

Fig. 14  
TRANSMISSION - VALVE GROUP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	144416	Transmission Control Valve (Includes Items 1, 2, 5 thru 17, 19 & 20).....	1		
1	144633	Plug, Detent, Forward & Reverse.....	1		
2	144634	Plug, Detent, Speed Range.....	1		
3	WL-16	Washer, Lock.....	3		
4	S-2622	Screw, Cap.....	3		
5	OR2-8	"O" Ring.....	1		
6	136361	Plug, Pipe.....	1		
7	144635	Cam, Detent.....	2		
8	119183	Spring, Detent.....	2		
9	136363	Plug, Plunger.....	1		
10	129646	Ball, 5/16" Dia.....	8		
11		Plunger, Speed Range.....	1		
12		Plunger, Forward & Reverse.....	1		
13		Plunger, Brake.....	1		
14	136366	Ring, Retaining.....	3		
15	139389	Spring, Plunger.....	1		
16	124516	Seal, Oil.....	3		
17		Housing, Valve.....	1		
18	OR4-9	"O" Ring.....	6		
19	OR4-19	"O" Ring.....	3		
20	139573	Plug, Detent, Brake.....	1		

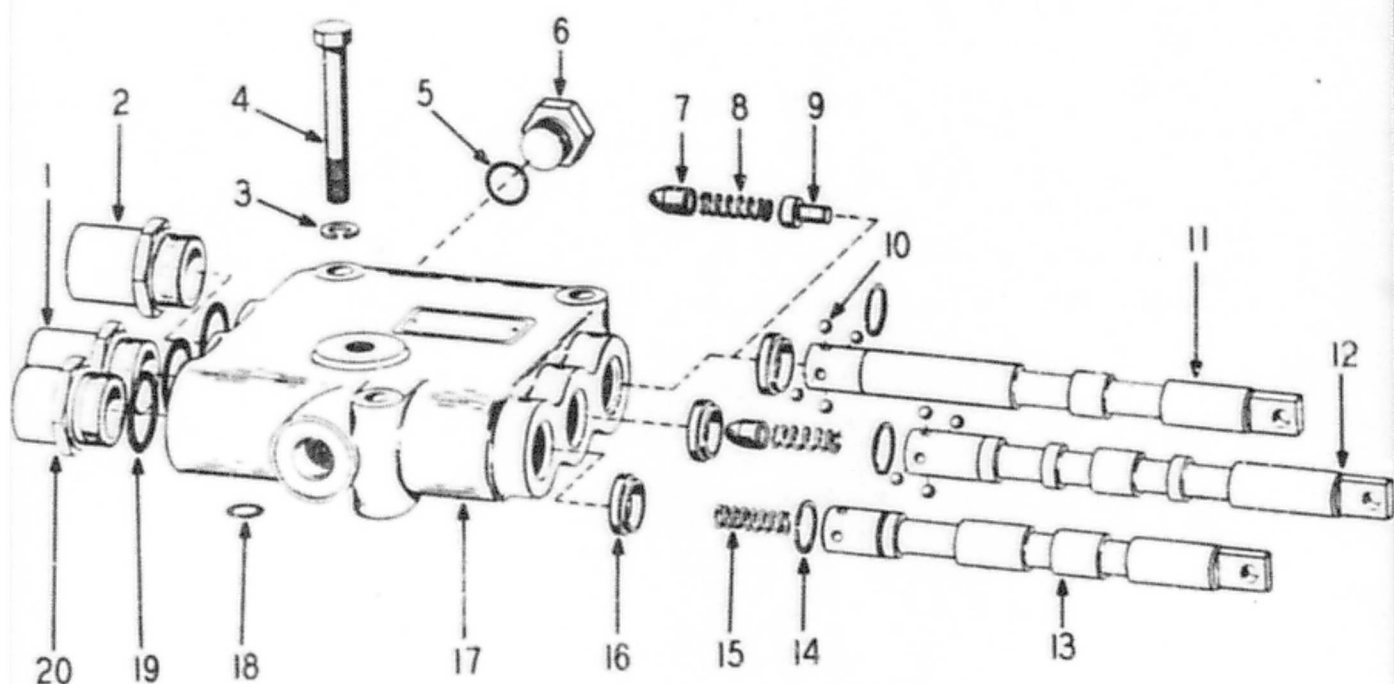


Fig. 14  
TRANSMISSION - VALVE GROUP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	144416	Transmission Control Valve (Includes Items 1, 2, 5 thru 17, 19 & 20).....	1		
1	144633	Plug, Detent, Forward & Reverse.....	1		
2	144634	Plug, Detent, Speed Range.....	1		
3	WL-16	Washer, Lock.....	3		
4	S-2622	Screw, Cap.....	3		
5	OR2-8	"O" Ring.....	1		
6	136361	Plug, Pipe.....	1		
7	144635	Cam, Detent.....	2		
8	119183	Spring, Detent.....	2		
9	136363	Plug, Plunger.....	1		
10	129646	Ball, 5/16" Dia.....	8		
11		Plunger, Speed Range.....	1		
12		Plunger, Forward & Reverse.....	1		
13		Plunger, Brake.....	1		
14	136366	Ring, Retaining.....	3		
15	139389	Spring, Plunger.....	1		
16	124516	Seal, Oil.....	3		
17		Housing, Valve.....	1		
18	OR4-9	"O" Ring.....	6		
19	OR4-19	"O" Ring.....	3		
20	139573	Plug, Detent, Brake.....	1		

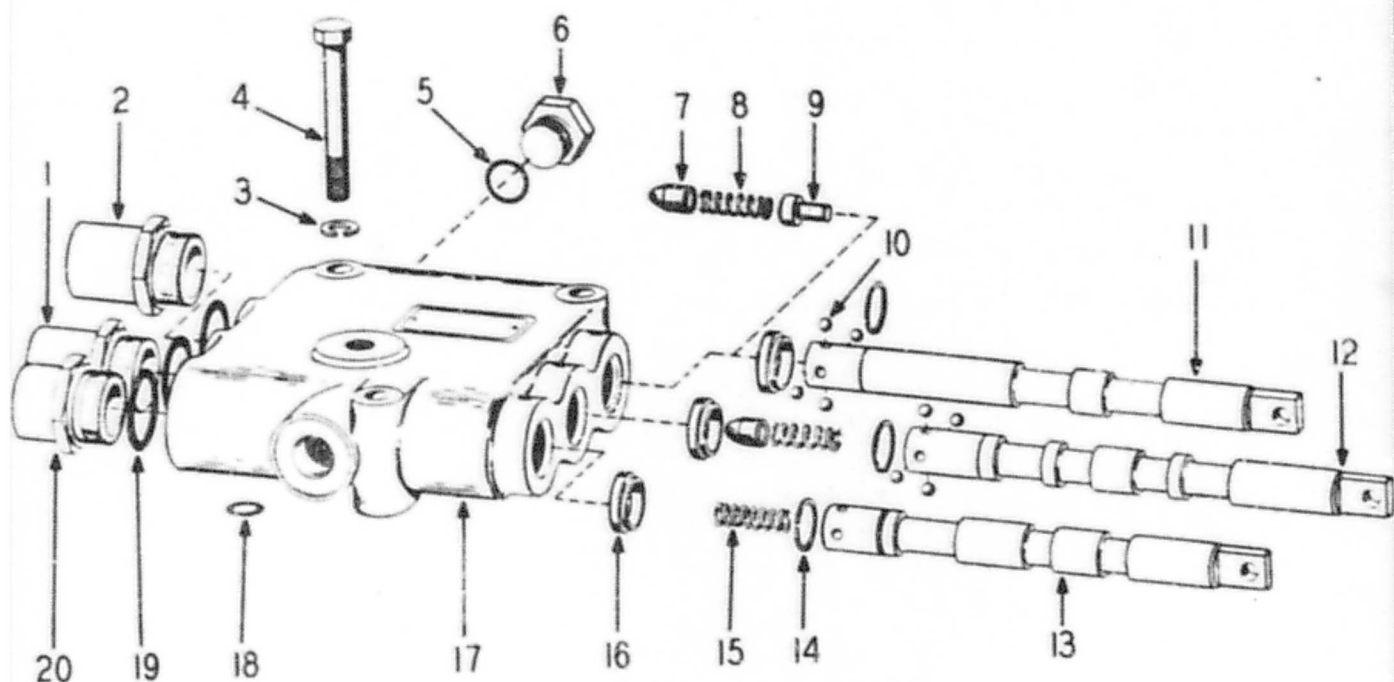


Fig. 14  
TRANSMISSION - VALVE GROUP

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	144416	Transmission Control Valve (Includes Items 1, 2, 5 thru 17, 19 & 20).....	1		
1	144633	Plug, Detent, Forward & Reverse.....	1		
2	144634	Plug, Detent, Speed Range.....	1		
3	WL-16	Washer, Lock.....	3		
4	S-2622	Screw, Cap.....	3		
5	OR2-8	"O" Ring.....	1		
6	136361	Plug, Pipe.....	1		
7	144635	Cam, Detent.....	2		
8	119183	Spring, Detent.....	2		
9	136363	Plug, Plunger.....	1		
10	129646	Ball, 5/16" Dia.....	8		
11		Plunger, Speed Range.....	1		
12		Plunger, Forward & Reverse.....	1		
13		Plunger, Brake.....	1		
14	136366	Ring, Retaining.....	3		
15	139389	Spring, Plunger.....	1		
16	124516	Seal, Oil.....	3		
17		Housing, Valve.....	1		
18	OR4-9	"O" Ring.....	6		
19	OR4-19	"O" Ring.....	3		
20	139573	Plug, Detent, Brake.....	1		

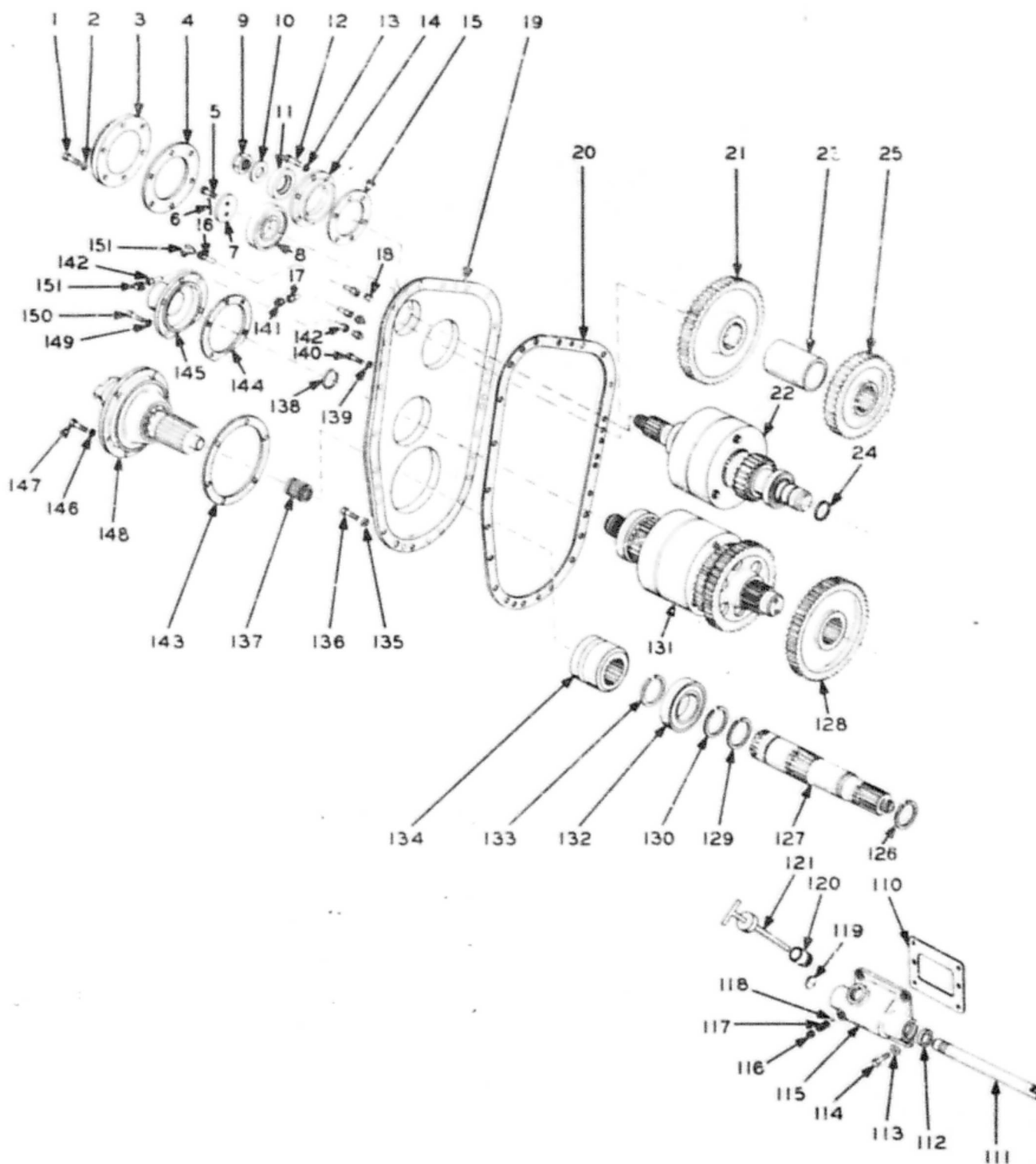


Fig. 15  
TRANSMISSION

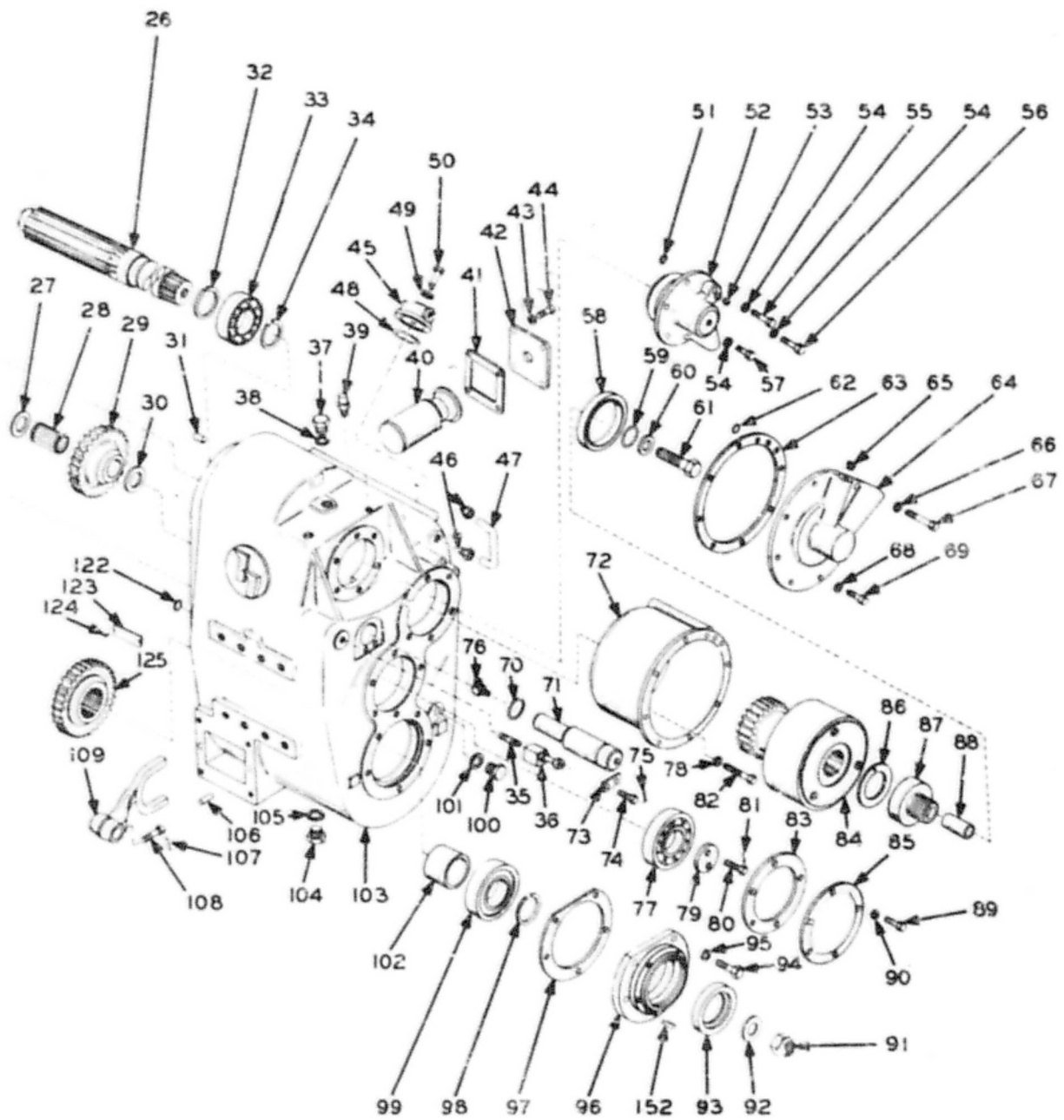


Fig. 15  
TRANSMISSION

TRANSMISSION

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	156930	Transmission Assembly .....	1		
	142895	Gasket Set (Includes Items 4, 15, 20, 41, 83, 97, 110, 143, and 144) .....	AR		
	142897	"O" Ring Set (Incl. Items 51, 62, 70, 90 & 95) .....	AR		
	142899	Seal Kit (Includes Items 11 and 93) .....	AR		
1	S-268	Screw, Cap .....	6		
2	WL-16	Washer, Lock .....	6		
3	116610	Cap, Countershaft .....	1		
4	116611	Gasket, Cap .....	1		
5	S-266-D	Screw, Cap .....	2		
6	LW-164	Wire .....	1		
7	116623	Washer, Retaining .....	1		
8	116598	Bearing, Ball .....	1		
9	123298	Nut .....	1		
10	WF-316	Washer, Flat .....	1		
11	104705	Seal .....	1		
12	S-268	Screw, Cap .....	6		
13	WL-16	Washer, Lock .....	6		
14	116608	Cap, Shaft, input .....	1		
15	116609	Gasket, Cap .....	1		
16	152125	Bent Tube, 3rd gear .....	1		
17	143052	Bent Tube, 2nd gear .....	1		
18	129553	Adapter, Straight .....	3		
19	143053	Cover, Transmission .....	1		
20	125524	Gasket .....	1		
21	125563	Gear, Spur, 55 teeth .....	1		
22	157177	Clutch Assembly, Forward and Reverse (Inc. all items shown on Page 26 ) .....	1		
23	125564	Spacer, Sleeve .....	1		
24	129509	Ring, Seal .....	3		
25	159658	Gear, Spur, 37 teeth .....	1		
	190994	Countershaft Assembly (Inc. Items 26, and 32 thru 34) .....	1		
26	190919	Countershaft, Upper .....	1		
27	150429	Washer, Flat .....	1		
28	125522	Bearing, Roller .....	1		
29	159653	Idler Gear, 30 teeth .....	1		
30	150429	Washer, Flat .....	1		
31	116641	Pin .....	2		
32	125566	Ring, Retaining .....	1		
33	118046	Bearing, Ball .....	1		
34	125567	Ring, Retaining .....	1		
35	109820	Nipple, Pipe .....	1		
36	153005	Valve Assembly, Relief (Inc. the following 4 items) .....	1		
	155522	Cartridge Assembly .....	1		
	OR4-16	"O" Ring .....	1		
	OR4-11	"O" Ring .....	1		
		Body .....	1		
37	116716	Plug .....	1		
38	114851	Washer .....	3		
39	152127	Breather .....	1		
		Strainer Assembly (Includes Items 40 and 42) .....	1		
40	129569	Strainer Element, Sediment .....	1		
41	129570	Gasket, Cover .....	1		
42	129568	Cover, Strainer .....	1		
43	WL-16	Washer, Lock .....	4		
44	S-268	Screw, Cap .....	4		
45	140734	Manifold and Relief Valve Assembly .....	1		
46	127302	Adapter, Straight, Pipe to Tube .....	2		
47	137572	Bent Tube .....	1		
48	OR3-6	"O" Ring .....	1		
49	125003	Washer .....	1		
50	S-2618	Screw, Cap .....	1		
51	OR4-9	"O" Ring .....	3		
		Cap Assembly (Inc. Items 52 and 53) .....	1		
52	125560	Cap .....	1		
53	139509	Plug, Pipe .....	6		

(Continued on following page)

TRANSMISSION - Continued

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
54	125003	Washer .....	6		
55	S-2618	Screw, Cap .....	1		
56	S-2614	Screw, Cap .....	1		
57	S-268	Screw, Cap .....	4		
58	157197	Bearing, Roller .....	1		
59	129509	Ring, Seal .....	2		
60	WF-312	Washer, Flat .....	1		
61	129508	Screw, Cap .....	1		
62	OR4-9	"O" Ring .....	4		
63	129513	Gasket .....	1		
156 949	156947	Cover Assembly (Includes Items 58, 64 and 65).....	1		
64	NSS	Cover, Gear, 1st gear .....	1		
65	139509	Plug, Pipe .....	2		
66	WL-16	Washer, Lock .....	1		
67	S-2618	Screw, Cap .....	1		
68	WL-16	Washer, Lock .....	7		
69	S-2610	Screw, Cap .....	7		
70	OR4-27	"O" Ring .....	1		
71	157209	Shaft, Idler Gear .....	1		
72	129510	Housing, Clutch .....	1		
73	125523	Plate, Lock .....	1		
74	S-266-D	Screw, Cap .....	2		
75	LW-166	Wire .....	1		
113 081	156932	Elbow .....	1		
77	120261	Bearing, Roller .....	1		
78	WL-16	Washer, Lock .....	6		
79	116623	Washer, Retaining .....	1		
80	S-266-D	Screw, Cap .....	2		
81	LW-164	Wire .....	1		
82	S-2616	Screw, Cap .....	6		
83	129548	Gasket .....	1		
84	157181	Clutch Assembly, 1st gear (Inc. All Items shown on Page 24).....	1		
85	129549	Cap .....	1		
86	156971	Gasket, Clutch .....	1		
	156939	Hub Assembly (Inc. Items 87 and 88) .....	1		
87	NSS	Hub .....	1		
88	NSS	Bearing, Sleeve .....	1		
89	S-268	Screw, Cap .....	5		
90	125003	Washer .....	5		
91	123298	Nut .....	1		
92	137974	Washer, Flat .....	1		
93	130534	Seal .....	1		
94	S-2814	Screw, Cap .....	5		
95	126563	Washer .....	5		
96	137663	Adapter, Brake .....	1		
97	129560	Gasket, Adapter .....	1		
98	118060	Ring, Retaining .....	1		
99	120260	Bearing, Ball .....	1		
100	116716	Plug .....	1		
101	114851	Washer, Flat .....	1		
102	129559	Spacer .....	1		
	160000	Housing and Tube Assembly (Inc. next 12 Items) .....	1		
103	NSS	Housing, Main .....	1		
	125511	Bent Tube, Steel, Forward Clutch .....	1		
	125512	Bent Tube, Steel, Reverse Clutch .....	1		
	125513	Bent Tube, Steel, First Gear Clutch .....	1		
	125514	Bent Tube, Steel, First Gear Lube .....	1		
	125515	Bent Tube, Steel, Forward and Reverse Lube .....	1		
	125516	Bent Tube, Steel, Second and Third Gear Lube .....	1		
	125517	Bent Tube, Steel, Second Gear Clutch .....	1		
	125518	Bent Tube, Steel, Third Gear Clutch .....	1		
	OR4-7	"O" Ring .....	16		
	125509	Bushing, Sleeve .....	16		
	146898	Washer .....	16		
104	121508	Plug, Magnetic .....	1		

(Continued on following page)

TRANSMISSION - Continued

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
105	114851	Washer, Flat .....	1		
106	116594	Pin .....	2		
	NSS	Axle Throwout Assembly (Inc. Items 107 thru 109, 111, 112, and 115 thru 119).....	1		
107	LW-187	Wire .....	1		
108	116148	Screw, Lock .....	1		
109	120268	Fork, Rail .....	1		
110	120275	Gasket .....	1		
111	120267	Rail, Shifting .....	1		
112	116596	Seal .....	1		
113	WL-16	Washer, Lock .....	4		
114	S-267	Screw, Cap .....	4		
115	159210	Housing, Shifter .....	1		
116	116593	Setscrew .....	1		
117	116640	Spring .....	1		
118	115451	Ball, Bearing .....	1		
119	116595	Plug, Expansion .....	1		
120	112080	Nipple, Half .....	1		
121	159208H2	Cap and Dipstick.....	1		
122	OR4-11	"O" Ring .....	3		
123	NSS	Plate, Identification .....	1		
124		Screw, Drive .....	2		
125	159045	Gear, 32 Teeth.....	1		
126	130537	Ring, Retaining .....	1		
	NSS	Shaft Assembly (Incl. Items 127, 129, 130, 132 and 133) .	1		
127	156960	Shaft, Output .....	1		
128	129547	Gear, Sput, 53 Teeth .....	1		
129	125566	Ring, Retaining .....	1		
130	129557	Ring, Retaining .....	1		
131	156950	Clutch Assembly, 2nd and 3rd Gear (Inc. All Items Shown on Page 25 ).....	1		
132	129556	Bearing, Ball .....	1		
133	129557	Ring, Retaining .....	1		
134	156968	Clutch, Sliding Sleeve.....	1		
135	WL-16	Washer, Lock .....	19		
136	S-2610	Screw, Cap .....	19		
137	156963	Bearing, Roller .....	1		
138	129509	Ring, Seal .....	3		
139	WL-16	Washer, Lock .....	2		
140	143049	Screw, Cap .....	2		
	139511	Cap Assembly (Inc. Items 141, 145 and 151).....	1		
141	129553	Adapter, Straight, Pipe to Tube .....	1		
142	143051	Bent Tube, Steel .....	1		
143	120248	Gasket .....	1		
144	120243	Gasket .....	1		
	129550	Cap and Plug Assembly (Inc. Next 2 Items).....	1		
	139509	Plug, Pipe .....	2		
145	NSS	Cap .....	1		
146	WL-16	Washer, Lock .....	6		
147	S-268	Screw, Cap .....	6		
148	NSS	Shaft Assembly, Rear output (See Page 27) .....	1		
149	WL-16	Washer, Lock .....	6		
150	S-268	Screw, Cap .....	6		
151	129554	Elbow, Pipe to Tube .....	2		
152	137660	Pin .....	1		



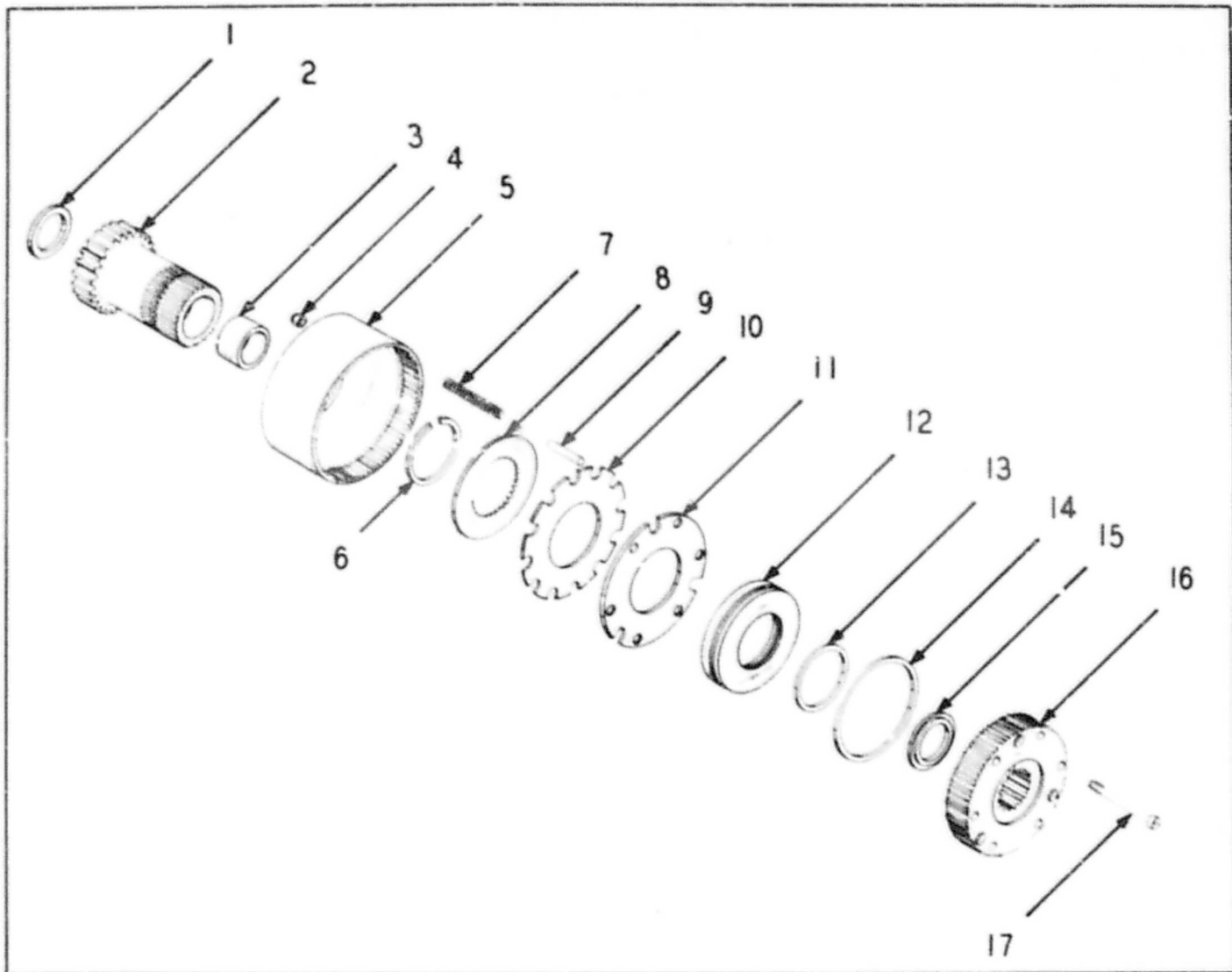


Fig. 16  
CLUTCH ASSEMBLY - 1st GEAR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	157181 <del>13</del>	Clutch Assembly - 1st Gear .....	1		
	150432	Washer .....	1		
	157182 <del>13</del>	Gear Assembly, Includes Items 2 & 3 .....	1		
2		Gear, Spur .....	1		
3		Bearing Sleeve .....	2		
4	125553	Nut.....	3		
5	156944	Plate, Backing .....	1		
6	125573	Ring, Retaining .....	1		
7	125548	Spring.....	6		
8	125504	Plate, Clutch .....	8		
9	157186	Pin .....	6		
10	125505	Plate, Clutch .....	7		
11	125506	Plate, Spring Retaining .....	1		
12	129502	Piston .....	1		
13	133601	Ring, Seal .....	1		
14	133600	Ring, Seal .....	1		
15	156946	Washer .....	1		
16	157185	Cylinder .....	1		
17	156945	Screw, Cap .....	3		
	178826	Spacer .....	1		
	176917	Dowel .....	1		

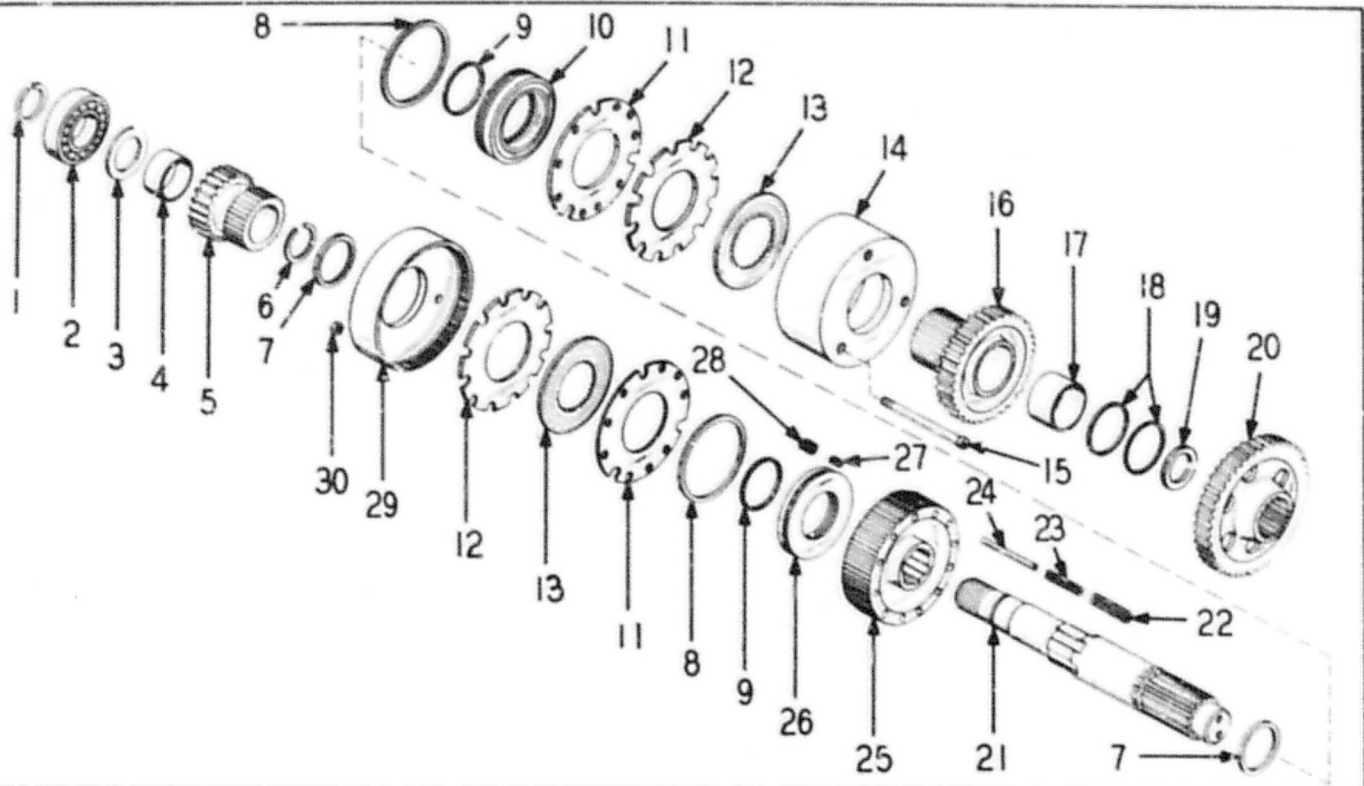


Fig. 17  
CLUTCH ASSEMBLY - 2nd & 3rd GEAR

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
1	156950	Clutch Assembly, 2nd & 3rd Gear .....	1		
2	116719	Ring, Retaining .....	1		
3	116598	Bearing, Ball .....	1		
4	150431	Washer .....	1		
5	129523	Gear Assembly, Includes Items 4 & 5 .....	1		
6	156970	Bearing, Sleeve .....	2		
7	150425	Gear, Spur .....	1		
8	133600	Ring, Retaining .....	1		
9	133601	Washer .....	2		
10	129535	Ring, Seal .....	2		
11	129529	Ring, Seal .....	2		
12	125505	Piston .....	1		
13	125504	Plate, Spring Retaining .....	2		
14	156955	Plate, Clutch .....	10		
15	125552	Plate, Clutch .....	12		
16	159661	Plate, Backing .....	1		
17	125552	Screw, Cap .....	3		
18	159661	Gear, Spur, 39T .....	1		
19	129543	Bearing, Sleeve .....	2		
20	150434	Washer .....	2		
21	134466	Ring, Retaining .....	1		
22	159044	Gear, Spur .....	1		
23	157187	Shaft Assembly .....	1		
24	159670	Spring .....	9		
25	159669	Spring .....	9		
26	156951	Pin .....	9		
27	156938	Cylinder .....	1		
28	129528	Piston .....	1		
29	156953	Spring .....	9		
30	156952	Spring .....	9		
	156954	Plate, Backing .....	1		
	125553	Nut .....	3		

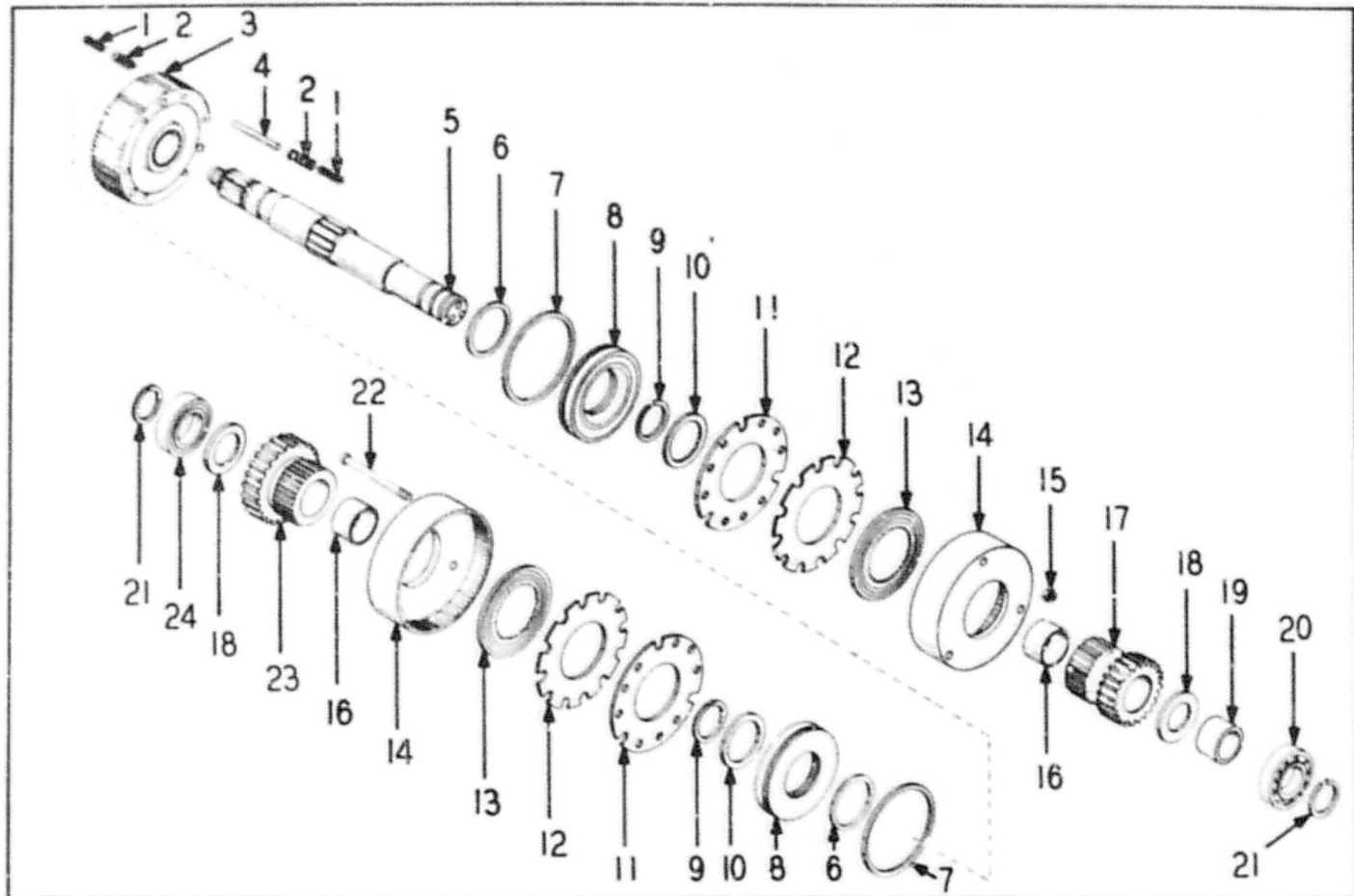


Fig. 18  
CLUTCH ASSEMBLY - FORWARD & REVERSE

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	157177	Clutch Assembly - Forward & Reverse .....	1		
1	129532	Spring .....	12		
2	129531	Spring .....	12		
3	157180	Cylinder .....	1		
4	156933	Pin .....	6		
5	157178	Shaft Assembly .....	1		
6	133601	Ring, Seal .....	2		
7	133600	Ring, Seal .....	2		
8	129528#2	Piston .....	2		
9	156970	Ring, Retaining .....	2		
10	150435	Washer .....	2		
11	129529	Plate, Spring Retaining .....	2		
12	125505	Plate, Clutch .....	8		
13	125504	Plate, Clutch .....	10		
14	156935	Plate, Backing .....	2		
15	125553	Nut .....	3		
16	159655#2	Gear Assembly, Includes Item 17 & (2) of Item 16 .....	1		
17		Bearing, Sleeve .....	4		
18	150433	Gear, Spur .....	1		
19	150430	Washer .....	2		
20	104706	Spacer, Sleeve .....	1		
21	114362	Bearing, Ball .....	1		
22	125552	Ring, Retaining .....	3		
23	125536#2	Screw, Cap .....	3		
24	116599	Gear Assembly, Includes Item 23 & (2) of Item 16 .....	1		
		Gear, Spur .....	1		
		Bearing, Ball .....	1		

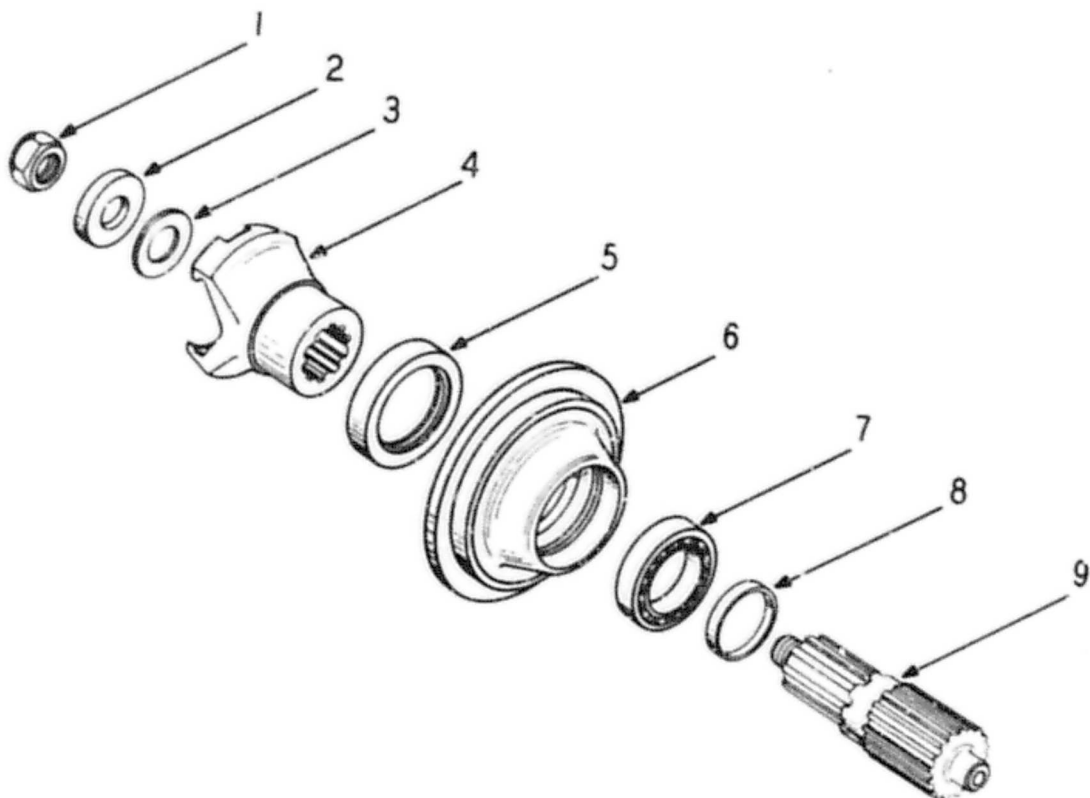


Fig. 19  
SHAFT ASSEMBLY - REAR OUTPUT

ITEM NO.	PART NO.	PART NAME	Qty.	First Used On Serial Numbers	
				FROM	THRU
	157198	Rear Output Shaft Assembly (Includes Items 1 thru 9)...	1		
1	123298	Nut .....	1		
2	WF-116	Washer .....	1		
3	130044	Washer .....	1		
4	151802	Yoke .....	1		
5	118086	Oil Seal .....	1		
6	157201	Cap .....	1		
7	147173	Bearing .....	1		
8	156969	Spacer .....	1		
9	15-964	Shaft, Output .....	1		