



**Roadranger®**

More time on the road®

# Illustrated Parts List

---

**RTOF-11707LL**  
**July 2011**

## Contents

How To Use The Illustrated Parts List .....	3
AUXILIARY DRIVE GEAR.....	4
CASE (AUX) .....	5
CASE (FRONT).....	7
COMBINATION CYLINDER .....	9
COUNTERSHAFT & BRGS(AUX).....	10
COUNTERSHAFT ASSY .....	11
FILTER REGULATOR.....	12
H & C W/19470 VALVE.....	13
H & C W/A-5000 VALVE.....	14
INPUT SHAFT & DRIVE GEAR .....	15
ISOLATORS .....	16
KITS & ASSEMBLIES .....	17
LEVERS/HOUSINGS .....	19
MAINSHAFT & SYNCHRO(AUX).....	21
MAINSHAFT ASSY .....	22
MISCELLANEOUS .....	24
REVERSE IDLER.....	25
ROADRANGER VALVE .....	28
SHIFT BAR HOUSING (F) .....	29
SLAVE VALVE - 19470.....	31
SLAVE VALVE - A-5000.....	32

## 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).

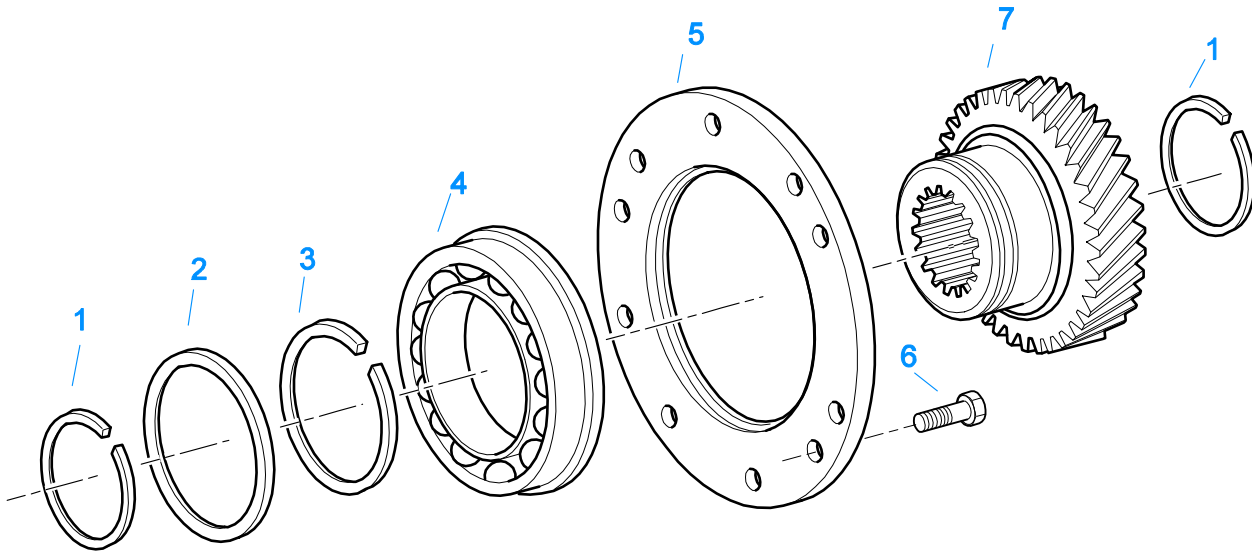
### Illustrations

- 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

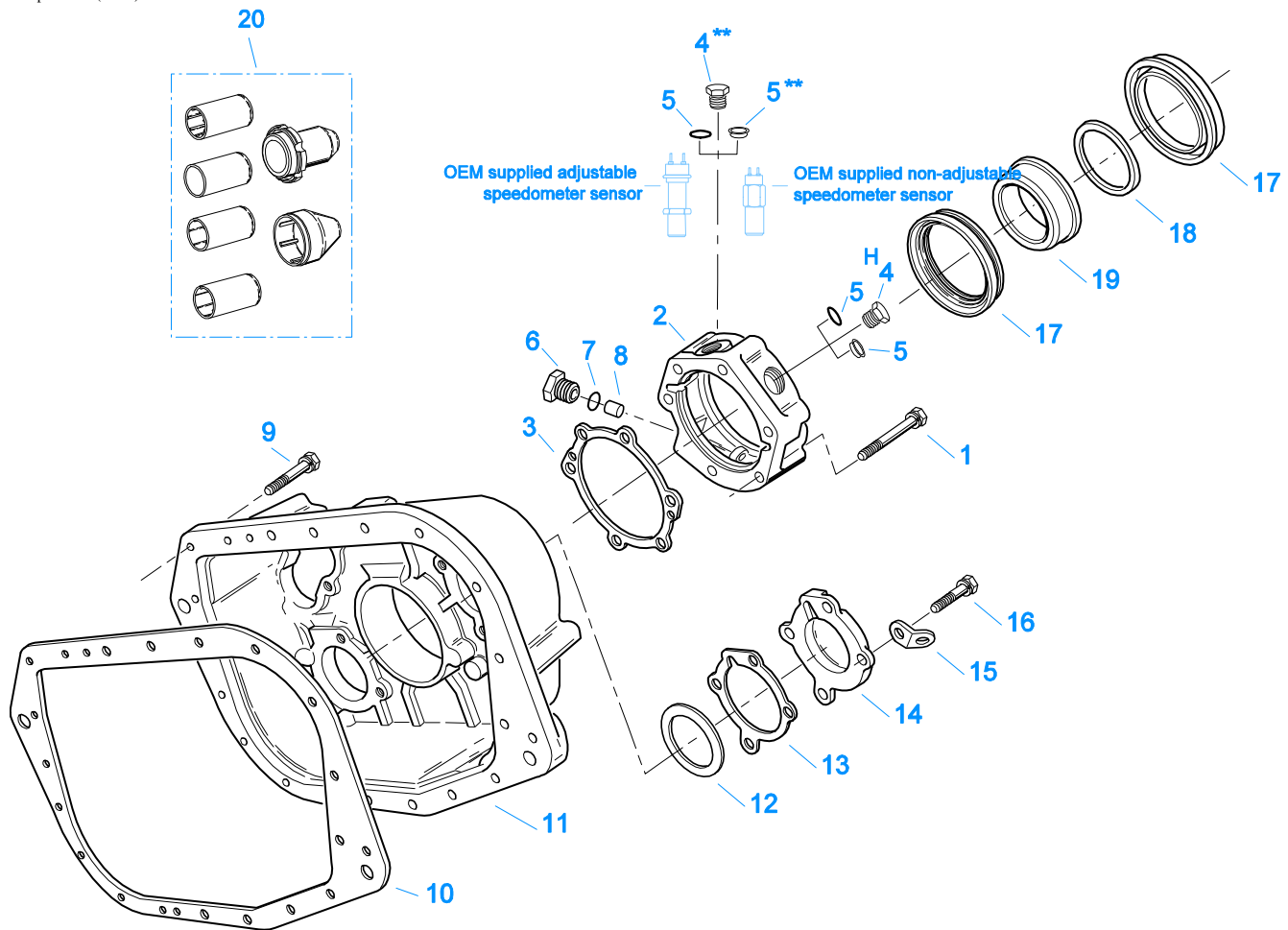
- **Item Number** - corresponding with numbers on illustrations for part identification.
- **Current Part** - identifies part as it is available for service.
- **Description** - specifies part name or description.
- **Replaced Part** - quantity quantity required for assembly.
- **Quantity** - defines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



10480-12/92 Aux DG

## AUXILIARY DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	16763	SNAP RING		2		K-1986,K-2045,K-2746
2	21320	SNAP RING RETAINER		1		K-1986,K-2045
3	16628	SNAP RING		1		K-2746
4	5566507-BOX	BEARING	5566504,5566507	1		K-1986,K-2045
5	16138	BEARING RETAINER		1		
6	X-8-645	CAPSCREW	X 8 612	6	3/8"-16X1"	
7	23159	AUXILIARY DRIVE GEAR	21321	1		



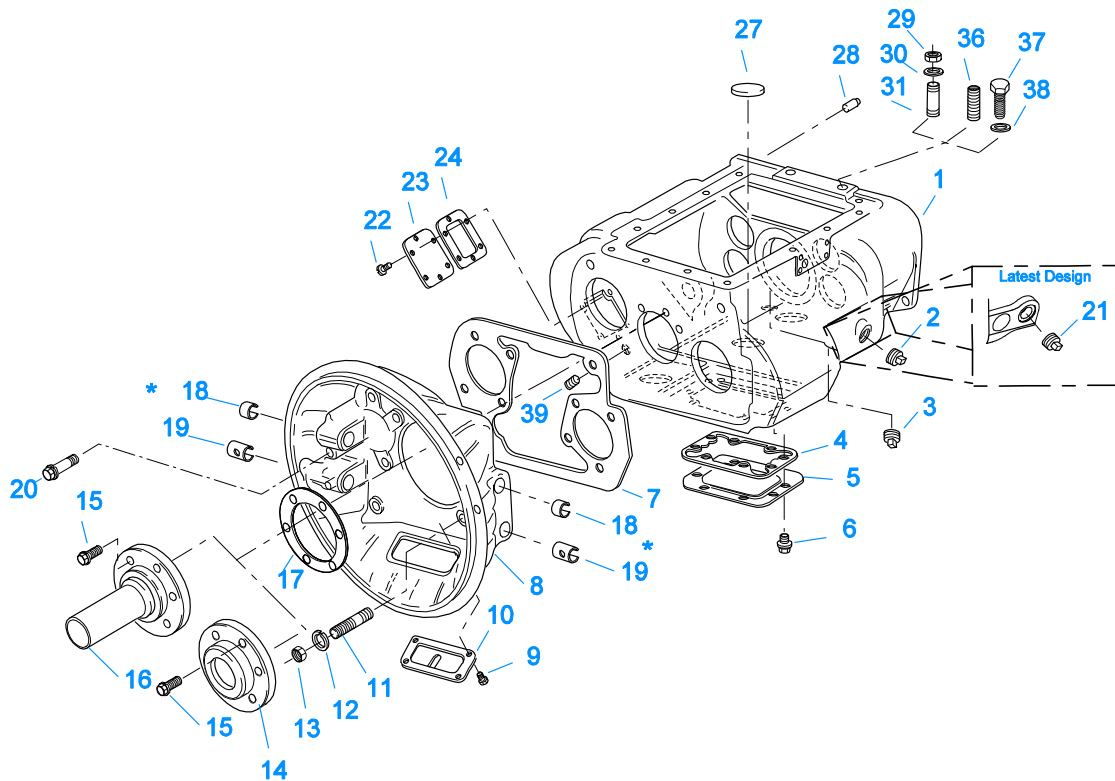
**\*\* Note — Items 4 & 5 / Magnetic Speedometer Openings:**  
 Use 13679 "O" ring w/ OEM supplied adjustable speedometer sensor  
 and 20225 "O" ring w/ OEM supplied non-adjustable speedometer sensor or Eaton part #20224 Plug

**10411-6-94 Aux Case**

**CASE (AUX)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8L-611	CAPSCREW		6	3/8"-16X3-1/4"	
2	S-2164	REAR BRG COVER ASSY	22733 ,4302026 ,S - 1553 ,S - 2367	1	MECHANICAL AND MAGNETIC	
3	21364	GASKET		1		K-2061,K-2077,K- 2262,S-2164 S-1554,S-2164
4	20224	PLUG-MAGNETIC		2		
5	13679	-O- RING		1	USE W/OEM SUPPLIED ADJUSTABLE SPEEDOMETER SENSOR NOT TO BE USED WITH 4301954 SEAL	
5	20225	-O- RING		2	USE W/20224 PLUG OR OEM SUPPLIED NON-ADJUSTABLE SPEEDOMETER SENSOR NOT TO BE USED WITH 4301954 SEAL O-RING NOT REQUIRED	
5	4301954	SENSOR SEAL		2		S-2164
6	20226	PLUG-MECHANICAL	2237	1		S-1554,S-2164
7	14142	-O- RING		1		S-1554,S-2164
8	7992	BUSHING		1		S-2164
9	X-8L-602	CAPSCREW		17	3/8"-16X1-1/2"	
9	X-8L-614	CAPSCREW		2	3/8"-16X2"	
10	14335	GASKET		2		K-2061,K-2077,S-1554
11	21431	REAR HOUSING		1		
11	21627	REAR HOUSING		1	USE W/OIL COOLER	

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
12	K-2805	SHIM KIT	21452 K - 2106	1		K-1986,K-2045,S-1554
13	4305978	GASKET	4302246	2		K-2061,K-2077,K-3470,K-3471,S-1554
14	4302320	COVER	21346	2		S-1554
15	20815	LIFTING EYE	17105	2		S-1554
16	X-8L-604	CAPSCREW		8	3/8"-16X1-1/4"	
17	K-2262	OIL SEAL W/SLINGER	19109 20807 20808	1	"FOR MECHANICAL COVER"	K-1986,K-2045
18	4301960	SEAL		1		A-6299
19	A-6299	SPACER-SLINGER ASSY	21359 ,4301959	1		
20	K-3651	OIL SEAL TOOL KIT		1		



**10300-6-92 Iron/Alum Hsg**

\* 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.

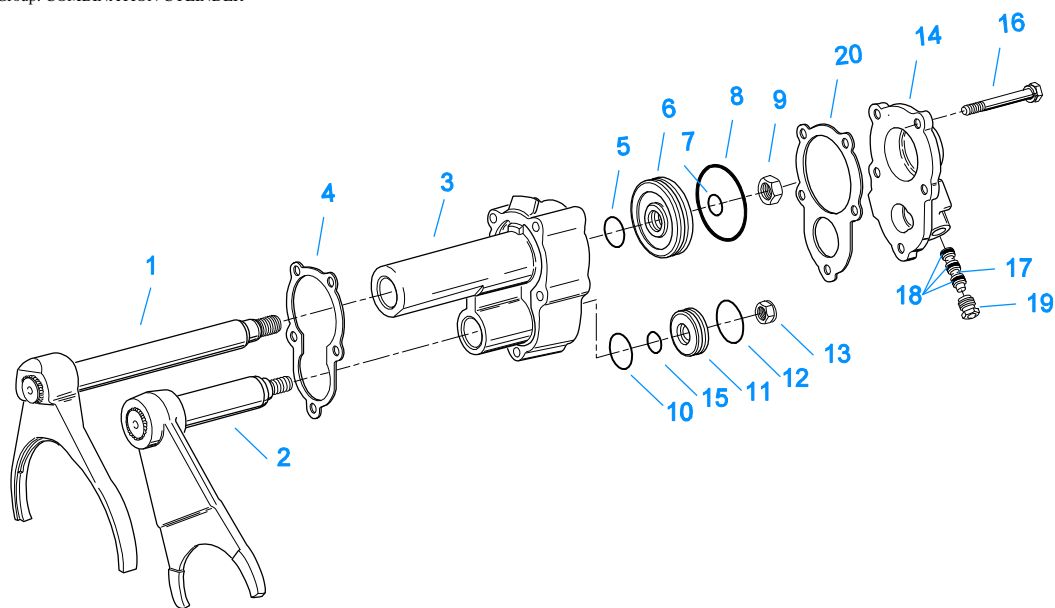
**Note: Some part requirements are specific to #1 or #2 Aluminum or Iron Clutch Housings and Push or Pull type Clutch.**

**CASE (FRONT)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2209	CASE ASSY	21317,S-1547	1		
2	X-12-2007	PIPE PLUG	X12 2006	1		
3	X-12-1207	PIPE PLUG	X12 1202 ,X12 1206	1	3/4" MAGNETIC	
4	4305310	GASKET	4302810	1		K-2061
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-2061
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	X-1-1005	6	.625-18	
14	20550	FRONT BEARING COVER		1	2" PULL	
14	20552	FRONT BRG COVER		1	1-3/4" PULL	
15	X-8L-604	CAPSCREW		6	3/8"-16X1-1/4" USE 6 PCS WITH PULL TYPE COVER USE 4 PCS WITH PUSH TYPE COVER	
15	X-8L-619	CAPSCREW		2	3/8"-16X1-1/4" - USE WITH PUSH TYPE COVER	

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
16	20549	FRONT BEARING COVER		1	2" PUSH	
16	20551	FRONT BRG. COVER		1	1-3/4" PUSH	
17	14311	GASKET		1		K-2061
18	12815	BUSHING		4	FOR #1 HOUSING UPPER	A-3713,A-3723,A-4772,A-6064
18	12815	BUSHING		2	FOR #2 HOUSING UPPER	A-3713,A-3723,A-4772,A-6064
18	8677	BUSHING		1	FOR #2 HOUSING UPPER	A-3713,A-3723,A-4772,A-6064
19	8677	BUSHING		2	FOR #1 AND #2 HOUSING 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	
21	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	S-2209
22	X-8-686	CAPSCREW		6	3/8"-16X3/4"	
23	14575	PTO COVER	4302254	1		
24	4305309	GASKET	1684	1		K-2061
27	14373	MAGNET		3		S-2209
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	
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"	

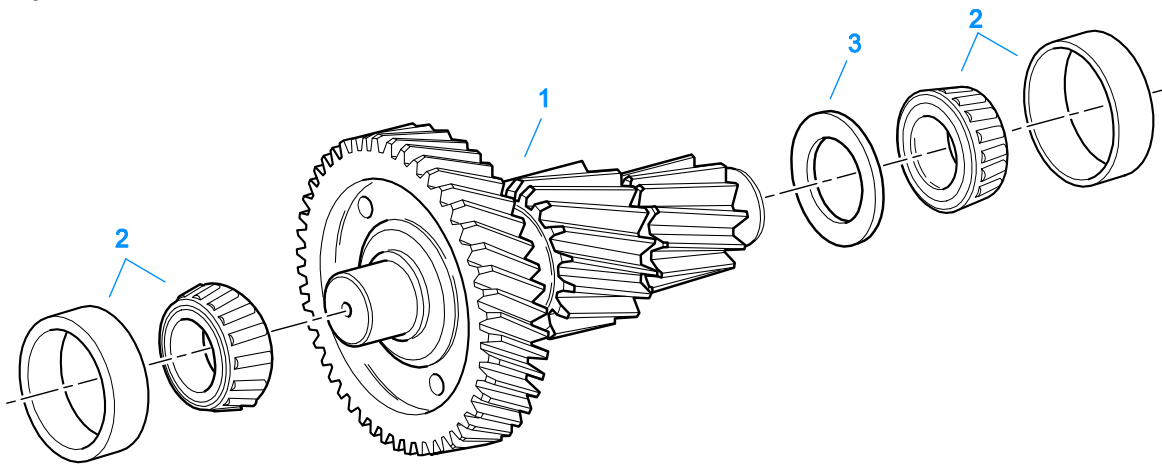




10475-4-92 CMB CYL

**COMBINATION CYLINDER**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-5159	YOKE ASSY	21333	1	RANGE	
2	A-5160	YOKE ASSY	21335	1	REDUCTION	
3	21330	CYLINDER		1		
4	21332	GASKET		1		K-2054,K-2061,K-2077
5	14765	-O- RING		1		K-2054
6	14341	PISTON	23353	1		
7	14345	-O- RING		1		K-2054
8	14344	-O- RING		1		K-2054
9	X-1-1010	NUT		1	5/8"-18	
10	14644	-O- RING		1		K-2054
11	K-2427	PISTON KIT	21337 ,4301320	1		
12	20423	-O- RING		1		K-2054
13	X-1-803	NUT		1	1/2"-20	
14	21329	CYLINDER COVER		1		
15	21338	GASKET		1	USE W/21337 PISTON	K-2054,K-2061,K-2077
15	4301348	-O- RING		1	USE W/4301320 PISTON	K-2054,K-2427
16	X-8L-631	CAPSCREW	X 8 631	5	3/8"-16X3-1/2"	
17	19974	INSERT VALVE	15512 4303616	1		K-1986,K-2045
18	13653	-O- RING		3		K-1457
19	15719	PLUG		1		
20	21331	GASKET		1		K-2054,K-2061,K-2077,K-2427

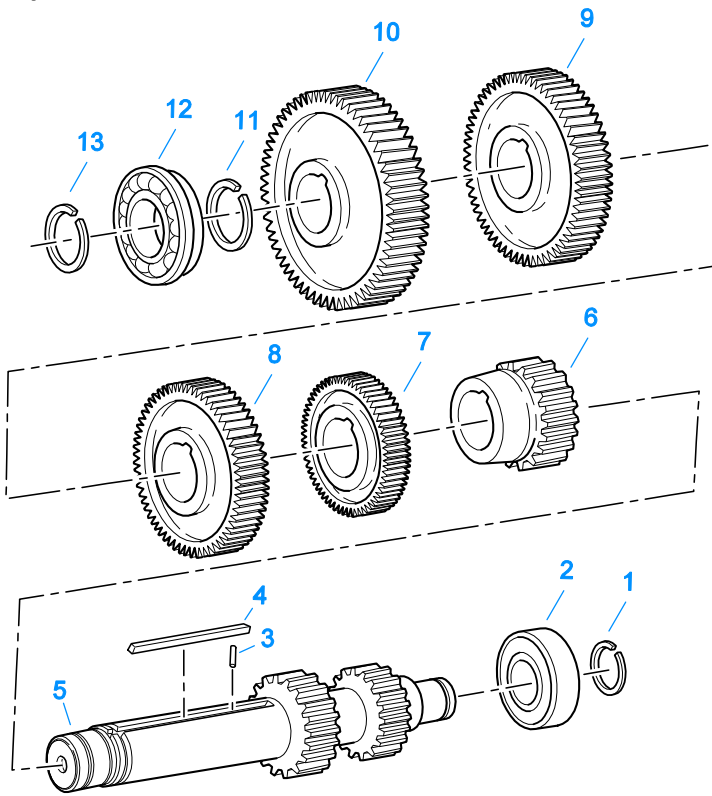


10445-12-93 AUXCS

**COUNTERSHAFT & BRGS(AUX)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3499	COUNTERSHAFT REPL KIT	A - 6841	2		
2	4302074-BOX	BEARING	21343,4302074	4		K-1986,K-2045
3	21342	SPACER		2		

Group: COUNTERSHAFT ASSY

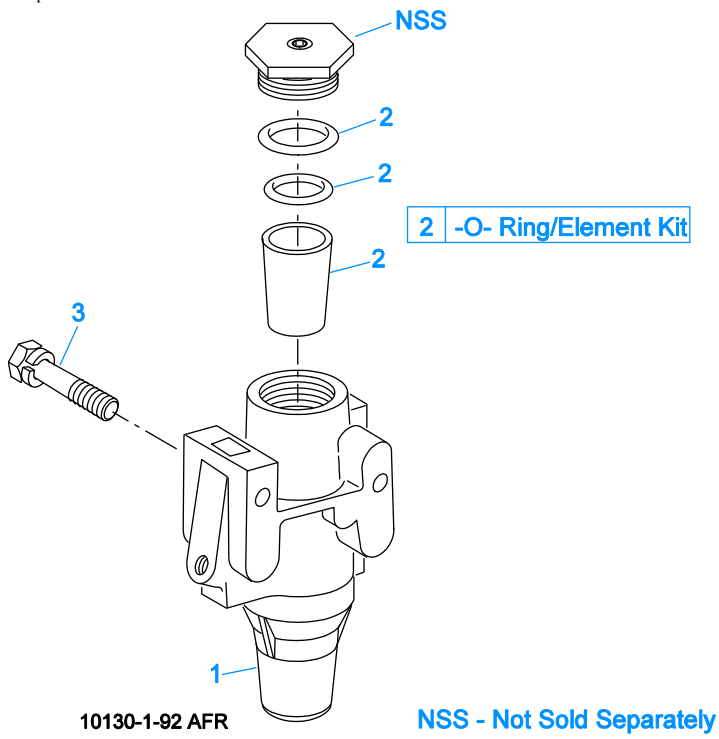


10344-12-93 CS

## COUNTERSHAFT ASSY

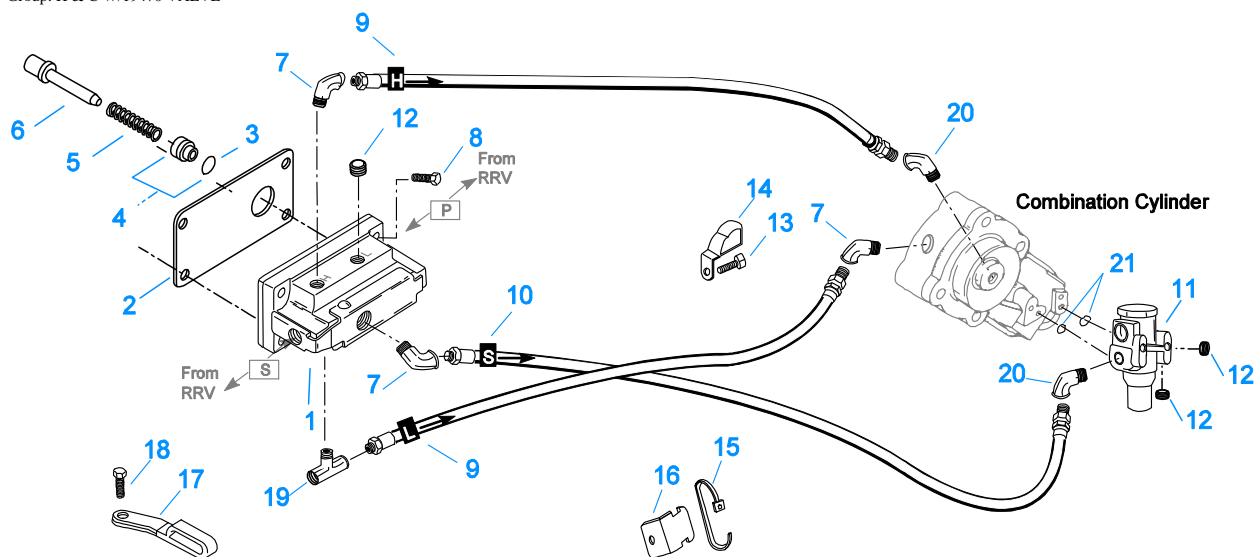
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14317	SNAP RING		2		K-1986,K-2045,K-2746
2	14366	BEARING		2		K-1986,K-2045
3	62511	ROLL PIN		2		S-1781
4	16664	KEY		2		
5	20134	COUNTERSHAFT		2		
6	4300293	1ST GEAR-CNTRSHFT	19178	2		
7	19613	2ND GEAR-CNTRSHFT		2		
8	4300289	OD GEAR-CNTRSHFT	19181	2		
9	14307	NO LONGER AVAILABLE		1		
9	14886	NO LONGER AVAILABLE		1		
9	14905	NO LONGER AVAILABLE		2		
10	4300287	DRIVE GEAR-CNTRSHFT	20133	2		
11	20085	SNAP RING		2		K-1986,K-2045
12	81022	BALL BEARING	5566509	2		K-1986,K-2045
13	15253	SNAP RING		2		K-1986,K-2045,K-2746

Group: FILTER REGULATOR



## FILTER REGULATOR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-2170	FILTER REG KIT	A - 5454	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"	

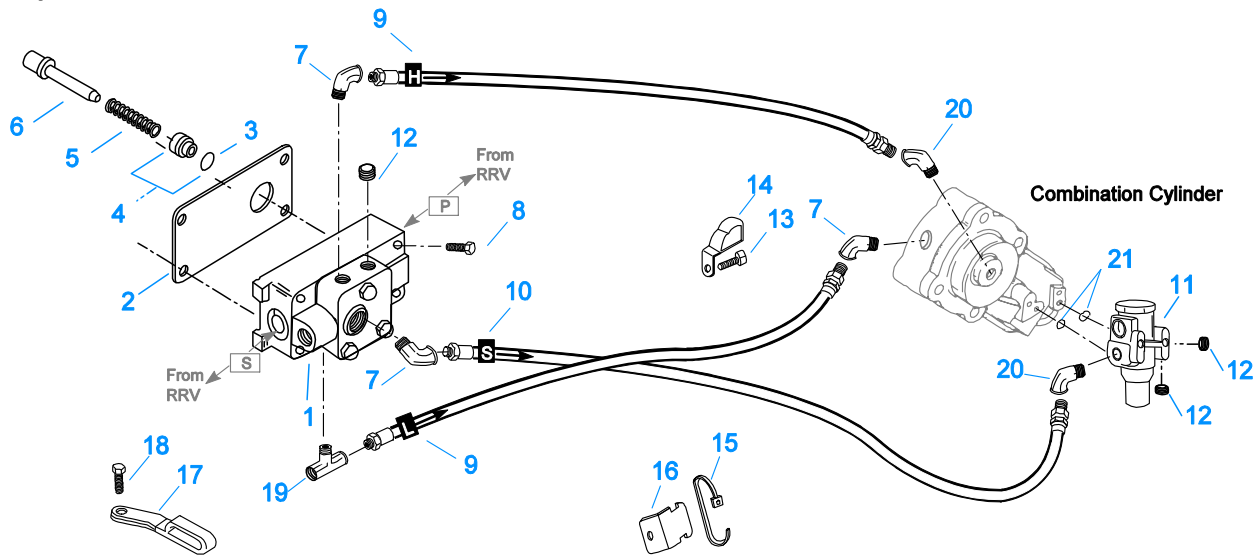


10111F-11-93 19470 HC

### 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-2061,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		3	1/8"	
8	X-8C-401	CAPSCREW		4	1/4"-20X1-1/8"	
9	55509	HOSE ASSY		2	34"	
10	55528	HOSE ASSY		1	36"	
11	K-2170	FILTER REG KIT	A - 5454	1		
12	X-12-208	PIPE PLUG		3	1/8" NPT	
13	X-8L-600	CAPSCREW		1	3/8"-16X1"	
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	21086	BRANCH TEE		1	1/8"	
20	12880	ELBOW		2	1/8"	
21	15114	-O- RING		2		A-5000,K-1935,K-2054,K-2170

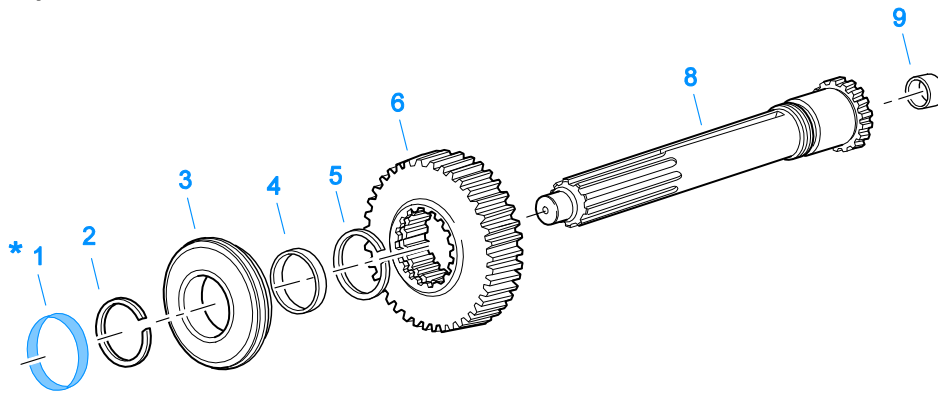
Group: H & C W/A-5000 VALVE



10110H-11-93 A-5000 HC

### 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-2061,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		3	1/8"	
8	X-8C-411	CAPSCREW		4	1/4"-20X1-3/4"	
9	55509	HOSE ASSY		2	34"	
10	55528	HOSE ASSY		1	36"	
11	K-2170	FILTER REG KIT	A - 5454	1		
12	X-12-208	PIPE PLUG		3	1/8" NPT	
13	X-8L-600	CAPSCREW		1	3/8"-16X1"	
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	21086	BRANCH TEE		1	1/8"	
20	12880	ELBOW		2	1/8"	
21	15114	-O- RING		2		A-5000,K-1935,K-2054,K-2170



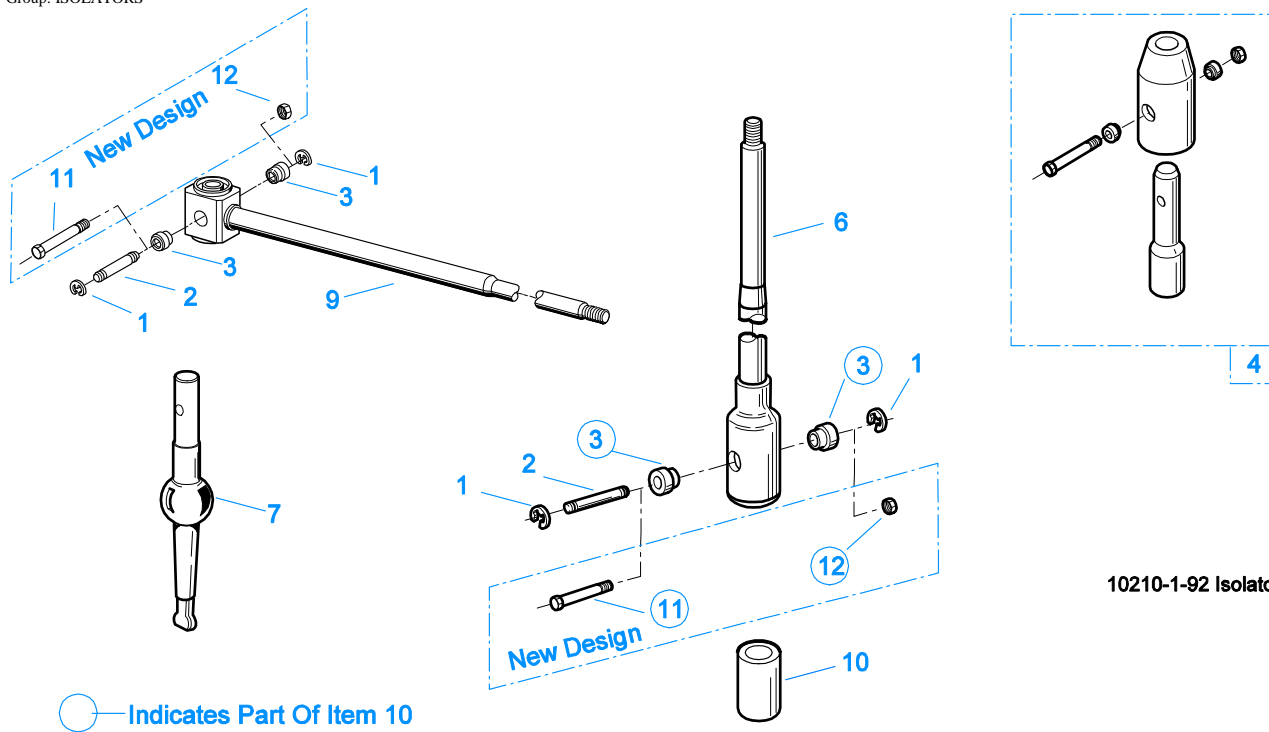
\* For Shipping Only -- Do Not Replace

\*

10370-1/92 IS

### INPUT SHAFT & DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	23559	SHIPPING SEAL		1	NOT SOLD FOR SERVICE	
2	16980	SNAP RING		1		K-1986
3	81504	BEARING		1		K-1986,K-2045
4	16396	SPACER		1		
5	14289	SNAP RING		1		K-1986,K-2045,K-2746
6	K-2321	UPDATE KIT	14654 ,19168 ,19182	1		
8	S-1661	INPUT SHAFT ASSY	20540 ,23569 ,691518	1	2" PULL - USE W/FBC 20550	K-1986
8	S-1662	INPUT SHAFT ASSY	20541 ,23570 ,4300430 ,S - 1507	1	2" PUSH - USE W/FBC 20549	
8	S-2916	INPUT SHAFT ASSY	20530 ,4304354	1	1-3/4" PUSH	
8	S-2917	INPUT SHAFT ASSY	20531 ,4304355	1	1-3/4" PULL	
9	16566	BUSHING		1		K-2045,S-1661,S-1662



10210-1-92 Isolator

## ISOLATORS

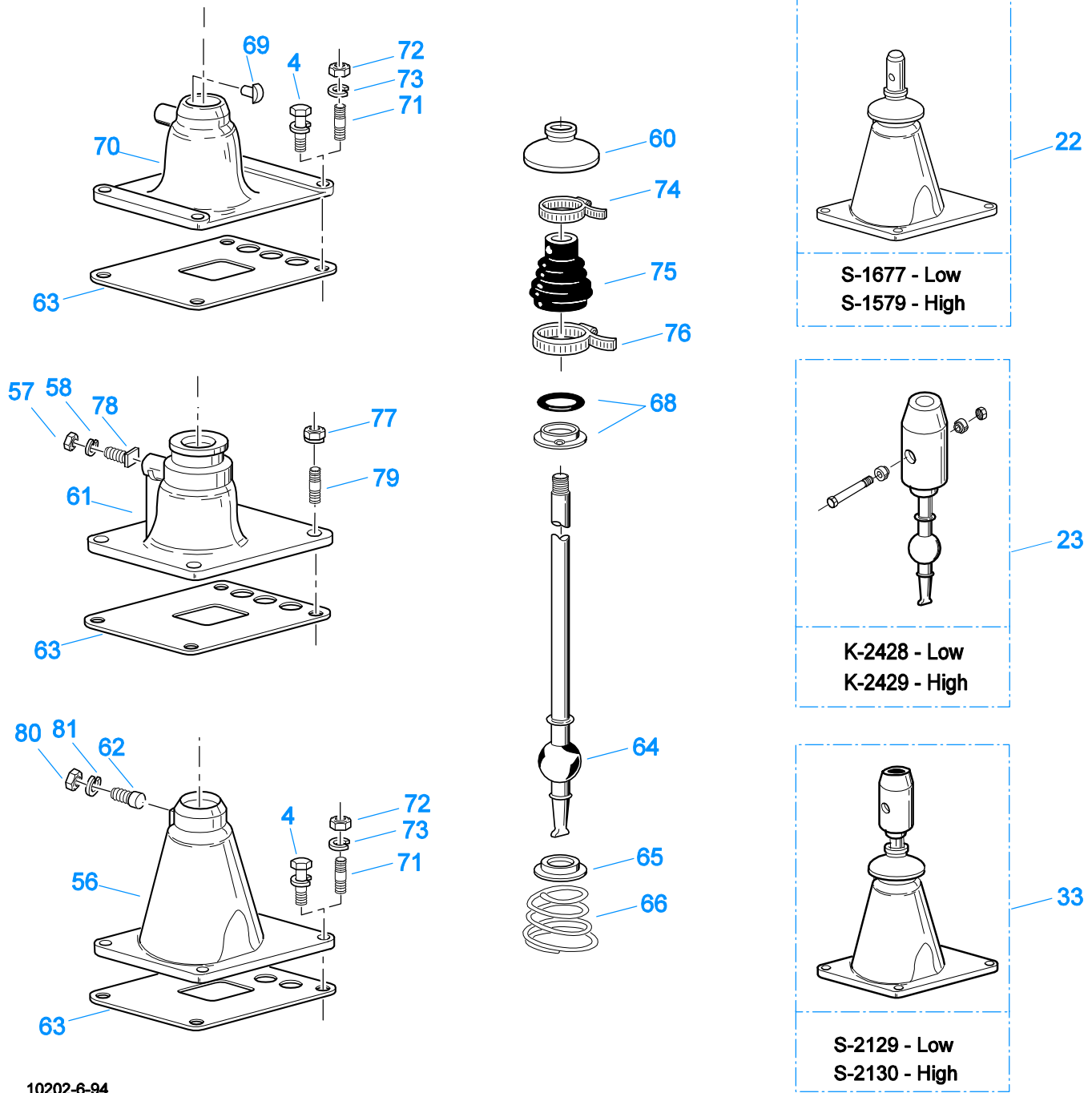
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	19124	-E- RING		2		
2	K-3467	PIN REPLACEMENT KIT	21245	1		
3	21246	BUSHING		2		K-2003,K-2428,K-2429,K-3399,S-2129,S-2130
4	S-1794	ISOLATOR ASSY		1		
6	21247	LEVER		1	STRAIGHT 18.67"	
7	21235	STUB LEVER		1	LOW TOWER	K-2428,S-1677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



## KITS & ASSEMBLIES

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
K-1457		-O- RING KIT		1	FOR INSERT VALVE	
K-1476		SHIFT LEVER HSG	4530 ,17163 ,18298 ,4304905 ,A - 4437	1	LOW TOWER	
K-1631		SHIFT LEVER HSG	14456 ,17168 ,4304327	1	LOW	
K-1698		-O- RING/ELEMENT KIT		1	FOR FILTER REGULATOR	
K-1922		MASTER VALVE REPAIR KIT		1	FOR A-5015 VALVE	
K-1935		REPAIR KIT-SLAVE VALVE		1	FOR A-5000 VALVE	
K-1969		SLEEVE KIT	14362 ,19460 ,21446	1	FOR SLAVE VALVE	
K-1986		BASIC OVERHAUL KIT		1		
K-2003		PIN & BUSHING KIT		1		
K-2045		BASIC REBUILD KIT		1		
K-2054		-O- RING KIT		1	FOR COMBINATION CYLINDER	K-1986,K-2045
K-2055		MASTER VALVE REPAIR KIT		1	FOR A-5315 VALVE	
K-2061		GASKET KIT		1		K-1986,K-2045
K-2077		GASKET KIT		1	FOR AUXILIARY SECTION	
K-2170		FILTER REG KIT	A - 5454	1		
K-2262		OIL SEAL W/SLINGER	19109 20807 20808	1	"FOR MECHANICAL COVER"	K-1986,K-2045
K-2321		UPDATE KIT	14654 ,19168 ,19182	1		
K-2394		AIR SYSTEMS TOOL KIT		1		
K-2424		VALVE REPLACEMENT KIT	19470	1		
K-2427		PISTON KIT	21337 ,4301320	1		
K-2428		LEVER REPLACEMENT KIT		1	LOW TOWER	
K-2429		LEVER REPLACEMENT KIT		1	HIGH TOWER	
K-2489		KEY & WASHER KIT	21339	1	CONTAINS 3-SIDED KEY	
K-2746		SMALL PARTS KIT		1		
K-2805		SHIM KIT	21452 K - 2106	1		K-1986,K-2045,S-1554
K-2973		SHIFT LEVER HSG KIT	17166 ,17167 ,4303050 ,4304910 ,K - 1630 K - 1941	1	HIGH TOWER	
K-3192		MASTER VALVE REPAIR KIT		1	FOR A-6915 VALVE	
K-3194		MASTER VALVE REPAIR KIT		1	FOR A-7315 VALVE	
K-3209		IDLER SHAFT REPL KIT	16405 ,4302981 ,4305513	1		
K-3399		ISOLATOR BUSHING KIT	21244 ,23311	1		
K-3467		PIN REPLACEMENT KIT	21245	1		
K-3470		OIL COOLER KIT	K - 3210	1		
K-3471		PUMP INSTALLATION KIT	K - 3126	1		
K-3491		SYNCHRONIZER KIT	K - 2445	1	LO RANGE / SMALL PIN	
K-3492		SYNCHRONIZER KIT	K - 2446	1	LO RANGE / LARGE PIN	
K-3499		COUNTERSHAFT REPL KIT	A - 6841	1		
K-3651		OIL SEAL TOOL KIT		1		
S-1516		CAP ASSY	20851 ,20853	1	FOR A-5000 VALVE	
S-1554		RANGE SECTION ASSY		1		
S-1661		INPUT SHAFT ASSY	20540 23569 ,691518	1	2" PULL	K-1986
S-1662		INPUT SHAFT ASSY	20541 ,23570 ,4300430 ,S - 1507	1	2" PUSH	
S-1781		MAINSHAFT ASSY	4300285 ,S - 1551	1		
S-1794		ISOLATOR ASSY		1		
S-2129		SHIFT LEVER HSG ASSY		1	LOW TOWER	
S-2130		SHIFT LEVER HSG ASSY	S - 2053	1	HIGH TOWER	
S-2164		REAR BRG COVER ASSY	22733 ,4302026 ,S - 1553 ,S - 2367	1	MECHANICAL AND MAGNETIC	
S-2209		CASE ASSY	21317,S-1547	1		
S-2547		ROADRANGER VALVE ASSY	A - 5036	1	RTO - W/SHIFT DIAGRAM MEDALLION	
S-2916		INPUT SHAFT ASSY	20530 ,4304354	1	1-3/4" PUSH	
S-2917		INPUT SHAFT ASSY	20531 ,4304355	1	1-3/4" PULL	



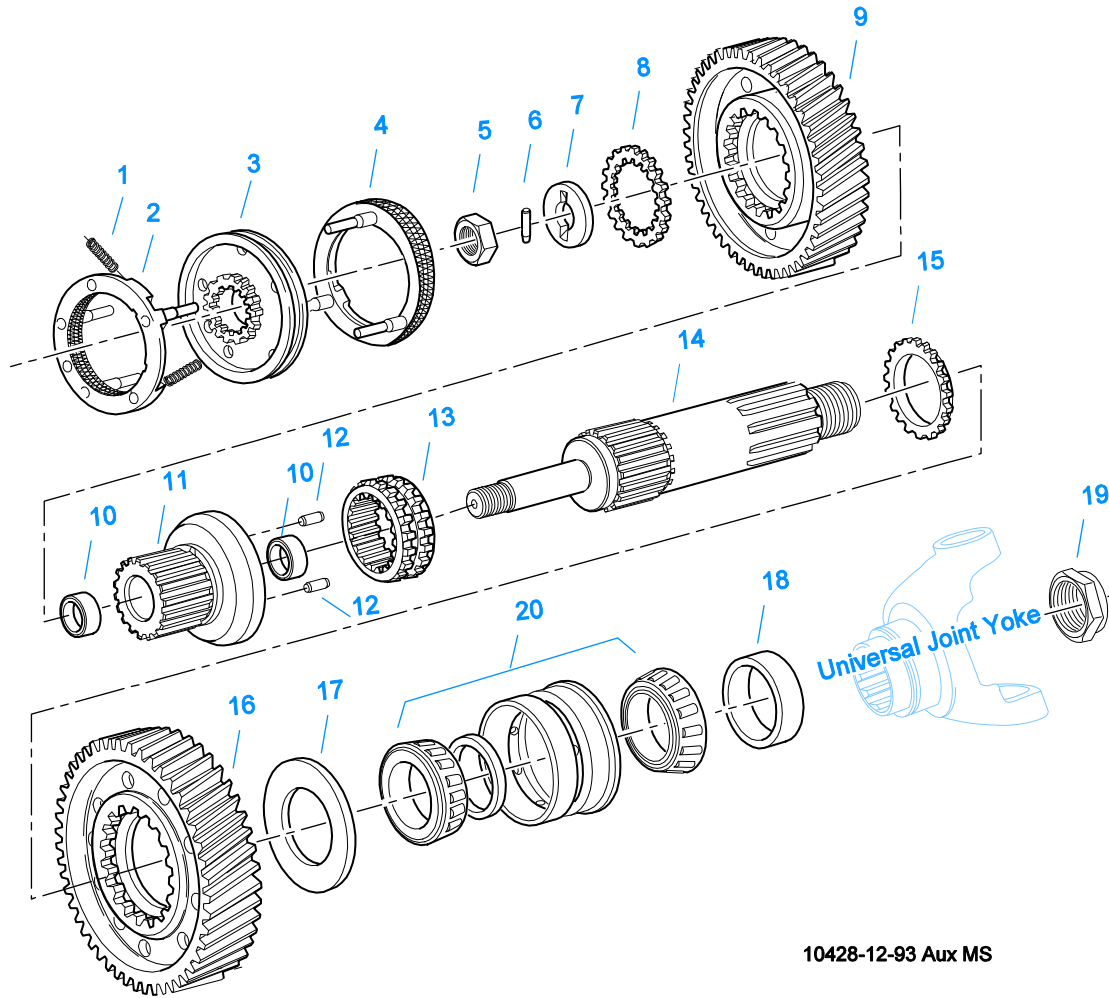


10202-6-94

## LEVERS/HOUSINGS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
4	X-8C-604	CAPSCREW		4	3/8"-16X1-1/4"	
22	S-1579	SHIFT TOWER ASSY		1	HIGH TOWER	
22	S-1677	SHIFT TOWER ASSY		1	LOW TOWER	
23	K-2428	LEVER REPLACEMENT KIT		1	LOW TOWER	
23	K-2429	LEVER REPLACEMENT KIT		1	HIGH TOWER	
33	S-2129	SHIFT LEVER HSG ASSY		1	LOW TOWER	
33	S-2130	SHIFT LEVER HSG ASSY	S - 2053	1	HIGH TOWER	
56	K-2973	SHIFT LEVER HSG KIT	17166 ,17167 ,4303050 ,4304910 ,K - 1630 K -	1	HIGH TOWER	

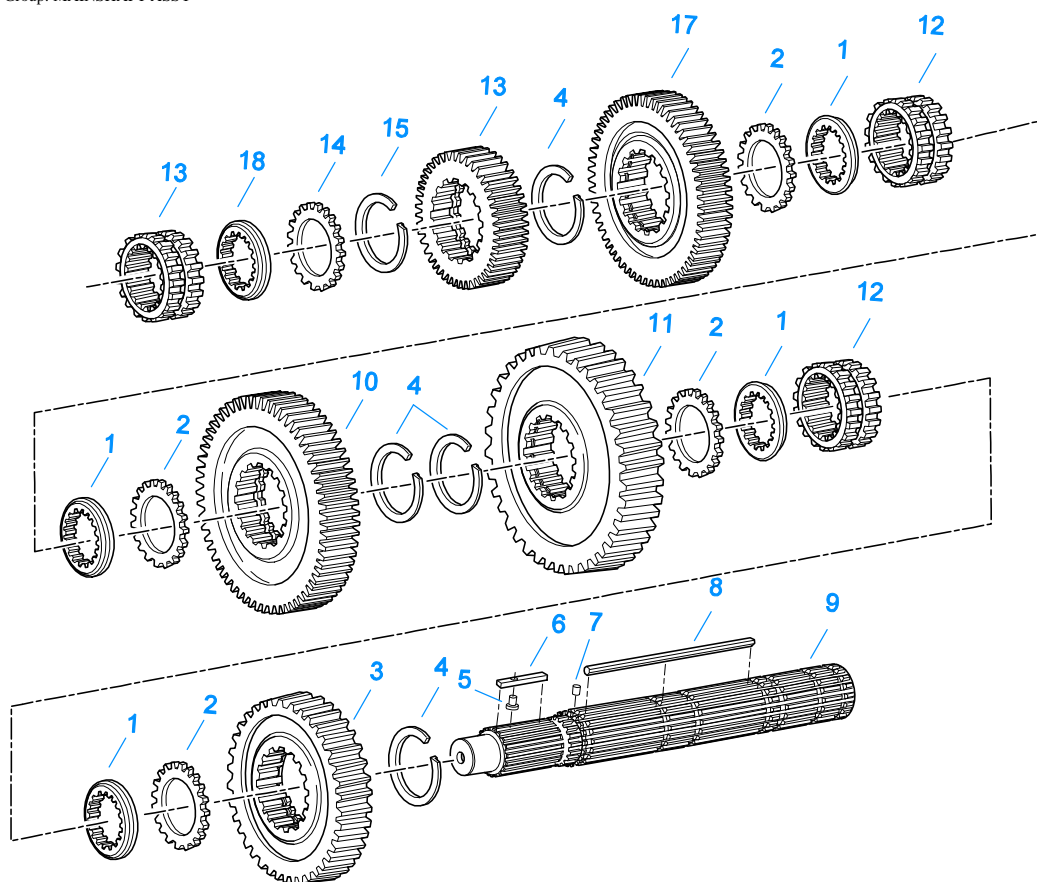
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
			1941			
57	X-1-500	NUT		1	5/16"-24	
58	X-3-500	LOCKWASHER		1	5/16"	
60	10427	BOOT		1		K-1476,K-2973,S-1579,S-1677,S-2130
61	K-1631	SHIFT LEVER HSG	14456 ,17168 ,4304327	1	LOW, USE W/14795 BOOT	
62	6541	PIN		1	3/8"	
63	4305294	GASKET	4303431	1		K-1476,K-1631,K-2061,K-2428,K-2429,K-2973,K-3470,S-1579,S-1677,S-2129,S-2130
64	17600	GEAR SHIFT LEVER		1	STRAIGHT - LOW 21-1/2"	
64	18482	GEAR SHIFT LEVER		1	STRAIGHT - HIGH 35"	
65	2538	RETAINER		1		K-1476,K-2973,S-1579,S-1677,S-2130
66	2536	SPRING		1		K-1476,K-2973,S-1579,S-1677,S-2130
68	K-3376	O-RING & WASHER KIT	4301211	1		
69	18299	PIN		1		K-1476,S-1677
70	K-1476	SHIFT LEVER HSG	4530 ,17163 ,18298 ,4304905 ,A - 4437	1	LOW TOWER	
71	11934	STUD	7467	4		
72	X-1-600	NUT		4	3/8"-24-N.F.PLAIN	
73	X-3-600	LOCKWASHER		4	3/8"	
74	14453	CLAMP		1		
75	14795	BOOT		1		
76	14454	CLAMP		1		
77	X-1-604	NUT		4	3/8"-24	
78	14461	PIN		1		
79	14236	NO LONGER AVAILABLE		4		
80	X-1-600	NUT		1	3/8"-24-N.F.PLAIN	
81	X-3-600	LOCKWASHER		1	3/8"	



10428-12-93 Aux MS

**MAINSHAFT & SYNCHRO(AUX)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14897	SPRING		3		K-1986,K-2045,K-2746,K-3491,K-3492
2	A-7331	SYNCHRONIZER ASSY	4304396 4304397 A - 5917	1	HI RANGE	K-3491,K-3492
3	20323	SLIDING CLUTCH		1		
4	A-7254	SYNCHRONIZER ASSEMBLY	A - 4937 A - 5876	1	LO RANGE	K-3492
5	21365	NUT		1		K-2746
6	17332	DOWEL PIN		1		K-2746
7	21347	WASHER		1		K-2746
8	21350	WASHER		1		K-2746
9	21319	REDUCTION GEAR		1		
10	21352	BUSHING		2		A-5156,K-1986,K-2045
11	A-5156	MAINSHAFT ASSY	21351	1		
12	21652	PIN		2		K-2746
13	21360	SLIDING CLUTCH		1		
14	21325	MAINSHAFT		1		
15	21354	WASHER		1		K-2746
16	21361	DEEP REDUCTION GEAR		1		
17	21358	WASHER		1		K-2746
18	20191	ROTOR	16295	1		
19	22254	NUT	11956	1		S-1554
20	21356-BOX	BEARING	21356	1		K-1986,K-2045



10331-12-94 MS

## MAINSHAFT ASSY

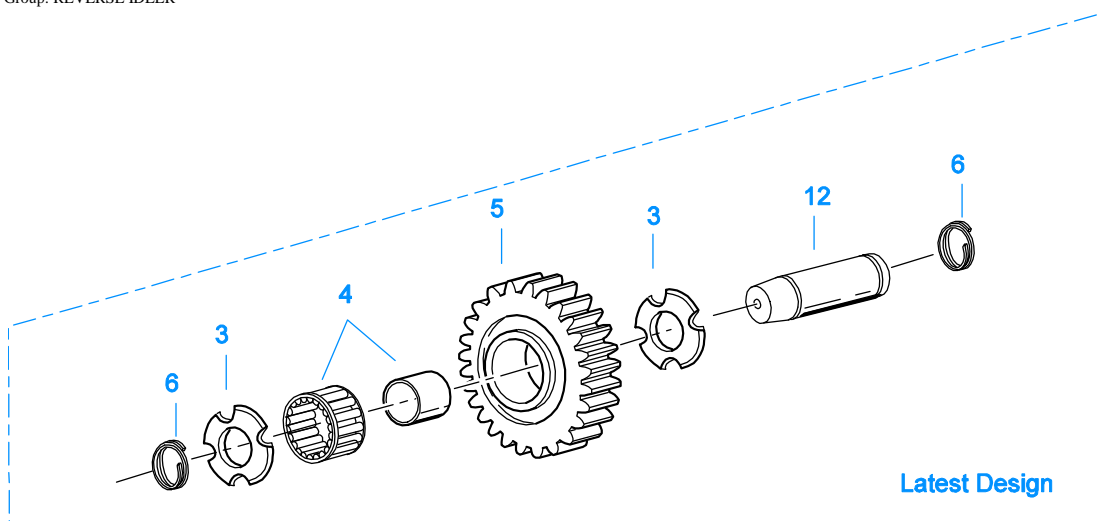
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14711	WASHER .248-.250 WHITE	18701	4		
1	14712	WASHER .253-.255 GREEN	18702	4		
1	14713	WASHER .258-.260 ORANGE	18703	4		
1	14714	WASHER .263-.265 PURPLE	18704	4		
1	14715	WASHER .268-.270 YELLOW	18705	4		
1	14716	WASHER .273-.275 BLACK	18706	4		
1	4300382	WASHER .249-WHITE		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	K-2489,K-2746
1	4300383	WASHER .254-GREEN		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	K-2489,K-2746
1	4300384	WASHER .259-ORANGE		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	K-2489,K-2746
1	4300385	WASHER .264-PURPLE		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	
1	4300386	WASHER .269-YELLOW		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	
1	4300387	WASHER .274-BLACK		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	
1	4300830	WASHER .244-BLUE		4	OPTIONAL 4300382-4300387 OR 4300830 USE ANY 4 WASHERS. USE WITH 3-SIDED KEY	K-2489,K-2746

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
					WITH 3-SIDED KEY	
2	14749	SPACER		4		K-2746
3	19313	REVERSE GEAR- MAINSHAFT		1		
4	14750	SNAP RING		4		K-2746
5	14832	PIN		1		A-3456
6	A-3456	KEY & PIN ASSY	14884	1		
7	62511	ROLL PIN		1		S-1781
8	4300976	3-SIDED KEY		1	MUST USE MATCHING WASHERS CONTAINS 3-SIDED KEY	K-2489,K-2746
8	K-2489	KEY & WASHER KIT	21339	1		
9	S-1781	MAINSHAFT ASSY	4300285 ,S - 1551	1		
10	4300292	1ST GEAR-MAINSHAFT	19177	1		
11	4300294	LO GEAR-MAINSHAFT	19082	1		
12	14709	SLIDING CLUTCH		2		
13	K-2321	UPDATE KIT	14654 ,19168 ,19182	1		
14	14273	SPACER		1		K-2746
15	14289	SNAP RING		1		K-1986,K-2045,K-2746
17	4300290	2ND GEAR-MAINSHAFT	19612	1		
18	14274	WASHER .248-.250 WHITE	18717	1		K-2746
18	14276	WASHER .258-.260 ORANGE	18719	1		
18	14277	WASHER .263-.265 PURPLE	18720	1		
18	14278	WASHER .268-.270 YELLOW	18721	1		
18	14279	WASHER .273-.275 BLACK	18722	1		
18	4300512	WASHER .253-.255 GREEN	14275 ,18718	1		

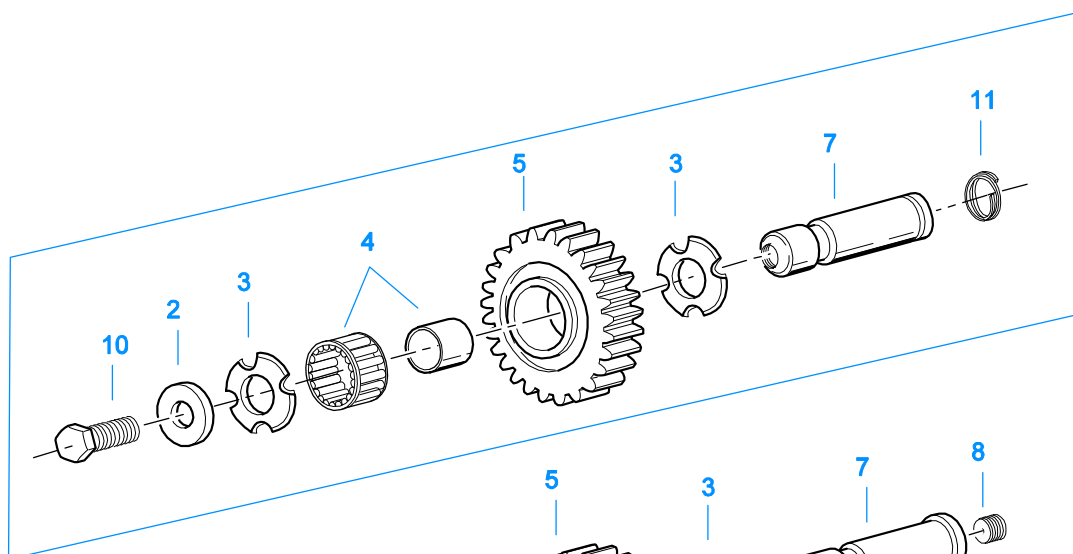
## MISCELLANEOUS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
20464		SHIFT DIAGRAM LABEL		1		
21075		WARNING LABEL		1		
71203		SILICONE LUBE		1	8 OZ (236.59 CC)-FLEET SIZE	
71204		ADHESIVE SEALANT		1	0.5 CC (SINGLE APPLICATION SIZE)	K-3470,K-3471
71205		SEALANT		1	2 CC (SINGLE APPLICATION SIZE)	K-1986,K-3470
71206		SILICONE LUBE		1	4 CC (SINGLE APPLICATION SIZE)	K-2054,K-2428,K-2429

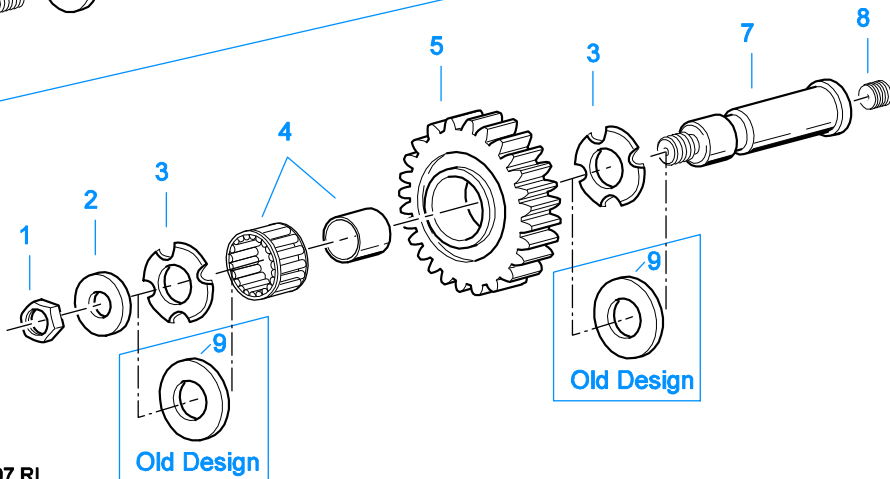




Latest Design



Old Design



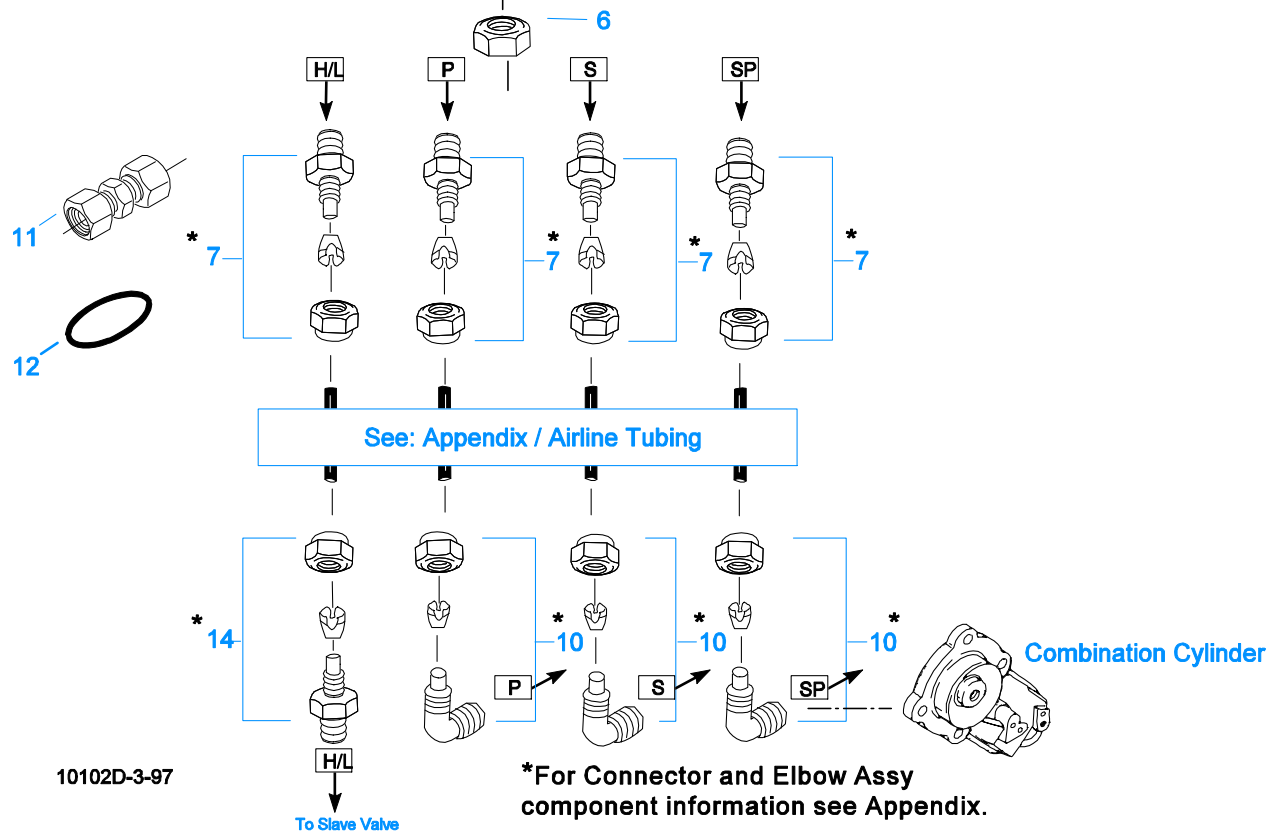
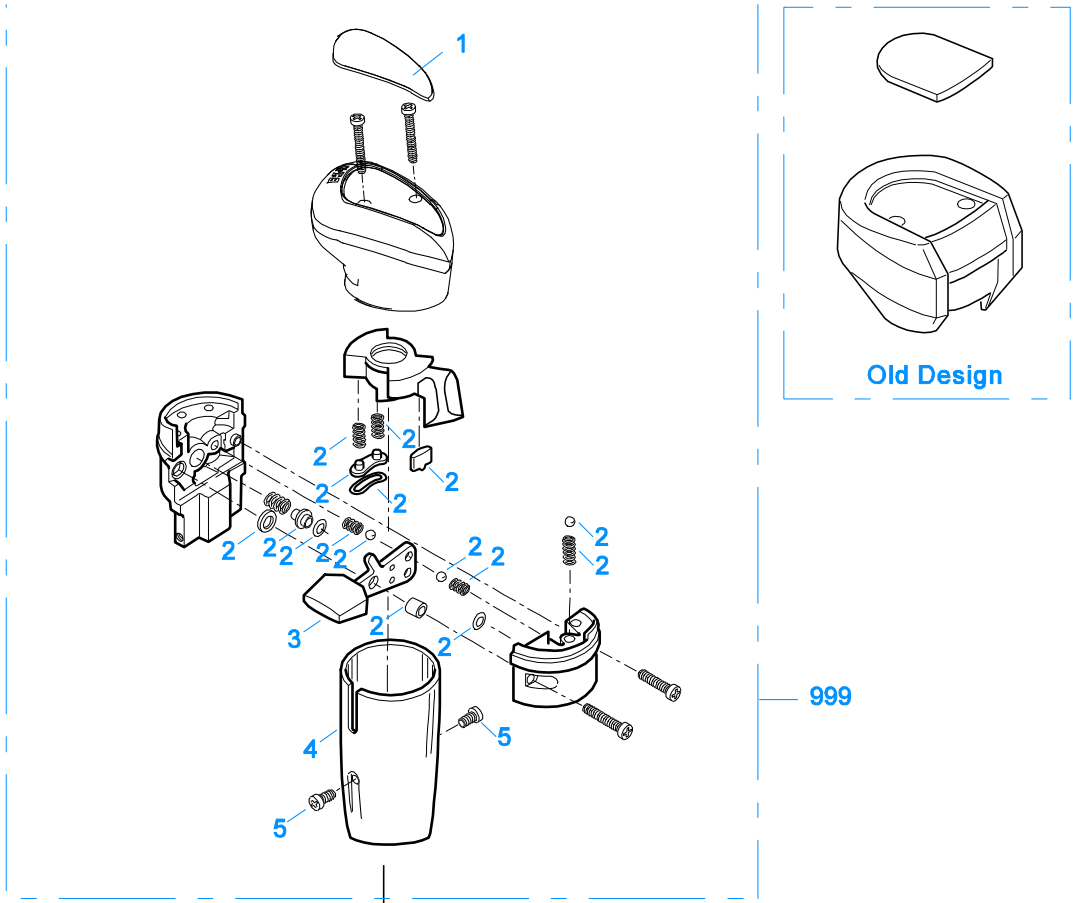
Old Design

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		
3	4302982	WASHER	14282	4		K-3209,S-2209
4	14287	BEARING	4305020	2		K-1986,K-2045
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		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
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



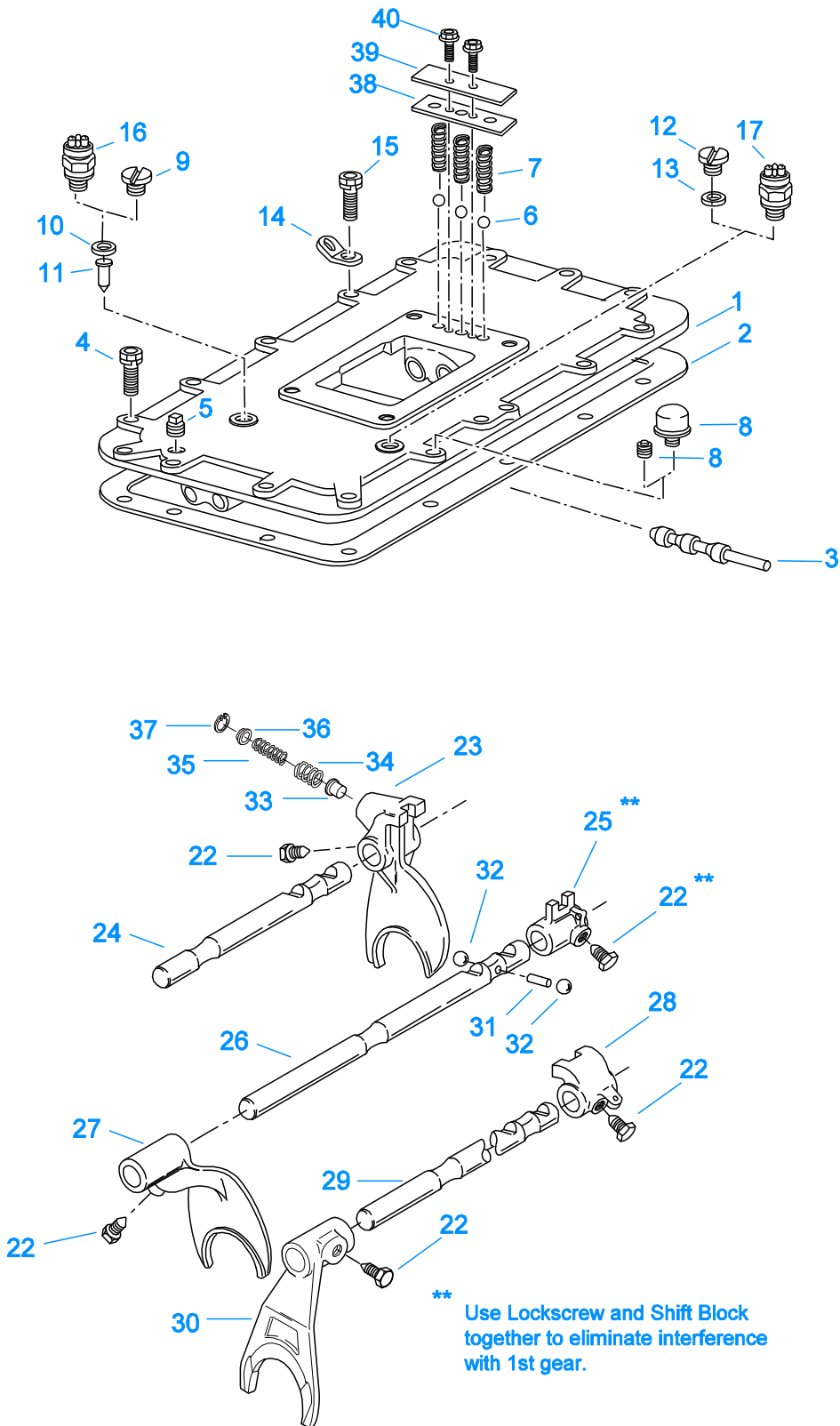
10102D-3-97

To Slave Valve

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

## ROADRANGER VALVE

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-6915,A-7315
1	5586103	SHIFT DIAGRAM MEDALLION		1	RTO	S-2547
2	K-1922	MASTER VALVE REPAIR KIT		1	FOR A-5015 VALVE	
2	K-2055	MASTER VALVE REPAIR KIT		1	FOR A-5315 VALVE	
2	K-3192	MASTER VALVE REPAIR KIT		1	FOR A-6915 VALVE	
2	K-3194	MASTER VALVE REPAIR KIT		1	FOR A-7315 VALVE	
3	20496	LEVER		1		A-6915,A-7315
4	20112	COVER		1		A-6915,A-7315
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	
7	84005	CONNECTOR ASSY		4	"PUSH-TO-CONNECT" 5/32" TUBE-1/16" NPTF	
10	85001	ELBOW ASSY	84501	3	5/32" TUBE-1/8" NPTF	K-1986
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		
14	84002	CONNECTOR ASSY	82502	1	1/8" TUBE-1/8" NPTF	
14	84004	CONNECTOR ASSY	82504	1	5/32" TUBE-1/8" NPTF	K-1986
14	84006	CONNECTOR ASSY		1	"PUSH-TO-CONNECT" 5/32" TUBE-1/8" NPTF	
999	A-6915	ROADRANGER VALVE ASSY	A - 5015	1	STANDARD-W/LOGO	
999	A-7315	ROADRANGER VALVE ASSY	A - 5315	1	(LEFT OF DRIVER)-W/LOGO	
999	S-2547	ROADRANGER VALVE ASSY	A - 5036	1	RTO - W/SHIFT DIAGRAM MEDALLION	



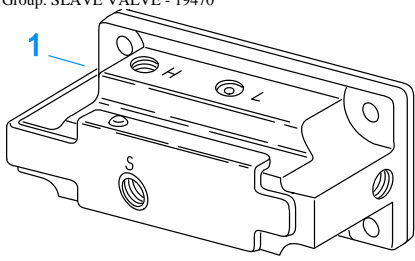
10234-12-94 For

## SHIFT BAR HOUSING (F)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
------	--------------	-------------	---------------	------	-------	-------------------------

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-1613	NO LONGER AVAILABLE	19770 ,22958	1	HOUSING ONLY	
1	S-1614	NO LONGER AVAILABLE	19702 ,21737	1	HOUSING ONLY-FOR TORQUE LIMITER	
2	4302676	GASKET	14918	1		K-2061,K-3470
3	20332	AIR VALVE SHAFT	17177	1		
4	X-8L-604	CAPSCREW		16	3/8"-16X1-1/4"	
5	X-12-603	PIPE PLUG	X12 602	1	3/8" NPT	
6	X-14-800	STEEL BALL		3	1/2"	
7	15918	SPRING		3		K-1986,K-2746
8	4304602	BREATHER	23605	1	1/4" NPT	K-3470
8	X-12-404	PIPE PLUG		1	1/4" NPT	
9	4303656	PLUG	15917	1		
10	15900	GASKET		1		
11	15899	PIN		1		
12	4303655	PLUG	17178	1		
13	17179	GASKET		1		
14	20815	LIFTING EYE	17105	2		S-1554
15	X-8L-602	CAPSCREW		2	3/8"-16X1-1/2" USE W/20815 LIFTING EYES	
16	22940	REVERSE LIGHT SWITCH	16830	1	SWITCH NORMALLY OPEN	
17	22941	NEUTRAL LIGHT SWITCH	12639	1	SWITCH NORMALLY CLOSED	
22	15776	LOCKSCREW		1	USE W/19703 SHIFT BLOCK	
22	3220	LOCKSCREW		4		
23	19705	SHIFT YOKE		1	LO/REVERSE	
24	19708	YOKE BAR		1	LO/REVERSE - W/TORQUE LIMITER	
24	19710	YOKE BAR		1	LO/REVERSE	
25	19703	SHIFT BLOCK		1	1ST/2ND	
26	19707	YOKE BAR		1	1ST/2ND	
27	16135	SHIFT YOKE		1	1ST/2ND	
28	19704	SHIFT BLOCK		1	3RD/OD	
29	19706	YOKE BAR		1	3RD/OD	
30	4300536	SHIFT YOKE	19878	1	3RD/OD	K-2321
31	1634	INTERLOCK PIN		1		K-2746
32	X-14-1200	STEEL BALL		2	3/4"	
33	19790	PLUNGER		1		
34	19791	SPRING		1		
35	19838	SPRING		1		
36	19792	RETAINER		1		
37	19793	SNAP RING		1		A-5000,K-1935
38	15133	GASKET		1		
39	15132	SPRING COVER		1		
40	X-8L-600	CAPSCREW		2	3/8"-16X1"	

Group: SLAVE VALVE - 19470

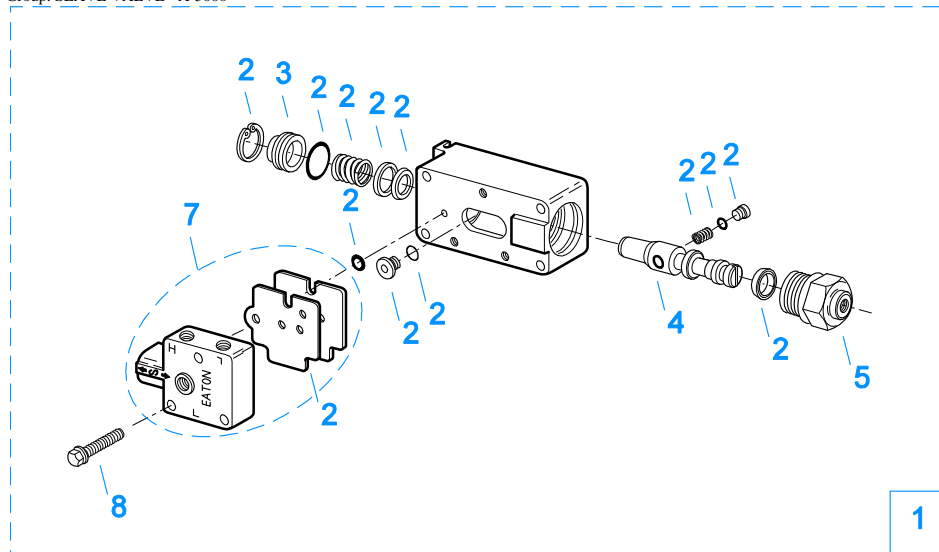


10121-1/92 19470 SV

## SLAVE VALVE - 19470

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

Group: SLAVE VALVE - A-5000



2 Repair Kit

10120-10-97 A-5000 SV

### 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"	





