



## Eaton Fuller FS-6406N Transmission Parts Manual


This is Eaton Fuller FS-6406N 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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**FS-6406N**  
**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).

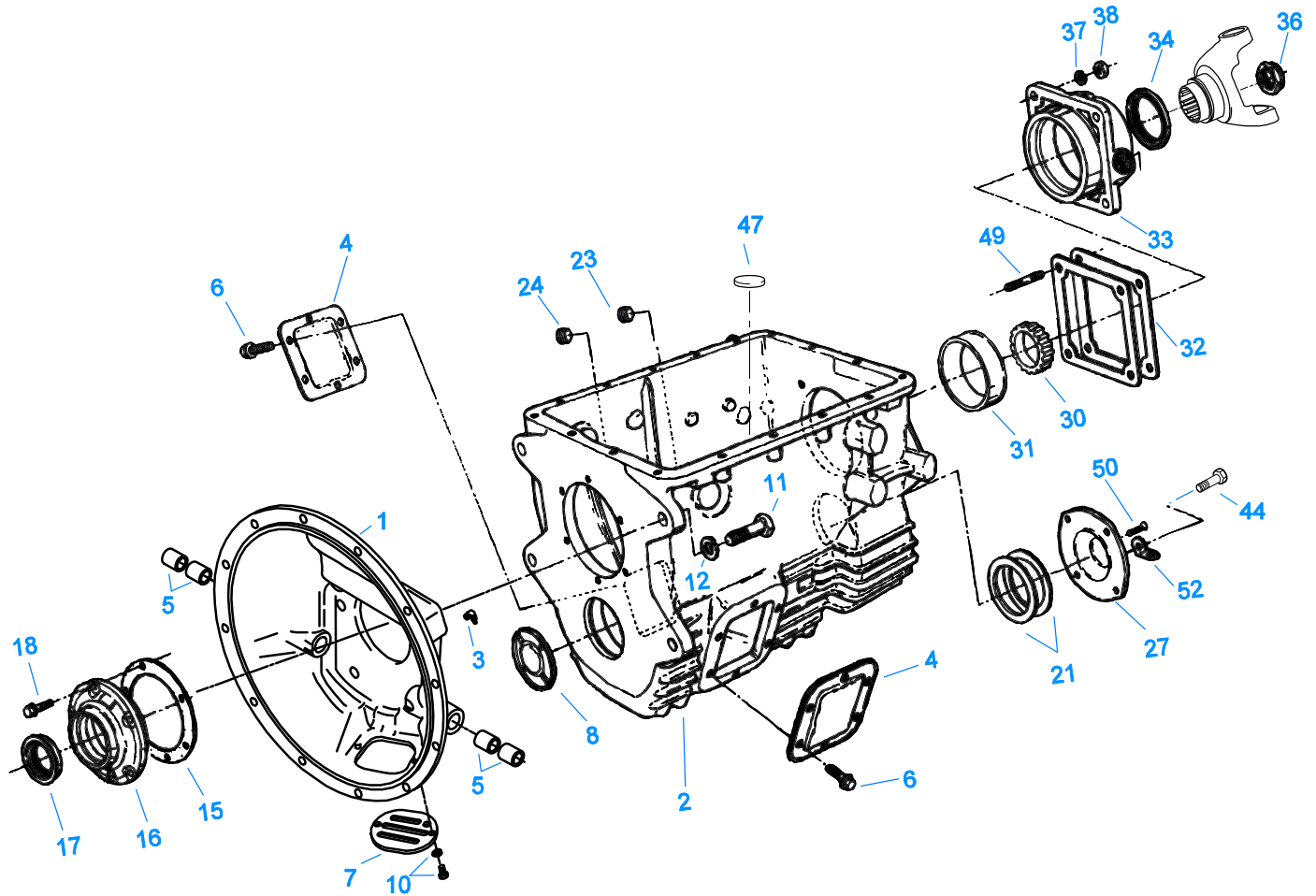
### Illustrations

- 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**

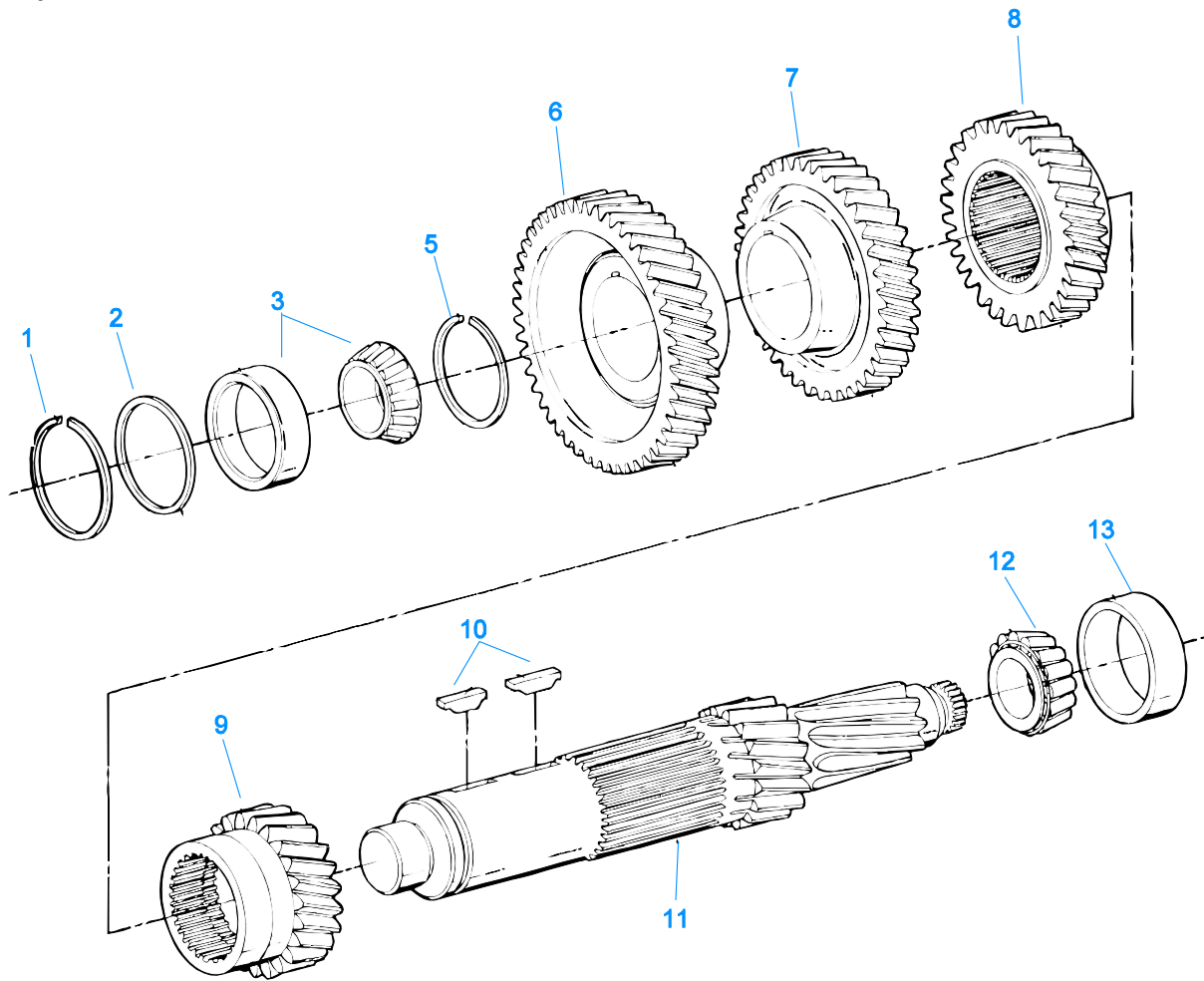


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**CASE**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-5634	CLUTCH HSG ASSY	23726 ,3316236 ,3316237 ,A - 5632 ,A - 5771	1	#2 ALUMINUM, ABOVE CENTER LINE PULL TYPE	
2	S-2952	CASE ASSY	3316276 ,4301285 ,4304643 ,4305177	1		
3	4300301	FITTING-45 DEGREE	11H15	2		
4	201398	PTO COVER		2		
5	12815	BUSHING		4		A-5634
6	239613	CAPSCREW		12	3/8"-16X5/8"	
7	23380	COVER	206466	1		A-5634
8	3315679	PLUG		1		K-3423
10	X-8L-408	SCREW & WASHER ASSY		2		
11	X-8-1011	CAPSCREW	1C1036	4	5/8"-11X2-1/4"	
12	X-3-1000	LOCKWASHER		4	5/8"	
15	3315659	GASKET		1		K-7028
16	4300888	FRONT BRG COVER-PULL		1		
17	4300121	OIL SEAL	3315623	1		K-3423
18	239614	SCREW		6	5/16-18X.81	
21	3315681	SHIM .004		1	QUANTITY AS REQUIRED	K-2183
21	3315682	SHIM .007		1	QUANTITY AS REQUIRED	K-2183
21	3315683	SHIM .010		1	QUANTITY AS REQUIRED	K-2183
21	3315684	SHIM .020		1	QUANTITY AS REQUIRED	K-2183
21	4300977	SHIM .040		1		
23	X-12-1207	PIPE PLUG	X12 1202 X12 1206	1	3/4" MAGNETIC	
24	X-12-1209	PIPE PLUG		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
27	4301607	C/S REAR BRG COVER		1		
30	3316160	SPEEDO ROTOR		1		
31	711123	BEARING CUP		1		K-3423
32	3315662	SHIM .004		1	QUANTITY AS REQUIRED	K-2183
32	3315663	SHIM .007		1	QUANTITY AS REQUIRED	K-2183
32	3315664	SHIM .010		1	QUANTITY AS REQUIRED	K-2183
32	3315665	SHIM .020		1	QUANTITY AS REQUIRED	K-2183
32	4300978	SHIM .040		1		
33	K-7045	REAR BRG COVER KIT	4302621	1		
34	4300119	OIL SEAL		1		K-3423
36	K-3411	NUT KIT	21937 ,4301920 ,4304690	1		
37	239436	WASHER		4	1/2"	
38	86D8	NUT	86D08	4	1/2"-20	
44	X-8C-604	CAPSCREW		4	3/8"-16X1-1/4"	
47	14373	MAGNET		1		S-2952
49	239433	STUD		4	1/2"-20X2-5/16"	
50	X-12-405	PIPE PLUG		1		
52	238370	LIFTING EYE		1		



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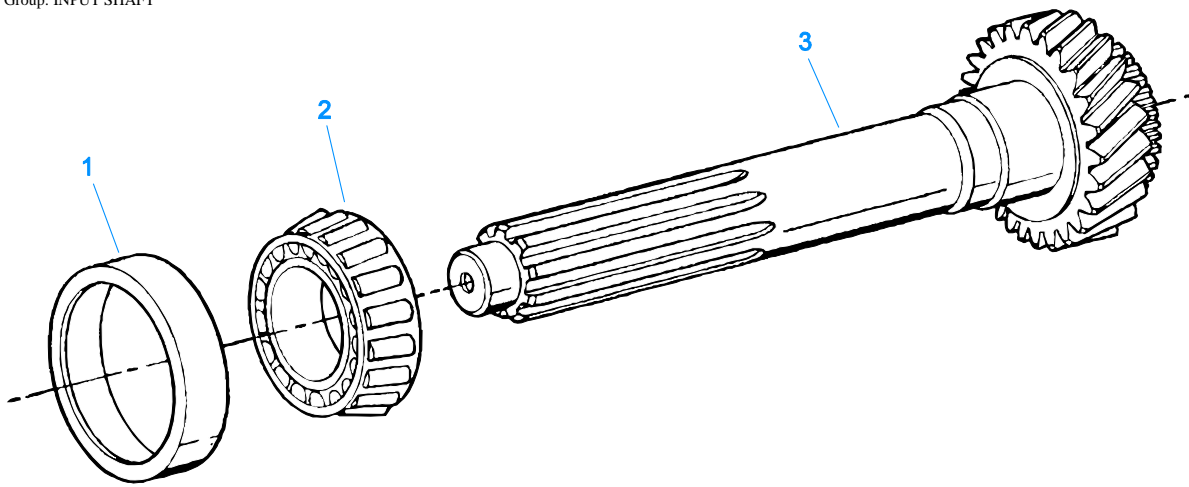
## COUNTERSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	3315686	SNAP RING		1		
2	3315687	WASHER		1		K-3422,K-3423
3	K-3796	COUNTERSHAFT BRG KIT	5557008, 5557506	1		K-3422
5	3315752	SNAP RING	3315751	1		
6	4304935	DRIVE GEAR-CNTRSHFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
7	4304936	5TH GEAR-CNTRSHFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
8	4304937	4TH GEAR-CNTRSHFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
9	4304938	3RD GEAR-CNTRSHFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
10	230292	KEY		2		K-3422
11	4304934	COUNTERSHAFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
12	658981	BEARING CONE		1		K-3423
13	660181	BEARING CUP		1		K-3423





Group: INPUT SHAFT



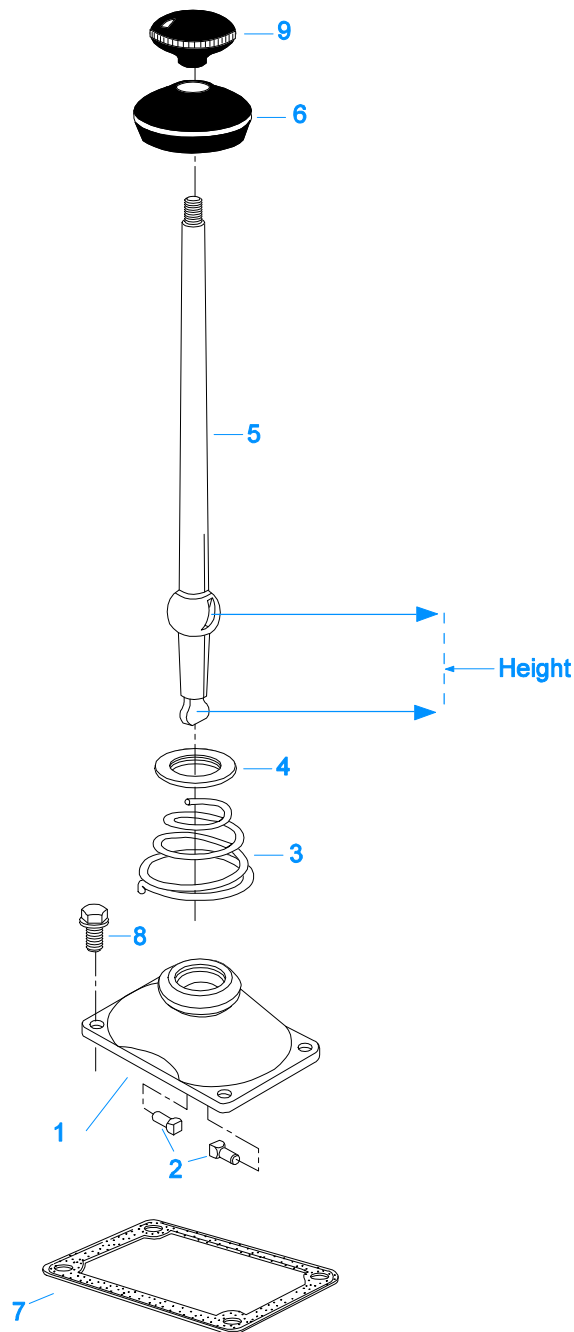
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## INPUT SHAFT

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	675250	BEARING CUP		1		K-3423
2	742259	BEARING CONE		1		K-3423
3	4304933	INPUT SHAFT-1.75"		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	

## KITS & ASSEMBLIES

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
K-2183		SHIM KIT		1		
K-3411		NUT KIT	21937 ,4301920 ,4304690	1		K-3423
K-3421		SYNCHRONIZER KIT	K - 7004	1		
K-3422		SMALL PARTS KIT		1		
K-3423		BASIC REBUILD KIT		1		
K-3796		COUNTERSHAFT BRG KIT		1		
K-7028		GASKET KIT		1		K-3423
K-7045		REAR BRG COVER KIT	4302621	1		
K-7051		SYNCHRONIZER KIT -3/4		1		
K-7061		SHIFT LEVER HSG KIT	241075 ,4302711 ,A - 6439	1	ALUMINUM HOUSING MEDIUM - LEVER HEIGHT 3-1/8"	
S-2861		SHIFT BAR HSG ASSY	4303606	1	COMPLETE REVERSE SWITCH POSITION - RIGHT FRONT	
S-2952		CASE ASSY	3316276 ,4301285 ,4304643 ,4305177	1		

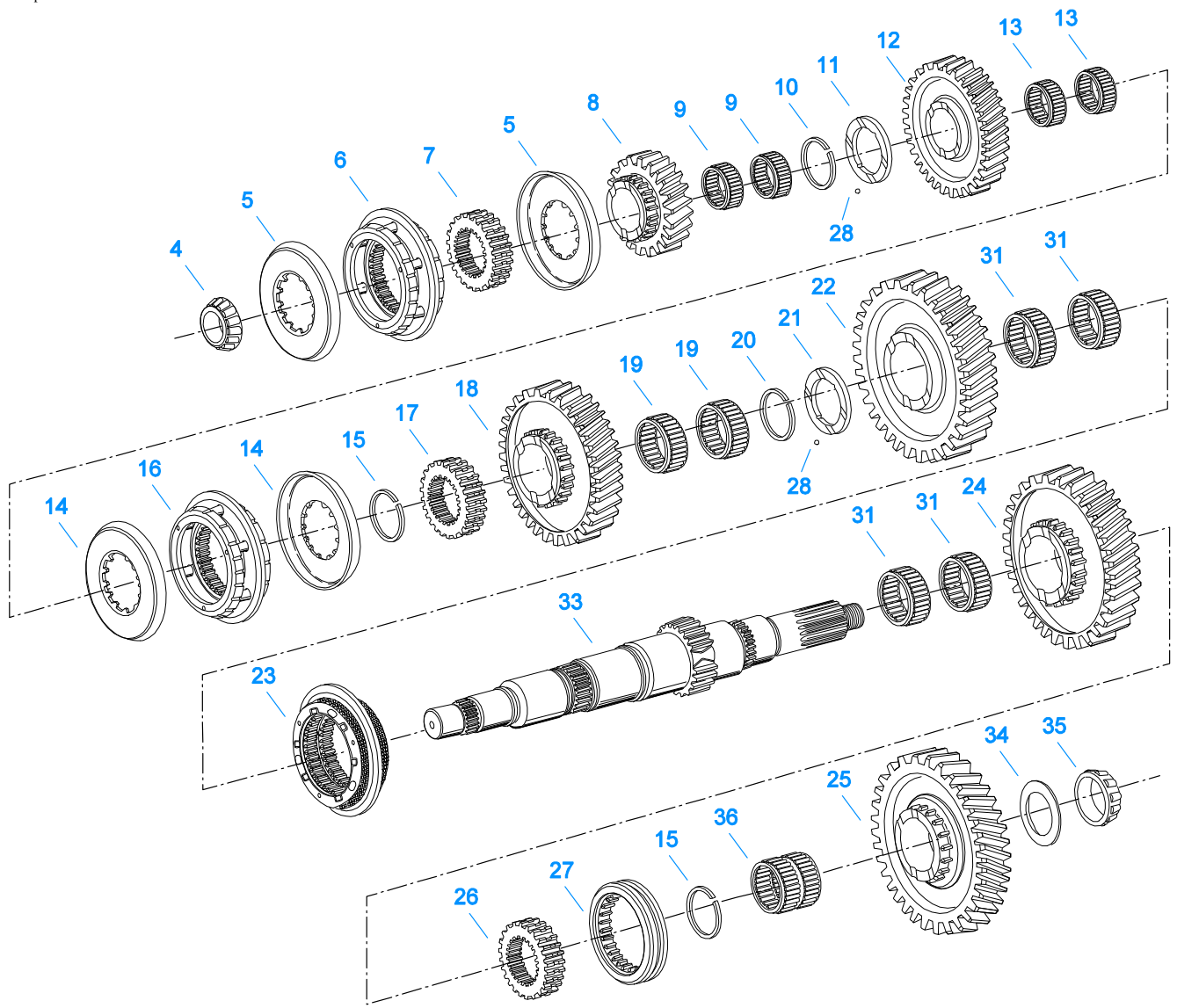


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## LEVER ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
2	23180	PIN		2		K-7061
3	4300690	SPRING	229337	1		
4	23181	WASHER		1		
5	241076	SHIFT LEVER 27-1/2		1	STRAIGHT LEVER - "BEND TO SUIT"	
6	202484	DUST COVER		1		
7	4301958	GASKET		1		K-7028,K-7061
8	X-8C-604	CAPSCREW		4	3/8"-16X1-1/4"	
9	201401	SHIFT KNOB		1	3/8"X24 THREAD	
10	K-7061	SHIFT LEVER HSG KIT	241075 ,4302711 ,A - 6439	1	ALUMINUM HOUSING MEDIUM - LEVER HEIGHT 3-1/8"	



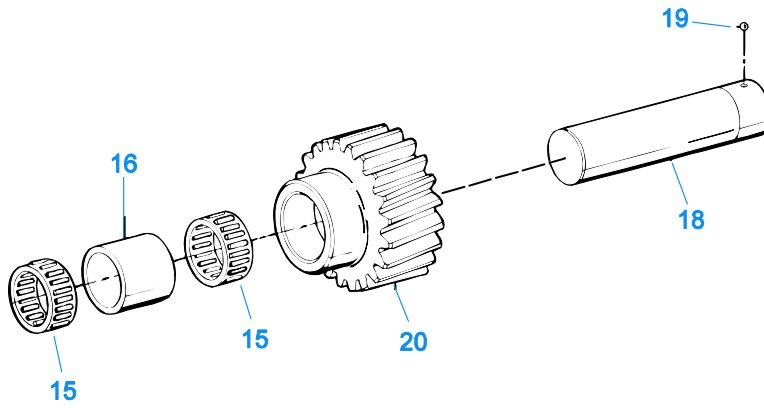


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**MAINSHAFT ASSY**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
4	710787	BEARING CONE		1		K-3423
5	4301467	SYNCHRONIZER CUP 5/6		2		K-3421
6	A-6608	SYNCHRONIZER ASSY 5/6	A - 6137	1		K-3421
7	4301476	CLUTCH HUB 5/6		1		
8	4304932	5TH GEAR-MAINSHAFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
9	3315737	BEARING		2		K-3423
10	3315728	SNAP RING	3315729	1		K-3422
11	3315727	WASHER		1		K-3422
12	4304931	4TH GEAR-MAINSHAFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
13	4124075	BEARING		2		K-3423
14	4301466	SYNCHRONIZER CUP 3/4		2		K-7051
15	3315725	SNAP RING		2		K-3422,K-3423
16	A-6136	SYNCHRONIZER ASSY 3/4	4301457 4304050	1		K-7051

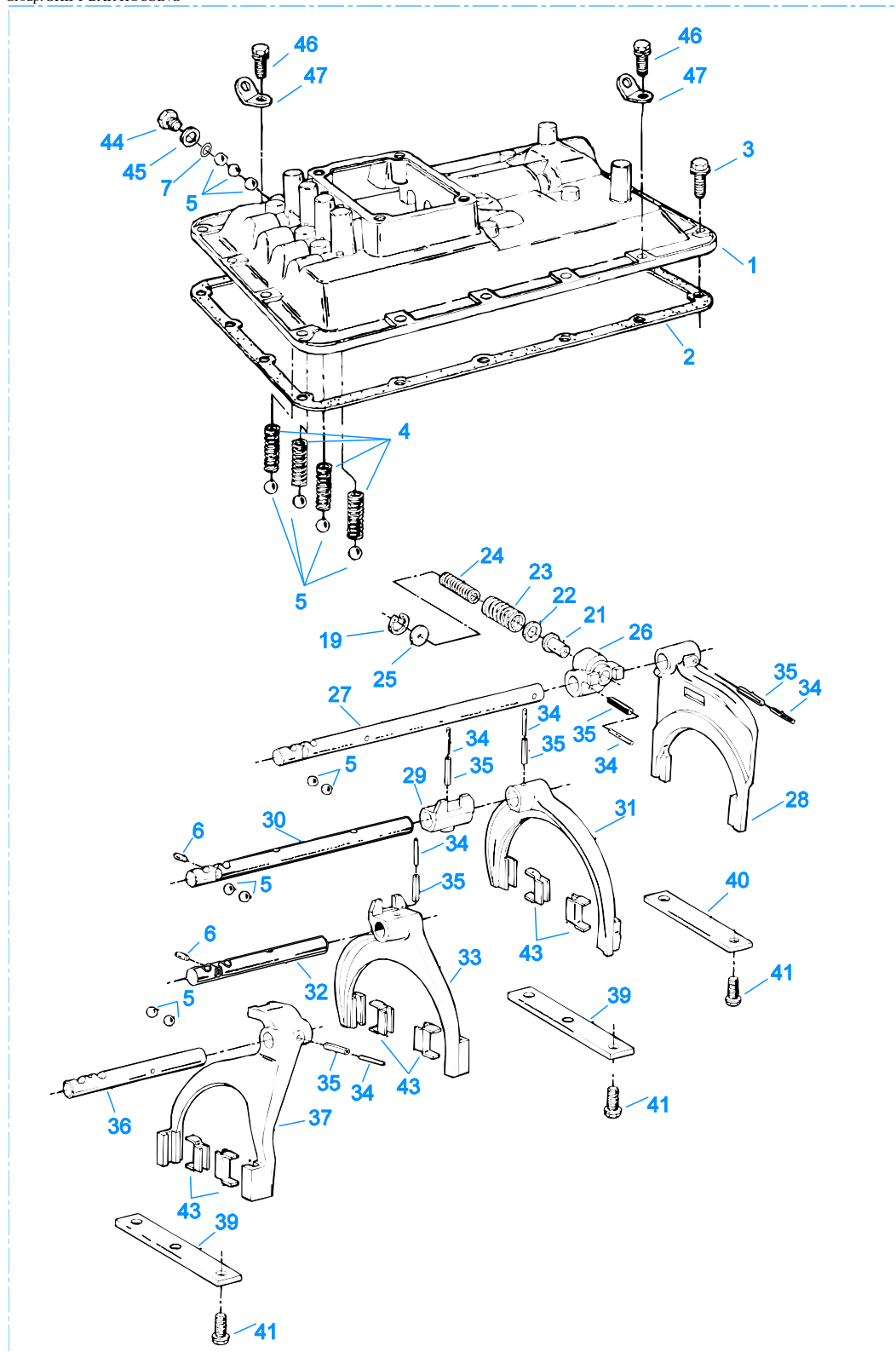
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
17	4301475	CLUTCH HUB 3/4	,4304452	1		
18	4304930	3RD GEAR-MAINSHAFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
19	3315722	BEARING		2		K-3423
20	3315717	SNAP RING	3315718	1		K-3422
21	3315719	WASHER		1		K-3422
22	4304929	2ND GEAR-MAINSHAFT		1	ORDERS FOR THIS PART MUST BE PLACED THRU A NAVISTAR INTERNATIONAL DEALER	
23	A-7934	SYNCHRONIZER ASSY 1/2	4304551 ,A - 6801,A-6932	1		
24	4304545	1ST GEAR-MAINSHAFT	4303809 ,4303946	1		
25	4304547	REVERSE GEAR-MAINSHAFT		1		
26	4301474	CLUTCH HUB-REV		1		
27	4304550	SLIDING CLUTCH-REV		1		
28	10J06	STEEL BALL		2	3/16"	K-3422
31	3315703	BEARING		4		K-3423
33	4304549	MAINSHAFT	4303808	1		
34	4301492	WASHER		1		K-3422
35	5557003	BEARING CONE		1		K-3423
36	4304555	BEARING		1		K-3423



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### REVERSE IDLER GEAR ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
15	3315674	BEARING		2		K-3423
16	3315676	SPACER		1		
18	3315672	REVERSE IDLER SHAFT		1		
19	10J06	STEEL BALL		1	3/16"	K-3422
20	4304318	REVERSE IDLER GEAR		1		



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## SHIFT BAR HOUSING

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-6744	SHIFT BAR HSG ASSY	3315760 ,4302947	1		



Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
			,4303606 ,A - 6536 ,A - 6537			
2	4300854	GASKET	3315678	1		K-7028,S-2861
3	X-8C-600	CAPSCREW	239611	12	3/8"-16X1"	
4	3315765	SPRING		4		K-3423
5	10J14	STEEL BALL		13	7/16"	K-3422
6	201044	PIN		2		
7	4301719	BALL RETAINER- REVERSE		1		
19	21736	SNAP RING		1		
21	3316296	PLUNGER		1		
22	3316298	WASHER		1		
23	21723	SPRING		1		
24	21724	SPRING		1		
25	3316295	WASHER		1		
26	3316300	SHIFT BLOCK REV		1		
27	4301469	YOKE BAR REV		1		
28	3315897	YOKE ASSY REV		1		
29	3315778	SHIFT BLOCK 1ST/2ND		1		
30	4304561	YOKE BAR 1ST/2ND	4303819	1		
31	3315772	YOKE ASSY 1ST/2ND	3315770	1		
32	4301471	YOKE BAR 3RD/4TH		1		
33	A-6139	YOKE ASSY 3RD/4TH	4301486	1		
34	1JM6028	PIN		6		
35	1JM3528	PIN		6		
36	4301472	YOKE BAR 5TH/6TH		1		
37	A-6138	YOKE ASSY 5TH/6TH	4301488	1		
39	4301279	SHIFT BAR RETAINER	3315756	2		
40	3315757	SHIFT BAR RETAINER		1		
41	233043	CAPSCREW		8	3/8"-16X1"	
43	227675	INSERT - YOKE PAD		6		A-6138,A-6139,K-3422
44	235052	CA PLUG		1	9/16 - 18	
44	4303656	PLUG	15917	1	9/16 - 18, THREADED	
45	15900	GASKET		1		K-7028,S-2861
46	X-8-688	CAPSCREW		5	3/8"-16X1"	
47	238370	LIFTING EYE		5		
999	S-2861	SHIFT BAR HSG ASSY	4303606	1	COMPLETE REVERSE SWITCH POSITION - RIGHT FRONT	

