

Roadranger®

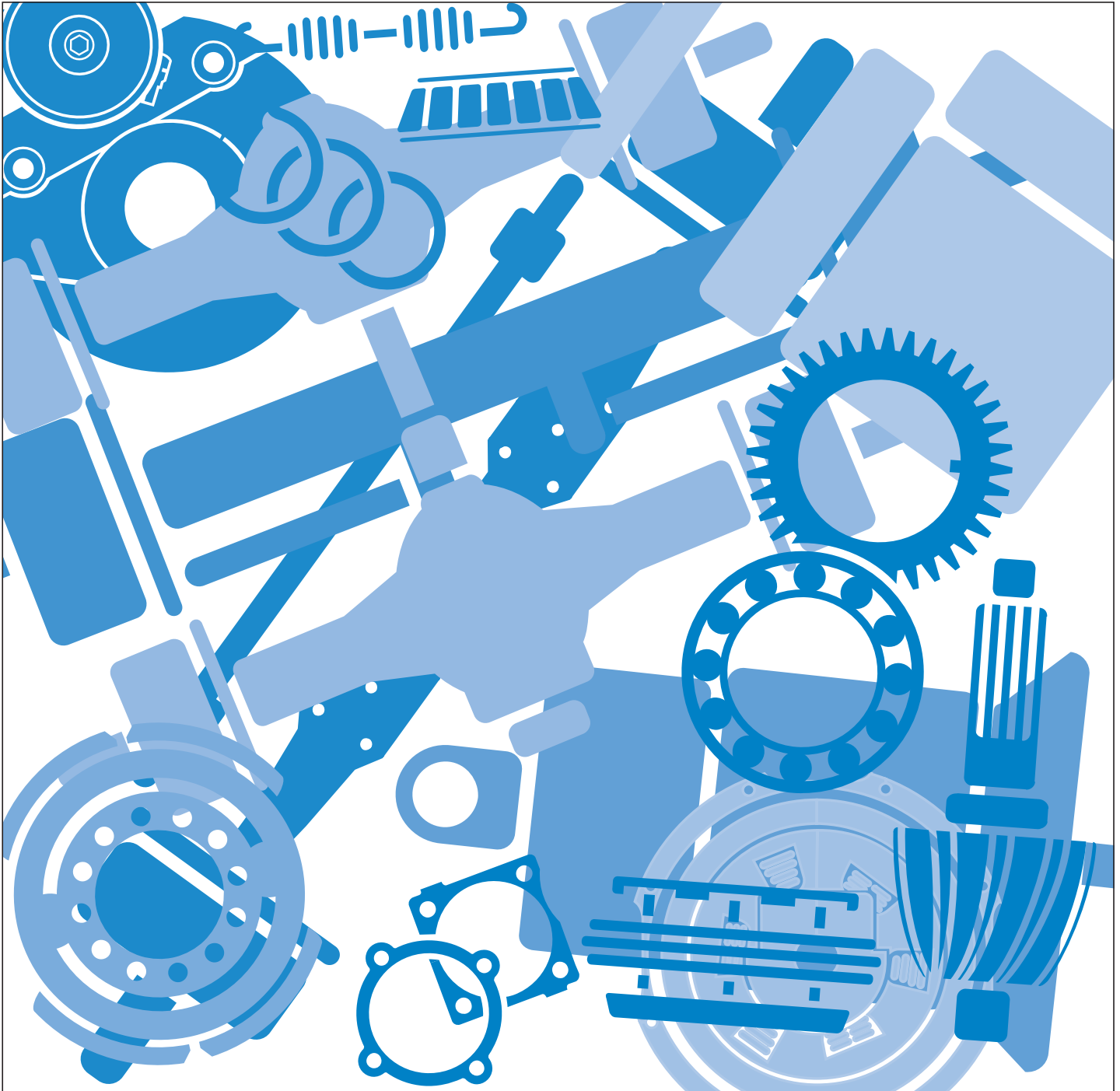
Eaton® Fuller® Mid-Range Transmissions

FS-7206 Series



One Great Drivetrain from Two Great Companies

Illustrated Parts List TRIP-0181 April 1989



For the most current information, visit the Roadranger web site at www.roadranger.com

How To Use The Illustrated Parts List

All Lists are arranged the same; available kits, assemblies, drivers' instructions, and technical service literature are listed in the front. Cases, clutch housings, bar housings, mainshafts, countershafts, drive gears and idler follow in order.

Use of Kits and Assembly Listing (Page 2)

The first column shows on which page kit or assembly is found.

The second column shows symbols used to identify components of kits on that page.

If you do not have kit or assembly in stock, symbols will allow you to either put kit or assembly together from individual parts in your stock or find an individual part you may need that is in your inventory as part of a kit or assembly.

The third and fourth columns show part number and description.

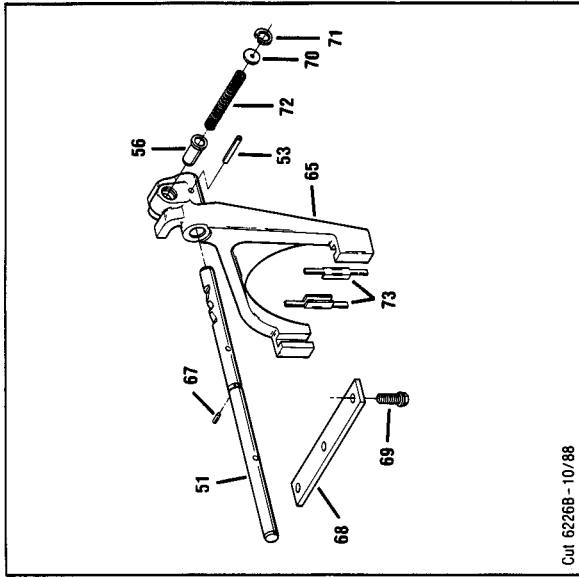
Page	Sym.	Part #	Description
13	C	A-5342	Yoke assembly 5th-6th

Illustrated Index

Pages 4 and 5 are an Illustrated Index for this Illustrated Parts List. The isometric drawing is a typical Fuller single countershaft transmission. The proper page on which to find these items is noted.

How to Identify Parts and Obtain Part Numbers.

Example: Yoke 5th-6th



Cut 6226B - 10/88

Determine item number of remote housing

Example: Item Number is one.

ITEM	QTY.	USED	PART NO.	DESCRIPTION	SYMBOL
65	1	22321	Yoke assembly 5th-6th order A-5342	● C	
73	6	21199	Pad	● abc	
80	1	22997	Oil trough		

Use of Symbols

Items 65 and 73 have symbol "C"
A-5342 assembly also has symbol "C"
This shows that items 65 and 73 are contained in A-5342.

ITEM	QTY.	USED	PART NO.	DESCRIPTION	SYMBOL
65	1	22321	Yoke assembly 5th-6th order A-5342	● C	
73	6	21199	Pad	● abc	
80	1	22997	Oil trough		

PART NO.	DESCRIPTION	SYMBOL
A-5342	Yoke assembly 5th-6th	C

Notes On Illustrations

Illustrations show parts in assembly groups.

Various notes are used where appropriate.

Current production

Not used in current production

Use of lockwire

Transmission model information

“Keep your Fuller Transmission Fuller.”

This booklet is designed to identify all parts in the FS-7206 Series Transmissions.

Service Kits and Assemblies available for the FS-7206 Series

Page	Sym.	Part #	Description	Page	Sym.	Part #	Description
11	B	S-1657	Case assembly	13	a	A-5344	Yoke assembly 1st-2nd
—	—	K-2181	Gasket kit	13	b	A-5343	Yoke assembly 3rd-4th
11	P	K-1966	Rear bearing cover kit	13	c	A-5342	Yoke assembly 5th-6th
11	A	K-2183	Shim kit				
—	S	K-2182	Small parts kit				

Purposes of Symbols

A. To denote the parts included in a kit or an assembly. B. Used for notes.

Kit and Assembly Identification for Service Parts

A — Denotes Production Assemblies K — Denotes Service Kit (Unassembled) S — Denotes Service Assembly

Basic Rebuild Kit

Sym. Part # Description
K-2130 All FS-7206 series
Above Kit also includes Gaskets.

Sealants and Lubricants

Part #	Description
71203	Silicone Lubricant 8 oz. size (236.59 cc)—(fleet size)
71204	Adhesive Sealant 0.5 cc size (single application size)
71205	Sealant 2 cc size (single application size)

Part #	Description
71206	Silicone Lubricant 4 cc size (single application size)
71231	Gasket Sealant 8 milliliter tube (single application size)
71232	Liquid Thread Adhesive 10 milliliter bottle (single application size)

Operating Labels and Instructions

22387 Shift label

Maintenance and Repair

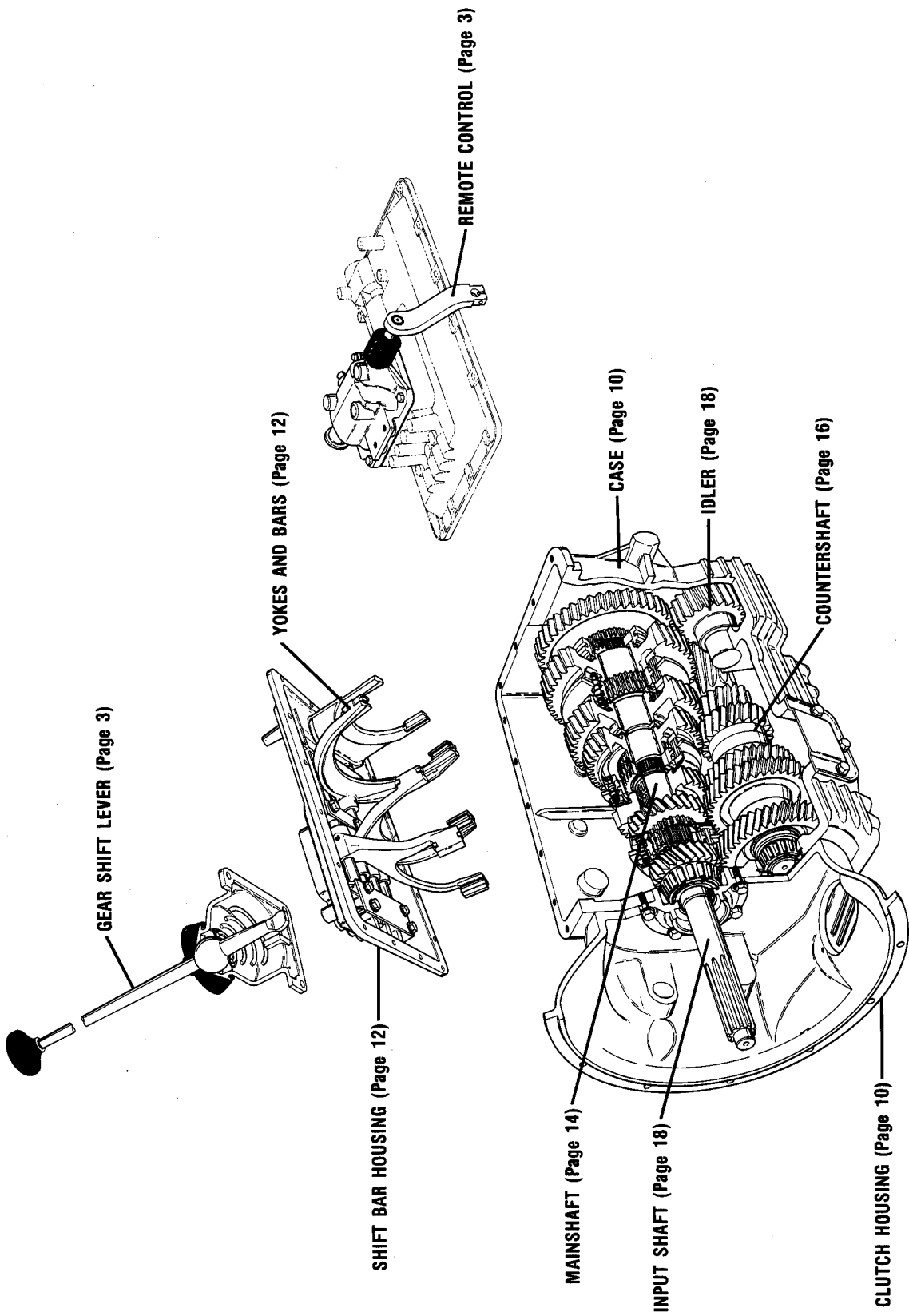
FS-7206 Series Service Manual — Form Number 210

FOR LEVER / CONTROL INFORMATION PLEASE SEE ILLUSTRATED PARTS LIST P-599

FOR INFORMATION ON THE FOLLOWING OPTIONS PLEASE SEE SUPER PARTS BOOK FORM P-583
SPEEDOMETER DRIVES — YOKES AND FLANGES

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ILLUSTRATION OF A TYPICAL FULLER TRANSMISSION



INDEX FOR ILLUSTRATION

DESCRIPTION	PAGE NO.
Case	Page 10
Clutch Housing	Page 10
Countershaft	Page 16
Mainshaft	Page 14
Gear Shift Lever	Page 3
Idler	Page 18
Input Shaft	Page 18
Remote Control	Page 3
Shift Bar Housing	Page 12
Yokes and Bars	Page 12

CLUTCH HOUSING CHART

ASSY. No. ★	Housing No.	SAE No.	Depth	D/G Cover Pedal Pilot Dia.	Shaft Type	Push Pull	Material	Nodal Mount
230548	230549	2	6 1/2	7.22	B	Push	Iron	Lower
227049	226981	2	6	6.25	D	Push	Iron	Upper
235651	235647	2	6 5/8	6.25	A	Pull	Iron	
3316236	3316237	2	6 5/8	6.25	A	Pull	Alum.	
A-5205	21646	2	6 5/8	6.25	E	Push	Alum.	
3316233	3316234	2	6 5/8	7.22	A	Pull	Alum.	
—	3316241	2	4 3/4	7.25	Fork	Push	Alum.	

★ Complete with Bushings and Grease Fittings

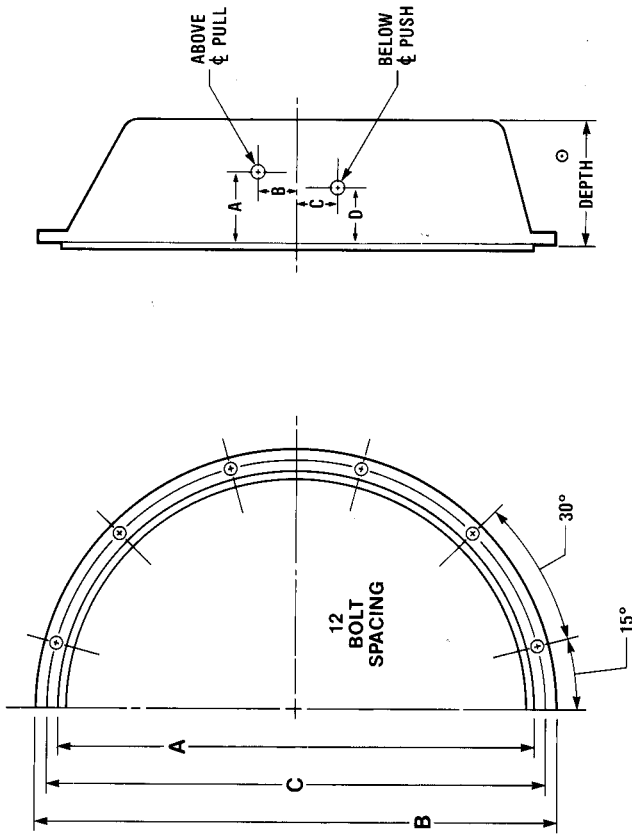
PEDAL SHAFT

TYPE	DIMENSION			
	ABOVE PULL		BELOW PUSH	
	A	B	C	D
A	3.750	1.500	—	—
B	—	—	2,500	3,590
D	—	—	2,500	3,625
E	—	—	3,000	2,563

CLUTCH HOUSING TERMS

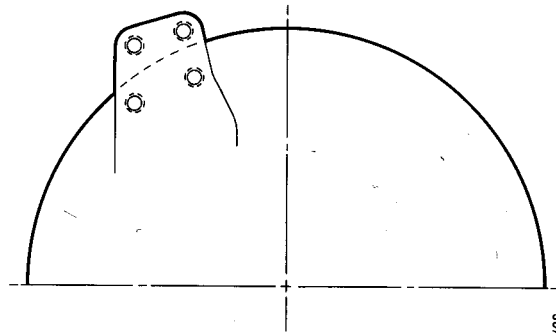
SAE #1 & SAE #2 denotes clutch housing size. SEE FIG. 1

SAE SIZE NO.	A PILOT DIAMETER	B OUTSIDE DIAMETER	CAPSCREW	
			QTY.	SIZE
1	20-1/8	21-3/4	12	7/16-14
2	17-5/8	19-1/4	12	3/8-16

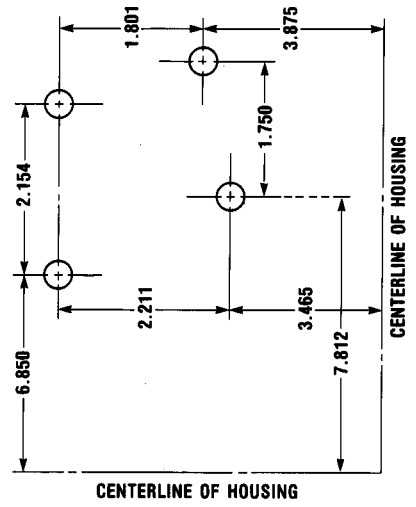
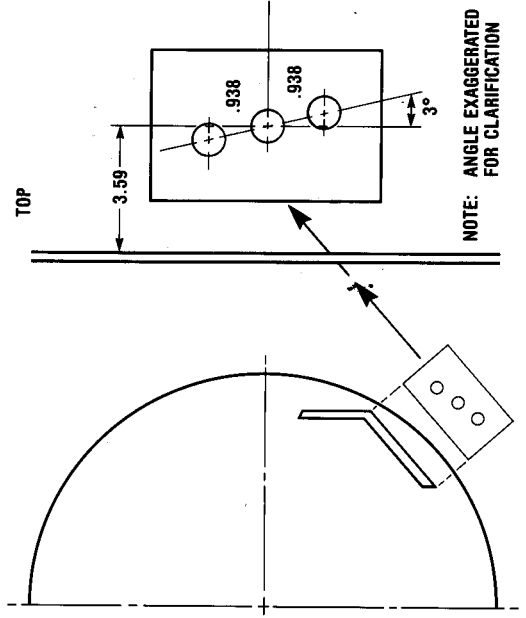


NODAL MOUNT - Denotes mounting pads used for support of transmission and engine.

UPPER NODAL MOUNT



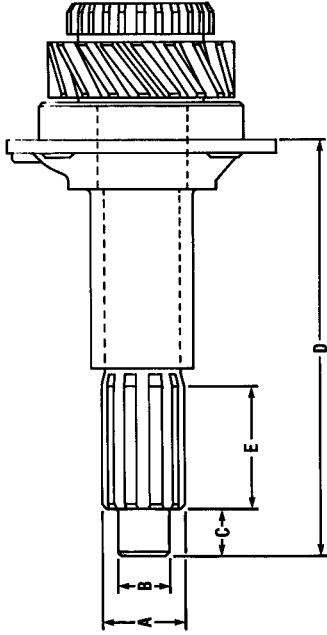
LOWER NODAL MOUNT



INPUT SHAFT

MODEL SERIES APPLICATION: FS-7206								
SHAFT	TYPE	A	B	C	D	E	SEAL	COVER
23043	PULL	1 ³ / ₄	1.18	.81	11.32	3.75	A	A
23046	PULL	1 ³ / ₄	.98	.81	11.32	3.75	A	A

Cut 8393L - 11/88



Cut 8392-7/87

FRONT BEARING COVER - OIL SEAL

BEARING COVER

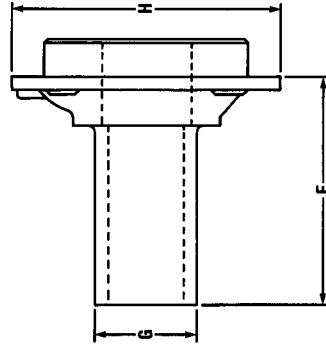
ITEM	PART #	SEAL	DESCRIPTION	F	G
A	3316171	22329	1 3/4" PULL	1.40	—

Cut 8394F - 11/88

OIL SEAL

ITEM	PART #
A	22329

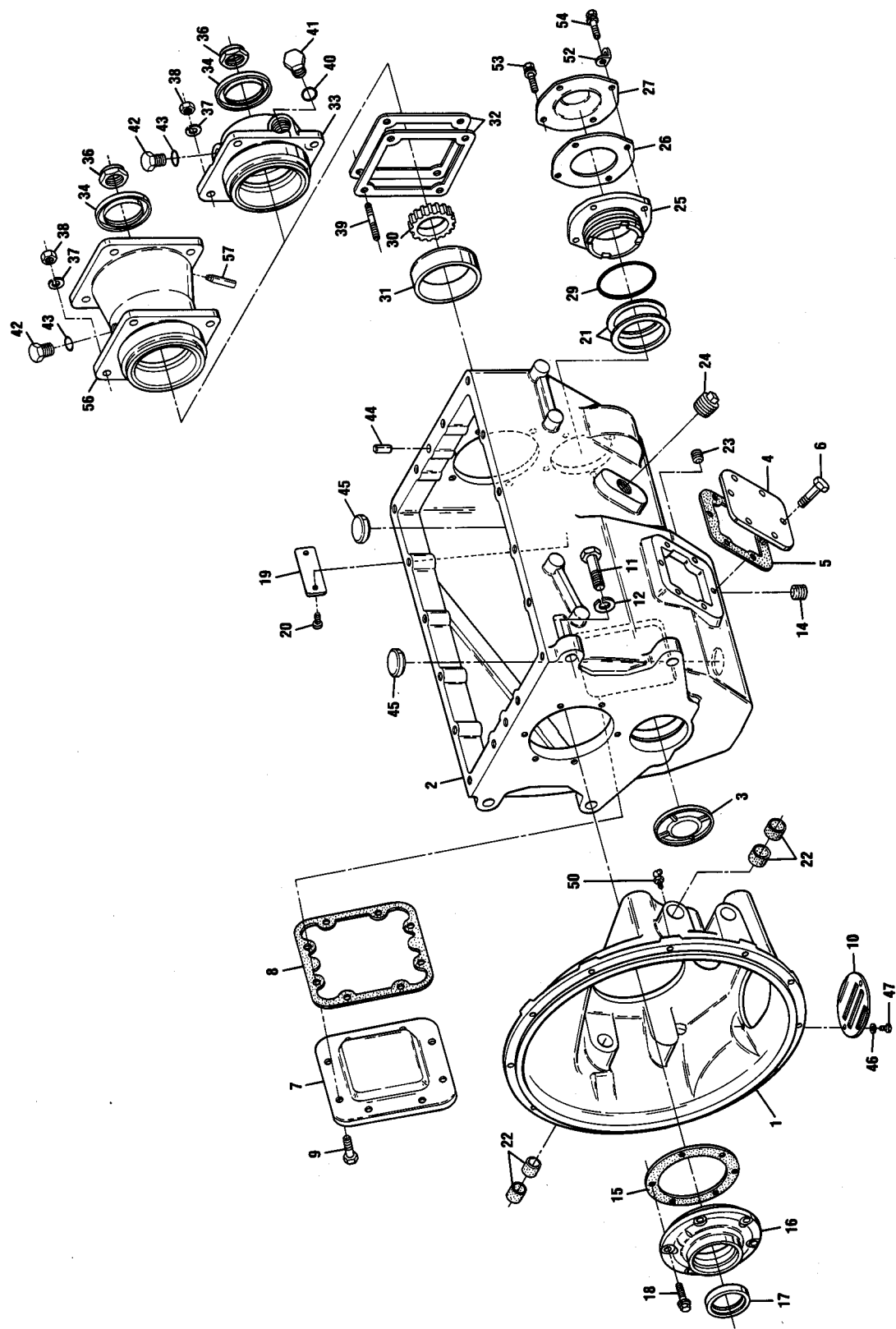
Cut 8395E - 11/88



Cut 8392B-7/87

CLUTCH HOUSING - CASE

CLUTCH HOUSING - CASE



QTY.	ITEM USED	PART NO.	DESCRIPTION	SYMBOL	QTY.	ITEM USED	PART NO.	DESCRIPTION	SYMBOL	PART NO.	DESCRIPTION	SYMBOL
1	1		For clutch housing information see pages 6 and 7 Also see Super Parts Book Form P-583		31	1	711123	Bearing cup	#	K-2183	Shim kit	A
2	1	22320	Case order A-1657	B	32	or	3315662	Shim .004	#A	S-1657	Case assembly	B
3	1	23445	Case w/tapped holes	#	33	or	3315663	Shim .007	#A	K-1966	Rear bearing cover kit	P
4	1	3315679	Plug			or	3315664	Shim .010	#A		mechanical and magnetic	
5	1	14575	PTO cover			or	3315665	Shim .020				
6	1	1684	Gasket				22325	Rear bearing cover				
7	6	X-8-686	Capscrew 3/8"-16 X 3/4"					mechanical and magnetic				
8	1	16596	PTO cover					Oil seal				
9	1	16929	Gasket					Nut				
10	8	X-8-725	Capscrew 7/16"-14 X 7/8"					Lockwasher				
11	1	23380	Hand hole cover					Nut				
12	4	1C1036	Capscrew					Stud w/22325				
13	4	4E10	Lockwashers					Stud (left) w/23336				
14	1	X-12-1201	Pipe plug 3/4"					Stud (right) w/23336				
15	1	3315659	Gasket					"O" ring				
16	1		For front bearing cover information see page 9					Plug mechanical				
17	1		For oil seal information see page 9					Plug magnetic				
18	6	239614	Capscrew					"O" ring use w/plug				
19	1	22300	Name plate					"O" ring use w/sensor				
20	2	X-13-206	Screw					Dowel pin				
21	or	3315681	Shim .004	#A				Magnet				
22	or	3315682	Shim .007	#A				Lockwasher				
23	or	3315683	Shim .010					Capscrew				
24	or	3315684	Shim .020					Grease fitting				
25	4	201966	Bushing					Lifting eye				
26	1	X-12-800	Pipe plug 1/2"					Capscrew 3/8"-16 X 1-1/4"				
27	1	X-12-2001	Pipe plug 1-1/4"					Capscrew 3/8"-16 X 1-1/2"				
28	1	22326	Bearing retainer					Rear bearing cover				
29	1	3315671	Gasket					12 X 3 brake magnetic				
30	1	3316141	Rear bearing cover					Tube				
31	1	22327	"O" ring									
32	1	86302	Speedometer gear									

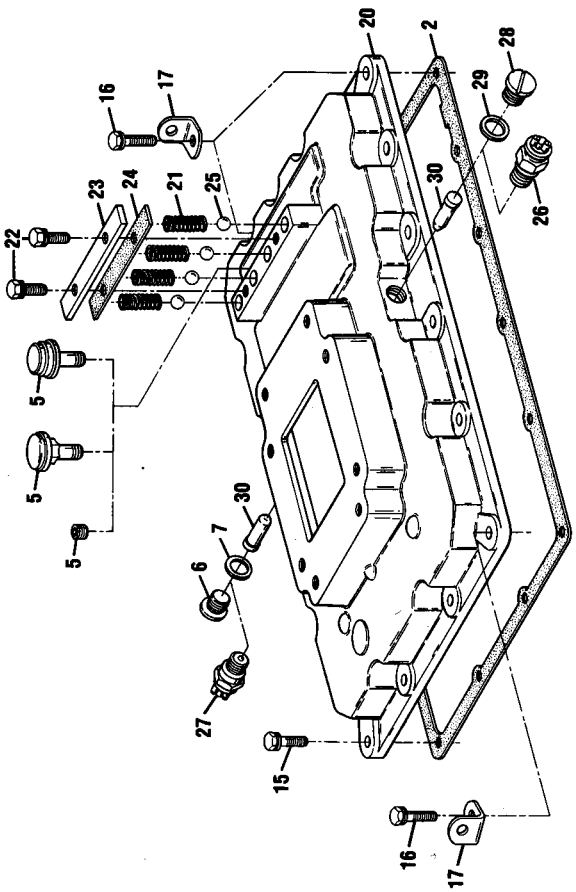
BASIC REBUILD KIT

K-2130 #

± NOTE: ITEMS 26 AND 27 NOT USED WITH EXTENDED COUNTERSHAFT P.T.O.
Also see page 13

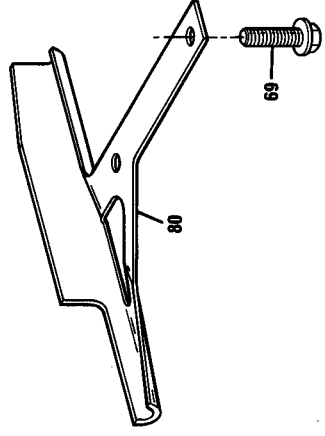
BAR HOUSING - YOKES AND BARS

BAR HOUSING ASSEMBLY



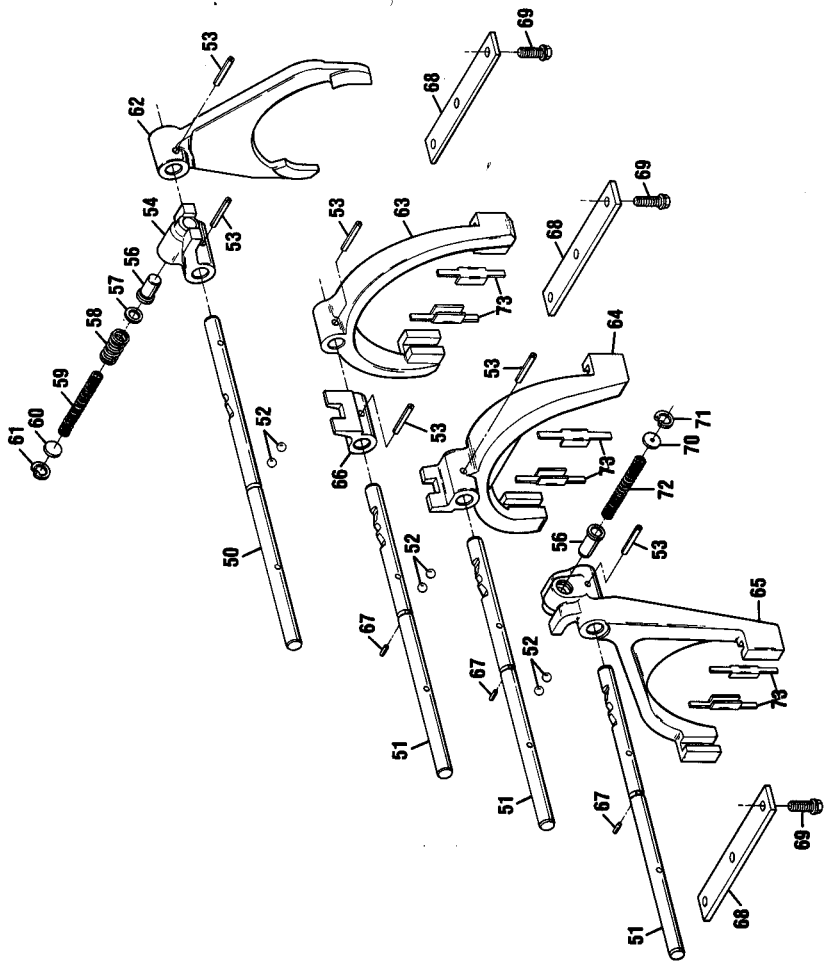
Cut 6229B-10/88

OIL TROUGH



Cut 6253-10/88

YOKES AND BARS



Cut 6226B-10/88

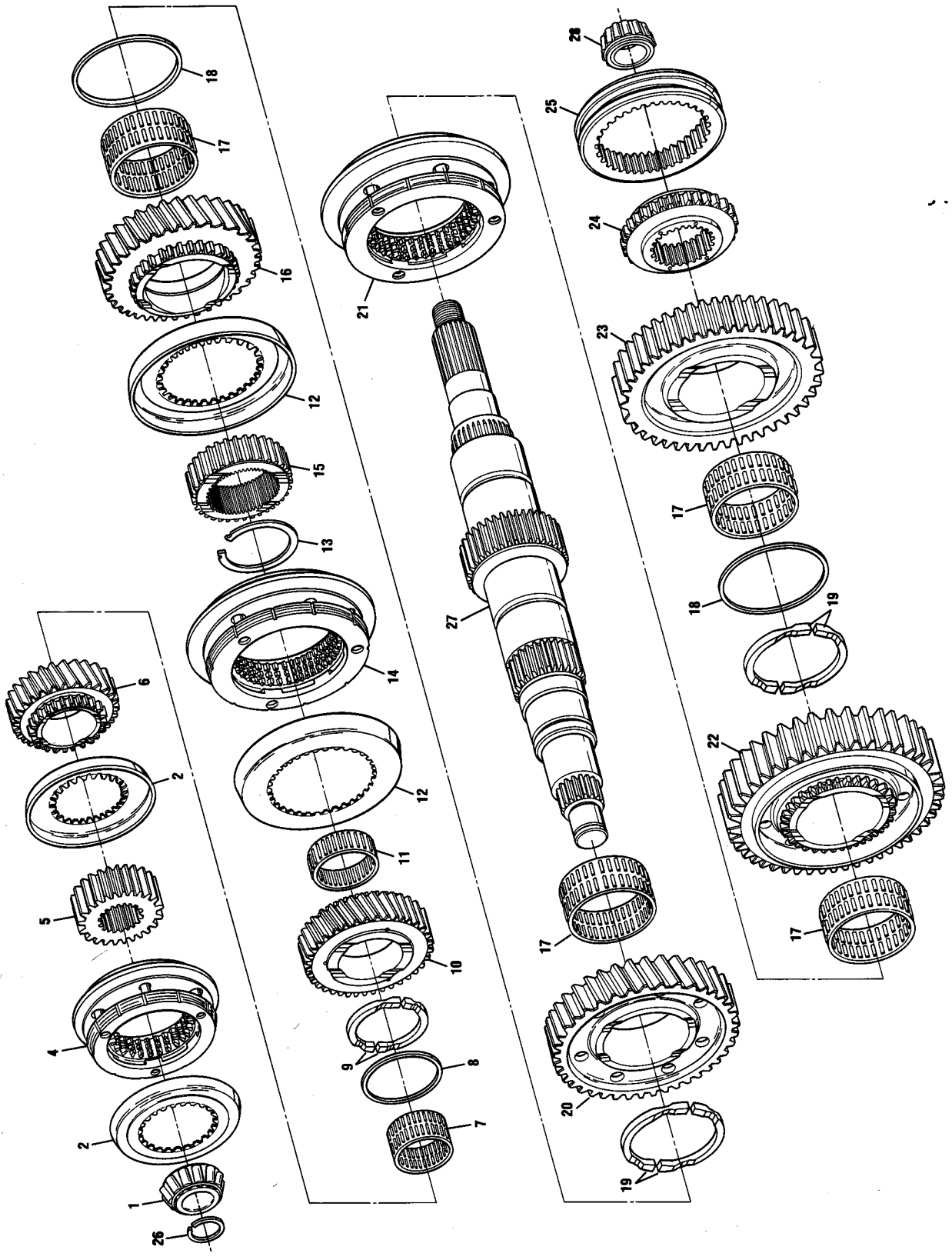
QTY.	ITEM USED	PART NO.	DESCRIPTION	SYMBOL	QTY.	ITEM USED	PART NO.	DESCRIPTION	SYMBOL
2	1	20698	Gasket		56	2	21966	Plunger	
5	1	X-12-404	Pipe plug 1/4"		57	1	21963	Washer	
	or	15276	Breather		58	1	21723	Spring (std.)	
6	1	15917	Plug			or	22834	Spring (opt.)	
7	1	15900	Gasket		59	1	22155	Spring (std.)	
15	13	X-8C-604	Cap screw 3/8"-16 X 1-1/4"			or	21724	Spring (opt.)	
16	3	X-8L-602	Cap screw 3/8"-16 X 1-1/2"		60	1	21964	Washer	
17	3	20815	Lifting eye		61	1	21965	Snap ring	
20	1	21956	Shift bar housing		62	1	22322	Reverse yoke	
			order S-1576		63	1	22330	Yoke assembly 1st-2nd	a
	or	23448	Shift bar housing	#	64	1	22331	Yoke assembly 3rd-4th	b
21	4	1064	Spring	#				order A-5344	
22	2	X-8L-600	Cap screw 3/8"-16 X 1"		65	1	22321	Yoke assembly 5th-6th	c
23	1	10838	Spring cover					order A-5343	
24	1	10839	Gasket					order A-5342	
25	4	X-14-800	Steel ball 1/2"	S	66	1	21958	Shift block 1st-2nd	
26	1	22941	Neutral light switch		67	3	1634	Pin	
27	1	22940	Reverse light switch		68	3	22335	Retainer	
28	1	22752	Plug		69	9	233043	Cap screw 3/8"-16 X 1"	
29	1	17179	Gasket		70	1	21967	Washer	
30	2	21970	Pin		71	1	21968	Snap ring	
50	1	22323	Yoke bar rev		72	1	22156	Spring (std.)	
	or	23450	Yoke bar rev			or	21724	Spring (opt.)	
51	3	21962	Yoke bar	#	73	6	21199	Pad	abc
52	6	X-14-600	Steel ball 3/8"	S	80	1	22997	Oil trough	
53	6	62516	Roll pin						
54	1	21957	Shift block rev						

BASIC REBUILD KIT

K-2130 #

USE IN SETS ITEM 20 23448
ITEMS 50 23450 ALSO OMIT 1 ITEM 30 21970

**MAINSHAFT
MAINSHAFT
ASSEMBLY**

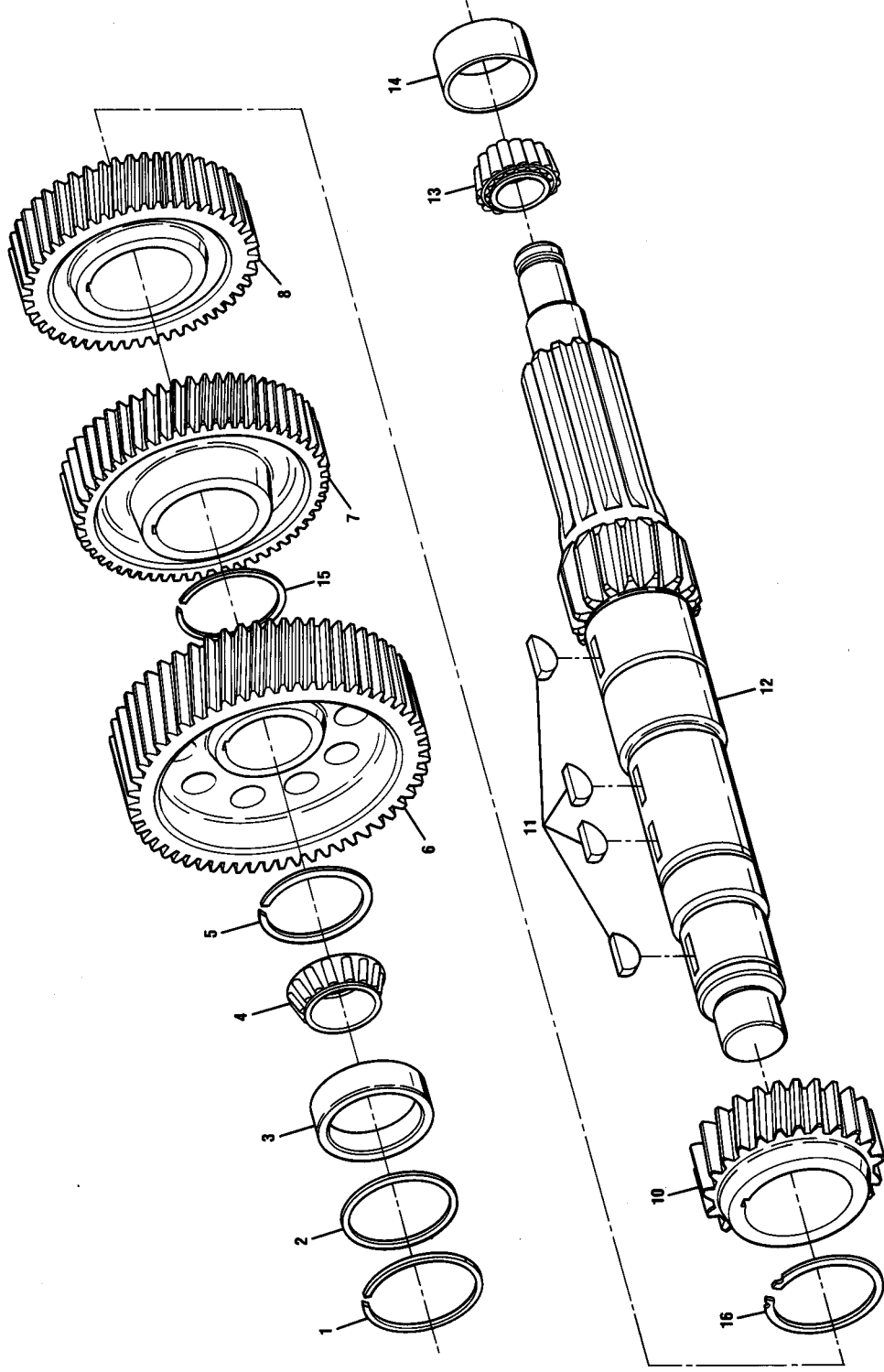


QTY.	ITEM	USED	PART NO.	DESCRIPTION	SYMBOL
1	1		710787	Bearing cone	≠
2	2		22315	Synchronizer cup	
4	1		A-5341	Synchronizer assembly 5th-6th	
5	1		22314	Clutch hub	
6	1		22303	Gear mainshaft 5th	
7	1		20704	Bearing	
8	1		20711	Retainer	
9	2		20710	Washer segment	S
10	1		22305	Gear mainshaft 4th	
11	1		20705	Bearing	
12	2		22317	Synchronizer cup	
13	1		20712	Snap ring	
14	1		A-5340	Synchronizer assembly 3rd-4th	
15	1		22316	Clutch hub	
16	1		23048	Gear mainshaft 3rd	
17	4		20706	Bearing	≠
18	2		20714	Retainer	
19	4		20713	Washer segment	S
20	1		23050	Gear mainshaft 2nd	
21	1		A-5339	Synchronizer assembly 1st-2nd	
22	1		22311	Gear mainshaft 1st	
23	1		22312	Gear mainshaft reverse	
24	1		22319	Clutch hub	
25	1		22318	Sliding clutch	
26	1		3313798	Snap ring	≠
27	1		22313	Mainshaft	
28	1		5202047	Bearing cone	≠

S Small parts kit K-2182

BASIC REBUILD KIT
K-2130 ≠

**COUNTERSHAFT
COUNTERSHAFT
ASSEMBLY**



ITEM	USED PART NO.	DESCRIPTION	SYMBOL	QTY.	ITEM	USED PART NO.	DESCRIPTION	SYMBOL
1	3315686	Snap ring	#	1	22304	Gear countershaft 5th		
2	3315687	Washer	#	8	22306	Gear countershaft 4th		
3	1313645	Bearing cup	#	10	23049	Gear countershaft 3rd		
4	791943	Bearing cone	#	11	X-6-E	Key		
5	17399	Snap ring		12	23051	Countershaft	S	
6	23047	Gear countershaft drive		13	658981	Bearing cone	#	
				14	660181	Bearing cup	#	
				15	22328	Snap ring		
				16	22360	Snap ring		

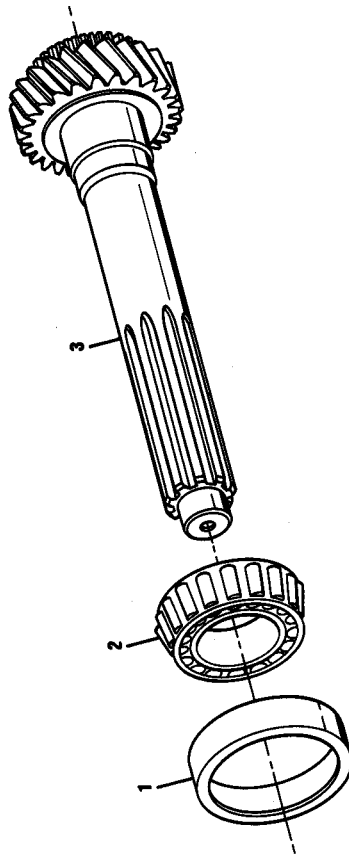
S Small parts kit K-2182

BASIC REBUILD KIT

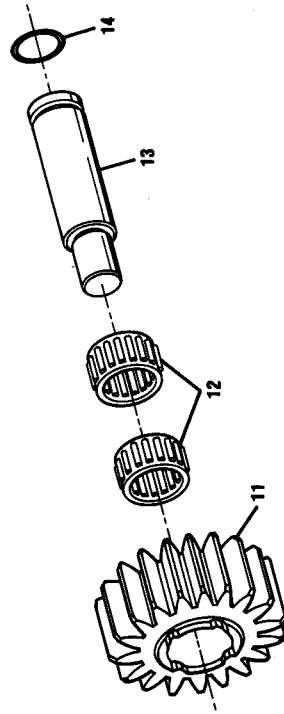
K-2130 #

DRIVE GEAR - IDLER

**DRIVE GEAR
ASSEMBLY**

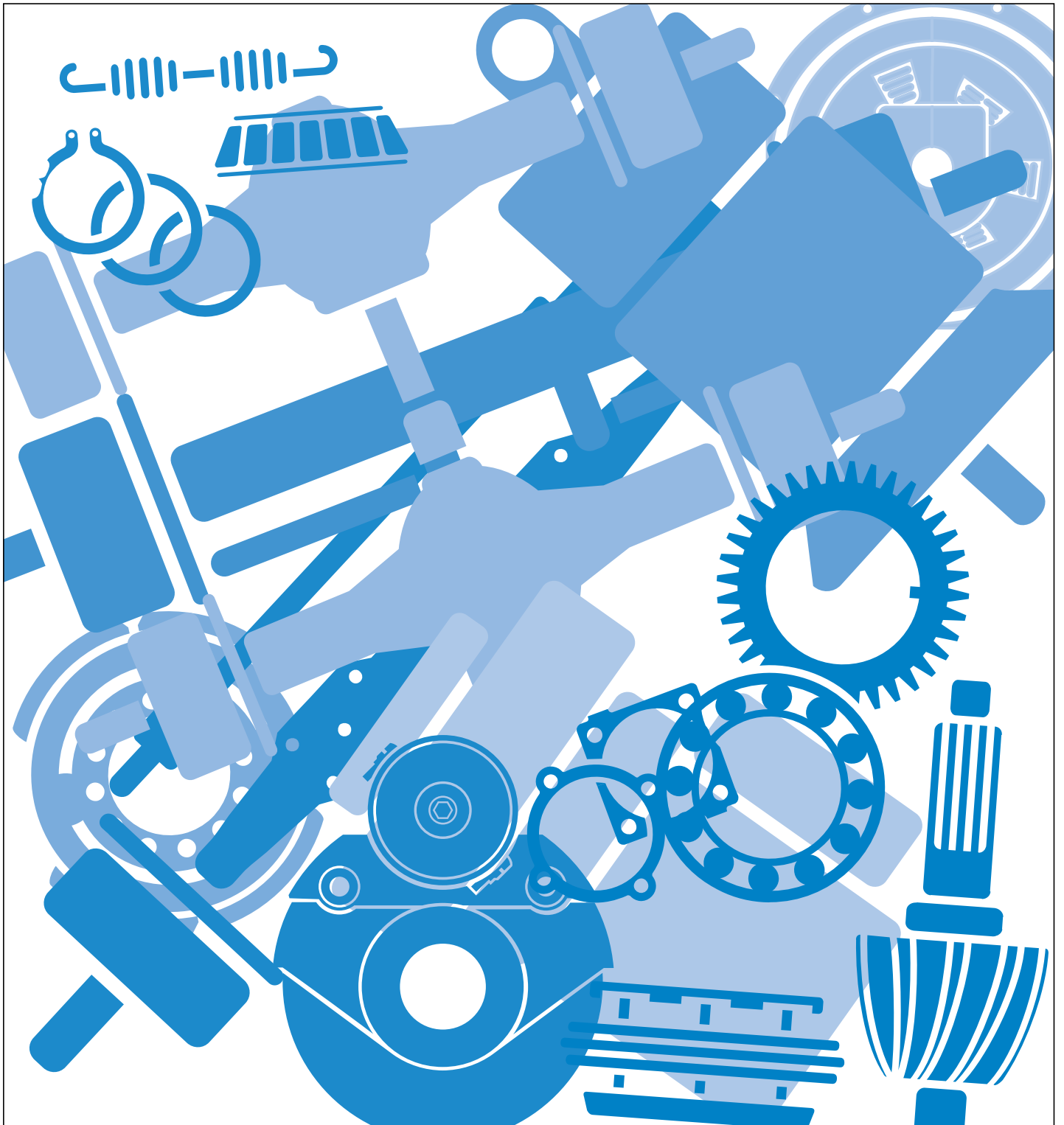


**REVERSE IDLER GEAR
ASSEMBLY**



QTY. USED	ITEM PART NO.	DESCRIPTION	SYMBOL	QTY. USED	ITEM PART NO.	DESCRIPTION	SYMBOL
1	675250	Bearing cup	≠	11	20671	Gear - idler	≠
2	742259	Bearing cone	≠	12	20707	Bearing	≠
3	1	For input shaft and drive gear information see page 8		13	22324	Idler shaft	
				14	20674	"O" ring	≠

BASIC REBUILD KIT
K-2130



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EXCELLENCE**

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MORE TIME ON THE ROAD

The Roadranger® System is an unbeatable combination of the best products from Eaton and Dana – partnering to provide you the most advanced, most trouble-free drivetrain in the industry. And it's backed by the Roadrangers – the most experienced, most expert, most accessible drivetrain consultants in the business.

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