



**Roadranger®**

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# Illustrated Parts List

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**RTLO-14613B**

**November 2012**

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## How To Use The Illustrated Parts List

The information contained in this document is subject to frequent updates. Therefore, for the latest information available, please visit the interactive Electronic Parts Catalog at [www.roadranger.com/epc](http://www.roadranger.com/epc).

### Model Designation or Nomenclature

- For information regarding Model Designation and Nomenclature, visit [www.roadranger.com](http://www.roadranger.com).

### 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.

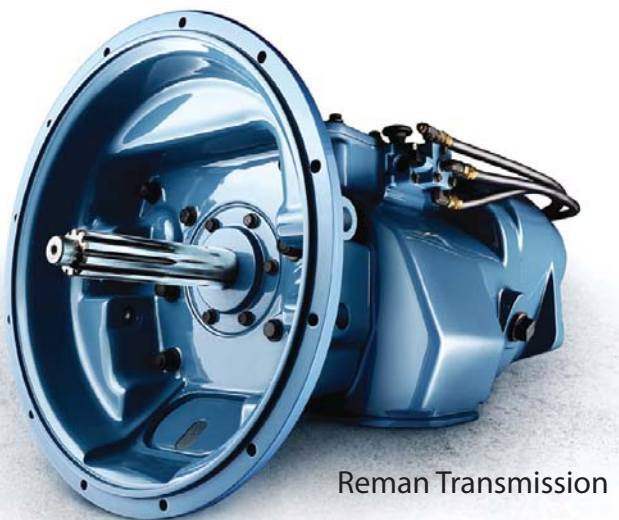
### Parts Listing

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**



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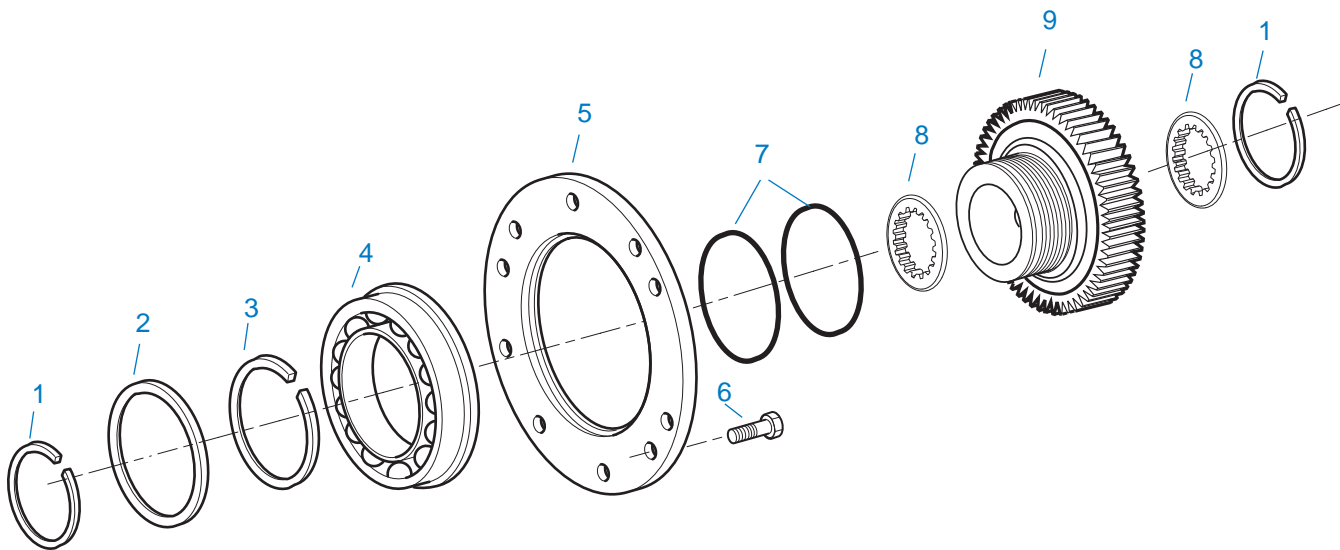
Reman Transmission

AFTMKT 09-12

Generic Illustration - Not specific to part numbers listed below

**AFTERMARKET TRANSMISSIONS**

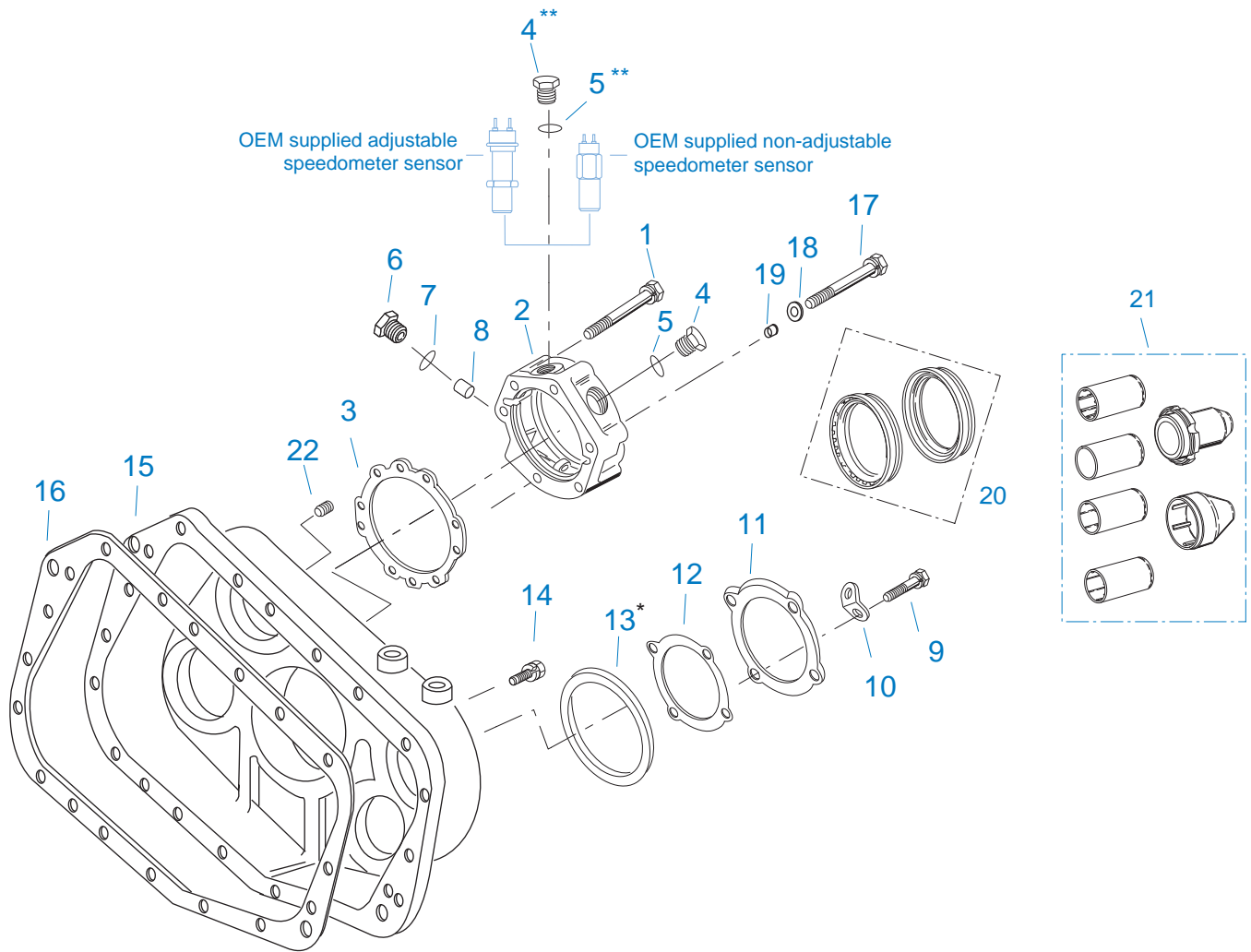
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
	TA-A66-12R	RTLO-14613B REMAN TRANS		1	WITH INTERNAL PUMP	
	TA-A66-12RM	RTLO-14613B REMAN TRANS		1	NODAL MOUNT BELOW CENTER - WITH INTERNAL PUMP	
	TA-A66-12RV	RTLO-14613B REMAN TRANS		1	NODAL MOUNT ABOVE CENTER - WITH INTERNAL PUMP	



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-2433,K-2993,K-2996
2	21320	SNAP RING RETAINER		1		K-3189
3	16628	SNAP RING		1		K-2433
4	5566507-BOX	BEARING	5566504,5566507	1		K-2993,K-2996
5	16138	BEARING RETAINER		1		
6	X-8-645	CAPSCREW	X 8 612	1	3/8"-16X1"	
7	17453	-O- RING		2		K-2993,K-2996,K-3189
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

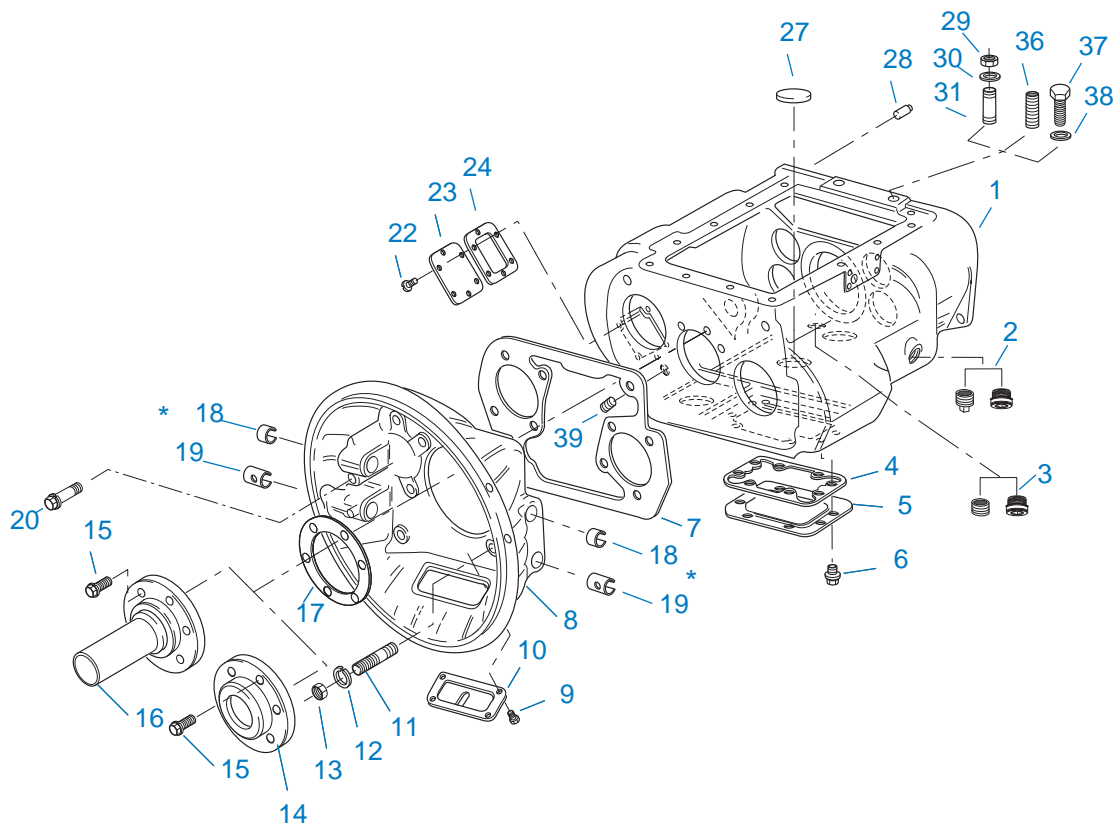
\* See Service Manual for Proper Shimming Procedure

10401-4/92 Aux Case 18/13 spd

## 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-2199,K-2262,S-2119
4	20224	PLUG-MAGNETIC		2		S-2119
5	13679	-O- RING		1	USE W/ OEM SUPPLIED ADJUSTABLE SPEEDOMETER SENSOR	

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
5	20225	-O- RING		2	USE W/20224 PLUG OR OEM SUPPLIED NON-ADJUSTABLE SPEEDOMETER SENSOR	
6	20226	PLUG-MECHANICAL	2237	1		S-2119
7	14142	-O- RING		1		S-2119
8	7992	BUSHING		1		S-2119
10	20815	LIFTING EYE	17105	2		
11	4300925	REAR BEARING COVER	4300185	2		
12	4300186	GASKET		2		K-1603,K-2199,K-3473
13	K-2430	SHIM KIT	21452	1		K-2338,K-2993,K-2996
13	K-2431	SHIM KIT		1	FOR AUXILIARY COUNTERSHAFT PUMP	K-3473
14	X-8L-602	CAPSCREW		9	3/8"-16X1-1/2"	
14	X-8L-604	CAPSCREW		16	3/8"-16X1-1/4" USE 8 FOR REAR CASE (BUBBLE #14) USE 8 FOR REAR BRG COVER (BUBBLE #9)	
14	X-8L-614	CAPSCREW		2	3/8"-16X2"	
15	S-2986	REAR HOUSING CASE ASSY	4300181 ,4300863	1		
16	14335	GASKET		1		K-1603,K-2199
17	X-8-611	CAPSCREW		1	3/8"-16X3-1/4"	
18	17106	GASKET		1		K-2199,K-2262,S-2119
19	19709	COLLAR		1		K-1603,K-2199,K-2262,S-2119
20	K-2262	OIL SEAL W/SLINGER	19109 20807 20808	1	"FOR MECHANICAL COVER"	K-2338,K-2993,K-2996
21	K-3651	OIL SEAL TOOL KIT		1		
22	X-12-404	PIPE PLUG		1	1/4" NPT	



10300B-8-00

- \* Bushing quantity requirements: #1 Housing – Upper bore use 4 #12815 / Lower bore use 2 #8677.  
#2 Housing – Upper bore use 2 #12815 and 1 #8677 / Lower bore use 2 #8677.

Note: Some part requirements are specific to #1 or #2 Aluminum or Iron Clutch Housings and Push or Pull type Clutch.

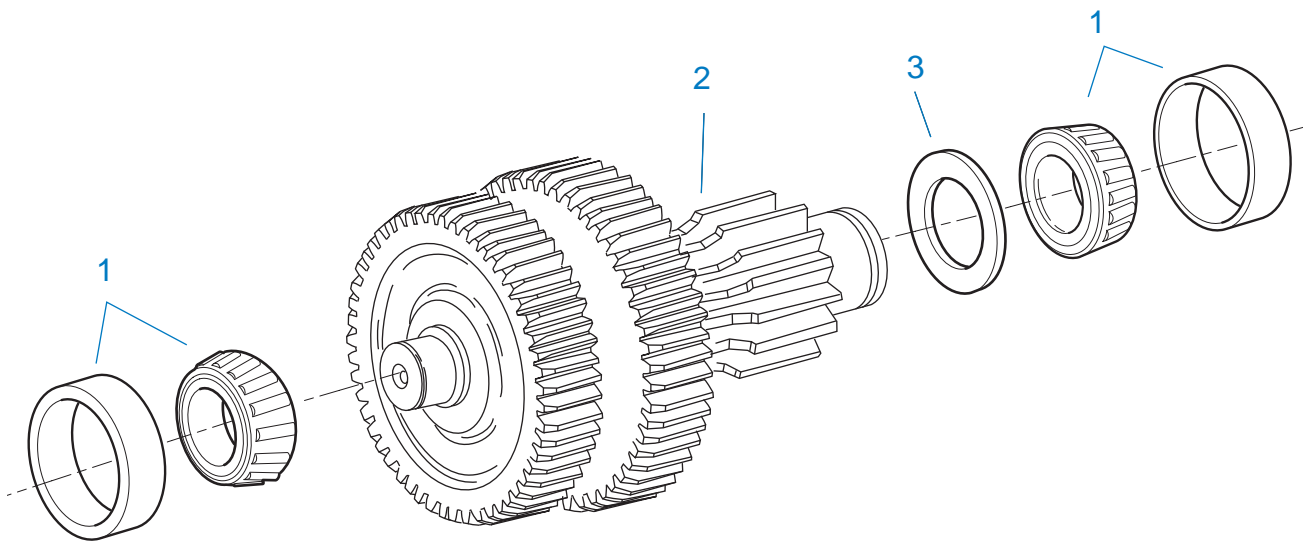
## CASE (FRONT)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-1820	CASE ASSY	4300445	1	FOR USE W/INTEGRAL PUMP	
1	S-1888	CASE ASSY	4300590	1		
2	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	
2	X-12-2007	PIPE PLUG	X12 2006	1		
3	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	
3	X-12-1207	PIPE PLUG	X12 1202 ,X12 1206	1	3/4" MAGNETIC	
4	4305310	GASKET	4302810	1		K-2199
5	4302809	PTO COVER	16596 ,4300571	1		
6	X-8-725	CAPSCREW	X 8 724	8	7/16"-14X7/8"	
7	4306584	CLUTCH HOUSING GASKET	4304815,4305668	1		K-2199



Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
8	A-3713	CLUTCH HOUSING ASSY	A - 3700	1	#1 PUSH-PULL IRON	
8	A-3723	CLUTCH HOUSING ASSY	A - 3721 ,A - 3722	1	#2 PUSH-PULL IRON	
8	A-4772	CLUTCH HOUSING ASSY	A - 4344 ,A - 4771	1	#2 PUSH-PULL ALUM.	
8	A-6064	CLUTCH HOUSING ASSY	A - 4342 ,A - 4770 ,A - 6062 ,A - 6063 ,A - 6065	1	#1 PUSH-PULL ALUM.	
9	239614	SCREW	X-8L-509	4	5/16-18X.81 QUANTITY DEPENDENT ON DESIGN	
10	14506	HAND HOLE COVER		1	#2 PUSH	
10	14507	HAND HOLE COVER		1	#2 PULL	
10	4305230	HAND HOLE COVER	11453	1	#1 PULL	
10	4305231	HAND HOLE COVER	1565	1	#1 PUSH	
11	4306583	STUD	5966	6		
12	X-10-1005	WASHER	X 3 1000 ,X10 1000 ,X10 1004	6	1.23 X 6.60	
13	X-1-1012	HEX NUT		6	.625-18	
14	20550	FRONT BRG COVER		1	2" PULL	K-2468,K-4125
15	X-8L-604	CAPSCREW		6	3/8"-16X1-1/4"	
16	20549	FRONT BRG COVER		1	2" PUSH	
17	14311	GASKET		1		K-2199
18	12815	BUSHING		4	USE 4 PCS FOR #1 HSG - UPPER USE 2 PCS FOR #2 HSG - UPPER	A-3713,A-3723,A-4772,A-6064,K-2468
19	8677	BUSHING		3	USE 2 PCS FOR #1 HSG-LOWER USE 3 PCS FOR #2 HSG-1 UPPER(#18),2 LOWER	A-3713,A-3723,A-4772,A-6064
20	X-8C-830	HEX HEAD SCREW/WASHER ASSY	X-8C-826	4	.500-13 X 1.490, USE 2 PCS FOR IRON HOUSING, USE 4 PCS FOR ALUMINUM HOUSING	
20	X-8C-831	HEX HEAD SCREW/WASHER ASSY	X-8C-822	2	.500-13 X 3.460, FOR IRON HOUSING	
22	X-8-686	CAPSCREW		6	3/8"-16X3/4"	
23	14575	PTO COVER	4302254	1		
24	4305309	GASKET	1684	1		K-2199
27	14373	MAGNET		3		S-1820,S-1888
28	18128	PIN		2		
29	X-1-1012	HEX NUT		2	.625-18	
30	X-10-1005	WASHER	X 3 1000 ,X10 1000 ,X10 1004	2	1.23 X 6.60	

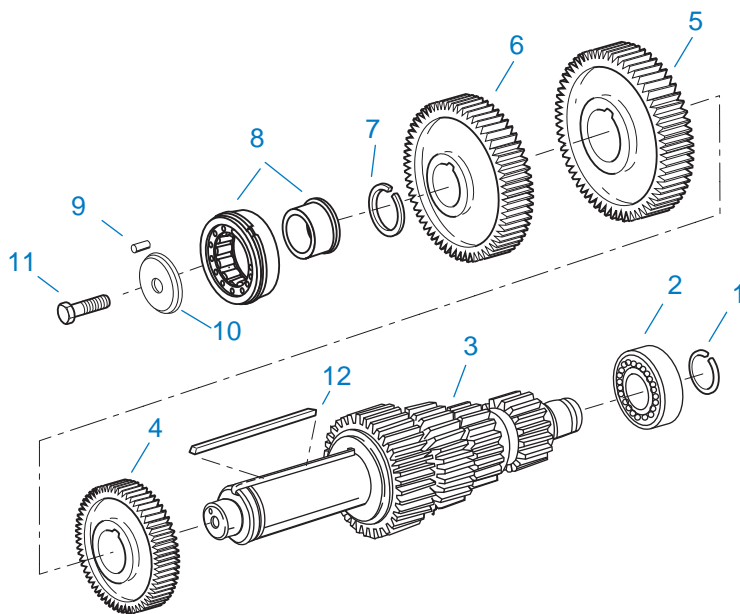
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
31	14554	STUD	1632 ,6579	2	5/8" X 2-3/16"	
36	23104	PLUG	1712	2		
37	X-8-1005	CAPSCREW		2	5/8"-11X1-1/4"	
38	20814	SPACER		2		
39	X-12-802	PIPE PLUG	X12 800	1	1/2"	



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-BOX	BEARING	21343,4302074	4		K-2338,K-2993,K-2996
2	A-6840	WELDED COUNTERSHAFT ASSY	A - 5747 ,A - 5899	2	C/S 4303902 - D/G 4300783 S/G 4300396	
3	4300184	SPACER		2		

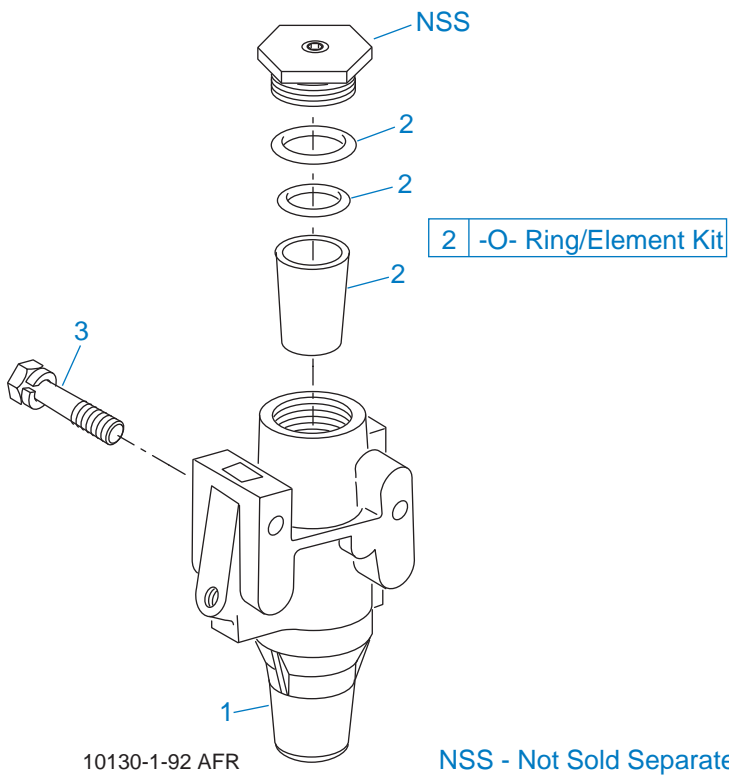


10342-4/92 CS/RTLO

## COUNTERSHAFT ASSY

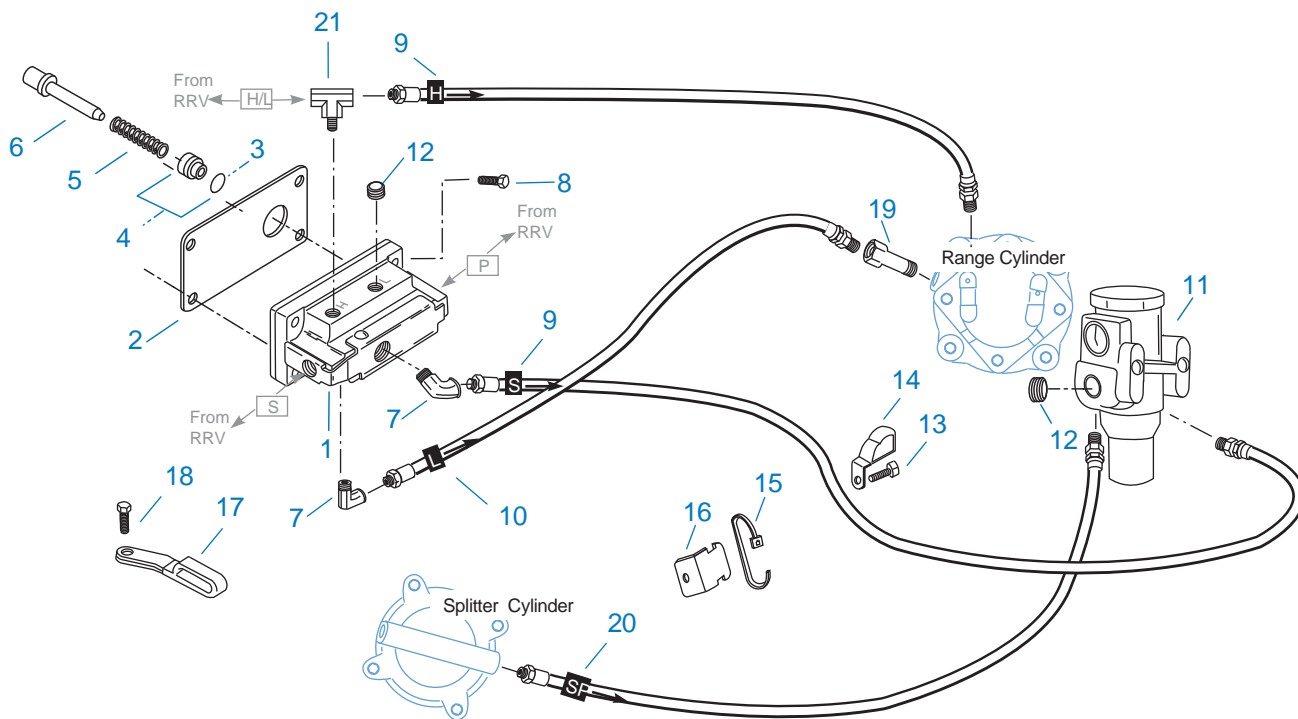
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14317	SNAP RING		2		K-2433,K-2993,K-2996
2	14366	BEARING		2		
3	A-6689	CNTRSHFT W/1ST & 2ND	A - 5746 ,A - 5873 ,K - 2939 ,K - 2968	2		
4	21588	3RD GEAR-CNTRSHFT		2		
5	15953	PTO GEAR - LOWER		1		
5	16390	NO LONGER AVAILABLE		2	AVAIL. OPTION IF PTO GEARS ARE NOT USED	
5	20840	PTO GEAR - UPPER	15952	1		
6	21586	DRIVE GEAR-CNTRSHFT	22271	2		
7	19198	SNAP RING		2		
8	4304599	BEARING	4302677 4304598	2		K-2993,K-2996
9	62511	ROLL PIN		2		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





## FILTER REGULATOR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-4740	FILTER/REGULATOR	19600	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"	



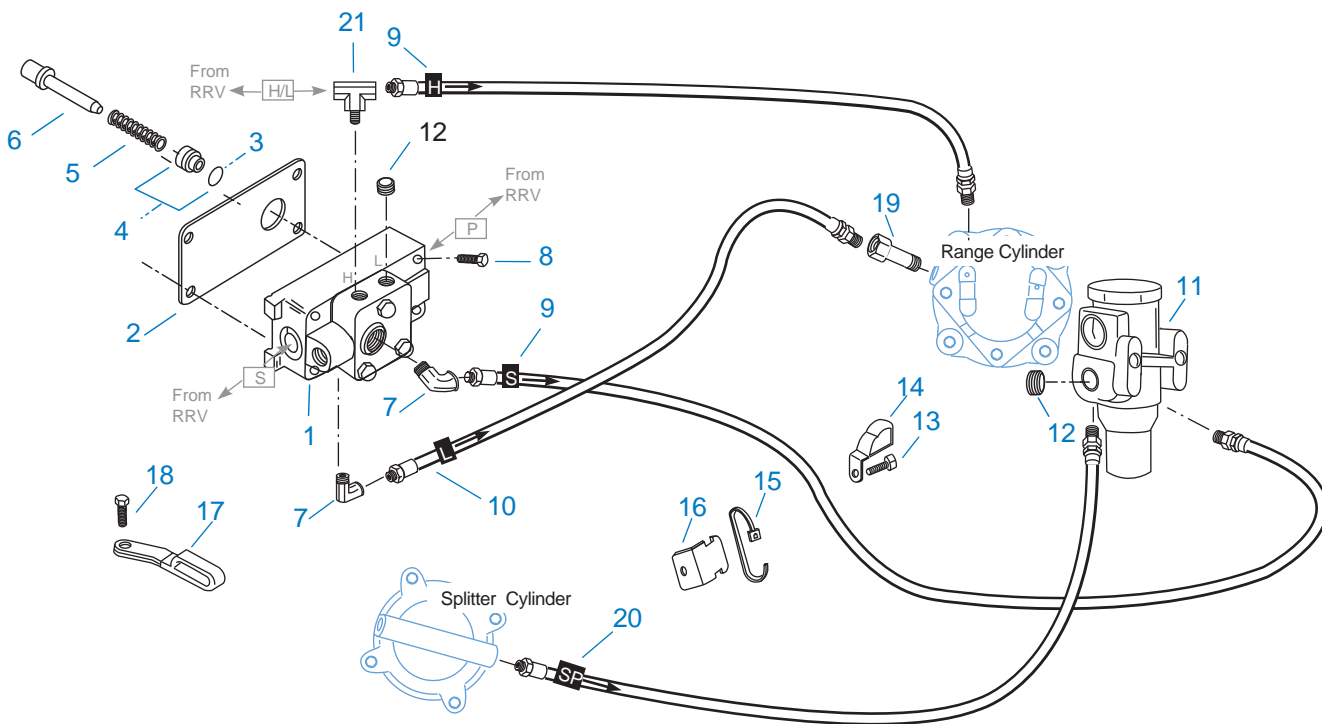
10111B-7/92 19470 HC 13spd

## H & C W/19470 VALVE

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-2424	VALVE REPLACEMENT KIT	19470	1		
2	19481	GASKET		1		K-2199,K-2424
3	19462	-O- RING	14033	1		K-1969
4	K-1969	SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVES	
5	21268	SPRING	19572	1		
6	20490	PIN	19459	1		
7	12845	ELBOW		2	1/8"	
8	X-8C-401	CAPSCREW		4	1/4"-20X1-1/8"	
9	55509	HOSE ASSY		2	34"	
10	55518	HOSE ASSY		1	32"	
11	A-4740	FILTER/REGULATOR	19600	1		
12	X-12-208	PIPE PLUG		2	1/8" NPT	
13	X-8L-601	CAPSCREW		1	3/8"-16X3/4"	
14	21427	HOSE CLAMP		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
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	4300330	ADAPTER	15094	1		
20	55527	HOSE ASSY		1	15"	
21	21086	BRANCH TEE		1	1/8"	



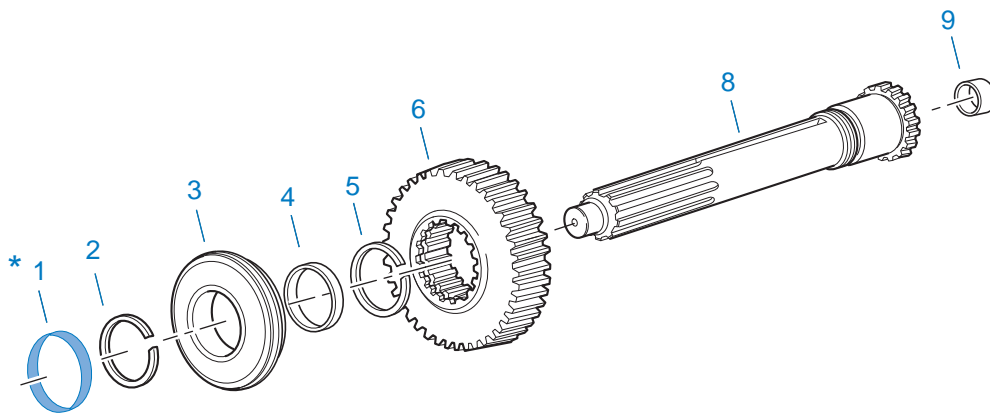


10110B-7/92 A-5000 HC 13spd

## 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		K-2424
2	19481	GASKET		1		K-2199,K-2424
3	19462	-O- RING	14033	1		K-1969
4	K-1969	SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVES	
5	21268	SPRING	19572	1		
6	20490	PIN	19459	1		
7	12845	ELBOW		2	1/8"	
8	X-8C-411	CAPSCREW		4	1/4"-20X1-3/4"	
9	55509	HOSE ASSY		2	34"	
10	55518	HOSE ASSY		1	32"	
11	A-4740	FILTER/REGULATOR	19600	1		
12	X-12-208	PIPE PLUG		2	1/8" NPT	
13	X-8L-601	CAPSCREW		1	3/8"-16X3/4"	
14	21427	HOSE CLAMP		1		
15	21425	STRAP		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
16	21426	BRACKET		1		
17	21428	HOSE CLAMP		1		
18	X-8L-604	CAPSCREW		1	3/8"-16X1-1/4"	
19	4300330	ADAPTER	15094	1		
20	55527	HOSE ASSY		1	15"	
21	21086	BRANCH TEE		1	1/8"	



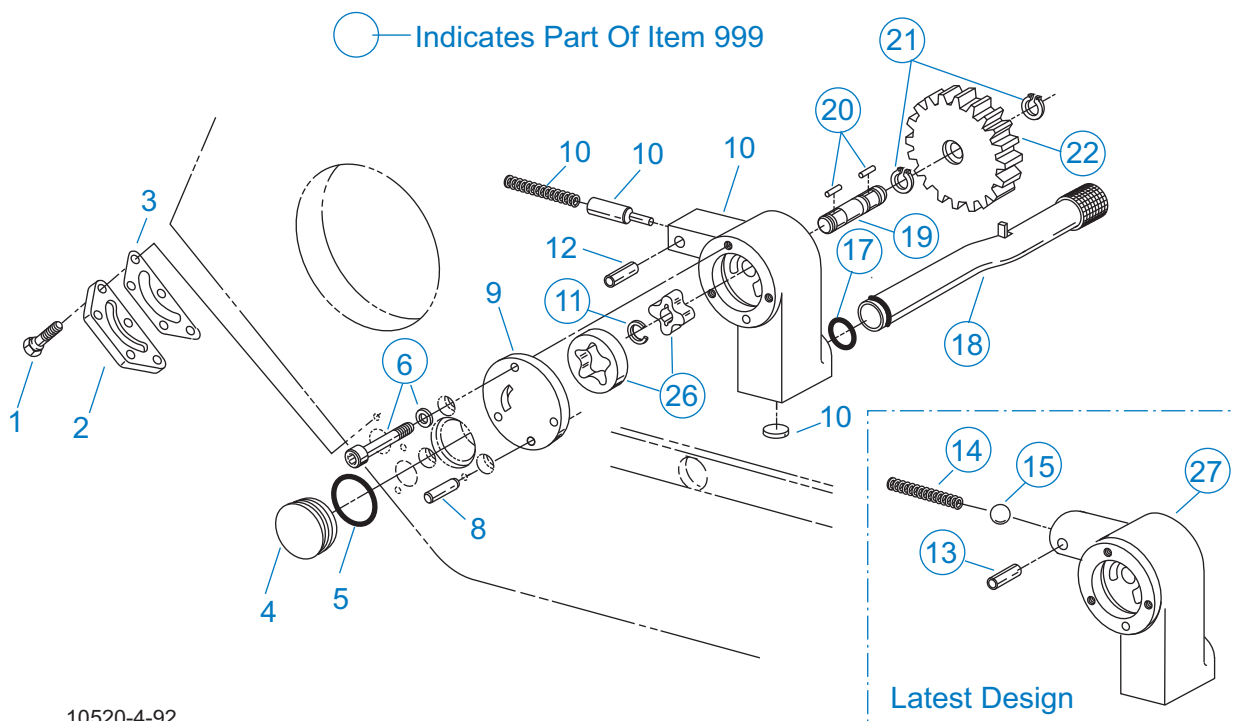
\* For Shipping Only -- Do Not Replace

\*

10370-1/92 IS

## INPUT SHAFT & DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	23559	SEAL		1	NOT SOLD FOR SERVICE	
2	16980	SNAP RING		1		K-2468,K-2993,K-2996,K-4125
3	81504	BEARING		1		K-2468,K-2993,K-2996,K-4125
4	16463	SPACER		1		
5	14750	SNAP RING		1		K-2433,K-2468,K-2993,K-2996,K-4125
6	20458	MAIN DRIVE GEAR	19630	1		
8	S-1659	INPUT SHAFT	20535 23566 ,4302661	1	2" PULL - USE W/FBC 20550	K-2468,K-2993,K-4125
8	S-1660	INPUT SHAFT	20536 ,23567	1	2" PUSH - USE W/FBC 20549	
9	16566	BUSHING		1		K-2996,S-1659,S-1660

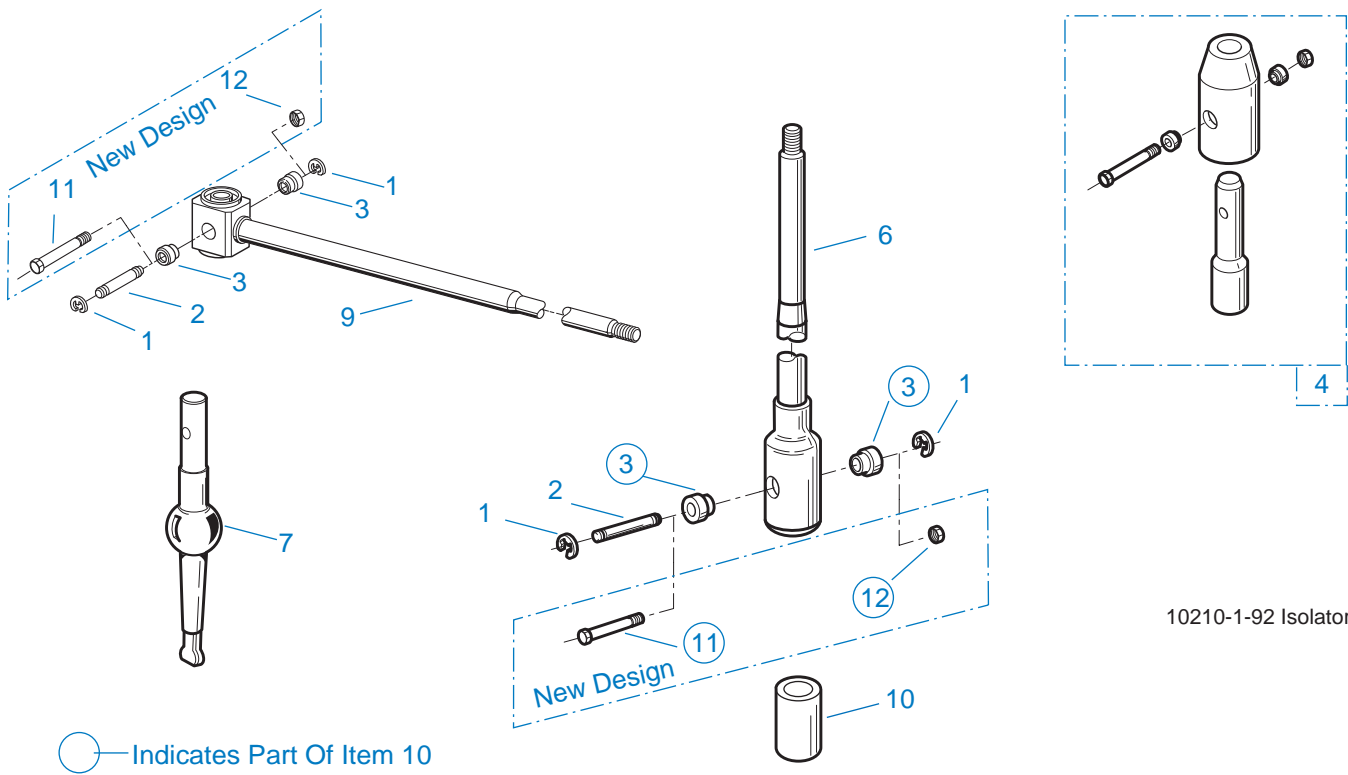


10520-4-92

## INTEGRAL OIL PUMP

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8C-409	CAPSCREW		5	1/4"-20X5/8" - USE WITH 4300751 COVER	
1	X-8C-430	CAPSCREW		5	1/4"-20X7/8" - USE WITH 20513 COVER	
2	K-2402	COVER & SCREW KIT	20513 ,4300751	1		K-2402
3	20514	GASKET		1		
4	20823	PLUG		1		
5	14765	-O- RING		1		K-2002
6	K-4126	FASTENER KIT	20824, X-8-448	1	KIT CONTAINS 3 FASTENERS AND 3 WASHERS	K-3367
8	20825	DOWEL PIN		1		
9	4303107	RETAINER	20510	1		S-1820
10	K-3367	OIL PUMP KIT	4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173	1		
11	20518	CRESCENT RING		1		
12	62516	ROLL PIN	62521	1		
13	62514	ROLL PIN		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
14	K-3367	OIL PUMP KIT	4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173	1		
15	X-14-700	STEEL BALL		1	7/16"	
17	20225	-O- RING		1		
18	4305713	SUCTION TUBE	4304628	1	O-RING INCLUDED ON SUCTION TUBE	K-3367
19	20508	DRIVE SHAFT		1		
20	20509	KEY		2		
21	14853	SNAP RING		2		
22	20511	DRIVE GEAR		1		
26	20507	ELEMENT		1		
27	K-3367	OIL PUMP KIT	4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173	1		
999	K-3367	OIL PUMP KIT	4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173	1		



10210-1-92 Isolator

## ISOLATORS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	19124	-E- RING		2		
2	K-3467	PIN REPLACEMENT KIT	21245	1		
3	21246	BUSHING		2		K-2003,K-2428,K-2429,K-2978,K-3399,S-2129,S-2130,S-2519
4	S-1794	ISOLATOR ASSY		1		
6	21247	LEVER		1	STRAIGHT 18.67"	
7	21235	STUB LEVER		1	LOW TOWER	K-2428,S-1677
7	21236	STUB LEVER		1	HIGH TOWER	K-2429,S-1579,S-2130
7	4301168	STUB LEVER		1	MID TOWER	K-2978
9	21767	90 DEG LEVER		1	STRAIGHT 33"	
10	K-3399	ISOLATOR BUSHING KIT	21244 ,23311	1		
11	X-8-560	SCREW		1		K-2003
12	X-9-503	NUT		1		K-2003

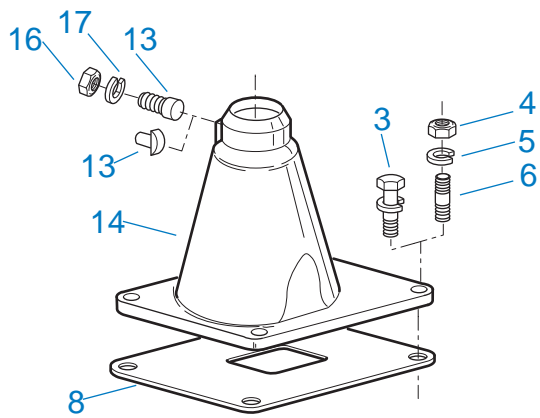
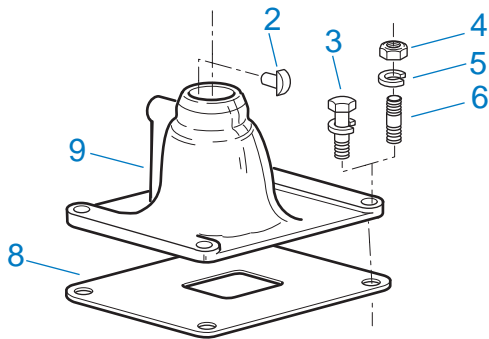
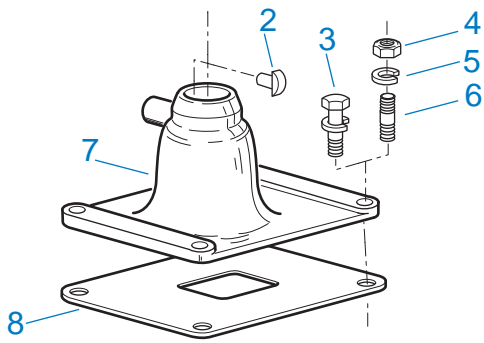
## KITS & ASSEMBLIES

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
K-1476		SHIFT LEVER HSG	4530 ,17163 ,18298 ,4304905 ,A - 4437	1	LOW TOWER	
K-1603		GASKET KIT		1	FOR AUXILIARY SECTION	K-2338
K-1698		-O- RING/ELEMENT KIT		1	FOR FILTER REGULATOR	
K-1703		OIL COOLER INSTL KIT		1		
K-1826		MASTER VALVE REPAIR KIT		1	FOR A-4900 VALVE	
K-1935		REPAIR KIT-SLAVE VALVE		1	FOR A-5000 VALVE	
K-1956		COOLER INSTLN KIT		1		
K-1969		SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVES	
K-2002		-O- RING KIT		1		K-2338,K-2993,K-2996
K-2003		PIN & BUSHING KIT		1		
K-2053		MASTER VALVE REPAIR KIT		1	FOR A-5313 VALVE	
K-2078		-O- RING KIT - SPLITTER		1	SPLITTER	
K-2199		GASKET KIT		1		K-2993,K-2996
K-2262		OIL SEAL W/SLINGER	19109 20807 20808	1	"FOR MECHANICAL COVER"	K-2338,K-2993,K-2996
K-2338		BASIC OVERHAUL KIT		1	FOR AUXILIARY SECTION	
K-2366		KEY & WASHER KIT	21326 ,4300763 ,4304614	1	CONTAINS 3-SIDED KEY	
K-2394		AIR SYSTEMS TOOL KIT		1		
K-2409		CYLINDER KIT-SPLITTER		1		
K-2424		VALVE REPLACEMENT KIT	19470	1		
K-2430		SHIM KIT	21452	1		K-2338,K-2993,K-2996
K-2431		SHIM KIT		1		K-3473
K-2433		SMALL PARTS KIT		1		
K-2468		CLUTCH INSTALLATION KIT		1	FOR USE WITH S-1659 INPUT SHAFT ASSY AND 81504 INPUT SHAFT BEARING	
K-2973		SHIFT LEVER HSG KIT	17166 ,17167 ,4303050 ,4304910 ,K	1	HIGH TOWER	

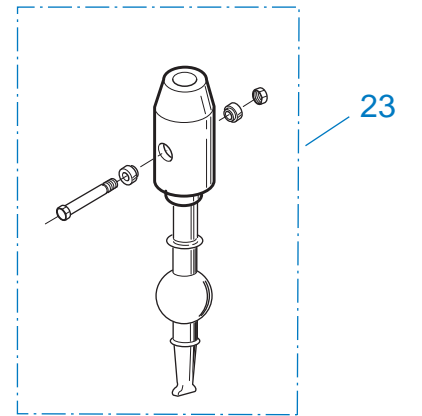
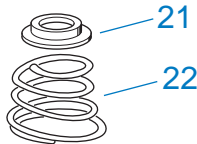
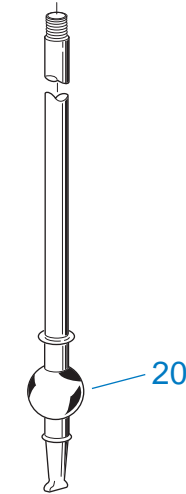
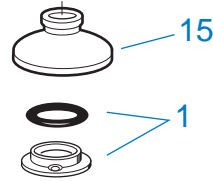
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
			- 1630 K - 1941			
K-2977		SHIFT LEVER HSG KIT	4301167 ,4304907 ,A - 6040	1	MID TOWER	
K-2978		LEVER REPLACEMENT KIT		1	MID TOWER	
K-2993		BASIC OVERHAUL KIT		1		
K-2996		BASIC REBUILD KIT		1		
K-3189		REPLT KIT-DRIVE GEAR	4300467 ,4303558 ,K - 2312	1		
K-3193		MASTER VALVE REPAIR KIT		1	FOR A-6913 VALVE	
K-3195		MASTER VALVE REPAIR KIT		1	FOR A-7313 VALVE	
K-3209		IDLER SHAFT REPL KIT	16405 ,4302981 ,4305513	1		
K-3333		SPLITTER VLV REPL KIT	A - 6861	1		
K-3367		OIL PUMP KIT	4301829 ,4301948 ,4303776 ,4304529 ,4304572 A - 6963 ,A - 7173	1		
K-3399		ISOLATOR BUSHING KIT	21244 ,23311	1		
K-3467		PIN REPLACEMENT KIT	21245	1		
K-3473		PUMP INSTALLATION KIT	K - 2407	1		
K-3492		SYNCHRONIZER KIT	K - 2446	1		
K-3494		SYNCHRONIZER REPLACEMENT KIT	K - 2448	1	SLIDING CLUTCH INCLUDED IN KIT	
K-3651		OIL SEAL TOOL KIT		1		
K-4125		CLUTCH INSTALLATION KIT (RT), HYDRAULIC RELEASE		1	STANDARD RT INPUT SHAFT AND YOKE FOR HYDRAULIC CLUTCH RELEASE	
S-1219		YOKE ASSY LOW-REV		1		
S-1404		OIL FILTER	17238	1		
S-1440		SHIFT BAR HSG (STD)	15890 ,15928 ,16913 ,17115 ,17180 17182 ,17428 ,18571 ,18640 ,18644 18840 ,18847 ,19448 ,19449 ,19453 19454 ,19455 ,19605 ,20074 ,20210 20211 ,21133 ,22955 ,S - 1360 ,S - 1364 S - 1376 ,S - 1377	1	HOUSING ONLY	



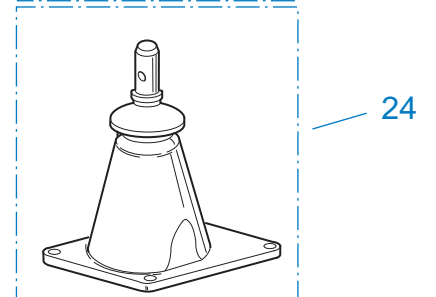
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
S-1441		SHIFT BAR HSG (F)	15891 ,16340 ,16564 ,17114 ,17128 17181 ,17218 ,17492 ,17577 ,17900 18203 ,18436 ,18642 ,18646 ,18886 19159 ,19450 ,19451 ,19456 ,19457 19458 ,19717 ,19956 ,20072 ,20212 20213 ,21134 ,22956 ,S - 1106 ,S - 1361 S - 1370 ,S - 1374 ,S - 1375 ,S - 1378	1	HOUSING ONLY	
S-1516		CAP ASSY	20851 ,20853	1		
S-1529		SHIFT BAR HSG ASSY (F)	20213 ,22956	1	COMPLETE	
S-1531		SHIFT BAR HSG ASSY (STD)	20211 ,22955	1	COMPLETE	
S-1659		INPUT SHAFT	20535 23566 4302661	1	2" PULL - USE W/FBC 20550	K-2468,K-2993,K-4125
S-1660		INPUT SHAFT	20536 ,23567	1	2" PUSH - USE W/FBC 20549	
S-1794		ISOLATOR ASSY		1		
S-1820		CASE ASSY	4300445	1	FOR USE W/INTEGRAL PUMP	
S-1888		CASE ASSY	4300590	1		
S-2119		REAR BRG COVER ASSY	20048 ,22045 ,4302009 ,4302031 ,S - 1558 S - 1560	1	EXTENDED	
S-2129		SHIFT LEVER HSG ASSY		1	LOW TOWER	
S-2130		SHIFT LEVER HSG ASSY	S - 2053	1	HIGH TOWER	
S-2519		SHIFT LEVER HSG ASSY	S - 2919	1	MID TOWER	
S-2545		ROADRANGER VALVE ASSY		1	RTLO - W/SHIFT DIAGRAM MEDALLION	
S-2660		MAINSHAFT ASSY	21594 ,4303714 ,S - 1561	1		



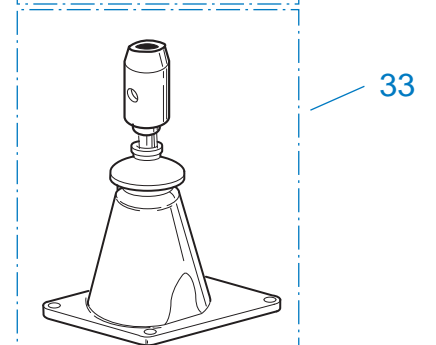
10207-9-95



K-2428 - Low  
K-2978 - Mid  
K-2429 - High



S-1677 - Low  
S-1967 - Mid  
S-1579 - High



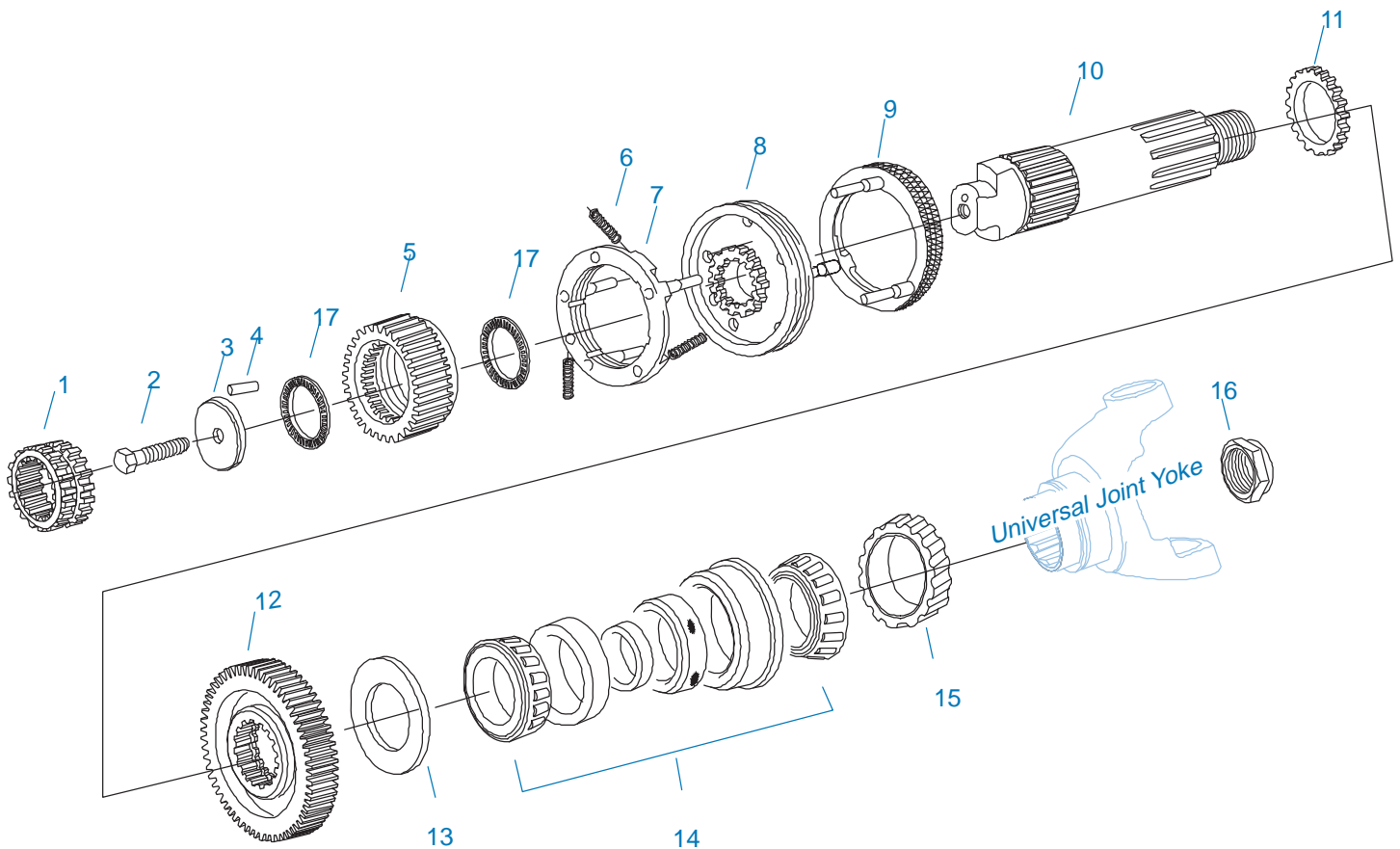
S-2129 - Low  
S-2519 - Mid  
S-2130 - High

## LEVERS/HOUSINGS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3376	O-RING & WASHER KIT	4301211	1		
2	18299	PIN		1		K-1476,K-2977,S-1677

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
3	X-8C-604	CAPSCREW		4	3/8"-16X1-1/4"	S-1529,S-1531
4	X-1-600	NUT		4	3/8"-24-N.F.PLAIN	
5	X-3-600	LOCKWASHER		4	3/8"	
6	11934	STUD	7467	4		
7	K-1476	SHIFT LEVER HSG	4530 ,17163 ,18298 ,4304905 ,A - 4437	1	LOW TOWER	
8	4305294	GASKET	4303431	1		K-1476,K-1703,K-2199,K-2428,K-2429,K-2973,K-2977,K-2978,S-1529,S-1531,S-1579,S-1677,S-1967,S-2129,S-2130,S-2519
9	K-2977	SHIFT LEVER HSG KIT	4301167 ,4304907 ,A - 6040	1	MID TOWER	
13	4303030	PIN		1		K-2973,S-1579,S-2130
13	6541	PIN		1	3/8" - USED W/17167 ONLY	
14	K-2973	SHIFT LEVER HSG KIT	17166 ,17167 ,4303050 ,4304910 ,K - 1630 K - 1941	1	HIGH TOWER	
15	10427	BOOT		1		K-1476,K-2973,K-2977,S-1579,S-1677,S-2130
16	X-1-600	NUT		1	3/8"-24-N.F.PLAIN	
17	X-3-600	LOCKWASHER		1	3/8"	
20	17600	GEAR SHIFT LEVER		1	STRAIGHT - LOW 21-1/2"	
20	18482	GEAR SHIFT LEVER		1	STRAIGHT - HIGH 35"	
21	2538	RETAINER		1		K-1476,K-2973,K-2977,S-1579,S-1677,S-2130
22	2536	SPRING		1		K-1476,K-2973,K-2977,S-1579,S-1677,S-2130
23	K-2428	LEVER REPLACEMENT KIT		1	LOW TOWER	
23	K-2429	LEVER REPLACEMENT KIT		1	HIGH TOWER	
23	K-2978	LEVER REPLACEMENT KIT		1	MID TOWER	
24	S-1579	SHIFT TOWER ASSY		1	HIGH TOWER	

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
24	S-1677	SHIFT TOWER ASSY		1	LOW TOWER	
24	S-1967	SHIFT TOWER ASSY		1	MID TOWER	
33	S-2129	SHIFT LEVER HSG ASSY		1	LOW TOWER	
33	S-2130	SHIFT LEVER HSG ASSY	S - 2053	1	HIGH TOWER	
33	S-2519	SHIFT LEVER HSG ASSY	S - 2919	1	MID TOWER	

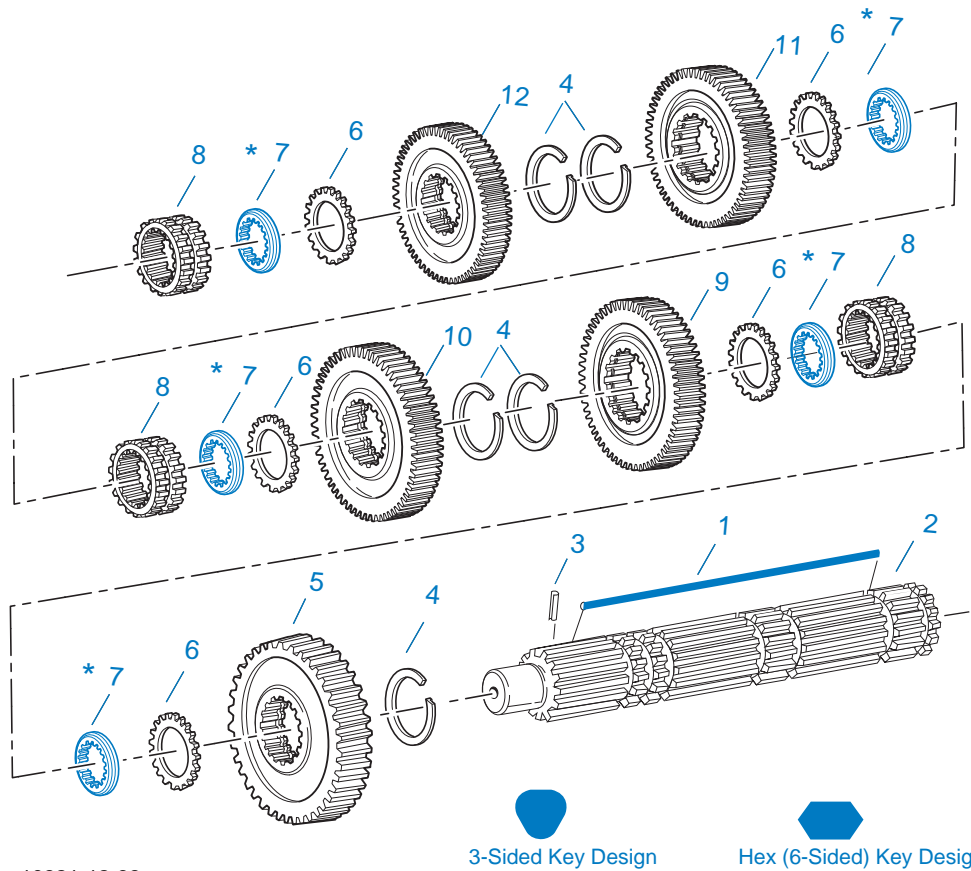


10422-4/92 Aux MS 13/18spd

## 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	K-2617	RETAINER REPL KIT	21606	1		
4	62511	ROLL PIN		1		A-6689,K-2433
5	21931	SPLITTER GEAR-MAINSHAFT		1		K-2616,K-2617
6	14897	SPRING		3		K-2338,K-2433,K-2993,K-2996,K-3492,K-3494
7	A-7331	SYNCHRONIZER ASSY	4304396 4304397 A - 5917	1	HI RANGE	K-3492,K-3494
8	20323	SLIDING CLUTCH		1		K-3494
9	A-7254	SYNCHRONIZER ASSEMBLY	A - 4937 A - 5876	1	LO RANGE	K-3492,K-3494

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
10	K-2616	MAINSHAFT REPL KIT	21604	1		
11	19203	SPACER		1		K-2433
12	21918	REDUCTION GEAR		1		
13	16772	WASHER		1		K-2433
14	15260	BEARING		1		K-2338,K-2993,K-2996
15	20191	ROTOR	16295	1		
16	22254	NUT	11956	1		
17	4302058	BEARING		2		K-2616,K-2617,K-2993,K-2996



10321-12-93

\* 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

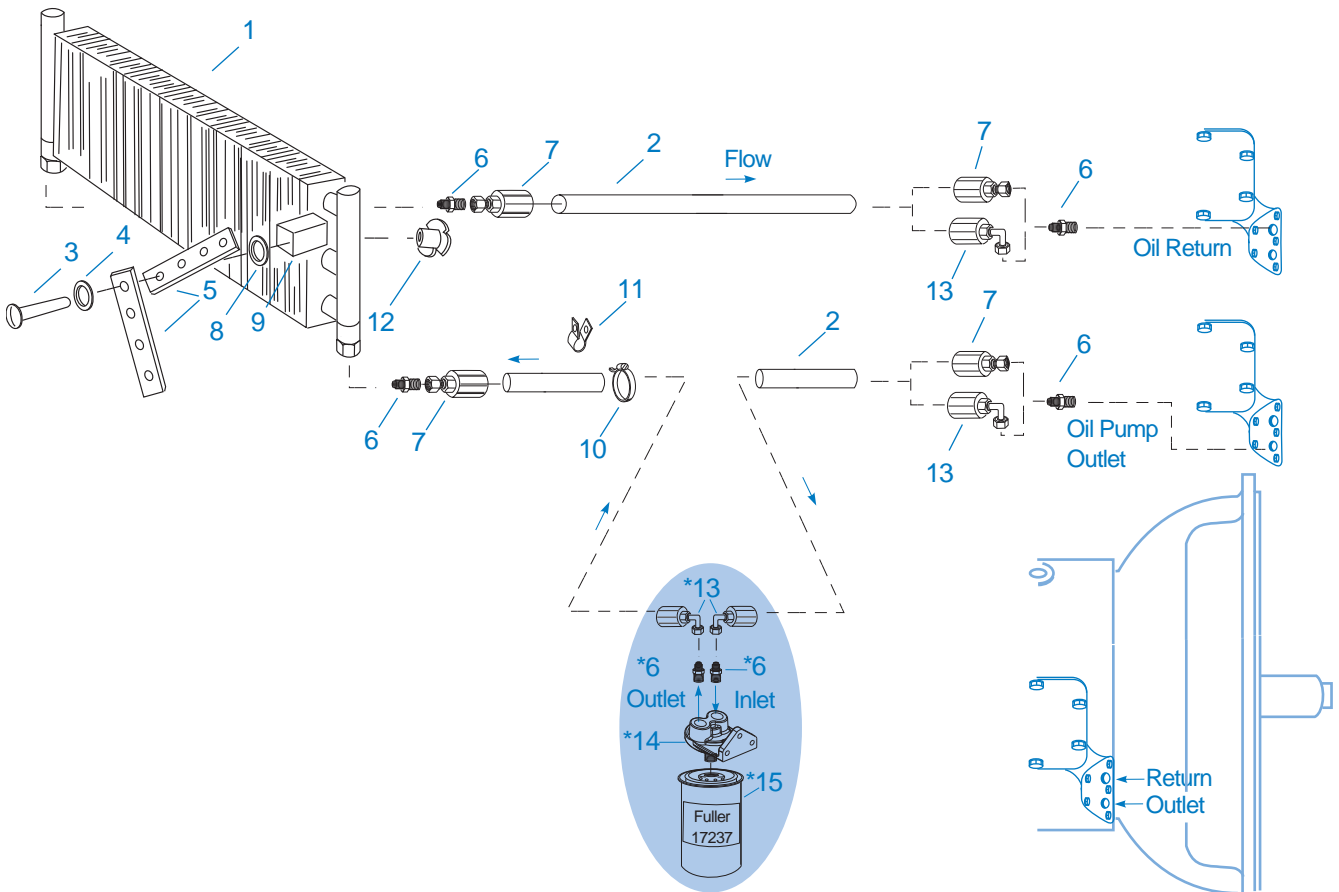
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4304614	3-SIDED KEY	4300890	1		K-2366,K-2433
1	K-2366	KEY & WASHER KIT	21326 ,4300763 ,4304614	1	CONTAINS 3-SIDED KEY	
2	S-2660	MAINSHAFT ASSY	21594 ,4303714 ,S - 1561	1		
3	62504	ROLL PIN		1		S-2660
4	14750	SNAP RING		5		K-2433,K-2468,K- 2993,K-2996,K-4125
5	16756	REVERSE GEAR- MAINSHAFT	22408	1		
6	14749	SPACER		5		K-2433

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
7	14711	WASHER .248-.250 WHITE	18701	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	14712	WASHER .253-.255 GREEN	18702	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	14713	WASHER .258-.260 ORANGE	18703	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	14714	WASHER .263-.265 PURPLE	18704	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	14715	WASHER .268-.270 YELLOW	18705	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	14716	WASHER .273-.275 BLACK	18706	5	OPTIONAL 14711-14716 USE ANY 5 WASHERS USE WITH 21326 KEY	
7	4300382	WASHER .249-WHITE		5		K-2366,K-2433
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	4300384	WASHER .259-ORANGE		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	K-2366,K-2433
7	4300385	WASHER .264-PURPLE		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	
7	4300386	WASHER .269-YELLOW		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	
7	4300387	WASHER .274-BLACK		5	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 5 WASHERS. USE WITH 3-SIDED KEY	
7	4300830	WASHER .244-BLUE		5		K-2366,K-2433
8	16118	SLIDING CLUTCH		3		K-2993
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
	4300764	SHIFT DIAGRAM LABEL	19819 ,20161	1	RTLO/RTLOF	
	4301194	SHIFT DIAGRAM LABEL		1	RTLO/RTLOF WITH VALVE LEFT OF DRIVER	
	71203	SILICONE LUBE		1	8 OZ (236.59 CC)-FLEET SIZE	
	71204	ADHESIVE SEALANT		1	0.5 CC (SINGLE APPLICATION SIZE)	K-3473
	71205	SEALANT		1	2 CC (SINGLE APPLICATION SIZE)	K-1703,K-2993
	71206	SILICONE LUBE		1	4 CC (SINGLE APPLICATION SIZE)	K-2002,K-2078,K-2409,K-2428,K-2429,K-2978,K-3333



10525-4/92 Cooler

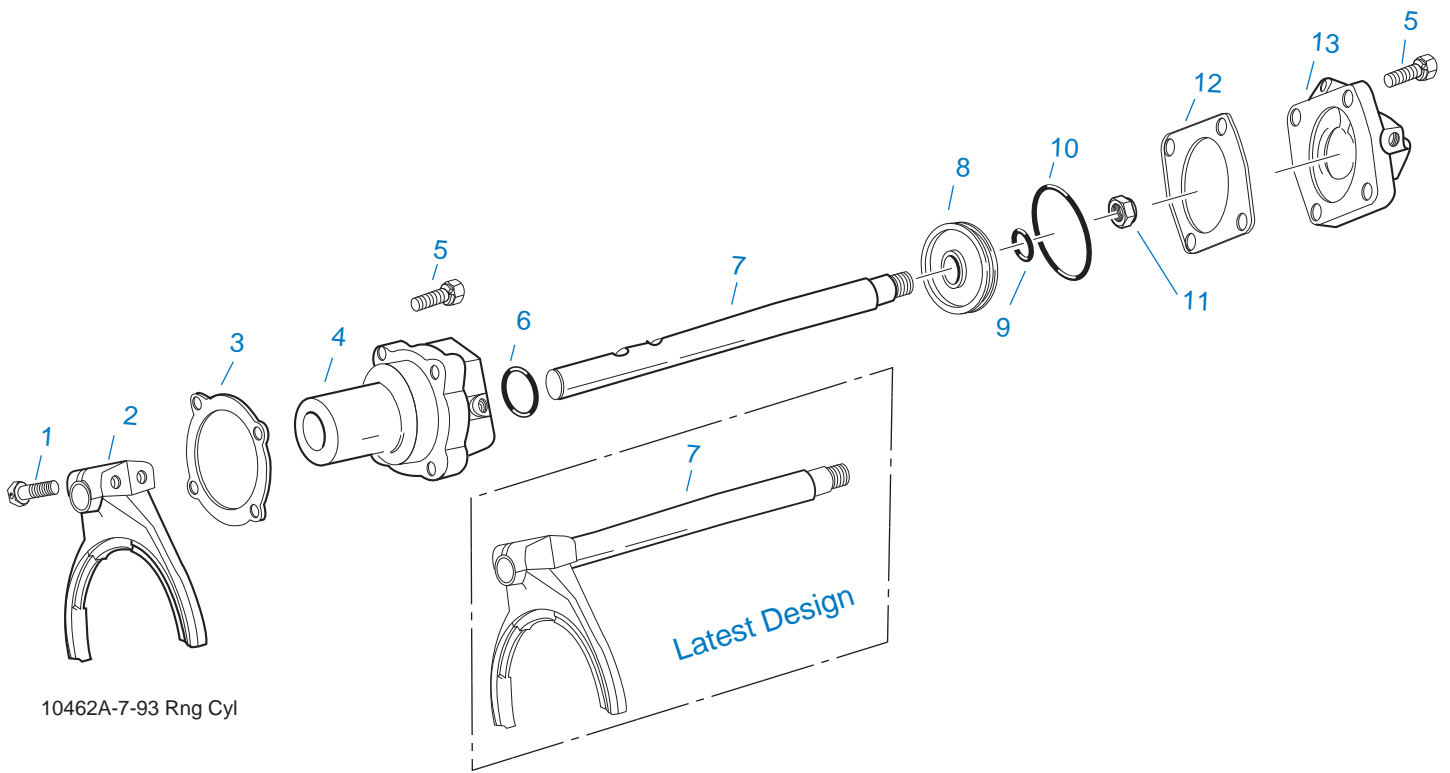
\*Adding Oil Filter and parts as shown is optional.

Return / Outlet Location

## OIL COOLER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	18025	OIL COOLER		1		K-1703,K-1956
2	19424	HOSE		1	25 FEET	K-1703,K-1956
3	X-8-535	CAPSCREW		2	5/16"-16X2-1/2"	
4	X-3-506	LOCKWASHER		2	5/16"	
5	18211	BRACKET		4		K-1703,K-1956
6	19419	CONNECTOR		6		K-1703,K-1956,S-1404
7	19415	SWIVEL		4		K-1703,K-1956
8	X-10-501	WASHER		2	5/16"	
9	18209	PLUG-RUBBER MOUNT		2		K-1703,K-1956
10	17190	STRAP		8		K-1703,K-1956
11	19423	CLAMP		5		K-1703,K-1956
12	18210	NUT		2		K-1703,K-1956

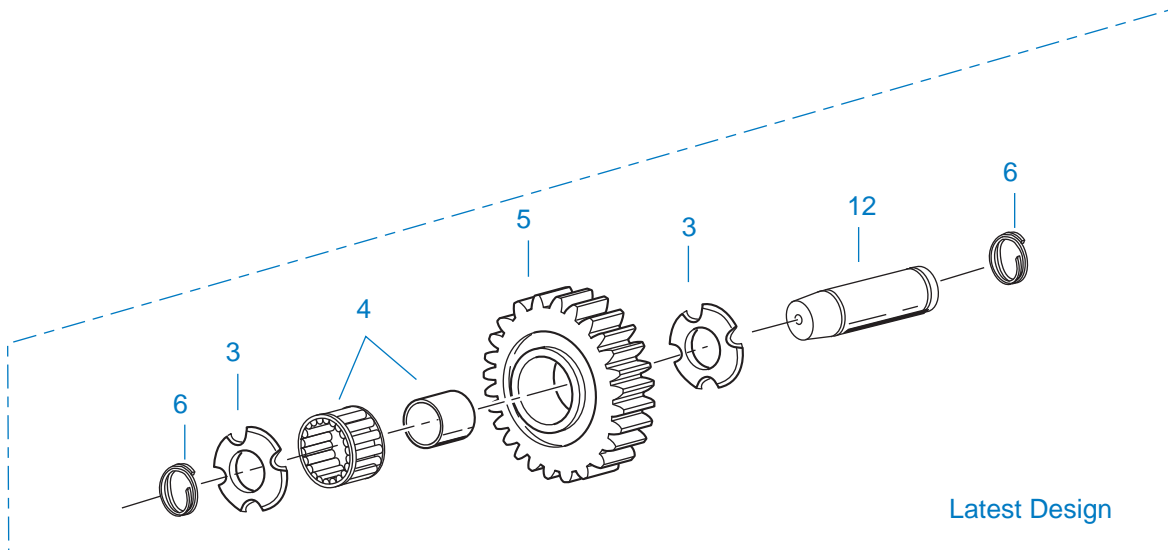
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
13	19422	ELBOW		4		K-1956
14	S-1404	OIL FILTER	17238	1		
15	17237	FILTER ELEMENT		1		S-1404



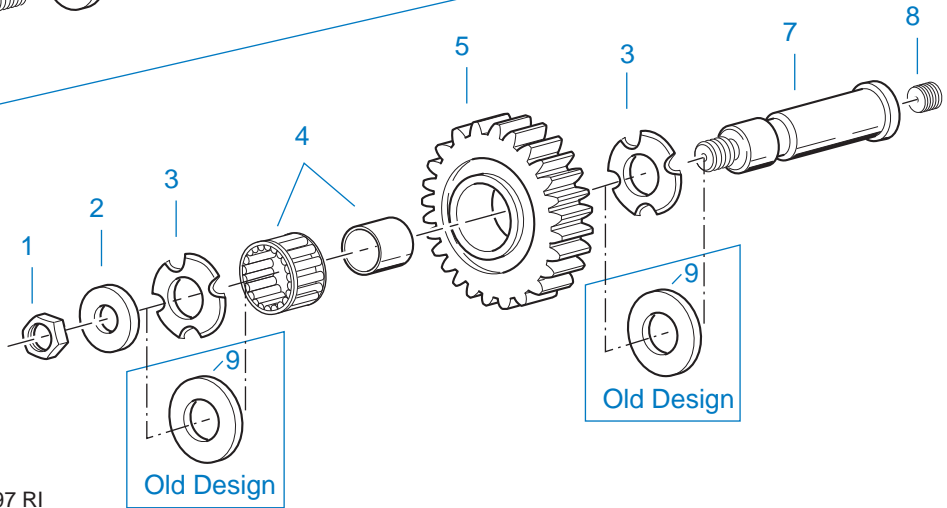
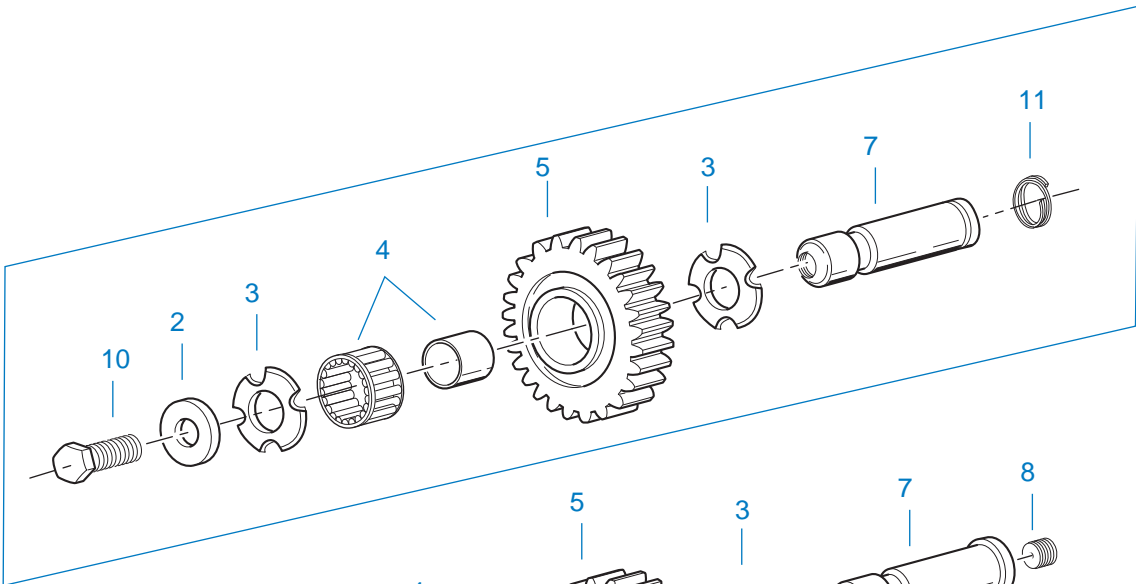
## RANGE CYLINDER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-7-809	BOLT	X 7 810 ,X 7 811	2	1/2"-20X1-3/4"	
2	22823	SHIFT YOKE	16775	1		
3	14347	GASKET		1		K-1603,K-2199
4	16778	AUXILIARY CYLINDER		1		
5	X-8L-604	CAPSCREW		8	3/8"-16X1-1/4"	
6	14765	-O- RING		1		K-2002
7	4300183	YOKE BAR		1		
7	A-6163	WELDED YOKE ASSY		1		
8	14341	PISTON	23353	1		
9	14345	-O- RING		1		K-2002
10	14344	-O- RING		1		K-2002
11	X-1-1010	NUT		1	5/8"-18	
12	14349	GASKET		1		K-1603,K-2002,K-2199
13	19690	CYLINDER COVER		1		





Latest Design



11383-5-97 RI

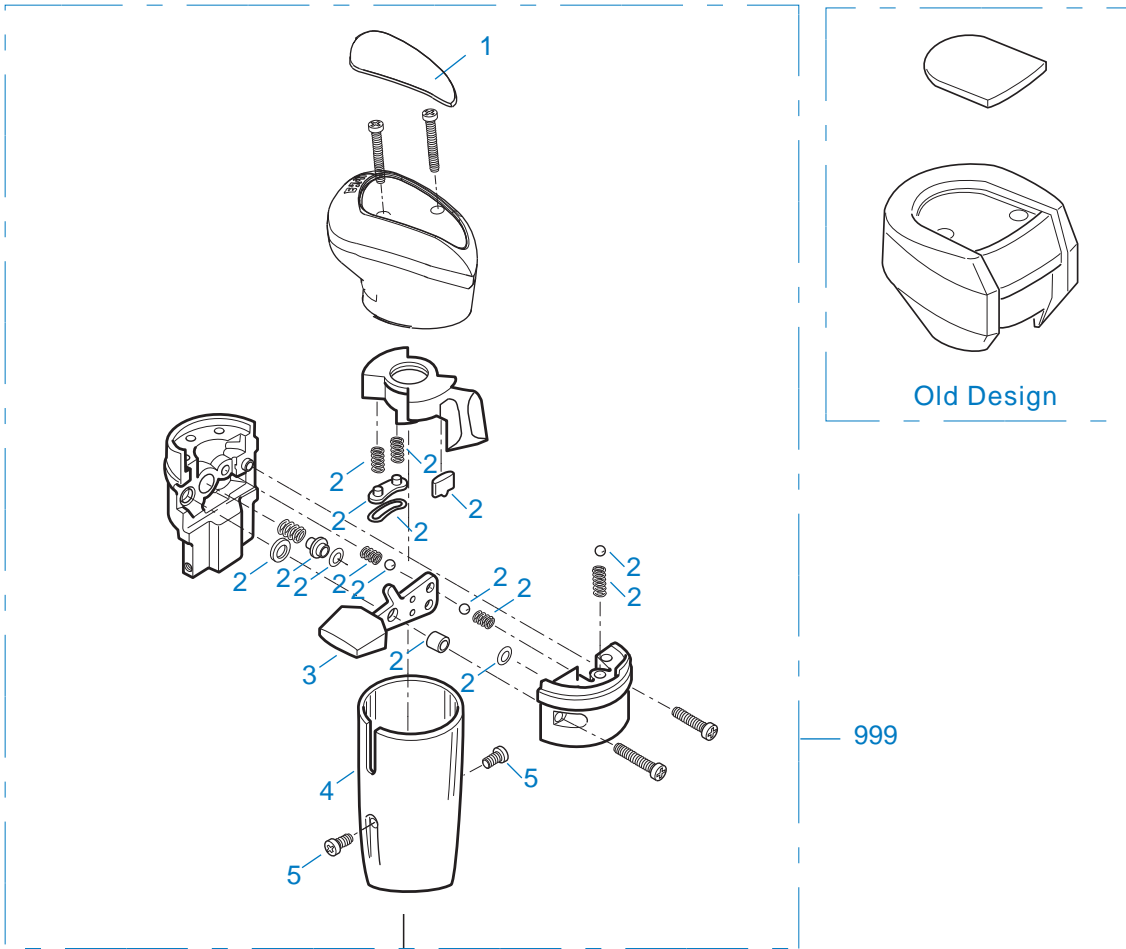
**REVERSE IDLER**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-1-1008	NUT		2	5/8"-18	
2	14283	WASHER		2		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
3	4302982	WASHER	14282	4		K-3209,S-1820,S-1888
4	14287	BEARING	4305020	2		K-2993,K-2996
5	16757	REVERSE IDLER GEAR	22409	2		
6	4303336	RETAINING RING		4		K-3209
7	K-3209	IDLER SHAFT REPL KIT	16405 ,4302981 ,4305513	2		
8	5202	PLUG		2		
9	14282	NO LONGER AVAILABLE		4		
10	X-7-1008	CAPSCREW		2	5/8"-18X1-1/4	
11	4303336	RETAINING RING		2		K-3209
12	4305513	IDLER SHAFT		2		K-3209

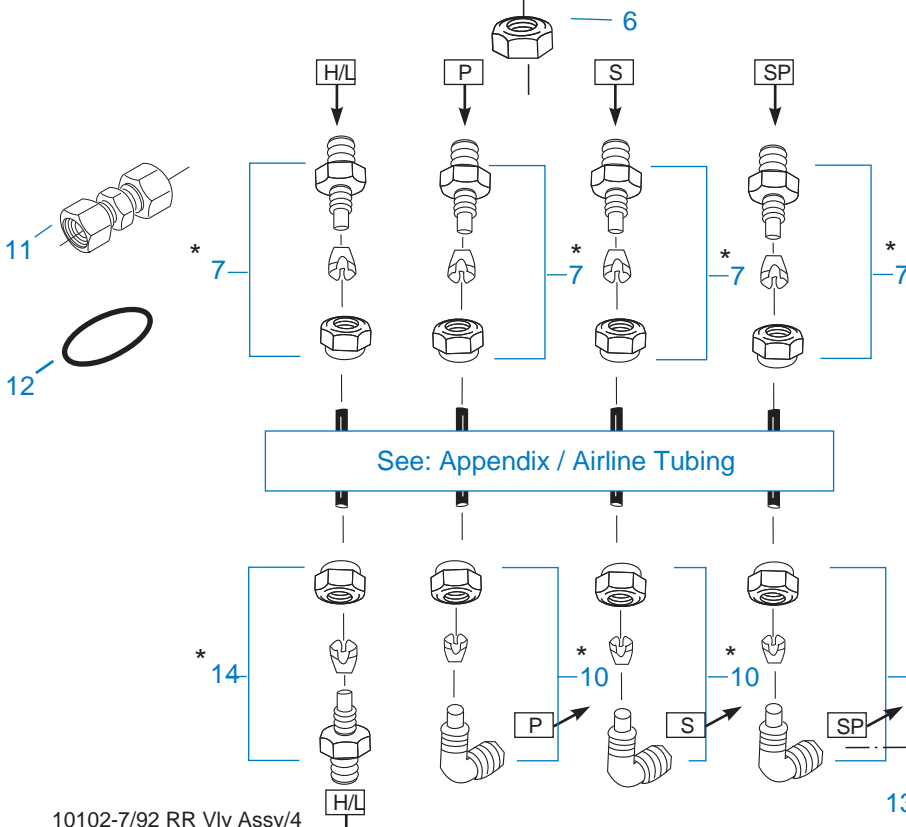






Old Design

999



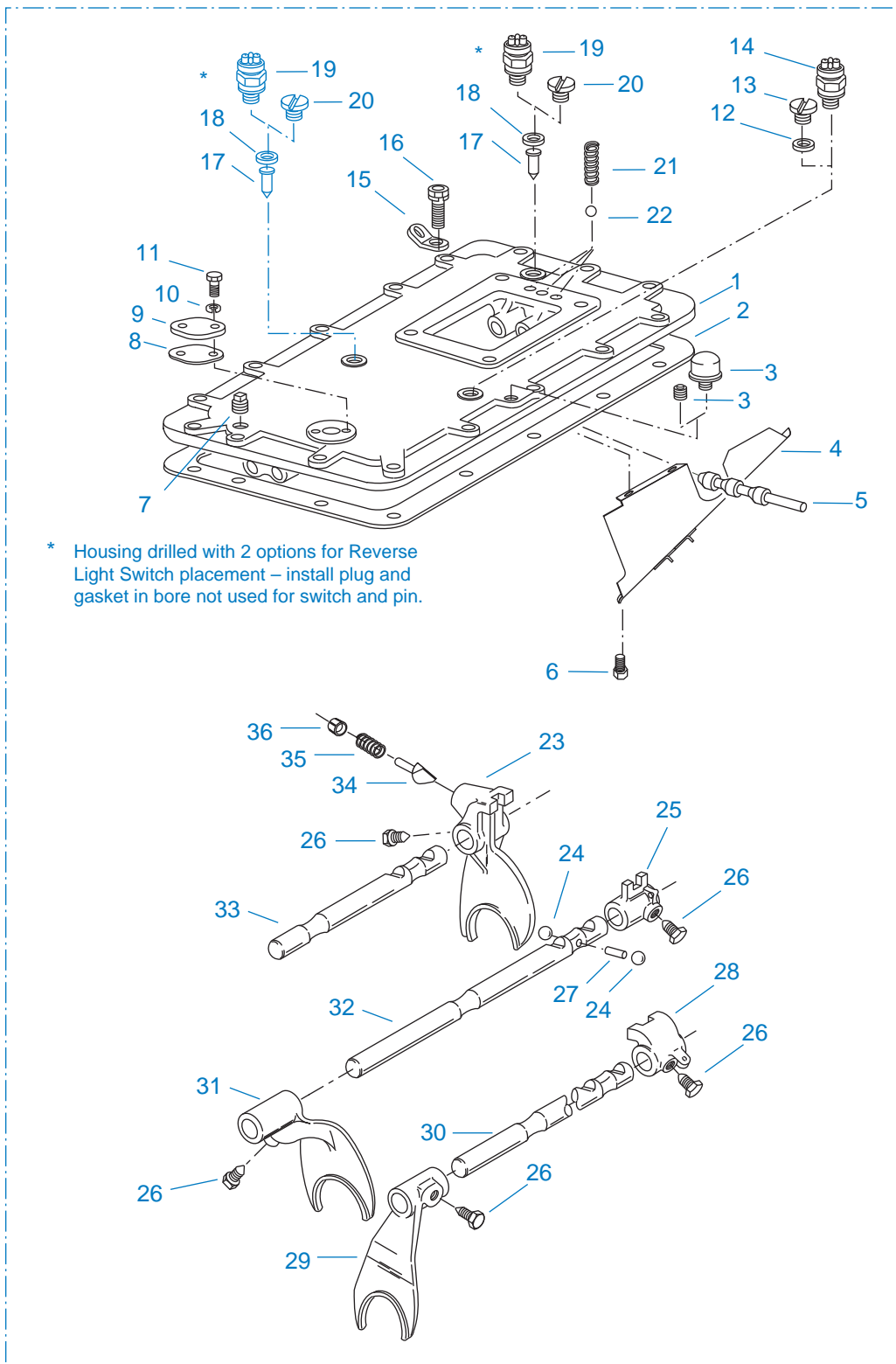
10102-7/92 RR Vlv Assy/4

To Slave Valve \*For Connector and Elbow Assy component information see Appendix.

## 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	21691	LOGO MEDALLION	4302349, 4300370	1	(OLD DESGIN) FULLER LOGO (LEFT OF DRIVER)	
1	5586100	MEDALLION, LOGO		1	(LATEST DESIGN) FULLER LOGO ONLY	A-6913,A-7313
1	5586113	SHIFT DIAGRAM MEDALLION		1	RTLO	S-2545
2	K-1826	MASTER VALVE REPAIR KIT		1	FOR A-4900 VALVE	
2	K-2053	MASTER VALVE REPAIR KIT		1	FOR A-5313 VALVE	
2	K-3193	MASTER VALVE REPAIR KIT		1	FOR A-6913 VALVE	
2	K-3195	MASTER VALVE REPAIR KIT		1	FOR A-7313 VALVE	
3	20495	LEVER		1		A-6913,A-7313
4	20112	COVER		1		A-6913,A-7313
5	X-8-213	SCREW	X 8 202	2	8-32X3/8"	
6	X-9-802	NUT		1	1/2"-13	
7	84001	CONNECTOR ASSY	82501	4	1/8" TUBE-1/16" NPTF	
7	84003	CONNECTOR ASSY	82503	4	5/32" TUBE-1/16" NPTF	K-2993
7	84005	CONNECTOR ASSY		4	"PUSH-TO-CONNECT" 5/32" TUBE-1/16" NPTF	
8	83001	COLLET		8	1/8" TUBING	
8	83002	COLLET		8	5/32" TUBING	K-2993
9	83501	HEX NUT		8	1/8" TUBING	
9	83502	HEX NUT		8	5/32" TUBING	
10	85001	ELBOW ASSY	84501	3	5/32" TUBE-1/8" NPTF	K-2338,K-2993
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	K-3333
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		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
13	4301233	REDUCER BUSHING	18004	1		
14	84004	CONNECTOR ASSY	82504	1	5/32" TUBE-1/8" NPTF	
999	A-6913	ROADRANGER VALVE ASSY	A - 4900	1	STANDARD-W/LOGO	
999	A-7313	ROADRANGER VALVE ASSY	A - 5313	1	(LEFT OF DRIVER)-W/LOGO	
999	S-2545	ROADRANGER VALVE ASSY		1	RTLO - W/SHIFT DIAGRAM MEDALLION	



999

10220-1/92 Standard

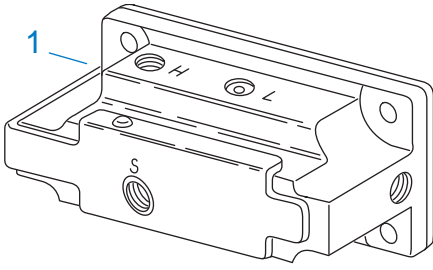
## SHIFT BAR HOUSING (STD)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
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Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-1440	SHIFT BAR HSG (STD)	20211 ,22955	1	HOUSING ONLY	
2	4302676	GASKET	14918	1		K-1703,K-2199,S-1529,S-1531
3	4304602	BREATHER	23605	1	1/4" NPT	K-1703
3	X-12-404	PIPE PLUG		1	1/4" NPT	
4	20070	OIL TROUGH		1		S-1529,S-1531
5	20332	AIR VALVE SHAFT	17177	1		S-1529,S-1531
6	X-8-423	CAPSCREW		2	1/4"-20X1/2"	
7	X-12-603	PIPE PLUG	X12 602	1	3/8" NPT	
8	20209	GASKET		1		S-1440,S-1441,S-1529,S-1531
9	20199	PLATE	18724	1		S-1440,S-1441,S-1529,S-1531
10	X-3-400	LOCKWASHER		2	1/4"	
11	X-8-406	CAPSCREW		2	1/4"-20X3/4"	
12	17179	GASKET		1		S-1440,S-1441,S-1529,S-1531
13	4303655	PLUG	17178	1		S-1440,S-1441,S-1529,S-1531
14	22941	NEUTRAL LIGHT SWITCH	12639	1	SWITCH NORMALLY CLOSED	
15	20815	LIFTING EYE	17105	2		
16	X-8L-602	CAPSCREW		2	3/8"-16X1-1/2"	
16	X-8L-604	CAPSCREW		16	3/8"-16X1-1/4"- OR USE 14 PCS OF X-8L-604 WITH 2 PCS OF X-8L-602	
17	15899	PIN		1		S-1440,S-1441,S-1529,S-1531
18	15900	GASKET		1		S-1440,S-1441,S-1529,S-1531
19	22940	REVERSE LIGHT SWITCH	16830	1	SWITCH NORMALLY OPEN	
20	4303656	PLUG	15917	1		S-1440,S-1441,S-1529,S-1531
21	15918	SPRING		3		K-2433,K-2993,S-1529,S-1531
22	X-14-800	STEEL BALL		3	1/2"	
23	16131	SHIFT YOKE		1	REVERSE/LO	S-1219,S-1531
24	X-14-1200	STEEL BALL		2	3/4"	
25	14658	SHIFT BLOCK		1	1ST/2ND	S-1531

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
26	3220	LOCKSCREW		5		S-1529,S-1531
27	1634	INTERLOCK PIN		1		K-2433,S-1529,S-1531
28	14659	SHIFT BLOCK		1	3RD/DIRECT	S-1531
29	16136	SHIFT YOKE		1	3RD/DIRECT	S-1529,S-1531
30	16134	YOKE BAR		1	3RD/DIRECT	S-1531
31	16135	SHIFT YOKE		1	1ST/2ND	S-1529,S-1531
32	16133	YOKE BAR		1	1ST/2ND	S-1531
33	16132	YOKE BAR		1	REVERSE/LO	S-1531
34	10019	PLUNGER		1		S-1219,S-1529,S-1531
35	6392	SPRING		1		S-1219,S-1529,S-1531
36	8968	PLUG		1		S-1219,S-1529,S-1531
999	S-1531	SHIFT BAR HSG ASSY (STD)	20211 ,22955	1	COMPLETE	

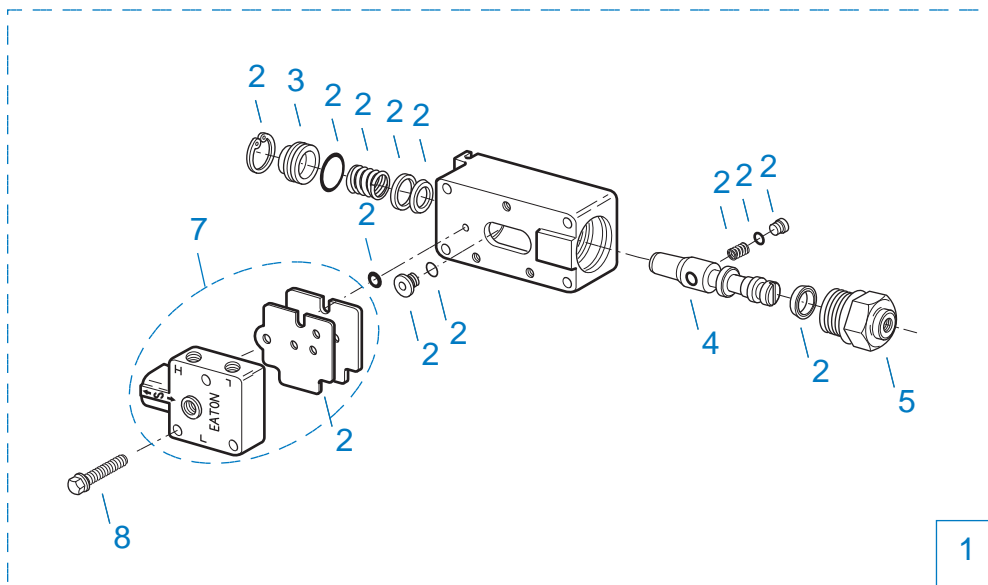
Group: SLAVE VALVE - 19470



10121-1/92 19470 SV

## SLAVE VALVE - 19470

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-2424	VALVE REPLACEMENT KIT	19470	1		



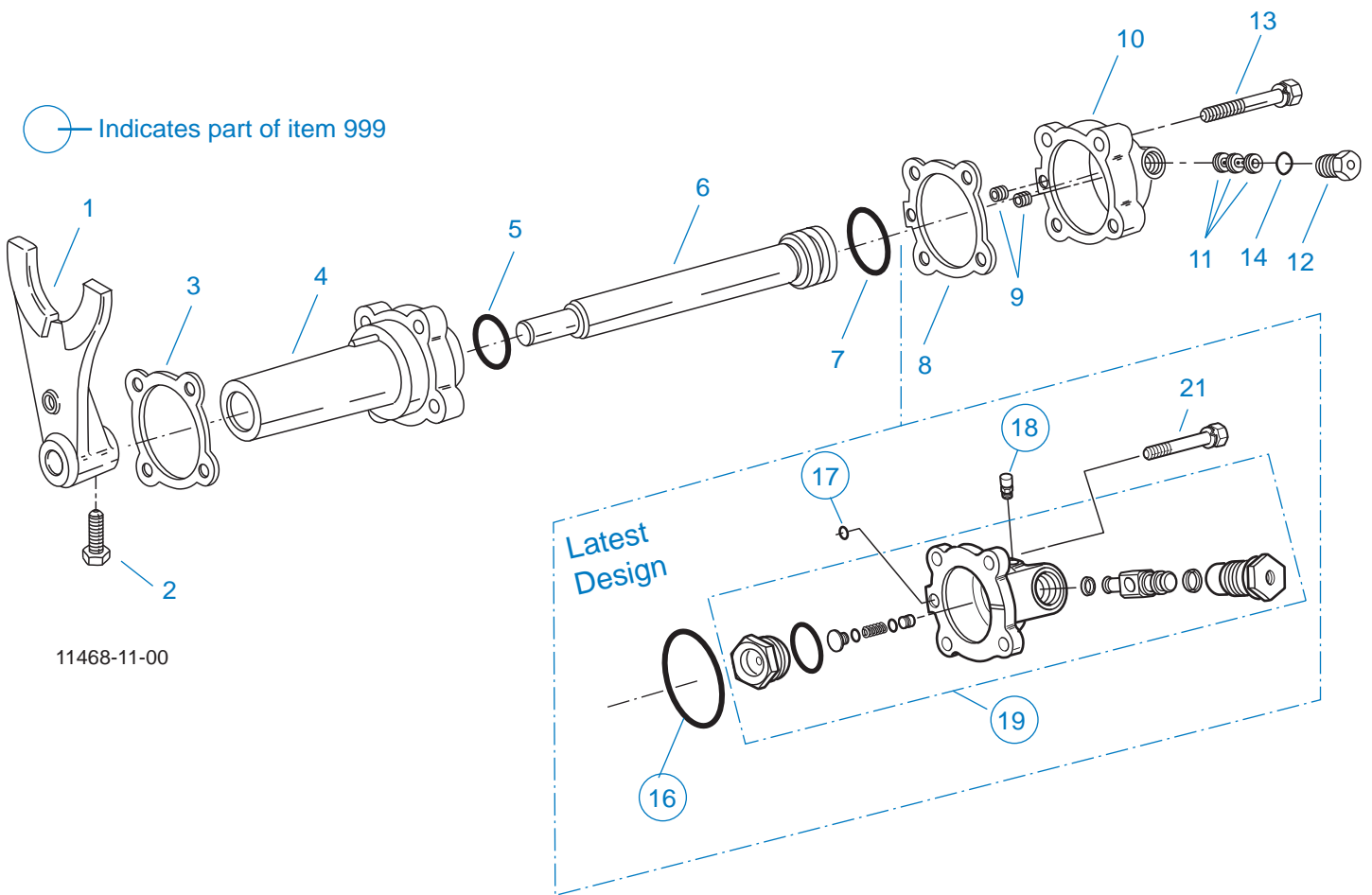
10120-10-97 A-5000 SV

2 Repair Kit

### SLAVE VALVE - A-5000

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-5000	SLAVE VALVE ASSY	20850	1		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-5000
7	S-1516	CAP ASSY	20851 ,20853	1		
8	X-8C-413	CAPSCREW		3	1/4"-20X1-1/2"	





## SPLITTER CYLINDER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	21607	SHIFT YOKE		1		
2	3220	LOCKSCREW		1		S-1529,S-1531
3	14632	GASKET		1		K-1603,K-2078,K-2199,K-2409
4	21609	SPLITTER CYLINDER		1		K-2409
5	21208	-O- RING		1		K-2002,K-2078,K-2409
6	4300182	YOKE BAR		1		K-2409
7	21209	-O- RING		1		K-2002,K-2078,K-2409
8	17073	GASKET		1		K-1603,K-2002,K-2078,K-2199,K-2409
9	X-12-101	PLUG		2	NOT SOLD FOR SERVICE	
10	21760	COVER		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
11	19974	INSERT VALVE	15512 4303616	1		K-2338,K-2993,K-2996
12	4301233	REDUCER BUSHING	18004	1		
13	X-8L-540	CAPSCREW		4	5/16"-18X1-7/8"	
14	5568504	-O- RING		1		
16	5568534	-O- RING		1		K-2078,K-3333
17	13653	-O- RING		1		K-3333
18	X2014210	BREATHER	7935	1		
19	K-3333	SPLITTER VLV REPL KIT	A - 6861	1		
21	X-8L-540	CAPSCREW		4	5/16"-18X1-7/8"	
999	K-3333	SPLITTER VLV REPL KIT	A - 6861	1		

