



## Eaton Fuller FRF-12210B Transmission Parts Manual

This is Eaton Fuller FRF-12210B Transmission parts manual brought to you by Pro Gear and Transmission to assist you identifying the parts for your Eaton / Fuller transmission unit.

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# Illustrated Parts List

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**FRF-12210B**  
**July 2011**

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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).

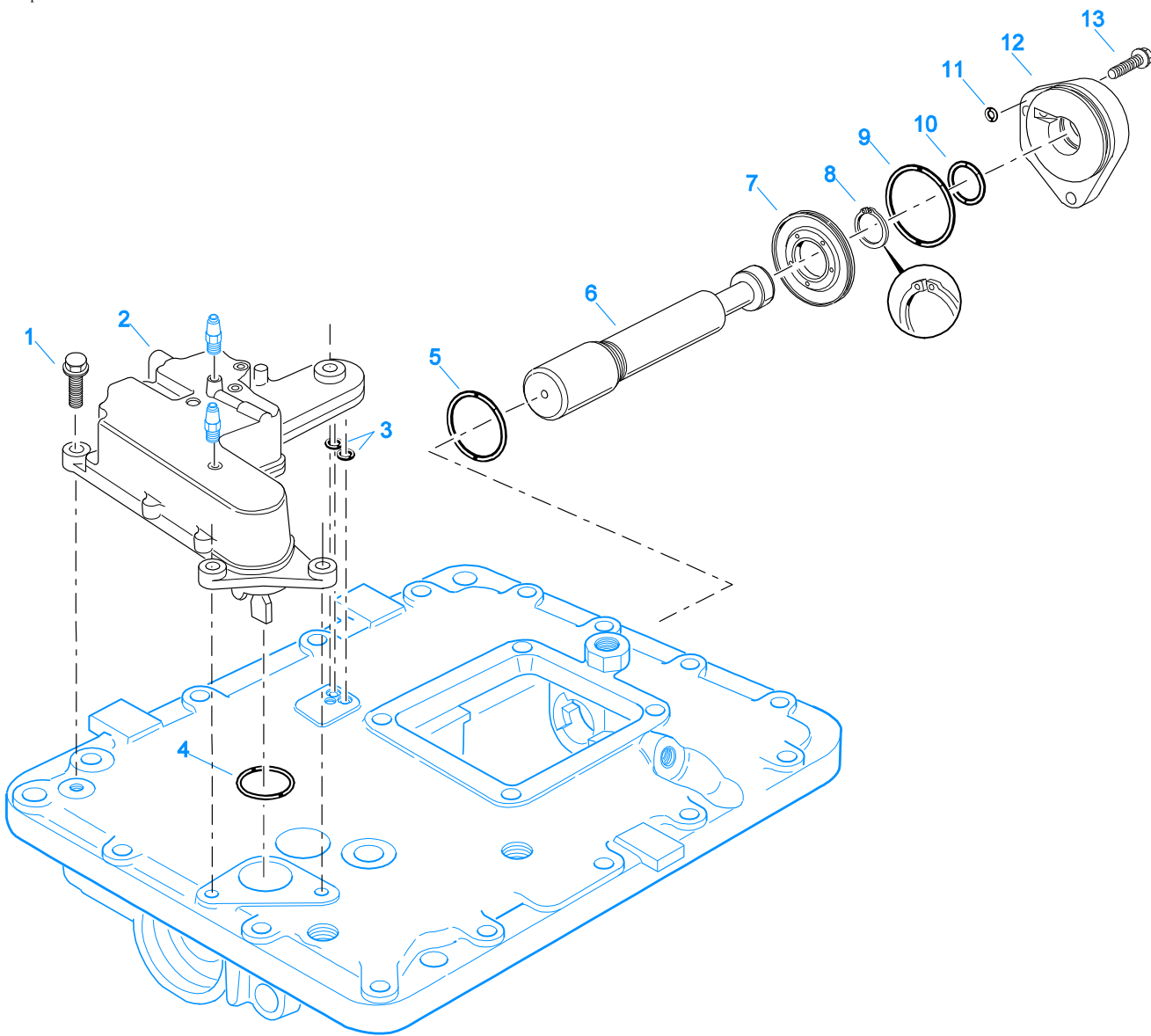
### Illustrations

- 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**

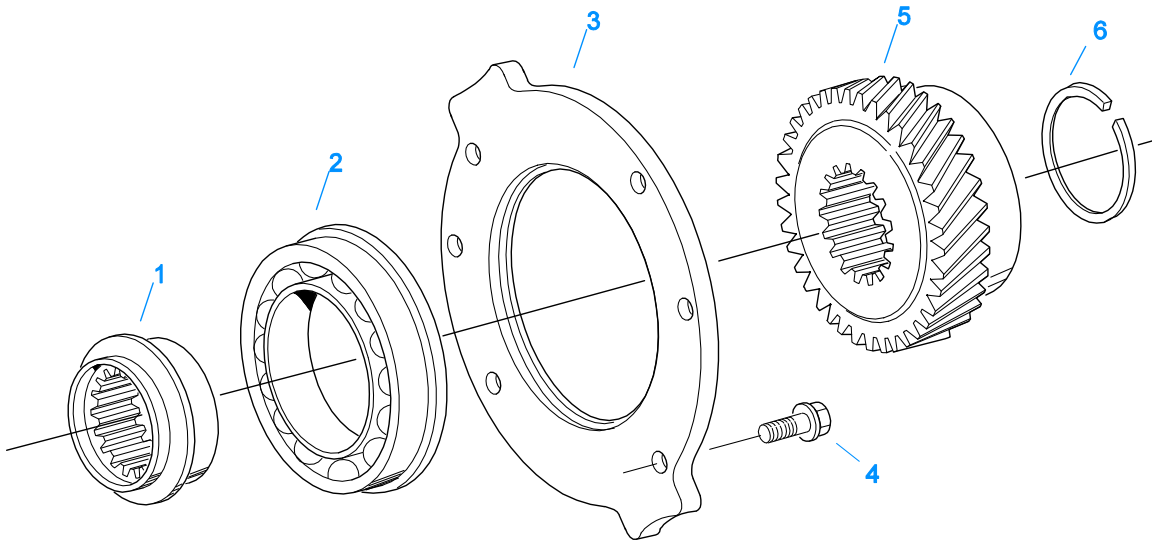


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**AIR MODULE & RANGE CYL.**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	X-8-0804M	CAPSCREW		4	M8 X 1.25 X 30MM	
2	K-3245	AIR MODULE ASSY	A - 6342	1		
3	14197	-O- RING		2		K-2923,K-3245,S-2701,S-2702
4	15569	-O- RING		1		K-3245,S-2701,S-2702
5	20423	-O- RING		1		K-2923,S-2701,S-2702
6	K-3129	BAR & RING KIT	4302918	1		
7	K-3128	PISTON KIT	4302177	1		
8	4302080	SNAP RING		1		K-2923,K-3128,K-3129,K-3130,K-3131,K-3239
9	5568507	-O- RING		1		K-2923,S-2701,S-2702
10	14765	-O- RING		1		K-2923,S-2701,S-2702
11	14197	-O- RING		1		K-2923,K-3245,S-2701,S-2702
12	4302140	COVER		1		S-2701,S-2702
13	X-8-0804M	CAPSCREW		2	M8 X 1.25 X 30MM	

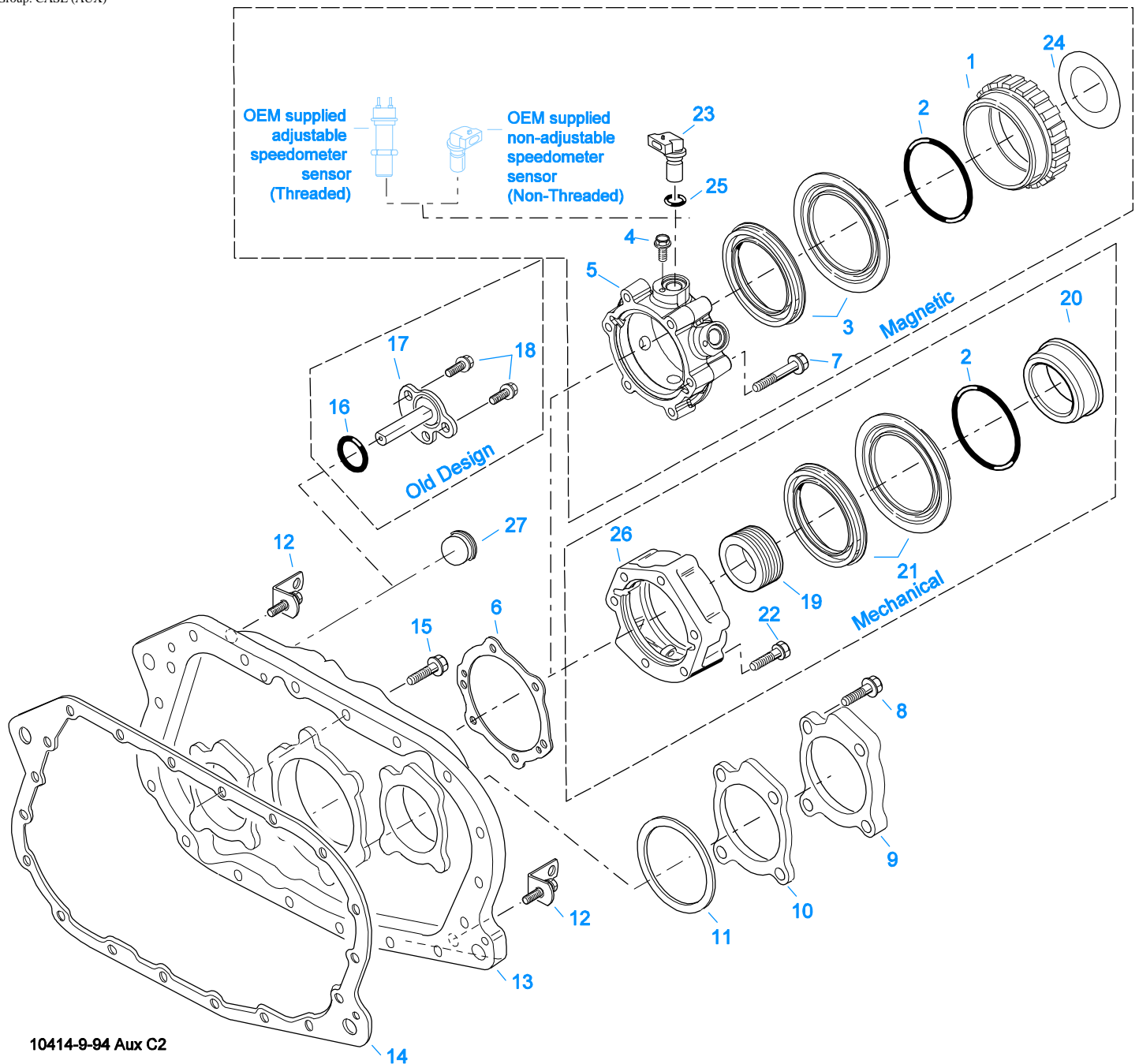




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### AUXILIARY DRIVE GEAR

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4302313	BEARING SPACER		1		
2	5566507-BOX	BEARING	5566504,5566507	1		K-2924,K-3132
3	4302257	RETAINER		1		
4	X-8-1003M	CAPSCREW		6	M10 X 1.5 X 25MM	
5	4302435	AUXILIARY DRIVE GEAR	4302434	1		
6	17399	SNAP RING		1		K-2917,K-2924,K-3132



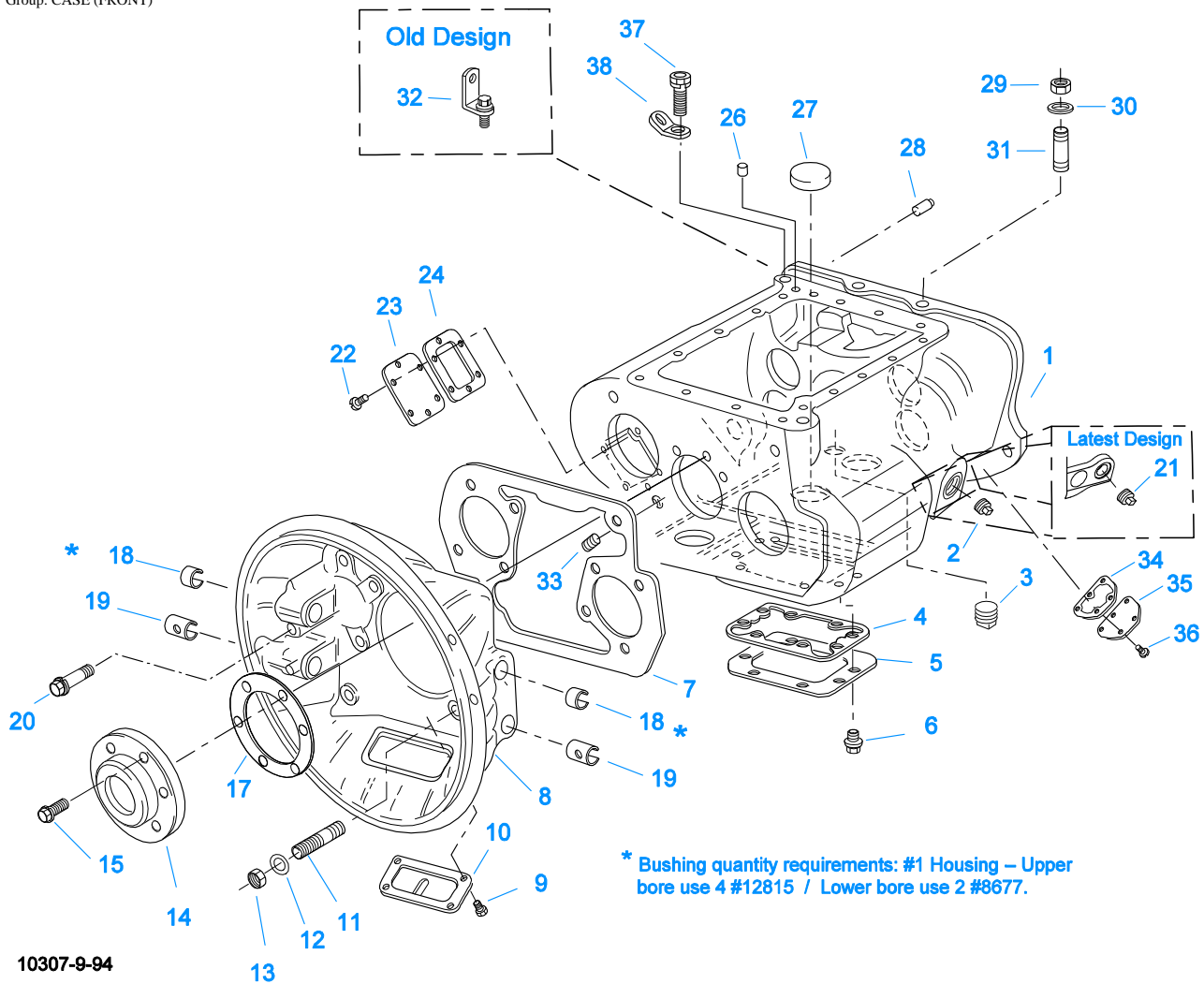
10414-9-94 Aux C2

**CASE (AUX)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2501	SPEEDO ROTOR ASSY	4302242	1	MAGNETIC	
2	5568511	-O- RING		1		K-2918,S-2501,S-2503,S-2809
3	K-2918	OIL SEAL KIT	4302322 4302323	1	"FOR MAGNETIC COVER"	K-2924
4	X-8-0801M	CAPSCREW		2	M8 X 1.25 X 12MM	
5	S-2809	REAR BEARING COVER ASSY	4302332 ,4303872 ,4304652 ,4305830	1	PUSH-IN/THREAD-IN MAGNETIC PICK-UP	
6	1009551	GASKET - RED EDGE MOLDED		1	RED EDGE MOLDED GASKET - UNCOMPRESSED THICKNESS .043 - .051 - NOT INTERCHANGEABLE WITH ANY OTHER GASKET	K-2262,K-2918,K-2921,S-2502,S-2809,S-2859
6	4302247	GASKET - PURPLE EDGE MOLDED		1	NON EDGE MOLDED GASKET - UNCOMPRESSED THICKNESS - .013	K-2262,K-2918,K-2921



Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
					- .018 - NOT INTERCHANGABLE WITH ANY OTHER GASKET	
7	X-8-1008M	HEX SCREW	X 8C 1024M	4	M10 X 80.0MM	
7	X-8-1009M	CAPSCREW		6	M10 X 1.5 X 50MM USE W/4303872 AND 4302332 RBC	
7	X-8-1009M	CAPSCREW		2	M10 X 1.5 X 50MM	
8	X-8-1003M	CAPSCREW		8	M10 X 1.5 X 25MM	
9	4302320	COVER	21346	2		S-2747
10	4305978	GASKET	4302246	2		K-2921,K-3475,K-3476,S-2747
11	K-2805	SHIM KIT	21452 K - 2106	1		K-2924,K-3132,S-2747
12	K-3517	LIFTING EYE KIT	A - 6409	2		
13	K-3239	REAR HSG REPL KIT	4302274	1		
13	S-2691	REAR HOUSING ASSY	4303750	1		K-3239
14	4302248	GASKET		1		K-2921,K-3883,S-2747
15	X-8C-1036M	CAPSCREW	X-8-1005M	17	M10 X 1.5 X 38MM	K-3883
15	X-8C-1037M	CAPSCREW	X-8-1006M	2	M10 X 1.5 X 49MM	K-3883
16	15569	-O- RING		1		K-3245,S-2701,S-2702
17	A-6715	RANGE BAR COVER ASSY	A - 6472	1		
18	X-8-0802M	SCREW		2	M8 X 1.25 X 20MM	
19	86104	SPEEDO DRIVE GEAR		1		
20	S-2503	SPEEDO SPACER ASSY	4302590	1	MECHANICAL	
21	K-2262	OIL SEAL W/SLINGER	19109 20807 ,20808	1	"FOR MECHANICAL COVER"	K-3132
22	X-8-1007M	SCREW		6	M10 X 1.5 X 75MM	
23	K-3454	SPEED SENSOR KIT	A - 6398 ,A - 6724	1	SINGLE PICK-UP (2 PIN)	
23	K-3455	SPEED SENSOR KIT, DUAL	A - 7046 ,A - 7518	1	DUAL PICK-UP (4 PIN)	
24	4304653	SHIELD		1		S-2809
25	14142	-O- RING		1		
26	S-2502	REAR BRG COVER ASSY	4303604 ,4305827	1	MECHANICAL - 4:00 OPENING	
26	S-2859	REAR BRG COVER ASSY	4302732 ,4305826	1	MECHANICAL - 6:00 OPENING	
27	K-3507	PLUG RETAINING KIT	4303832 ,4305218 ,4305219	1		

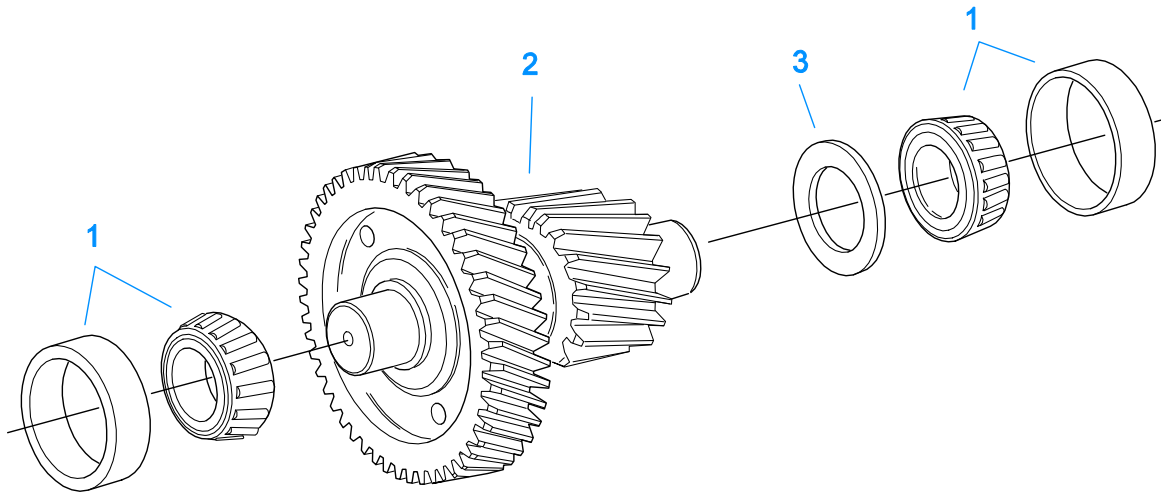


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**CASE (FRONT)**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2347	CASE ASSY	4302071	1	OPTIONAL - FOR USE W/INTEGRAL OIL PUMP	
1	S-2348	CASE ASSY	4302645	1	STANDARD	
1	S-2706	CASE ASSY	4303707	1	OPTIONAL - FOR USE W/INTEGRAL OIL COOLER	
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-2921
5	4302809	PTO COVER	16596 ,4300571	1		
6	X-8-1200M	CAPSCREW		8	M12 X 1.75 X 20MM	
7	4306584	GASKET	4302314	1		K-2921,K-4054
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-5992	CLUTCH HOUSING ASSY	43011103	1	#1 PULL ALUMINUM FOR MODELS ABOVE 1250 LBS. FT.	
8	A-6064	CLUTCH HOUSING ASSY	A - 4342 ,A - 4770 ,A - 6062 ,A - 6063 ,A - 6065	1	#1 PULL ALUMINUM FOR MODELS BELOW 1250 LBS. FT.	
9	239614	SCREW	X-8L-509	4	5/16-18X.81 QUANTITY DEPENDENT ON DESIGN	
10	4305230	HAND HOLE COVER	11453	1	#1 PULL	
11	5577509	STUD	5577505,5577503	6	M16 X 60MM	
12	X-10-1005	WASHER		6		K-4054
13	X-1-1606M	SELF LOCKING HEX NUT	X 1 1601M ,X 1 1603M,X-1-1605M	6	M16 X 1.5	K-4054

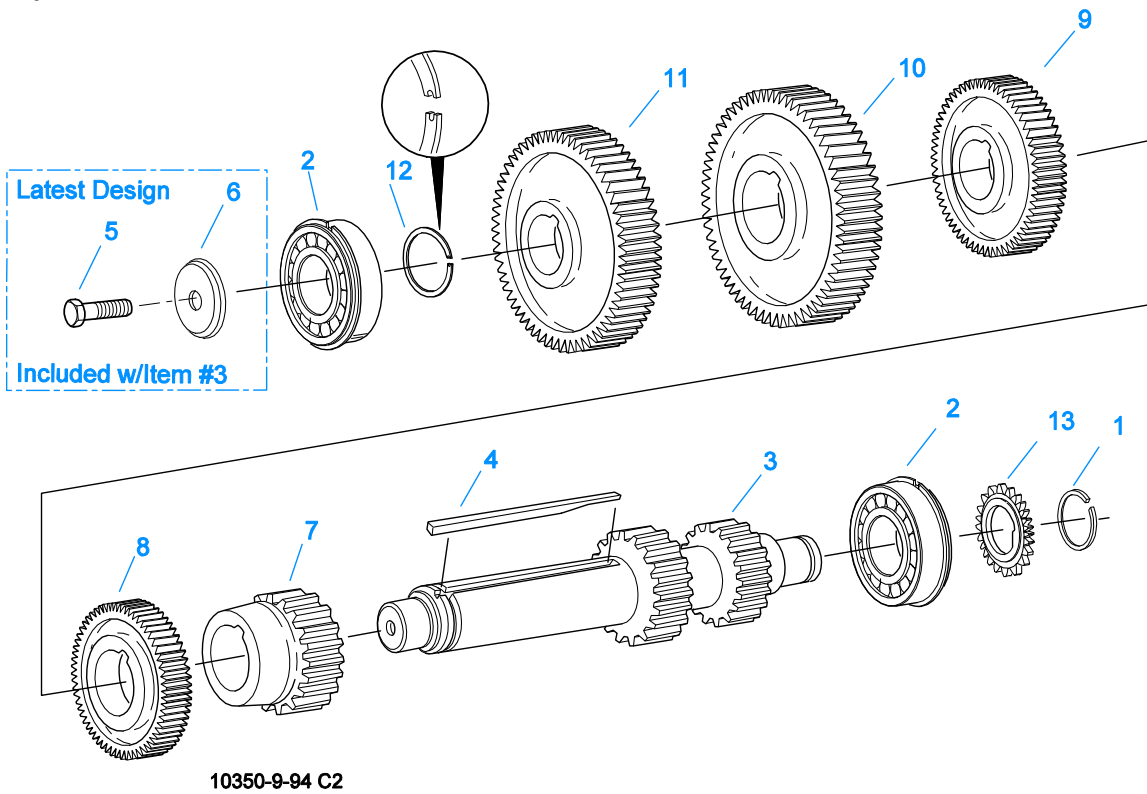
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
14	20550	FRONT BRG COVER		1	2" PULL	K-3600,K-3602,K-4124
15	X-8-1004M	CAPSCREW		6	M10 X 1.5 X 30MM	
17	14311	GASKET		1		K-2921
18	12815	BUSHING		4	UPPER	A-3713,A-3723,A-4772,A-5992,A-6064,K-3600,K-3602
19	8677	BUSHING		2	LOWER	A-3713,A-3723,A-4772,A-6064
20	X-8C-1209M	SCREW, HEX HD/WASHER ASSY	X-8C-1204M	4	M12X1.75, USE 2 PCS FOR IRON HOUSING, USE 4 PCS FOR ALUMINUM HOUSING	K-4054
20	X-8C-1210M	SCREW, HEX HD/WASHER ASSY	X-8C-1203M	2	M12X1.75, FOR IRON HOUSING	K-4054
21	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	S-2347,S-2348,S-2707,S-2738
22	X-8-1002M	CAPSCREW		6	M10 X 1.5 X 20MM	
23	14575	PTO COVER	4302254	1		
24	4305309	GASKET	1684	1		K-2921
26	5575503	DOWEL PIN		2		S-2347,S-2348,S-2706
27	14373	MAGNET		3		S-2347,S-2348,S-2706,S-2707,S-2738
28	18128	PIN		2		
29	X-1-1606M	SELF LOCKING HEX NUT	X 1 1601M ,X 1 1603M,X-1-1605M	2	M16 X 1.5	K-4054
30	X-10-1005	WASHER		2		K-4054
31	5577504	STUD		2	M16 X 2 X 52MM	
32	K-3517	LIFTING EYE KIT	A - 6409	2		
33	X-12-802	PIPE PLUG	X12 800	1	1/2"	
34	4302864	GASKET		1	FOR USE W/INTEGRAL OIL PUMP	K-2910,K-2921
35	4302854	COVER		1	FOR USE W/INTEGRAL OIL PUMP	
36	X-8-0603M	CAPSCREW		5	FOR USE W/INTEGRAL OIL PUMP	
37	20815	LIFTING EYE	17105	2		K-3517,S-2347,S-2348,S-2691,S-2692,S-2706
38	X-8-1003M	CAPSCREW		2	M10 X 1.5 X 25MM	



10440-1/92 Aux CS Helical

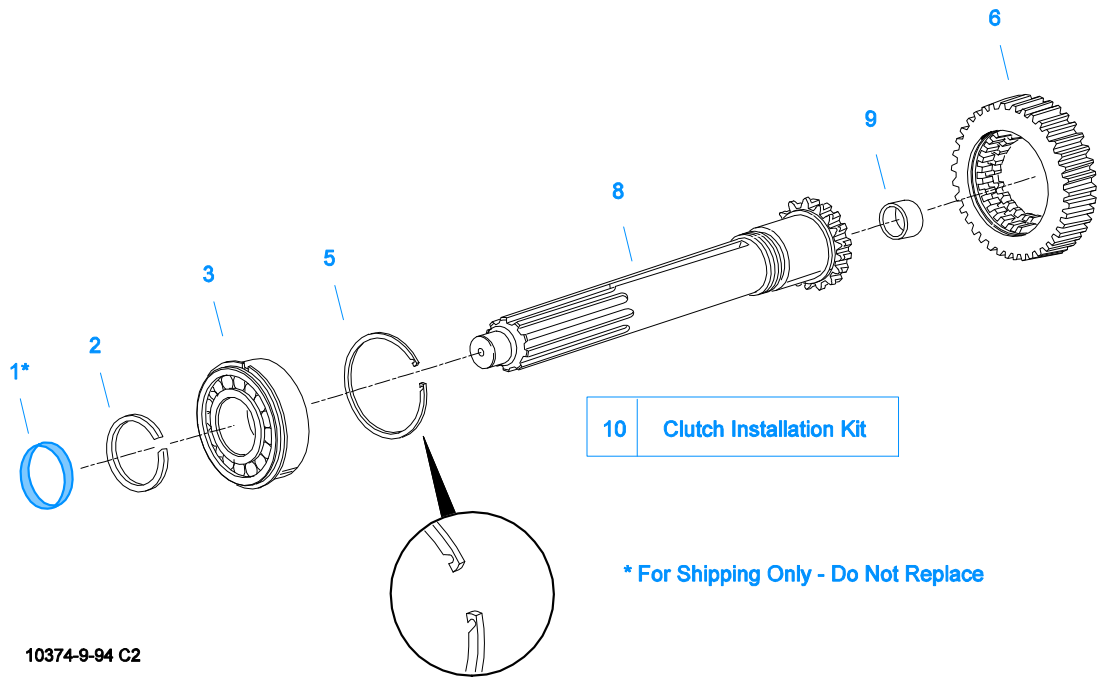
### COUNTERSHAFT & BRGS(AUX)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4302074-BOX	BEARING	21343,4302074	4		K-2924,K-3132
2	A-6434	WELDED COUNTERSHAFT ASSY	A - 6433 ,A - 6552	2	D/G 23160 - C/S 4302412	
3	21342	SPACER	22903	2		



## COUNTERSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4302082	SNAP RING		2		K-2924,K-3132
2	4304080	BEARING	4302240	4		K-2924,K-3132
3	K-3267	CNTRSHFT KIT-W/REV & 1ST	4303739 ,4304493	2	STANDARD	
3	K-3268	CNTRSHFT KIT-W/REV & 1ST	4303740 ,4304554	1	LOWER W/PUMP	
3	K-3269	CNTRSHFT KIT-W/REV & 1ST	4303758 ,4304552, 4303950	2	LOWER & UPPER W/THRU SHAFT PTO	
3	K-3270	CNTRSHFT KIT-W/REV & 1ST	4303759 ,4304553, 4303951	1	LOWER W/PUMP & W/PTO	
4	4302317	KEY		2		
5	X-7-1005	CAPSCREW		2	INCLUDED WITH ITEM #3	
6	4304024	BEARING RETAINER		2	INCLUDED WITH ITEM #3	K-3267,K-3268,K-3269,K-3270
7	4302420	2ND GEAR-CNTRSHFT	4302404 ,4302530	2		
8	4304491	3RD GEAR-CNTRSHFT	4302402	2		
9	4303737	4TH GEAR-CNTRSHFT	4303010	2		
10	15953	PTO GEAR - LOWER		1		
10	20840	PTO GEAR - UPPER	15952	1		
11	4302271	DRIVE GEAR-CNTRSHFT	4302414 ,4304490	2		
12	4302081	SNAP RING		2		
13	4302792	PUMP DRIVE GEAR		1	FOR MODELS WITH PUMP	

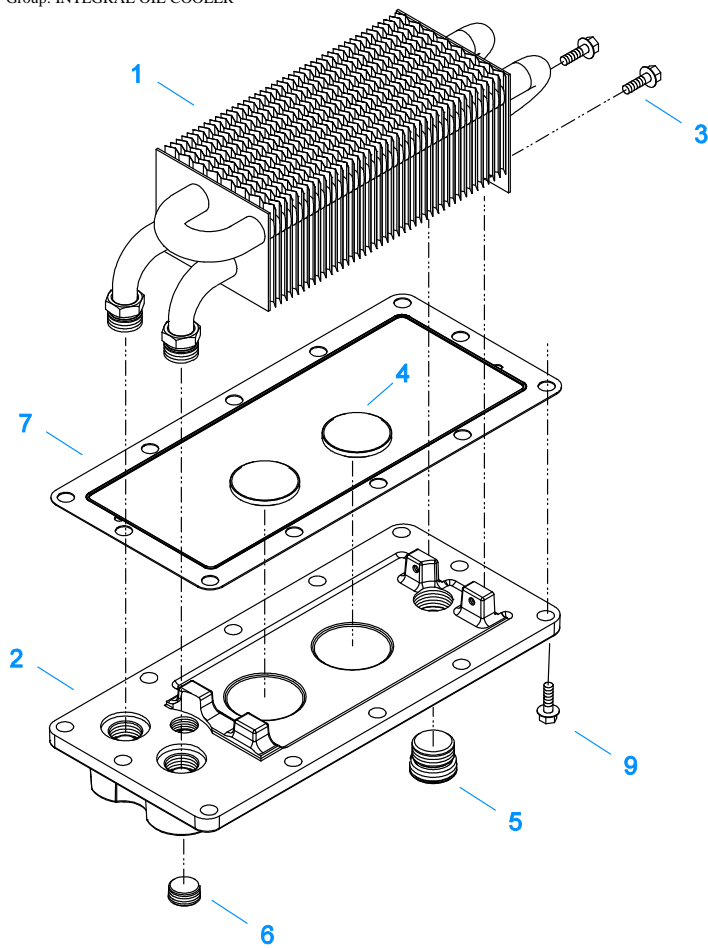


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## INPUT SHAFT & DRIVE GEAR

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-2917,K-3600,K-3602,K-4124
3	4301417	BEARING	81504	1		K-2924,K-3132,K-3600,K-3602,K-4124
5	4302486	SNAP RING		1	USE W/4303999 MAIN DRIVE GEAR	K-2917,K-3602
5	4303362	SNAP RING		1	USE W/4304635 MAIN DRIVE GEAR	K-2917,K-2924,K-3132,K-3416,K-3600,K-4124
6	4302264	NLA-ORDER K-3416		1		
6	4302428	NLA-ORDER K-3416		1		
6	4303999	NLA-ORDER K-3416	4303998	1		
6	4305873	MAIN DRIVE GEAR	4304634,4304635	1	USE W/4303362 SNAP RING AND S-2822 INPUT SHAFT FOR 4302315 INPUT SHAFT REPLACEMENT	K-3416
8	K-3602	CLUTCH INSTALLTION KIT	4302315 ,S - 2988	1		
8	S-2395	NLA-ORDER K-3416	4302315	1		
8	S-2822	INPUT SHAFT ASSY	4304633	1	2" PULL - USE W/4304635 MAIN DRIVE GEAR	K-3416,K-3600,K-4124
9	16566	BUSHING		1		K-2924,K-3132,S-2395,S-2822
10	K-3600	CLUTCH INSTALLTION KIT		1	FOR CURRENT DESIGN INPUT SHAFT (S-2822)	
10	K-3602	CLUTCH INSTALLTION KIT	4302315 ,S - 2988	1	FOR ORIGINAL DESIGN INPUT SHAFT (4302315)	
10	K-4124	CLUTCH INSTALLATION KIT (FR), HYDRAULIC RELEASE		1	STANDARD FR INPUT SHAFT AND YOKE FOR HYDRAULIC CLUTCH RELEASE	

Group: INTEGRAL OIL COOLER

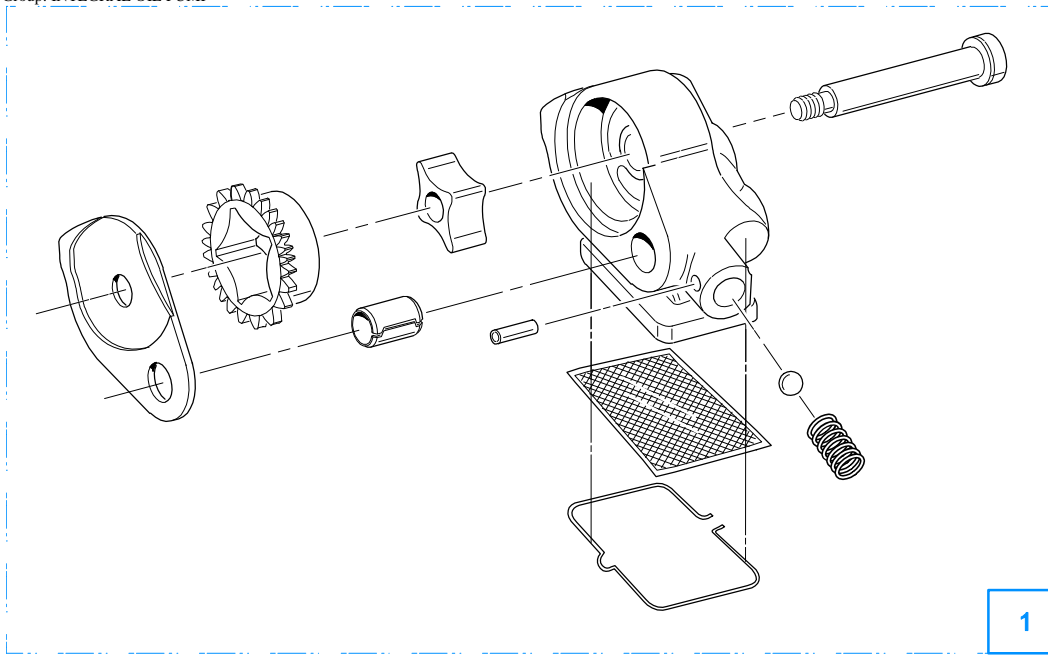


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## INTEGRAL OIL COOLER

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3246	INTEGRAL OIL COOLER KIT		1		
2	S-2707	OIL COOLER COVER ASSY	4303709	1	OPTIONAL - 1/2-14 NPTF	
2	S-2738	OIL COOLER COVER ASSY	4303993	1	STANDARD - 3/4-16 UNF 2B	
3	X-8-0603M	CAPSCREW		2	M6 X 1 X 20MM	
4	14373	MAGNET		2		S-2347,S-2348,S-2706,S-2707,S-2738
5	4304023	PLUG	4303747	1	1-1/16" MAGNETIC, O-RING INCLUDED	S-2347,S-2348,S-2707,S-2738
6	X-12-802	PIPE PLUG	X12 800	1	1/2"	
7	4303742	GASKET		1		S-2707,S-2738
9	X-8-1004M	CAPSCREW		12	M10 X 1.5 X 30MM	

Group: INTEGRAL OIL PUMP



10522-9-94 C2

## INTEGRAL OIL PUMP

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-6473	INTEGRAL OIL PUMP		1	COMPONENT PARTS NOT SOLD SEPARATELY	





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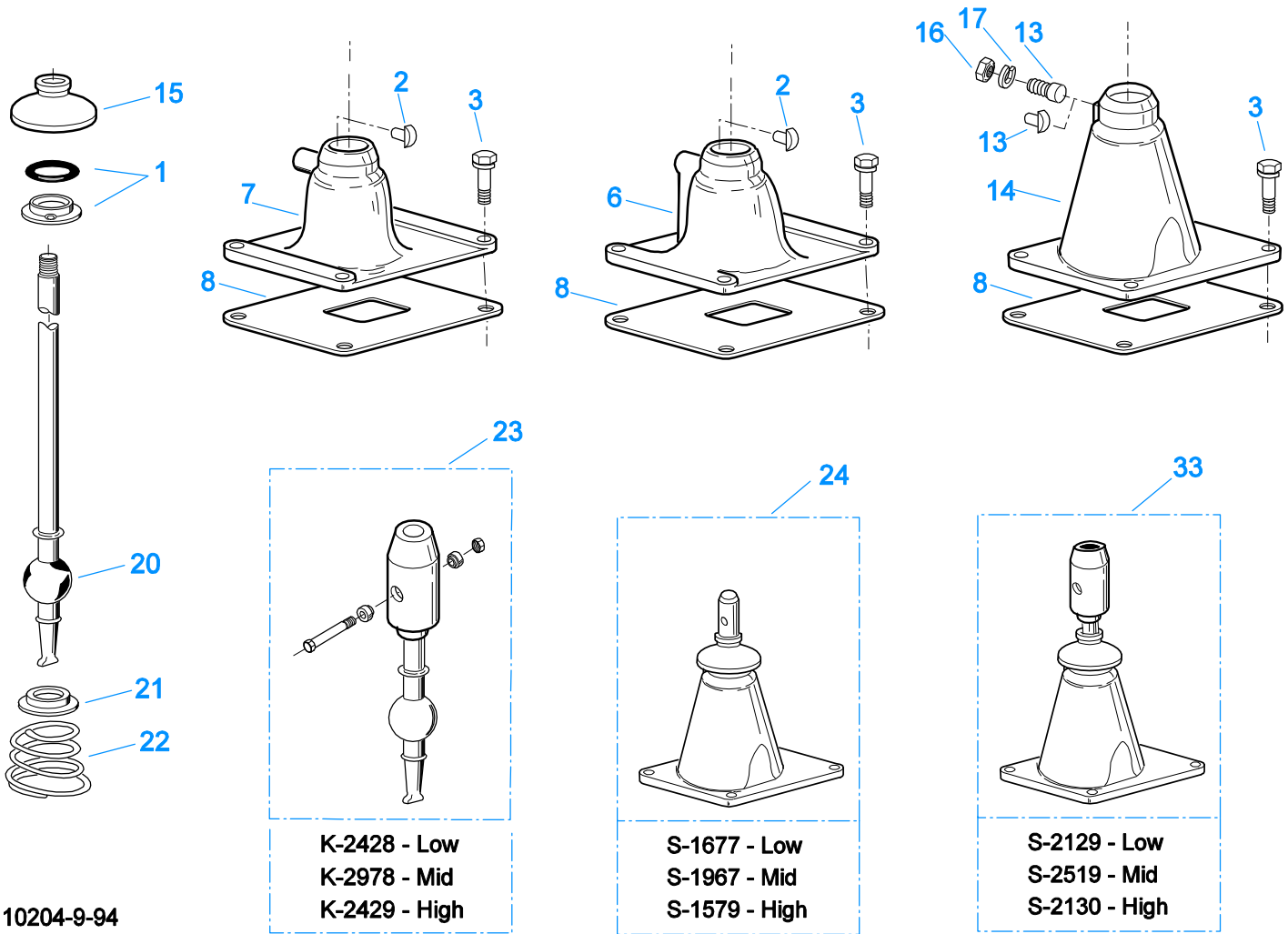
**ISOLATORS**

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		
12	X-9-503	NUT		1		

## 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-1921		MASTER VALVE REPAIR KIT		1	FOR A-6909 & A-5010 VALVES	
K-1956		COOLER INSTLN KIT		1		
K-2003		PIN & BUSHING KIT		1		
K-2262		OIL SEAL W/SLINGER	19109 20807 ,20808	1	"FOR MECHANICAL COVER"	K-3132
K-2394		AIR SYSTEMS TOOL KIT		1		
K-2428		LEVER REPLACEMENT KIT		1	LOW TOWER	
K-2429		LEVER REPLACEMENT KIT		1	HIGH TOWER	
K-2805		SHIM KIT	21452 K - 2106	1		K-2924,K-3132,S-2747
K-2910		COVER & SCREW KIT	4302854	1		
K-2917		SMALL PARTS KIT		1		
K-2918		OIL SEAL KIT	4302322 4302323	1	"FOR MAGNETIC COVER"	K-2924
K-2921		GASKET KIT		1		K-2924,K-3132
K-2923		RANGE PISTON KIT		1		K-2924,K-3132
K-2924		BASIC REBUILD KIT		1	ELECTRONIC SPEEDO FOR OVERHAUL KIT - ORDER THE REBUILD KIT AND THE REQUIRED INPUT SHAFT	
K-2973		SHIFT LEVER HSG KIT	17166 ,17167 ,4303050 ,4304910 ,K - 1630 K - 1941	1	HIGH TOWER	
K-2977		SHIFT LEVER HSG KIT	4301167 ,4304907 ,A - 6040	1	MID TOWER	
K-2978		LEVER REPLACEMENT KIT		1	MID TOWER	
K-3104		ACTUATOR PIN KIT	4303287	1		
K-3128		PISTON KIT	4302177	1		
K-3129		BAR & RING KIT	4302918	1		
K-3130		SHIFT YOKE KIT	4302179	1		
K-3131		YOKE BAR KIT	4302780 ,4303831	1		
K-3132		BASIC REBUILD KIT		1	MECHANICAL SPEEDO FOR OVERHAUL KIT - ORDER THE REBUILD KIT AND THE REQUIRED INPUT SHAFT ASSY	
K-3150		IDLER SHAFT KIT	4302261 ,4303503	1		
K-3239		REAR HSG REPL KIT	4302274	1		
K-3240		REAR HSG REPL KIT	4302534	1	THRU-SHAFT PTO	
K-3245		AIR MODULE ASSY	A - 6342	1		
K-3267		CNTRSHFT KIT-W/REV & 1ST	4303739 ,4304493	1	STANDARD	
K-3268		CNTRSHFT KIT-W/REV & 1ST	4303740 ,4304554	1	LOWER W/PUMP	
K-3269		CNTRSHFT KIT-W/REV & 1ST	4303758 ,4304552, 4303950	1	LOWER & UPPER W/THRU SHAFT PTO	
K-3270		CNTRSHFT KIT-W/REV & 1ST	4303759 ,4304553, 4303951	1	LOWER W/PUMP & W/PTO	
K-3376		O-RING & WASHER KIT	4301211	1		
K-3399		ISOLATOR BUSHING KIT	21244 ,23311	1		
K-3416		GEAR UPDATE KIT		1	FOR UNITS BUILT PRIOR TO 3-1-99	
K-3454		SPEED SENSOR KIT	A - 6398 ,A - 6724	1	SINGLE PICK-UP (2 PIN)	
K-3455		SPEED SENSOR KIT, DUAL	A - 7046 ,A - 7518	1	DUAL PICK-UP (4 PIN)	
K-3467		PIN REPLACEMENT KIT	21245	1		
K-3475		OIL COOLER KIT	K - 3212	1	FOR FR SERIES (C2000) MODELS REQUIRING METRIC FASTENERS, REAR MOUNTING AUX C/S PUMP	
K-3476		PUMP INSTALLATION KIT	K - 3213	1	AIR TO OIL COOLER INSTALLATION KIT FOR FR SERIES (C2000) MODELS REQUIRING METRIC FASTENERS, REAR MOUNTED AUX C/S PUMP	
K-3492		SYNCHRONIZER KIT	K - 2446	1		
K-3495		SYNCHRONIZER REPLACEMENT KIT	K - 2922	1	SLIDING CLUTCH INCLUDED IN KIT	

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
	K-3507	PLUG RETAINING KIT	4303832 ,4305218	1		
	K-3517	LIFTING EYE KIT	,4305219	1		
	K-3600	CLUTCH INSTALLTION KIT	A - 6409	1	FOR CURRENT DESIGN INPUT SHAFT (S-2822)	
	K-3602	CLUTCH INSTALLTION KIT	4302315 ,S - 2988	1	FOR ORIGINAL DESIGN INPUT SHAFT (4302315)	
	K-3740	EXTERNAL COOLER KIT		1	FOR USE ON UNITS WITH A HYDRAULIC CLUTCH RELEASE	
	K-3883	CONICAL WASHER FASTENER KIT		1	TO CONVERT FROM LOCKWASHER TO CONICAL WASHER	
	K-4054	FR CLUTCH HOUSING SERVICE KIT		1		
	K-4124	CLUTCH INSTALLATION KIT (FR), HYDRAULIC RELEASE		1	STANDARD FR INPUT SHAFT AND YOKE FOR HYDRAULIC CLUTCH RELEASE	
	S-1404	OIL FILTER	17238	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-2347	CASE ASSY	4302071	1	FOR USE W/INTEGRAL OIL PUMP	
	S-2348	CASE ASSY	4302645	1	STANDARD	
	S-2501	SPEEDO ROTOR ASSY	4302242	1	MAGNETIC	
	S-2502	REAR BRG COVER ASSY	4303604 ,4305827	1	MECHANICAL - 4:00 OPENING	
	S-2503	SPEEDO SPACER ASSY	4302590	1	MECHANICAL	
	S-2519	SHIFT LEVER HSG ASSY	S - 2919	1	MID TOWER	
	S-2543	ROADRANGER VALVE ASSY	A - 5043	1	RT - W/SHIFT DIAGRAM MEDALLION	
	S-2691	REAR HOUSING ASSY	4303750	1		K-3239
	S-2692	REAR HOUSING ASSY	4303778	1	THRU-SHAFT PTO	K-3240
	S-2700	SHIFT BAR HSG (FRF)	4302642 ,4305077	1	HOUSING ONLY	
	S-2701	SHIFT BAR HSG ASSY (FRF)	4302642 ,4305077	1	COMPLETE - INCLUDES RANGE CYLINDER ASSY	
	S-2702	SHIFT BAR HSG ASSY (FRF)	4302642 ,4305077	1	COMPLETE - INCLUDES RANGE CYLINDER ASSY AND OPTIONAL DETENT SPRING DESIGN	
	S-2706	CASE ASSY	4303707	1	OPTIONAL - FOR USE W/INTEGRAL OIL COOLER	
	S-2747	RANGE SECTION ASSY		1		
	S-2747R	REMAN RANGE SECTION ASSY		1		
	S-2809	REAR BEARING COVER ASSY	4302332 ,4303872 ,4304652 ,4305830	1	PUSH-IN/THREAD-IN MAGNETIC PICK-UP	
	S-2822	INPUT SHAFT ASSY	4304633	1	2" PULL	K-3416,K-3600,K-4124
	S-2859	REAR BRG COVER ASSY	4302732 ,4305826	1	MECHANICAL - 6:00 OPENING	

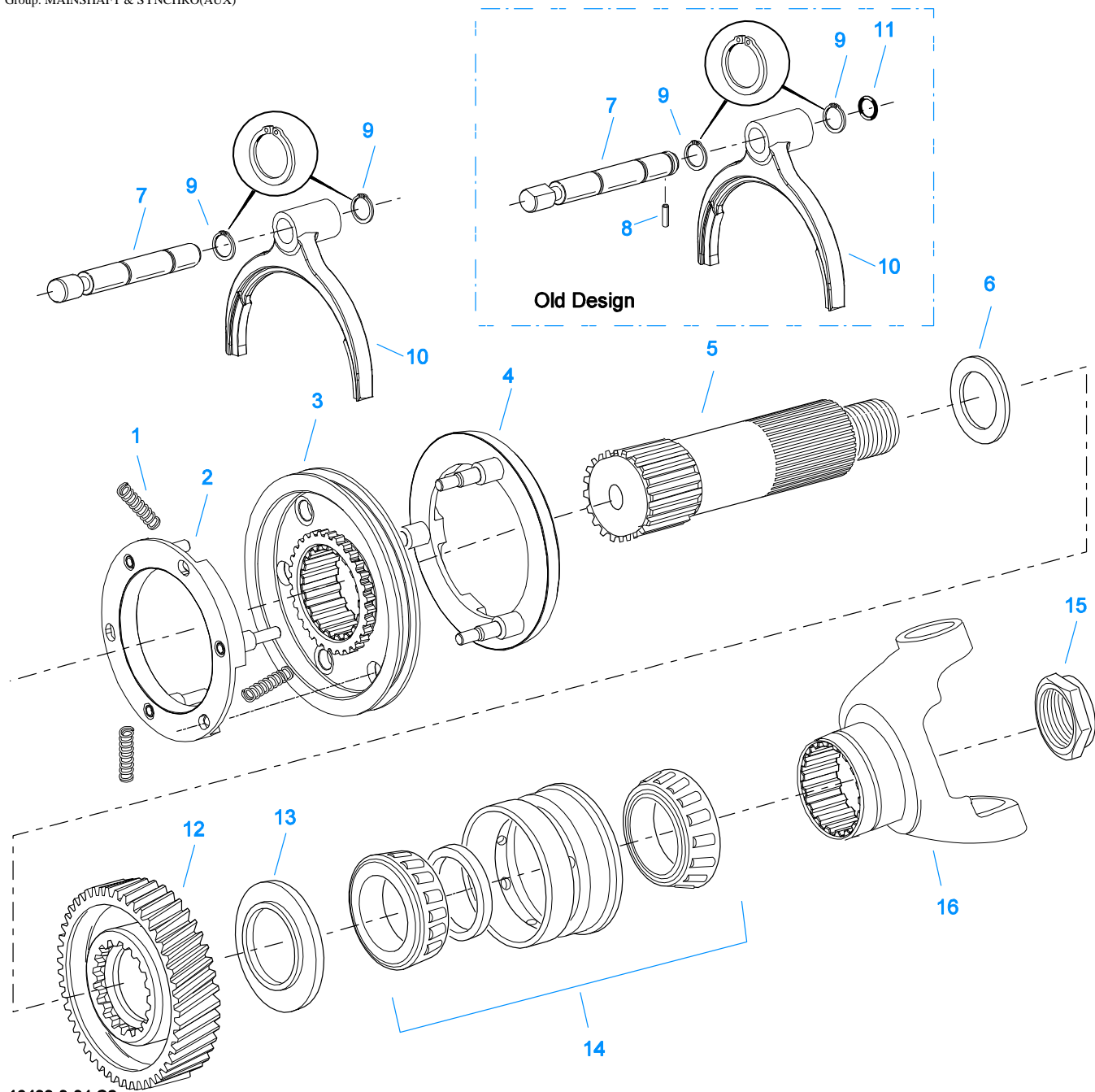


10204-9-94

**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
3	X-8C-1036M	CAPSCREW	X-8-1005M	4	M10 X 1.5 X 38MM	K-3883
6	K-2977	SHIFT LEVER HSG KIT	4301167 ,4304907 ,A - 6040	1	MID TOWER	
7	K-1476	SHIFT LEVER HSG	4530 ,17163 ,18298 ,4304905 ,A - 4437	1	LOW TOWER	
8	4305294	GASKET	4303431	1		K-1476,K-2428,K-2429,K-2921,K-2973,K-2977,K-2978,K-3476,K-3883,S-1579,S-1677,S-1967,S-2129,S-2130,S-2519,S-2701,S-2702 K-2973,S-1579,S-2130
13	4303030	PIN		1		
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"	

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

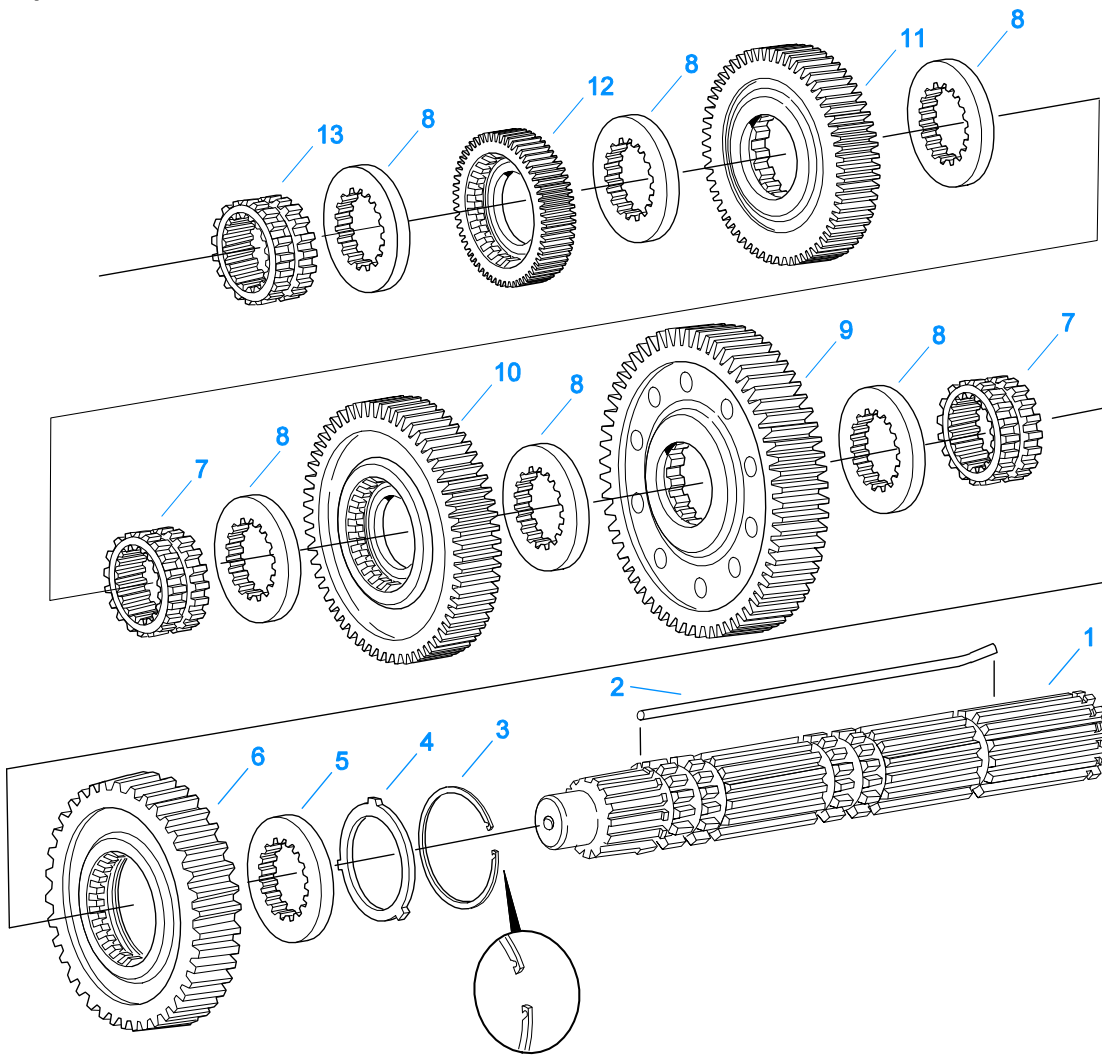


10433-9-94 C2

### MAINSHAFT & SYNCHRO(AUX)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	14897	SPRING		3		K-2917,K-2924,K-3132,K-3492,K-3495
2	A-7331	SYNCHRONIZER ASSY	4304396 4304397 A - 5917	1	HI RANGE	K-3492,K-3495
3	4300924	SLIDING CLUTCH		1		K-3495
4	A-7254	SYNCHRONIZER ASSEMBLY	A - 4937 A - 5876	1	LO RANGE	K-3492,K-3495
5	4302276	AUXILIARY MAINSHAFT		1		
6	4302243	WASHER		1		K-2917
7	K-3131	YOKE BAR KIT	4302780 ,4303831	1		
8	5575506	PIN		1	NOT REQUIRED FOR 4303831 YOKE BAR	
9	4302080	SNAP RING		2		K-2923,K-3128,K-

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
10	K-3130	SHIFT YOKE KIT	4302179	1		3129,K-3130,K-3131,K-3239
11	5568519	NO LONGER AVAILABLE		1	NOT REQUIRED FOR 4303831 YOKE BAR	
12	4302413	REDUCTION GEAR	4302409	1		
13	22898	SPACER		1		K-2917
14	5556503-BOX	BEARING	5556503	1		K-2924,K-3132
15	K-4122	HEX FLANGE CRIMPED NUT KIT	4302321,4306520	1		
16	5505543	YOKE-1710 HALF ROUND		1		
16	5505544	YOKE-1710 FULL ROUND		1		
16	5505545	YOKE-1760 HALF ROUND		1		
16	5505546	YOKE-1760 FULL ROUND		1		
16	5505547	YOKE-1810 HALF ROUND		1		
16	5505548	YOKE-1810 FULL ROUND		1		



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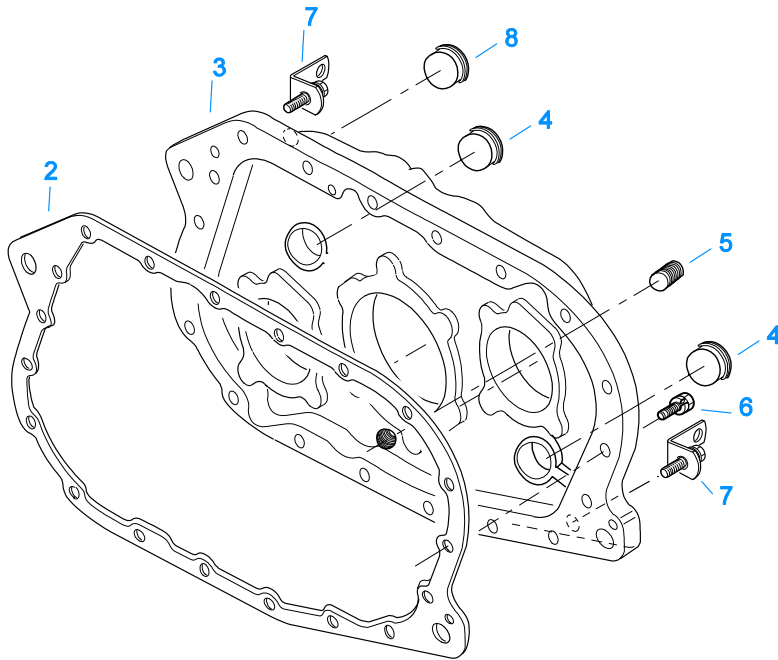
## MAINSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4304617	MAINSHAFT	4302318	1		
2	4302316	KEY		1		
3	4302184	SNAP RING		1		K-2917
4	4302312	SPACER		1		K-2917
5	4302259	WASHER		1		K-2917
6	4303033	REVERSE GEAR-MAINSHAFT	4303116	1		
7	4302265	SLIDING CLUTCH		2		
8	4302258	WASHER		6		K-2917
9	4303880	1ST GEAR-MAINSHAFT	4304494,4303741	1		
10	4302421	2ND GEAR-MAINSHAFT	4302405	1		
11	4302529	3RD GEAR-MAINSHAFT	4302403	1		
12	4303006	NLA-ORDER K-3416 FOR UNITS BUILT PRIOR TO 3-1-99		1		
12	4303738	NLA-ORDER K-3416 FOR UNITS BUILT PRIOR TO 3-1-99		1		
12	4304001	4TH GEAR-MAINSHAFT	4304000	1		K-3416
13	4302309	NLA-ORDER K-3416 FOR UNITS BUILT PRIOR TO 3-1-99		1		
13	4304014	SLIDING CLUTCH		1		K-3416





Group: MISC. THRU-SHAFT PTO  
 Sub-Group: REAR HOUSING ASSY



10414A-10/95 Thru Sh PTO

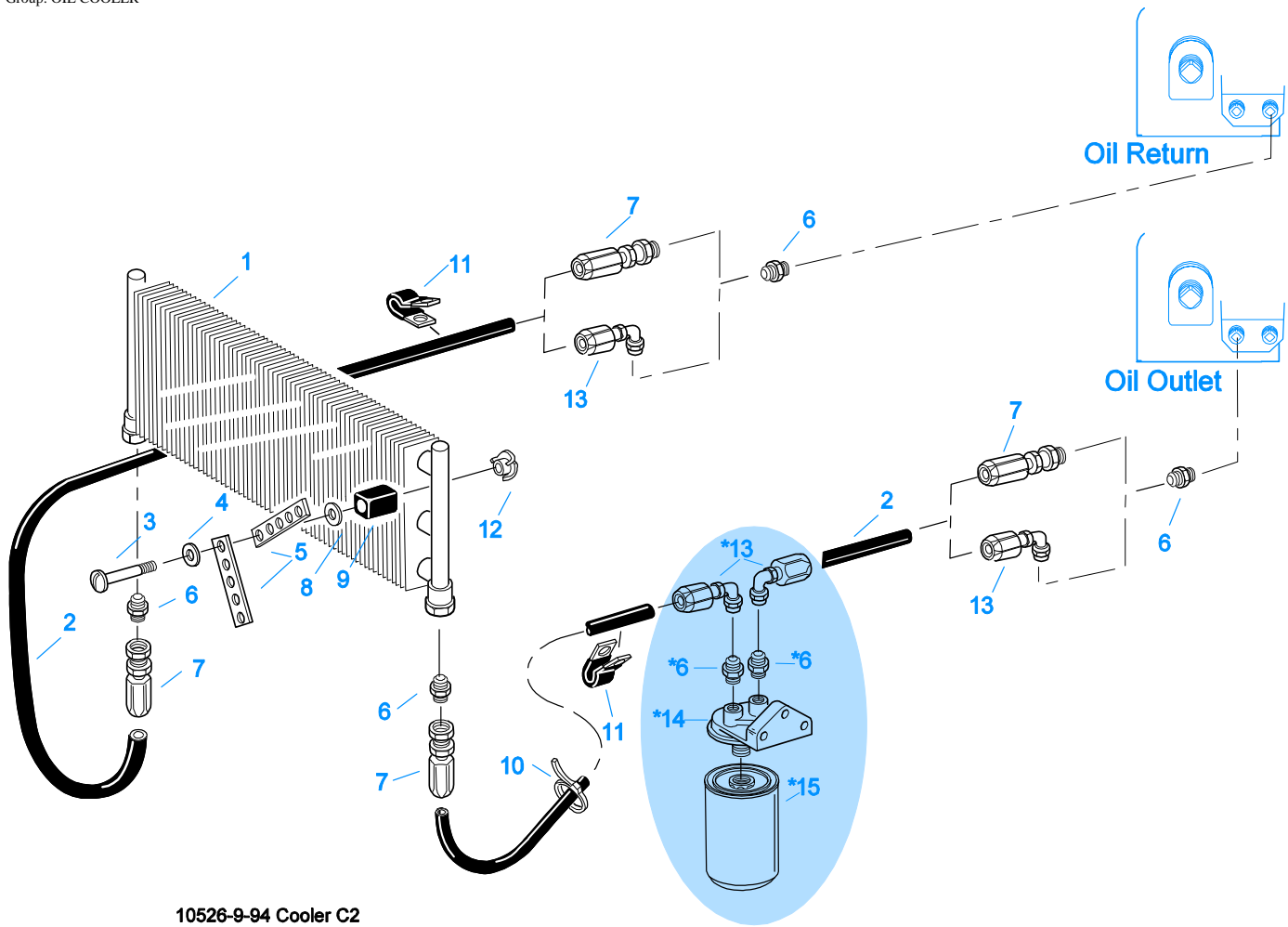
## MISC. THRU-SHAFT PTO

### REAR HOUSING ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
2	4302248	GASKET		1		
3	K-3240	REAR HSG REPL KIT	4302534	1		
3	S-2692	REAR HOUSING ASSY	4303778	1		
4	21073	EXPANSION PLUG		2		
6	X-8-1028M	SCREW	X 8L 1021M	6	10MM X 1.5 X 12MM	
6	X-8L-1021M	CAPSCREW & WASHER		6	M10 X 1.5	
7	K-3517	LIFTING EYE KIT	A - 6409	2		
8	K-3507	PLUG RETAINING KIT	4303832 ,4305218 ,4305219	1		
9	20815	LIFTING EYE	17105	2		
10	X-8-1003M	CAPSCREW		2	M10 X 1.5 X 25MM	

## MISCELLANEOUS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
20400		SHIFT DIAGRAM LABEL	19301	1		
71203		SILICONE LUBE		1	8 OZ (236.59 CC)-FLEET SIZE	
71204		ADHESIVE SEALANT		1	0.5 CC (SINGLE APPLICATION SIZE)	K-3475,K-3476,K-3507
71205		SEALANT		1	2 CC (SINGLE APPLICATION SIZE)	K-3476
71206		SILICONE LUBE		1	4 CC (SINGLE APPLICATION SIZE)	K-2428,K-2429,K-2923,K-2978

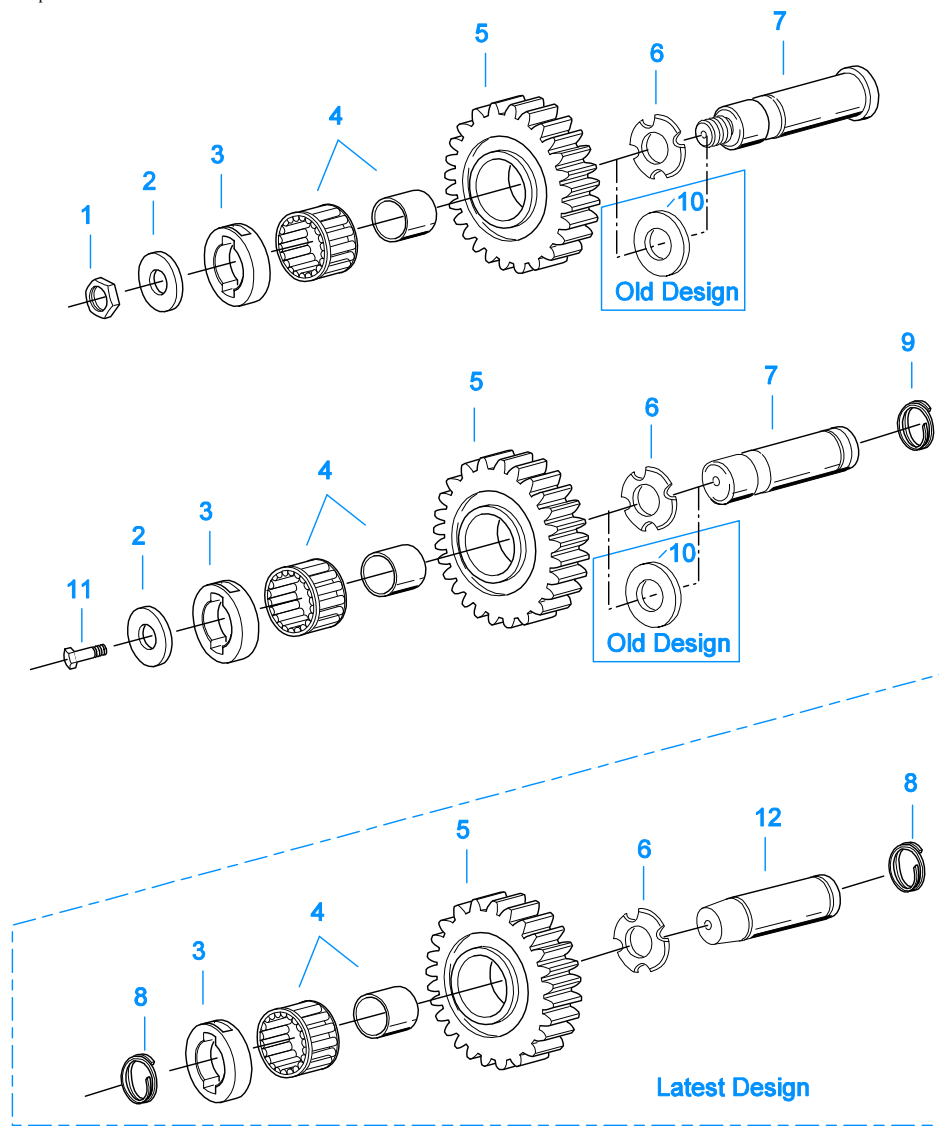


10526-9-94 Cooler C2

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

## OIL COOLER

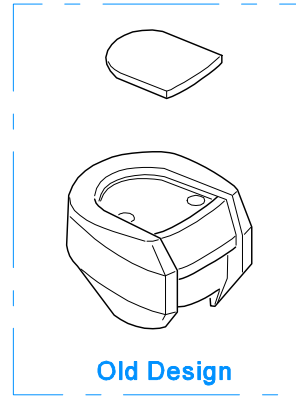
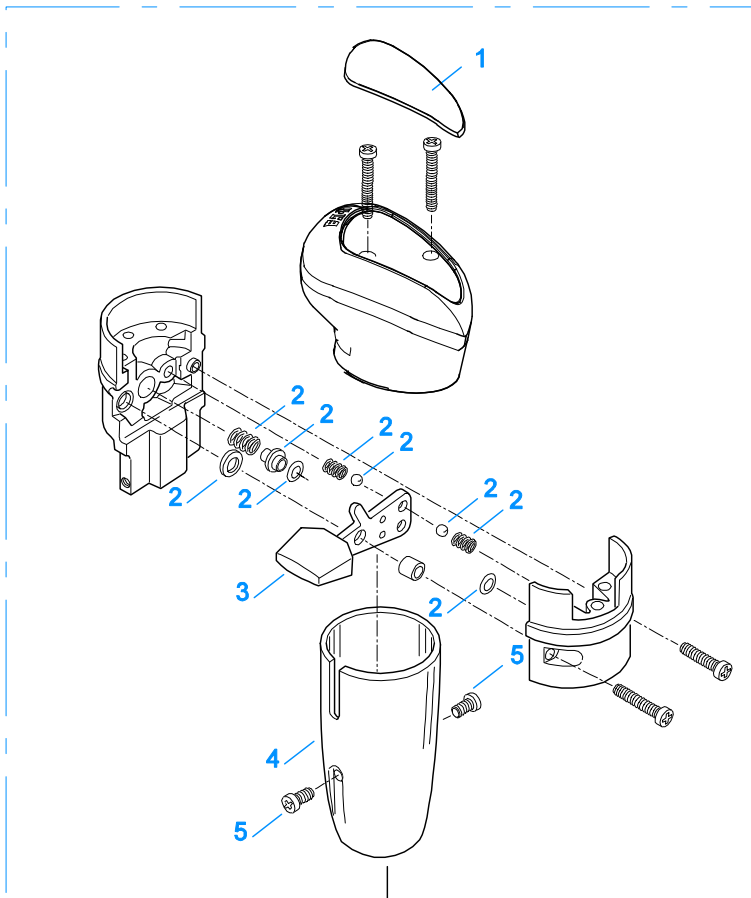
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	18025	OIL COOLER		1		K-1956,K-3476
2	19424	HOSE		1	25 FEET	K-1956,K-3476
3	X-8-535	CAPSCREW		2	5/16"-16X2-1/2"	
4	X-3-506	LOCKWASHER		2	5/16"	
5	18211	BRACKET		4		K-1956,K-3476
6	19419	CONNECTOR		6		K-1956,K-3476,S-1404
7	19415	SWIVEL		4		K-1956,K-3476
8	X-10-501	WASHER		2	5/16"	
9	18209	PLUG-RUBBER MOUNT		2		K-1956,K-3476
10	17190	STRAP		8		K-1956,K-3476
11	19423	CLAMP		5		K-1956,K-3476
12	18210	NUT		2		K-1956,K-3476
13	19422	ELBOW		4		K-1956
14	S-1404	OIL FILTER	17238	1		
15	17237	FILTER ELEMENT		1		S-1404



11380-11-95

## REVERSE IDLER

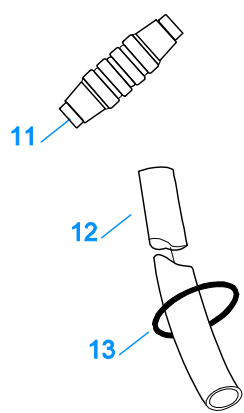
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3150	IDLER SHAFT KIT	4302261 ,4303503	2		
2	14283	WASHER		2		
3	4302241	WASHER		2		K-3150
4	14287	BEARING	4305020	2		K-2924,K-3132
5	4303117	REVERSE IDLER GEAR		2		
6	4302982	WASHER	14282	2		K-3150,S-2347,S-2348,S-2706
7	K-3150	IDLER SHAFT KIT	4302261 ,4303503	2		
8	4303336	RETAINING RING		4		K-3150
9	4303336	RETAINING RING		2		K-3150
10	14282	NO LONGER AVAILABLE		2		
11	X-8-1600M	CAPSCREW		2	M16 X 2 X 30MM	
12	4305512	REVERSE IDLER SHAFT		2		K-3150



999

2 Valve Repair Kit

See: Appendix / Air Line Tubing



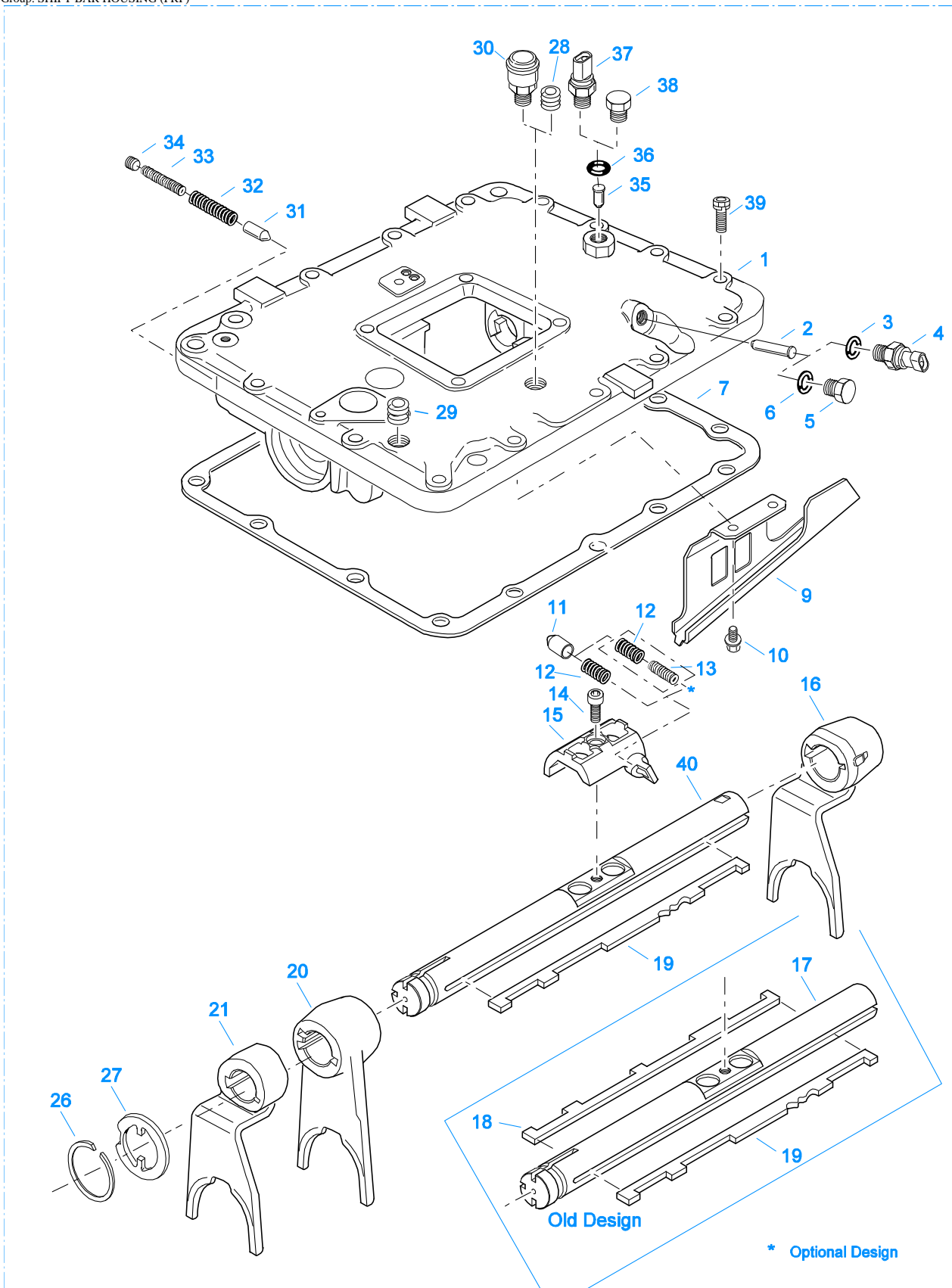
10109-1-97 RRV C2

\*For Connector component information see Appendix.

## ROADRANGER VALVE

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	5586100	MEDALLION, LOGO		1	(LATEST DESIGN) FULLER LOGO ONLY	A-6909

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	5586106	SHIFT DIAGRAM MEDALLION		1	FR/FRF/FRO/FROF	S-2543
2	K-1921	MASTER VALVE REPAIR KIT		1	FOR A-6909 & A-5010 VALVES	
3	20495	LEVER		1		A-6909
4	20112	COVER		1		A-6909
5	X-8-213	SCREW	X 8 202	2	8-32X3/8"	
6	X-9-802	NUT		1	1/2"-13	
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	K-3245
11	84102	UNION ASSY		1	5/32" TUBING	
11	84103	UNION ASSY		1	"PUSH-TO-CONNECT" 5/32" TUBING	
12	80120	SHEATHING (50 FT ROLL)		1	5/32" - BLACK 50'	
13	13571	-O- RING CLAMP		2		
999	A-6909	ROADRANGER VALVE ASSY	A - 5010 ,A - 5310	1	STANDARD-W/LOGO	
999	S-2543	ROADRANGER VALVE ASSY	A - 5043	1	FR/FRF/FRO/FROF-W/MEDALLION	



10237-1-97



## SHIFT BAR HOUSING (FRF)

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-2700	SHIFT BAR HSG (FRF)	4302642 ,4305077	1	HOUSING ONLY	
2	4302713	PIN		1	AFTER S/N 51109212	S-2701,S-2702
2	4303767	PIN		1	PRIOR TO S/N 51109212	
3	5568504	-O- RING		1	TO BE USED WITH SWITCH ONLY	
4	4302748	REVERSE SWITCH		1		
5	4302142	PLUG		1	M14 X 2 HEX	S-2700,S-2701,S-2702
6	14192	-O- RING		1	TO BE USED WITH PLUG ONLY	S-2700,S-2701,S-2702
7	4302156	GASKET		1		K-2921,K-3883,S-2701,S-2702
9	4302175	OIL TROUGH		1		S-2701,S-2702
10	X-8-0801M	CAPSCREW		2	M8 X 1.25 X 12MM	
11	4304138	PLUNGER	4302162	1		K-2917,S-2701,S-2702
12	4302134	SPRING		1	STANDARD	K-2917,S-2701,S-2702
13	4303135	SPRING		1		S-2702
14	X-8-1013M	SCREW		1	M10 X 1.5 X 20MM	
15	4303039	SHIFT BLOCK		1		S-2701,S-2702
16	4302168	SHIFT YOKE		1	REVERSE/LO	S-2701,S-2702
17	4303037	SHIFT SHAFT		1	CAN BE USED WITH EITHER 4305077 OR 4302642 SHIFT BAR HOUSING	
18	4304604	KEY	4302158	1	SHIFT	K-2917,K-3416
19	4302159	INTERLOCK KEY		1	DETENT	S-2701,S-2702
20	4302166	SHIFT YOKE		1	1ST/2ND	S-2701,S-2702
21	4302164	SHIFT YOKE		1	3RD/4TH	S-2701,S-2702
26	4302183	SNAP RING		1		K-2917,S-2701,S-2702
27	4302172	BIAS PLATE		1		K-2917,S-2701,S-2702
28	X-12-404	PIPE PLUG		1	1/4" NPT	
28	X-12-603	PIPE PLUG	X12 602	1	3/8" NPT	
29	X-12-603	PIPE PLUG		1	3/8" NPT	
30	4302857	BREATHER		1	3/8" NPT	
30	4304602	BREATHER	23605	1	1/4" NPT	K-3476
31	4302133	BIAS PLUNGER		1		K-2917,S-2701,S-2702
32	4302138	SPRING		1	OUTER	K-2917,S-2701,S-2702
33	4302139	SPRING		1	INNER	K-2917,S-2701,S-2702
34	X-12-208	PIPE PLUG		1	1/8" NPT	
35	4302153	PIN		1		S-2701,S-2702
36	5568510	-O- RING		1	USE WITH SWITCH OR PLUG	S-2700,S-2701,S-2702
37	4302749	NEUTRAL SWITCH		1		
38	4302143	PLUG		1	M16 X 1.5 HEX	S-2700,S-2701,S-2702
39	X-8C-1036M	CAPSCREW	X-8-1005M	16	M10 X 1.5 X 38MM	K-3883
40	4305078	SHIFT SHAFT		1	CAN ONLY BE USED WITH 4305077 SHIFT BAR HOUSING	S-2701,S-2702
999	S-2701	SHIFT BAR HSG ASSY (FRF)	4302642 ,4305077	1	COMPLETE - INCLUDES RANGE CYLINDER ASSY	
999	S-2702	SHIFT BAR HSG ASSY (FRF)	4302642 ,4305077	1	COMPLETE - INCLUDES RANGE CYLINDER ASSY AND OPTIONAL DETENT SPRING DESIGN DETENT SPRING. IT IS USED TO INCREASE SHIFTER DETENT FORCE.	

