



## **Eaton Fuller FO-6506B-DM3 Transmission Parts Manual**

This is Eaton Fuller FO-6506B-DM3 Transmission parts manual brought to you by Pro Gear and Transmission to assist you identifying the parts for your Eaton / Fuller transmission unit.

If you need any assistance identifying the correct Eaton / Fuller unit for your truck and equipment, contact your Eaton replacement parts specialists at Pro Gear and Transmission.

Pro Gear stocks every part for your Eaton transmission including: Valve Assemblies, Synchronizers, Yoke Assemblies, O-Ring Kits, Drive Gears, Gaskets, Bearing and Seal Kits, and much more.

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# Illustrated Parts List

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**FO-6506B-DM3**

**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).

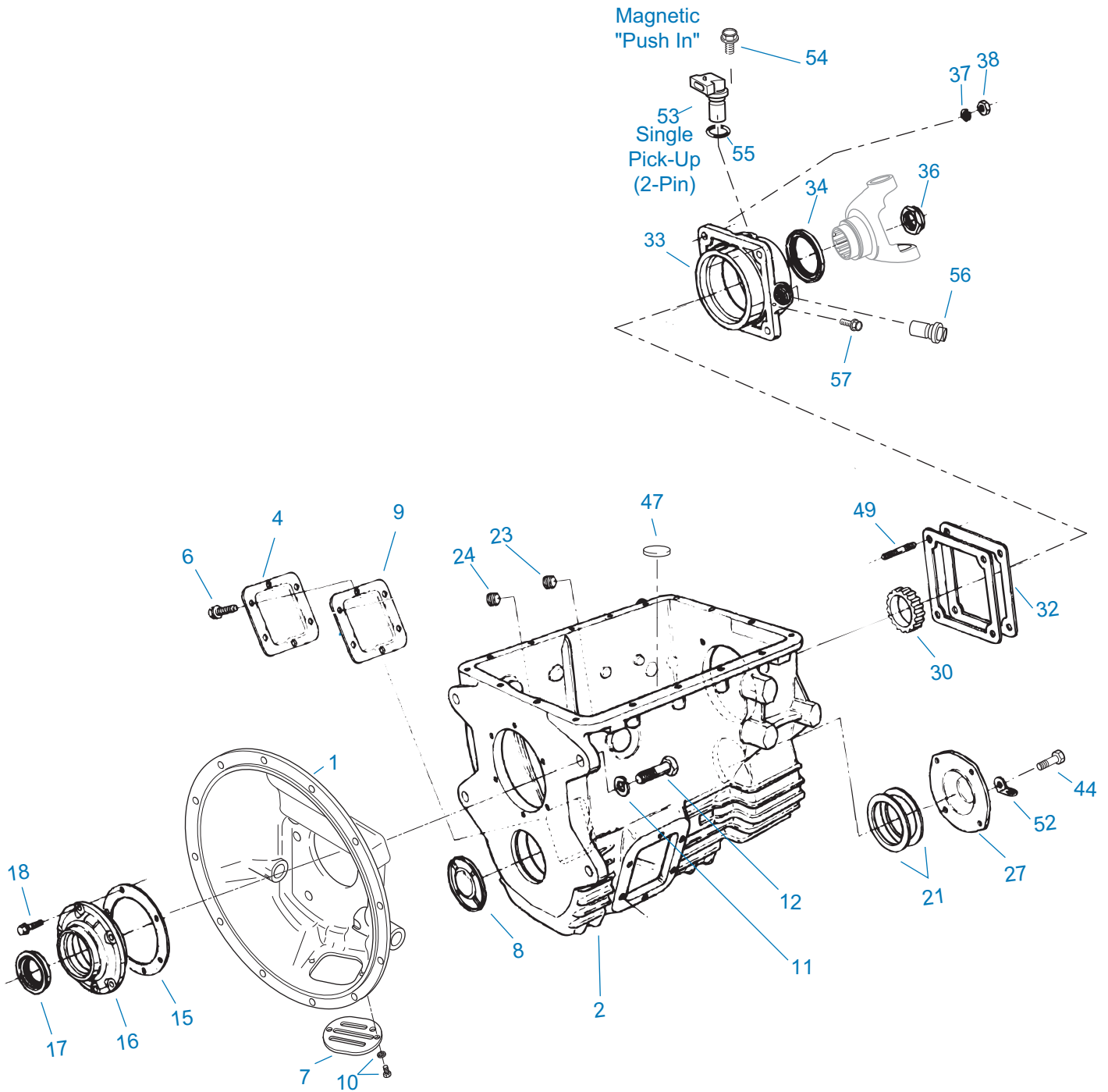
### Illustrations

- 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**



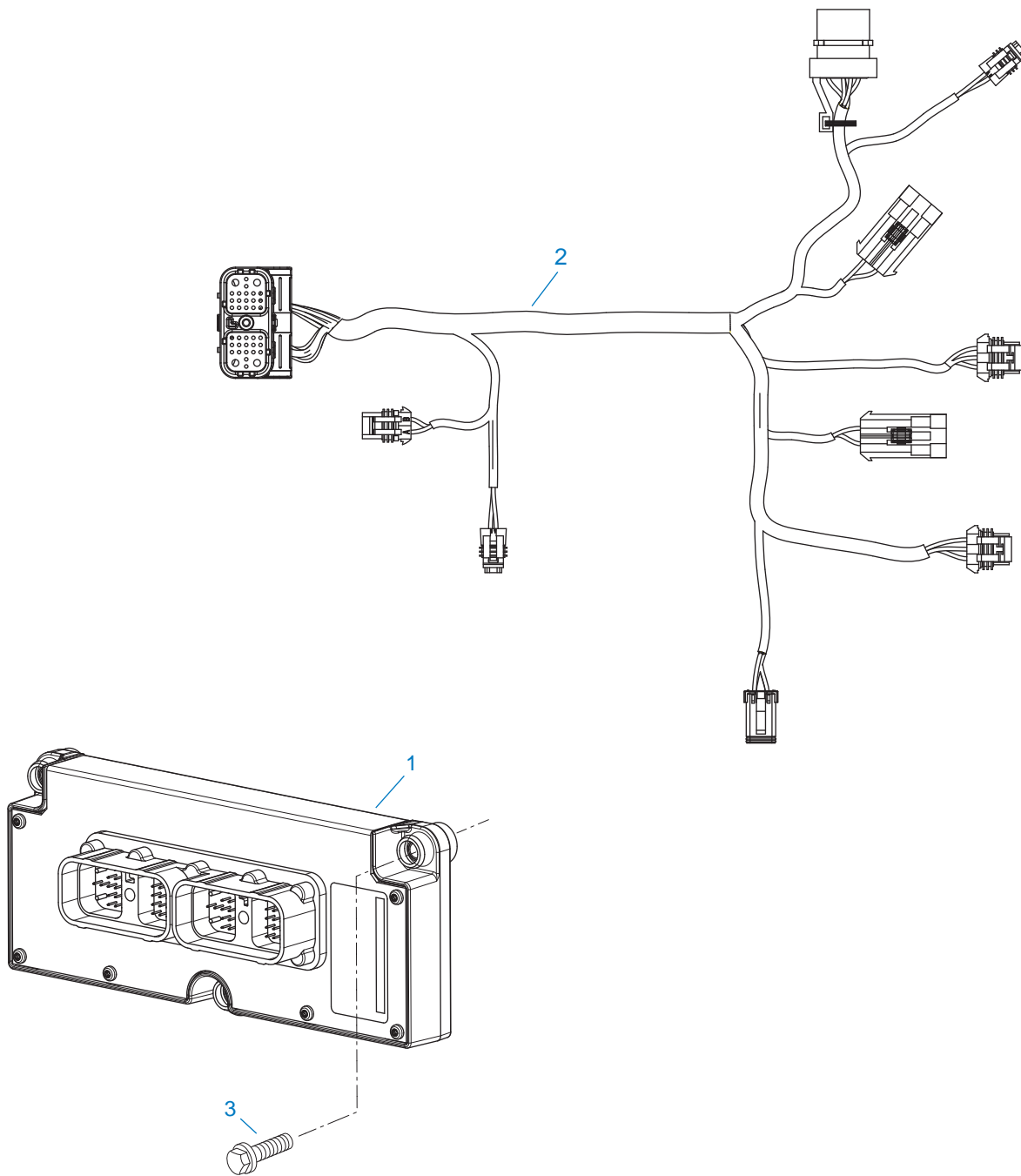
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**CASE**

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	A-7636	CLUTCH HSG ASSY	4305882	1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
2	A-7852	CASE ASSY		1		
4	201398	PTO COVER		1		
6	239613	CAPSCREW		12	3/8"-16X5/8"	
7	4303692	HAND HOLE COVER		1		A-7636
8	3315679	PLUG		1		K-3440
9	4305309	GASKET	1684	1		K-3648,K-3738,K-4129
10	X-8L-408	SCREW & WASHER ASSY		2		
11	X-3-1000	LOCKWASHER		4	5/8"	
12	X-8-1013	HEX HEAD SCREW		4	.625-11 X 3.00	
15	3315659	GASKET		1		K-3738
16	4300888	FRONT BRG COVER-PULL		1		
17	4300121	OIL SEAL	3315623	1	SHAFT 1.873, WIDTH .375, OD 2.68	K-3440
18	239614	SCREW		6	5/16-18X.81	
21	3315681	SHIM .004		1		K-2183
21	3315682	SHIM .007		1		K-2183
21	3315683	SHIM .010		1		K-2183
21	3315684	SHIM .020		1		K-2183
21	4300977	SHIM .040		1		
23	X-12-1209	PIPE PLUG		1		
24	X-12-1207	PIPE PLUG	X12 1202 ,X12 1206	2	3/4" MAGNETIC	
27	4301607	C/S REAR BRG COVER		1		
30	3316160	SPEEDO ROTOR		1	16 TEETH	
32	3315662	SHIM .004		1		K-2183
32	3315663	SHIM .007		1		K-2183
32	3315664	SHIM .010		1		K-2183
32	3315665	SHIM .020		1		K-2183
32	4300978	SHIM .040		1		
33	S-2864	REAR BRG COVER ASSY	691423 ,691666	1		
34	4300119	OIL SEAL		1	SHAFT 2.753, WIDTH .5	K-3440,S-2864
36	K-3411	NUT KIT	21937 ,4301920 ,4304690	1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
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		2		
49	239433	STUD		4	1/2"-20X2-5/16"	
52	238370	LIFTING EYE		2		
53	K-3231	SPEED SENSOR KIT	A - 6398 ,A - 6724	1	SINGLE PICK-UP (2 PIN)	
54	X-8C-409	CAPSCREW		1	1/4"-20X5/8"	
55	14142	-O- RING		1		K-3125,K-3638,S-2864
56	K-3125	SPEEDO PLUG KIT	4302707	2		
57	X-8C-409	CAPSCREW		2	1/4"-20X5/8"	



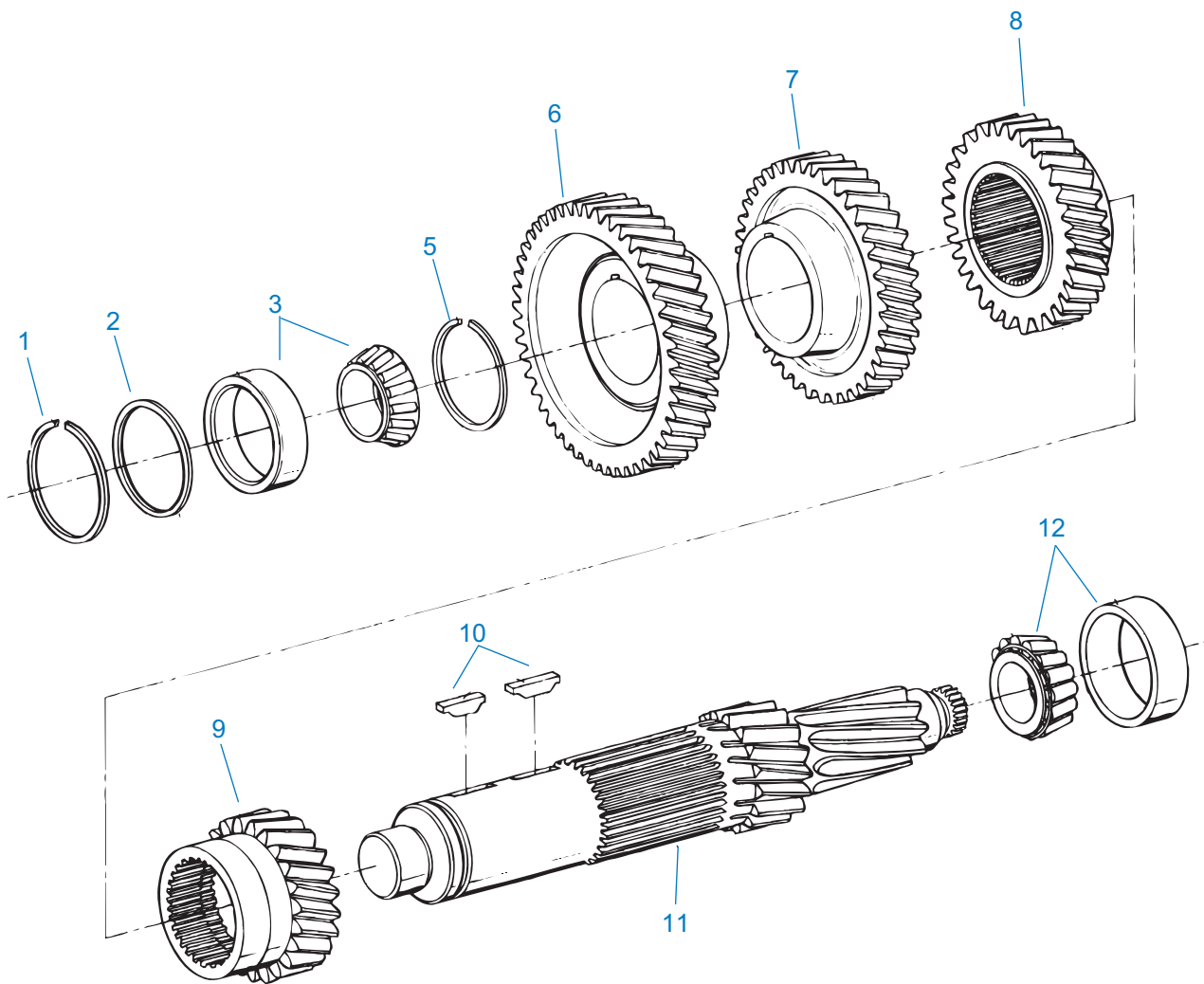
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### CONTROLLER ECU & HARNESS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3911	TRANSMISSION CONTROLLER KIT		1		
2	K-3743	TRANS HARNESS KIT	4306024	1		
3	X-8C-455	HEX HEAD		3		K-3911



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

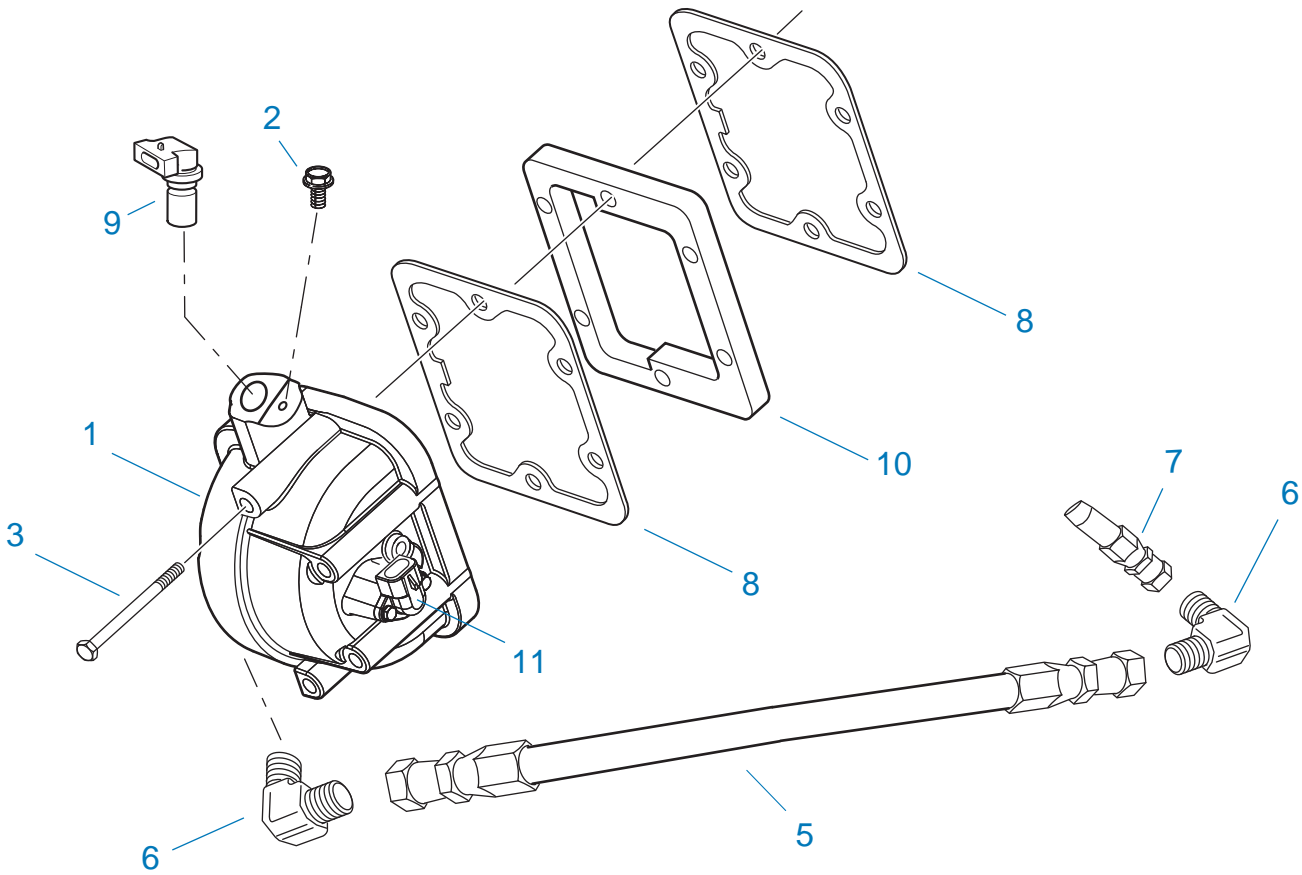


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## COUNTERSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	3315686	SNAP RING		1		K-3440
2	3315687	WASHER		1		
3	K-3795	COUNTERSHAFT BRG KIT	1313645, 791943	1		
5	3315752	SNAP RING	3315751	1		
6	4304541	DRIVE GEAR-CNTRSHFT		1		
7	4304542	5TH GEAR-CNTRSHFT		1		
8	4304097	4TH GEAR-CNTRSHFT	4304099	1		
9	4304056	3RD GEAR-CNTRSHFT	4304062	1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
10	230292	KEY		2		
11	4306202	COUNTERSHAFT		1		
12	K-4155	BEARING KIT (C/S REAR)	658981, 660181	1		

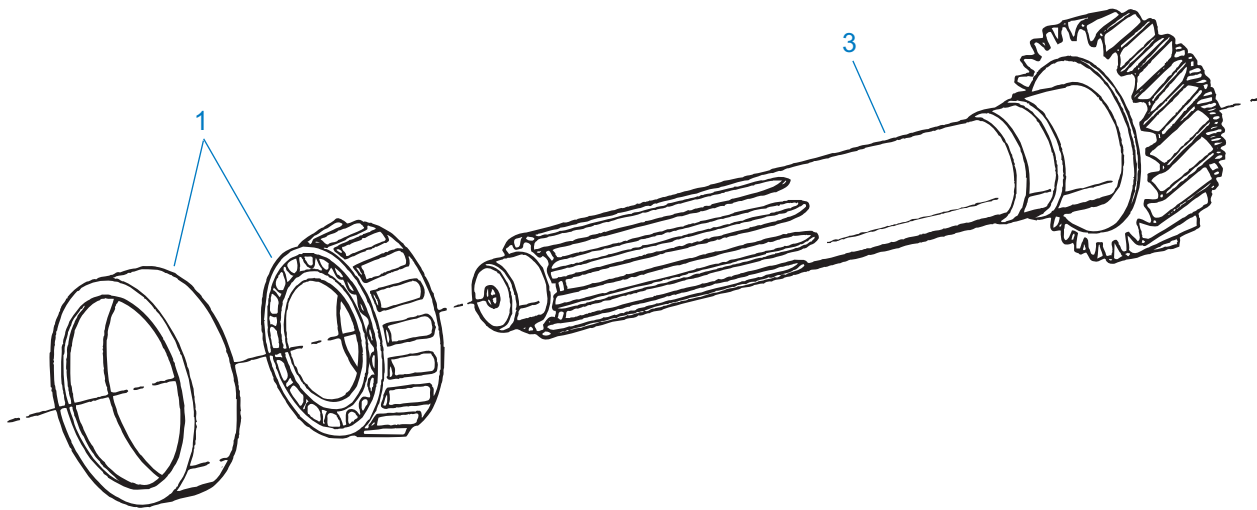


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### INERTIA BRAKE ASSEMBLY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3648	INERTIA BRAKE KIT	A - 7434 ,K - 3508, A-7828	1		
2	X-8C-409	CAPSCREW		1	1/4"-20X5/8"	
3	X-8C-690	CAPSCREW		6		
4	4303677	ELBOW		1		K-3981
5	K-3981	GEN 3 DUAL MOUNT INERTIA BRAKE HOSE KIT	5588211, 5588213	1		
6	691603	CONN 3/8 PIPE TO3/4 16		1		K-3981
7	691517	FILTER FITTING		1		

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
8	4305309	GASKET	1684	2		K-3648,K-3738,K-4129
9	K-3231	SPEED SENSOR KIT	A - 6398 ,A - 6724	1	SINGLE PICK-UP (2 PIN)	
10	K-4129	ADAPTER PLATE KIT	691519	1		
11	K-3638	I-BRAKE CONNECTOR KIT	691499	1		



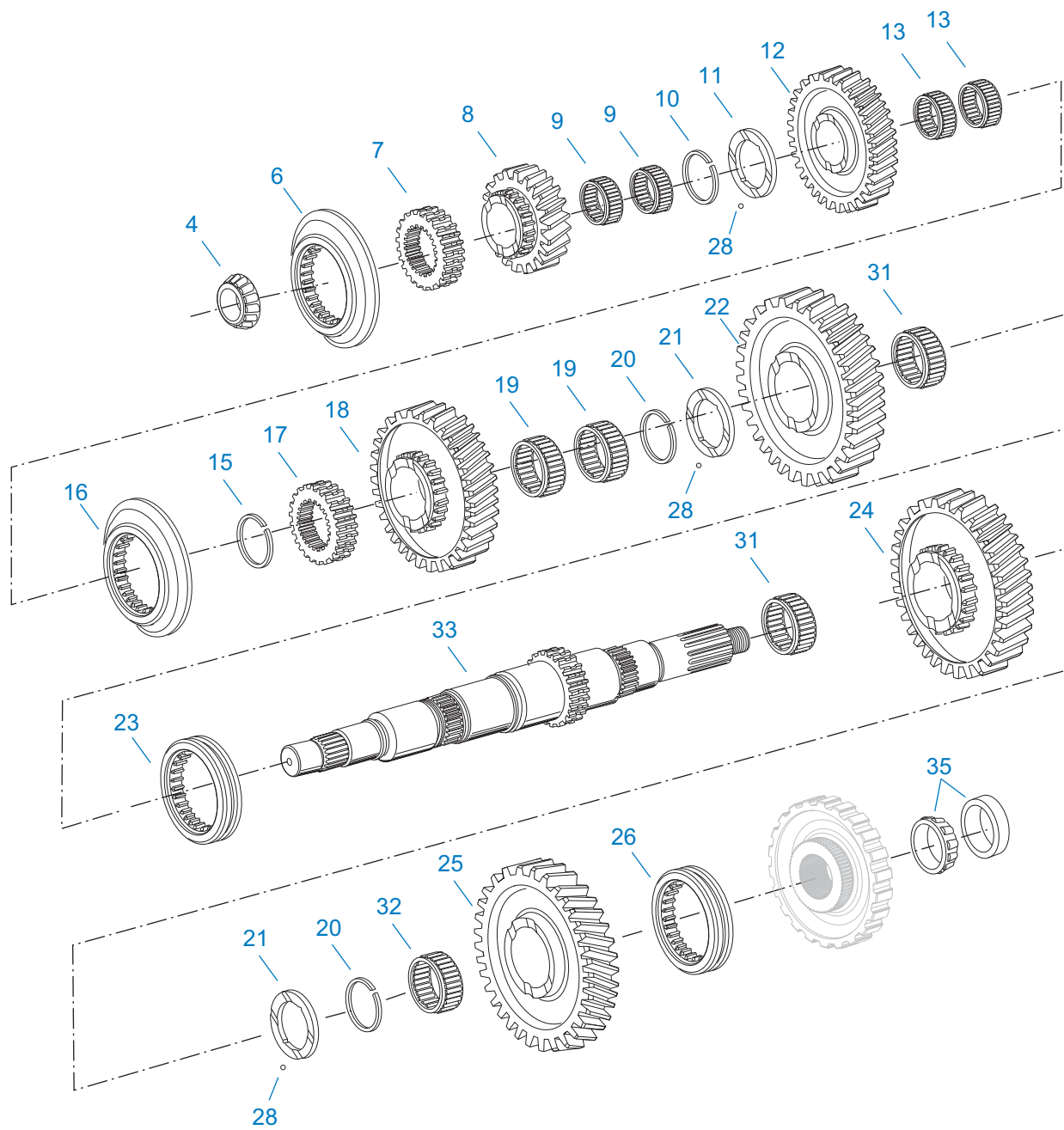
00401-8/93

## INPUT SHAFT

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-4152	BEARING KIT (INPUT SHAFT)	675250, 742259	1	1.75" INPUT	
3	4304539	INPUT SHAFT-1.75" PULL		1	PILOT 30MM	

## KITS & ASSEMBLIES

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
K-2183		SHIM KIT		1		K-3440
K-3125		SPEEDO PLUG KIT	4302707	1		
K-3231		SPEED SENSOR KIT	A - 6398 ,A - 6724	1	SINGLE PICK-UP (2 PIN)	
K-3411		NUT KIT	21937 ,4301920 ,4304690	1		
K-3438		POSITION SENSOR KIT	691551 ,691926	1		
K-3440		BASIC REBUILD KIT		1		
K-3638		I-BRAKE CONNECTOR KIT	691499	1		
K-3648		INERTIA BRAKE KIT	A - 7434 ,K - 3508	1		
K-3738		GASKET KIT		1		K-3440
K-3743		TRANS HARNESS KIT	4306024	1		
K-3784RX		REMAN EXCH GEN 3 X-Y SHIFTER KIT	A - 7670, A - 7856,K-3784	1		
K-3795		COUNTERSHAFT BRG KIT	1313645, 791943	1		
K-3911		TRANMISSION CONTROLLER KIT		1		
K-4009		XY SHIFTER REPAIR KIT		1		
K-4048		ACTUATOR ASSEMBLY	A-7900	1		
K-4049		ROTARY POSITION SENSOR	4306348	1		
S-2864		REAR BRG COVER ASSY	691423 ,691666	1		
S-3107		SHIFT BAR HSG ASSY		1		
TA-C45-01		FO-6506B-DM3 SERVICE UNIT		1	COMPLETE UNIT	



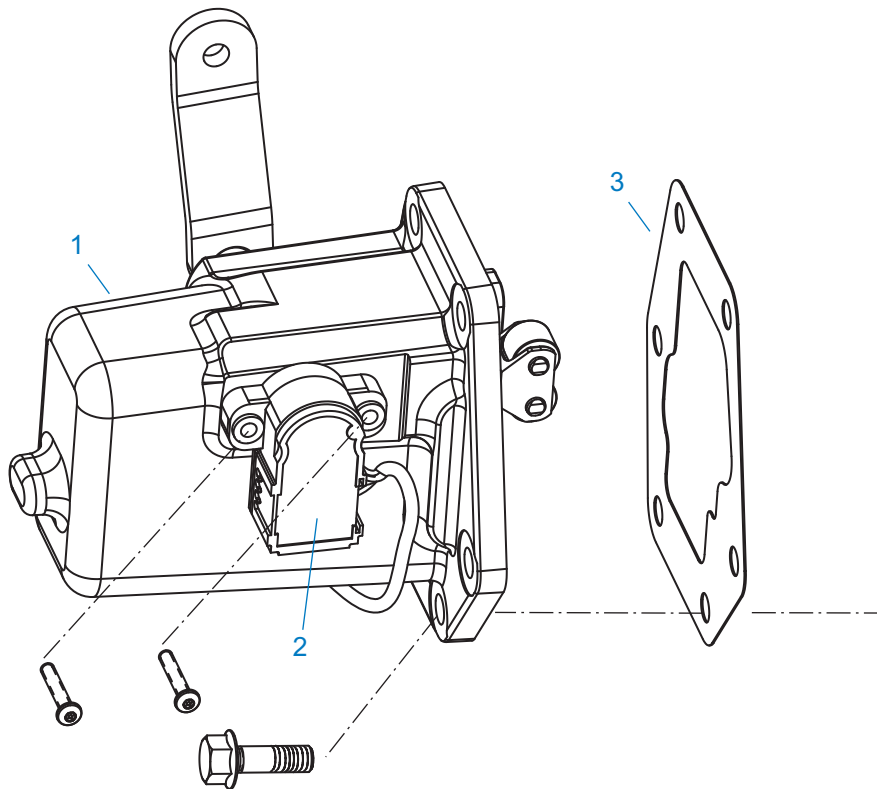
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## MAINSHAFT ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
4	710787	BEARING CONE		1		K-3440
6	691415	SLIDING CLUTCH (5TH/6TH)		1		
7	4301476	CLUTCH HUB 5/6		1		



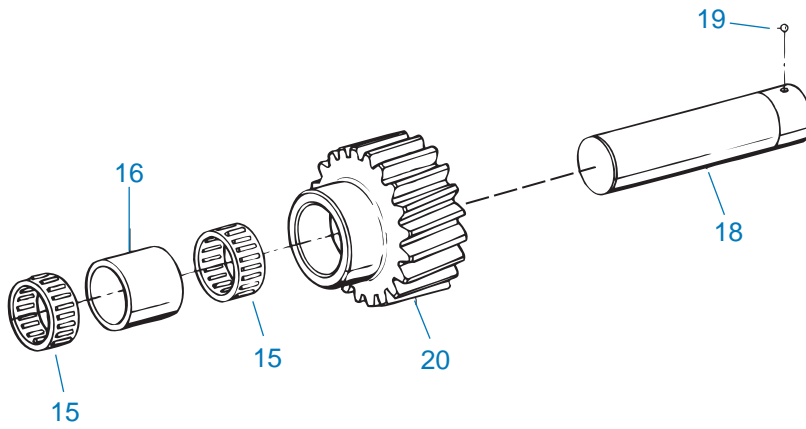
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
8	4304543	OD GEAR-MAINSHAFT		1		
9	3315737	BEARING		2		K-3440
10	3315728	SNAP RING	3315729	1		
11	3315727	WASHER		1		
12	4304098	4TH GEAR-MAINSHAFT	4304401	1		
13	4124075	BEARING		2		K-3440
15	3315725	SNAP RING		1		K-3440
16	691414	SLIDING CLUTCH (3RD/4TH)		1		
17	4301475	CLUTCH HUB 3/4		1		
18	4304057	3RD GEAR-MAINSHAFT	4304063	1		
19	3315722	BEARING		2		K-3440
20	3315717	SNAP RING	3315718	2		
21	3315719	WASHER		2		
22	4306161	2ND GEAR-MAINSHAFT		1		
23	4306165	SLIDING CLUTCH (1ST/2ND)		1		
24	4306160	1ST GEAR-MAINSHAFT		1		
25	4306159	REV GEAR-MAINSHAFT		1		
26	4306164	CLUTCH HUB - REV		1		
28	10J06	STEEL BALL		3	3/16"	
31	4306171	BEARING		2		
32	4306172	BEARING		1		
33	4306155	MAINSHAFT		1		
35	K-4160	BEARING KIT (OUTPUT SHAFT)	5557003, 711123	1		



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## PARK MECHANISM

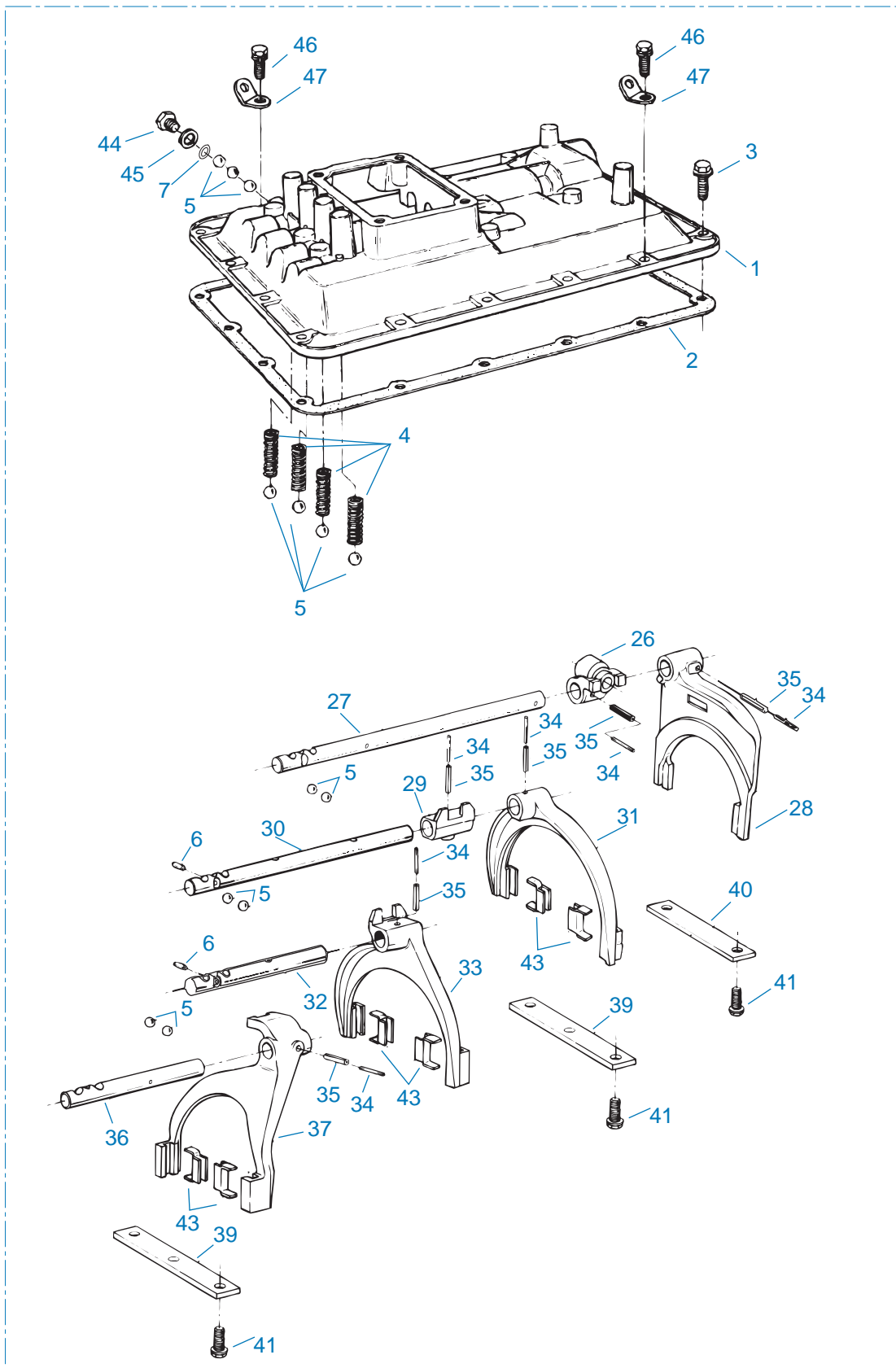
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-4048	ACTUATOR ASSEMBLY	A-7900	1		
2	K-4049	ROTARY POSITION SENSOR	4306348	1		
3	4306175	GASKET		1		K-4048,K-4049



00455-02-03

## REVERSE IDLER GEAR ASSY

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
15	3315674	BEARING		2		K-3440
16	4306163	SPACER		1		
18	4307129	REVERSE IDLER SHAFT		1		
19	10J06	STEEL BALL		1	3/16"	
20	4306162	REVERSE IDLER GEAR		1		

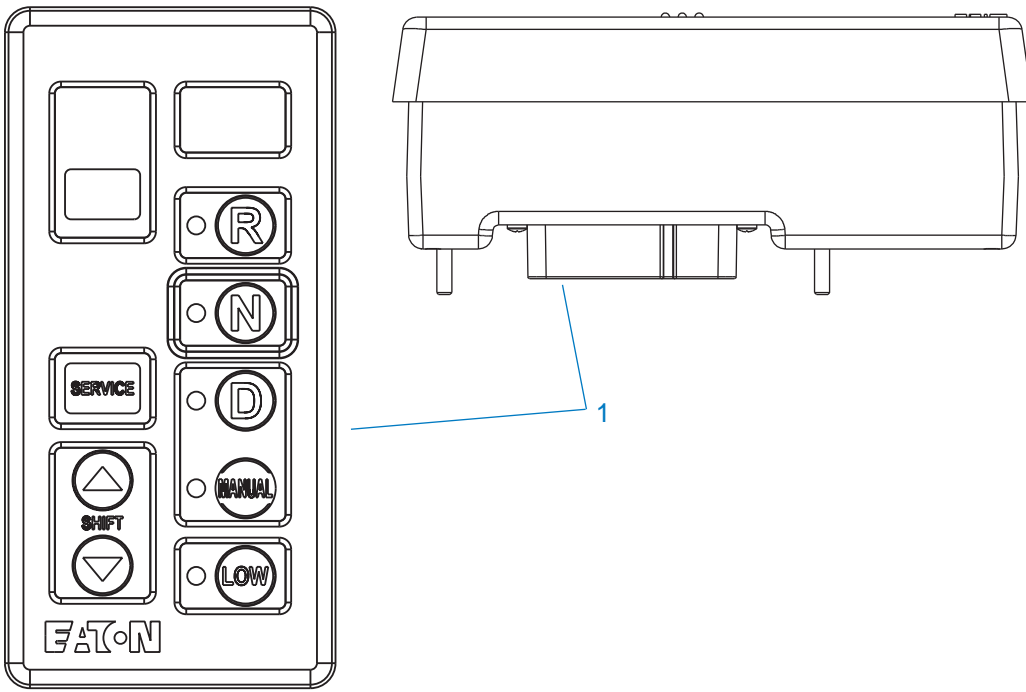


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## SHIFT BAR HOUSING

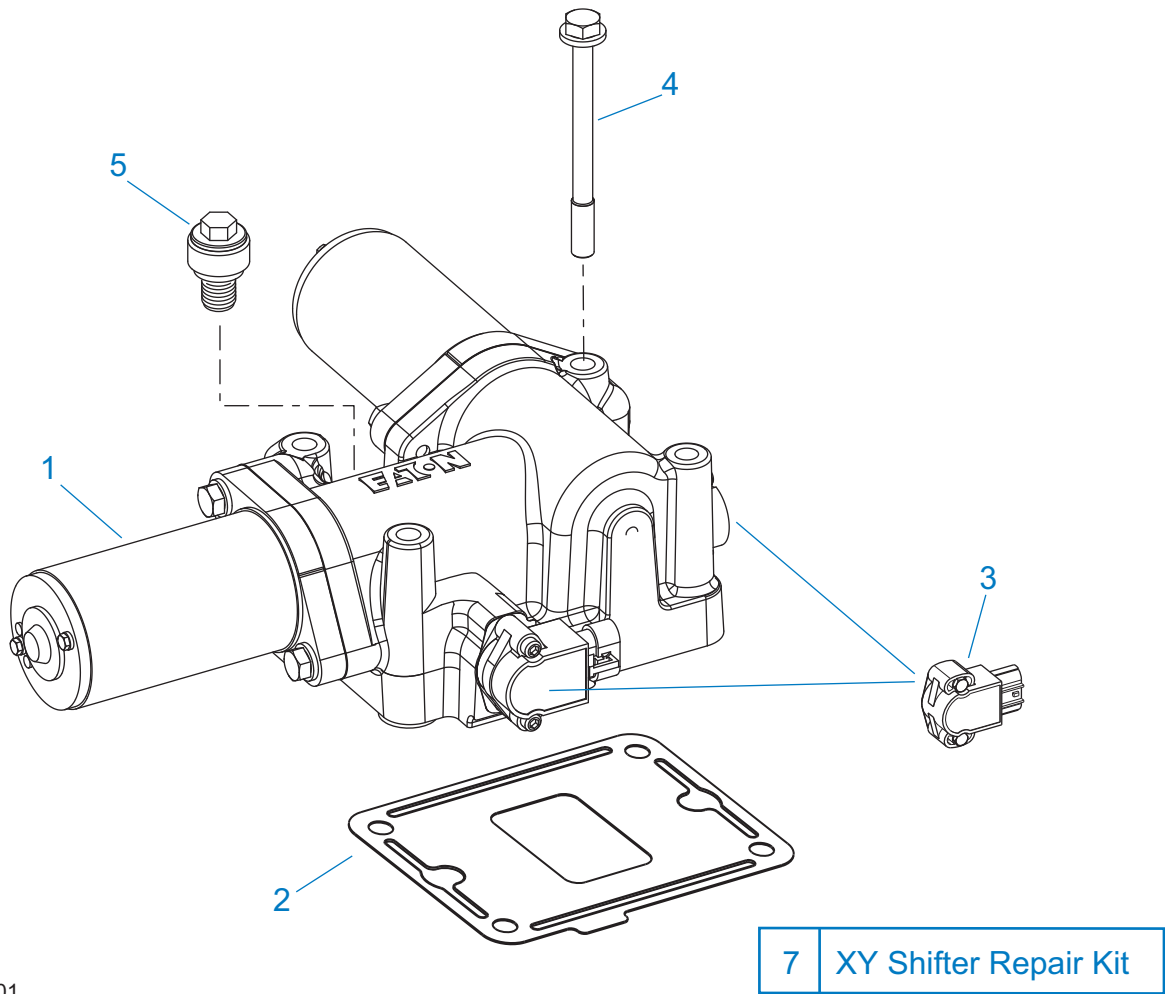
Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	S-3107	SHIFT BAR HSG ASSY		1		
2	4300854	GASKET	3315678	1		K-3738
3	X-8C-600	CAPSCREW	239611	12	3/8"-16X1"	
4	4306390	SPRING		4		
5	10J14	STEEL BALL		13	7/16"	
6	201044	PIN		2		
7	4301719	BALL RETAINER- REVERSE		1		
26	691526	SHIFT BLOCK - REVERSE		1		
27	4306166	YOKE BAR - REVERSE		1		
28	4306169	SHIFT YOKE ASSY		1		
29	691522	SHIFT BLOCK (1ST/2ND)		1		
30	691419	YOKE BAR (1ST/2ND)		1		
31	4306167	SHIFT YOKE ASSY		1		
32	691420	YOKE BAR (3RD/4TH)		1		
33	A-7038	YOKE ASSY (3RD/4TH)	691524	1		
34	1JM6028	PIN		6		
35	1JM3528	PIN		6		
36	691421	YOKE BAR (5TH/6TH)		1		
37	A-7039	YOKE ASSY (5TH/6TH)	691525	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-7038,A-7039
44	235052	CA PLUG		1		
45	15900	GASKET		1		K-3738
46	X-8-688	CAPSCREW		3	3/8"-16X1"	
47	238370	LIFTING EYE		3		
999	S-3107	SHIFT BAR HSG ASSY		1		



20318-03-01

## SHIFT CONTROLS

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	4306043	PUSHBUTTON ASSY	A - 7466,S-3007	1		



20230-09-01

## X-Y SHIFTER MODULE

Item	Current Part	Description	Replaced Part	Qty.	Notes	Kits/Assys Where Needed
1	K-3784RX	REMAN EXCH GEN 3 X-Y SHIFTER KIT	A - 7670, A - 7856,K-3784	1		
2	4305452	GASKET	4301958	1		K-3738,K-4009
3	K-3438	POSITION SENSOR KIT	691551 ,691926	2		
4	X-8C-615	CAPSCREW		4		
5	4304602	BREATHER	23605	1	1/4" NPT	
7	K-4009	XY SHIFTER REPAIR KIT		1		





