

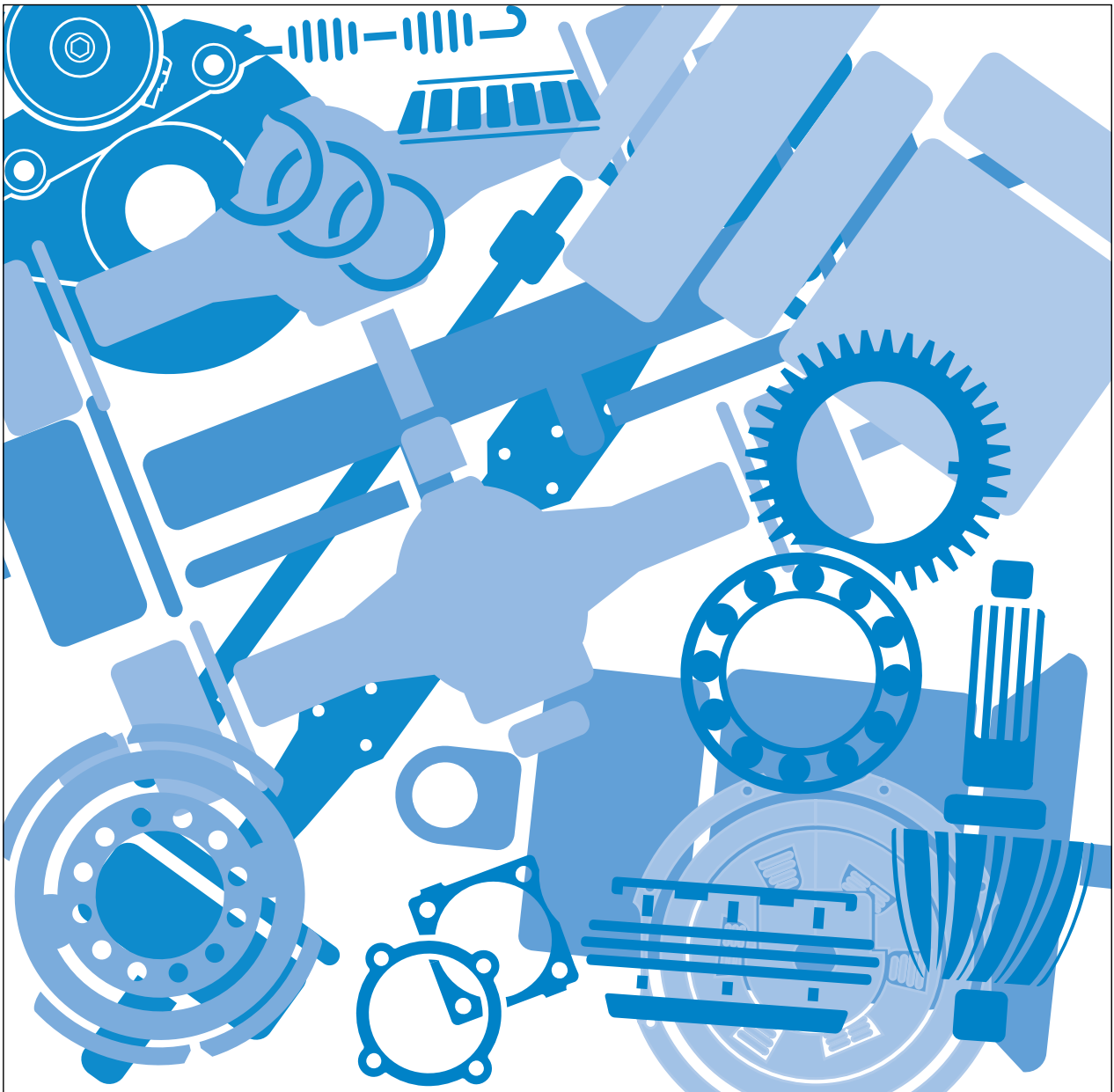
# Roadranger®

Eaton® Fuller® Heavy Duty Transmissions



One Great Drivetrain from Two Great Companies

Illustrated Parts List RTLO-11118A-MT Jun 2005



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**Shift Bar Housing**  
Roadranger Valve

**Air System**  
Range Valve Assembly  
Air Filter Regulator

**Shift Bar Housing**  
Shift Bar Housing Assembly

**Auxiliary Section**  
Range Cylinder  
Splitter Cylinder

**Front Section**  
Case Assembly  
Mainshafts/Countershafts

**Front Section**  
Input Shaft  
Drive Gear

**Front Section**  
Torque Converter Assy  
Stator Support Assy

**Auxiliary Section**  
Aux Case Assembly  
Aux Mainshaft

**Auxiliary Section**  
Auxiliary Countershaft

**Front Section**  
Torque Converter Hsg Assy  
Hydraulic Valve  
Oil Transfer Tube  
Oil Pan

**Front Section**  
Oil Line Return

**Front Section**  
Inertia Brake  
Reverse Idler

20002-4-94

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## How To Use The Illustrated Parts List

### Using Model Designation or Nomenclature

- This information provides a guideline to assist you in identifying the transmission designation assigned to a transmission model - information vital to identifying and ordering parts.

### Kits and Assemblies (K/A's)

- Kits and Assemblies contain groups of individual or assembled parts developed for optimal replacement or repair of a service problem.
- Kits and Assemblies are shown with applicable parts groupings in the parts listings.

### Identifying Kits and Assemblies

A- Part numbers beginning with the letter 'A' are pre-assembled Production Assemblies

K- Part numbers beginning with the letter 'K' are kits that are not assembled

S- Part numbers beginning with the letter 'S' are pre-assembled Service Assemblies

- Note: Some Production Assemblies do not begin with a letter prefix (Midrange only).

### Illustrations

- Illustrations show parts in assembly groups.
- Item numbers on illustrations correspond with parts listings on pages adjacent to the illustration.
- Notes are included on illustrations where additional information is needed.

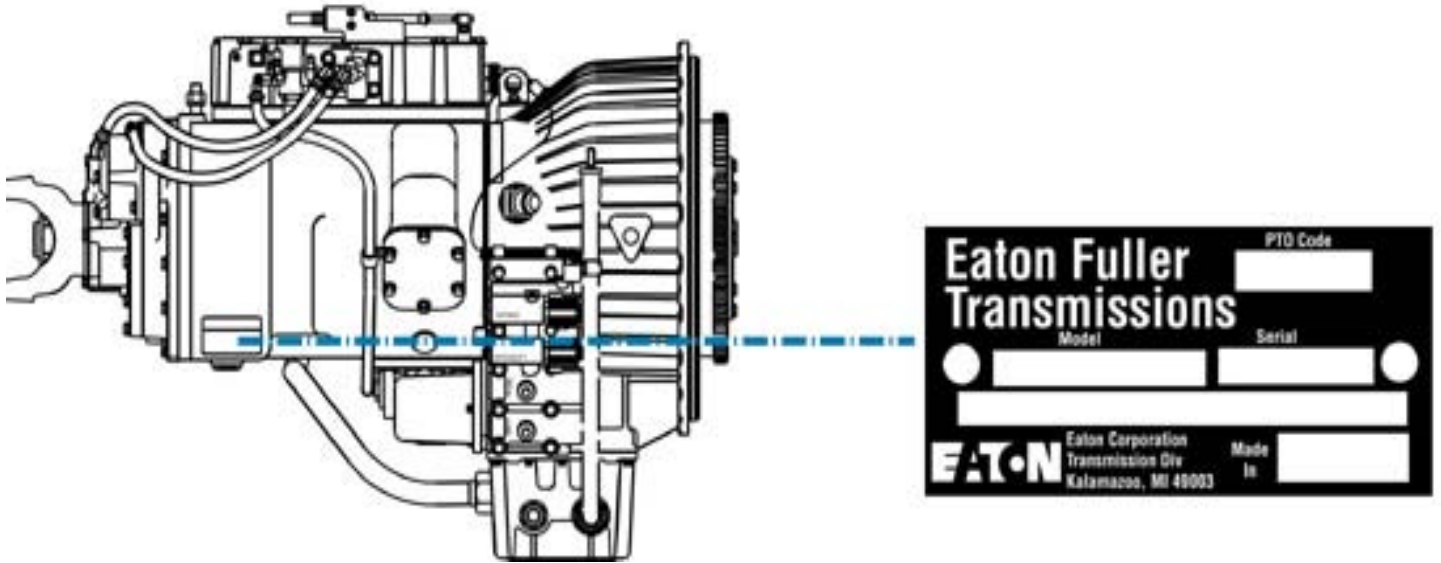
### Parts Listing

Parts listings are defined by parts groupings and are broken down by service assemblies. Parts listings identify a part for servicing with the following categories

- **Item Number** - corresponding with numbers on illustrations for part identification.
- **Current Part** - identifies part as it is available for service.
- **Description** - specifies part name or description.
- **Replaced Part** - quantity quantity required for assembly.
- **Quantity** - defines unique characteristics or requirements.
- **Notes** - indicates Kits or Assemblies that contain a particular part.
- **Kits/Assy's Where Used**

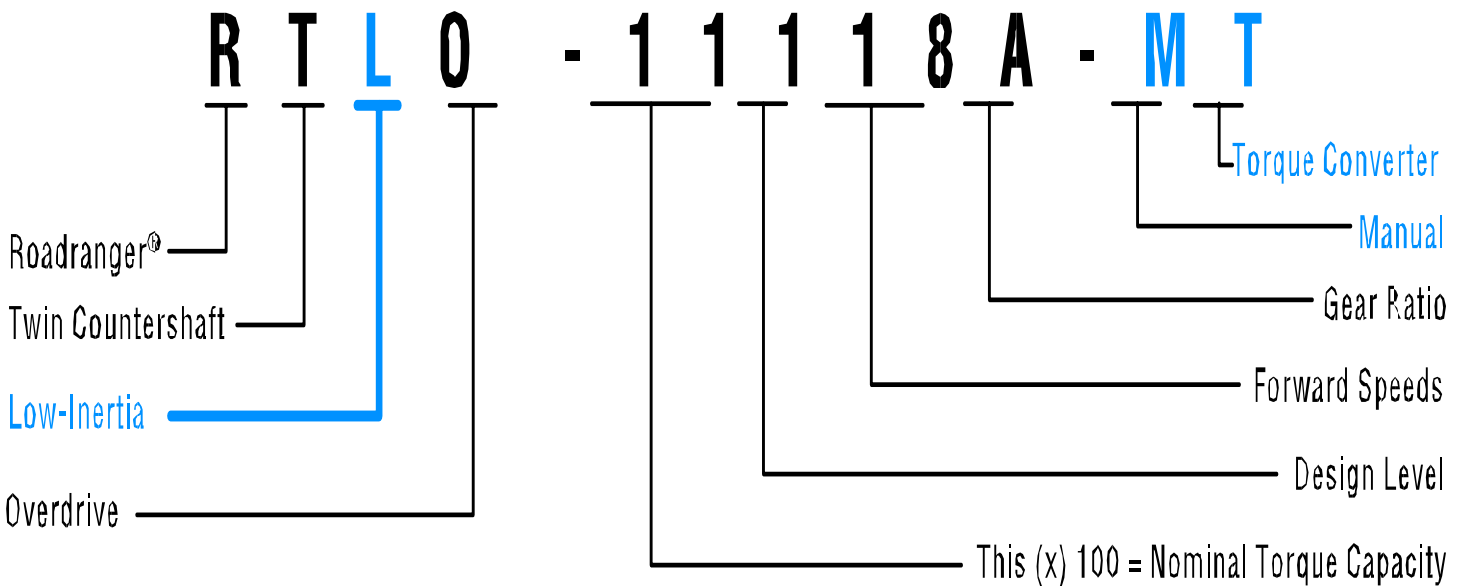
## Locating Transmission Tag and Identifying Model Designation

Transmission model designation, and other transmission information, are stamped on the transmission tag. To identify the transmission model designation (nomenclature), locate the tag on the transmission and then locate the model designation number as shown.

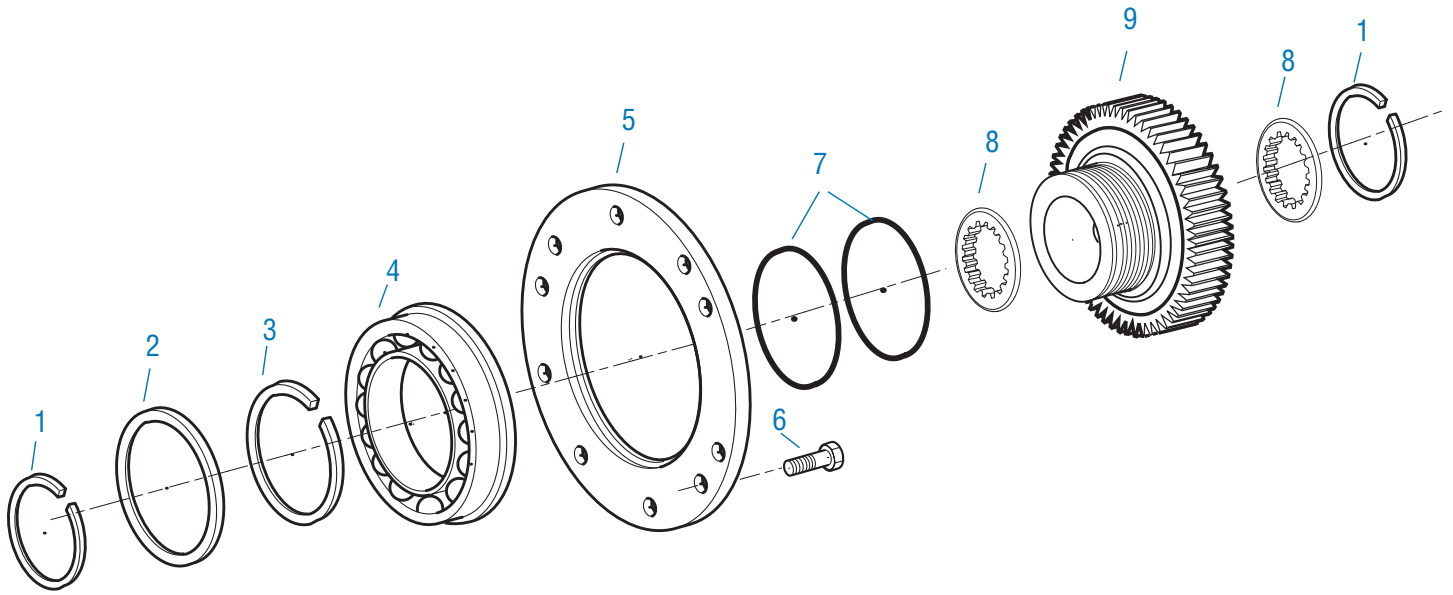


## Using Model Designation or Nomenclature

The model designation or nomenclature assigned to a transmission model provides information concerning transmission torque capacity, forward speeds, ratio set, shift bar housing and other provisions and options. Use the following guidelines to identify your transmission model designation. This information is useful when ordering parts.



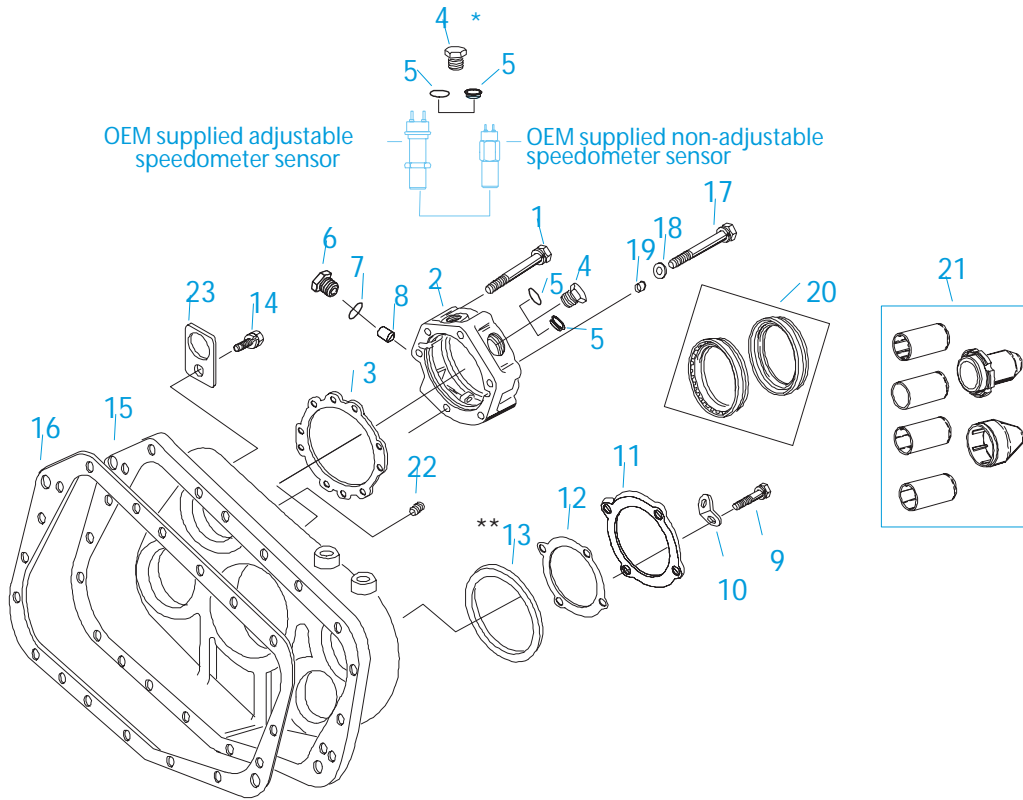
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10481-12/92 Aux DG

### AUXILIARY DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	16763	SNAP RING		2		K-3585 ,K-3586 ,K-3587
2	21320	SNAP RING RETAINER		1		K-3189
3	16628	SNAP RING		1		K-3587
4	5566507	BEARING	5566504	1		K-3585 ,K-3586
5	16138	BEARING RETAINER		1		
6	X-8-645	CAPSCREW	X 8 612	1	3/8"-16X1"	
7	17453	-O- RING		2		K-3189 ,K-3585 ,K-3586
8	21599	WASHER		2		
9	K-3189	REPLT KIT-DRIVE GEAR	4300467 ,4303558 ,K - 2312	1		



\* Note Items 4 & 5 / Magnetic Speedometer Openings:  
 Use 13679 "O" ring w/ OEM supplied adjustable speedometer sensor  
 and 20225 "O" ring w/ OEM supplied non-adjustable speedometer sensor or Eaton part #20224 Plug

\*\*See Service Manual for Proper Shimming Procedure  
 20526-3-94 Aux Case CE-18

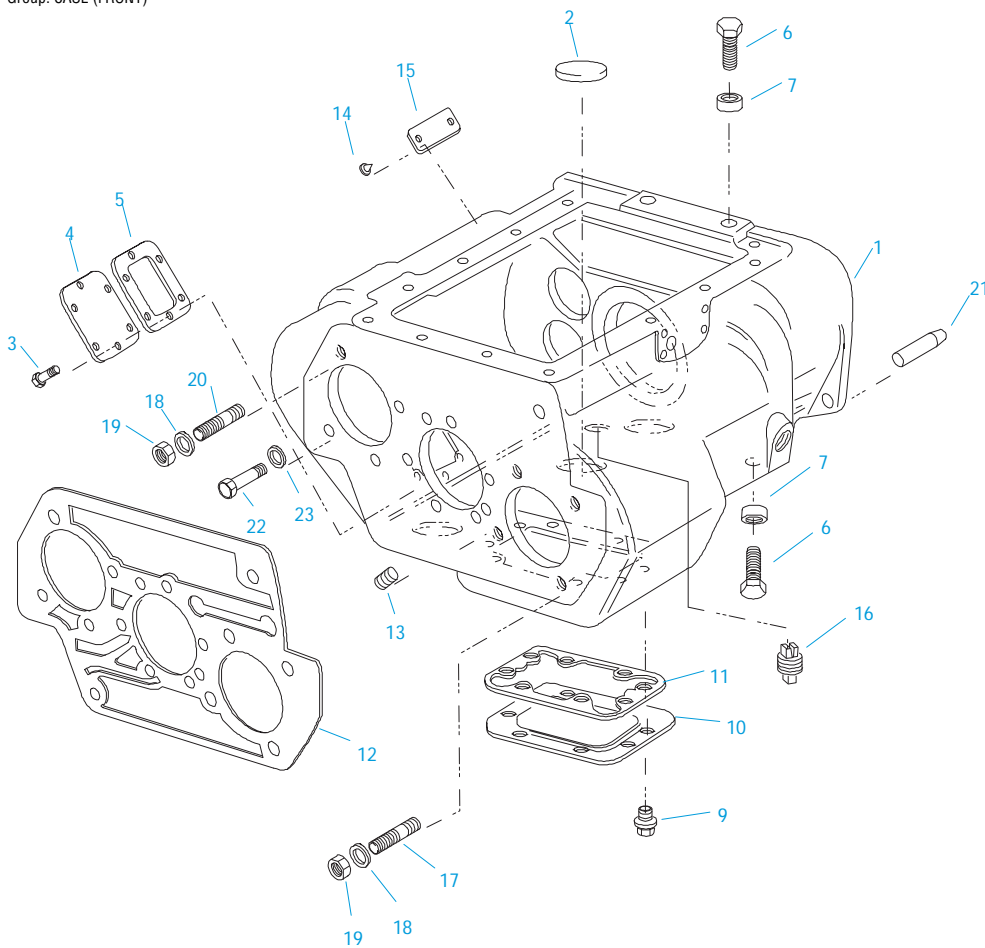
### CASE (AUX)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8L-611	CAPSCREW		5	3/8"-16X3-1/4"	
2	S-2119	REAR BRG COVER ASSY	20048 ,22045 ,4302009 ,4302031 ,S - 1558 S - 1560	1	EXTENDED	
3	15532	GASKET		1		K-1603 ,K-2262 ,K-2870 ,S-2119
4	20224	PLUG-MAGNETIC		2		S-2119
5	13679	-O- RING		1	USE W/OEM SUPPLIED ADJUSTABLE SPEEDOMETER SENSOR	
5	20225	-O- RING		2	USE W/20224 PLUG OR OEM SUPPLIED NON-ADJUSTABLE SPEEDOMETER SENSOR NOT TO BE USED WITH 4301954 SEAL	
5	4301954	SEAL		2	O-RING NOT REQUIRED	S-2119
6	20226	PLUG-MECHANICAL		1		S-2119
7	14142	-O- RING		1		S-2119
8	7992	BUSHING		1		S-2119
9	X-8L-604	CAPSCREW		8	3/8"-16X1-1/4"	
10	20815	LIFTING EYE		2		
11	4300925	REAR BEARING COVER	4300185	2		
12	4300186	GASKET		2		K-1603 ,K-2870
13	K-2430	SHIM KIT	21452	1		K-2871 ,K-2873
14	X-8L-602	CAPSCREW		9	3/8"-16X1-1/2"	
14	X-8L-604	CAPSCREW		8	3/8"-16X1-1/4"	
14	X-8L-614	CAPSCREW		1	3/8"-16X2"	
15	S-2986	REAR HOUSING CASE ASSY	4300181 ,4300863	1		
16	14335	GASKET		1		K-1603 ,K-2870

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
17	X-8-611	CAPSCREW		1	3/8"-16X3-1/4"	
18	17106	GASKET		1		K-2262 ,K-2870 ,S-2119
19	19709	COLLAR		1		K-1603 ,K-2262 ,K-2870 ,S-2119
20	K-2262	OIL SEAL W/SLINGER	19109 20807 20808	1		K-2871 ,K-2873
21	K-3651	OIL SEAL TOOL KIT		1		
22	X-12-405	PIPE PLUG		1		
23	23646	LIFTING EYE		1		



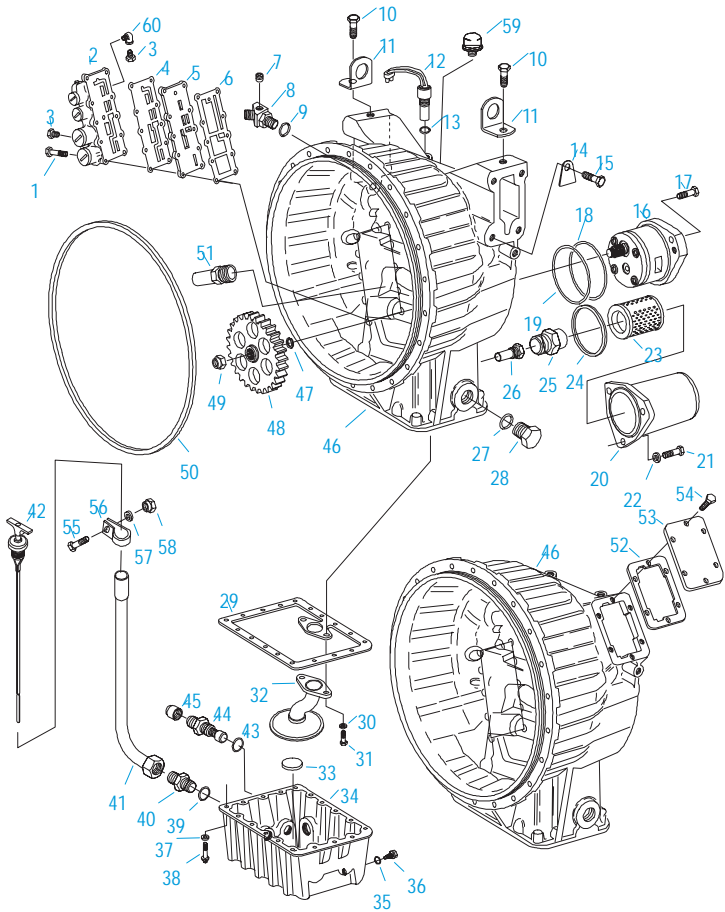
Group: CASE (FRONT)



20446-3-94

## CASE (FRONT)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2278	CASE ASSY	4300592	1		
2	14373	MAGNET		3		S-2278
3	X-8-686	CAPSCREW		6	3/8"-16X3/4"	
4	14575	PTO COVER	4302254	1		
5	4305309	GASKET	1684	1		K-2388 ,K-2870 ,K-2906
6	X-8-1005	CAPSCREW		4	5/8"-11X1-1/4"	
7	20814	SPACER		4		
9	X-8-725	CAPSCREW		8	7/16"-14X7/8"	
10	4302809	PTO COVER	16596 ,4300571	1		
11	4305310	GASKET	4302810	1		K-2870
12	22507	GASKET		1		K-2388 ,K-2504 ,K-2625 ,K-2870 K-3226
13	X-12-802	PIPE PLUG		1	1/2"	
16	X-12-1207	PIPE PLUG	X12 1202 ,X12 1206	1	3/4" MAGNETIC	
16	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	
17	4302708	STUD	5966	4		
18	X-10-1005	WASHER	X 3 1000 ,X10 1000 ,X10 1004	6	1.23 X 6.60	
19	X-1-1005	NUT	X 1 1000	6	5/8"-18	K-2504 ,K-2625
20	22916	STUD		2		
21	18128	PIN		2		
22	X-8-808	CAPSCREW		4	1/2"-13X1-1/4"	
23	X-10-801	WASHER		4	1/2"	
24	X-12-2007	PIPE PLUG	X12 2006	1		
24	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	

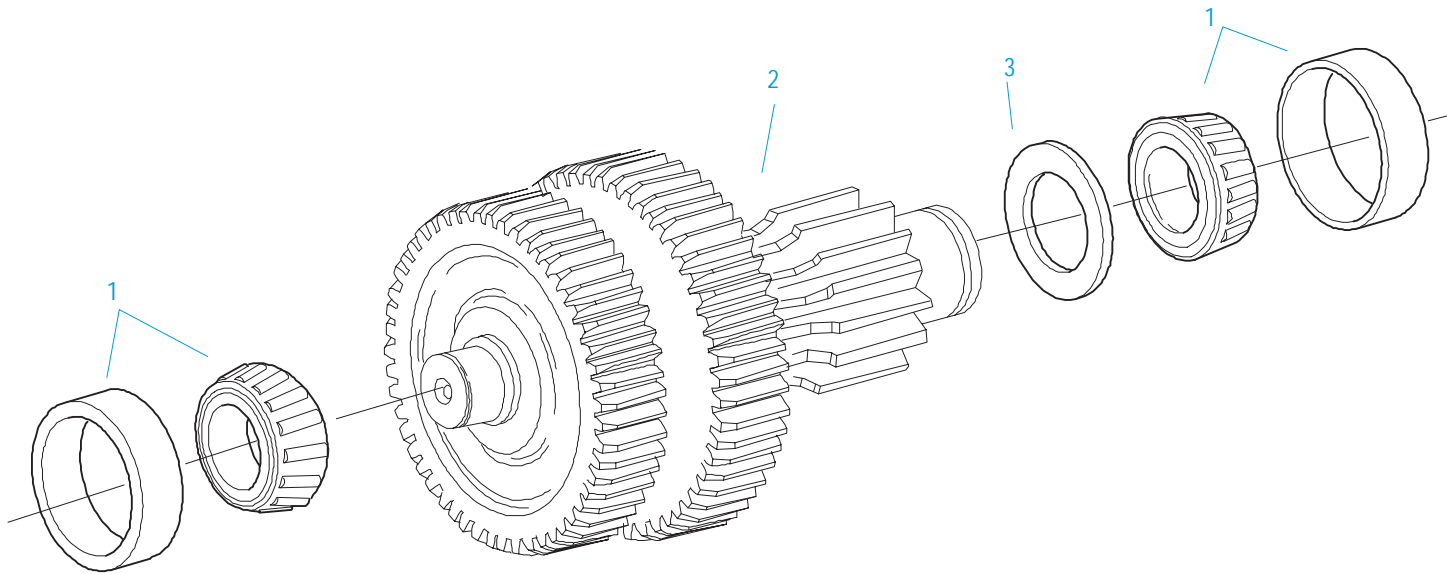


20403-3-94

## CONVERTER HOUSING ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8-6104	CAPSCREW		2	3/8"-16X2-3/4"	
1	X-8L-672	CAPSCREW		6	3/8"-16X3-1/4"	
1	X-8L-626	CAPSCREW		2	3/8"-16X2-1/4"	
2	A-5587	VALVE ASSY		1		
3	X-12-210	PIPE PLUG		4	1/8"	
4	22532	GASKET		1		K-2387R ,K-2388 ,K-2625 ,K-2870
5	23612	PLATE		1		
6	22534	GASKET		1		K-2387R ,K-2388 ,K-2625 ,K-2870
7	X-12-802	PIPE PLUG		1	1/2"	
8	K-3226	ELBOW KIT	4300307	1		
9	23109	-O- RING		1		K-2388 ,K-2625 ,K-2877
10	X-8L-601	CAPSCREW		2	3/8"-16X3/4"	
11	23645	LIFTING EYE		2	90 DEG.	
12	K-2632	ENG SPEED SENSOR KIT	22569	1		
13	22504	-O- RING		1		K-2388 ,K-2625 ,K-2632
14	23573	INSTRUCTION TAG		3		
15	X-8-1202	SCREW		3	3/4"-10X1"	
16	K-2911	OIL PUMP KIT	4300747 ,4302714	1		
17	X-8C-604	CAPSCREW		2	3/8"-16X1-1/4"	K-2504 ,K-2911
18	691342	SEAL RING	5568503	1		K-2388 ,K-2504 ,K-2625 ,K-2911
19	22430	-O- RING		1		K-2388 ,K-2504 ,K-2625 ,K-2911
20	23220	FILTER BOWL		1		
21	X-8-6105	SCREW	X 8 6106	3	3/8"-16X1-1/4"	K-2314

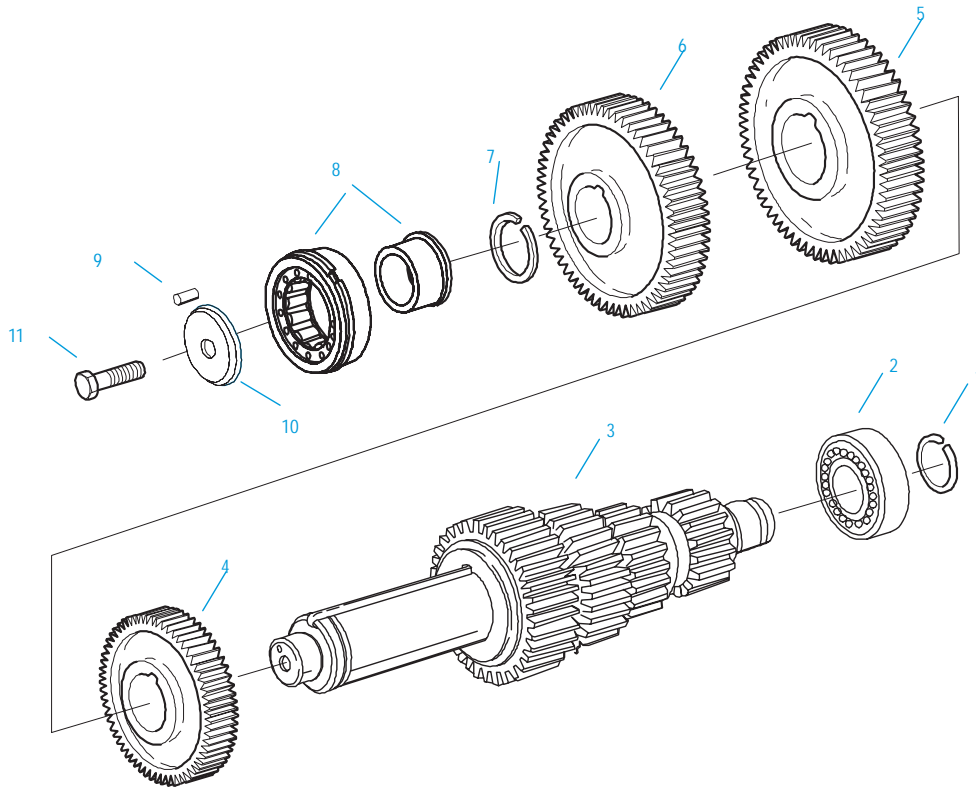
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
22	X-3-607	CONICAL WASHER		3	3/8"	K-2314
23	22510	OIL FILTER		1		K-2314
24	23108	-O- RING		1		K-2314 ,K-2388 ,K-2625
25	22512	NIPPLE		1		
26	A-5732	RELIEF VALVE ASSY		1		K-2625 ,S-2015
27	23029	-O- RING		1		K-2388 ,K-2625
28	23028	PLUG		1		
29	22474	GASKET		1		K-2314 ,K-2388 ,K-2403 ,K-2625 ,K-2870
30	X-3-507	CONICAL WASHER		2	5/16"	
31	X-8-550	CAPSCREW		2	5/16"-18X1" 12 PT	
32	4301601	OIL TRANSFER TUBE	4300434	1		K-2403
33	14373	MAGNET		1		S-2278
34	4300432	OIL PAN		1		
35	4300484	WASHER		1		
36	4300438	DRAIN PLUG		1		
37	X-3-507	CONICAL WASHER		20	5/16"	
38	X-8-550	CAPSCREW		20	5/16"-18X1" 12 PT	
39	23109	-O- RING		1		K-2388 ,K-2625 ,K-2877
40	22431	CONNECTOR		1		
41	5500506	OIL FILL TUBE		1	STANDARD	
42	5501023	DIPSTICK	5501008	1	STANDARD	
43	23029	-O- RING		1		K-2388 ,K-2625
44	A-5754	VALVE ASSY		1		K-2625
45	4300452	CAP		1		
46	K-2625	#1 CONVERTER HSG KIT		1		
46	K-2388	CONVERTER HOUSING KIT	4300323 ,4300377	1	6 BOLT ACCESS	
47	4302219	SNAP RING		1		K-2911
48	4302216	PUMP GEAR		1		
49	X-1-1008	NUT		1	5/8"-18	K-2504 ,K-2625
50	23487	SEAL RING		1		K-2388 ,K-2398 ,K-2504 ,K-2870
51	A-7119	FILTER BYPASS VALVE ASSY	A - 6067 A - 6393	1		K-2387R ,K-2625 ,S-2015
52	4305309	GASKET	1684	1		K-2388 ,K-2870 ,K-2906
53	14575	PTO COVER	4302254	1		
54	X-8-686	CAPSCREW		6	3/8"-16X3/4"	
55	X-8-601	CAPSCREW		1	3/8"-16X3/4"	
56	4300626	CLAMP		1		
57	X-10-605	WASHER		1	3/8"	K-2906
58	X-9-604	NUT		1	3/8"-16	
59	4304602	BREATHING	23605	1	1/4" NPT	
60	12845	ELBOW		2	1/8"	



10441-4/92 Aux CS 13/18 spd

### COUNTERSHAFT & BRGS(AUX)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4302074	BEARING	21343	4		K-3585 ,K-3586 ,S-2970 ,S-2972
2	A-6840	WELDED COUNTERSHAFT ASSY	A - 5747 ,A - 5899	2	C/S 4303902 - D/G 4300783 S/G 4300396	
3	4300184	SPACER		2		

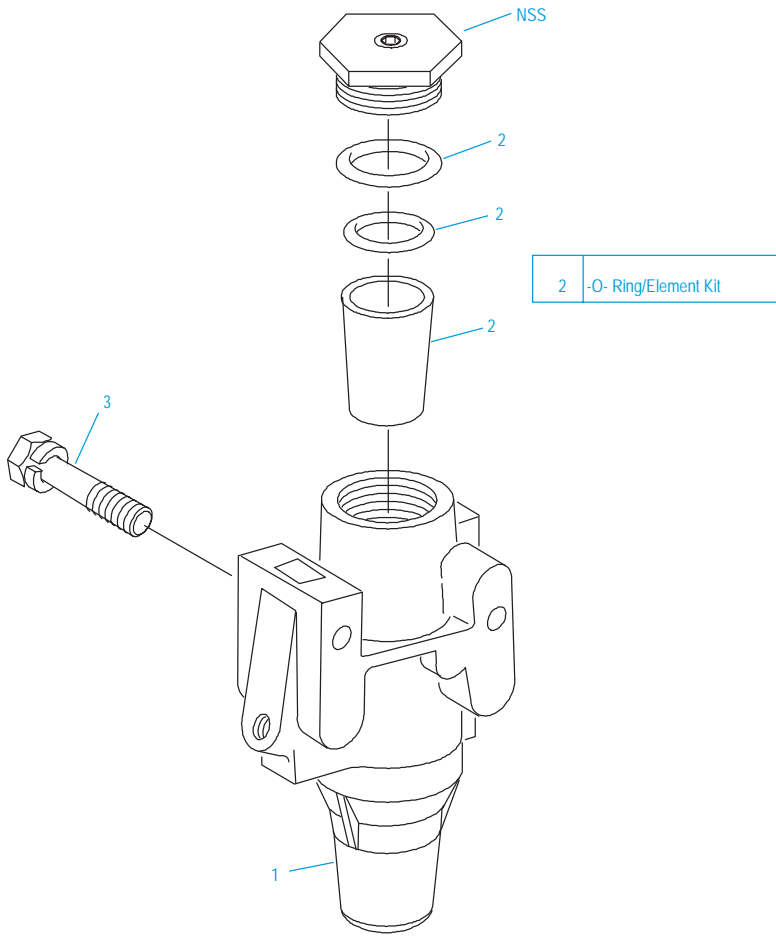


10342-4/92 CS/RTLO

## COUNTERSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14317	SNAP RING		2		K-2433 ,K-2871 ,K-2873
2	14366	BEARING		2		K-2871 ,K-2873
3	A-6689	CNTRSHFT W/1ST & 2ND	A - 5746 ,A - 5873 ,K - 2939 ,K - 2968	2		
4	21588	3RD GEAR-CNTRSHFT		2		
5	15953	PTO GEAR - LOWER		1		
5	20840	PTO GEAR - UPPER		1		
5	16390	SPACER-PTO REPLACEMENT		2	OPTIONAL IF PTO GEARS ARE NOT USED	
6	21586	DRIVE GEAR-CNTRSHFT	22271	2		
7	19198	SNAP RING		2		
8	4304599	BEARING	4302677 4304598	2		K-2871 ,K-2873
9	62511	ROLL PIN		2		A-6340 ,A-6689 ,K-2433
10	4304605	RETAINER	19548	2	ROLL PIN NO LONGER REQUIRED	
11	X-7-1005	CAPSCREW		2	5/8"-18X1-3/4"	
12	4304840	KEY	19673	1	KEY INCLUDED IN COUNTERSHAFT ASSY	A-6689

Group: FILTER REGULATOR



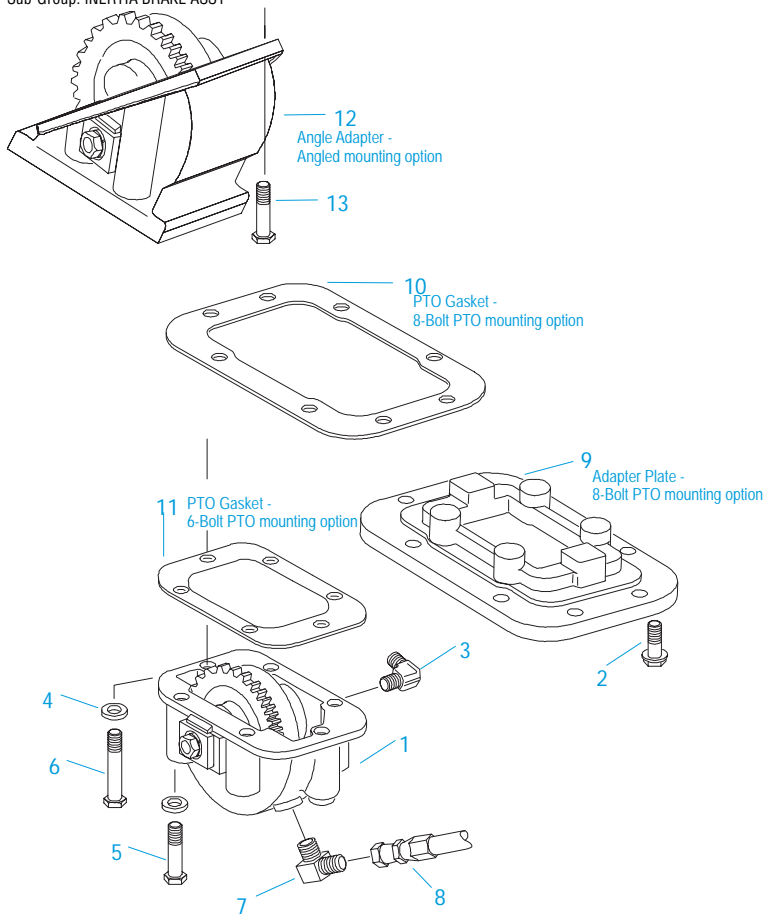
10130-1-92

NSS - Not Sold Separately

## FILTER REGULATOR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-6058	FILTER REGULATOR ASSY		1		
2	K-1698	-O- RING/ELEMENT KIT		1	FOR FILTER REGULATOR	
3	X-8C-412	CAPSCREW	X 8S 412	2	1/4"-20X2-1/4"	

Group: FRONT SECTION MISC.  
 Sub-Group: INERTIA BRAKE ASSY



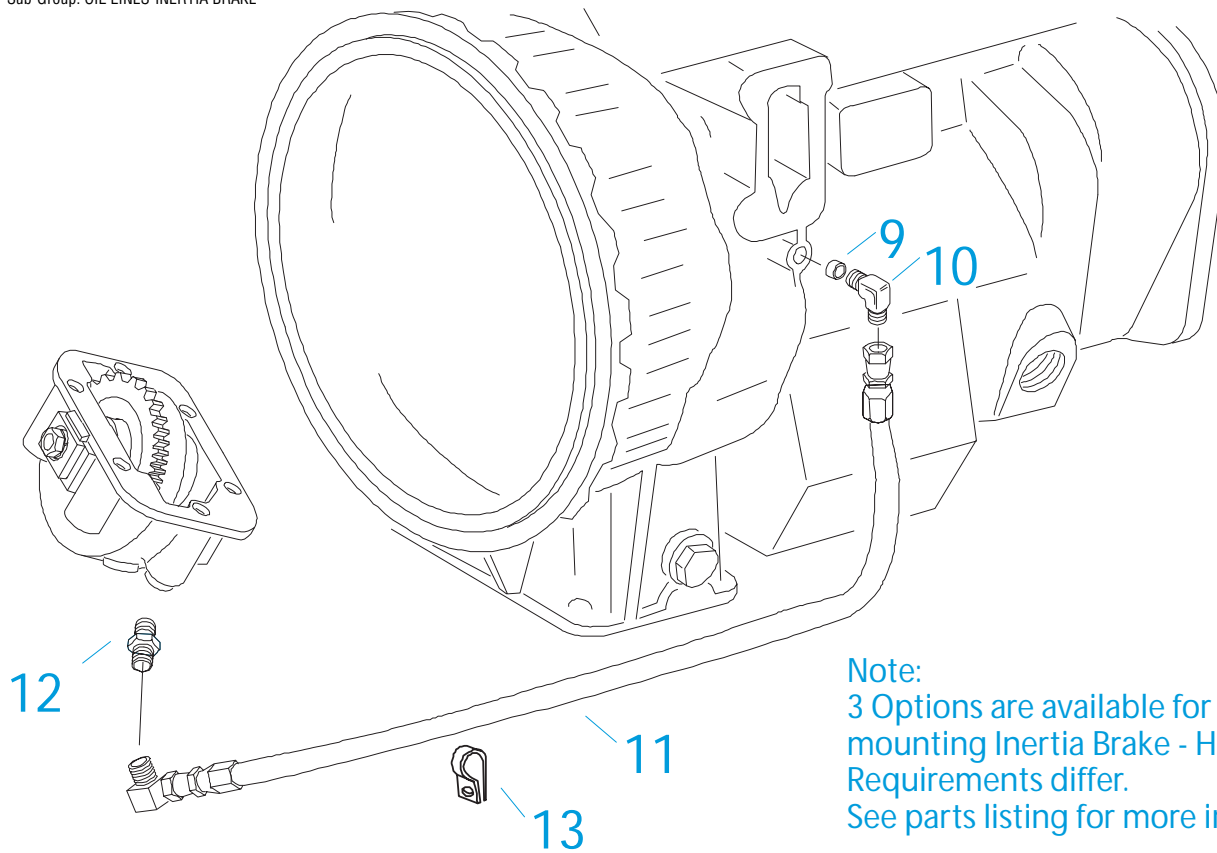
Note: Three mounting options are available for Inertia Brake See Parts Listing for more information.

20425-11-93

## FRONT SECTION MISC.

### INERTIA BRAKE ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-2906	INERTIA BRAKE KIT	A - 6200 ,A - 6437	1		
2	X-8L-722	CAPSCREW	X 8L 721	8	7/16"-14X1-1/4"	
3	12845	ELBOW		1	1/8"	
4	23473	WASHER		6		K-2385 ,K-2633 ,K-2906 ,K-2980 ,K-2981 ,K-2982 ,K-2983 ,S-1876
5	X-8-636	SCREW		4	3/8"-16X3-3/4"	
6	X-8-624	CAPSCREW		2	3/8"-16X4"	
7	22424	ELBOW		1	90 DEGREE	K-2621 ,K-2642 ,K-2643 ,K-2644
7	23486	CONNECTOR		1	STRAIGHT	K-2621 ,K-2642 ,K-2643
8	22427	HOSE ASSY		1	6 BOLT POSITION	K-2621 ,K-2643
8	4302098	HOSE ASSY		1	8 BOLT POSITION	K-2644
8	4302099	HOSE ASSY		1	ROTATED 6 BOLT POSITION	K-2642
9	18471	ADAPTER PLATE		1	8 BOLT POSITION	
10	4305310	GASKET	4302810	1		K-2172
11	4305309	GASKET	1684	1		K-2172 ,K-2388 ,K-2906
12	4302464	ANGLE ADAPTER		1	ROTATED 6 BOLT POSITION	
13	X-8L-604	CAPSCREW		6	3/8"-16X1-1/4"	



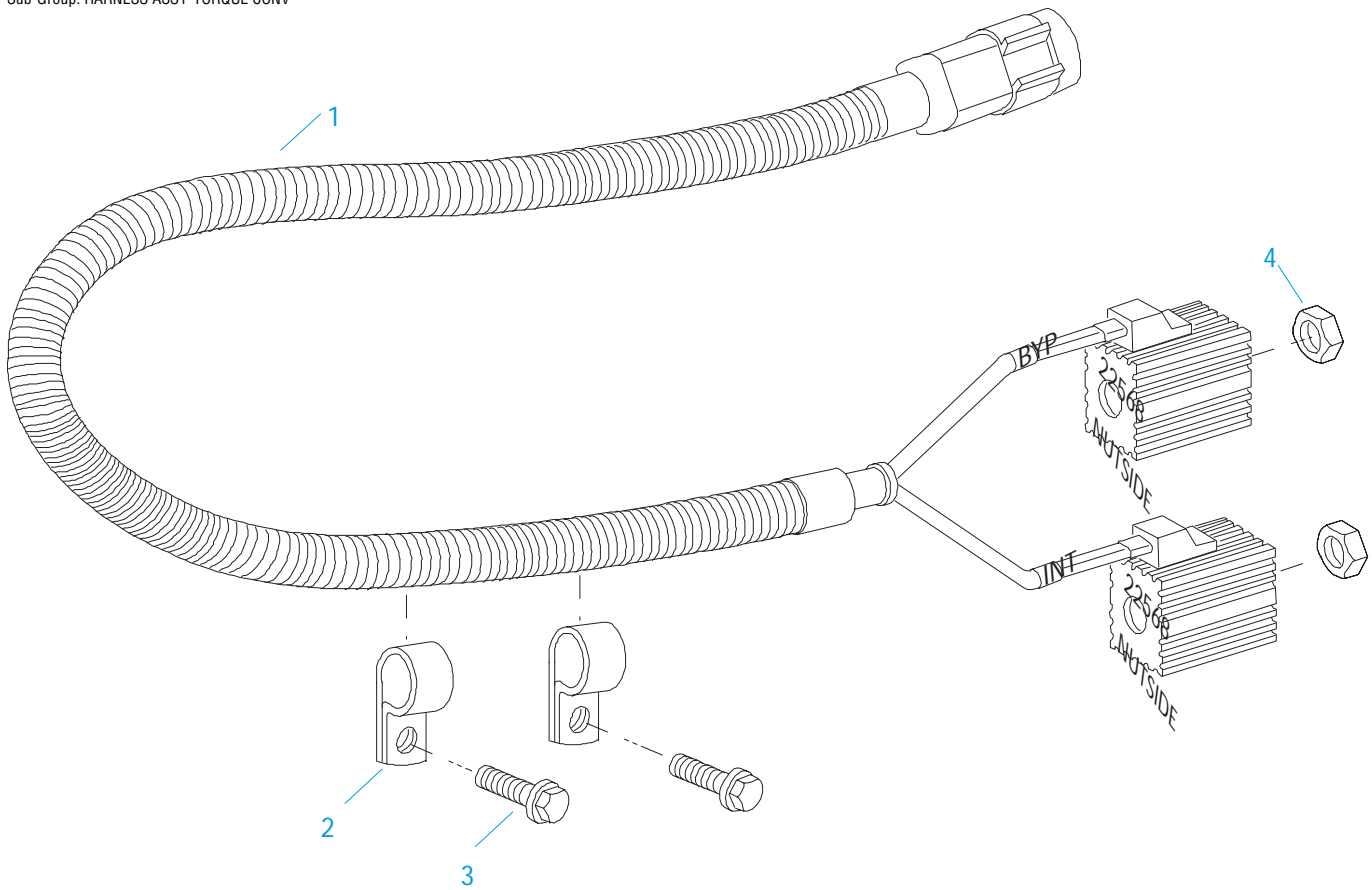
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**FRONT SECTION MISC.**

**OIL LINES-INERTIA BRAKE**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
9	22627	OIL RESTRICTOR		1		K-2642 ,K-2643 ,K-2644
10	4302077	ELBOW		1		
11	22427	HOSE ASSY		1	6 BOLT POSITION	K-2643
11	4302098	HOSE ASSY		1	8 BOLT POSITION	K-2644
11	4302099	HOSE ASSY		1	ROTATED 6 BOLT POSITION	K-2642
12	23486	CONNECTOR		1	STRAIGHT	K-2642 ,K-2643
13	11665	CLAMP		1	USE ON 6 BOLT AND ROTATED POSITION	





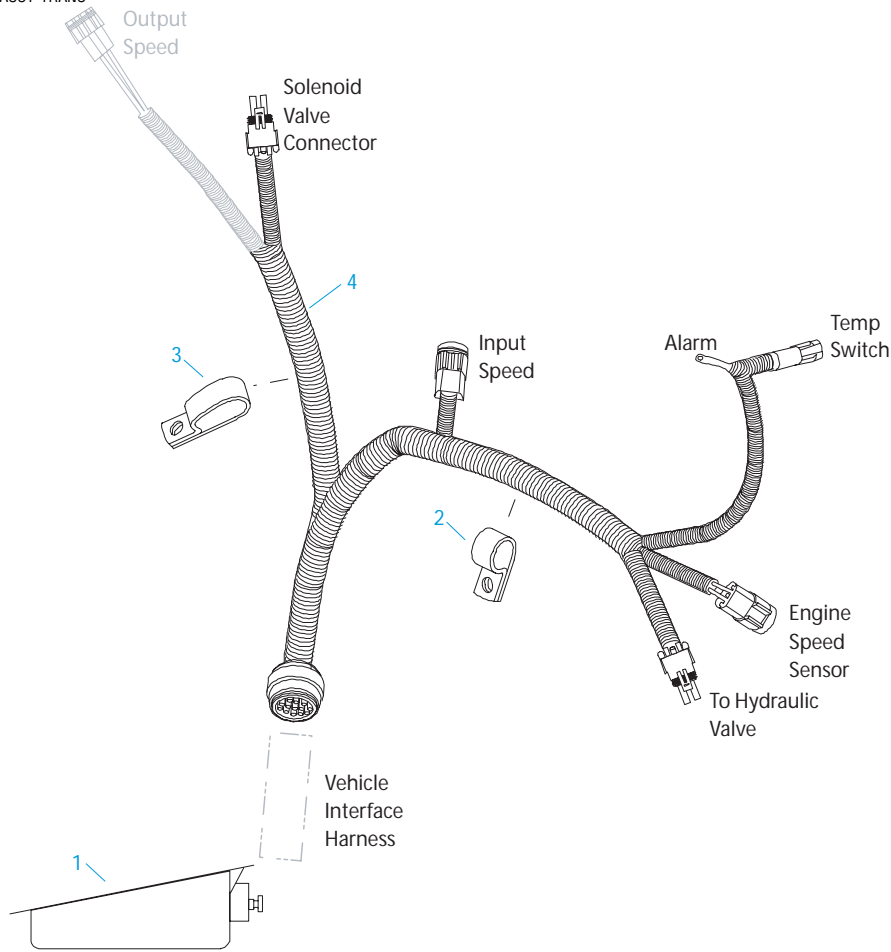
20309-3-94

## HARNESSES & HARDWARE

### HARNESS ASSY-TORQUE CONV

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4301251	HARNESS, TORQ CONV 12V		1		
2	11665	CLAMP		2		
3	X-8L-679	CAPSCREW		2	3/8"-16X1-3/4"	
4	X-1-809	JAM NUT		2	1/2"-20	

Group: HARNESSES & HARDWARE  
 Sub-Group: HARNESS ASSY-TRANS

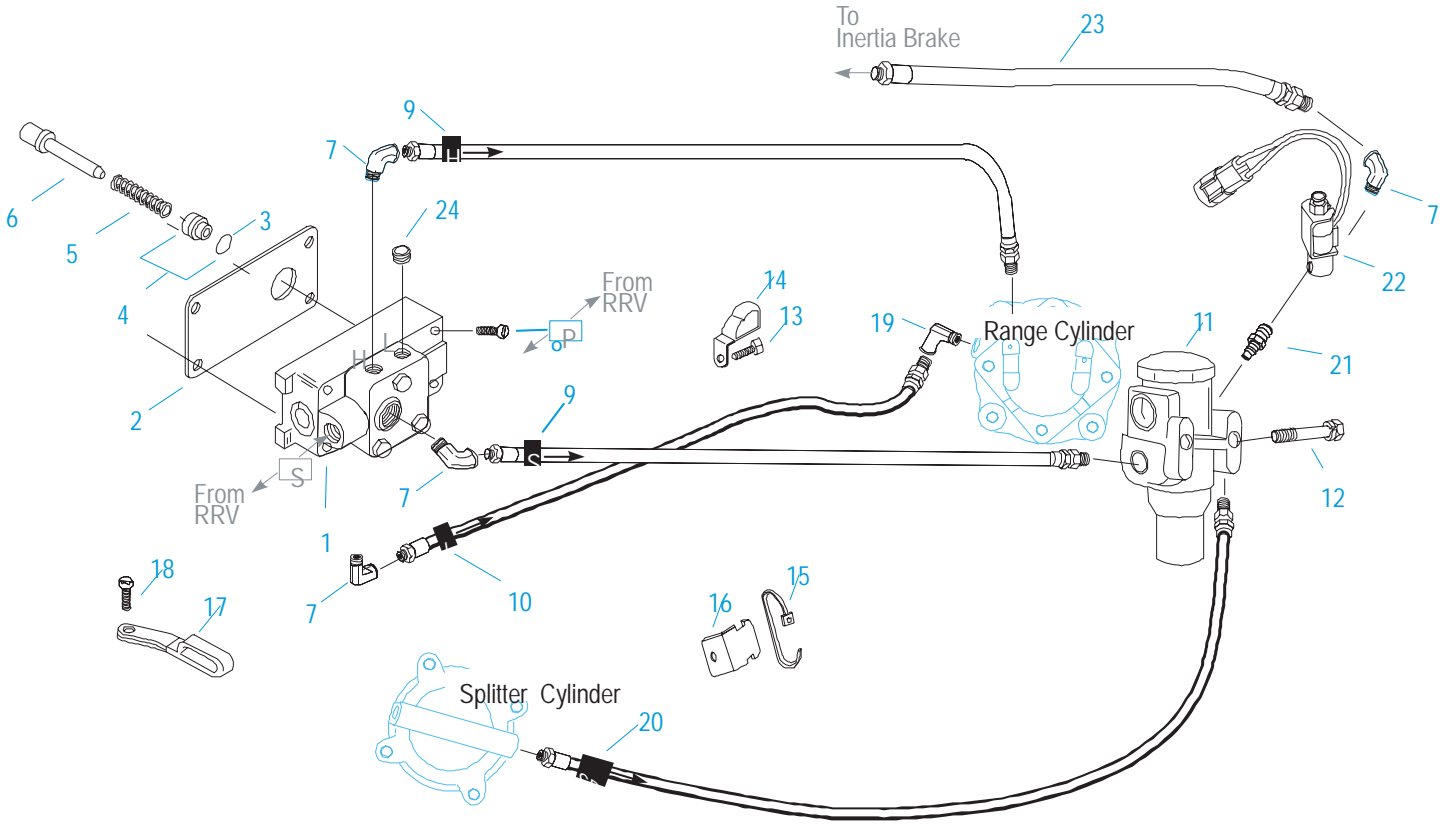


20301-3-94

## HARNESSES & HARDWARE

### HARNESS ASSY-TRANS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-6630	ECU ASSY	A - 6421	1	CUMMINS 8.3 LITER & L-10-350	
2	19727	HOSE CLAMP		1		
3	18769	HOSE CLAMP		1		
4	4302493	HARNESS	4301249	1		



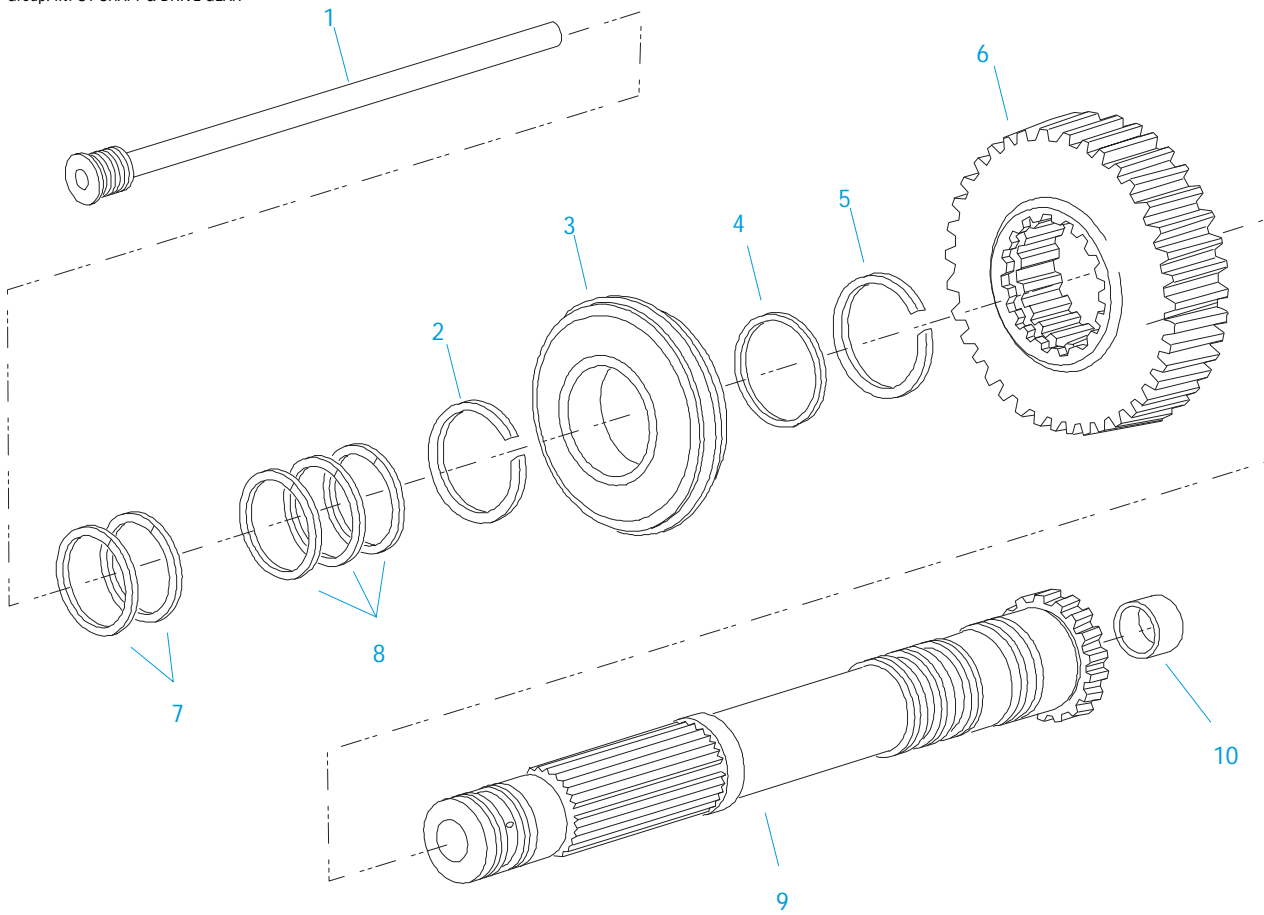
10110C-3-94

## HOSES & CONNECTIONS

### H & C W/A-5000 VALVE

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-5000	SLAVE VALVE ASSY	20850	1		
2	19481	GASKET		1		K-2424
3	19462	-O- RING	14033	1		K-2424 ,K-2870
4	K-1969	SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVES	K-1969
5	21268	SPRING	19572	1		
6	20490	PIN	19459	1		
7	12845	ELBOW		4	1/8"	
8	X-8C-411	CAPSCREW		4	1/4"-20X1-3/4"	K-2424
9	55509	HOSE ASSY		2	34"	
10	55518	HOSE ASSY		1	32"	
11	A-6058	FILTER REGULATOR ASSY		1		
12	X-8C-412	CAPSCREW	X 8S 412	2	1/4"-20X2-1/4"	
13	X-8L-601	CAPSCREW		1	3/8"-16X3/4"	
14	21427	HOSE CLAMP		1		
15	21425	STRAP		1		
16	21426	BRACKET		1		
17	21428	HOSE CLAMP		1		
18	X-8L-604	CAPSCREW		1	3/8"-16X1-1/4"	
19	12880	ELBOW		1	1/8"	
20	55527	HOSE ASSY		1	15"	
21	12769	NIPPLE		1	1/8"	
22	4301252	SOLENOID VALVE 12V		1		
23	55523	HOSE ASSY		1	29"	
24	X-12-208	PIPE PLUG		1	1/8" NPT	A-5587

Group: INPUT SHAFT & DRIVE GEAR



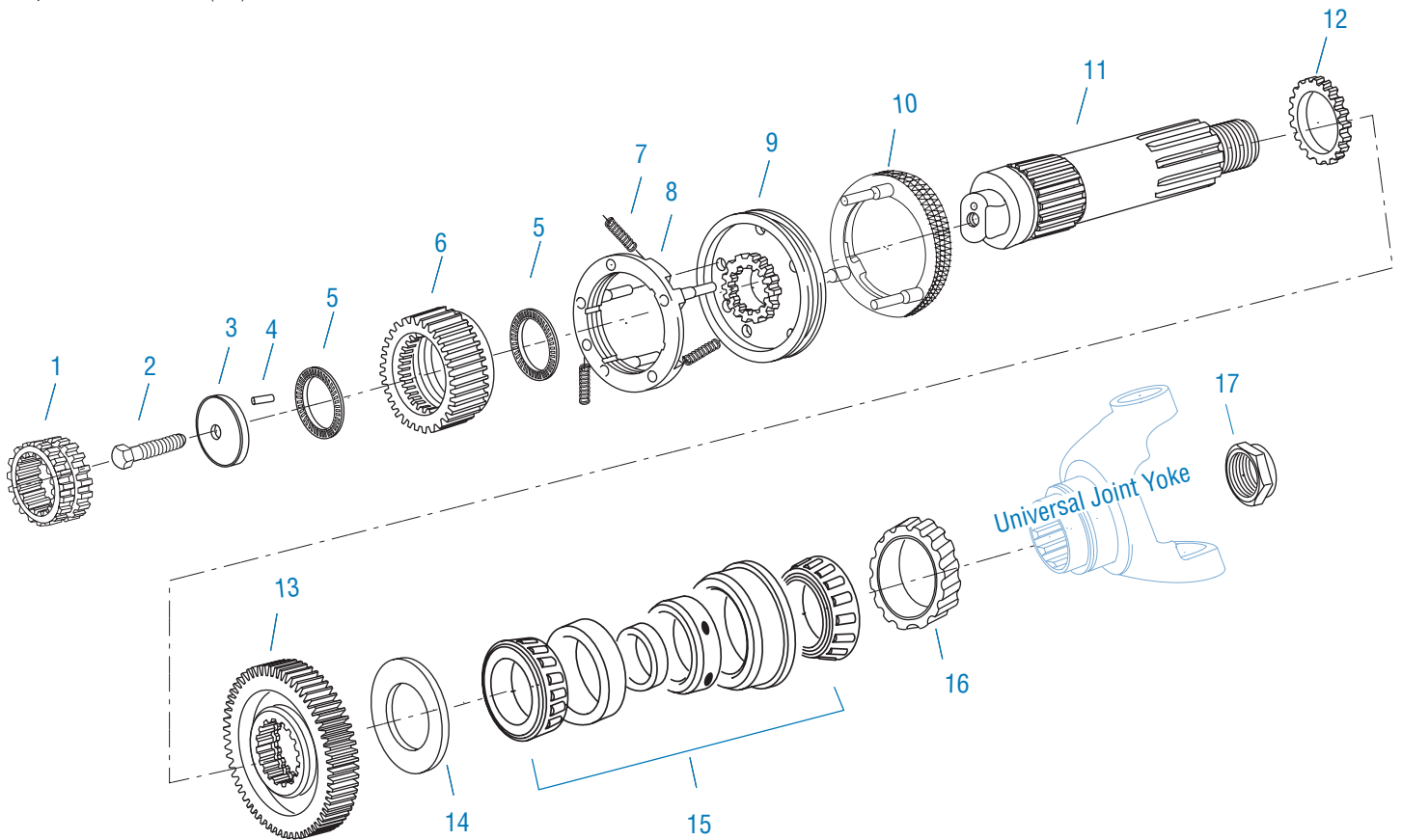
20465-11-93

## INPUT SHAFT & DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	23402	INPUT SHAFT OIL TUBE		1		S-1670
2	16980	SNAP RING		1		K-2775 ,K-2776 ,K-2777 ,K-2830
3	81504	BEARING		1		K-2289 ,K-2290 ,K-2775 ,K-2776 ,K-2777 ,K-2778
4	16463	SPACER		1		K-2289 ,K-2290 ,K-2775 ,K-2776 ,K-2777 ,K-2778 ,K-2829 ,K-2830
5	14750	SNAP RING		1		K-2289 ,K-2290 ,K-2775 ,K-2776 ,K-2777 ,K-2778 ,K-2829 ,K-2830
6	20458	DRIVE GEAR	19630	1		K-2398 ,K-2504 ,K-2990
7	22428	PISTON RING		2		K-2398 ,K-2504
8	23438	PISTON RING		3		K-2391 ,K-2775 ,K-2776 ,K-2777
9	S-1670	INPUT SHAFT ASSY	23395	1		K-2289 ,K-2290 ,K-2778 ,S-1670
10	20171	BUSHING		1		

## KITS & ASSEMBLIES

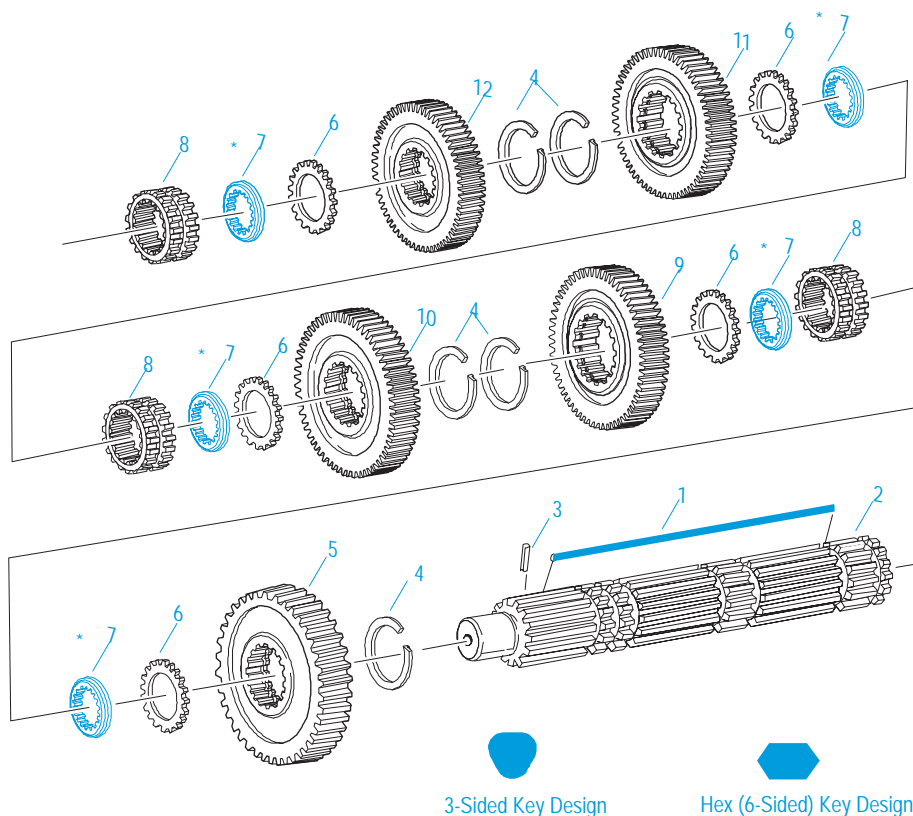
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
K-2625		#1 CONVERTER HSG KIT		1		
K-2643		6 BOLT OIL LINE KIT		1		
K-2642		6 BOLT ROTATED LINE KIT		1		
K-2644		8 BOLT OIL LINE KIT		1		
K-2394		AIR SYSTEMS TOOL KIT		1		
K-2873		BASIC OVERHAUL KIT		1		
K-2871		BASIC REBUILD KIT		1		
S-1516		CAP ASSY	20851 ,20853	1		
S-2278		CASE ASSY	4300592	1		
S-2015		CONVERTER HOUSING ASSY		1		
K-2388		CONVERTER HOUSING KIT	4300323 ,4300377	1		
K-2398		CONVERTOR SEAL KIT		1		K-2390 ,K-2391 ,K-2625 ,K-2646R ,K-2647 ,K-2647R
K-2831		CYLINDER KIT-RANGE		1		
K-2870		GASKET KIT		1	COMPLETE	K-2871 ,K-2873
K-1603		GASKET KIT-RANGE SECTIO		1	AUX. SECTION	
K-3209		IDLER SHAFT REPL KIT	16405 ,4302981 ,4305513	1		
S-1670		INPUT SHAFT ASSY	23395	1		K-2391 ,K-2873
K-2391		INPUT SHAFT KIT		1		
K-2366		KEY & WASHER KIT	21326 ,4300763 ,4304614	1	CONTAINS 3-SIDED KEY	
S-2660		MAINSHAFT ASSY	21594 ,4303714 ,S - 1561	1		
K-2073		MASTER VALVE REPAIR KIT		1	FOR A-5318 VALVE	
K-3196		MASTER VALVE REPAIR KIT		1	FOR A-7318 VALVE	
K-2072		MASTER VALVE REPAIR KIT		1	FOR A-5013 VALVE	
K-3191		MASTER VALVE REPAIR KIT		1	FOR A-6918 VALVE	
K-2002		-O- RING KIT		1	COMPLETE	K-2871 ,K-2873
K-2078		-O- RING KIT - SPLITTER		1	SPLITTER	
K-1450		-O- RING KIT-RANGE		1		
K-1698		-O- RING/ELEMENT KIT		1	FOR FILTER REGULATOR	
K-2314		OIL FILTER KIT		1		
K-2403		OIL PAN RETRO KIT		1	STANDARD	
K-2504		OIL PUMP KIT		1		
K-2911		OIL PUMP KIT	4300747 ,4302714	1		
K-3651		OIL SEAL TOOL KIT		1		
K-2262		OIL SEAL W/SLINGER	19109 20807 20808	1		K-2871 ,K-2873
S-2119		REAR BRG COVER ASSY	20048 ,22045 ,4302009 ,4302031 ,S - 1558 S - 1560	1	EXTENDED	
K-2647R		REMAN 16-C CNVTR KIT	K - 3082	1		
K-2646R		REMAN 16-D CNVTR KIT	K - 3083	1		
K-2387R		REMAN HYDRA VALVE KIT	K - 2387 ,K - 3085	1		
K-1935		REPAIR KIT-SLAVE VALVE		1	FOR A-5000 VALVE	
K-3494		REPL KIT-SLIDING CLUTCH	K - 2448	1		
K-3189		REPLT KIT-DRIVE GEAR	4300467 ,4303558 ,K - 2312	1		
S-2280		SHIFT BAR HSG	23738	1	HOUSING ONLY	
S-2279		SHIFT BAR HSG ASSY	23738	1	COMPLETE	
K-2430		SHIM KIT	21452	1		K-2871 ,K-2873
K-1969		SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVES	
K-2433		SMALL PARTS KIT		1		
S-1676		STATOR SUPPORT ASSY	23397	1		K-2390
K-2390		STATOR SUPPORT KIT		1		
K-2877		SUMP TUBE RETURN KIT	K - 2620	1		
K-3492		SYNCHRONIZER KIT	K - 2446	1		
K-2424		VALVE REPLACEMENT KIT	19470	1		
S-1219		YOKE ASSY LOW-REV		1		



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## MAINSHAFT & SYNCHRO(AUX)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	21930	SLIDING CLUTCH		1		
2	X-7-1005	CAPSCREW		1	5/8"-18X1-3/4"	
3	A-6340	RETAINER ASSY	4302057	1		
4	62511	ROLL PIN		1		A-6340 ,A-6689 ,K-2433
5	4302058	BEARING		2		K-2873
6	21931	SPLITTER GEAR		1		
7	14897	SPRING		3		K-2433 ,K-2871 ,K-2873
8	A-7331	SYNCHRONIZER ASSY	4304396 4304397 A - 5917	1	HI RANGE	,K-3492 ,K-3494 K-3492 ,K-3494
9	20323	SLIDING CLUTCH		1		K-3494
10	A-7254	SYNCHRONIZER ASSEMBLY	A - 4937 A - 5876	1	LO RANGE	K-3492 ,K-3494
11	4302059	AUXILIARY MAINSHAFT		1		
12	19203	SPACER		1		K-2433
13	21918	REDUCTION GEAR		1		
14	16772	WASHER		1		K-2433
15	15260	BEARING		1		K-2871 ,K-2873
16	20191	ROTOR		1		
16	16295	SPACER		1		
17	22254	NUT		1		



10321-12-93

3-Sided Key Design

Hex (6-Sided) Key Design

- Updating to 3-Sided Key is Recommended.  
 When Updating to 3-Sided Key Replace all Washers to Match Key Design  
 Always Use Matching Key and Washer Sets (See Appendix - Mainshaft Washers)

## MAINSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4304614	3-SIDED KEY	4300890	1		K-2366 ,K-2433
1	K-2366	KEY & WASHER KIT	21326 ,4300763 ,4304614	1	CONTAINS 3-SIDED KEY	
2	S-2660	MAINSHAFT ASSY	21594 ,4303714 ,S-1561	1		
3	62504	ROLL PIN		1		S-2660
4	14750	SNAP RING		5		K-2433 ,K-2468 ,K-2994 ,K-2997
5	16756	REVERSE GEAR-MAINSHAFT	22408	1		
6	14749	SPACER		5		K-2433
7	4300830	WASHER .244-BLUE		5		K-2366 ,K-2433
7	14711	WASHER .248-.250 WHITE	18701	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	4300382	WASHER .249-WHITE		5		K-2366 ,K-2433
7	14712	WASHER .253-.255 GREEN	18702	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	4300383	WASHER .254-GREEN		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	K-2366 ,K-2433
7	14713	WASHER .258-.260 ORANGE	18703	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	4300384	WASHER .259-ORANGE		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	K-2366 ,K-2433
7	14714	WASHER .263-.265 PURPLE	18704	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	4300385	WASHER .264-PURPLE		5	OPTIONAL 4300382-4300387 OR	

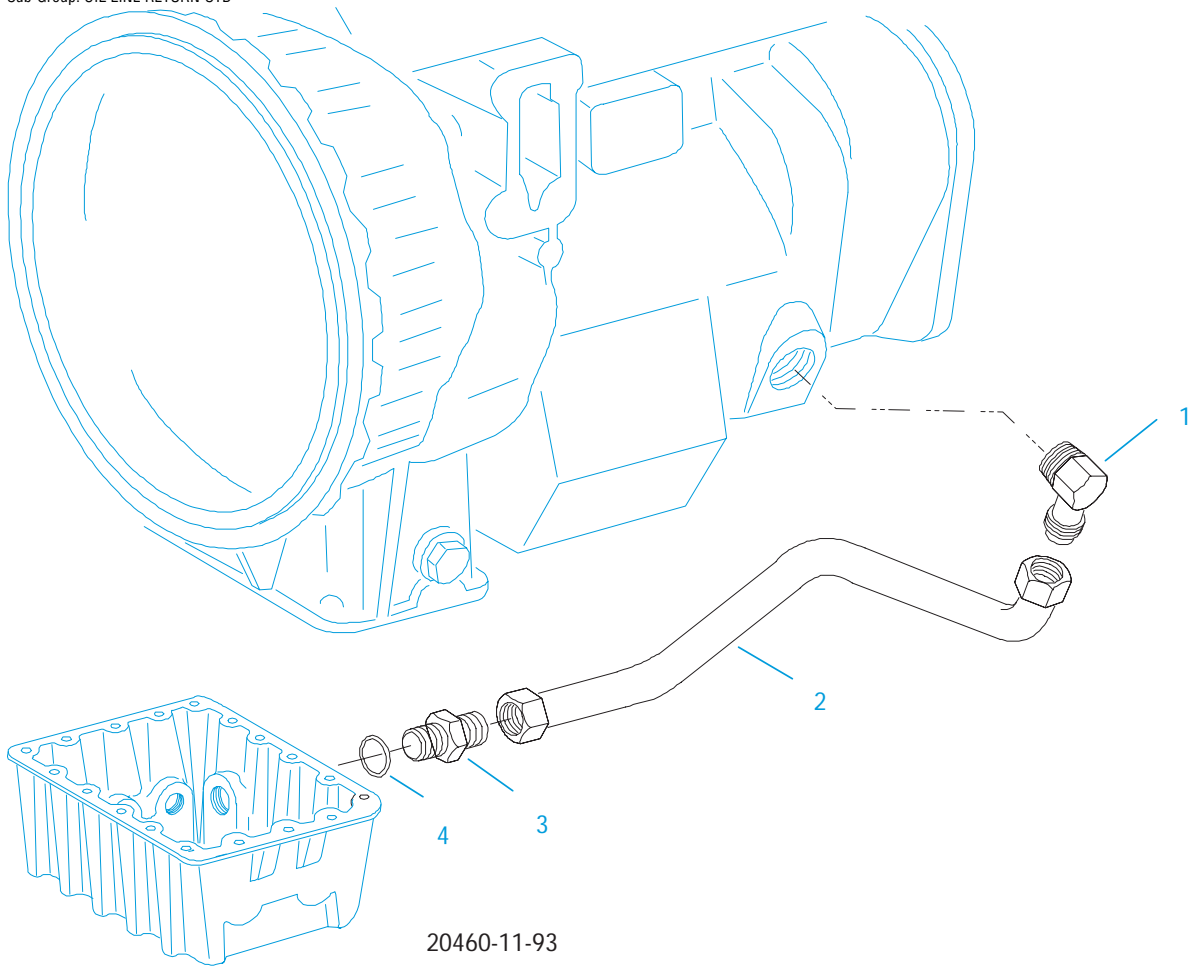
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed	
7	14715	WASHER .268-.270 YELLOW	18705	5	4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY		
7	4300386	WASHER .269-YELLOW		5			
7	14716	WASHER .273-.275 BLACK	18706	5			
7	4300387	WASHER .274-BLACK		5			
8	16118	SLIDING CLUTCH		3			K-2994
9	4300654	LO GEAR-MAINSHAFT	21593	1			
10	21591	1ST GEAR-MAINSHAFT		1			
11	21589	2ND GEAR-MAINSHAFT		1			
12	21587	3RD GEAR-MAINSHAFT		1			



## MISCELLANEOUS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
71204		ADHESIVE SEALANT		1	0.5 CC (SINGLE APPLICATION SIZE)	
71205		SEALANT		1	2 CC (SINGLE APPLICATION SIZE)	K-3461
21628		SHIFT DIAGRAM LABEL	4300591	1		
71206		SILICONE LUBE		1	4 CC (SINGLE APPLICATION SIZE)	K-2428 ,K-2429 ,K-2978 ,K-3331 ,K-3341
71203		SILICONE LUBE		1	8 OZ (236.59 CC)-FLEET SIZE	

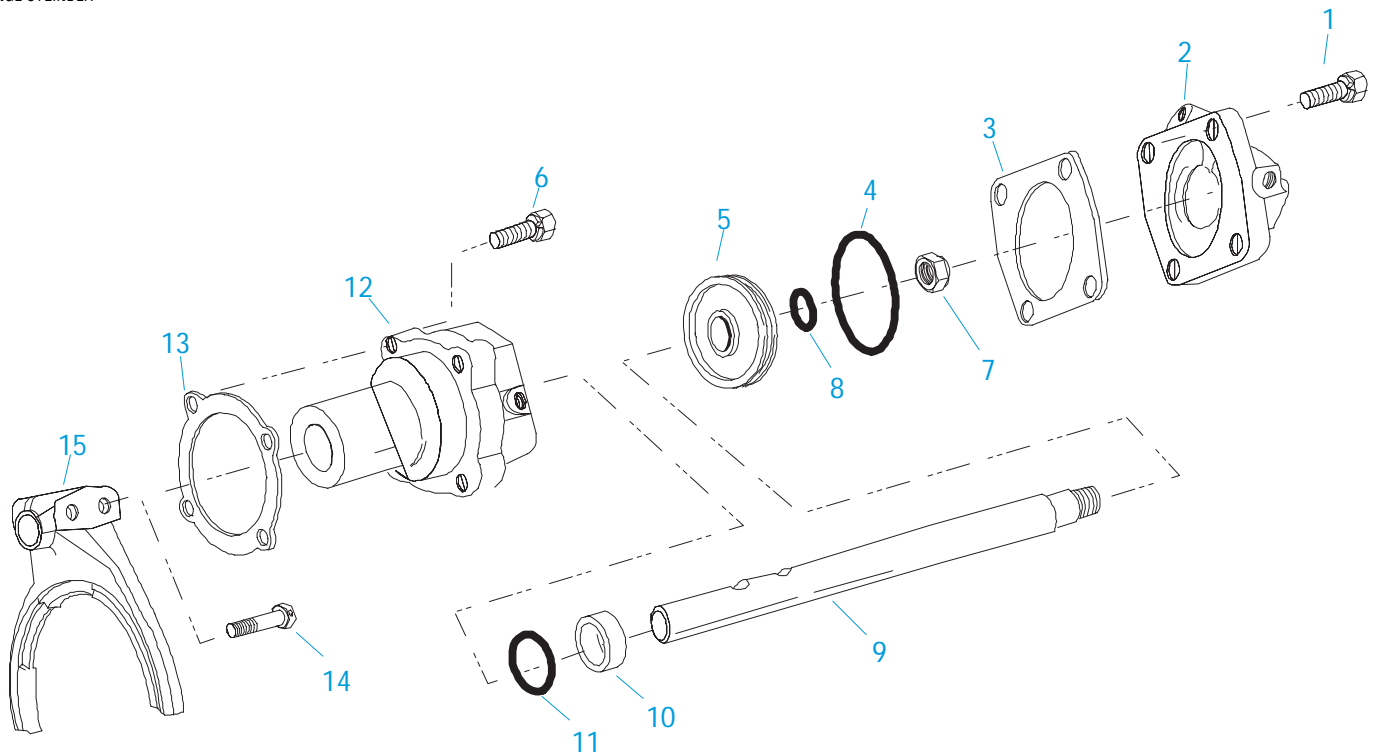
Group: OIL LINE RETURN  
 Sub-Group: OIL LINE RETURN-STD



## OIL LINE RETURN

### OIL LINE RETURN-STD

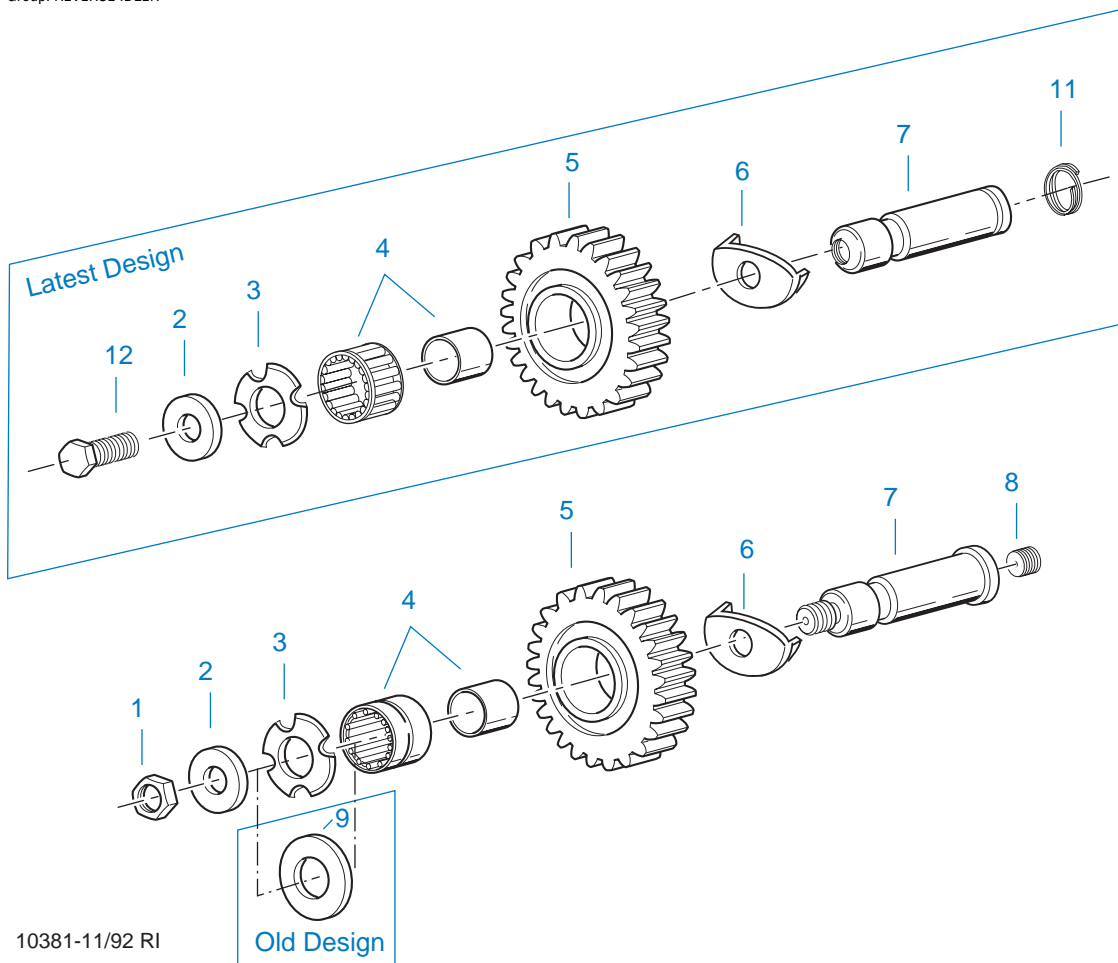
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4301100	ELBOW	23597	1		K-2877
2	4301101	TUBE	23778	1		K-2877
3	23596	CONNECTOR		1		K-2877
4	23109	-O- RING		1		K-2388 ,K-2625 ,K-2877



20538-3-94

## RANGE CYLINDER

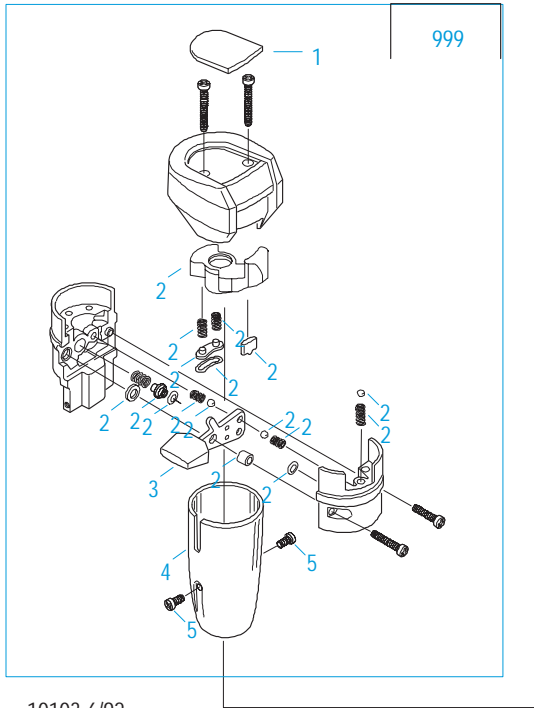
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8L-604	CAPSCREW		4	3/8"-16X1-1/4"	
2	19690	CYLINDER COVER		1		
3	14349	GASKET		1		K-1450 ,K-1603 ,K-2002 ,K-2831 ,K-2870
4	14344	-O- RING		1		K-1450 ,K-2002 ,K-2831
5	14341	PISTON	23353	1		K-2831
6	X-8L-604	CAPSCREW		4	3/8"-16X1-1/4"	
7	X-1-1010	NUT		1	5/8"-18	K-1450 ,K-2002 ,K-2831
8	14345	-O- RING		1		K-1450 ,K-2002 ,K-2831
9	4300183	YOKE BAR		1		
10	22542	BUSHING		1		A-5371
11	14765	-O- RING		1		K-1450 ,K-2002 ,K-2831
12	A-5371	RANGE CYLINDER ASSY	22543	1		K-2831
13	14347	GASKET		1		K-1603 ,K-2831 ,K-2870
14	X-8-825	CAPSCREW		2	1/2"-13X2-3/8"	
15	4301642	SHIFT YOKE	22888	1		



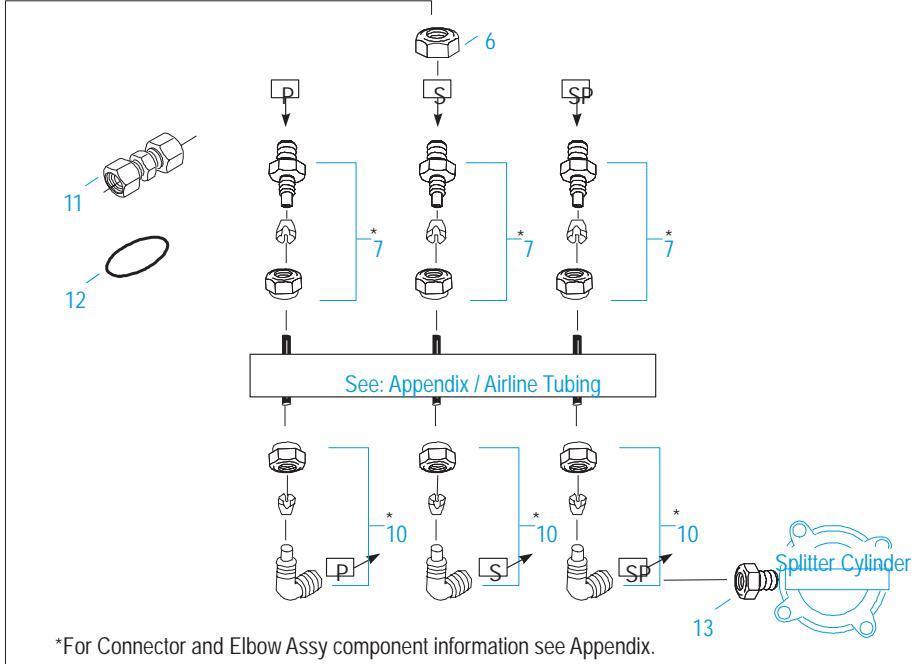
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## REVERSE IDLER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-1-1008	NUT		2	5/8"-18	
2	14283	IDLER PLATE		2		K-3217
3	4302982	WASHER	14282	2		K-3217 ,S-1412
4	14287	BEARING	4305020	2		K-1866 ,K-1980
5	16757	REVERSE IDLER GEAR	22409	2		
6	16403	WASHER		2		K-3217
7	K-3217	IDLER SHAFT REPL KIT	4302981	2		
8	5202	PLUG		2		
9	14282	NO LONGER AVAILABLE		2		
11	4303336	RETAINING RING		2		K-3217
12	X-7-1008	CAPSCREW		2	5/8"-18X1-1/4	K-3217



10103-6/92

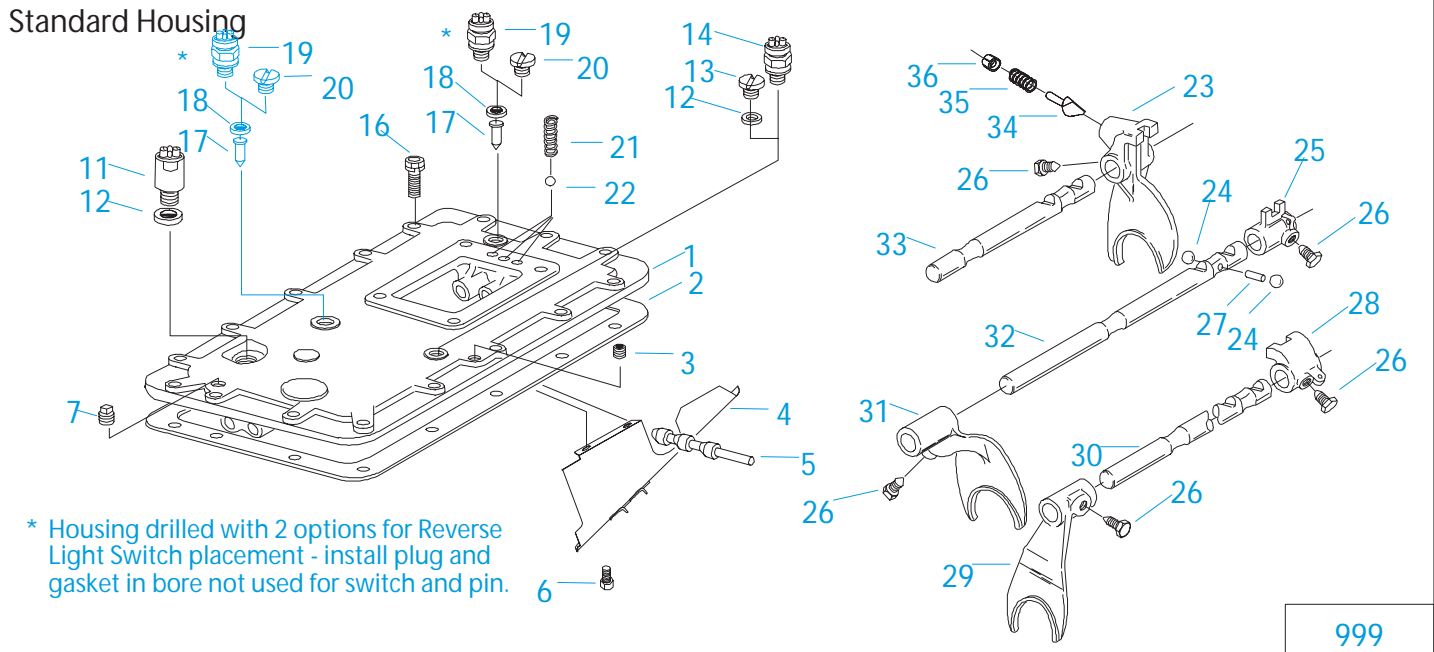


## ROADRANGER VALVES

### ROADRANGER VALVES

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	20107	MEDALLION, LOGO		1	(OLD DESIGN) FULLER LOGO ONLY	
1	5586100	MEDALLION, LOGO		1	(LATEST DESIGN) FULLER LOGO ONLY	A-6918 ,A-7318
2	K-2072	MASTER VALVE REPAIR KIT		1	FOR A-5013 VALVE	
2	K-2073	MASTER VALVE REPAIR KIT		1	FOR A-5318 VALVE	
2	K-3191	MASTER VALVE REPAIR KIT		1	FOR A-6918 VALVE	
2	K-3196	MASTER VALVE REPAIR KIT		1	FOR A-7318 VALVE	
3	20495	LEVER		1		A-6918 ,A-7318
4	20112	COVER		1		A-6918 ,A-7318
5	X-8-213	SCREW	X 8 202	2	8-32X3/8"	A-6918 ,A-7318
6	X-9-802	NUT		1	1/2"-13	
7	84001	CONNECTOR ASSY	82501	3	1/8" TUBE-1/16" NPTF	
7	84003	CONNECTOR ASSY	82503	3	5/32" TUBE-1/16" NPTF	K-2873
7	84005	CONNECTOR ASSY		3	"PUSH-TO-CONNECT" 5/32" TUBE-1/16" NPTF	
10	85001	ELBOW ASSY	84501	3	5/32" TUBE-1/8" NPTF	K-2873
10	85002	ELBOW ASSY	84502	3	1/8" TUBE-1/8" NPTF	
10	85003	ELBOW ASSY		3	"PUSH-TO-CONNECT" 5/32" TUBE-1/8" NPTF	
11	84101	UNION ASSY		1	1/8" TUBING	
11	84102	UNION ASSY		1	5/32" TUBING	
11	84103	UNION ASSY		1	"PUSH-TO-CONNECT" 5/32" TUBING	
12	13571	-O- RING CLAMP		2		
13	4301233	REDUCER BUSHING	18004	1		
999	A-6918	ROADRANGER VALVE ASSY	A - 5013	1	STANDARD-W/LOGO	
999	A-7318	ROADRANGER VALVE ASSY	A - 5318	1	(LEFT OF DRIVER)-W/LOGO	

Standard Housing

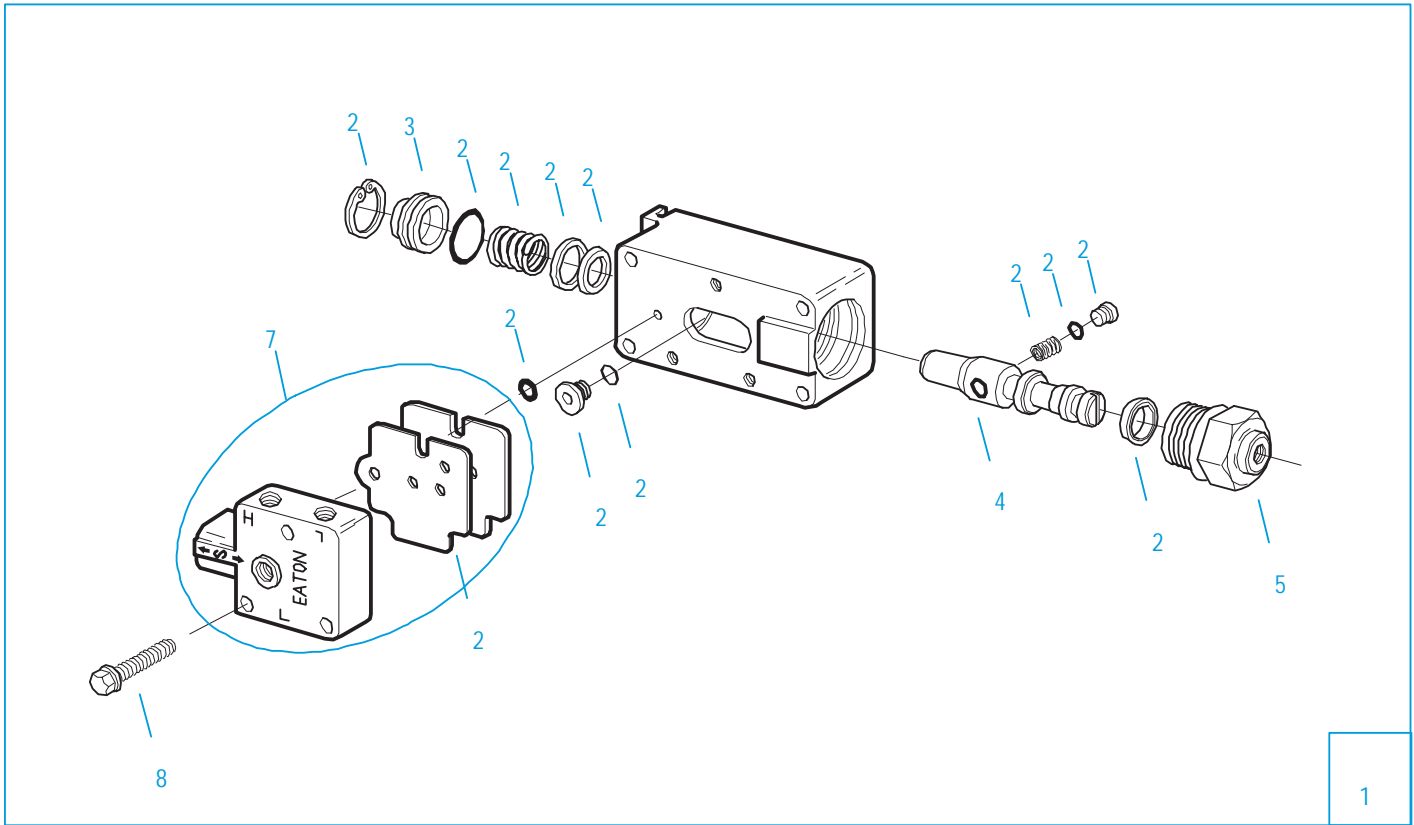


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20234-3- 94 STD/CE-18spd

**SHIFT BAR HOUSING (STD)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2280	SHIFT BAR HSG	23738	1	HOUSING ONLY	
2	4302676	GASKET	14918	1		K-2870 ,S-2279 ,S-2280
3	X-12-404	PIPE PLUG		1	1/4" NPT	S-2279 ,S-2986
4	20070	OIL TROUGH		1		S-2279
5	20332	AIR VALVE SHAFT		1		S-2279
6	X-8-423	CAPSCREW		2	1/4"-20X1/2"	S-2279
7	X-12-603	PIPE PLUG	X12 602	1	3/8" NPT	S-2279 ,S-2280
11	4302361	MAGNETIC SENSOR	23680	1		
12	17179	GASKET		2		S-2280
13	4303655	PLUG	17178	1		S-2279 ,S-2280
14	22941	NEUTRAL LIGHT SWITCH		1	SWITCH NORMALLY CLOSED	
16	X-8L-604	CAPSCREW		16	3/8"-16X1-1/4"	
17	15899	PIN		1		S-2280
18	15900	GASKET		1		S-2279 ,S-2280
19	22940	REVERSE LIGHT SWITCH		1	SWITCH NORMALLY OPEN	
20	4303656	PLUG	15917	1		S-2279 ,S-2280
21	15918	SPRING		3		A-5732 ,K-2433 ,K-2873 ,S-2279
22	X-14-800	STEEL BALL		3	1/2"	A-5732 ,K-2433 ,S-2279
23	16131	SHIFT YOKE		1	REVERSE/LO	S-1219
24	X-14-1200	STEEL BALL		2	3/4"	S-2279
25	14658	SHIFT BLOCK		1	1ST/2ND	S-2279
26	3220	LOCKSCREW		5		S-2279
27	1634	INTERLOCK PIN		1		K-2433 ,S-2279
28	14659	SHIFT BLOCK		1	3RD/DIRECT	S-2279
29	16136	SHIFT YOKE		1	3RD/DIRECT	S-2279
30	16134	YOKE BAR		1	3RD/DIRECT	S-2279
31	16135	SHIFT YOKE		1	1ST/2ND	S-2279
32	16133	YOKE BAR		1	1ST/2ND	S-2279
33	16132	YOKE BAR		1	REVERSE/LO	S-2279
34	10019	PLUNGER		1		S-1219
35	6392	SPRING		1		S-1219
36	8968	PLUG		1		S-1219
999	S-2279	SHIFT BAR HSG ASSY	23738	1	COMPLETE	



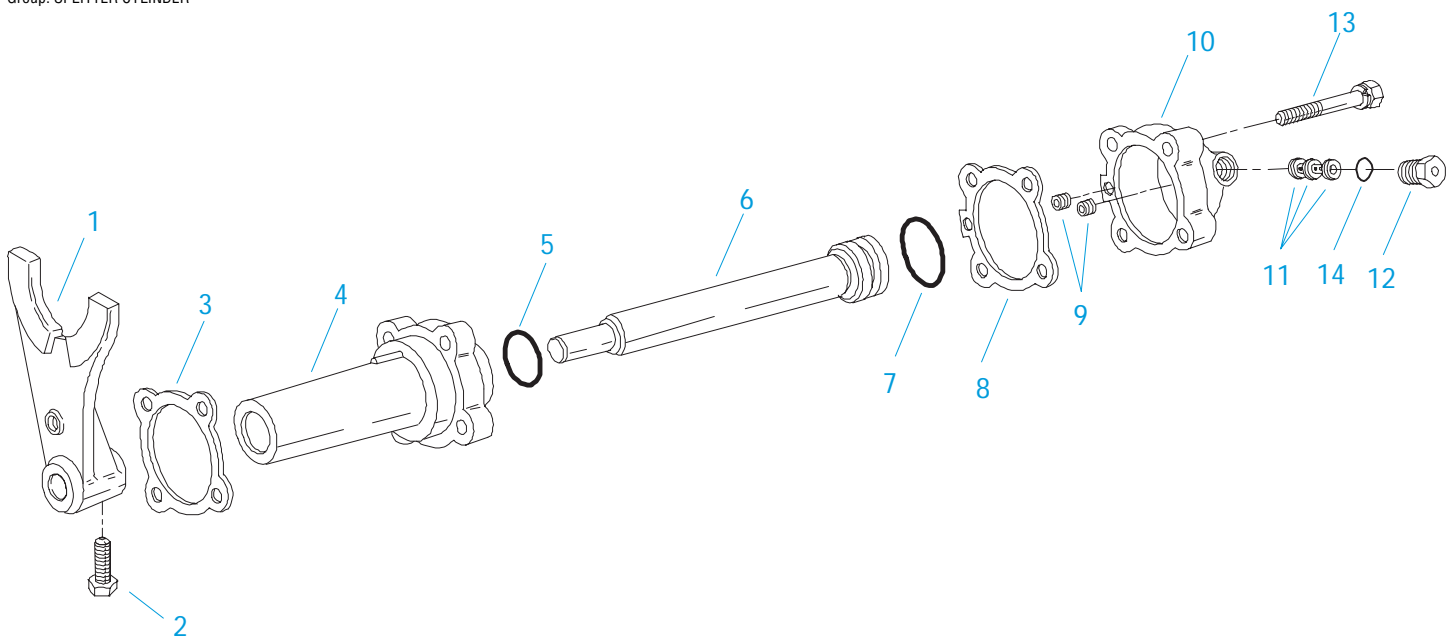
10120-10-97

2	Repair Kit
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## SLAVE VALVES

### A-5000 SLAVE VALVE

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-5000	SLAVE VALVE ASSY	20850	1		K-1963 ,K-2424
2	K-1935	REPAIR KIT-SLAVE VALVE		1	FOR A-5000 VALVE	
3	20855	PLUG		1		A-5000
4	20854	PISTON		1		A-5000
5	20849	CAP	15131	1		A-4688 ,A-5000
7	S-1516	CAP ASSY	20851 ,20853	1		
8	X-8C-413	CAPSCREW		3	1/4"-20X1-1/2"	A-5000

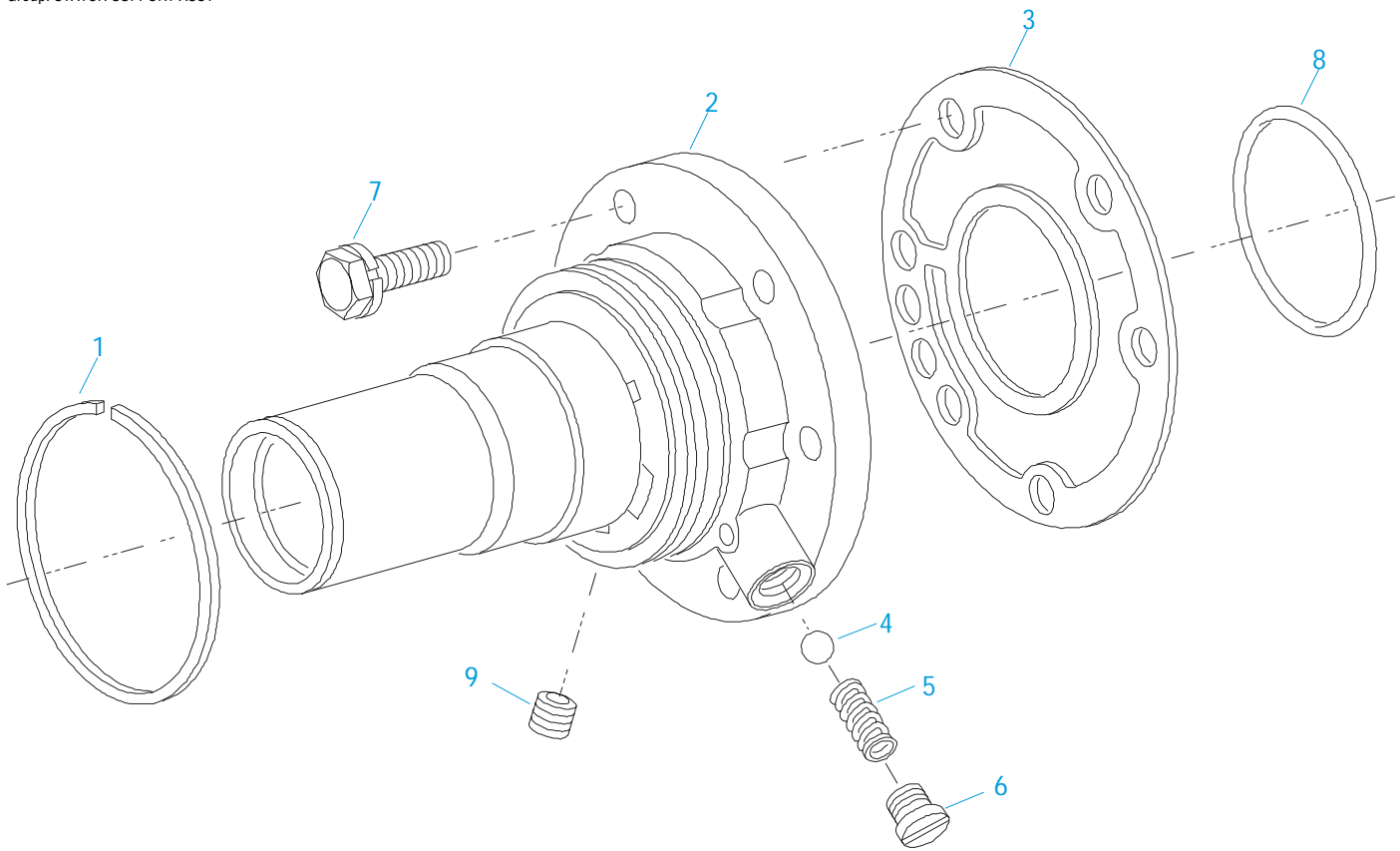


10465-4/92 Spl Cyl

### SPLITTER CYLINDER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	21607	SHIFT YOKE		1		
2	3220	LOCKSCREW		1		S-2279
3	14632	GASKET		1		K-1603 ,K-2078 ,K-2870
4	21609	SPLITTER CYLINDER		1		
5	21208	-O- RING		1		K-2002 ,K-2078
6	4300182	YOKE BAR		1		
7	21209	-O- RING		1		K-2002 ,K-2078
8	17073	GASKET		1		K-1603 ,K-2002 ,K-2078 ,K-2870
9	X-12-101	PLUG		2	NOT SOLD FOR SERVICE	
10	21760	COVER		1		
11	19974	INSERT VALVE	15512 4303616	1		K-2871 ,K-2873
12	4301233	REDUCER BUSHING	18004	1		
13	X-8L-540	CAPSCREW		4	5/16"-18X1-7/8"	
14	5568504	-O- RING		1		

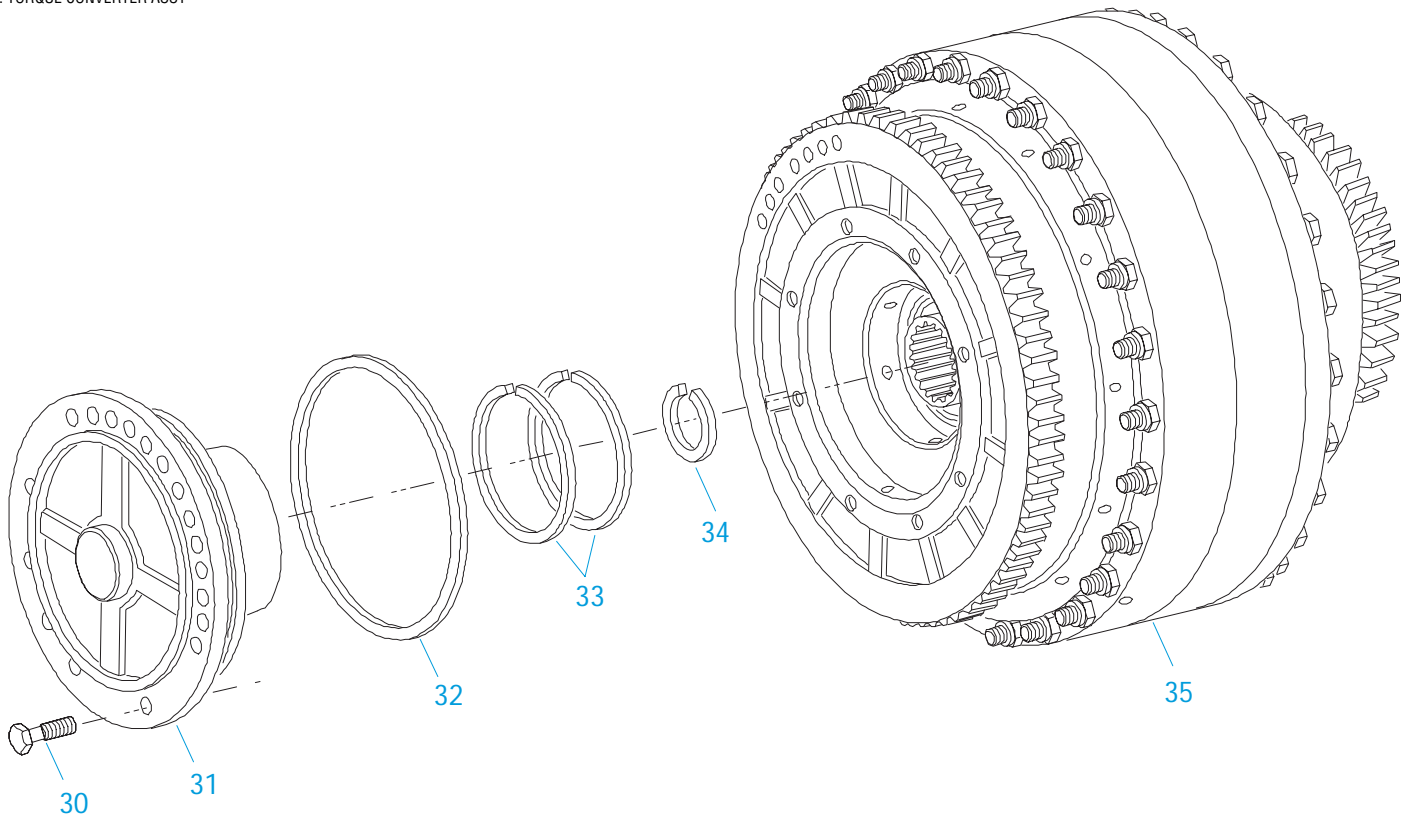




20421-11-93

### STATOR SUPPORT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	22496	SEAL RING		1		K-2398 ,K-2504
2	S-1676	STATOR SUPPORT ASSY	23397	1		K-2390
3	23398	GASKET		1		K-2172 ,K-2391 ,K-2504 ,K-2625 ,S-1676
4	X-14-700	STEEL BALL		1	7/16"	
5	22464	SPRING		1		
6	23616	PLUG		1		
7	X-8L-616	CAPSCREW		6	3/8"-16X2-3/4"	
8	23401	-O- RING		1		K-2391
9	X-12-208	PIPE PLUG		1	1/8" NPT	A-5587



20430-11-93

### TORQUE CONVERTER ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
30	X-8-645	CAPSCREW		8	3/8"-16X1"	
31	4301426	PILOT		1		
32	22463	-O- RING		1		K-2398 ,K-2504
33	22497	SEAL RING		2		K-2398 ,K-2504
34	22429	SNAP RING		1		K-2398
35	K-2647	ENHANCED CONV KIT "C"	A - 5572 ,A - 6141	1		

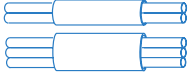
## Appendix



## Air Line Tubing

### Choosing nylon tubing for air lines

Use the following chart to specify the Eaton® Fuller® nylon tube appropriate to your vehicle's air system.

 <b>5/32" Air Line and Harness Combinations</b>			
Line Type	Line Color	Order Part No#	Length
Supply + Port	Red (S) + Black (P)	52601	50 ft
Splitter + Deep Reduction	Blue (SP) + Green (H/L)	52701	50 ft
Supply + Splitter + Port	Red(S)+Blue(SP)+ Black(P)	74601	50 ft

<b>5/32" Air Lines</b>			
Line Type	Line Color	Order Part No#	Length
Supply	Red (S)	75120	50 ft
Port	Black (P)	75320	50 ft
Splitter	Blue (SP)	75720	50 ft
Deep Reduction	Green (H/L)	75520	50 ft
Sheathing		80120	50 ft

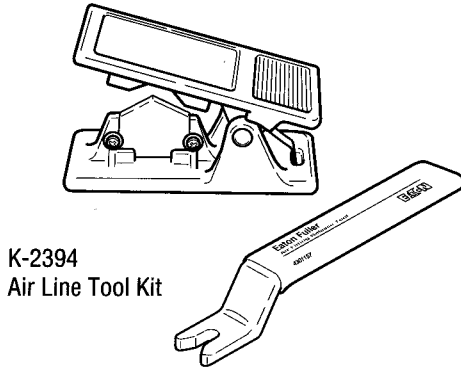
  

<b>1/8" Air Lines</b>			
Line Type	Line Color	Order Part No#	Length
Supply	White	68526	50 ft
Port	Black	82013	50 ft
Sheathing		80000	50 ft

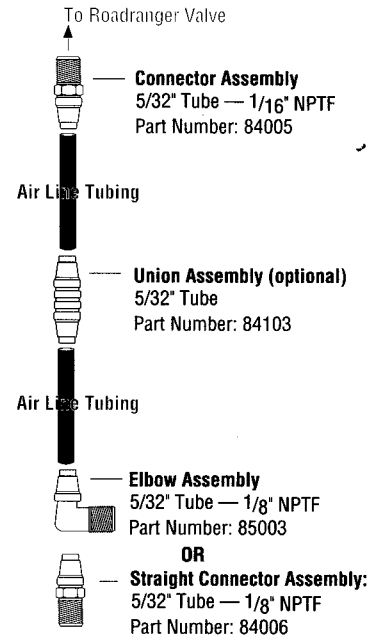
10650-1/92 AL Chart

## Identifying fittings

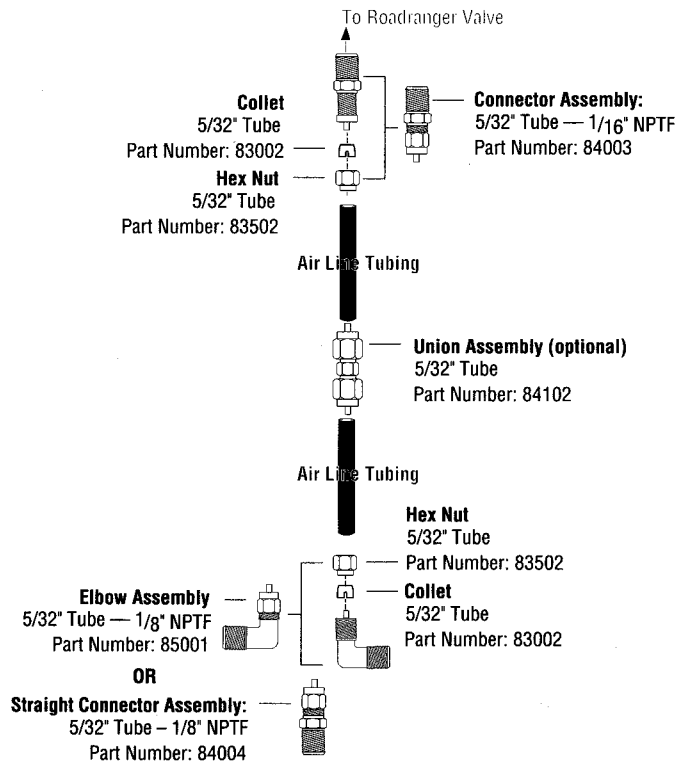
Fittings are available in 5/32" and 1/8" sizes as appropriate for vehicle air line sizes. 5/32" fittings are available as 'push to connect' or compression fittings. 1/8" fittings are available as compression fittings.



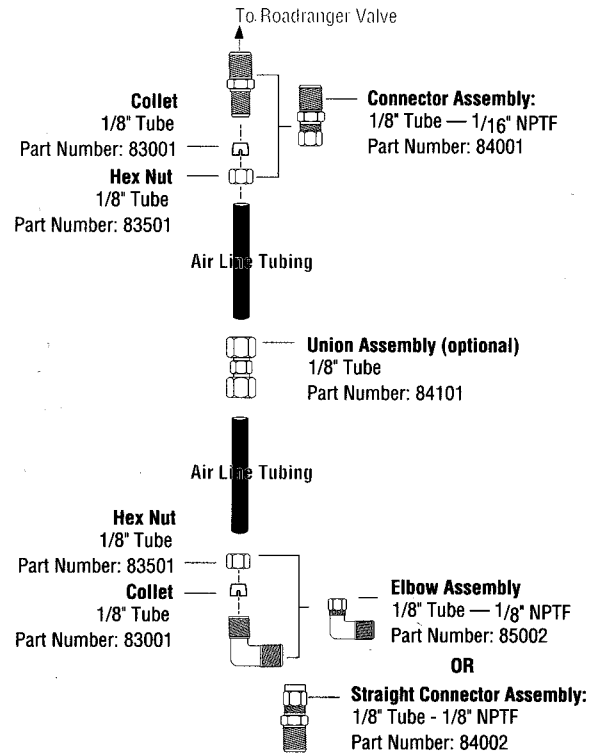
### 5/32" 'Push-to-Connect' Fittings



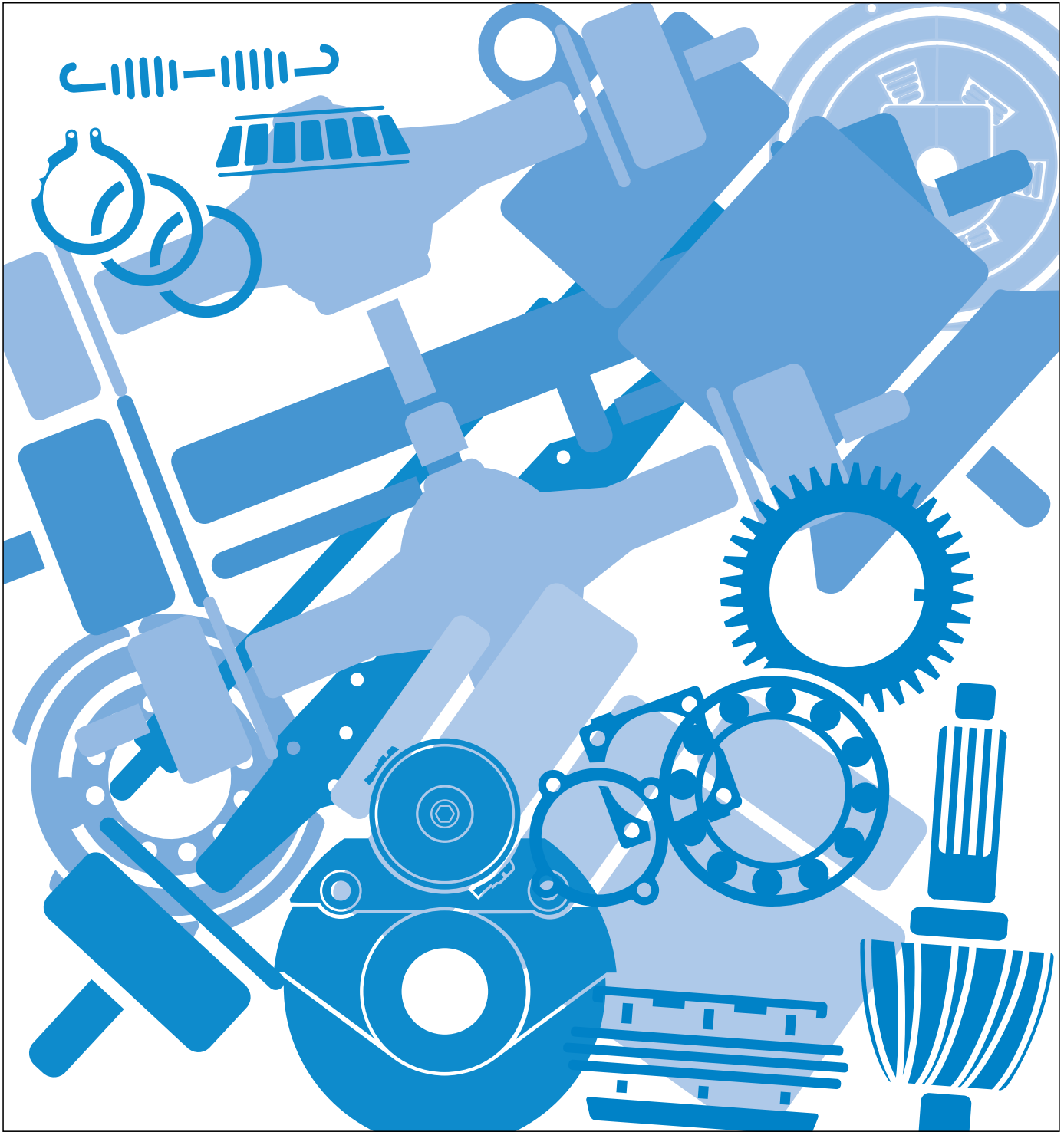
### 5/32" Compression Fittings



### 1/8" Compression Fittings







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