooth	Cummins B Engine Thru−Drive	CUM−4
3558211X	Cummins B−Series − Type QE296B	13.2	QE296B Quiet Economy Single Cylinder	Front	Right	11 Tooth	Cummins B Engine Thru−Drive	CUM−4
3558212X	Cummins B−Series − Type QE338B	15.0	QE338B Quiet Economy Single Cylinder	Front	Right	11 Tooth	Cummins B Engine	CUM−4
3558218X	Cummins B−Series − Type QE296B	13.2	QE296B Quiet Economy Single Cylinder	Front	Left	11 Tooth	−	CUM−4
3558220X	Cummins B−Series − Type HD850B	15.0	HD850B Single Cylinder	Rear	Front	11 Tooth	Thru−Drive High Duty Cycle Natural Asperation Only	CUM−4

Competitive (Remanufactured)

Cummins/Holset Model QE296C/QE338C/HD850C

Features:

- Flange Mount
- Engine Drive
- Water Cooled
- Threaded Discharge Type

Specifications:

Approximate Weight 48 lbs.

Notes:

1) Port orientation viewed from rear.

2) Unloader/Inlet Assembly not supplied.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Air Inlet	Air Outlet	Spline	Application/Notes	Core Group
3558051X	Cummins C−Series − Type QE338C	−	QE338C Quiet Economy Single Cylinder	Left	Front	11 Tooth	Thru−Drive	CUM−4
3558052X	Cummins C−Series − Type QE296C	13.2	QE296C Quiet Economy Single Cylinder	Left	Front	11 Tooth	Cummin C Engine Iron Head/Cover Intake Valve Retainer Thru−Drive for power steering pump	CUM−4
3558094X	Cummins C−Series − Type QE296C	−	QE296C Quiet Economy Single Cylinder	Left	Left	11 Tooth	Thru−Drive	CUM−4
3558095X	Cummins C−Series − Type QE338C	15.0	QE338C Quiet Economy Single Cylinder	Left	Left	11 Tooth	Cummins C Engine	CUM−4
3558113X	Cummins C−Series − Type QE338C	15.0	QE338C Quiet Economy Single Cylinder	Left	Left	9 Tooth	Cummins C Engine	CUM−4
3558122X	Cummins C−Series − Type HD850C	−	HD850C	Left	Front	11 Tooth	High Duty Cycle Natural Asperation Only	CUM−4
3558186X	Cummins C−Series − Type QE296C	13.2	QE296C Quiet Economy Single Cylinder	Front	Rear	11 Tooth	Cummin C Engine	CUM−4
3558189X	Cummins C−Series − Type QE338C	15.0	QE338C Quiet Economy Single Cylinder	Front	Rear	11 Tooth	Cummins C Engine	CUM−4

Competitive (Remanufactured)

Remanufactured WABCO Air Compressor

9111535200X
9111535207X

9111535100X

9111545000X
9111545020X

9111530040X
9111535300X
9111535313X
9111535330X

STOR – Straight Thread O–Ring
WABCO Head Replacement Instructions go to
www.haldex.com/North–America/
Choose Products, Literature, Compressors
[L31271W] or [L31272W]

SKU#	Product Description	Model	Bore Size	Cubic Feet Per Minute	Water Port	Discharge Port	Governor Port	Head Assembly	OEM Number	Core Group
9111530040X	Cummins ISC, 13 Tooth, Thru–Drive	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	3969114 4933745NX 4933780RX 4936219RX	WAB6
9111530130X	Transit 13T rear spline	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	9111530130	WAB14
9111530147X	Cummins ISB	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111549202X	5286960 911530140 911530147	WAB18
9111530197X	Cummins QSX/ISX	SS318	85MM	18.7	M18 – 1.5 STOR	M27–2.0 STOR	M10–1.0 STOR	9111539212X	4318220RX 3687343	WAB19
9111535100X	Cummins ISX	SS318	85MM	18.7	M18 – 1.5 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539212X	3681904 3681902 3103413	WAB3
9111535200X	Cummins L, M, N	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	3558163	WAB1

SKU#	Product Description	Model	Bore Size	Cubic Feet Per Minute	Water Port	Discharge Port	Governor Port	Head Assembly	OEM Number	Core Group
9111535207X	Cummins L, M, N	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	–	WAB1
9111535300X	Cummins ISC, 11 Tooth, Thru-Drive	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	3944524 3966522RX 3944526 3944525	WAB6
9111535313X	Cummins C Series	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	4936214	WAB4
9111535330X	Cummins B Series	SS318	85MM	18.7	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111539202X	3936810	WAB4
9111545000X	Cummins B Series	SS250	75MM	15.2	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111549202X	3944460 3948842 3976362	WAB5
9111545020X	Cummins B Series	250	75MM	15.2	3/4" – 16 STOR	M27 – 2.0 STOR	M10 – 1.0 STOR	9111549202X	3936808	WAB5

Haldex (New and Remanufactured)

EL1300 DDC 0° , 1° and 4°

EL13051/EL16051 Torque Nut to 220−255 ft. lbs. All Other Units Featured Below Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- End Cap Oil Feed
- Oil Drain Internal at Flange
- Top/Flange Discharge Type

Specifications:

Overall Height	12.00 in.
Overall Width	6.84 in.
Overall Length	10.45 in.
External Shaft Length	.19 in.
Bore Diameter	2.75 in.
Stroke	1.50 in.
Rated Displacement	13.0 CFM @ 1250 RPM
Approximate Weight	50 lbs.

Notes:

1) EL13050/EL16050 Changeover/Installation Instructions: L31028.

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover. Service and Remanufactured units have a 1 inch oil drain port with no threads.

3) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

4) Port orientation viewed from front.

5) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13050X	Reman. Detroit Diesel 0°	Right	Right	DDC 0° Tilt Engines	Substitution for KN7070X and KN7080X; must rotate head for KN7080X.	N7005H	1300
EL13051X	Reman. Detroit Diesel 0°	Right	Left	DDC 0° Tilt Engines	Non−Thru Drive	NT7005M	1300
EL13070X	Reman. Detroit Diesel 1°	Right	Left	DDC 1° Tilt Engines	High Capacity	N7005M	1300

Haldex (New and Remanufactured)

EL1600 DDC 0° , 1° and 4°

EL13051/EL16051 Torque Nut to 220−255 ft. lbs. All Other Units Featured Below Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- End Cap Oil Feed
- Oil Drain Internal at Flange
- Top/Flange Discharge Type

Specifications:

Overall Height	12.19 in.
Overall Width	6.84 in.
Overall Length	10.45 in.
External Shaft Length	.19 in.
Bore Diameter	2.75 in.
Stroke	1.87 in.
Rated Displacement	16.1 CFM @ 1250 RPM
Approximate Weight	50 lbs.

Notes:

1) EL13050/EL16050 Changeover/Installation Instructions: L31028.

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover. Service and Remanufactured units have a 1 inch oil drain port with no threads.

3) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

4) Port orientation viewed from front.

5) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL16050X	Reman. Detroit Diesel 0°	Right	Right	DDC 0° Engines	High Capacity	N7205 Exact Replacement	1600
EL16051X	Reman. Detroit Diesel 0°	Right	Left	DDC 0° Engines	High Capacity	NT7205V	1600
EL16070X	Reman. Detroit Diesel 1°	Right	Left	DDC 1° Tilt Engines	High Capacity	N7205B	1600
EL16072X	Reman. Detroit Diesel 4°	Right	Left	DDC Bus Application 4° Tilt	−	N7205S	1600

Haldex (New and Remanufactured)

EL1300/EL1600 41° DDC

Torque Nut to 80−100 ft. lbs

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Oil Drain Internal at Flange

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	7.10 in.
Overall Length	9.90 in.
External Shaft Length	.41 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	49 lbs.

Notes:

1) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover. Service and Remanufactured units have a 1 inch oil drain port with no threads.

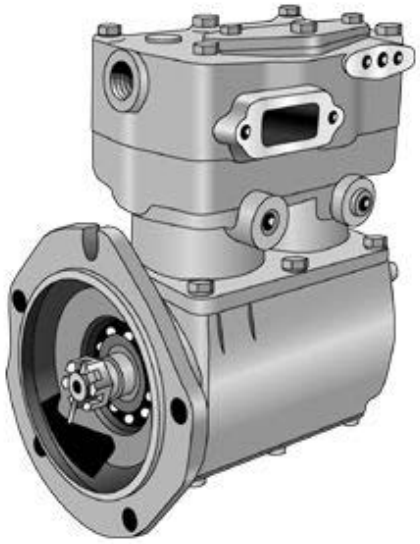
2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13090X	Remanufactured Detroit Diesel 41°	Right	Right	DDC 41° Engines	High capacity replacement EL16090X	N7009	1300
EL16090X	Remanufactured Detroit Diesel 41°	Right	Right	DDC 41° Engines	High Capacity	N7209	1600

Haldex (New and Remanufactured)

EL1300/EL1600 45° DDC



Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	7.10 in.
Overall Length	10.11 in.
External Shaft Length	.61 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	48 lbs.

Notes:

1) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13160X	Remanufactured Detroit Diesel 45°	Left	Right	DDC 45° Engines	High capacity replacement EL16160X	N7016	1300
EL16160	Detroit Diesel 45°	Right	Right	DDC 45° Engines	High Capacity	N7216 Exact Replacement	−
EL16160X	Remanufactured Detroit Diesel 45°	Left	Right	DDC 45° Engines	High Capacity	N7216 Exact Replacement	1600

Haldex (New and Remanufactured)

EL1300/EL1600 50° DDC

Torque Nut to 100 − 135 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	7.09 in.
Overall Length	9.90 in.
External Shaft Length	.41 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	49 lbs.

Notes:

1) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13100X	Remanufactured Detroit Diesel 50°	Right	Right	DDC 50° Engines	High capacity replacement EL16100X	N7010 Exact Replacement	1300
EL16100X	Remanufactured Detroit Diesel 50°	Right	Right	DDC 50° Engines	High Capacity DDC Identify	NT7210E Exact Replacement	1600

Haldex (New and Remanufactured)

EL1600 75° DDC

Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Flange Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.17 in.
Overall Width	6.94 in.
Overall Length	10.31 in.
External Shaft Length	.19 in.
Bore Diameter	2.75 in.
Stroke	1.87 in.
Rated Displacement	16.1 CFM @ 1250 RPM
Approximate Weight	49 lbs.

Notes:

1) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) Port orientation viewed from front.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL16250X	Remanufactured Detroit Diesel 75°	Left	Left	DDC 75° Engines Bus Applications	High Capacity	N7225	1600

Haldex (New and Remanufactured)

EL1300/EL1600 60−Series DDC

Typical − Torque Nut to 220−255 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Threaded Discharge Type
- End Cap Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	7.10 in.
Overall Length	9.90 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	75 lbs.

Notes:

1) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) Thru drive units must not exceed 65 ft. lbs. of transmitted torque.

3) Port orientation viewed from front.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13312X	Remanufactured Detroit Diesel Flange Mount	Right	Right	60−Series DDC 0° Tilt	Thru−Drive Adapterless	NT7031B	1331
EL16312X	Remanufactured Detroit Diesel Flange Mount	Right	Right	60−Series DDC 0° Tilt	Thru−Drive Adapterless	NT7231	1631

Haldex (New and Remanufactured)

EL1300/EL1600 60−Series DDC, Thru−Drive

Typical − Torque Nut to 220−255 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Threaded Discharge Type
- End Cap Oil Feed
- Oil Drain Internal at Flange

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	6.84 in.
Overall Length	10.45 in.
External Shaft Length	.19 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	53 lbs.

Notes:

1) Changeover/Installation Instructions: L31106.

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Thru−drive units must not exceed 65 ft. lbs. of transmitted torque.

4) Port orientation viewed from front.

5) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL13053X	Remanufactured Detroit Diesel 60−Series, Thru−Drive	Right	Left	DDC 0° Tilt 60−Series Thru−Drive	High Capacity Replacement EL16053X	NT7005AK Exact Replacement	1353
EL16053X	Remanufactured Detroit Diesel 60−Series, Thru−Drive	Right	Left	DDC 0° Tilt 60−Series Thru−Drive	High Capacity	NT7205Y Exact Replacement	1653

Competitive (Remanfactured)

Bendix® BA921

Features:

- Engine Drive
- Water and Air Cooled

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Core Group
5018485X	BA921, Flange Mount − DDA 60 Series with EGR	Top	Side	61 lbs.	−	921B

Competitive (Remanfactured)

Bendix® BA922

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Picture	Core Group
5012895X	BA922 Flange Mount − Detroit Diesel Series 60 EGR	Water/Air	Top	Top	Threaded	63 tooth drive gear with a 21 tooth spline	1	922D
5013695X	BA922 Flange Mount − Detroit Diesel Series 60 non−EGR & 50 Series	Water/Air	Top	Top	Threaded	69 tooth drive gear with a 21 tooth spline	1	922A

Competitive (Remanfactured)

Bendix® DF596

Features:

- Engine Drive

Specifications:

Approx. Weight 50 lbs.

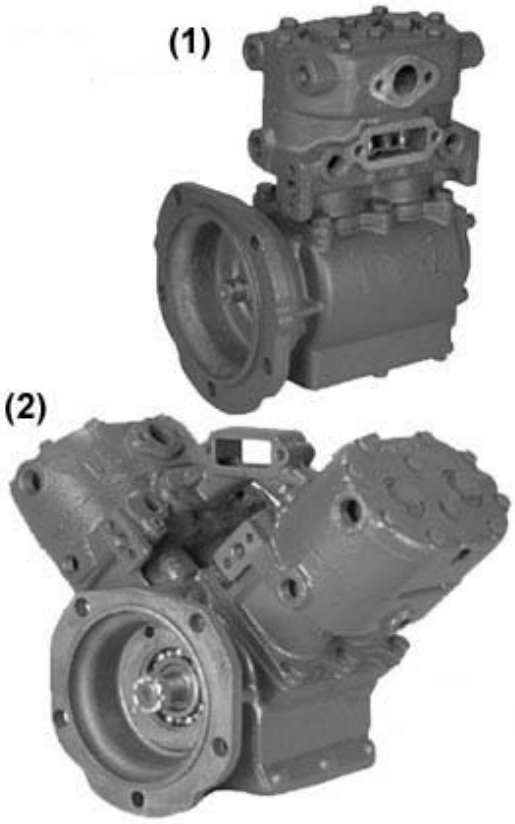
Notes:

1) Port orientation viewed from rear.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Core Group
5005875X	DF596 Flange Mount − Detroit Diesel 60 Series	Water/Air	Top	Top	27 CFM	596A

Competitive (Remanfactured)

Bendix® TF400/TF1000



Features:

- Engine Drive
- Water Cooled
- Flange Discharge Type

Notes:

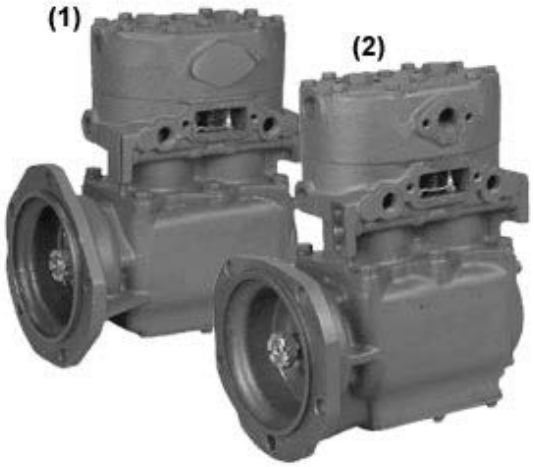
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
276166X	TF400 Flange Mount − Detroit Diesel 0° Tilt	Left	Left	34 lbs.	−	1	400B
276777X	TF1000 Flange Mount − Detroit Diesel	Middle	Middle	77 lbs.	Intake/Discharge Manifold not supplied.	2	1000
276778X	TF400 Flange Mount − Detroit Diesel 0° Tilt	Right	Right	34 lbs.	−	1	400B

Competitive (Remanfactured)

Bendix® TF500



Features:

- Engine Drive

Specifications:

Approximate Weight 46 lbs.

Notes:

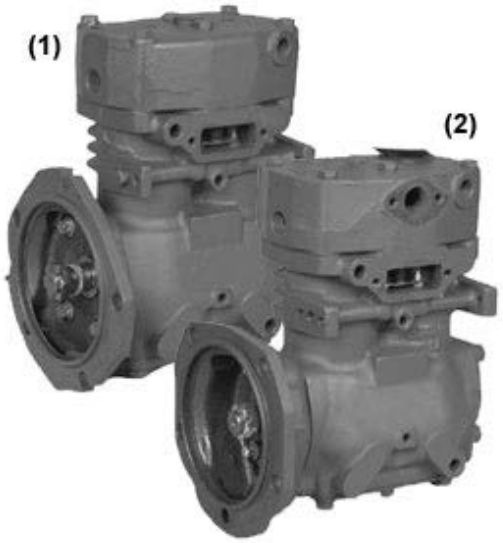
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Picture	Core Group
275777X	TF500 Flange Mount − Detroit Diesel 75° Tilt	Water	Left	Left	Flange	2	500A
276961X	TF500 Flange Mount − Detroit Diesel 0° Tilt	Water	Left	Left	Flange	2	500A
276962X	TF500 Flange Mount − Detroit Diesel 0° Tilt	Water	Right	Right	Flange	2	500A
278681X	TF500 Flange Mount − Detroit Diesel 75° Tilt	Water	Right	Right	Flange	2	500A
279068X	TF500 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Left	Left	Flange	2	500A
279069X	TF500 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Right	Right	Flange	2	500A
281042X	TF500 Flange Mount − Detroit Diesel 45° Tilt	Water	Left	Top	Threaded	1	500A
282010X	TF500 Flange Mount − Detroit Diesel 45° Tilt	Water	Right	Top	Threaded	1	500A
282928X	TF500 Flange Mount − Detroit Diesel 0° Tilt − Short Flange	Water	Right	Top	Threaded	2	500A
283515X	TF500 Flange Mount − Detroit Diesel 0° Tilt	Water	Right	Right	Flange	2	500A
284106X	TF500 Flange Mount − Detroit Diesel 45° Tilt	Water	Left	Left	Flange	1	500A
285252X	TF500 Flange Mount − Detroit Diesel 45° Tilt	Water	Right	Top	Threaded	1	500A

Competitive (Remanfactured)

Bendix® TF501



Features:

- Engine Drive

Specifications:

Approximate Weight 45 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Picture	Core Group
286538X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Left	Left	Flange	−	2	501H
286539X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Right	Right	Flange	−	2	501H
286540X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Left	Top	Threaded	−	2	501H
286541X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Right	Top	Threaded	−	2	501H
286542X	TF501 Flange Mount − Detroit Diesel 45° Tilt	Water/Air	Left	Top	Threaded	−	1	501H
286543X	TF501 Flange Mount − Detroit Diesel 45° Tilt	Water/Air	Right	Top	Threaded	−	1	501H
286579X	TF501 Shallow Flange Mount − Detroit Diesel 0° Tilt	Water	Right	Top	Threaded	Press On Gear Stud Shaft Shallow Flange	2	501H
286581X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Left	Top	Threaded	Oil Port Reversed	2	501H
286623X	TF501 Flange Mount − Detroit Diesel 0° Tilt	Water/Air	Left	Left	Flange	60 Series	2	501H

Competitive (Remanfactured)

Bendix® TF550/TF750

(1)

(2)

(3)

Features:

- Engine Drive
- Optional Top or Left Discharge Type

Notes:

1) Port orientation viewed from rear.

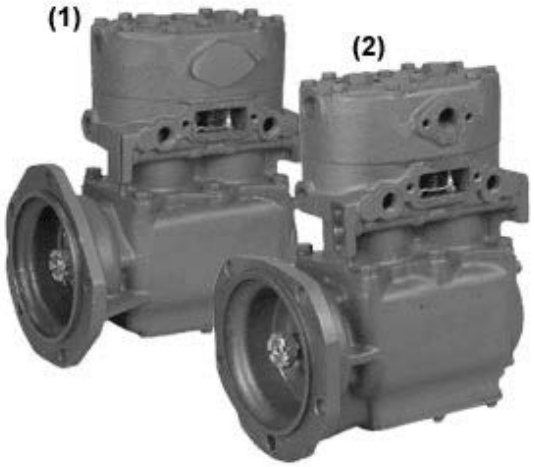
2) See Accessories for Compressor Kits

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
107512X	TF750 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Right	Top/Right	57 lbs.	–	2	750D
107513X	TF550 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Right	Top/Right	57 lbs.	–	1	550D
107622X	TF550 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Left	Top/Left	57 lbs.	60 Series Thru-Drive	1	550F
107623X	TF750 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Left	Top/Left	57 lbs.	60 Series Thru-Drive	2	750G
107813X	TF750 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Left	Top/Left	57 lbs.	–	2	750H
108557X	TF750 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Left	Top/Left	57 lbs.	–	2	750H
109647X	TF550 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Right	Top/Right	55 lbs.	60 Series Special c/c casting 298629D	1	550D
5004187X	TF750 Flange Mount – Detroit Diesel 0°	Water/Air	Right	Top/Right	79 lbs.	60 Series Adapterless Head Rotated Detroit R23534461	3	750R
5004188X	TF550 Flange Mount – Detroit Diesel 0Â° Tilt	Water/Air	Right	Top/Right	79 lbs.	60 Series Adapterless Head Rotated Detroit R23534455	3	550R

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
5013157X	TF750 Flange Mount – Detroit Diesel	Water/Air	Left	Top	60 lbs.	–	–	750M
5013830X	TF550 Flange Mount – Detroit Diesel 0° Tilt	Water/Air	Left	Top/Left	79 lbs.	60 Series Adapterless Same as the 5004188X with the head rotated 180° Detroit R23534455	3	550R

Competitive (Remanfactured)

Bendix® TF600



Features:

- Engine Drive

Specifications:

Approximate Weight 46 lbs.

Notes:

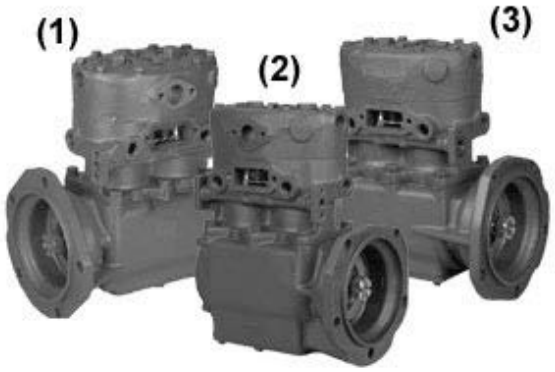
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Picture	Core Group
280369X	TF600 Flange Mount − Detroit Diesel 75° Tilt	Water	Right	Top	Threaded	2	500A
280570X	TF600 Flange Mount − Detroit Diesel 0° Tilt	Water	Right	Right	Flange	2	500A
280609X	TF600 Flange Mount − Detroit Diesel 0° Tilt	Water	Left	Left	Flange	2	500A
281677X	TF600 Flange Mount − Detroit Diesel 0° Tilt	Water	Left	Top	Threaded	2	500A
282011X	TF600 Flange Mount − Detroit Diesel 0° Tilt	Water	Right	Top	Threaded	2	500A
282013X	TF600 Flange Mount − Detroit Diesel 45° Tilt	Water	Left	Top	Threaded	1	500A

Competitive (Remanfactured)

Bendix® TF700



Features:

- Engine Drive
- Water Cooled
- Optional Top or Left Discharge Type

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
101158X	TF700 Flange Mount − Detroit Diesel 45° Tilt	Right	Right/Top	46 lbs.	−	2	501H
101636X	TF700 Flange Mount − Detroit Diesel 52° Tilt	Right	Right/Top	46 lbs.	−	2	501H
106268X	TF700 Flange Mount − Detroit Diesel 0° Tilt	Left	Left/Top	49 lbs.	Bearings Ball/Ball	1	501H
289262X	TF700 Flange Mount − Detroit Diesel 0° Tilt	Left	Left/Top	49 lbs.	−	1	501H
289342X	TF700 Flange Mount − Detroit Diesel 45° Tilt	Left	Left/Top	46 lbs.	−	2	501H
289915X	TF700 Flange Mount − Detroit Diesel 75° Tilt	Right	Top	47 lbs.	−	3	501H
289925GX	TF700 Flange Mount with Gear − Detroit Diesel 0° Tilt	Left	Left/Top	49 lbs.	Gear Installed	1	501H
289925X	TF700 Flange Mount − Detroit Diesel 0° Tilt	Left	Left/Top	49 lbs.	−	1	501H
289941GX	TF700 Flange Mount with Gear − Detroit Diesel 0° Tilt	Right	Right/Top	49 lbs.	Gear Installed	1	501H
289941X	TF700 Flange Mount − Detroit Diesel 0° Tilt	Right	Right/Top	49 lbs.	−	1	501H
289964X	TF700 Flange Mount − Detroit Diesel 75° Tilt	Right	Right/Top	47 lbs.	−	3	501H

Haldex/Midland (Remanufactured)

292 GM/Isuzu

Features:

- Flange Mount
- Air/Water Cooled
- Direct OEM Replacement
- Reusable Fittings
- Reusable Gear
- For light and medium duty air braked GM/Isuzu Trucks

Specifications:

Overall Height	327 mm
Overall Width	186 mm
Overall Length	233.5 mm
Bore Diameter	90 mm
Stroke	46 mm
Rated Displacement	292 cc
Approximate Weight	45 lbs.

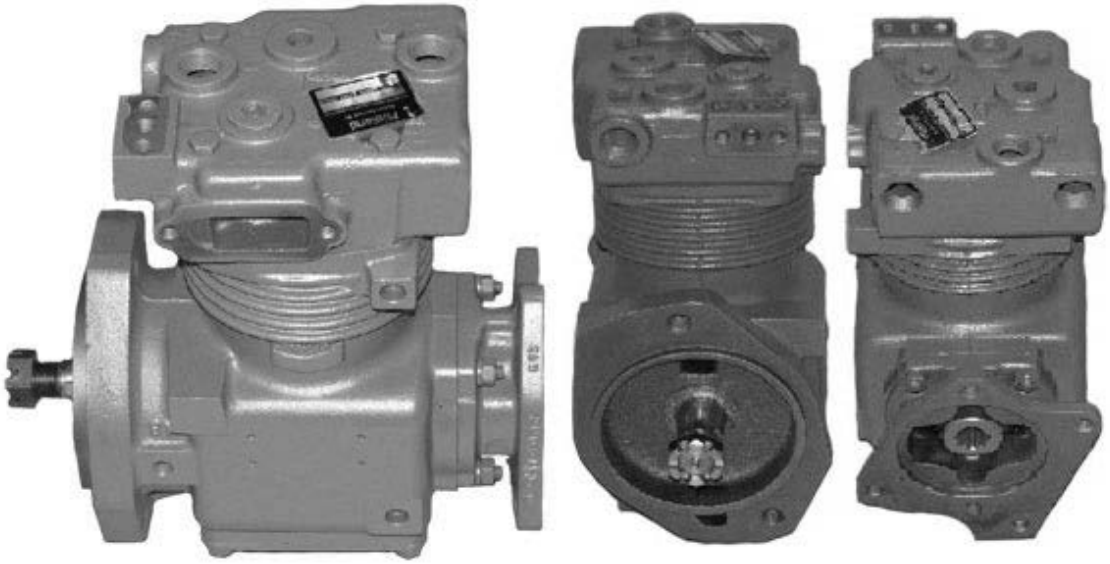
Notes:

1) Reuse current fittings and gear.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM #	Core Group
KN7700CX	Remanufactured 292 GM/Isuzu Compressor	N/A	N/A	292 GM/Isuzu	Backflow Surpression Valve − Naturally Aspriated	N7700C	EL292
KN7700JX	Remanufactured 292 GM/Isuzu Compressor	N/A	N/A	292 GM/Isuzu	Turbocharged, without Backflow Surpression Valve	N7700C	EL292

Competitive (Remanufactured)

BX2150 Bendix®



Engine Drive
Water and Air Cooled
Threaded Discharge Type
Port orientation viewed from rear

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Core Group
109219X	BX2150 Flange Mount − International DT466	Left	Top	44 lbs.	Tapered Shaft Thru−Drive	2150

Competitive (Remanufactured)

550 Bendix®

SKU#	Product Description	Air Inlet	Outlet	Approx Weight	Notes	Core Group
5014488X	Tu−Flo − Flange Mount − International HT570	Left	Top	30 lbs.	Bottom drain with metric port	550S

Competitive (Remanufactured)

750 Bendix®

SKU#	Product Description	Air Inlet	Outlet	Approximate Weight	Notes	Core Group
5014489X	TU−FLO − Flange Mount − International HT570	Left	Top	28 lbs.	Bottom drain with metric port	750U

Haldex/Midland (New and Remanufactured)

EL1300/EL1600 Mack 0° In−Line 6−Cylinder

Torque Nut to 80−100 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Top/Threaded Discharge Type
- Crankshaft End Oil Feed
- Flange Oil Drain

Specifications:

Overall Height	12.00 in. (EL1300), 12.19 in. (EL1600)
Overall Width	5.43 in.
Overall Length	11.58 in.
External Shaft Length	.16 in.
Bore Diameter	2.75 in.
Stroke	1.50 in. (EL1300) and 1.87 in. (EL1600)
Rated Displacement	13.0 (EL1300) and 16.1 (EL1600) CFM @ 1250 RPM
Approximate Weight	51 lbs.

Notes:

1) Changeover/Installation Instructions − L31035.

2) Service units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

3) Port orientation viewed from front.

4) See Accessories for Compressor Kits.

SKU#	Product Description	Head Rotation	Block Rotation	Notes	OEM Part Number	Core Group
EL13111X	Reman. 0° Mack In−Line, 6−Cylinder, Extended Flange	Left	Left	High Capacity Replacement EL16111X	N7011F Exact Replacement	1300
EL13112X	Reman. 0° Mack In−Line, 6−Cylinder, Extended Flange	Left	Left	Gear Included	N7011C Exact Replacement	1300
EL16111X	Reman. 0° Mack In−Line, 6−Cylinder, Extended Flange	Left	Left	High Capacity	N7211E Exact Replacement	1600
EL16112X	Reman. 0° Mack In−Line, 6−Cylinder, Extended Flange	Left	Left	Gear Included High Capacity	N7211B Exact Replacement	1600

Haldex/Midland (New and Remanufactured)

EL3200 Mack In−Line, 6−Cylinder

Torque Nut to 150 ft. lbs.

Features:

- Flange Mount, Gear Drive
- Flange Discharge Type
- Crankshaft End Oil Feed
- Flange and Base Oil Drain

Specifications:

Overall Height	13.11 in.
Overall Width	8.14 in.
Overall Length	16.74 in.
External Shaft Length	.16 in.
Bore Diameter	2.75 in.
Stroke	1.87 in.
Rated Displacement	32.2 CFM @ 1250 RPM
Approximate Weight	97 lbs.

Notes:

1) Service Units are furnished without governors and manifolds and may require head rotation and end cap rotation before installation or changeover.

2) Port orientation viewed from front.

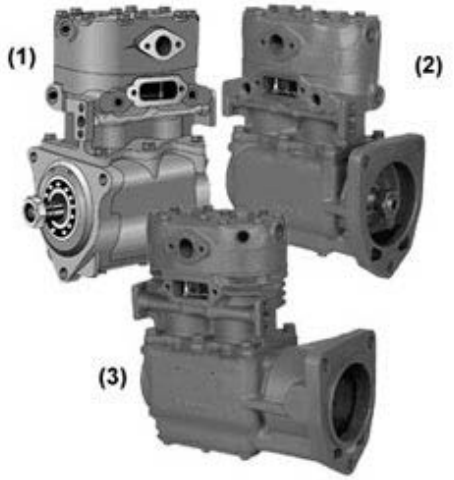
3) See Accessories for Compressor Kits.

4) **DO NOT** Turbo−Charge Mack Compressors.

SKU#	Product Description	Head Rotation	Block Rotation	Application	Notes	OEM Part Number	Core Group
EL14111X	Remanufactured Mack In−Line, 6−Cylinder	Left/Left	Left/Right	Mack In−Line 6−Cylinder Engines	Crankshaft Oil Feed	N7311	1400

Competitive (Remanufactured)

Bendix® TF500



Features:

- Engine Drive

Specifications:

Approximate Weight 46 lbs.

Notes:

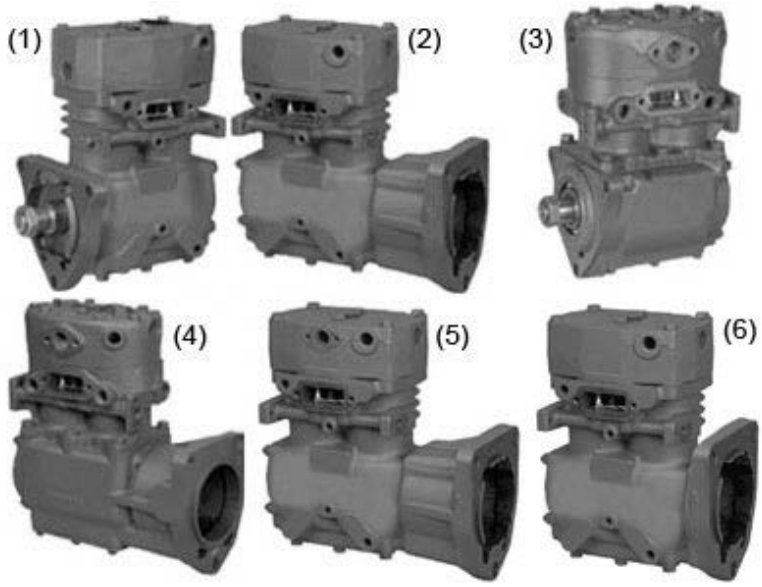
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Picture	Core Group
227326X	TF500 Flange Mount for Mack Short Case	Water	Right	Right	Flange	−	2	500A
277122X	TF500 Flange Mount for Mack Foxhead	Water	Left	Left	Flange	Mack V8	1	500A
277901X	TF500 Flange Mount for Mack Short Case	Water	Right	Top	Threaded	−	2	500A
278604X	TF500 Flange Mount for Mack Short Case	Water/Air	Right	Right	Flange	Water Cooled Head/ Air Cooled Block with Angled Port	2	500A
278605X	TF500 Flange Mount for Mack Extended Flange	Water/Air	Right	Right	Flange	Sleeve Type Bearings	3	500A
279556X	TF500 Flange Mount for Mack Extended Flange	Water/Air	Left	Left	Flange	Sleeve Type Bearings	3	500A
282586X	TF500 Flange Mount for Mack Extended Flange	Water/Air	Right	Right	Flange	−	3	500A
282621X	TF500 Flange Mount for Mack Extended Flange	Water/Air	Right	Right	Flange	−	3	500A
283577X	TF500 Flange Mount for Mack Foxhead	Water	Right	Right	Flange	Mack V8	1	500A
283692X	TF500 Flange Mount for Mack Foxhead	Water	Right	Right	Flange	Mack V8	1	500A
284010X	TF500 Flange Mount for Mack Short Case	Water	Right	Top	Threaded	−	2	500A
284662X	TF500 Flange Mount for Mack Extended Flange	Water/Air	Right	Right	Flange	Power Steering	3	500A

Competitive (Remanufactured)

Bendix® TF501/TF700



Features:

- Engine Drive

Notes:

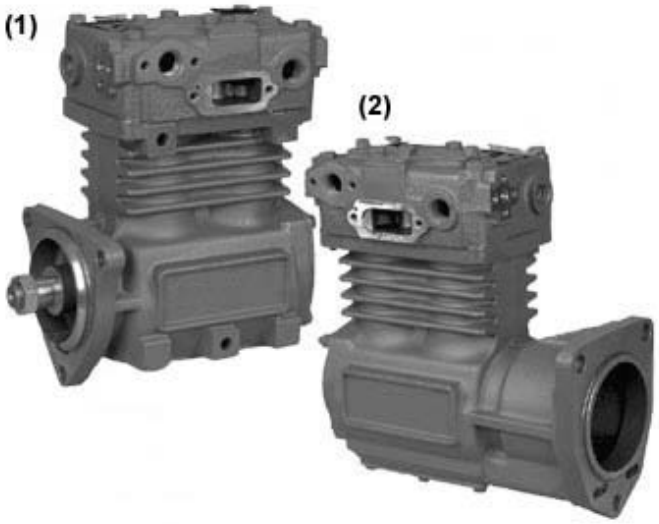
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Notes	Picture	Core Group
102953X	TF501 Flange Mount − Mack Foxhead	Water/Air	Left	Top	Threaded	40 lbs.	Mack V8	1	501E
104607X	TF501 Flange Mount − Mack	Water/Air	Right	Top	Top Threaded	46 lbs.	Mack V8	6	501E
286544X	TF501 Flange Mount − Mack Extended Flange	Water/Air	Right	Right	Flange	45 lbs.	Equipped for Power Steering	5	501E
286574X	TF501 Flange Mount − Mack Foxhead	Water/Air	Left	Left	Flange	40 lbs.	Mack V8	1	501E
286620X	TF501 Flange Mount − Mack Extended Flange	Water/Air	Right	Top	Threaded	45 lbs.	Equipped for power steering drive option supercedes 102697X.	2	501E
289340X	TF700 Flange Mount − Mack Extended Flange	Water	Right	Right/Top	Optional Top or Right	49 lbs.	Equipped for Power Steering	4	501E
289348X	TF700 Flange Mount − Mack Foxhead	Water	Left	Left/Top	Optional Top or Left	36 lbs.	Mack V8	3	501E

Competitive (Remanufactured)

Bendix® TF550/TF750



Features:

- Engine Drive
- Water and Air Cooled
- Optional Top or Right Discharge Type

Notes:

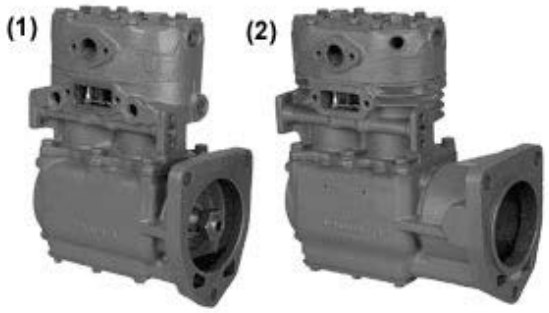
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Air Inlet	Air Outlet	Approx. Weight	Notes	Picture	Core Group
107510X	TF750 Flange Mount − Mack Extended Flange	Right	Right/Top	57 lbs.	Equipped for Power Steering	2	750E
107511X	TF550 Flange Mount − Mack Extended Flange	Right	Right/Top	57 lbs.	Equipped for Power Steering	2	550E
107869X	TF750 Flange Mount − Mack Foxhead	Left	Left/Top	53 lbs.	Mack V8	1	750J
108866X	TF550 Flange Mount − Mack Extended Flange	Right	Right/Top	57 lbs.	V−Mac Step Head	2	550E
108869X	TF750 Flange Mount − Mack Extended Flange	Right	Right/Top	57 lbs.	V−Mac Step Head	2	750E
5002865GX	TF550 Flange Mount with Gear − ETECH Mack	Right	Right/Top	56 lbs.	E Tech Engine Special Crankcase	2	550E
5002865X	TF550 Flange Mount − ETECH Mack	Right	Right/Top	56 lbs.	E Tech Engine Special Crankcase	2	550E
5002868GX	TF750 Flange Mount with Gear − ETECH Mack	Right	Right/Top	59 lbs.	E Tech Engine Special Crankcase	2	750E
5002868X	TF750 Flange Mount − ETECH Mack	Right	Right/Top	59 lbs.	E Tech Engine Special Crankcase	2	750E

Competitive (Remanufactured)

Bendix® TF600



Features:

- Engine Drive
- Flange Discharge Type

Specifications:

Approximate Weight 46 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Picture	Core Group
280608X	TF600 Flange Mount for Mack Short Case	Water	Right	Right	−	1	500A
284307X	TF600 Flange Mount for Mack Extended Flange	Water	Right	Right	−	2	500A
285108X	TF600 Flange Mount for Mack Extended Flange	Water	Right	Right	Power Steering	2	500A

Competitive (Remanufactured)

Holset Model SS296ME/SS338ME

Features:

- Flange Mount
- Engine Drive
- Water Cooled

Specifications:

Air Inlet	Right
Air Outlet	Rear
Unloader Port/Type	Front/Direct
Approximate Weight	50 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cubic Feet Per Minute	Model	Spline	Application/Notes	Core Group
3558000X	Standard Case − Type SS338ME	15	SS338ME Super Single Cylinder	11 Tooth	Mack E6/E7 Engine Mack p/n 303GB5102 Thru−Drive	CUM−3
3558029X	Standard Case − Type SS296ME	13.2	SS296ME Super Single Cylinder	11 Tooth	Mack E6/E7 Engines Mack p/n 303GB5107 Thru−Drive	CUM−3
3558042X	Standard Case − Type SS296ME	13.2	SS296ME Super Single Cylinder	−	Mack E6/E7 Engines Mack p/n 303GB5111 Non Thru−Drive	CUM−3
3558043X	Standard Case − Type SS338ME	15	SS338ME Super Single Cylinder	−	Mack E6/E7 Engine Mack p/n 303GB5111 Non Thru−Drive	CUM−3

Competitive (Remanufactured)

Holset Model QE296M/QE338M

Features:

- Flange Mount
- Engine Drive
- Water Cooled
- Threaded Discharge Type

Specifications:

Approximate Weight 42 lbs.

Notes:

1) Port orientation viewed from rear.

2) Unloader/Inlet Assembly not included.

3) See Accessories for Compressor Kits.

SKU#	Product Description	Model	Air Inlet	Air Outlet	Spline	Application/Notes	Core Group
3558068X	Mack−In−Line − Type QE296M	QE296M Quiet Economy Single Cylinder	Right	Rear	−	−	CUM−3
3558075X	Mack−In−Line − Type QE296M	QE296M Quiet Economy Single Cylinder	Right	Rear	11 Tooth	Thru−Drive	CUM−3
3558076X	Mack−In−Line − Type QE338M	QE338M Quiet Economy Single Cylinder	Right	Rear	11 Tooth	Thru−Drive	CUM−3
3558077X	Mack−In−Line − Type QE338M	QE338M Quiet Economy Single Cylinder	Right	Rear	−	−	CUM−3
3558194X	Mack−In−Line − Type QE296M	QE296M Auiet Economy Single Cylinder	Rear	Rear	−	−	Cum−3

Competitive (Remanufactured)

Reman. WABCO

SKU#	Product Description	Model	Bore Size	CFM	Water Port	Discharge Port	Governor Port	Head Assembly	OEM Number	Core Group
9111535400X	Extended Flange with Gear, 11 Tooth, Thru−Drive	SS318	85MM	18.7	3/8" NPT	1/2" NPT	1/8" − 27 NPT	9111539312X	303GB5129M	WAB2
9111535410X	Extended Flange with Gear, Non−Thru−Drive with Cover Plate	SS318	85MM	18.7	3/8" NPT	1/2" NPT	1/8" − 27 NPT	9111539312X	9111530560	WAB2
9125420017X	Remanufactured Wabco Compressor	ST636		37.4	M16 x 1.5	M26 x 1.5	M16 x 1.5	9125129242RX	9125420010	WAB10

Competitive (Remanufactured)

Bendix® Volvo−GM Application

Features:

- Engine Drive
- Threaded Discharge Type

Specifications:

Approximate Weight 54 lbs.

Notes:

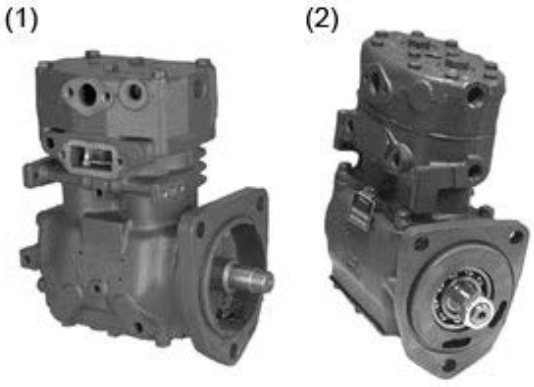
1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Core Group
108935X	TF750 Flange Mount − Volvo−GM	Water/Air	Right	Top	750P
108937X	TF550 Flange Mount − Volvo−GM	Water/Air	Right	Top	550P

Competitive (Remanufactured)

Bendix® Volvo−White Application



Features:

- Engine Drive

Specifications:

Approximate Weight 45 lbs.

Notes:

1) Port orientation viewed from rear.

2) See Accessories for Compressor Kits.

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Notes	Picture	Core Group
286563X	TF501 Flange Mount − Volvo−White	Water/Air	Right	Right	Base Drain Flange Discharge Type	1	501P
289347X	TF700 Flange Mount − Volvo−White	Water/Air	Right	Top	−	2	700N

Competitive (Remanufactured)

WABCO Volvo−D12 Application

SKU#	Product Description	Model	Cooling	Air Inlet	Air Outlet	Discharge Type	Approx. Weight	Core Group
4127040087X	Volvo−D12 Application, Flange Mount, Gear Drive	SS636	Water	Top	Side Discharge	Threaded M26x1.5	46 lbs.	WAB8

Competitive (Remanufactured)

Bendix® BA922

SKU#	Product Description	Cooling	Air Inlet	Air Outlet	Discharge Type	Notes	Picture	Core Group
5016389X	BA922 Flange Mount − John Deere Tier 3 Power Tech Plus	Water/Air	Top	Top	Threaded	Drive Gear not included	1	922C

Mercedes

Wabco Compressor

Specifications:

Model	318
Bore Size	85MM
CFM	15.5
Water Port	M14 − 1.5
Discharge Port	M26 − 1.5
Governor Port	M12 − 1.5
Core Group	WAB16
Core Group Link	WAB16

SKU#	Product Description	Model	Bore Size	CFM	Water Port	Discharge Port	Governor Port	OEM Number	Core Group	Core Group Link
4123520250X	Remanufactured Wabco Compressor for Mercedes	318	85MM	15.5	M14 − 1.5	M26 − 1.5	M12 − 1.5	−	WAB16	

Governors

Competitive (Remanufactured)

Features:

- Standard Unit

Specifications:

Cut−In Pressure	105−110
Cut−Out Pressure/Range	15−30 PSI above Cut−In
Approximate Weight	1 lb.

Notes:

1) D2 Maintenance Kit use part number **276121K**.

2) D2 High Temp Kit use part number **280915K**.

SKU#	Product Description	Port Size Reservoir	Port Size Unloader	Port Size Exhaust	Core Group
275491RX	Remanufactured D−2 Style Governor − CoreFreeÂ™	1/8"	1/8"	1/8"	−

Changeover Kits

Miscellaneous

SN3711AJ

SKU#	Product Description	Application/Notes
5016415K	Bendix® Adapter Kit	TF550 Compressor Converts standard to metric ports
SN3711AJ	Compressor Inlet Check Valve	EL1300/1600 Compressor

Drive Gear Kits

SN3072BM

SN3072BN

SN3072BP

SN3072BR

SN3072BS

SN3072BT/SN3072CA

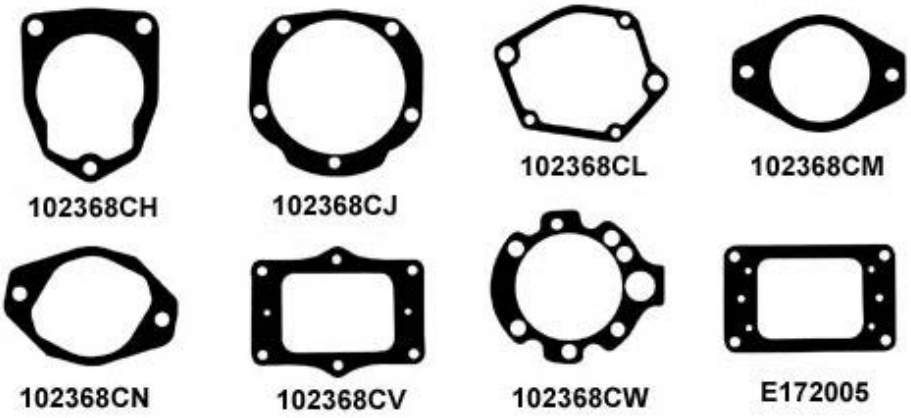
SN3072BV

SN3072BW

505249G

SKU#	Product Description	Application/Notes	Sleeve Length
505249G	Spider Gear − Compressor to Fuel Pump	To replace Detroit 23505249.	−
SN3072BM	Drive Gear Kit	To replace Cummins 200824.	2.75"
SN3072BN	Drive Gear Kit	To replace Cummins 200398.	−
SN3072BP	Drive Gear Kit	To replace Cummins 162426 fuel pump coupling.	−
SN3072BR	Drive Gear Kit	To replace DDC 5141773 coupling.	2.54"
SN3072BS	Drive Gear Kit	To replace DDC 5140982 coupling.	1.85"
SN3072BT	Drive Gear Kit − Metal Gear	To replace DDC drive hub, fits all DDC.	−
SN3072BV	Drive Gear Kit	To replace Mack 320GB11A and 102533A, drive hub and retaining washer.	−
SN3072BW	Drive Gear Kit (Thru−Drive)	Cummins Only.	−
SN3072CA	Drive Gear Kit − Fiber Gear	To replace DDC drive hub, fits all DDC.	−
SN3072CC	Rear Adapter Kit	−	−

Gaskets − Mounting



SKU#	Product Description	Application/Notes
102368CH	Compressor Mounting Gasket	Mack and Caterpillar Flange Mount
102368CJ	Compressor Mounting Gasket	Detroit Diesel, All Flange Mounts
102368CL	Compressor Mounting Gasket	Caterpillar, Flange Mount To 3306 Engine
102368CM	Compressor Mounting Gasket	Cummins B−Series
102368CN	Compressor Mounting Gasket	Cummins C−Series
102368CV	Compressor Mounting Gasket	6−Bolt Base Mount
102368CW	Compressor Mounting Gasket	Cummins In−Line, Flange To Engine (Internal Oil Feed)
E172005	Compressor Mounting Gaskets	OEM Number − 102368CD, 4−Bolt Base Mount

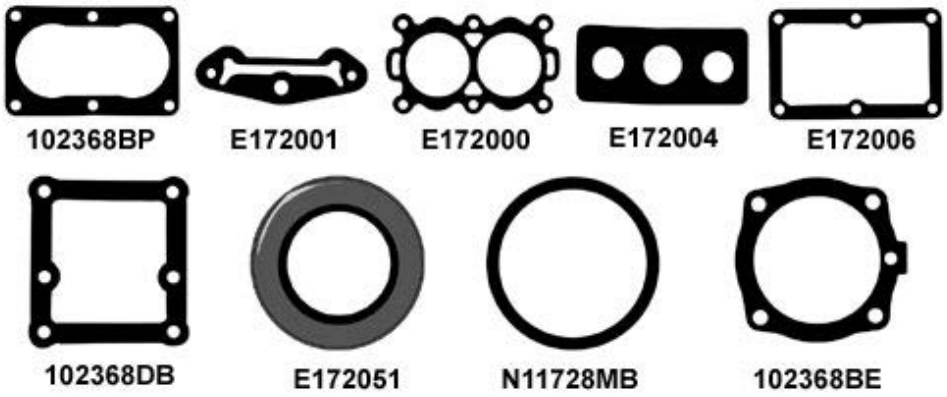
Gaskets/Small Parts

Model 7.4, EL740 or Model 12

SKU#	Product Description	Application
102368BA	Crankcase To Front Bearing Cap Gasket	7.4, EL740 or Model 12 Compressors
102368BC	Crankcase To Rear Bearing Cap Gasket	7.4, EL740 or Model 12 Compressors
102368BG	Cylinder Head Gasket	Model 12 Compressor
102368BJ	Cylinder Head Gasket	7.4 or EL740 Compressor
102368BM	Crankcase To Block Gasket	7.4, EL740 or Model 12 Compressors

Gaskets/Small Parts

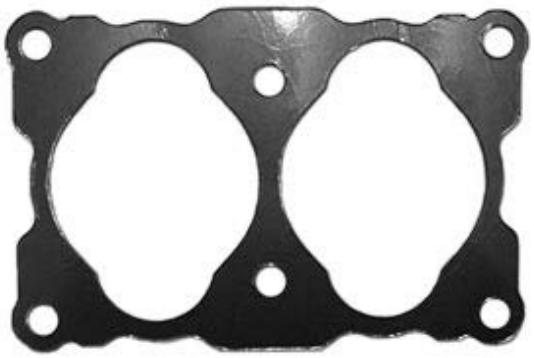
EL1300 & EL1600



SKU#	Product Description	Application
102368BE	End Cap To Crankcase Gasket	EL1300/EL1600 Compressors
102368BP	Crankcase to Block Gasket	EL1300/EL1600 Compressors
102368DB	Adapter Gasket	Caterpillar − 3208
E172000	Cylinder Head Gasket	EL1300/EL1600 Compressors
E172001	Unloader Cover To Head Gasket	EL1300/EL1600 Compressors
E172004	Governor Mounting	For KN18530 Governor
E172006	Crankcase to Bottom Cover Plate Gasket	EL1300/EL1600 Compressors
E172051	Front Shaft Oil Seal	EL1300/EL1600 Compressors
N11728MB	O−Ring for Compressor Rear End Cap	Mack Only

Gaskets/Small Parts

TF550/TF750



SKU#	Product Description	Application
298715K	Cylinder Head Gasket	TF550/TF750 Compressors

Gasket and Installation Kits

Haldex/Midland Base Mount

SKU#	Product Description	Application	Application	Application	Application	Application	Application
RN26GV	Gasket Kit for EL740	KN7000X, KN7010X,	KN7020X, KN7030X,	KN7040X, KN7041X,	KN7050X,	KN7170X,	KN7180X
RN26GW	Gasket & Seal Kit for EL1300/EL1600	EL13020, EL13020X, EL13021X,	EL13022, EL13022X, EL13023X,	EL13060, EL13060X,	EL13140, EL13140X,	EL16020, EL16020X,	EL16060, EL16060X
RN26JG	Gasket & Seal Kit for EL850	KN85020, KN85020X,	KN85021,	KN85022,	KN86020,	KN86020X,	KN86021
SN144	Installation Kit for EL1300/EL1600	EL13020,	EL13020X,	EL13021X,	EL16020,	EL16020X	–
SN144A	Installation Kit for EL1300/EL1600	EL13022,	EL13022X,	EL16022,	EL16022X	–	–
SN144AA	Installation Kit for EL740	KN7000X,	KN7030X	–	–	–	–
SN144AB	Installation Kit for EL740	KN7010X,	KN7020X,	KN7040X,	KN7041X,	KN7050X,	–
SN144ABA	Installation Kit for EL740	KN7170X	KN7180X	–	–	–	–
SN144D	Installation Kit for EL1300/EL1600	EL13060X	EL16060X	–	–	–	–

Gasket and Installation Kits

Haldex/Midland Flange Mount

SKU#	Product Description	Application	Application	Application	Application	Application	Application
RN26GX	Gasket & Seal Kit for EL1300/EL1600	EL13040X,	EL13220,	EL13220X,	EL13280	EL16040X	–
RN26GY	Gasket & Seal Kit for EL1300/EL1600/EL3200 – Detroit Diesel	EL13050, EL13050X, EL13051, EL13051X, EL13052, EL13053, EL13053X,	EL13070, EL13070X, EL13090, EL13090X, EL13100, EL13100X, EL13160, EL13160X,	EL14050, EL14051, EL16050, EL16050X,	EL16051, EL16051X, EL16052, EL16053, EL16053X, EL16070, EL16070X,	EL16072, EL16072X, EL16090, EL16090X, EL16100, EL16100X,	EL16160, EL16160X, EL16250, EL16250X
RN26GZ	Gasket & Seal Kit for EL1300/EL1600/EL3200 – Mack In–Line	EL13111, EL13111X,	EL13112, EL13112X,	Two kits required for EL14111 and EL14111X	EL16111, EL16111X,	EL16112, EL16112X,	–
RN26HA	Gasket & Seal Kit EL1300/EL1600	EL13041, EL13080X, EL13081X,	EL13120, EL13120X, EL13151, EL13151X,	EL13170, EL13170X, EL13200, EL13200X, EL13280, EL13280X,	EL13300, EL13301, EL13301X, EL13330,	EL16080X, EL16120, EL16120X,	EL16200, EL16200X, EL16280, EL16280X, EL16330
RN26JH	Gasket & Seal Kit for EL850	KNT85230,	KNT85230X,	KNT86230,	KNT86230X	–	–
SN144AC	Installation Kit for EL740 – Detroit Diesel	KN7070X,	KN7080X	–	–	–	–
SN144AM	Installation Kit for EL850	KNT85230X,	KNT86230X	–	–	–	–
SN144AP	Installation Kit for EL1300/EL1600 – Detroit Diesel 0°	EL13051,	EL13051X,	EL16051,	EL16051X	–	–
SN144B	Installation Kit for EL1300/EL1600 – Cummins	EL13220,	EL13220X,	EL13040,	EL13040X,	EL16040,	EL16040X
SN144BA	Installation Kit for EL1300 – Cummins	EL13220,	EL13220X	–	–	–	–
SN144BD	Installation Kit for EL1300/EL1600 – Detroit Diesel 60–Series	EL13053,	EL13053X,	EL16053,	EL16053X	–	–
SN144BE	Installation Kit for EL1300/EL1600 – Detroit Diesel 60–Series	EL13312,	EL13312X,	EL16312,	EL16312X	–	–
SN144C	Installation Kit for EL1300/EL1600 – Detroit Diesel 0° & 75°	EL13050,	EL13050X,	EL16050,	EL16050X,	EL16250,	EL16250X
SN144E	Installation Kit for EL1300/EL1600 – Detroit Diesel 0°	EL13070,	EL13070X,	EL16072,	EL16072X,	One each SN3711G and SN144E needed to install EL16070	One each SN3711G and SN144E needed to install EL16070X

SN144F	Installation Kit for EL1300/EL1600 − Caterpillar	EL13080X	EL13081X	EL16080X	−	−	−
SN144G	Installation Kit for EL1300/EL1600 − Detroit Diesel 41°	EL13090,	EL13090X,	EL16090,	EL16090X	−	−
SN144H	Installation Kit for EL1300/EL1600 − Detroit Diesel 50°	EL13100,	EL13100X,	EL16100,	EL16100X	−	−
SN144J	Installation Kit for EL1300/EL1600 − Mack	EL13111, EL13111X,	EL13112, EL13112x,	EL16111, EL16111X	EL16112, EL16112X	−	−
SN144K	Installation Kit for EL1300/EL1600 − Caterpillar	EL13120,	EL13120X,	EL16120,	EL16120X	−	−
SN144L	Installation Kit for EL1300 − Caterpillar 3306 Engine	EL13151,	EL13151X	−	−	−	−
SN144M	Installation Kit for EL1300/EL1600 − Detroit Diesel 45°	EL13160,	EL13160X,	EL16160,	EL16160X	−	−
SN144N	Installation Kit for EL1300/EL1600 Caterpillar 3176 Engine	EL13170, EL13170X,	EL13200, EL13200X,	EL13300, EL13330,	EL13301, EL13301X,	EL16200, EL16200X,	EL16330
SN144X	Installation Kit for EL3200 − Mack In−Line	EL14111,	EL14111X	.	−	−	−

Gasket and Installation Kits

Competitive Base Mount

Product Image Not Available

SKU#	Product Description	Application	Application	Application	Application	Application	Application
101558K	Gasket Kit for Bendix® TF501	102697X, 102698X, 102734X, 102742X, 102953X, 102989X, 103274X, 286526X, 286527X, 286528X,	286529X, 286530X, 286532X, 286533X, 286536X, 286537X, 286538X, 286539X, 286540X, 286541X,	286542X, 286543X, 286544X, 286546X, 286550X, 286551X, 286552X, 286554X, 286555X,	286556X, 286557X, 286558X, 286560X, 286561X, 286562X, 286563X, 286564X, 286566X,	286567X, 286574X, 286576X, 286578X, 286579X, 286580X, 286581X, 286582X, 286584X,	286585X, 286586X, 286589X, 286591X, 286592X, 286595X, 286623X, 286535X, 286565X
101559K	Gasket Kit for Bendix® TF500/TF700	101158X, 101256X, 101636X, 103278X, 106268X,	280369X, 280622X, 280626X, 282013X, 284307X,	284714X, 285108X, 289262X, 289336X,	289339X, 289340X, 289342X, 289348X,	289349X, 289350X, 289744X, 289915X,	289924X, 289925X, 289941X, 289964X
280511K	Gasket Kit for Bendix® TF400	101142X, 101242X, 227400X, 227401X,	227402X, 227403X, 227406X, 227407X,	227409X, 227410X, 229077X, 275317X,	276166X, 276778X, 279037X,	279712X, 283505X, 283506X,	289686X, 289688X, 289689X
280512K	Gasket Kit for Bendix® TF500/TF600	227320X, 227321X, 227323X, 227326X, 227331X, 227332X, 228141X, 228366X, 228443X, 228479X, 229078X, 229525X,	275777X, 276990X, 276961X, 276962X, 276974X, 277122X, 277694X, 277730X, 277731X, 277901X, 278604X, 278605X,	278681X, 279068X, 279069X, 279356X, 279556X, 279995X, 280453X, 280556X, 280570X, 280602X, 280603X,	280604X, 280608X, 280609X, 280610X, 280611X, 280613X, 280774X, 281042X, 281157X, 281677X, 282010X,	282011X, 282025X, 282076X, 282586X, 282621X, 282928X, 283513X, 283514X, 283515X, 283577X, 283585X,	283690X, 283692X, 284010X, 284106X, 284260X, 284310X, 284662X, 284699X, 284718X, 284959X, 285252X,
BN144A	Installation Kit for Bendix® Base Mount	101242X, 101256X, 107514X, 107866X, 108066X, 108110X, 108277X, 227320X, 227321X,	227322X, 227323X, 227400X, 227401X, 227402X, 227403X, 227406X, 227407X, 228141X,	228479X, 229990X requires BN144C also, 275317X, 275990X, 277694X,	279356X, 280453X, 280602X, 280603X, 280604X, 280613X, 282076X, 283690X,	286526X, 286527X, 286528X, 286529X, 286530X, 286532X, 286533X, 286560X,	286582X, 286586X, 286589X, 286591X, 286595X, 289350X, 289689X,
BN144B	Installation Kit for Bendix® 6-Hole Base Mount	227331X, 227332X	227409X, 227410X	280610X, 280611X	286535X, 286536X	286537X, 286576X	286578X, 289924X
BN144C	Installation Kit for Bendix® Base Mount	229990X requires use of BN144A also,	276777X requires use of BN144E also,	102698X, 228366X, 279037X,	279712X, 283506X, 283514X,	283585X, 286556X, 286557X,	286565X, 289688X
BN144D	Installation Kit for Bendix® Slant Mount	229077X	229078X	283505X	283513X	-	-

SKU#	Product Description	Application	Application	Application	Application	Application	Application
BN144J	Installation Kit for Bendix® Base Mount	101142X	102989X	286585X	–	–	–
BN144K	Installation Kit for Bendix® TF501 Slant Mount	286558X	286561X	286562X	–	–	–
BN144R	Installation Kit for Bendix® BX2150 Base Mount	104039X	104041X	106985X	107221X	–	–
BN144S	Installation Kit for Bendix® TF501	286564X	286567X	286580X	286592X	–	–

Gasket and Installation Kits

Competitive Flange Mount

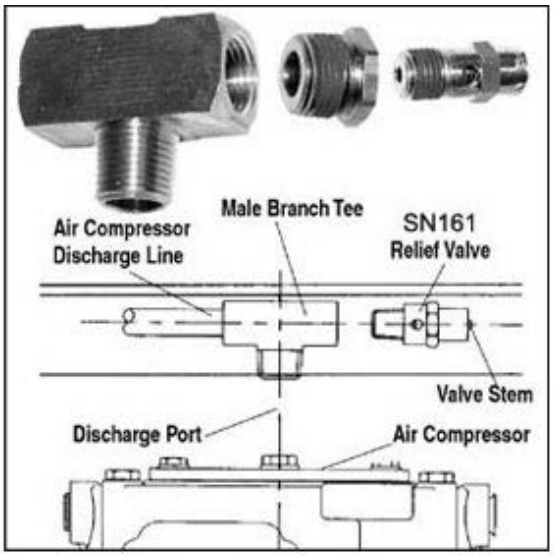
Product Image Not Available

SKU#	Product Description	Application	Application	Application	Application	Application	Application
101558K	Gasket Kit for Bendix® TF501	102697X, 102698X, 102734X, 102742X, 102953X, 102989X, 103274X, 286526X, 286527X, 286528X,	286529X, 286530X, 286532X, 286533X, 286536X, 286537X, 286538X, 286539X, 286540X, 286541X,	286542X, 286543X, 286544X, 286546X, 286550X, 286551X, 286552X, 286554X, 286555X,	286556X, 286557X, 286558X, 286560X, 286561X, 286562X, 286563X, 286564X, 286566X,	286567X, 286574X, 286576X, 286578X, 286579X, 286580X, 286581X, 286582X, 286584X,	286585X, 286586X, 286589X, 286591X, 286592X, 286595X, 286623X, 286535X, 286565X
101559K	Gasket Kit for Bendix® TF500/TF700	101158X, 101256X, 101636X, 103278X, 106268X,	280369X, 280622X, 280626X, 282013X, 284307X,	284714X, 285108X, 289262X, 289336X,	289339X, 289340X, 289342X, 289348X,	289349X, 289350X, 289744X, 289915X,	289924X, 289925X, 289941X, 289964X
280511K	Gasket Kit for Bendix® TF400	101142X, 101242X, 227400X, 227401X,	227402X, 227403X, 227406X, 227407X,	227409X, 227410X, 229077X, 275317X,	276166X, 276778X, 279037X,	279712X, 283505X, 283506X,	289686X, 289688X, 289689X
280512K	Gasket Kit for Bendix® TF500/TF600	227320X, 227321X, 227323X, 227326X, 227331X, 227332X, 228141X, 228366X, 228443X, 228479X, 229078X, 229525X,	275777X, 276990X, 276961X, 276962X, 276974X, 277122X, 277694X, 277730X, 277731X, 277901X, 278604X, 278605X,	278681X, 279068X, 279069X, 279356X, 279556X, 279995X, 280453X, 280556X, 280570X, 280602X, 280603X,	280604X, 280608X, 280609X, 280610X, 280611X, 280613X, 280774X, 281042X, 281157X, 281677X, 282010X,	282011X, 282025X, 282076X, 282586X, 282621X, 282928X, 283513X, 283514X, 283515X, 283577X, 283585X,	283690X, 283692X, 284010X, 284106X, 284260X, 284310X, 284662X, 284699X, 284718X, 284959X, 285252X,
BN144E	Installation Kit for Bendix® Flange Mount – Detroit Diesel	101158X, 101636X, 106268X, 107512X, 107513X, 107813X, 275777X, 276166X,	276778X, 276961X, 276962X, 278681X, 279068X, 279069X,	276777X requires kit BN144C also, 280369X, 280570X, 280609X, 281042X,	281677X, 282010X, 282011X, 282013X, 282929X, 283515X, 284106X,	285252X, 286538X, 286539X, 286540X, 286541X, 286542X, 286543X, 286579X,	286581X, 286623X, 289262X, 289342X, 289915X, 289925X, 289941X, 289964X
BN144F	Installation Kit for Bendix® TF500/TF600/TF700 Flange Mount	103278X, 227326X, 277730X, 277731X, 277901X,	278604X, 278605X, 279556X, 279995X,	280556X, 280608X, 280774X, 281157X,	282025X, 282586X, 282621X, 284010X,	284260X, 284307X, 284310X, 284662X,	285108X, 289340X, 289349X, 289744X
BN144G	Installation Kit for Bendix® Flange Mount – Cummins	228443X, 229525X,	276974X, 280622X,	280626X, 284339X,	284699X, 284718X,	284959X, 286554X,	286555X, 289339X
BN144H	Installation Kit for Bendix® Flange Mount – Mack	102953X	277122X	283577X	283692X	286574X	289348X

SKU#	Product Description	Application	Application	Application	Application	Application	Application
BN144L	Installation Kit for Bendix® Flange Mount	102697X, 103274X, 107023X, 107506X, 107507X,	107508X, 107509X, 107510X, 107511X, 107869X,	107917X, 107981X, 108866X, 108869X,	108935X, 108990X, 108992X, 109139X,	109142X, 286544X, 286546X, 286550X,	286551X, 286552X, 286566X, 286620X
BN144M	Installation Kit for TF501/TF700 Flange Mount − Caterpillar	109287X	286584X	289336X	–	–	–
BN144N	Installation Gasket Kit for Cummins/Holset Style, Standard Case, L/K/N	3018527X, 3018543X, 3047440X,	3048680X, 3049186X, 3558000X,	3558020X, 3558029X,	3558042X, 3558043X,	3558044X, 3558045X,	3558072X, 3558074X
BN144T	Installation Kit for Bendix® TF501 Flange Mount − Volvo White	286563X	–	–	–	–	–
BN144V	Installation Kit for Bendix® TF550 Flange Mount − Cummins	108804X	–	–	–	–	–
BN144X	Installation Kit for Bendix® TF550/TF750 Flange Mount − Detroit Diesel	107622X	107623X	–	–	–	–
BN144Y	Installation Gasket Kit for Cummins/Holset Style, "B" and "C" Series	3558005X, 3558006X, 3558021X,	3558022X, 3558049X, 3558050X,	3558051X, 3558052X, 3558094X,	3558095X, 3558097X, 3558098X,	3558113X, 3558122X,	3558211X, 3558220X
BN144Z	Installation Kit for Bendix® TF550 Flange Mount − CAT and BX2150	109079X	109088X	–	–	–	–
RN26ND	Gasket Kit for GM 292 Compressor	KN7700CX	–	–	–	–	–

Service Kits

Reduces oil passing around the tube which lowers the pooling effect of the oil in the crankcase.



Prevents air line failure due to excess pressure

SKU#	Product Description	Length	Kit contains	Applications
RN12106K	Cover Plate and Gasket Kit for Compressors	−	Cover Plate and Gasket	Bendix, WABCO, Holset
SN151	Oil Tube Service Kit	3.54"	Oil tube and two o−rings.	EL1300 and EL1600 compressors, Replacement kit for Mack E−6 Engine 201GC110 oil entry tube.
SN151A	Oil Tube Service Kit	1.50"	Oil tube and two o−rings.	EL1300 and EL1600 compressors, Replacement kit for Mack E−7 Engine 201GC110 oil entry tube.
SN161	Pressure Relief Valve Service Kit	−	One pressure relief valve.	Discharge line relief valve for air compressors.

Connecting Rod and Bearing Kits

EQ2620 Shown

Notes:

1) Connecting Rod Bearing − One Set per Kit.

2) Connecting Rod and Bearing − One Only per Kit.

SKU#	Product Description	Notes
EQ2620	Connecting Rod and Bearing Kit − Standard	Includes Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
EQ2621	Connecting Rod and Bearing Kit − .010 US	Includes Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
EQ2622	Connecting Rod and Bearing Kit − .020 US	Includes Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
EQ2630	Connecting Rod Bearing Kit − Standard	No Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
EQ2631	Connecting Rod Bearing Kit − .010 US	No Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
EQ2632	Connecting Rod Bearing Kit − .020 US	No Connecting Rod For EL850/EL1300/EL1600/EL3200 Compressors
RN26A	Connecting Rod Bearing Kit − Standard	No Connecting Rod For EL740 Compressor
RN26AL	Connecting Rod Bearing Kit − .010 US	No Connecting Rod For EL740 Compressor

Piston and Ring Kits

SKU#	Product Description	Notes
107640K	Bendix® TF550/TF750 Ring Set .010	One Set Only
107641K	Bendix® TF550/TF750 Ring Set .020	One Set Only
107642K	Bendix® TF550/TF750 Ring Set .030	One Set Only
225516K	Bendix® TF500 Ring Set .020	One Set Only
225517K	Bendix® TF500 Ring Set .030	One Set Only
226723K	Bendix® TF400 Ring Set .020	One Set Only
226724K	Bendix® TF400 Ring Set .030	One Set Only
282526K	Bendix® TF700 Ring Set .010	One Set Only
282527K	Bendix® TF700 Ring Set .020	One Set Only
282528K	Bendix® TF700 Ring Set .030	One Set Only
289114K	Bendix® TF501 Piston Kit .010	Piston Only
289115K	Bendix® TF501 Piston Kit .020	Piston Only
289116K	Bendix® TF501 Piston Kit .030	Piston Only
289439K	Bendix® TF400 Piston Kit .010	Piston Only
289440K	Bendix® TF400 Piston Kit .020	Piston Only
289441K	Bendix® TF400 Piston Kit .030	Piston Only
289929K	Bendix® TF500 Piston Kit .010	Piston Only
289930K	Bendix® TF500 Piston Kit .020	Piston Only
289931K	Bendix® TF500 Piston Kit .030	Piston Only
550010K	Bendix® TF550 Piston Kit .010	Piston Only
550020K	Bendix® TF550 Piston Kit .020	Piston Only
550030K	Bendix® TF550 Piston Kit .030	Piston Only
550040K	Bendix® TF550 Piston Kit .040	Piston Only
750010K	Bendix® TF750 Piston Kit .010	Piston Only
750030K	Bendix® TF750 Piston Kit .030	Piston Only
750040K	Bendix® TF750 Piston Kit .040	Piston Only
EQ2604	EL1300/EL1600/EL3200 Piston Kit − Standard	Piston with Wrist Pin and Rings − One Only
EQ2606	EL1300/EL1600/EL3200 Piston Kit .020 OS	Piston with Wrist Pin and Rings − One Only
EQ2614	EL1300/EL1600/EL3200 Ring Kit − Standard	One Set Only
EQ2616	EL1300/EL1600/EL3200 Ring Kit .020 OS	One Set Only
EQ2640	EL850 Piston Kit − Standard	Piston with Wrist Pin and Rings − One Only
EQ2650	EL850 Ring Kit − Standard	One Set Only
EQ2670	EL740 Ring Kit − Standard	One Set Only
EQ2672	EL740 Ring Kit .020 OS	One Set Only

Insert Kits

SKU#	Product Description
282763K	Bendix® TF400 Insert Kit Standard
282764K	Bendix® TF400 Insert Kit .010
282765K	Bendix® TF400 Insert Kit .020
282766K	Bendix® TF400 Insert Kit .030
282767K	Bendix® TF500 Insert Kit Standard
282768K	Bendix® TF500 Insert Kit .010
282769K	Bendix® TF700 Insert Kit .020
282770K	Bendix® TF700 Insert Kit .030
286254K	Bendix® TF501 Insert Kit Standard
286255K	Bendix® TF501 Insert Kit .010
286256K	Bendix® TF501 Insert Kit .020
286257K	Bendix® TF501 Insert Kit .030

Head Assemblies

EL850/EL1300/EL1600/EL3200/292 GM/Isuzu

SKU#	Product Description	Cooling	Installation Kit	Approximate Weight	Application	Picture	Core Group
KN17091X	Reman. EL3200 Head Assembly	Water Cooled (Rear)	SN144AY	13 lbs.	EL3200 Compressors	3	1700
KN17092X	Reman. EL3200 Head Assembly	Water Cooled (Front)	SN144AY	13 lbs.	EL3200 Compressors	4	1700
KNT17090	New EL1300/EL1600 Head Assembly Kit	Water Cooled	–	13 lbs.	EL1300/EL1600 Compressors	1	–
KNT17090X	Reman. EL1300/EL1600 Head Assembly	Water Cooled	SN144Y	13 lbs.	EL1300/EL1600 Compressors	1	1700
KNT17300	New EL850 Head Assembly Kit	Air Cooled	–	7 lbs.	EL850 Compressors Air Cooled	2	–
KNT17300X	Reman. EL850 Head Assembly	Air Cooled	SN144R	7 lbs.	EL850 Compressors Air Cooled	2	1702
KNT17400	New EL850 Head Assembly Kit	Water Cooled	–	7 lbs.	EL850 Compressors Water Cooled	2	–
KNT17400X	Reman. EL850 Head Assembly	Water Cooled	SN144R	7 lbs.	EL850 Compressors Water Cooled	2	1702
KNT17500X	GM/Isuzu 292 with Check Valve	Water	–	–	GM/Isuzu	–	1703

Head Assemblies

Bendix

Specifications:	
Approximate Weight	14.5 lbs.

SKU#	Product Description	Core Group	
298718X	Remanufactured Bendix® Compressor 550/750 Head Assembly	550H1	
K023600X	Reman Head for BA−291 Compressore	921H1	

Head Assemblies

Cummins/Holset Style

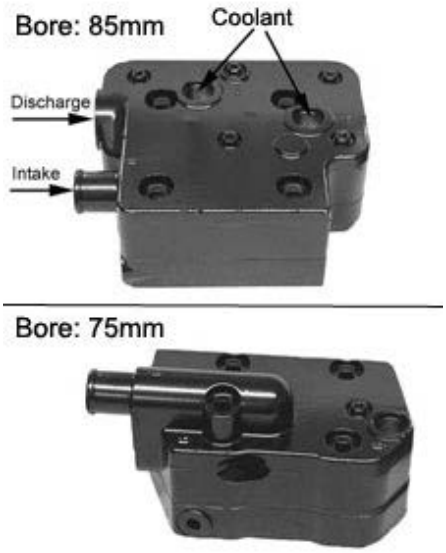
3559591X Shown

Specifications:	
Approximate Weight	9.5 lbs.

SKU#	Product Description	Ports	Core Group
3559570X	Reman. Holset Quiet Economy (QE) Compressor Head Assembly	3/4"−16 straight thread o−ring water ports	CUM5
3559591X	Reman. Holset Quiet Economy (QE) Compressor Head Assembly	3/8" pipe thread (Mack Style) water ports	CUM6

Head Assemblies

WABCO



Specifications:

STOR Straight Thread O−Ring

Notes:

1) **85mm Head Assemblies Kits Contain:** New lower head assemblies, new gaskets and bolts, with remanufactured upper head assembly.

2) WABCO Head Replacement Instructions go to www.haldex.com/North−America/ Choose Products, Literature, Compressors L31271W or L31272W

SKU#	Product Description	Model	Bore	Water Port	Discharge Port	Governor Port	Application	Core Group
4123529212RX	Remanufactured Wabco Compressor	WABCO SS318	85MM	M16 X 1.5	M27 X 2.0	M12 X 1.5	4123520057X	−
4127049322RX	Remanufactured Wabco Compressor	WABCO SS704	85MM	M16 x 1.5	M26 x 1.5	M12 x 1.5	4127040087X	−
9111539202	New WABCO Head Assembly − Cummins	WABCO SS318	85MM	3/4" − 16 STOR	M27 − 2.0 STOR	M10 − 1.0 STOR	9111535200X 9111535207X 9111535300X 9111530040X 9111535330X 9111535313X	−
9111539202X	Reman. WABCO Head Assembly − Cummins	WABCO SS318	85MM	3/4" − 16 STOR	M27 − 2.0 STOR	M10 − 1.0 STOR	9111535200X 9111535207X 9111535300X 9111530040X 9111535330X 9111535313X	WAB12
9111539212	New WABCO Head Assembly − Cummins	WABCO SS318	85MM	M18 − 1.5 STOR	M27 − 2.0 STOR	M10 − 1.0 STOR	9111535100X	−
9111539212X	Reman. WABCO Head Assembly − Cummins	WABCO SS318	85MM	M18 − 1.5 STOR	M27 − 2.0 STOR	M10 − 1.0 STOR	9111535100X	WAB12
9111539312	New WABCO Head Assembly − Mack	WABCO SS318	85MM	3/8" NPT	1/2" NPT	1/8" − 27 NPT	9111535400X 9111535410X	−
9111539312X	Reman. WABCO Head Assembly − Mack	WABCO SS318	85MM	3/8" NPT	1/2" NPT	1/8" − 27 NPT	9111535400X 9111535410X	WAB12
9111549202X	Reman. WABCO Head Assembly − Cummins	WABCO SS250	75MM	3/4" − 16 STOR	M27 − 2.0 STOR	M10 − 1.0 STOR	9111545000X 9111545020X	WAB11
9125129242RX	Remanufactured Wabco Compressor	ST636		M16 x 1.5	M26 x 1.5	M16 x 1.5	9125420017X	−

Head Assemblies

Repair Kits

SKU#	Product Description	Application
3559545GK	Head Gasket Kit for Cummins/Holset Style	Models SS296/SS296C/ST676
3559545K	Minor Head Repair Kit for Cummins/Holset Style	Models SS296/SS296C/ST676
3559547GK	Head Gasket Kit for Cummins/Holset Style	Model ST676 Super Twin Cylinder
3559547K	Minor Head Repair Kit for Cummins/Holset Style	Model ST676 Super Twin Cylinder
3559551K	Major Head Repair Kit for Cummins/Holset Style	Models SS296/SS296C/ST676
3559555K	Major Head Repair Kit for Cummins/Holset Style	Model ST676 Super Twin Cylinder
3559569GK	Head Gasket Kit for Cummins/Holset Style	Quiet Economy (QE) Models
3559576K	Head/Valve Repair Kit for Cummins/Holset Style	Quiet Economy (QE) Models
RN26DW	Head Repair Kit	EL740 Compressors
RNT26	Head Repair Kit	EL1300/EL1600/EL3200 Compressors
RNT26JA	Head Repair Kit	EL850 Compressors

Unloader Assemblies and Kits

Cummins/Holset Style Unloader Assemblies

SKU#	Product Description	Application	Core Group
3559571X	Reman. Quiet Economy (QE) Unloader Assembly for Cummins/Holset Style Compressor	LMNKO Series Engines 3558072X 3558074X	CUMUL
3559582X	Reman. Quiet Economy (QE) Unloader Assembly for Cummins/Holset Style Compressor	"B" Auto J Series Engines 3558097X 3558098X	CUMUL
3559586X	Reman. Quiet Economy (QE) Unloader Assembly for Cummins/Holset Style Compressor	"C" Series Engines 3558051X 3558052X 3558094X 3558095X 3558113X	CUMUL

Unloader Assemblies and Kits

Bendix®

Notes:

1) **108847K can not be used if the Compressor to be serviced has an Unloader Piston of 1/4" diameter. Use Maintenance Kit 108848K in servicing Compressor.**

SKU#	Product Description
107515K	Unloader Kit for Bendix® TF550/TF750 Flange Mount Compressor
108847K	Unloader Kit for Bendix® BX2150 with 3/8" Unloader Piston
108848K	Unloader Kit for Bendix® BX2150 with 1/4" Unloader Piston
279614K	Unloader Kit for Bendix® TF400 Compressors
279615K	Unloader Kit for Bendix® TF500/TF501/TF600/TF700 Compressors
5008557AK	Unloader Kit (Minor) for Bendix® BA−921 Compressor
5008557K	Unloader Kit (Major) for Bendix® Compressor

Unloader Assemblies and Kits

Cummins/Holset Style

SKU#	Product Description	Application
3559544K	Unloader Kit for Cummins/Holset Style	SS296/SS296C/ST676
3559546K	Minor Unloader Kit for Cummins/Holset Style	E Type Unloader
3559553K	Major Unloader Kit for Cummins/Holset Style	E Type Unloader
3559568K	Unloader Maintenance Kit for Cummins/Holset Style	Quiet Economy (QE)

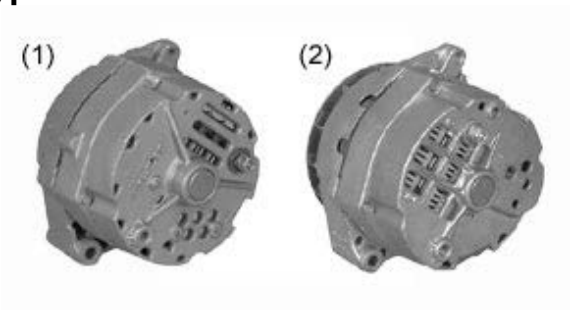
Troubleshooting Information

CONDITION	POSSIBLE CAUSE	RESOLUTION
Compressor fails to maintain sufficient pressure or adequate air supply.	Dirty air cleaner.	Clean or replace element as necessary.
	Restriction in compressor cylinder head intake discharge cavities or line.	Repair or replace as necessary.
	Leaking or broken inlet or exhaust valves.	Repair or replace valves as necessary.
	Drive belt slipping.	Adjust or replace belt.
	Excessive system leakage.	Check all fittings and connections.
	Defective governor.	Repair or replace governor as necessary.
	Governor with improper setting.	Adjust governor as necessary.
	Gauge defective.	Replace gauge as necessary
Noisy operation.	Loose drive pulley.	Tighten, repair or replace pulley as necessary.
	Restrictions in cylinder head or discharge line.	Repair or replace as necessary.
	Worn or burned out bearings.	Repair or replace as necessary.
	Compressor not getting proper lubrication.	Service lubrication system as necessary.
	Excessive wear.	Overhaul or replace compressor as necessary.
Compressor not unloading (excessive pressure).	Defective unloader pins or seals.	Replace pins/seals as necessary.
	Defective governor.	Repair or replace governor as necessary.
	Reservoir line to governor restricted.	Repair or replace line as necessary.
	Unloader mechanism binding or stuck.	Repair unloader as necessary.
	Gauge defective.	Replace gauge as necessary.
Compressor passes excessive oil.	Excessive wear.	Overhaul or replace compressor as necessary.
	Dirty air cleaner.	Clean or replace element as necessary.
	High inlet vacuum (obstructed intake).	Service intake as necessary.
	Small or restricted oil return line flooding compressor.	Repair or replace return line as necessary.
	Excessive oil pressure.	Service lubrication system as necessary.
	Defective or worn seal in rear bearing cap	Replace seal as necessary.
	Piston rings improperly installed.	Remove and Reinstall as necessary.
	Back pressure from engine crankcase.	Check engine ventilation system, excessive engine blow by (piston rings).
	Intake pipe restricted; too long or too small.	Repair or replace pipe as necessary.

Notes

Delco 10−SI and 15−SI Series

Type 116 Alternator



Features:

- **Delco 10−SI** recommended for farm and industrial equipment.
- **Delco 15−SI** recommended for diesel or gasoline industrial and off−highway applications operating in adverse environments.
- Built−in integrated circuit regulator.
- Special "R" terminals for electric tachometer and tach hour meter.

SKU#	Product Description	Voltage	Amps	Polarity	Delco Reman. #	Approx. Weight	Pic. #	Core Group
RA110000X	Delco 10−SI Series Type 116 Remanufactured Alternator	12	61	Negative	19020500	12.4 lbs.	1	AL1000
RA110001X	Delco 10−SI Series Type 116 Remanufactured Alternator	24	40	Negative	19020525	11.3 lbs.	1	AL1000
RA110002X	Delco 10−SI Series Type 116 Remanufactured Alternator	12	63	Negative	19020521	11.3 lbs.	1	AL1000
RA115000X	Delco 15−SI Type 116 Series Remanufactured Alternator	12	105	Negative	10459366	14.6 lbs.	2	AL1001

Delco 20−SI Series

Type 450 Alternator

Features:

- Recommended for both off and on highway applications with heavy drive belt loads and intermediate electrical loads.
- Built−in integrated circuit regulator.
- 1 wire charging system.
- Brushless.

SKU#	Product Description	Voltage	Amps	Polarity	Delco Reman. #	Approx. Weight	Core Group
RA120000X	Delco 20−SI Series Type 450 Remanufactured Alternator	12	60	Negative	10459020	17.6 lbs.	AL1002
RA120001X	Delco 20−SI Series Type 450 Remanufactured Alternator	24	35	Negative	10459319	18.3 lbs.	AL1002

Delco 21−SI Series

Remanufactured Alternator

Features:

- Flat temperature compensated regulator.

Specifications:

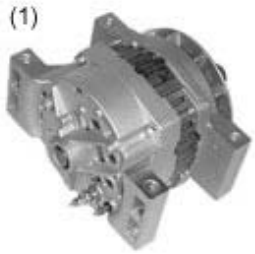
Approximate Weight 15 lbs.

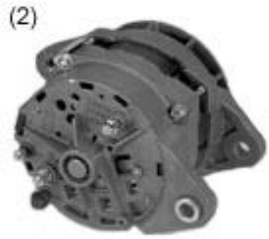
Notes:

1) **RA121016X** has 3 wire hook−up.

SKU#	Product Description	Voltage	Amps	Polarity	Batt. Term.	"R" Term.	"I" Term.	Delco Reman. #	Core Group
RA121000RX	Delco 21−SI Series Reman. Alternator − CoreFreeÂ™	12	100	Negative	1/4"−28	PIN − 10/24	10/24	10459013	−
RA121000X	Delco 21−SI Series Reman. Alternator	12	100	Negative	1/4"−28	PIN − 10/24	10/24	10459013	AL1010
RA121001RX	Delco 21−SI Series Reman. Alternator − CoreFreeÂ™	12	130	Negative	1/4"−28	PIN − 10/24	10/24	10459037	−
RA121001X	Delco 21−SI Series Reman. Alternator	12	130	Negative	1/4"−28	PIN − 10/24	10/24	10459037	AL1010
RA121001XBK30	Delco 21−SI Series Reman. Alternator − Bulk	12	130	Negative	1/4"−28	PIN − 10/24	10/24	10459037	AL1010
RA121002RX	Delco 21−SI Series Reman. Alternator − CoreFreeÂ™	12	145/160	Negative	1/4"−28	PIN − 10/24	10/24	10459051	−
RA121002X	Delco 21−SI Series Reman. Alternator	12	145/160	Negative	1/4"−28	PIN − 10/24	10/24	10459051	AL1010
RA121016X	Delco 21−SI Series Reman. Alternator	12	100	Negative	5/16"−18	PIN − 10/24	10/24	10459463	AL1010

Delco 22−SI Series





Features:

- Recommended for commercial vehicles.
- Instant turn on with auto start feature.

Specifications:

Polarity Negative

Notes:

1) Pad Mount Style for DDC applications.

SKU#	Product Description	Voltage	Amps	Batt. Term.	"R" Term.	"I" Term.	Delco Reman.	DDC Part #	Approx. Weight	Pic. #	Core Group
RA122000RX	Delco 22−SI Series Reman. Alternator − CoreFreeÂ™	12	100	5/16"−18	PIN − 10/24	10/24	10459188	−	15.9 lbs.	2	−
RA122000X	Delco 22−SI Series Reman. Alternator	12	100	5/16"−18	PIN − 10/24	10/24	10459188	−	15.9 lbs.	2	AL1029
RA122001RX	Delco 22−SI Series Reman. Alternator − CoreFreeÂ™	12	130	5/16"−18	PIN − 10/24	10/24	10459189	−	15.5 lbs.	2	−
RA122001X	Delco 22−SI Series Reman. Alternator	12	130	5/16"−18	PIN − 10/24	10/24	10459189	−	15.5 lbs.	2	AL1029
RA122002RX	Delco 22−SI Series Reman. Alternator − CoreFreeÂ™	12	145	5/16"−18	PIN − 10/24	10/24	10459190	−	18.0 lbs.	2	−
RA122002X	Delco 22−SI Series Reman. Alternator	12	145	5/16"−18	PIN − 10/24	10/24	10459190	−	18.0 lbs.	2	AL1029
RA122010X	Delco 22−SI Pad Mount Style Reman. Alternator	12	100	5/16"−18	PIN − 10/24	10/24	10459340	R0459340	16.9 lbs.	1	AL1029
RA122011X	Delco 22−SI Pad Mount Style Reman. Alternator	12	130	5/16"−18	PIN − 10/24	10/24	10459341	R0459041	16.9 lbs.	1	AL1029
RA122012X	Delco 22−SI Pad Mount Style Reman. Alternator	12	145	5/16"−18	PIN − 10/24	10/24	10459342	R0459042	16.9 lbs.	1	AL1029

Delco 26−SI Series

Type 450 Alternator

Features:

- Replaces 25−SI.
- Lower turn−on speed than 25−SI Series.
- Recommended for off−highway and marine use.
- Load dump design.
- Brushless.
- Built−in integrated circuit regulator.
- Inside cooled design.

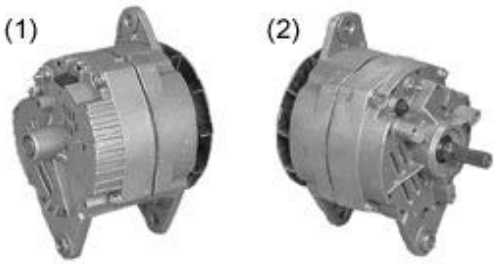
Specifications:

Polarity Negative

SKU#	Product Description	Voltage	Amps	Batt. Term.	"R" Term.	"I" Term.	Delco Reman. #	Approx. Weight	Replaces	Core Group
RA126001X	Delco 26−SI Series Type 450 Reman. Alternator	12	85	7/16"−14 Int. Hole	PIN	None	10459066	27.6 lbs.	RA125004X	AL1003
RA126002X	Delco 26−SI Series Type 450 Reman. Alternator	12	75	7/16"−14 Int. Hole	PIN	None	10459077	27.6 lbs.	RA125002X	AL1003
RA126004X	Delco 26−SI Series Type 450 Reman. Alternator	12	85	1/4"−28 Ext.	PIN	None	10459067	29.6 lbs.	−	AL1003
RA126005X	Delco 26−SI Series Type 450 Reman. Alternator	24	50	7/16"−14 Int. Hole	PIN	None	10459064	29.4 lbs.	RA125000X	AL1003
RA126006X	Delco 26−SI Series Type 450 Reman. Alternator	24	75	7/16"−14 Int. Hole	PIN	None	10459076	27.6 lbs.	RA125003X	AL1003

Delco 27−SI Series

Type 200 and 205 Alternator



Features:

- Built−in integrated circuit regulator.
- **Type 200** recommended for medium duty, large gasoline and light duty diesel engines.
- **Type 200** special "R" terminal for electric tachometer and tach hour meter.
- **Type 205** recommended for light trucks and small diesel applications with extended shaft for vacuum pump.

SKU#	Product Description	Voltage	Amps	Polarity	Battery Terminal	"R" Terminal	"I" Terminal	Delco Reman. #	Wt.	Pic. #	Core Group
RA127000X	Delco 27−SI Series Type 200 Reman. Alternator	12	80	Negative	12 − 24 External	PIN	None	10459069	18 lbs.	1	AL1004
RA127001X	Delco 27−SI Series Type 200 Reman. Alternator	12	80	Postive	12 − 24 External	PIN	None	10463074	18 lbs.	1	AL1004
RA127002X	Delco 27−SI Series Type 200 Reman. Alternator	24	65	Negative	12 − 24 External	PIN	None	10459244	18 lbs.	1	AL1004
RA127003X	Delco 27−SI Series Type 200 Reman. Alternator	12	100	Negative	12 − 24 External	PIN	None	10459238	18 lbs.	1	AL1004
RA127006X	Delco 27−SI Series Type 205 Reman. Alternator	12	100	Negative	12 − 24 External	PIN	None	10463161	19 lbs.	2	AL1004

Delco 30−SI and 30−SI/TR Series

Type 400 Alternator

Features:

- Built−in integrated circuit regulator.
- One wire system.
- **Delco 30−SI** recommended for high mileage heavy duty line haul diesel application.
- **Delco 30−SI/TR** recommended for high mileage heavy duty, extra large line haul diesel engine applications.
- **Delco 30−SI/TR** for 24 Volt starting, 12 Volt charging.

SKU#	Product Description	Voltage	Amps	Polarity	Output Terminal	"R" Terminal	"I" Terminal	Delco Reman. Number	Approx. Weight	Core Group
RA130001X	Delco 30−SI Type 400 Series Reman. Alternator	12	90	Negative	1/4"−28	PIN	None	10459004	26.3 lbs.	AL1006
RA130002RX	Delco 30−SI Type 400 Series Reman. Alternator − CoreFreeÂ™	12	105	Negative	1/4"−28	PIN − 10/24	None	10459008	27.0 lbs.	−
RA130002X	Delco 30−SI Type 400 Series Reman. Alternator	12	105	Negative	1/4"−28	PIN − 10/24	None	10459008	27.0 lbs.	AL1006
RA130006X	Delco 30−SI Type 400 Series Reman. Alternator	12	105	Negative	1/4"−28	None	10/24	10459079	28.0 lbs.	AL1006
RA130008X	Delco 30−SI Type 400 Series Reman. Alternator	24	75	Negative	1/4"−28	PIN	None	10459057	26.3 lbs.	AL1006

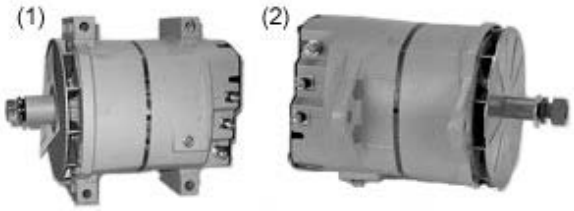
Delco 33−SI Series

Features:

- Brushless.
- Recommended for commercial vehicles.

SKU#	Product Description	Voltage	Amps	Polarity	Batt. Term.	"R" Term.	"I" Term.	Delco Reman. #	Approx. Weight	Core Group
RA133002X	Delco 33−SI Series Reman. Alternator	12	110	Negative	1/4"−28	PIN − 10/24	10/24	10459143/44	30.0 lbs.	AL1031
RA133004X	Delco 33−SI Series Reman. Alternator	12	135	Negative	1/4"−28	PIN − 10/24	10/24	10459141/42	27.4 lbs.	AL1031

Delco 34−SI Series



Features:

- Brushless.
- Recommended for commercial vehicles.

Specifications:

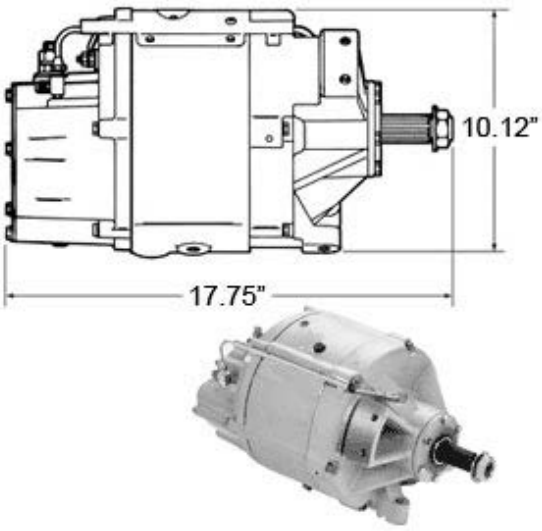
Polarity Negative

Notes:

1) Pad Mount Style for DDC applications.

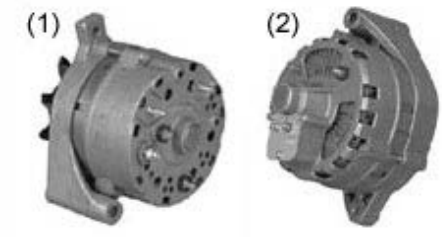
SKU#	Product Description	Voltage	Amps	Batt. Term.	"R" Term.	"I" Term.	Delco Reman. #	DDC Part #	Approx. Weight	Pic. #	Core Group
RA134001X	Delco 34SI Quad Mount Reman. Alternator	12	110	1/4"−28	PIN − 10/24	10/24	10459145	−	27.2 lbs.	2	AL1032
RA134002X	Delco 34SI Quad Mount Reman. Alternator	12	135	1/4"−28	PIN − 10/24	10/24	10459206	−	28 lbs.	2	AL1032
RA134003X	Delco 34−SI Pad Mount Style Reman. Alternator	12	110	1/4"−28	PIN − 10/24	10/24	10459279	R0459279	27.2 lbs.	1	AL1032Q
RA134004X	Delco 34−SI Pad Mount Style Reman. Alternator	12	135	1/4"−28	PIN − 10/24	10/24	10459278	R0459278	27.2 lbs.	1	AL1032Q

Delco 50−DN Series



SKU#	Product Description	Voltage	Amps	Rotation	Polarity	Delco Number	Note	Core Group
RA150001	New Delco 50−DN Series Alternator − Transit/Coach	24	270	Clockwise or Counterclockwise	Negative Ground	10459123	Belt Drive	−
RA150001X	Remanufactured Delco 50−DN Series Alternator − Transit/Coach	24	270	Clockwise or Counterclockwise	Negative Ground	10459123	Belt Drive	AL1050

Ford Alternators



Notes:

1) **RA501006X** mounting ears offset at 2 o'clock and 6 o'clock when viewed from front.
2) **RA501022X** 2:30 Plug Clocking Postion.

SKU#	Product Description	Voltage	Amps	Polarity	Motorcraft MFG. #	Ford Orig. MFG. #	Approx. Weight	Pic. #	Core Group
RA501000X	Reman. Ford Alternator with Double Groove Pulley	12	90	Negative	GL−94C	C7TF10300A	15.1 lbs.	2	AL1013
RA501002X	Reman. Ford GL−95 Alternator	12	60	Negative	GL−89	D0AF−10346E	10.7 lbs.	1	AL1014
RA501003X	Reman. Ford Alternator with Single Groove Pulley	12	100	Negative	GL−203A	E1VF−10346−AA E1VZ−10346−A	16.0 lbs.	1	AL1019
RA501006X	Reman. Ford GL−210 Alternator	12	60	Negative	GL−210	E1FZ−10346A	10.1 lbs.	1	AL1014
RA501022RX	Reman. Ford Alternator without Pulley CorefreeÂ™	12	115	Negative	−	F3HZ−10346−B	16.0 lbs.	N/A	−

Ford Blue Back Alternators

3 o'clock position shown

SKU#	Product Description	Voltage	Amps	Polarity	Position	Motorcraft MFG. #	Ford Orig. MFG. #	Approx. Weight	Core Group
RA501001RX	Reman. Ford Blue Back Alternator − CoreFreeÂ™	12	90	Negative	3 o'clock	GL−215, GL−216	E2HT−10300EB, F0HT−10300GB	10.1 lbs.	−
RA501001X	Reman. Ford Blue Back Alternator	12	90	Negative	3 o'clock	GL−215, GL−216	E2HT−10300EB, F0HT−10300GB	18.7 lbs.	AL1016
RA501005X	Reman. Ford Blue Back Alternator	12	90	Negative	12 o'clock	−	−	18.6 lbs.	AL1016

Leece−Neville JB Series

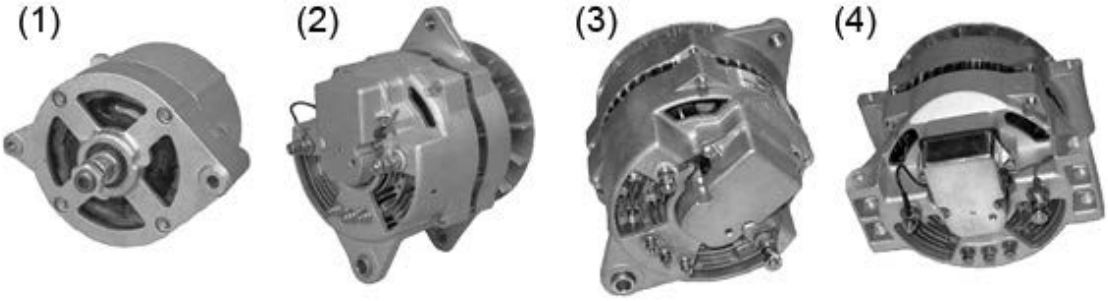
Features:

- Used on heavy duty trucks.
- Internal regulator.

SKU#	Product Description	Voltage	Amps	Polarity	Positive Terminal	Negative Terminal	"R" Terminal	"I" Terminal	Approx. Weight	Core Group
RA225000X	Leece−Neville 2500JB Series Reman. Alternator	14	90	Pos./Neg.	5/16"−18	1/4"−20	PIN	None	23.3 lbs.	AL1007
RA226000RX	Leece−Neville 2600JB Series Reman. Alternator − CoreFreeÂ™	14	105	Pos./Neg.	5/16"−18	1/4"−20	PIN	None	23.3 lbs.	−
RA226000X	Leece−Neville 2600JB Series Reman. Alternator	14	105	Pos./Neg.	5/16"−18	1/4"−20	PIN	None	23.3 lbs.	AL1007
RA227000RX	Leece−Neville 2700JB Series Reman. Alternator − CoreFreeÂ™	14	130	Pos./Neg.	5/16"−18	1/4"−20	PIN	None	23.9 lbs.	−
RA227000X	Leece−Neville 2700JB Series Reman. Alternator	14	130	Pos./Neg.	5/16"−18	1/4"−20	PIN	None	23.9 lbs.	AL1007
RA228000RX	Leece−Neville 2800JB Series Reman. Alternator − CoreFreeÂ™	14	160	Pos./Neg.	5/16"−18	5/16"−18	PIN	None	24.3 lbs.	−
RA228000X	Leece−Neville 2800JB Series Reman. Alternator	14	160	Pos./Neg.	5/16"−18	5/16"−18	PIN	None	24.3 lbs.	AL1007

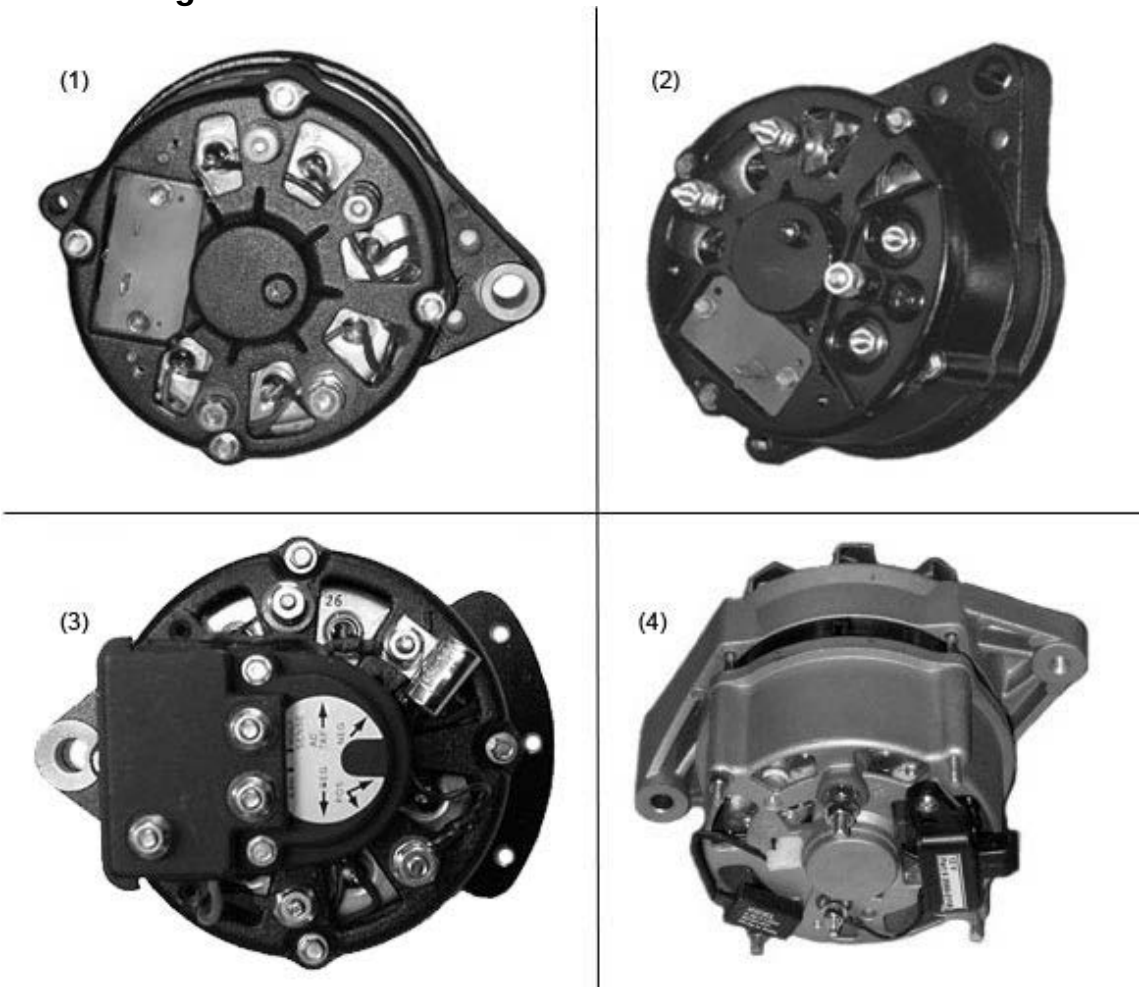
Prestolite/Motorola Alternators

10−255, 10−555 and 110−555



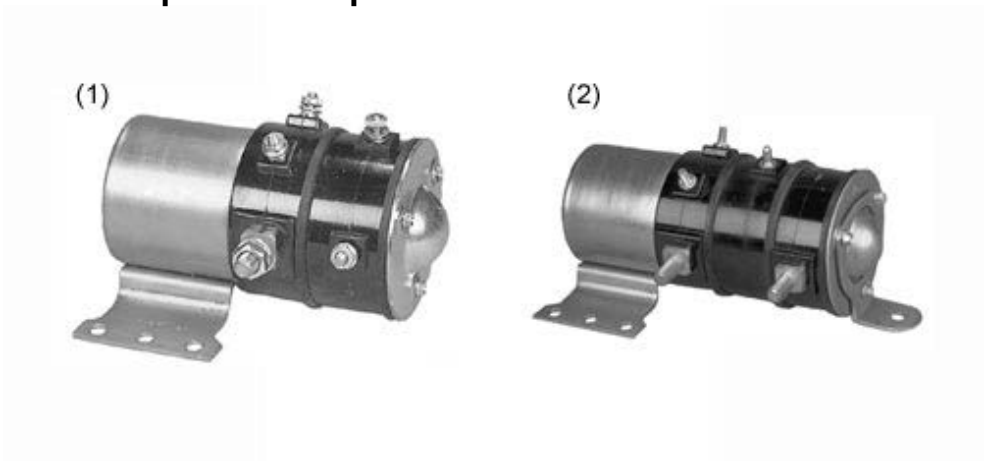
SKU#	Product Description	Voltage	Amps	Polarity	Manufacture Number	Approx. Weight	Notes	Pic. #	Core Group
RA403000HO	New Prestolite/Motorola 110−555JHO Dual Foot J−180 Mount Alternator	12	160	Insulated	8LHA2070VE	21.4 lbs.	Recommended for heavy duty and medium truck, Class 3−8 diesel engines.	3	−
RA403000PHO	New Prestolite/Leece−Neville 110−555PHO 4 Point Pad Mount Alternator	12	160	Insulated	8LHP2170E	23 lbs.	Recommended for heavy duty and medium truck, Class 3−8 diesel engines.	4	−
RA403000RX	Remanufactured Motorola 10−255 & 10−555 Alternator − CoreFreeÂ™	12	130	Insulated	8LHA2023V	20.4 lbs.	Recommended for Western Star, Peterbilt, Volvo−White, Kenworth, International and Ford. Positive/Negative Ground.	2	−
RA403000X	Remanufactured Motorola 10−255 & 10−555 Alternator	12	130	Insulated	8LHA2023V	20.4 lbs.	Recommended for Western Star, Peterbilt, Volvo−White, Kenworth, International and Ford. Positive/Negative Ground.	2	AL1015

Thermo−King Alternators



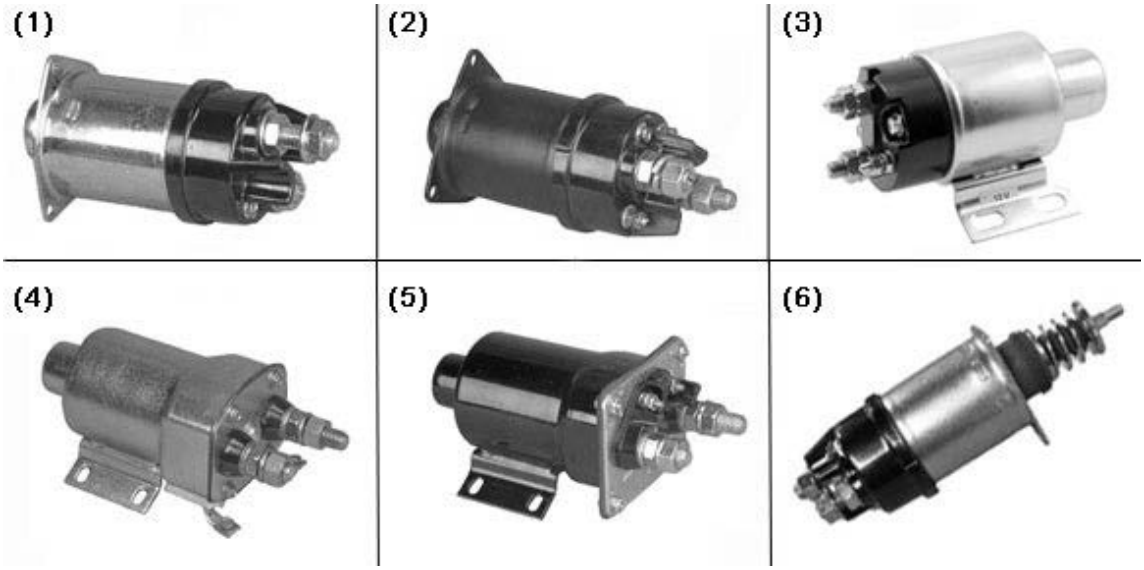
SKU#	Product Description	Volts	Amps	Polarity	Thermo−King MFG. #	Motorola Number	Bosch Number	Approx. Weight	Pic. #	Core Group
RA401000X	Remanufactured Thermo−King Alternator	12	37	Negative	TK44−6266	8HA2008	−	8.5 lbs.	1	AL1011
RA402002X	Remanufactured Thermo−King Alternator	12	51	Negative	TK44−6257	−	−	9.7 lbs.	1	AL1011
RA403003X	Remanufactured Thermo−King Alternator	12	37	Negative	TK44−3325	8HA2003F	−	8.4 lbs.	2	AL1011
RA405005X	Remanufactured Thermo−King Alternator for Motorola 8EK Application	12	37	Negative	TK44−7155	8EK2003FA, 8EK2006FB	−	10.1 lbs.	3	AL1018
RA601000X	Remanufactured Thermo−King Alternator	12	37	Negative	TK44−9571	−	9−120−060−027	11.4 lbs.	4	AL1021

Delco 2−Cap and 3−Cap



SKU#	Product Description	Voltage	Delco Manufacture Number	Application	Approx. Weight	Picture Number	Core Group
RS119000X	Delco 3−Cap Parallel Switch − Remanufactured	12/24	1119844	Primarily for Mack	5.4 lbs.	2	SP1300
RS119001X	Delco 2−Cap Parallel Switch − Remanufactured	12/24	1119845	Primarily for Ford	4.7 lbs.	1	SP1300

Delco Solenoids



SKU#	Product Description	Voltage	Delco Manufacture Number	Approx. Weight	Picture Number	Core Group
RS111000X	Delco 40−MT & 50−MT Early Style Solenoid − Remanufactured	24	1115516	5.4 lbs.	4	SO1200
RS111030	Delco 30−MT & 35−MT Solenoid − New	12	1115501	2.5 lbs.	3	−
RS112000X	Delco 40−MT & 50−MT Late Style Solenoid − Remanufactured	12	1115556	5.5 lbs.	5	SO1200
RS112001X	Delco 40−MT & 50−MT Late Style Solenoid − Remanufactured	24	1115557	5.5 lbs.	5	SO1200
RS113000X	Delco 37−MT Solenoid − Remanufactured	12	1115609	3.7 lbs.	1	SO1202
RS114000X	Delco 42−MT Solenoid − Remanufactured	24	1115595	3.5 lbs.	2	SO1202
RS114001X	Delco 42−MT Solenoid − Remanufactured	12	1115593	3.5 lbs.	2	SO1202
RS114002RX	Delco 42−MT Semi Solid Link Solenoid − Remanufactured − CorefreeÂ™	24	1115667	4.5 lbs.	6	−
RS114003RX	Delco 42−MT Semi Solid Link Solenoid − Remanufactured − CorefreeÂ™	12	1115712	4.5 lbs.	6	−

Delco 27−MT Starters

Features:

- Recommended for diesel engines in farm, construction, stand−by power and similar off−road service, as well as light and medium duty trucks.
- Diesel engines up to 6.9 liter.

Specifications:

Mounting	Pad Mount, Offset
Approximate Weight	32.8 lbs.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Switch Position	Delco Reman. #	Mounting Hole	Core Group
RS127000X	Reman. Delco 27−MT Starter	12	CW	10	135°	10496882	.43	ST1107

Delco 28−MT Starters

Features:

- Recommended for diesel engines in passenger cars and light trucks, construction, stand−by power and other industrial vehicles.
- Diesel engines up to 6.2 liter.

Notes:

1) **RS128002X** sealed for wet clutch application.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Switch Position	Delco Reman. #	Approx. Weight	Mounting Hole	Core Group
RS128000X	Reman. Delco 28−MT Starter	12	CW	10	315°	10465043	19.0 lbs.	.41	ST1104
RS128002X	Reman. Delco 28−MT Starter	12	CW	10	315°	10465365	17.8 lbs.	.41	ST1104
RS128010X	Reman. Delco 28−MT Starter	12	CW	10	120°	10465150	19.0 lbs.	.41	ST1104
RS128011X	Reman. Delco 28−MT Starter	12	CW	10	055°	10465151	20.0 lbs.	.41	ST1104

Delco 30−MT Starters

Features:

- Recommended for medium duty trucks.

Specifications:

Mounting	Flange Mount
Approximate Weight	50 lbs.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Switch Position	Delco Reman. #	Mounting Hole	Core Group
RS130001X	Reman. Delco 30−MT Starter	12	CW	12	90°	1113089	.43	ST1109

Delco 37–MT Starters

Features:

- Recommended for mid–range diesel engines in trucks, farm and construction equipment, standby power and industrial vehicles.
- Diesel engines up to 9.8 liter.

Specifications:

Mounting Flange Mount
Length 16"

Notes:

1) Consider 41–MT for replacement.

SKU#	Product Description	Volt.	Rot.	Pinion Teeth	Switch Pos.	Delco Reman. #	Notes	Approx. Weight	Mtg. Hole	Core Group
RS137000X	Reman. Delco 37–MT Starter	12	CW	12	082°	10461089	–	51.5 lbs.	.66	ST1103
RS137001X	Reman. Delco 37–MT Starter	12	CW	10	308°	10461058	Offset Nose Housing Solenoid Terminal Reversed (ie. S terminal on left hand side)	53.1 lbs.	.66	ST1103
RS137002X	Reman. Delco 37–MT Starter	12	CW	10	068°	10461044	Offset Nose Housing Ground Stud Shift Lever Inspection Port at 12:00, Ground Stud is located nearest Comm Port End at 10:00	53.2 lbs.	.66	ST1103
RS137003X	Reman. Delco 37–MT Starter	12	CW	10	278°	10461069	3/8" Battery Terminal	54.1 lbs.	.53	ST1103
RS137005X	Reman. Delco 37–MT Starter	12	CW	10	308°	10461404	Offset Nose Housing Insulated Overcrank Protected	53.1 lbs.	.66	ST1103
RS137010X	Reman. Delco 37–MT Starter	12	CW	12	308°	10461066	Ground Stud Shift Lever Inspection Port at 12:00, Ground Stud is located nearest Comm Port End at 4:00	52.0 lbs.	.53	ST1103
RS137011X	Reman. Delco 37–MT Starter	12	CW	10	322°	10461084	Offset Nose Housing Mounting Ear Holes positioned 93° apart	52.0 lbs.	.42	ST1103

SKU#	Product Description	Volt.	Rot.	Pinion Teeth	Switch Pos.	Delco Reman. #	Notes	Approx. Weight	Mtg. Hole	Core Group
RS137012X	Reman. Delco 37-MT Starter	12	CW	10	308°	10461098	CE rotated 180° (ie. Stud is at 5:00) 215° Nose Housing Ground at Comm End (no lead wire)	48.6 lbs.	.41	ST1103
RS137013X	Reman. Delco 37-MT Starter	12	CW	10	308°	10461110	Ground Stud 215° Nose Housing Insulated Overcrank Protected Shift Lever Inspection Port at 12:00, Ground Stud is located nearest Comm Port End at 4:00	52.0 lbs.	.41	ST1103
RS137014X	Reman. Delco 37-MT Starter	12	CW	12	082°	10461169	Insulated	53.2 lbs.	.53	ST1103
RS137015X	Reman. Delco 37-MT Starter	12	CW	10	278°	10461170	Insulated	52.9 lbs.	.53	ST1103
RS137016X	Reman. Delco 37-MT Starter	12	CW	10	278°	10461108	-	52.0 lbs.	.53	ST1103
RS137017X	Reman. Delco 37-MT Starter	12	CW	10	128°	10461207	CE rotated 180° (ie. Stud is at 5:00) 215° Nose Housing Ground at Comm End (no lead wire)	51.7 lbs.	.41	ST1103
RS137018X	Reman. Delco 37-MT Starter	12	CW	10	128°	10461209	CE rotated 180° (ie. Stud is at 5:00) 215° Nose Housing Insulated Overcrank Protected	52.0 lbs.	.41	ST1103
RS137019X	Reman. Delco 37-MT Starter	24	CW	10	068°	10461130	Offset Nose Housing Ground Stud 24 Volt Model	52.0 lbs.	.66	ST1103
RS137020X	Reman. Delco 37-MT Starter	12	CW	12	082°	10461276	Insulated Overcrank Protected	52.0 lbs.	.66	ST1103
RS137021X	Reman. Delco 37-MT Starter	12	CW	10	322°	10461416	Offset Nose Housing	52.0 lbs.	.41	ST1103

Delco 39−MT Starters

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Switch Position	Delco Reman. Number	Notes	Approx. Weight	Mounting Hole	Core Group
RS139001X	Reman. Delco 39−MT Starter with IMS Switch	12	CW	11	082°	10461753	IMS Switch and Overcrank protected	32.0 lbs.	.66	ST1139
RS139002X	Reman. Delco 39−MT Starter with IMS Switch	12	CW	11	052°	10461334	IMS Switch and Overcrank protected	32.0 lbs.	.66	ST1139

Delco 40−MT Starters

Features:

- Recommended for vehicles that operate under conditions where excessive cranking time could occur.
- Gasoline engines from 9.8 to 26.2 liters.
- Diesel engines from 6.6 to 14.8 liters.
- Flange mount, multi−position drive end housing.

Specifications:

Length 20"

SKU#	Product Description	Volt.	Rot.	Pinion Teeth	Switch Pos.	Delco Reman. #	Notes	Approx. Weight	Mtg. Hole	Core Group
RS140000X	Reman. Delco 40−MT Starter	24	CW	11	308°	10461047	−	66.8 lbs.	.66	ST1100
RS140001X	Reman. Delco 40−MT Starter	12	CW	11	052°	10461045	−	67.7 lbs.	.66	ST1100
RS140001XBK30	Reman. Delco 40−MT Starter − Bulk	12	CW	11	052°	10461045	−	67.7 lbs.	.66	ST1100
RS140002X	Reman. Delco 40−MT Starter	12	CW	12	308°	10461046	−	65.5 lbs.	.66	ST1100
RS140003X	Reman. Delco 40−MT Starter	12	CW	13	322°	10461059	−	66.8 lbs.	.66	ST1100
RS140004X	Reman. Delco 40−MT Starter	12	CW	11	052°	10461067	145° Nose Housing Opening	66.3 lbs.	.66	ST1100
RS140005X	Reman. Delco 40−MT Starter	12	CW	11	068°	10461073	−	65.0 lbs.	.66	ST1100
RS140006X	Reman. Delco 40−MT Starter	24	CW	12	308°	10461107	−	66.7 lbs.	.66	ST1100
RS140015X	Reman. Delco 40−MT Starter	12	CW	12	082°	10461060	Commutator End Rotated 180°	68.0 lbs.	.53	ST1100
RS140022X	Reman. Delco 40−MT Starter	12	CCW	11	292°	10461071	Solenoid Terminals Reversed (ie. S Terminal on left hand side)	68.0 lbs.	.66	ST1100
RS140024X	Reman. Delco 40−MT Starter	12	CW	12	278°	10461099	−	65.2 lbs.	.66	ST1100

Delco 41−MT Starters

Features:

- Mid range diesel applications.
- Positive−engagement shift mechanism.
- A more durable replacement for 37−MT models.
- Temperature sensitive circuit breaker protects unit from overcrank heat damage.

Specifications:

Approximate Weight 60 lbs.

SKU#	Product Description	Volt.	Rotation	Pinion Teeth	Switch Pos.	Delco New	Delco Reman.	Mtg. Hole	Eng. App.	Core Group
RS141025X	Reman. Delco 41−MT Starter	12	CW	12	128°	10479226	10461282	.41	CAT 3126	ST1120
RS141026X	Reman. Delco 41−MT Starter − Insulated	12	CW	12	.082°	10478999	10461171	.53	DTA466 DTA530	ST1120
RS141027X	Reman. Delco 41−MT Starter − Insulated − Overcrank Protection (OCP)	12	CW	12	.082°	10461304	10461304	.53	Various	ST1120

Delco 42−MT Starters

Features:

- Recommended for most on−road and off−road heavy duty vehicles.
- Gasoline engines from 9.8 to 26.2 liters.
- Diesel engines from 6.6 to 14.8 liters.

Specifications:

Length 18"

Notes:

1) Bushing Kit use part number **RS101K**. Housing mounting holes from 5/8" to 1/2".

SKU#	Product Description	Volt.	Rot.	Pinion Teeth	Switch Pos.	Delco Reman. #	Notes	Approx. Weight	Mtg. Hole	Core Group
RS142000X	Reman. Delco 42−MT Starter	24	CW	11	308°	10461068	−	60.0 lbs.	.66	ST1102
RS142001X	Reman. Delco 42−MT Starter	12	CW	11	082°	10461052	−	60.7 lbs.	.66	ST1102
RS142001XBK30	Reman. Delco 42−MT Starter − Bulk	12	CW	11	082°	10461052	−	60.7 lbs.	.66	ST1102
RS142002X	Reman. Delco 42−MT Starter	12	CW	12	082°	10461414	−	60.1 lbs.	.66	ST1102
RS142003X	Reman. Delco 42−MT Starter	12	CW	13	322°	10461133	−	58.0 lbs.	.66	ST1102
RS142004X	Reman. Delco 42−MT Starter	24	CW	12	308°	10461136	−	59.9 lbs.	.53	ST1102
RS142005X	Reman. Delco 42−MT Starter	12	CW	11	082°	10461055	Overcrank Protection	61.1 lbs.	.66	ST1102
RS142006X	Reman. Delco 42−MT Starter	12	CW	12	082°	10461079	Overcrank Protection	60.6 lbs.	.66	ST1102
RS142007X	Reman. Delco 42−MT Starter	12	CW	11	088°	10461053	−	61.2 lbs.	.66	ST1102
RS142008X	Reman. Delco 42−MT Starter	12	CW	12	145°	10461077	145° Nose Housing Opening	61.1 lbs.	.66	ST1102
RS142015X	Reman. Delco 42−MT Starter	12	CW	12	278°	10461051	−	60.6 lbs.	.66	ST1102
RS142020X	Reman. Delco 42−MT Starter	12	CW	12	082°	10461050	Commutator End rotated 180°	61.0 lbs.	.66	ST1102
RS142021X	Reman. Delco 42−MT Starter	24	CW	11	088°	10461054	−	60.0 lbs.	.66	ST1102
RS142022X	Reman. Delco 42−MT Starter	12	CW	11	088°	10461075	Overcrank Protection	61.3 lbs.	.66	ST1102
RS142023X	Reman. Delco 42−MT Starter	12	CW	12	082°	10461078	145° Nose Housing Opening Overcrank Protection	60.0 lbs.	.66	ST1102

RS142025X	Reman. Delco 42−MT Starter	12	CW	12	270°	10461166	−	60.0 lbs.	.66	ST1102
RS142026X	Reman. Delco 42−MT Starter	12	CW	11	052°	10461096	Overcrank Protection	60.0 lbs.	.66	ST1102
RS142027X	Reman. Delco 42−MT Starter	24	CCW	11	038°	10461134	−	60.0 lbs.	.66	ST1102

Delco 50−MT Starters

Features:

- Recommended for large on−road and off−road heavy duty vehicles.
- Gasoline engines up to 49.17 liters.
- Diesel engines up to 29.5 liters.
- Two or more units can be tandem mounted for starting very large engines.

Specifications:

Length 20.5"

SKU#	Product Description	Volt.	Rot.	Pinion Teeth	Switch Pos.	Delco Reman. #	Notes	Approx. Weight	Mtg. Hole	Core Group
RS150001X	Reman. Delco 50−MT Starter	24	CW	12	068°	1109795	−	75 lbs.	.66	ST1101
RS150002X	Reman. Delco 50−MT Starter	24	CW	11	038°	10461493	−	77 lbs.	.66	ST1101
RS150003X	Reman. Delco 50−MT Starter	24	CW	12	158°	1109792	215° Nose Housing	75 lbs.	.66	ST1101
RS150004X	Reman. Delco 50−MT Starter	24	CW	11	068°	1109793	215° Nose Housing	75 lbs.	.66	ST1101
RS150010X	Reman. Delco 50−MT Starter	12	CW	11	082°	10461056	−	78.5 lbs.	.66	ST1101
RS150011X	Reman. Delco 50−MT Starter	32	CW	11	308°	10461159	−	75 lbs.	.66	ST1101
RS150012X	Reman. Delco 50−MT Starter	64	CW	11	308°	10461160	−	75 lbs.	.66	ST1101
RS150013X	Reman. Delco 50−MT Starter	32	CW	11	308°	10461161	−	75 lbs.	.66	ST1101
RS150015X	Reman. Delco 50−MT Starter	24	CW	11	322°	10461749	−	77 lbs.	.66	ST1101

Ford Starters

Specifications:

Approximate Weight 15.5 lbs.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Motorcraft MFG. #	Ford Orig. MFG. #	Core Group
RS331811X	Remanufactured Ford Starter	12	CW	9	SA−727	D9HT−11001AA	ST1114

Ford/Mitsubishi Starters

Features:

- 6.9 and 7.3 Diesel Engine (Non−Turbo) from 1985 to 1995.

Specifications:

Approximate Weight 22 lbs.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Motorcraft MFG. #	Ford Orig. MFG. #	Core Group
RS331813X	Remanufactured Ford/Mitsubishi Starter	12	CW	9	SAE−739A	E5TF11000AA E5TF11001AA E5TZ11002B E8TF11000AA E8TZ11002A F3TU11000AA	ST1119

Leece−Neville Starters

Specifications:

Approximate Weight 60.5 lbs.

SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Drive	Leece−Neville MFG. #	Core Group
RS272000X	Remanufactured Leece−Neville Starter	12	CW	11	488	7268M	ST1108

Thermo−King Starters

Features:

- 44−5674 Nippondenso replacement.
- 45−1229 Isuzu 2.2 liter diesel engine, Hitachi starter.

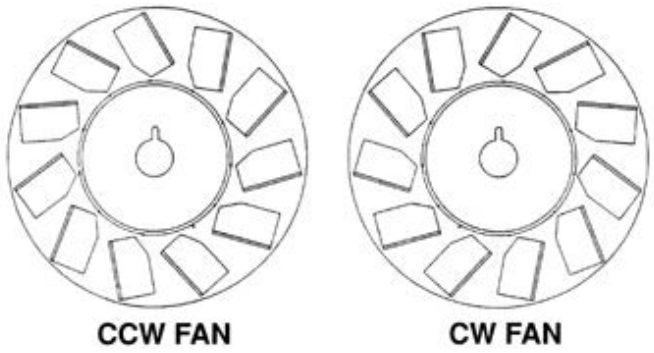
Specifications:

Approximate Weight 21 lbs.

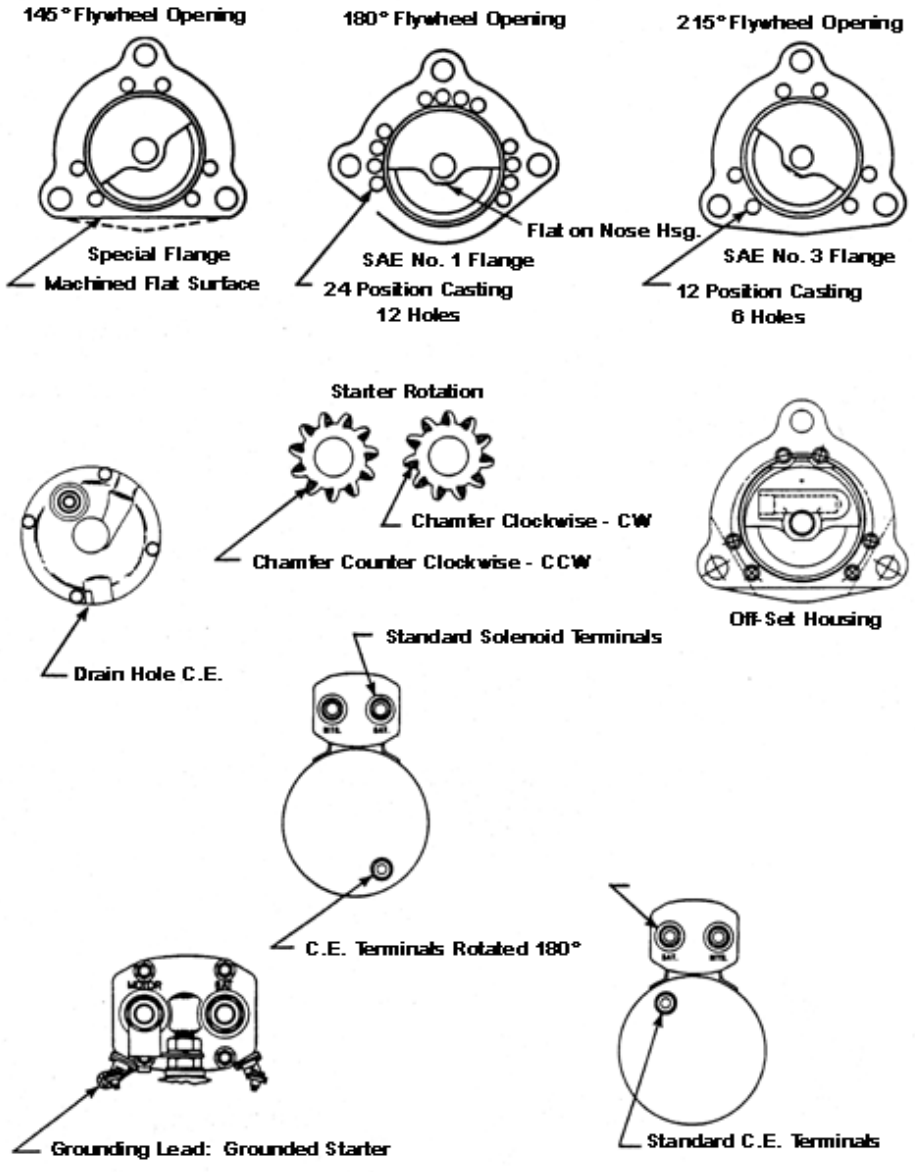
SKU#	Product Description	Voltage	Rotation	Pinion Teeth	Thermo−King MFG. #	OEM Number	Core Group
RS312700X	Remanufactured Thermo−King Starter	12	CW	9	44−5674	128000−0960	ST1112
RS312800X	Remanufactured Thermo−King Starter	12	CW	9	45−1229	S−12−59	ST1112

FAN BLADE ROTATION

When looking down into the fan blades, a counter clockwise (CCW) rotation fan will have the blade on the right portion of the welded−on blade while a clockwise (CW) fan will have the blade on the left portion. **Note position of aligning slot.**

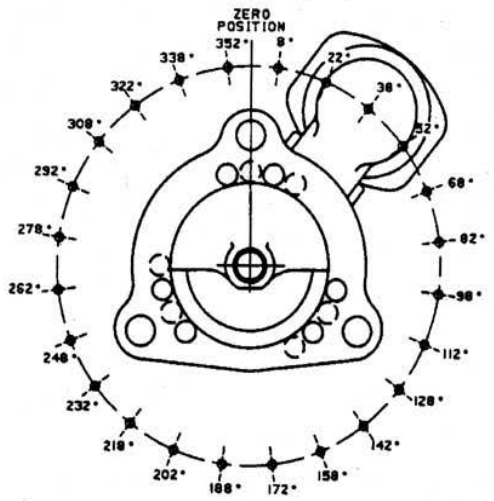


FEATURES: Any motor model may have combinations of these features.



DRIVE HOUSING ROTATION

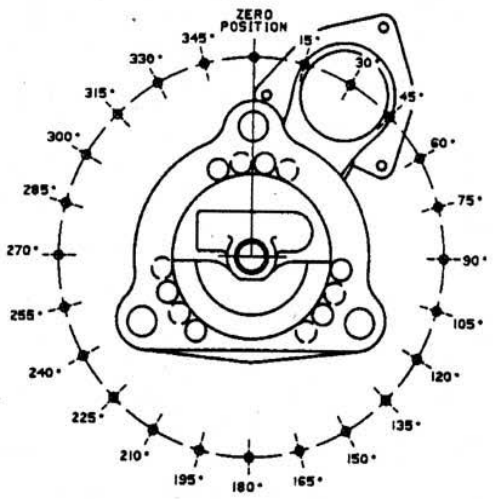
35, 37, 40, 41, 42 & 50-MT



12 OR 24 POSITION
12 POSITION - Ending in 2° OR 8° Every 30°

24 POSITION - Ending in 2° AND 8° Every 15°

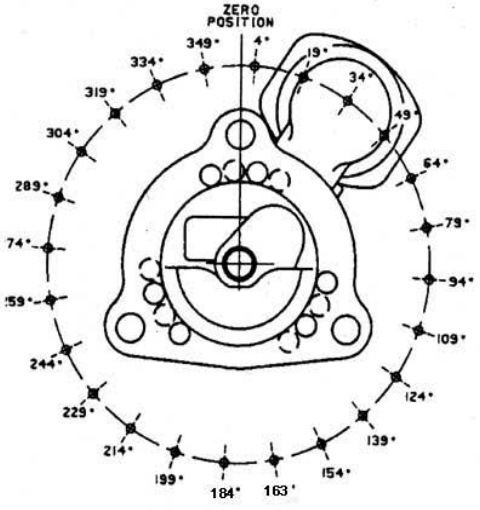
30, 35 & 40-MT



12 OR 24 POSITION
12 POSITION - Ending in 0° OR 5° Every 30°

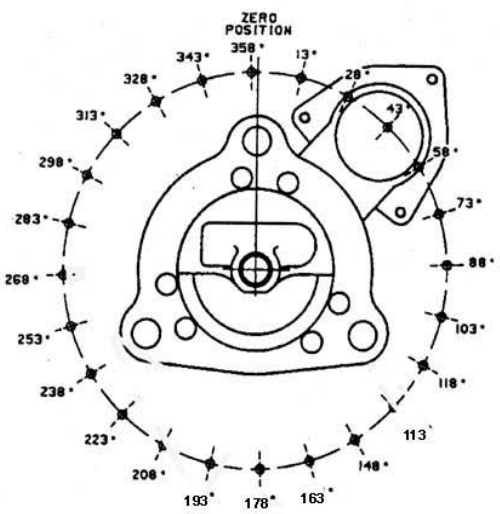
24 POSITION - Ending in 0° AND 5° Every 15°

40 & 42-MT



12 OR 24 POSITION
12 POSITION - Ending in 4° OR 9° Every 30°
24 POSITION - Ending in 4° AND 9° Every 15°

42-MT



12 POSITION
12 POSITION - Ending in 3° OR 8° Every 30°

TROUBLESHOOTING

CAUTION: Failure to follow these instructions may damage the alternator and void the warranty.

IMPORTANT: Place vehicle in neutral and disconnect batteries before working on the electrical system.

TEST THE BATTERIES BEFORE INSTALLING THE ALTERNATOR
Batteries must be in good condition, have the proper capacity and be fully charged. A defective battery may cause an alternator to fail prematurely and a discharged battery will shorten the life of the alternator. An alternator is designed to maintain the charge in a battery, **not to recharge the battery.**

INSPECT ALL WIRE AND BATTERY CABLES
Battery cables, alternator wiring, and wiring connections must be tight, in good condition, and free of corrosion. Loose connections and corrosion add resistance to the charging system and will result in damage to the alternator. If upgrading the vehicle to a higher amperage alternator, insure that the wiring in the charging circuit is of sufficient size to carry the additional output.

INSPECT THE FAN AND PULLEY
A damaged fan will affect the cooling of the alternator, decreasing its life. A damaged pulley may affect the drive belts causing them to slip and drive the alternator at improper speeds. If the fan and pulley are out of balance, vibration will cause premature alternator failure.

PROPERLY TORQUE THE FAN AND PULLEY IN PLACE
The rotor may not spin freely when the alternator is removed from the carton. **Do not reject the unit!** Install the fan and pulley and torque the pulley nut to 70−80 ft. lbs. This will locate the rotor properly in the alternator and it will turn freely.

USE PROPER MOUNTING HARDWARE
Use grade 5 bolts and self−locking nuts when mounting the alternator. Use hardened flat washers under the bolts and lock nuts. If using a slotted type adjusting bracket, place a hardened flat washer between the adjusting bracket and alternator adjusting ear. **Do not use lock washers.**

IF ALTERNATOR FAILS TO CHARGE AFTER PROPER INSTALLATION
If the alternator fails to charge after proper installation, it may be necessary to increase the engine speed or magnetize the rotor.

ENERGIZING SPEED
Sufficient alternator speed must be obtained before the regulator turns on and energizes the field circuit. This may be higher than "idle" speed. If this condition exists, increase engine speed until the regulator turns on. Once the regulator turns on it will remain on until the engine is stopped.

MAGNETIZING THE ROTOR
Magnetism is usually retained by the rotor to provide sufficient voltage build−up to turn on the field circuit when the engine is started. However, units that have been in inventory, dissembled or serviced may need to have this magnetism re−established. This is accomplished by magnetizing the rotor. To magnetize the rotor, connect the altenator to the electrical system in the normal manner. **With the engine off momentarily, connect a jumper lead from the battery positive to the relay terminal of the alternator.** (The relay terminal is the small pin type terminal generally covered by a rubber cap.) This applies to both positive and negative ground systems. This will restore the magnetism in the rotor and the alternator will begin operating correctly.

ALTERNATOR OPERATION
This unit has been factory tested under full and simulated load conditions. The regulator has been preset to O.E. specifications. Vehicle indicator gauges may not reveal accurate charging system operation. Reliable test equipment should be used when testing or troubleshooting the electrical system.

DO NOT TEST THE ALTERNATOR BY DISCONNECTING THE BATTERY LEAD TO SEE IF IT SPARKS. THIS WILL DAMAGE THE ALTERNATOR AND VOID THE WARRANTY.

TROUBLESHOOTING

CAUTION: Failure to follow these instructions may cause early starter failure and void the warranty.
IMPORTANT: Place vehicle in neutral and disconnect batteries before working on the electrical system.

TEST THE BATTERIES BEFORE INSTALLING THE STARTER

Batteries must be in good condition, have the proper capacity and be fully charged. A defective or discharged battery will stress the starter and may result in early failure. Batteries with insufficient capacity will result in poor starter performance especially in colder temperatures.

INSPECT ALL WIRE AND BATTERY CABLES

Battery cables and starter wiring must be of the proper size and free of corrosion. High resistance in starter circuit will result in slow or sluggish starter performance due to low current flow. **Many starters are needlessly replaced for this reason.**

INSPECT FOR LOOSE AND CORRODED CONNECTIONS

All cable clamps and terminal ends must be clean and tight to minimize circuit resistance.

INSPECT THE FLYWHEEL RING GEAR

Excessive wear on the ring gear will result in premature drive wear and, under certain conditions, in poor drive engagement into the ring gear.

USE PROPER MOUNTING HARDWARE

Use grade 5 cap screws and lock−washers to mount the starter to the engine housing.

ROTATABLE DRIVE HOUSING

MANY STARTERS ARE EQUIPPED WITH EITHER A 12 OR A 24 POSITION ROTATABLE DRIVE HOUSING. READ THESE INSTRUCTIONS BEFORE CHANGING THE POSITION OF THIS HOUSING.

In order to match the solenoid position of the original starter it may be necessary to rotate the drive housing of the starter.

To change the position of the drive end housing, remove the six socket screws from the housing mounting flange and rotate the housing to the correct position. Make sure the gasket that seals the drive housing to the starter is still in proper position. When the housing is properly positioned, reattach the six socket screws and tighten to 13−17 ft. lbs. torque. Place the rubber plugs provided in the blank bolt holes to properly seal the housing flange when the unit is mounted to the engine.

TROUBLESHOOTING

CAUTION: Failure to follow these instructions may damage the series parallel switch and void the warranty.

IMPORTANT: Place vehicle in neutral and disconnect batteries before working on the electrical system.

TEST THE BATTERIES BEFORE INSTALLING THE SERIES PARALLEL SWITCH

Batteries must be in good condition, have the proper capacity and be fully charged. A defective or discharged battery will result in low voltage in the battery system and cause early failure of the series parallel switch.

INSPECT ALL WIRE AND BATTERY CABLES

Battery cables and starter wiring must be of the proper size and free of corrosion.

INSPECT FOR LOOSE AND CORRODED CONNECTIONS

All cable clamps and terminal ends must be clean and tight to minimize circuit resistance.

CHECK STARTER AMPERAGE DRAW

Excessive starter current draw can cause excessive arching and burning in the series parallel switch. This could be caused by a defective starter, improper starter application, or engine problems.

TROUBLESHOOTING

CAUTION: Failure to follow these instructions may damage the solenoid and void the warranty.
IMPORTANT: Place vehicle in neutral and disconnect batteries before working on the electrical system.

DETERMINE CAUSE OF FAILURE

Solenoids generally fail due to burnt or pitted contacts caused by improper engine starting procedures, low battery voltage or defective components in the starting circuit. The entire starting system should be checked in order to prevent repeated solenoid failures.

PROPER TERMINAL TORQUE

Torque the 1/2−13 inch copper terminals at 20−25 ft. lbs. and the 10−32 terminals at 16−30 ft. lbs. If possible, use a backup wrench when tightening the copper terminals to prevent the stud from turning and damaging the insulation on the solenoid or twisting the field coil leads inside the starter.

PROPER CABLE ATTACHMENT

When connecting the wires and cables to the solenoid place the battery cables on first and follow with the smaller accessory wires. This will insure a good solid connection between the cable and solenoid stud assembly.

INSPECT THE PLUNGER AND SEALING BOOT

The solenoid plunger which is attached to the starter should be clean, dry and free from excessive wear. The sealing boot should be flexible and free from any cuts or tears. If not, they should be replaced.

INSPECT THE SOLENOID TO STARTER CONNECTING STRAP

Inspect the solenoid connector strap for any cracks which may have been caused by engine vibration. Make sure the connecting eyelets are clean and smooth to insure the connection is clean and tight.

PINION CLEARANCE ADJUSTMENT

CAUTION: FAILURE TO PROPERLY ADJUST THE STARTER PINION OR DRIVE CLEARANCE AFTER REPLACING THE SOLENOID COULD RESULT IN DAMAGE TO THE STARTING MOTOR OF THE ENGINE FLYWHEEL.

ADJUSTMENT PROCEDURE

1. Connect the solenoid to a battery as shown in the figure.
2. Momentarily flash from Terminal G to Terminal MTR. The drive will now shift into cranking position and remain so until the battery is disconnected.
3. Push the pinion back toward the commutator end to eliminate slack movement.
4. Measure the distance between drive and housing.
5. Adjust the clearance by moving the plug and turning the shaft nut.
6. Clearance dimensions are as follows: **37−MT.....25MM/1.78MM**
   40−MT, 42−MT, 50−MT.....8.30MM/9.90MM

WHAT YOU NEED TO LOOK FOR:

1. Core is complete and not disassembled. The fan clutch core must include a bracket, sheave, PFD (piston friction disk),and an air chamber.

2. The fan clutch core cannot be broken, cracked, welded or galled.

3. The sheave and air chamber must spin freely.

4. Core has not been damaged by non−operational causes such as fire, rust, or rough handling.

5. The fan clutch core must be a part number specified by Haldex that is acceptable for exchange.

APPLICABLE CREDIT:

1. If none of the above conditions exist (1, 2, 3 or 4), full credit is applicable.

2. If any **one** of the above conditions exist, fifty percent (50%) credit is applicable.

3. If **two or more** of the above conditions exist, no credit is applicable.

Refer to Core Policy L00036 for additional information on core credits, core return procedures, core changes, core acceptance, core refunds, and freight.

PRINCIPLE COMPONENT PARTS:

PROCEDURES FOR CORE IDENTIFICATION:

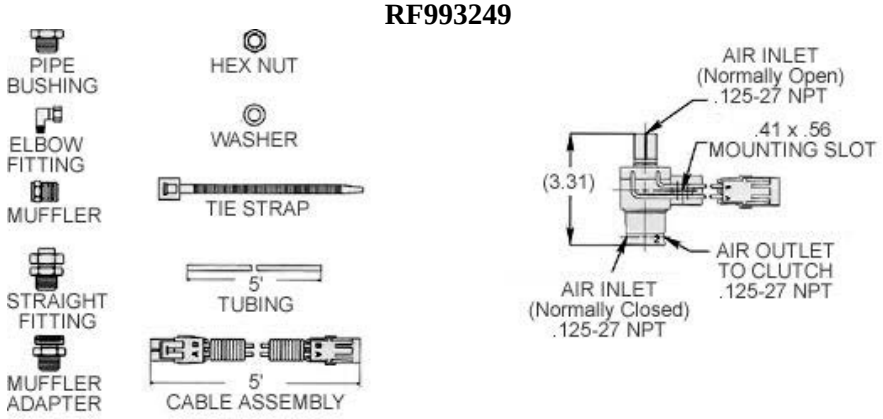
A. Sticker Check	A "Good" core should have a product number which matches the listed acceptable product numbers. (If sticker is not available, go to steps B & C).
B. Visual Check	A "Good" core should match match one of the graphics and notes listed on the following pages.

CASTING NUMBER LOCATIONS:

Sheave	On the edge of the back rim
Bracket	Front surface near shaft
Air Chamber	Front surface (smooth type has no casting numbers)

Pneumatic Fan Clutch Controls
Solenoid Valve Illustrations

RF993249



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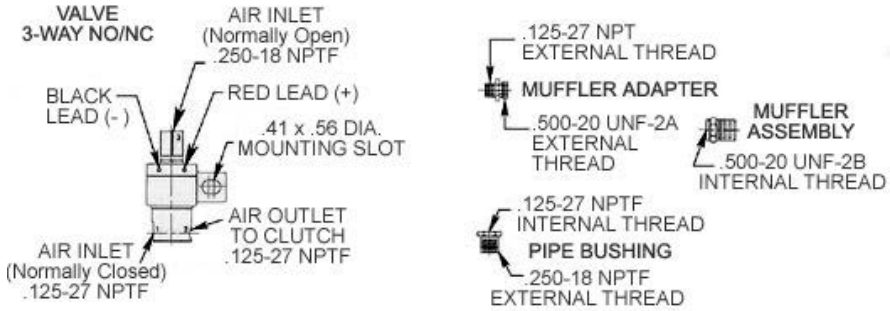

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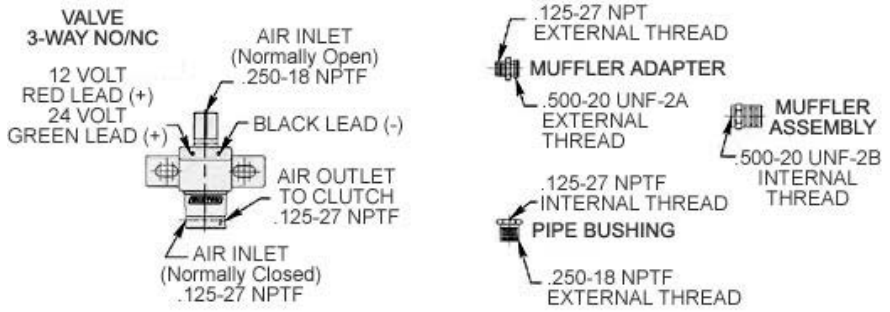

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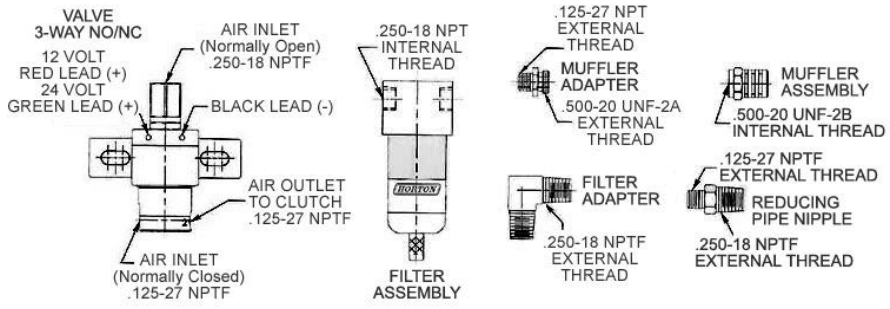
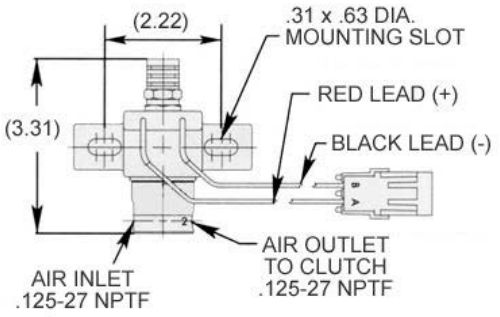


Pneumatic Fan Clutch Controls
Solenoid Valve Illustrations

RF993284



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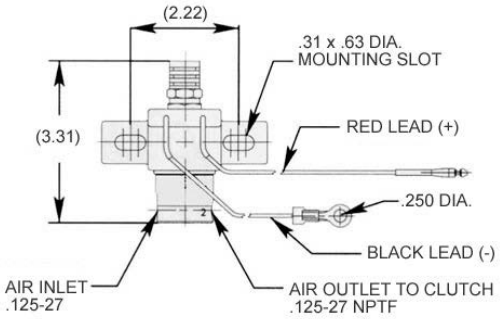

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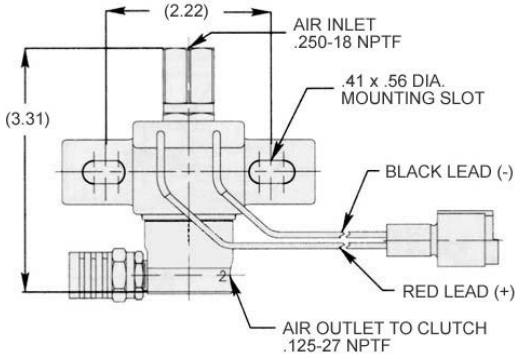

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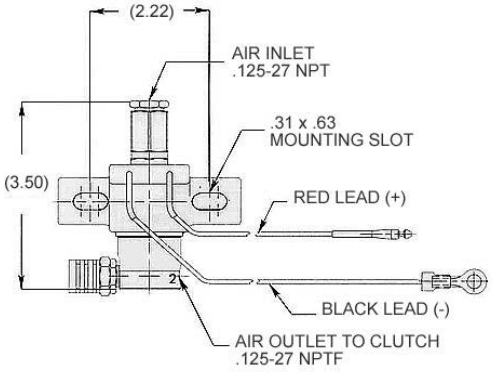

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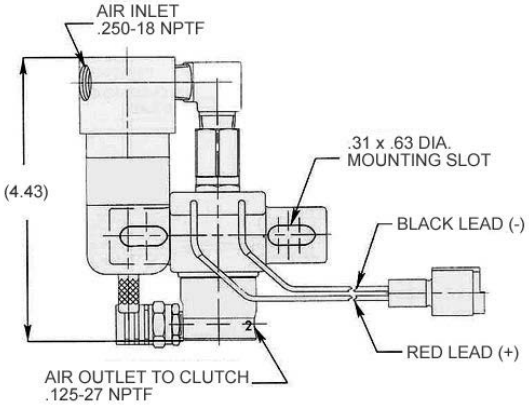

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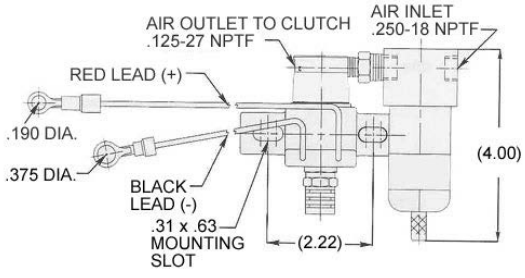
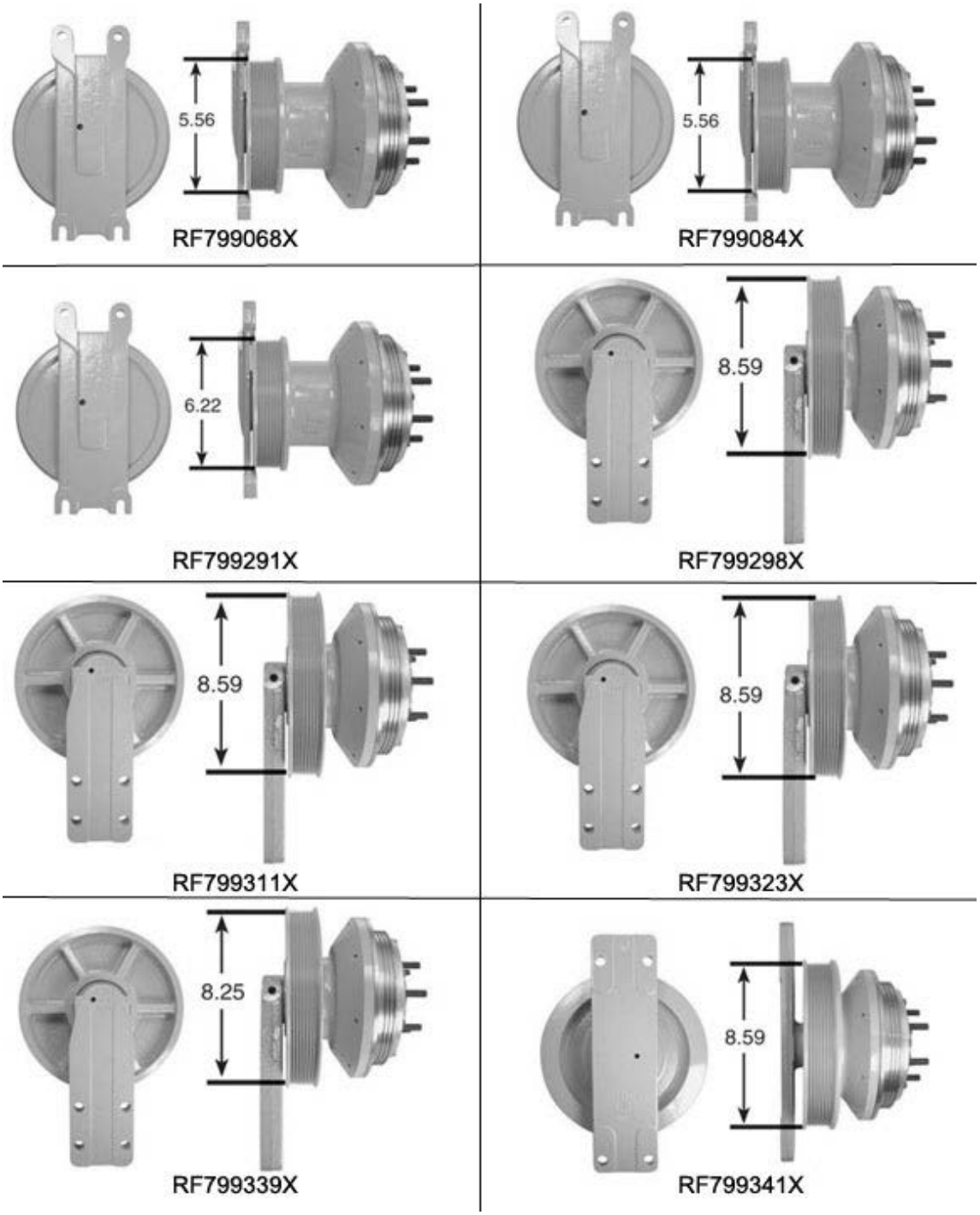


Caterpillar® Engine (DriveMaster) GoldTop®

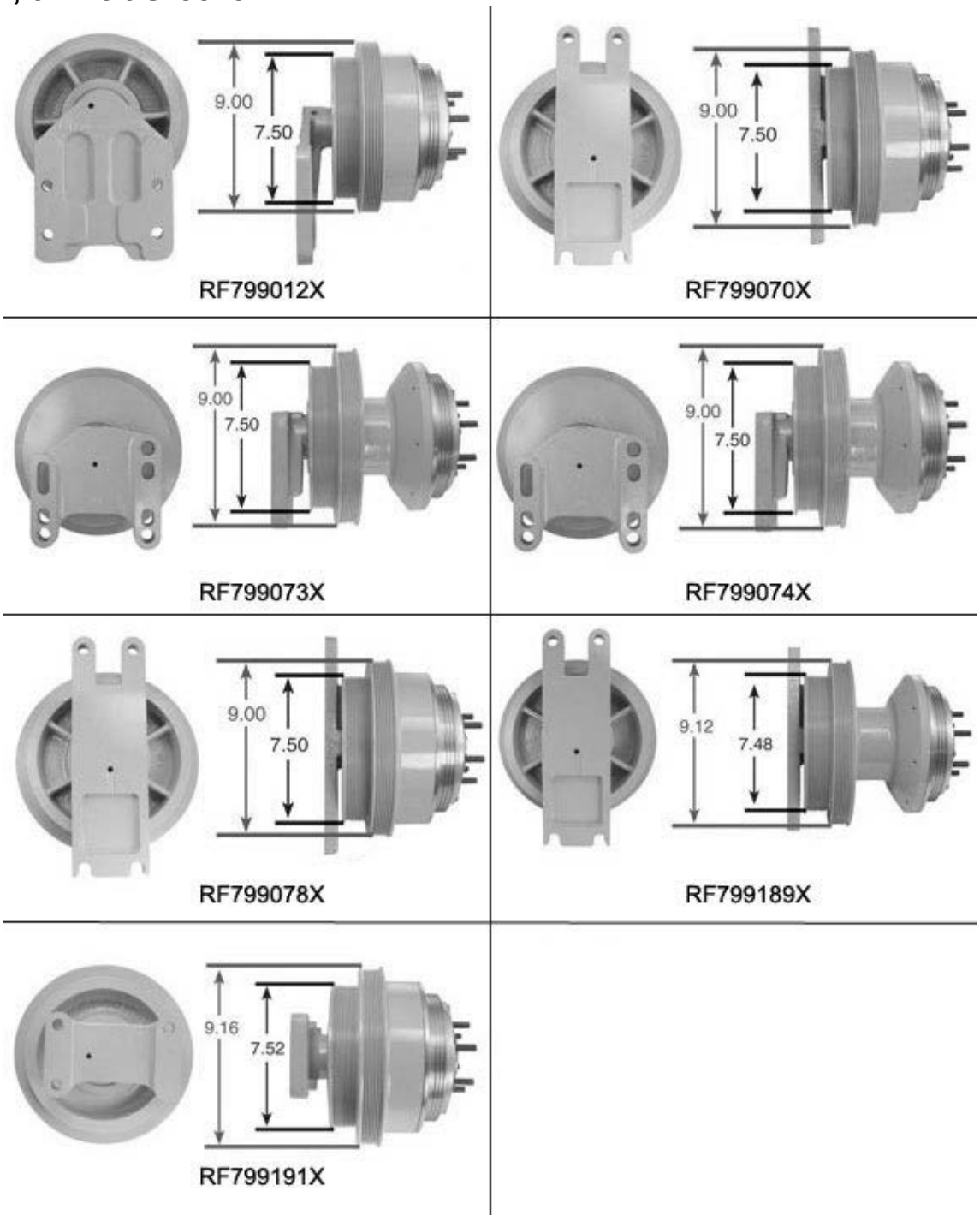
8K Belt Groove

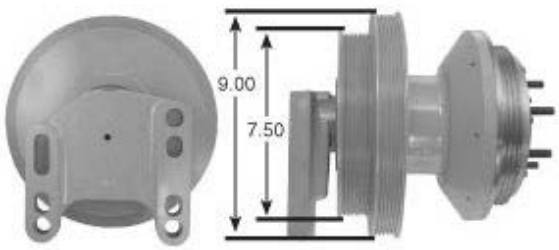


SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799068X	Caterpillar® 3126	8K	DriveMaster − GoldTop®	799068	−	FC99H1	RF14256K
RF799084X	Caterpillar® 3126	8K	DriveMaster − GoldTop®	799084	−	FC99H1	RF14256K
RF799291X	Caterpillar® C7, C9	8K	DriveMaster − GoldTop®	799291	−	FC99H1	RF14256K
RF799298X	Caterpillar® C11 ACERT, C13 ACERT	8K	DriveMaster − GoldTop®	799298	−	FC99H1	RF14256K
RF799311X	Caterpillar® C11, C13	8K	DriveMaster − GoldTop®	799311	−	FC99H1	RF142561K
RF799323X	Caterpillar® C11 ACERT, C13 ACERT	8K	DriveMaster − GoldTop®	799323	−	FC99H1	RF14256K
RF799339X	Caterpillar® C11, C13	8K	DriveMaster − GoldTop®	799339	−	FC99H1	RF142561K
RF799341X	Caterpillar® C13 ACERT	8K	DriveMaster − GoldTop®	799341	−	FC99H1	RF142561K

Caterpillar® Engine (DriveMaster) GoldTop®

8K, 6K Belt Groove





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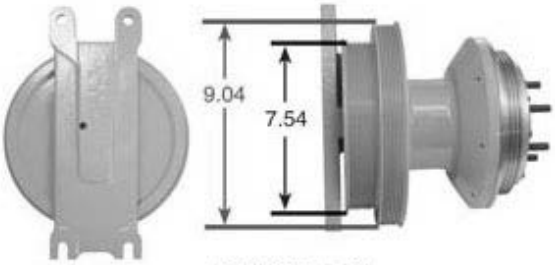

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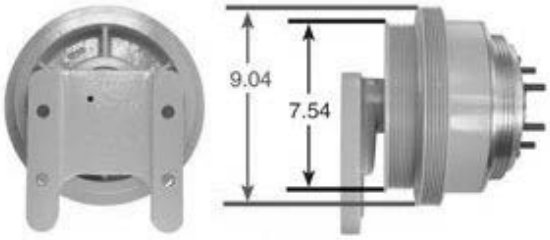

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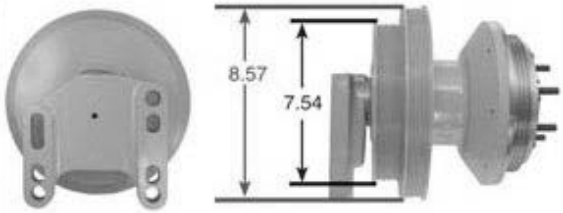

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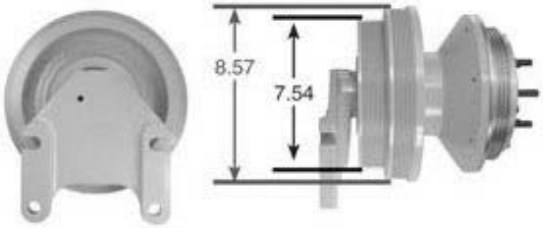

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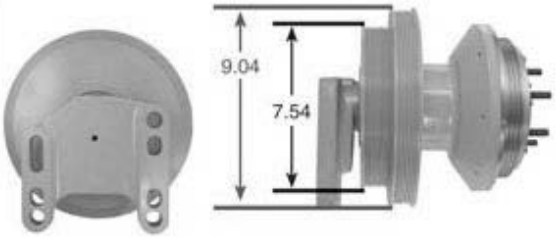

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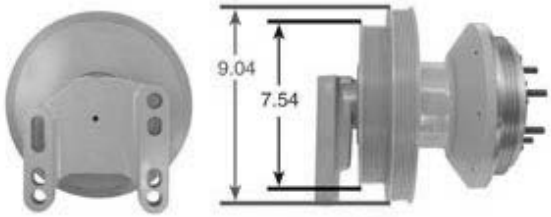

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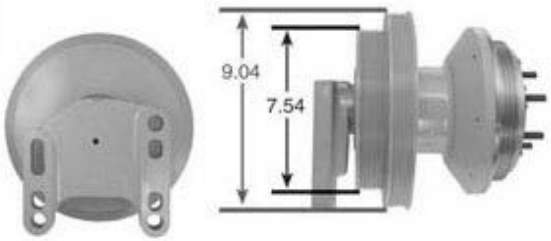

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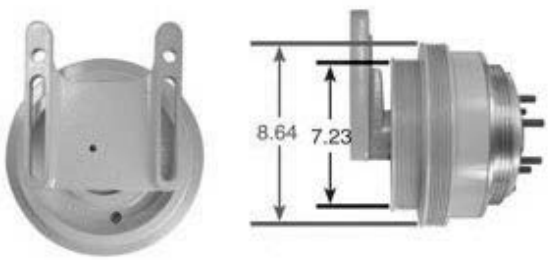

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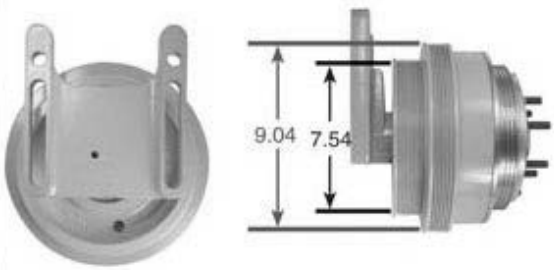
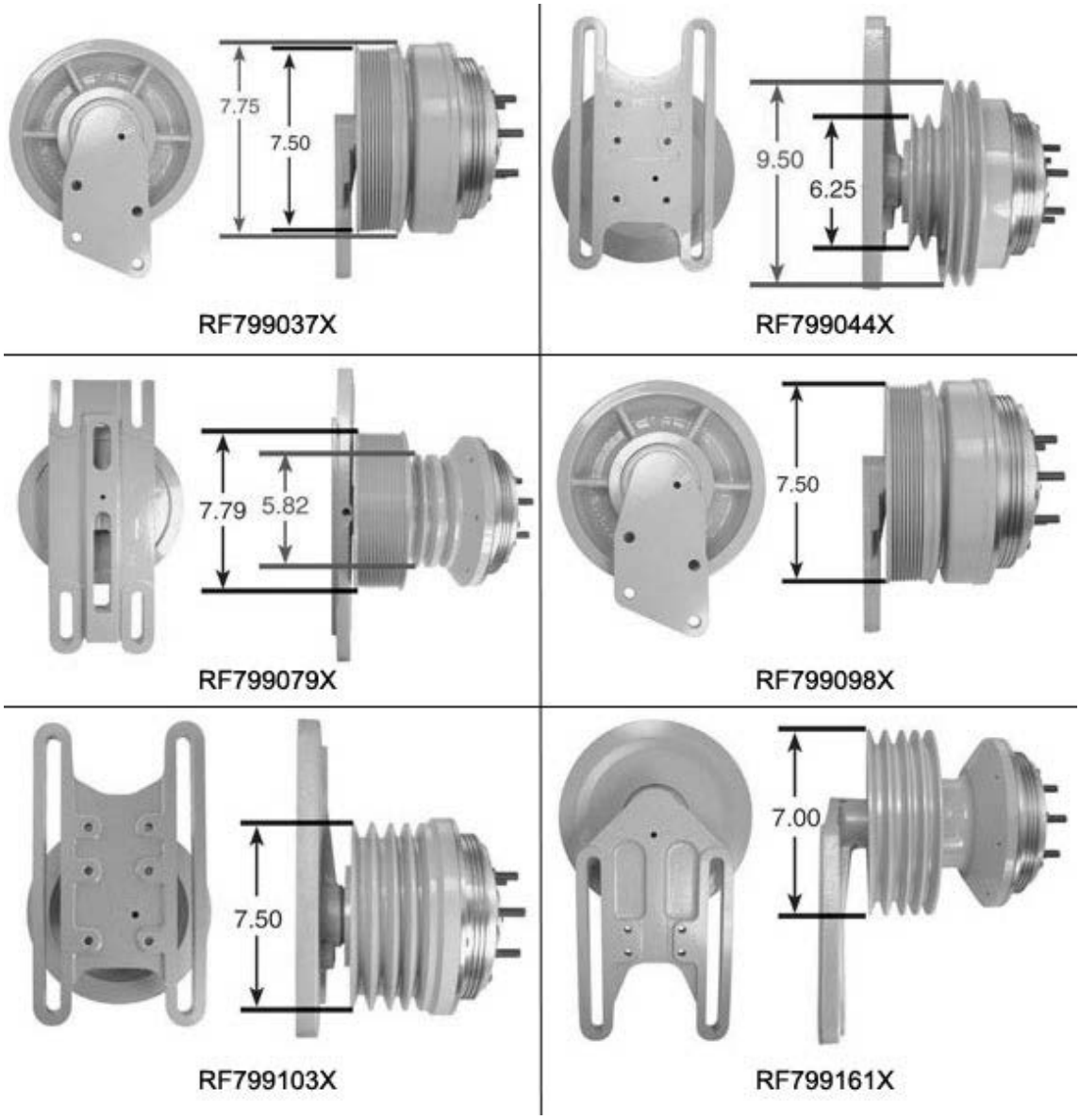


RF799360X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799012X	Caterpillar® 3406	8K, 6K	DriveMaster − GoldTop®	799012	−	FC99H1	RF14256K
RF799070X	Caterpillar® C10, C12	8K, 6K	DriveMaster − GoldTop®	799070	−	FC99H1	RF14256K
RF799073X	Caterpillar® 3406	8K, 6K	DriveMaster − GoldTop®	799073	−	FC99H1	RF14256K
RF799074X	Caterpillar® 3406	8K, 6K	DriveMaster − GoldTop®	799074	−	FC99H1	RF14256K
RF799078X	Caterpillar® C10, C12	8K, 6K	DriveMaster − GoldTop®	799078	−	FC99H1	RF14256K
RF799189X	Caterpillar® C10, C12	8K, 6K	DriveMaster − GoldTop®	799189	−	FC99H1	RF14256K
RF799191X	Caterpillar® C15, C16	8K, 6K	DriveMaster − GoldTop®	799191	−	FC99H1	RF14256K
RF799273X	Caterpillar® C15	8K, 6K	DriveMaster − GoldTop®	799273	−	FC99H1	RF14256K
RF799292X	Caterpillar® C10, C12	8K, 6K	DriveMaster − GoldTop®	799292	−	FC99H1	RF14256K
RF799313X	Caterpillar® C15, C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799313	−	FC99H1	RF14256K
RF799316X	Caterpillar® C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799316	−	FC99H1	RF14256K
RF799317X	Caterpillar® C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799317	−	FC99H1	RF14256K
RF799318X	Caterpillar® C15	8K, 6K	DriveMaster − GoldTop®	799318	−	FC99H1	RF14256K
RF799333X	Caterpillar® C15, C16	8K, 6K	DriveMaster − GoldTop®	799333	−	FC99H1	RF14256K
RF799334X	Caterpillar® C15, C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799334	53 lbs.	FC99H1	RF14256K
RF799346X	Caterpillar® C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799346	−	FC99H1	RF14256K
RF799360X	Caterpillar® C15 ACERT, C16 ACERT	8K, 6K	DriveMaster − GoldTop®	799360	−	FC99H1	RF14256K
RF799437X	Caterpillar® C15, C16	8PK, 6PK	DriveMaster − GoldTop®	799437	51 lbs.	FC99H1	RF14256K

Caterpillar® Engine (DriveMaster) GoldTop®

Various Belt Groove

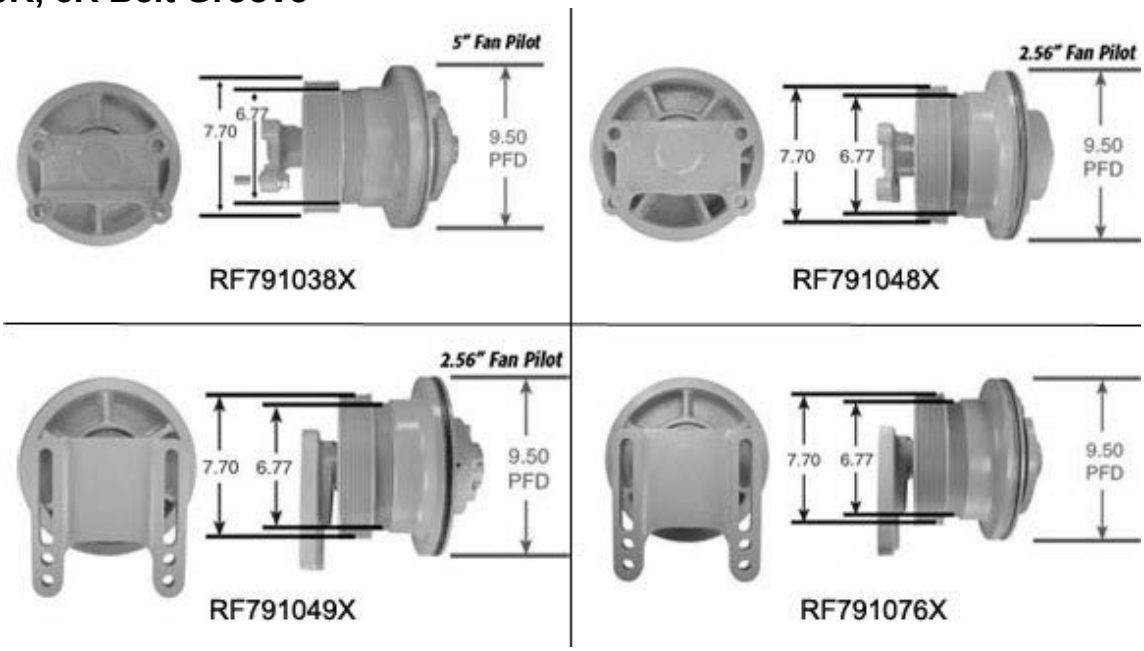


SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799037X	Caterpillar® 3176, C10, C12	8K, 1V	DriveMaster − GoldTop®	799037	−	FC99H1	RF14256K
RF799044X	Caterpillar® 3406	4V	DriveMaster − GoldTop®	799044	−	FC99H1	RF14256K
RF799079X	Caterpillar® 3176, C10, C12	14K, 3V	DriveMaster − GoldTop®	799079	−	FC99H1	RF14256K
RF799098X	Caterpillar® C10, C12	8K, 1V	DriveMaster − GoldTop®	799098	−	FC99H1	RF14256K
RF799103X	Caterpillar® 3406, 3406E, C15, C16	4V	DriveMaster − GoldTop®	799103	49 lbs.	FC99H1	RF14256K

RF799161X	Caterpillar® C15, C16	4V	DriveMaster − GoldTop®	799161	−	FC99H1	RF14256K
RF799809X	Caterpillar® C15	12K, 6K	DriveMaster − GoldTop®	799809	53 lbs.	FC99H1	RF14256K

Caterpillar® Engine (Model HT/S)

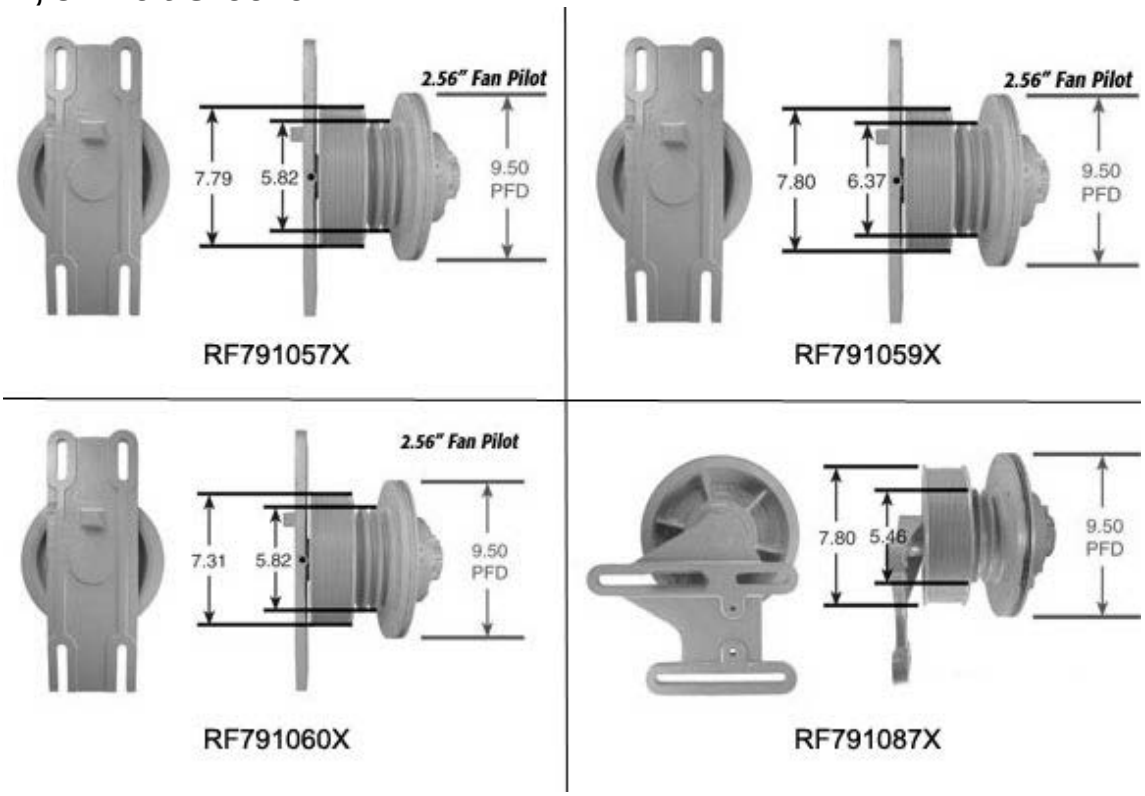
10K, 6K Belt Groove



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791038X	Caterpillar® 3406, 3406E	10K, 6K	HT/S	791038	44 lbs.	FC10H1	RF994305
RF791048X	Caterpillar® 3406, C15, C16	10K, 6K	HT/S	791048	44 lbs.	FC10H1	RF994305
RF791049X	Caterpillar® 3406, C15, C16	10K, 6K	HT/S	791049	62 lbs.	FC10H1	RF994305
RF791076X	Caterpillar® 3406	10K, 6K	HT/S	791076	62 lbs.	FC10H1	RF994305

Caterpillar® Engine (Model HT/S)

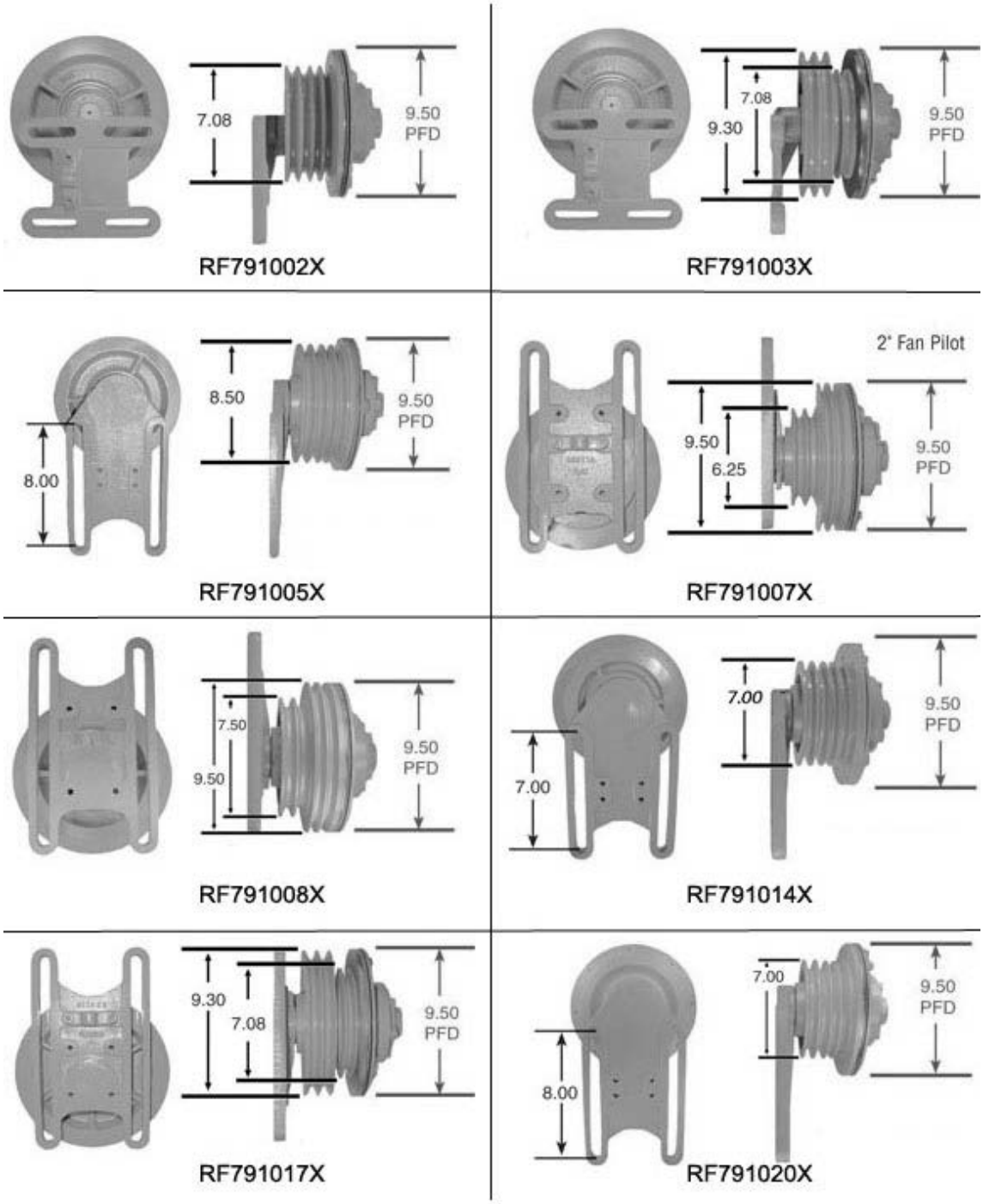
14K, 3V Belt Groove

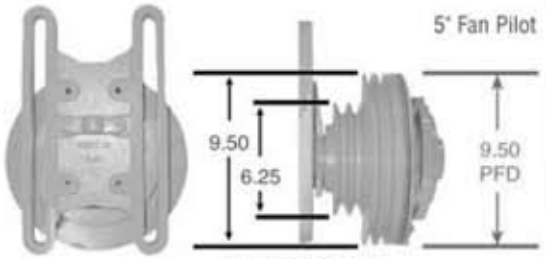


SKU#	Product Description	Belt Groove	Model	Mfg.#	Core Group	Rebuild Kit
RF791057X	Caterpillar® 3176, C10, C12	14K, 3V	HT/S	791057	FC10H1	RF994305
RF791059X	Caterpillar® 3406E	14K, 3V	HT/S	791059	FC10H1	RF994305
RF791060X	Caterpillar® 3176, C10, C12	14K, 3V	HT/S	791060	FC10H1	RF994305
RF791087X	Caterpillar® 3406, 3406E	14K, 3V	HT/S	791087	FC10H1	RF994305

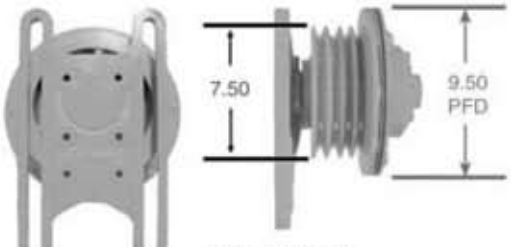
Caterpillar® Engine (Model HT/S)

4V Belt Groove



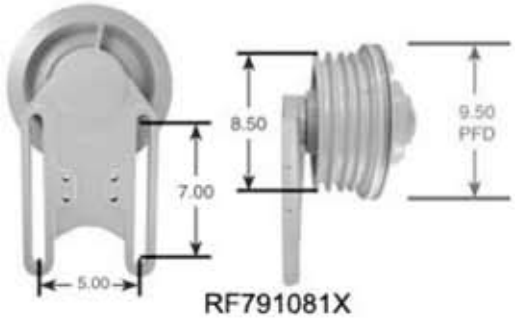


RF791013X



RF791027X

RF791028X



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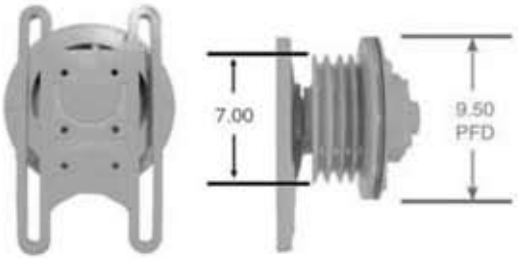
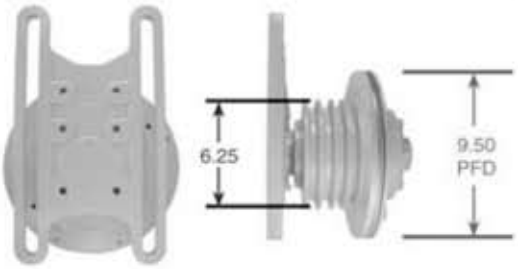
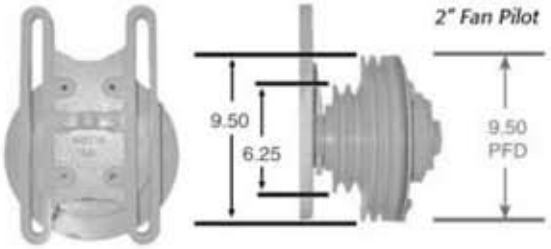


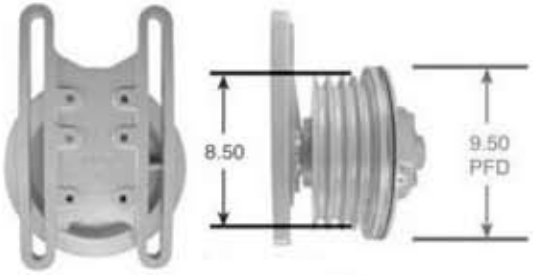
RF791082X



RF791089X



RF791097X



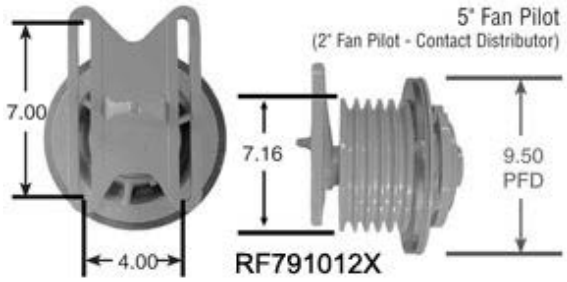
RF791116X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791002X	Caterpillar® 3406 ATAAC	4V	HT/S	791002	44 lbs.	FC10H1	RF994305
RF791003X	Caterpillar® 3406, 3406 ATAAC	4V	HT/S	791003	44 lbs.	FC10H1	RF994306
RF791005X	Caterpillar® 3406 ATAAC, 3406B	4V	HT/S	791005	44 lbs.	FC10H1	RF994305
RF791007X	Caterpillar® 3406, 3406 ATAAC, 3406C, 3406E	4V	HT/S	791007	55 lbs.	FC10H1	RF994305
RF791008X	Caterpillar® 3406, 3406 ATAAC	4V	HT/S	791008	50 lbs.	FC10H1	RF994305

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791013X	Caterpillar®, Cummins, Detroit Diesel Model HT550	4V	HT/S	791013	50 lbs.	FC10H1	RF994305
RF791014X	Caterpillar® 3406	4V	HT/S	791014	51 lbs.	FC10H1	RF994305
RF791017X	Caterpillar® 3406	4V	HT/S	791017	50 lbs.	FC10H1	RF994306
RF791020X	Caterpillar® 3406, 3406 JWAC, 3406C, 3406E	4V	HT/S	791020	55 lbs.	FC10H1	RF994305
RF791027X	Caterpillar® 3176, 3406, 3406 ATAAC, 3406B, 3406C, 3406E	4V	HT/S	791027	55 lbs.	FC10H1	RF994305
RF791028X	Caterpillar® 3306	4V	HT/S	791028	44 lbs.	FC10H1	RF994305
RF791081X	Caterpillar® 3406, 3406B	4V	HT/S	791081	–	FC10H1	RF994305
RF791082X	Caterpillar® 3406	4V	HT/S	791082	–	FC10H1	RF994305
RF791089X	Caterpillar® 3406, 3406C, 3406E	4V	HT/S	791089	–	FC10H1	RF994305
RF791116X	Caterpillar® 3406, 3406 ATAAC, C15, C16	4V	HT/S	791116	–	FC10H1	RF994305

Caterpillar® Engine (Model HT/S)

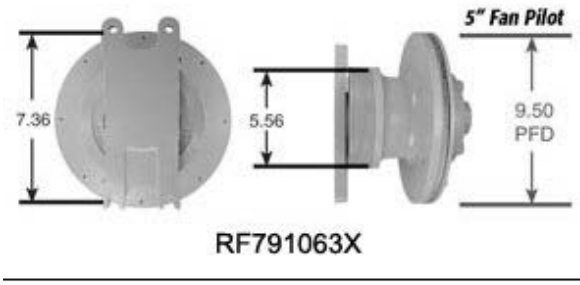
5V Belt Groove



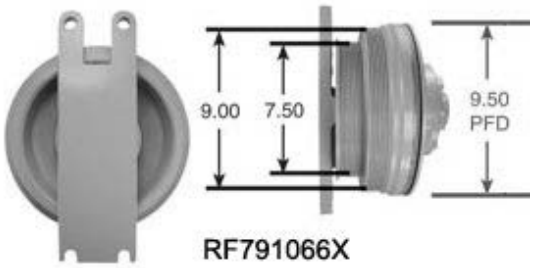
SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791012X	Caterpillar® 3306, 3306 JWAC	5V	HT/S	791012	44 lbs.	FC10H1	RF994306

Caterpillar® Engine (Model HT/S)

8K and 8K, 6K Belt Groove



RF791063X



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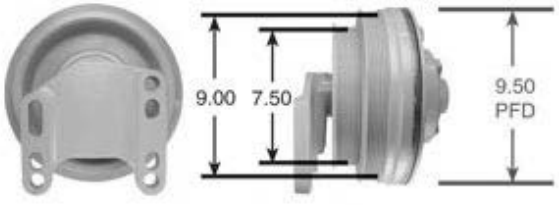

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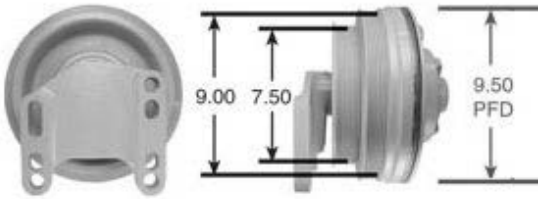
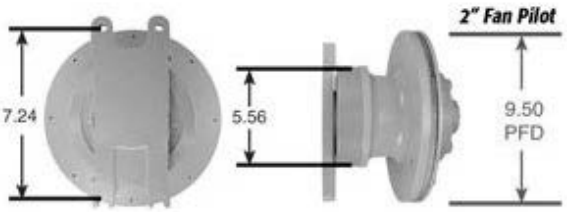


RF791070X



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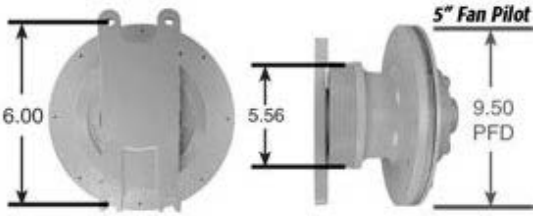

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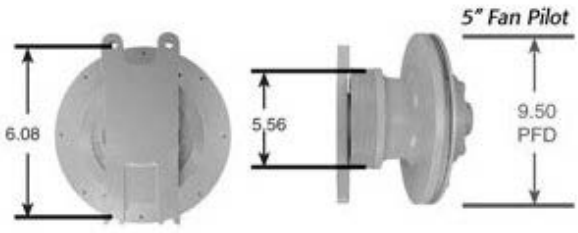


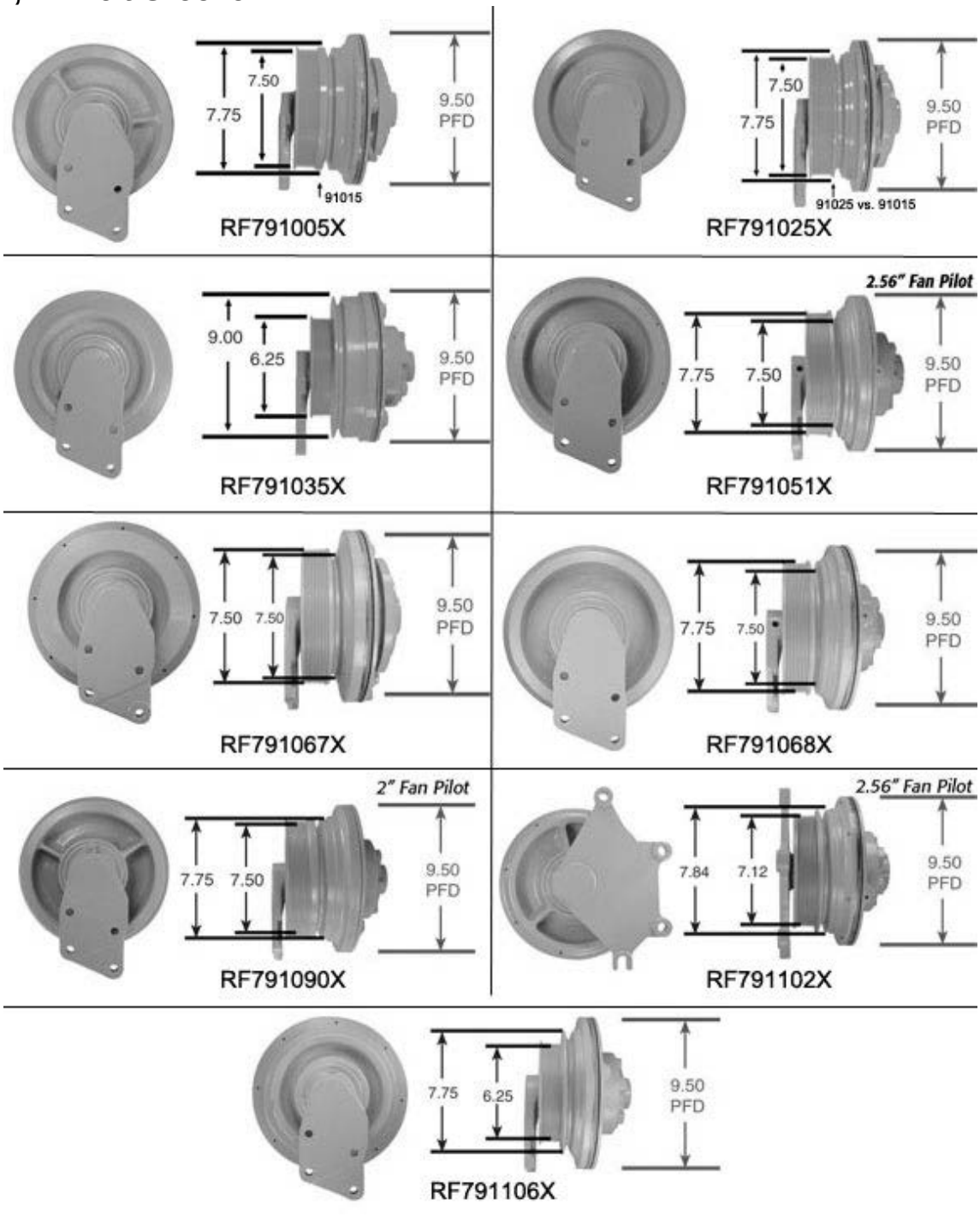
RF791098X

RF791115X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791063X	Caterpillar® 3126	8K	HT/S	791063	−	FC10H1	RF994305
RF791066X	Caterpillar® C10, C12	8K, 6K	HT/S	791066	−	FC10H1	RF994305
RF791069X	Caterpillar® 3406	8K, 6K	HT/S	791069	49 lbs.	FC10H1	RF994305
RF791070X	Caterpillar® 3406, C15	8K, 6K	HT/S	791070	49 lbs.	FC10H1	RF994305
RF791071X	Caterpillar® 3126	8K	HT/S	791071	−	FC10H1	RF994305
RF791085X	Caterpillar® 3126	8K	HT/S	791085	−	FC10H1	RF994305
RF791098X	Caterpillar® 3126	8K	HT/S	791098	−	FC10H1	RF994305
RF791115X	Caterpillar® 3176	8K, 6K	HT/S	791115	−	FC10H1	RF994306

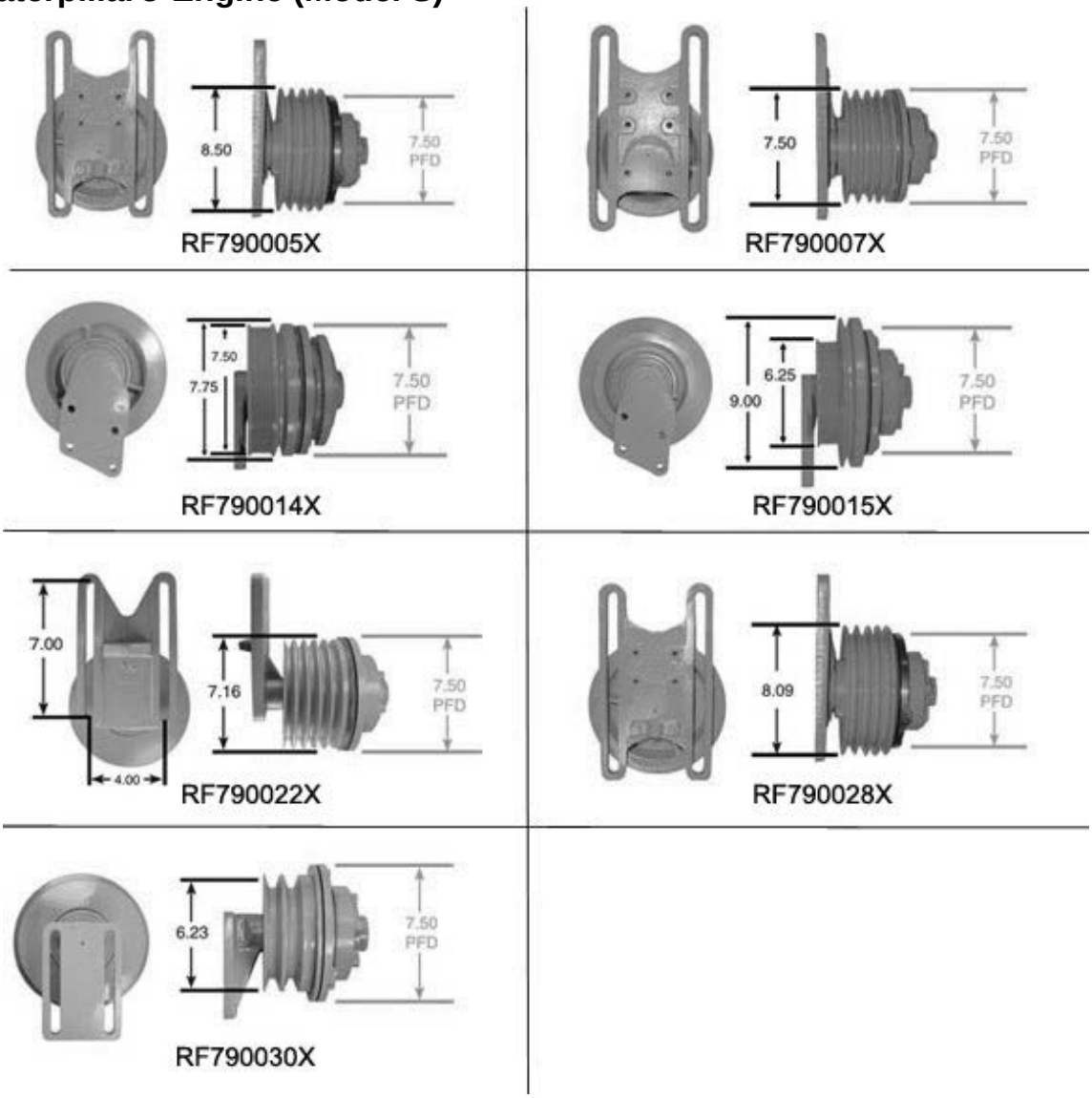
Caterpillar® Engine (Model HT/S)

8K, 1V Belt Groove



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791015X	Caterpillar® 3176, C10, C12	8K, 1V	HT/S	791015	44 lbs.	FC10H1	RF994305
RF791025X	Caterpillar® 3176, L10	8K, 1V	HT/S	791025	44 lbs.	FC10H1	RF994305
RF791035X	Caterpillar® 3176	8K, 1V	HT/S	791035	45 lbs.	FC10H1	RF994305
RF791051X	Caterpillar® C10, C12	8K, 1V	HT/S	791051	−	FC10H1	RF994305
RF791067X	Caterpillar® 3176, C12	8K, 1V	HT/S	791067	−	FC10H1	RF994305
RF791068X	Caterpillar® 3176, C10, C12	8K, 1V	HT/S	791068	−	FC10H1	RF994305
RF791090X	Caterpillar® 3176, C10, C12	8K, 1V	HT/S	791090	−	FC10H1	RF994305
RF791102X	Caterpillar® 3176, 3176B	8K, 1V	HT/S	791102	−	FC10H1	RF994305
RF791106X	Caterpillar® 3176, 3306	8K, 1V	HT/S	791106	−	FC10H1	RF994305

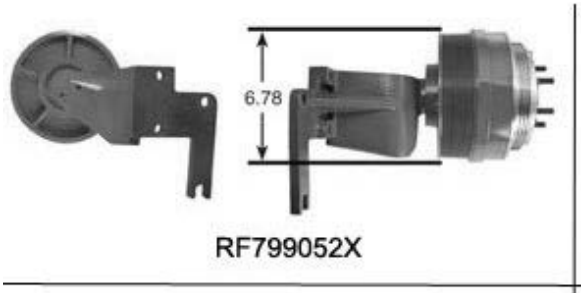
Caterpillar® Engine (Model S)



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF790005X	Caterpillar® 3406	4V	S	790005	52 lbs.	FC00H1	RF994307
RF790007X	Caterpillar® 3406	4V	S	790007	47 lbs.	FC00H1	RF994307
RF790014X	Caterpillar® 3176, C10, C12	8K, 1V	S	790014	45 lbs.	FC00H1	RF994307
RF790015X	Caterpillar® 3176	8K, 1V	S	790015	43 lbs.	FC00H1	RF994307
RF790022X	Caterpillar® 3306, 3306 ATAAC	5V	S	790022	45 lbs.	FC00H1	RF994307
RF790028X	Caterpillar® 3306 ATAAC, 3406 ATAAC, 3406B	4V	S	790028	45 lbs.	FC00H1	RF994307
RF790030X	Caterpillar® 3208	2V	S	790030	45 lbs.	FC00H1	RF994307

Cummins® Engine (DriveMaster) GoldTop®

12K Belt Groove



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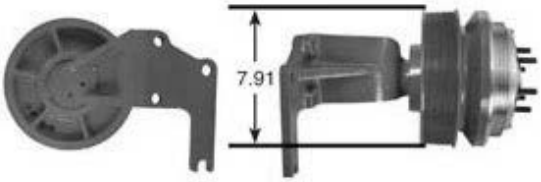

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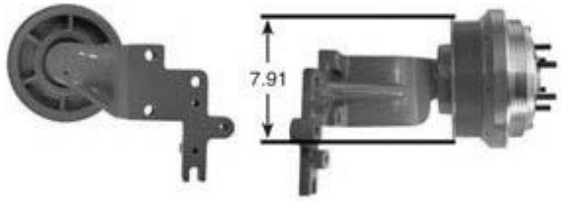

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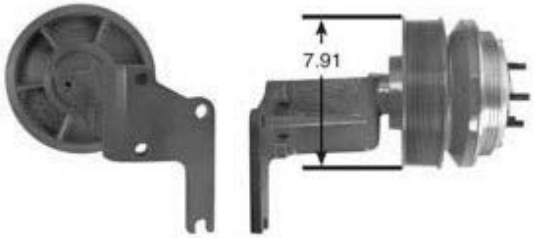

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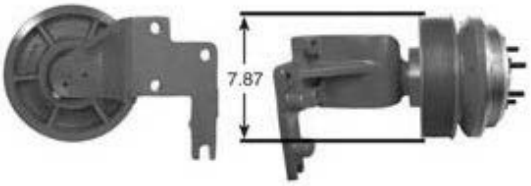

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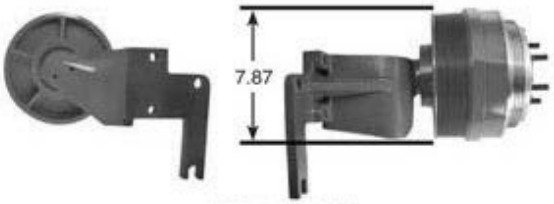

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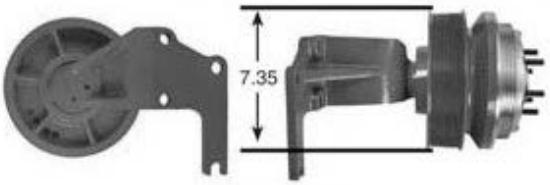

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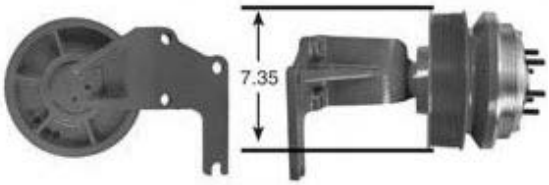


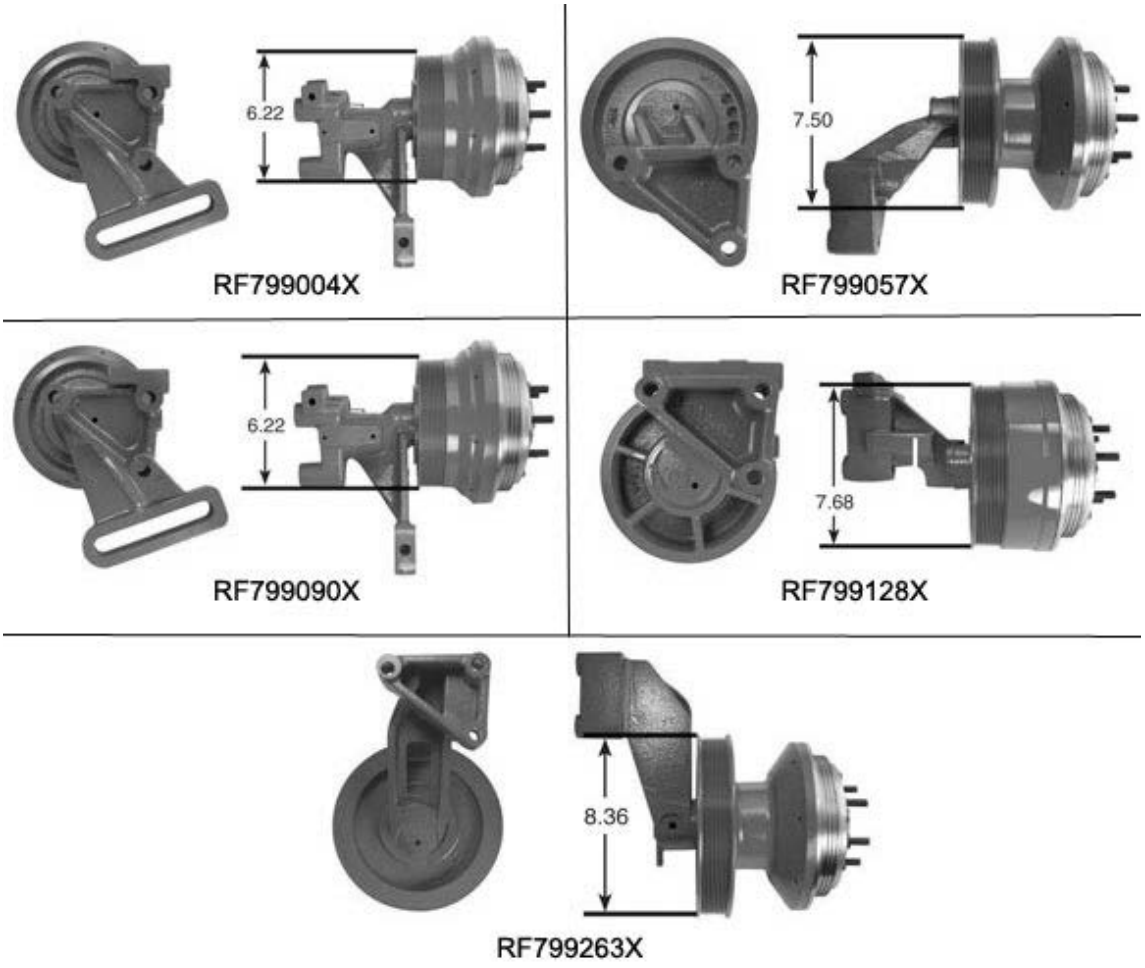
RF999801

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799052X	Cummins® ISX	12K	DriveMaster − GoldTop®	799052	−	FC99H1	RF14256K
RF799154X	Cummins® ISX	12K	DriveMaster − GoldTop®	799154	−	FC99H1	RF14256K
RF799205X	Cummins® ISX	12K	DriveMaster − GoldTop®	799205	−	FC99H1	RF14256K
RF799238X	Cummins® ISX	12K	DriveMaster − GoldTop®	799238	−	FC99H1	RF14256K
RF799326X	Cummins® ISX	12K	DriveMaster − GoldTop®	799326	−	FC99H1	RF14256K

RF799515X	Cummins® ISX	12PK	DriveMaster − GoldTop®	799515	−	FC99H1	RF14256K
RF799801X	Cummins® ISX	12K	DriveMaster − GoldTop®	799801	−	FC99H1	RF14256K

Cummins® Engine (DriveMaster) GoldTop®

8K Belt Groove

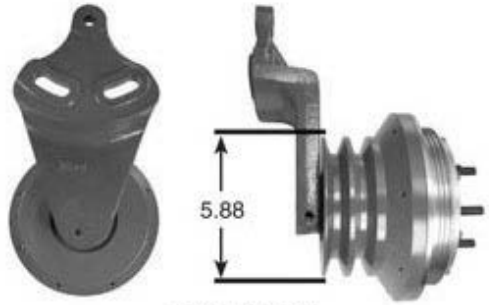


SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799004X	Cummins® ISM	8K	DriveMaster − GoldTop®	799004	−	FC99H1	RF14256K
RF799011X	Cummins® ISM	8K	DriveMaster − GoldTop®	799011	−	FC99H1	RF142561K
RF799057X	Cummins® ISM	8K	DriveMaster − GoldTop®	799057	−	FC99H1	RF14256K
RF799090X	Cummins® ISM	8K	DriveMaster − GoldTop®	799090	−	FC99H1	RF14256K
RF799128X	Cummins® ISM	8K	DriveMaster − GoldTop®	799128	−	FC99H1	RF14256K
RF799263X	Cummins® ISM	8K	DriveMaster − GoldTop®	799263	−	FC99H1	RF14256K

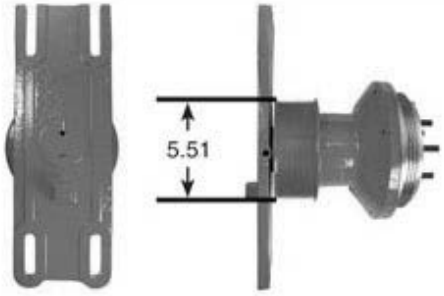
Cummins® Engine (DriveMaster) GoldTop®

Various Belt Groove

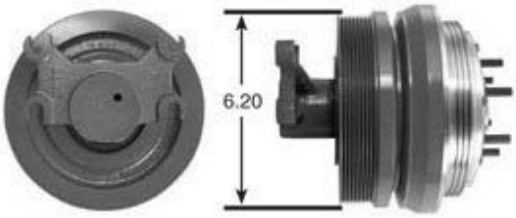
RF799005X



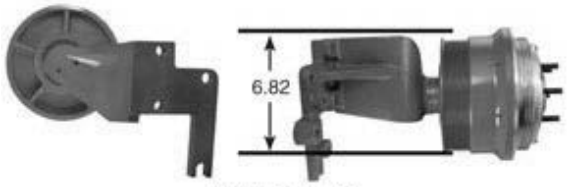
RF799047X



RF799082X



RF799131X

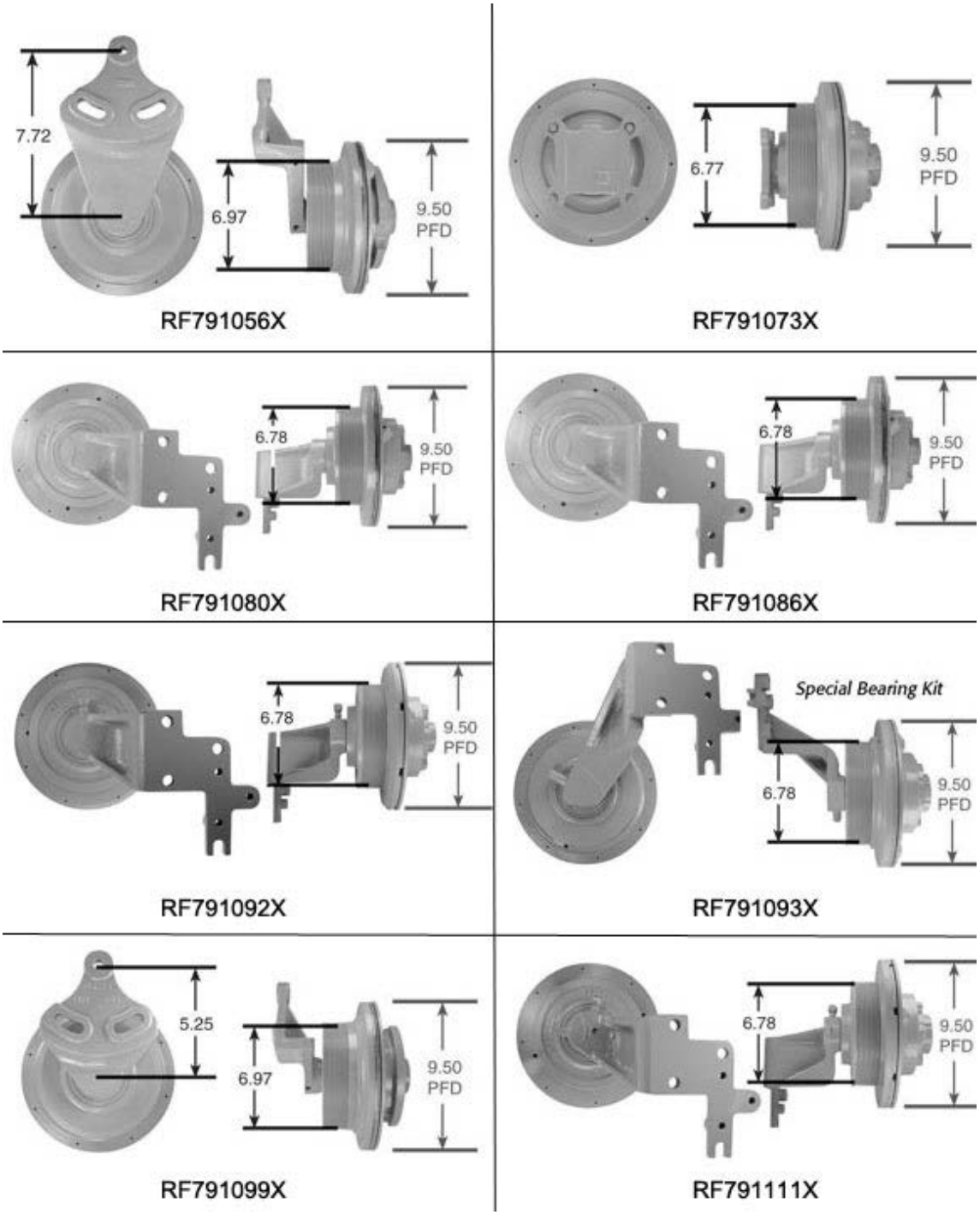


RF799168X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799005X	Cummins® N14	10K	DriveMaster − GoldTop®	799005	−	FC99H1	RF14256K
RF799047X	Cummins® N14	2V	DriveMaster − GoldTop®	799047	−	FC99H1	RF14256K
RF799082X	Cummins® ISM	14K	DriveMaster − GoldTop®	799082	−	FC99H1	RF14256K
RF799131X	Cummins® ISC, ISL	8K, 1V	DriveMaster − GoldTop®	799131	−	FC99H1	RF14256K
RF799168X	Cummins® ISX	10K	DriveMaster − GoldTop®	799168	50 lbs.	FC99H1	RF14256K
RF999416	Cummins® ISL	8K, 1V	DriveMaster − GoldTop®	999416	−	None (NEW)	RF14256K

Cummins® Engine (Model HT/S)

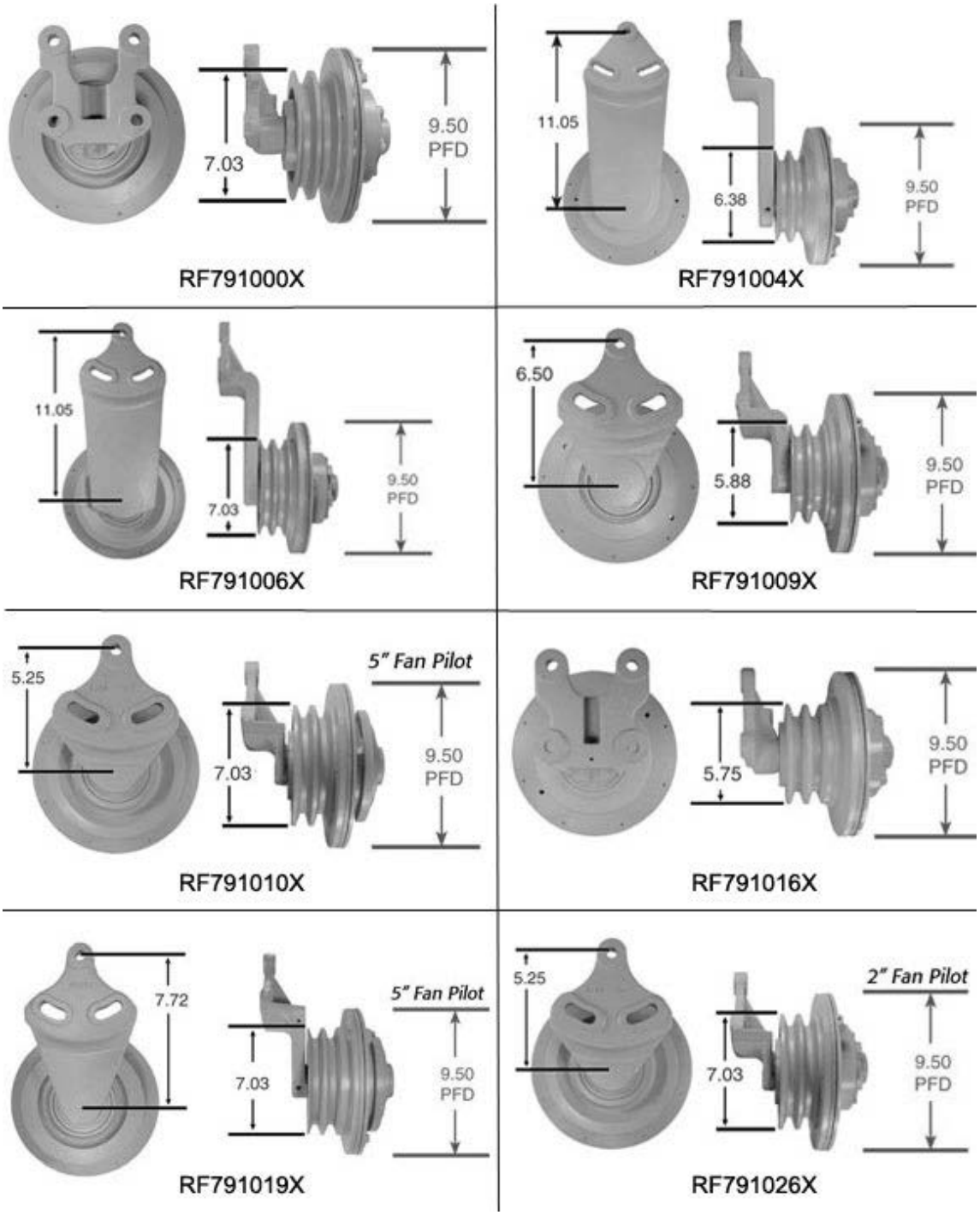
10K Belt Groove

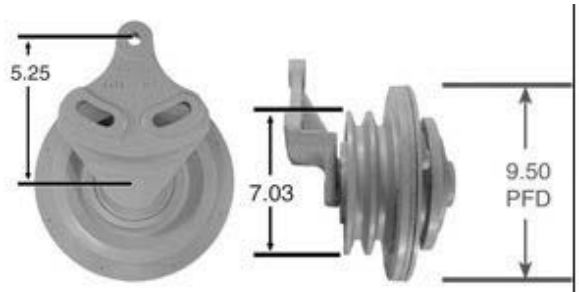


SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791056X	Cummins® N14	10K	HT/S	791056	−	FC10H1	RF994305
RF791073X	Cummins® ISX, N14 / Volvo® VE D12	10K	HT/S	791073	37.5 lbs.	FC10H1	RF994305
RF791080X	Cummins® ISX	10K	HT/S	791080	−	FC10H1	RF994305
RF791086X	Cummins® ISX	10K	HT/S	791086	−	FC10H1	RF994305
RF791092X	Cummins® ISX	10K	HT/S	791092	−	FC10H1	RF994305
RF791093X	Cummins® ISX	10K	HT/S	791093	52 lbs.	FC10H1	RF994305
RF791099X	Cummins® N14	10K	HT/S	791099	−	FC10H1	RF994305
RF791111X	Cummins® ISX	10K	HT/S	791111	−	FC10H1	RF994305

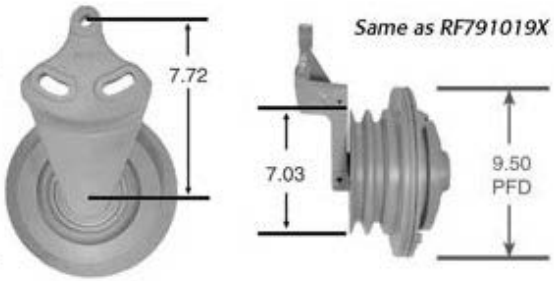
Cummins® Engine (Model HT/S)

2V Belt Groove





RF791054X



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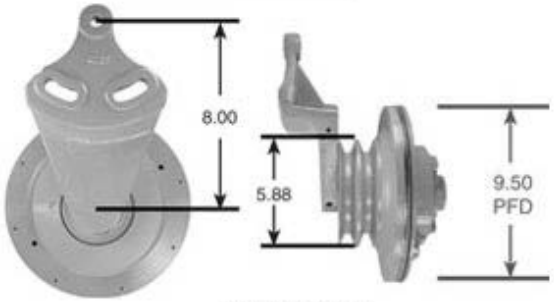

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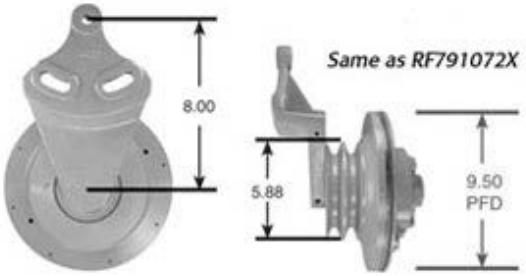

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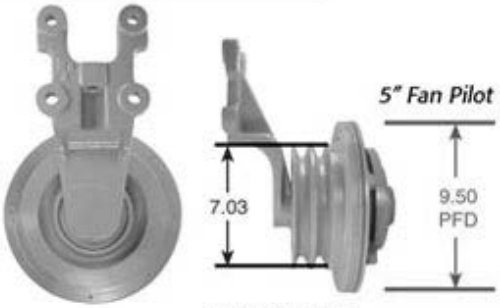

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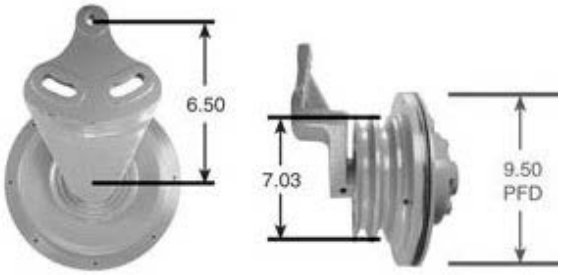

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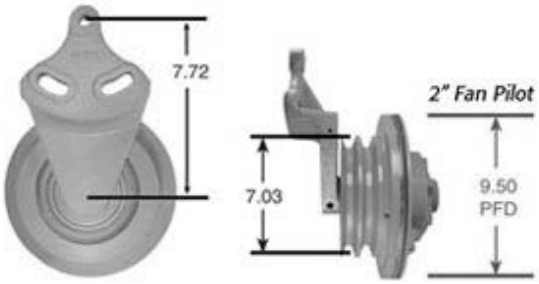

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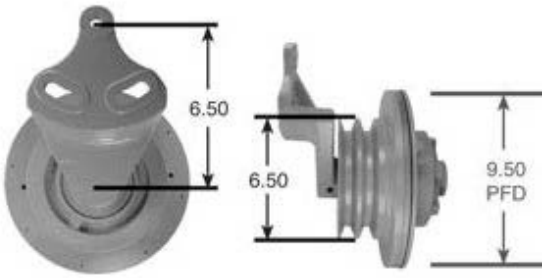
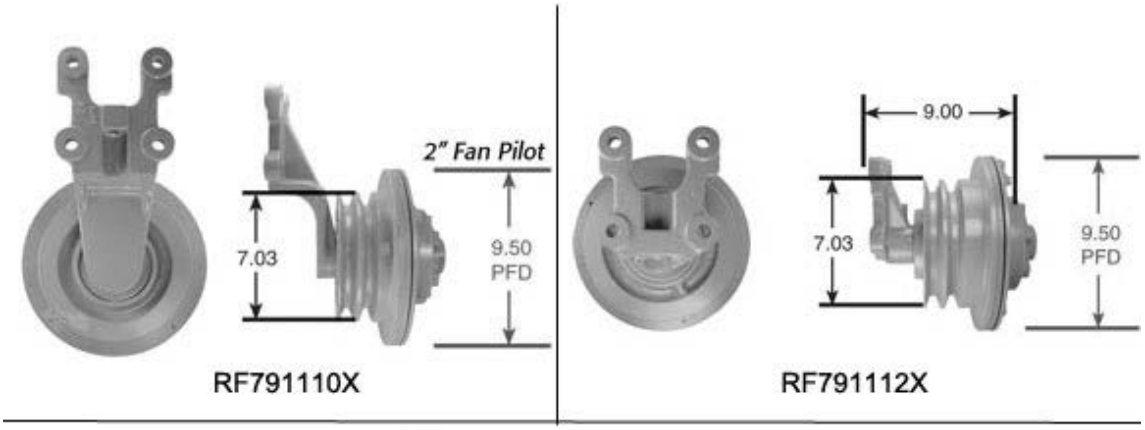
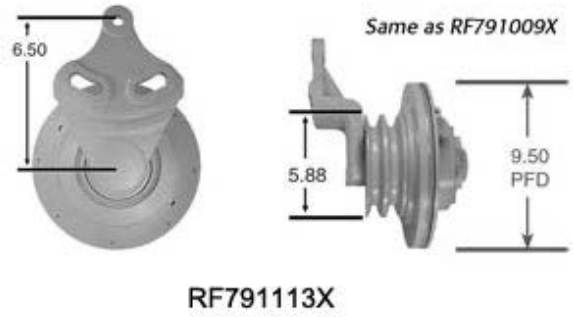


RF791108X

Horton® Fan Clutches − New/Reman.

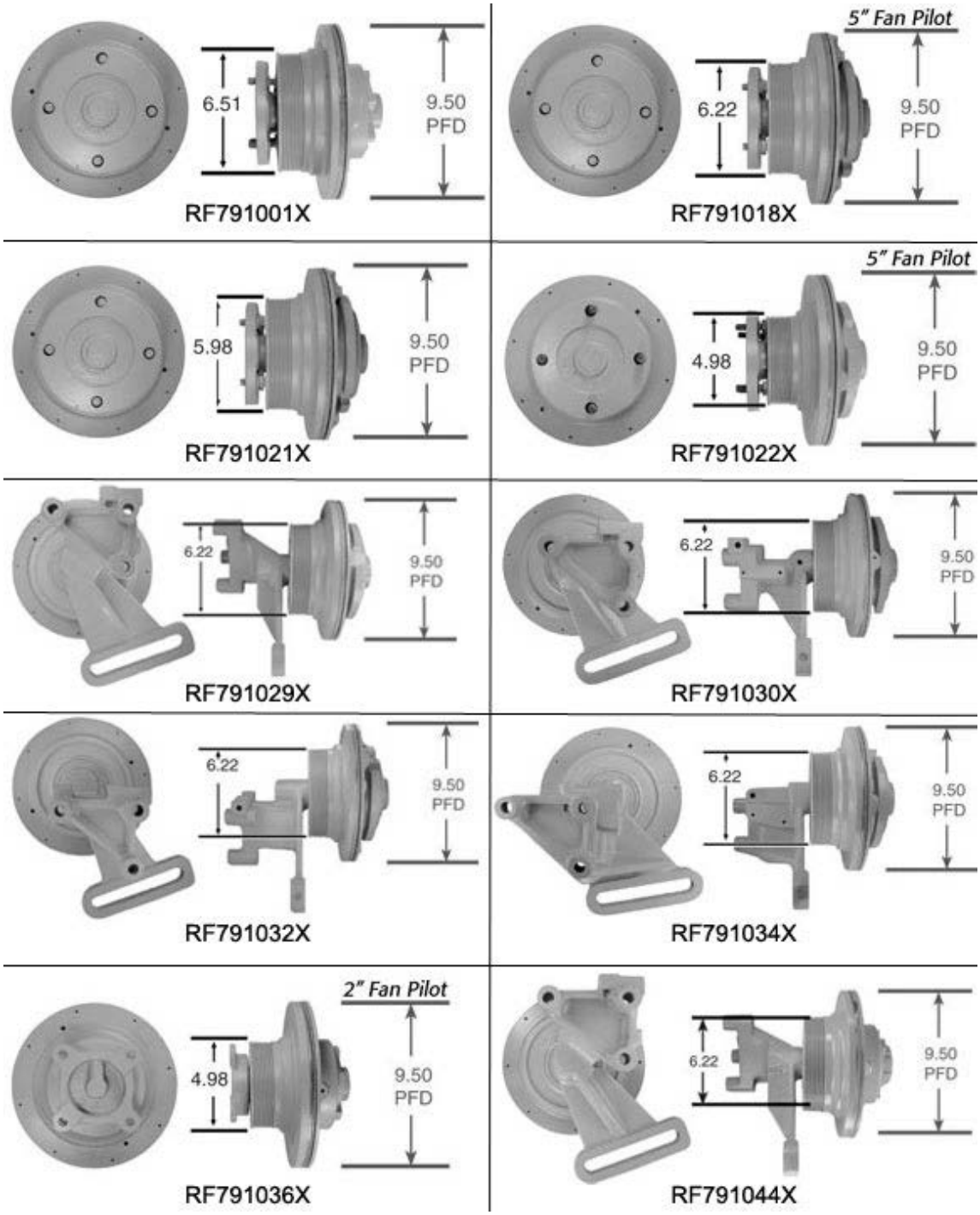




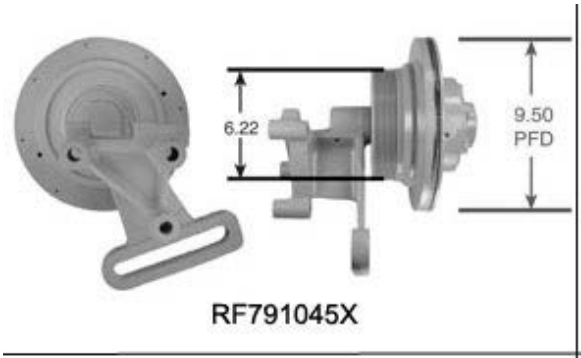
SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791000X	Cummins® 315, N14, NT88, Various NTC	2V	HT/S	791000	42 lbs.	FC10H1	RF994305
RF791004X	Cummins® NTC Big Cam III and IV	2V	HT/S	791004	44 lbs.	FC10H1	RF994305
RF791006X	Cummins® 444, N14, NTC Big Cam III and IV	2V	HT/S	791006	52 lbs.	FC10H1	RF994305
RF791009X	Cummins® N14, NTC, NTC Big Cam IV	2V	HT/S	791009	44 lbs.	FC10H1	RF994305
RF791010X	Cummins® 444, N14, NTC, NTC 230, NTC 250	2V	HT/S	791010	45 lbs.	FC10H1	RF994305
RF791016X	Cummins® N14, NTC, NTC Big Cam, NTC Big Cam IV	2V	HT/S	791016	44 lbs.	FC10H1	RF994305
RF791019X	Cummins® N14, N14 TYCO	2V	HT/S	791019	47 lbs.	FC10H1	RF994305
RF791026X	Cummins® N14, NT88	2V	HT/S	791026	47 lbs.	FC10H1	RF994305
RF791054X	Cummins® N14	2V	HT/S	791054	−	FC10H1	RF994305
RF791064X	Cummins® N14	2V	HT/S	791064	−	FC10H1	RF994305
RF791072X	Cummins® N14	2V	HT/S	791072	−	FC10H1	RF994305
RF791096X	Cummins® N14	2V	HT/S	791096	−	FC10H1	RF994305
RF791100X	Cummins® N14	2V	HT/S	791100	−	FC10H1	RF994305
RF791103X	Cummins® N14, NT88	2V	HT/S	791103	−	FC10H1	RF994305
RF791104X	Cummins® NT88, NTC Big Cam IV	2V	HT/S	791104	−	FC10H1	RF994305
RF791108X	Cummins® NT88, NTC	2V	HT/S	791108	−	FC10H1	RF994305
RF791110X	Cummins® N14	2V	HT/S	791110	−	FC10H1	RF994305
RF791112X	Cummins® 444, NTC, NTC Big Cam IV	2V	HT/S	791112	−	FC10H1	RF994305
RF791113X	Cummins® NTC, NTC Big Cam IV	2V	HT/S	791113	−	FC10H1	RF994305

Cummins® Engine (Model HT/S)

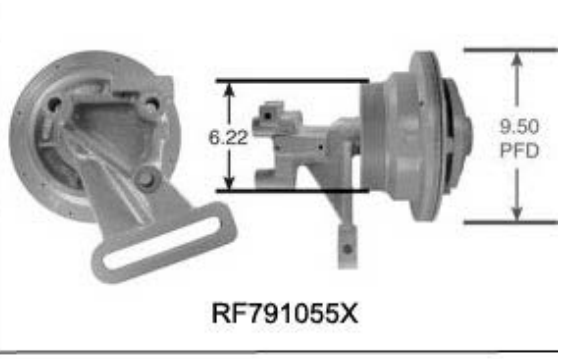
8K Belt Groove



Horton® Fan Clutches − New/Reman.



RF791045X



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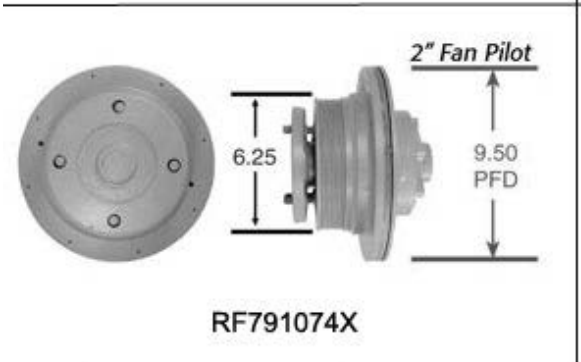

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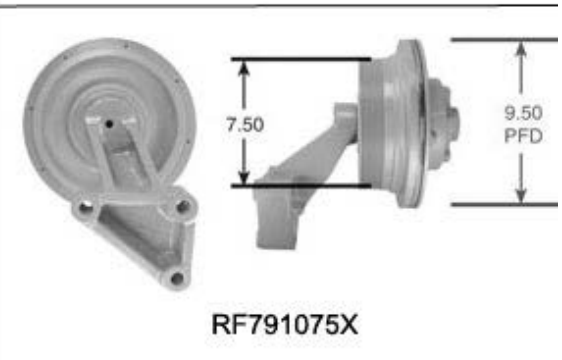

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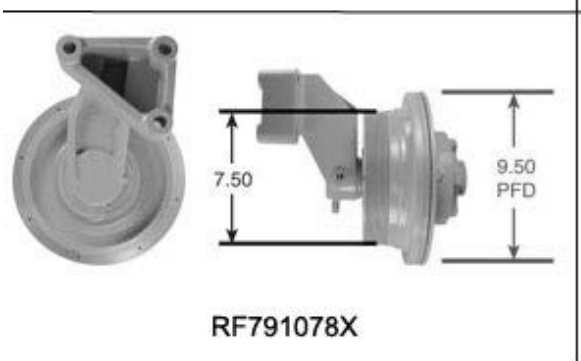
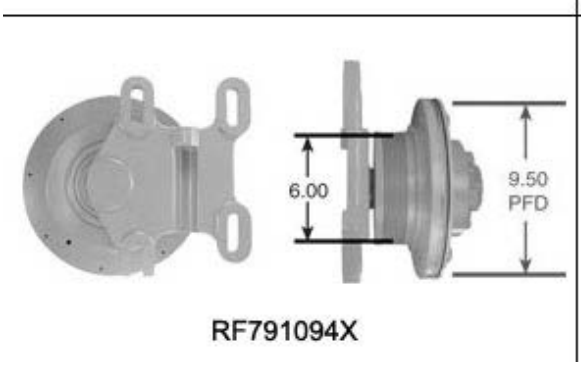
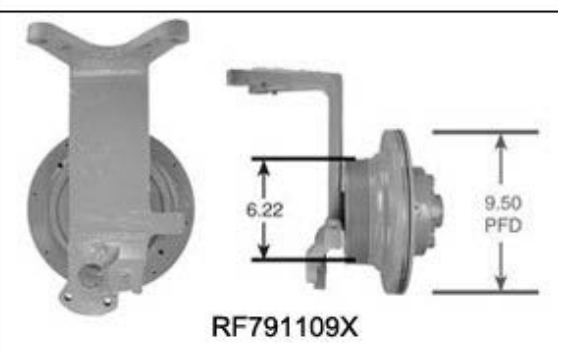


RF791078X

RF791079X



RF791094X



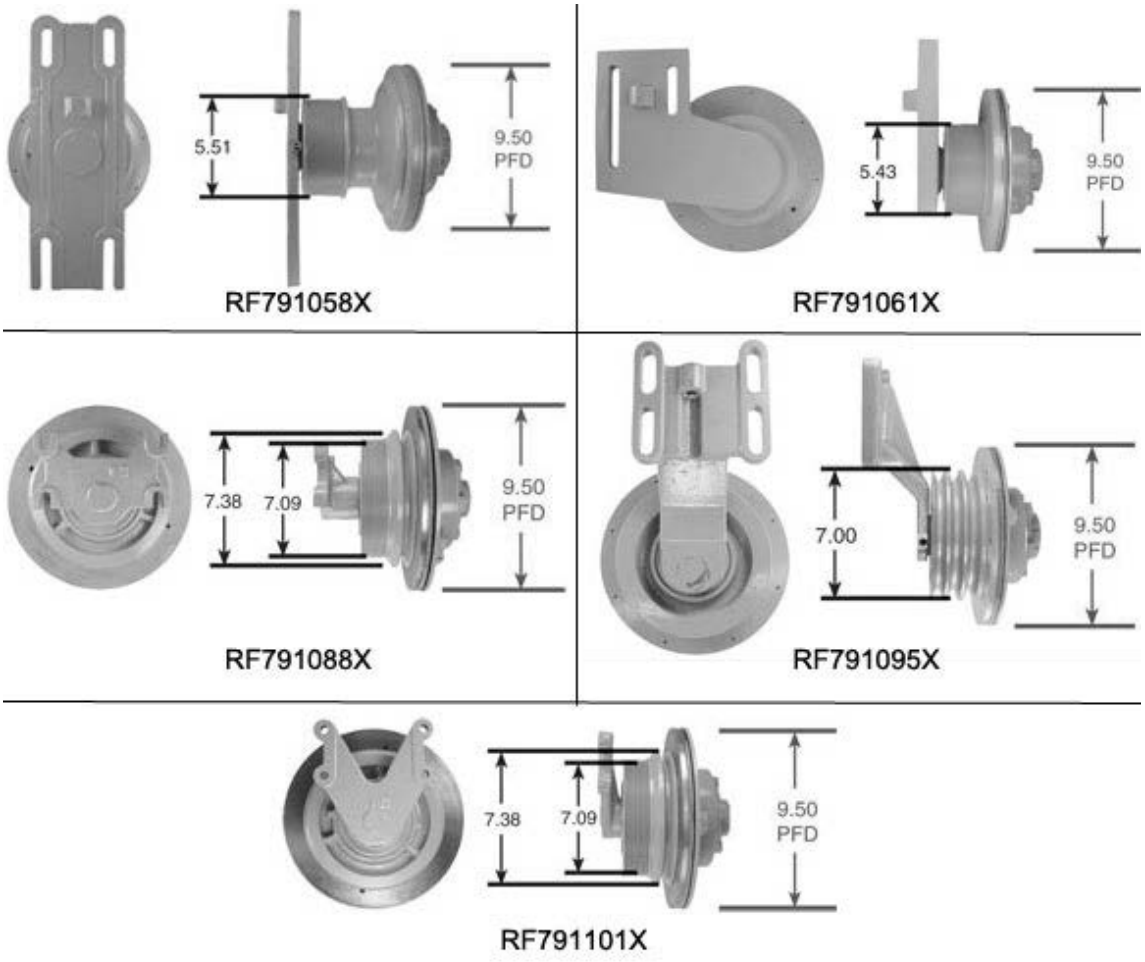
RF791109X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791001X	Cummins® ISM, L10, M11	8K	HT/S	791001	44 lbs.	FC10H1	RF994305
RF791018X	Cummins® ISM, L10, M11	8K	HT/S	791018	43 lbs.	FC10H1	RF994305
RF791021X	Cummins® L10, M11, N14	8K	HT/S	791021	44 lbs.	FC10H1	RF994305
RF791022X	Cummins® L10, M11, N14, NH 230, NTA 400, Various NTC	8K	HT/S	791022	44 lbs.	FC10H1	RF994305
RF791029X	Cummins® L10	8K	HT/S	791029	44 lbs.	FC10H1	RF994305
RF791030X	Cummins® L10	8K	HT/S	791030	54 lbs.	FC10H1	RF994305

RF791032X	Cummins® L10, M11	8K	HT/S	791032	44 lbs.	FC10H1	RF994305
RF791034X	Cummins® L10, M11	8K	HT/S	791034	44 lbs.	FC10H1	RF994305
RF791036X	Cummins® L10, M11	8K	HT/S	791036	44 lbs.	FC10H1	RF994305
RF791044X	Cummins® ISM	8K	HT/S	791044	−	FC10H1	RF994305
RF791045X	Cummins® ISM	8K	HT/S	791045	−	FC10H1	RF994305
RF791055X	Cummins® L10	8K	HT/S	791055	−	FC10H1	RF994305
RF791074X	Cummins® M11	8K	HT/S	791074	−	FC10H1	RF994305
RF791075X	Cummins® ISM	8K	HT/S	791075	−	FC10H1	RF994305
RF791078X	Cummins® ISM	8K	HT/S	791078	−	FC10H1	RF994305
RF791079X	Cummins® ISM, M11	8K	HT/S	791079	−	FC10H1	RF994305
RF791094X	Cummins® L10, M11	8K	HT/S	791094	−	FC10H1	RF994305
RF791109X	Cummins® L10, N14, NT	8K	HT/S	791109	−	FC10H1	RF994305

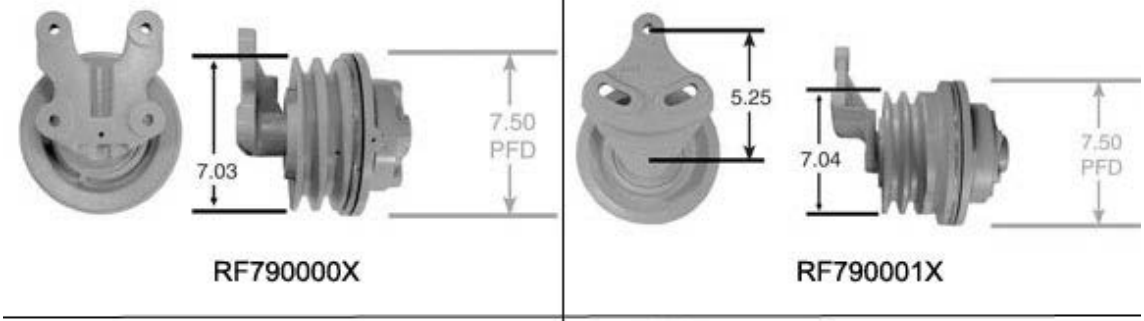
Cummins® Engine (Model HT/S)

Various Belt Groove



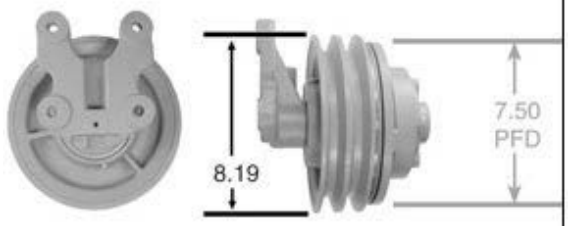
SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791058X	Cummins® M11	14K	HT/S	791058	−	FC10H1	RF994305
RF791061X	Cummins® N14	14K	HT/S	791061	−	FC10H1	RF994305
RF791088X	Cummins® C Series, ISC	8K 1V	HT/S	791088	−	FC10H1	RF994305
RF791095X	Cummins® 444, N14, NT, NTC	3V	HT/S	791095	−	FC10H1	RF994305
RF791101X	Cummins® C Series, ISC	8K 1V	HT/S	791101	−	FC10H1	RF994305

Cummins® Engine (Model S)



RF790000X

RF790001X



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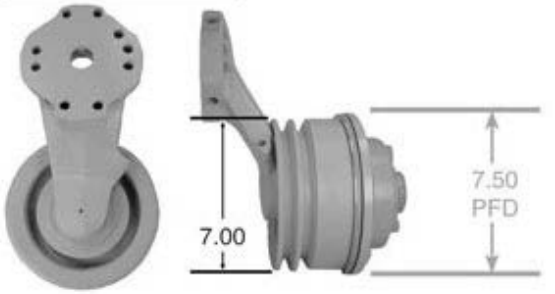

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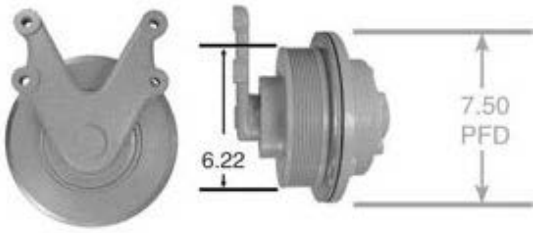
RF790010X



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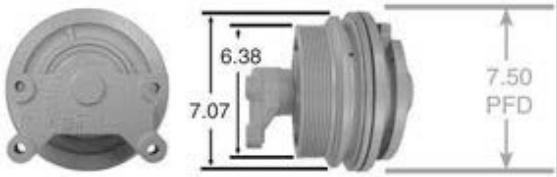

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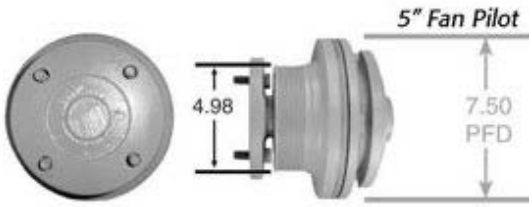
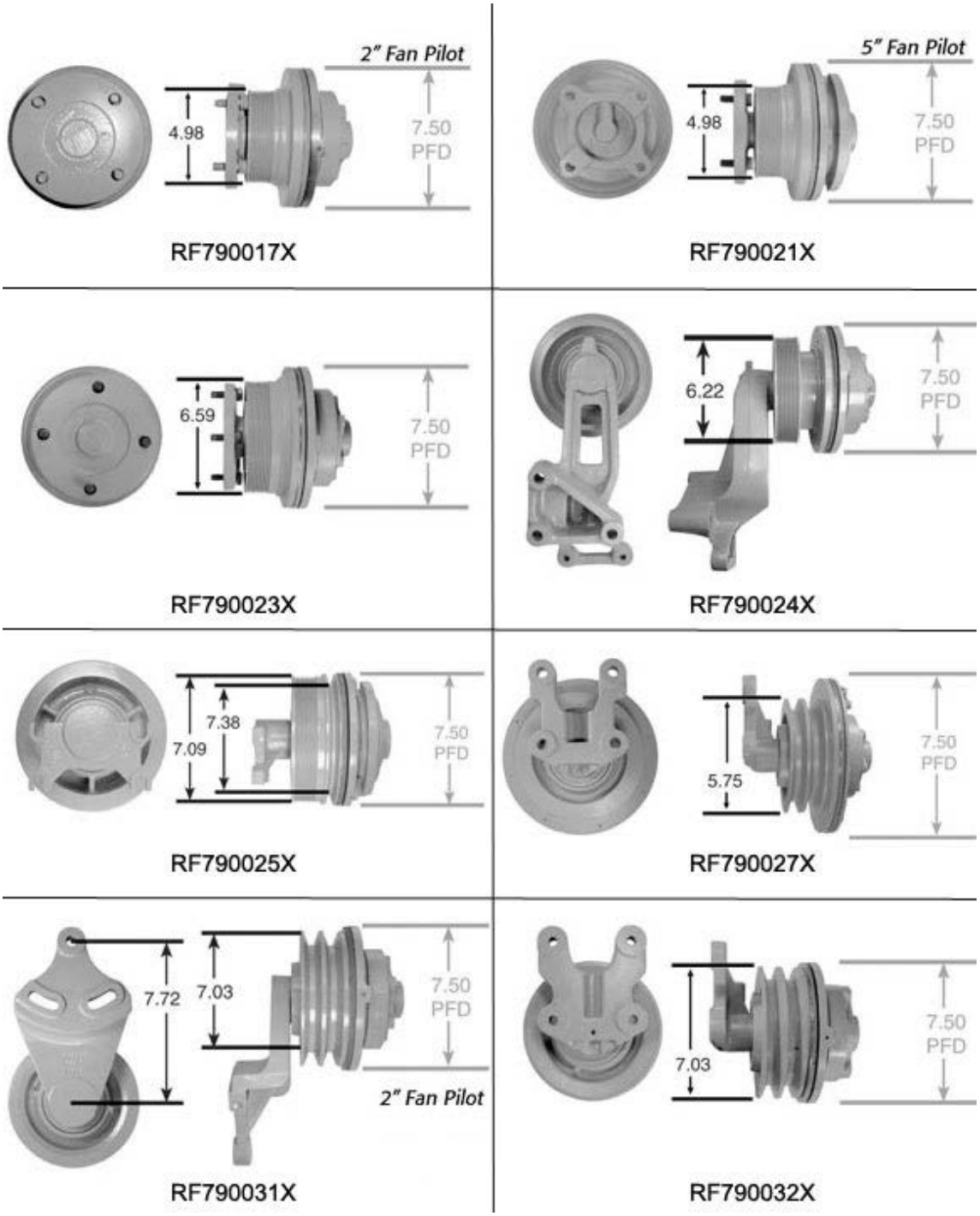


RF790016X

Horton® Fan Clutches − New/Reman.



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF790000X	Cummins® 444, L10, NT, NTA, Various NTC	2V	S	790000	35 lbs.	FC00H1	RF994307
RF790001X	Cummins® NH 230, NTA 400, Various NTC	2V	S	790001	40 lbs.	FC00H1	RF994307
RF790002X	Cummins® F 290, N14, NTA, NTA 400, Various NTC	2V	S	790002	40 lbs.	FC00H1	RF994307
RF790008X	Cummins® NTC	2V	S	790008	40 lbs.	FC00H1	RF994307

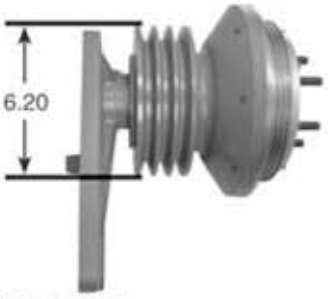
RF790010X	Cummins® L10, NTC	8K	S	790010	40 lbs.	FC00H1	RF994307
RF790012X	Cummins® C Series, ISC	8K	S	790012	40 lbs.	FC00H1	RF994307
RF790013X	Cummins® C Series, ISC	8K 1V	S	790013	50 lbs.	FC00H1	RF994307
RF790016X	Cummins® L10	8K	S	790016	40 lbs.	FC00H1	RF994307
RF790017X	Cummins® L10, M11	8K	S	790017	40 lbs.	FC00H1	RF994307
RF790021X	Cummins® L10, M11, N14	8K	S	790021	33.5 lbs.	FC00H1	RF994307
RF790023X	Cummins® L10, M11	8K	S	790023	40 lbs.	FC00H1	RF994307
RF790024X	Cummins® L10	8K	S	790024	−	FC00H1	RF994307
RF790025X	Cummins® C Series, ISC, ISL	8K 1V	S	790025	−	FC00H1	RF994307
RF790027X	Cummins® N14, NTA, Various NTC	2V	S	790027	−	FC00H1	RF994307
RF790031X	Cummins® NTC	2V	S	790031	−	FC00H1	RF994307
RF790032X	Cummins® NT	2V	S	790032	−	FC00H1	RF994307

Detroit Diesel® Engine (DriveMaster) GoldTop®

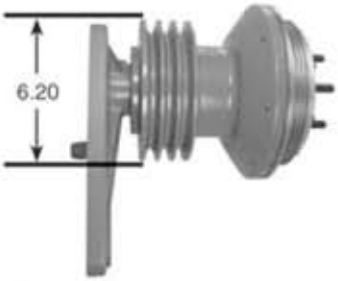
RF799027X

RF799041X

RF799049X



RF799065X



RF799067X

RF799223X

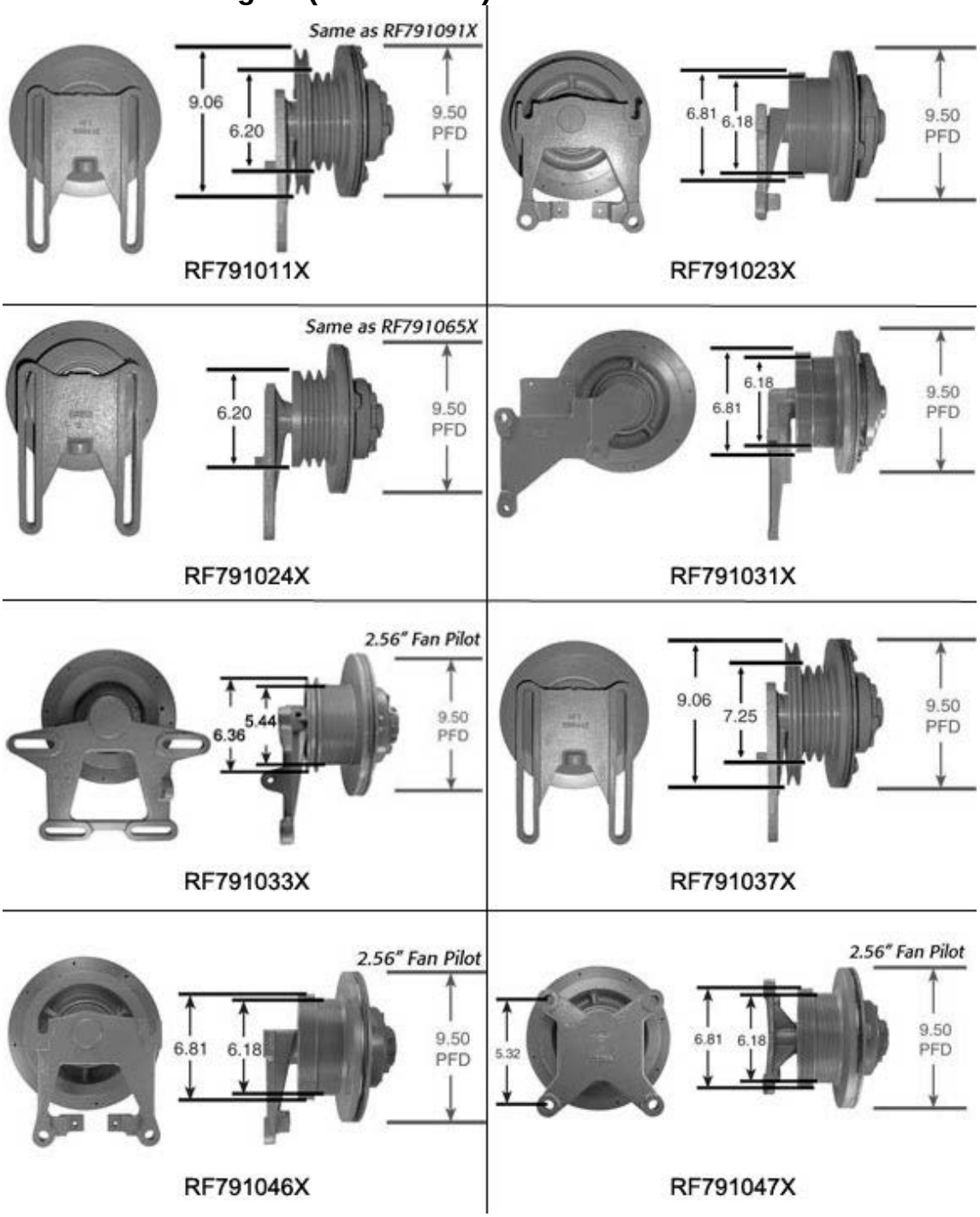
RF799300X

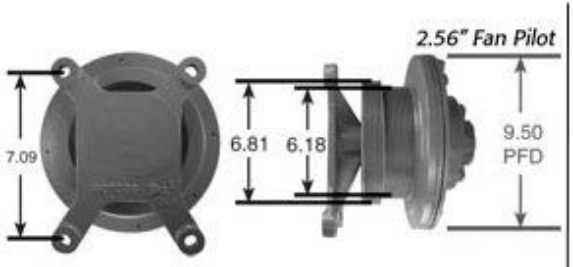
RF799410X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799027X	Detroit Diesel® 60 Series	3V	DriveMaster – GoldTop®	799027	–	FC99H1	RF14256K
RF799041X	Detroit Diesel® 60 Series	14K	DriveMaster – GoldTop®	799041	–	FC99H1	RF14256K

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799049X	Detroit Diesel® 60 Series	10K	DriveMaster – GoldTop®	799049	–	FC99H1	RF14256K
RF799065X	Detroit Diesel® 60 Series	3V	DriveMaster – GoldTop®	799065	39.5 lbs.	FC99H1	RF14256K
RF799067X	Detroit Diesel® 60 Series	3V	DriveMaster – GoldTop®	799067	41.7 lbs.	FC99H1	RF14256K
RF799223X	Detroit Diesel® 60 Series	10K	DriveMaster – GoldTop®	799223	53.7 lbs.	FC99H1	RF14256K
RF799300X	Detroit Diesel® 60 Series	10K	DriveMaster – GoldTop®	799300	–	FC99H1	RF14256K
RF799410X	Detroit Diesel® 60 Series	10K	DriveMaster – GoldTop®	799410	–	FC99H1	RF14256K

Detroit Diesel® Engine (Model HT/S)





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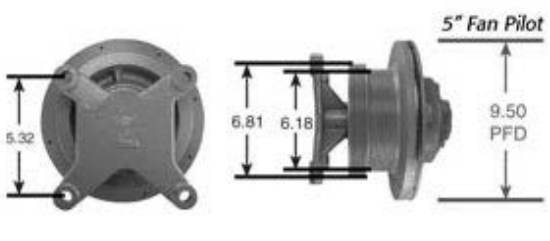

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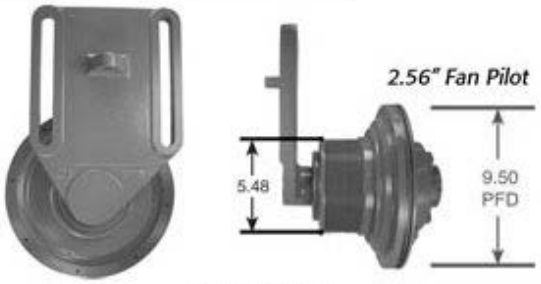

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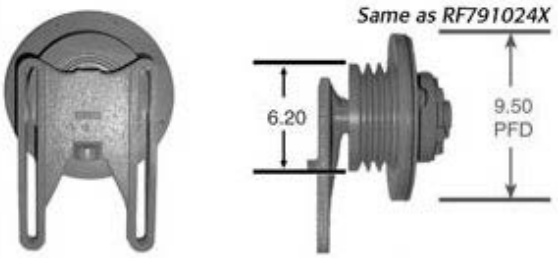

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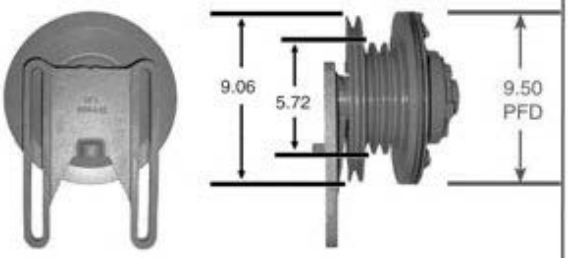

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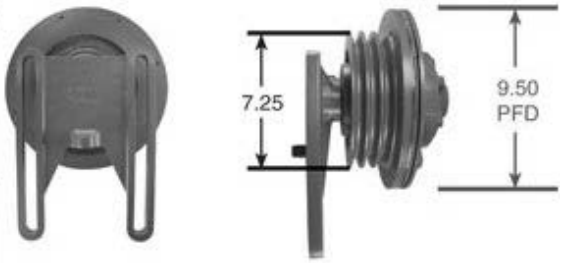

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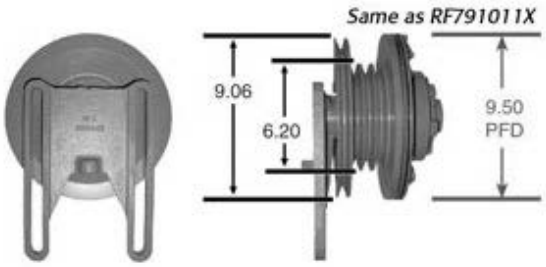

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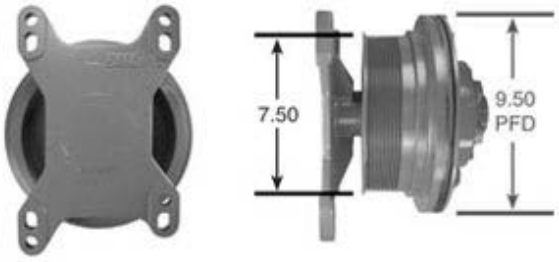

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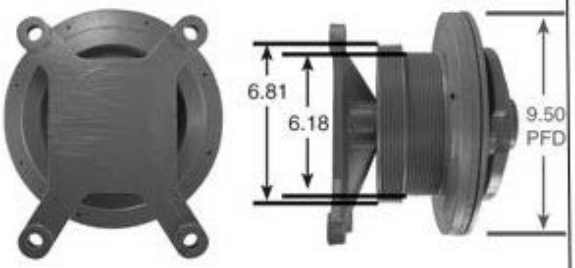

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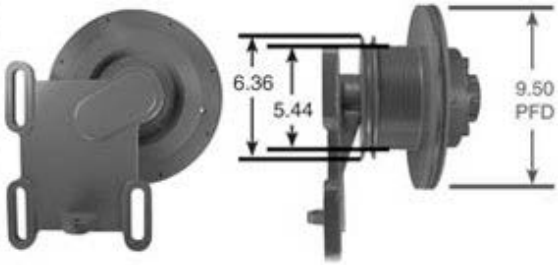
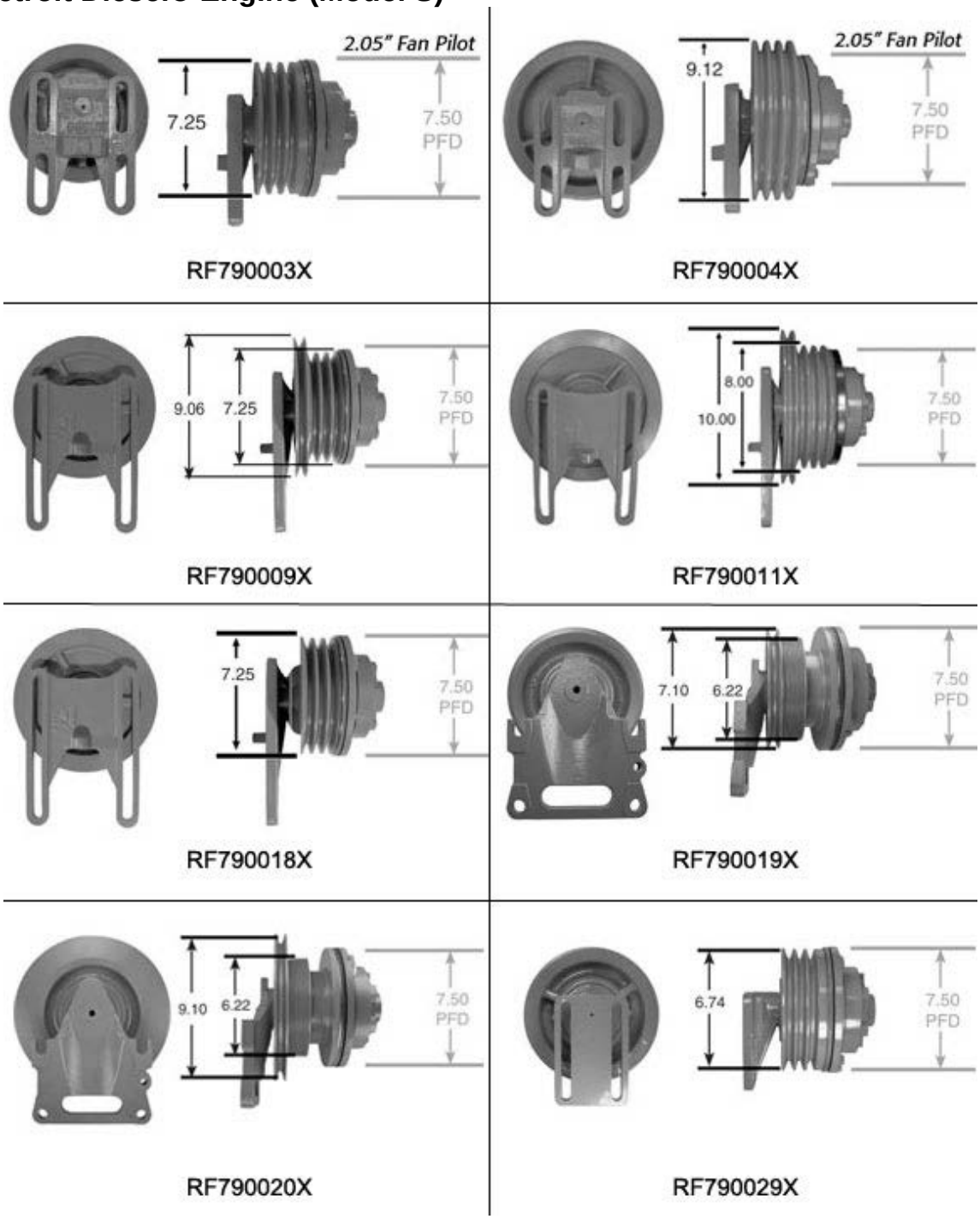


RF791114X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791011X	Detroit Diesel® 50 Series, 60 Series	4V	HT/S	791011	44 lbs.	FC10H1	RF994305
RF791023X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791023	44 lbs.	FC10H1	RF994305
RF791024X	Detroit Diesel® 60 Series	3V	HT/S	791024	43 lbs.	FC10H1	RF994305
RF791031X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791031	44 lbs.	FC10H1	RF994305
RF791033X	Detroit Diesel® 60 Series	1V, 14K	HT/S	791033	44 lbs.	FC10H1	RF994305
RF791037X	Detroit Diesel® 60 Series	4V	HT/S	791037	54 lbs.	FC10H1	RF994305
RF791046X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791046	−	FC10H1	RF994305
RF791047X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791047	−	FC10H1	RF994305
RF791050X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791050	−	FC10H1	RF994305
RF791052X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791052	−	FC10H1	RF994305
RF791062X	Detroit Diesel® 60 Series	14K	HT/S	791062	−	FC10H1	RF994305
RF791077X	Detroit Diesel® 50 Series	4V	HT/S	791077	−	FC10H1	RF994305
RF791083X	Detroit Diesel® 60 Series	3V	HT/S	791083	−	FC10H1	RF994305
RF791091X	Detroit Diesel® 50 Series, 60 Series	4V	HT/S	791091	−	FC10H1	RF994305
RF791105X	Detroit Diesel® 60 Series	10K	HT/S	791105	−	FC10H1	RF994305
RF791107X	Detroit Diesel® 60 Series	6K, 10K	HT/S	791107	−	FC10H1	RF994305
RF791114X	Detroit Diesel® 60 Series	1V, 14K	HT/S	791114	−	FC10H1	RF994305

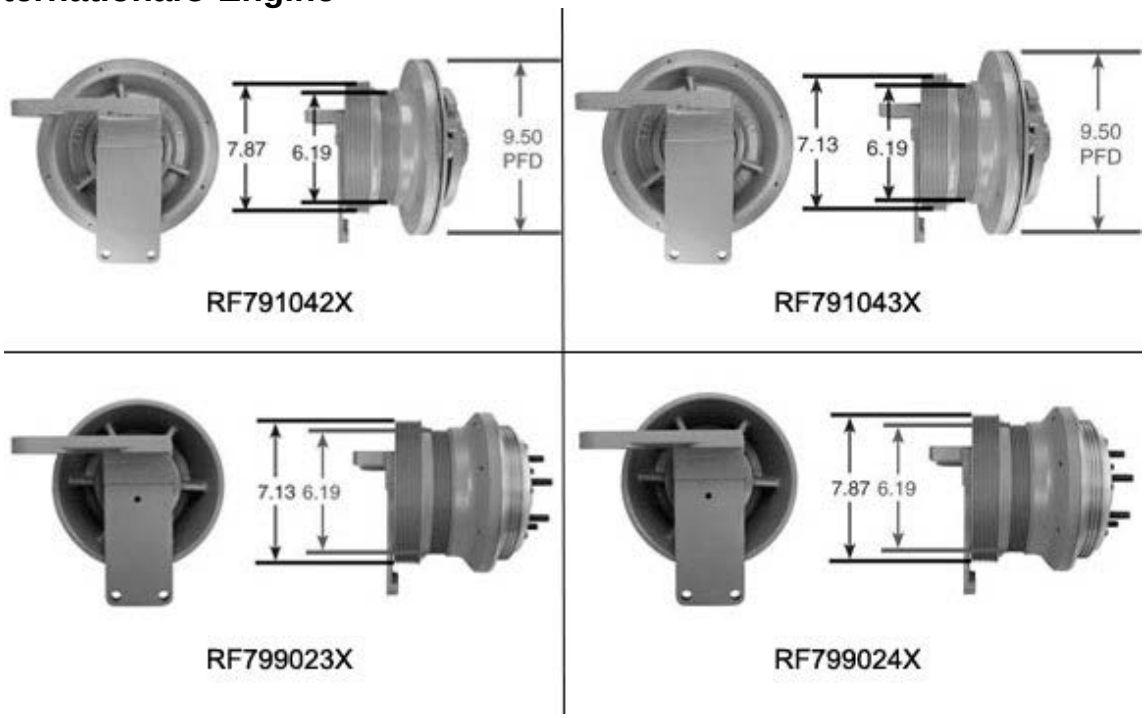
Detroit Diesel® Engine (Model S)



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF790003X	Detroit Diesel® 12V−71, 6−71, 6V−53, 6V71, 6V92, 8V71, 8V92	3V	S	790003	40 lbs.	FC00H1	RF994307
RF790004X	Detroit Diesel® 6−71, 6V53, 6V71, 6V92, 8V71, 8V92, 12V71	3V	S	790004	40 lbs.	FC00H1	RF994307
RF790009X	Detroit Diesel® 50 Series, 60 Series	4V	S	790009	46 lbs.	FC00H1	RF994307

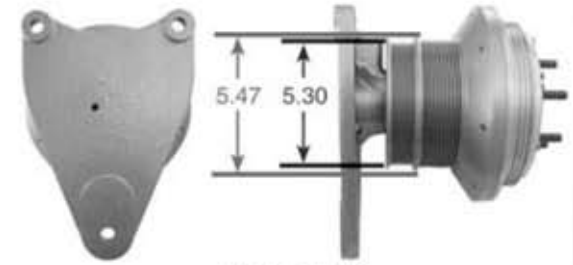
RF790011X	Detroit Diesel® 60 Series	4V	S	790011	40 lbs.	FC00H1	RF994307
RF790018X	Detroit Diesel® 60 Series	3V	S	790018	40 lbs.	FC00H1	RF994307
RF790019X	Detroit Diesel® 60 Series	1V, 8K	S	790019	−	FC00H1	RF994307
RF790020X	Detroit Diesel® 60 Series	1V, 8K	S	790020	−	FC00H1	RF994307
RF790029X	Detroit Diesel® 6−71	3V	S	790029	−	FC00H1	RF994307

International® Engine



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791042X	International® DT466	8K, 6K	HT/S	791042	−	FC10H1	RF994305
RF791043X	International® INT530	8K, 6K	HT/S	791043	−	FC10H1	RF994305
RF799023X	International® INT530	8K, 6K	DriveMaster − GoldTop®	799023	−	FC99H1	RF14256K
RF799024X	International® DT466, DT466E	8K, 6K	DriveMaster − GoldTop®	799024	−	FC99H1	RF14256K

Mack® Engine



RF799491X

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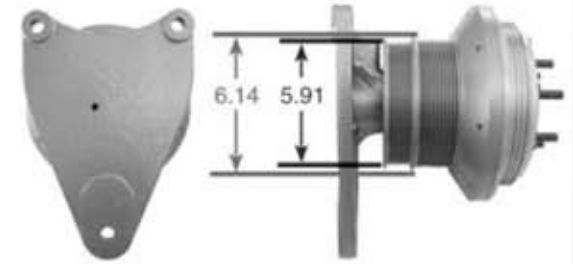

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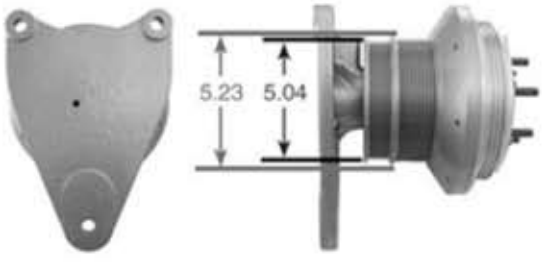

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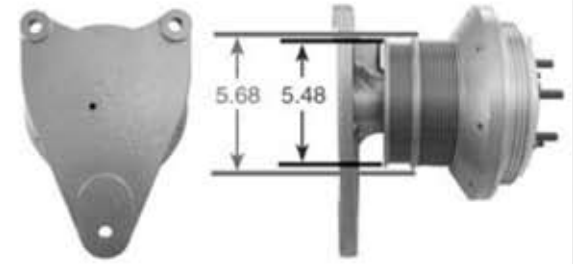

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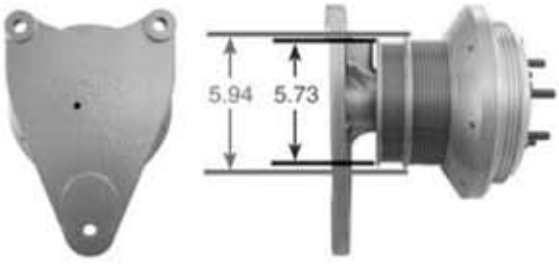

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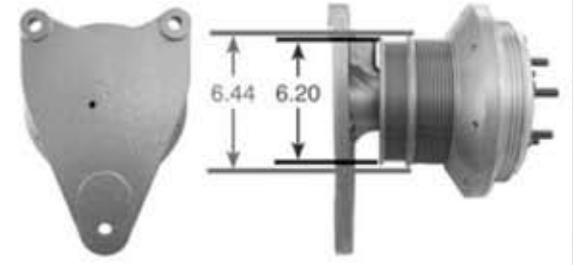

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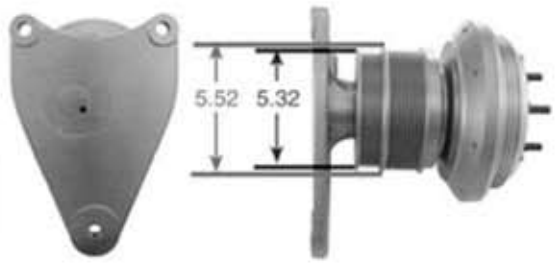
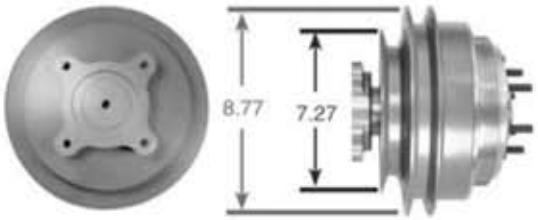


RF799499X

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799491X	Mack® ASET AC	6PK, 10PK	DriveMaster – GoldTop®	799491	–	FC99H1	RF14256K
RF799492X	Mack® ASET AC	6PK, 10PK	DriveMaster – GoldTop®	799492	–	FC99H1	RF14256K

SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799493X	Mack® ASET AC	6PK, 10PK	DriveMaster – GoldTop®	799493	–	FC99H1	RF14256K
RF799494X	Mack® ASET AI	6PK, 10PK	DriveMaster – GoldTop®	799494	–	FC99H1	RF14256K
RF799495X	Mack® ASET AI, ASET AMI	6PK, 10PK	DriveMaster – GoldTop®	799495	–	FC99H1	RF14256K
RF799496X	Mack® ASET AI	6PK, 10PK	DriveMaster – GoldTop®	799496	–	FC99H1	RF14256K
RF799497X	Mack® ASET AMI	6PK, 10PK	DriveMaster – GoldTop®	799497	–	FC99H1	RF14256K
RF799499X	Mack® ASET AMI	6PK, 10PK	DriveMaster – GoldTop®	799499	–	FC99H1	RF14256K

MCI® Remote Mount



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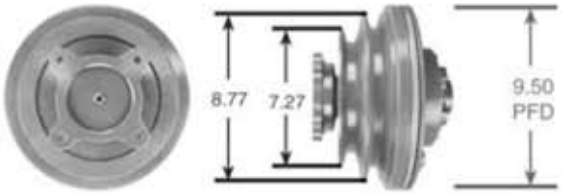

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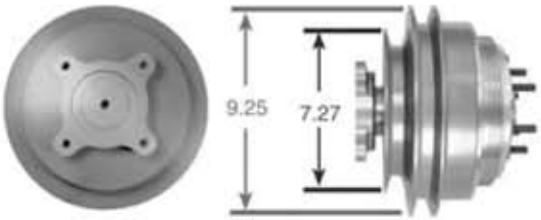

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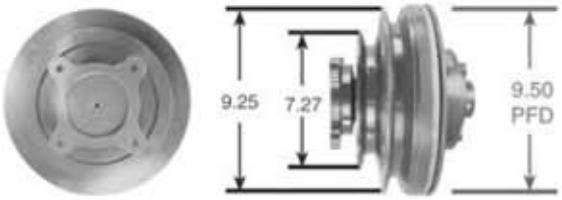

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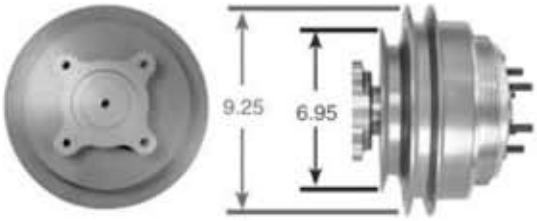

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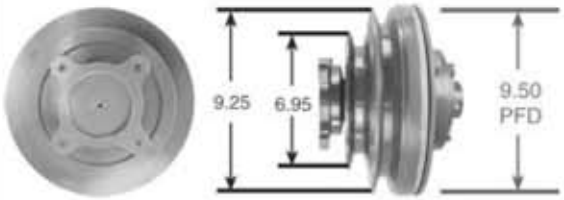

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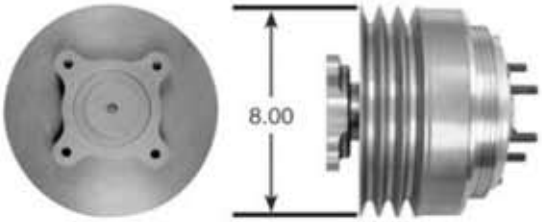

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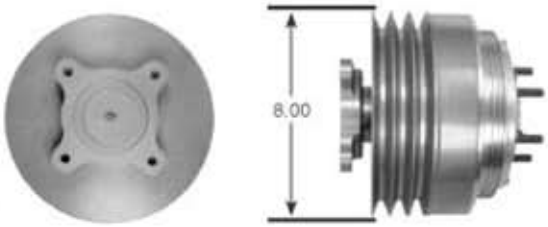
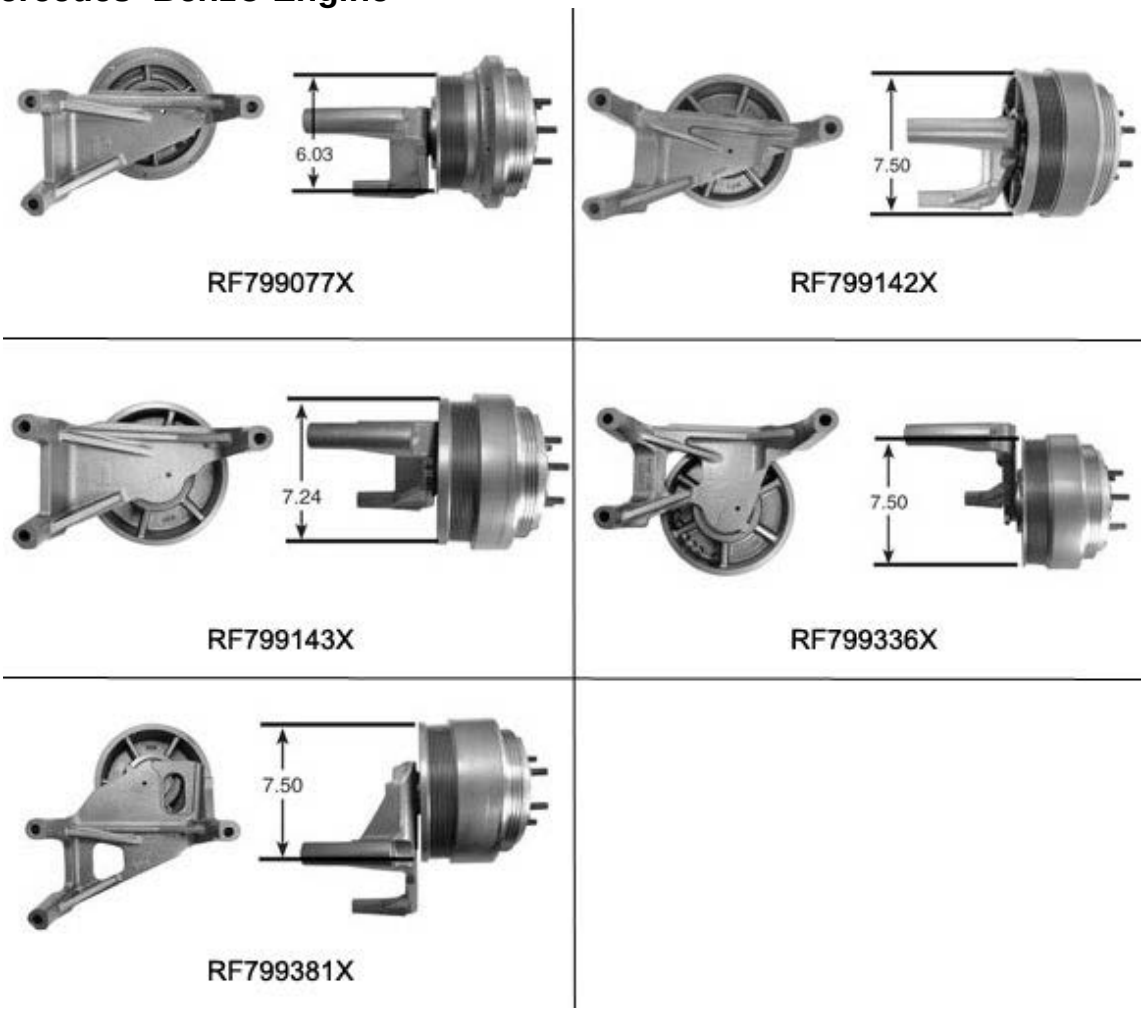


RF999285

SKU#	Product Description	Belt Groove	Model	Mfg.#	Approximate Weight	Core Group	Rebuild Kit
RF791039GTNX	Caterpillar® 3176 / Cummins® All Engines D-Coach / Detroit Diesel® 60 Series	2V	DriveMaster – GoldTop®	791039GTN	–	FC99H1	RF14200K

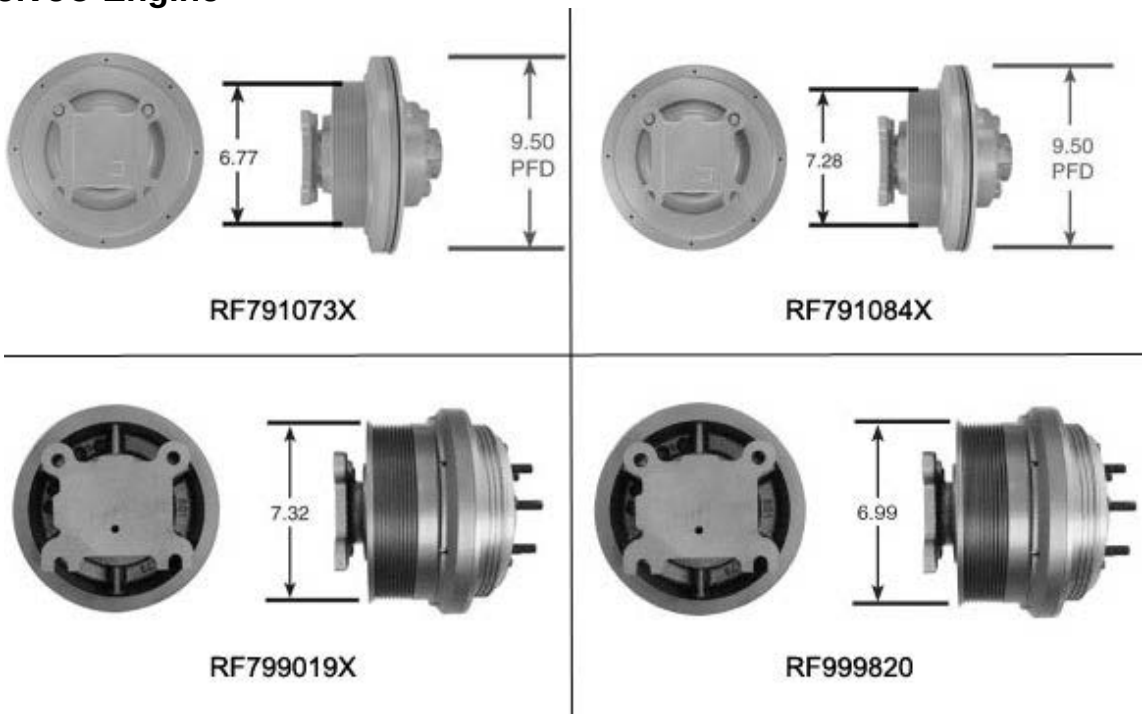
SKU#	Product Description	Belt Groove	Model	Mfg.#	Approximate Weight	Core Group	Rebuild Kit
RF791039X	Caterpillar® 3176 / Cummins® All Engines D-Coach / Detroit Diesel® 60 Series	2V	HT/S	791039	46 lbs.	FC10H1	RF994305
RF791040GTNX	Caterpillar® 3176 and All Engine Coach / Cummins® L10 and All Engines D-Coach / Detroit Diesel® 60 Series, 8V92 and All Engines Coach	2V	DriveMaster - GoldTop®	791040GTN	-	FC99H1	RF14200K
RF791040X	Caterpillar® 3176 and All Engine Coach / Cummins® L10 and All Engines D-Coach / Detroit Diesel® 60 Series, 8V92 and All Engines Coach	2V	HT/S	791040	48 lbs.	FC10H1	RF994305
RF791041GTNX	Caterpillar® All Engines Coach / Cummins® All Engines Coach / Detroit Diesel® 60 Series and All Engines Coach	2V	DriveMaster - GoldTop®	791041GTN	-	FC99H1	RF14200K
RF791041X	Caterpillar® All Engines Coach / Cummins® All Engines Coach / Detroit Diesel® 60 Series and All Engines Coach	2V	HT/S	791041	48 lbs.	FC10H1	RF994305
RF799285X	Detroit Diesel® 60 Series	3V	DriveMaster - GoldTop®	799285	-	FC99H1	RF14256K
RF999285	Detroit Diesel® 60 Series	3V	DriveMaster - GoldTop®	999285	-	None (NEW)	RF14256K

Mercedes−Benz® Engine



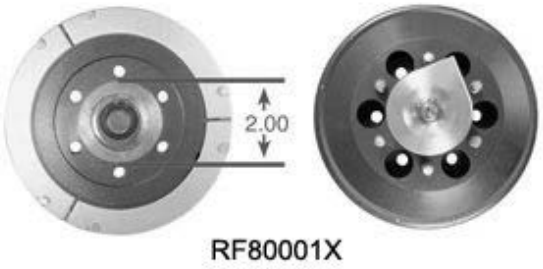
SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF799077X	Mercedes−Benz® MBE 4000	8K	DriveMaster − GoldTop®	799077	−	FC99H1	RF142561K
RF799142X	Mercedes−Benz® MBE 4000	8K	DriveMaster − GoldTop®	799142	−	FC99H1	RF142561K
RF799143X	Mercedes−Benz® MBE 4000	8K	DriveMaster − GoldTop®	799143	−	FC99H1	RF142561K
RF799336X	Mercedes−Benz® MBE 4000	8K	DriveMaster − GoldTop®	799336	−	FC99H1	RF142561K
RF799381X	Mercedes−Benz® MBE 4000	8PK	DriveMaster − GoldTop®	799381	−	FC99H1	RF14256K

Volvo® Engine



SKU#	Product Description	Belt Groove	Model	Mfg.#	Wt.	Core Group	Rebuild Kit
RF791073X	Cummins® ISX, N14 / Volvo® VE D12	10K	HT/S	791073	37.5 lbs.	FC10H1	RF994305
RF791084X	Cummins® ISM / Detroit Diesel® 60 Series / Volvo® VE D12	10K	HT/S	791084	−	FC10H1	RF994305
RF799019X	Cummins® ISM / Volvo® VE D12	10K	DriveMaster − GoldTop®	799019	−	FC99H1	RF14256K
RF999820	Volvo® VE D12	12PK	DriveMaster − GoldTop®	999820	−	None (NEW)	RF14256K

KysorB™/BW Style Fan Clutches − Reman.



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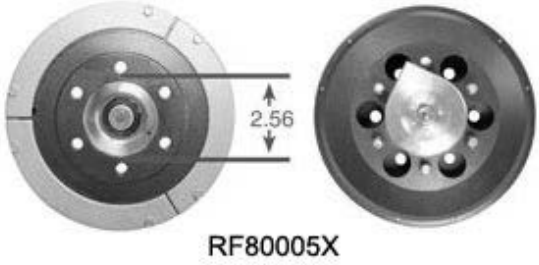

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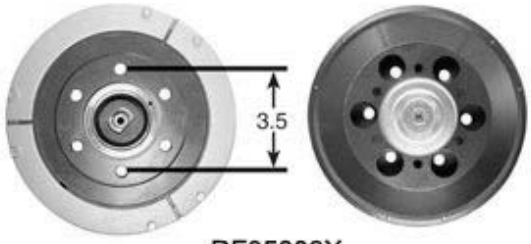

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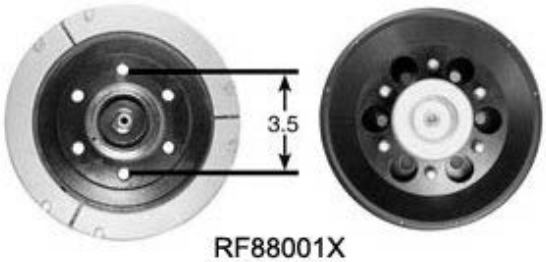
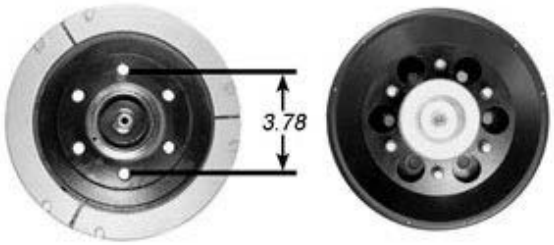


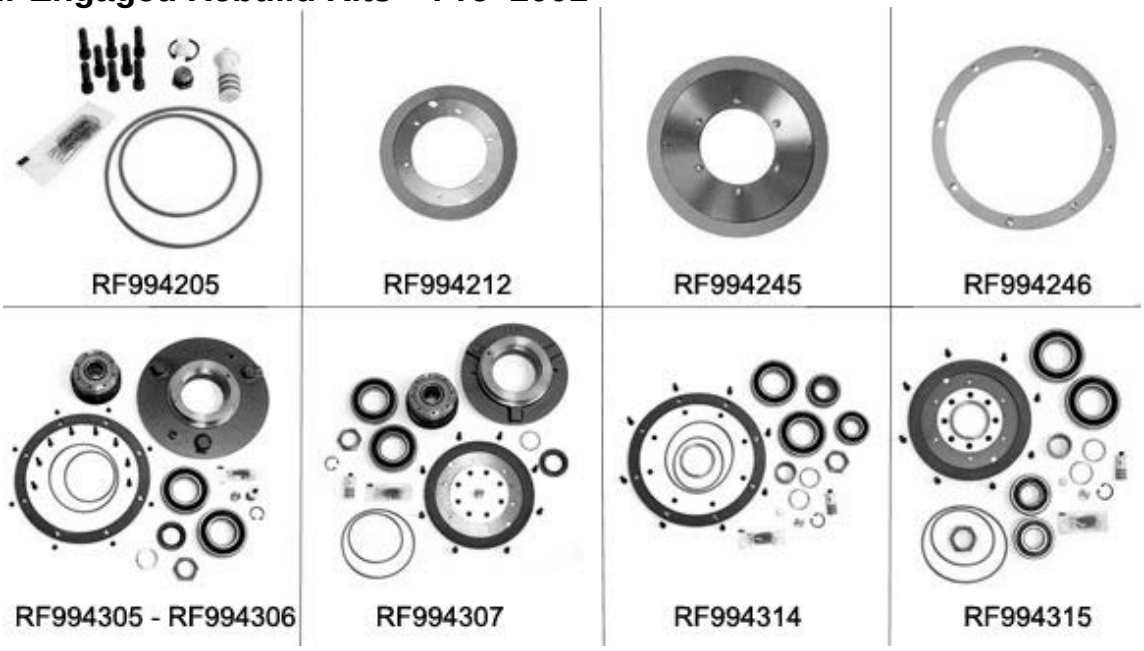
RF88001X



RF88003X

SKU#	Product Description	OEM Number	Wt.	Core Group	Rebuild Kit
RF80001X	K−22 Front Air Reman. Fan Clutch	1090−07050−01 1090−08000−01	14 lbs.	FC101KF	RF8000KCK
RF80005X	K−22 Front Air Reman. Fan Clutch for Mack Application Only	1090−08000−05	14 lbs.	FC101KF	RF8000KCK
RF85002X	K−22 Rear Air Reman. Fan Clutch for some Ford Application; No Studs, 5/16" Threaded Holes	1090−08500−02	14 lbs.	FC101KR	RF8500KCK
RF88001X	K−22 & K−26 Rear Air (Hi−Torque) Reman. Fan Clutch; Most Common 2003 to Present	1090−08500−01 1090−09500−01	14 lbs.	FC102KR	RF8800KCK
RF88003X	K−26 Rear Air (Hi−Torque) Reman. Fan Clutch; Most Common 2003 to Present	1090−09500−03	14 lbs.	FC102KR	RF8800KCK

Air Engaged Rebuild Kits − Pre−2001



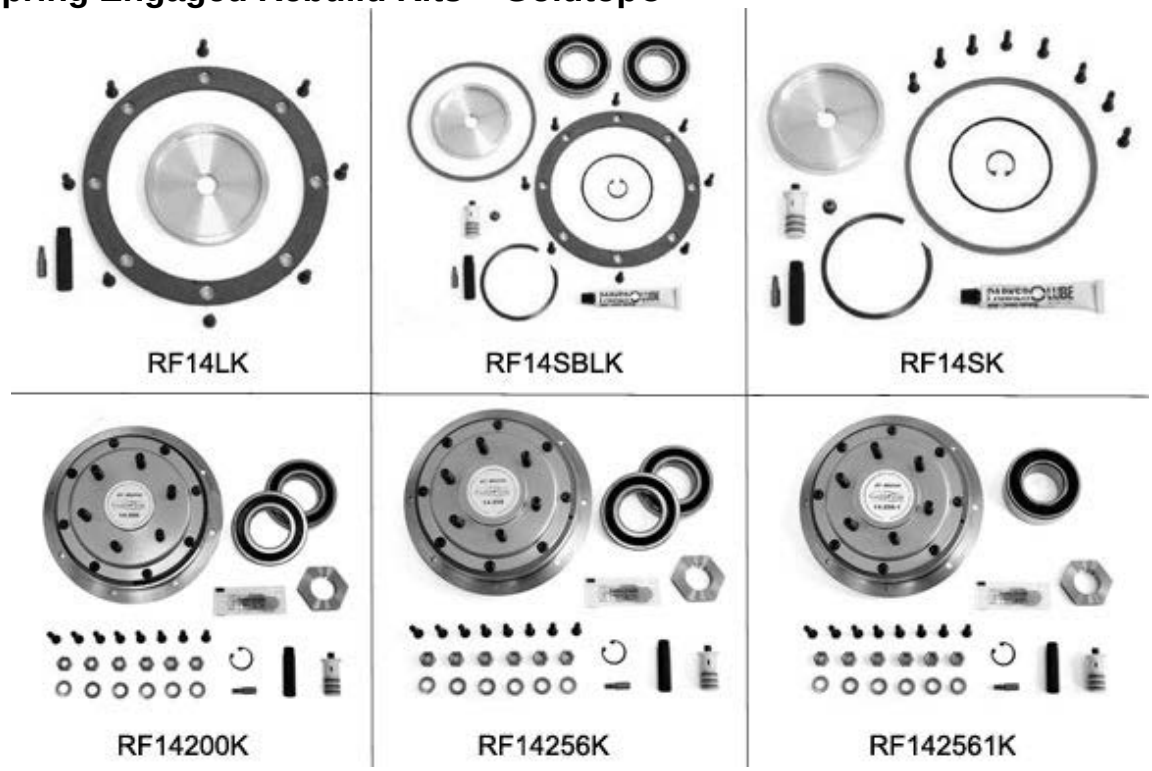
SKU#	Product Description
RF994205	Minor Seal Repair Kit
RF994212	Lining Kit
RF994245	Lining Kit
RF994246	Lining Kit
RF994305	Super Repair Kit 9.5" HT/S Series
RF994306	Super Repair Kit 9.5" HT/S Series "Special Plate"
RF994307	Super Repair Kit 7.5" S Series
RF994314	Major Repair Kit S Series
RF994315	Major Repair Kit HT/S Series

Front and Rear Air Rebuild Kits

Pulley Bearing Kits will repair all 1077 series rear air hubs.

SKU#	Product Description	OEM Number
RF8000KCK	K−22 Front Air Seal/Lining Combo Kit	1033−05435−02
RF8000KSK	K−22 Front Air Seal Leak Repair Kit	N/A
RF8101K	Pulley Bearing Kit	1033−07781−01
RF8201K	Pulley Bearing Kit	1033−07782−01
RF8202K	Pulley Bearing Kit	1033−07782−02
RF8203K	Pulley Bearing Kit	1033−07782−03
RF8204K	Pulley Bearing Kit	1033−07782−04
RF8500KCK	K−22 Rear Air Seal/Lining Combo Kit	1033−05435−03
RF8500KLK	K−22 Lining Kit	1033−08250−01
RF8500KSK	K−22, K−26 & K−30 Rear Air Seal Leak Repair Kit	1033−08233−01
RF8800KCK	K−26 & K−30 Rear Air Seal/Lining Combo Kit	1033−09339−01
RF8800KLK	K−26 & K−30 Lining Kit	1033−09340−01

Spring Engaged Rebuild Kits − Goldtop®



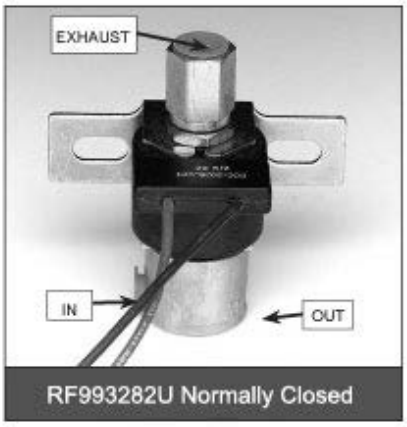
Over 5,000 inch−pounds of torque

SKU#	Product Description
RF14200K	2" Pilot, 2 Pulley Bearings Spring Engaged Rebuild Kit − Gold Top®
RF142561K	2.56" Pilot, 1 Pulley Bearing Spring Engaged Rebuild Kit − Gold Top®
RF14256K	2.56" Pilot, 2 Pulley Bearings Spring Engaged Rebuild Kit − Gold Top®
RF14LK	Lining Kit − Gold Top®
RF14SBLK	Seal, Bearing & Lining Kit − Gold Top®
RF14SK	Seal Kit − Gold Top®

Solenoid Valve & Filter

RF993282U Normally Open

Used with air engaged fan clutches with Normally Closed Thermal Switch or use with spring engaged fan clutches



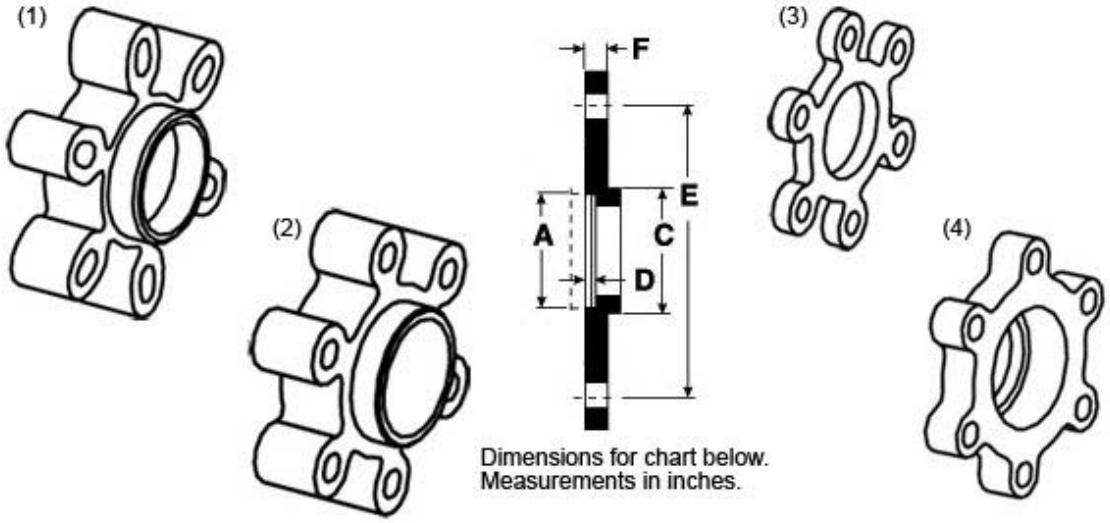
RF993282U Normally Closed

Used with air engaged fan clutches with Normally Open Thermal Switch

RF993282U and RF993283U 3−way Solenoid Valves can be plumbed either Normally Open or Normally Closed.

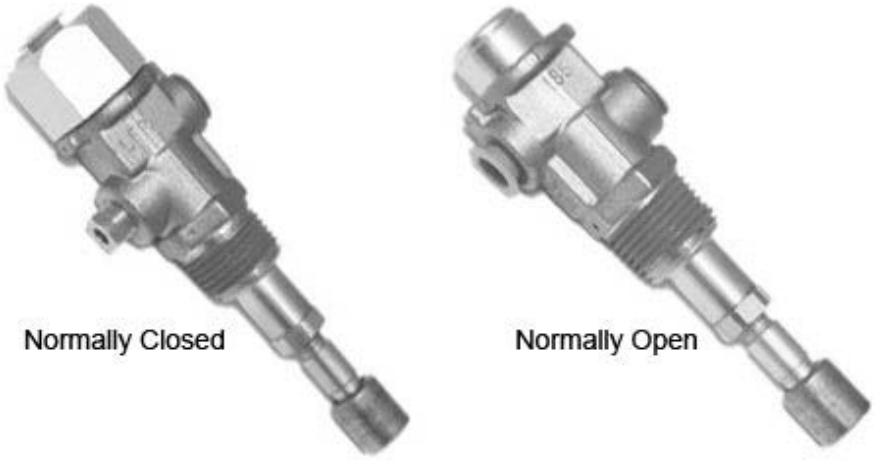
SKU#	Product Description	Circuit Type	Notes	OEM Part Number
RF993282U	12 Volt Solenoid Valve	Normally Open/Normally Closed	3−Way Universal Type 125 NPTF	993282
RF993283U	24 Volt Solenoid Valve	Normally Open/Normally Closed	3−Way Universal Type 125 NPTF	993283

Spacers & Adapters



SKU#	Product Description	Female Pilot Dia. (A)	Male Pilot Dia. (C)	Female Pilot Depth (D)	Bolt Circle (E)	Thickness (F)	Comments	OEM #	FIG. #
RF994039	Spacer for Horton® Fan Clutch	2.06"	2.00"	.62"	3.5"−4.0"	1.00"	For DDA Drives	984081	1
RF994040	Spacer for Horton® Fan Clutch	2.00"	2.00"	.62"	3.50"	1.00"	−	984080	2
RF994052	Spacer for Horton® Fan Clutch	2.00"	2.00"	.75"	3.50"	1.23"	−	984086	2
RF994053	Spacer for Horton® Fan Clutch	2.00"	2.56"	0.75"	3.50"	.62"	−	984087	4
RF994072	Spacer for Horton® Fan Clutch	2.00"	2.00"	.75"	3.50"	2.25"	−	984089	2
RF994073	Spacer for Horton® Fan Clutch	2.00"	2.00"	.26"	3.50"	.62"	−	984090	2
RF994074	Spacer for Horton® Fan Clutch	2.00"	−	Thru Hole	3.50"	.25"	Flat Spacer Thru Holes	984091	3

Temperature Controls/Shutterstats



SKU#	Product Description	Port Size
RF35029	185°F Normally Closed Temperature Control/Shutterstats for KysorÂ™ Style Clutch	1/8−27 NPTF
RF35030	190°F Normally Closed Temperature Control/Shutterstats for KysorÂ™ Style Clutch	1/8−27 NPTF
RF35031	195°F Normally Closed Temperature Control/Shutterstats for KysorÂ™ Style Clutch	1/8−27 NPTF
RF36029	185°F Normally Open Temperature Control/Shutterstats for KysorÂ™ Style Clutch	1/8−27 NPTF

Thermal Switches

Features:

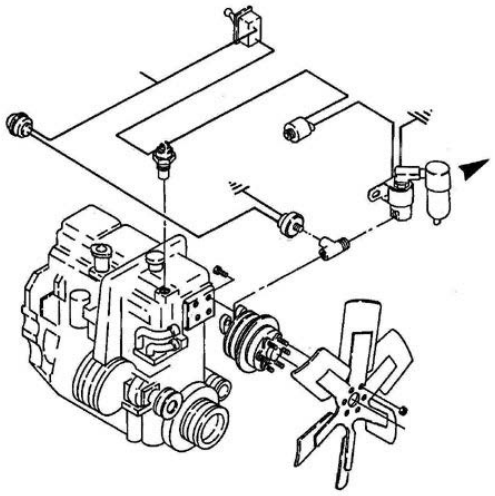
- The thermal switch is an integrated temperature control and/or overheat protective device.
- The switching circuit features mechanical load switching, designed for frequent or high current switching.
- Controls include the fan clutch, radiator shutters and engine shutdown (overtemp).

SKU#	Product Description
RF993603	190° Normally Closed Thermal Switch
RF993605	195° Normally Closed Thermal Switch used most on Cummins®
RF993606	200° Normally Closed Thermal Switch used most on Detroit®
RF993607	205° Normally Closed Thermal Switch used most on Caterpillar®
RF993611	185° Normally Open Thermal Switch
RF993616	185° Normally Open Thermal Switch
RF993617	190° Normally Open Thermal Switch
RF993624	210° Normally Open Thermal Switch
RF993625	215° Normally Open Thermal Switch
RF993626	220° Normally Open Thermal Switch
RF993653	195° Normally Open Thermal Switch used most on Cummins®
RF993654	200° Normally Open Thermal Switch used most on Detroit®
RF993655	205° Normally Open Thermal Switch used most on Caterpillar®
RF993665	220° Normally Closed Thermal Switch
RF993684	210° Normally Closed Thermal Switch
RF993685	215° Normally Closed Thermal Switch

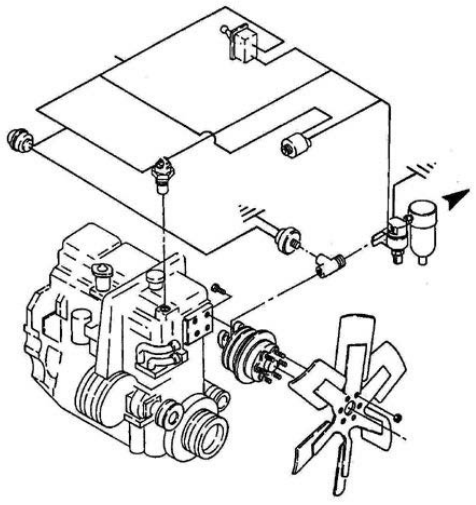
COOLING SYSTEM CONTROLS

- A **Normally Closed Electric Control System** has a normally closed Thermal Switch and a normally open Solenoid Valve.
- A **Normally Open Electric Control System** has a normally open Thermal Switch and a normally closed Solenoid Valve.

NORMALLY CLOSED



NORMALLY OPEN



Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan won't engage when manual override is turned on.	Manual override switch, air solenoid valve or related plumbing or wiring is faulty.	Replace faulty component.
Fan won't cycle on when air conditioning test is performed.	Outside air temperature is too low, there is a low refrigerant charge or refrigerant pressure switch is faulty.	1. Check air conditioning system. 2. Replace pressure switch if required.
Overtemp warning activates before fan engages.	Defective overtemp warning switch.	Replace overtemp warning switch.
Engine appears to overheat. (Fan won't engage when engine coolant temp gauge is above 195−205°F or overtemp warning activates before fan engages.)	1. Air Solenoid valve may be plumbed incorrectly 2. Overtemp warning switch faulty (warning light activates prematurely). 3. Overtemp warning switch is too far away from the fan temp switch. 4. Temp gauge is faulty (reads high). 5. Fan temp switch is faulty.	1. Check solenoid plumbing. Replumb solenoid valve. 2. Replace overtemp warning switch. 3. Move overtemp warning switch as close to the fan temp switch as possible. 4. Replace temp gauge. 5. Replace fan temp switch.
Fan engages at low engine temperatures while vehicle is moving.	1. Normal condition in extremely hot weather or at slow vehicle speeds in warm weather. 2. Faulty temp gauge. 3. A/C system overcharged or condenser covered with debris. 4. Refrigerant pressure switch may be faulty. 5. Fan temp switch is faulty, if fan engages at low engine temp and A/C is **OFF**.	1. Normal condition in hot weather. 2. Replace temp gauge or sender. 3. Check A/C system. 4. Replace pressure switch if necessary. 5. Replace fan temp switch.
Fan won't run under any condition.	1. Air line may be leaking (Horton/Evans air−on fan drives). 2. Wiring may be shorted and/or fuses, circuit breakers blown. 3. Air solenoid may be faulty. Test air solenoid valve by shorting across the terminals of the temp switch to energize the air solenoid valve and to activate the fan drive.	1. Check air lines. Fix where necessary. 2. Check wiring, fuses, and circuit breakers. 3. If solenoid does not activate, replace solenoid.

Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan runs all the time when the air conditioning is OFF.	1. Manual override switch is ON. 2. Air solenoid valve may be faulty or plumbed incorrectly. 3. Air line to clutch may be leaking (Bendix/Kysor air−off fan drives). 4. Fan temp switch may be stuck open; with engine temp below 180°F short across terminals, if fan turns off, switch is faulty. 5. Pressure switch may be stuck open; turn off A/C system, if fan continues to run, short across pressure switch, if fan stops, pressure switch is defective.	1. Turn manual override off. 2. Check air solenoid valve plumbing, replace valve if faulty. 3. Check air lines, fix where necessary. 4. Replace fan temp switch. 5. Replace pressure switch.
Fan runs all the time when the air conditioning is ON.	1. This is a normal condition in extremely hot weather; spray water on A/C condenser (fan should disengage for a short period of time and then re−engage after water evaporates). 2. Air conditioning system may be over−charged or condenser covered with debris. Turn OFF the A/C system; if the fan stops, the refrigerant pressure switch is functioning. 3. Pressure switch may have drifted out of calibration; use pressure gauge to compare actual fan−on and fan−off pressures vs. specified pressures.	1. Normal condition in hot weather. 2. Service A/C system. Check A/C pressure and condenser. 3. If out of calibration, replace pressure switch.
Fan operation is erratic.	1. Loose electrical connection. 2. Fan temp or pressure switch may be faulty.	1. Check wiring; fix where necessary. 2. If other system components and connections check out okay, (a) replace pressure switch if erratic fan operation is associated with air conditioning at idle or (b) replace fan temp switch if the erratic operation occurs primarily when the engine is hot.
Fan cycles frequently when engine is hot.	The fan should remain engaged long enough to reduce temperature 7−10ºF. The fan temp switch is defective if the fan disengages after only a 3−4º reduction.	Replace fan temp switch.

Normally Closed Fan Clutches

Problem	Possible Cause	Solution
Fan cycles frequently when vehicle is stationary with A/C **ON**.	Up to 4 cycles per minute is a normal condition for conventional control systems; turn off air conditioning system and cycling should stop.	To reduce cycling by up to 90%, install an Index K7 fan control system.
Fan turns on whenever ignition is on (turns off when engine gets hot).	Air solenoid valve plumbed backwards.	Check solenoid installation instructions; plumb correctly.
Control system fuses blown.	1. If fuse blows whenever the ignition is turned on, the problem is most likely related to a fault in the wiring. 2. If the fuses blow only when the fan engages, the fault is probably associated with the solenoid valve.	1. Check wiring, fix where necessary. 2. Use an ohmmeter to check for a shorted solenoid coil (the coil resistance should be greater than 14 ohms). If shorted, replace air solenoid valve.

Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan won't engage when manual override is turned on.	Manual override switch, air solenoid valve or related plumbing or wiring is faulty.	Replace faulty component.
Fan won't cycle on when air conditioning test is performed.	Outside air temperature is too low, there is a low refrigerant charge or refrigerant pressure switch is faulty.	1. Check air conditioning system. 2. Replace pressure switch if required.
Override warning activates before fan engages.	Defective overtemp warning switch.	Replace overtemp warning switch.
Engine appears to overheat. (Fan won't engage when engine coolant temp gauge is above 195−205°F or overtemp warning activates before fan engages.)	1. Air Solenoid valve may be plumbed incorrectly 2. Overtemp warning switch faulty (warning light activates prematurely). 3. Overtemp warning switch is too far away from the fan temp switch. 4. Temp gauge is faulty (reads high). 5. Fan temp switch is faulty.	1. Check solenoid plumbing. Replumb solenoid valve. 2. Replace overtemp warning switch. 3. Move overtemp warning switch as close to the fan temp switch as possible. 4. Replace temp gauge. 5. Replace fan temp switch.
Fan engages at low engine temperatures while vehicle is moving, with air conditioning **ON**.	1. Normal condition in extremely hot weather or at slow vehicle speeds in warm weather. 2. Faulty temp gauge. 3. A/C system overcharged or condenser covered with debris. 4. Refrigerant pressure switch may be faulty. 5. Fan temp switch is faulty if fan engages at low engine temp and A/C is **OFF**.	1. Normal condition in hot weather. 2. Replace temp gauge or sender. 3. Check A/C system. 4. Replace pressure switch if necessary. 5. Replace fan temp switch.
Fan won't run under any condition.	1. Air line may be leaking (Horton/Evans air−on fan drives). 2. Wiring may be shorted and/or fuses, circuit breakers blown. 3. Air solenoid may be faulty. Test air solenoid valve by shorting across the terminals of the temp switch to energize the air solenoid valve and to activate the fan drive.	1. Check air lines. Fix where necessary. 2. Check wiring, fuses, and circuit breakers. 3. If solenoid does not activate, replace solenoid.

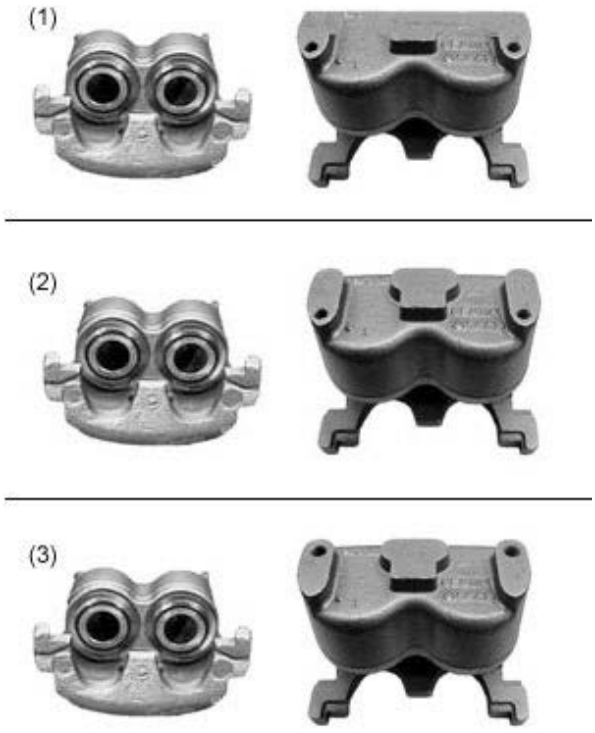
Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan runs all the time when the air conditioning is OFF.	1. Manual override switch is ON. 2. Air solenoid valve may be faulty or plumbed incorrectly. 3. Air line to clutch may be leaking (Bendix/Kysor air−off fan drives). 4. Fan temp switch may be stuck closed; with engine temp below 180°F disconnect wiring, if fan turns off, switch is faulty. 5. Pressure switch may be stuck closed; turn off A/C system, if fan continues to run, disconnect wiring to pressure switch, if fan stops, pressure switch is defective.	1. Turn manual override off. 2. Check air solenoid valve plumbing, replace valve if faulty. 3. Check air lines, fix where necessary. 4. Replace fan temp switch. 5. Replace pressure switch.
Fan runs all the time when the air conditioning is ON.	1. This is a normal condition in extremely hot weather; spray water on A/C condenser (fan should disengage for a short period of time and then re−engage after water evaporates). 2. Air conditioning system may be over−charged or condenser covered with debris. Turn OFF the A/C system; if the fan stops, the refrigerant pressure switch is functioning. 3. Pressure switch may have drifted out of calibration; use pressure gauge to compare actual fan−on and fan−off pressures vs. specified pressures.	1. Normal condition in hot weather. 2. Service A/C system. Check A/C pressure and condenser. 3. If out of calibration, replace pressure switch.
Fan operation is erratic.	1. Loose electrical connection. 2. Fan temp or pressure switch may be faulty.	1. Check wiring; fix where necessary. 2. If other system components and connections check out okay, (a) replace pressure switch if erratic fan operation is associated with air conditioning at idle or (b) replace fan temp switch if the erratic operation occurs primarily when the engine is hot.
Fan cycles frequently when engine is hot.	The fan should remain engaged long enough to reduce temperature 7−10ºF. The fan temp switch is defective if the fan disengages after only a 3−4ºF reduction.	Replace fan temp switch.

Normally Open Fan Clutches

Problem	Possible Cause	Solution
Fan cycles frequently when vehicle is stationary with A/C **ON**.	Up to 4 cycles per minute is a normal condition for conventional control systems; turn off air conditioning system and cycling should stop.	To reduce cycling by up to 90%, install an Index K7 fan control system.
Fan turns on whenever ignition is on (turns off when engine gets hot).	Air solenoid valve plumbed backwards.	Check solenoid installation instructions; plumb correctly.
Control system fuses blown.	1. If fuse blows whenever the ignition is turned on, the problem is most likely related to a fault in the wiring. 2. If the fuses blow only when the fan engages, the fault is probably associated with the solenoid valve.	1. Check wiring, fix where necessary. 2. Use an ohmmeter to check for a shorted solenoid coil (the coil resistance should be greater than 14 ohms). If shorted, replace air solenoid valve.

2.60" Twin Piston Caliper − Remanufactured



Features:

- Phenolic Pistons

Specifications:

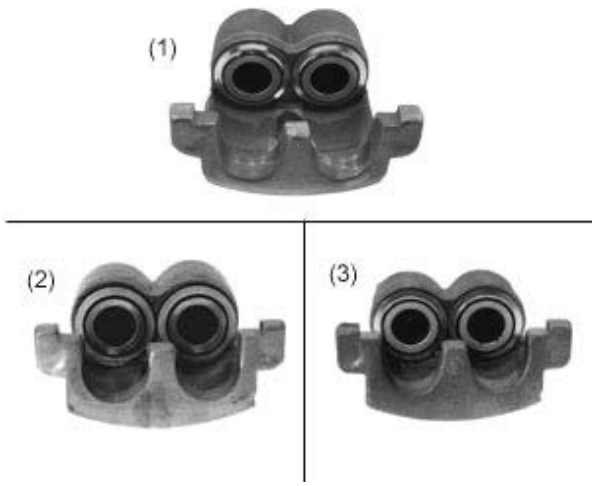
Inlet Port	7/16 − 24
Application	Navistar
Shim Kit	SK225K
Disc Pad Set	HP7815D717
Hardware Kit	RH5634K

Notes:

1) *55245 series calipers also replaced with 55314 series

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Notes	Core Group	Pic. #
RH55312X	Remanufactured Bendix® 2.60" Twin Piston − Special	Caliper Only	4151733	20 lbs.	Note port locations and machined area above ports.	HYD1051	1
RH55313X	Remanufactured Bendix® 2.60" Twin Piston	Caliper Only	4151733	21 lbs.	Note port locations.	HYD1051	2
RH55314LX	Remanufactured Bendix® 2.60" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4151733 2238299* 4151020*	25 lbs.	Note port locations.	HYD1051	3
RH55314SX	Remanufactured Bendix® 2.60" Twin Piston, Semi−Loaded	Caliper and Mounting Hardware	4151733 2238299* 4151020*	22 lbs.	Note port locations.	HYD1051	3
RH55314X	Remanufactured Bendix® 2.60" Twin Piston	Caliper Only	4151733 2238299* 4151020*	21 lbs.	Note port locations.	HYD1051	3

2.88" Twin Piston Caliper − Remanufactured



Features:

- **RH55480 Series** have Metric Hose Clamp Holes

Specifications:

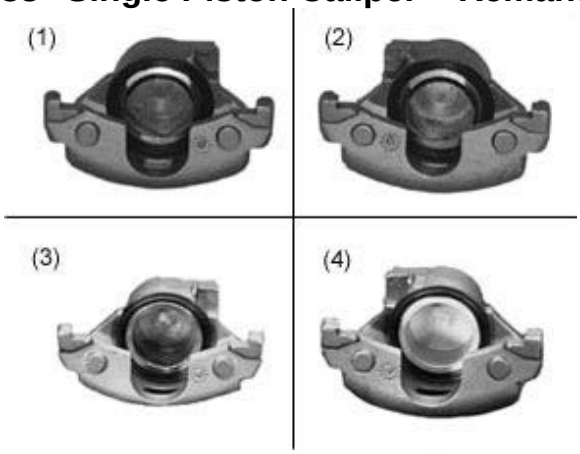
Inlet Port	7/16 − 24
Shim Kit	SK225K
Hardware Kit for 55250 Series	RH5635K

Notes:

1) When not specified left or right side, can be used on either with relocation of bleeder screw.
2) **RH55480 series** have Metric Hose Clamp Holes.

SKU#	Product Description	Contains	Casting #	Approx. Weight	Application	Notes	Core Group	Pic. #
RH55250LLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4150844	31 lbs.	Chevrolet GMC Navistar	Left Hand	HYD1052	1
RH55250RLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4150844	31 lbs.	Chevrolet GMC Navistar	Right Hand	HYD1052	1
RH55250SX	Reman. Bendix® 2.88" Twin Piston, Semi−Loaded	Caliper and Mounting Hardware	4150844	26 lbs.	Chevrolet GMC Navistar	−	HYD1052	1
RH55250X	Reman. Bendix® 2.88" Twin Piston	Caliper Only (Base Caliper)	4150844	24 lbs.	Chevrolet GMC Navistar	−	HYD1052	1
RH55480LLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4150884	30 lbs.	Chevrolet GMC	Left Hand	HYD1052	2
RH55480RLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4150884	30 lbs.	Chevrolet GMC	Right Hand	HYD1052	2
RH55480SX	Reman. Bendix® 2.88" Twin Piston, Semi−Loaded	Caliper and Mounting Hardware	4150884	25 lbs.	Chevrolet GMC	−	HYD1052	2
RH55480X	Reman. Bendix® 2.88" Twin Piston	Caliper Only (Base Caliper)	4150884	24 lbs.	Chevrolet GMC	−	HYD1052	2
RH55656LLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4152279	30 lbs.	Navistar w/Air Suspension	Left Hand	HYD1052	3
RH55656RLX	Reman. Bendix® 2.88" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	4152279	30 lbs.	Navistar w/Air Suspension	Right Hand	HYD1052	3
RH55656SX	Reman. Bendix® 2.88" Twin Piston, Semi−Loaded	Caliper and Mounting Hardware	4152279	25 lbs.	Navistar w/Air Suspension	−	HYD1052	3
RH55656X	Reman. Bendix® 2.88" Twin Piston	Caliper Only	4152279	24 lbs.	Navistar w/Air Suspension	−	HYD1052	3

3.38" Single Piston Caliper − Remanufactured



Specifications:

Shim Kit	SK224K
Disc Pad Set	HP7815D717
Hardware Kit	RH5519K

SKU#	Product Description	Contains	Casting #	Inlet Port	Approx. Weight	Application	Core Group	Pic. #
RH55098LX	Reman. Bendix® 3.38" Single Piston, Right Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	2238452R	3/8 − 24	25 lbs.	Navistar	HYD1050	2
RH55098SX	Reman. Bendix® 3.38" Single Piston, Right Hand, Semi−Loaded	Caliper and Mounting Hardware	2238452R	3/8 − 24	19 lbs.	Navistar	HYD1050	2
RH55098X	Reman. Bendix® 3.38" Single Piston, Right Hand	Caliper Only	2238452R	3/8 − 24	17 lbs.	Navistar	HYD1050	2
RH55099LX	Reman. Bendix® 3.38" Single Piston, Left Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	2238451L	3/8 − 24	23 lbs.	Navistar	HYD1050	1
RH55099SX	Reman. Bendix® 3.38" Single Piston, Left Hand, Semi−Loaded	Caliper and Mounting Hardware	2238451L	3/8 − 24	19 lbs.	Navistar	HYD1050	1
RH55099X	Reman. Bendix® 3.38" Single Piston, Left Hand	Caliper Only	2238451L	3/8 − 24	17 lbs.	Navistar	HYD1050	1
RH55199LX	Reman. Bendix® 3.38" Single Piston, Right Hand, Fully Loaded	Caliper, Pad and Mounting Hardware	2230355R	M10 x 1.5 Metric	25 lbs.	Chevrolet GMC	HYD1050	4
RH55199SX	Reman. Bendix® 3.38" Single Piston, Right Hand, Semi−Loaded	Caliper and Mounting Hardware	2230355R	M10 x 1.5 Metric	19 lbs.	Chevrolet GMC	HYD1050	4
RH55199X	Reman. Bendix® 3.38" Single Piston, Right Hand	Caliper Only	2230355R	M10 x 1.5 Metric	17 lbs.	Chevrolet GMC	HYD1050	4
RH55200LX	Reman. Bendix® 3.38" Single Piston, Left Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	2230354L	M10 x 1.5 Metric	25 lbs.	Chevrolet GMC	HYD1050	3
RH55200SX	Reman. Bendix® 3.38" Single Piston, Left Hand, Semi−Loaded	Caliper and Mounting Hardware	2230354L	M10 x 1.5 Metric	19 lbs.	Chevrolet GMC	HYD1050	3
RH55200X	Reman. Bendix® 3.38" Single Piston, Left Hand	Caliper Only	2230354L	M10 x 1.5 Metric	17 lbs.	Chevrolet GMC	HYD1050	3

2 x 66mm Bosch Type Caliper − Remanufactured

Features:

- Available as caliper only or loaded with friction
- Premium Haldex disc pads included in loaded versions

Specifications:

Disc Pad Set (Axle)	HP7654D786
Inlet Port	7/16 − 24

SKU#	Product Description	Contains	Casting/MFG. #	Application	Approx. Weight	Core Group
RH55849LX	Reman. 2 x 66mm Bosch Type Brake Caliper	Exchange Caliper and Disc Pads	4153269 2501839C91 2509253C91	1998 and Newer 3000−49000 Series Navistar Vehicles	31 lbs.	HYD1066
RH55849SX	Reman. 2 x 66mm Bosch Type Brake Caliper, Semi−Loaded	Caliper and Mounting Hardware	4153269 2501839C91 2509253C91	1998 and Newer 3000−49000 Series Navistar Vehicles	30.5 lbs.	HYD1066
RH55849X	Reman. 2 x 66mm Bosch Type Brake Caliper	Exchange Caliper Only	4153269 2501839C91 2509253C91	1998 and Newer 3000−49000 Series Navistar Vehicles	29.5 lbs.	HYD1066

2 x 73mm Bosch Type Caliper − Remanufactured

Features:

- Available as caliper only or loaded with friction
- Premium Haldex disc pads included in loaded versions

Specifications:

Disc Pad Set (Axle) HP7655D786
Inlet Port 7/16 − 24

SKU#	Product Description	Contains	Casting/MFG. #	Application	Approx. Weight	Core Group
RH55850LX	Reman. 2 x 73mm Bosch Type Brake Caliper	Exchange Caliper and Disc Pads	4153222 2501838C91 2509254C91	1998 and Newer 3000−49000 Series Navistar Vehicles	31 lbs.	HYD1070
RH55850SX	Reman. 2 x 73mm Bosch Type Brake Caliper, Semi−Loaded	Caliper and Mounting Hardware	4153222 2501838C91 2509254C91	1998 and Newer 3000−49000 Series Navistar Vehicles	30.5 lbs.	HYD1070
RH55850X	Reman. 2 x 73mm Bosch Type Brake Caliper	Exchange Caliper Only	4153222 2501838C91 2509254C91	1998 and Newer 3000−49000 Series Navistar Vehicles	29.5 lbs.	HYD1070

2.50" Twin Piston Caliper − Remanufactured

Specifications:

Inlet Port	7/16 − 24
Shim Kit	SK224K
Disc Pad Set	HP7141D224
Hardware Kit	RH5636K

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Application	Core Group
RH55251LX	Reman. Dayton Walther 2.50" Twin Piston, Fully Loaded	Caliper, Pads and Mounting Hardware	472	27 lbs.	Chevrolet Ford GMC	HYD1053
RH55251SX	Reman. Dayton Walther 2.50" Twin Piston, Semi−Loaded	Caliper and Mounting Hardware	472	20 lbs.	Chevrolet Ford GMC	HYD1053
RH55251X	Reman. Dayton Walther 2.50" Twin Piston	Caliper Only	472	18 lbs.	Chevrolet Ford GMC	HYD1053

2.88" Twin Piston Caliper − Remanufactured

Specifications:

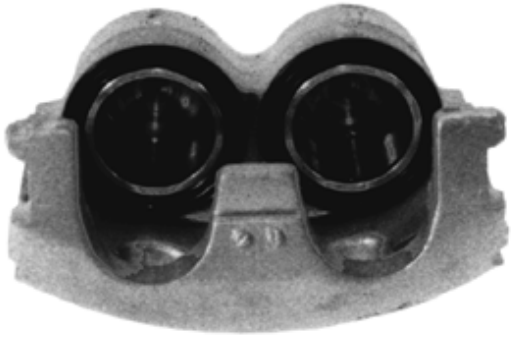
Inlet Port	7/16 − 24
Shim Kit	SK236K
Disc Pad Set	HP7149D236
Hardware Kit	RH5637K

Notes:

1) RH55252X base caliper can be used on left or right side with relocation of bleeder screw.

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Application	Core Group
RH55252LLX	Reman. Dayton Walther 2.88" Twin Piston, Left Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	578	40 lbs.	Chevrolet GMC Ford	HYD1054
RH55252LSX	Reman. Dayton Walther 2.88" Twin Piston, Left Hand, Semi−Loaded	Caliper and Mounting Hardware	578	35 lbs.	Chevrolet GMC Ford	HYD1054
RH55252RLX	Reman. Dayton Walther 2.88" Twin Piston, Right Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	578	40 lbs.	Chevrolet GMC Ford	HYD1054
RH55252RSX	Reman. Dayton Walther 2.88" Twin Piston, Right Hand, Semi−Loaded	Caliper and Mounting Hardware	578	35 lbs.	Chevrolet GMC Ford	HYD1054
RH55252X	Reman. Dayton Walther 2.88" Twin Piston	Caliper Only	578	27 lbs.	Chevrolet GMC Ford	HYD1054

2.36" Twin Piston Caliper − Remanufactured



Specifications:

Inlet Port 3/8 − 24
Hardware Kit RH5735K

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Application	Core Group
RH55604LX	Reman. Kelsey Hayes 2.36" Twin Piston, Right Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	KH12068401	24 lbs.	Ford E Ford F450	HYD1058
RH55604SX	Reman. Kelsey Hayes 2.36" Twin Piston, Right Hand, Semi−Loaded	Caliper and Mounting Hardware	KH12068401	19 lbs.	Ford E Ford F450	HYD1058
RH55604X	Reman. Kelsey Hayes 2.36" Twin Piston, Right Hand	Caliper Only	KH12068401	17 lbs.	Ford E Ford F450	HYD1058
RH55605LX	Reman. Kelsey Hayes 2.36" Twin Piston, Left Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	KH12068401	24 lbs.	Ford E Ford F450	HYD1058
RH55605SX	Reman. Kelsey Hayes 2.36" Twin Piston, Left Hand, Semi−Loaded	Caliper and Mounting Hardware	KH12068401	19 lbs.	Ford E Ford F450	HYD1058
RH55605X	Reman. Kelsey Hayes 2.36" Twin Piston, Left Hand	Caliper Only	KH12068401	17 lbs.	Ford E Ford F450	HYD1058

3.62" Twin Piston Caliper − Remanufactured

1002 Series

Specifications:

Inlet Port	7/16 − 24

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Application	Core Group
RH1002LX	Remanufactured Kelsey Hayes 3.62" Twin Piston, Fully Loaded Hydraulic Brake Caliper Kit	Caliper, Pads and Mounting Hardware	KH91142−01, Ford 5HA−2B−120BB	48 lbs.	Ford/Mack with Hydraulic Front Brakes and Rear Air Brakes	HYD1056
RH1002X	Remanufactured Kelsey Hayes 3.62" Twin Piston Hydraulic Brake Caliper	Caliper Only	KH91142−01, Ford 5HA−2B−120BB	45 lbs.	Ford/Mack with Hydraulic Front Brakes and Rear Air Brakes	HYD1056

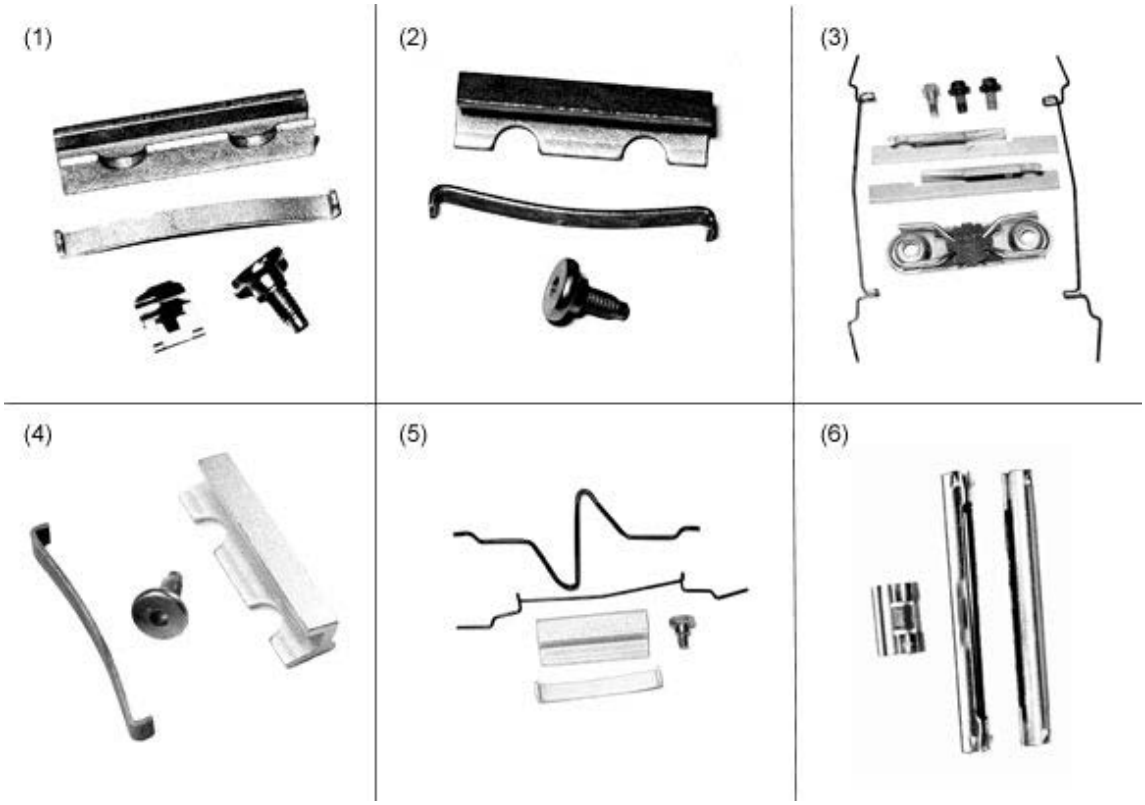
2.874" Twin Piston Caliper − Remanufactured

Specifications:

Inlet Port 7/16 − 24

SKU#	Product Description	Contains	Casting Number	Approx. Weight	Application	Core Group
RH22837LX	Reman. Varga 2.874" Twin Piston, Left Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	VFCC2283−7	41 lbs.	Ford 1985−1991 CF6000−8000	HYD1055
RH22837X	Reman. Varga 2.874" Twin Piston, Left Hand	Caliper Only	VFCC2283−7	31 lbs.	Ford 1985−1991 CF6000−8000	HYD1055
RH22845LX	Reman. Varga 2.874" Twin Piston, Right Hand, Fully Loaded	Caliper, Pads and Mounting Hardware	VFCC2284−5	41 lbs.	Ford 1985−1991 CF6000−8000	HYD1055
RH22845X	Reman. Varga 2.874" Twin Piston, Right Hand	Caliper Only	VFCC2284−5	31 lbs.	Ford 1985−1991 CF6000−8000	HYD1055

Hardware Kits



SKU#	Product Description	Application	Picture Number
RH5519K	Hydraulic Brake Caliper Hardware Kit	RH55098X, RH55099X, RH55199X, RH55200X	1
RH5634K	Hydraulic Brake Caliper Hardware Kit	RH55245X, RH55314	4
RH5635K	Hydraulic Brake Caliper Hardware Kit	RH55250X	2
RH5636K	Hydraulic Brake Caliper Hardware Kit	RH55251	5
RH5637K	Hydraulic Brake Caliper Hardware Kit	RH55252 left and right, one kit will do either one.	3
RH5735K	Hydraulic Brake Caliper Hardware Kit	RH55605, RH55604	6
RH5850K	Hydraulic Brake Caliper Hardware Kit	RH55849, RH55850	not shown

Shim Kits

SKU#	Product Description	Application	Picture Number
SK224K	Hydraulic Brake Caliper Shim Kit	Bendix® 3.38" Single Dayton 2.50" Twin	–
SK225K	Hydraulic Brake Caliper Shim Kit	Bendix® 2.60" and 2.88"	–
SK236K	Hydraulic Brake Caliper Shim Kit	Dayton 2.88"	–

Back Plate Assemblies without Shoes

Notes:

1) Backing Plates with 1.625" Cylinders have been replaced by 1.750" Cylinders.

2) Cylinders must be replaced in pairs − i.e. you should use the same cylinder size on an axle.

SKU#	Product Description	Size	Approx. Weight	Core Group
RH203251X	Remanufactured Lucas Right Hand Backplate Assembly for 5" Shoes	1.750"	38 lbs.	HYD1009
RH203252X	Remanufactured Lucas Left Hand Backplate Assembly for 5" Shoes	1.750"	35 lbs.	HYD1009
RH203261X	Remanufactured Lucas Right Hand Backplate Assembly for 6"/ 7" Shoes	1.750"	40 lbs.	HYD1010
RH203262X	Remanufactured Lucas Left Hand Backplate Assembly for 6"/ 7" Shoes	1.750"	39 lbs.	HYD1010

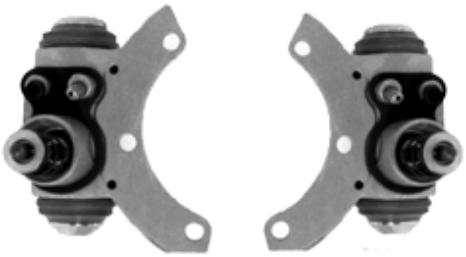
Back Plate Assemblies with Shoes

Notes:

1) Backing Plates with 1.625" Cylinders have been replaced by 1.750" Cylinders.
2) Cylinders must be replaced in pairs − i.e. you should use the same cylinder size on an axle.

SKU#	Product Description	Size	Notes	Approx. Weight	Core Group
RH202251X	Remanufactured Lucas Right Hand Backplate Assembly with 5" Shoes	1.750"	Shoes Only FMSI − 4528 GW4528LWR (Relined Shoe) GW4528LWN (New Shoe)	55 lbs.	HYD1009
RH202252X	Remanufactured Lucas Left Hand Backplate Assembly with 5" Shoes	1.750"	Shoes Only FMSI − 4528 GW4528LWR (Relined Shoe) GW4528LWN (New Shoe)	55 lbs.	HYD1009
RH202261X	Remanufactured Lucas Right Hand Backplate Assembly with 6" Shoes	1.750"	Shoes Only FMSI − 4504 GW4504LWK (Relined, 2 per box) GW4504LWR (Relined Shoe) GW4504LWN (New Shoe)	60 lbs.	HYD1010
RH202262X	Remanufactured Lucas Left Hand Backplate Assembly with 6" Shoes	1.750"	Shoes Only FMSI − 4504 GW4504LWK (Relined, 2 per box) GW4504LWR (Relined Shoe) GW4504LWN (New Shoe)	60 lbs.	HYD1010
RH202271X	Remanufactured Lucas Right Hand Backplate Assembly with 7" Shoes	1.750"	Shoes Only FMSI − 4505 GW4505LWK (Relined, 2 per box) GW4505LWR (Relined Shoe) GW4505LWN (New Shoe)	63 lbs.	HYD1010
RH202272X	Remanufactured Lucas Left Hand Backplate Assembly with 7" Shoes	1.750"	Shoes Only FMSI − 4505 GW4505LWK (Relined, 2 per box) GW4505LWR (Relined Shoe) GW4505LWN (New Shoe)	63 lbs.	HYD1010

Park Cylinders/Expanders



Specifications:

Inlet Port	7/16 − 24
Park Cylinder Repair Kit	RH7872K
Residual Check Valve	RH01K

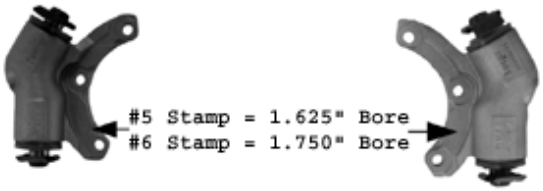
Notes:

1) 1.625" Cylinders have been replaced by 1.750" Cylinders.

2) Cylinders must be replaced in pairs − i.e. you should use the same cylinder size on an axle.

SKU#	Product Description	Size	Approximate Weight	Core Group
RH201179X	Remanufactured Lucas Left Hand Park Cylinder (Expander)	1.750"	14 lbs.	HYD1002
RH201180X	Remanufactured Lucas Right Hand Park Cylinder (Expander)	1.750"	14 lbs.	HYD1002

Adjusting Cylinders



Specifications:

Inlet Port	7/16 − 24
Adjusting Cylinder Repair Kit	RH7871K
Residual Check Valve	RH01K

Notes:

1) 1.625" Cylinders have been replaced by 1.750" Cylinders.

2) Cylinders must be replaced in pairs − i.e. you should use the same cylinder size on an axle.

SKU#	Product Description	Size	Approximate Weight	Core Group
RH201183X	Remanufactured Lucas Left Hand Wheel Cylinder	1.750" (#6 Stamp)	12 lbs.	HYD1003
RH201184X	Remanufactured Lucas Right Hand Wheel Cylinder	1.750" (#6 Stamp)	12 lbs.	HYD1003

Repair Kits

SKU#	Product Description	Application	Picture Number
RH01K	Residual Check Valve for Adjusting Cylinders	RH201183, RH201183X, RH201184, RH201184X, RH201180, RH201180X, RH201179, RH201179X	2
RH7871K	Repair Kit for 1.75" Adjusting Cylinders	RH201183, RH201183X, RH201184, RH201184X	3
RH7872K	Repair Kit for 1.75" Park Cylinders	RH201179, RH201179X, RH201180, RH201180X	1

Hydraulic Residual Check Valve

Part Number: RH01K

This hydraulic residual check valve should be used in conjunction with the Lucas Girling type braking system. Installation of the RH01K hydraulic residual check valve will typically prevent this leakage; therefore extending the life cycle of these brake assemblies. This valve maintains a small amount of residual pressure (3 − 10 psi) in the brake line to keep a positive pressure on the seals in both the backing plate adjuster and part cylinders. This small amount of pressure will help keep the seal solidly fitted against their cylinder walls, thereby preventing excessive leakage. Installation of this valve will benefit the system whether the vehicle is running or parked. Please note that a minimal amount of external wetness on the cylinders with this type of system is normal and acceptable.

Installation Instruction

1. Find the brake line union behind the cab.
2. Remove this union and replace with residual check valve. Arrow on check valve ***must*** point toward the rear wheel. (Same as direction of fluid flow).
3. Pump brake pedal and bleed rear brakes.

Helpful Tips

It is possible to avoid bleeding the brakes by leaving the rear tube nut loose but threaded into the check valve. Have an assistant slowly depress the brake pedal until the fluid begins leaking at threaded port. Tighten rear tube nut once fluid begins to leak around threads. Check ther fluid level in the master cylinder and the brake pedal for proper feel. Road test the vehicle. If you suspect there is air in the lines, bleed the brakes.

Heavy duty power steering gears have a twelve (12) month, 3,600 hour (whichever comes first) warranty. For further details, refer to L20221 Aftermarket Warranty Policy. For warranty return, use L90005 Warranty Adjustment Form.

SPECIAL NOTE

Proper service and repair is important to the safe reliable operation of all motor vehicles. Careful and cautious service procedures recommended by the manufacturers should be taken by anyone servicing a motor vehicle to minimize the risk of personal injury and vehicle damage. All information, illustrations, specifications and schematics contained in this section are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

WARNING FOR PROPER STEERING GEAR OPERATION

1. Do not weld, braze or solder any steering gear or system arm components.
2. Maximum flow under any conditions must not exceed vehicle manufacturers specifications.
3. Always inspect any steering component(s) which has been (or is suspected to have been) subject to impact. Replace any part that has been damaged or is questionable.
4. Never mix or use improper oils for units.

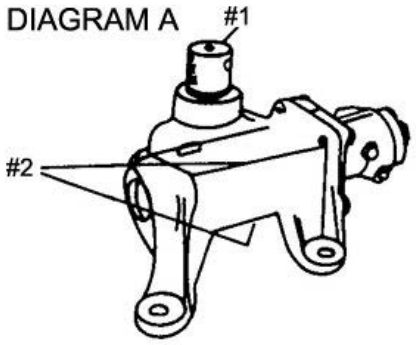
STEERING SYSTEM MAINTENANCE TIPS

1. Prevent internal bottoming of the steering gear. Carefully check axle stops to be sure that they meet the manufacturer's specifications.
2. Regularly check the fluid and the fluid level in the power steering reservoir.
3. Keep tires inflated to correct pressure.
4. Always use a puller, never a hammer or torch, to remove pitman arms.
5. Investigate and immediately correct the cause of any play, rattle, or shimmy in any part of the steering linkage or steering mechanism.
6. Remove the cause of steering column misalignment.
7. Encourage all drivers to report any malfunctions or accidents that could have damaged steering components.
8. Do not attempt to weld any broken steering component. Replace the component with original equipment only.
9. Do not cold straighten, hot straighten, or bend any steering system component.
10. Always clean off around the reservoir filler cap before you remove it. Prevent dirt or other foreign matter from entering the hydraulic systems.
11. Investigate and correct any external leaks, no matter how minor.
12. Replace filters and pumps in compliance with specification.
13. If extended stationary use of vehicle is developing excessive hydraulic fluid temperatures, consult vehicle manufacturer for auxiliary cooling method.
14. Maintain grease pack applied behind the input and output shaft's protector seal as a general maintenance procedure.

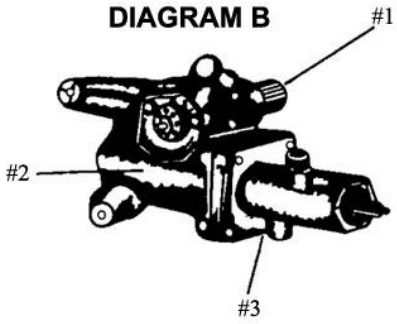
SAGINAW ROTARY VALVE GEARS

Used on many medium and heavy duty GMC−Chevrolet trucks.

- To correctly identify all units listed below (except for 5696067) you will need to know numbers 1 & 2 only (shown in diagram A).
  - #1. Order gear with number(s) and letter(s) stamped on end of pitman/sector shaft.
  - #2. Order gear with housing/casting number.



- To correctly identify unit 5696067 you will need to know numbers 1, 2 & 3 (shown in diagram B).
  - #1. Order gear with number(s) and letter(s) stamped on end of pitman/sector shaft.
  - #2. Order gear with housing/casting number.
  - #3. Order gear with tower housing number.

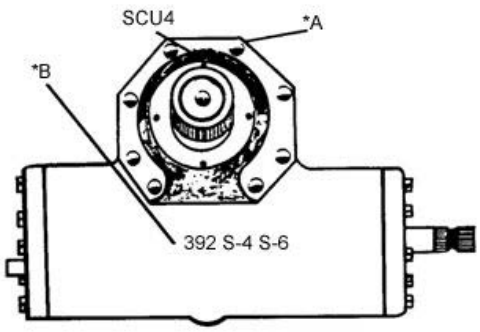


HOUSING CASTING #	SECTOR SHAFT #	PORT SIZES	FRONT AXLE WEIGHT
5690653	L		
5696067	LL1		
5696067	LL1	9/16" (LV)	
7832331	LL	11/16" (HV)	Single Assist Cylinder up to 12000 lbs.
7802018	L2		Double Assist Cylinder 16000 lbs. & up

SHEPPARD STEERING GEARS

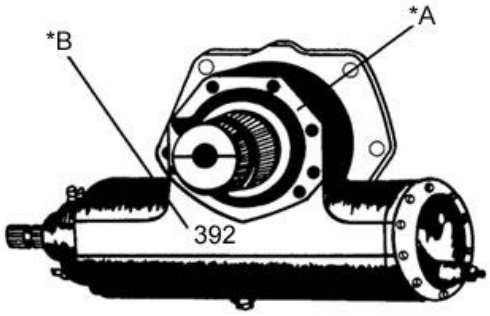
- Series "S Sheppard steering gears.
- Order Sheppard steering gears with (*A) stamp numbers and (*B) casting/housing numbers located on side of gear as shown in diagram C.
- Typical 292S, 392S, 492S and 592S steering gear arrangement.
- Example: 292SCA5
  392SCH4
  492SAG5
  592ST5

DIAGRAM C

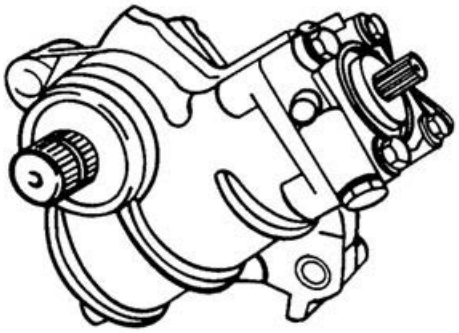


- Standard Sheppard steering gears.
- Order Sheppard steering gears with (*A) stamp numbers and (*B) casting/housing numbers located on side of gear as shown in diagram D.
- Typical 292, 392, 492 and 592 steering gear arrangement.
- Example: 292AJL4
  392BR5
  492COZ4
  592U3

DIAGRAM D



NOTE: OBSOLETE GEARS: 39, 59, 372, 382 & 491 series. These gears cannot be taken as a core or be remanufactured.

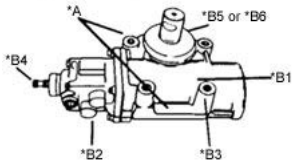


FORD BENDIX STEERING GEARS

- Order Bendix gears with all raised and stamped numbers.
- Example: 2260377

TRW/ROSS STEERING GEARS

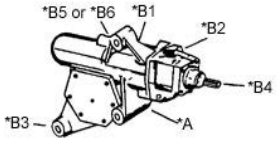
HF54 SERIES



- HF54 Series.

STAMP NUMBER EXAMPLES	CASTING NUMBER EXAMPLES
HF54039	HF542995
HF54042	HF542996
HF54044	HF542998

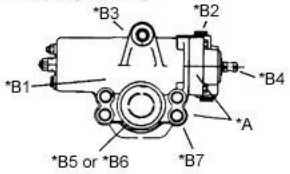
HF64 SERIES



- HF64 Series.

STAMP NUMBER EXAMPLES	CASTING NUMBER EXAMPLES
HF64076	HF642990
HF64113	HF642989
HF64114	HF642984

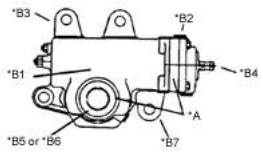
HFB52 SERIES



- HFB52 Series.

STAMP NUMBER EXAMPLES	CASTING NUMBER EXAMPLES
HFB52013	HFB52991
HFB52023	HFB522987

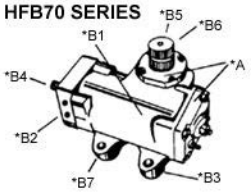
HFB64 & TAS65 SERIES



- HFB64 & TAS65 Series.

STAMP NUMBER EXAMPLES	CASTING NUMBER EXAMPLES
HFB64082	HFB642963
TAS65007	TAS652294

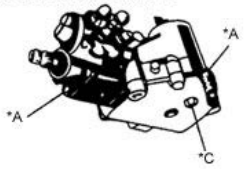
HFB70 SERIES



- HFB70 Series.

STAMP NUMBER EXAMPLES	CASTING NUMBER EXAMPLES
HFB70065	HFB702992
HFB70049	HFB702931

HPS53 & 70 SERIES



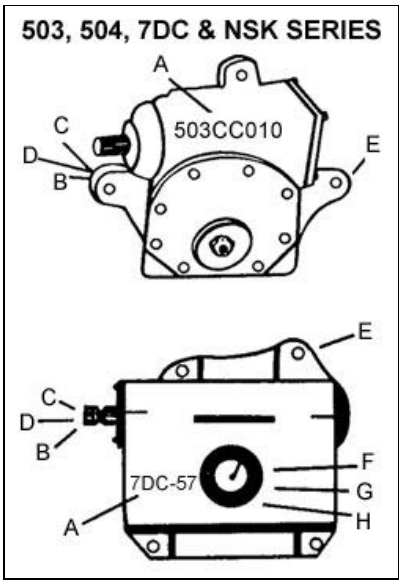
- HPS53 & 70 Series.
- *C) Do not order HPS gear with raised casting numbers.
- Example: HPS702989.

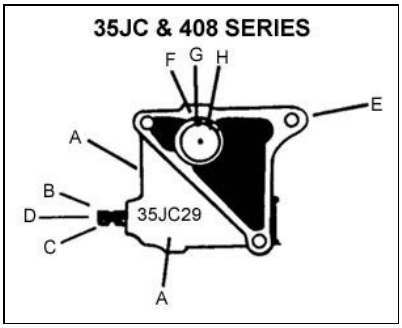
*A) Order all Ross steering gears with stamp numbers located on areas of the gears as shown above.
NOTE: All stamp numbers will start with HF or HFB and be followed by five numbers. See stamp number examples in illustrations above.
*B) Order all Ross steering gears using *B examples if stamp number cannot be found.
*B1) Ross casting number. *B4) Diameter of input. *B6) Type of sector shaft: Tapered
*B2) Number of hoses used by gear. *B5) Type of sector shaft: Clamp type. *B7) Thickness of mounting bolts.
*B3) Number of mounting bolts.

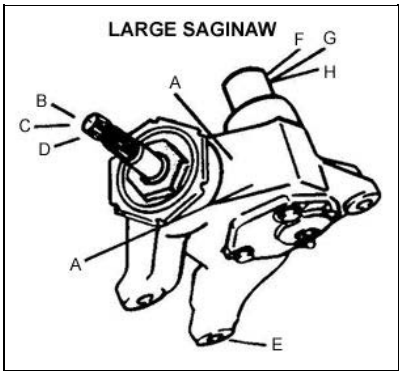
MANUAL GEARS

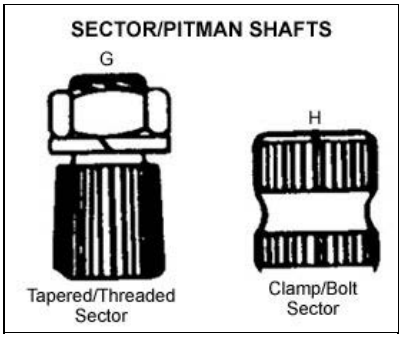
Order manual gears with all examples shown.

A) Casting number on housing.
B) Length of input shaft protruding out of case.
C) Input splined with notch or splined with 360 groove.
D) Input smooth (no splines) with keyway.
E) Number of mounting bolts.
F) Length of sector/pitman shaft protruding out of case.
G) Tapered/threaded sector shaft.
H) Clamp/bolt on type sector/pitman shaft.
I) Input shaft coming out round end or case/housing.
J) Input shaft coming out 4 bolt cover.









Assist Steering Box

SKU#	Product Description	Cross Reference Number	Core Group
RG55011X	Assist Steering Box	RCS55001	SG4001

Light Duty Steering Gears − Remanufactured

Specifications:

Approximate Weight 30 lbs.

SKU#	Product Description	Stamped #	Casting #	Year	Type	Core Group
RG1416X	Remanufactured Light Duty Steering Gear	SPA DX	D9AC−AA	1980−1995	Ford F100−F350 Truck 2WD & 4WD	SG1101
RG1456X	Remanufactured Light Duty Steering Gear	SPA HY	3550	1997−2000	Ford F100−F350 Truck 2WD & 4WD	SG1101

Bendix® Steering Gear Kit

SKU#	Product Description	MFG. #
RG300K	Steering Gear Kit for Bendix® Model 300	C300N-SK
RP500K	Steering Gear Kit for Bendix® Model 500	C500N-SK

Bendix® Steering Gears − Remanufactured

SKU#	Product Description	Approx. Weight	MFG. #	Casting #	Hoses	Mounting Bolts	Sector Shaft	Input Spline	OEM #	Core Group
RG22603X	Remanufactured Bendix® Model 300 Steering Gear	60 lbs.	2260377	2260377	2	3	Clamp	Flat	E8HT3N503AD	SG9000
RG22682X	Remanufactured Bendix® Model 500 Steering Gear	94 lbs.	2268244	2260351	2	3	Clamp	Flat	2268244	SG9000

Ross Steering Gears − Remanufactured

SKU#	Product Description	Approximate Weight	Manufacture Number	Core Group
RG50302X	Remanufactured Ross Manual Steering Gear	40 lbs.	503AS144	SG8001
RG50303X	Remanufactured Ross Manual Steering Gear	40 lbs.	503AS074	SG8001
RG50304X	Remanufactured Ross Manual Steering Gear	40 lbs.	503AS110	SG8001
RG50306X	Remanufactured Ross Manual Steering Gear	40 lbs.	503AS124	SG8001

Saginaw Steering Gears − Remanufactured

RG78020X not pictured

Features:

- **RG78131X** − Dual Piston Gear, Metric, GMC−Chev. Application
- **RG78132X** − Dual Piston Gear, GMC−Chev. Application
- **RG78133X** − Dual Piston Gear, Metric, GM Topkick Application
- **RG78303X** − Dual Piston Gear, S−Line Internationals.

SKU#	Product Description	Approx. Weight	MFG. #	Casting #	Service Kit	Core Group
RG56906X	Reman. Saginaw Steering Gear	38 lbs.	5696067LV	5696067	Brigadier Kit RG78002	SG6001
RG56907X	Reman. Saginaw Steering Gear	55 lbs.	5696067HV	5696067	Brigadier Kit RG78002	SG6001
RG56908X	Reman. Saginaw Steering Gear	34 lbs.	5690653	5690653	Brigadier Kit RG78002	SG6001
RG78020X	Reman. Saginaw Steering Gear	55 lbs.	7802018	7802018	Astro Kit RG78001	SG6001
RG78131D9X	Reman. Saginaw Steering Gear − Dual Piston Gear, Metric	55 lbs.	781316M	7813161 Metric	Dual Kit RG78003	SG6001
RG78131X	Reman. Saginaw Steering Gear − Dual Piston Gear, Metric	52 lbs.	781316M	7813161 Metric	Dual Kit RG78003	SG6001
RG78132X	Reman. Saginaw Steering Gear − Dual Piston Gear	54 lbs.	781316MN	7813161	Dual Kit RG78003	SG6001
RG78133X	Reman. Saginaw Steering Gear − Dual Piston Gear − Metric	60 lbs.	26002502	−	Dual Kit RG78003	SG6001
RG78303X	Reman. Saginaw Steering Gear − Dual Piston Gear	57 lbs.	78303891	7830389	Dual Kit RG78003	SG6001
RG78323X	Reman. Saginaw Steering Gear	37 lbs.	7832331	7832331	Brigadier Kit RG78002	SG6001

Saginaw Cylinders − Remanufactured

Features:

- Need weld to weld measurement to order correct cylinder.

SKU#	Product Description	Application	Length	Core Group
RG40011X	Remanufactured Saginaw Cylinder	Most GMC−Chevrolet trucks with rotary valve Saginaw gears.	11"	SC1001
RG40113X	Remanufactured Saginaw Cylinder	Most GMC−Chevrolet trucks with rotary valve Saginaw gears.	13"	SC1001

Saginaw Service Kits

RG78002

RG78003

RG8092K

SKU#	Product Description	Application
RG78001	Astro Service Kit for Saginaw Power Steering Gear	RG78020X
RG78002	Brigadier Service Kit for Saginaw Power Steering Gear	RG56906X, RG56907X, RG56908X, RG78323X
RG78003	Dual Service Kit for Saginaw Power Steering Gear	RG78131D9X, RG78131X, RG78132X, RG78133X, RG78303X
RG8092K	710 Series Seal Kit for Saginaw Power Steering Gear	710 Series

292 Series Steering Gears − Remanufactured

Specifications:

Shaft Diameter	2"
Seal Kit	RG29210
Approximate Weight	85 lbs.

SKU#	Product Description	Approx. Weight	MFG. #	Casting #	OEM #	Core Group
RG29202X	Remanufactured Sheppard 292 Series Steering Gear	80 lbs.	292RR2	292S−4S5	443675C92	SG7001
RG29203X	Remanufactured Sheppard 292 Series Steering Gear	88 lbs.	292BYL4	292	585922C91	SG7001
RG29204X	Remanufactured Sheppard 292 Series Steering Gear	89 lbs.	292AJL4	292S−4S−5	585922C91	SG7001
RG29205X	Remanufactured Sheppard 292 Series Steering Gear	87 lbs.	292SCA5	292S−4S6	573063C91	SG7001
RG29207X	Remanufactured Sheppard 292 Series Steering Gear	90 lbs.	292SCX6	292 S−6	15554382	SG7001
RG29208X	Remanufactured Sheppard 292 Series Steering Gear	84 lbs.	292SCA6	292 S−6	1650926C91	SG7001
RG29209X	Remanufactured Sheppard 292 Series Steering Gear	84 lbs.	292SBE5	292	594565C91	SG7001
RG29211X	Remanufactured Sheppard 292 Series Steering Gear	−	292SEX	−	−	SG7001

392 Series Steering Gears − Remanufactured

Specifications:

Shaft Diameter	2"
Approximate Weight	100 lbs.
Seal Kit	RG39210

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG39201X	Reman. Sheppard 392 Series	392BR5	392	464027C92	SG7003
RG39202X	Reman. Sheppard 392 Series	392SCH4	392S−4S−6	584547C91	SG7003
RG39203X	Reman. Sheppard 392 Series	392SU4	392S−4S6	492982C92	SG7003
RG39204X	Reman. Sheppard 392 Series	392SCU4	392S	585920C91	SG7003
RG39205X	Reman. Sheppard 392 Series	392SBV4	392 S4	20QC493088P2	SG7003
RG39206X	Reman. Sheppard 392 Series	392SGA6	392S−6	14−10064	SG7003
RG39207X	Reman. Sheppard 392 Series	392SFY6	392S−6	14−10065	SG7003
RG39208X	Reman. Sheppard 392 Series	392SFZ6	392S−6	15517614J	SG7003
RG39209X	Reman. Sheppard 392 Series	392SFV4	392S−4S6	1649465C91	SG7003
RG39211X	Reman. Sheppard 392 Series	392BSL5	392 S4	464028C93	SG7003
RG39214X	Reman. Sheppard 392 Series	392SGM6	392S−4S6	14−10201	SG7003
RG39215X	Reman. Sheppard 392 Series	392CG5	392S−5	K254−201	SG7003
RG39216X	Reman. Sheppard 392 Series	392SDX6	392S−6	10−02084	SG7003
RG39217X	Reman. Sheppard 392 Series	392SGS4	392S4−5−6	1649466C91	SG7003
RG39218X	Reman. Sheppard 392 Series	392SHA4	392S−4S−6	1650932C91	SG7003
RG39220X	Reman. Sheppard 392 Series	392S5	392S−5	−	SG7003
RG39221X	Reman. Sheppard 392 Series	392SCB4	392S	B14−9921−0	SG7003

492 Series Steering Gears − Remanufactured

Product Image Not Available

Specifications:

Approximate Weight 128 lbs.

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG49201X	Reman. Sheppard 492 Series	492SH	−	−	SG7003
RG49206X	Reman. Sheppard 492 Series	492SAF	−	−	SG7003
RG49207X	Reman. Sheppard 492 Series	492SDW	−	−	SG7003

592 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	189 lbs.
Seal Kit	RG59210

SKU#	Product Description	Stamped Number	Casting Number	OEM Number	Core Group
RG100PTDX	Remanufactured Sheppard M100 series	PTD	M100		SG4001
RG59204X	Remanufactured Sheppard 592 Series Steering Gear	592SV5	592S−5	20QC522	SG7003

M80, M90, M100, M110 Series Steering Gear − Remanufactured

Typical

Specifications:

Sector Shaft	4.75 Tapered Bolt with Washer
Approximate Weight	M80 − 60 lbs. M90 − 75 lbs. M100 − 95 lbs.

SKU#	Product Description	Stamped Number	Casting Number	OEM Number	Core Group
RG100APHEX	Reman. Sheppard M100 Series	PHE	M100 Auto	3519043C91	SG4001
RG100PABX	Remanufactured Sheppard M100 series	PAB	M100	−	SG4001
RG100PACX	Remanufactured Sheppard M100 series	PAC	M100	−	SG4001
RG100PADX	Remanufactured Sheppard M100 series	PAD	M100	−	SG4001
RG100PAEX	Reman. Sheppard M100 Series	PAE	M100	10−02155	SG4001
RG100PAGX	Reman. Sheppard M100 Series	PAG1	M100	1677448C91	SG4001
RG100PAHX	Reman. Sheppard M100 Series	PAH1	M100	1657435C91	SG4001
RG100PAJX	Reman. Sheppard M100 Series	PAJ	M100	−	SG4001
RG100PAKX	Reman. Sheppard M100 Series	PAK	M100	−	SG4001
RG100PALX	Reman. Sheppard M100 Series	PAL	M100	−	SG4001
RG100PAMX	Reman. Sheppard M100 Series	PAM	M100	1654317C91	SG4001
RG100PARX	Reman. Sheppard M100 Series	PAR	M100	−	SG4001
RG100PASX	Remanufactured Sheppard M100 series	PAS	M100	−	SG4001
RG100PAYX	Remanufactured Sheppard M100 series	PAS	M100	−	SG4001
RG100PBJX	Reman. Sheppard M100 Series	PBJ	M100	−	SG4001
RG100PBMX	Reman. Sheppard M100 Series	PBM	M100	−	SG4001
RG100PBWX	Reman. Sheppard M100 Series	PBW	M100	14−100301	SG4001
RG100PBXX	Remanufactured M100 series	PBX	M100		SG4001
RG100PBYX	Reman. Sheppard M100 Series	PBY	M100	14−103340	SG4001
RG100PBZX	Reman. Sheppard M100 Series	PBZ	M100	14−103360	SG4001
RG100PCAX	Reman. Sheppard M100 Series	PCA	M100	−	SG4001
RG100PCBX	Remanufactured Sheppard M100 series	PCB	M100	−	SG4001
RG100PCDX	Reman. Sheppard M100 Series	PCD	M100	−	SG4001
RG100PCHX	Remanufactured Sheppard M100 series	PCH	M100	−	SG4001
RG100PCLX	Reman. Sheppard M100 Series	PCL	M100	1659881C91	SG4001

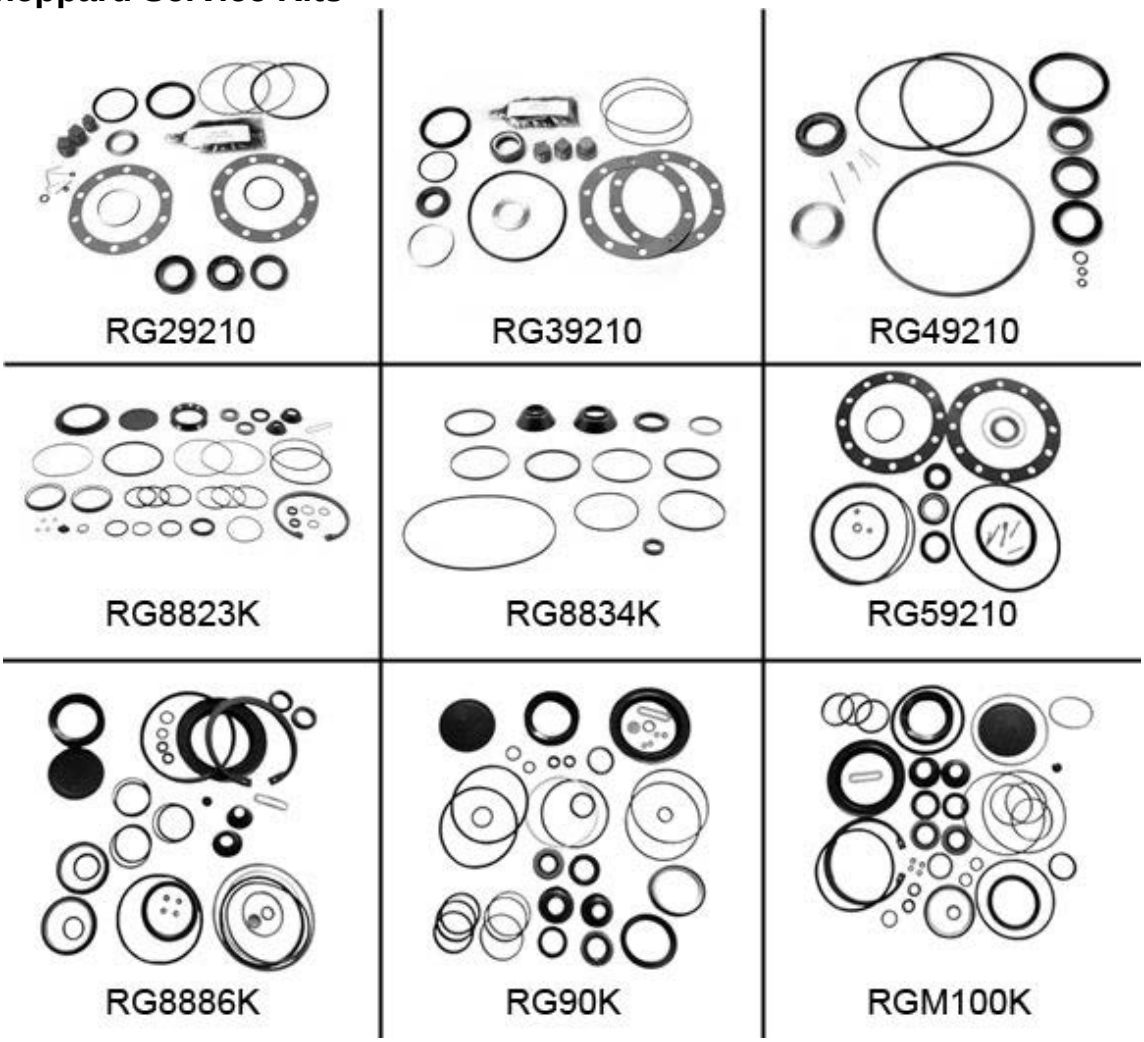
RG100PCMX	Reman. Sheppard M100 Series	PCM	M100	–	SG4001
RG100PCNX	Reman. Sheppard M100 Series	PCN	M100	667306C91	SG4001
RG100PCPX	Reman. Sheppard M100 Series	PCP	M100	1667537C91	SG4001
RG100PCRX	Reman. Sheppard M100 Series	PCR	M100	1669028C91	SG4001
RG100PCSX	Remanufactured Sheppard M100 series	PCS	M100	–	SG4001
RG100PCTX	Reman. Sheppard M100 Series	PCT	M100	–	SG4001
RG100PCWX	Remanufactured Sheppard M100 series	PCW	M100	–	SG4001
RG100PCXX	Reman. Sheppard M100 Series	PCX	M100	–	SG4001
RG100PDAX	Reman. Sheppard M100 Series	PDA	M100	–	SG4001
RG100PDFX	Remanufactured Sheppard M100 series	PDF	M100	–	SG4001
RG100PDHX	Reman. Sheppard M100 Series	PDH	M100	–	SG4001
RG100PDJX	Reman. Sheppard M100 Series	PDJ	M100	–	SG4001
RG100PDKX	Reman. Sheppard M100 Series	PDK	M100	20QC381M5	SG4001
RG100PDLX	Reman. Sheppard M100 Series	PDL	M100	–	SG4001
RG100PDOX	Remanufactured Sheppard M100 series	PDO	M100	–	SG4001
RG100PDPX	Remanufactured Sheppard M100 series	PDP	M100	–	SG4001
RG100PDQX	Reman. Sheppard M100 Series	PDQ	M100	–	SG4001
RG100PDRX	Reman. Sheppard M100 Series	PDR	M100	–	SG4001
RG100PDUX	Reman. Sheppard M100 Series	PDU	M100	–	SG4001
RG100PDZX	Remanufactured Sheppard M100 series	PDZ	M100	–	SG4001
RG100PEGX	Remanufactured Sheppard M100 series	PEG	M100	–	SG4001
RG100PEJX	Remanufactured Sheppard M100 series	PEJ	M100	–	SG4001
RG100PENX	Reman. Sheppard M100 Series	PEN	M100	14-10337-000	SG4001
RG100PETX	Reman. Sheppard M100 Series	PET	M100	–	SG4001
RG100PEVX	Remanufactured Sheppard M100 series	PEV	M100	–	SG4001
RG100PEWX	Reman. Sheppard M100 Series	PEW	M100	–	SG4001
RG100PEZX	Reman. Sheppard M100 Series	PEZ	M100	–	SG4001
RG100PFAX	Remanufactured Sheppard M100 series	PFA	M100	–	SG4001
RG100PFBX	Remanufactured Sheppard M100 series	PFB	M100	–	SG4001
RG100PFDX	Remanufactured Sheppard M100 series	PFD	M100	–	SG4001
RG100PFFX	Reman. Sheppard M100 Series	PFF	M100	–	SG4001
RG100PFLX	Remanufactured Sheppard M100 series	PFL	M100	–	SG4001
RG100PFSX	Reman. Sheppard M100 Series	PFS	M100	–	SG4001
RG100PFXX	Reman. Sheppard M100 Series	PFX	M100	–	SG4001
RG100PFYX	Remanufactured Sheppard M100 series	PFY	M100	–	SG4001

RG100PGAX	REmanufactured Sheppard M100 series	PGA	M100	–	SG4001
RG100PGBX	Remanufactured Sheppard M100 series	PGB	M100	–	SG4001
RG100PGDX	Remanufactured Sheppard M100 series	PGD	M100	–	SG4001
RG100PGEX	Reman. Sheppard M100 Series	PGE	M100	14-12740-000	SG4001
RG100PGGX	Reman. Sheppard M100 Series	PGG	M100	–	SG4001
RG100PGHX	Reman. Sheppard M100 Series	PGH	M100	–	SG4001
RG100PGJX	Remanufactured Sheppard M100 series	PGJ	M100	–	SG4001
RG100PGKX	Remanufactured Sheppard M100 series	PGK	M100	–	SG4001
RG100PGMX	Remanufactured Sheppard M100 series	PGM	M100	–	SG4001
RG100PGPX	Remanufactured Sheppard M100 series	PGP	M100	–	SG4001
RG100PGWX	Remanufactured Sheppard M100 series	PGW	M100	–	SG4001
RG100PGYX	Remanufactured Sheppard M100 series	PGY	M100	–	SG4001
RG100PHBX	Remanufactured Sheppard M100 series	PHB	M100	–	SG4001
RG100PHCX	Remanufactured Sheppard M100 series	PHC	M100	–	SG4001
RG100PHDX	Reman. Sheppard M100 Series	PHD	M100	3501229C91	SG4001
RG100PHFX	Remanufactured Sheppard M100 series	PHF	M100	–	SG4001
RG100PHGX	Remanufactured Sheppard M100 series	PHG	M100	–	SG4001
RG100PHJX	Remanufactured Sheppard M100 series	PHJ	M100	–	SG4001
RG100PHUX	Reman. Sheppard M100 Series	PHU	M100	–	SG4001
RG100PJBX	Reman. Sheppard M100 Series	PJB	M100	8084060	SG4001
RG100PJCX	Reman. Sheppard M100 Series	PJC	M100	–	SG4001
RG100PJDX	Reman. Sheppard M100 Series	PJD	M100	–	SG4001
RG100PJEX	Remanufactured Sheppard M100 series	PJE	M100	–	SG100
RG100PJGX	Reman. Sheppard M100 Series	PJG	M100	–	SG4001
RG100PJHX	Reman. Sheppard M100 Series	PJH	M100	–	SG4001
RG100PJJX	Reman. Sheppard M100 Series	PJJ	M100	–	SG4001
RG100PJMX	Remanufactured Sheppard M100 series	PJM	M100	–	SG4001
RG100PJTX	Remanufactured Sheppard M100 series	PJT	M100	–	SG4001
RG100PJUX	Remanufactured Sheppard M100 series	PJU	M100	–	SG4001
RG100PKCX	Remanufactured Sheppard M100 series	PKC	M100	–	SG4001
RG100PKEX	Remanufactured Sheppard M100 series	PKE	M100	–	SG4001

RG100PKTX	Remanufactured Sheppard M100 series	PKT	M100	-	SG4001
RG100PLGX	Remanufactured Sheppard M100 series	PLG	M100	-	SG4001
RG100PLJX	Reman. Sheppard M100 Series	PLJ	M100	-	SG4001
RG100PLTX	Reman. Sheppard M100 Series	PLT	M100	-	SG4001
RG100PLXX	Reman. Sheppard M100 Series	PLX	M100	9002-8283	SG4001
RG100PMHX	Remanufactured Sheppard M100 series	PMH	M100	-	SG4001
RG100PMJX	Remanufactured Sheppard M100 series	PMJ	M100	-	SG4001
RG100PMKX	Remanufactured Sheppard M100 series	PMK	M100	-	SG4001
RG100PMLX	Remanufactured Sheppard M10 series	PML	M100	-	SG4001
RG100PMNX	Remanufactured Sheppard M100 series	PMN	M100	-	SG4001
RG100PMPX	Remanufactured Sheppard M100 series	PMP	M100	-	SG4001
RG100PMRX	Remanufactured Sheppard M100 series	PMR	M100	-	SG4001
RG100PMTX	Reman. Sheppard M100 Series	PMT	M100	-	SG4001
RG100PMWX	Reman. Sheppard M100 Series	PMW	M100	-	SG4001
RG100PMXX	Reman. Sheppard M100 Series	PMX	M100	3501032C91	SG4001
RG100PNBX	Remanufactured Sheppard M100 series	PNB	M100	-	SG4001
RG100PNDX	Remanufactured Sheppard M100 series	PND	M100	-	SG4001
RG100PNEX	Remanufactured Sheppard M100 series	PNE	M100	-	SG4001
RG100PNFX	Remanufactured Sheppard M100 series	PNF	M100	-	SG4001
RG100PNJX	Reman. Sheppard M100 Series	PNJ	M100	-	SG4001
RG100PNQX	Reman. Sheppard M100 Series	PNQ	M100	-	SG4001
RG100PPCX	Remanufactured Sheppard M100 series	PPC	M100	-	SG4001
RG100PPEX	Remanufactured Sheppard M100 series	PPE	M100	-	SG4001
RG100PPFX	Reman. Sheppard M100 Series	PPF	M100	-	SG4001
RG100PPGX	Reman. Sheppard M100 Series	PPG	M100	-	SG4001
RG100PPJX	Reman. Sheppard M100 Series	PPJ	M100	-	SG4001
RG100PPLX	Remanufactured Sheppard M100 series	PPL	M100	-	SG4001
RG100PPNX	Remanufactured Sheppard M100 series	PPN	M100	-	SG4001
RG100PPQX	Remanufactured Sheppard M100 series	PPQ	M100	-	SG4001
RG100PPSX	Remanufactured Sheppard M100 series	PPS	M100	-	SG4001
RG100PQEX	Reman. Sheppard M100 Series	PQE	M100	-	SG4001
RG100PQFX	Reman. Sheppard M100 Series	PQF	M100	-	SG4001

RG100PQHX	Reman. Sheppard M100 Series	PQH	M100	–	SG4001
RG100PQMX	Remanufactured Sheppard M100 series	PQM	M100	–	SG4001
RG100PQQX	Reman. Sheppard M100 Series	PQQ	M100	–	SG4001
RG100PQRX	Reman. Sheppard M100 Series	PQR	M100	–	SG4001
RG100PQSX	Reman. Sheppard M100 Series	PQS	M100	–	SG4001
RG100PQTX	Reman. Sheppard M100 Series	PQT	M100	–	SG4001
RG100PQUX	Remanufactured Sheppard M100 series	PQU	M100		SG4001
RG100PQVX	Reman. Sheppard M100 Series	PQV	M100	–	SG4001
RG100PQWX	Remanufactured Sheppard M100 series	PQW	M100	–	SG4001
RG100PQXX	Remanufactured Sheppard M100 series	PQXX	M100	–	SG4001
RG100PQYX	Remanufactured Sheppard M100 series	PQY	M100	–	SG4001
RG100PRCX	Remanufactured Sheppard M100 series	PRC	M100	–	SG4001
RG100PRDX	Remanufactured Sheppard M100 series	PRD	M100	–	SG4001
RG100PRZX	Remanufactured Sheppard M100 series	PRZ	M100	–	SG4001
RG100PTGX	Remanufactured Sheppard M100 series	PTG	M100	–	SG4001
RG100PTSX	Remanufactured Sheppard M100 series	PTS	M100	–	SG4001
RG100PXEX	Remanufactured Sheppard M100 series	PXE	M100	–	SG4001
RG100PZEX	Remanufactured Sheppard M100 series	PZE	M100	–	SG4001
RG110PBQX	Reman. Sheppard M110 series	PBQ	M110	–	SG4008
RG110PDQX	Reman. Sheppard M110 series	PDQ	M110	–	SG4008
RG110PFAX	Reman. Sheppard M110 series	PFA	M110	–	SG4008
RG110PFLX	Reman. Sheppard M110 series	PFL	M110	–	SG4008
RG110PFRX	Reman. Sheppard M110 series	PFR	M110	–	SG4008
RG110PHCX	Reman. Sheppard M110 series	PHC	M110	–	SG4008
RG110PHEX	Reman. Sheppard M110 series	PHE	M110	–	SG4008
RG110PHMX	Reman. Sheppard M110 series	PHM	M110	–	SG4008
RG110PJDX	Reman. Sheppard M110 series	PJD	M110	–	SG4008
RG110PJEX	Reman. Sheppard M110 series	PJE	M110	–	SG4008
RG110PJTX	Reaman. Sheppard M110 series	PJT	M110	–	SG4008
RG110PJZX	Reman. Sheppard M110 series	PJZ	M110	–	SG4008
RG110PLX	Remanufactured Sheppard M110 Series	PL	M110	–	SG4008
RG80SAAX	Reman. Sheppard M80 Series	SAA	M80	1664771C91	SG4001
RG80SADX	Reman. Sheppard M80 Series	SAD	M80	1667449C91	SG4001
RG90PAEX	Reman. Sheppard M90 Series	PAE1	M90	1664770C91	SG4001

Sheppard Service Kits



SKU#	Product Description
RG29210	Seal Kit for Sheppard 292 Series Power Steering Gear
RG39210	Seal Kit for Sheppard 392 Series Steering Gear
RG49210	Seal Kit for Sheppard 492 Series Steering Gear
RG59210	Seal Kit for Sheppard 592 Series Steering Gear
RG8823K	Complete Seal Kit for Sheppard M−100 Series Power Steering Gear
RG8834K	Input Seal Kit for Sheppard M80, M90 & M100 Series Steering Gear
RG8886K	Seal Kit for Sheppard M−110 Power Steering Gear
RG90K	Seal Kit for Sheppard M−90 Series Power Steering Gear
RGM100K	Minor Seal Kit for Sheppard M−100 Series Power Steering Gear

HF54 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	60 lbs.
Seal Kit	RG54001

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG54039X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54039	HF542995	402062C93	SG1001
RG54042X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54042	HF542998	DOTZ3504C	SG1001
RG54043X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54043	HF542996	DOHZ3504K	SG1001
RG54044X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54044	HF542998	DOTZ3504A	SG1001
RG54050X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54050	HF542996	DOHZ3504J	SG1001
RG54053X	Remanufactured TRW/Ross HF54 Series Steering Gear	HF54053	HF542997	442783C95	SG1001

HF64 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	84 lbs.
Seal Kit	RG64001

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG64076X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64076	HF642990	D1HZ3504F	SG2001
RG64077X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64077	HF642990	D1HZ3504E	SG2001
RG64107X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64107	HF642988	402061C93	SG2001
RG64113X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64113	HF642989	20QC4290P2	SG2001
RG64114X	Remanufactured TRW/Ross HF64 Series Steering Gear	HFB64114	HFB642997	20QC4290P1	SG2001
RG64119X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64119	HF642989	20QC49307	SG2001
RG64122X	Remanufactured TRW/Ross HF64 Series Steering Gear	HF64122	HF642990	E1HZ3504A	SG2001

HFB52 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	67 lbs.
Seal Kit	RG52001

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG52013X	Remanufactured TRW/Ross HFB52 Series Steering Gear	HFB52991	HFB52991	496785C91	SG3002
RG52017X	Remanufactured TRW/Ross HFB52 Series Steering Gear	HFB52017	HFB52299	E1HZ3504H	SG3001
RG52023X	Remanufactured TRW/Ross HFB52 Series Steering Gear	HFB52023	HFB522987	E1HZ3504M	SG3001
RG52033X	Remanufactured TRW/Ross HFB52 Series Steering Gear	HFB52033	HFB522991	1656618C91	SG3001

HFB64 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	85 lbs.
Seal Kit	RG64002

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG64032X	Reman. TRW/Ross HFB64 Series	HFB64032	HFB642987	5004439C92	SG4001
RG64033X	Reman. TRW/Ross HFB64 Series	HFB64033	HFB642996	B14099190 B149919	SG4001
RG64042X	Reman. TRW/Ross HFB64 Series	HFB64042	2994	E3HZ3504A	SG4001
RG64045X	Reman. TRW/Ross HFB64 Series	HFB64045	HFB642989	585777C91	SG4001
RG64047X	Reman. TRW/Ross HFB64 Series	HFB64047	HFB642987	584539C91	SG4001
RG64052X	Reman. TRW/Ross HFB64 Series	HFB64052	HFB642945	E2HT3N503BA	SG4001
RG64055X	Reman. TRW/Ross HFB64 Series	HFB64055	HFB642976	20QC4294A	SG4001
RG64057X	Reman. TRW/Ross HFB64 Series	HFB64057	HFB642988 RH	475179C93	SG4001
RG64079X	Reman. TRW/Ross HFB64 Series	HFB64079	HFB642978	E2HT3N503AA	SG4001
RG64080X	Stearing Gear − Ford Application	4	3	HFB642978	
RG64083X	Reman. TRW/Ross HFB64 Series	HFB64083	HFB642953	1002064	SG4001
RG64085X	Reman. TRW/Ross HFB64 Series	HFB64085	HFB642985	K254−218	SG4001
RG64086X	Reman. TRW/Ross HFB64 Series	HFB64086	HFB642964	584539C91	SG4001
RG64098X	Reman. TRW/Ross HFB64 Series	HFB64098	HFB642960	2901161330 Bluebird	SG4001
RG64128X	Reman. TRW/Ross HFB64 Series	HFB64128	−	−	SG4001

HFB70 Series Steering Gears − Remanufactured

Specifications:

Approximate Weight	110 lbs.
Seal Kit	RG70001

SKU#	Product Description	MFG. #	Casting #	OEM #	Core Group
RG70014X	Remanufactured TRW/Ross HFB70 Series Steering Gear	HFB70014	HFB702883	383010002 383010003	SG5001
RG70045X	Remanufactured TRW/Ross HFB70 Series Steering Gear	HFB70045	HFB702993	383010006	SG5001
RG70049X	Remanufactured TRW/Ross HFB70 Series Steering Gear	HFB70049	HFB702931	28QC49309	SG5001
RG70065X	Remanufactured TRW/Ross HFB70 Series Steering Gear	HFB70065	HFB702992	K254206 6990−HFB70065	SG5001
RG70114X	Remanufactured TRW/Ross HFB70 Series Steering Gear	HFB70114	−	−	SG5001

TAS Series Steering Gears − Remanufactured

Specifications:

Seal Kit	RG65000
Approximate Weight	85 lbs.

SKU#	Product Description	Manufacture Number	Casting Number	OEM Part Number	Core Group
RG40001X	Reman. TAS Series	TAS40001	TAS402299	1688582C91	SG4001
RG40005X	Reman. TAS Series	RCS40005	−	−	SG4001
RG40006X	Reman. TAS Series	TAS40006	TAS402299	16885882C91	SG4001
RG40024X	Reman. TAS Series	TAS40024	−	−	SG4001
RG40040X	Reman. TAS Series	TAS40040	−	−	SG4001
RG40044X	Remanufactured TAS 40 Series	TAS40044	−	−	SG4001
RG55001X	Reman. TAS Series	TAS55001	TAS552299	1661401C91	SG4001
RG55003X	Reman. TAS Series	TAS55003	TAS552298	680 460 0001	SG4001
RG65001X	Reman. TAS Series	TAS65001	TAS652299	1659069C91	SG4001
RG65003X	Reman. TAS Series	TAS65003	−	−	SG4001
RG65004X	Reman. TAS Series	TAS65004	TAS652295	14−10053−000	SG4001
RG65005X	Reman. TAS Series	TAS65005	TAS652293	14−100520	SG4001
RG65006X	Reman. TAS Series	TAS65006	TAS652296	3047087	SG4001
RG65007X	Reman. TAS Series	TAS65007	TAS652294	K294−194	SG4001
RG65008X	Reman. TAS Series	TAS65008	TAS652292	K254−218	SG4001
RG65010X	Reman. TAS Series	TAS65010	TAS652291	F2HZ3504F	SG4001
RG65012X	Reman. TAS Series	TAS65012	TAS652290	20QC535AM	SG4001
RG65014X	Reman. TAS Series	TAS65014	TAS652295	38301−3409	SG4001
RG65015X	Reman. TAS Series	TAS65015	TAS652289	1161330	SG4001
RG65024X	Reman. TAS Series	TAS65024	TAS652292	10−02379	SG4001
RG65025X	Reman. TAS Series	TAS65025	TAS652286	10−02064	SG4001
RG65026X	Reman. TAS Series for GMC Top Kick	TAS65026	TAS652288	15651116	SG4001
RG65028X	Reman. TAS Series	TAS65028	TAS652289	−	SG4001
RG65042X	Reman. TAS Series	TAS65042	TAS652282	1663200C91	SG4001

RG65047X	Reman. TAS Series	TAS65047	TAS652291	FOHT3N503BA	SG4001
RG65048X	Reman. TAS Series	TAS65048	TAS652291	F1HT3N503EA	SG4001
RG65057X	Remanufactured TAS Series	TAS65057	–	–	SG4001
RG65065X	Reman. TAS Series	TAS65065	TAS652279	F3HT3N503AC	SG4001
RG65066X	Reman. TAS Series	TAS65066	–	–	SG4001
RG65067X	Reman. TAS Series	TAS65067	–	–	SG4001
RG65068X	Reman. TAS Series	TAS65068	–	–	SG4001
RG65069X	Reman. TAS Series	TAS65069	–	–	SG4001
RG65070X	Reman. TAS Series	TAS65070	TAS652291	F2HZ3504E	SG4001
RG65071X	Reman. TAS Series	TAS65071	TAS652291	F7HZ3504G	SG4001
RG65072X	Reman. TAS Series	TAS65072	–	–	SG4001
RG65074X	Reman. TAS Series	TAS65074	–	–	SG4001
RG65075X	Reman. TAS Series	TAS65075	–	–	SG4001
RG65076X	Reman. TAS Series	TAS65076	–	–	SG4001
RG65078X	Reman. TAS Series	TAS65078	–	–	SG4001
RG65079X	Reman. TAS Series	TAS65079	TAS652296	–	SG4001
RG65080X	Reman. TAS Series	TAS65080	–	–	SG4001
RG65082X	Reman. TAS Series	TAS65082	–	–	SG4001
RG65084X	Reman. TAS Series	TAS65084	–	–	SG4001
RG65085X	Reman. TAS Series	TAS65085	TAS652289	–	SG4001
RG65086X	Reman. TAS Series	TAS65086	–	–	SG4001
RG65087X	Reman. TAS Series	TAS65087	–	–	SG4001
RG65088X	Reman. TAS Series	TAS65088	–	–	SG4001
RG65089X	Reman. TAS Series	TAS65089	–	–	SG4001
RG65090X	Reman. TAS Series for Kenworth	TAS65090	TAS652274	K294−194	SG4001
RG65091X	Reman. TAS Series	TAS65091	–	–	SG4001
RG65092X	Reman. TAS Series	TAS65092	TAS652290	20QC535AM	SG4001
RG65093X	Reman. TAS Series	TAS65093	–	–	SG4001
RG65094X	Reman. TAS Series	TAS65094	–	–	SG4001
RG65095X	Reman. TAS Series	TAS65095	–	–	SG4001
RG65098X	Reman. TAS Series	TAS65098	–	–	SG4001
RG65100X	Reman. TAS Series	TAS65100	–	–	SG4001
RG65101X	Reman. TAS Series	TAS65101	TAS652278	F5HZ3504C	SG4001
RG65102X	Reman. TAS Series	TAS65102	TAS652295	90022655	SG4001
RG65103X	Reman. TAS Series	TAS65103	–	–	SG4001
RG65104X	Reman. TAS Series	TAS65104	TAS652268	F6HZ3504BC	SG4001
RG65105X	Reman. TAS Series	TAS65105	TAS652267	F6HZ3504DB	SG4001
RG65106X	Reman. TAS Series	TAS65106	–	–	SG4001
RG65107X	Reman. TAS Series	TAS65107	–	–	SG4001
RG65108X	Reman. TAS Series	TAS65108	–	–	SG4001
RG65109X	Reman. TAS Series	TAS65109	–	–	SG4001
RG65111X	Reman. TAS Series	TAS65111	–	–	SG4001
RG65112X	Reman. TAS Series	TAS65112	–	–	SG4001
RG65113X	Reman. TAS Series	TAS65113	–	–	SG4001

RG65114X	Reman. TAS Series	TAS65114	–	–	SG4001
RG65115X	Reman. TAS Series	TAS65115	–	–	SG4001
RG65116X	Reman. TAS Series	TAS65116	–	–	SG4001
RG65118X	Reman. TAS Series	TAS65118	–	–	SG4001
RG65119X	Reman. TAS Series	TAS65119	TAS652262	14−12475−000	SG4001
RG65122X	Reman. TAS Series	TAS65122	TAS652269	F6HT3504KA	SG4001
RG65126X	Reman. TAS Series	TAS65126	–	–	SG4001
RG65127X	Reman. TAS Series	TAS65127	TAS652261	–	SG4001
RG65129X	Reman. TAS Series for Freightliner	TAS65129	TAS652262	14−12475−000	SG4001
RG65130X	Reman. TAS Series	TAS65130	–	–	SG4001
RG65133X	Reman. TAS Series	TAS65133	TAS652296	–	SG4001
RG65142X	Reman. TAS Series	TAS65142	TAS652290	20QC535AM	SG4001
RG65143X	Reman. TAS Series	TAS65143	–	–	SG4001
RG65150X	Reman. TAS Series for Volvo	TAS65150	TAS652265	3098661	SG4001
RG65154X	Reman. TAS Series	TAS65154	–	–	SG4001
RG65155X	Reman. TAS Series for Freightliner	TAS65155	TAS652262	14−13451−000	SG4001
RG65166X	Reman. TAS Series	TAS65166	TAS652295	38301−3409	SG4001
RG65171X	Reman. TAS Series	TAS65171	–	–	SG4001
RG65179X	Reman. TAS Series	TAS65179	–	–	SG4001
RG65196X	Reman. TAS Series	TAS65196	–	–	SG4001
RG65204X	Reman. TAS Series	TAS65204	–	–	SG4001
RG65211X	Reman. TAS Series	TAS65211	–	–	SG4001
RG65212X	Reman. TAS Series	TAS65212	–	–	SG4001
RG65214X	Reman. TAS Series	TAS65214	–	–	SG4001
RG65216X	Reman. TAS Series	TAS65216	–	–	SG4001
RG65217X	Reman. TAS Series	TAS65217	–	–	SG4001
RG65218X	Reman. TAS Series	TAS65218	TAS652249	20518924	SG4001
RG65219X	Reman. TAS Series	TAS65219	–	–	SG4001
RG85002X	Reman. TAS Series	TAS85002	TAS852298	38301−3419	SG8501
RG85006X	Remanufactured THP Series	THP60006	–	–	SG4001
RG85014X	Remanufactured TAS Series	TAS85014	–	–	SG8501
RG85024X	Reman. TAS Series	TAS85024	–	38301−0007	SG8501
RG85052X	Reman. TAS Series	TAS85052	TAS852292	–	SG4004
RG85134X	Reman. TAS Series	TAS85134	TAS852276	14−14955−001	SG8501
RG85142X	Remanufactured TAS Series	TAS85142	–	–	SG8501

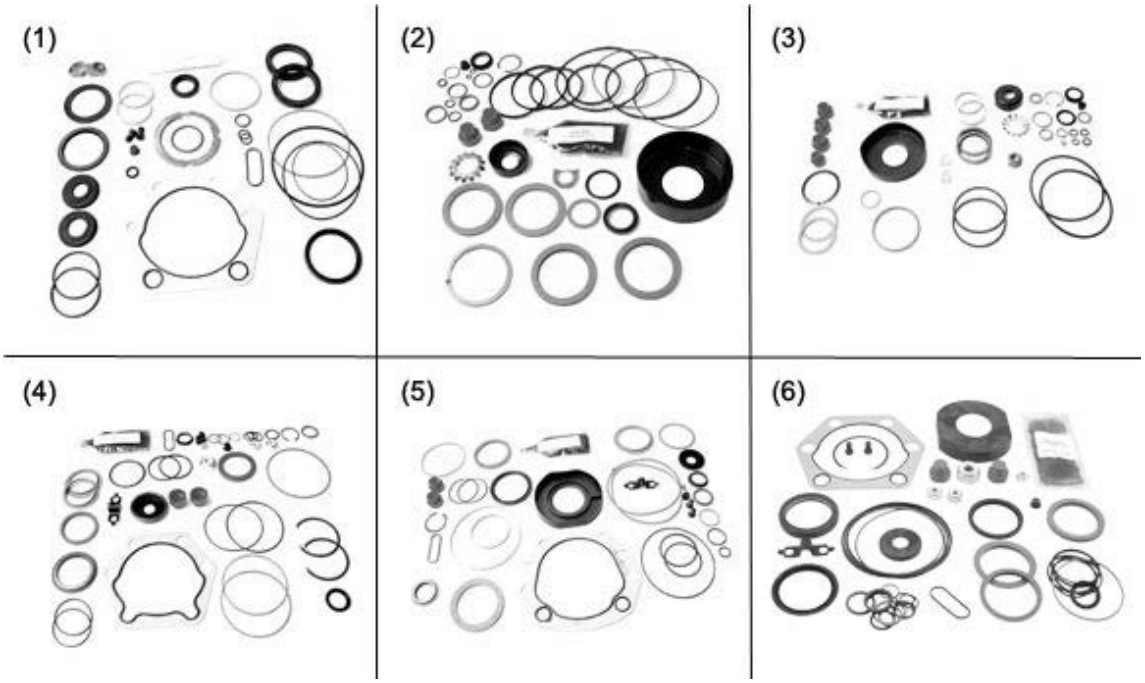
THP Series Steering Gears − Remanufactured

SKU#	Product Description	Manufacture Number	Casting Number	OEM Part Number	Notes	Core Group
RG60001X	Remanufactured THP Series	THP60001	THP602298	−	3 Bolts / 4 Lines	SG4001
RG60002X	Remanufactured THP Series	THP60002	THP602297	−	3 Bolts / 2 Lines	SG4001
RG60003X	Remanufactured THP Series	THP60003	THP602298	−	3 Bolts / 2 Lines	SG4001
RG60004X	Remanufactured THP Series	THP60004	THP602296	−	3 Bolts / 2 Lines	SG4001
RG60006X	Remanufactured THP Series	THP60006	THP602299	−	3 Bolts / 4 Lines	SG4001
RG60007X	Remanufactured THP Series	THP60007	THP602295	−	5 Bolts / 4 Lines	SG4001
RG60008X	Remanufactured THP Series	THP60008	THP602295	−	5 Bolts / 4 Lines	SG4001
RG60009X	Remanufactured THP Series	THP60009	THP602296	20511466	3 Bolts / 2 Lines	SG4001
RG60010X	Remanufactured THP Series	THP60010	THP602295	−	5 Bolts / 2 Lines	SG4001
RG60011X	Remanufactured THP Series	THP60011	THP602295	−	5 Bolts / 4 Lines	SG4001

TRW/Ross Cylinders − Remanufactured

SKU#	Product Description	Length	Core Group
RG40112X	Remanufactured TRW/Ross Cylinder	12"	SC1002

TRW/Ross Service Kits



SKU#	Product Description	Picture Number
RG52001	TRW/Ross HFB52 Series Steering Gear Seal Kit	4
RG54001	TRW/Ross HF54 Series Steering Gear Seal Kit	3
RG64001	TRW/Ross HF64 Series Steering Gear Seal Kit	2
RG64002	TRW/Ross HFB64 Series Steering Gear Seal Kit	6
RG65000	TRW/Ross TAS Series Steering Gear Seal Kit	1
RG70001	TRW/Ross HFB70 Series Steering Gear Seal Kit	5
RG8101K	TRW/Ross TAS 65 Series Steering Gear Seal Kit	–
RG8103K	TRW/Ross TAS 85 Series Steering Gear Seal Kit	–
RG8800SK	TRW/Ross TAS Series Steering Gear Shaft	–

OIL SPECIFICATIONS

Ford Bendix C−300N
Motorcraft − Marcon
Multi−Purpose ATF XT−2−QDX or DDX (ESP−M2C166−H)
or Equivalent

Ross HF54 & HF64 ATF "E" or "F"
Ford Spec. M2C138CJ
ATF Dexron 2
Shell Rotella T.....SAE 30
Mobile.....SAE 10W30
Mobile.....SAE 10W40
Ashland.....SAE 10W40
Union.....SAE 10W40
Texaco.....SAE 10W40

Ross HFB52
ATF "E" or "F"
Ford Spec. M2C138CJ
ATF Dexron 2
Mack EO−K2 Engine Oil
Shell Rotella T.....SAE 30
Mobile.....SAE 10W30
Mobile.....SAE 10W40
Ashland.....SAE 10W40
Union.....SAE 10W40
Texaco.....SAE 10W40
Unical Gaurdol.....SAE 15W40
Unical Gaurdol.....SAE 30
Essolube.....SAE 15W40
Chevron.....SAE 15W40

Ross HFB64 & HFB70
ATF "E" or "F"
Ford Spec. M2C138
ATF Dexron 2
Mack EO−K2 Engine Oil
Shell Rotella T.....SAE 30
Mobile.....SAE 10W30
Mobile.....SAE 10W40
Ashland .....SAE 10W40
Union.....SAE 10W40
Texaco.....SAE 10W40
Unical Gaurdol.....SAE 15W40
Unical Gaurdol.....SAE 30
Essolube.....SAE 15W40
Chevron.....SAE 10W40

M−Sheppard (M80, M90, M100 & M110)
15W40 Motor Oil
ATF Dexron 2
GM Power Steering Fluid
Hydraulic Fluid
Sheppard 292, 392, 492 & 592 Series
10W40 (API SD−SE) Motor Oil is Preferred
ATF
GM Power Steering Fluid
Hydraulic Fluid
Dexron 2

ALL Power Steering Pumps
See Vehicle Manufacturer's Recommendations.

NOTE: The filter element should always be changed when the oil in the steering system is changed or a unit is changed.
WARNING: Completely flush the system with recommended fluid only. Do not mix oil types. Any mixture or any unapproved oil could lead to seal deterioration and leaks. A leak could ultimately cause the loss of fluid, which could result in loss of power steering assist.

OPERATING PRESSURE & OIL FLOW

Ross HF54 Series
Maximum operating pressure is 1500 PSI
Maximum flow rate is 6 GPM
NOTE: The recommended minimum flow at 1 1/2 hand wheel turns must be no more than 2.5 GPM. If the HF54 gear is operating an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Ross HFB52 Series
Maximum operating pressure is 2000 PSI
Maximum flow rate is 6 GPM
NOTE: The recommended minimum flow at 1 1/2 hand wheel turns must be no less than 2 GPM. If the HFB52 steering gear is controlling an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Ross HFB70 Series
Maximum operating pressure is 2000 PSI
Maximum flow rate is 8 GPM
NOTE: The recommended minimum flow at 1 1/2 hand wheel turns must be no less than 3.4 GPM. If the HFB70 is controlling an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Ross HF64 Series
Maximum operating pressure is 1750 PSI
Maximum flow rate is 8 GPM
NOTE: The recommended minimum flow at 1 1/2 hand wheel turns must be no less than 3.4 GPM. If the HFB70 is gear is operating an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Ross HFB64 Series
Maximum operating pressure is 2000 PSI
Maximum flow rate is 6 GPM
NOTE: The recommended minimum flow at 1 1/2 hand wheel turns must be no less than 2.9 GPM. If the HFB52 steering gear is controlling an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Ross TAS40, 55 & 65 Series
Maximum operating pressure is 2175 PSI
Maximum flow rate is 7 GPM
NOTE: The recommended minimum flow at 1 1/2 steering wheel turns per second is as follows: TAS40no less than 2.2 GPM. TAS55no less than 2.6 GPM. TAS65 no less than 3.0 GPM. If the gear controlling an assist cylinder, more flow may be required based on size of cylinder and front axle weight.

Whenever steering complaints are encountered it is important that the complete steering system be inspected. Special body or equipment installations should also be considered for their affect on steering performance.

The steering system consists of the Sheppard Integral Power Steering Gear, a hydraulic supply pump with pressure and flow controls and an oil reservoir, the front axle and mechanical components and the steering column or input shaft and connecting linkages, The front tires and wheels must also be considered as part of the total steering system.

Steering performance can be affected by out of line conditions anywhere in the total steering system. Other factors outside the steering system can also contribute to poor steering performance.

Many times a steering gear is removed and disassembled needlessly, because an organized diagnosis procedure has not been followed. Start your diagnosis by:

- **Defining The Complaint**

    1. Talk to and question the driver
    2. Drive the vehicle

- **Visual Inspection**

    1. Look for poor loading practices
    2. Check tires for mismatch and proper air pressure
    3. Check for dry fifth wheel or improper location
    4. Check suspension for sagging or shifting (out of line rear axles will tend to steer the front end of the vehicle)

- **Mechanical Components Inspection**

    1. Check all front axle components for wear, excessive slack, or seizure
    2. Inspect front and rear suspension components
    3. Check steering gear mounting to be sure it is tight and not shifting on the chassis or axle
    4. Inspect steering column components

- **Hydraulic Supply System Inspection**

    Evaluate hydraulic supply system performance. Follow procedures in "Hydraulic Supply−Diagnosis" section. Oil pressure and oil flow must be within the vehicle manufacturer's specification.

The following pages list possible symptoms, causes and corrective action for steering system complaints. Careful and complete diagnosis will enable you to solve steering problems quickly.

NOTE: Keep in mind that the same problems that upset manual steering will also affect power steering.

SYMPTOM	POSSIBLE CAUSE	REMEDY
Oil leaking at output shaft of steering gear	Damaged sector shaft seal Clogged oil filter in reservoir (high back pressure) Pinched or restricted oil return line Damaged quad ring seal Damaged bronze bearings Damaged lipseal (Series 5 gears) Damaged roller bearings	Replace sector shaft seal Replace filter Increase change frequency Locate and correct Check back pressure Replace quad ring seal Replace bronze bearings Polish output shaft or replace to remove bronze deposits Replace with replacement seal assy. Replace roller bearings Polish output shaft or replace to remove pitting & grooving in seal area
Oil leaking at actuating shaft of steering gear	Worn or damaged oil seal Damaged actuating shaft seal surface	Replace seals Replace damaged ports Lube bearing cap more often
Oil leaking at supply pump drive shaft	Damaged oil seal Oil seal−heat damaged Loose or damaged bushing on pump drive shaft	Replace oil seal Check operating temperature Repair pump per pump service instructions
Oil leaking between reservoir and pump body	Seal or gasket damaged	Replace damaged parts
Lubricant milky or white in appearance	Water entry through reservoir venting system	Clean vent system or replace cap assembly
Oil forced out of reservoir or foaming	Clogged oil filter Loose pump drive belts Air in system Faulty supply pump (Cavitation) Relief plungers of steering gear not adjusted properly Operating temperatures too high	Change oil and oil filter Increase change intervals Adjust belts or replace Bleed air from system Check for air leak on suction side of supply pump Check supply pump following "Hydraulic Supply−Diagnosis" procedures Repair pump per pump service instructions Adjust relief plungers (see Final Adjustments) Follow "Hydraulic Supply−Diagnosis" procedures
Engine oil in power steering reservoir (Gear driven pump)	Faulty seal at pump drive shaft Faulty seal at accessory shaft driving supply pump	Repair pump Repair accessory drive
Lubricating oil discolored or smells bad	Operating temperatures too high Change intervals too long Incorrect lubricant used	Check and correct cause of over−heating Increase oil change frequency Drain, flush and refill with 10W40 motor oil
High operating temperatures	Oil flow restriction Oil flow too high	Check back pressure (Follow "Hydraulic Supply−Diagnosis" procedures) Check maximum oil flow (follow "Hydraulic Supply−Diagnosis" procedures)

SYMPTOM	POSSIBLE CAUSE	REMEDY
Oil in reservoir foaming	Air leak in suction side of supply pump Pump cavitating Oil overheating Incorrect lubricant	Refer to pump servicing instructions Check for restriction in pump supply See high operating temperatures Change to 10W40 motor oil
No power steering on cold start	Hydraulic supply pump vanes not extending (Vane type pump only)	Increase engine speed momentarily to extend vanes and start pump action. Usually a temporary and infrequent occurence and not cause for pump repair or replacement
Excessive pump pressure with steering gear in neutral position	Pinched oil return line High back pressure Binding steering column Damaged actuating shaft bearing	Relocate line Repair steering column Replace damaged parts as required
Wheel cuts restricted	Relief plungers misadjusted	Adjust relief plungers (See Final Adjustments section)
Erratic steering or mechanical steering only	Insufficient volume of oil being metered by flow divider to steering gear induced by foreign particles on flow divider valve, causing the valve to hang up in the bore	Polish flow divider valve to remove foreign particles and burrs
Hard steering	Loose belts Worn pully(s) due to belt slipping Faulty supply pump Front axle overloaded Faulty steering geometry High operating temperature	Tighten or replace belts Replace pully(s) and belts (keep belt tight) Follow "Hydraulic Supply−Diagnosis" procedures Correct loading practices Align front end Locate and correct cause of overheating
Wheel turns hard in one or both directions	Bent or damaged king pins and tie rods Front end load too great for rated axle capacity Fatigued by−pass valve spring in pump Low oil level in steering system Air in system Metal or foreign material caught in actuating valve Actuating valve worn or chipped by dirt	Repair or replace king pins and tie rods Lighten load or install larger steering gear Replace with flow control valve pump assembly Fill oil reservoir as required Bleed system and check for cause of air (See Final Adjustments Section) Remove actuating valve Clean and check parts for damage If damage is excessive replace damaged parts as required.
Wheel steering hard in one direction	Broken reversing springs in steering gear Metal or foreign material in relief ball seat in piston of steering gear Foreign material in relief valve	Replace reversing springs and damaged parts Remove piston and clean relief valve seats or replace damaged parts Clean relief valve
Steering extremely light in one or both direction(s)	Bent or damaged reversing springs	Check for impact or accident damage Replace damaged parts

SYMPTOM	POSSIBLE CAUSE	REMEDY
Steering input not smooth (seizing, binding)	Worn universal joint Lack of lubrication Universal joint not phased properly Low oil flow Pump cavitating Overheating	Check and replace as required Lubricate per vehicle manufacturer's recommendations See NOTE: Universal Joints below Idle speed too slow Drive belts slipping Supply pump not to specifications (See "Hydraulic Supply−Diagnosis" procedures Correct pump supply Correct cause of overheating
Darting, wandering (oversteering)	Oil flow too high Air trapped in steering gear Looseness, worn front end parts Front end alignment not correct Radial tire sidewall flex Excessive wear or damage in steering gear Overloading Steering column universal joint phasing incorrect Mechanical bind in steering gear Tight tie rod ends & drag link sockets	Supply pump not to specifications (See "Hydraulic Supply−Diagnosis" Procedures) Bleed system (See Final Adjustments Section) Check and repair as required Align front end Caster Check tire pressure Check for out of line tread Contact tire manufacturer representative Check and repair as required Reduce loads See NOTE: Unviersal Joints below Check steering gear mounting for distortion Check for damaged or distorted steering gear components Check rotational torque & replace if necessary
Excessive backlash	Worn universal joint Worn pins and keys universal joint to actuating shaft and universal to steering shaft Low oil volume Pitman arm ball worn "egg−shaped" Improperly adjusted drag link, pitman arm to drag link and steering arm to drag link Loose bracket frame to bracket or bracket to gear bracket	Replace universal joint Replace pins and keys Check flow divider and pump drive Replace pitman arm assembly where riveted ball is used or only where bolted ball is used (vertical socket) Adjust drag link, drag link to pitman arm and drag link to steering arm Remove bracket, clean frame and bracket Check radius of frame making sure is not bearing on radius surface Check bracket for wear from working Replace bracket and tighten to recommended torque rating according to size and grade of bolts If necessary, replace bracket with new one

NOTE: Universal Joints

Universal joints are designed to operate best when the angle between the drive and driven shafts is a maximum of 20 to 25 degrees. Angles greater than this will cause undesirable velocity changes between the two shafts. this velocity change may upset steering performance. When two universal joints are used, it is in most instances possible to phase the two joints to match a high and low velocity in a manner that will provide equal velocity between the drive and driven shafts. A third universal joint in the shaft arrangement can upset the phasing of the first two joints and it is important that this third joints operating angle is limited to a maximum of 20−25 degrees.

Phasing of the universal joints in the steering column can be checked quite easily. Using an inch−pound graduated dial reading type torque wrench, read the variation in the torque reading while steering from lock−to−lock, with a socket on the steering shaft nut under the horn button. Variation of more than 15 in.−lb. indicates improper phasing. This reading is taken with the vehicle stationary and the engine running.

Phasing can usually be accomplished by rotating the two piece intermediate shaft one spline at a time until the torque reading remains the same all the way around the 360 degree rotation of the steering wheel.

SYMPTOM	POSSIBLE CAUSE	REMEDY
Rack on piston damaged	Replace parts as required	
	Damaged pinion gear on output shaft	Replace pinion gear
	Damaged output shaft splines	Replace output shaft
	Worn output shaft bushings	Replace bushings and polish shaft to remove bronze deposits
	Worn pitman arm splines	Replace worn parts
	Worn actuating shaft and valve threads	Replace worn parts as required
		Follow "Hydraulic Supply−Diagnosis" procedures to locate cause of wear
	Free play in miter gears of angle drive	Remove miter gear housing shims to mesh gears
	Damaged reversing springs	Check and repair as required
	Universal joint yoke loose on actuating shaft	Repair or replace damaged parts, check for spline wear
No attempt to return straight ahead from turns	No positive caster	Set to 4" to 6" positive caster
	Steering column bind	Check and repair universal joints and support bearings
	Steering gear mounting distorted	Shim mounting pads to correct piston to bore interference
	Linkage ball sockets seized or binding	Check and repair or replace
	King pins seized or binding	Repair or replace
	Knuckle clearance misadjust	Adjust clearance to specifications
	Oil flow rate incorrect	Check and correct supply pump or controls

NOTE: Thread Wear
Acme thread wear generally comes from inadequate lubrication or excessive manual steering of the vehicle. Manual steering results from inadequate pump pressure or flow, or an overloaded front axle where you need steering forces in excess of the hydraulic design of the steering gear.

NOTE: Freeplay
The movement of the shuttle type actuating valve within the piston, along with the normal clearances required between operating parts in the steering gear will produce a certain amount of unresponsive motion at the rim of the steering wheel. This unresponsive motion is inherent to the design and must be considered normal. With recent advances in technology and manufacturing methods it has been possible to considerably reduce the amount of this unresponsive motion. Steering gears in service prior to July 1978 could be expected to have 3 1/2 to 4 inches unresponsive motion. Current production Sheppard steering gears in service will have 1 1/2 to 2 1/2 inches of unresponsive motion. Various combinations of steering gear ratios and steering wheel diameters could effectively reduce these maximum allowances. Nominal unresponsive motion in Series 6 steering gears, measurable at 1/2 to 1 1/2 inches. Unresponsive motion is measured at the rim of the steering wheel. It must, therefore, be noted that any freeplay in the steering column and related components will affect your measurements. The steering gear mounting must be tight and steering linkage wear adjusted out or worn parts replaced. The vehicle should be standing on a smooth shop floor with the engine idling when unresponsive motion is checked. Measurement is made at the rim of the steering wheel, from initial tire and wheel movement left steer, to initial tire and wheel movement right steer.

1. **Normal Noises**
    - ♦ You or the driver may hear a hissing noise from the control valve when it is actuated during a steering maneuver
    - ♦ You or the driver may hear a noise as fluid bypasses through the poppets at full turn
    - ♦ You or the driver may hear a noise from the system relief valve when it is required to actuate
    - ♦ You or the driver may hear pump growl from some types of power steering pumps

2. **Abnormal Noises**
    - ♦ If the power steering pump is belt driven, a squealing noise may indicate that the belts should be tightened or replaced
    - ♦ A clicking noise heard during a turn, or when changing directions, may indicate that some component is loose and shifting under load
    - ♦ A Change in the normal noise of the pump may indicate that air has been induced into the system or that fluid level is low

3. **Possible Steering Problems and Causes Road Wander**
    - ♦ Tire pressure incorrect or unequal left to right
    - ♦ Components in steering linkage loose or worn (Steering wheel to road wheel)
    - ♦ Wheel bearings improperly adjusted or worn
    - ♦ Front end alignment out of specification
    - ♦ Dry fifth wheel or poor finish on fifth wheel or trailer plate
    - ♦ Steering gear mounting bolts loose on frame
    - ♦ Steering gear improperly adjusted
    - ♦ Looseness in rear axle assemblies or trailer bogies

No Recovery
- ♦ Tire pressure low
- ♦ Front end components binding
- ♦ Front end alignment incorrect
- ♦ Tight front axle king pins
- ♦ Dry fifth wheel or poor finish on fifth wheel or trailer plate
- ♦ Steering column binding
- ♦ Pump flow insufficient
- ♦ Steering gear improperly adjusted
- ♦ Steering gear control valve spool sticking

Shimmy
- ♦ Badly worn or unevenly worn tires
- ♦ Improperly mounted tire or wheel
- ♦ Wheel bearings improperly adjusted or worn
- ♦ Components in steering linkage loose or worn
- ♦ Wheels or brake drums out of balance
- ♦ Front end alignment incorrect
- ♦ Air in the hydraulic system

3. Possible Steering Problems and Causes, continued

External Oil Leakage

- Finding the location of a leak may be difficult, since oil may run away from the leak source, the fittings, hoses, pump, or gear to a low point on the gear or chassis
- A leak from the vent plug at the side cover indicates failure of the sector shaft oil seal inside the side cover

Oversteering or Darting

- Dry fifth wheel or poor finish on fifth wheel or trailer plate
- Front end components binding or loose
- Steering gear improperly adjusted
- Steering gear control valve spool sticking
- Rear axle mounts (rear steer)

High Steering Effort in One Direction

- Unequal tire pressure
- Vehicle overloaded
- Inadequate hydraulic system pressure
- Excessive internal leakage in one direction of turn only (verify with internal leakage test)

High Steering Effort in Both Directions

- Low tire pressure
- Vehicle overloaded
- Low hydraulic fluid level
- Low pressure or flow from pump
- Components of steering system binding
- Restriction in return line, or line too small in diameter
- Excessive internal leakage (verify with internal leakage test)
- Oversized tires (check manufacturer's specifications)

Lost Motion (Lash) at the Steering Wheel

- Steering wheel loose on the shaft
- Loose connection between the steering gear, intermediate column, and steering column
- Steering gear loose on frame
- Pitman arm loose on output shaft
- Components in steering linkage loose or worn
- Steering gear improperly adjusted

Excessive Heat [150F (65.6C) Over Ambient]

- Excessive pump flow
- Vehicle overloaded
- Undersized replacement hose or line
- Restricted hose or line that is kinked or severely bent or internally blocked
- Restricted recentering of gear valve caused by column bind or side load on the input shaft
- Poppet not adjusted properly
- Prolonged stationary vehicle operation

WARNING: IF THE HYDRAULIC SYSTEM FLUID BECOMES OVERHEATED, IT CAN CAUSE THE SEALS IN THE STEERING GEAR AND PUMP TO SHRINK, HARDEN, OR CRACK AND LOSE THEIR SEALING ABILITY.

4. **Filling and Air Bleeding The System**
CAUTION: For steps 1 and 2, do not turn the steering wheel. Otherwise, air may be induced into the system.

Step 1.
Fill the reservoir nearly full. Crank the engine for 10 seconds without, if possible, allowing it to start. If the engine does start, shut it down immediately. Check and refill the reservoir. Repeat at least three times, each time checking and refilling the reservoir.

CAUTION: Do not allow the fluid to drop significantly or run out of the reservoir. This may induce air into the system.

Step 2.
Start engine and let it idle for 2 minutes. Shut the engine off and check the fluid level in the reservoir.

Step 3.
Start the engine again. Steer the vehicle from full left to full right several times. Add fluid, as necessary, to the fill line on the dipstick.

NOTE: Poppets, equipped on the gear, must be adjusted so that they relieve pressure at the full left and right turns to aid in the removing of air from the system. At this time, make sure any poppets are properly adjusted. If they are not, adjust them according to specifications in the TRW gear manual.

The above procedures should remove all the air from the steering system, unless the gear is mounted in an inverted position and is equipped with the manual bleed screw. If this is so refer to Step 4.

Step 4.
Remove the air from a gear mounted in an inverted position and equipped with a manual bleed screw by following steps 1, 2 and 3 above. Then, with the engine idling, steer the gear from full left to full right several times. Loosen the manual bleed screw about one turn, with the steering gear in neutral **(no steering action)**, allowing air and aerated fluid to "bleed out" around the bleed screw until only clear **(non aerated)** fluid is bleeding out then close the bleed screw. 4/16" socket required. Check and refill reservoir.

Repeat this procedure 3 or 4 times starting with the steering maneuver with bleed screw closed, until only clear (non aerated) fluid is discharged when bleed screw is loosened. Torque the manual bleed screw to 27−33 in.lbs. Check and refill reservoir if needed.

CAUTION: Do not turn steering wheel with bleed screw loosened as this could allow air into the system.

BLEEDING AIR FROM SYSTEM

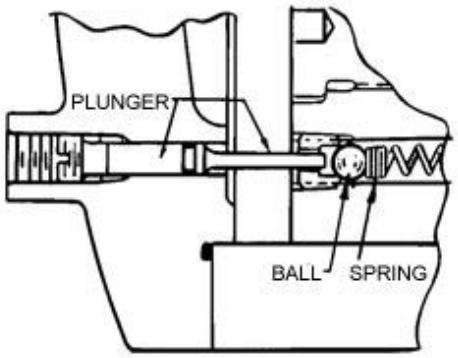
The steering gear by design is self bleeding; however, in some installations where the gear is positioned at an odd angle or where the piston does not make a full stroke in the cylinder bore air can be trapped in the steering gear. To avoid this possibility the air should be bled from the system anytime the oil has been changed or the steering system is repaired.

After reinstalling the steering gear on the vehicle but prior to connecting the drag link to the pitman arm, bleed the air from the steering system in the following manner:

1. Fill pump reservoir with recommended oil. It will be necessary to continue filling after starting the engine and during the bleeding operation until correct oil level is maintained.
2. Set parking brake or block wheels. Start engine and allow it to operate at fast idle speed.
3. With engine running, turn steering wheel from left to right and return making three complete cycles to remove all air from the steering system.
4. Stop engine. Reconnect the drag link.

Following these procedures will ensure that the piston bottoms in both directions of steer, opens the relief valve in the piston, and allows the air to escape to the reservoir and into the atmosphere. (See Fig. A) Check and adjust the relief valve plungers as required.

FIGURE "A"



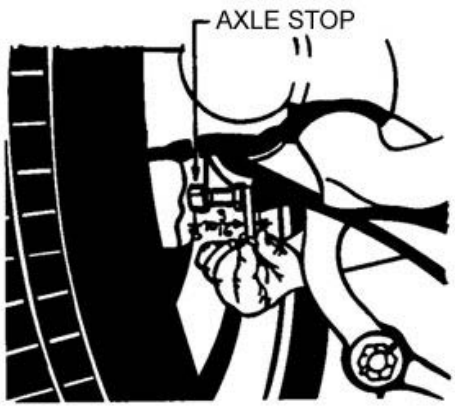
ADJUSTING RELIEF VALVE PLUNGERS

The relief valve plunger adjustment is provided to automatically reduce the steering pressure when the road wheels have reached their limits of turn. This keeps the supply pump from operating at maximum relief pressure when the road wheels are at their steering limits. System temperatures are therefore reduced and high stress loads on the mechanical components of the steering system are relieved.

High−pressure oil at either end of the piston will push the relief ball valve off its seat and fill the relief passage with oil at high pressure. At the opposite end of this passage the relief ball valve is held against its seat and holds the high pressure in the relief passage. As the piston moves close to its limits of stroke, the adjustable relief plungers push the relief ball valve off its seat and the pressure is relieved. The distance the piston can move is dependent upon the total front axle/steering system geometry and tire size. the relief valve plungers are adjustable to allow for variations or changes in these areas. Adjust the relief valve plungers as follows:

1. Start the engine and allow it to operate at idle speed.
2. With full weight of the vehicle on all wheels, turn the steering wheel in one direction until a high−pressure hiss is heard or the axle stops contact.
3. Turn the relief valve plunger in or out until the high−pressure hiss is heard when there is 1/8 to 3/16 inch clearance between the axle stops. (See Fig. B)
4. Repeat this procedure for the opposite direction of steer, and adjust the relief valve plunger on the opposite end of the steering gear.

FIGURE "B"



Turning the plungers in will increase the space between the axle stops. Turning the plungers out will decrease the clearance between the stops. Do not turn the slotted plungers out beyond flush with the plunger boss or a leak will occur. Axle stops should only be adjusted in accordance with the vehicle manufacturer's specifications.

After relief valve plunger adjustment always check to ensure that the road wheels and tires have adequate clearance between suspension, brake and frame components.

Two integral steering gear units are sometimes used where high front axle loads or installation space limitations are encountered.

The secondary gear assembly differs from the master steering gear in that it does not have actuating shaft, nor does the piston have an actuating valve. Both gears are connect to the steering linkage, drag links, pitman arms and rack and pinion gears.

Pressure to operate the secondary, or slave gear, is passed through ports in the cylinder head and bearing cap of the master gear and is routed through high−pressure lines to the proper end of the slave gear. Thus, as the actuating valve of the master gear is moved to cause pressure build up on the piston of the master gear, pressure is also directed to the slave gear piston.

Fluid exhausted from the low pressure end of the master gear is routed through the low pressure pinion gear area of the slave gear and then back to the reservoir.

Early production dual gear systems routed the exhaust fluid from the master gear pinion gear area directly to the reservoir. Later systems route the exhaust fluid from the pinion gear area of the master gear through the pinion gear area of the slave gear and then to the reservoir. The later production method of oil return flow provides faster warm up of the slave gear and offers further assurance that air entrapment in the slave gear is avoided. The pressure relief check valve in the slave gear piston also allows entrapped air to escape to the low pressure side of the piston and be purged from the system. Early slave gear pistons have two check valves. Present versions have only one check valve which might be found on either end of the piston, and is located in the piston end plug.

Pressure relief valve plungers are not required on slave gears as pressure relief is provided by the master gear.

BLEEDING AIR FROM SYSTEM DUAL STEERING

To bleed the air from the steering system on the vehicle after installing the steering gears, the pitman arms may be installed if there is a clearance problem with the pitman arm striking any object using the full travel of the gear. Install them by aligning the timing mark on output shaft with the timing mark on the pitman arm. For torquing see pitman arm torquing assembly. Then proceed in the following manner.

1. Fill pump reservoir with recommended engine oil. (Continue filling after starting engine and during the bleeding operation until correct oil level is maintained.)
2. Set parking brake. Start engine and allow it to operate at fast idle speed.
3. With engine running and drag links disconnected, turn steering wheel to the left and hold until the secondary (slave) gear pitman arm moves the full travel. Then turn to the right and hold until the secondary (slave) gear pitman arm again moves the full travel, repeat this process three or more times.
4. Connect the drag link to the master gear. Do not connect the secondary (slave) gear drag link at this time. Turn steering wheel to the left and hold until the secondary (slave) gear pitman arm moves the full travel. Then turn to the right and hold until the secondary (slave) gear pitman arm lines up with the drag link. Then install the pitman arm. (DO NOT move the pitman arm by hand or air will be pulled back into the system.)

WHEEL SHAKE CONDITION DUAL STEERING

When two integral steering gear units, of the same size, are applied to a single axle application, the geometry of the vehicle is critical. At no time may the effective length of the slave gear pitman arm be shorter than the master gear. If this situation does occur, the slave will power into the drag link and tie rod mechanism, creating a wheel shake, primarily on a left hand turn. To remedy the problem, contact O.E.M. for correct pitman arm timing and design drag link length necessary to balance the system.

The Sheppard Integral Power Steering Gear is dependent upon adequate supplies of oil pressure and volume of oil flow to enable the steering gear to operate as designed. Oil pressure reacting on a piston creates the force to cause the piston to move and assist steering effort.

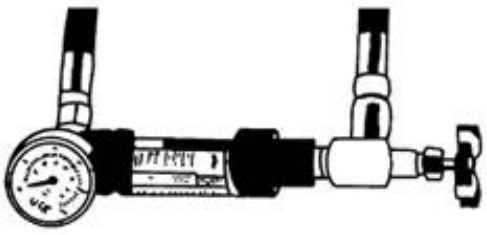
As the piston moves it is displaced in the cylinder bore by a volumn of oil under pressure. How fast the piston can be displaced is dependent upon adequate oil flow and volume.

Oil pressure and oil flow requirements are engineering considerations that are established during the design of a total power steering installation. When diagnosing power steering problems you must be able to determine that oil pressure and oil flow meet design specifications. Pressure and flow specifications vary considerably and the vehicle manufacturer's recommendations must be followed carefully at all times.

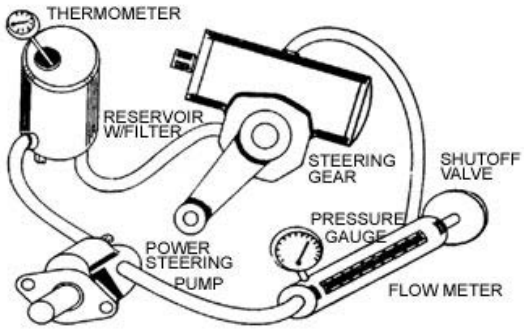
Back pressure and operating temperature are two additional factors that must be considered during the diagnosis of power steering problems. High back pressures will restrict the movement of the piston in the power steering gear and this back pressure must be overcome before steering power is available. Back pressure is caused by restrictions to oil flow. A clogged oil filter, undersized fittings and lines, pinched lines and high flow rates are possible causes of back pressure.

High system oil temperatures reduce the overall efficiency of the steering pump and the steering gear. High temperatures are caused by restriction to flow or inadequate system oil capacity to allow for heat dissipation during normal operation. A supply pump which constantly operates at maximum relief pressure will also generate more heat than can be dissipated.

Various types of pressure gauges and flow meters are available and can be used to diagnose power steering problems. A pressure gauge which reads at least 3000 PSI and a flow meter with a capacity to 10 GPM are used to check pressures and oil flow. A shutoff valve downstream from the pressure gauge makes it possible to isolate the steering pump from the steering gear and by closing the valve, maximum pump relief pressure can be read.



The gauge set illustrated will indicate pressure (PSI) and flow (GPM) with a single connection in series with the high-pressure line to the steering gear. A shut-off valve is included.



A simple thermometer in the reservoir will indicate system oil temperatures.

Using the equipment available to you, proceed with your evaluation of the hydraulic supply system.

1. Make necessary gauge/meter connections.
2. Start engine & check system oil level assuring that oil flow is in proper direction through flow meter.
3. Place thermometer in reservoir.
4. Run the engine at correct idle speed and steer from lock−to−lock several times to allow system to warm up. (140 to 160F)

5. **Pump Maximum Pressure Relief**
   With the engine running at specified idle speed, slowly turn the shutoff valve until closed and read the pressure at which the pressure relief valve opens. (Open the shutoff valve as quickly as possible to avoid heat build−up or possible damage to the steering pump.) This pressure reading should equal the maximum pump pressure specified by the manufacturer of your chassis. Check your specifications.

CAUTION: A malfunctioning pressure relief valve may not relieve pump pressure and closing the shutoff valve may cause severe pump damages or high−pressure hoses to rupture. Constantly observe the pressure gauge while closing the shutoff valve. If pressure rises rapidly or appears to be uncontrolled do not completely close the valve before inspecting the pump and pressure relief valve.

6. **Flow Test Minimum Recommended Flow**
   With the engine running at a specified idle speed, vehicle stationary on the shop floor and with a normal load on the front axle, steer the wheels from full right to full left turn and observe the flow meter. The flow must not fall below the minimum GPM flow specification.

   NOTE: It is important that flow be checked at normal operating temperatures and with a load on the front axle, or steering response complaints may not be found. Inadequate flow will cause binding, uneven or intermittent hard steering.

7. **Flow Test Recommended Maximum**
   Increase the engine speed to approximately 1500 RPM and note the flow rate with the steering wheel stationary. Check this reading against the maximum flow rate specifications. Excessive oil flow can cause high operating temperature, and sluggish heavy steering response.

8. **Leakage Test**
   If the supply pump is performing to specification, install a 1/2 inch spacer between the axle stops on one side, and turn the steering wheel hard in the direction necessary to pinch the spacer block. Record the maximum pressure reading. the maximum pressure reading should be within 100 PSI as was recorded in Step 5 for pump relief pressure when the shutoff valve was closed.

   Remove the spacer and repeat test in the opposite direction. Record pressure.

   If the pressure does not meet the recorded maximum pressure reading, the steering gear is worn internally and must be repaired or replaced.

9. **Back Pressure**
   Normal system back pressure will be 50 to 75 PSI with the engine idling and the steering wheel stationary. Back pressure is checked with the system at normal operating temperature.

10. **Operating Temperatures**
    Steering system oil temperature is best checked after two hours of normal operation. Ideal operating temperature should range betwwen 140F to 160F. Normal operation in this range will allow for intermittently higher temperatures which will be encountered during periods of heavy steering usage.

11. **Aerated Oil**
    Visually check for the presence of air mixed with the oil in the steering system. The oil should be clear. any signs of frothing indicate air entry and steering performance will be affected. Carefully check for leakage on the suction side of the steering pump. Drain and refill the system and bleed for air following the procedure under Final Adjustments section.

Before any steering gear repairs are attempted, the above hydraulic supply evaluation must be completed and corrections made as required. Many times steering gears have been repaired or replaced needlessly because a hydraulic supply system evaluation had not been made.

1. **Wander.** Wander is described as the vehicle not tracking properly on the road surface. The vehicle tends to drift side to side. Continual correction is required to keep the vehicle on the road.

   The driver may describe wander in the following ways:

   * Squirrelly
   * Continually correcting
   * Constantly fighting the wheel
   * Can't hold it on the road
   * All over the road

2. **Pulls.** Pulling is a term used to describe a constant movement of the vehicle in one direction.

   The driver may describe pulling in the following ways:

   * Won't track
   * Pushes to one side
   * Wanders
   * Drives one way
   * Heads for the ditch

   If a directional pull is present, the most probably cause will be misalignment of the rear axle.

3. **Binds.** Binding is an increase in steering wheel effort that is momentary or intermittent.

   The driver may describe binding in the following ways:

   * High spot
   * Hangs up
   * Locks up
   * Catches when turning
   * Siezes

   Binding is normally a result of some mechanical problem with steering components. Most often the bind will occur at the same posistion on the wheel while turning.

4. **No Return** No return is used to describe the lack of wheel coming back to center after a turn or correction is completed.

   The driver may describe no return in the following ways:

   * The wheel won't come back
   * Hangs up in turns
   * Wheel sticks

   No return can result from a misaligned front axle or a bind in mechanical components external to the steering gear. Front axle caster angles should be checked in return complaints.

5. **Hard Steering.** Hard steering is experienced when steering wheel effort exceeds 100 inch pounds measured at the steering wheel retaining nut. Hard steering will remain constant through the full turn. Do not confuse hard steering with binding.

   The driver may describe hard steering in the following ways:

   * No power assist
   * Steers like a manual gear
   * Won't turn all the way

   Hard steering can result from hydraulic and/or mechanical problems. A complete mechanical and hydraulic diagnosis is necessary to determine the cause.

6. **Excessive Free Play / Unresponsive Motion.** Excessive free play is a condition where there is too much steering wheel movement before the steer tires move. A small amount of free play is considered normal.

   The driver may describe free play in the following ways:

   * Too much slop in the wheel
   * Too much backlash
   * Slack in the wheel

   Free play is normally a function of looseness in the linkage.

7. **Shimmy** Shimmy is a shake or vibration of the front tires that is transmitted through the steering wheel.

   The driver may describe shimmy in the following ways:

   * Steering wheel shake
   * Cab shakes
   * Steering wheel chatter

   Shimmy is a funchtion of looseness in the steering linkage, looseness in front end components or unbalanced tires. Shimmy can also be caused by air trapped in the system.

8. **Noise** Noise in the steering system can come from any number of components. Harmonics or hydraulic noise can be caused by fluid flow. Metallic or grinding noises come from component parts.

   The driver may describe noise in the following ways:

   * Growls
   * Swishes
   * Pops when steering
   * Moans

   When noise is present you must first determine if it is a mechanical or hydraulic noise. Most mechanical noises are a result of looseness or wear in components. Hydraulic noise will normally be associated with problems in pump flow, such as cavitation or low fluid levels.

Notes

Heavy duty power steering pumps have a twelve (12) month, 3,600 hour (whichever comes first) warranty. For further details, refer to L20221 Aftermarket Warranty Policy. For warranty return, use L90005 Warranty Adjustment Form.

SPECIAL NOTE

Proper service and repair is important to the safe reliable operation of all motor vehicles. Careful and cautious service procedures recommended by the manufacturers should be taken by anyone servicing a motor vehicle to minimize the risk of personal injury and vehicle damage. All information, illustrations, specifications and schematics contained in this section are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.

GENERAL INFORMATION

What you need to know to identify pumps:

1. Year of Truck *
2. Make of Truck *
3. Model Type *
4. Type of Engine *
5. Front Axle Weight *
6. Name Brand on Pump Example: Vickers
7. Numbers on Pump Example: 10F1P6P38C6F20

*1980 Peterbilt conventional (359 model), Cummins engine & 12,000 lb. front axle.

NOTE: Several different engines or axle weights can fall within same year and type of truck.

To determine pump rotation, first look for OEM stamp number on housing. If pump is counterclockwise rotation, the OEM stamp number will generally be followed by CCW. If no number or CCW is found, generally rotation can be determined by this: All inline DDC's are generally clock−wise rotation. On V6 & V8, if pump is mounted on right hand side of engine, it will generally be clockwise rotation. If mounted on left side, it will generally be counter−clockwise rotation.

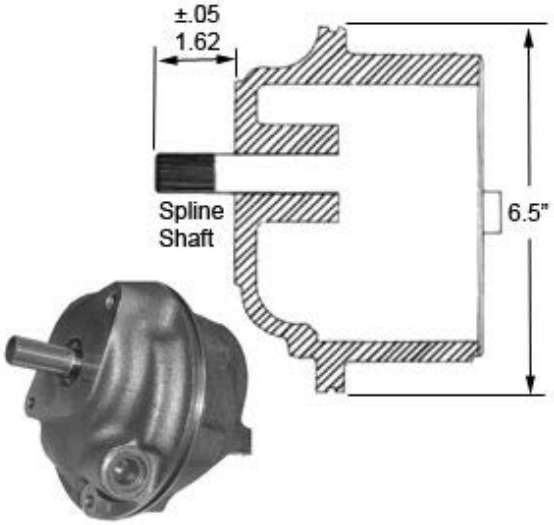
Saginaw, Eaton U, B and BB pumps are supplied with the necessary oil rings for servicing the reservoir.

* A. Check all Vickers pumps with stamped numbers and letters located on back or side of pumps. (Example: V−10F1P6P38C6F20 or VTM42607515N0R114).
* B. Some V−20F series pumps can come with a straight keyed shaft (#1) or can have a keyed shaft with threads on end. The keyed shaft with threads on end is used for a pulley. The length of the shaft will need to be measured.
* C. This shaft can be used for direct accessory drive or pulley/belt drive.

NOTE: Vickers pumps come with all gaskets necessary for mounting to engines.

Eaton B−Pump − Remanufactured

Spline Shaft



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 20 lbs.

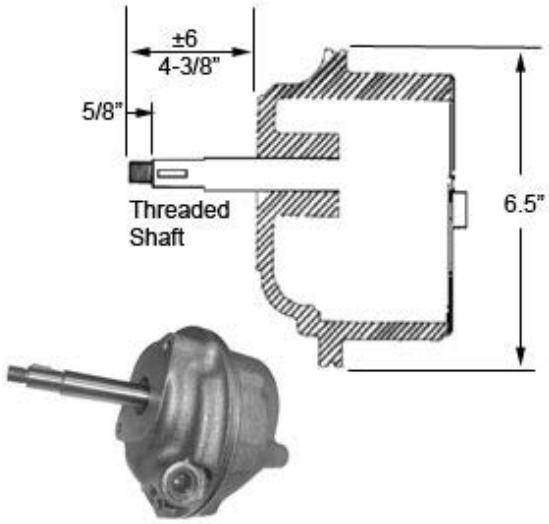
Notes:

1) Seal Kit use part number **R3307**.

SKU#	Product Description	Axle Weight	Shaft Length	Rotation	GPM	PSI	OEM #	MFG. #	Truck/Engine Application	Core Group
RP40101X	Remanufactured Eaton B−Pump, Spline Shaft	12000 lbs.	1−5/8"	CW	4.3	1750	D4HA3K514CA	−	Mack/Mack Engine	PS4001
RP40102X	Remanufactured Eaton B−Pump, Spline Shaft	12000 lbs.	2−1/2"	CW	4.3	1750	D7HA1514	ER15867−1	Ford, IHC/Cat Engine	PS4001
RP40103X	Remanufactured Eaton B−Pump, Spline Shaft	16000 lbs.	2−1/2"	CW	7.8	1750	−	ER16640−1	Ford, IHC/Cat Engine	PS4001
RP40104X	Remanufactured Eaton B−Pump, Spline Shaft	12000 lbs.	3−1/4"	CW	4.3	1750	E2HZ3A674J 478781C91	ER15467−1	Ford, IHC, White, Autocar/Cummins Engine	PS4001
RP40105X	Remanufactured Eaton B−Pump, Spline Shaft	16000 lbs.	3−1/4"	CW	7.5	2000	−	ER15422−4	Ford, IHC, White, Autocar/Cummins Engine	PS4001
RP40106X	Remanufactured Eaton B−Pump, Spline Shaft	16000 lbs.	2−1/2"	CCW	7.5	1750	E4HT3K514DB	−	−	PS4001
RP40122X	Remanufactured Eaton B−Pump, Spline Shaft	12000 lbs.	2−1/2"	CCW	4.3	1750	D7HA1514	ER15867−1	Ford, IHC/ Cat Engine	PS4001
RP40303X	Remanufactured Eaton B−Pump, Spline Shaft	16000 lbs.	1−5/8"	CW	7.5	2000	−	ER16280−1	Ford, IHC/ Gas & Diesel Engine	PS4001

Eaton B−Pump − Remanufactured

Threaded Shaft



Features:

- Supplied with the necessary oil rings for servicing the reservoir.
- Threaded Shaft (nut and key).
- Pump bolts to flange which bolts to engine.

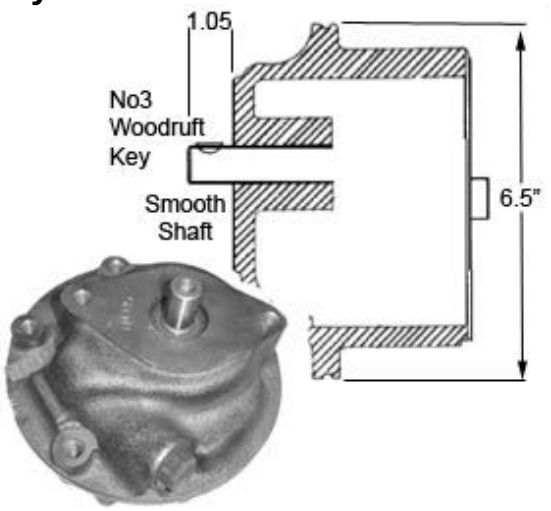
Notes:

1) Seal Kit use part number **R3307**.

SKU#	Product Description	Approx. Weight	Axle Weight	Shaft Length	Rotation	GPM	PSI	OEM#/MFG#	Truck/Engine Application	Core Group
RP40201X	Remanufactured Eaton B−Pump, Threaded Shaft	18 lbs.	12000 lbs.	3−1/2"	CW	4.5	1750	478779C91 ER16335−1	Ford/Detroit Engine	PS4001
RP40203X	Remanufactured Eaton B−Pump, Threaded Shaft	19 lbs.	12000 lbs.	3−1/2"	CCW	4.5	1750	D9H23A674B ER16323−1	Ford/Detroit Engine	PS4001
RP40204X	Remanufactured Eaton B−Pump, Threaded Shaft	10 lbs.	16000 lbs.	3−1/2"	CCW	7.5	2000	D0HZ3A674D ER16278−1	Ford/Detroit Engine	PS4001
RP40205X	Remanufactured Eaton B−Pump, Threaded Shaft	10 lbs.	12000 lbs.	4−3/8"	CW	4.5	1750	−/−	Various Truck/Detroit Engine	PS4001
RP40206X	Remanufactured Eaton B−Pump, Threaded Shaft	10 lbs.	16000 lbs.	4−3/8"	CW	7.5	2000	−/−	Various Truck/Detroit Engine	PS4001
RP40207X	Remanufactured Eaton B−Pump, Threaded Shaft	10 lbs.	12000 lbs.	4−3/8"	CCW	4.5	1750	−/−	Detroit	PS4001

Eaton B−Pump − Remanufactured

Pulley/Belt Driven



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 20 lbs.

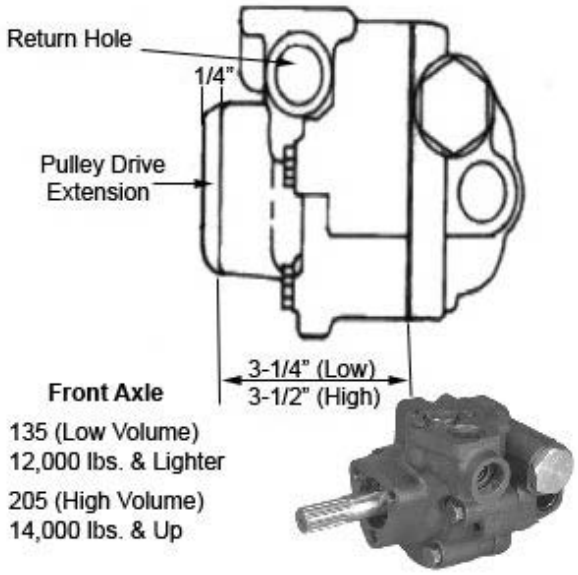
Notes:

1) Seal Kit use part number **R3307**.

SKU#	Product Description	Axle Wgt.	Shaft	Rotation	GPM	PSI	OEM #	MFG. #	Truck/Eng. App.	Core Group
RP40301X	Remanufactured Eaton B−Pump, Pulley/Belt Driven	12000 lbs.	Smooth Key	CW	4.5	1750	493115C91	ER15183−1	Ford, IHC/Gas & Diesel	PS4001
RP40302X	Remanufactured Eaton B−Pump, Pulley/Belt Driven	16000 lbs.	Smooth Key	CW	7.5	2000	D0HZ3A674A 478782C91	ER15323−1	Ford, IHC/Gas & Diesel	PS4001

Eaton BB−Pump − New/Remanufactured

Spline Shaft



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 15 lbs.

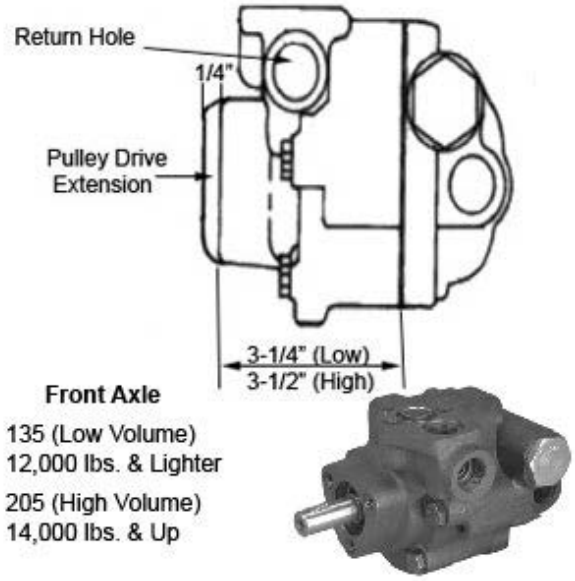
Notes:

1) Seal Kit use part number **R3309**.

SKU#	Product Description	Axle Weight	GPM	PSI	OEM #	MFG. #	Application/Notes	Core Group
RP70101X	Remanufactured Eaton BB−Pump	12000 lbs.	5	2100	10−02446	ER17276−3	Paccar−Peterbilt With Return Port Spline Shaft	PS7001
RP70102X	Remanufactured Eaton BB−Pump	16000 lbs. 12000 lbs.	6 5.5	2100	14−12051−000 ER17273−58 P100796	ER17273−37 ERS17110−18	Freightliner Oshkosh Spline Shaft	PS7001
RP70103X	Remanufactured Eaton BB−Pump	16000 lbs.	6	2100	14−12050−000	ER17273−38	Freightliner Spline Shaft	PS7001
RP70106	New Eaton BB−Pump	12000 lbs.	8	1500	3913991	ER17273−18	Cummins Engine Spline Shaft	−
RP70106X	Remanufactured Eaton BB−Pump	12000 lbs.	8	1500	3913991	ER17273−18	Cummins Engine Spline Shaft	PS7001
RP70107X	Remanufactured Eaton BB−Pump	12000 lbs.	5	1750	97−7774−00001	ER17273−52	Flexible Spline Shaft	PS7001
RP70108X	Remanufactured Eaton BB−Pump	12000 lbs.	5	2100	E8HT3A674EA 290−1311117	ER17184−1 ER17273−16	Bluebird Spline Shaft	PS7001
RP70110X	Remanufactured Eaton BB−Pump	16000 lbs.	6	2100	E8HT3A674FA	ER17185−1	Ford Spline Shaft	PS7001
RP70111X	Remanufactured Eaton BB−Pump	12000 lbs.	3.5	1500	681−466−1301	ER17273−8	Freightliner Spline Shaft	PS7001
RP70112X	Remanufactured Eaton BB−Pump	16000 lbs.	6	2100	E7HZ3A674C	−	Cummins−Ford−CCW Spline Shaft	PS7001
RP70302X	Remanufactured Eaton BB−Pump	−	7.5	2300	LE5X	−	High Volume, CCW 11 Tooth, Spline Shaft	PS7001

Eaton BB−Pump − New/Remanufactured

Gear Driven with Straight Shaft



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 15 lbs.

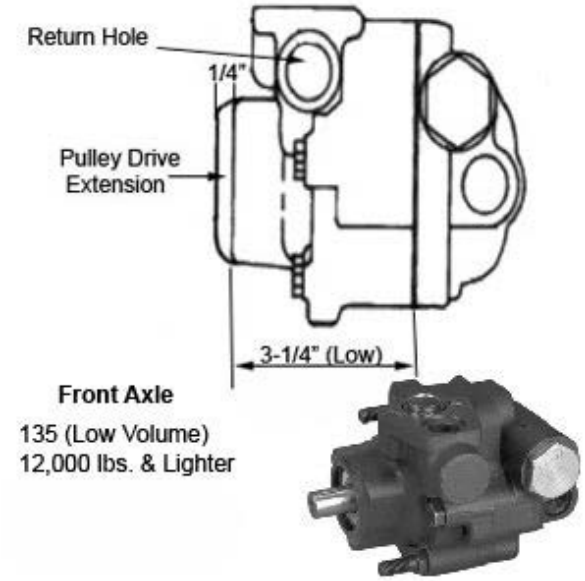
Notes:

1) Seal Kit use part number **R3309**.

SKU#	Product Description	Axle Weight	GPM	PSI	OEM #	MFG. #	Application	Core Group
RP70105	New Eaton BB−Pump, Gear Driven, Straight Shaft	16000 lbs.	6	2100	14−12049−000	ER17274−9	Freightliner	−
RP70105X	Remanufactured Eaton BB−Pump, Gear Driven, Straight Shaft	16000 lbs.	6	2100	14−12049−000	ER17274−9	Freightliner	PS7001
RP70201X	Remanufactured Eaton BB−Pump, Gear Driven, Straight Shaft	16000 lbs.	6	2350	1664376C91	ER17225−2	Navistar	PS7001
RP70202X	Remanufactured Eaton BB−Pump, Gear Driven, Straight Shaft	16000 lbs.	8	2350	E8HT3A674CA	ER17229−3	Ford	PS7001
RP70203X	Remanufactured Eaton BB−Pump, Gear Driven, Straight Shaft	12000 lbs.	4	2350	1675898C91	ER17270−10	Navistar	PS7001
RP70204X	Remanufactured Eaton BB−Pump, Gear Driven, Straight Shaft	12000 lbs.	5.5	2100	−	−	−	PS7001

Eaton BB−Pump − New/Remanufactured

Pulley Driven with Straight Shaft



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

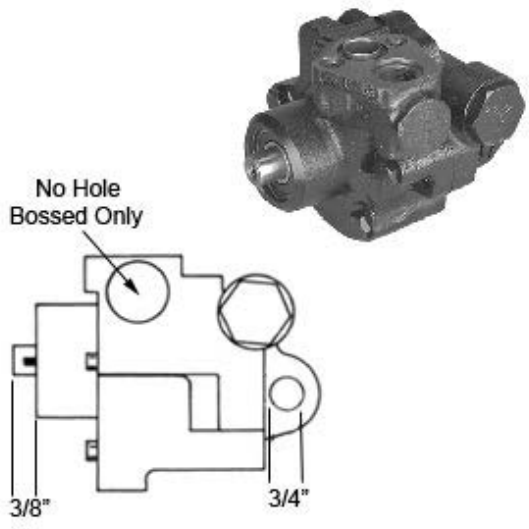
Approximate Weight 13 lbs.

Notes:

1) Seal Kit use part number **R3309**.

SKU#	Product Description	Axle Weight	GPM	PSI	OEM #	MFG. #	Application	Core Group
RP70113X	Remanufactured Eaton BB−Pump, Pulley Driven, Straight Shaft	12000 − 14000 lbs.	5.5	2000	89683508	ER17127	GRADALL	PS7001
RP70205X	Remanufactured Eaton BB−Pump, Pulley Driven, Straight Shaft	12000 lbs.	4.5	2100	−	−	−	PS7001
RP70301X	Remanufactured Eaton BB−Pump, Pulley Driven, Straight Shaft	12000 lbs.	4	2300	1664377C91	ER16481−2	Navistar	PS7001

Eaton U−Pump − Remanufactured



Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 13 lbs.

Notes:

1) Seal Kit use part number **R3308**.

SKU#	Product Description	Type Of Fitting	Shaft Length	Cooler Port	G.P.M.	PSI	OEM #	MFG. #	Truck/Engine Application	Core Group
RP30301X	Remanufactured Eaton U−Pump	5/8" Inverted Flare	1/2"	No	3.5	1450	D7HT3A691BA	ER15255−1	Ford/Cat Engine	PS3003
RP30302X	Remanufactured Eaton U−Pump	5/8" Inverted Flare	1/2"	Yes	3.5	1450	D5HA3A691YA	ER15256−1	Ford/Cat Engine	PS3003
RP30303X	Remanufactured Eaton U−Pump	5/8" Inverted Flare	1"	No	3.5	1450	E1HT3A696AB	ER15860−1	Ford/Cat Engine	PS3003
RP30304X	Remanufactured Eaton U−Pump	5/8" Inverted Flare	1"	Yes	3.5	1450	−	ER15342−1	Ford/Cat Engine	PS3003
RP30305X	Remanufactured Eaton U−Pump	3/4" O−Ring	1/2"	No	4.9	1550	255801C91	ER15092−1	Navistar/Gas & Diesel Engine	PS3003
RP30306X	Remanufactured Eaton U−Pump	3/4" O−Ring	1"	No	4.9	1550	−	ER12704−1	Ford/Gas & Diesel Engine	PS3003
RP30307X	Remanufactured Eaton U−Pump	5/8" Inverted Flare	1"	3/4"	3.5	1450	−	ER15342−1	Ford/Cat Engine	PS3003

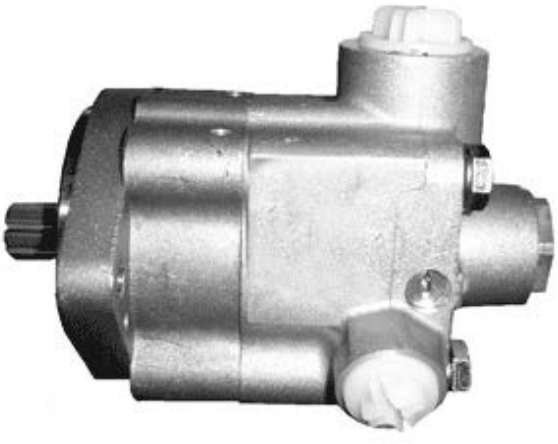
Eaton HE Series − New/Remanufactured

Specifications:

Approximate Weight 10 lbs.

SKU#	Product Description	Axle Weight	GPM	PSI	OEM #	MFG. #	Application	Core Group
RP70114X	Remanufactured Eaton HE Series Pump	12000 lbs.	4.5	1950	15150553	1200281	GM	PS6001

LUK 73 Series − New/Remanufactured



Features:

- Spline Shaft − 11 Teeth

Specifications:

Approximate Weight 7 to 10 lbs.

SKU#	Product Description	OEM Number	Manufacture Number	Truck/Engine Application	Core Group
RP12101X	Remanufactured LUK 73 Series Pump	2106218	LF73RUUB38	Kenworth	PS1006
RP12102X	Remanufactured LUK 73 Series Pump	2106076	LF73LUUB38	International	PS1006
RP12103X	Remanufactured LUK 73 Series Pump	2108831	LF73RPUB38	Mack	PS1006
RP12104X	Remanufactured LUK 73 Series Pump	2108214	LF73LPUB38	Freightliner	PS1006
RP12106	New LUK 73 Series Pump	516154	LF73LMMB38	Volvo	−
RP12110X	Remanufactured LUK 73 Series Pump	−	LF73CRPUB38	−	PS1006
RP12111	New LUK 73 Series Pump	2105341	LF73LUUD38	International	−
RP12115	New LUK 73 Series Pump	2106400	LF73LMND38	Volvo	−
RP12116X	Remanufactured LUK 73 Series Pump	−	LF73CLPUB38	−	PS1006
RP12118X	Remanufactured LUK 73 Series Pump	2105333	LF73CLPUB38	International	PS1006
RP13001	New LUK 73 Series Pump	2105355	LF73RPUB38	Freightliner	−
RP13002	New LUK 73 Series Pump	2106765	LF73RUUB38	Volvo	−
RP13003	New LUK 73 Series Pump	2106751	LF73LPUD38	Volvo	−
RP13004	New LUK 73 Series Pump	−	LF73RMMB	−	−

LUK 93 Series − New

Features:

- Spline Shaft − 11 Teeth

SKU#	Product Description	OEM Number	Manufacture Number	Truck/Engine Application
RP12120	New LUK 93 Series Pump	542−0370−10	LF93CLPUB38	GMC

H−39 Series Pump − Remanufactured

Specifications:

Spline	11 Tooth
Rotation	Clockwise
Approximate Weight	10 lbs.

SKU#	Product Description	Axle Weight	Gallons Per Minute	PSI	OEM Number	Manufacture Number	Application	Core Group
RP80101X	Remanufactured Parker Hannifin H−39 Series Power Steering Pump	12000 lbs.	4	2150	575585C91	H39BT2AA21540DS	Navistar	PS8001
RP80102X	Remanufactured Parker Hannifin H−39 Series Power Steering Pump	12000 lbs.	4	1500	6814662001	PH39BT2AA21540DS	Freightliner	PS8001

H−90 Series Pump − Remanufactured

Features:

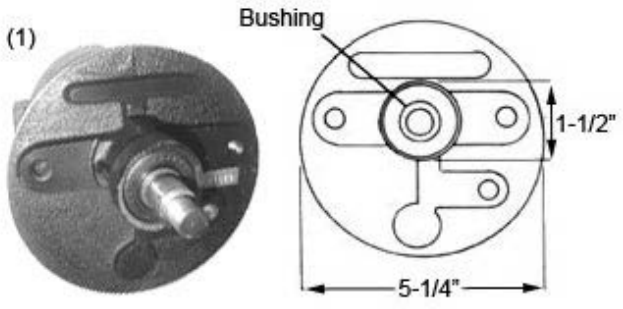
- Key Driven 2.66 Extension

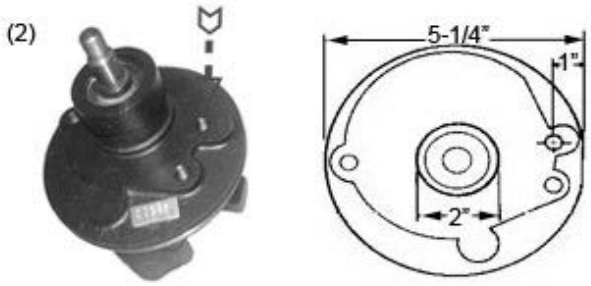
Specifications:

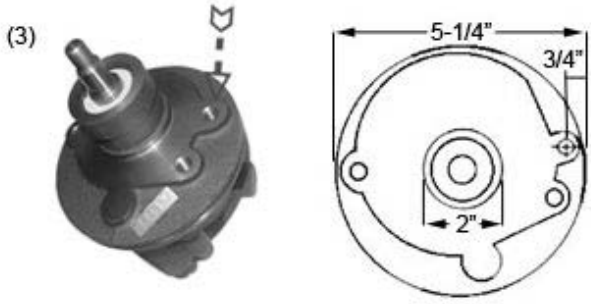
Approximate Weight 12 lbs.

SKU#	Product Description	Axle Weight	Rotation	GPM	PSI	OEM Number	Manufacture Number	Application	Core Group
RP80301X	Remanufactured Parker Hannifin H−90 Series Power Steering Pump	16000 lbs.	CW	6	1750	472586C91	H90CY2CA17560DS	Navistar	PS8001
RP80302X	Remanufactured Parker Hannifin H−90 Series Power Steering Pump	16000 lbs.	CCW	6	1750	472587C91	H90CY1CA17560DS	Navistar	PS8001
RP80304X	Remanufactured Parker Hannifin H−90 Series Power Steering Pump	16000 lbs.	CCW	7.5	1750	592997C91	H90CY1C917560DS	Navistar	PS8001

Saginaw Steering Pumps − New/Remanufactured







Features:

- Supplied with the necessary oil rings for servicing the reservoir.

Specifications:

Approximate Weight 11 lbs.

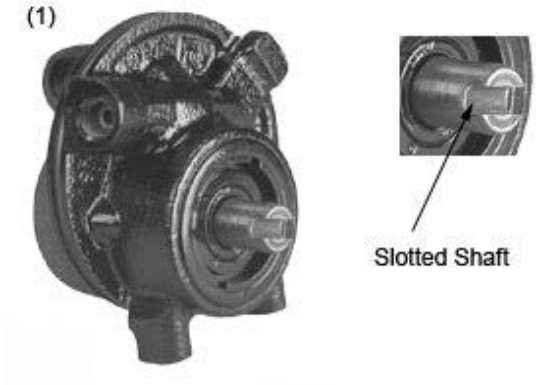
Notes:

1) Seal Kit use part number **R3285**.

SKU#	Product Description	Casting Number	Manufacturer Number	Engine	Model	Core Group	Picture Number
RP20201X	Reman. Saginaw Power Steering Pump − Chevrolet / GMC / IHC	7812808	488787C91	Chevrolet/GMC	Big Bearing	PS2002	3
RP20202	Saginaw Power Steering Pump − Chevrolet / GMC / IHC	5692687	7840122	Chevrolet/GMC	Big Bearing	−	2
RP20202X	Reman. Saginaw Power Steering Pump − Chevrolet / GMC / IHC	5692687	7840122	Chevrolet/GMC	Big Bearing	PS2002	2
RP20203X	Reman. Saginaw Power Steering Pump − Chevrolet / GMC / IHC	5688074	−	Chevrolet/GMC	Bushing Type	PS2002	1

TRW Dodge/Early Ford − Remanufactured

(1)



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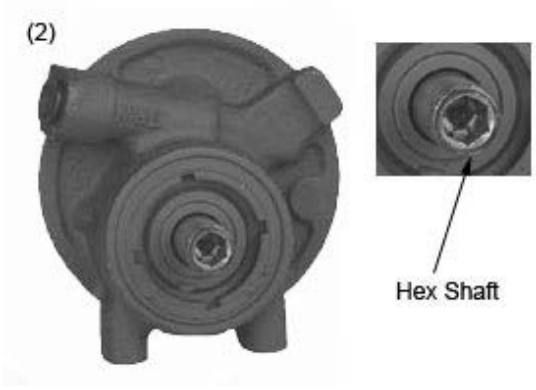


Specifications:

Approximate Weight 10 lbs.

SKU#	Product Description	Casting Number	Manufacture Number	Engine	Core Group	Pic. #
RP10401X	Remanufactured TRW Dodge/Early Ford Power Steering Pump − Slotted Shaft	36−5N	38−58	Dodge 318, 361, 413	PS1004	1
RP10501X	Remanufactured TRW Dodge/Early Ford Power Steering Pump − Hex Shaft	36−5N	38−58	Dodge 318, 361, 413	PS1005	2

TRW EV Series − New/Remanufactured

Features:

- Lightweight, High Pressure Pump

Specifications:

Approximate Weight 10 lbs.

SKU#	Product Description	OEM Number	Rotation	Shaft	Housing	Relief Setting	Core Group
RP221605	New TRW EV Series Power Steering Pump	EV221615L101	Left	11 Tooth	SAE A Flange − JIC port	2175 PSI	−
RP221605X	Reman. TRW EV Series Power Steering Pump	EV221615L101	Left	11 Tooth	SAE A Flange − JIC port	2175 PSI	PS1006
RP221606X	Reman. TRW EV Series Power Steering Pump	EV221618L101	Left	11 Tooth	SAE A Flange − JIC port	2683 PSI	PS1006
RP221607X	Reman. TRW EV Series Power Steering Pump	EV221615R101	Right	11 Tooth	SAE A Flange − JIC port	2175 PSI	PS1006
RP221614X	Reman. TRW EV Series Power Steering Pump	EV181615L101	Left	11 Tooth	SAE A Flange − JIC port	2175 PSI	PS1006
RP221619X	Reman. TRW EV Series Power Steering Pump	EV251615R101	Right	11 Tooth	SAE A Flange − JIC port	2100	PS1006

TRW PS Series − Remanufactured

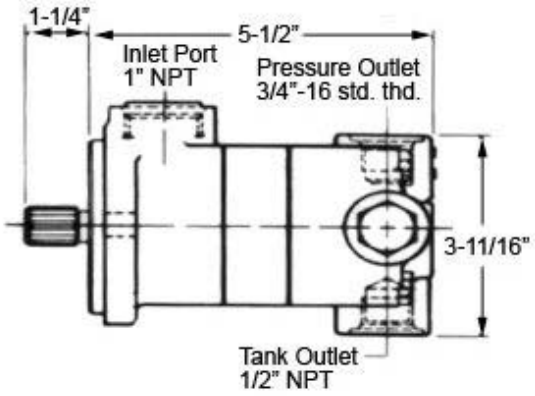
Specifications:

Approximate Weight 10 lbs.

SKU#	Product Description	OEM Number	Rotation	Shaft	Housing Outler/Inlet	Core Group	Core Group Link
RP181615R114X	Reman TRW Power Steering Pump	PS181615R114	Right	11 Tooth	Left/Right	PS1006	
RP221601X	Reman. TRW New Style Power Steering Pump	PS221615R103	Right	11 Tooth	Right/Left	2175 PSI	PS1006
RP221602X	Reman. TRW New Style Power Steering Pump	PS221615L103	Left	11 Tooth	Right/Left	2175 PSI	PS1006
RP221603X	Reman. TRW New Style Power Steering Pump	PS221615R102	Right	11 Tooth	Right/Top	2175 PSI	PS1006
RP221604X	Reman. TRW New Style Power Steering Pump	PS221615L102	Left	11 Tooth	Right/Top	2175 PSI	PS1006
RP221608X	Reman. TRW New Style Power Steering Pump	PS251615L111	Left	11 Tooth	Left/Top	2100 PSI	PS1006
RP221609X	Reman. TRW New Style Power Steering Pump	PS221615L111	Left	11 Tooth	Left/Top	2175 PSI	PS1006
RP221611X	Reman. TRW New Style Power Steering Pump	PS251415R102	Right	11 Tooth	Right/Top	2175 PSI	PS1006
RP221612X	Reman. TRW New Style Power Steering Pump	PS221412R102	Right	11 Tooth	Right/Top	1750 PSI	PS1006
RP221613X	Reman. TRW New Style Power Steering Pump	PS221615L116	Left	11 Tooth	Right/Top	2175 PSI	PS1006
RP221615AX	Reman. TRW New Style Power Steering Pump	PS251615R114	Right	11 Tooth	Left/Right	2175 PSI	PS1006
RP221615X	Reman. TRW New Style Power Steering Pump	PS251615L102	Left	11 Tooth	Right/Top	2175 PSI	PS1006

RP221616X	Reman. TRW New Style Power Steering Pump	PS221610R105	Right	11 Tooth	Left/Top	1450 PSI	PS1006	
RP221617X	Reman. TRW New Style Power Steering Pump	PS251415L105	Left	11 Tooth	Left/Top	2175 PSI	PS1006	
RP221618X	Reman. TRW New Style Power Steering Pump	PS221415R102	Right	11 Tooth	Right/Top	2175 PSI	PS1006	
RP221620X	Reman. TRW New Style Power Steering Pump	PS252415R11401	Right	11 Tooth	Right/Top	2100 PSI	PS1006	
RP221621X	Reman. TRW New Style Power Steering Pump	PS252415L103	Left	11 Tooth	Right/Left	2175 PSI	PS1006	
RP221622X	Reman. TRW New Style Power Steering Pump	PS251615L105	Left	11 Tooth	Right/Top	2200 PSI	PS1006	
RP221623X	Reman. TRW New Style Power Steering Pump	PS282416R10501	Right	11 Tooth	Right/Top	2380 PSI	PS1006	
RP221624X	Remanufactured TRW PS Series Power Steering Pump	POS282815L103	CCW	11 Tooth	2100	7GPM	PS1006	PS1006

V−10F & NF Series Pump − Remanufactured



Features:

- Comes with all gaskets necessary for mounting to engines.

Specifications:

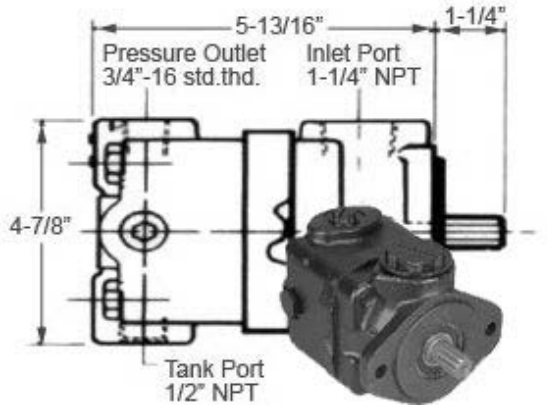
Approximate Weight 14 lbs.

Notes:

1) Seal Kit use part number **R3293**.

SKU#	Product Description	Axle Weight	GPM	PSI	OEM #	MFG. #	Application	Core Group
RP50101X	Remanufactured V−10F Series with Spline Shaft	12000 lbs.	6	1500	503114−3	V10F1P6P38C6F20	Peterbilt	PS5001
RP50102X	Remanufactured V−10F Series with Spline Shaft	12000 lbs.	5	1500	38QC375P2	V10F1P7P38D5F20	Mack	PS5001
RP50103X	Remanufactured V−10NF Series with Spline Shaft	12000 lbs.	6	1700	575585C91	V10NF1S5T38C5G	International	PS5001
RP50105X	Remanufactured V−10F Series with Spline Shaft	12000 lbs.	6	1700	502503−3	V10F1P6P38C6G	Peterbilt	PS5001
RP50107X	Remanufactured V−10F Series with Spline Shaft	12000 lbs.	6	1700	502503−3	V10F1P7P38C6G20	Peterbilt	PS5001

V−20F Series Pump − Remanufactured



Features:

- Comes with all gaskets necessary for mounting to engines.

Specifications:

Approximate Weight 17 lbs.

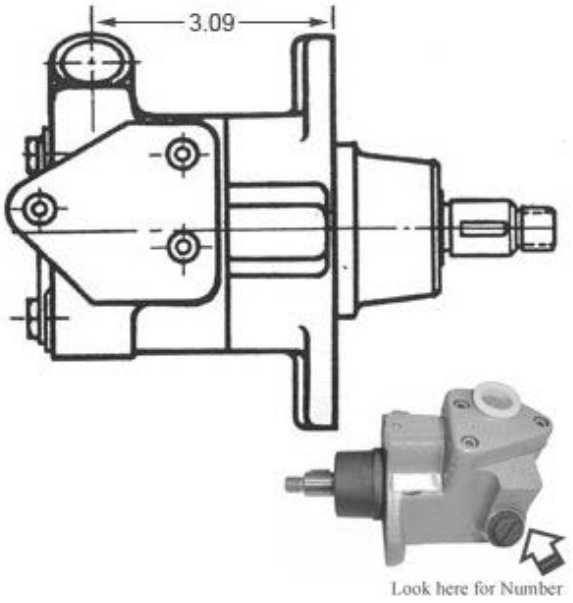
Notes:

1) Seal Kit use part number **R3294**.

SKU#	Product Description	Shaft	Axle Weight	GPM	PSI	MFG. #	Application	Core Group
RP60101X	Reman. V−20F	Spline	12000 lbs.	6	1500	V20F1P6P38C6F20	Cummins/Cat	PS6001
RP60103X	Reman. V−20F	Smooth Keyed	12000 lbs.	6	1250	V20NF4R9P1C6E11	Detroit	PS6001
RP60104X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20F1P9P38C6G11	Cummins	PS6001
RP60105X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20NF1D6P38C6G11	Cummins	PS6001
RP60106X	Reman. V−20F	Smooth Keyed	12000 lbs.	6	2000	V20F4P8S1C6H11	Detroit	PS6001
RP60107X	Reman. V−20F	Smooth Keyed	12000 lbs.	4	1750	V20F1P6P3C4G11	Detroit	PS6001
RP60108X	Reman. V−20F	Spline	12000 lbs.	5	1750	V20NF1S5T38C5G20	Cummins/Cat	PS6001
RP60109X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20NF1011P38C6G11C	Cummins	PS6001
RP60110X	Reman. V−20F	Spline	16000 lbs.	6	1750	V20F1P11P38D6G11	Cummins	PS6001
RP60111X	Reman. V−20F	Smooth Keyed	12000 lbs.	6	1250	V20F4P9P1C6E11	Detroit	PS6001
RP60112X	Reman. V−20F	Spline	12000 lbs.	4	2000	V20F1P7P38C4H20L	Cummins/Cat	PS6001
RP60113X	Reman. V−20F	Smooth Keyed	12000 lbs.	6	1750	V20F1P9P1C6G11	Detroit	PS6001
RP60114X	Reman. V−20F	Spline	12000 lbs.	6	2000	V20NF1P9P38C6H20	Cummins/Cat	PS6001
RP60115X	Reman. V−20F	Spline	12000 lbs.	5	2000	V20F1P7P38C5H20	Mack	PS6001
RP60116X	Reman. V−20F	Spline	16000 lbs.	7	2000	V20F1P13P38C7H22	Cummins/Cat	PS6001
RP60118X	Reman. V−20F	Spline	16000 lbs.	8	1500	V20F1P13P38D8F11	Cummins/Cat	PS6001
RP60119X	Reman. V−20F	Spline	16000 lbs.	7	2000	V20F1S8S38C7H11	Cummins/Cat	PS6001
RP60120X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20NF1P9P38C6GLH	Cummins L−10 Cat 3406B	PS6001
RP60121X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20NF1P9P38C6G20	Cummins	PS6001
RP60122X	Reman. V−20F	Spline	12000 lbs.	6	1750	V20F1P8P38C6G11	Cummins/Cat	PS6001
RP60133X	Reman. V−20F	Spline	12000 lbs.	4	2000	V20F1P8P38C4H	Cummins/Cat	PS6001
RP60134X	Reman. V−20F	Spline	16000 lbs.	8	2000	V20F1P11P38C8H	Cummins/Cat	PS6001
RP60136X	Reman. V−20F	Spline	16000 lbs.	8	2000	V20F1P11P38C8O11L	Cummins/Cat	PS6001
RP60137X	Reman. V−20F	Spline	12000 lbs.	6	2000	V20NF1D11T38C6HL	Cummins/Cat	PS6001
RP60138X	Reman. V−20F	Spline	12000 lbs.	6	1700	V20F1D9P38C6G	Various	PS6001

RP60139X	Reman. V−20F	Spline	16000 lbs.	8	1700	V20F1P13P38D8G	Various	PS6001
RP60140X	Reman. V−20F	Spline	−	6	1700	V20F1P8P38C6GL	−	PS6001
RP60141X	Reman. V−20F	Spline	−	4	1700	V20NF1R6P38B4GL	−	PS6001
RP60142X	Reman. V−20F	Spline	−	4	2000	V20NF1D8P38C4HL	−	PS6001
RP60143X	Reman. V−20F	Spline	−	7	2000	V20NF1P13P38A7H	−	PS6001
RP60144X	Reman. V−20F	Spline	−	6	2000	V20NF1R11P38C6HL	−	PS6001
RP60146X	Reman. V−20F	Spline	−	4	2000	V20NF1DP38C4HLH	−	PS6001
RP60147X	Reman. V−20F	Spline	−	7	2000	V20F1P13P38A7H	−	PS6001
RP60148X	Reman. V−20F	Spline	−	6	2000	V20F1R11P38C6HL	−	PS6001
RP60150X	Reman. V−20; w/o flow control, w/o internal relief valve	Spline	−	11	−	V201S13S38C11L063	−	PS6001
RP60153X	Remanufactured Vickers V−20 Pump	Spline 11 tooth	−	11	2000	V20F1P11P38D7H	−	PS6001

VTM−42 Series Pump − Remanufactured



Features:

- Comes with all gaskets necessary for mounting to engines.

Specifications:

Approximate Weight 14 lbs.

SKU#	Product Description	Axle Weight	Gallons Per Minute	PSI	Manufacture Number	Core Group
RP90102X	Remanufactured Vickers VTM−42 Series Power Steering Pump	12000 lbs.	4.5	1500	VTM42505515	PS9002
RP90105X	Remanufactured Vickers VTM−42 Series Power Steering Pump	12000 lbs.	4.5	2000	VTM42504520	PS9002
RP90106X	Remanufactured Vickers VTM−42 Series Power Steering Pump	12000 lbs.	4	1500	VTM42504015L	PS9002

ZF Gear Driven − Remanufactured

Features:

- Gear Drive

Specifications:

Approximate Weight 15 to 20 lbs.

SKU#	Product Description	Shaft	Rotation	Gallons Per Minute	PSI	ZF Number	OEM Number	Application	Core Group
RP11001X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CW	4 to 4.5	2100	7674 974 909	E8HT3A674AA	Ford New Holland	PS1101
RP11010X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	7	2325	7677 955 179	F1HZ3A674F	Ford New Holland	PS1101
RP11011X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	4.5	2175	7674 955 272	E8HT3A674BA	Ford New Holland	PS1101
RP11014X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	4.5	2300	7674 497 924	E8HZ3A674M	Ford New Holland	PS1101
RP11016X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CW	4.5	2325	7674 900 112	F6HZ3A711VA	Ford New Holland	PS1101
RP11019X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CW	6	2325	7674 974 109	F4HZ3A674F	Ford New Holland	PS1101
RP11021X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	4.5	2150	LF7674974924	E8HZ3A674M	Ford	PS1101
RP11022X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	4.5	2150	LF7674974920	F3HT3A674DA	Ford	PS1101
RP11025X	Reman. ZF Power Steering Pump − Gear Drive	Gear	CCW	4.5	2450	LF7685955794	93803970	Volvo	PS1101

ZF Spline Driven – Remanufactured

Features:

- Spline Drive

Specifications:

Approximate Weight 20 lbs.

SKU#	Product Description	Shaft	Rotation	Gallons Per Minute	PSI	ZF Number	OEM Number	Application	Core Group
RP11004X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CCW	3.5 to 4	1900	7673 955 273	38401-3226	Cat L10-3406	PS1101
RP11005X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	3.5 to 4	2100	7674 955 273	E9HT3A674BA	NTC Cummins	PS1101
RP11006X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	5.5 to 6	2175	7677 955 180	F1HT3A674AA	Cummins	PS1101
RP11007X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CCW	5.5 to 6	2175	7677 955 181	F1HT3A674EA	Cat 3406	PS1101
RP11008X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	7.0	2400	7677 955 187	F1HZ3A674L	Ford	PS1101
RP11009X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CCW	5.5 to 6	2400	7674 955 343	F0H23A674D	Ford	PS1101
RP11012X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	4.0	2000	7673 955 320	10-02146	Peterbilt	PS1101
RP11013X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CCW	4.0	2000	7673 955 321	10-02141	Peterbilt	PS1101

SKU#	Product Description	Shaft	Rotation	Gallons Per Minute	PSI	ZF Number	OEM Number	Application	Core Group
RP11015X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	5.0	2300	7674 955 344	F4HT3A674EA	Ford	PS1101
RP11018X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	6.0	2175	7674 955 920	–	–	PS1101
RP11023X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	3.7	1800	LF7673955958	10–02466	Peterbilt	PS1101
RP11024X	Reman. ZF Power Steering Pump – Spline Drive	11 Tooth	CW	4.5	2150	LF7673955305	E9HT3A674AA	Ford	PS1101
RP11026X	Remanufactured ZF Power Steering Pump – Spline Drive	11 Tooth	CCW	3.7	1800	LF7673955959	–	Peterbilt	PS1101

ZF Tang Driven − Remanufactured

SKU#	Product Description	Shaft	Rotation	Gallons Per Minute	PSI	ZF Number	OEM	Application	Core Group	
RP11101X	ZF Tang Driven Power Steering Pump	Tang	ccw	5	2800	7685955173	14−14599−004	Sterling/reighliner with Mercedes engine	PS1103	

Seal Kits

R3293

R3294

R3307

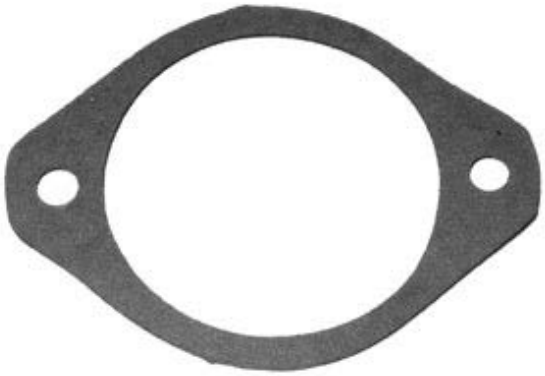
R3308

R3309

SKU#	Product Description	Model Type	Kit Contains
R3285	Power Steering Pump Seal Kit for Saginaw	Saginaw Steering Pump	(2) O−Ring − Bolt and Pressure Union (1) O−Ring − Reservoir (2) O−Ring − End and Pressure Plate (1) Seal Ring − Flow Control Valve (1) O−Ring − Flow Control Valve (1) Plug
R3293	Power Steering Pump Seal Kit for Vickers	Vickers V−10F Pump Series	(1) Oil Seal − Rotor Shaft (2) Plugs (2) O−Ring − Body and Housing (2) O−Ring − Cap Plug
R3294	Power Steering Pump Seal Kit for Vickers	Vickers V−20F Pump Series	(1) Oil Seal − Rotor Shaft (3) Plugs (2) O−Ring − Body and Housing (2) O−Ring − Cap Plug
R3307	Power Steering Pump Seal Kit for Eaton	Eaton Pump B Series	(1) O−Ring − Gasket (1) Oil Seal − Rotor Shaft (1) O−Ring − Fitting (8) O−Ring − Port Plates (1) O−Ring − Valve Cap (2) Nut and Flat Washer
R3308	Power Steering Pump Seal Kit for Eaton	Eaton Pump U Series	(1) Oil Seal − Rotor Shaft (1) O−Ring − Valve Body Cap (1) O−Ring − Valve Body (1) O−Ring − By Pass (4) O−Ring − Gaskets

R3309	Power Steering Pump Seal Kit for Eaton	Eaton Pump BB Series	–
RP131K	Power Steering Pump Seal Kit for TRW	TRW PS Series	–

Miscellaneous Kits



R1549 Shown

SKU#	Product Description	Application
R1549	Cummins Power Steering Pump Gasket	Vickers V−10F and V−20F

HARD STEERING

1. Improper tire pressure	1. Inflate tires to recommended pressures.
2. Loose pump drive belt	2. Tighten or replace belt.
3. Low or incorrect fluid	3. Refill reservoir with proper fluid; check for leaks.
4. Loose, bent or poorly lubricated front end parts	4. Tighten or replace parts; lubricate at all fittings.
5. Improper front end alignment	5. Align front end.
6. Bind in steering column or linkage	6. Disassemble and inspect component parts. Repair or replace as necessary.
7. Air in hydraulic system	7. Bleed system, refill and check for leaks.
8. Low pump output or leaks in system	8. Disassemble pump, check for worn or damaged parts. Check for leaks in the system.
9. Obstruction in lines	9. Clean or replace lines.
10. Pump valves sticking or out of adjustment	10. Replace or adjust valves.

LEAKING HOSES AND SEALS

1. Too much fluid in pump reservoir	1. Remove oil to proper level.
2. Damaged or improperly installed "O" ring in pump reservoir	2. Replace or adjust.
3. Loose pump fittings or studs	3. Re−torque to specifications.
4. Defective pump and seals	4. Replace.
5. Cracks in hose or splits in fittings	5. Replace hose assembly.

LOOSE STEERING

1. Loose wheel bearings	1. Adjust wheel bearings.
2. Faulty shocks	2. Replace shocks.
3. Worn linkage components	3. Replace worn components.
4. Loose steering gear mounting or linkage points	4. Tighten mountings or linkage.
5. Steering mechanism worn or improperly adjusted.	5. Replace and/or adjust mechanism.
6. Valve spool improperly adjusted	6. Adjust valve spool.

NOISES

1. Loose belts	1. Replace and/or adjust belts.
2. Low fluid, air in system	2. Refill and check for leaks.
3. Foreign matter in system	3. Disassemble and clean system.
4. Improper lubrication	4. Lubricate all fittings.
5. Interference or chafing in linkage	5. Disassemble, inspect, replace or adjust components.
6. Steering gear mountings loose	6. Tighten mountings.
7. Incorrect adjustment or wear in gear box	7. Disassemble, inspect, repair, replace and/or adjust parts.
8. Faulty valves or wear in pump	8. Replace parts as necessary.

VEER OR WANDER

1. Improper tire pressure	1. Inflate tires to recommended pressures.
2. Improper front end alignment	2. Align front end.
3. Dragging brakes	3. Inspect, replace and/or adjust brakes.
4. Bent frame	4. Straighten frame.
5. Improper rear end alignment	5. Inspect shocks and control arm torque. Replace and/or adjust as necessary.
6. Faulty shocks or springs	6. Replace as necessary.
7. Loose or bent front end components	7. Replace as necessary.
8. Play in Pitman arm	8. Inspect bushings and arm. Replace as necessary.
9. Loose wheel bearings	9. Adjust to specifications.
10. Binding Pitman arm	10. Replace arm.
11. Spool valve sticking or improperly adjusted	11. Adjust or replace as necessary.

WHEEL OSCILLATION

1. Improper tire pressure	1. Inflate tires to recommended pressures.
2. Loose wheel bearings	2. Adjust to specifications.
3. Improper front end alignment.	3. Align front end.
4. Bent spindle	4. Replace spindle.
5. Worn, bent or broken front end components	5. Inspect, repair or replace as necessary.
6. Tires out of round or out of balance	6. Replace or balance tires.
7. Excessive lateral runout in disc brake rotor	7. Reface or replace rotor.

CONTAMINATED OIL FLUSHING INSTRUCTIONS

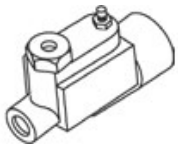
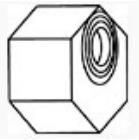
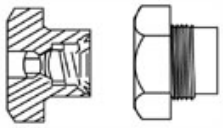
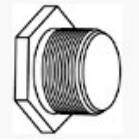
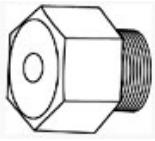
1. Disconnect return line from the gear at the point it is attached to the integral or remote reservoir. Direct the return line into a suitable fluid container of eight quarts minimum capacity. Temporarily plug or cap reservoir return port tube or fitting. Fill reservoir with recommended fluid. Disconnect ignition system. Jack front wheels from floor. Restrain vehicle with safety blocks. Engage starter motor and turn wheels simultaneously to full travel until oil is no longer pumped. Refill reservoir and repeat. Remove vehicle from jack, remove safety blocks, reconnect return line to reservoir and reconnect ignition system. Fill reservoir with manufacturer's recommended fluid to capacity. Start engine and run for 30 seconds. Shut off engine.

2. Fill (or refill) the reservoir to the cold fill mark with the manufacturer's recommended fluid. If equipped with a dipstick showing hot full only, fill with oil to just cover the filter.

3. Start the engine and let run at idle speed for a couple minutes. Cycle the steering wheel a few times to eliminate entrapped air. For pumps having dipstick showing hot full only, allow the truck to reach operating temperature before stopping the engine. For units with cold fill marks, the engine may be stopped after cycling. Fill to indicated levels on sight gauge (some models) or dipstick (some models).

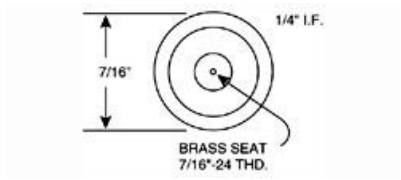
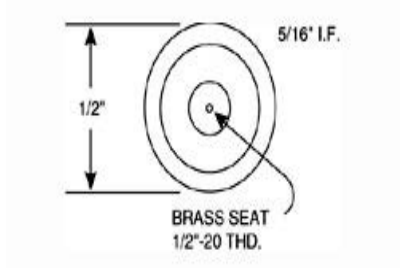
Notes

Identification Aids

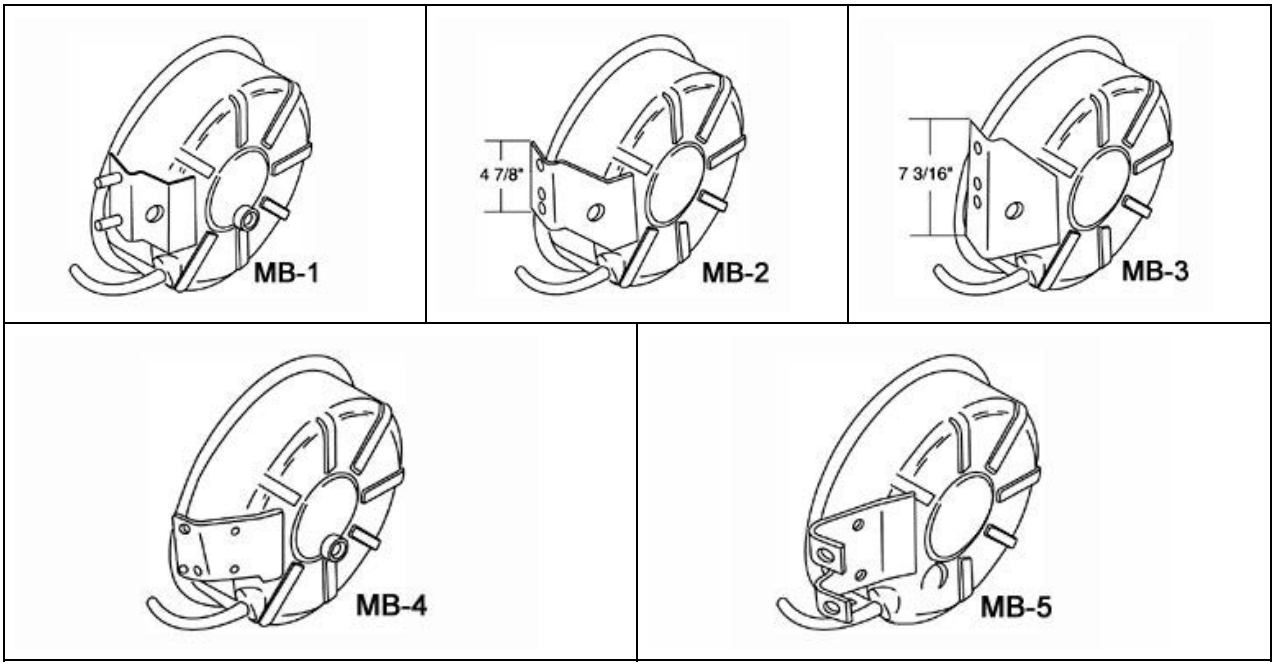
A. END CAP Without Residual Valve.	
B. END CAP With Residual Valve.	
C. END CAP Without Residual Valve.	
D. END CAP With Residual Valve.	
E. END CAP Without Residual Valve.	
F. END CAP With Residual Valve.	
G. END CAP Without Residual Valve.	
H. END CAP With Residual Valve.	
I. END CAP Without Residual Valve.	
J. END CAP With Residual Valve.	

Identification Aids

BRASS SEATS

	**A. Brass Seat** 7/16" − 24 Thread.
	**B. Brass Seat** 1/2" − 20 Thread.
	C. No Brass Seat. Sealing rings. 7/16" or 1/2" − 20 Thread. Requires adapter fitting or hose with copper gasket.

MOUNTING BRACKETS



Midland (Remanufactured)

Single Reservoir

SKU#	Product Description	MFG. #	Outlet	Approx. Weight	Notes	Core Group	Pic. #
RV347201X	Remanufactured Midland Single Reservoir Master Cylinder	C3472SD	1/4" Inverted Flare Tube	7 lbs.	Thru−Bolt Cap Output port on top of casting.	VAC1011	1
RV349201X	Remanufactured Midland Single Reservoir Master Cylinder	C3492SX	5/16" Inverted Flare Tube	8.7 lbs.	Thru−Bolt Cap Output on side of casting.	VAC1010	2
RV349601X	Remanufactured Midland Single Reservoir Master Cylinder	C3496SX	5/16" Inverted Flare Tube	8.6 lbs.	Thru−Bolt Cap Output port on side of casting.	VAC1010	2
RV350701X	Remanufactured Midland Single Reservoir Master Cylinder	C3507SB	1/4" Inverted Flare Tube	8.5 lbs.	Bail−Wire Cap Output port on side of casting.	VAC1010	3

Midland (Remanufactured)

Dual Reservoir

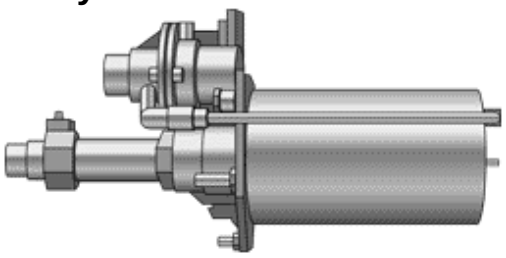
SKU#	Product Description	MFG. #	Approx. Weight	Core Group	Pic. #
RV350001X	Remanufactured Midland Dual Reservoir Master Cylinder	C3500SE	11 lbs.	VAC1012	1
RV350002X	Remanufactured Midland Dual Reservoir Master Cylinder	C3500SF	11 lbs.	VAC1012	1
RV350301X	Remanufactured Midland Dual Reservoir Master Cylinder	C3503SX	11 lbs.	VAC1012	2
RV351001X	Remanufactured Midland Dual Reservoir Master Cylinder	C3510SA	11 lbs.	VAC1012	3

Competitive (Remanufactured)

SKU#	Product Description	Application	Approximate Weight	Core Group
RV12379X	Master Cylinder for Navistar	1000 Series Navistar 1987−95 3000 Series Navistar 1990−95 4000 Series Navistar 1990−95 7000 Series Navistar 1990−95	14 lbs.	VAC 1036

Bendix® − Remanufactured

Air over Hydraulic



Features:

- Bendix Air−Pac air over hydaulic unit
- Repair and Return only

SKU#	Product Description	Manufacturer's Number	Approx. Weight	Features	Core Group
RV2500690X	Pressure Converter	2500690	15 lbs.	Unit has Hydraulic Residual Pressure Check Valve	VAC1024

Midland Firewall Mount

Single Diaphragm − Remanufactured

SKU#	Product Description	MFG. #	Diameter	Overall Length w/Master Cylinder	Stud Size	Stud Pattern	Approx. Weight	Core Group	Pic. #
RV402801X	Reman. Single Diaphragm Vacuum Booster	C4028A	11−1/2"	−	5/16−18 x 3/4"	4" x 5"	15 lbs.	VAC1031	1
RV403001X	Reman. Single Diaphragm Vacuum Booster	C4030B	9−1/2"	−	5/16−18 x 3/4"	3−1/8" x 3−3/8"	10 lbs.	VAC1031	1
RV403701X	Reman. Single Diaphragm Vacuum Booster	C4037L	11−11/16"	22−5/16"	3/8−16 x 2"	3−3/4" x 3−3/4"	17 lbs.	VAC1002	2
RV403702X	Reman. Single Diaphragm Vacuum Booster	C4037N	11−11/16"	23−7/16"	3/8−16 x 1−1/4"	3−3/4" x 3−3/4"	17 lbs.	VAC1002	2
RV404402X	Reman. Single Diaphragm Vacuum Booster	C4044K	11−11/16"	−	5/16−18 x 3/4"	3−9/16" x 5"	14 lbs.	VAC1031	1
RV408401X	Reman. Single Diaphragm Vacuum Booster	C4084MB	13"	30−1/4"	3/8−16 x 3/4"	3−1/2" x 6−1/8"	19 lbs.	VAC1003	3
RV408402X	Reman. Single Diaphragm Vacuum Booster	C4084C	13"	31−9/32"	3/8−16 x 7/8"	3−1/2" x 6−1/8"	20 lbs.	VAC1003	3
RV408403X	Reman. Single Diaphragm Vacuum Booster	C4084E	13"	26−3/4"	3/8−16 x 2−1/2"	4−11/16 x 5"	21 lbs.	VAC1003	4
RV408404X	Reman. Single Diaphragm Vacuum Booster	C4084H	13"	30−1/4"	3/8−16 x 2−1/2"	4−11/16 x 5"	21 lbs.	VAC1003	4
RV408405X	Reman. Single Diaphragm Vacuum Booster	C4084J	13"	33−5/16"	3/8−16 x 7/8"	4−1/2 x 5"	21 lbs.	VAC1003	5

Midland Frame Mount

C462/C464R Series − Remanufactured

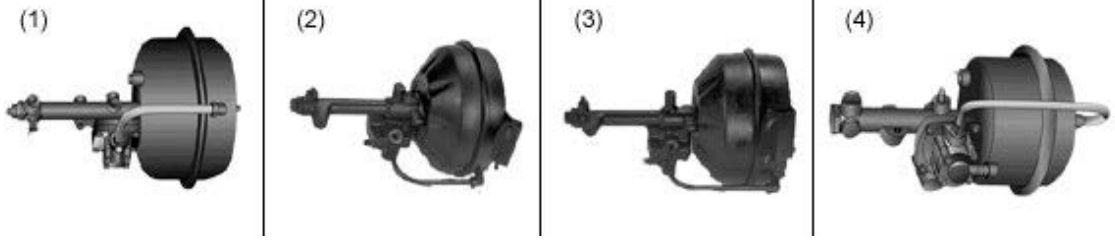
(1)

(2)

SKU#	Product Description	MFG. #	Cast. #	Clamp Band Dia.	Hyd. Displ.	O.A.L.	Inlet	Outlet	Max. Boost at 20 In. Hg.	Wt.	Core Group	Pic. #
RV46201X	Remanufactured C462 Series Single Diaphragm Vacuum Booster	C462C	C3388	10.03"	1.80 cu. in.	13.81"	1/2"−20 UNF 3A	1/2"−20 UNF 3A	950 PSI at 250 PSI Input	17 lbs.	VAC1000	1
RV46401X	Remanufactured C464R Series Single Diaphragm Vacuum Booster	C464R	C3389	11.50"	2.48 cu. in.	16.12"	1/8"−27 NPT	1/8"−27 NPT	1150 PSI at 200 PSI Input	23 lbs.	VAC1001	2

Midland Frame Mount

Single Diaphragm − Remanufactured



SKU#	Product Description	MFG. #	Diameter	Overall Length	Inlet	Outlet	Approx. Weight	Core Group	Pic. #
RV401201X	Remanufactured Single Diaphragm Frame Mount Vacuum Booster − Three Line Unit	C4012E	11−1/4"	23−3/4"	1/4" Inverted Flare	1/4" Inverted Flare	20 lbs.	VAC1030	1
RV405501X	Remanufactured Single Diaphragm Frame Mount Vacuum Booster	C4055	11−11/16"	16−3/4"	1/4" Inverted Flare	5/16" Inverted Flare	23 lbs.	VAC1032	2
RV4056X	Remanufactured Single Diaphragm Frame Mount Vacuum Booster	C4056	11−11/16"	18−1/8"	5/16" Inverted Flare	5/16" Inverted Flare	25 lbs.	VAC1016	3
RV46801X	Remanufactured Single Diaphragm Frame Mount Vacuum Booster	C468C	8"	13−7/8"	1/2"− 20 UNF 3B	1/2"− 20 UNF 3B	12 lbs.	VAC1033	4

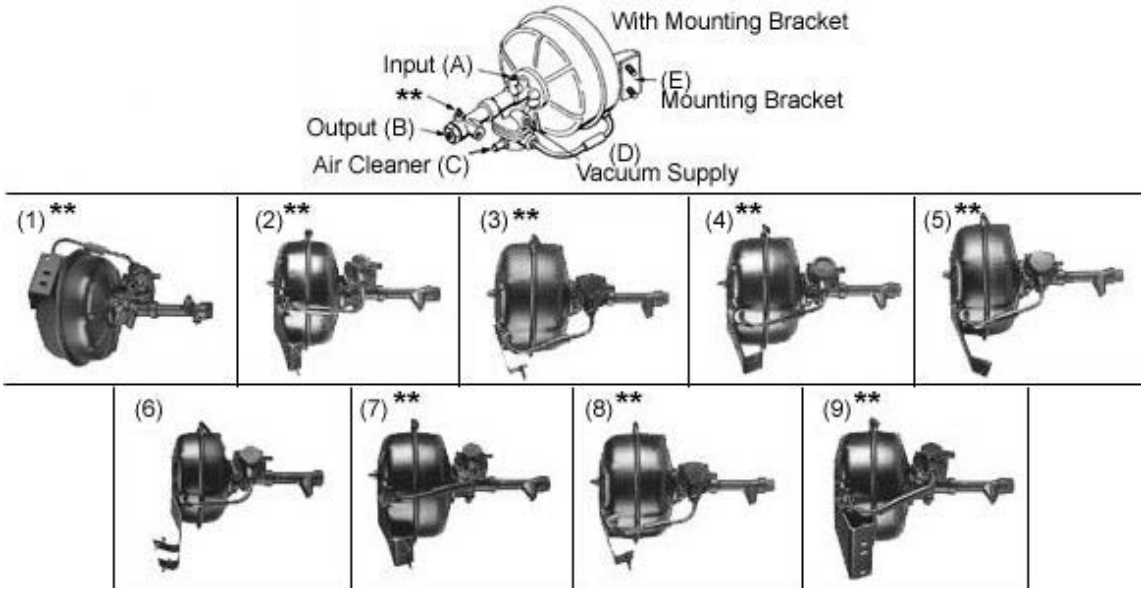
Midland Ultravac

C479 Series − Remanufactured

SKU#	Product Description	MFG. #	Cast. #	Vacuum Cylinder Dia.	Hydraulic Displacement	Overall Length	Hydraulic Output at 20 In. HG.	Inlet	Outlet	Wt.	Core Group
RV47902X	Remanufactured C479B Series Single Diaphragm Ultravac Vacuum Booster	C479B	C3389	11.50"	2.48 cu. in.	16.19"	1060 PSI	Res.	1/4" Inverted Flare	24 lbs.	VAC1000

Bendix® − Remanufactured

Fourth Series Single Diaphragm with Mounting Bracket

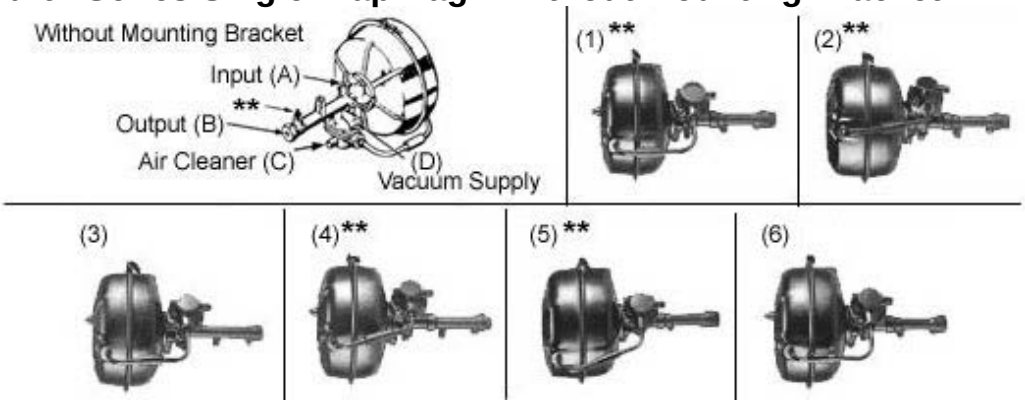


***End Caps and Mounting Brackets shown in Identification Aids.**
****Units contain residual pressure check valve and must be used with master cylinder that does not have a residual pressure check valve.**
Approximate Weight 26 lbs.
IF=Inverted Flare

SKU#	Product Description	MFG. #	Diameter	Overall Length	A	B	C	D	End Cap*	E*	Core Group	Pic. #
RV2511170X	Reman. Fourth Series	2511170	12−3/4"	18−5/8"	1/4" IF	1/4" IF	3/4"	3/8" NPT	H	MB−2	VAC1004	1
RV2512059X	Reman. Fourth Series	2512059	12−3/4"	17−1/8"	1/4" IF	7/16" Grommet Style	3/4"	1/2" NPT	J	MB−1	VAC1004	2
RV2512062X	Reman. Fourth Series	2512062	12−3/4"	17−5/8"	1/4" IF	1/4" IF	1/2"	1/2" IF	H	MB−4	VAC1004	5
RV2512063X	Reman. Fourth Series	2512063	11−1/32"	16−1/2"	1/4" IF	5/16" IF	1/2"	1/2" IF	H	MB−5	VAC1004	6
RV2512065X	Reman. Fourth Series	2512065	12−3/4"	18−5/8"	5/16" IF	5/16" IF	1/2"	1/2" IF	H	MB−1	VAC1004	7
RV2512066X	Reman. Fourth Series	2512066	12−3/4"	18−5/8"	1/4" IF	1/4" IF	1/2"	1/2" IF	H	MB−1	VAC1004	8
RV2512138X	Reman. Fourth Series	2512138	12−3/4"	18−5/8"	1/4" IF	1/4" IF	3/4"	3/8" NPT	H	MB−3	VAC1004	9
RV2512139X	Reman. Fourth Series	2512139	12−3/4"	18−5/8"	5/16" IF	5/16" IF	3/4"	1/2" NPT	H	MB−2	VAC1004	4
RV2513813X	Reman. Fourth Series	2513813	12−3/4"	18−5/8"	5/16" IF	5/16" IF	3/4"	1/2" IF	H	MB−1	VAC1004	3
RV2513814X	Reman. Fourth Series	2513814	12−3/4"	18−5/8"	5/16" IF	5/16" IF	3/4"	1/2" IF	H	MB−1	VAC1004	3

Bendix® − Remanufactured

Fourth Series Single Diaphragm without Mounting Bracket



***End Caps shown in Identification Aids.**
****Units contain residual pressure check valve and must be used with master cylinder that does not have a residual pressure check valve.**
Approximate Weight 25 lbs.

SKU#	Product Description	MFG. #	Diameter	Overall Length	A	B	C	D	End Cap*	Core Group	Pic. #
RV2512060X	Reman. Fourth Series	2512060	12−3/4"	17−3/8"	1/4" Inverted Flare	7/16"− 20 Copper Gasket	3/4"	1/2" NPT	J	VAC1004	1
RV2512061X	Reman. Fourth Series	2512061	12−3/4"	18−5/8"	1/2" Grommet Style	1/2"− 20 Copper Gasket	3/4"	1/2" NPT	J	VAC1004	2
RV2512076X	Reman. Fourth Series	2512076	12−3/4"	17−1/8"	1/2" Grommet Style	1/2"− 20 Copper Gasket	3/4"	1/2" NPT	G	VAC1004	3
RV2512140X	Reman. Fourth Series	2512140	12−3/4"	18−5/8"	5/16" Inverted Flare	5/16" Inverted Flare	3/4"	3/8" NPT	H	VAC1004	4
RV2512141X	Reman. Fourth Series	2512141	12−3/4"	18−5/8"	5/16" Inverted Flare	5/16" Inverted Flare	3/4"	1/2" NPT	H	VAC1004	5
RV2513494X	Reman. Fourth Series	2513494	12−3/4"	17−5/8"	5/16" Inverted Flare	5/16" Inverted Flare	3/4"	1/2" NPT	H	VAC1004	6

Bendix® − Remanufactured

Fourth Series Single Diaphragm 3−Line Unit

Features:

- 3−Line Unit output port connects to MC Reservoir

Notes:

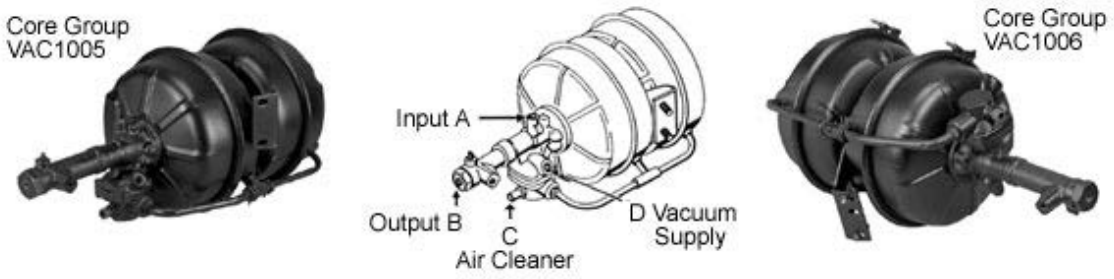
1) *End Caps and Mounting Bracket (MB−1) shown in Identification Aids.

2) **RV2501424X** contains residual pressure check valve and must be used with master cylinder that does not have a residual pressure check valve.

SKU#	Product Description	MFG. #	Dia.	O.A.L.	Input	Output	Air Cleaner	Vacuum Supply	End Cap*	Wt.	Core Group
RV2500517X	Reman. Fourth Series without Bracket	2500517	12−5/8"	16"	1/2"− 20 Thread	1/2"− 20 Thread	3/4"	3/8" NPT	A	19 lbs.	VAC1013
RV2500660X	Reman. Fourth Series without Bracket	2500660	11"	12−1/2"	1/2"− 20 Thread	1/4" Inverted Flare	1/2"	1/2" NPT	CE	15 lbs.	VAC1014
RV2501424X	Reman. Fourth Series without Bracket	2501424	11−1/32"	14−3/4"	5/16" Inverted Flare	1/4" Inverted Flare	−	−	H	15 lbs.	VAC1025
RV2503151X	Reman. Fourth Series with Bracket*	2503151	11−1/32"	16−1/8"	1/4" Inverted Flare	5/16" Inverted Flare	1/2"	1/2" Inverted Flare	G	23 lbs.	VAC1026
RV2503259X	Reman. Fourth Series without Bracket	2503259	11−1/32"	14"	5/16" Inverted Flare	5/16" Inverted Flare	3/4"	3/8" NPT	H	18 lbs.	VAC1023
RV2504102X	Reman. Fourth Series with Bracket*	2504102	11−1/32"	16"	1/4" Inverted Flare	5/16" Inverted Flare	1/2"	1/2" Inverted Flare	I	22 lbs.	VAC1026
RV2504105X	Reman. Fourth Series without Bracket	2504105	12−3/4"	17−1/2"	1/4"− 20 Thread	1@1/8"− 27 NPT (end of hydraulic cylinder) 1@1/2"− 20 Thread (in side of end cap)	3/4"	1/2" NPT	H	25 lbs.	VAC1028
RV2504113X	Reman. Fourth Series with Bracket*	2504113	12−3/4"	17−1/2"	1/4" Inverted Flare	5/16" Inverted Flare	1/2"	1/2" Inverted Flare	H	25 lbs.	VAC1013

Bendix® − Remanufactured

Fourth Series Tandem Diaphragm



***End Caps shown in Identification Aids.**

SKU#	Product Description	MFG. #	Dia.	Overall Length	A	B	C	D	End Cap*	Wt.	Core Group
RV2512142X	Remanufactured Bendix® Fourth Series Tandem Diaphragm Frame Mount	2512142	12−3/4"	24−3/4"	5/16" Inverted Flare	1/4" Inverted Flare	3/4"	1/2" NPT	H	39 lbs.	VAC1005
RV2513491X	Remanufactured Bendix® Fourth Series Tandem Diaphragm Frame Mount	2513491	12−3/4"	24−3/4"	5/16" Inverted Flare	1/2" Grommet Style	3/4" or 1"	1/2" NPT	J	40 lbs.	VAC1006
RV2513493X	Remanufactured Bendix® Fourth Series Tandem Diaphragm Frame Mount	2513493	12−3/4"	24−3/4"	5/16" Inverted Flare	1/2" Grommet Style	3/4" or 1"	1/2" NPT	J	39 lbs.	VAC1006
RV2513812X	Remanufactured Bendix® Fourth Series Tandem Diaphragm Frame Mount	2513812	12−3/4"	24−3/4"	5/16" Inverted Flare	5/16" Inverted Flare	3/4"	1/2" Inverted Flare	H	38 lbs.	VAC1006

Bendix® − Remanufactured

Single Piston Frame Mount

Notes:

1) *End Caps shown in Identification Aids.

SKU#	Product Description	MFG. #	Dia.	Overall Length	Input	Output	Air Cleaner	Vacuum Supply	End Cap*	Wt.	Core Group
RV2509426X	Remanufactured Bendix® Single Piston Frame Mount	2509426	9−1/2"	23−5/16"	1/2"− 20 Thread	1/2"− 20 Thread	3/4"	1/2" NPT	B	26 lbs.	VAC1015
RV374750X	Remanufactured Bendix® Single Piston Frame Mount	374750	9−1/2"	22"	1/2"− 20 Thread	1/2"− 20 Thread	3/4"	1/2" NPT	B	26 lbs.	VAC1015
RV374980X	Remanufactured Bendix® Single Piston Frame Mount	374980	9−1/2"	17−5/16"	1/2"− 20 Thread	1/2"− 20 Thread	3/4"	1/2" NPT	B	24 lbs.	VAC1015
RV379474X	Remanufactured Bendix® Single Piston Frame Mount	379474	6−3/4"	14−1/2"	1/2"− 20 Thread	1/2"− 20 Thread	1/2"	3/8" NPT	A or E	15 lbs.	VAC1015

Bendix® − Remanufactured

Hydrovac

Features:

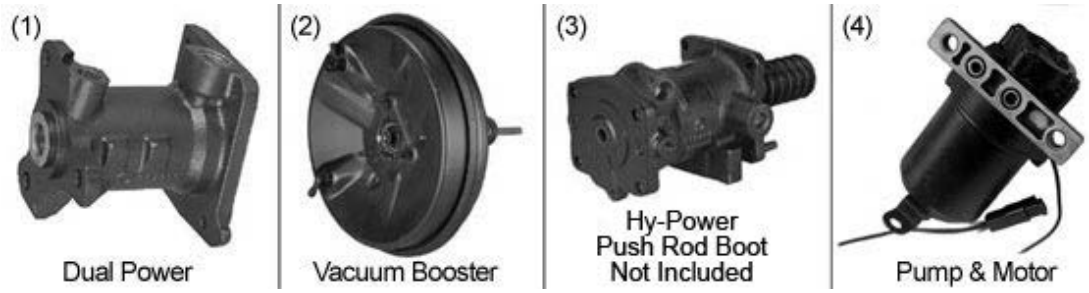
- Return & Rebuild only

Notes:

1) *End Caps shown in Identification Aids.

SKU#	Product Description	MFG. #	Diameter	Overall Length	Input	Output	Vacuum Supply	End Cap*	Approx. Weight	Core Group
RV2513815X	Remanufactured Bendix® Hydrovac	2513815	12−3/4"	8−5/8"	1/4" Inverted Flare	1/4" Inverted Flare	1/2" NPT	H	24 lbs.	VAC1004
RV2765110X	Remanufactured Bendix® Pasco Hydrovac	2765110	12−3/4"	18−5/8"	−	5/16" Inverted Flare	1/2" NPT	H	24 lbs.	VAC1007

Delco − Remanufactured

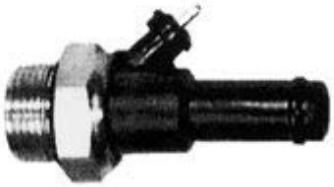


SKU#	Product Description	MFG. #	Approx. Weight	Features	Primary Application	Core Group	Pic. #
RV18001047X	Remanufactured Delco Dual Power Booster	18001047	6 lbs.	R & R only. Casting 2623501.	−	VAC1019	1
RV18001072X	Remanufactured Delco Vacuum Booster	18001072	22 lbs.	Piston Rod Length − 7" with Removable Mounting Plate	GMC	VAC1019	2
RV18001810X	Remanufactured Delco Hy−Power Hydroboost	18001810 18015765	17 lbs.	7" Threaded Rod Length Installed (Push rod loose in box) Supplied with Flow Switch Inverted Flare Input Line Push Rod Boot not included	GM OshKosh	VAC1018	3
RV18003144X	Remanufactured Delco Vacuum Booster	18003144	22 lbs.	Piston Rod Length − 5" with Removable Mounting Plate	GMC	VAC1019	2
RV18003998X	Remanufactured Delco Hy−Power Hydroboost	18003998	17 lbs.	5−1/2" Threaded Rod Supplied with Flow Switch Push Rod Boot not included	Navistar (IHC)	VAC1018	3
RV18006974X	Remanufactured Delco Hy−Power Hydroboost	18006974	4 lbs.	Pump & Motor Only 1 Wire	All	VAC1007	4
RV18014080X	Remanufactured Delco Hy−Power Hydroboost	18014080 18015765	19 lbs.	9−1/4" Fixed Eyelet Rod Flow Switch RV20002K Supplied Separately Tube Type O−Ring Fitting Push Rod Boot not included	Topkick Kodiak	VAC1018	3
RV18015776X	Remanufactured Delco Hy−Power Hydroboost	18015776	4 lbs.	Pump and Motor Only 2 Wire	Topkick & Kodiak	VAC1007	4

Component Parts

(1)

(2)



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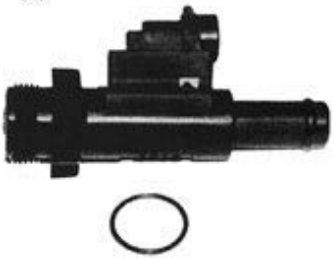
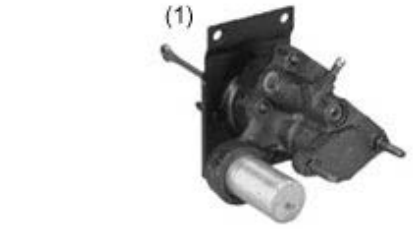
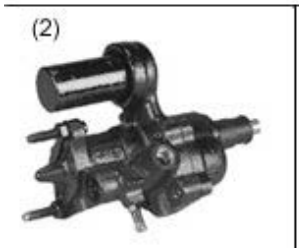


SKU#	Product Description	MFG. #	Application/Notes	Pic. #
RV10001K	Vacuum Booster Check Valve Kit	–	Contents in Kit: (1) Check Valve, (2) Hose Clamps, (1) Screw & (1) Piece of Vacuum Hose	1
RV20001K	Vacuum Booster Flow Switch	18005544	RV18001810X RV18003998X	2

Bendix® − Remanufactured

Hydroboost





Features:

- Hydraulic Assisted Booster

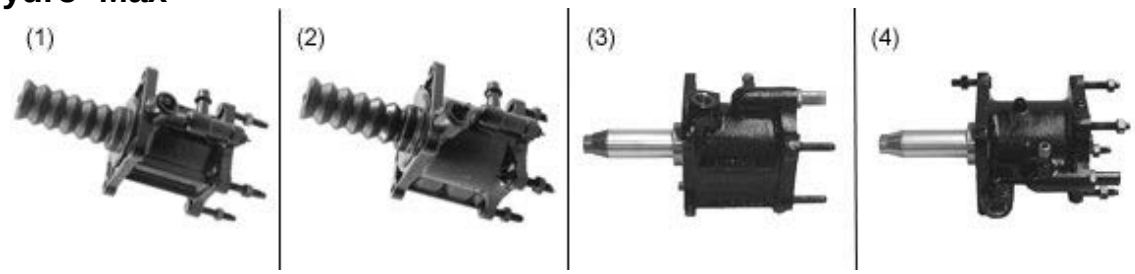
Notes:

1) Removeable mounting plate (units are shipped with new mounting nut).

SKU#	Product Description	MFG. #	Inlet	Outlet	Accumulator	Input Piston Dia.	Approx. Weight	App.	Core Group	Pic. #
RV2770317X	Remanufactured Bendix® Hydroboost	2770317	Metric Straight	Metric Straight	GOLD	19/32" Straight	10 lbs.	GMC	VAC1007	1
RV2770433X	Remanufactured Bendix® Hydroboost	2770433	11/16−18 Straight	5/8−18 Straight	BLUE	21/32" Standard Thread	14 lbs.	Ford Heavy Duty	VAC1022	2
RV2771117X	Remanufactured Bendix® Hydroboost	2771117	Metric Straight	Metric Straight	GOLD	3/4" Grommet Style	12 lbs.	GMC	VAC1008	3
RV2771118X	Remanufactured Bendix® Hydroboost	2771118	Metric Straight	Metric Straight	BLUE	21/32" Grommet Style	13 lbs.	GM	VAC1022	2
RV2771173X	Remanufactured Bendix® Hydroboost	2771173	11/16−18 Inverted	5/8−18 Inverted	SILVER	3/4" Grommet Style	17 lbs.	GMC	VAC1009	3
RV2771250X	Remanufactured Bendix® Hydroboost	2771250	Metric Straight	Metric Straight	GOLD	21/32" Grommet Style	10 lbs.	GMC	VAC1007	1

Bendix® − Remanufactured

Hydro−Max



Hydraulic Actuated Units

SKU#	Product Description	MFG. #	Input	Output	Approx. Weight	Notes	Application	Core Group	Pic. #
RV2770255X	Remanufactured Bendix® Hydro−Max I Booster	2770255 2771558	3/4−18 with o'ring tube seat	1/2" Inside Diameter for push on hose	6 lbs.	Inlet port on center line.	Ford	VAC1007	1
RV2770256X	Remanufactured Bendix® Hydro−Max I Booster	2770256 2771559	3/4−18 with o'ring tube seat	1/2" Inside Diameter for push on hose	4 lbs.	Inlet port on center line.	Ford	VAC1007	1
RV2770454X	Remanufactured Bendix® Hydro−Max II Booster	2770454 2771552	3/4−18 with o'ring tube seat	1/2" Inside Diameter for push on hose	6 lbs.	Inlet port off center.	IHC	VAC1007	2
RV2772181X	Remanufactured Bendix® Hydro−Max II Booster	2772114	3/4−18 with o'ring tube seat	1/2" Inside Diameter for push on hose	4 lbs.	Used with Mini Master Cylinder bore size 2".	IHC Chev. GMC	VAC1045	3
RV2772184X	Remanufactured Bendix® Hydro−Max II Booster	2772114	3/4−18 with o'ring tube seat	1/2" Inside Diameter for push on hose	4 lbs.	Used with Mini Master Cylinder bore size 1−3/4".	Chev. GMC	VAC1045	4

Bendix® − Remanufactured

Pump and Motor

Features:

- Reserve Electric Motor Pump

Specifications:

Approximate Weight 5 lbs.

Notes:

1) Supplied with two face seals.

SKU#	Product Description	Manufacturer's Number	Application	Features	Core Group
RV2771494X	Remanufactured Pump & Motor for Bendix® Hydro−Max	2771494	Bendix® Hydro−Max I & II	With Lead Wire	VAC1021
RV2771544X	Remanufactured Pump & Motor for Bendix® Hydro−Max	2771544	Bendix® Hydro−Max I & II	Stud − No Lead Wire	VAC1021

Saginaw − Remanufactured

Brake Pump

Features:

- Pump with Press on Pulley
- Metric Fitting in Output Port

Specifications:

Approximate Weight 5 lbs.

SKU#	Product Description	Application	Application	Core Group
RHBP1X	Remanufactured Saginaw Brake Pump	1980−Present Ford Truck with Bendix® Hydro−Max Style System	Chevrolet 3500 light duty w/o reservoir	HYD2021

Push Rod Kits

Features:

- Used on change overs from "Staked Rod Type" units.

Specifications:

RV000002K Adapter	Length 2.5"
RV129495K Grommet	.47 Outside Diameter .25 Inside Diameter
RV129708K Rod	Staked Rod #71217 Length 6"
RV129960K Rod	Staked Rod #71236 Length 3.4"
RV129970K Rod	Staked Rod #71235 Length 5.6"
RV2770533K Rod	Staked Rod #71237 Length 3.6"
RV2771406K Rod	Staked Rod #71346, 71586 Length 5"

SKU#	Product Description	Manufacturer's Number	Kit Contents − Pedal Rods	Kit Contents − Adapter
RV129000K	Push Rod Kit	HPR12900	5 − Different pedal rods (2 each) for Grommet Type units	1−Special adapter for converting RV18003998X Delco Hy−Power to RV18001810 by extending the pedal rod

TROUBLESHOOTING GUIDE

HARD BRAKE PEDAL

- Check for engine vacuum, make sure manifold is open and clear of carbon buildup.
- Use a vacuum gauge to check the vacuum at the booster; do not guess.
- Check vacuum hoses for soft spots, deterior−ation or collapse (replace hose if in doubt.)
- Check brake pedal for binding.
- Check the condition of the foundation brakes drums, lining, brake shoes for binding.
- Check for air in Hydraulic System.
- Check for any line restrictions.

PEDAL KICKBACK

- Check for dirt or foreign matter in Hydraulic System.
- Before replacing the booster, remove the master cylinder to clean any dirt out. Clean out the rest of the Hydraulic System.

BRAKE WILL NOT RELEASE

- Be sure a brake booster with residual check valve is not used with master cylinder with check valve.
- On remote mounted boosters, disconnect the line between the master cylinder and the brake booster.
- If the brakes release, the trouble is in the master cylinder (possibly the brake pedal is binding.)
- If brakes do not release, disconnect the line from the booster to the wheel cylinders.
- If the brakes release, the problem will be in the booster.
- If brakes still do not release, the problem is in the foundation brakes.
- If brakes will not release on firewall mounted brake booster, disconnect the hydraulic line to the wheels.
- If the brakes release, the problem is in the booster or master cylinder (be sure the brake pedal is not binding).

LOW BRAKE PEDAL

- Make sure master cylinder reservoir is full.
- Check for air in the Hydraulic System.
- Make sure there are no leaks in the wheel cylinders, lines or fittings.
- Check the foundation brakes for proper adjustment, cracked or over−sized drums.

SPECIAL NOTES: Common Causes of Booster Failure

Gas Engines: Gas is the cause of a large number of Booster failures. If the vacuum hose does not have a vacuum check valve in the line, raw gas or gas fumes are drawn into the Hydrovac causing the diaphragm to rupture and fail. It could possibly cause an explosion. The vacuum hose should run from the manifold to the vacuum check valve mounted on the firewall above the carburetor, then down to the booster. If no firewall is available, such as on cab−over models, the vacuum hose should be routed so that it goes above the manifold and then down to the booster.

Propane & Butane Equipped Engines: A vacuum check valve should be used as close to the manifold as possible and as high on the firewall as possible. This would prevent raw gas or fumes from getting to the Hydrovac or Booster and prevent a possible explosion if the engine should backfire. A vacuum tank should be used between the engine and Hydrovac or booster when Butane or Propane gas is used to fuel the engine.

Diesel Engines: Diesel engines with vacuum pumps need a check valve in the vacuum line to prevent oil from being drawn into the booster when the engine is shut down. Oil will ruin the diaphragm causing the booster to fail.

BLEEDING PROCEDURES

ALL VACUUM UNITS

IT IS RECOMMENDED THAT ALL BRAKE BLEEDING BE PERFORMED WITH A PRESSURE BLEEDER. IF ONE IS NOT AVAILABLE, USE THE FOLLOWING PROCEDURE.

FRAME MOUNTED: 2 LINE UNITS. DO NOT RUN ENGINE WHILE PERFORMING BLEEDING OPERATIONS.

1. **Fill the reservoir** of the new, rebuilt, or flushed out master cylinder with new, clean, heavy duty brake fluid.

2. **During bleeding** check frequently to make certain that fluid in master cylinder reservoir maintains at least 1/2 inch of fluid. Failure to do so may require starting all over.

3. **Pre−bleed master cylinder** by loosening tube nut and slowly pump master cylinder until fluid runs clear. Retighten nut.

4. **Bleed power unit** as required. Pump pedal slowly to avoid creating air bubbles in fluid. Bleeder screws should be opened on the pressure stroke of the master cylinder and closed on the return stroke.

5. **Continue** around vehicle wheels until all bleeder screws run clear.

6. **Refill master cylinder reservoir** and **slowly** pump pedal with no bleeders open. This allows master cylinder to evacuate any air bubbles that may remain in cylinder bore. Air will escape through compensating port in the bottom of the reservoir.

7. **Start engine** and pump pedal two or three times. Then allow time for fluid to return to the reservoir. If pedal is firm but has excessive stroke, adjust brakes at all wheels. If pedal is "spongy" it still has air in the hydraulic system. See step 8.

8. **Some vehicles** may require "serge" bleeding. To accomplish this, have engine running at idle and make a firm pedal application. Open and close wheel cylinder bleeder screws very quickly. Do not let the pedal go clear to the floor. Repeat this step at each wheel. Remember to check brake fluid level in reservoir.

9. **Proceed** with road test.

FRAME MOUNTED:	**3 LINE UNITS.** Three line units, (with third line connected to master cylinder reservoir) cannot be properly bled without a pressure bleeder. Set bleeder pressure at 50 to 60 PSI. Be sure reservoir on master cylinder is filled above third line connection port. Do not run engine while bleeding.
FIREWALL MOUNTED:	(Push through boosters) all makes. Same as frame mounted 2 line units.

INSTALLATION INSTRUCTIONS FOR BENDIX® HYDRO−BOOST AND HYDRO−MAX DELCO HYPOWER AND DUAL POWER

THIS PROCEDURE DOES NOT INCLUDE INSTRUCTIONS FOR BLEEDING THE BRAKE SYSTEM. THE HYDRO−BOOST, HYDRO−MAX, HYPOWER AND HYDRAULIC SECTION OF THE DUAL POWER UNIT USES POWER STEERING FLUID. THE BRAKE SYSTEM USES HYDRAULIC BRAKE FLUID. DO NOT MIX THE TWO SYSTEMS.

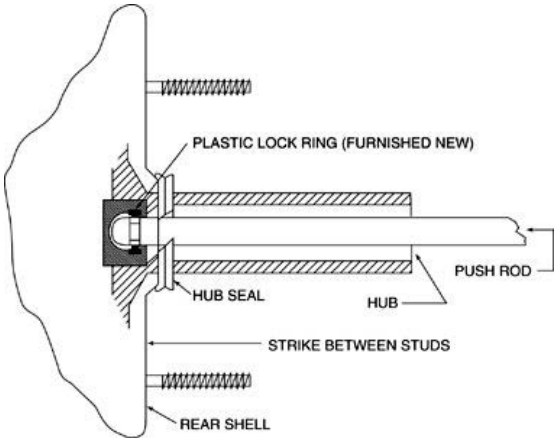
1. **Fill power steering pump reservoir** with power steering fluid.
2. **Start engine and run** for approximately two seconds. Check fluid level, and add as required.
3. **Repeat step #2** until fluid retains constant level.
4. **Raise front of vehicle** to clear tires. Run engine at 1000 to 1500 RPM. Depress brake pedal several times. Turn steering right and left, lightly contacting wheel stops.
5. **Turn engine off,** recheck fluid level in reservoir. Add if needed.
6. **Lower vehicle** and repeat steps 4 & 5.
7. **If** pedal is up and firm, road test.
8. **If** fluid in reservoir is extremely foamy, let vehicle stand for one hour with engine off, then recheck.

REMOVAL AND INSTALLATION OF PUSH ROD FOR FIREWALL MOUNT BOOSTERS

ALL PUSH THRU BOOSTERS ARE FURNISHED WITHOUT PEDAL PUSH ROD

REMOVING PUSH ROD FROM OIL BOOSTER:

1. Hold Push Rod in vise using caution to not damage threads on rod if applicable. Support weight of booster at all times during this operation.



2. Using a soft faced hammer, strike rear shell near base of hub with a forceful blow while pulling unit away from vise, parallel to push rod. Use caution not to damage hub.

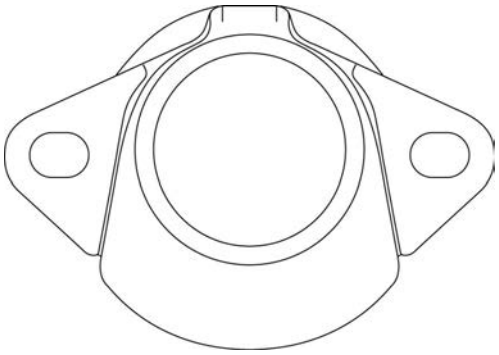
INSTALLING PUSH ROD IN REPLACEMENT UNIT:

1. Insert new plastic lock (furnished) into groove of push rod and push into hub.

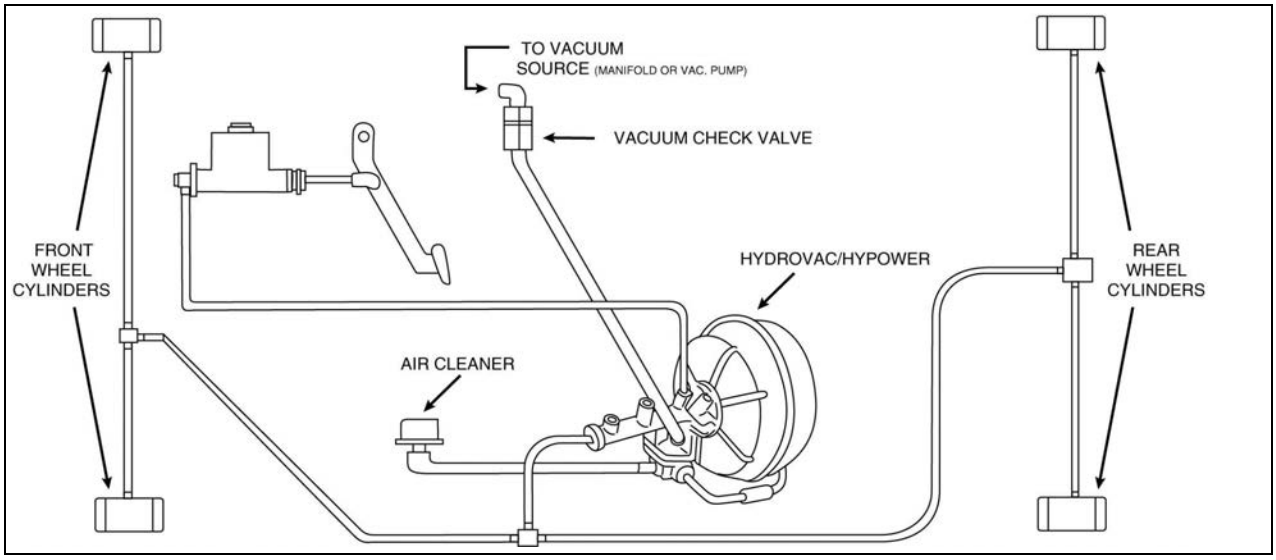
2. Push and move rod side to side until lock catches in place. Do not use hammer to force rod down.

MASTER CYLINDER SPACER

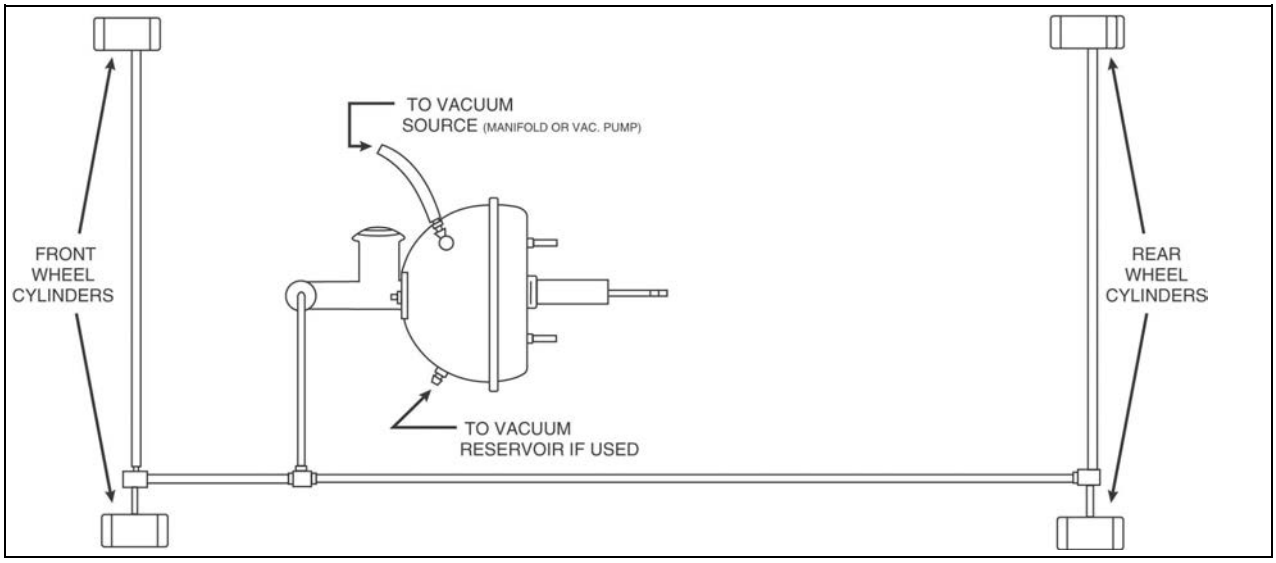
Master Cylinder Spacer shown is used on C4028,C4026, C4030 series boosters, and must be re−used from old unit. Failure to install spacer will cause brakes not to release properly and damage the rubber bellows in unit, voiding warranty.



TYPICAL FRAME MOUNT HYDROVAC INSTALLATION

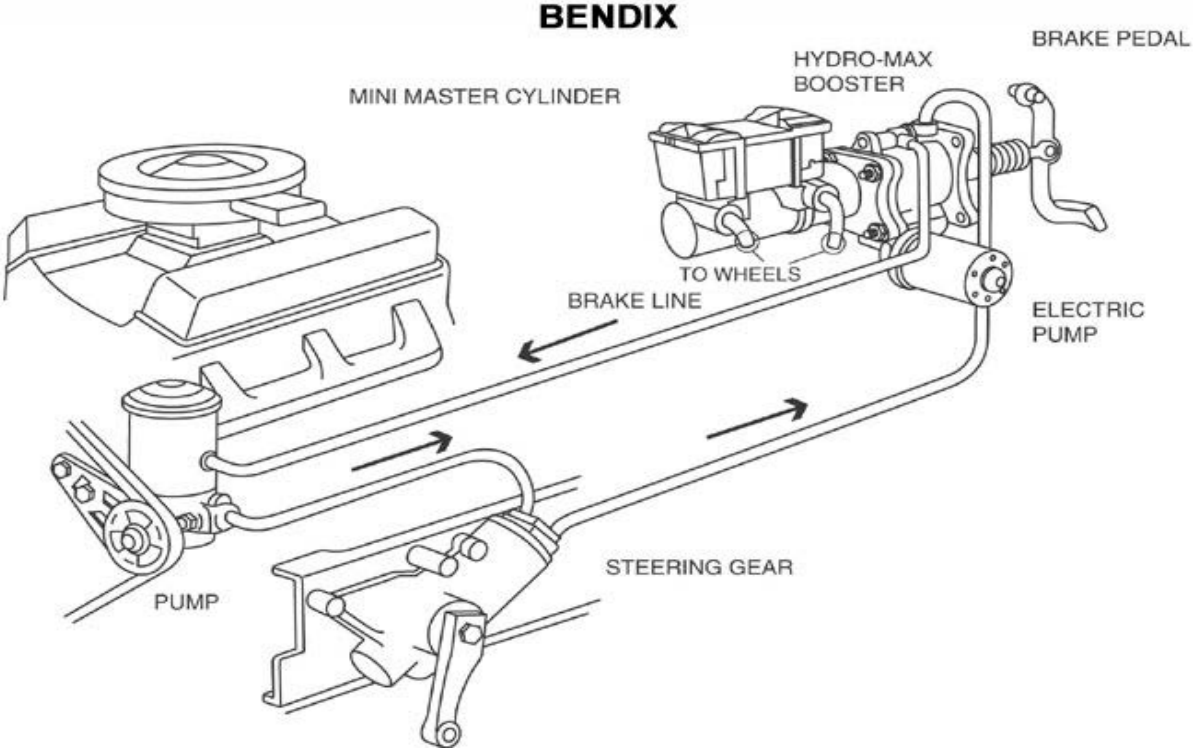


TYPICAL FIREWALL MOUNT BOOSTER INSTALLATION

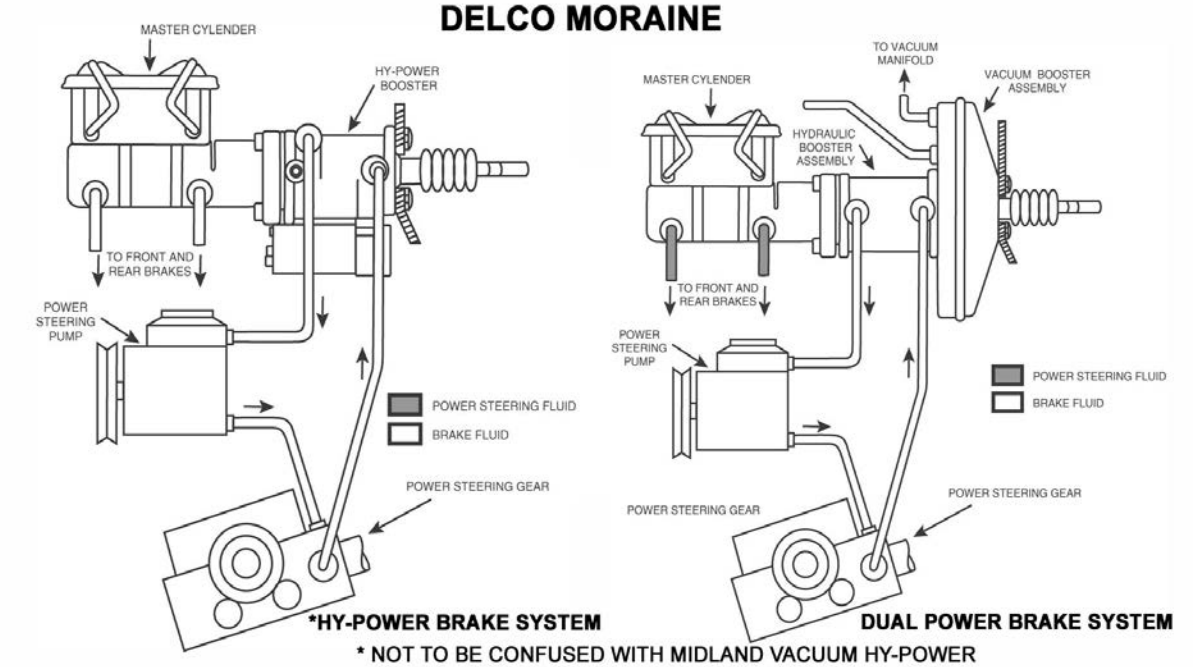


HYDRAULIC POWER UNITS − FIREWALL MTD. SCHEMATICS

BENDIX

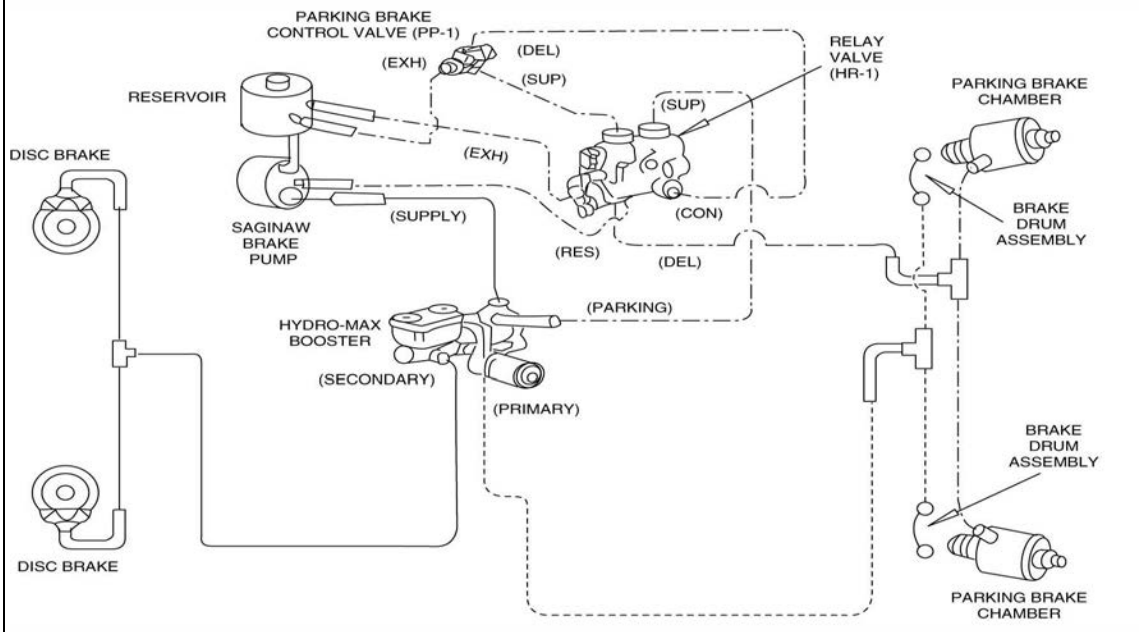


DELCO MORAINE

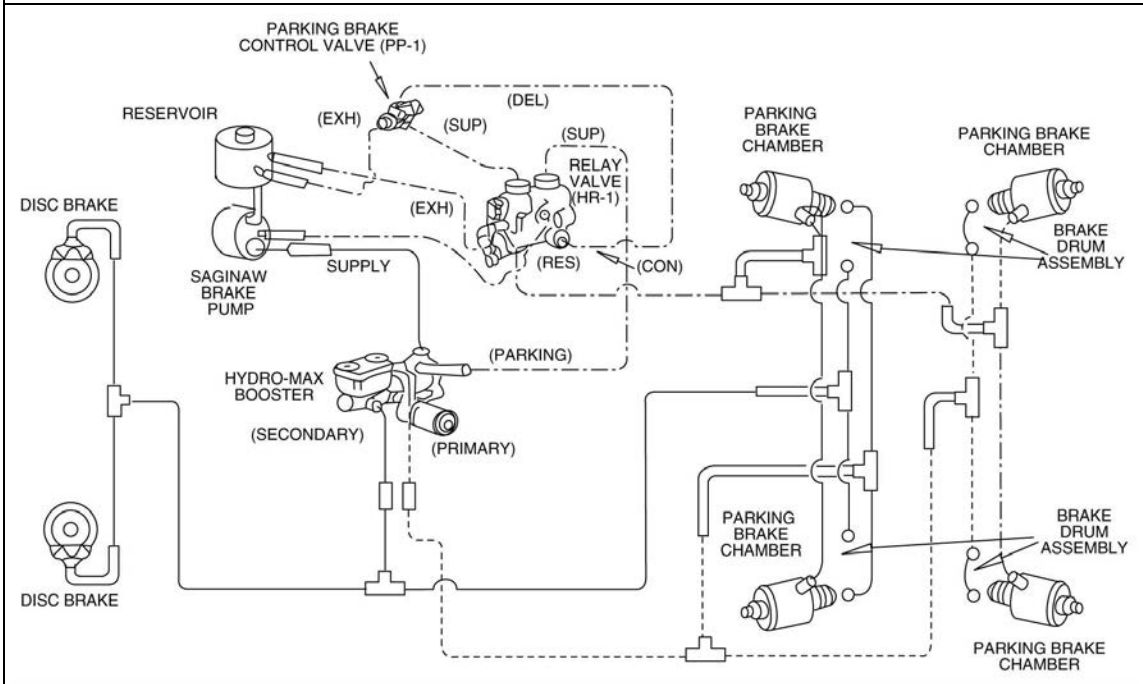


* NOT TO BE CONFUSED WITH MIDLAND VACUUM HY-POWER

LATE SYSTEMS REFERENCE



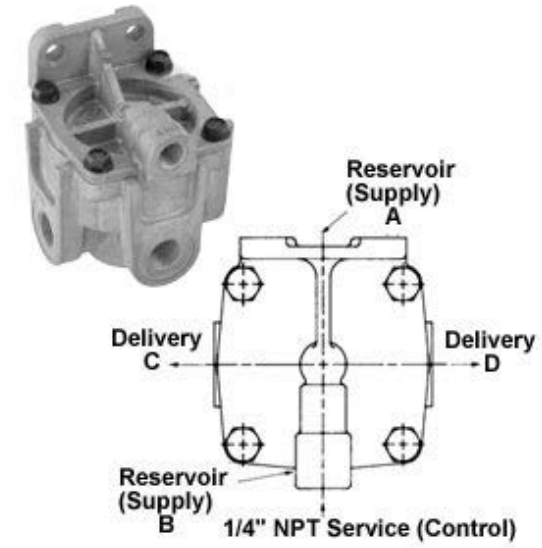
FORD MEDIUM TRUCK
TYPICAL HYDRAULIC BRAKE SCHEMATIC
(LT & LNT SERIES SHOWN)



FORD MEDIUM TRUCK
TYPICAL HYDRAULIC BRAKE SCHEMATIC
(LT & LNT SERIES SHOWN)

Haldex (New and Remanufactured)

RG2 − 2 Port Trailer Valve



Picture illustrates 90° control port position. 0° would locate port in line with delivery port "D".

Features:

- A fast relay used to apply and release service brakes on tractor or trailer.
- Compact size.
- Two port delivery.
- Cover may be rotated without affecting performance or warranty.
- Control position is in relationship to delivery ports.

Specifications:

Width	3−1/2"
Length	3−1/2"
Height	3−5/8"
Contol Port	1/4"
Cracking Pressure	5.6 Â± 1.0 PSI
Mounting Holes (2)	.34" diameter on 1.50" centers
Approximate Weight	1.5 lbs.

Notes:

1) Repair Kit use part number **RN10HM**.

SKU#	Product Description	Sup. A	Sup. B	Del. C	Del. D	Cont. Pos.	Plugs Included	OEM Part Number	Core Group
KN28500	RG2 Relay Valve	3/8"	3/8"	3/8"	3/8"	90°	1 @ 3/8"	N30108BC	−
KN28500RX	Reman. RG2 Relay Valve − CoreFreeÂ™	3/8"	3/8"	3/8"	3/8"	90°	1 @ 3/8"	N30108BC	−
KN28500X	Reman. RG2 Relay Valve	3/8"	3/8"	3/8"	3/8"	90°	1 @ 3/8"	N30108BC	225
KN28510	RG2 Relay Valve	3/8"	1/2"	3/8"	3/8"	90°	1 @ 1/2" 1 @ 3/8"	N30108BK	−
KN28510RX	Reman. RG2 Relay Valve − CoreFreeÂ™	1/2"	−	3/8"	3/8"	90°	1 @ 3/8"	N30108AK	−
KN28510X	Reman. RG2 Relay Valve	1/2"	−	3/8"	3/8"	90°	1 @ 3/8"	N30108AK	225
KN28514RX	Reman. RG2 Relay Valve − CoreFreeÂ™	1/2"	3/8"	3/8"	3/8"	90°	1 @ 1/2" 1 @ 3/8"	N30108BK	−
KN28514X	Reman. RG2 Relay Valve	1/2"	3/8"	3/8"	3/8"	90°	1 @ 1/2" 1 @ 3/8"	N30108BK	225
KN28520	RG2 Relay Valve	1/2"	1/2"	1/2"	1/2"	90°	1 @ 1/2"	N30108BF	−
KN28520RX	Reman. RG2 Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/2"	1/2"	90°	1 @ 1/2"	N30108BF	−
KN28520X	Reman. RG2 Relay Valve	1/2"	1/2"	1/2"	1/2"	90°	1 @ 1/2"	N30108BF	225
KN28531	RG2 Relay Valve	1/2"	3/8"	3/8"	3/8"	0°	−	N30108BH	−
KN28531X	Reman. RG2 Relay Valve	1/2"	3/8"	3/8"	3/8"	0°	−	N30108BH	225

Haldex (New and Remanufactured)

2 Port

Features:

- 2 Port Delivery
- Multi−Application Valve.
- Replaces many Haldex OEM numbers.
- Used to apply and release service brakes on tractor or trailer.
- Cover may be rotated without affecting warranty or performance.

Specifications:

Approximate Weight 3 lbs.

Notes:

1) Brackets available separately.

2) Includes bushings and plugs to match OEM production valves.

3) Repair Kit use part number **RN10HK**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (1)	Crack Pressure	Notes	OEM Part Number	Core Group
KN28131	Relay Valve − Two Port − Single Control Line	1/2"	1/2"	1/4"	4.6 PSI	Includes K202000 Bracket.	N30106F	−
KN28131X	Remanufactured Relay Valve − Two Port − Single Control Line	1/2"	1/2"	1/4"	4.0Â± 1 PSI	Bracket not included use K202000. Replacement for KN28130X.	N30106F	225
KN28140	Relay Valve − Two Port − Single Control Line	1/2"	1/2"	1/4"	4.6 PSI	Includes K202000 Bracket.	N30100AG	−
KN28140X	Remanufactured Relay Valve − Two Port − Single Control Line	1/2"	1/2"	1/4"	4.0Â± 1 PSI	Bracket not included.	N30100AG	225

Haldex (New and Remanufactured)

2 Port with Integral Bracket

Features:

- 2 Port Delivery
- Used to apply and release service brakes on tractor or trailer.
- Cover may be rotated without affecting performance or warranty.

Specifications:

Mounting	5/16" on 1−1/2" centers
Approximate Weight	3 lbs.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (1)	Crack Pressure	Repair Kit	OEM Part Number	Core Group
KN28060	Relay Valve − Two Port − Single Control Line with Integral Bracket	1/2"	3/8"	3/8"	4.6 PSI	RN10HK	N30096F	−
KN28060RX	Remanufactured Relay Valve with Two Delivery Ports − CoreFreeÂ™	1/2"	3/8"	3/8"	4.6 Â± 1.5 PSI	RN10HK	N30096F	−
KN28060X	Remanufactured Relay Valve with Two Delivery Ports	1/2"	3/8"	3/8"	4.6 Â± 1.5 PSI	RN10HK	N30096F	225
KN28061	Relay Valve − Two Port − Single Control Line with Integral Bracket	1/2"	1/2"	3/8"	4.6 PSI	RN10HK	N30096L	−
KN28061X	Remanufactured Relay Valve with Two Delivery Ports	1/2"	1/2"	3/8"	4.6 Â± 1.5 PSI	RN10HK	N30096L	225
KN28132	Relay Valve − Two Port − Single Control Line with Integral Bracket	1/2"	1/2"	3/8"	7.0 PSI	RN10HB	N30106D	−
KN28132X	Remanufactured Relay Valve with Two Delivery Ports	1/2"	1/2"	3/8"	7.0 Â± 1.5 PSI	RN10HB	N30106D	225

Haldex (New and Remanufactured)

2 Port with Anti−Compounding

Features:

- Multi−Application Valve
- Replaces many Haldex OEM numbers.
- Cover may be rotated without affecting warranty or performance.
- Built−in anti−compounding two−way check valve for spring brake control.
- KN28077 has Push−To−Connect (PTC) fittings for easy installation.

Specifications:

Approximate Weight 3 lbs.

Notes:

1) Includes bushings and plugs to match OEM production valves.

2) Brackets available separately.

3) Repair Kit use part number **RN10HK**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (2)	Crack Pressure	Notes	OEM Part Number	Core Group
KN28043	Relay Valve − Two Port with Anti−Compounding	1/2"	1/2"	3/8" and 1/4"	4.6 PSI	Bracket not included.	Various	−
KN28071	Relay Valve − Two Delivery Ports − with Anti−Compounding	1/2"	1/2"	1/4" and 1/8"	4.6 PSI	Includes K202000 Bracket.	N30100AD	−
KN28071RX	Remanufactured Relay Valve with Two Delivery Ports − CoreFreeÂ™	1/2"	1/2"	1/4" and 1/8"	4.0Â± 1 PSI	Bracket not included.	N30100AD	−
KN28071X	Remanufactured Relay Valve with Two Delivery Ports	1/2"	1/2"	1/4" and 1/8"	4.0Â± 1 PSI	Bracket not included.	N30100AD	225

Haldex (New and Remanufactured)

2 Port without Anti−Compounding − Dual Control

Features:

- 2 Port Delivery
- Dual control ports.
- Cover may be rotated without affecting performance or warranty.
- Used to apply and release service brakes on tractor or trailer.

Specifications:

Approximate Weight 3 lbs.

Notes:

1) Repair Kit use part number **RN10HK**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (2)	Crack Pressure	Notes	OEM Part Number	Core Group
KN28065	Relay Valve − Two Port − without Anti−Compounding − Dual Control	1/2"	1/2"	1/4"	4.6 PSI	Supplied with K202000 Bracket	N30100AR	−
KN28065X	Remanufactured Relay Valve − Two Port − without Anti−Compounding − Dual Control	1/2"	1/2"	1/4"	4.6Â± 1 PSI	Bracket not included use K202000.	N30100AR	225

Haldex (New and Remanufactured)

2 Port − Fast Air and Balancing (FAB)

Features:

- Speedup or fast air relay.
- Used on converter dollies, long wheel base and towing trailers to accelerate control signal and meet FMVSS121 pressure differential requirements.
- Cover may be rotated without affecting performance or warranty.
- Replaces Bendix R8P or R12P.

Specifications:

Two Mounting Holes	.34" diameter on 1.50" centers
Approximate Weight	2.5 lbs.

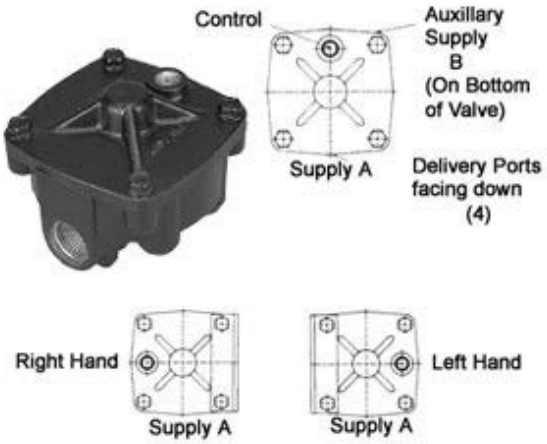
Notes:

1) Repair Kit use part number **RN10HT**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (1)	Crack Pressure/Differential	OEM Part Number	Core Group
KN28300	FAB Relay Valve − Fast Air Dolly − Two Delivery Ports	1/2"	1/2"	3/8"	0 PSI	N30096PA	−
KN28300X	Remanufactured Fast Air and Balancing (FAB) Relay Valve	1/2"	1/2"	3/8"	0 PSI	N30096PA	225

Haldex (New and Remanufactured)

4 Port − Vertical Ports



Features:

- Four delivery ports facing down.
- Low differential − high capacity.
- Meets or exceeds FMVSS−121 requirements.
- Used to apply and release service brakes on tractor or trailer.
- Cover may be rotated without affecting warranty or performance.

Specifications:

Mounting Holes	3/8" diameter on 2−1/2" centers
Approximate Weight	3 lbs.

Notes:

1) The auxiliary supply port "B" on A103600 may be used for air suspensions or other accessories requiring reservoir air.

2) Repair Kit use part number **RN10HP**.

SKU#	Product Description	Supply (A)	Supply (B)	Delivery (4)	Control (1)	Crack Pressure	Notes	OEM Part Number	Core Group
A103600	Relay Valve − Four (Vertical) Port − Single Control	3/4"	Plugged	3/8"	1/4"	3.0 PSI	Mounting Bracket not included	AF103600	−
A103600X	Remanufactured RF Relay Valve with Four Delivery Ports	3/4"	Plugged	3/8"	1/4"	3.0Â± 1 PSI	Mounting Bracket not included	AF103600	225
A86472	Relay Valve with Four (Vertical) Ports − Single Control	3/4"	Not Drilled − No Threads	1/2"	1/4"	3.0 PSI	Right Hand Mounting Bracket included	AF86472	−
A86473	Relay Valve with Four (Vertical) Ports − Single Control	1/2"	Not Drilled − No Threads	1/2"	1/4"	3.0 PSI	Left Hand Mounting Bracket included	AF86473	−
A86473X	Remanufactured RF Relay Valve with Four Delivery Ports	1/2"	Not Drilled − No Threads	1/2"	1/4"	3.0Â± 1 PSI	Mounting Bracket included	AF86473	225
A86477	Relay Valve with Four (Vertical) Ports − Single Control	3/4"	Plugged	1/2"	1/4"	3.0 PSI	Mounting Bracket not included	AF86477	−
A86477X	Remanufactured RF Relay Valve with Four Delivery Ports	3/4"	Plugged	1/2"	1/4"	3.0Â± 1 PSI	Mounting Bracket not included	AF86477	225

Haldex (New and Remanufactured)

4 Port with Integral Bracket

Features:

- Popular replacement for competitive valves.
- Used to apply and release service brakes on tractor or trailer.
- Cover may be rotated without effecting performance or warranty.

Specifications:

Mounting	5/16" on 1−1/2" centers.
Approximate Weight	3 lbs.

SKU#	Product Description	Supply (2)	Delivery (4)	Control (1)	Crack Pressure	Repair Kit	OEM Part Number	Core Group
KN28080	Relay Valve − Four Port − Single Control Line with Integral Bracket	1/2"	3/8"	3/8"	7.0 PSI	RN10HB	N30096N	−
KN28080RX	Remanufactured Relay Valve with Four Delivery Ports − CoreFreeÂ™	1/2"	3/8"	3/8"	7.0Â± 1 PSI	RN10HB	N30096N	−
KN28080X	Remanufactured Relay Valve with Four Delivery Ports	1/2"	3/8"	3/8"	7.0Â± 1 PSI	RN10HB	N30096N	225
KN28085	Relay Valve − Four Port − Single Control Line with Integral Bracket	1/2"	3/8"	3/8"	4.6 PSI	RN10HK	N30096P	−
KN28085X	Remanufactured Relay Valve with Four Delivery Ports	1/2"	3/8"	3/8"	4.6Â± 1.5 PSI	RN10HK	N30096P	225

Competitive (Remanufactured)

Bendix® BP−1

Features:

- Reduces the braking effort on the rear axles.

Specifications:

Approximate Weight .9 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Control	Nominal Inshot PSI	Notes	Core Group
106284RX	Remanufactured Bendix® BP−1 Rear Air Brake Proportioning Relay Valve − CoreFreeÂ™	3/8"	3/8"	1/8"	8 PSI	Nominal Equalizing PSI 105.	−
106284X	Remanufactured Bendix® BP−1 Rear Air Brake Proportioning Relay Valve	3/8"	3/8"	1/8"	8 PSI	Nominal Equalizing PSI 105.	145LQ5

Competitive (Remanufactured)

Bendix® BP−R1

Features:

- Designed for use on tractor only.
- Functions as a standard relay valve and a proportioning valve.
- 4 port delivery.

Specifications:

Approximate Weight 2.6 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Control	Service	Crack Pressure	Core Group
65145RX	Reman. Bendix® BP−R1 Bobtail Brake Proportioning Relay Valve − CoreFreeÂ™	1/2"	2 @ 3/8" FPT Side 2 @ 3/8" FPT Bottom	1/8"	1/4"	4.0 PSI	−
65145X	Reman. Bendix® BP−R1 Bobtail Brake Proportioning Relay Valve	1/2"	2 @ 3/8" FPT Side 2 @ 3/8" FPT Bottom	1/8"	1/4"	4.0 PSI	BPR−1
65146RX	Reman. Bendix® BP−R1 Bobtail Brake Proportioning Relay Valve − CoreFreeÂ™	1/2"	2 @ 3/8" FPT Side 2 @ 3/8" FPT Bottom	1/8"	1/4"	5.5 PSI	−
65146X	Reman. Bendix® BP−R1 Bobtail Brake Proportioning Relay Valve	1/2"	2 @ 3/8" FPT Side 2 @ 3/8" FPT Bottom	1/8"	1/4"	5.5 PSI	BPR−1

Competitive (Remanufactured)

Bendix® R−6

Features:

- 4 port delivery.

Specifications:

Crack Pressure	2 PSI
Approximate Weight	2.5 lbs.

Notes:

1) Repair Kit use part number **280856K**.

SKU#	Product Description	Supply	Delivery (4)	Control	Notes	Core Group
279180RX	Reman. Bendix® R−6 Relay Valve − CoreFreeÂ™	3/8"	3/8"	1/4"	180° Service Port	−
279180X	Reman. Bendix® R−6 Relay Valve	3/8"	3/8"	1/4"	180° Service Port	121RLV
279952RX	Reman. Bendix® R−6 Relay Valve − CoreFreeÂ™	1 @ 3/4" 1 @ 3/8"	3/8"	1/4"	180° Service Port	−
279952X	Reman. Bendix® R−6 Relay Valve	1 @ 3/4" 1 @ 3/8"	3/8"	1/4"	180° Service Port	121RLV
280375RX	Reman. Bendix® R−6 Relay Valve − CoreFreeÂ™	1/2"	3/8"	1/4"	90° Service Port	−
280375X	Reman. Bendix® R−6 Relay Valve	1/2"	3/8"	1/4"	90° Service Port	121RLV
280651RX	Reman. Bendix® R−6 Relay Valve − CoreFreeÂ™	1 @ 3/4" 1 @ 3/8"	3/8"	1/4"	Includes pipe plugs and gasket 180° Service Port	−
280651X	Reman. Bendix® R−6 Relay Valve	1 @ 3/4" 1 @ 3/8"	3/8"	1/4"	Includes pipe plugs and gasket 180° Service Port	121RLV
283940RX	Reman. Bendix® R−6 Relay Valve − CoreFreeÂ™	3/8"	3/8"	1/4"	Ford application 270° Service Port	−
283940X	Reman. Bendix® R−6 Relay Valve	3/8"	3/8"	1/4"	Ford application 270° Service Port	121RLV

Competitive (Remanufactured)

Bendix® R−8

Features:

- 1/8" balance port located under the exhaust cover.
- Controls spring brakes and service brakes.
- 2 and 3 port delivery.

Specifications:

Crack Pressure	3 PSI
Approximate Weight	3.3 lbs.

Notes:

1) Repair Kit use part number **287370K**.

SKU#	Product Description	Supply	Delivery	Control	Port Rotation	Notes	Core Group
286370RX	Remanufactured Bendix® R−8 Relay Valve − CoreFreeÂ™	2 @ 3/4" 1 @ 1/4"	2 @ 1/2"	1/4"	90°	−	−
286370X	Remanufactured Bendix® R−8 Relay Valve	2 @ 3/4" 1 @ 1/4"	2 @ 1/2"	1/4"	90°	−	121RLV
286371RX	Remanufactured Bendix® R−8 Relay Valve − CoreFreeÂ™	2 @ 3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	90°	No Exhaust Cover	−
286371X	Remanufactured Bendix® R−8 Relay Valve	2 @ 3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	90°	No Exhaust Cover	121RLV
287224RX	Remanufactured Bendix® R−8 Relay Valve − CoreFreeÂ™	1 @ 3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	270°	−	−
287224X	Remanufactured Bendix® R−8 Relay Valve	1 @ 3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	270°	−	121RLV
287260RX	Remanufactured Bendix® R−8 Relay Valve − CoreFreeÂ™	2 @ 3/4" 1 @ 1/4"	2 @ 1/2"	1/4"	180°	No Exhaust Cover	−
287260X	Remanufactured Bendix® R−8 Relay Valve	2 @ 3/4" 1 @ 1/4"	2 @ 1/2"	1/4"	180°	No Exhaust Cover	121RLV

Competitive (Remanufactured)

Bendix® R−8P

Features:

- Designed for use on semitrailer converter dollies.
- 3 port delivery.

Specifications:

Crack Pressure	0 PSI
Approximate Weight	3 lbs.

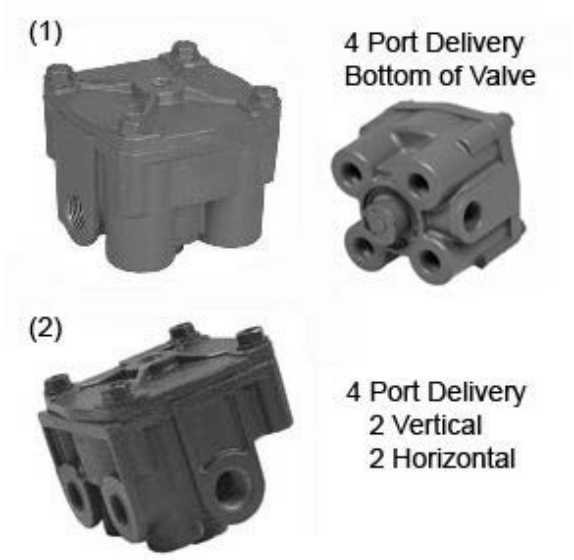
Notes:

1) Repair Kit use part number **103799K**.

SKU#	Product Description	Supply (2)	Delivery (3)	Control (1)	Core Group
287114RX	Remanufactured Bendix® R−8P Pressure Equalizing Relay Valve − CoreFreeÂ™	3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	−
287114X	Remanufactured Bendix® R−8P Pressure Equalizing Relay Valve	3/4"	2 @ 1/2" 1 @ 1/4"	1/4"	121RLV

Competitive (Remanufactured)

Bendix® R−12



Features:

- Vertical mount.
- 4 port delivery.

Specifications:

Approximate Weight 2 lbs.

Notes:

1) Repair Kit use part number **102802K**.

SKU#	Product Description	Supply	Delivery (4)	Control	Crack Pressure	Notes	Pic. #	Core Group
102165RX	Remanufactured Bendix® R−12 Relay Valve − CoreFreeÂ™	1/2"	3/8"	1/4"	4.0 PSI	−	1	−
102165X	Remanufactured Bendix® R−12 Relay Valve	1/2"	3/8"	1/4"	4.0 PSI	−	1	121RLV
102626RX	Remanufactured Bendix® R−12 Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/4"	4.0 PSI	−	1	−
102626X	Remanufactured Bendix® R−12 Relay Valve	1/2"	1/2"	1/4"	4.0 PSI	−	1	121RLV
103912RX	Remanufactured Bendix® R−12 Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/4"	7.5 PSI	−	1	−
103912X	Remanufactured Bendix® R−12 Relay Valve	1/2"	1/2"	1/4"	7.5 PSI	−	1	121RLV
65303RX	Remanufactured Bendix® R−12 Relay Valve − CoreFreeÂ™	1/2"	3/8" (2 vertical and 2 horizontal)	1/4"	4.0 PSI	Bendix 108281, International 1684489C91	2	−
65303X	Remanufactured Bendix® R−12 Relay Valve	1/2"	3/8" (2 vertical and 2 horizontal)	1/4"	4.0 PSI	Bendix 108281, International 1684489C91	2	121RLV

Competitive (Remanufactured)

Bendix® R−12H

Features:

- Horizontal mount.
- 2 port delivery located on the side of the valve.

Specifications:

Approximate Weight 2 lbs.

Notes:

1) Repair Kit use part number **102802K**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (1)	Crack Pressure	Core Group
103009RX	Remanufactured Bendix® R−12H Relay Valve − CoreFreeÂ™	3/4"	1/2"	1/4"	4.0 PSI	−
103009X	Remanufactured Bendix® R−12H Relay Valve	3/4"	1/2"	1/4"	4.0 PSI	121RLV
65125RX	Remanufactured Bendix® R−12H Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/4"	5.5 PSI	−
65125X	Remanufactured Bendix® R−12H Relay Valve	1/2"	1/2"	1/4"	5.5 PSI	121RLV

Competitive (Remanufactured)

Bendix® R−12P

Features:

- Pilot Relay Valve.
- 4 port delivery located on the side of the valve.

Specifications:

Approximate Weight 2 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply (2)	Delivery (4)	Control (1)	Core Group
109264RX	Remanufactured Bendix® R−12P Pilot Relay Valve − CoreFreeÂ™	1/2"	3/8"	1/4"	−
109264X	Remanufactured Bendix® R−12P Pilot Relay Valve	1/2"	3/8"	1/4"	121RLV

Competitive (Remanufactured)

Bendix® R−14

(1)

4 Port Delivery
Bottom of Valve

(2)

4 Port Delivery
2 Vertical
2 Horizontal

Features:

- Vertical mount.
- 1/8" balance port located under the exhaust cover.
- Controls spring brakes and service brakes.
- 4 port delivery.

Specifications:

Approximate Weight 2.7 lbs.

Notes:

1) Repair Kit use part number **102802K**.

SKU#	Product Description	Supply (1)	Delivery (4)	Control (1)	Crack Pressure	Pic. #	Core Group
103028RX	Remanufactured Bendix® R−14 Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/4"	4.0 PSI	1	−
103028X	Remanufactured Bendix® R−14 Relay Valve	1/2"	1/2"	1/4"	4.0 PSI	1	121RLV
103833RX	Remanufactured Bendix® R−14 Relay Valve − CoreFreeÂ™	1/2"	1/2"	1/4"	7.5 PSI	1	−
103833X	Remanufactured Bendix® R−14 Relay Valve	1/2"	1/2"	1/4"	7.5 PSI	1	121RLV
65430X	Remanufactured Bendix® R−14 Relay Valve	1/2"	3/8" (2 vertical and 2 horizontal)	1/4"	4.0 PSI	2	121RLV

Competitive (Remanufactured)

Bendix® R−14H

Features:

- Horizontal mount.
- 1/8" balance port located under the exhaust cover.
- Controls spring brakes and service brakes.
- 2 port delivery.

Specifications:

Approximate Weight 2.6 lbs.

Notes:

1) Repair Kit use part number **102802K**.

SKU#	Product Description	Supply (2)	Delivery (2)	Control (1)	Crack Pressure	Core Group
103010RX	Remanufactured Bendix® R−14H Relay Valve − CoreFreeÂ™	3/4"	1/2"	1/4"	4.0 PSI	−
103010X	Remanufactured Bendix® R−14H Relay Valve	3/4"	1/2"	1/4"	4.0 PSI	121RLV
103294RX	Remanufactured Bendix® R−14H Relay Valve − CoreFreeÂ™	3/4"	1/2"	1/4"	5.5 PSI	−
103294X	Remanufactured Bendix® R−14H Relay Valve	3/4"	1/2"	1/4"	5.5 PSI	121RLV

Competitive (Remanufactured)

Sealco Ratio Relay

Features:

- Used on trailers only to apply and release service brakes.
- 4 port delivery.

Specifications:

Crack Pressure	4.5 PSI
Approximate Weight	3.9 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply (1)	Delivery (4)	Control (1)	Reservoir (1)	Core Group
110139X	Remanufactured Sealco Ratio Relay Valve	3/8"	3/8"	3/8"	3/4"	210

Competitive (Remanufactured)

Sealco Relay

Features:

- Used to apply and release service brakes on trailers.
- 2 and 4 port delivery.

Specifications:

Mounting Nipple Mount

Notes:

1) Repair Kit not available.

SKU#	Product Description	Reservoir	Delivery	Control	Crack Pressure	Approximate Weight	Notes	Core Group
110207x	Remanufactured Sealco Relay Valve	(2) 1/2"	3/8" (1) 1/2"1/2(1)	(2) 3/8"	5.5	3 lb	–	210
110360X	Reman. Sealco Relay Valve	1/2"	2 @ 3/8"	3/8"	1.5 PSI	1.7 lbs.	Low opening valve.	210
110380X	Reman. Sealco Relay Valve	3/4"	4 @ 3/8"	3/8"	1.5 PSI	2.8 lbs.	Low opening valve.	210
110410X	Reman. Sealco Relay Valve	1/2"	2 @ 3/8"	3/8"	4.0 PSI	1.7 lbs.	–	210
110415X	Reman. Sealco Relay Valve	3/4"	4 @ 3/8"	3/8"	4.0 PSI	2.1 lbs.	–	210

Competitive (Remanufactured)

Sealco Control Line

Features:

- Used on converter dollies to speed the tractor control signal to the rear trailer(s) service brakes.
- 2 port delivery.

Specifications:

Crack Pressure 0 PSI

Notes:

1) Repair Kit not available.

SKU#	Product Description	Reservoir (1)	Delivery (2)	Control (1)	Approx. Weight	Note	Core Group
110370X	Remanufactured Sealco Control Line Relay Valve	1/2"	3/8"	3/8"	3.4 lbs.	Bracket not supplied.	210
110570X	Remanufactured Sealco Control Line Relay Valve	1/2"	3/8"	3/8"	2.9 lbs.	Bracket not supplied.	210

Competitive (Remanufactured)

Sealco Mini Relay

Features:

- Used to apply and release service brakes on tractor or trailer.
- 2 port delivery.

Specifications:

Crack Pressure	2.5 PSI
Approximate Weight	2.7 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Reservoir (1)	Delivery (2)	Control (2)	Core Group
3100X	Remanufactured Sealco Mini Relay Valve	3/8"	1/4"	1/4"	210

Competitive (Remanufactured)

Sealco Trailer Relay

Features:

- Used to apply and release service brakes on tractor or trailer.
- 2 port delivery.

Specifications:

Crack Pressure	4.0 PSI
Approximate Weight	3.4 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Reservoir (1)	Delivery (2)	Control (2)	Core Group
110197RX	Remanufactured Sealco Trailer Relay Valve − CoreFreeÂ™	1/2"	3/8"	3/8"	−
110197X	Remanufactured Sealco Trailer Relay Valve	1/2"	3/8"	3/8"	210

Competitive (Remanufactured)

Sealco 3 Port Delivery

Features:

- Used to apply and release service brakes on tractor or trailer.
- 3 port delivery.

Specifications:

Crack Pressure	2.5 PSI
Approximate Weight	3.5 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Reservoir (2)	Delivery (3)	Control (2)	Core Group
9125X	Remanufactured Sealco Three−Port Delivery Relay Valve	1/2"	2 @ 3/8" 1 @ 1/2"	1/4"	210

Competitive (Remanufactured)

Bendix® HPP−1 Push−Pull

Features:

- Push−Pull Type Valve

Specifications:

Approximate Weight .6 lbs.

SKU#	Product Description	All Ports	Automatic Release Pressure	Notes	Core Group
RH65077X	Remanufactured Bendix® HPP−1 Hydraulic Push−Pull Control Valve	1/8"	10 PSI	Hand operated used to control hydraulic parking and emergency brakes.	HYD2023

Competitive (Remanufactured)

Bendix® PP−1 Push−Pull

Features:

- Commonly used to control parking and emergency brakes.

Specifications:

Approximate Weight .7 lbs.

Notes:

1) Repair Kit use part number **281126K**.

SKU#	Product Description	Sup.	Del.	Exh.	Automatic Release Pressure	Notes	Core Group
104240RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/4"	1/8"	60 PSI	−	−
104240X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/4"	1/8"	60 PSI	−	132PP1
276566RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/8"	1/8"	20 PSI	−	−
276566X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/8"	1/8"	20 PSI	−	132PP1
276567RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/8"	1/8"	40 PSI	−	−
276567X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/8"	1/8"	40 PSI	−	132PP1
276569RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/8"	1/8"	30 PSI	−	−
276569X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/8"	1/8"	30 PSI	−	132PP1
281587RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/8"	1/8"	40 PSI	Remote Mount 1/4" Female Thread in Shaft	−
281587X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/8"	1/8"	40 PSI	Remote Mount 1/4" Female Thread in Shaft	132PP1
282499RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/4"	1/8"	40 PSI	Stem Height 1.62"	−
282499X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/4"	1/8"	40 PSI	Stem Height 1.62"	132PP1
287417RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/4"	1/8"	30 PSI	−	−
287417X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/4"	1/8"	30 PSI	−	132PP1
287600RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/4"	1/8"	40 PSI	Stem Height 1.12"	−
287600X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/4"	1/8"	40 PSI	Stem Height 1.12"	132PP1
287637RX	Reman. Bendix® PP−1 Push−Pull − CoreFreeÂ™	1/8"	1/8"	1/8"	−	Manual Valve	−
287637X	Reman. Bendix® PP−1 Push−Pull	1/8"	1/8"	1/8"	−	Manual Valve	132PP1

Competitive (Remanufactured)

Bendix® PP−2 Push−Pull

Features:

- Push−Pull Type Valve.
- Use with parking and emergency brakes.
- Anti−compounding port which prevents simultaneous application of both the service and parking brakes.

Notes:

1) Repair Kit use part number **281127K**.

SKU#	Product Description	Supply (1)	Delivery (2)	Automatic Release Pressure	Notes	Core Group
276462RX	Reman. Bendix® PP−2 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	1/8"	40 PSI	Replaces 276538	−
276462X	Remanufactured Bendix® PP−2 Push−Pull Hand Control Valve	1/8"	1/8"	40 PSI	Replaces 276538	132PP1
280454RX	Remanufactured Bendix® PP−2 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	1/8"	40 PSI	Remote Mount	−
280454X	Remanufactured Bendix® PP−2 Push−Pull Hand Control Valve	1/8"	1/8"	40 PSI	Remote Mount	132PP1

Competitive (Remanufactured)

Bendix® PP−3 Push−Pull

Features:

- Push−Pull Type Valve.
- Primarily used with a two−line tractor protection valve.
- Tripper exhaust at 30 PSI and charges above 50 PSI.
- Plunger trips at 40 PSI and charges manually.

Specifications:

Approximate Weight 1.2 lbs.

Notes:

1) Repair Kit use part number **280857K**.

SKU#	Product Description	Supply (3)	Delivery (3)	Exhaust	Notes	Core Group
279787RX	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	2 plugged 1 @ 1/4"	1/4"	Remote Mount 1/4"−20 Thread	−
279787X	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve	1/8"	2 plugged 1 @ 1/4"	1/4"	Remote Mount 1/4"−20 Thread	132PP1
288746RX	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	2 plugged 1 @ 1/4"	1/4"	−	−
288746X	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve	1/8"	2 plugged 1 @ 1/4"	1/4"	−	132PP1
289477RX	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	2 @ 1/8" 1 @ 1/4"	1/4"	−	−
289477X	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve	1/8"	2 @ 1/8" 1 @ 1/4"	1/4"	−	132PP1
289512RX	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve − CoreFreeÂ™	1/8"	2 @ 1/8" 1 @ 1/4"	1/4"	Remote Mount 1/4" Female Thread in Shaft	−
289512X	Remanufactured Bendix® PP−3 Push−Pull Hand Control Valve	1/8"	2 @ 1/8" 1 @ 1/4"	1/4"	Remote Mount 1/4" Female Thread in Shaft	132PP1

Competitive (Remanufactured)

Bendix® PP−5

Features:

- Manually operated.
- Can automatically be moved to exhaust position by applying a low signal from another control valve to the PP−5 Pilot Port.
- Used in conjunction with vehicle torque converter systems, engine speed control systems and some parking brake systems.

Specifications:

Release Pressure	40 PSI
Approximate Weight	.8 lbs.

Notes:

1) Knob not included.

2) Repair Kit not available.

SKU#	Product Description	Supply (1)	Delivery (2)	Exhaust (1)	Pilot Air Inlet	Notes	Core Group
281946RX	Remanufactured Bendix® PP−5 − CoreFreeÂ™	1/8"	1/8"	1/8"	1/8"	Push−Pull Control Valve	−
281946X	Remanufactured Bendix® PP−5	1/8"	1/8"	1/8"	1/8"	Push−Pull Control Valve	132PP1

Competitive (Remanufactured)

Bendix® PP−7 Trailer Supply

Features:

- Steering column mount.
- Generally used on tractors and provides modulated control on trailer brakes only.

Specifications:

Automatic, All Release Pressure	40 PSI
Approximate Weight	1.2 lbs.

Notes:

1) Repair Kit use part number **287367K**.

SKU#	Product Description	Sup.	Del.	Cont.	Exh.	Stem Dia.	Notes	Core Group
288239RX	Reman. Bendix® PP−7 Trailer Supply − CoreFreeÂ™	1/8"	1/4"	1/8"	−	3/8"	−	−
288239X	Reman. Bendix® PP−7 Trailer Supply	1/8"	1/4"	1/8"	−	3/8"	−	132PP1
288240RX	Reman. Bendix® PP−7 Trailer Supply − CoreFreeÂ™	1/8"	1/4"	1/8"	−	1/2"	Remote Mount 1/4" Female Thread in Shaft	−
288240X	Reman. Bendix® PP−7 Trailer Supply	1/8"	1/4"	1/8"	−	1/2"	Remote Mount 1/4" Female Thread in Shaft	132PP1
288241RX	Reman. Bendix® PP−7 Trailer Supply − CoreFreeÂ™	1/8"	1/4"	1/8"	1/4"−18 NPT	5/16"	−	−
288241X	Reman. Bendix® PP−7 Trailer Supply	1/8"	1/4"	1/8"	1/4"−18 NPT	5/16"	−	132PP1
288242RX	Reman. Bendix® PP−7 Trailer Supply − CoreFreeÂ™	1/8"	1/4"	1/8"	−	1/2"	Remote Mount 1/4" Female Thread in Shaft	−
288242X	Reman. Bendix® PP−7 Trailer Supply	1/8"	1/4"	1/8"	−	1/2"	Remote Mount 1/4" Female Thread in Shaft	132PP1
288721RX	Reman. Bendix® PP−7 Trailer Supply − CoreFreeÂ™	1/8"	1/4"	1/8"	1/4"−18 NPT	3/8"	−	−
288721X	Reman. Bendix® PP−7 Trailer Supply	1/8"	1/4"	1/8"	1/4"−18 NPT	3/8"	−	132PP1

Competitive (Remanufactured)

Bendix® PP−8

Features:

- Manually operated.
- Generally used on tractor parking brakes.
- Meets FMVSS−121 requirements.

Specifications:

Approximate Weight .8 lbs.

Notes:

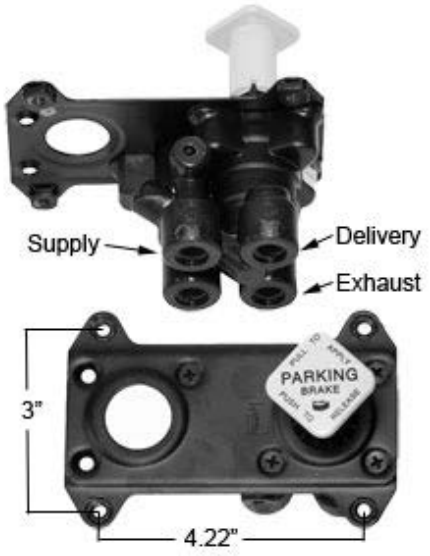
1) Supplied without knob or mounting hardware.

2) Repair Kit not available.

SKU#	Product Description	Supply (1)	Delivery (2)	Exhaust (1)	Notes	Picture	Core Group
287238RX	Remanufactured Bendix® PP−8 − CoreFreeÂ™	1/8"	1/8"	1/8"	Push−Pull Control Valve	1	−
287238X	Remanufactured Bendix® PP−8	1/8"	1/8"	1/8"	Push−Pull Control Valve	1	132PP1
287418RX	Remanufactured Bendix® PP−8 − CoreFreeÂ™	1/8"	1/4"	1/8"	Push−Pull Control Valve	2	−
287418X	Remanufactured Bendix® PP−8	1/8"	1/4"	1/8"	Push−Pull Control Valve	2	132PP1

Competitive (Remanufactured)

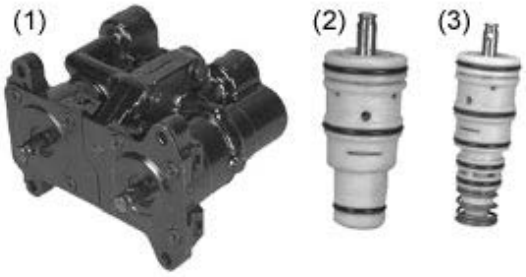
Bendix® PP−DC



SKU#	Product Description	Ports	Mounting Hole Diameter	Mounting Hole Distance	Core Group
800034X	Remanufactured Bendix® PP−DC Hand Control Valve	1/4" − 18 NPT	.27"	4.22" width x 3" height	165PPDC

Competitive (Remanufactured)

Bendix® MV−2 (Manifold)



Features:

- Non−metallic assembly.
- Control Panel Mounting in truck or tractor.
- Two push−pull valves and a dual circuit supply valve.

Specifications:

Valve Approx. Weight	2.7 lbs.
Spool Assm. Approx. Weight	.5 lbs.

Notes:

1) Knobs not included.

SKU#	Product Description	Reservoirs	Delivery Tractor	Delivery Trailer	Auxiliary Supply	Exhaust	Pic. #	Core Group
101569RX	Remanufactured Bendix® Control Valve MV−2 Spool Assembly − CoreFreeÂ™	−	−	−	−	−	3	−
101569X	Remanufactured Bendix® Control Valve MV−2 Spool Assembly	−	−	−	−	−	3	163MV2
101570RX	Remanufactured Bendix® Control Valve MV−2 Spool Assembly − CoreFreeÂ™	−	−	−	−	−	2	−
101570X	Remanufactured Bendix® Control Valve MV−2 Spool Assembly	−	−	−	−	−	2	163MV2
K095875RX	K095875RX Hand Control Valve	2	1/4"	1/4"	1/4"	1/4"	1	

Competitive (Remanufactured)

Bendix® MV−3 (Manifold)

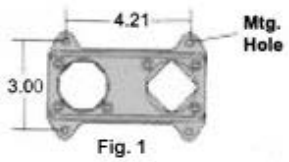


Fig. 1

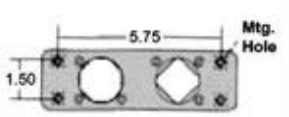


Fig. 2

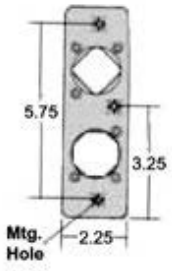


Fig. 3

Features:

- Non−metallic assembly.
- Control Panel Mounting in truck or tractor.
- Two push−pull valves and a dual circuit supply valve.

Notes:

1) Knobs not included.

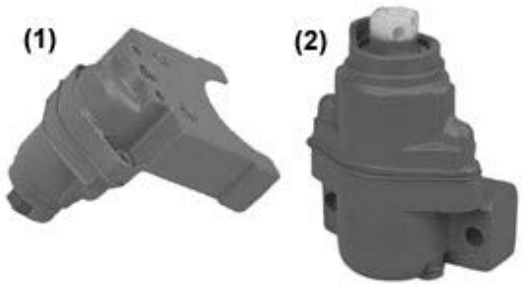
2) Maintenance Kit use part number **107216K**.

3) MV−3 Shuttle Kit use part number **107217K**.

SKU#	Product Description	Reservoirs (2)	Delivery Tractor	Delivery Trailer	Exhaust	Mounting Hole Threads	Approx. Weight	Config.
800516RX	Remanufactured Bendix® MV−3 Manifold	1/4"	1/4"	1/4"	1/4"	.27" Unthreaded	1.9 lbs.	Fig. 1
800517RX		1/4"	1/4"	1/4"	1/4"	M6x1−6H (Metric)	1.9 lbs.	Fig. 2
800521RX	Remanufactured Bendix® MV−3 Manifold	1/4"	1/4"	1/4"	1'4"	1/4"−20	1.6 lbs.	Fig. 3
800573RX	800573RX Hand Control Valve	1/4"	1/4"	1/4"	1/4"	1/4" − 20	1.9 lbs.	Fig. 1

Competitive (Remanufactured)

Bendix® TC−2 Trailer



Features:

- Steering column mount.
- Generally used on tractors and provides modulated control on trailer brakes only.

Specifications:

Approximate Weight 2.4 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Exhaust	Notes	Picture	Core Group
276270X	Remanufactured Bendix® TC−2 Trailer Hand Control Valve	1/4"	1/4"	1/4"	Long Maximum Delivery 80 PSI	1	107TC2
276272RX	Remanufactured Bendix® TC−2 Trailer Hand Control Valve − CoreFreeÂ™	1/4"	1/4"	1/4"	Short Maximum Delivery 80 PSI	2	−
276272X	Remanufactured Bendix® TC−2 Trailer Hand Control Valve	1/4"	1/4"	1/4"	Short Maximum Delivery 80 PSI	2	107TC2

Competitive (Remanufactured)

Bendix® TW−1

Features:

- Lever type.
- Manually operated valve.

Specifications:

Approximate Weight .6 lbs.

Notes:

1) Two position controls.

2) Repair Kit use part number **101805K**.

SKU#	Product Description	Supply	Delivery (2)	Core Group
229635RX	Remanufactured Bendix® TW−1 Control Valve − CoreFreeÂ™	1/8"	1/8"	−
229635X	Remanufactured Bendix® TW−1 Control Valve	1/8"	1/8"	138TW1

Competitive (Remanufactured)

Bendix® TW−3

Features:

- Lever type.
- Used in conjunction with parking and emergency brake systems.

Specifications:

Approximate Weight .6 lbs.

Notes:

1) Two position controls.

2) Repair Kit not available.

SKU#	Product Description	Supply (1)	Delivery (2)	Core Group
283040RX	Remanufactured Bendix® TW−3 Emergency Control Valve − CoreFreeÂ™	1/4"	1/4"	−
283040X	Remanufactured Bendix® TW−3 Emergency Control Valve	1/4"	1/4"	138TW1
283935RX	Remanufactured Bendix® TW−3 Emergency Control Valve − CoreFreeÂ™	1/4"	1/4"	−
283935X	Remanufactured Bendix® TW−3 Emergency Control Valve	1/4"	1/4"	138TW1

Competitive (Remanufactured)

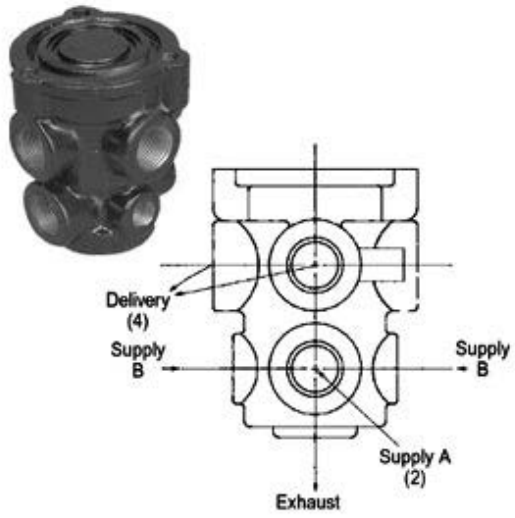
Bendix® Hydraulic Brake Valve

Specifications:	
Approximate Weight	2.4 lbs.

SKU#	Product Description	Notes	Core Group
RH65060X	Remanufactured Bendix® HR−1 Hydraulic Brake Valve	Directs hydraulic pump pressure to and from parking brakes.	HYD2022

Haldex (New/Remanufactured)

Single Circuit



Features:

- Directly replaces competitive brands.
- All supply and delivery ports are common.
- Provides smooth and consistent pedal feel.
- Used primarily with pre FMVSS−121 vechicles − prior to 1975.

Specifications:

Approximate Weight 1.5 lbs.

Notes:

1) Repair Kit use part number **RN10BX**.

SKU#	Product Description	Supply A (2)	Supply B (2)	Delivery (4)	Notes	OEM Part Number	Core Group
KN22100	Single Circuit Foot Operated Service Brake Control	1/2"	1/4"	1/2"	Standard Tractor Foot Valve Prior to 1975	N20837	−
KN22100X	Remanufactured Single Circuit Foot Operated Service Brake Control	1/2"	1/4"	1/2"	Studs Not Included	N20837	304

Competitive (Remanufactured)

Bendix® E−2 & E−3

Features:

- Floor mounted.
- Treadle or Lever actuated.
- Used in single circuit systems.

Specifications:

Approximate Weight 1.3 lbs.

Notes:

1) Repair Kit use part number **276119K**.

SKU#	Product Description	Supply	Delivery	Auxiliary	Notes	Core Group
229501RX	Remanufactured Bendix® E−2 CoreFreeÂ™	2 @ 1/2"	4 @ 1/2"	2 @ 1/4"	−	−
229501X	Remanufactured Bendix® E−2	2 @ 1/2"	4 @ 1/2"	2 @ 1/4"	−	103E−6
277863X	Remanufactured Bendix® E−3	2 @ 1/2"	4 @ 1/2"	2 @ 1/4"	Slightly Longer Plunger than E−2	103E−6
278998RX	Remanufactured Bendix® E−3 CoreFreeÂ™	2 @ 1/2"	4 @ 1/2"	3 @ 1/4"	Slightly Longer Plunger than E−2	−
278998X	Remanufactured Bendix® E−3	2 @ 1/2"	4 @ 1/2"	3 @ 1/4"	Slightly Longer Plunger than E−2	103E−6

Competitive (Remanufactured)

Bendix® E−5

Features:

- Firewall mounted.
- Mounted in cab of truck.
- Suspended pedal.
- Used in single circuit systems.

Specifications:

Approximate Weight 2 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Core Group
279950RX	Remanufactured Bendix® E−5 CoreFreeÂ™	5 @ 1/4" 1 @ 1/2"	1 @ 1/2" 2 @ 1/4" 1 @ 3/8"	−
279950X	Remanufactured Bendix® E−5	5 @ 1/4" 1 @ 1/2"	1 @ 1/2" 2 @ 1/4" 1 @ 3/8"	103E−6

Competitive (Remanufactured)

Bendix® E−6 Dual Circuit

Features:

- Floor mounted, treadle or lever operated.
- Two separate supply and delivery circuits for service and secondary braking.
- Meets FMVSS−121 requirements.

Specifications:

Approximate Weight 4.8 lbs.

Notes:

1) Repair Kit use part number **287368K**.

SKU#	Product Description	Supply (4)	Delivery (4)	Core Group
286171RX	Remanufactured Bendix® E−6 Dual Circuit CoreFreeÂ™	3/8"	3/8"	−
286171X	Remanufactured Bendix® E−6 Dual Circuit	3/8"	3/8"	103E−6

Competitive (Remanufactured)

Bendix® E−7 Dual Circuit

Features:

- Firewall mounted.
- Suspended pedal foot valve.
- Two separate supply and delivery circuits.
- Used in dual or split air brake systems.

Specifications:

Approximate Weight 3.7 lbs.

Notes:

1) Repair Kit use part number **289352K**.

SKU#	Product Description	Supply	Delivery	Exhaust	Sup. Ports Mount Side	Del. Ports Mount Side	Core Group
101818RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	4 @ 3/8"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
101818X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	4 @ 3/8"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
284760RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	2 @ 1/4"	−	Diaphragm	2 @ O−ring Sealed Flange	2 @ O−ring Sealed Flange	−
284760X	Reman. Bendix® E−7 Dual Circuit	2 @ 1/4"	−	Diaphragm	2 @ O−ring Sealed Flange	2 @ O−ring Sealed Flange	106E−7
286773RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
286773X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
286774RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
286774X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
286775RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
286775X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	4 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
287411RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	2 @ 3/8" 2 @ 1/4"	2 @ 3/8" 2 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
287411X	Reman. Bendix® E−7 Dual Circuit	2 @ 3/8" 2 @ 1/4"	2 @ 3/8" 2 @ 1/4"	1/2"	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
287564RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	2 @ 1/4" 2 @ 3/8"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
287564X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	2 @ 1/4" 2 @ 3/8"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7
288383RX	Reman. Bendix® E−7 Dual Circuit CoreFreeÂ™	4 @ 1/4"	4 @ 1/4"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	−
288383X	Reman. Bendix® E−7 Dual Circuit	4 @ 1/4"	4 @ 1/4"	Diaphragm	1 @ 1/8" 2 @ 1/2"	2 @ 1/2"	106E−7

Competitive (Remanufactured)

Bendix® E−10 Dual Circuit

Features:

- Floor mounted, treadle operated.
- Two separate supply and delivery circuits for service and secondary braking.
- Used in dual or split air brake systems.

Specifications:

Approximate Weight 4.8 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply (4)	Delivery (4)	Core Group
101100RX	Remanufactured Bendix® E−10 Dual Circuit CoreFreeÂ™	3/8"	3/8"	−
101100X	Remanufactured Bendix® E−10 Dual Circuit	3/8"	3/8"	103E−6

Competitive (Remanufactured)

Bendix® E−12

Features:

- Firewall mounted.
- Mounted in cab of truck.
- Dual circuit valve with two separate supply and delivery circuits.

Specifications:

Approximate Weight 2.8 lbs.

Notes:

1) Treadle and mounting plate not furnished.

SKU#	Product Description	Supply	Delivery	Auxiliary	Core Group
65313X	Remanufactured Bendix® E−12	3/8"−18	3/8"−18	1/4"−18	160E12

Competitive (Remanufactured)

Bendix® E−14

Features:

- Firewall mounted.
- Dual circuit valve with two separate supply and delivery circuits.

Specifications:

Approximate Weight 8 lbs.

Notes:

1) Used with manifold.

2) Pedal and mounting plate not furnished.

SKU#	Product Description	Supply	Delivery	Core Group
65395X	Remanufactured Bendix® E−14	3/8"−18	3/8"−18	166E14

Haldex (New)

Two−Way Check Valve − Shuttle Type

Features:

- Only mount horizontally as pictured.
- Interchangeable with most competitive models.
- Use when two valves must independently control or supply one system.

Specifications:

Approximate Weight .6 lbs.

Notes:

1) Repair Kit use part number **RN11W**.

SKU#	Product Description	Inlet A	Inlet B	Outlet C	Outlet D	OEM Part Number
KN25061	Shuttle Type Two−Way Check Valve	3/8" NPT (female)	3/8" NPT (female)	3/8" NPT (female)	−	N20966BA
KN25080	Shuttle Type Two−Way Check Valve	3/8" NPT (male)	3/8" NPT (female)	3/8" NPT (female)	1/4" NPT (female)	N20966A
KN25090	Shuttle Type Two−Way Check Valve	3/8" NPT (female)	3/8" NPT (female)	3/8" NPT (female)	1/4" NPT (female)	N20966B
KN25100	Shuttle Type Two−Way Check Valve	1/2" NPT (male)	3/8" NPT (female)	3/8" NPT (female)	3/8" NPT (female)	N20966G
KN25110	Shuttle Type Two−Way Check Valve	3/8" NPT (female)	3/8" NPT (female)	3/8" NPT (female)	3/8" NPT (female)	N20966F
KN25120	Shuttle Type Two−Way Check Valve	1/4" NPT (female)	1/4" NPT (female)	1/4" NPT (female)	1/4" NPT (female)	N20966M

Competitive (Remanufactured)

Bendix® DS−1

Features:

- Stoplight switch.
- Functions as both a stoplight switch and a double check valve.
- Used in pre−FMVSS−121 single circuit systems.

Specifications:

Terminal Thread	8/32
Approximate Weight	.9 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Male Port (1)	Female Port (2)	Core Group
228050RX	Remanufactured Bendix® DS−1 Double Check Valve − CoreFreeÂ™	1/2"	1/4"	−
228050X	Remanufactured Bendix® DS−1 Double Check Valve	1/2"	1/4"	140DS1
228165RX	Remanufactured Bendix® DS−1 Double Check Valve − CoreFreeÂ™	3/8"	1/4"	−
228165X	Remanufactured Bendix® DS−1 Double Check Valve	3/8"	1/4"	140DS1
228520RX	Remanufactured Bendix® DS−1 Double Check Valve − CoreFreeÂ™	1/2"	1 @ 1/4" 1 @ 3/8"	−
228520X	Remanufactured Bendix® DS−1 Double Check Valve	1/2"	1 @ 1/4" 1 @ 3/8"	140DS1

Competitive (Remanufactured)

Bendix® PR−2

Features:

- Protects the brake system from accessory failure.
- Pressure setting is adjustable.

Specifications:

Approximate Weight .7 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Notes	Core Group
277147RX	Remanufactured Bendix® PR−2 CoreFreeÂ™	1/4"	1/4"	Minimum Closing Pressure 65 PSI	−
277147X	Remanufactured Bendix® PR−2	1/4"	1/4"	Minimum Closing Pressure 65 PSI	152PR4
277148RX	Remanufactured Bendix® PR−2 CoreFreeÂ™	1/4"	1/4"	Minimum Closing Pressure 85 PSI	−
277148X	Remanufactured Bendix® PR−2	1/4"	1/4"	Minimum Closing Pressure 85 PSI	152PR4

Competitive (Remanufactured)

Bendix® PR−4

Features:

- Protects the brake system from accessory failure.
- Pressure setting is not adjustable.

Specifications:

Approximate Weight .6 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Notes	Core Group
286500RX	Remanufactured Bendix® PR−4 CoreFreeÂ™	1/4"	1/4"	Minimum Closing Pressure 85 PSI	−
286500X	Remanufactured Bendix® PR−4	1/4"	1/4"	Minimum Closing Pressure 85 PSI	152PR4

Pressure Relief Valves

Features:

- Protects from damage due to excessive pressure.
- Made of brass and stainless steel.
- Will not rust or corrode.

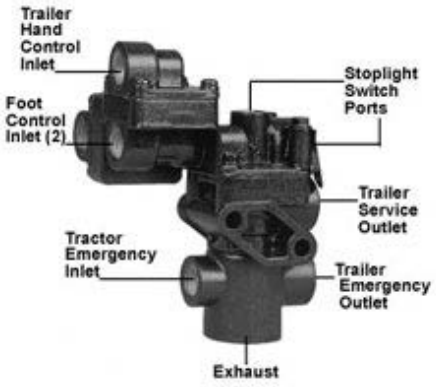
Specifications:

Approximate Weight .3 lbs.

SKU#	Product Description	Body Style	Thread Size	PSI	Notes	OEM Part Number
KN31200	Pressure Relief Valve	Short	1/4"	150	–	N1178AA
KN31250	Pressure Relief Valve	Short	3/8"	150	Pure Air	N1178BB
KN31300	Pressure Relief Valve	Short	1/2"	150	–	N1178AC
KN31400	Pressure Relief Valve	Long	1/4"	150	–	N1178CA
KN31450	Pressure Relief Valve	Long	3/8"	150	–	N1178CB
KN31526	Pressure Relief Valve	Closed	1/4"	250	EL Compressor	N1178DF
KN31527	Pressure Relief Valve	Closed	3/8"	175	Pure Air Plus, PURest, ModulAir®	N1178EE
KN31528	Pressure Relief Valve	Closed	1/4"	170	–	N1178EC
KN31529	Pressure Relief Valve	Closed	3/8"	200	Pure Air Plus, PURest, ModulAir® – fit and functionally the same as KN31527 but has a higher pressure setting. Has felt sleeve (not shown) to protect vent holes from road debris.	N1178EH

Haldex (New/Remanufactured)

Two−Line Manifold Style Remanufactured



Features:

- Can replace up to four valves on competitive systems.

Specifications:

Approximate Weight 1.5 lbs.

Notes:

1) Repair Kit use part number **RN31BC**.

2) Includes tractor protection, two double check valves, stoplight switch port, and built−in quick release, all in one valve.

SKU#	Product Description	Trac. Emer. Inlet	Foot Cont.	Hand Cont.	Stop Light Switch	Trlr. Serv. Outlet	Trlr. Emer. Outlet	Exh. Tube	OEM Part Number	Core Group
KN34080X	Remanufactured Two−Line Manifold Style	3/8"	2@3/8"	3/8"	1@1/4" 1@3/8" plugged	3/8"	3/8"	−	−	225
KN34090X	Remanufactured Two−Line Manifold Style	3/8"	2@3/8"	3/8"	1@1/4" 1@3/8" plugged	1/2"	1/2"	−	−	225
KN34100X	Remanufactured Two−Line Manifold Style	3/8"	2@3/8"	3/8"	1@1/4"	3/8"	3/8"	−	−	225
KN34110X	Remanufactured Two−Line Manifold Style	3/8"	2@3/8"	3/8"	1@1/4"	1/2"	1/2"	Yes	N30162MA	225

Haldex (New/Remanufactured)

Two−Line Non−Automatic

Features:

- Quick release feature eliminates the need for an extra valve.
- Will not allow trailer brake compounding.
- Directly replaces competitive valves.
- Available with Push−To−Connect (PTC) fittings for easy installation.

Specifications:

Approximate Weight 1.3 lbs.

Notes:

1) **MUST BE USED WITH PRESSURE SENSING DASH CONTROL VALVE.**

SKU#	Product Description	Tractor Service	Tractor Emer.	Trailer Service	Trailer Emer.	Remarks	OEM Part Number	Core Group
KN34060	Two−Line Non−Automatic	3/8"	1/4"	1/2"	1/2"	−	N20949CA	−
KN34060X	Remanufactured Two−Line Non−Automatic	3/8"	1/4"	1/2"	1/2"	−	N20949CA	225
KN34061	Two−Line Non−Automatic	3/8"	1/4"	1/2"	1/2"	Exhaust Fitting	N20949CF	−

Competitive (Remanufactured)

Bendix® TP−2

Features:

- Dual mounting.
- 3−line automatic style.
- Used in pre−FMVSS−121 vehicles.
- Used in conjunction with dash mounted control valves.

Specifications:

Approximate Weight .8 lbs.

Notes:

1) Repair Kit use part number **229418K**.

SKU#	Product Description	Tractor Control	Tractor Service	Tractor Emergency	Trailer Service	Trailer Emergency	Stoplight Switch	Core Group
227661X	Remanufactured Bendix® TP−2	1/4"	3/8"	3/8"	3/8"	3/8"	−	111TP3
227672X	Remanufactured Bendix® TP−2	1/4"	3/8"	3/8"	1/2"	1/2"	−	111TP3
283090RX	Remanufactured Bendix® TP−2 CoreFreeÂ™	1/4"	3/8"	3/8"	1/2"	1/2"	1/8"	−
283090X	Remanufactured Bendix® TP−2	1/4"	3/8"	3/8"	1/2"	1/2"	1/8"	111TP3

Competitive (Remanufactured)

Bendix® TP−3

Features:

- Generally mounted on the rear of the tractor cab.
- Two−Line Non−Automatic Style.
- Meets FMVSS−121 requirements.
- Used in conjunction with dash mounted control valves.

Specifications:

Functions Between	20 − 45 PSI
Approximate Weight	.8 lbs.

Notes:

1) Repair Kit use part number **280858K**.

SKU#	Product Description	Tractor Service	Tractor Emergency	Trailer Service	Trailer Emergency	Core Group
279000RX	Remanufactured Bendix® TP−3 CoreFreeÂ™	3/8"	1/4"	1/2"	1/2"	−
279000X	Remanufactured Bendix® TP−3	3/8"	1/4"	1/2"	1/2"	111TP3
279692RX	Remanufactured Bendix® TP−3 CoreFreeÂ™	3/8"	1/4"	3/8"	3/8"	−
279692X	Remanufactured Bendix® TP−3	3/8"	1/4"	3/8"	3/8"	111TP3

Competitive (Remanufactured)

Bendix® TP−4

Features:

- Formerly VM−1 Control Valve Manifold.
- Combination of a tractor protection valve and two double check valves.
- Used in conjunction with a PP−3 or PP−7 to perform normal functions of a tractor protection valve.

Specifications:

Application	Ford "L" Model tractors only
Approximate Weight	2.2 lbs.

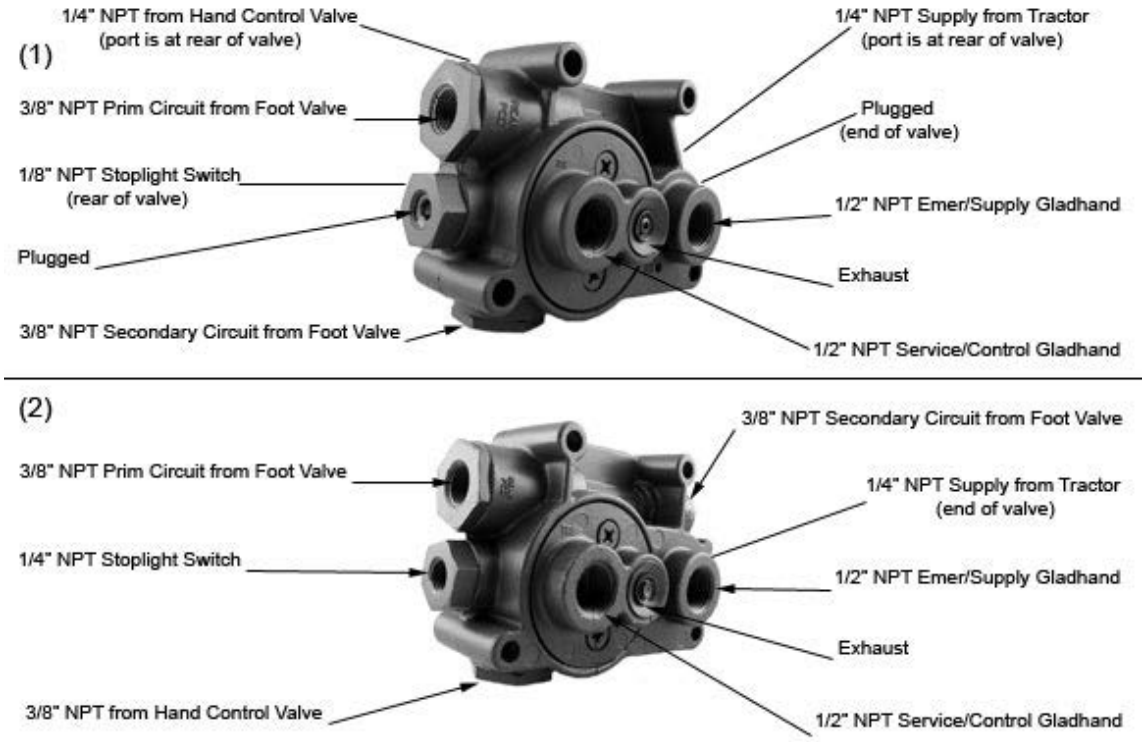
Notes:

1) Repair Kit use part number **283863K**.

SKU#	Product Description	Delivery	Trailer Emergency	Trailer Service	Stoplight Switch	Core Group
288301X	Remanufactured Bendix® TP−4	2 @ 3/8"	1/4"	3/8"	1/4"	113TP5

Competitive (Remanufactured)

Bendix® TP−5



Repair Kit use part number 289061K

SKU#	Product Description	Notes	Approx. Weight	Picture Number	Core Group
106941X	Remanufactured Bendix® TP−5	Mounting Holes Not Threaded	2.7 lbs.	1	113TP5
288605RX	Remanufactured Bendix® TP−5 CoreFreeÂ™	Threaded Mounting Holes	2.3 lbs.	2	−
288605X	Remanufactured Bendix® TP−5	Threaded Mounting Holes	2.3 lbs.	2	113TP5

Competitive (Remanufactured)

Bendix® LQ−2 Limiting Quick Release Valve

Features:

- Mounted on front axle.
- Limits front axle brake application by 50% on slippery roads, full application pressure on dry roads.
- Serves as a Quick Release Valve for the front axle.
- Used on pre−FMVSS−121 vehicles.

Specifications:

Approximate Weight 1 lb.

Notes:

1) Repair Kit use part number **282098K**.

SKU#	Product Description	Supply	Delivery	Cut Out Port	Core Group
229505RX	Remanufactured Bendix® LQ−2 CoreFreeÂ™	3/8"	2 @ 3/8"	1/4"	−
229505X	Remanufactured Bendix® LQ−2	3/8"	2 @ 3/8"	1/4"	145LQ5
229507RX	Remanufactured Bendix® LQ−2 CoreFreeÂ™	1/2"	2 @ 1/4"	1/4"	−
229507X	Remanufactured Bendix® LQ−2	1/2"	2 @ 1/4"	1/4"	145LQ5
229509RX	Remanufactured Bendix® LQ−2 CoreFreeÂ™	3/8"	2 @ 1/4"	1/4"	−
229509X	Remanufactured Bendix® LQ−2	3/8"	2 @ 1/4"	1/4"	145LQ5

Competitive (Remanufactured)

Bendix® LQ−4 Ratio Valve

Features:

- Automatically reduces application pressure to the front service brakes.
- Preset "Hold−Off" pressure prevents the front brakes from operating until the "Hold−Off" pressure is reached.
- Meets FMVSS−121 requirements.

Specifications:

Approximate Weight .9 lbs.

Notes:

1) Repair Kit use part number **289500K**.

SKU#	Product Description	Supply	Delivery	Nominal Hold−Off Pressure	Nominal Equalizing Pressure	Core Group
101311RX	Remanufactured Bendix® LQ−4 Ratio Valve − CoreFreeÂ™	3/8"	3/8"	20 PSI	70 PSI	−
101311X	Remanufactured Bendix® LQ−4 Ratio Valve	3/8"	3/8"	20 PSI	70 PSI	145LQ5
289144RX	Remanufactured Bendix® LQ−4 Ratio Valve − CoreFreeÂ™	3/8"	3/8"	4 PSI	60 PSI	−
289144X	Remanufactured Bendix® LQ−4 Ratio Valve	3/8"	3/8"	4 PSI	60 PSI	145LQ5
289148RX	Remanufactured Bendix® LQ−4 Ratio Valve − CoreFreeÂ™	3/8"	3/8"	10 PSI	65 PSI	−
289148X	Remanufactured Bendix® LQ−4 Ratio Valve	3/8"	3/8"	10 PSI	65 PSI	145LQ5

Competitive (Remanufactured)

Bendix® LQ−5 Bobtail Ratio Valve

Features:

- Used on the front (steering) axle of tractor air brake systems.
- Reduces brake application pressure during normal tractor/trailer operation.
- Delivers full brake pressure to the steering axle during bobtail mode.

Specifications:

Application	Tractor Systems Only
Approximate Weight	.9 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Control	Core Group
65154X	Remanufactured Bendix® LQ−5 Bobtail Ratio Valve	3/8"	3/8"	1/8"	145LQ5

Competitive (Remanufactured)

Bendix® QR−1 Quick Release Valve

Features:

- Decreases the release time on a brake application.
- Exhausts air through itself rather than through the controlling valve.

Specifications:

Crack Pressure	1 PSI
Approximate Weight	.8 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Exhaust	Core Group
229813RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	3/8"	1/4"	−	−
229813X	Remanufactured Bendix® QR−1	3/8"	1/4"	−	118QR1
229844RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	1/2"	1/4"	−	−
229844X	Remanufactured Bendix® QR−1	1/2"	1/4"	−	118QR1
229859RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	3/8"	3/8"	−	−
229859X	Remanufactured Bendix® QR−1	3/8"	3/8"	−	118QR1
229860RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	1/2"	3/8"	−	−
229860X	Remanufactured Bendix® QR−1	1/2"	3/8"	−	118QR1
281024RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	1/4"	1/4"	−	−
281024X	Remanufactured Bendix® QR−1	1/4"	1/4"	−	118QR1
288251RX	Remanufactured Bendix® QR−1 CoreFreeÂ™	3/8"	3/8"	3/8"	−
288251X	Remanufactured Bendix® QR−1	3/8"	3/8"	3/8"	118QR1

Competitive (Remanufactured)

Bendix® QR−1C Quick Release and Double Check Valve

Features:

- Functions as a Quick Release Valve for the emergency side of the spring brakes.
- Double Check Valve prevents simultaneous application of the emergency side of the spring brakes (Anti−Compounding).
- Supply and delivery differential is 1 PSI max.

Specifications:

Crack Pressure	1 PSI
Approximate Weight	1.2 lbs.

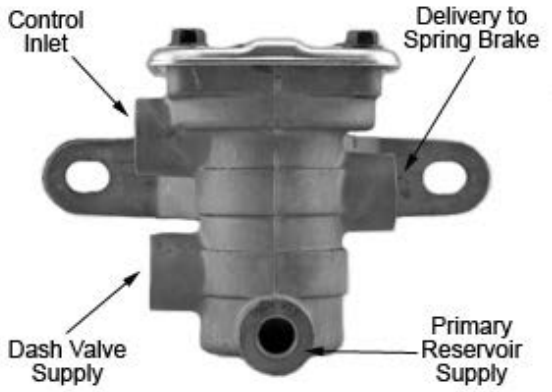
Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Core Group
289182RX	Remanufactured Bendix® QR−1C CoreFreeÂ™	1/4"	1/4"	−
289182X	Remanufactured Bendix® QR−1C	1/4"	1/4"	118QR1
289714RX	Remanufactured Bendix® QR−1C CoreFreeÂ™	1/4"	3/8"	−
289714X	Remanufactured Bendix® QR−1C	1/4"	3/8"	118QR1

Haldex (New/Remanufactured)

Inversion Valve − pre−March 1998



Features:

- Complies with pre−March 1998 FMVSS−121 regulations.
- Detects primary reservoir air system failure, allowing modulated control of spring brakes.
- Interchangeable with competitive models (with hose line relocation).
- Available with (PTC) Push−To−Connect fittings.

Specifications:

Mounting Centers	4.65"
Approximate Weight	1.6 lbs.

Notes:

1) Repair Kit use part number **RN10EV**.

SKU#	Product Description	Primary Reservoir	Supply	Control	Delivery	OEM Part Number	Core Group
KN28030	Inversion Valve	1/4"	1/4"	1/4"	1/4"	N20950AA	−
KN28030X	Remanufactured Midland Inversion Valve	1/4"	1/4"	1/4"	1/4"	N20950AA	225
KN28034	Inversion Valve	3/8" PTC	3/8" PTC	3/8" PTC	3/8" PTC	N20950AB	−

Competitive (Remanufactured)

Bendix® SR−1

Features:

- Used on trucks and tractors with dual air brake systems.
- Spring brake release pressure is limited to 90−95 PSI through the SR−1.
- Normal parking functions are controlled through the SR−1.

Specifications:

Reservoir Trip Pressure	55 PSI
Approximate Weight	2.1 lbs.

Notes:

1) Repair Kit use part number **287072K**.

SKU#	Product Description	Supply	Delivery	Reservoir	Control	Core Group
286364RX	Remanufactured Bendix® SR−1 Spring Brake Valve − CoreFreeÂ™	1/4"	1/4"	1/4"	1/4"	−
286364X	Remanufactured Bendix® SR−1 Spring Brake Valve	1/4"	1/4"	1/4"	1/4"	117SR4

Haldex (New/Remanufactured)

Automatic Drain Valves

KN24000 Shown

Features:

- Available Heated (12 volt 5 AMP) and Non−Heated.
- Mounts to side or bottom of wet tank.
- Functions when pressure varies in air tank.
- Only one moving part.
- Cable looped on both ends.

Specifications:

All Ports	1/4"−18 threaded
Approximate Weight	1.7 lbs.

Notes:

1) Exhaust port must be facing down.

2) Direct replacement for Bendix DV2.

3) Repair Kit use part number **RN10HH**.

4) Replacement Parts: **10027** 5' Cable Kit, **KN24100** Filter Assembly.

SKU#	Product Description	Manual Drain Valve	Cable Length	Notes	OEM Part Number	Core Group
KN24000	Automatic Drain Valve	Yes	60"	Non−Heated	N20878A	−
KN24000X	Remanufactured Automatic Drain Valve	Yes	60"	Non−Heated	N20878A	200
KN24001	Automatic Drain Valve	Yes	60"	Heated	N20879A	−
KN24003	Automatic Drain Valve	Yes	64"	Heated Includes Packard Connector	N20879BA	−

Competitive (Remanufactured)

Bendix® DV−2

Features:

- Mounts into bottom drain port of the reservoir.
- Only one moving part.

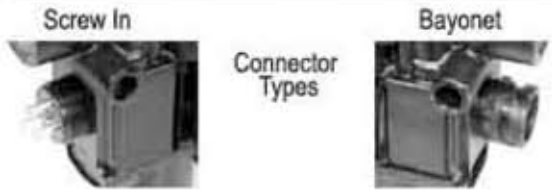
Notes:

1) Repair Kit use part number **282134K**.

SKU#	Product Description	Approximate Weight	Notes	Core Group
281923RX	Remanufactured Bendix® DV−2 Automatic Drain Valve − CoreFreeÂ™	1.2 lbs.	Non−Heated	−
281923X	Remanufactured Bendix® DV−2 Automatic Drain Valve	1.2 lbs.	Non−Heated	146DV2
284795RX	Remanufactured Bendix® DV−2 Automatic Drain Valve − CoreFreeÂ™	1.4 lbs.	Heated	−
284795X	Remanufactured Bendix® DV−2 Automatic Drain Valve	1.4 lbs.	Heated	146DV2

Competitive (Remanufactured)

Meritor WABCO Style Rear Axle Valve Packs



Features:

- Combines two ABS modulator valves and one service brake relay valve
- Usually attached to a frame cross-member
- Compatible with C, D and E versions of Meritor WABCO Style ECUs
- For a tandem drive axle, both wheels on the same side are typically controlled by the same valve

Specifications:

Voltage	12
Modulator Valve Ports	1/2" – 14 NPT
Application	Truck/Tractor/Bus

Notes:

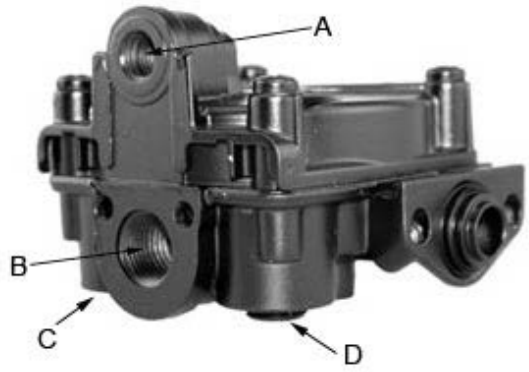
1) Use the following converter cables to switch connector styles:
Screw to Bayonet **8946011322K**
Bayonet to Screw **8946011332K**

SKU#	Product Description	Crack Pressure	System Config.	Valve Package Contains	Connector Type	Core Group
4725001000X	Reman. Rear Axle Valve Pack	4 psi	4S/4M	(1) 4721950800X Modulator Valve-Left (1) 4721950810X Modulator Valve-Right (1) 9730110210X Relay Valve 4 psi	Screw In	ABS5
4725001010X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M	(1) 4721950800X Modulator Valve-Left (1) 4721950810X Modulator Valve-Right (1) 9730110220X Relay Valve 5.5 psi	Screw In	ABS5
4725001020X	Reman. Rear Axle Valve Pack	4 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve-Left (1) 4721950830X Modulator Valve-Right (1) 9730110210X Relay Valve 4 psi	Screw In	ABS5
4725001030X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve-Left (1) 4721950830X Modulator Valve-Right (1) 9730110220X Relay Valve 5.5 psi	Screw In	ABS5
4725001200X	Reman. Rear Axle Valve Pack	4 psi	4S/4M	(1) 4721950760X Modulator Valve-Left (1) 4721950770X Modulator Valve-Right (1) 9730110210X Relay Valve 4 psi	Bayonet	ABS5
4725001210X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M	(1) 4721950760X Modulator Valve-Left (1) 4721950770X Modulator Valve-Right (1) 9730110220X Relay Valve 5.5 psi	Bayonet	ABS5

SKU#	Product Description	Crack Pressure	System Config.	Valve Package Contains	Connector Type	Core Group
4725001220X	Reman. Rear Axle Valve Pack	4 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110210X Relay Valve 4 psi	Bayonet	ABS5
4725001230X	Reman. Rear Axle Valve Pack	5.5 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110220X Relay Valve 5.5 psi	Bayonet	ABS5
4725001240X	Reman. Rear Axle Valve Pack	4 psi	6S/6M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110230X Relay Valve 4 psi	Bayonet	ABS5
4725001250X	Reman. Rear Axle Valve Pack	5.5 psi	6S/6M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110240X Relay Valve 5.5 psi	Bayonet	ABS5
4725002030X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	4S/4M 6S/4M	(1) 4721950820X Modulator Valve-Left (1) 4721950830X Modulator Valve-Right (1) 9730110260X Relay Valve 5.5 psi (1) 4721707910X ATC Valve	Screw In	ABS5
4725002220X	Reman. Rear Axle Valve Pack with ATC Valve	4 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110250X Relay Valve 4 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002230X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	4S/4M 6S/4M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110260X Relay Valve 5.5 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002240X	Reman. Rear Axle Valve Pack with ATC Valve	4 psi	6S/6M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110270X Relay Valve 4 psi (1) 4721707970X ATC Valve	Bayonet	ABS5
4725002250X	Reman. Rear Axle Valve Pack with ATC Valve	5.5 psi	6S/6M	(1) 4721950780X Modulator Valve-Left (1) 4721950790X Modulator Valve-Right (1) 9730110280X Relay Valve 5.5 psi (1) 4721707970X ATC Valve	Bayonet	ABS5

Competitive (Remanufactured)

Meritor WABCO Style Relay Valve for Valve Pack



Specifications:

Application Rear Axle ABS Valve Packs

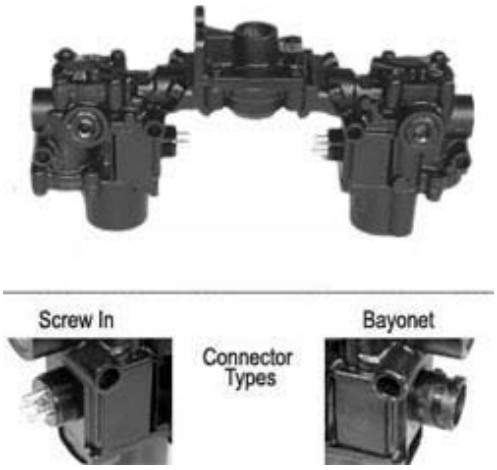
Notes:

1) Each individual valve includes (2) o−rings, (4) mounting bolts and grease pack.

SKU#	Product Description	Crack Pressure	System Configuration	Control (A)	Supply (B)	Delivery (C)	Delivery (D)	Core Group
9730110210X	Reman. Service Brake Relay Valve for Valve Pack	4 psi	4S/4M or 6S/4M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	N/A	ABS11
9730110220X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	4S/4M or 6S/4M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	N/A	ABS11
9730110230X	Reman. Relay Valve for Valve Pack	4 psi	6S/6M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110240X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	6S/6M	1/4" − 18 NPTF	1/2" − 14 NPTF	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110250X	Reman. Service Brake Relay Vavle for Valve Pack	4 psi	4S/4M or 6S/4M	non−threaded	non−threaded	3/8" − 18 NPTF	N/A	ABS11
9730110260X	Reman. Service Brake Relay Valve for Valve Pack	5.5 psi	4S/4M or 6S/4M	non−threaded	non−threaded	3/8" − 18 NPTF	N/A	ABS11
9730110270X	Reman. Relay Valve for Valve Pack	4 psi	6S/6M	non−threaded	non−threaded	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11
9730110280X	Reman. Relay Valve for Valve Pack	5.5 psi	6S/6M	non−threaded	non−threaded	3/8" − 18 NPTF	3/8" − 18 NPTF	ABS11

Competitive (Remanufactured)

Meritor WABCO Style Front Axle Valve Packs



Features:

- Combines two ABS modulator valves and one quick release valve
- Usually attached to a frame cross−member
- Compatible with C, D and E versions of Meritor/WABCO ECUs

Specifications:

Voltage	12
Modulator Valve Ports	1/2" − 14 NPT
Application	Truck/Tractor/Bus

Notes:

1) Use the following converter cables to switch connector styles:
Screw to Bayonet **8946011322K**
Bayonet to Screw **8946011332K**

SKU#	Product Description	Crack Pressure	System Configuration	Valve Package Contains	Connector Type	Core Group
4725003000X	Reman. Front Axle Valve Pack	1 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001040X Quick Release Valve 1 psi	Screw In	ABS13
4725003010X	Reman. Front Axle Valve Pack	3 − 4 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001050X Quick Release Valve 3 − 4 psi	Screw In	ABS13
4725003020X	Reman. Front Axle Valve Pack	6 − 8 psi	Various	(1) 4721950800X Modulator Valve−Left (1) 4721950810X Modulator Valve−Right (1) 9735001060X Quick Release Valve 6 − 8 psi	Screw In	ABS13
4725003200X	Reman. Front Axle Valve Pack	1 psi	Various	(1) 4721950760XModulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001040X Quick Release Valve 1 psi	Bayonet	ABS13
4725003210X	Reman. Front Axle Valve Pack	3 − 4 psi	Various	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001050XQuick Release Valve 3 − 4 psi	Bayonet	ABS13
4725003220X	Reman. Front Axle Valve Pack	6 − 8 psi	Various	(1) 4721950760X Modulator Valve−Left (1) 4721950770X Modulator Valve−Right (1) 9735001060X Quick Release Valve 6 − 8 psi	Bayonet	ABS13

Competitive (Remanufactured)

Meritor WABCO Style Quick Release Valve for Valve Pack

Specifications:

Application Front Axle ABS Valve Packs

Notes:

1) Each individual valve includes (2) o−rings, (4) mounting bolts and grease pack.

SKU#	Product Description	Crack Pressure	System Configuration	Supply	Core Group
9735001040X	Reman. Quick Release Valve for Valve Pack	1 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12
9735001050X	Reman. Quick Release Valve for Valve Pack	3 − 4 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12
9735001060X	Reman. Quick Release Valve for Valve Pack	6 − 8 psi	All Steer Axle Config.	1/2" − 14 NPTF	ABS12

Competitive (Remanufactured)

Meritor WABCO Style Modulator Valves

Features:

- Regulates air pressure to each ABS controlled brake
- Compatible with all versions of Meritor WABCO ECUs

Specifications:

Voltage	12
Modulator Valve Ports	1/2" − 14 NPT
Application	Truck/Tractor/Bus

Notes:

1) Each individual modulator valve includes (1) o−ring, (2) mounting bolts and grease pack.

SKU#	Product Description	System Configuration	Connector Type	Core Group
4721950050X	Reman. Modulator Valve − In Line Style	One Delivery 180° from Supply	Screw In	ABS1
4721950520X	Reman. Modulator Valve − In Line Style	One Delivery 180° from Supply	Bayonet	ABS1
4721950760X	Reman. Modulator Valve − Left	4S/4M	Bayonet	ABS7
4721950770X	Reman. Modulator Valve − Right	4S/4M	Bayonet	ABS7
4721950780X	Reman. Modulator Valve − Left	4S/4M, 6S/4M or 6S/6M	Bayonet	ABS7
4721950790X	Reman. Modulator Valve − Right	4S/4M, 6S/4M or 6S/6M	Bayonet	ABS7
4721950800X	Reman. Modulator Valve − Left	4S/4M	Screw In	ABS7
4721950810X	Reman. Modulator Valve − Right	4S/4M	Screw In	ABS7
4721950820X	Reman. Modulator Valve − Left	4S/4M, 6S/4M or 6S/6M	Screw In	ABS7
4721950830X	Reman. Modulator Valve − Right	4S/4M, 6S/4M or 6S/6M	Screw In	ABS7

Competitive (Remanufactured)

Meritor WABCO Style ATC Valve

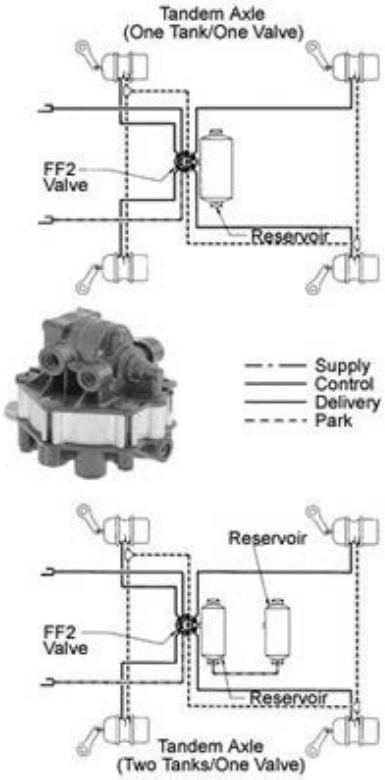
Specifications:

Voltage 12

SKU#	Product Description	Connector Type	System Configuration	Core Group
4721707910X	Reman. Automatic Traction Control Valve	Screw In	Compatible with Version D & E ECU's	ABS15
4721707970X	Reman. Automatic Traction Control Valve	Bayonet	Compatible with Version D & E ECU's	ABS15

Haldex (New/Remanufactured)

FF2 − Full Function Valves



Features:

- Single valve system − easy to install, maintain and troubleshoot.
- Built−in pressure protection and anti−compounding functions:
  −−FMVSS−121 compliant.
  −−Eliminates broken foundation components caused by compounding of spring brake.
- Space age engineering grade composites:
  −−Resists corrosion.
  −−Lighter and more durable than aluminum.
- Built−in service and spring brake quick release.
  −−Prompt application of spring brakes.
  −−Quick release of service brakes.
- Heavy wall mounting nipple is treated to resist corrosion and withstand severe duty applications.
- Service brake priority ensures air tank pressure is sufficient to stop vehicle when spring brakes are first released.
- Can be used with single or twin air tanks.
- Valve combines a pressure protection valve, two one−way check valves, spring brake valve with quick release, and a four port relay valve.

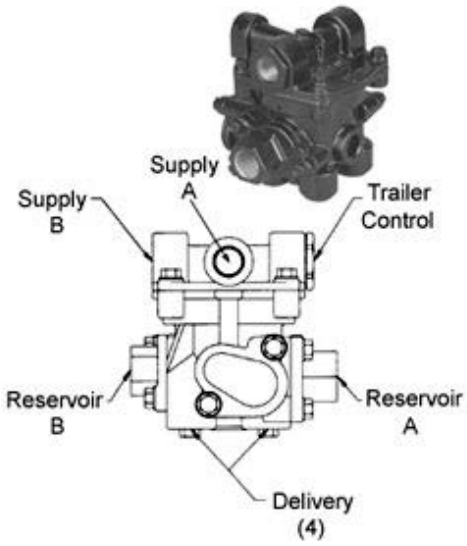
Specifications:

Approximate Weight 3 lbs.

SKU#	Product Description	Crack Press.	Res.	Cont.	Sup.	Spring Brake	Del. (4)	OEM Part Number	Core Group
KN28600	FF2 − Full Function Trailer Valve	3.0 PSI	3/4"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AC	−
KN28600RX	Remanufactured FF2 − Full Function Trailer Valve − CoreFreeÂ™	3.0 PSI	3/4"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AC	−
KN28600X	Remanufactured FF2 − Full Function Trailer Valve	3.0 PSI	3/4"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AC	228
KN28601	FF2 − Full Function Trailer Valve	3.0 PSI	1/2"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AB	−
KN28601RX	Remanufactured FF2 − Full Function Trailer Valve − CoreFreeÂ™	3.0 PSI	1/2"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AB	−
KN28601X	Remanufactured FF2 − Full Function Trailer Valve	3.0 PSI	1/2"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AB	228
KN28602	FF2 − Full Function Trailer Valve	5.0 PSI	3/4"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AE	−
KN28603	FF2 − Full Function Trailer Valve	5.0 PSI	1/2"	1/4"	3/8"	2 @ 3/8"	3/8"	N4304AD	−

Haldex (New/Remanufactured)

RT4 Multi−Function Trailer Valves



Features:

- Meets all FMVSS−121 trailer requirements for spring brake control and other regulations.
- Used on trailers to control both parking and emergency brake functions.
- Applies emergency (parking) brakes upon loss of trailer supply (emergency) line pressure.
- Controls reservoir charging.
- Interchangeable with competitive units.

Specifications:

Approximate Weight 4.5 lbs.

Notes:

1) On KN26000X, KN26020 and KN26020X the trailer control port is over reservoir port A.
On KN26010 and KN26010X the trailer control port is over reservoir port B.

2) Repair Kit use part number **RN10JM**.

SKU#	Product Description	Trlr. Sup. (A)	Trlr. Sup. (B)	Trlr. Cont.	Res. (A)	Res. (B)	Del. (4)	PPV Closing Press.	Notes	OEM Part Number	Core Group
KN26000RX	Remanufactured RT4 Multi−Function CoreFreeÂ™	3/8"	3/8"	3/8"	1/2"	3/8"	3/8"	55 PSI	Cover as shown	−	−
KN26000X	Remanufactured RT4 Multi−Function	3/8"	3/8"	3/8"	1/2"	3/8"	3/8"	55 PSI	Cover as shown	−	225
KN26010	RT4 Multi−Function	3/8"	Plugged	3/8"	1/2"	3/8"	3/8"	70 PSI	−	N4305AA	−
KN26010X	Remanufactured RT4 Multi−Function	3/8"	Plugged	3/8"	1/2"	3/8"	3/8"	70 PSI	−	N4305AA	225
KN26020	RT4 Multi−Function	Plugged	3/8"	3/8"	1/2"	3/8"	3/8"	70 PSI	−	N4305A	−
KN26020X	Remanufactured RT4 Multi−Function	Plugged	3/8"	3/8"	1/2"	3/8"	3/8"	70 PSI	−	N4305A	225

Competitive (Remanufactured)

Bendix® SR−2

Features:

- Meets FMVSS−121 requirements.
- Used on trailers with dual air brake systems.
- Ability to release the spring brakes at least once prior to their application.

Notes:

1) Repair Kit use part number **287691K**.

SKU#	Product Description	Supply (1)	Delivery (4)	Reservoir (1)	Service	Exhaust	Approximate Weight	Notes	Core Group
102761RX	Remanufactured Bendix® SR−2 CoreFreeÂ™	1/4"	3/8"	3/4"	2 @ 1/4"	3/8"	3.0 lbs.	−	−
102761X	Remanufactured Bendix® SR−2	1/4"	3/8"	3/4"	2 @ 1/4"	3/8"	3.0 lbs.	−	117SR4
103061RX	Remanufactured Bendix® SR−2 CoreFreeÂ™	1/4"	3/8"	1/2"	2 @ 1/4"	3/8"	2.8 lbs.	−	−
103061X	Remanufactured Bendix® SR−2	1/4"	3/8"	1/2"	2 @ 1/4"	3/8"	2.8 lbs.	−	117SR4
287376RX	Remanufactured Bendix® SR−2 CoreFreeÂ™	1/4"	3/8"	3/4"	1 @ 1/4"	3/8"	1.7 lbs.	Does not have a Trailer Service Port for Anti−Compounding	−
287376X	Remanufactured Bendix® SR−2	1/4"	3/8"	3/4"	1 @ 1/4"	3/8"	1.7 lbs.	Does not have a Trailer Service Port for Anti−Compounding	117SR4

Competitive (Remanufactured)

Bendix® SR−4

Features:

- Meets FMVSS−121 requirements.
- Used on trailers to control both parking and emergency brake functions.

Notes:

1) Repair Kit use part number **102048K**.

SKU#	Product Description	Supply	Delivery	Reservoir	Service	Approx. Weight	Notes	Core Group
101112RX	Remanufactured Bendix® SR−4 CoreFreeÂ™	1/4"	4 @ 3/8" 1 @ 1/4"	3/4"	1/4"	2.9 lbs.	Reservoir Male Connector Port − 3/4"	−
101112X	Remanufactured Bendix® SR−4	1/4"	4 @ 3/8" 1 @ 1/4"	3/4"	1/4"	2.9 lbs.	Reservoir Male Connector Port − 3/4"	117SR4
101622RX	Remanufactured Bendix® SR−4 CoreFreeÂ™	1/4"	4 @ 3/8" 1 @ 1/4"	3/4"	1/4"	3.4 lbs.	Reservoir Male Connector Port − 1/2"	−
101622X	Remanufactured Bendix® SR−4	1/4"	4 @ 3/8" 1 @ 1/4"	3/4"	1/4"	3.4 lbs.	Reservoir Male Connector Port − 1/2"	117SR4

Competitive (Remanufactured)

Bendix® SR−5 with Anti−Compounding

Features:

- Meets FMVSS−121 requirements.
- Used on trailers with dual air brake systems.
- Permits the use of a single reservoir on the trailer.

Specifications:

Approximate Weight 3 lbs.

Notes:

1) Repair kit not available.

SKU#	Product Description	Supply (1)	Delivery (4)	Reservoir (1)	Service (2)	Core Group
65437RX	Remanufactured Bendix® SR−5 with Anti−Compounding − CoreFreeÂ™	1/4"	3/8"	3/4"	1/4"	−
65437X	Remanufactured Bendix® SR−5 with Anti−Compounding	1/4"	3/8"	3/4"	1/4"	117SR4
65439RX	Remanufactured Bendix® SR−5 with Anti−Compounding − CoreFreeÂ™	1/4"	3/8"	1/2"	1/4"	−
65439X	Remanufactured Bendix® SR−5 with Anti−Compounding	1/4"	3/8"	1/2"	1/4"	117SR4

Competitive (Remanufactured)

Sealco Brake Control Valve

Features:

- Designed for use with a single reservoir on a typical single or tandem axle trailer.

Specifications:

Approximate Weight 2 lbs.

SKU#	Product Description	Supply Port (1)	Control Port (1)	Reservoir Port (1)	Delivery Ports (4)	Core Group
110700X	Remanufactured Sealco Spring Brake Control Valve	3/8"	3/8"	1/2"	3/8"	210

Competitive (Remanufactured)

Sealco Ratio Relay

Features:

- Meets FMVSS−121 requirements.
- Used on trailers to control both parking and emergency brake functions.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery (4)	Reservoir (A)	Reservoir (B)	Control	Approx. Weight	Core Group
110170RX	Remanufactured Sealco Ratio Relay CoreFreeÂ™	3/8"	3/8"	1/2"	1/2"	3/8"	3.1 lbs.	−
110170X	Remanufactured Sealco Ratio Relay	3/8"	3/8"	1/2"	1/2"	3/8"	3.1 lbs.	210
110171X	Reman. Sealco Ratio Relay − Protected Reservoir 90° Cover Plate Orientation	3/8"	3/8"	1/2"	3/8"	3/8"	3.9 lbs.	210
110191X	Remanufactured Sealco Ratio Relay	3/8"	3/8"	3/8"	1/2"	3/8"	3.6 lbs.	210
110310X	Remanufactured Sealco Ratio Relay	3/8"	3/8"	3/8"	1/2"	3/8"	3.7 lbs.	210
110315X	Remanufactured Sealco Ratio Relay	3/8"	3/8"	1/2"	3/8"	3/8"	4.0 lbs.	210
110500X	Remanufactured Sealco Ratio Relay − Spring Brake Priority	3/8"	3/8"	1/2"	−	3/8"	4.0 lbs.	210

Competitive (Remanufactured)

Sealco Ratio Relay with Anti−Compounding

Features:

- Meets FMVSS−121 requirements.
- Used on trailers to control both parking and emergency brake functions.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Sup. (2)	Del. (4)	Res. (1)	Service Res. (2)	Approx. Weight	Notes	Core Group
110147X	Reman. Sealco Ratio Relay with Anti−Compounding	3/8"	3/8"	3/4"	3/8"	4.9 lbs.	with Nipple	210
110148X	Reman. Sealco Ratio Relay with Anti−Compounding	3/8"	3/8"	3/4"	3/8"	5.0 lbs.	−	210

Competitive (Remanufactured)

TRAMEC Spring Brake Valve

51301X - 51301RX

51321X - 51321RX

Features:

- Prevent Spring Brake Drag
- Use a Single Air Tank − allows the elimination of the protected reservoir
- Small Size is Gentle on Tanks, weigh less than two pounds
- Easy Installation & Conversion from Old Systems
- Fully Compatible with Anti−Lock Systems

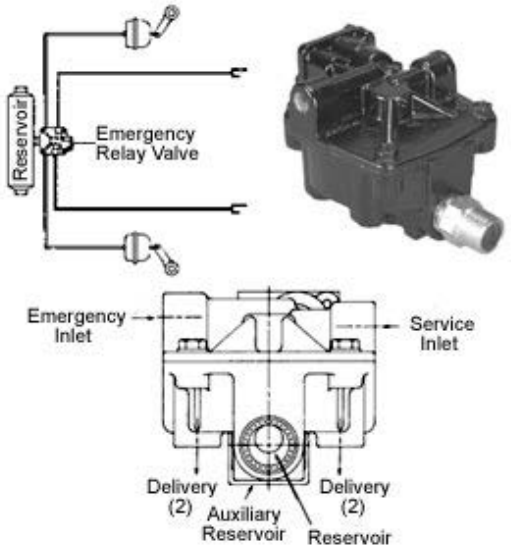
Notes:

1) TRAMEC Spring Brake Valves (TEV & STEV Valves) provide trailer spring brake control and gladhand pressure protection as required by DOT 121.

SKU#	Product Description	Reservior	Delivery	Control	Supply	Priority	Core Group
51301RX	Remanufactured TRAMEC Trailer Emergency Valve (TEV) − CoreFreeÂ™	3/4 NPT	3/8 NPT	1/4 NPT	1/4 NPT	Spring Brake	−
51321RX	Remanufactured TRAMEC Sensing Trailer Emergency Valve (STEV) − CoreFreeÂ™	3/4 NPT	3/8 NPT	1/4 NPT	1/4 NPT	Service Brake	−

Haldex (New/Remanufactured)

Emergency Relay Valve (4 Port)



Features:

- Suitable for pre−121 trailers, converter dollies, or exempt trailers.
- **KN30100** has automatic bleed down feature.

Specifications:

Approximate Weight 3 lbs.

Notes:

1) Repair Kit use part number **RN10HL**.

2) **KN30100 and KN30100X** has 3/8"−18 auxiliary reservoir port on bottom of valve drilled and tapped for use **in air hydraulic systems**. Do not use them to control spring brakes.

SKU#	Product Description	Serv. Inlet	Emer. Inlet	Del. (4)	Aux. Res.	Res.	Crack Pressure	Remarks	OEM Part Number	Core Group
KN30100	Emergency Relay Valve	1/4"	1/4"	1/4"	Plugged	3/4"	3.0 PSI	See Notes	N4301A	−
KN30100X	Remanufactured Emergency Relay Valve	1/4"	1/4"	1/4"	Plugged	3/4"	4.5Â± 1 PSI	See Notes	N4301A	225
KN30200	Emergency Relay Valve	3/8"	3/8"	3/8"	1/2"	Plugged	3.0 PSI	Non−Charging	N4301BA	−
KN30200X	Remanufactured Emergency Relay Valve	3/8"	3/8"	3/8"	1/2"	Plugged	4.5Â± 1 PSI	Non−Charging	N4301BA	225
KN30300	Emergency Relay Valve	1/4"	1/4"	1/4"	Plugged	3/4" with Nipple	3.0 PSI	Charging	N4301AA	−
KN30300RX	Remanufactured Emergency Relay Valve − CoreFreeÂ™	1/4"	1/4"	1/4"	Plugged	3/4" with Nipple	4.5Â± 1 PSI	Charging	N4301AA	−
KN30300X	Remanufactured Emergency Relay Valve	1/4"	1/4"	1/4"	Plugged	3/4" with Nipple	4.5Â± 1 PSI	Charging	N4301AA	225
KN30400	Emergency Relay Valve	1/4"	1/4"	3/8"	Plugged	3/4" with Nipple, Female	3.0 PSI	Charging	N4301CB	−
KN30400RX	Remanufactured Emergency Relay Valve − CoreFreeÂ™	1/4"	1/4"	3/8"	Plugged	3/4" with Nipple, Female	4.5Â± 1 PSI	Charging	N4301CB	−
KN30400X	Remanufactured Emergency Relay Valve	1/4"	1/4"	3/8"	Plugged	3/4" with Nipple, Female	4.5Â± 1 PSI	Charging	N4301CB	225

Competitive (Remanufactured)

Bendix® R−7

Features:

- Will modulate the spring brakes through application of the foot valve if rear axle service brake pressure is lost.
- 2−port delivery.

Specifications:

Approximate Weight 2.8 lbs.

Notes:

1) Repair Kit use part number **283861K**.

SKU#	Product Description	Supply (1)	Delivery (2)	Control (1)	Balance (1)	Release Pressure	Core Group
103081RX	Remanufactured Bendix® R−7 Modulating − CoreFreeÂ™	3/8"	3/8"	1/4"	1/4"	95 PSI	−
103081X	Remanufactured Bendix® R−7 Modulating	3/8"	3/8"	1/4"	1/4"	95 PSI	117SR4
283932RX	Remanufactured Bendix® R−7 Modulating − CoreFreeÂ™	3/8"	3/8"	1/4"	1/4"	85 PSI	−
283932X	Remanufactured Bendix® R−7 Modulating	3/8"	3/8"	1/4"	1/4"	85 PSI	117SR4

Competitive (Remanufactured)

Bendix® RE−6

281865X Shown

Features:

- Dual function valve used on trailers.
- Used on pre−FMVSS−121 vehicles and off road applications.
- 4−port delivery.
- 284280X − Initial Emergency High Pressure Application.

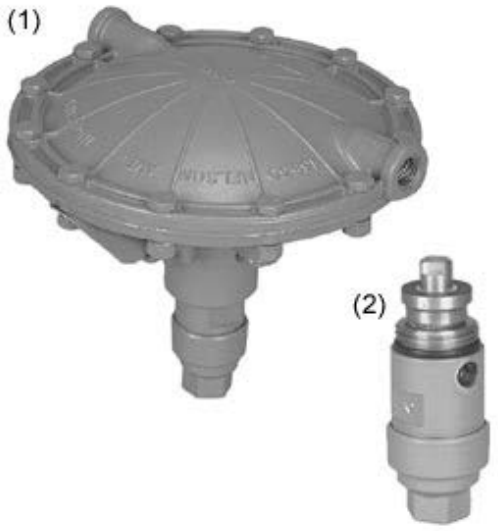
Notes:

1) Repair Kit use part number **282812K**.

SKU#	Product Description	Supply	Delivery	Service	Emergency	Approx. Weight	Initial Emergency Application Pressure	Maximum Emergency Release Pressure	Core Group
101197RX	Remanufactured Bendix® RE−6 CoreFreeÂ™	1 @ 3/8" 1 @ 3/4"	4 @ 3/8"	1/4"	1/4"	2.7 lbs.	65Â± 5 PSI	110 PSI	−
101197X	Remanufactured Bendix® RE−6	1 @ 3/8" 1 @ 3/4"	4 @ 3/8"	1/4"	1/4"	2.7 lbs.	65Â± 5 PSI	110 PSI	129RE6
281865RX	Remanufactured Bendix® RE−6 CoreFreeÂ™	1 @ 3/8" 1 @ 3/4"	2 @ 1/4" 2 @ 3/8"	1/4"	1/4"	3.3 lbs.	50Â± 5 PSI	95 PSI	−
281865X	Remanufactured Bendix® RE−6	1 @ 3/8" 1 @ 3/4"	2 @ 1/4" 2 @ 3/8"	1/4"	1/4"	3.3 lbs.	50Â± 5 PSI	95 PSI	129RE6
284280X	Remanufactured Bendix® RE−6	1 @ 3/8" 1 @ 3/4"	2 @ 1/4" 2 @ 3/8"	1/4"	1/4"	3.5 lbs.	65Â± 5 PSI	110 PSI	129RE6

Competitive (Remanufactured)

Sealco Emergency Relay Valve



Features:

- Used on converter dollies and pre−1975 trailers.
- 4−port delivery.

Specifications:

Crack Pressure	1.5 PSI
Valve Approximate Weight	6 lbs.
Cartridge Approximate Weight	.8 lbs.

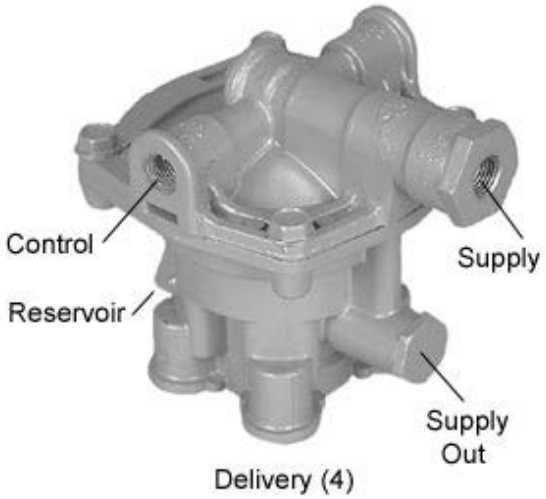
Notes:

1) Repair Kits not available.

SKU#	Product Description	Supply (1)	Reservoir (1)	Delivery (4)	Control (2)	Picture	Core Group
10005ARX	Remanufactured Sealco Cartridge for A1000SX − CoreFreeÂ™	−	−	−	−	2	−
10005AX	Remanufactured Sealco Cartridge for A1000SX	−	−	−	−	2	209
A1000SX	Remanufactured Sealco Emergency Relay Valve	1/4"	1/2"	1/4"	1/4"	1	210

Competitive (Remanufactured)

Sealco Ratio



Features:

- 4−port delivery.

Specifications:

Crack Pressure	4.5 PSI
Approximate Weight	5.5 lbs.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Reservoir	Delivery	Control	Supply Out	Notes	Application	Core Group
110200X	Remanufactured Sealco Ratio Emergency Relay Valve	1/4"	3/4"	3/8"	1/4"	−	Charging	pre−FMVSS−121 Trailers	210
110205X	Remanufactured Sealco Ratio Emergency Relay Valve	3/8"	3/4"	3/8"	3/8"	−	Charging	pre−FMVSS−121 Trailers	210
110338X	Remanufactured Sealco Ratio Emergency Relay Valve	3/8"	3/4"	3/8"	3/8"	3/8"	Replaces 110267X Non−Charging	Converter Dollies and pre−FMVSS−121 Trailers	210
110470X	Remanufactured Sealco Ratio Emergency Relay Valve	3/8"	3/4"	3/8"	3/8"	−	Charging	pre−FMVSS−121 Trailers	210

Competitive (New/Remanufactured)

Fuller Style Air Valves

SKU#	Product Description	All Ports	MFG. #	Notes	Wt.	Pic. #	Core Group
A3546X	Reman. Transmission Shift Valve	1/8" NPT	A3546	Includes Knob	.5 lbs.	2	331
A4688X	Reman. Range Selector Valve	1/8" NPT	A4688	−	3.2 lbs.	9	227
KN16743	Transmission Air Regulator	1/8" NPT	16743	Non−Adjustable Preset at 57−65 PSI	.1 lbs.	1	−
KN3546	Transmission Range Valve	1/8" NPT	A3546	Push−Pull Type Includes Knob	.4 lbs.	2	−
KN4487	Transmission Selector Valve	1/16" NPT	A4487	Chrome Plated Cover 3−Position Selector 9 Speed Transmission	.5 lbs.	6	−
KN4490	Transmission Selector Valve	1/16" NPT	A4490	Chrome Plated Cover 3−Position Selector 13 Speed Transmission	.6 lbs.	7	−
KN4491	Transmission Selector Valve	1/16" NPT	A4491	Chrome Plated Cover 2−Position Selector 9 Speed Transmission	.6 lbs.	8	−
KN4688	Transmission Slave Valve	1/8" NPT	A4688	Includes Mounting Gasket	3.2 lbs.	9	−
KN4900	Transmission Range Valve	1/16" NPT	A4900	"Rubberized" Shift Knob Cover Includes Upper and Lower Covers 13 Speed Transmission	.7 lbs.	3	−
KN5010	Transmission Range Valve	1/16" NPT	A5010	"Rubberized" Shift Knob Cover Includes Upper and Lower Covers 7−8−9 Speed Transmission	.8 lbs.	4	−
KN5015	Transmission Range Valve	1/16" NPT	A5015	"Rubberized Shift Knob Cover Includes Upper and Lower Covers 15 Speed Transmission	.8 lbs.	5	−

Competitive (New/Remanufactured)

Cummins Fuel Solenoid Valves

Specifications:

Approximate Weight 1 lb.

Notes:

1) Outlet not threaded.

2) Repair Kit not available.

SKU#	Product Description	Inlet	Outlet	Voltage	Core Group
6997312RX	Remanufactured Cummins Fuel Solenoid Valve − CoreFreeÂ™	1/8"	1/8"	12 Volt	−
6997312X	Remanufactured Cummins Fuel Solenoid Valve	1/8"	1/8"	12 Volt	333
6997324X	Remanufactured Cummins Fuel Solenoid Valve	1/8"	1/8"	24 Volt	333

Competitive (New/Remanufactured)

Williams® 3−Way Regulating Valve

Features:

- Used as general purpose pushrod actuated regulators.
- **RM9001X**not recommended for On−Highway applications.

Notes:

1) Repair Kit not available.

SKU#	Product Description	Supply	Delivery	Exhaust	Approx. Weight	Notes	Core Group
RM9001X	Remanufactured Williams® 3−Way Regulating Valve	1/4"−18 NPTF	1/4"−18 NPTF	1/4"−18 NPTF	2 lbs.	Without Boot/Nut Maximum Supply Pressure 200 PSI	WM406
RM90DX	Remanufactured Williams® WM−90 Series 3−Way Regulating Valve	1/4"−18 NPTF	1/4"−18 NPTF	1/4"−18 NPTF	2 lbs.	Maximum Supply Pressure 60 PSI	WM406

Competitive (New/Remanufactured)

Williams® Air Throttle Cylinder

Features:

- General purpose throttle cylinder

Notes:

1) Features levers with multiple holes for easy connection to a variety of throttle linkages.

SKU#	Product Description	Control	Lever Holes	Mounting Holes	Approx. Weight	Notes	Core Group
RM388X	Remanufactured Williams® WM−388 Series Air Throttle Cylinder	1/4"−18 NPTF	.25 Dia. (6)	.27 Dia. (2)	1.65 lbs.	Pressure Range 0−30/35 PSI	WM415

Knobs for Push−Pull Valves

Knob for Bendix® Threaded Type

SKU#	Product Description	Application	Notes
298817	Bendix® Trailer Air Supply Knob for Threaded Type Push−Pull Valves	Dash Brake Valve	Red − 5/8 thread
298818	Bendix® Parking Brake Knob for Threaded Type Push−Pull Valves	Dash Brake Valve	Yellow − 5/8 thread

Repair Kits

Relay/Emergency Relay Valve

SKU#	Product Description	Application
102802K	Bendix® Relay Valve Repair Kit	R−12: 102165X, 102626X 103912X, 65303X R−12H: 103009X, 65125X R−14: 103028X, 103833X R−14H: 103010X, 103294X
103799K	Bendix® R−8P Relay Valve Repair Kit	R−8P: 287114X
109265K	Repair Kit for R−12P Pilot Relay Valve	R−12P: 109264X
229585K	Bendix® RE−4 Emergency Relay Valve Repair Kit	229434X
279553K	Bendix® RE−4 Emergency Relay Valve Repair Kit	277446X
280856K	Bendix® R−6 Relay Valve Repair Kit	R−6: 279180X, 279952X 280375X, 280651X, 283940X
282812K	Bendix® RE−6 Emergency Relay Valve Repair Kit	101197X, 281865X, 284280X
283861K	Bendix® R−7 Modulating Emergency Relay Valve Repair Kit	103081X, 283932X
287370K	Bendix® R−8 Relay Valve Repair Kit	R−8: 286370X, 286371X 287224X, 287260X
A75530	Plastic Cover for Four Port Emergency Relay Valve	KN30100, KN30100X, KN30200, KN30200X, KN30300, KN30300X, KN30400, KN30400X
RN10HB	Relay Valve Repair Kit	KN28080, KN28080X, KN28132, KN28132X, N30106C
RN10HK	Relay Valve Repair Kit	KN28041, KN28042, KN28043, KN28060, KN28060X, KN28061, KN28061X, KN28064, KN28065, KN28065X, KN28071, KN28071X, KN28077, KN28085, KN28085X, KN28086, KN28087, KN28088, KN28089, KN28131, KN28131X, KN28140, KN28140X, KN32080
RN10HL	Four Port Emergency Relay Valves Repair Kit	KN30100, KN30100X, KN30300, KN30300X, KN30400, KN30400X, KN30200, KN30200X
RN10HM	Relay Valve Repair Kit	KN28500, KN28500X, KN28510, KN28510X, KN28514, KN28514X, KN28520, KN28520X, KN28531, KN28531X
RN10HP	Relay Valve Repair Kit	A103600, A103600X, A86472, A86473, A86473X, A86477, A86477X
RN10JZ	Two Port with Anti−Compounding Dual Crack Pressure Valve Repair Kit	KN28054, KN28055

Repair Kits

Hand Control Valve

SKU#	Product Description	Application
101805K	Repair Kit for Bendix® TW−1	229635X
102462D	Replacement Lever for Panel Mount Valve	KN20581
107216K	Maintenance Kit for Bendix® MV−3 Valve (Manifold)	65157X, 65159X, 65187X, 65192X
107217K	Shuttle Kit for Bendix® MV−3 Valve (Manifold)	65157X, 65159X, 65187X, 65192X
280857K	Repair Kit for Bendix® PP−3	279787X, 288746X, 289477X, 289512X
281126K	Repair Kit for Bendix® PP−1	104240X, 276566X, 276567X, 276569X, 281587X, 282499X, 287417X, 287600X, 287637X
281127K	Repair Kit for Bendix® PP−2	276462X, 280454X
287367K	Repair Kit for Bendix® PP−7 Trailer Supply	288239X, 288240X, 288241X, 288242X, 288721X
K200800	Handle Only for Double Flipper Style	KN20080
K200900	Handle Only for Double Flipper Style	KN20090, N15791H, N15791V
K201100	Handle Only for Double Flipper Style	KN20110, N15791T
KN20543	Handle for In−Column Mount Trailer Brake	KN20541, KN20542
KQ205450	Handle for In−Column Trailer Brake	KN20545
N15285M	Knob for Panel Mount Trailer Brake	3/8" − 24 thread Knob for KN20580, KN20590
RN10GJ	Repair Kit for Trailer Control Valve	KN20561, KN20561X, KN20562, KN20562X
RN31A	Repair Kit for Hostler Push−Pull Style	KN20010, KN20020, KN20015, KN20011
RN31BF	Repair Kit for Manifold Dash Valve	KN20601, KN20602, KN20603, KN20605, KN20606, KN20607, KN20608, KN20611, KN20612, KN20615, KN20616, KN20619, KN20620, KN20621, KN20622, KN20623, KN20624, KN20625, KN20626, KN20627, KN20628, KN20629
RN31BM	Trailer Spool Kit with Knob for Manifold Dash Valve	KN20601, KN20602, KN20603, KN20605, KN20606, KN20607, KN20608, KN20611, KN20612, KN20615, KN20616, KN20619, KN20620, KN20621, KN20622, KN20623, KN20624, KN20625, KN20626, KN20627, KN20628, KN20629
RN31BP	Tractor Spool Kit with Knob for Manifold Dash Valve	KN20601, KN20602, KN20603, KN20605, KN20606, KN20607, KN20608, KN20611, KN20612, KN20615, KN20616, KN20619, KN20620, KN20621, KN20622, KN20623, KN20624, KN20625, KN20626, KN20627, KN20628, KN20629
RN34F	Repair Kit for Double Flipper Style	KN20110
RN34H	Repair Kit for Double Flipper Style	KN20080, KN20090, N15791H, N15791T, N15791V

Repair Kits

Tractor Protection Valve

SKU#	Product Description	Application
229418K	Bendix® TP−2 Tractor Protection Valve Repair Kit	227661X, 227672X, 283090X
280858K	Bendix® TP−3 Tractor Protection Valve Repair Kit	279000X, 279692X
283863K	Bendix® TP−4 Tractor Protection Valve Repair Kit	288301X
289061K	Bendix® TP−5 Tractor Protection Valve Repair Kit	288605X, 106941X
RN31BC	Tractor Protection Valve Repair Kit − Two−Line Manifold Style	KN34080X, KN34100X, KN34090X, KN34110, KN34110X, KN34101, KN34102, KN34121, KN34122, KN34103, KN34104, KN34111, KN34130

Repair Kits

Automatic Drain Valve

SKU#	Product Description	Application	OEM Part Number
10027	5' Cable Kit for Drain Valve	KN21004, KN21008, KN24000, KN24000X, KN24001, KN24001X, KN24002, KN24003, KN24005	SN153
282134K	Bendix® DV−2 Automatic Drain Valve Repair Kit	281923X, 284795X	–
KN24100	Filter Assembly for Automatic Drain Valve	KN24000, KN24000X, KN24001, KN24001X, KN24002, KN24003, KN24005	1118260
RN10HH	Automatic Drain Valve Repair Kit	KN24000, KN24000X, KN24001, KN24001X, KN24002, KN24003, KN24005	–

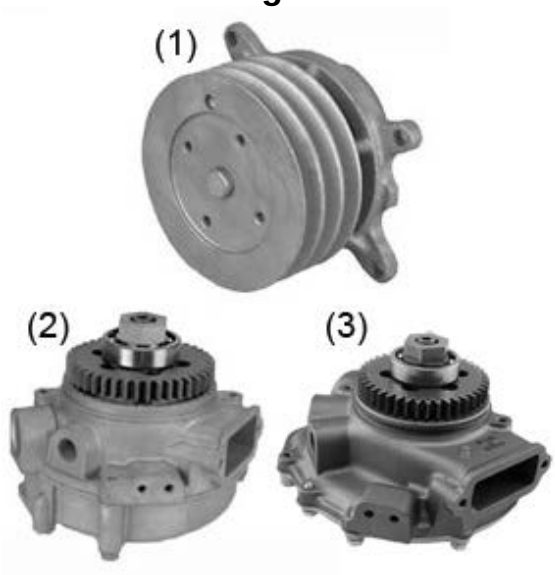
Repair Kits

Miscellaneous

SKU#	Product Description	Application
102048K	Bendix® SR−4 Trailer Spring Brake Valve Repair Kit	101112X, 101622X, 107539X
20837K	Foot Valve Repair Kit	N20837
276119K	E−3 Minor Kit for Bendix® Foot Valve	229501X, 277863X, 278998X
282098K	LQ−2 Limiting Quick Release Valve Repair Kit	229505X, 229507X, 229509X
287072K	Bendix® Tractor Spring Brake Valve Repair Kit	Bendix SR−1
287368K	Bendix® E−6 Dual Circuit Foot Valve Repair Kit	286171X
287691K	Bendix® SR−2 Trailer Spring Brake Valve Repair Kit	102761X, 103061X, 287376X
289352K	Bendix® E−7 / E−7 Dual Circuit Foot Valve Repair Kit	284760X, 101818X, 286773X, 286774X, 286775X, 287411X, 287564X, 288383X
289500K	Bendix® LQ−4 Ratio Valve Repair Kit	101311X, 289144X, 289148X
RN10BX	Single Circuit Foot Operated Valve Repair Kit	KN22100, KN22100X
RN10CH	One−Way Check Valve Repair Kit	KN23000, KN23010
RN10EV	Inversion Valve Repair Kit	KN28030, KN28030X, KN28034
RN10HW	Pressure Protection Valves with One−Way Check Repair Kit	KN31171
RN10HY	Pressure Protection Valves with One−Way Check Repair Kit	KN31170
RN10HZ	One−Way Check Valve Repair Kit	KN23060
RN10JM	RT4 Multifunction Trailer Valve Repair Kit	KN26010X, KN26020X, KN26000X
RN10JP	Dual Circuit Foot Control Valve Repair Kit	KN22150, KN22150X, KN22154
RN10JT	Inversion Valve Repair Kit	KN28032, KN28033
RN10Y	One−Way Check Valve Repair Kit	KN23040, KN23080
RN11V	Diaphragm Type Two−Way Check Valve Repair Kit	KN25060
RN11W	Shuttle Type Two−Way Check Valve Repair Kit	KN25080, KN25090, KN25100, KN25110, KN25120, KN25061
RN17Y	Adjustable Air Regulating Valves (Auxiliary Systems) Repair Kit	KN31040, KN31050 & KN31060
RN19AF	Quick Release Valve with Two−Way Check Repair Kit	KN32040, KN32041, KN32042, KN32043

Notes

1160 and 3176 Engine

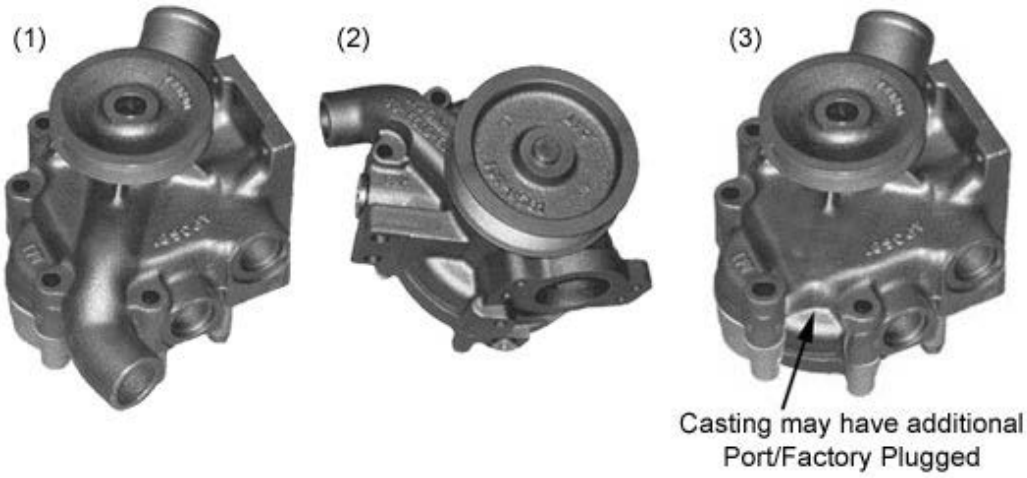


Notes:

1) Installation Kits listed later in this section.

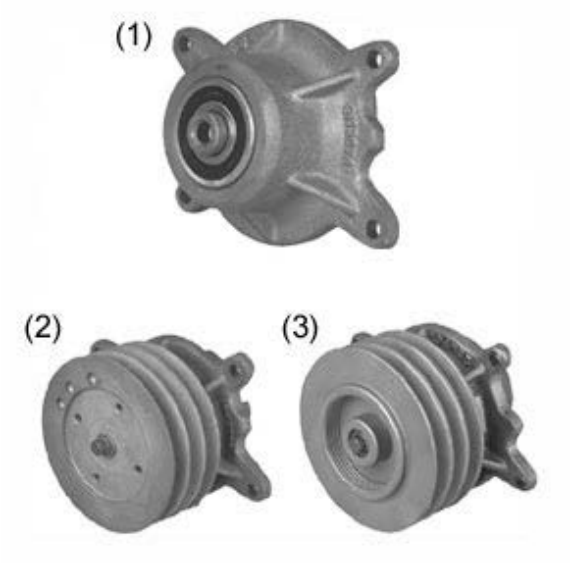
SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Pic. #	Core Group
RW4005X	Remanufactured Water Pump for Caterpillar 1160 Engine	9L7660	9N138	Pressed on Pulley	14 lbs.	1	WP1001
RW4009RX	Remanufactured Water Pump for Caterpillar 3176 Engine − CoreFreeÂ™	1025844 (9Y4361)	103−0745	Aluminum Housing & Cover	15 lbs.	2	−
RW4009X	Remanufactured Water Pump for Caterpillar 3176 Engine	1025844 (9Y4361)	103−0745	Aluminum Housing & Cover	15 lbs.	2	WP1054
RW4011RX	Remanufactured Water Pump for Caterpillar 3176B, C−10, C−12 Engines − CoreFreeÂ™	1006944 OR0705 OR3709 OR8767	105−4213 105−4214	Cast Iron Housing & Aluminum Cover	20 lbs.	3	−
RW4011X	Remanufactured Water Pump for Caterpillar 3176B, C−10, C−12 Engines	1006944 OR0705 OR3709 OR8767	105−4213 105−4214	Cast Iron Housing & Aluminum Cover	20 lbs.	3	WP1063

3116/3126 Engine



SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Core Group	Pic. #
RW4015X	Remanufactured Water Pump for Caterpillar 3116/3126	4P3682 OR1011 OR1013 1208402 1593141 4P3682	4P3681 (Body) 7W3780 (Pulley)	3.75" Pulley Threaded Ports	15.8 lbs.	WP1066	1
RW4016X	Remanufactured Water Pump for Caterpillar 3116/3126	OR1015 4P3683 9Y5249	4P3681 (Body) 7C7890 (Pulley)	4.37" Pulley Threaded Ports	14.5 lbs.	WP1066	1
RW4017X	Remanufactured Water Pump for Caterpillar 3116/3126	227−4299 227−4301 10R5407	203−6093 Housing 226−6051 Backing Plate 197−9581 Pulley	Multi−Groove Pulley Pressed on Gear	15 lbs.	WP1067	2
RW4018X	Remanufactured Water Pump for Caterpillar 3116/3126	−	128−5121	3.75" Pulley Threaded Ports	14.5 lbs.	WP1066	3
RW6015	New Water Pump for Caterpillar 3116/3126	4P3682	4P3681 187−8957−00 7W3780	3.75" Pulley Threaded Ports	19.6 lbs.	−	1
RW6016	New Water Pump for Caterpillar 3116/3126	OR3007 4W0253 9V4879 OR1013 4P3683	4P3681 187−8957−00 7C7890 Pulley	4.37" Pulley Threaded Ports	14.5 lbs.	−	1

3208 Engine



Notes:

1) Installation Kits listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Pic. #	Core Group
RW1162	New Water Pump for Caterpillar 3208 Engine	2W1225	9N3076	Bolt on Pulley (3 belt)	16.0 lbs.	2	–
RW1162RX	Remanufactured Water Pump for Caterpiller 3208 Engine – CoreFreeÂ™	2W1225	9N3076	Bolt on Pulley (3 belt)	16.0 lbs.	2	–
RW1162X	Remanufactured Water Pump for Caterpiller 3208 Engine	2W1225	9N3076	Bolt on Pulley (3 belt)	16.0 lbs.	2	WP1001
RW1407	New Caterpillar 3208 Water Pump	2W1227	9N3076	Threaded Pulley (for fan clutch)	17.5 lbs.	3	–
RW1407RX	Remanufactured Water Pump for Caterpillar 3208 Engine – CoreFreeÂ™	2W1227	9N3076	Threaded Pulley (for fan clutch)	17.5 lbs.	3	–
RW1407X	Remanufactured Water Pump for Caterpillar 3208 Engine	2W1227	9N3076	Threaded Pulley (for fan clutch)	17.5 lbs.	3	WP1001
RW4001X	Remanufactured Water Pump for Caterpillar 3208 Engine	2W1225 (9N6147)	9N3076	No Pulley	10.0 lbs.	1	WP1042

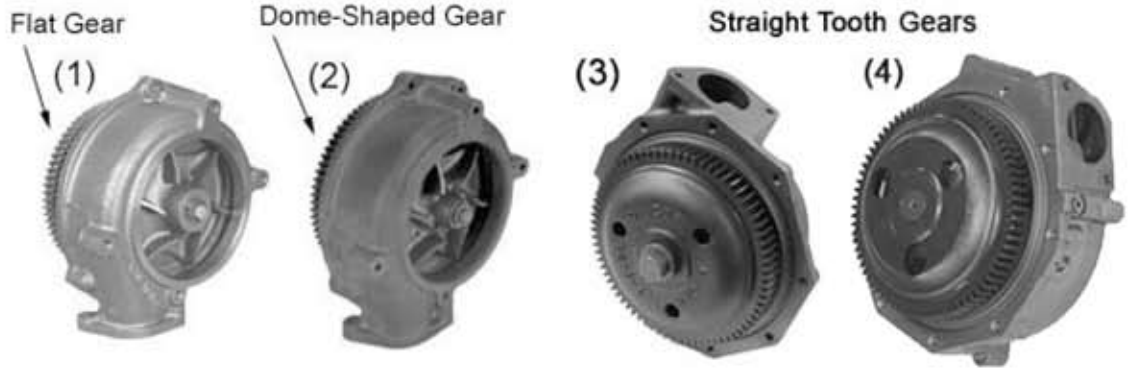
3306 Engine

(1)

(2)

SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Pic. #	Core Group
RW4007X	Remanufactured Water Pump for Caterpillar 3306 Engine	6N8413	7N196 1W9619 172−7829 1543945	Angled Teeth	30.0 lbs.	1	WP1028
RW4008X	Remanufactured Water Pump for Caterpillar 3306 Engine	OR9493 OR8532 4P9862	7N196 1W9619 172−7829 1543945	Straight Teeth	29.0 lbs.	2	WP1028

3406, C15, C18 Engine



Installation Kits listed later in this section.

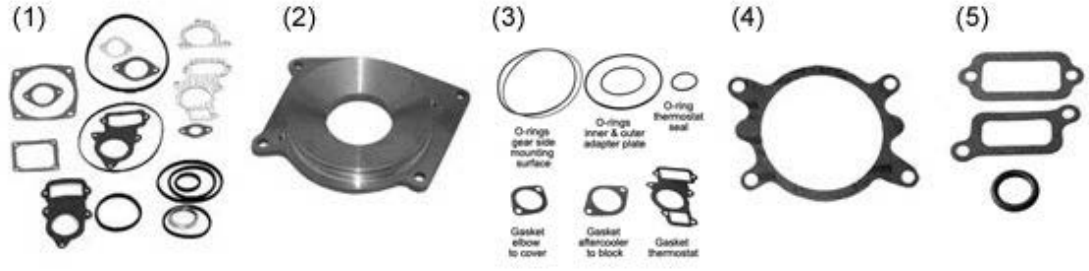
SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Pic. #	Core Group
RW1017	Water Pump for Caterpillar C15, C18 - Straight Tooth Gear	10R2776 10R3326	244-3237	Pressed on Straight Gear, Press on Impeller, 8" impeller opening	40.0 lbs.	4	WP1055
RW1017X	Remanufactured Water Pump for Caterpillar C15, C18 - Straight Tooth Gear	10R2776 10R3326	244-3237	Pressed on Straight Gear, Press on Impeller, 8" impeller opening	40.0 lbs.	4	WP1055
RW1018X	Remanufactured Water Pump for Caterpillar C15, C18 ACERT, Strait Tooth Gear with cooler port	10R2776 10R3326	244-3237	Pressed on Straight Gear, Press on Impeller, 8" impeller opening R & R Only	40.0 lbs.	4	WP1056
RW1194	New Water Pump for Caterpillar 3406B/C Engine - Flat Gear	7W7019 7C4957 OR8217	9N5034	Gear Driven	40.0 lbs.	1	-
RW1194PRX	Premium Remanufactured Water Pump for Caterpillar 3406B/C Engine - Flat Gear - CoreFreeÅ™	7W7019 7C4957 OR8217	9N5034	Gear Driven Premium Oil & Water Seal Design Includes basic O-rings and Gaskets for the Pump only	40.0 lbs.	1	-
RW1194PX	Premium Remanufactured Water Pump for Caterpillar 3406B/C Engine - Flat Gear	7W7019 7C4957 OR8217	9N5034	Gear Driven Premium Oil & Water Seal Design Includes basic O-rings and Gaskets for the Pump only	40.0 lbs.	1	WP1002
RW6012RX	Remanufactured Water Pump for Caterpillar 3406B/C/E Engine - Dome-Shaped Gear - CoreFreeÅ™	613890 OR4120 OR8330 OR8218 10R0483	100-7479	Gear Driven Includes basic O-rings and Gaskets for the Pump only	39.5 lbs.	2	-
RW6012X	Remanufactured Water Pump for Caterpillar 3406B/C/E Engine - Dome-Shaped Gear	613890 OR4120 OR8330 OR8218 10R0483	100-7479	Gear Driven Includes basic O-rings and Gaskets for the Pump only	39.5 lbs.	2	WP1029

SKU#	Product Description	MFG. #	Casting #	Notes	Approx. Weight	Pic. #	Core Group
RW6014X	Remanufactured Water Pump for Caterpillar C15 - Straight Tooth Gear	10R0484	-	Bolt on Gear and Impeller 5.9" impeller opening Includes basic O-rings and Gaskets for the Pump only	40.0 lbs.	3	WP1068

C13 Acert

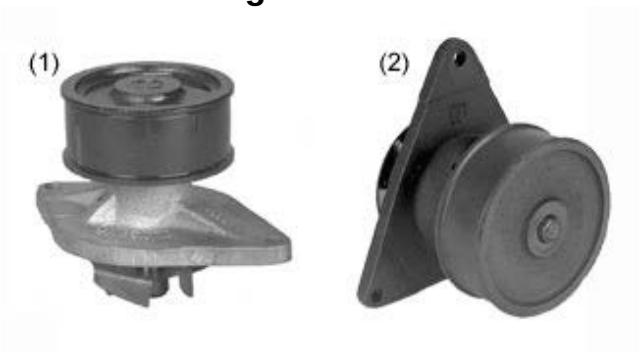
SKU#	Product Description	MFG#	Casting #	Core Group
RW4019X	Remanufactured Water Pump for Caterpillar C13 Acert Engine	10R2129	223−9145	WP1083

Installation Kits



SKU#	Product Description	Application	Notes	Pic. #
1162KIT	Installation Kit for Caterpillar 3208 Engine Water Pump	RW1162, RW1162X, RW1407X, RW4001X	–	4
1194KIT	Installation Kit for Caterpillar 3406 B/C Engines Water Pump	RW1194, RW1194PX, RW6012X, RW6014X	–	3
4009KIT	Installation Kit for Caterpillar 3176 Engine Water Pump	RW6009, RW4009X	–	5
RW1194BPK	Back Plate Kit for Caterpillar 3406 Water Pump	RW1194X, RW1194PX	–	2
RW5922K	Premium Installation Kit for 3406 B/C Engines Water Pump	RW1194, RW1194PX, RW6012X, RW6014X	Contains additional gaskets for water line plumbing.	1

B & C−Series Engine



Specifications:

Approximate Weight 7.0 lbs.

Notes:

1) Installation Kits listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Application	Pic. #	Core Group	New Part #
RW6075	New Water Pump for Cummins B−Series Engine	3802358 (3802004)	3913132	B−Series Engine 4 & 6 Cylinder	1	−	−
RW6075RX	Remanufactured Water Pump for Cummins B−Series Engine − CoreFreeÂ™	3802358 (3802004)	3913132	B−Series Engine 4 & 6 Cylinder	1	−	RW6075
RW6075X	Remanufactured Water Pump for Cummins B−Series Engine	3802358 (3802004)	3913132	B−Series Engine 4 & 6 Cylinder	1	WP1047	RW6075
RW6077	New Water Pump for Cummins C−Series Engine	3802081	3903357	C−Series Diesel Engine	2	−	−
RW6077RX	Remanufactured Water Pump for Cummins C−Series Engine − CoreFreeÂ™	3802081	3903357	C−Series Diesel Engine	2	−	RW6077
RW6077X	Remanufactured Water Pump for Cummins C−Series Engine	3802081	3903357	C−Series Diesel Engine	2	WP1043	RW6077

ISC & ISL Models

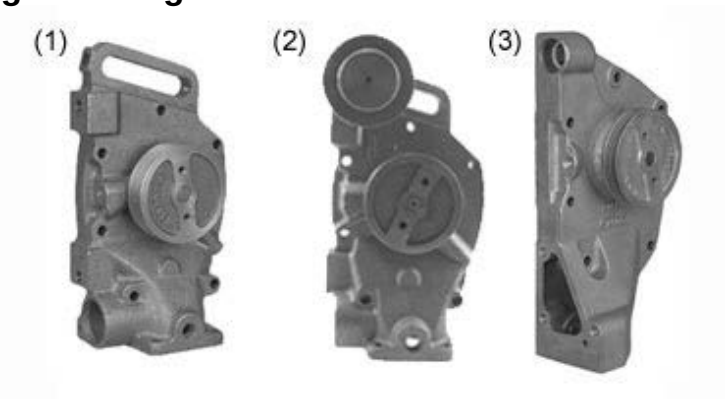
SKU#	Product Description	MFG. #	Casting #	Application	Approx. Weight	Core Group	New Part #	Application
RW6079	New Water Pump for Cummins Models ISC & ISL	3804927 3940052 4089647 (NX)	2370−10C	Models ISC & ISL 8.3 Liters	7.2 lbs.	−	−	8.9L
RW6079RX	Remanufactured Water Pump for Cummins Models ISC & ISL − CoreFreeÂ™	3804927 3940052 4089647 (NX)	2370−10C	Models ISC & ISL 8.3 Liters	7.2 lbs.	−	RW6079	8.9L
RW6079X	Remanufactured Water Pump for Cummins Models ISC & ISL	3804927 3940052 4089647 (NX)	2370−10C	Models ISC & ISL 8.3 Liters	7.2 lbs.	WP1050	RW6079	8.9L

ISX Engine

RW6069 Shown

SKU#	Product Description	MFG. #	Casting #	Approx. Weight	Core Group
RW4068X	Remanufactured Water Pump for Cummins ISX Engine with a 12 Groove Pulley	4089910	2201−10C	40.0 lbs.	WP1007
RW4069X	Remanufactured Water Pump for Cummins ISX Engine with a 10 Groove Pulley	4026702	2201−10C	38.9 lbs.	WP1007
RW6066	New Water Pump for Cummins ISX Engine with a 12 Groove Pulley	4089910	2201−10C	36.0 lbs.	−
RW6069	New Water Pump for Cummins ISX Engine with a 10 Groove Pulley	4026702	2201−10C	35.0 lbs.	−

Big Cam Engine



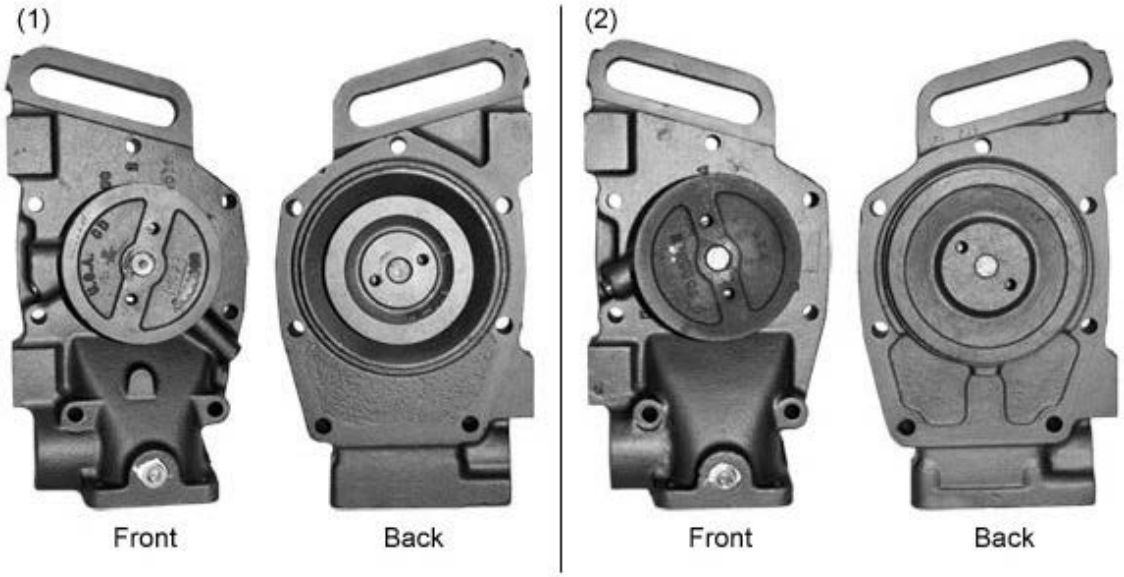
Notes:

1) Installation Kits listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Application	Wt.	Pic. #	Core Group	New Part #
RW1061	New Water Pump for Cummins Big Cam III Engine	3004923	218274	Multi−Groove Pulley 4" Impeller Vented	NTC300, 350, 400; Formula 300, 350, 400, 475	26.0 lbs.	1	−	−
RW1061RX	Reman. Water Pump for Cummins Big Cam III Engine − CoreFreeÂ™	3004923	218274	Multi−Groove Pulley 4" Impeller Vented	NTC300, 350, 400; Formula 300, 350, 400, 475	26.0 lbs.	1	−	RW1061
RW1061X	Reman. Water Pump for Cummins Big Cam III Engine	3004923	218274	Multi−Groove Pulley 4" Impeller Vented	NTC300, 350, 400; Formula 300, 350, 400, 475	26.0 lbs.	1	WP1003	RW1061
RW1170	New Water Pump for Cummins Big Cam III, IV Engine	3022474 (3801788)	218274	4.675 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	NTC290, 350, 400; Formula 290, 350	26.0 lbs.	1	−	−
RW1170RX	Reman. Water Pump for Cummins Big Cam III, IV Engine − CoreFreeÂ™	3022474 (3801788)	218274	4.675 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	NTC290, 350, 400, Formula 290, 350	26.0 lbs.	1	−	RW1170
RW1170X	Reman. Water Pump for Cummins Big Cam III, IV Engine	3022474 (3801788)	218274	4.675 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	NTC290, 350, 400; Formula 290, 350	26.0 lbs.	1	WP1003	RW1170
RW1172	New Water Pump for Cummins Big Cam IV Engine	3801708	3045163	4.275 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	300, 350, 400, Fleet 300, NTC−Formula 300, 350, 400, NTC−475	27.0 lbs.	1	−	−
RW1172RX	Reman. Water Pump for Cummins Big Cam IV Engine − CoreFreeÂ™	3801708	3045163	4.275 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	300, 350, 400, Fleet 300, NTC−Formula 300, 350, 400, NTC−475	27.0 lbs.	1	−	RW1172
RW1172X	Reman. Water Pump for Cummins Big Cam IV Engine	3801708	3045163	4.275 Diameter Multi−Groove Pulley 4−1/2" Impeller Vented	300, 350, 400, Fleet 300, NTC−Formula 300, 350, 400, NTC−475	27.0 lbs.	1	WP1003	RW1172

RW1176	New Water Pump for Cummins 88 Big Cam IV Engine	3803138 (3803030)	3062899	Multi−Groove Pulley	NTC−300, 315, 350, 365, 400	23.5 lbs.	3	−	−
RW1176RX	Reman. Water Pump for Cummins 88 Big Cam IV Engine − CoreFreeÂ™	3803138 (3803030)	3062899	Multi−Groove Pulley	NTC−300, 315, 350, 365, 400	23.5 lbs.	3	−	RW1176
RW1176X	Reman. Water Pump for Cummins 88 Big Cam IV Engine	3803138 (3803030)	3062899	Multi−Groove Pulley	NTC−300, 315, 350, 365, 400	23.5 lbs.	3	WP1031	RW1176
RW1177RX	Reman. Water Pump for Cummins Big Cam III (GMC) Engine − CoreFreeÂ™	3027174	3045163	4" Impeller Multi−Groove Pulley	NTC 290, 350, 400	28.0 lbs.	1	−	RW6067
RW1177X	Reman. Water Pump for Cummins Big Cam III (GMC) Engine	3027174	3045163	4" Impeller Multi−Groove Pulley	NTC 290, 350, 400	28.0 lbs.	1	WP1003	RW6067
RW3000	New Water Pump for Cummins Big Cam Engine	3045943	3045163	Multi−Groove Pulley & Idler	−	30.0 lbs.	2	−	−
RW6067	New Water Pump for Cummins Big Cam III (GMC) Engine	3027174	3045163	4" Impeller Multi−Groove Pulley	NTC 290, 350, 400	28.0 lbs.	1	−	−

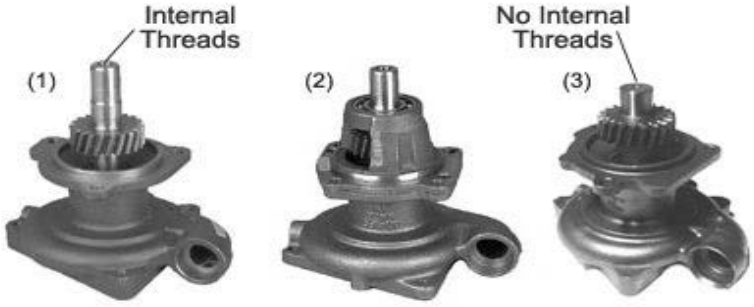
Small Cam Engine



Installation Kits listed later in this section

SKU#	Product Description	MFG. #	Casting #	Description	Application	Approx. Weight	Core Group	New Part #	Pic. #
RW1067RX	Remanufactured Water Pump for Cummins Small Cam FFC Engine − CoreFreeÂ™	3024671	−	Multi−Groove Pulley 4" Impeller Non−Vented	NTC230	26.4 lbs.	−	−	1
RW1067X	Remanufactured Water Pump for Cummins Small Cam FFC Engine	3024671	−	Multi−Groove Pulley 4" Impeller Non−Vented	NTC230	26.4 lbs.	WP1003	−	1
RW1171	New Water Pump for Cummins Small Cam FFC Engine	3000886 3801784 (AR45090)	219040 210238	7 Hole Mount 2 Groove Pulley 5−1/4" Impeller Non−Vented	NTC270−CT, 290, 290R, 350, 355; NT855−C280, C310, C360, NT310	28.0 lbs.	−	−	2
RW1171RX	Remanufactured Water Pump for Cummins Small Cam FFC Engine − CoreFreeÂ™	3000886 3801784 (AR45090)	219040 210238	7 Hole Mount 2 Groove Pulley 5−1/4" Impeller Non−Vented	NTC270−CT, 290, 290R, 350, 355; NT855−C280, C310, C360, NT310	28.0 lbs.	−	RW1171	2
RW1171X	Remanufactured Water Pump for Cummins Small Cam FFC Engine	3000886 3801784 (AR45090)	219040 210238	7 Hole Mount 2 Groove Pulley 5−1/4" Impeller Non−Vented	NTC270−CT, 290, 290R, 350, 355; NT855−C280, C310, C360, NT310	28.0 lbs.	WP1003	RW1171	2

L−10 and M−11 Engine

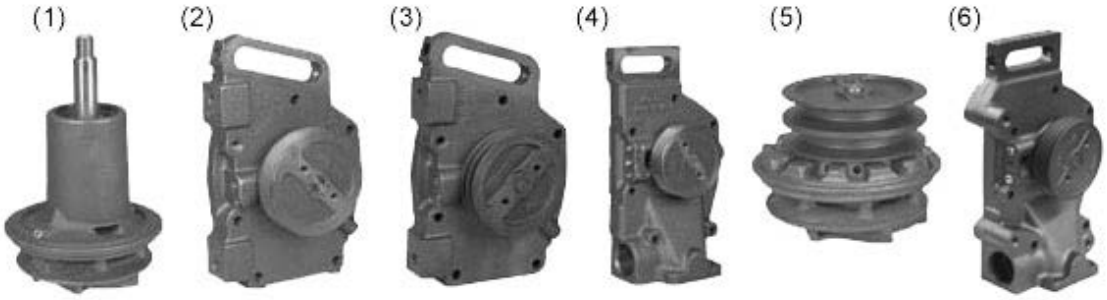


Notes:

1) Needle Bearing Kit not supplied with **RW4076X** and **RW4076RX**.
2) Installation Kits listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Application	Approx. Weight	Pic. #	Core Group	New Part #
RW1178RX	Reman. Water Pump for Cummins LTA10 Series and M−11 Engine; Before 1991 − CoreFreeÂ™	3803402 (3801840)	3039182	4−Hole Mount	LTA10−240, 270, 300 Engines	21 lbs.	2	−	RW6068
RW1178X	Reman. Water Pump for Cummins LTA10 Series and M−11 Engine; Before 1991	3803402 (3801840)	3039182	4−Hole Mount	LTA10−240, 270, 300 Engines	21 lbs.	2	WP1034	RW6068
RW4076RX	Reman. Water Pump for Cummins L−10 Series and M−11 Engine; 1991 and After − CoreFreeÂ™	3803403	3882615	3−Hole Mount	L10−310E L10−330E Engines	18 lbs.	1	−	RW6076
RW4076X	Reman. Water Pump for Cummins L−10 Series and M−11 Engine; 1991 and After	3803403	3882615	3−Hole Mount	L10−310E L10−330E Engines	18 lbs.	1	WP1034	RW6076
RW4077X	Reman. Water Pump for Cummins M−11 ISM Application − Short Shaft	3800745	−	3−Hole Mount Short Shaft	−	18 lbs.	3	WP1065	−
RW6068	New Water Pump for Cummins LTA10 Series and M−11 Engine; Before 1991	3803402 (3801840)	3039182	4−Hole Mount	LTA10−240, 270, 300 Engines	21 lbs.	2	−	−
RW6076	New Water Pump for Cummins L−10 Series Engine; 1991 and After	3803403	3882615	3−Hole Mount	L10−310E L10−330E Engines	18 lbs.	1	−	−

N−Series Engine



Installation Kits listed later in this section

SKU#	Product Description	MFG. #	Casting #	Description	Application	Approx. Weight	Pic. #	Core Group	New Part #
RW1073RX	Reman. Water Pump for Cummins N14 Series Engine − CoreFreeÂ™	3803605 (3803361)	3069644 3076523	Multi−Groove Pulley	N14−310, 330, 350, 370, 410 Engines	26.0 lbs.	4	−	RW6073
RW1073VX	Reman. Water Pump for Cummins N14 − Volvo Application	3804826RX	3084024	Multi−Groove Pulley	N14 − Volvo	27.8 lbs.	6	WP1045	−
RW1073X	Reman. Water Pump for Cummins N14 Series Engine	3803605 (3803361)	3069644 3076523	Multi−Groove Pulley	N14−310, 330, 350, 370, 410 Engines	26.0 lbs.	4	WP1045	RW6073
RW1174	New Water Pump for Cummins NH, NT, & NTC Non−FFC Engines	AR4284	196845	With Pulley Pancake 5−1/2" Bore Short Shaft	NH230, NH250, NHC270, NHE225 Diesel, NT280, NT300, NT310, NT335, NT380, NTA380, NTC280, NTC335, NTC350 Diesel Engines	13.0 lbs.	5	−	−
RW1174RX	Reman. Water Pump for Cummins NH, NT & NTC Non−FFC Engines − CoreFreeÂ™	AR4284	196845	With Pulley Pancake 5−1/2" Bore Short Shaft	NH230, NH250, NHC270, NHE225 Diesel, NT280, NT300, NT310, NT335, NT380, NTA380, NTC280, NTC335, NTC350 Diesel Engines	13.0 lbs.	5	−	RW1174
RW1174X	Reman. Water Pump for Cummins NH, NT & NTC Non−FFC Engines	AR4284	196845	With Pulley Pancake 5−1/2" Bore Short Shaft	NH230, NH250, NHC270, NHE225 Diesel, NT280, NT300, NT310, NT335, NT380, NTA380, NTC280, NTC335, NTC350 Diesel Engines	13.0 lbs.	5	WP1004	RW1174

RW1179X	Reman. Water Pump for Cummins NTC230 Engine (Short Suitcase Style)	AR45073 (3022471)	3002520	2−Groove Pulley 4" Impeller	NTC Formula 230 Engine	23.0 lbs.	3	WP1005	−
RW1195X	Reman. Water Pump for Cummins NTC230 Engine (Short Suitcase Style)	3027882	3002520	Multi−Groove Pulley 4" Impeller	NTC Formula 230 Engine	24.3 lbs.	2	WP1005	−
RW1198RX	Reman. Water Pump for Cummins NH, NT & NTC Non−FFC Engines − CoreFreeÂ™	AR4283	196845	Without Pulley Pancake 5−1/2" Bore Short Shaft	NH230, NH250, NHC270, NHE225 Diesel, NT280, NT300, NT310, NT335, NT380, NTA380, NTC280, NTC335, NTC350 Diesel Engines	14.0 lbs.	5	−	−
RW1198X	Remanufactured Water Pump for Cummins NH, NT & NTC Engines	AR4283	196845	Without Pulley Pancake 5−1/2" Bore Short Shaft	NH230, NH250, NHC270, NHE225 Diesel, NT280, NT300, NT310, NT335, NT380, NTA380, NTC280, NTC335, NTC350 Diesel Engines	14.0 lbs.	5	WP1004	−
RW4054X	Reman. Water Pump for Cummins NT & NTC Engine	AR4547	196830	5−1/2" Bore 1−3/4" Shaft (from bearing surface to step on shaft just below threads)	NT & NTC Engines	18.0 lbs.	1	WP1044	−
RW4055X	Reman. Water Pump for Cummins NT & NTC Engine	AR4548	196830	5−1/2" Bore 2−1/4" Shaft (from bearing surface to step on shaft just below threads)	NT & NTC Engines	18.0 lbs.	1	WP1044	−
RW6063	New Water Pump for Cummins N Series Engine	AR51360	−	−	N Series Engines	18.0 lbs.	−	−	−
RW6073	New Water Pump for Cummins N14 Series Engine	3803605 (3803361)	3069644	Multi−Groove Pulley	N14−310, 330, 350, 370, 410 Engines	26.0 lbs.	4	−	−

VT903 Engine

SKU#	Product Description	Manufacturer's Number	Casting Number	Description	Approximate Weight	Core Group
RW1903X	Remanufactured Water Pump for Cummins VT903 Engine	AR5664	196960	3−Belt Pulley	28 lbs.	WP1041

Cummins: D Series Engine

SKU#	Product Description	Manufacturer's Part Number	Application	Casting Number	Approximate Weight	Core Group	
RW1994	New Water Pump for Cummins D Series Engine	3800984	D Series Engine 5.9, 6.7L	–	7 lbs.	–	

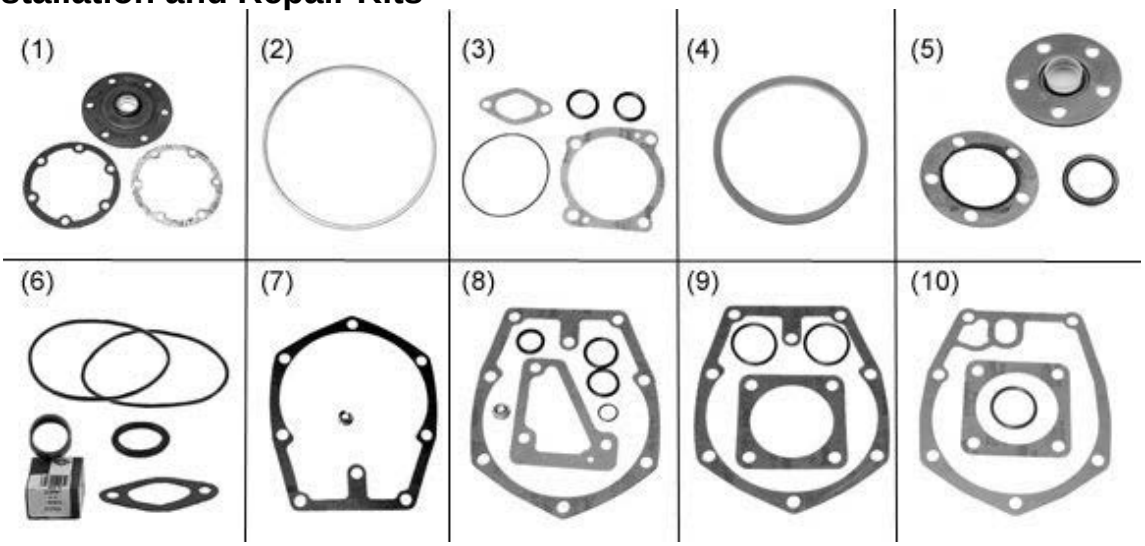
ISB

SKU#	Product Description	Manufacturer's Number	Casting #	Application
RW2060	New Water Pump for Cummins ISB	4955394NX		

Idlers

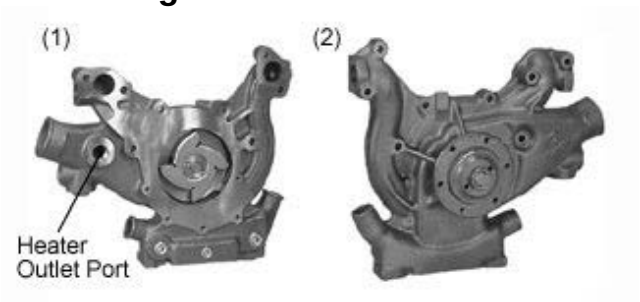
SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW1074X	Reman. Idler for Cummins N−14 Engine	3066330	−	Multi−Groove Pulley	4.0 lbs.	3	WP1052	RW6074
RW1173	New Idler for Cummins Big Cam Engine	AR45189	215397	Multi−Groove Pulley	4.0 lbs.	6	−	−
RW1173RX	Reman. Idler for Cummins Big Cam Engine − CoreFreeÂ™	3064919 (AR45189)	215397	Multi−Groove Pulley	4.0 lbs.	6	−	RW1173
RW1173X	Reman. Idler for Cummins Big Cam Engine	3064919 (AR45189)	215397	Multi−Groove Pulley	4.0 lbs.	6	WP1006	RW1173
RW1175	New Idler for Cummins Small Cam Engine	3064920 (AR8851)	208118	2 Belt Pulley	4.0 lbs.	4	−	−
RW1175RX	Reman. Idler for Cummins Small Cam Engine − CoreFreeÂ™	3064920 (AR8851)	208118	2 Belt Pulley	4.0 lbs.	4	−	RW1175
RW1175X	Reman. Idler for Cummins Small Cam Engine	3064920 (AR8851)	208118	2 Belt Pulley	4.0 lbs.	4	WP1006	RW1175
RW4070RX	Reman. Idler for Cummins 88 Big Cam IV Engine − CoreFreeÂ™	3065000	−	Stamped Pulley	2.7 lbs.	5	−	RW6070
RW4070X	Reman. Idler for Cummins 88 Big Cam IV Engine	3065000	−	Stamped Pulley	2.7 lbs.	5	WP1038	RW6070
RW4071RX	Reman. Idler for Cummins 88 Big Cam IV Engine − CoreFreeÂ™	3062931 (3053537)	3064201	Multi−Groove Pulley	3.3 lbs.	2	−	RW6071
RW4071X	Reman. Idler for Cummins 88 Big Cam IV Engine	3062931 (3053537)	3064201	Multi−Groove Pulley	3.3 lbs.	2	WP1038	RW6071
RW6070	New Idler for Cummins 88 Big Cam IV Engine	3065000	−	Stamped Pulley	2.7 lbs.	5	−	−
RW6071	New Idler for Cummins 88 Big Cam IV Engine	3062931 (AR8851)	3064201	Multi−Groove Pulley	3.3 lbs.	2	−	−
RW6074	New Idler for Cummins N−14 Engine	3066330	−	Multi−Groove Pulley	4.0 lbs.	3	−	−
RW6078	New Idler for Cummins L−10 Engine	3062602	3060884	−	5.9 lbs.	1	−	−
RW6078X	Reman. Idler for Cummins L−10 Engine	3062602	3060884	−	5.9 lbs.	1	WP1032	RW6078

Installation and Repair Kits



SKU#	Product Description	Application	Pic. #
1073KIT	Gasket Kit for Cummins N−14 Engine Water Pump	RW6073, RW1073X	10
1172KIT	Gasket Kit for Cummins Small Cam & Big Cam III, IV Engines Water Pump	RW1170, RW1170X, RW1171, RW1171X, RW1172, RW1172X, RW1176, RW1176X, RW1177, RW3000, RW6061	9
1174KIT	Gasket Kit for Cummins NH, NT, & NTC Engines Water Pump	RW1174, RW1174X, RW1198X, RW4054X, RW4055X	2
1176KIT	Installation Kit for Cummins 88 Big Cam IV Engine Water Pump	RW1176X	8
1178KIT	Gasket Kit for Cummins L−10 Engine Water Pump	RW6068, RW1178X	3
1179KIT	Gasket Kit for Cummins NTC230 Engine Water Pump	RW1179, RW1179X, RW1195, RW1195X	7
4076KIT	Gasket Kit for Cummins L−10 Engine Water Pump	RW6076, RW4076X , RW4077X	6
6075KIT	Installation Kit for Cummins B Series Engine Water Pump	RW6075X	4
RW5072K	Front Gear Cover Seal Kit for Cummins LTA10 Series before 1991	RW1178X, RW6068, RW6076	1
RW5079K	Front Gear Cover Kit for Cummins L−10 Engine	RW4076X , RW4077X	5

8.2 Liter Engine



Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW1119RX	Reman. Water Pump for Detroit Diesel 8.2 Liter Engine − CoreFreeÂ™	8928672 8926904	8828804	No Pulley With Heater Outlet	31.0 lbs.	1	−	RW6119
RW1119X	Reman. Water Pump for Detroit Diesel 8.2 Liter Engine	8928672 8926904	8828804	No Pulley With Heater Outlet	31.0 lbs.	1	WP1030	RW6119
RW1120RX	Reman. Water Pump for Detroit Diesel 8.2 Liter Engine − CoreFreeÂ™	8922302	8820383 8924657	No Pulley Without Heater Outlet	28.6 lbs.	2	−	−
RW1120X	Reman. Water Pump for Detroit Diesel 8.2 Liter Engine	8922302	8820383 8924657	No Pulley Without Heater Outlet	28.6 lbs.	2	WP1053	−
RW6119	New Water Pump for Detroit Diesel 8.2 Liter Engine	8928672 8926904	8828804	**New** No Pulley With Heater Outlet	31.0 lbs.	1	−	−

53 Series Engine

RW1183X
Right Hand

RW1180X
Left Hand

Specifications:

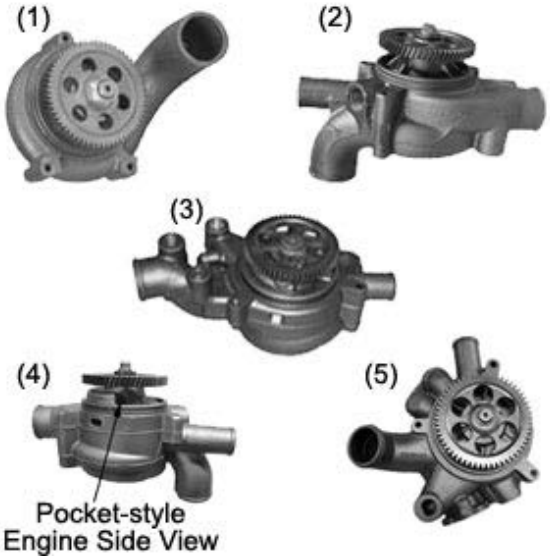
Approximate Weight 13.3 lbs.

Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	Manufacturer's Number	Casting Number	Description	Core Group
RW1180X	Remanufactured Water Pump for Detroit Diesel 53 Series Engine	5144685	5144688	Left Hand 2−Belt Pulley	WP1008
RW1183X	Remanufactured Water Pump for Detroit Diesel 53 Series Engine	5144686	5144689	Right Hand 2−Belt Pulley	WP1008

60 Series Engine



Notes:

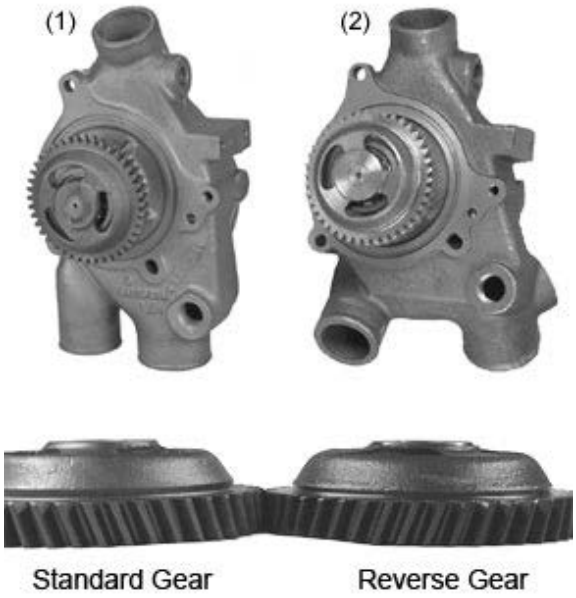
1) Installation Kits listed later in this section.
2) RW4123X (High Capacity) includes a 6 vane impeller and is recommended by the OE manufacturer.
3) **SPECIAL NOTE:** When replacing the water pump on a Detroit 60 Series engine, always check for excessive Bull Gear Runout (wear). Excessive runout will lead to premature water pump failure. *Refer to Mfg. Specifications for acceptable Runout and Bull Gear Replacement Guidelines.

   Failure to Replace Worn Bull Gear may result in:
   − Excessive gear wear and chipped/broken teeth
   − Broken casting near bearing journal
   − Failed Bearings

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW1160RX	Reman. Water Pump for Detroit Diesel 60 Series Engine prior to 12/90 − CoreFreeÂ™	23509067 (23505019)	23505018	Premium Seal Gear Driven	22.8 lbs.	1	−	−
RW1160X	Reman. Water Pump for Detroit Diesel 60 Series Engine prior to 12/90	23509067 (23505019)	23505018	Premium Seal Gear Driven	22.8 lbs.	1	WP1039	−
RW4122PRX	Premium Reman. Water Pump for Detroit Diesel 60 Series Engine after 12/90 − CoreFreeÂ™	23505895 23520136 R3518216	23505894	Premium Seal Metal Back Plate/Seal Gear Driven Std. Flow Capacity 7 Vane Impeller	31.3 lbs.	2	−	−
RW4122PX	Premium Reman. Water Pump for Detroit Diesel 60 Series Engine after 12/90	23505895 23520136 R3518216	23505894	Premium Seal Metal Back Plate/Seal Gear Driven Std. Flow Capacity 7 Vane Impeller	31.3 lbs.	2	WP1048	−
RW4122RX	Reman. Water Pump for Detroit Diesel 60 Series Engine after 12/90 − CoreFreeÂ™	23505895 23520136 R3518216	23505894	Premium Seal Gear Driven Std. Flow Capacity 7 Vane Impeller	30.7 lbs.	2	−	−
RW4122X	Reman. Water Pump for Detroit Diesel 60 Series Engine after 12/90	23505895 23520136 R3518216	23505894	Premium Seal Gear Driven Std. Flow Capacity 7 Vane Impeller	30.7 lbs.	2	WP1048	−
RW4123PRX	Premium Reman. Water Pump for Detroit Diesel 60 Series Engine − CoreFreeÂ™	23522707	23512027	Premium Seal Metal Back Plate/Seal High Flow Capacity 6 Vane Impeller	30.8 lbs.	2	−	−

RW4123PX	Premium Reman. Water Pump for Detroit Diesel 60 Series Engine	23522707	23512027	Premium Seal Metal Back Plate/Seal High Flow Capacity 6 Vane Impeller	30.8 lbs.	2	WP1048	−
RW4123RX	Reman. Water Pump for Detroit Diesel 60 Series Engine − CoreFreeÂ™	23522707	23512027	Premium Seal Plastic Back Plate High Flow Capacity 6 Vane Impeller	30.8 lbs.	2	−	−
RW4123X	Reman. Water Pump for Detroit Diesel 60 Series Engine	23522707	23512027	Premium Seal Plastic Back Plate High Flow Capacity 6 Vane Impeller	30.8 lbs.	2	WP1048	−
RW4124X	Reman. Water Pump for Detroit Diesel 60 Series Engine with EGR (Exhaust Gas Recirculation)	23531257	23530427	Stamped Steel Impeller 61 Tooth Drive Gear	34 lbs.	3	WP1021	RW6124
RW4125PRX	Reman. Water Pump for Detroit Diesel 60 Series Engine "Pocket Style" − CoreFreeÂ™	−	23522721	High Flow Capacity 6 Vane Impeller "Pocket Style"	31 lbs.	2 and 4	−	RW6127
RW4125PX	Reman. Water Pump for Detroit Diesel 60 Series Engine "Pocket Style"	−	23522721	High Flow Capacity 6 Vane Impeller "Pocket Style"	31 lbs.	2 and 4	WP1048	RW6127
RW4126X	Reman. Water Pump for Detroit Diesel 60 Series Engine with EGR	23531258 23532543	−	With EGR Port	36.0 lbs.	5	WP1082	RW6126
RW6126	New Water Pump for Detroit Diesel 60 Series Engine with EGR	23531258 23532543	−	With EGR Port	36.0 lbs.	5	−	−
RW6127	New Water Pump for Detroit Diesel 60 Series Engine "Pocket Style"	−	23522721	High Flow Capacity 6 Vane Impeller "Pocket Style"	31 lbs.	2 and 4	−	−

71 Series Engine

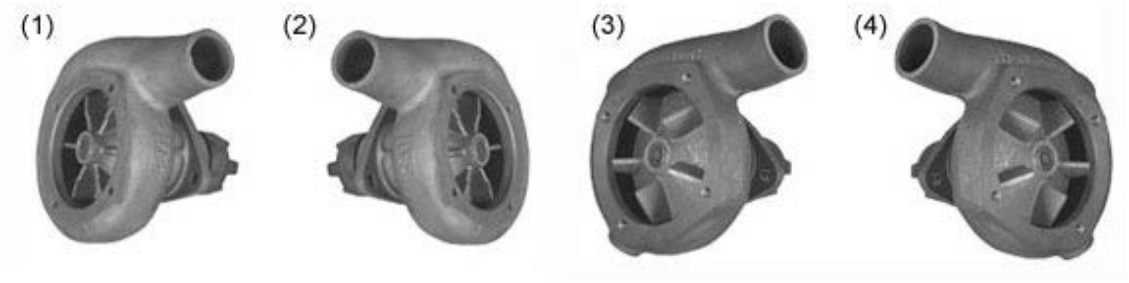


Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group
RW1184X	Reman. Water Pump for Detroit Diesel 6V & 8V 71 Series Engine	5149328	5117921	1−7/8" & 2−1/4" I.D. Outlets Standing Standard Capacity 2 Straight Outlet Pipes	26.8 lbs.	1	WP1011
RW1185X	Reman. Water Pump for Detroit Diesel 71 Series Engine	5149329	5142273	Standard Capacity Running 2 Outlet Pipes at 45°	25.0 lbs.	2	WP1012
RW1186X	Reman. Water Pump for Detroit Diesel 8V 71 Series Engine	5149326	5135455	1−7/8" & 2−1/4" I.D. Outlets Standing High Capacity 2 Straight Outlet Pipes	26.9 lbs.	1	WP1011
RW1187X	Reman. Water Pump for Detroit Diesel 71 Series Engine	5149327	5142273	High Capacity Running 2 Outlet Pipes at 45°	27.0 lbs.	2	WP1012
RW1196X	Reman. Water Pump for Detroit Diesel 8V 71 Series Engine	5149382	5135455	1−7/8" & 2−1/4" I.D. Outlets Standing High Capacity 2 Straight Outlet Pipes with Reverse Gear	25.8 lbs.	1	WP1011

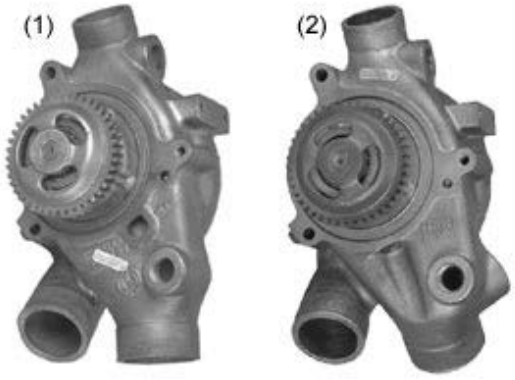
71 Series In−Line Engine



Installation Kit listed later in this section

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group
RW1181	New Water Pump for Detroit Diesel 71 Series In−Line Engine	5149707	5186574	Right Side Standard Capacity	6.9 lbs.	2	−
RW1181RX	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine − CoreFreeÂ™	5149707	5186574	Right Side Standard Capacity	6.7 lbs.	2	−
RW1181X	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine	5149707	5186574	Right Side Standard Capacity	6.7 lbs.	2	WP1009
RW1182RX	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine − CoreFreeÂ™	5149706	5186573	Left Side Standard Capacity	6.8 lbs.	1	−
RW1182X	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine	5149706	5186573	Left Side Standard Capacity	6.8 lbs.	1	WP1009
RW1192X	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine	5149708	5182070	Right Hand 3/8" Thread High Capacity Applications normally used with Turbo	6.9 lbs.	4	WP1010
RW1193X	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine	5149710	5182069	Left Hand 3/8" Thread High Capacity Applications normally used with Turbo	6.8 lbs.	3	WP1010
RW1197X	Reman. Water Pump for Detroit Diesel 71 Series In−Line Engine	5149708	5182070	Right Hand 1/4" Thread High Capacity Applications normally used with Turbo	7.0 lbs.	4	WP1036

92 Series Engine

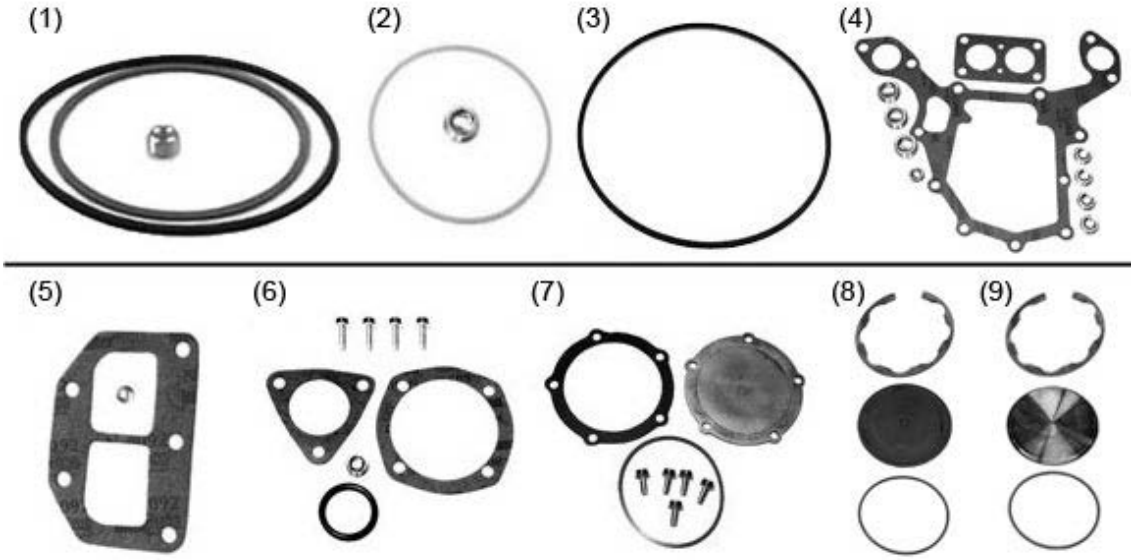


Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group
RW1188X	Reman. Water Pump for Detroit Diesel 92 Series Engine	8921104	8921099	Gear Driven Running 2 Outlet Pipes at 45° Snap Ring Cover	31 lbs.	2	WP1014
RW1189RX	Reman. Water Pump for Detroit Diesel 6V & 8V 92 Series Engine − CoreFreeÂ™	8921105	8921100, 5101261	2−1/4" & 2−1/2" I.D. Outlets Walking 1 Straight & 1@ 45° Outlet Pipe Snap Ring Cover	28 lbs.	1	−
RW1189X	Reman. Water Pump for Detroit Diesel 6V & 8V 92 Series Engine	8921105	8921100, 5101261	2−1/4" & 2−1/2" I.D. Outlets Walking 1 Straight & 1@ 45° Outlet Pipe Snap Ring Cover	28 lbs.	1	WP1013

Installation and Repair Kits

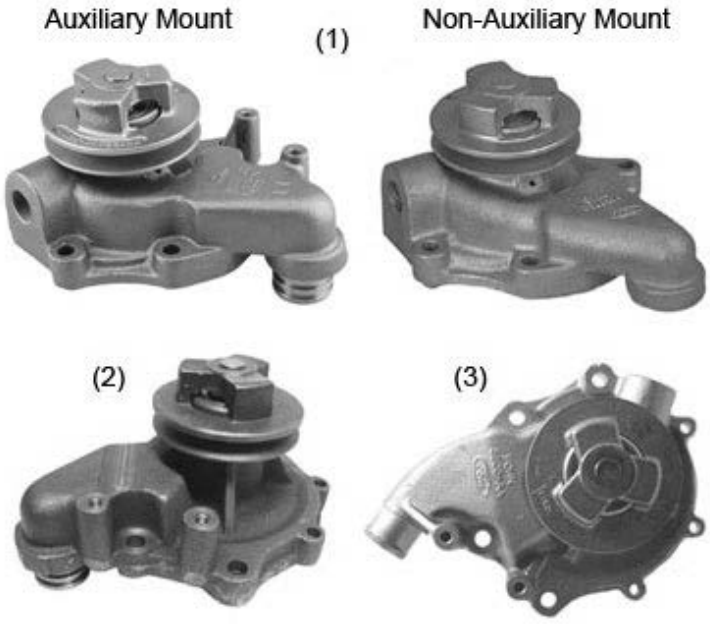


SKU#	Product Description	Application	Pic. #
1119KIT	Bracket Kit for Detroit Diesel 8.2 Liter Engine Water Pump	RW6119, RW1119X, RW1120X	4
1160KIT	Gasket Kit for Detroit Diesel 60 Series Engine Water Pump	RW6121, RW1160X	1
1180KIT	Gasket Kit for Detroit Diesel 53 Series Engine Water Pump	RW1180X, RW1183X	5
1181KIT	Gasket Kit for Detroit Diesel 71 Series Engine Water Pump	RW1181, RW1181X, RW1182, RW1182X	6
1184KIT	Gasket Kit for Detroit Diesel 71 Series Engines Water Pump	RW1184X, RW1185X, RW1186X, RW1187X, RW1196X	7
1189KIT	Gasket Kit for Detroit Diesel Engine − 92 Series Water Pump	RW1188, RW1189	3
4122KIT	Gasket Kit for Detroit Diesel 60 Series Engine Water Pump	RW6122, RW4122X	2
RW4122PLK	Plastic Backing Plate Kit for Detroit Diesel 60 Series Engine Water Pump	RW6122, RW4122X	8
RW4122STK	Steel Backing Plate Kit for Detroit Diesel 60 Series Engine Water Pump	RW6122, RW4122X	9

Ford: 7.3L Engines

SKU#	Product Description	Application	Casting Number	Manufacturer's Number	Approximate Weight	Core Group	Picture Number
RW1923	New Water Pump for Ford 7.3L Engine	1996 − 2007 7.3L	−	YC3Z8501CA	−	−	

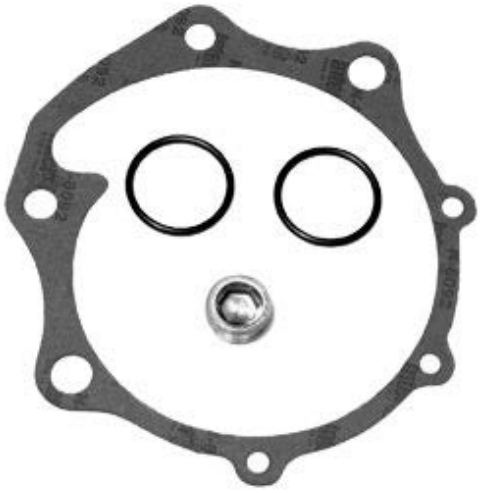
6.6 and 7.8 Liter Engine



Installation Kit listed later in this section.

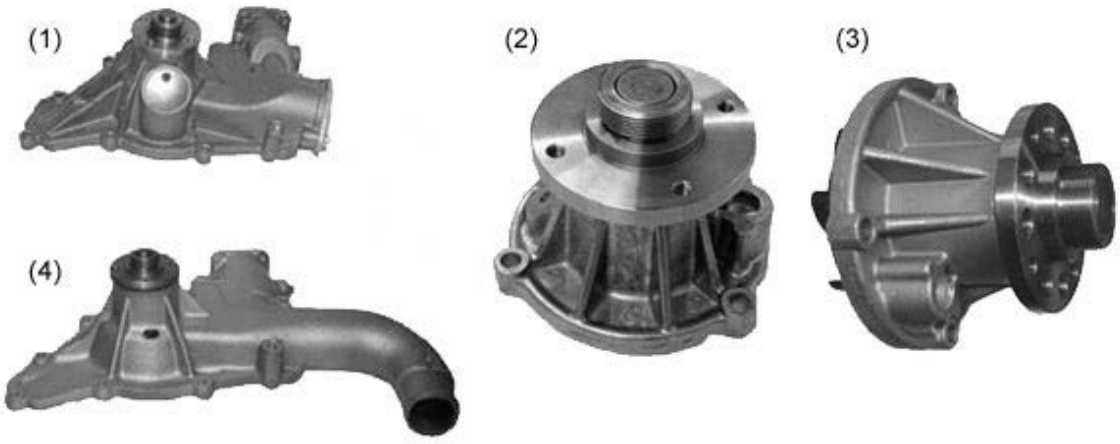
SKU#	Product Description	Manufacturer's Number	Casting Number	Description	Approx. Weight	Core Group	Pic. #
RW1760RX	Reman. Water Pump for Ford 6.6 & 7.8 Liter Engines − CoreFreeÂ™	E9TZ8501B	E7HN8508AA	Auxiliary Mount 3/4" Outlet Cab Over	18.4 lbs.	−	1
RW1760X	Reman. Water Pump for Ford 6.6 & 7.8 Liter Engines	E9TZ8501B	E7HN8508AA	Auxiliary Mount 3/4" Outlet Cab Over	18.4 lbs.	WP1046	1
RW1761RX	Reman. Water Pump for Ford 6.6 & 7.8 Liter Engines − CoreFreeÂ™	E7TZ8501A	E5HN8508AB	Non−Auxiliary Mount 1" Outlet Conventional Cab	16.8 lbs.	−	1
RW1761X	Reman. Water Pump for Ford 6.6 & 7.8 Liter Engines	E7TZ8501A	E5HN8508AB	Non−Auxiliary Mount 1" Outlet Conventional Cab	16.8 lbs.	WP1058	1
RW1762	New Water Pump for Ford 7.8 Liter Engine	F1HZ8501CRM	F0HN8505AA	91−93 Ford Truck (94 F600 only) w/o Pump Mounted Fan	16.2 lbs.	−	3
RW1762X	Reman. Water Pump for Ford 7.8 Liter Engine	F1HZ8501CRM	F0HN8505AA	91−93 Ford Truck (94 F600 only) w/o Pump Mounted Fan	16.2 lbs.	WP1061	3
RW6314	New Water Pump for Ford 6.6 & 7.8 Liter (Brazilian)	E7HN8A513AB E8HZ8501B	−	−	16 lbs.	−	2
RW885	New Water Pump for Ford 7.8L Engine	E1HZ8501DRM	−	1991−1995 6.6L FTL600−900 exc 210HP) / B−C−CF−F800	21 lbs.	−	−

Installation Kits



SKU#	Product Description	Application
1760KIT	Gasket Kit for Ford 6.6 & 7.8 Engine Water Pump	RW1760X, RW1761X, RW1762X

Ford Powerstroke



SKU#	Product Description	Application	Casting Number	OEM Part Numbers	Approx. Weight	Core Group	Pic. #
RW1767	New Water Pump for Ford Powerstroke − 7.3L (466) DI Turbo Diesel Engine	2000−2002 E150/E350 2000−2002 Excursion 1996−2002 F250, F350, F450, F550 Super Duty 1996−1997 F53/59 Stripped Chassis	1831005C2	F6TZ−8501AA F7TZ−8501BRM F81Z−8501A F81Z−8501B F81Z−8501CRM F81Z−8501FA F7TZ−8501B F7TZ−8501C	11 lbs.	−	1
RW1767X	Reman. Water Pump for Ford Powerstroke − 7.3L (466) DI Turbo Diesel Engine	2000−2002 E150/E350 2000−2002 Excursion 1996−2002 F250, F350, F450, F550 Super Duty 1996−1997 F53/59 Stripped Chassis	1831005C2	F6TZ−8501AA F7TZ−8501BRM F81Z−8501A F81Z−8501B F81Z−8501CRM F81Z−8501FA F7TZ−8501B F7TZ−8501C	11 lbs.	WP1064	1
RW1768	New Water Pump for Ford Powerstroke − 6.0L Turbo Diesel Engine	2003−June 2004 Super Duty	−	3C3Z8501A	7 lbs.	−	2
RW1769	New Water Pump for Ford Powerstroke − 6.0L Turbo Diesel Engine	July 2004−Present Super Duty	−	4C3Z8501AB	7 lbs.	−	3
RW1786	New Water Pump for Ford Powestroke − 6.0L Turbo Diesel Engine	2003 − 2010 6.0L Super Duty	−	4C4Z−8501AARM	7 lbs.	−	−
RW1917	New Water Pump for Ford Powerstroke 6.4L	2008−2010 Super Duty	−	8C3Z8501C	7lbs.	−	−
RW6310	New Water Pump for Ford Powerstroke − 7.3L (466) DI Turbo Diesel Engine	94−96 Super Duty	−	F5TZ−8501B F5TZ−8501C	10 lbs.	−	4

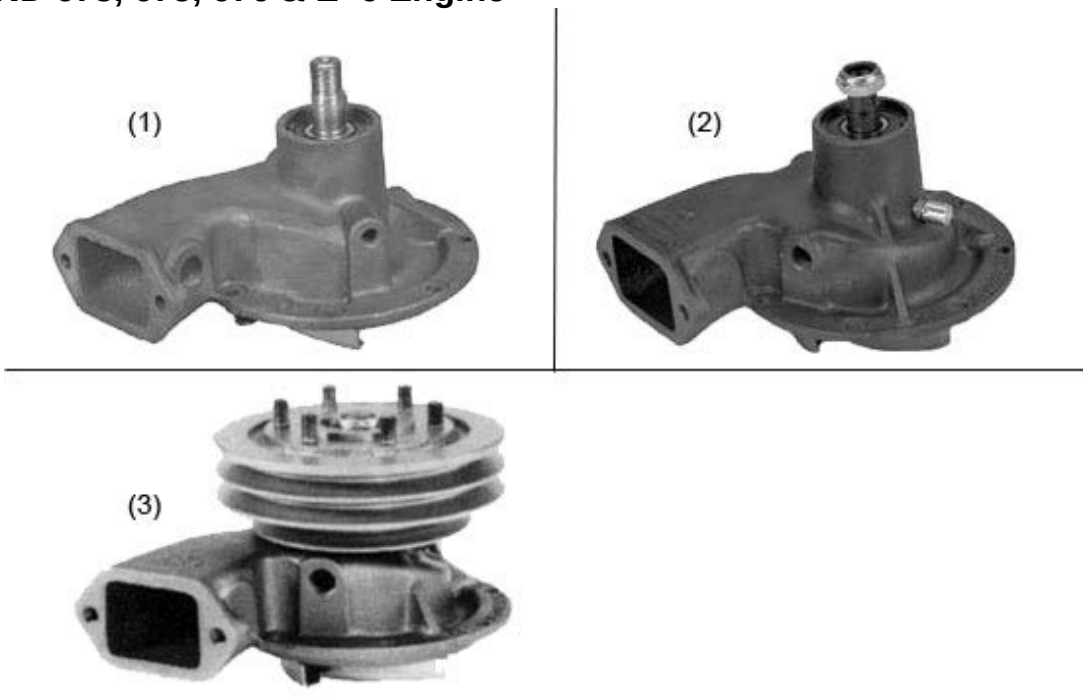
6 to 7 Liter Engine

SKU#	Product Description	Manufacturer Number	Casting #	Description	Application	Approx. Weight	Pic. #	Core Group
RW1381	New Water Pump for GM6.5L Engine	12530176	–	Second Design,br.Double Thermostat	6.5L Medium Duty/School Bus	14 lbs	–	–
RW1406	New Water Pump for General Motors 6.2 Liter Engine	14082745 (23500133)	14024206	Belt Driven Conventional Cab Pulley Not Supplied	1986–90 Chev & GMC	15 lbs.	1	–
RW1406X	Remanufactured Water Pump for General Motors 6.2 Liter Engine	14082745 (23500133)	14024206	Belt Driven Conventional Cab Pulley Not Supplied	1986–90 Chev & GMC	15 lbs.	1	WP1015
RW1408X	Remanufactured Water Pump for General Motors 366 & 427 Engines	14002440	14001939	Standard Hub	6.0 & 7.0 Liter Engines 1979–84 All 1976–78 CE–ME65 with Front End Drive	24 lbs.	2	WP1059
RW1409X	Remanufactured Water Pump for General Motors 366 & 427 Engines	6258548	3856286	Screw–On Hub	6.0 & 7.0 Liter Engines 1969–78 All CE–ME65 with Front End Drive	24 lbs.	2	WP1059
RW1559	New Water Pump for GM 6.5L DSL Engine	12456231	–	–	1999–2003 6.5L Light/Medium Duty	19 lbs	–	–
RW852	New Water Pump for GM 6.2L, 6.5L DSL Engines	23500138	First Design single thermostat	6.2L, 6.5L, light/medium duty	14.6 lbs	–	–	

Duramax 6.6 Liter Engine

SKU#	Product Description	MFG. #	Casting #	Application	Approx. Weight	Core Group
RW1463	New Water Pump for General Motors 6.6 Liter Duramax Diesel Engines	97216136	–	2001–2005 GM Duramax 6.6L Diesel	6 lbs.	–
RW1935	New Water Pump for General Motors 6.6L Duramax Diesel Engines	98031233	–	2006–2010 GM Duramas 6.6L Diesel	4.4 lbs	–

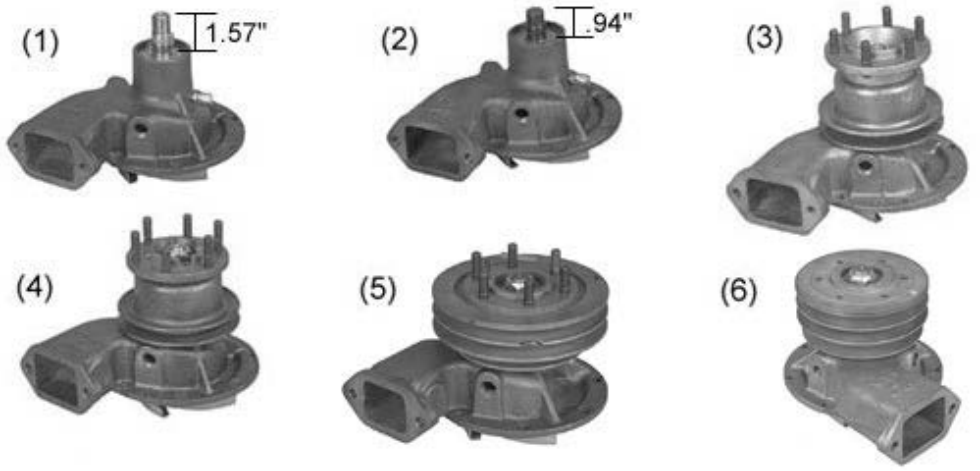
END 673, 675, 676 & E−6 Engine



Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW2000X	Reman. Thermodyne Water Pump for Mack END 673, 675, 676 Engines	316GC184	360GB334	Short Shaft Without Pulley	12.2 lbs.	1	WP1020	−
RW4215X	Reman. Econodyne Water Pump for Mack E−6 Engines	316GC1219AX	360GB443	Flush Impeller Without Pulley	13.0 lbs.	2	WP1023	RW6215
RW4219X	Reman. Water Pump for Mack E−6 Engines	316GC549MX	360GB443A	Stamped Impeller 3 Groove 7−1/4" Pulley	24.5 lbs.	3	WP1071	−
RW6215	New Econodyne Water Pump for Mack E−6 Engines	316GC1219AX	360GB443	Flush Impeller Without Pulley	13.0 lbs.	2	−	−

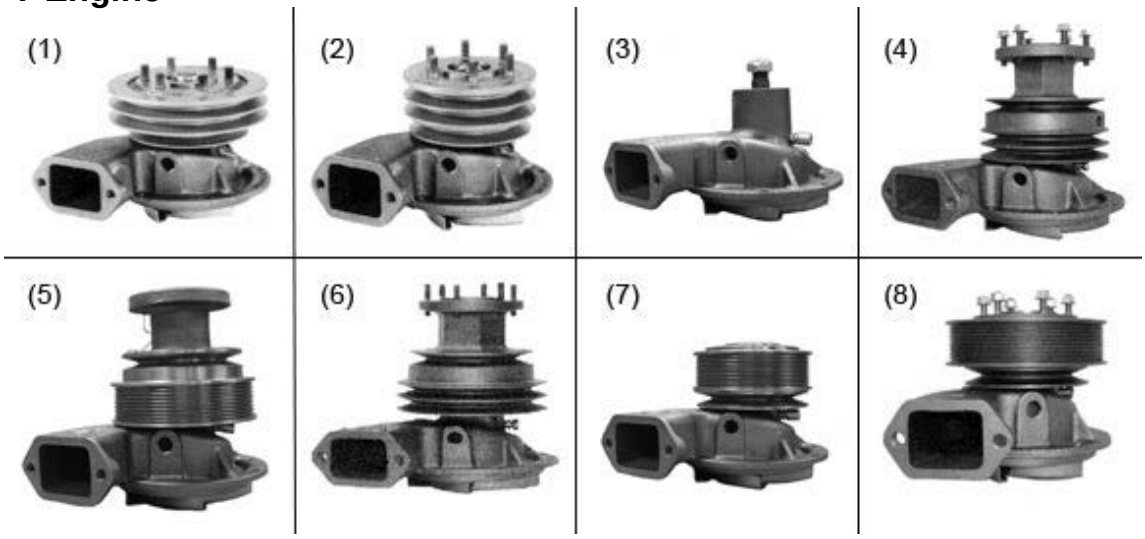
ENDT 675, 676 & EMS−6 Engine



Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW2001	New Maxidyne Water Pump for Mack ENDT 675, 676 Engines	316GC1184	316GB443 316GC1211A 316GC1211B	1.57" Long Shaft No Pulley	13.0 lbs.	1	−	−
RW2001X	Reman. Maxidyne Water Pump for Mack ENDT 675, 676 Engines	316GC1184	360GB443 316GC1211A 316GC1211B	1.57" Long Shaft No Pulley	13.0 lbs.	1	WP1023	RW2001
RW2002	New Econodyne Water Pump for Mack E6, EM6 & EMS−6 Engine	316GC1210A	316GB443	Charged Air No Pulley .94" Long Shaft	13.0 lbs.	2	−	−
RW2002X	Reman. Econodyne Water Pump for Mack E6, EM6 & EMS−6 Engines	316GC1210A	360GB443	Charged Air No Pulley .94" Long Shaft	13.0 lbs.	2	WP1023	RW2002
RW2005	New Water Pump for Mack ENDT 675 & 676 Engines	316GC1184BX	360GB443	Long Shaft With Pullet Stamped Impeller	16.0 lbs.	3	−	−
RW2005X	Reman. Water Pump for Mack ENDT 675 & 676 Engines	316GC1184BX	360GB443	Long Shaft With Pulley Stamped Impeller	16.0 lbs.	3	WP1022	−
RW2006X	Reman. Water Pump for Mack ENDT 675 & 676 Engines	316GC1211AX	360GB443	Long Shaft with Notched Hub Pulley Fan Clutch Application	17.6 lbs.	4	WP1022	−
RW4209X	Reman. Econodyne Water Pump for Mack E6, EM6 & EMS−6 Engines	316GC1210AX	360GB443	Charged Air 3−Groove 6−5/8" Diameter Pulley	23.0 lbs.	5	WP1022	−
RW4210X	Reman. Econodyne Water Pump for Mack E6, EM6 & EMS−6 Engines	316GC528CX	360GB443	Charged Air 3−Groove 5−1/2" Diameter Pulley Stamped Impeller	20.0 lbs.	6	WP1022	−

E−7 Engine

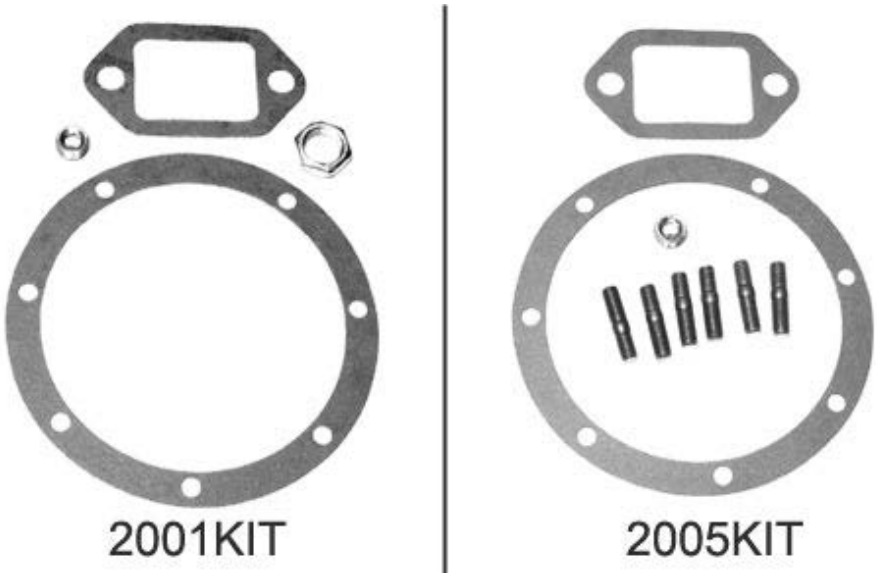


SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group
RW4217X	Reman. Water Pump for Mack E−7 Engines	316GC548M2X	360GB251AM	Metric Housing Stamped Impeller 3 Groove 7−1/4" Diameter Pulley	24.5 lbs.	1	WP1071
RW4218X	Reman. Water Pump for Mack E−7 Engines	316GC548MX	360GB251AM	Metric Housing Stamped Impeller 3 Groove 5−1/2" Diameter Pulley	20.0 lbs.	2	WP1071
RW4220X	Reman. Water Pump for Mack E−7 Engines	Base 316GC284	360GB251AM	Metric Housing Stamped Impeller Base Pump with 6−19/64" shaft length No Pulley	13.0 lbs.	3	WP1070
RW4221X	Reman. Water Pump for Mack E−7 Engines	Base 316GC285	360GB251AM	Base Pump with 7−1/4" shaft length No Pulley	13.0 lbs.	3	WP1080
RW4222X	Reman. Water Pump for Mack E−7 Engines	316GC551M3X	360GB251AM	Multi−Groove 5" Diameter Pulley	−	4	WP1071
RW4223X	Reman. Water Pump for Mack E−7 Engines	316GC548M4X	360GB251AM	3 Groove 6−5/8" Diameter Pulley	−	1	WP1071
RW4224X	Reman. Water Pump for Mack E−7 Engines	316GC4108MX	360GB251AM	With Pulley	−	6	WP1081
RW4226X	Reman. Water Pump for Mack E−7 Engines	316GC551M2X	360GB251AM	Metric Housing Multi−Groove 5−1/2" Diameter Pulley	24.0 lbs.	7	WP1071
RW4227X	Reman. Water Pump for Mack E−7 Engines	316GC551MX	360GB251AM	Multi−Groove 6" Diameter Pulley	−	8	WP1071
RW4229X	Reman. Water Pump for Mack E−7 Engines	316GC552M2X	−	Cast Multi−Groove Pulley	24.0 lbs.	5	WP1081

ACET Engines

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Core Group
RW2008X	Reman. Water Pump for Mack ACET Engines	315GC3193	2739−17	Pulley 5.3" Diameter Smooth	14 lbs.	WP1037
RW2009X	Reman. Water Pump for Mack ACET Engines	316GC3196	2738−17	Pulley 5.9" Diameter Smooth	14 lbs.	WP1037

Installation Kits

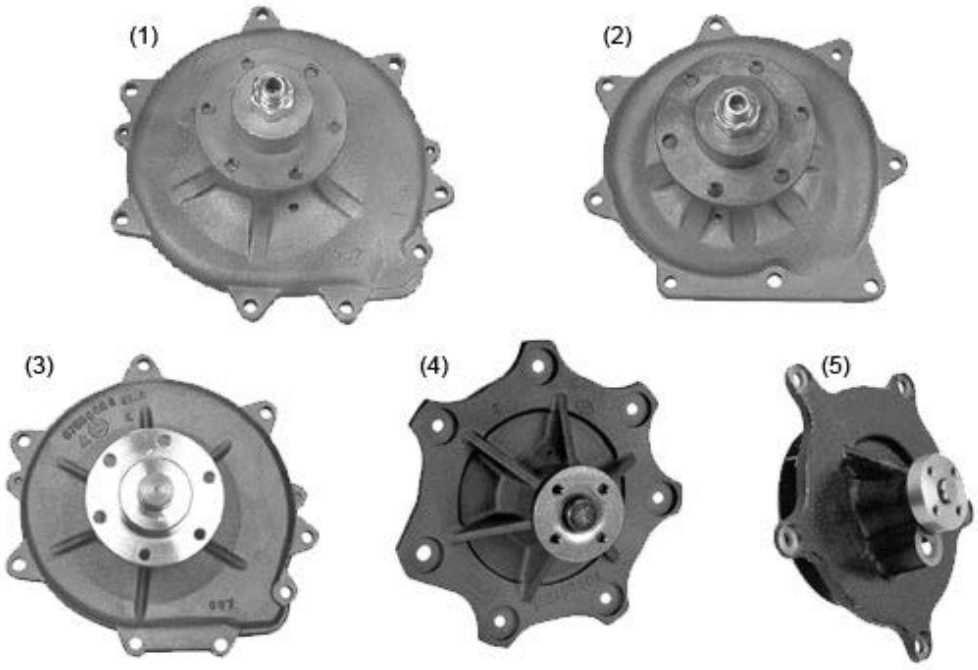


SKU#	Product Description	Application
2001KIT	Gasket Kit for Mack ENDT 675, 676 & EMS−6 Engines Water Pump	RW2000, RW2000X, RW2001, RW2001X, RW2002, RW2002X, RW4215X, RW6215
2005KIT	Gasket Kit for Mack ENDT675, 676 & EMS−6 Engines Water Pump	RW2005X, RW2006X, RW4209X, RW4210X, RW6214, RW6216, RW6217

Mercedes

SKU#	Product Description	Manufacturer's Number	Application	Approximate Weight	Picture Number
RW1912	New Water Pump for Mercedes 2.7L	5138057AA	2004−2006 Dodge Sprinter 2500, 3500	3.9 lbs.	
RW2044	New Water Pump for Mercedes MBE904/924	5138057AA	MBE924 4.8L MBE904 4.3L	26 lbs.	−
RW6355	New Water Pump for Mercedes OM366, OM366A, OM366LA	A366 200 5901 355 200 5901	OM366, OM366A, OM633LA	16 lbs.	−

DT360, 414, 415, 466 & DTA360 Engine

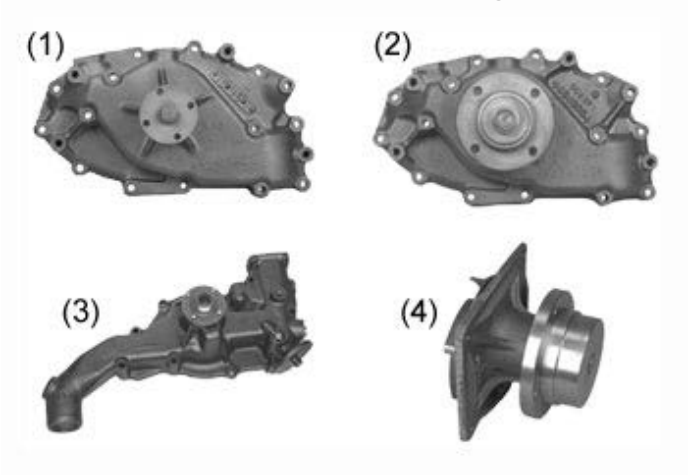


Installation Kit listed later in this section

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW1190	New Water Pump for Navistar DT466 Engine	685155C92	677856C1	Belt Driven Conventional Cab Pulley Not Supplied	19.2 lbs.	1	−	−
RW1190RX	Reman. Water Pump for Navistar DT466 Engine − CoreFreeÂ™	685155C92	677856C1	Belt Driven Conventional Cab Pulley Not Supplied	19.2 lbs.	1	−	RW1190
RW1190X	Reman. Water Pump for Navistar DT466 Engine	685155C92	677856C1	Belt Driven Conventional Cab Pulley Not Supplied	19.2 lbs.	1	WP1016	RW1190
RW1191	New Water Pump for Navistar DT466 Engines	680899C92	677137C1	Belt Driven Cab Over Pulley Not Supplied	17.1 lbs.	2	−	−
RW1191X	Reman. Water Pump for Navistar DT466 Engines	680899C92	677137C1	Belt Driven Cab Over Pulley Not Supplied	17.1 lbs.	2	WP1017	RW1191
RW1303X	Reman. Water Pump for Navistar DT466, DT414, & DT456 Engines	673162C94	675806C2	Belt Driven Press−On Hub	18.0 lbs.	3	WP1017	−
RW1304RX	Reman. Water Pump for Navistar DTA360 & DT466 Engines − CoreFreeÂ™	1815538C91	677856C3	Belt Driven Bolt On Hub Left Hand Thread Pulley Not Supplied	22.0 lbs.	1	−	RW6307

RW1304X	Reman. Water Pump for Navistar DTA360 & DT466 Engines	1815538C91	677856C3	Belt Driven Bolt On Hub Left Hand Thread Pulley Not Supplied	22.0 lbs.	1	WP1016	RW6307
RW1310X	Reman. Water Pump for Navistar DT360 & DT466 New Generation Engines	1817687C92	1821935C1 1821935C3	Stamped Steel Impeller	10.0 lbs.	4	WP1060	RW6313
RW6307	New Water Pump for Navistar DTA360 & DT466 Engines	1815538C91	677856C3	Belt Driven Bolt On Hub Left Hand Thread Pulley Not Supplied	22.0 lbs.	1	–	–
RW6311	New Water Pump for International DT466 & DT466E Engines	1842664C92	1841765C1	Bolt on Pulley 5 Bolt Pump	3.5 lbs.	5	–	–
RW6313	New Water Pump for Navistar DT360 & DT466 New Generation Engines	1817687C92	1821935C1 1821935C3	Stamped Steel Impeller	10.0 lbs.	4	–	–

6.9, 7.3, 9.0 Liters & DT444E Engine

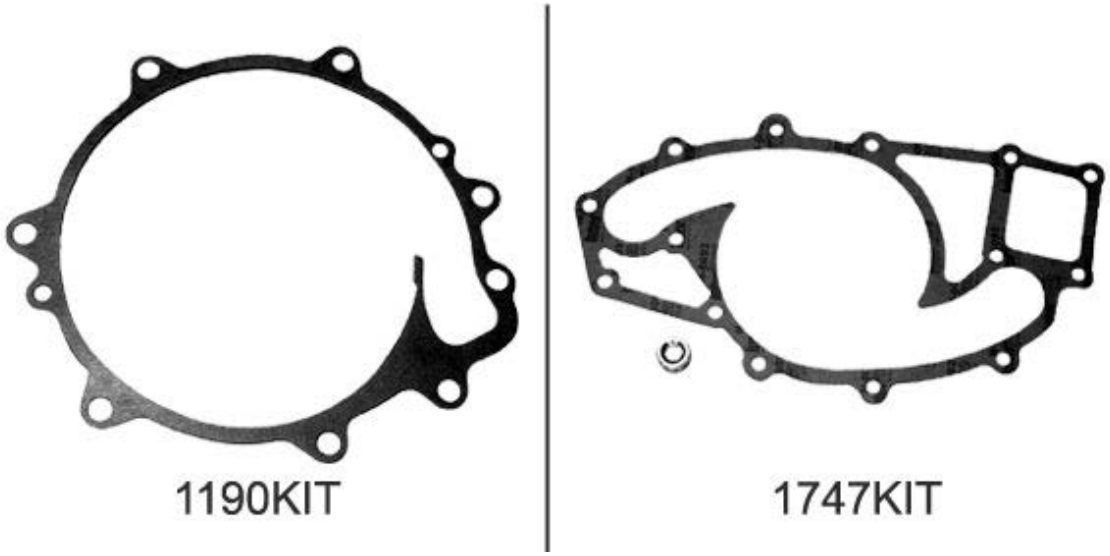


Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group	New Part #
RW1747	New Water Pump for Navistar 6.9 & 7.3 Liter Engines	1809374C91	446430C1	Belt Driven 2−5/8" Hub O.D. Pulley Not Supplied	17.0 lbs.	1	−	−
RW1747X	Reman. Water Pump for Navistar 6.9 & 7.3 Liter Engines	1809374C91	446430C1	Belt Driven 2−5/8" Hub O.D. Pulley Not Supplied	17.0 lbs.	1	WP1019	RW1747
RW1757	New Water Pump for Navistar 6.9 & 7.3 Liter (Ford Truck) Engines	E4TZ−8501C (E9TZ−8501B)	446430C1	Belt Driven 4−1/2" Hub O.D. Pulley Not Supplied	18.8 lbs.	2	−	−
RW1757RX	Reman. Water Pump for Navistar 6.9 & 7.3 Liter (Ford Truck) Engines − CoreFreeÂ™	E4TZ−8501C (E9TZ−8501B)	446430C1	Belt Driven 4−1/2" Hub O.D. Pulley Not Supplied	18.8 lbs.	2	−	RW1757
RW1757X	Reman. Water Pump for Navistar 6.9 & 7.3 Liter (Ford Truck) Engines	E4TZ−8501C (E9TZ−8501B)	446430C1	Belt Driven 4−1/2" Hub O.D. Pulley Not Supplied	18.8 lbs.	2	WP1018	RW1757
RW4114X	Reman. Water Pump for Navistar 7.3 Liter DT444E Engine	1831676C91 1823669C92 1831676C92	1822851C1	Direct Injection	26.8 lbs.	3	WP1062	RW6114
RW6114	New Water Pump for Navistar 7.3 Liter DT444E Engine	1831676C91 1823669C92 1831676C92	1822851C1	Direct Injection	26.8 lbs.	3	−	−
RW6306	New Water Pump for Navistar 9.0 Liter Engines	1700594C91 1700594C92	489173C1	Belt Driven	10.3 lbs.	4	−	−
RW6306X	Reman. Water Pump for Navistar 9.0 Liter Engines	1700594C91 1700594C92	489173C1	Belt Driven	10.3 lbs.	4	WP1049	RW6306

Installation Kits

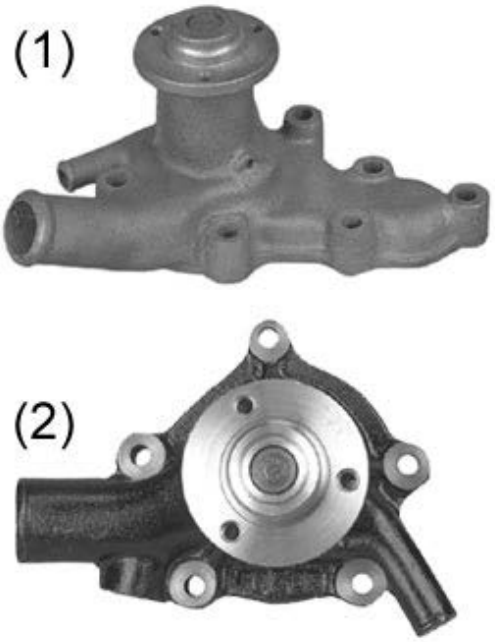


SKU#	Product Description	Application
1190KIT	Gasket Kit for Navistar Engines Water Pump	RW1190, RW1190X, RW1303X, RW1304X
1747KIT	Gasket Kit for Navistar 6.9 & 7.3 Liter Engines Water Pump	RW1747, RW1747X, RW1757, RW1757X

MaxxForce Diesel 9L, 10L

SKU#	Product Description	Manufacturer's Number	Casting Number	Description	Picture Number
RW2052	New Water Pump for International MassForce 9L, 10L	1889116C92	MassForce Diesel 9L	-	-

Isuzu 2.2 Liter and C−201 Engine



Notes:

1) Installation Kit listed later in this section.

SKU#	Product Description	MFG. #	Casting #	Description	Approx. Weight	Pic. #	Core Group
RW1199	New Water Pump for Thermo−King Isuzu C−201 Engine	11−4576	PH374	−	9.6 lbs.	1	−
RW1199X	Reman. Water Pump for Thermo−King Isuzu C−201 Engine	11−4576	PH374	−	9.6 lbs.	1	WP1024
RW1351	New Water Pump for Thermo−King Isuzu 2.2 Liter Engine	11−5858	M−1/M−2	with Threaded Auxiliary Port	6.8 lbs.	2	−
RW1351X	Reman. Water Pump for Thermo−King Isuzu 2.2 Liter Engine	11−5858	M−1/M−2	with Threaded Auxiliary Port	6.8 lbs.	2	WP1024
RW1352X	Reman. Water Pump for Thermo−King Isuzu 2.2 Liter Engine	11−5858	M−1/M−2	without Auxiliary Port	6.7 lbs.	2	WP1024
RW6352	New Water Pump for Thermo−King Isuzu 2.2 Liter Engine	11−5858	M−1/M−2	without Auxiliary Port	6.7 lbs.	2	−

Installation Kit

SKU#	Product Description	Application
1351KIT	Gasket Kit for Thermo−King Isuzu 2.2 Liter Engine Water Pump	RW1351X

Isuzu: Yanmar 482, 486 Engines

SKU#	Product Description	Manufacturer's Number	Casting Number	Description	Approximate Weight	Picture Number
RW1910	New Water Pump for Thermo−King Yanmar 482, 486	11−9499	−	Thermo King, Yanmar 482, 486 Engines		

Volvo

SKU#	Product Description	MFG#	Casting #	Notes	Approx. Weight	Core Group
RW4786X	Reman. Water Pump for Volvo D12C Engine	20431135, 20713787, 20734268 Volvo Reman. #85000786	20713184	Pressed on Gear and Impeller	12 lbs.	WP1086

Carrier/Kubota/Bobcat

SKU#	Product Description	Manuracturer's Number	Casting Number	Description	Approximate Weight	Picture Number
RW1799	New Water Pump for Carrier/Kubota/Bobcat	15521−73−03	−	Carrier Refrigeration/Kubota Tractor/Bobcat Loader	−	−

Isuzu: 4BD2 Engines

Features:

- RW1907 without bypass tube
- RW1908 with bypass tube

SKU#	Product Description	Manufacturer Number	Casting #	Application	Approximate Weight
RW1907	New Water Pump for Isuzu Engines	2911463250	–	1992 – 1998 NPR 3.9L	
RW1908	New Water Pump for Isuzu Engines	2911463250	–	1992–1998 NPR 4BD2	

Dodge: Light/Medium Duty Engines

SKU#	Product Description	Manufacturer's Number
RW1438	New Water Pump for 1994−2003 Dodge 5.2, 5.9L engines	
RW181747	New Water Pump for 2004−2008 Dodge 5.2, 5.9L engines	

General Motors: Light/Medium

SKU#	Product Description	Manufacturer's Number
RW1652	New Water Pump for Chevy/GMC 1999−2006 5.3, 6.0, 6.2L	
RW1939	New Water PUmp for Chevy/GMC 2007−2013 5.3, 6.0, 6.2L Light/Medium Duty	12600767

Ford: Light/Medium Duty

SKU#	Product Description	Manufacturer's Number
RW1694	New Water Pump for Ford 1997−2013 4.6L, 5.4L Light/Medium Duty Engine	3L3Z−8501−CA

INSTALLATION

GENERAL INFORMATION

To avoid problems when installing your water pump, follow the simple, step−by−step instructions below. Handle your replacement water pump with care. If the unit is dropped, the internal ceramic seal may crack. NEVER STRIKE THE SHAFT, as this can damage the shaft or bearings. Always check the fan, pulleys, belts, and fan clutch. **CAUTION: FOR YOUR PROTECTION, CLOSE HOOD WHEN REVVING ENGINE.**

INSTALLATION INSTRUCTIONS

1. Flush cooling system if it shows signs of corrosion. Dirt particles in the coolant can cause seal failure. Clean the water pump impeller cavity and gasket surface. Also, check the radiator cap, thermostat, and the fan belt for wear or improper function. Replace if necessary.
2. Carefully install the replacement water pump. NEVER STRIKE THE SHAFT. Tighten all bolts in a staggered sequence.
3. Turn pump shaft by hand to check for free rotation. If the shaft does not turn freely then recheck your installation.
4. Check fan belt tension. Belt should deflect 1/2" to 3/4". If the belt is too tight the pump will be damaged.
5. Reconnect hoses and refill cooling system. Be sure there are no leaks.
6. Check the fan blade for bent blades, loose rivets, or any other damage. NEVER STRAIGHTEN A BENT BLADE. Replace the entire fan when defects are found.
7. Check the fan clutch (if installed) for loss of oil, looseness or wobble. If there is more than 1/4" of play at the blade edges the bearing is bad and the fan clutch needs to be replaced. A bad or misaligned clutch will damage a water pump.
8. Check fan clearances at blade tip between fan and shroud, and between fan and radiator.
9. Check motor mounts for wear or splitting. Check bolt tightness.
10. Start the engine and run until normal operating temperature is reached. Check for leaks and unusual vibration. NEVER STAND IN LINE WITH OR NEAR FAN WHEN REVVING THE ENGINE. THE HOOD SHOULD BE CLOSED WHEN REVVING THE ENGINE.

IMPORTANT!

Leaks, loose fan belts or defective fan clutches cause cooling system problems more often than defective water pumps. Water pump failure can be caused by defective, crooked, or unbalanced fans; defective or unbalanced fan clutches; excessive (too−tight) fan belt tension; dirty cooling systems; insufficient clearance between the fan and the shroud or radiator; loose or broken motor mounts. MANY FUTURE PROBLEMS CAN BE AVOIDED IF EVERYTHING IS CHECKED OUT WHEN THE WATER PUMP IS REPLACED.

ITEMS TO REMEMBER

- Handle the replacement water pump with care.
- Always use a new gasket.
- All pumps are greased at the factory − do not add grease.
- Drain and flush the cooling system.
- Check hoses, clamps, thermostat, and radiator cap. Replace if necessary.
- Check the fan belt. A glazed belt will slip at high RPM. Overtightening will cause damage to the water pump (stress on bearing, broken shaft, broken housing).
- The fan clutch should be free running and in proper balance.
- Check the fan for loose rivets, bent blades, cracked blades, wobble and shroud clearance.

TROUBLESHOOTING

BROKEN WATER PUMP BEARINGS OR SHAFTS ARE CAUSED BY ONE OR MORE OF THE FOLLOWING CONDITIONS:

EXCESSIVE ENGINE ACCELERATION. Rapid engine accelerations, particularly in low gear during quick getaways, place heavy overloads on the bearing. Any minor imbalance can be amplified during rapid acceleration and high speeds, which can result in severe whipping action and sudden fractures.

DEFECTIVE FAN. Relatively minor fan defects can impose substantial strain on the water pump shaft at 3000 to 5000 RPM. A small piece of fan blade missing can result in tremendous adverse centrifugal force. Fatigue cracks near the rivets can cause blade shift or vibration. Bent fan blades can also cause serious load problems.

FAN NOT SQUARE WITH SHAFT. It is extrememly important that the fan is mounted square to the center line of the shaft. If it is not square, the fan will wobble, causing vibrations to develop. This is particularly important where shaft spacers are used to move the fan closer to the radiator. The mounting bolts, if not properly torqued, will cause the fan to be tilted and may result in permanent deformation of the spacer.

BENT OR CRACKED PULLEYS. Damaging vibration can result from bent or cracked pulleys. This usually happens when a pulley is improperly handled or installed.

FAN BELT TOO TIGHT. An overtightened fan belt can overload the bearing, resulting in shorter than ordinary fatigue life. It also causes bending of the shaft. Sudden accelerations cause large unbalanced loads, excessive shaft bending and early shaft failure.

SHAFT FAILURE CAUSED BY IMBALANCE

Examination of a failed water pump shaft will reveal the probable cause of failure. Discoloration around the fracture indicates unusually high temperatures caused by centrifugal forces due to imbalance. A small amount of imbalance can result in tremendous pressure on the shaft at operating RPM. The overload is concentrated at one point of the shaft and eventually the shaft snaps.

Lack of discoloration at the break indicates no heat buildup occured before a sudden vibratory overload of the shaft caused a clean, instantaneous fracture. Rapid acceleration of the engine coupled with imbalance in the shaft is the cause. Small vibrations can be amplified during rapid acceleration and when combined with other engine vibrations can result in an instantaneous shaft fracture.

PREVENT WATER PUMP FAILURE WITH THESE COMMON SENSE RULES

ALWAYS TIGHTEN FAN BELTS PROPERLY. Drive belt tension should be 1/2" to 3/4" deflection with light pressure applied midway between pulleys.

NEVER HAMMER BEARING SHAFT. Often it is necessary to tap the pump to get it properly aligned during installation. It is very important not to tap on the shaft, as this results in ball race and ball damage. This can cause anything from a noisy pump to an early failure and even a fracture of the shaft.

BE SURE FAN IS SEATED SQUARE WITH THE PUMP SHAFT AND FAN CLUTCH IS NOT DEFECTIVE. Fan wobble during rotation will cause the shaft to vibrate, contributing to bearing or shaft failure.

ALWAYS REPLACE DAMAGED FANS. Never straighten bent blades; replace the complete fan. Stress cracks and loose rivets in the blades can go undetected and cause a catastrophic failure. If a fan breaks, it can cause serious personal injuries and vehicle damage.

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