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PART MANUAL

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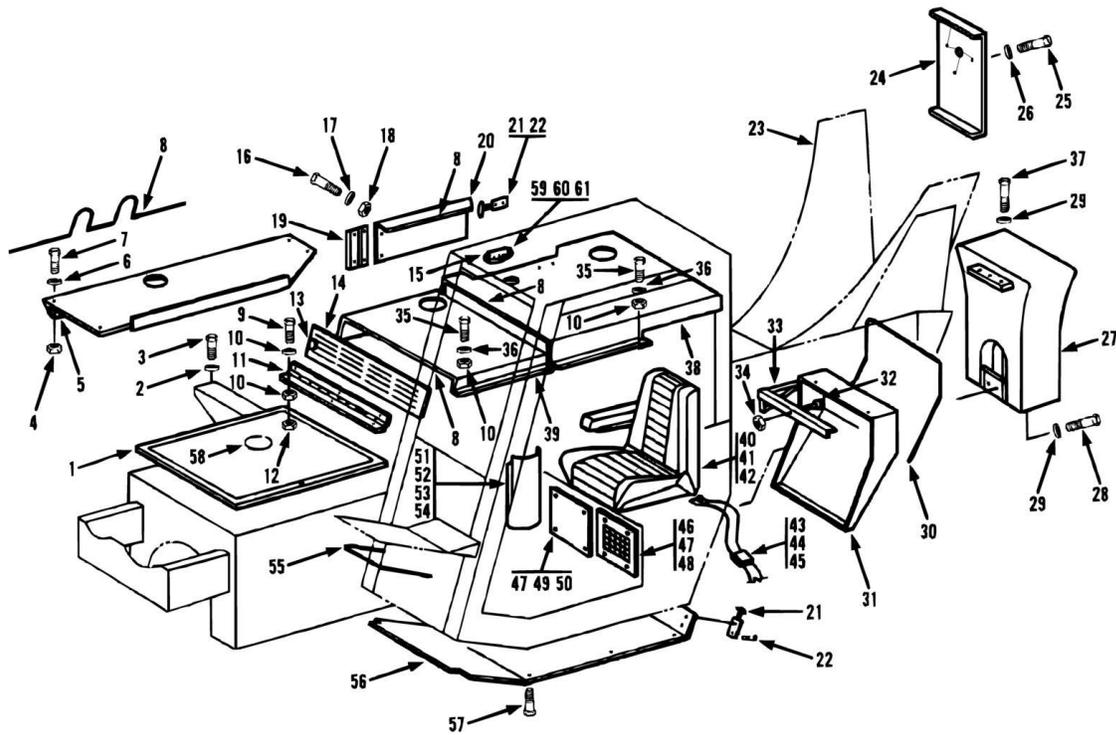
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SECTION 1 - CHASSIS AND ATTACHING PARTS

SECTION 1 - CHASSIS AND ATTACHING PARTS

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-1. FRAME SHROUDING AND TRIM (SN 8655105G to Present)



SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-1. FRAME SHROUDING AND TRIM (SN 8655105G to Present)

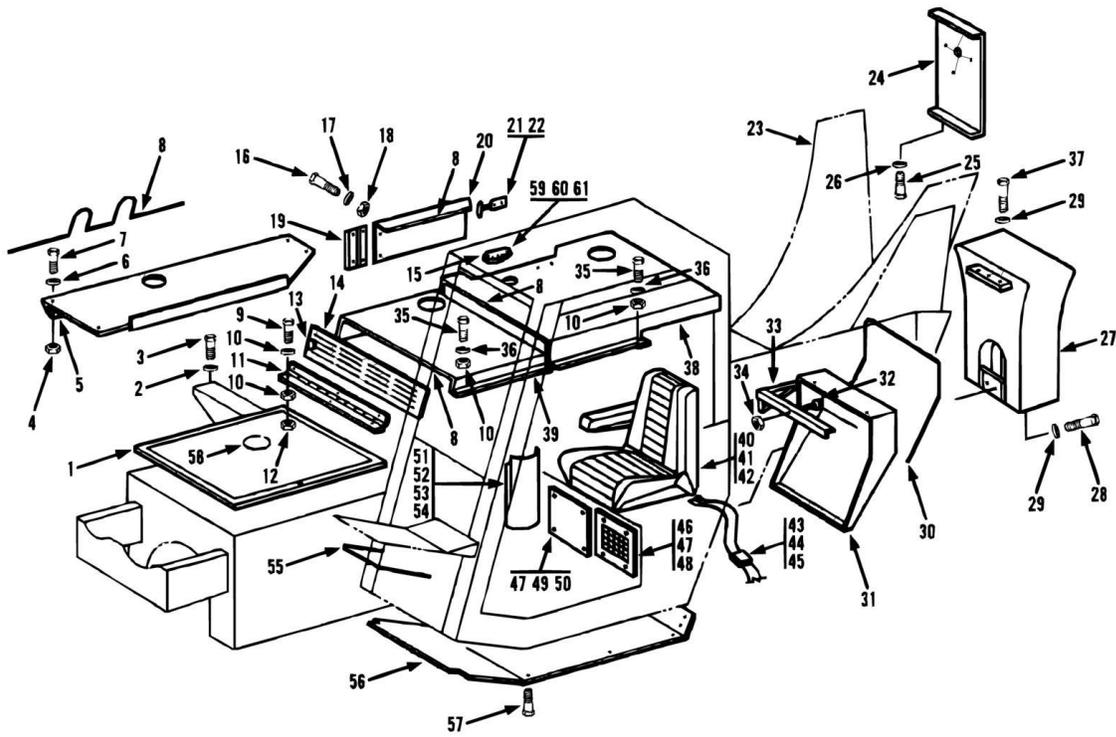
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91035096	1	DECK ASSY	
2	88551010	2	LOCKWASHER, 5/16	
3	88201021	2	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
4	88521308	4	HEX LOCKNUT, 1/2-13	
5	91031260	1	TANK COVER	
6	85401340	4	HARDENED WASHER	
7	88201066	4	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
8	90206196	AR	TRIM, 11FT	
9	88261017	6	SOCKET BUTTON HD CAPSCREW, 1/4-20X7/8	
10	88561107	16	FLAT WASHER, 1/4	
11	91031075	1	HINGE	
12	88521304	6	HEX LOCKNUT, 1/4-20	
13	83683311	2	PAWL LATCH	
14	91031074	1	FRONT SERVICE DOOR	
15	91033320	1	LEVEL GAUGE	
16	88201003	4	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
17	88551009	4	LOCKWASHER, 1/4	
18	86921163	2	FLAT WASHER	
19	91033077	1	HINGE	
20	91031067	1	SIDE SERVICE DOOR	
21	90207458	4	DRAW LATCH	
22	90028951	16	POP RIVET	
23	91046032	1	FRAME WELDMENT	
24	91041080	1	BOOM COVER	
25	88201031	4	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
26	88561109	4	FLAT WASHER, 3/8	
27	91040002	1	COUNTERWEIGHT	
28	88201115	3	HEX HD CAPSCREW, 3/4-10X3, GR5	
29	88561009	3	FLAT WASHER, 3/4	
30	90206194	AR	TRIM, 8FT	
31	91031364	1	REAR CAB COVER	
32	77143004	3	LOCKSCREW	
33	90602885	1	BRACKET	
34	77143006	3	LOCK NUT	
35	88201003	8	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
36	88551009	8	LOCKWASHER, 1/4	
37	88201118	2	HEX HD CAPSCREW, 3/4-10X3-3/4, GR5	
38	91045027	1	REAR HOOD ASSY	
39	91036016	1	FRONT HOOD ASSY	
40	91043063	1	SEAT	
40	91043237	1	SEAT W/BELTS (optional)	
41	86671164	2	SPACER	
42	77143006	4	LOCK NUT	
43	91033029	1	SEAT BELT	
44	88201050	2	HEX HD CAPSCREW, 7/16-14X1, GR5	
45	88501007	2	HEX NUT, 7/16-14	
46	90205746	1	HEATER COVER	
47	77143003	8	LOCK SCREW	
48	77143006	4	LOCK NUT	
49	77103044	4	CLIP NUT	

SECTION 1 - CHASSIS AND ATTACHING PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	90205730	1	VALVE COVER	
51	91046056	1	JOYSTICK COVER	
52	88201018	2	HEX HD CAPSCREW, 5/16-18X3/4, GR5	
53	88551010	2	LOCKWASHER, 5/16	
54	88501005	2	HEX NUT, 5/16-18	
55	90206196	AR	TRIM, 4FT	
56	91031363	1	CAB BOTTOM COVER	
57	77143003	7	LOCK SCREW	
58	90206200	1	TRIM, 15.7IN LONG	
59	88204912	1	HEX HD CAPSCREW, 1/4-20X1, GR5	
60	88561107	1	FLAT WASHER, 1/4	
61	88521204	1	HEX LOCKNUT, 1/4-20	

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-2. FRAME SHROUDING AND TRIM (SN 0155173 to Present)



SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-2. FRAME SHROUDING AND TRIM (SN 0155173 to Present)

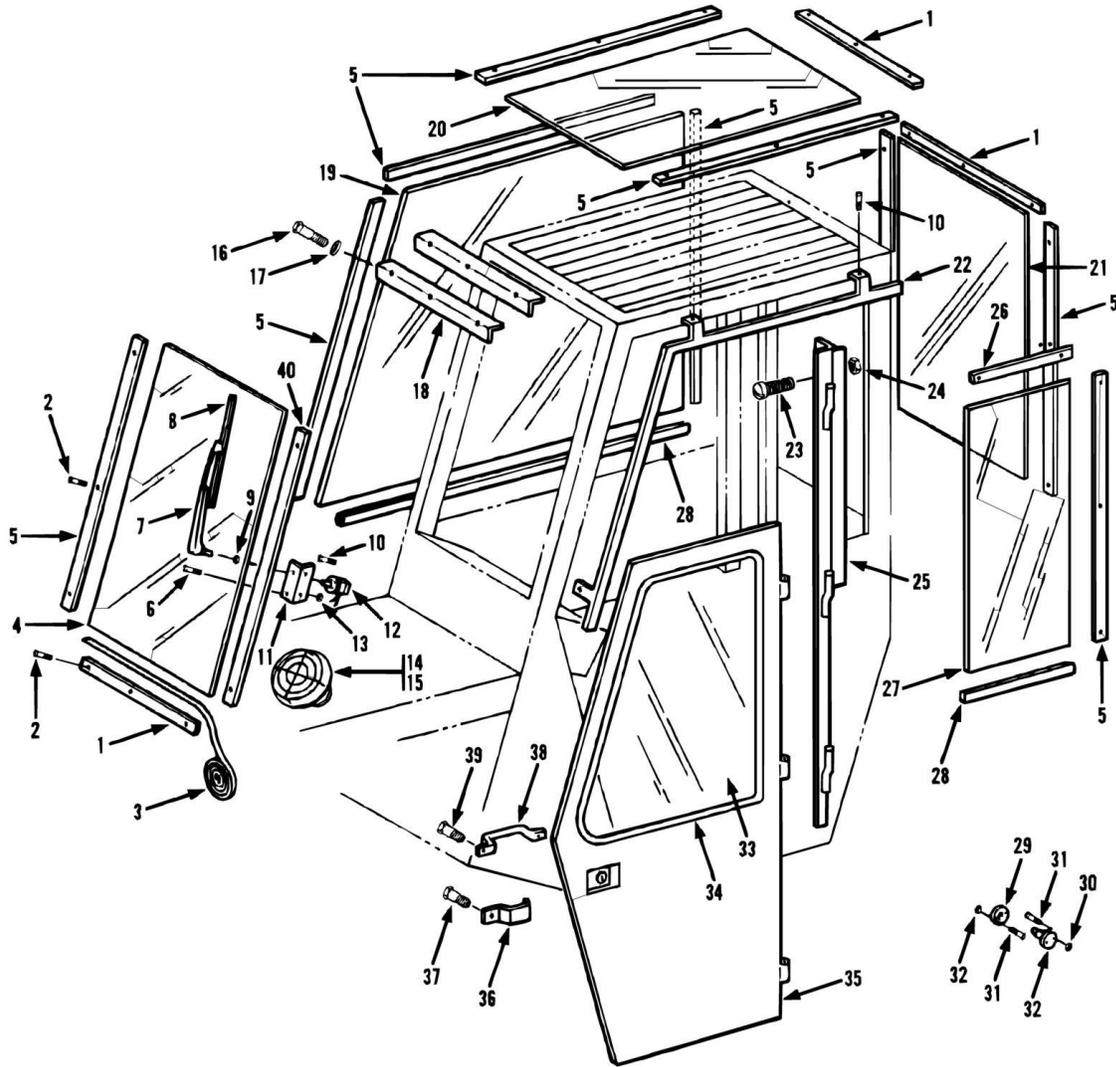
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91035096	1	DECK ASSY	
2	88551010	2	LOCKWASHER, 5/16	
3	88201021	2	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
4	88521308	4	HEX LOCKNUT, 1/2-13	
5	91031260	1	TANK COVER	
6	85401340	4	HARDENED WASHER	
7	88201066	4	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
8	90206196	AR	TRIM, 11FT	
9	88261017	6	SOCKET BUTTON HD CAPSCREW, 1/4-20X7/8	
10	88561107	16	FLAT WASHER, 1/4	
11	91031075	1	HINGE	
12	88521304	6	HEX LOCKNUT, 1/4-20	
13	83683311	2	PAWL LATCH	
14	91031074	1	FRONT SERVICE DOOR	
15	91033320	1	LEVEL GAUGE	
16	88201003	4	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
17	88551009	4	LOCKWASHER, 1/4	
18	86921163	2	FLAT WASHER	
19	91033077	1	HINGE	
20	91031067	1	SIDE SERVICE DOOR	
21	90207458	2	DRAW LATCH	
22	90028951	8	POP RIVET	
23	91046032	1	FRAME WELDMENT	
24	91041080	1	BOOM COVER	
25	88201031	2	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
26	88561109	2	FLAT WASHER, 3/8	
27	91040002	1	COUNTERWEIGHT	
28	88201115	3	HEX HD CAPSCREW, 3/4-10X3, GR5	
29	88561009	3	FLAT WASHER, 3/4	
30	90206194	AR	TRIM, 8FT	
31	91036079	1	REAR CAB COVER	
32	77143004	3	LOCK SCREW	
33	90602885	1	BRACKET	
34	77143006	3	LOCK NUT	
35	88201003	8	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
36	88551009	8	LOCKWASHER, 1/4	
37	88201118	2	HEX HD CAPSCREW, 3/4-10X3-3/4, GR5	
38	91045027	1	REAR HOOD ASSY	
39	91036016	1	FRONT HOOD ASSY	
40	91043063	1	SEAT	
40	91043237	1	SEAT W/BELTS (optional)	
41	86671164	2	SPACER	
42	77143006	4	LOCK NUT	
43	91033029	1	SEAT BELT	
44	88201050	2	HEX HD CAPSCREW, 7/16-14X1, GR5	
45	88501007	2	HEX NUT, 7/16-14	
46	90205746	1	HEATER COVER	
47	77143003	8	LOCK SCREW	
48	77143006	4	LOCK NUT	
49	77103044	4	CLIP NUT	

SECTION 1 - CHASSIS AND ATTACHING PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	90205730	1	VALVE COVER	
51	91046056	1	JOYSTICK COVER	
52	88201018	2	HEX HD CAPSCREW, 5/16-18X3/4, GR5	
53	88551010	2	LOCKWASHER, 5/16	
54	88501005	2	HEX NUT, 5/16-18	
55	90206196	AR	TRIM, 4FT	
56	91031363	1	CAB BOTTOM COVER	
57	77143003	7	LOCK SCREW	
58	90206200	1	TRIM, 15.7IN LONG	
59	88204912	1	HEX HD CAPSCREW, 1/4-20X1, GR5	
60	88561107	1	FLAT WASHER, 1/4	
61	88521204	1	HEX LOCKNUT, 1/4-20	

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-3. CAB ENCLOSURE, WIPER AND DEFROSTER (SN 8655105G to Present)



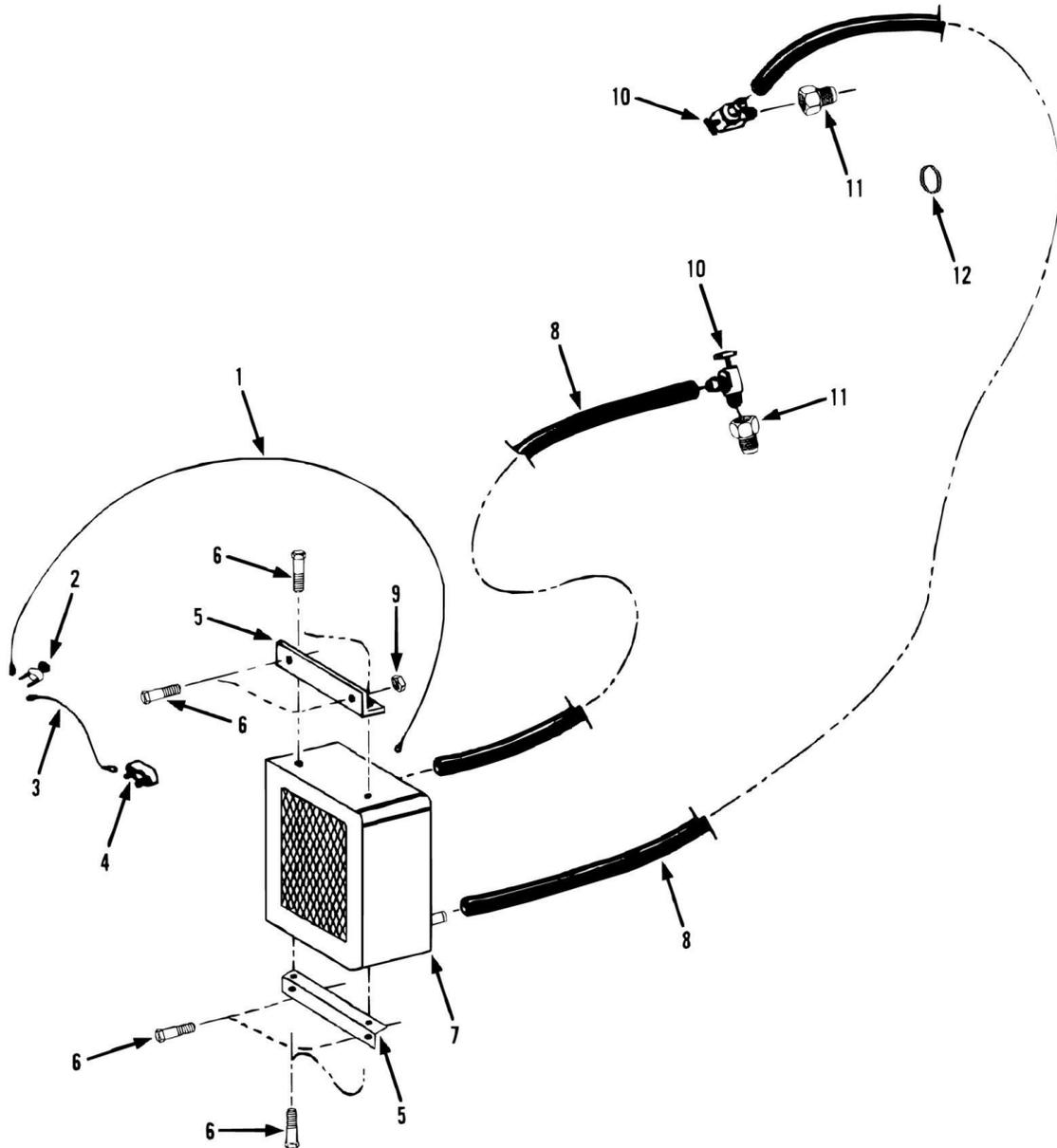
SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-3. CAB ENCLOSURE, WIPER AND DEFROSTER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91031361	2	WINDOW HOLD DOWN BAR	
2	90027319	AR	SELF-TAPPING SCREW (window hold down bar)	
3	90200755	AR	BULK WEATHER STRIPPING (50 feet)	
4	90403036	1	FRONT WINDOW	
5	91031362	4	WINDOW HOLD DOWN BAR	
6	88201003	1	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
7	91033464	1	WINDSHIELD WIPER ARM	
8	91033465	1	WIPER BLADE	
9	90027214	1	WIPER MOTOR SHAFT GROMMET	
10	90027319	5	SELF-TAPPING SCREW	
11	90206025	1	WIPER MOTOR MOUNTING ANGLE	
12	90206023	1	WIPER MOTOR	
13	88501004	1	HEX NUT, 1/4-20	
14	90200680	1	DEFROSTER FAN	
15	88321025	4	SELF-TAPPING SCREW, #8-32X3/4	
16	88201031	2	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
17	88551011	2	LOCKWASHER, 3/8	
18	90206613	1	ANGLE	
19	90205846	1	RIGHT SIDE WINDOW	
20	90403034	1	TOP WINDOW	
21	90403035	1	REAR WINDOW	
22	90403032	1	DOOR TROUGH	
23	88301309	4	FLAT HD MACHINE SCREW, 1/4-20X3/4	
24	88501004	4	HEX NUT, 1/4-20	
25	90403082	1	DOOR POST	
26	91031360	1	LEFT WINDOW TOP HOLD DOWN BAR	
27	90403033	1	LEFT SIDE WINDOW	
28	90206100	AR	RUBBER GLAZING STRIP	
29	90205888	1	PLUNGER SOCKET	
30	90205886	1	DOOR HOLD PLUNGER	
31	88201309	4	HEX HD CAPSCREW, 3/8-16X2, GR5	
32	88501006	4	HEX NUT, 3/8-16	
33	90410229	1	DOOR WINDOW	
34	83661145	AR	RUBBER GLAZING STRIP (8ft long)	
35	90801238	1	DOOR ASSY	
36	90203627	1	HANDLE	
37	88201031	2	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
38	90203840	1	DOOR PULL HANDLE	
39	88321039	2	SELF-TAPPING SCREW, #10-32X1/2	
40	91031362	1	WINDOW HOLD DOWN BAR	

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-4. CAB HEATER AND HOSES (SN 8655105G to Present)



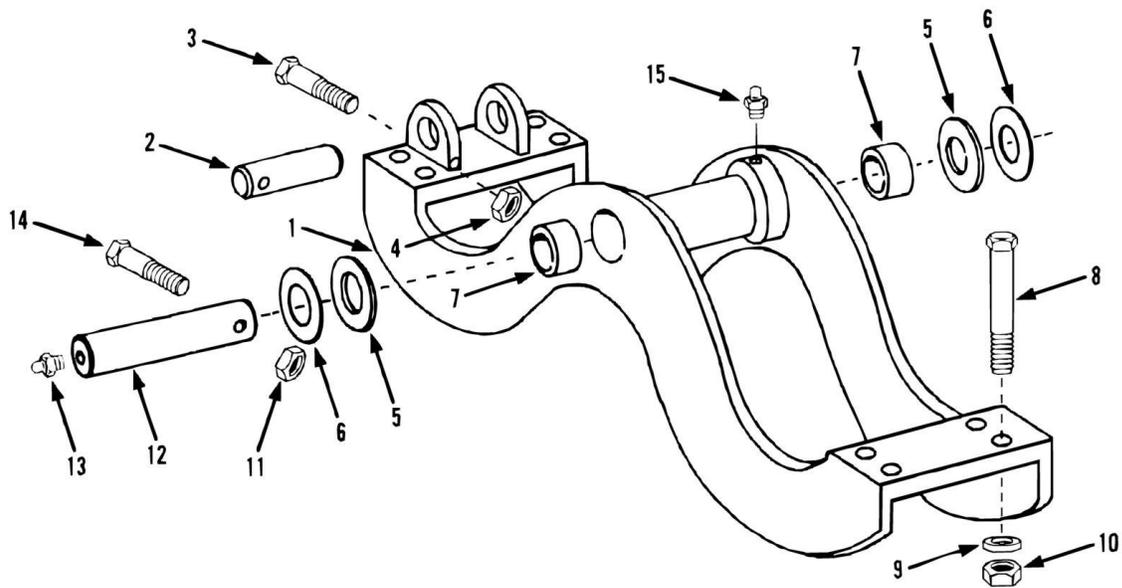
SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-4. CAB HEATER AND HOSES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90206134	1	JUMPER WIRE	
2	91034098	1	HEATER SWITCH (furnished with heater)	
3	90206133	1	JUMPER WIRE	
4	90206131	1	CIRCUIT BREAKER	
5	90205731	2	HEATER MOUNTING BRACKET	
6	88201005	8	HEX HD CAPSCREW, 1/4-20X1, GR5	
7	90200679	1	HEATER (includes item 2)	
8		Ref	HOSE, 5/8 I.D.	
9	88501004	4	HEX NUT, 1/4-20	
10	24641328	2	SHUT-OFF VALVE	
11	88711383	2	REDUCING BUSHING, 1/2X3/8	
12	86683193	4	HOSE CLAMP	

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-5. FRONT AXLE CRADLE AND ATTACHING PARTS (SN 8655105G to Present)



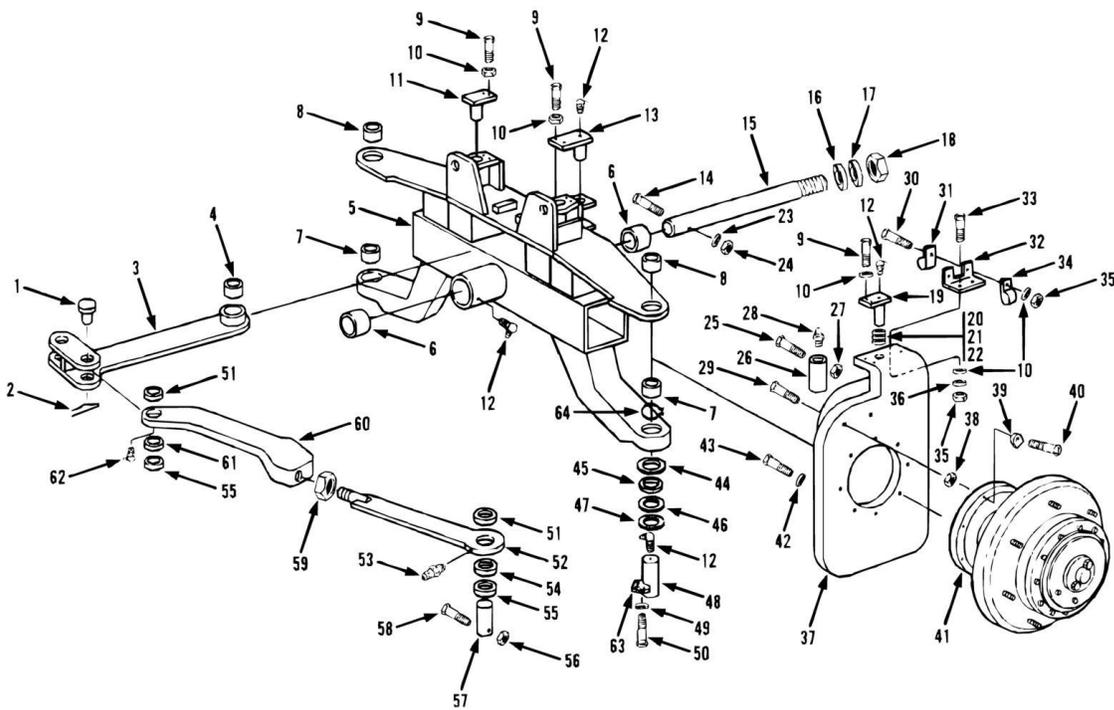
SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-5. FRONT AXLE CRADLE AND ATTACHING PARTS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90801303	1	FRONT AXLE CRADLE	
2	90206847	1	SWAY CYLINDER ROD PIN	
3	88201106	1	HEX HD CAPSCREW, 5/8-11X4-1/2, GR5	
4	88551010	1	HEX NUT, 5/8-11	
5	90205891	2	SPACER	
6	91031014	AR	SHIM	
7	91031371	2	BUSHING	
8	90041002	8	HEX HD CAPSCREW (lubricate and torque to 545-595 ft. lbs.)	
9	90027475	8	WASHER	
10	88521216	8	HEX LOCKNUT, 1-8	
11	88521016	1	HEX LOCKNUT, 1-8 (stover)	
12	91031176	1	FRAME PIN	
13	88671001	2	LUBE FITTING, STRAIGHT, 1/8	
14	83201031	1	HEX HD CAPSCREW	
15	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	

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FIGURE 1-6. REAR STEERING AXLE AND ATTACHING PARTS (SN 8755124G to Present)



SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-6. REAR STEERING AXLE AND ATTACHING PARTS (SN 8755124G to Present)

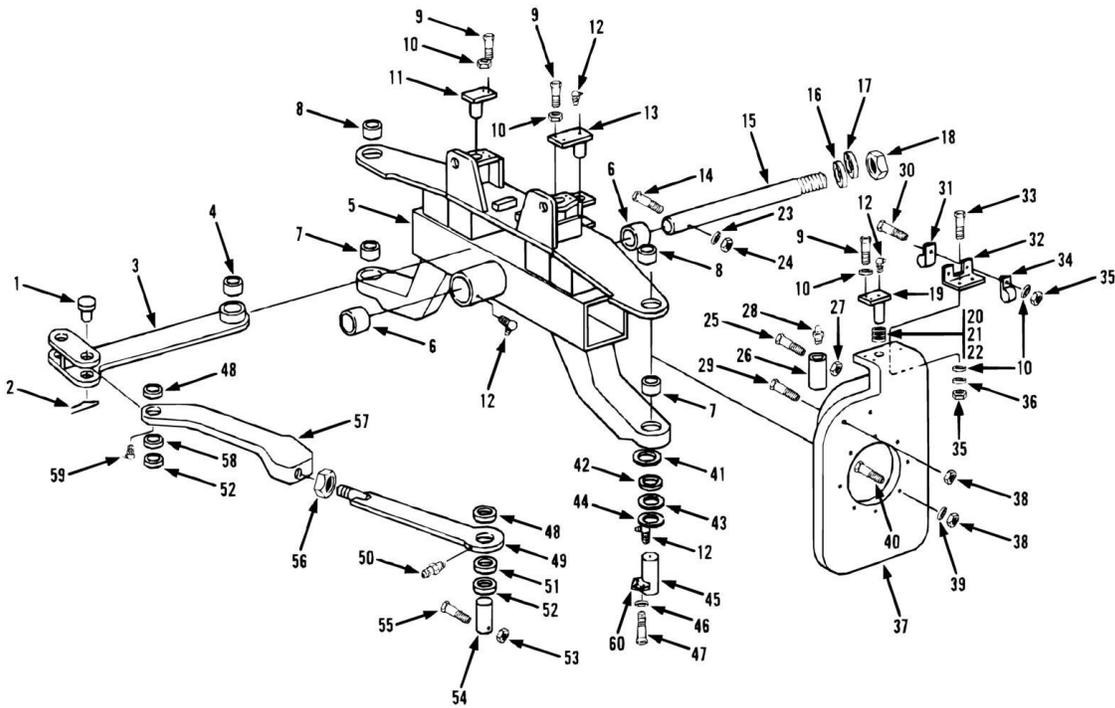
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91065036	1	REAR AXLE REBUILD KIT (includes items 4, 7, 8, 11, 13, 19, 22, 26, 44 thru 48, 51, 54, 55, 57, 61, 63)	
	91035122	1	KING PIN BUSHING KIT (includes items 7, 28, 26, 44 thru 48, 63)	
1	91043152	2	CLEVIS PIN	
2	88631337	2	COTTER PIN, 3/16x1-1/2	
3	90602826	1	IDLER ARM ASSY (includes item 4)	
4	90205340	1	BUSHING	
5	91046029	1	AXLE FRAME ASSY (includes items 6, 7, 8)	
6	91031369	2	BUSHING	
7	91031391	2	FRAME LOWER BUSHING	
8	91031374	2	FRAME UPPER BUSHING	
9	83201024	10	HEX HD CAPSCREW, SELF-LOCKING (Nylok), 3/8-16X1, GR8	
10	90027470	20	HARDENED WASHER	
11	90207419	2	STEERING CYLINDER BASE PIN	
12	88671022	6	LUBE FITTING, 90, 1/8	
13	90206895	1	IDLER ARM MOUNT PIN	
14	86791002	1	HEX HD CAPSCREW	
15	91031440	1	REAR AXLE PIN	
16	90206846	AR	SHIM (1/8IN thick)	
17	91031009	AR	SHIM (1/4IN thick)	
18	90022234	1	HEX LOCKNUT	
19	91036043	2	PIN WELDMENT	
20	90203039	AR	SHIM (1/16in thick)	
21	90203040	AR	SHIM (1/8in thick)	
22	91061112	AR	SHIM (.132 thick)	
22	91061111	AR	SHIM (.0359 thick)	
23	88561119	1	FLAT WASHER, 1-1/4	
24	85101098	1	HEX NUT	
25	88201078	2	HEX HD CAPSCREW, 1/2-13X4-1/2, GR5	
26	91031340	2	UPPER STEERING KNUCKLE PIN	
27	88521208	2	HEX LOCKNUT, 1/2-13	
28	88671001	4	LUBE FITTING, STRAIGHT, 1/8	
29	88212260	2	SOCKET HD CAPSCREW, 5/8-11X2- 1/2, GR8	
30	88201036	4	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
31	85941017	2	HOSE CLAMP	
32	91031239	2	BRACKET	
33	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
34	90202343	4	TUBE CLAMP	
35	88501006	8	HEX NUT, 3/8-16	
36	88551011	4	LOCK WASHER, 3/8	
37	91040003	1	STEERING KNUCKLE, L.H.	
37	91040004	1	STEERING KNUCKLE, R.H.	
38	88501110	2	HEAVY HEX JAM NUT, 5/8-11	
39	91041403	2	MODIFIED WASHER	
40	91043222	2	CAPSCREW	
41		Ref	WHEEL DRIVE ASSY (See DRIVE TRAIN SECTION for Breakdown)	
42	86923010	14	HARDENED WASHER	
43	83201006	14	HEX HD CAPSCREW, 3/4-10X2, GR8	
44	90207484	AR	FELT (1/2IN thick)	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
44	90207485	AR	FELT (1/4IN thick)	
45	90206542	2	THRUST BEARING	
46	90200253	AR	THRUST WASHER	
47	90203039	AR	SHIM (1/16IN thick)	
47	90203040	AR	SHIM (1/8IN thick)	
48	91031344	2	LOWER STEERING KNUCKLE PIN	
49	85401340	6	HARDENED WASHER	
50	83201129	6	HEX HD CAPSCREW, SELF-LOCKING (Nylok), 1/2-13X1-1/4, GR8	
51	90205653	AR	SHIM	
52	91046024	2	TIE ROD BAR ASSY (includes items 53, 54)	
53	88671001	1	LUBE FITTING, STRAIGHT, 1/8	
54	91031397	1	BUSHING	
55	90203139	AR	SHIM	
56	88521306	2	HEX LOCKNUT, 3/8-16	
57	90206896	2	PIN	
58	88201041	2	HEX HD CAPSCREW, 3/8-16x2-1/2, GR5	
59	88501420	2	HEX JAM NUT, 1-1/4X12	
60	91045008	2	TIE ROD ARM ASSY (includes items 61, 62)	
61	91041509	1	BUSHING	
62	88671022	1	LUBE FITTING, 90, 1/8	
63	91031345	2	KEY PLATE	
64	88581144	2	RETAINING RING	

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FIGURE 1-7. REAR STEERING AXLE AND ATTACHING PARTS (SN 8655105G to Present)



SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-7. REAR STEERING AXLE AND ATTACHING PARTS (SN 8655105G to Present)

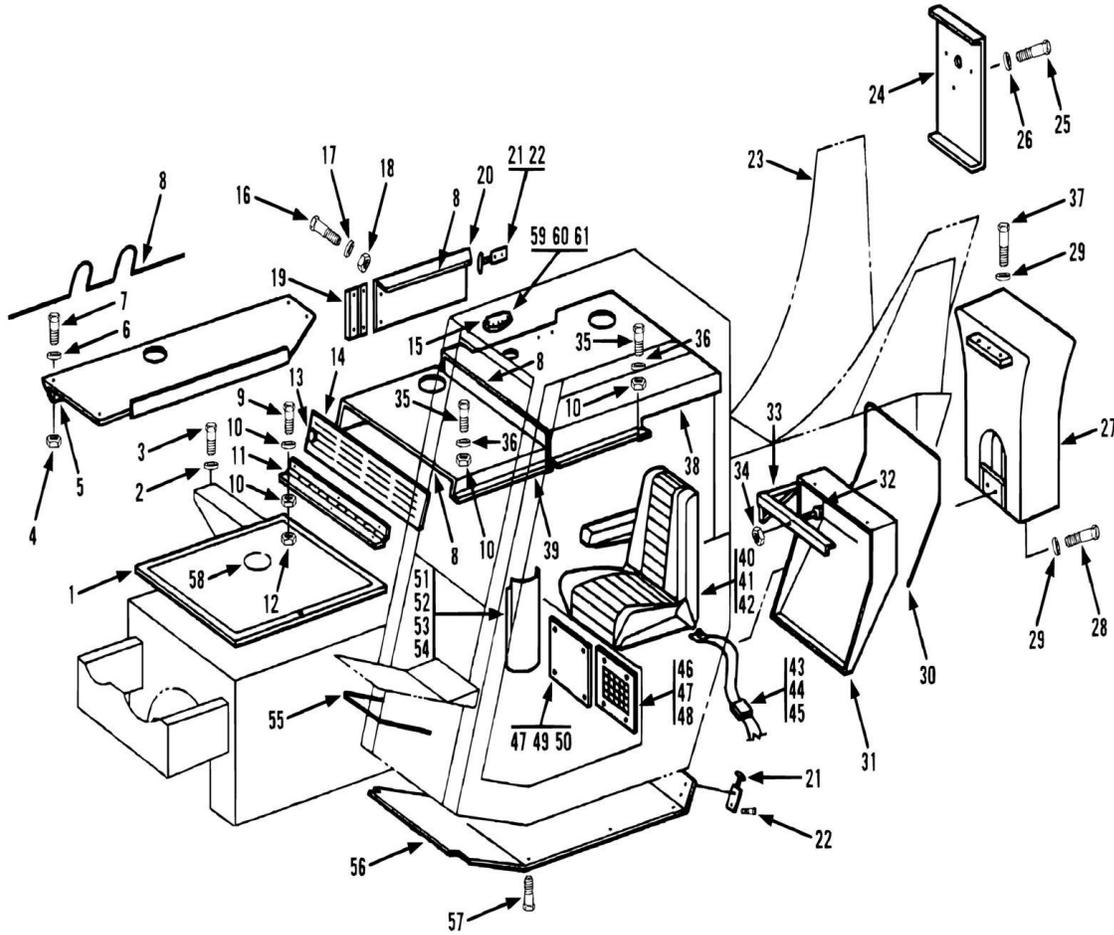
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043152	2	CLEVIS PIN	
2	88631337	2	COTTER PIN, 3/16x1-1/2	
3	90602826	1	IDLER ARM ASSY (includes item 4)	
4	90205340	1	BUSHING	
5	91046029	1	AXLE FRAME ASSY (includes items 6, 7, 8)	
6	91031092	2	BUSHING	
7	91031391	2	FRAME LOWER BUSHING	
8	91031374	2	FRAME UPPER BUSHING	
9	83201024	10	HEX HD CAPSCREW	
10	90027470	20	HARDENED WASHER	
11	90207419	2	STEERING CYLINDER BASE PIN	
12	88671022	6	LUBE FITTING, 90, 1/8	
13	90206895	1	IDLER ARM MOUNT PIN	
14	86791002	1	HEX HD CAPSCREW	
15	91031440	1	REAR AXLE PIN	
16	90206846	AR	SHIM (1/8IN thick)	
17	91031009	AR	SHIM (1/4IN thick)	
18	90022234	1	HEX LOCKNUT	
19	91036043	2	PIN WELDMENT	
20	90203039	AR	SHIM (1/16IN thick)	
21	90203040	4	SHIM (1/8IN thick)	
22	90201918	AR	THRUST BEARING	
23	88561119	1	FLAT WASHER, 1-1/4	
24	85101098	1	HEX NUT	
25	88201078	2	HEX HD CAPSCREW, 1/2-13X4-1/2, GR5	
26	90206897	2	UPPER STEERING KNUCKLE PIN	
27	88521208	2	HEX LOCKNUT, 1/2-13	
28	88671001	4	LUBE FITTING, STRAIGHT, 1/8	
29	88212260	2	SOCKET HD CAPSCREW, 5/8-11X2- 1/2, GR8	
30	88201036	4	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
31	85941017	2	HOSE CLAMP	
32	91031239	2	BRACKET	
33	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
34	90202343	4	TUBE CLAMP	
35	88501006	8	HEX NUT, 3/8-16	
36	88551011	4	LOCK WASHER, 3/8	
37	91030003	1	STEERING KNUCKLE, L.H.	
37	91030004	1	STEERING KNUCKLE, R.H.	
38	88501110	18	HEAVY HEX JAM NUT, 5/8-11	
39	90027472	16	HARDENED WASHER	
40	83201102	16	HEX HD CAPSCREW, 5/8-11X2-1/2, GR8	
41	90207484	AR	FELT (1/2IN thick)	
41	90207485	AR	FELT (1/4IN thick)	
42	90206542	2	THRUST BEARING	
43	90200253	AR	THRUST WASHER	
44	90203039	AR	SHIM (1/16IN thick)	
44	90203040	AR	SHIM (1/8IN thick)	
45	91031344	2	LOWER STEERING KNUCKLE PIN	
46	85401340	6	HARDENED WASHER	
47	83201129	6	HEX HD CAPSCREW, SELF-LOCKING (Nylok), 1/2-13X1-1/4, GR8	

SECTION 1 - CHASSIS AND ATTACHING PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
48	90205653	AR	SHIM	
49	91046024	2	TIE ROD BAR ASSY (includes items 50, 51)	
50	88671001	1	LUBE FITTING, STRAIGHT, 1/8	
51	91031397	1	BUSHING	
52	90203139	AR	SHIM	
53	88521306	2	HEX LOCKNUT, 3/8-16	
54	90206896	2	PIN	
55	88201041	2	HEX HD CAPSCREW, 3/8-16x2-1/2, GR5	
56	88501420	2	HEX JAM NUT, 1-1/4X12	
57	91045008	2	TIE ROD ARM ASSY (includes items 58, 59)	
58	91041509	1	BUSHING	
59	88671022	1	LUBE FITTING, 90, 1/8	
60	91031345	2	KEY PLATE	

SECTION 1 - CHASSIS AND ATTACHING PARTS

FIGURE 1-8. OUTRIGGER AND ATTACHING PARTS (SN 8655105G to Present)



SECTION 1 - CHASSIS AND ATTACHING PARTS

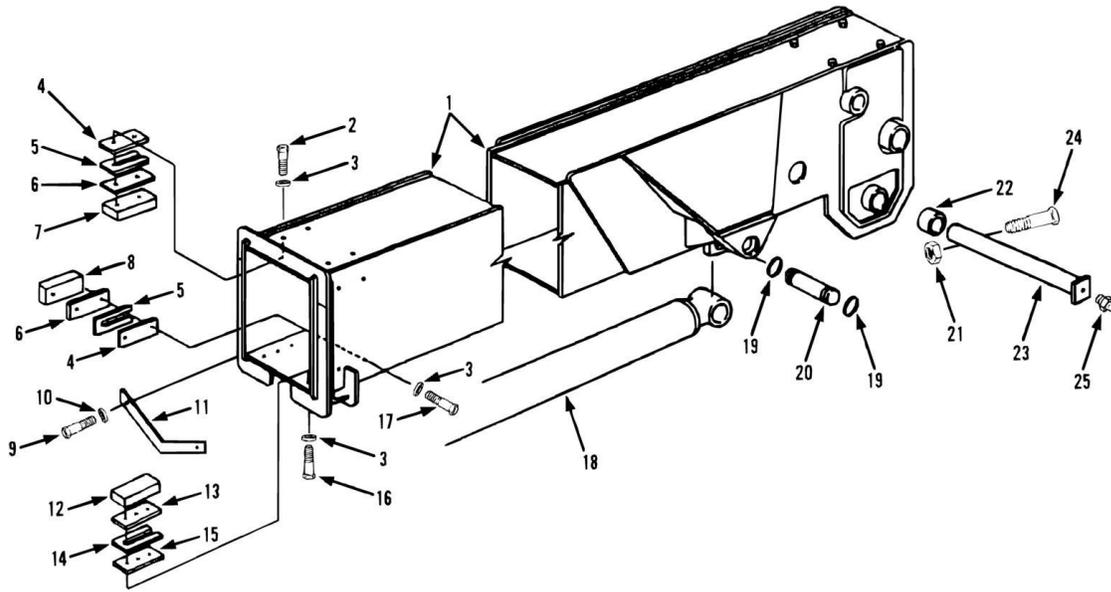
FIGURE 1-8. OUTRIGGER AND ATTACHING PARTS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	86431005	16	HEX HD CAPSCREW (lubricate and torque to 795-845 ft lbs)	
2	05101411	16	HEAT TREATED WASHER	
3	91036029	1	OUTRIGGER BRACKET, L.H.	
3	91036030	1	OUTRIGGER BRACKET, R.H.	
4	83201073	6	HEX HD CAPSCREW	
5	91031141	4	SHOE PIN	
6	88521206	6	HEX LOCKNUT, 3/8-16	
7	88671001	8	LUBE FITTING, STRAIGHT, 1/8	
8	91043258	2	DUAL P.O. CHECK VALVE	
9	88201040	6	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5	
10	88551011	6	LOCK WASHER, 3/8	
11		Ref	OUTRIGGER CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
12	91036032	2	OUTRIGGER SHOE	
13	91036041	2	ARM WELDMENT	
14	91031140	2	ARM PIN	

SECTION 2 - BOOMS

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FIGURE 2-1. 1ST BOOM SECTION (SN 0155173 to Present)



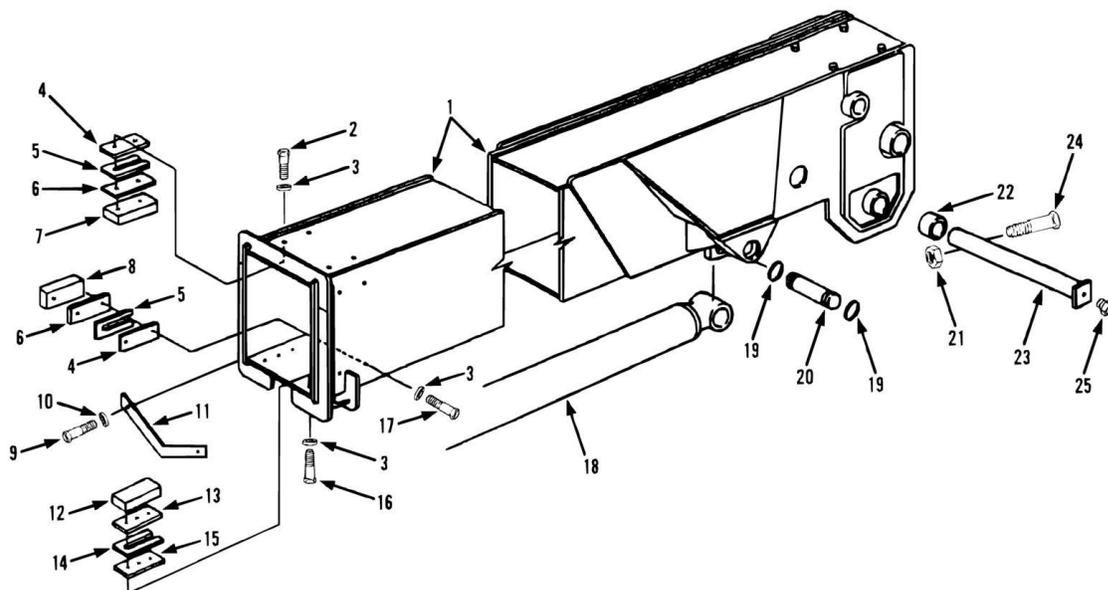
SECTION 2 - BOOMS

FIGURE 2-1. 1ST BOOM SECTION (SN 0155173 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046079	1	FIRST BOOM SECTION WELDMENT	
2	88201564	4	HEX HD CAPSCREW, 1/2-20X1, GR5 (lubricate and torque to 68-78 ft lbs)	
3	12381025	24	HARDENED WASHER	
4	91041277	8	SPACER	
5	91041276	10	SHIM	
6	91041278	6	SPACER	
7	91043180	2	BEARING PAD	
8	91043177	4	BEARING PAD	
9	88201069	2	HEX HD CAPSCREW, 1/2-13X2, GR5	
10	88551013	2	LOCK WASHER, 1/2	
11	91041009	1	CYLINDER SUPPORT PLATE	
12	91043164	4	BEARING PAD	
13	91041265	4	SPACER	
14	91041006	12	SHIM	
15	91041007	4	SPACER	
16	88201566	12	HEX HD CAPSCREW, 1/2-20X1-1/2, GR5 (lubricate and torque to 68-78 ft lbs)	
17	88201562	8	HEX HD CAPSCREW, 1/2-20x3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
18		Ref	CROWD CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
19	90028935	2	RETAINING RING	
20	90207352	1	PIN	
21	88521010	1	HEX LOCKNUT, 5/8-11	
22	91031371	2	BUSHING	
23	91031389	1	PIN	
24	83481645	1	HEX HD CAPSCREW	
25	88671001	2	LUBE FITTING, STRAIGHT, 1/8	

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FIGURE 2-2. 1ST BOOM SECTION (SN 8655105G to Present)



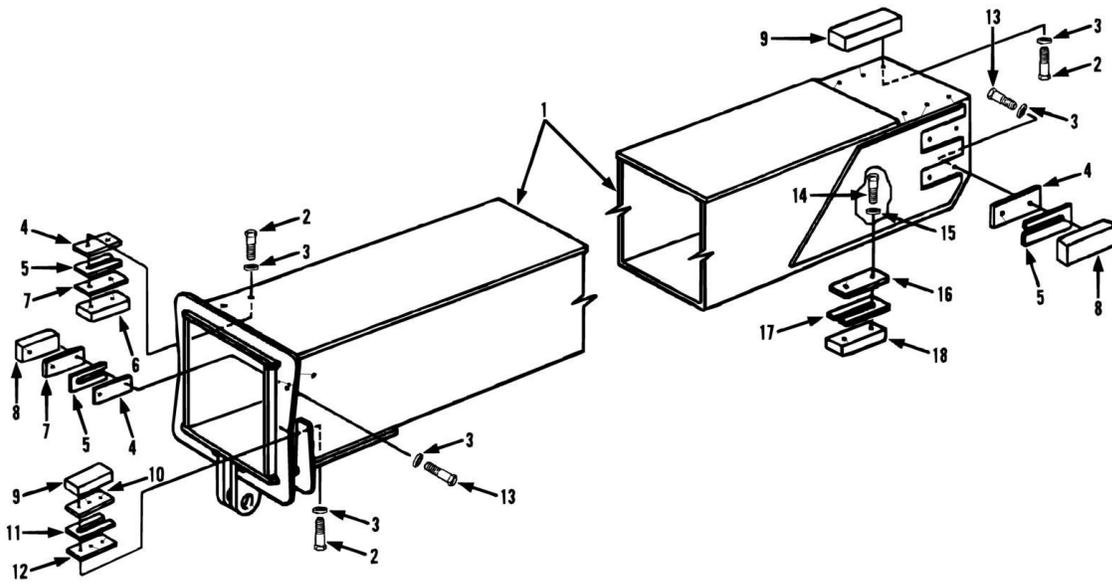
SECTION 2 - BOOMS

FIGURE 2-2. 1ST BOOM SECTION (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046017	1	FIRST BOOM SECTION WELDMENT	
2	88201564	4	HEX HD CAPSCREW, 1/2-20X1, GR5 (lubricate and torque to 68-78 ft lbs)	
3	12381025	24	HARDENED WASHER	
4	91041277	8	SPACER	
5	91041276	14	SHIM	
6	91041278	6	SPACER	
7	91043180	2	BEARING PAD	
8	91043177	4	BEARING PAD	
9	88201069	2	HEX HD CAPSCREW, 1/2-13X2, GR5	
10	88551013	2	LOCK WASHER, 1/2	
11	91041009	1	CYLINDER SUPPORT PLATE	
12	91043164	4	BEARING PAD	
13	91041265	4	SPACER	
14	91041006	12	SHIM	
15	91041007	4	SPACER	
16	88201566	12	HEX HD CAPSCREW, 1/2-20X1-1/2, GR5 (lubricate and torque to 68-78 ft lbs)	
17	88201562	8	HEX HD CAPSCREW, 1/2-20x3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
18		Ref	CROWD CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
19	90028935	2	RETAINING RING	
20	90207352	1	PIN	
21	88521010	1	HEX LOCKNUT, 5/8-11	
22	91031369	2	BUSHING	
23	90403280	1	PIN	
24	83481644	1	HEX HD CAPSCREW, 5/8-11x5-1/2, GR8	
25	88671001	2	LUBE FITTING, STRAIGHT, 1/8	

SECTION 2 - BOOMS

FIGURE 2-3. 2ND BOOM SECTION (SN 8655105G to Present)



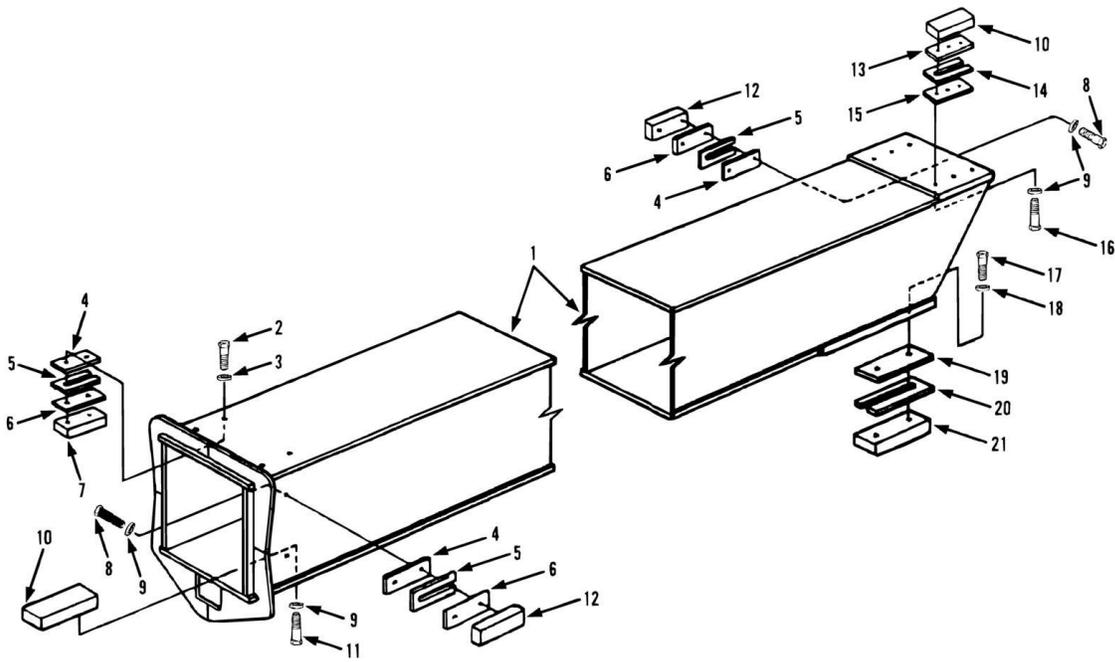
SECTION 2 - BOOMS

FIGURE 2-3. 2ND BOOM SECTION (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046018	1	SECOND BOOM SECTION WELDMENT	
2	88201563	16	HEX HD CAPSCREW, 1/2-20x7/8, GR5 (lubricate and torque to 68-78 ft lbs)	
3	12381025	32	HARDENED WASHER	
4	91041277	12	SPACER	
5	91041276	12	SHIM	
6	91043180	2	BEARING PAD	
7	91041278	10	SPACER	
8	91043177	8	BEARING PAD	
9	91043164	4	BEARING PAD	
10	91041265	2	SPACER	
11	91041006	6	SHIM	
12	91041007	2	SPACER	
13	88201562	16	HEX HD CAPSCREW, 1/2-20x3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
14	88201535	4	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5 (lubricate and torque to 30-35 ft lbs)	
15	12001234	4	HARDENED WASHER	
16	91031234	2	SHIM	
17	90207029	6	SHIM	
18	91033188	2	BEARING PAD	

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FIGURE 2-4. 3RD BOOM SECTION (SN 8655105G to Present)



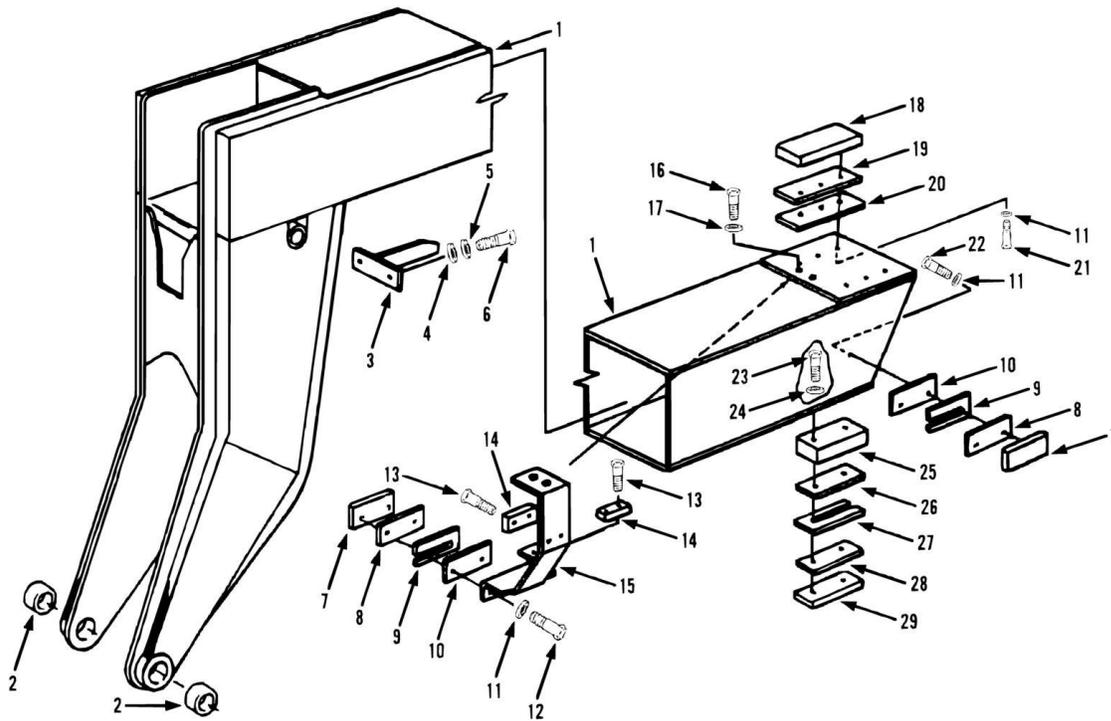
SECTION 2 - BOOMS

FIGURE 2-4. 3RD BOOM SECTION (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046019	1	THIRD BOOM SECTION WELDMENT	
2	88201563	4	HEX HD CAPSCREW, 1/2-20x7/8, GR5 (lubricate and torque to 68-78 ft lbs)	
3	12381025	8	HARDENED WASHER	
4	91041277	10	SPACER	
5	91041276	12	SHIM	
6	91041278	10	SPACER	
7	91043180	2	BEARING PAD	
8	88201562	16	HEX HD CAPSCREW, 1/2-20x3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
9	12381025	24	HARDENED WASHER	
10	91043164	4	BEARING PAD	
11	88201567	6	HEX HD CAPSCREW, 1/2-20X1-3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
12	91043177	8	BEARING PAD	
13	91041265	2	SPACER	
14	91041006	4	SHIM	
15	91041007	2	SPACER	
16	88201656	6	HEX HD CAPSCREW, 1/2-20X1-1/4, GR5 (lubricate and torque to 68-78 ft lbs)	
17	88201535	4	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5 (lubricate and torque to 30-35 ft lbs)	
18	12001234	4	HARDENED WASHER	
19	91031234	2	SHIM	
20	90207029	6	SHIM	
21	91033188	2	BEARING PAD	

SECTION 2 - BOOMS

FIGURE 2-5. 4TH BOOM SECTION (SN 8655105G to Present)



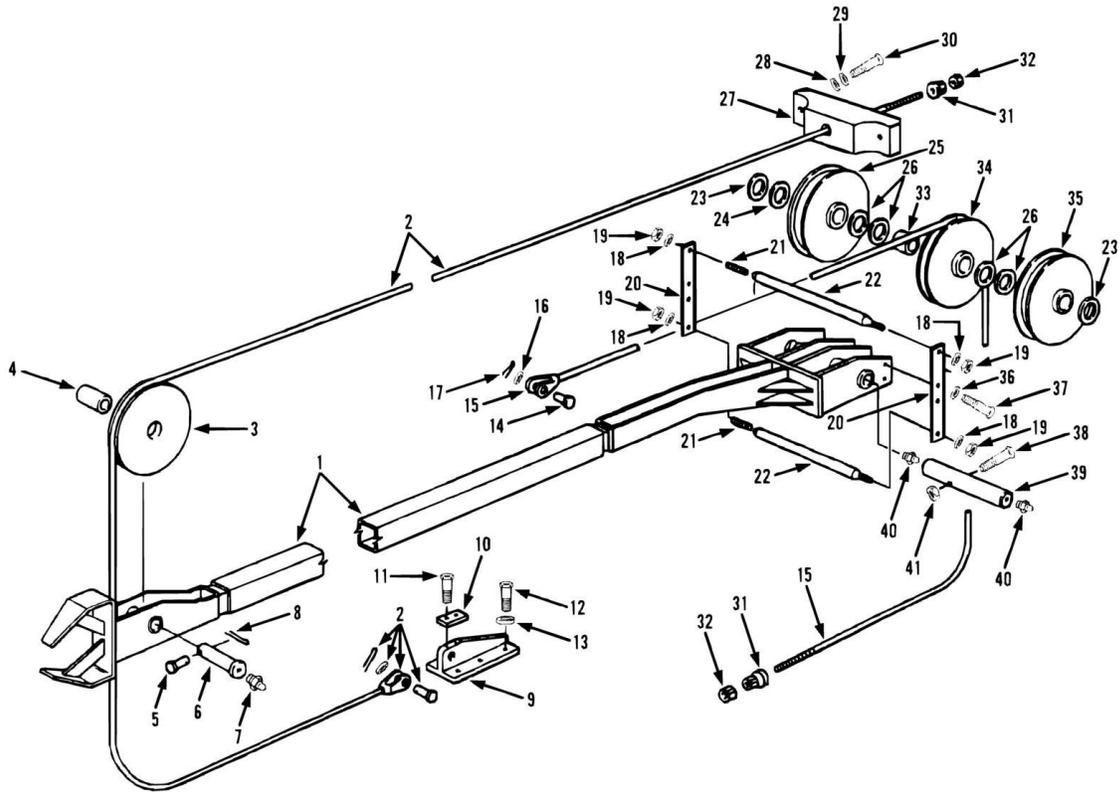
SECTION 2 - BOOMS

FIGURE 2-5. 4TH BOOM SECTION (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046020	1	FOURTH BOOM SECTION WELDMENT (includes item 2)	
2	91031136	2	BUSHING	
3	91046008	1	SWITCH ACTUATOR	
4	88561004	2	FLAT WASHER, 3/8	
5	88551011	2	LOCK WASHER, 3/8	
6	88201035	2	HEX HD CAPSCREW, 3/8-16X1, GR5	
7	91043177	2	BEARING PAD	
8	91041278	2	SPACER	
9	91041276	4	SHIM	
10	91041277	2	SPACER	
11	12381025	10	HARDENED WASHER	
12	88201563	2	HEX HD CAPSCREW, 1/2-20x7/8, GR5 (lubricate and torque to 68-78 ft lbs)	
13	88241029	4	SOCKET FLAT HD CAPSCREW, 1/4-20X1/2	
14	91043099	2	BEARING PAD	
15	91046006	1	SUPPORT WELDMENT	
16	88201065	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
17	88551013	2	LOCK WASHER, 1/2	
18	91043164	2	BEARING PAD	
19	91041007	2	SPACER	
20	91041265	2	SPACER	
21	88201565	6	HEX HD CAPSCREW, 1/2-20x1-1/4, GR5 (lubricate and torque to 68-78 ft lbs)	
22	88201562	2	HEX HD CAPSCREW, 1/2-20x3/4, GR5 (lubricate and torque to 68-78 ft lbs)	
23	88201538	4	HEX HD CAPSCREW, 3/8-24X2, GR5 (lubricate and torque to 30-35ft lbs)	
24	12001234	4	HARDENED WASHER	
25	91041134	2	BEARING BLOCK	
26	91041005	2	SPACER	
27	91041004	6	SHIM	
28	91041264	2	SPACER	
29	91043059	2	BEARING PAD	

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FIGURE 2-6. PUSH BEAM AND CABLES (SN 8655105G to Present)



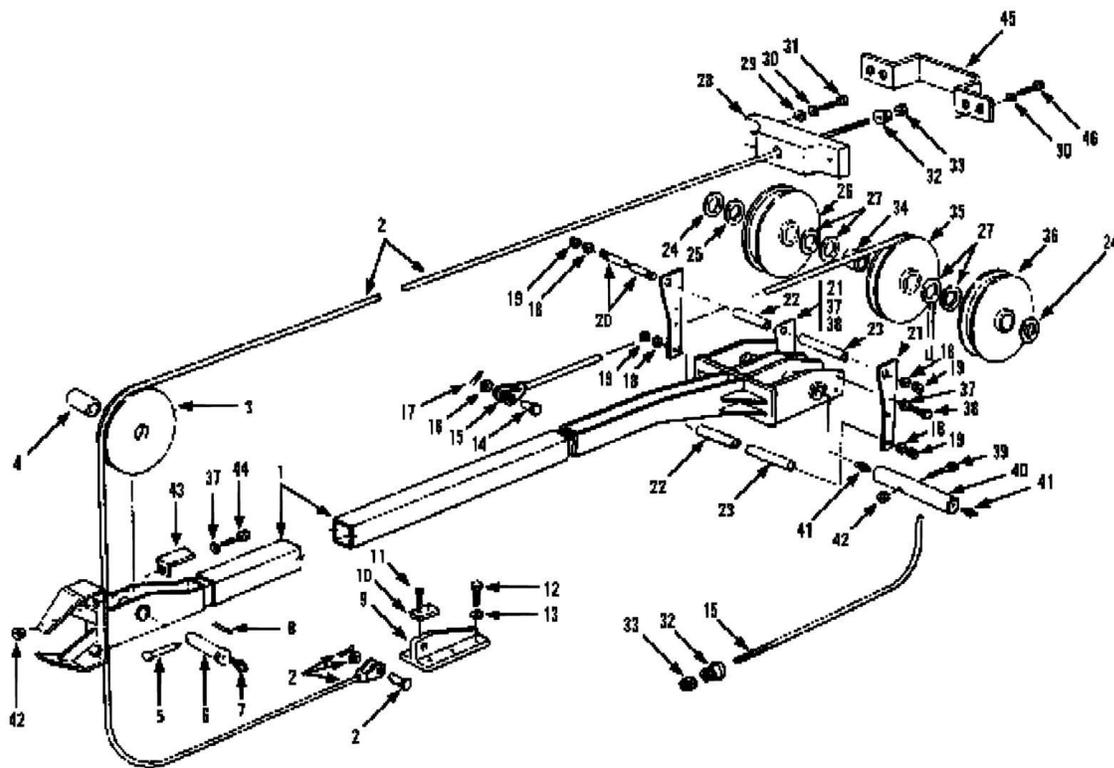
SECTION 2 - BOOMS

FIGURE 2-6. PUSH BEAM AND CABLES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046049	1	PUSH BEAM WELDMENT	
2	91043055	1	EXTENSION CABLE (includes mounting hardware)	
3	90403182	1	NYLON SHEAVE	
4	91041231	1	BUSHING	
5	90021608	1	CLEVIS PIN	
6	91041232	1	SHEAVE PIN	
7	88671002	1	LUBE FITTING, STRAIGHT, 1/8	
8	88631310	1	COTTER PIN, 3/32X1	
9	91046052	1	CABLE ANCHOR	
10	91043099	1	BEARING PAD	
11	88241030	2	SOCKET FLAT HD CAPSCREW, 1/4-20X5/8	
12	83201003	6	HEX HD CAPSCREW	
13	77141077	6	HARDENED WASHER	
14	91043062	1	CABLE PIN	
15	91043047	1	RETRACTION CABLE	
16	88561013	1	FLAT WASHER, 1-1/4	
17	88631339	1	COTTER PIN, 3/16X2	
18	88551011	4	LOCK WASHER, 3/8	
19	88501006	4	HEX NUT, 3/8-16	
20	91041010	2	HOSE RETAINER BAR	
21	91041012	2	HOSE RETAINER STUD	
22	91041011	2	ROLLER	
23	90203039	2	THRUST WASHER	
24	90203040	1	THRUST WASHER	
25	91043101	1	SHEAVE	
26	90200253	4	THRUST WASHER	
27	91041013	1	STRONGBACK PLATE	
28	85401340	2	HARDENED WASHER	
29	88551013	2	LOCK WASHER, 1/2	
30	88201071	2	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
31	90028965	2	FLANGE NUT	
32	88501116	2	HEX JAM NUT, 1-8	
33	91041231	1	BUSHING	
34	90403182	1	CABLE SHEAVE	
35	91043100	1	SHEAVE	
36	88561109	4	FLAT WASHER, 3/8	
37	88201033	4	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
38	88201044	1	HEX HD CAPSCREW, 3/8-16X3-1/4, GR5	
39	91041008	1	PUSH BEAM PIN	
40	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
41	88521006	1	HEAVY HEX LOCKNUT, 3/8-16	

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FIGURE 2-7. PUSH BEAM AND CABLES (SN 8755156G to Present)



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FIGURE 2-7. PUSH BEAM AND CABLES (SN 8755156G to Present)

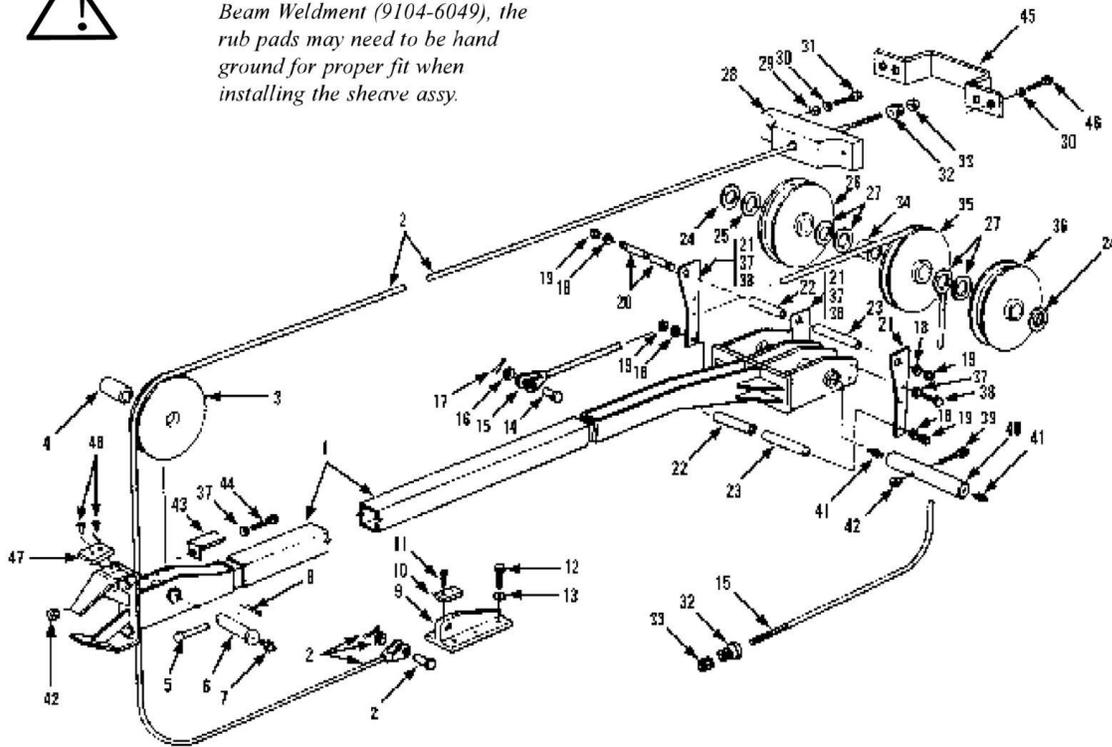
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046049	1	PUSH BEAM WELDMENT	
2	91043055	1	EXTENSION CABLE (includes mounting hardware)	
3	91405126	1	SHEAVE ASSY (includes item 4)	
4		Ref	BUSHING	
5	90021608	1	CLEVIS PIN	
6	91041232	1	SHEAVE PIN	
7	88671002	1	LUBE FITTING, STRAIGHT, 1/8	
8	88631310	1	COTTER PIN, 3/32X1	
9	91046052	1	CABLE ANCHOR	
10	91043099	1	BEARING PAD	
11	88241030	2	SOCKET FLAT HD CAPSCREW, 1/4-20X5/8	
12	83201003	6	HEX HD CAPSCREW, 5/8-11X1-3/4, GR8 (nylok)	
13	77141077	6	HARDENED WASHER	
14	91043062	1	CABLE PIN	
15	91043047	1	RETRACTION CABLE	
16	88561013	1	FLAT WASHER	
17	88631339	1	COTTER PIN, 3/16X2	
18	88551011	4	LOCKWASHER, 3/8	
19	88501006	8	HEX NUT, 3/8-16	
20	91041012	2	HOSE RETAINER STUD	
21	91041404	3	HOSE RETAINER PLATE	
22	91041406	2	RETAINER ROLLER, 5IN LONG	
23	91041405	2	RETAINER ROLLER, 8-1/2IN LONG	
24	90203039	2	THRUST WASHER	
25	90203040	1	THRUST WASHER	
26	91043101	1	SHEAVE	
27	90200253	4	THRUST WASHER	
28	91041013	1	STRONGBACK PLATE	
29	85401340	2	HARDENED WASHER	
30	88551013	6	LOCKWASHER, 1/2	
31	88201071	2	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
32	90028965	2	FLANGE NUT	
33	88501116	2	HEX JAM NUT, 1IN-8	
34		Ref	BUSHING	
35	91035147	1	SHEAVE ASSY (includes item 34)	
36	91043100	1	SHEAVE	
37	88561109	8	FLAT WASHER, 3/8	
38	88201033	6	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
39	88201044	1	HEX HD CAPSCREW, 3/8-16X3-1/4, GR5	
40	91041008	1	PUSH BEAM PIN	
41	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
42	88521006	3	HEAVY HEX LOCKNUT, 3/8-16	
43	91041421	2	CABLE RETAINER	
44	88201036	2	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
45	91041510	1	BOOM CABLE GUARD	
46	88201067	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR5	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 2-8. PUSH BEAM AND CABLES (SN 0155250 to Present)



NOTE: When purchasing item (1) Push Beam Weldment (9104-6049), the rub pads may need to be hand ground for proper fit when installing the sheave assy.



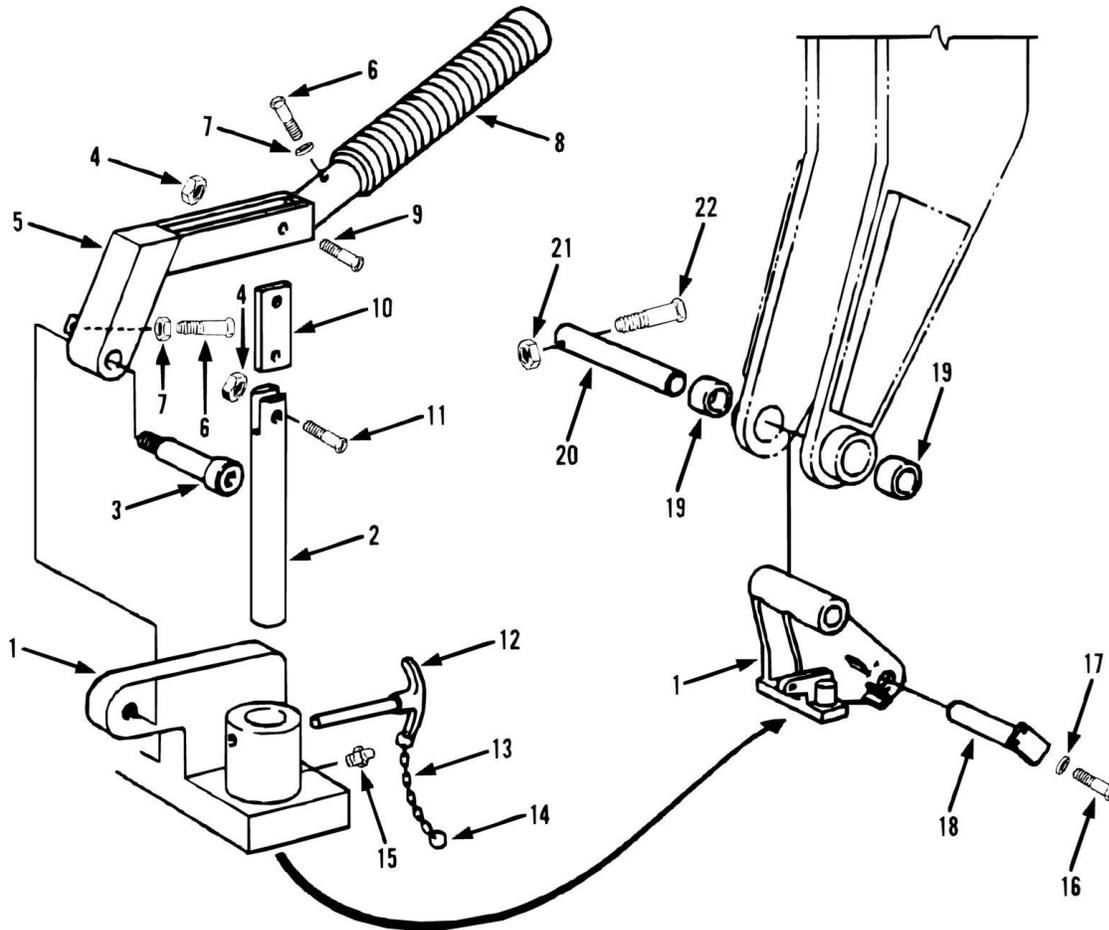
SECTION 2 - BOOMS

FIGURE 2-8. PUSH BEAM AND CABLES (SN 0155250 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046049	1	PUSH BEAM WELDMENT	
2	91043055	1	EXTENSION CABLE (includes mounting hardware)	
3	91045126	1	SHEAVE ASSY (includes item 4)	
4		Ref	BUSHING	
5	90021608	1	CLEVIS PIN	
6	91041232	1	SHEAVE PIN	
7	88671002	1	LUBE FITTING, STRAIGHT, 1/8	
8	88631310	1	COTTER PIN, 3/32X1	
9	91046052	1	CABLE ANCHOR	
10	91043099	1	BEARING PAD	
11	88241030	2	SOCKET FLAT HD CAPSCREW, 1/4-20X5/8	
12	83201003	6	HEX HD CAPSCREW, 5/8-11X1-3/4 (nylok) GR8	
13	77141077	6	HARDENED WASHER	
14	91043062	1	CABLE PIN	
15	91043047	1	RETRACTION CABLE	
16	88561013	1	FLAT WASHER	
17	88631339	1	COTTER PIN, 3/16X2	
18	88551011	4	LOCKWASHER, 3/8	
19	88501006	8	HEX NUT, 3/8-16	
20	91041012	2	HOSE RETAINER STUD	
21	91041404	3	HOSE RETAINER PLATE	
22	91041406	2	RETAINER ROLLER, 5IN LONG	
23	91041405	2	RETAINER ROLLER, 8-1/2IN LONG	
24	90203039	2	THRUST WASHER	
25	90203040	1	THRUST WASHER	
26	91043101	1	SHEAVE	
27	90200253	4	THRUST WASHER	
28	91041013	1	STRONGBACK PLATE	
29	85401340	2	HARDENED WASHER	
30	88551013	6	LOCKWASHER, 1/2	
31	88201071	2	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
32	90028965	2	FLANGE HALF	
33	88501116	2	HEX JAM NUT, 1IN-8	
34		Ref	BUSHING	
35	91035147	1	SHEAVE ASSY (includes item 34)	
36	91043100	1	SHEAVE	
37	88561109	8	FLAT WASHER, 3/8	
38	88201033	6	HX HD CAPSCREW, 3/8-16X3/4	
39	88201044	1	HEX HD CAPSCREW, 3/8-16X3-1/4, GR5	
40	91041008	1	PUSH BEAM PIN	
41	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
42	88521006	3	HEAVY HEX JAM LOCKNUT, 3/8-16	
43	91041421	2	CABLE RETAINER	
44	88201036	2	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
45	91041510	1	BOOM CABLE GUARD	
46	88201067	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR5	
47	91043261	1	BEARING PAD	
48	88301339	2	FLAT HD MACHINE SCREW, 3/8-16X1	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 2-9. QUICK SWITCH ASSEMBLY (SN 8655105G to Present)



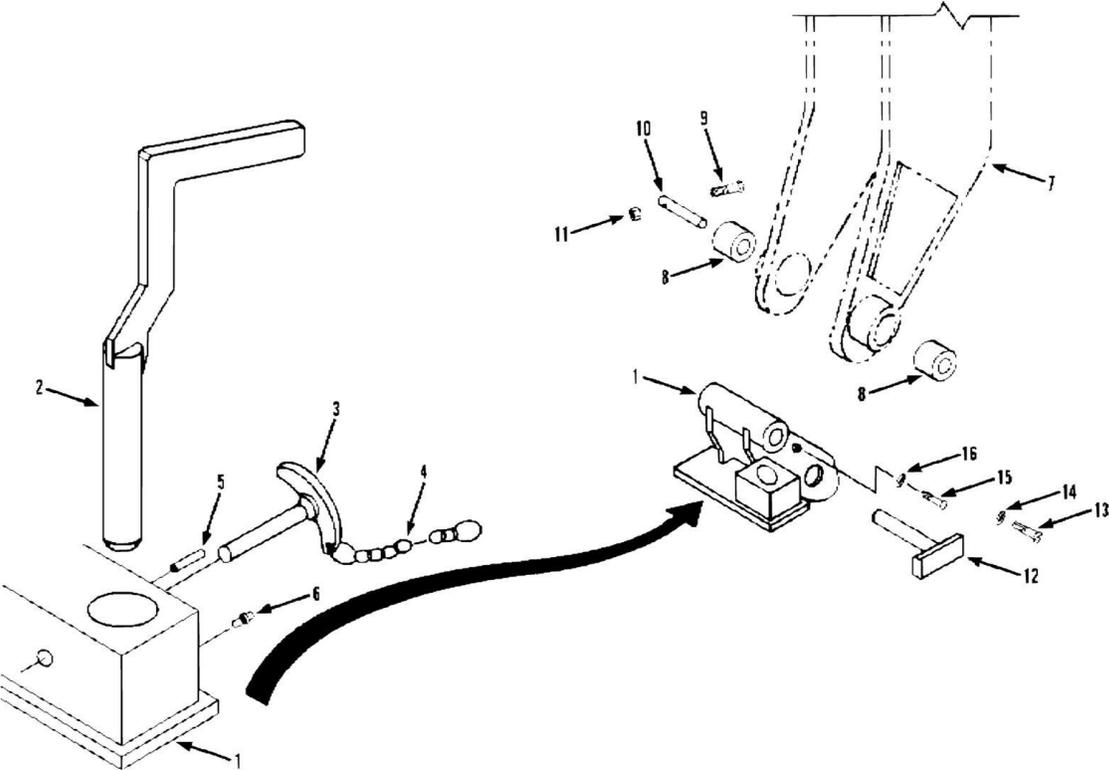
SECTION 2 - BOOMS

FIGURE 2-9. QUICK SWITCH ASSEMBLY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045006	1	QUICK SWITCH ASSY (includes all items except items 16 thru 23)	
1	91046027	1	QUICK SWITCH WELDMENT	
2	91041091	1	PLUNGER	
3	88251037	1	SOCKET HD SHOULDER SCREW, 1/2x1 (3/8-16 thread)	
4	88521306	2	HEX LOCKNUT, 3/8-16	
5	90602906	1	HANDLE WELDMENT	
6	88201005	2	HEX HD CAPSCREW, 1/4-20X1, GR5	
7	88501104	2	HEX NUT, 1/4-20	
8	90206976	1	HANDLE GRIP	
9	88201037	1	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
10	90207894	1	LINK	
11	88201038	1	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
12	90207902	1	QUICK RELEASE PIN	
13	91033038	1	JACK CHAIN, 8IN LONG, SIZE 12	
14	91033039	1	CHAIN CONNECTION	
15	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
16	88201065	2	HEX HD CAPSCREW, 1/2-13X1, GR5	
17	88551013	2	LOCK WASHER, 1/2	
18	90207046	1	TILT CYLINDER ROD END PIN	
19		Ref	BUSHING (See 3RD BOOM SECTION for Breakdown)	
20	91041365	1	HEAD PIN	
21	88521010	1	HEX LOCKNUT, 5/8-11	
22	86641057	1	HEX HD CAPSCREW	
23		Ref	FOURTH BOOM SECTION WELDMENT (See 3RD BOOM SECTION for Breakdown)	

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FIGURE 2-10. QUICK SWITCH ASSEMBLY (SN 0155269 to Present)



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FIGURE 2-10. QUICK SWITCH ASSEMBLY (SN 0155269 to Present)

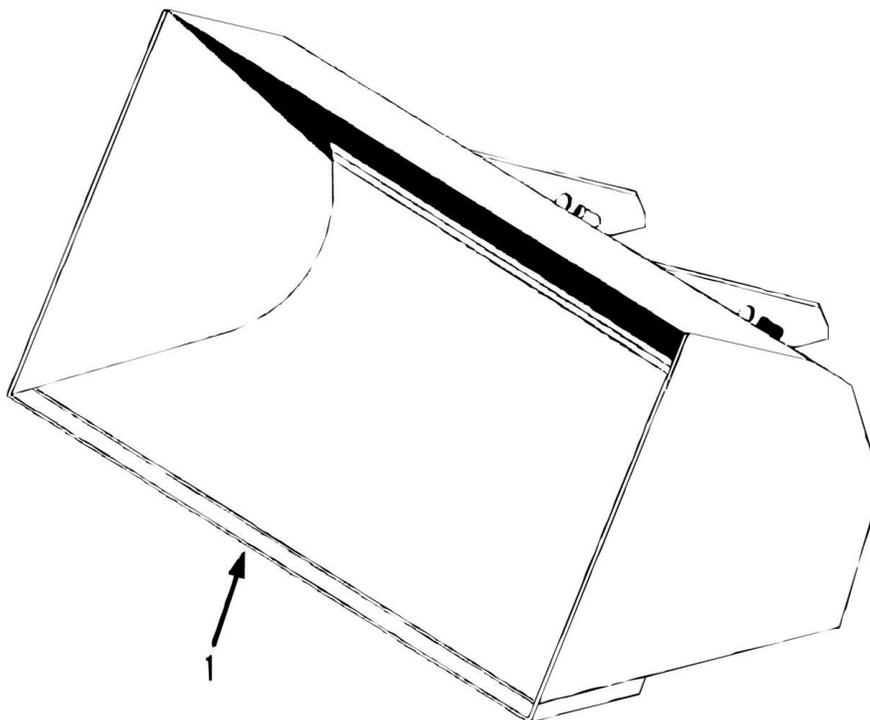
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045095	1	QUICK SWITCH ASSY	
1	91046074	1	QUICK SWITCH WELDMENT	
2	91086073	1	PLUNGER WELDMENT	
3	90207902	1	QUICK RELEASE PIN	
4	91033038	1	JACK CHAIN, 8IN LONG, SIZE 12	
5	88631509	1	ROLL PIN, 1/4X2	
6	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
7		Ref	FOURTH BOOM SECTION WELDMENT (See 3RD BOOM SECTION for Breakdown)	
8		Ref	BUSHING (See 3RD BOOM SECTION for Breakdown)	
9	86641057	1	HEX HD CAPSCREW, 5/8-11X4-1/2, GR8	
10	91041365	1	HEAD PIN	
11	88521010	1	HEX LOCKNUT, 5/8-11	
12	90207046	1	TILT CYLINDER ROD END PIN	
13	88201065	2	HEX HD CAPSCREW, 1/2-13X1, GR5	
14	88551013	2	LOCKWASHER, 1/2	
15	88301090	1	ROUND HD MACHINE SCREW, #10-24X1/2	
16	88561105	1	FLAT WASHER, #10	

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SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-1. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)



NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544. PLEASE SEE FORK INFORMATION FOR LIST OF FORKS.

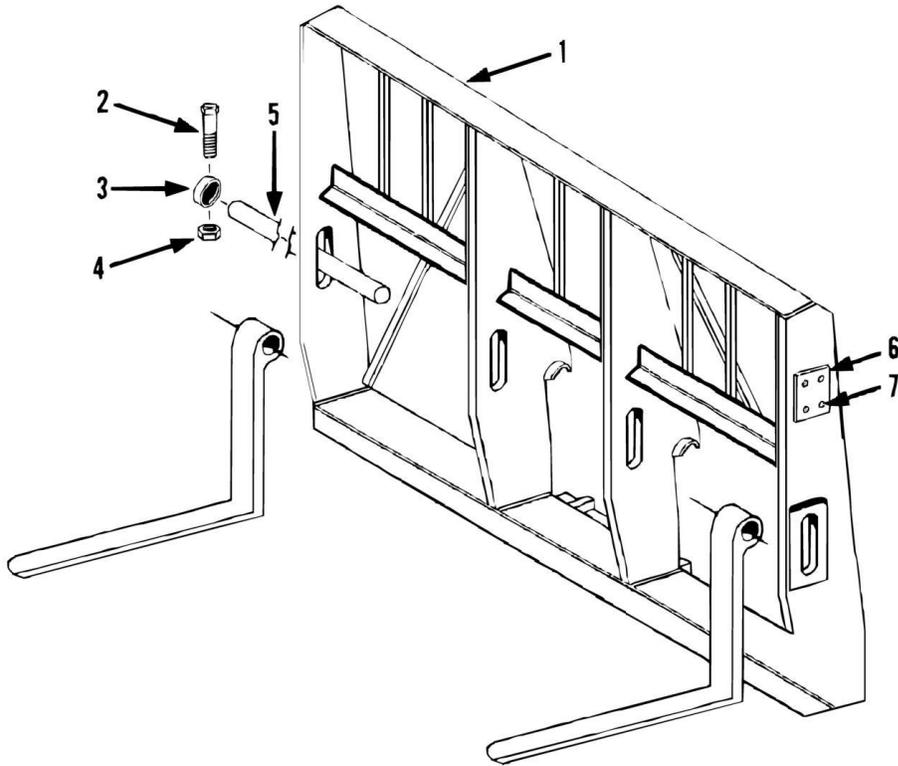
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-1. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90801332	1	SAND BUCKET	

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FIGURE 3-2. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)



NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544. PLEASE SEE FORK INFORMATION FOR LIST OF FORKS.

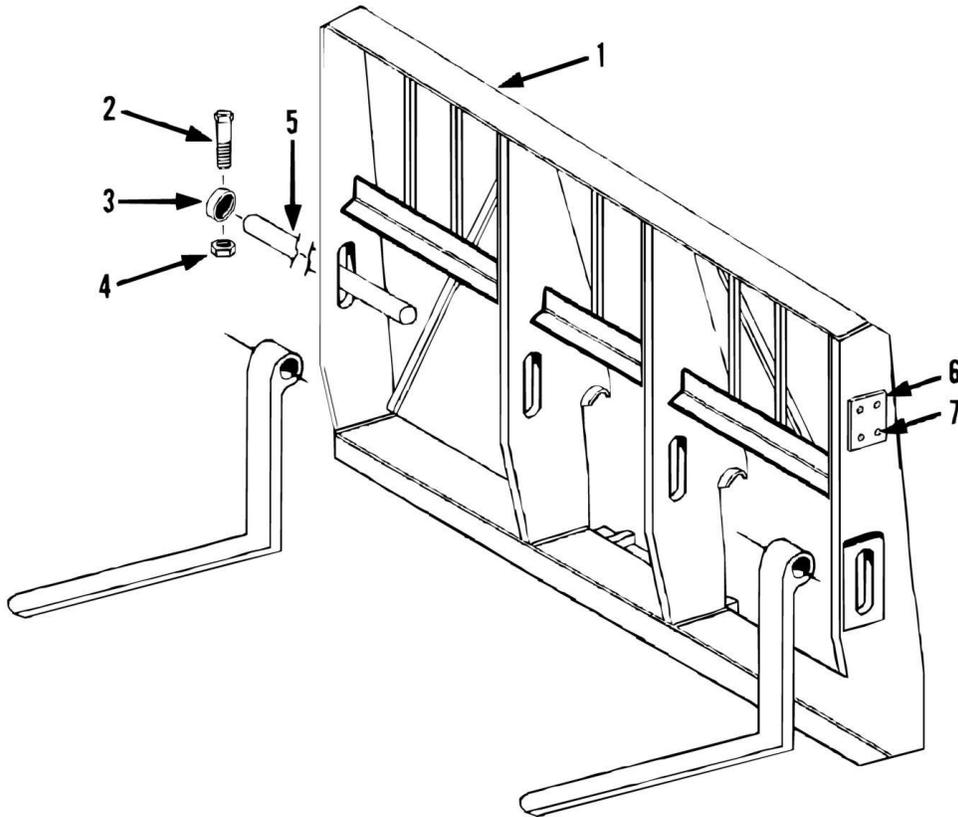
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-2. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90455007	1	48IN CARRIAGE ASSY, (includes all items)	
1	90801315	1	48IN CARRIAGE WELDMENT	
2	88201105	2	HEX HD CAPSCREW, 5/8-11X4, GR5	
3	90200003	2	COLLAR	
4	88521310	2	HEX LOCKNUT, 5/8-11	
5	90402477	1	FORK PIN	
6	90153001	1	SERIAL NUMBER PLATE	
7	88341022	4	DRIVE SCREW, #10X3/8	

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FIGURE 3-3. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)



NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544. PLEASE SEE FORK INFORMATION FOR LIST OF FORKS.

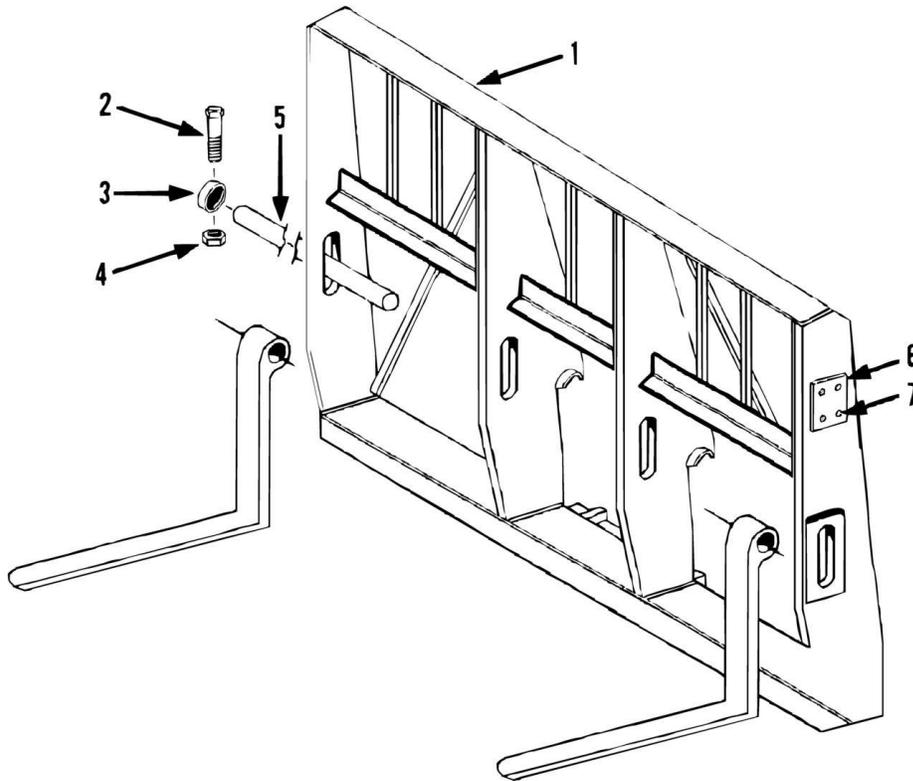
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-3. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90555008	1	72IN CARRIAGE ASSY, (includes all items)	
1	90556003	1	72IN CARRIAGE WELDMENT	
2	88201105	2	HEX HD CAPSCREW, 5/8-11X4, GR5	
3	90200003	2	COLLAR	
4	88521310	2	HEX LOCKNUT, 5/8-11	
5	90402478	1	FORK PIN	
6	90153001	1	SERIAL NUMBER PLATE	
7	88341022	4	DRIVE SCREW, #10X3/8	

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FIGURE 3-4. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)



NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544. PLEASE SEE FORK INFORMATION FOR LIST OF FORKS.

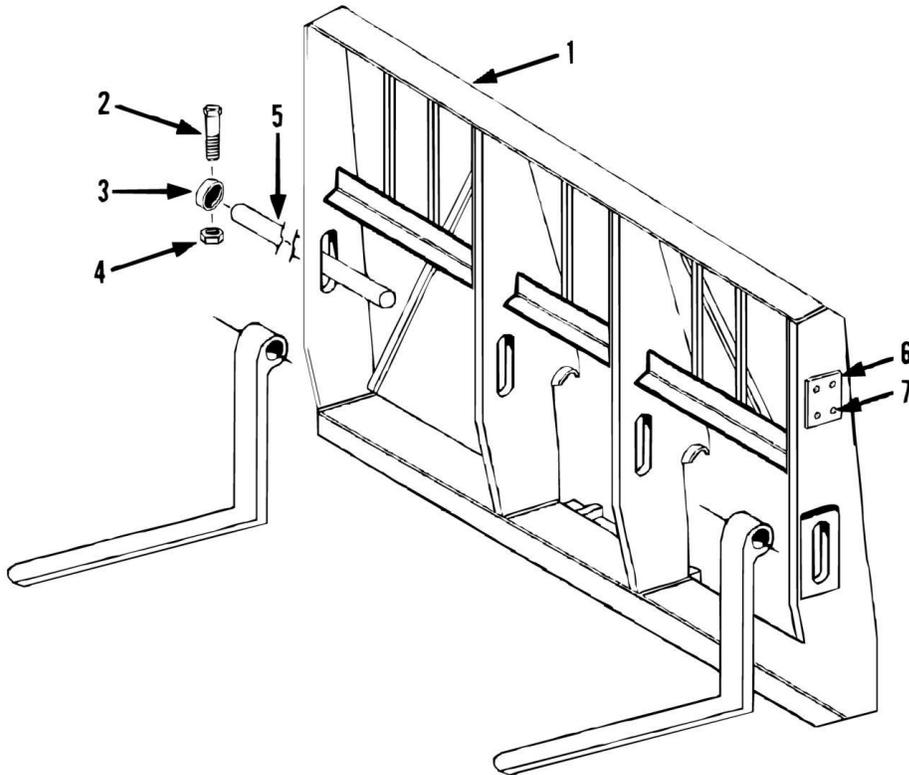
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-4. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90455008	1	66IN CARRIAGE ASSY, (includes all items)	
1	90801314	1	66IN CARRIAGE WELDMENT	
2	88201105	2	HEX HD CAPSCREW, 5/8-11X4, GR5	
3	90200003	2	COLLAR	
4	88521310	2	HEX LOCKNUT, 5/8-11	
5	90402478	1	FORK PIN	
6	90153001	1	SERIAL NUMBER PLATE	
7	88341022	4	DRIVE SCREW, #10X3/8	

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FIGURE 3-5. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)



NOTE: MANY DIFFERENT FORK ASSEMBLIES ARE AVAILABLE FOR THE CARRIAGE ASSEMBLIES USED ON THE 544. PLEASE SEE FORK INFORMATION FOR LIST OF FORKS.

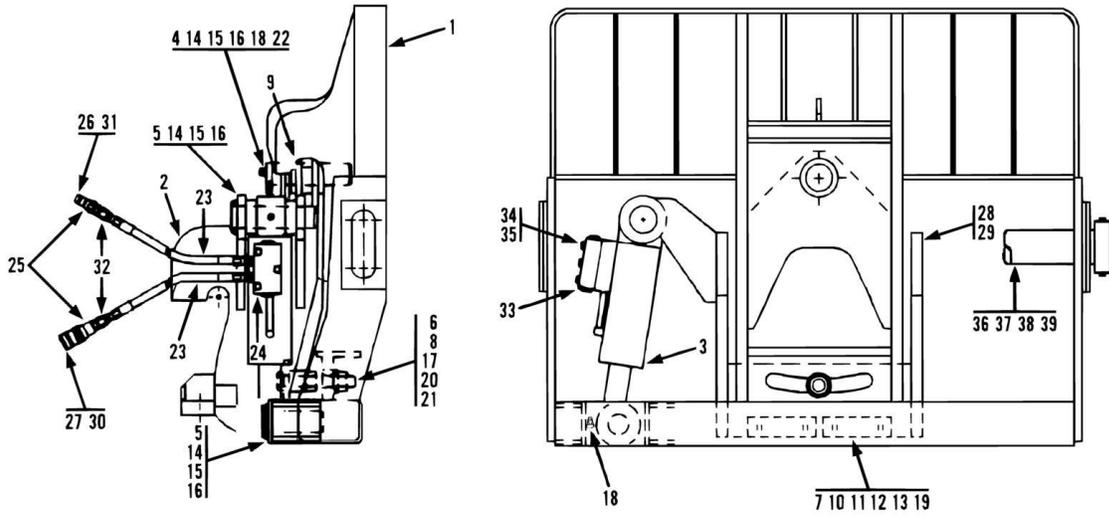
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-5. SAND BUCKET AND CARRIAGES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90455038	1	80IN CARRIAGE ASSY, (includes all items)	
1	90456003	1	80IN CARRIAGE WELDMENT	
2	88201105	2	HEX HD CAPSCREW, 5/8-11X4, GR5	
3	90200003	2	COLLAR	
4	88521310	2	HEX LOCKNUT, 5/8-11	
5	90451011	1	FORK PIN	
6	90153001	1	SERIAL NUMBER PLATE	
7	88341022	4	DRIVE SCREW, #10X3/8	

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FIGURE 3-6. (91305016) 66IN SLOPE PILER CARRIAGE (SN 8655105G to Present)



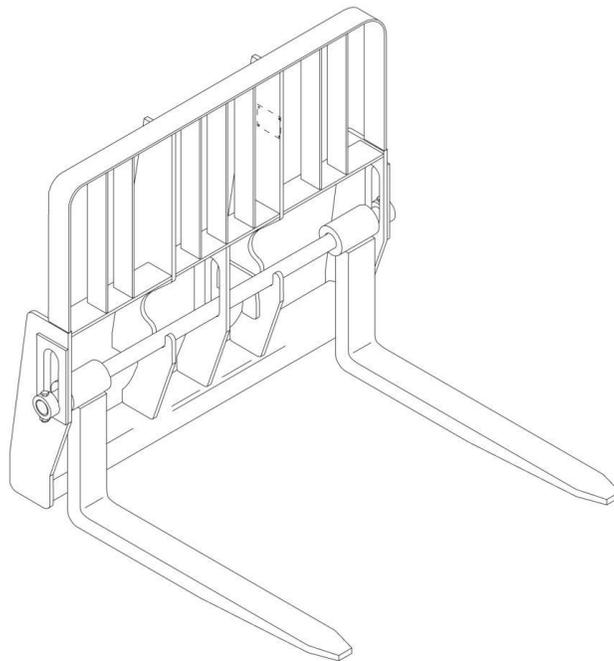
SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-6. (91305016) 66IN SLOPE PILER CARRIAGE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91305016	1	66IN SLOPE PILER CARRIAGE (includes all items)	
	91033426	1	CAPACITY DECAL, (not shown)	
1	91306030	1	CARRIAGE WELDMENT	
2	91086122	1	ADAPTER WELDMENT	
3		Ref	SWAY CYLINDER (See OPTIONAL EQUIPMENT SECTION for Breakdown)	
4	91083248	1	BUSHING	
5	91081554	2	PIN	
6	90204007	1	TUBE	
7	91033186	2	BEARING PAD	
8	91081577	1	TAP BOLT	
9	91081594	1	THRUST WASHER	
10	90205870	AR	SHIM	
11	91031236	2	SPACER	
12	88201537	4	HEX HD CAPSCREW, 3/8-24X1-3/4, GR5	
13	88201536	4	HEX HD CAPSCREW, 3/8-24X1-1/2, GR5	
14	91081313	3	KEEPER PLATE	
15	88201065	6	HEX HD CAPSCREW, 1/2-13X1, GR5	
16	88551013	6	LOCKWASHER, 1/2	
17	88521016	1	HEX LOCKNUT, 1-8	
18	88671022	2	LUBE FITTING, 90, 1/8	
19	88561109	4	FLAT WASHER, 3/8	
20	88501016	1	HEX NUT, 1-8	
21	05101441	1	WASHER, 1-1/16	
22	91081622	1	PIN	
23	84716434	2	HOSE ASSY	
24	83661316	2	CONNECTOR	
25	88661010	2	CONNECTOR, (Prior to SN 2005283-01)	
25	88662018	2	CONNECTOR, (SN 2005283-01 to Present)	
26	91163138	1	MALE QUICK DISCONNECT, (Prior to SN 2005283-01)	
26	91403414	1	MALE QUICK DISCONNECT, (SN 2005283-01 to Present)	
27	91163139	1	FEMALE QUICK DISCONNECT, (Prior to SN 2005283-01)	
27	91403413	1	FEMALE QUICK DISCONNECT, (SN 2005283-01 to Present)	
28	88341022	4	DRIVE SCREW, #10X3/8	
29	90153001	1	SERIAL NUMBER PLATE	
30	91043125	1	DUST PLUG	
31	91043126	1	DUST CAP	
32	86883469	2	ADAPTER	
33		Ref	DUAL P.O. CHECK VALVE (See OPTIONAL EQUIPMENT SECTION for Breakdown)	
34	88201040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5	
35	88551011	3	LOCKWASHER, 3/8	
36	91301083	1	FORK PIN	
37	90200003	2	COLLAR	
38	88201105	2	HEX HD CAPSCREW, 5/8-11X4, GR5	
39	88521310	2	LOCKNUT, 5/8-11	
40	84521062	1	SUPPORT CLAMP	
41	77143015	1	WHIZ-LOCK NUT, 3/8-16	

SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-7. FORK INFORMATION



NOTE: FORKS RATED LESS THAN THE ATTACHMENT OR MACHINE'S CAPACITY DECREASE CAPACITY OF THE ATTACHMENT OR MACHINE TO THAT OF THE FORKS. FORKS RATED MORE THAN THE ATTACHMENT OR MACHINE'S CAPACITY DO NOT INCREASE ATTACHMENT OR MACHINE'S CAPACITY.

NOTE: PLEASE CONSULT THE GRADALL PARTS DEPARTMENT TO DETERMINE THE CORRECT FORKS APPLICABLE TO YOUR SPECIFIC CARRIAGE ASSEMBLY AND APPLICATION.

SECTION 3 - ATTACHMENTS AND ACCESSORIES

FIGURE 3-7. FORK INFORMATION

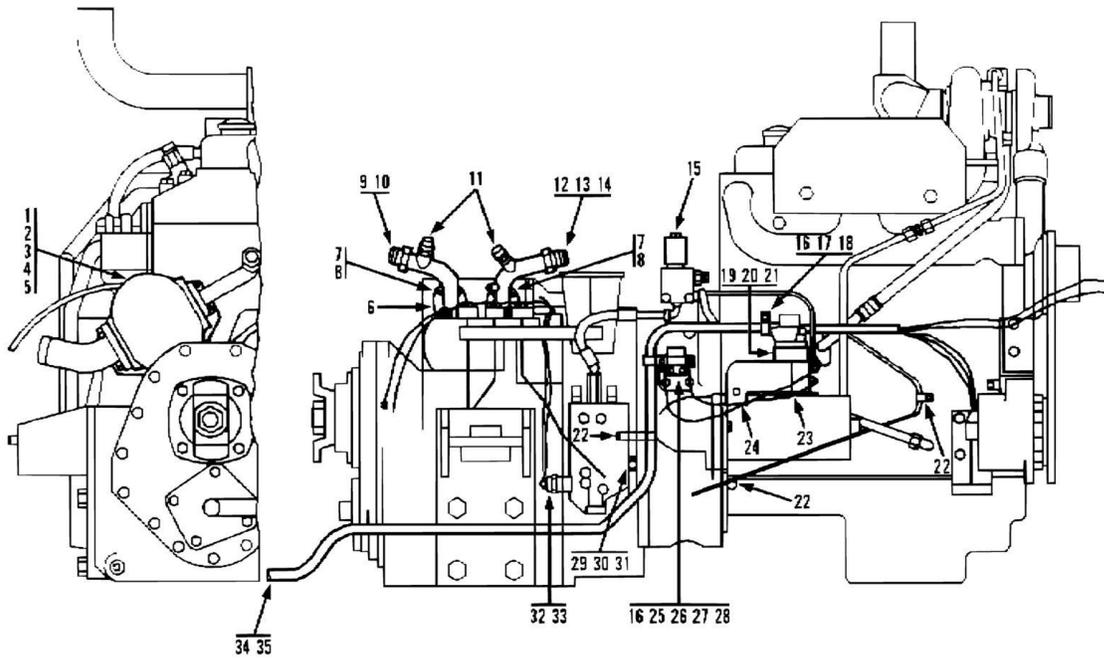
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90600390	2	48IN CUBING FORK, 2X2, 3000 lbs, (B, C and D series)	
	90601819	2	48IN PALLET FORK, 1-3/4X6, 9000 lbs, (B, C and D series)	
	90453002	2	48IN PALLET FORK, 2X4, 8000 lbs, (B, C and D series)	
	90553005	2	48IN PALLET FORK, 2X6, 10,000 lbs, (B, C and D series)	
	90553008	2	48 PALLET FORK, 1-3/4X4, 5000 lbs, (used on 6ft swing mast only, P/N 90455047)	
	90601015	2	60IN PALLET FORK, 2X6, 10,000 lbs, (B, C and D series)	
	91163269	2	60IN PALLET FORK, 2X6, 11,300 lbs, (B, C and D series)	
	90453045	2	60IN PALLET FORK, 2X6, 11,300 lbs, (used on 6ft swing mast only, P/N 90455054)	
	90553018	2	72IN PALLET FORK, 2X6, 10,000 lbs, (B, C and D series)	
	91123132	2	72IN PALLET FORK, 2X6, 10,000 lbs, (B, C and D series)	
	90600832	2	48IN PALLET FORK, 2-1/4X8, 16,000 lbs, (used on the 542, 552 & 554)	
	90601873	2	48IN PALLET FORK, 2-1/4X7, 15,000 lbs, (used on the 542, 552 & 554)	
	90600833	2	60IN PALLET FORK, 2-1/4X8, 16,000 lbs, (used on the 542, 552 & 554)	
	90601219	2	60IN PALLET FORK, 2-1/2X8, 16,000 lbs, (used on the 542, 552 & 554)	
	90601874	2	60IN PALLET FORK, 2-1/4X7, 15,000 lbs, (used on the 542, 552 & 554)	
	H0453002	2	96IN PALLET FORK, 2X6, 7500 lbs loaded center, (B, C and D series)	
	90553018	2	72IN PALLET FORK, 2X6, 10,000 lbs, (B, C and D series)	

SECTION 4 - ENGINE AND ATTACHING PARTS

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FIGURE 4-1. ENGINE LEFT SIDE VIEW (SN 8655105G to Present)



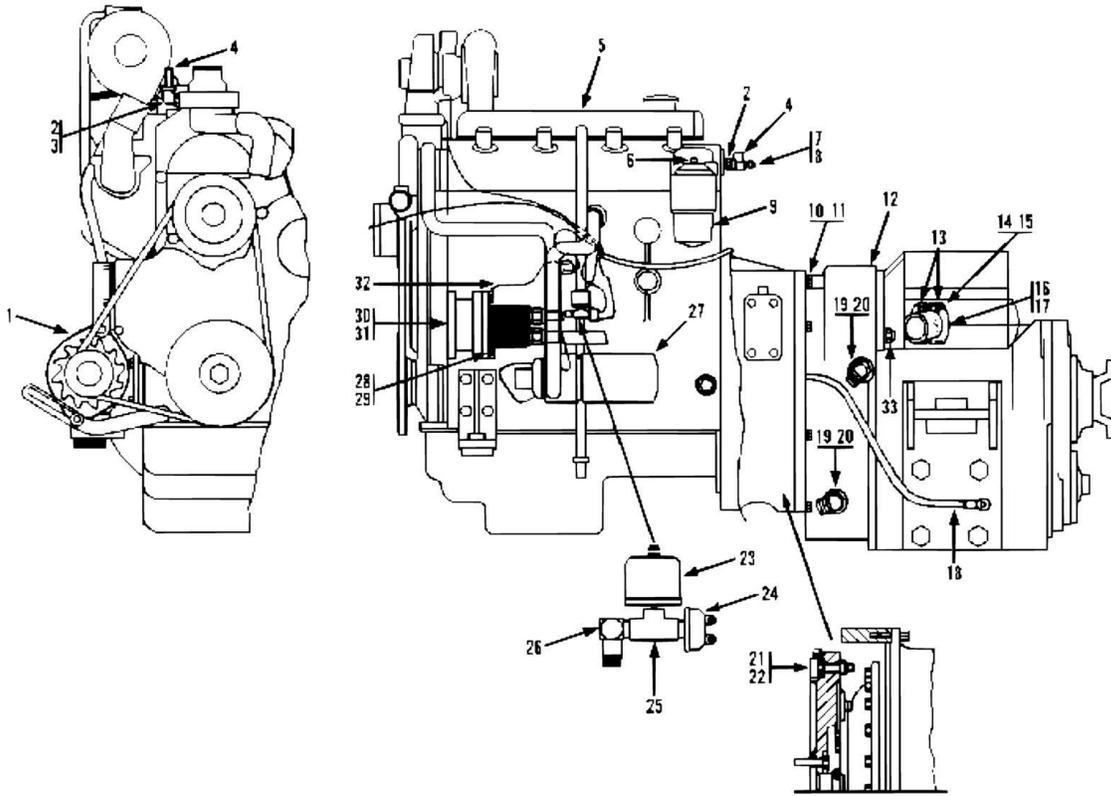
SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-1. ENGINE LEFT SIDE VIEW (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	MAIN HYDRAULIC PUMP ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	77134059	1	PUMP GASKET	
3	88201067	2	HEX HD CAPSCREW, 1/2-13X1-1/2, GR5	
4	85401340	2	HARDENED WASHER	
5	88551013	2	LOCK WASHER, 1/2	
6	84711369	2	FLANGE HALF	
7	88201036	8	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
8	88551011	8	LOCK WASHER, 3/8	
9	91053345	1	TUBE LINE	
10	85031525	1	O-RING	
11	77133089	2	MINI-CHECKING COUPLING	
12	84711333	2	FLANGE HALF	
13	83661304	1	O-RING	
14	91053344	1	TUBE LINE	
15		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
16	86521144	2	SUPPORT CLAMP	
17	88201031	1	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
18	88561109	1	FLAT WASHER, 3/8	
19		Ref	HOSE, 5/16 O.D., 8FT LONG	
20	91033131	1	CONNECTOR	
21	83483497	1	CLAMP	
22	85941017	3	HOSE CLAMP	
23	90205205	1	JUMPER WIRE	
24	90207497	1	JUMPER WIRE	
25	90402427	1	STARTER SOLENOID	
26	88201001	2	HEX HD CAPSCREW, 1/4-20X1/2, GR5	
27	88561107	2	FLAT WASHER, 1/4	
28	88551009	2	LOCK WASHER, 1/4	
29	90205002	1	STUD	
30	88501006	1	HEX NUT, 3/8-16	
31	88551011	1	LOCK WASHER, 3/8	
32	89981036	2	PAN HD MACHINE SCREW, #8-32X3/8	
33	88551006	2	LOCK WASHER, 3/8	
34	91033079	1	WIRING HARNESS	
35	90027187	5	NYLON TY-RAP	

SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-2. ENGINE RIGHT SIDE VIEW (SN 8655105G to Present)



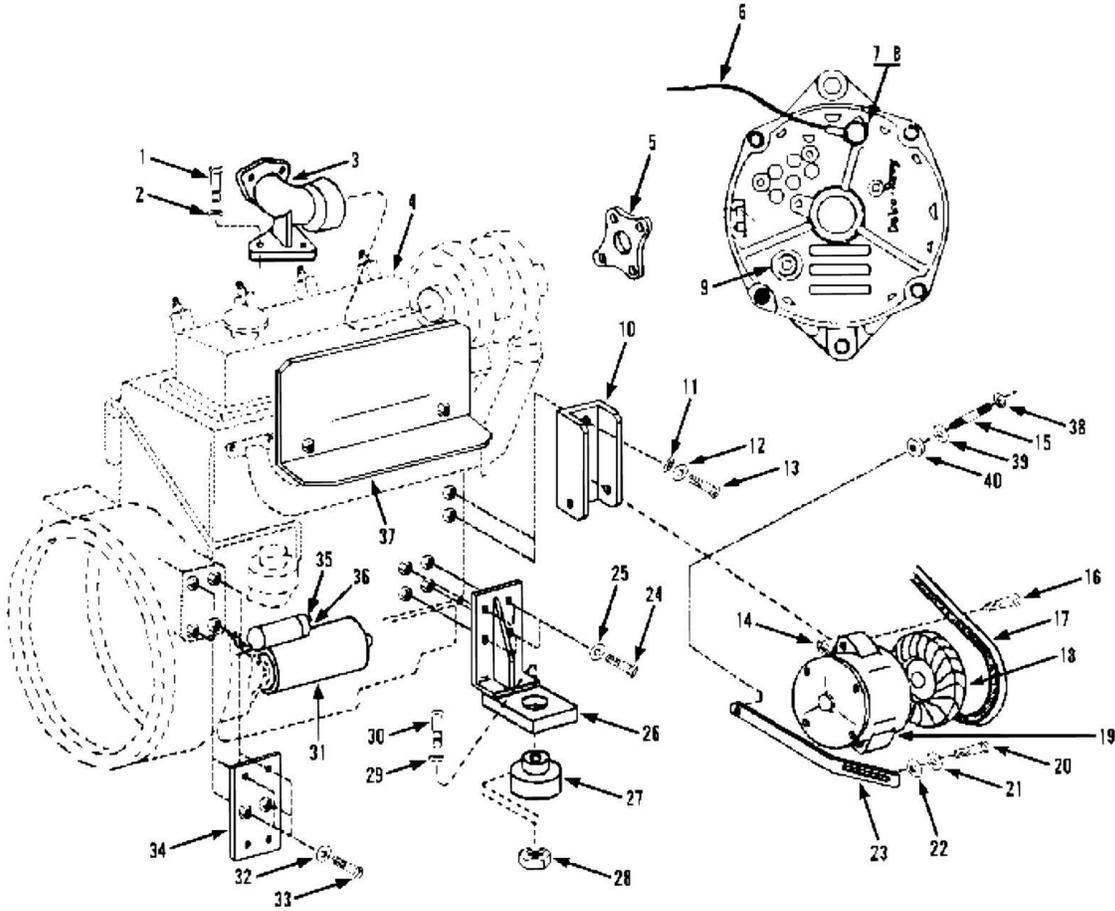
SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-2. ENGINE RIGHT SIDE VIEW (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035141	1	PERKINS ENGINE/TRANSMISSION FILTER KIT	
	90206262	1	AIR FILTER	
	91034006	1	OIL FILTER	
	91034005	1	FUEL FILTER	
	90204732	1	TRANSMISSION FILTER	
1		Ref	ALTERNATOR (See ENGINE MOUNTING for Breakdown)	
2	88711383	2	REDUCING BUSHING, 1/2X3/8	
3	88711102	1	STREET ELBOW, 90, 3/8	
4	24641328	2	SHUT-OFF VALVE	
5	Kit	1	PERKINS DIESEL ENGINE (see separate engine manual for parts information)	
6	91033136	1	FUEL FILTER TUBE, 1/4X3	
7	88711381	1	REDUCING BUSHING, 3/8X1/4	
8	90206124	1	WATER TEMPERATURE SENDER	
9	91034005	1	FUEL FILTER ELEMENT	
10	88201037	11	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
11	88551011	11	LOCK WASHER, 3/8	
12		Ref	TRANSMISSION ASSY (See DRIVE TRAIN SECTION for Breakdown)	
13	84711427	2	FLANGE HALF	
14	88201067	4	HEX HD CAPSCREW, 1/2-13X1-1/2, GR5	
15	88551013	4	LOCK WASHER, 1/2	
16	91043176	1	SUCTION TUBE	
17	88591104	1	O-RING	
18	90200811	1	GROUND CABLE	
19	88662067	2	ELBOW, 90, (includes item 20)	
20	88591207	2	O-RING	
21	88201537	8	HEX HD CAPSCREW, 3/8-24X1-3/4, GR5 (lubricate and torque to 25-30 ft lbs)	
22	88561003	8	FLAT WASHER, 3/8	
23	91033246	1	OIL PRESSURE SENDER	
24	24741047	1	SWITCH	
25	88712231	1	STREET TEE, 1/8	
26	88691345	1	CONNECTOR, 90, 1/8	
27	91034006	1	OIL FILTER ELEMENT	
28	88201535	2	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5	
29	88551011	2	LOCK WASHER, 3/8	
30		Ref	PILOT PUMP ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
31	86671112	1	PUMP GASKET	
32	91031197	1	JUMPER WIRE	
33	91033283	1	OIL TEMPERATURE SENDER	

SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-3. ENGINE MOUNTING (Including 8655105G)



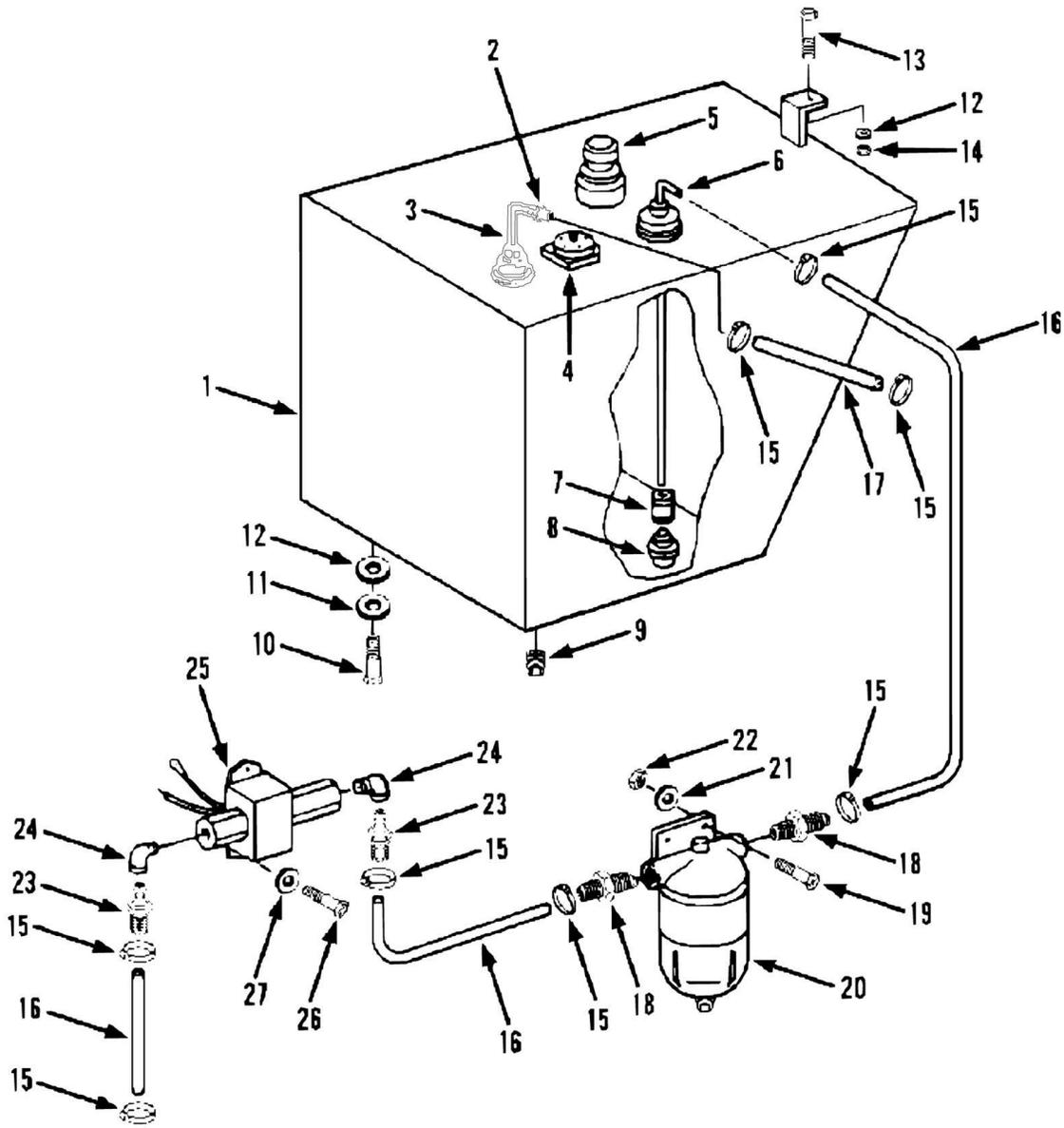
SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-3. ENGINE MOUNTING (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201534	3	HEX HD CAPSCREW, 3/8-24X1, GR5	
2	88551011	3	LOCKWASHER, 3/8	
3	91036012	1	EXHAUST MANIFOLD	
4	91033258	1	PERKINS DIESEL ENGINE (see separate engine manual for parts information)	
5	91033256	1	FAN BLADE SPACER	
6	90207497	1	JUMPER WIRE	
7	83191007	1	HEX HD CAPSCREW, M8X1.25, GR8.8	
8	83191011	1	LOCKWASHER, M8	
9	83191019	1	HEX NUT, M6X1	
10	91031395	1	ALTERNATOR BRACKET	
11	12001234	2	FLAT WASHER, 3/8	
12	88551011	2	LOCKWASHER, 3/8	
13	88201535	2	HEX HD CAPSCREW, 3/8-24X1-1/4, GR5	
14	88521306	1	HEX LOCKNUT, 3/8-16	
15	91033329	1	STUD	
16	88201044	1	HEX HD CAPSCREW, 3/8-16X3-1/4, GR5	
17	91033248	1	FAN BELT	
18	91033074	1	ALTERNATOR FAN	
19	91033234	1	ALTERNATOR	
20	83191028	1	HEX HD CAPSCREW, M8X1.25, GR8.8	
21	83191011	1	LOCKWASHER, M8	
22	90027469	1	HARDENED WASHER, M8	
23	91031404	1	ADJUSTING STRIP	
24	88201549	8	HEX HD CAPSCREW, 7/16-20X1, GR5	
25	88551012	8	LOCKWASHER, 7/16	
26	91036009	2	MOTOR MOUNT	
27	90205032	2	SHOCK MOUNT	
28	88521208	2	HEX LOCKNUT, 1/2-13	
29	90205031	2	SPECIAL WASHER	
30	88201073	2	HEX HD CAPSCREW, 1/2-13X3, GR5	
31	91033323	1	STARTING MOTOR, 12 VOLT (mounting hardware furnished with engine)	
32	88551013	2	LOCKWASHER, 1/2	
33	88201066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
34	91031041	1	MOUNTING PLATE	
35	91033134	1	HEX NUT	
36	91033133	2	HEX NUT	
37	91031152	1	HEAT SHIELD	
38	88501005	1	HEX NUT, 5/16-18	
39	88551010	1	LOCKWASHER, 5/16	
40	86671164	1	SPACER	

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FIGURE 4-4. FUEL TANK AND LINES (Including 8655105G)



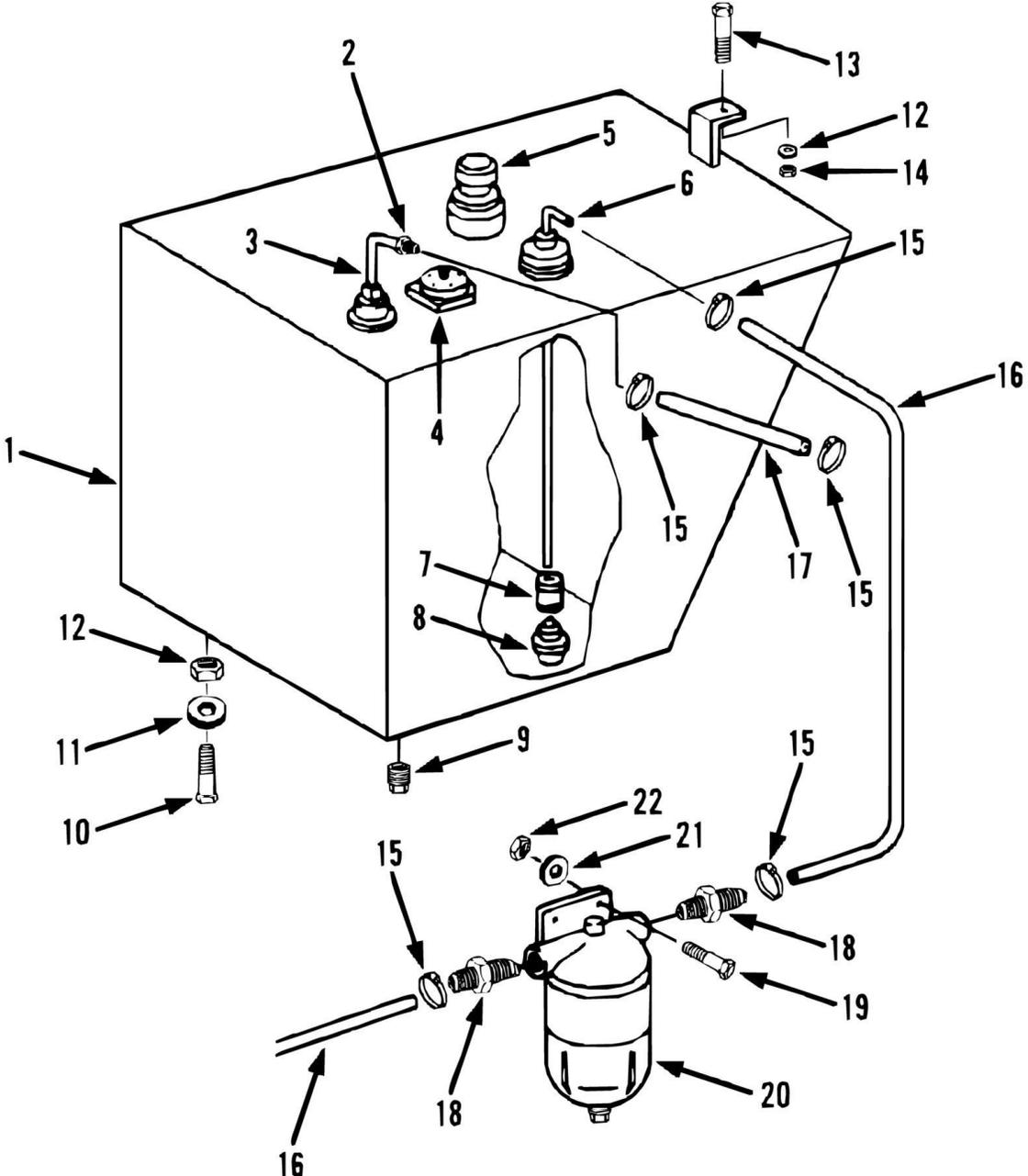
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FIGURE 4-4. FUEL TANK AND LINES (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035093	1	FUEL TANK ASSY (includes items 1 thru 9)	
1	91036047	1	FUEL TANK WELDMENT	
2	90028674	1	PUSH LOCK FITTING	
3	90402827	1	STANDPIPE WELDMENT	
4	90400654	1	FUEL LEVEL SENDER (includes gasket and mounting hardware)	
5	91003186	1	FILLER-BREATHER (includes gasket and mounting hardware)	
5	91034224	AR	RESERVOIR CAP (with locking tab)	
6	91056106	1	STANDPIPE WELDMENT	
7	88711212	1	PIPE COUPLING, 1/4	
8	90205223	1	SUCTION SCREEN	
9	88711255	1	SQUARE HD PIPE PLUG, 1IN	
10	88201066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
11	88551013	2	LOCK WASHER, 1/2	
12	88561111	4	FLAT WASHER, 1/2	
13	88201070	1	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	
14	88521208	1	HEX LOCKNUT, 1/2-13	
15	86683106	6	HOSE CLAMP	
16		Ref	HOSE, 5/16 I.D.	
17		Ref	HOSE, 1/4 I.D.	
18	91033131	2	BARB CONNECTOR	
19	88201021	2	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
20	91033054	1	WATER SEPERATOR	
21	88561108	2	FLAT WASHER, 5/16	
22	88521305	2	HEX LOCKNUT, 5/16-18	
23	88741801	2	HOSE NIPPLE	
24	88712081	2	STREET ELBOW, 3/8	
25	91033270	1	PRIMER PUMP	
26	88201001	2	HEX HD CAPSCREW, 1/4-20X1/2, GR5	
27	88551009	2	LOCKWASHER, 1/4	

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FIGURE 4-5. FUEL TANK AND LINES (Including 0155251)



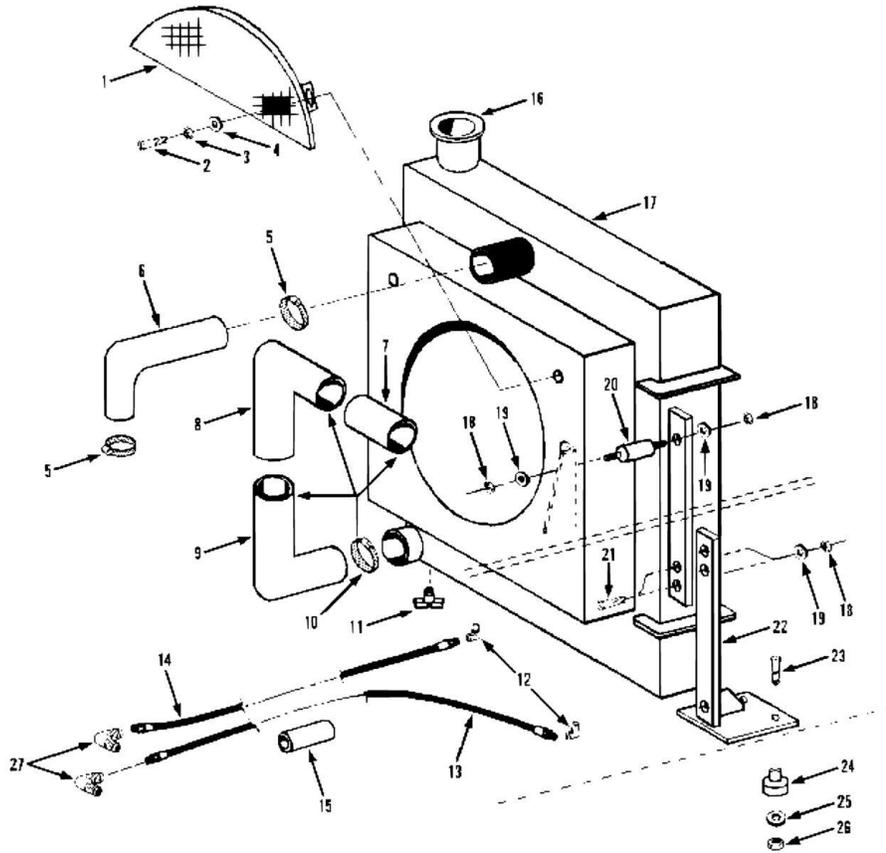
SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-5. FUEL TANK AND LINES (Including 0155251)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035093	1	FUEL TANK ASSY (includes items 1 thru 9)	
1	91036047	1	FUEL TANK WELDMENT	
2	90028674	1	PUSH LOCK FITTING	
3	90402827	1	STANDPIPE WELDMENT	
4	90400654	1	FUEL LEVEL SENDER (includes gasket and mounting hardware)	
5	91003186	1	FILLER-BREATHER (includes gasket and mounting hardware)	
5	91034224	AR	RESERVOIR CAP (with locking tab)	
6	91056106	1	STANDPIPE WELDMENT	
7	88711212	1	PIPE COUPLING, 1/4	
8	90205223	1	SUCTION SCREEN	
9	88711255	1	SQUARE HD PIPE PLUG, 1IN	
10	88201066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
11	88551013	2	LOCK WASHER, 1/2	
12	88561111	4	FLAT WASHER, 1/2	
13	88201070	1	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	
14	88521208	1	HEX LOCKNUT, 1/2-13	
15	86683106	6	HOSE CLAMP	
16		Ref	HOSE, 5/16 I.D.	
17		Ref	HOSE, 1/4 I.D.	
18	91033131	2	BARB CONNECTOR	
19	88201021	2	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
20	91033054	1	WATER SEPARATOR	
21	88561108	2	FLAT WASHER, 5/16	
22	88521305	2	HEX LOCKNUT, 5/16-18	

SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-6. RADIATOR AND HOSES (Including 8655105G)



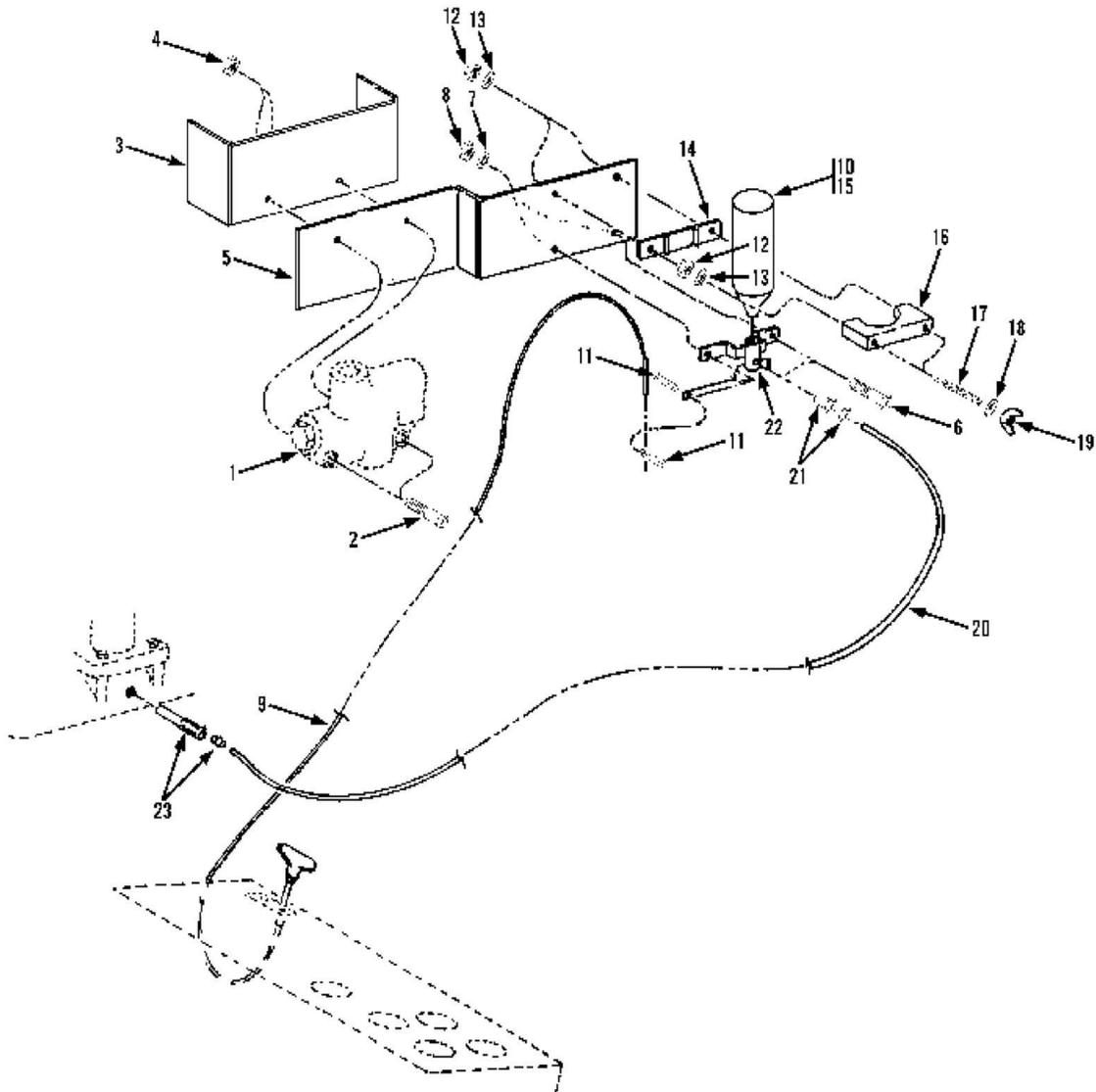
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FIGURE 4-6. RADIATOR AND HOSES (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91036051	1	FAN GUARD	
2	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
3	88551009	2	LOCK WASHER, 1/4	
4	88561107	2	FLAT WASHER, 1/4	
5	85071128	2	HOSE CLAMP	
6	91033132	1	UPPER RADIATOR HOSE	
7	91033062	1	HOSE CONNECTOR	
8	91033061	1	LOWER WATER PIPE	
9	91033063	1	LOWER RADIATOR HOSE	
10	85041654	4	HOSE CLAMP	
11	84521056	1	DRAIN PETCOCK	
12	90028492	2	ELBOW, 90	
13	84717570	1	HOSE ASSY	
14	84717571	1	HOSE ASSY	
15	90207622	1	HOSE GUARD	
16	86671609	1	RADIATOR CAP (7 PSI)	
17	91033254	1	RADIATOR	
18	88521305	8	HEX LOCKNUT, 5/16-18	
19	88561108	8	FLAT WASHER, 5/16	
20	91033137	2	SHOCK MOUNT	
21	88201021	4	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
22	91006016	1	LEFT RADIATOR MOUNT	
22	91006017	1	RIGHT RADIATOR MOUNT	
23	88201039	4	HEX HD CAPSCREW, 3/8-16X2, GR5	
24	83683308	4	SHOCK MOUNT	
25	90205918	8	SPECIAL WASHER	
26	88521206	4	HEX LOCKNUT, 3/8-16	
27	88661118	2	MALE ELBOW, 90, 3/4X3/4 TUBE	

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FIGURE 4-7. ETHER STARTING KIT (Including 8655105G)



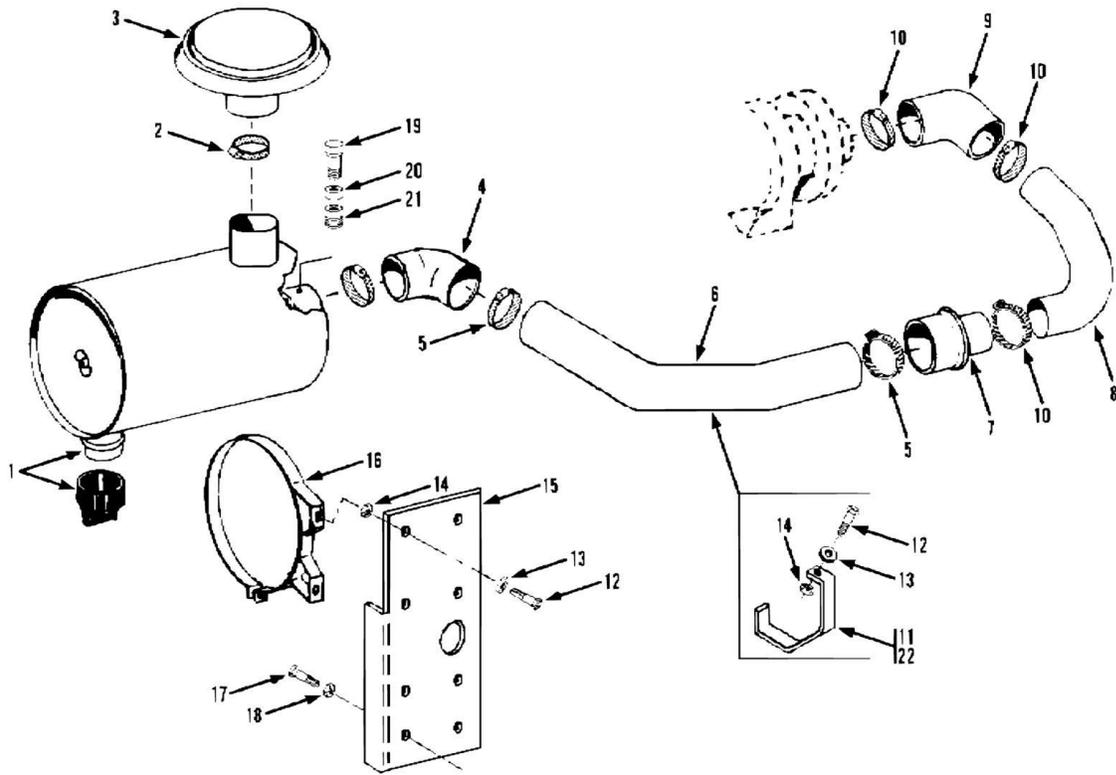
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FIGURE 4-7. ETHER STARTING KIT (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	PRIORITY VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	90025075	2	HEX HD CAPSCREW	
3	90205767	1	VALVE MOUNTING BRACKET	
4	88501005	2	HEX NUT, 5/16-18	
5	90403110	1	MOUNTING BRACKET	
6	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
7	90021454	2	WASHER	
8	90021903	2	HEX NUT	
9	90200308	1	CABLE	
10	90206316	1	ETHER START KIT (includes items 11 thru 23)	
11	Kit	1	CABLE STOP	
12	Kit	4	HEX NUT	
13	Kit	4	LOCK WASHER	
14	Kit	1	TANK MOUNTING BRACKET	
15	Kit	1	ETHER TANK	
16	Kit	1	CLAMP	
17	Kit	2	STUD	
18	Kit	6	LOCK WASHER	
19	Kit	2	WING NUT	
20	Kit	1	HOSE	
21	Kit	1	VALVE FITTING	
22	Kit	1	VALVE	
23	Kit	1	ATOMIZER	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 4-8. AIR CLEANER PIPING (Including 8655105G)



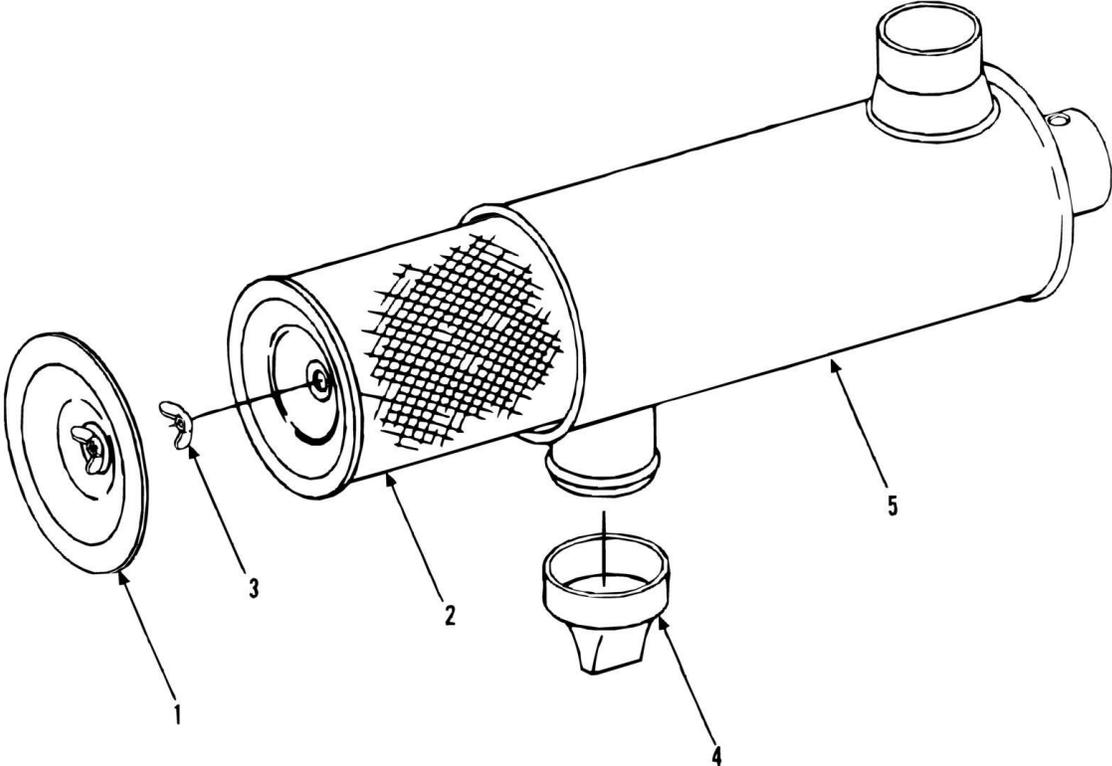
SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-8. AIR CLEANER PIPING (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	AIR CLEANER (See AIR CLEANER PIPING for Breakdown)	
2	85031160	1	CLAMP	
3	91033028	1	INLET CAP	
4	91033056	1	ELBOW, 90	
5	86871176	3	CLAMP	
6	91033060	1	INTAKE TUBE	
7	91033055	1	HUMP REDUCER	
8	91033059	1	INTAKE TUBE	
9	91033058	1	REDUCING ELBOW	
10	86883327	3	CLAMP	
11	91031154	1	BRACKET	
12	88201021	5	HEX HD CAPSCREW, 5/16-18X1, GR5	
13	88561108	5	FLAT WASHER, 5/16	
14	88521305	5	HEX LOCKNUT, 5/16-18	
15	91031042	1	AIR CLEANER BRACKET	
16	77103138	2	AIR CLEANER BAND	
17	88201018	4	HEX HD CAPSCREW, 5/16-18X3/4, GR5	
18	88551010	4	LOCK WASHER, 5/16	
19	77383154	1	SERVICE INDICATOR	
21	88701023	1	CLOSE NIPPLE, 1/8X3	
22	90206200	2	TRIM-LOK, 9IN LONG	

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FIGURE 4-9. AIR CLEANER (SN 8655105g to Present)



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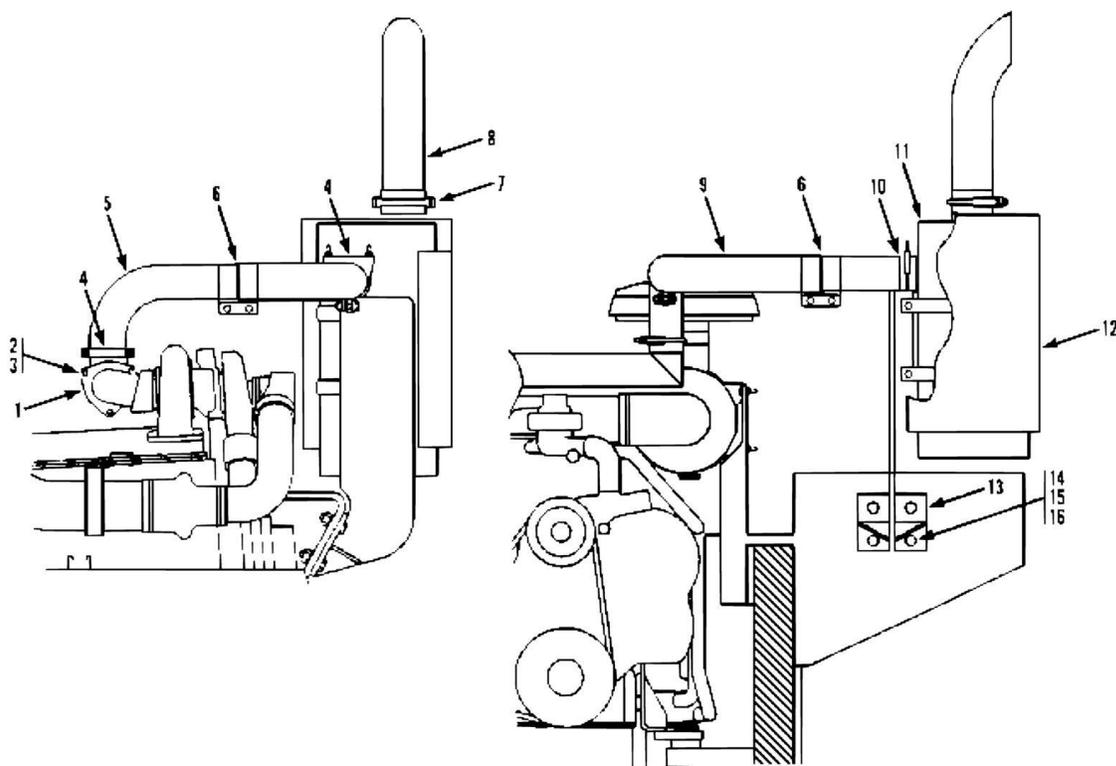
FIGURE 4-9. AIR CLEANER (SN 8655105g to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90205663	1	AIR CLEANER (includes items 1 thru 5)	
1	90206606	1	COVER W/NUT	
2	90206262	1	ELEMENT	
3	90201414	1	WING NUT W/SEAL	
4	90200807	1	VACUATOR	
5		Ref	BODY (not sold separately order P/N 90205663)	

SECTION 4 - ENGINE AND ATTACHING PARTS

FIGURE 4-10. EXHAUST SYSTEM (Including 8655105G)

PERKINS ENGINE



SECTION 4 - ENGINE AND ATTACHING PARTS

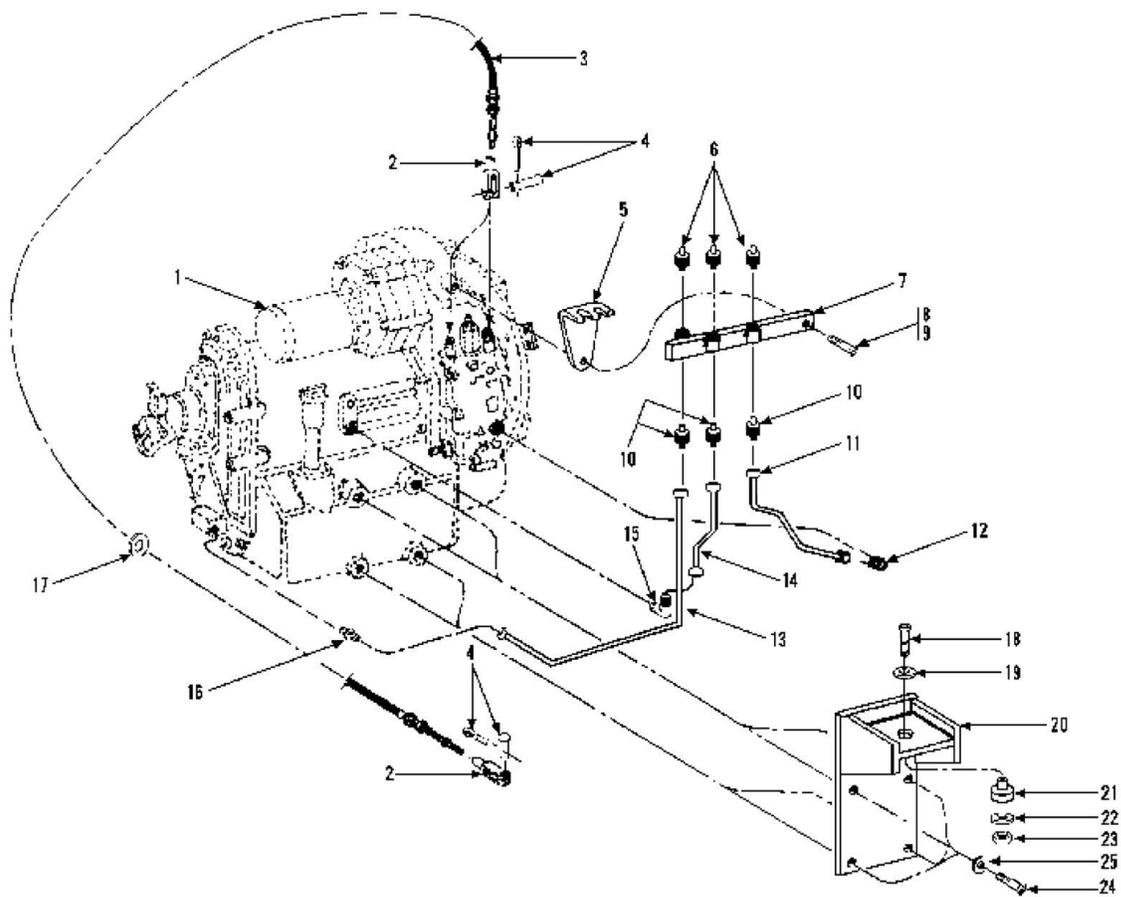
FIGURE 4-10. EXHAUST SYSTEM (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91046004	1	HEADER PIPE WELDMENT	
2	88201534	3	HEX HD CAPSCREW, 3/8-24X1, GR5	
3	88551011	3	LOCKWASHER, 3/8	
4	83683175	2	MUFFLER CLAMP	
5	91043148	1	EXHAUST PIPE	
6	77213031	2	SEAL CLAMP	
7	24921332	1	MUFFLER CLAMP	
8	91043198	1	EXHAUST STACK	
9	91043150	1	FLEXIBLE TUBE	
10	91041016	1	SLEEVE	
11	91043151	1	MUFFLER	
12	91043197	1	MUFFLER CAGE (includes mounting bands and hardware)	
12	91044471	1	MUFFLER CAGE BAND KIT	
13	91046005	1	MUFFLER BRACKET	
14	88201068	4	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
15	88551013	4	LOCKWASHER, 1/2	
16	88501008	4	HEX NUT, 1/2-13	

SECTION 5 - DRIVE TRAIN

SECTION 5 - DRIVE TRAIN

FIGURE 5-1. TRANSMISSION MOUNTING AND CONTROLS (Including 8655105G)



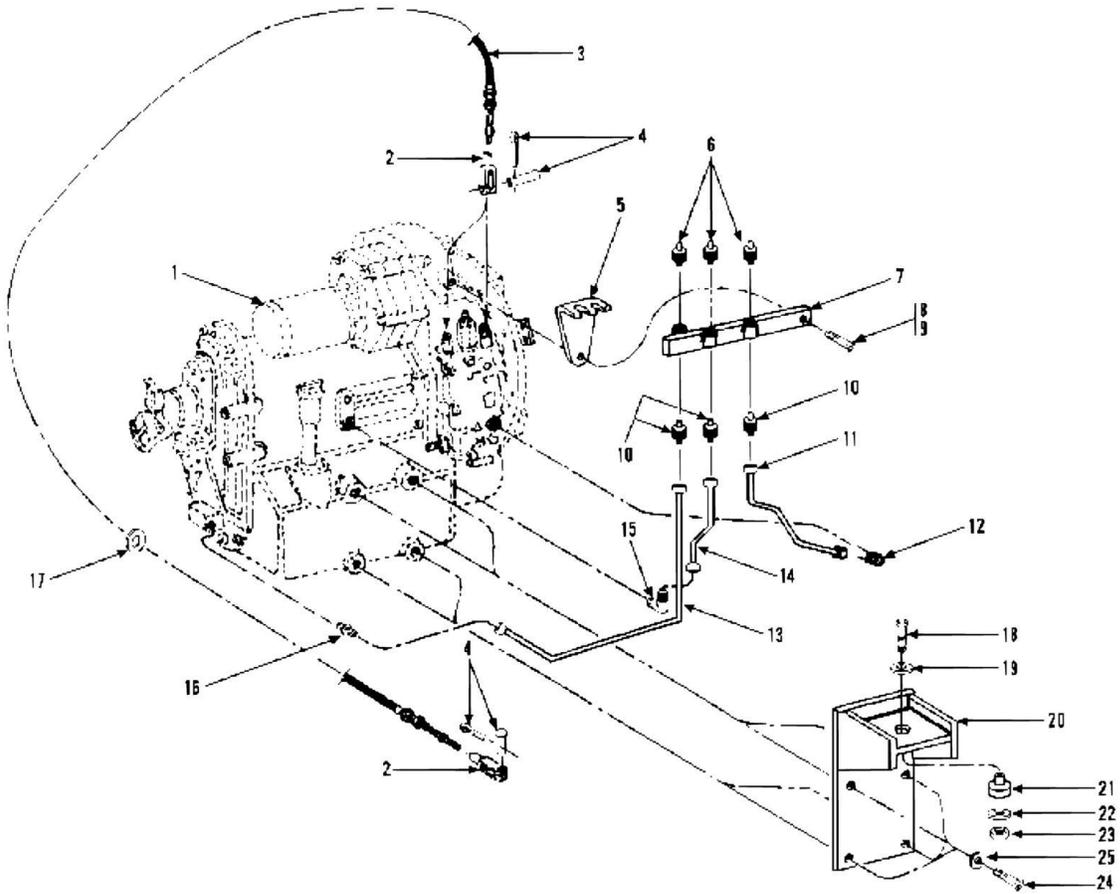
SECTION 5 - DRIVE TRAIN

FIGURE 5-1. TRANSMISSION MOUNTING AND CONTROLS (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91034326	1	TRANSMISSION O-RING KIT	
	91034327	1	TORQUE CONVERTER O-RING KIT	
1	90205166	1	TRANSMISSION ASSY (includes all items shown on TRANSMISSION ASSEMBLIES for Breakdown)	
2	88821003	4	ADJUSTABLE YOKE END, 5/16-24	
3	90203374	2	CONTROL CABLE	
4	90027720	4	CLEVIS AND COTTER PIN	
5	90402642	1	CABLE MOUNTING BRACKET	
6	91035112	3	PRESSURE SWITCH ASSY	
7	90403349	1	SWITCH BRACKET	
8	88201066	1	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
9	88551013	1	LOCKWASHER, 1/2	
10	88743000	3	MALE ADAPTER, 1/8X1/4 TUBE	
11	90207258	1	TUBE LINE	
12	88743041	1	MALE ELBOW, 90, 1/8X1/4 TUBE	
13	90207256	1	TUBE LINE	
14	90207257	1	TUBE LINE	
15	88743055	1	MALE ELBOW, 90, 1/4X1/4 TUBE	
16	90028750	1	ADAPTER	
17	90202303	2	CABLE GROMMET	
18	88201120	2	HEX HD CAPSCREW, 3/4-10X4-1/4, GR5	
19	90207219	2	WASHER	
20	91036008	2	MOUNTING BRACKET	
21	90600097	2	SHOCK MOUNT	
22	88551115	2	FLAT WASHER, 3/4	
23	88501012	2	HEX NUT, 3/4-10	
24	88201110	8	HEX HD CAPSCREW, 3/4-10X1-3/4, GR5	
25	88551016	8	LOCKWASHER, 3/4	
26	91033283	1	TRANS TEMP SENDER (not shown) (See ENGINE AND ATTACHING PARTS SECTION for Breakdown)	
27	91033282	1	TRANS TEMP GAGE (not shown) (See ELECTRICAL SECTION for Breakdown)	

SECTION 5 - DRIVE TRAIN

FIGURE 5-2. TRANSMISSION MOUNTING AND CONTROLS (Including 0155173G)



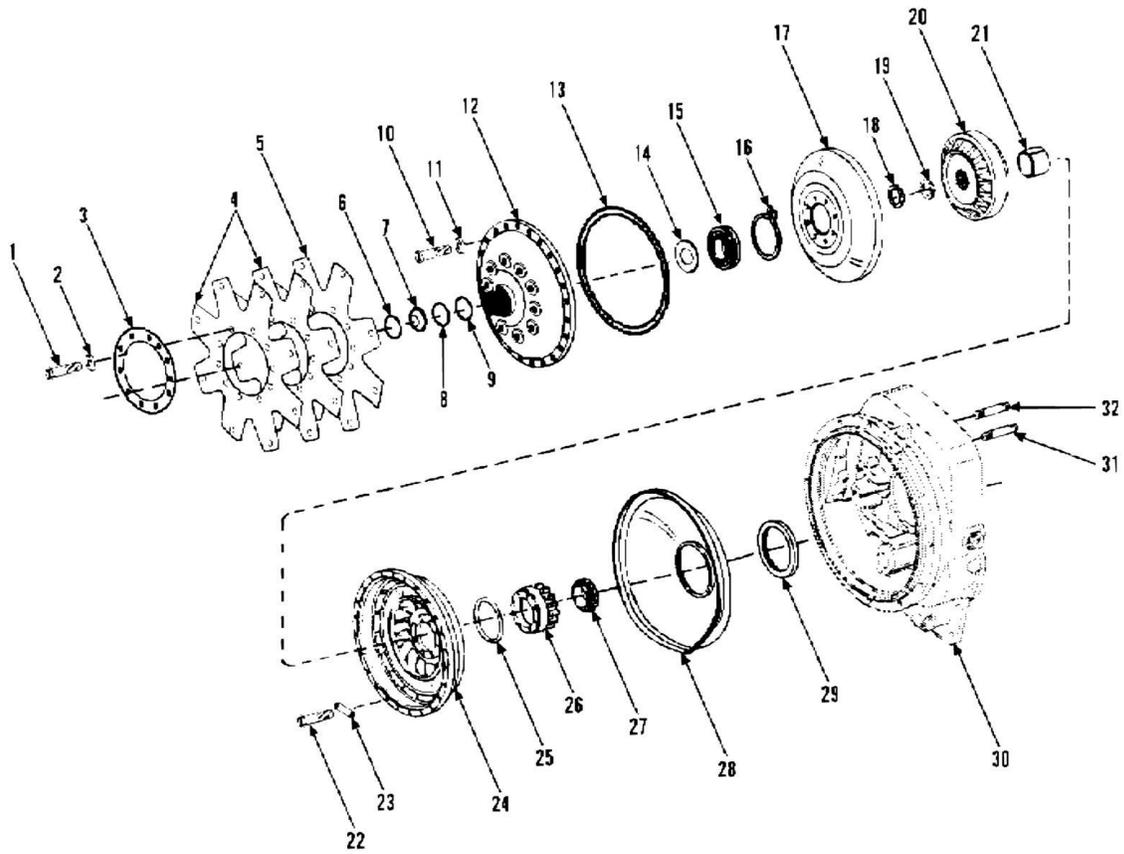
SECTION 5 - DRIVE TRAIN

FIGURE 5-2. TRANSMISSION MOUNTING AND CONTROLS (Including 0155173G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91034326	1	TRANSMISSION O-RING KIT	
	91034327	1	TORQUE CONVERTER O-RING KIT	
1	91033319	1	TRANSMISSION ASSY (includes all items shown on TRANSMISSION ASSEMBLIES for Breakdown)	
2	88821003	4	ADJUSTABLE YOKE END, 5/16-24	
3	90203374	2	CONTROL CABLE	
4	90027720	4	CLEVIS AND COTTER PIN	
5	90402642	1	CABLE MOUNTING BRACKET	
6	91035112	3	PRESSURE SWITCH ASSY	
7	90403349	1	SWITCH BRACKET	
8	88201066	1	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
9	88551013	1	LOCKWASHER, 1/2	
10	88743000	3	MALE ADAPTER, 1/8X1/4 TUBE	
11	90207258	1	TUBE LINE	
12	88743041	1	MALE ELBOW, 90, 1/8X1/4 TUBE	
13	90207256	1	TUBE LINE	
14	90207257	1	TUBE LINE	
15	88743055	1	MALE ELBOW, 90, 1/4X1/4 TUBE	
16	90028750	1	ADAPTER	
17	90202303	2	CABLE GROMMET	
18	88201120	2	HEX HD CAPSCREW, 3/4-10X4-1/4, GR5	
19	90207219	2	WASHER	
20	91036008	2	MOUNTING BRACKET	
21	90600097	2	SHOCK MOUNT	
22	88551115	2	FLAT WASHER, 3/4	
23	88501012	2	HEX NUT, 3/4-10	
24	88201110	8	HEX HD CAPSCREW, 3/4-10X1-3/4, GR5	
25	88551016	8	LOCKWASHER, 3/4	
26	91033283	1	TRANS TEMP SENDER (not shown) (See ENGINE AND ATTACHING PARTS SECTION for Breakdown)	
27	91033282	1	TRANS TEMP GAGE (not shown) (See ELECTRICAL SECTION for Breakdown)	

SECTION 5 - DRIVE TRAIN

FIGURE 5-3. TRANSMISSION FLEX PLATE AND TORQUE CONVERTER (Including 8655105G)



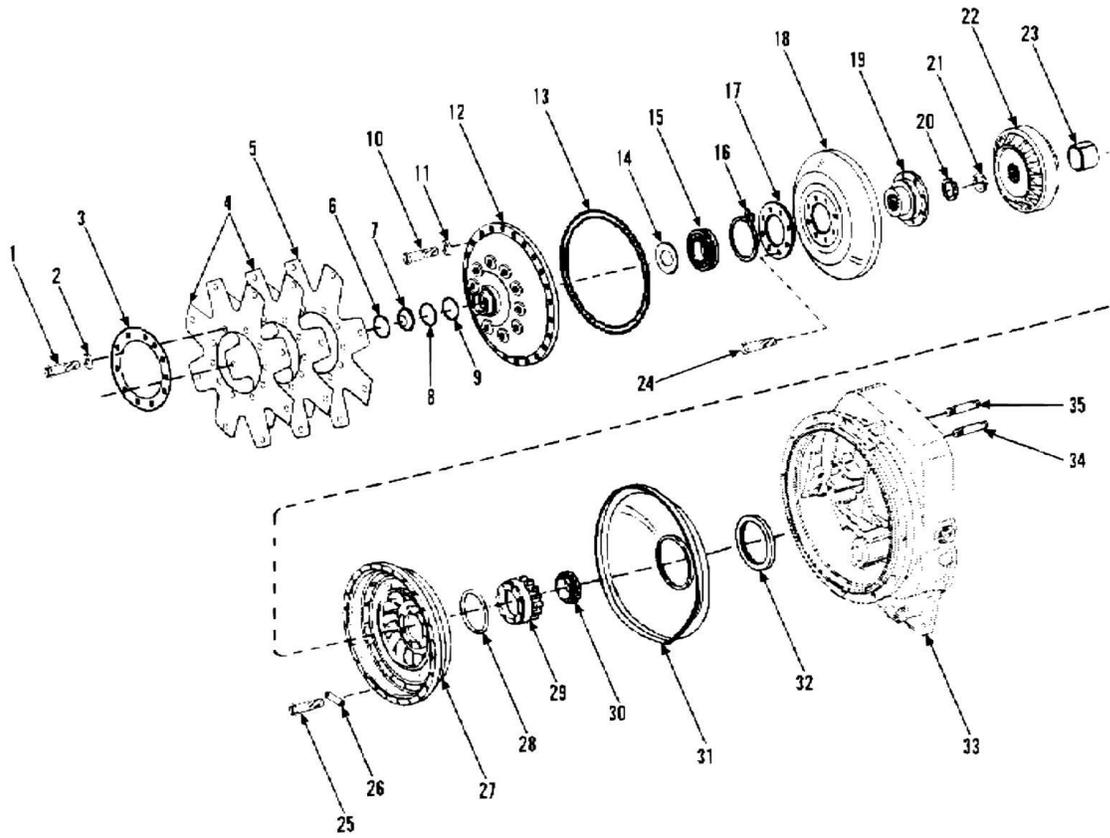
SECTION 5 - DRIVE TRAIN

FIGURE 5-3. TRANSMISSION FLEX PLATE AND TORQUE CONVERTER (Including 8655105G)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201033	10	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
2	88551011	10	LOCK WASHER, 3/8	
3	77104044	1	DRIVE PLATE BACKING RING	
4	90204784	2	DRIVE PLATE	
5	77104042	1	DRIVE PLATE ASSY	
6	90204782	1	BORE PLUG RETAINING RING	
7	77104040	1	BORE PLUG	
8	77104039	1	O-RING	
9	77104032	1	TURBINE RETAINING RING	
10	77104046	24	HEX HD CAPSCREW AND LOCK WASHER ASSY (includes item 11)	
11		Ref	LOCK WASHER (included with item 10)	
12	90204779	1	IMPELLER COVER	
13	77104037	1	O-RING	
14	77104036	1	BEARING RETAINING WASHER	
15	77104035	1	TURBINE HUB BEARING	
16	77104034	1	BEARING LOCATING RING	
17	77104033	1	TURBINE	
18	77104032	1	TURBINE RETAINING RING	
19	77104031	1	RETAINING RING	
20	91044048	1	REACTION MEMBER	
21	90206387	1	SPACER	
22	88201352	8	HEX HD CAPSCREW, 3/8-24X3/4, GR5	
23	77104027	4	LOCK TAB	
24	90204767	1	IMPELLER	
25	77104012	1	O-RING	
26	90206386	1	IMPELLER HUB GEAR	
27	90206385	1	IMPELLER HUB GEAR BEARING	
28	90204756	1	OIL BAFFLE ASSY	
29	90204755	1	OIL SEAL	
30		Ref	CONVERTER HOUSING (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
31	90206378	1	PUMP MOUNTING STUD	
32	90206379	1	PUMP MOUNTING STUD	

SECTION 5 - DRIVE TRAIN

FIGURE 5-4. TRANSMISSION FLEX PLATE AND TORQUE CONVERTER (SN 0155173G to Present)



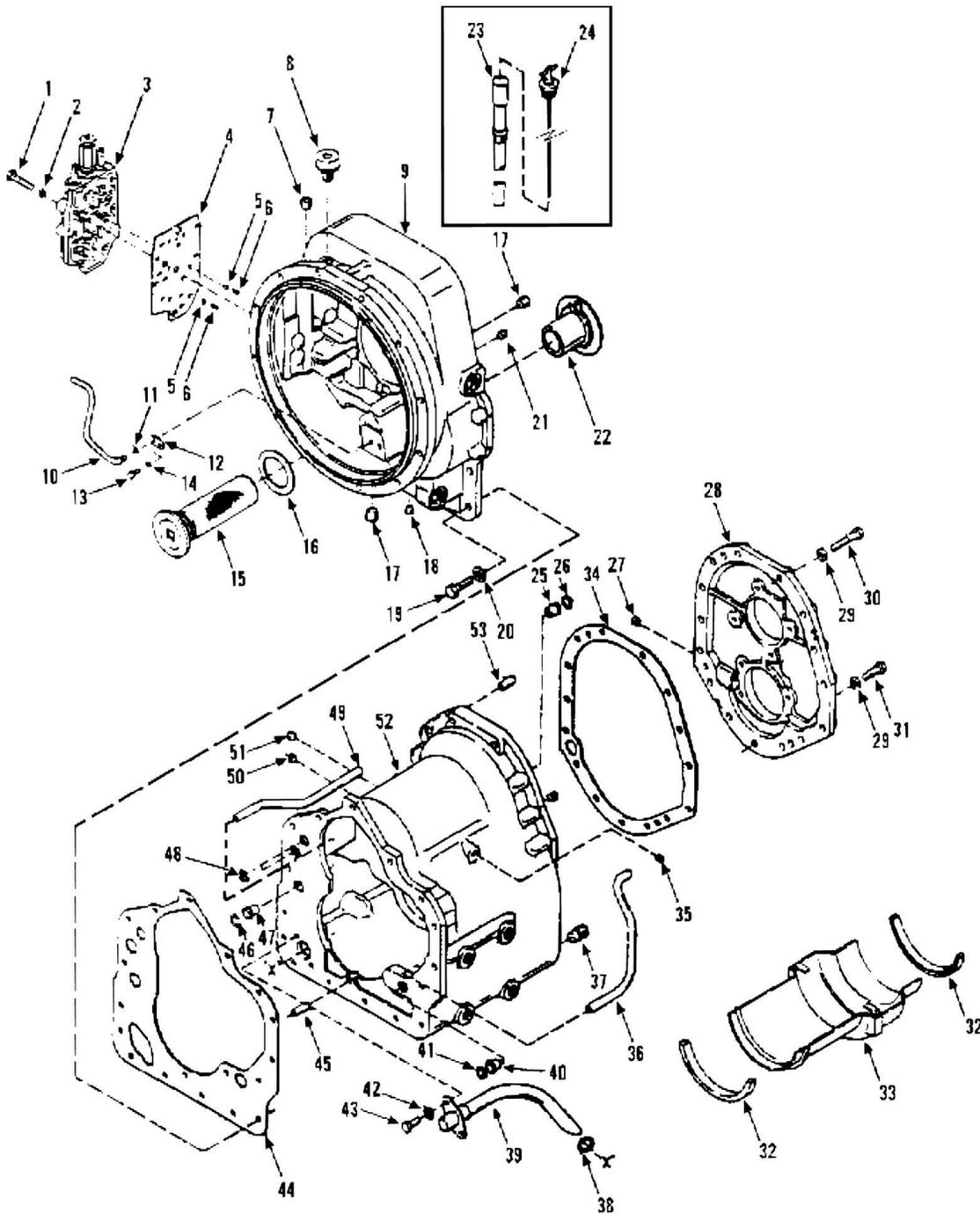
SECTION 5 - DRIVE TRAIN

FIGURE 5-4. TRANSMISSION FLEX PLATE AND TORQUE CONVERTER (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91034238	1	DRIVE PLATE KIT ASSY (includes items 1 thru 5)	
1	77104045	10	HEX HD CAPSCREW AND LOCK WASHER ASSY (includes item 2)	
2	Kit	10	LOCK WASHER	
3	77104044	1	DRIVE PLATE BACKING RING	
4	90204784	2	DRIVE PLATE	
5	77104042	1	DRIVE PLATE ASSY	
6	77104041	1	BORE PLUG RETAINING RING	
7	77104040	1	BORE PLUG	
8	77104039	1	O-RING	
9	77104032	1	TURBINE RETAINING RING	
10	77104046	24	HEX HD CAPSCREW AND LOCK WASHER ASSY (includes item 11)	
11		Ref	LOCK WASHER	
12	90204779	1	IMPELLER COVER ASSY (includes item 6)	
13	77104037	1	O-RING	
14	77104036	1	BEARING RETAINING WASHER	
15	77104035	1	TURBINE HUB BEARING	
16	77104034	1	BEARING LOCATING RING	
17	91034239	1	TURBINE RING	
18	91034240	1	TURBINE	
19	91034241	1	TURBINE HUB	
20	77104032	1	TURBINE RETAINING RING	
21	77104031	1	RETAINING RING	
22	77104030	1	REACTION MEMBER	
23	91034242	1	SPACER	
24	91034243	12	HEX HD CAPSCREW	
25	91034244	8	HEX HD CAPSCREW	
26	77104027	4	LOCK TAB	
27	90204767	1	IMPELLER	
28	77104012	1	O-RING	
29	90206386	1	IMPELLER HUB GEAR	
30	90206385	1	IMPELLER HUB GEAR BEARING	
31	90204756	1	OIL BAFFLE ASSY	
32	90204755	1	OIL SEAL	
33		Ref	CONVERTER HOUSING (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
34	90206378	1	PUMP MOUNTING STUD	
35	90206379	1	PUMP MOUNTING STUD	

SECTION 5 - DRIVE TRAIN

FIGURE 5-5. TRANSMISSION CASE AND CONVERTER HOUSING (SN 8655105G to Present)



SECTION 5 - DRIVE TRAIN

FIGURE 5-5. TRANSMISSION CASE AND CONVERTER HOUSING (SN 8655105G to Present)

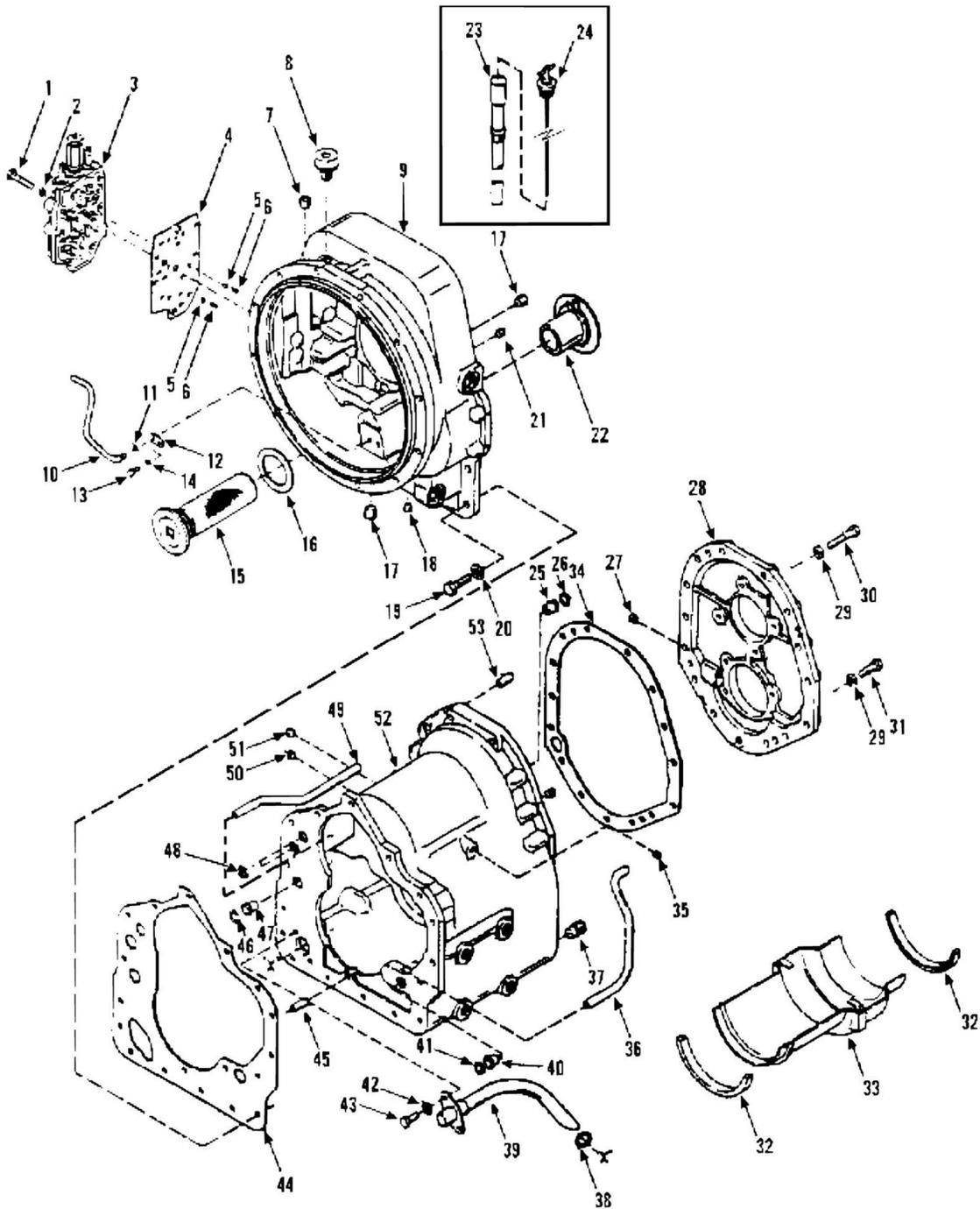
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201046	9	HEX HD CAPSCREW, 3/8-16X3-3/4, GR5	
2	88551011	9	LOCK WASHER, 3/8	
3		Ref	MODULATOR VALVE ASSY (See TRANSMISSION CONTROL VALVE for Breakdown)	
4	77104283	1	GASKET	
5	77104284	2	DETENT BALL	
6	77104285	2	DETENT SPRING	
7	77104112	1	PIPE PLUG	
8	77104096	1	AIR BREATHER	
9	91044049	1	CONVERTER HOUSING ASSY (includes items 10 thru 14)	
10	91044050	1	LUBE BYPASS TUBE	
11	91044051	1	O-RING	
12	91044052	1	TUBE CLIP	
13	77104102	1	HEX HD CAPSCREW	
14	77104103	1	LOCK WASHER	
15	90204800	1	SCREEN ASSY	
16	90204799	1	SCREEN GASKET	
17	90027267	2	PIPE PLUG	
18	77104116	1	PIPE PLUG	
19	77104086	16	HEX HD CAPSCREW	
20	77104085	16	LOCK WASHER	
21	77104116	1	PIPE PLUG	
22	77104097	1	CONVERTER HOUSING SLEEVE	
23	90204823	1	DIPSTICK TUBE	
24	90204824	1	DIPSTICK	
25	77104109	1	TUBE SLEEVE	
26	77104111	1	O-RING	
27	77104116	1	COVER PIPE PLUG	
28	90204798	1	COVER AND PLUG ASSY (includes item 27)	
29	77104085	15	LOCKWASHER	
30	88201053	9	HEX HD CAPSCREW, 7/16X1-3/4, GR5	
31	77104086	6	HEX HD CAPSCREW	
32	90204806	2	OIL BAFFLE SEAL	
33	90204807	1	OIL BAFFLE	
34	90204802	1	GASKET	
35	77104112	2	PIPE PLUG	
36	90204804	1	CLUTCH LUBE TUBE	
37	77104119	1	MAGNETIC DRAIN PLUG	
38	77104057	1	O-RING	
39	90204809	1	SUCTION TUBE ASSY	
40	77104107	1	TUBE SLEEVE	
41	77104111	1	O-RING	
42	88551010	2	LOCK WASHER, 5/16	
43	88201017	2	HEX HD CAPSCREW, 5/16-18X5/8, GR5	
44	77104098	1	GASKET	
45	77104113	1	DOWEL PIN	
46	77104116	1	O-RING	
47	77104109	1	TUBE SLEEVE	
48	77104048	2	O-RING	
49	77104110	1	LOW SPEED CLUTCH PRESSURE TUBE	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	77104112	1	PIPE PLUG	
51	77104118	1	PIPE PLUG	
52	90204817	1	TRANSMISSION CASE ASSY (includes items 25, 32, 33, 36, 38, 39, 40, 42, 43, 47, 49)	
53	77104113	2	DOWEL PIN	

SECTION 5 - DRIVE TRAIN

FIGURE 5-6. TRANSMISSION CASE AND CONVERTER HOUSING (SN 0155173G to Present)



SECTION 5 - DRIVE TRAIN

FIGURE 5-6. TRANSMISSION CASE AND CONVERTER HOUSING (SN 0155173G to Present)

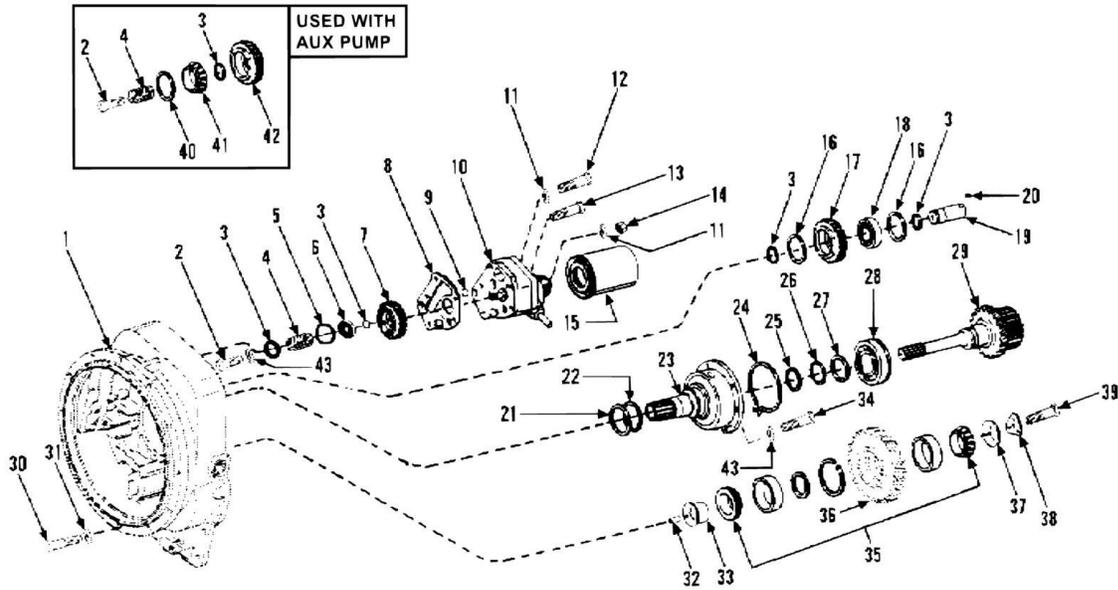
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201046	9	HEX HD CAPSCREW, 3/8-16X3-3/4, GR5	
2	88551011	9	LOCK WASHER, 3/8	
3		Ref	MODULATOR VALVE ASSY (See TRANSMISSION CONTROL VALVE for Breakdown)	
4	91034245	1	GASKET	
5	77104284	2	DETENT BALL	
6	77104285	2	DETENT SPRING	
7	77104112	1	PIPE PLUG	
8	77104096	1	AIR BREATHER	
9	91034246	1	CONVERTER HOUSING ASSY (includes items 10 thru 14)	
10	91044050	1	LUBE BYPASS TUBE	
11	91044051	1	O-RING	
12	91044052	1	TUBE CLIP	
13	77104102	1	HEX HD CAPSCREW	
14	77104103	1	LOCK WASHER	
15	90204800	1	SCREEN ASSY	
16	90204799	1	SCREEN GASKET	
17	90027267	2	PIPE PLUG	
18	77104116	1	PIPE PLUG	
19	77104086	16	HEX HD CAPSCREW	
20	77104085	16	LOCK WASHER	
21	77104116	1	PIPE PLUG	
22	77104097	1	CONVERTER HOUSING SLEEVE	
23	90204823	1	DIPSTICK TUBE	
24	90204824	1	DIPSTICK	
25	77104109	1	TUBE SLEEVE	
26	77104111	1	O-RING	
27	77104116	1	COVER PIPE PLUG	
28	90204798	1	COVER AND PLUG ASSY (includes item 27)	
29	77104085	15	LOCK WASHER	
30	88201053	9	HEX HD CAPSCREW, 7/16X1-3/4, GR5	
31	77104086	6	HEX HD CAPSCREW	
32	90204806	2	OIL BAFFLE SEAL	
33	90204807	1	OIL BAFFLE	
34	90204802	1	GASKET	
35	77104112	2	PIPE PLUG	
36	90204804	1	CLUTCH LUBE TUBE	
37	77104119	1	MAGNETIC DRAIN PLUG	
38	77104057	1	O-RING	
39	90204809	1	SUCTION TUBE ASSY	
40	77104107	1	TUBE SLEEVE	
41	77104111	1	O-RING	
42	88551010	2	LOCK WASHER, 5/16	
43	88201017	2	HEX HD CAPSCREW, 5/16-18X5/8, GR5	
44	77104098	1	GASKET	
45	77104113	1	DOWEL PIN	
46	77104116	1	O-RING	
47	77104109	1	TUBE SLEEVE	
48	77104048	2	O-RING	
49	77104110	1	LOW SPEED CLUTCH PRESSURE TUBE	

SECTION 5 - DRIVE TRAIN

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	77104112	1	PIPE PLUG	
51	77104118	1	PIPE PLUG	
52	90204817	1	TRANSMISSION CASE ASSY (includes items 25, 32, 33, 36, 38, 39, 40, 42, 43, 47, 49)	
53	77104113	2	DOWEL PIN	

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FIGURE 5-7. TRANSMISSION DRIVE GEARING (SN 8655105G to Present)



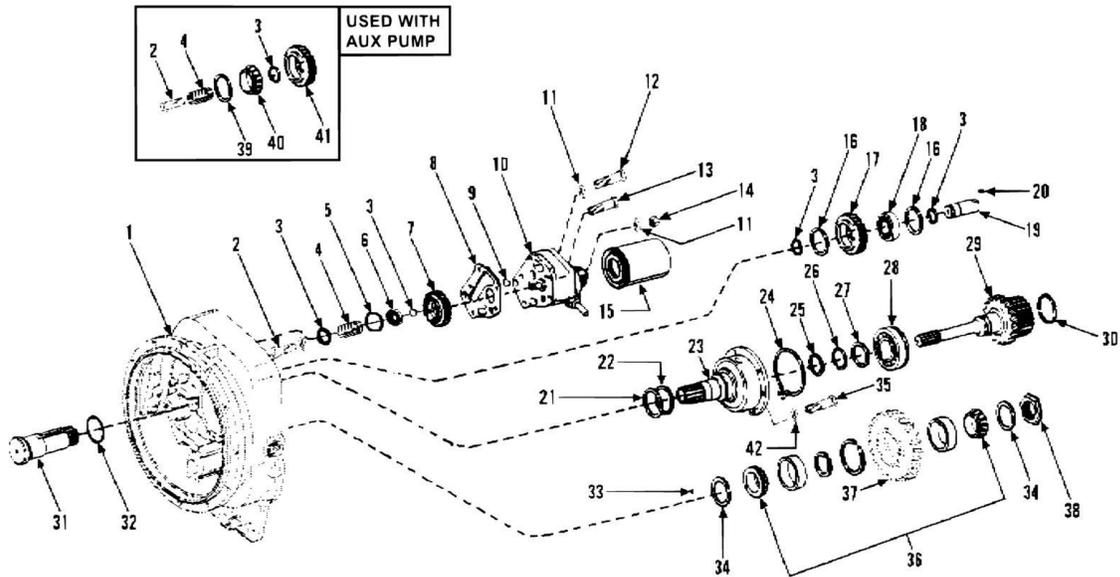
SECTION 5 - DRIVE TRAIN

FIGURE 5-7. TRANSMISSION DRIVE GEARING (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	CONVERTER HOUSING (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	88201036	AR	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
3	90204733	AR	BEARING LOCATING RING	
4	90204734	AR	PUMP DRIVE BEARING SUPPORT	
5	90204735	1	BEARING RETAINING RING	
6	90204793	1	PUMP DRIVE GEAR BEARING	
7	90204737	1	PUMP DRIVE GEAR	
8	90204730	1	GASKET	
9	77104048	1	O-RING	
10	90204731	1	CHARGING PUMP ASSY	
10	91034331	1	CHARGE PUMP SEAL KIT	
11	77104085	3	LOCKWASHER	
12	90028641	1	HEX HD CAPSCREW	
13	88201062	2	HEX HD CAPSCREW, 7/16-14X4, GR5	
14	77104204	2	HEX NUT	
15	90204732	1	FILTER	
16	77104181	2	BEARING RETAINING RING	
17	90204740	1	IDLER GEAR	
18	90204741	1	IDLER STUB SHAFT BEARING	
19	90204738	1	IDLER GEAR SHAFT	
20	90205047	1	LOCK BALL	
21	90206377	1	PISTON RING	
22	77104016	1	PISTON RING EXPANDER SPRING	
23	90206376	1	STATOR SUPPORT	
24	90204749	1	SNAP RING	
25	90204748	1	PISTON RING	
26	77104164	1	BEARING RETAINING RING	
27	77104197	1	BEARING LOCATING WASHER	
28	91044053	1	TURBINE SHAFT BEARING	
29	91044054	1	HUB ASSY	
30	77104250	3	HEX HD CAPSCREW	
31	77104085	3	LOCKWASHER	
32	77104253	1	IDLER SHAFT PIN	
33	77104254	1	REVERSE IDLER SHAFT	
34	88201035	6	HEX HD CAPSCREW, 3/8-16X1, GR5	
35	77104255	1	BEARING ASSY	
36	90206382	1	REVERSE IDLER GEAR	
37	77104257	1	BEARING RETAINING PLATE	
38	77104258	1	LOCK PLATE	
39	90206384	3	HEX HD CAPSCREW	
40	90204787	1	BEARING RETAINING RING	
41	90204788	1	AUXILIARY PUMP GEAR BEARING	
42	90204790	1	AUXILIARY PUMP DRIVE GEAR	
43	88551011	AR	LOCKWASHER, 3/8	

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FIGURE 5-8. TRANSMISSION DRIVE GEARING (SN 0155173G to Present)



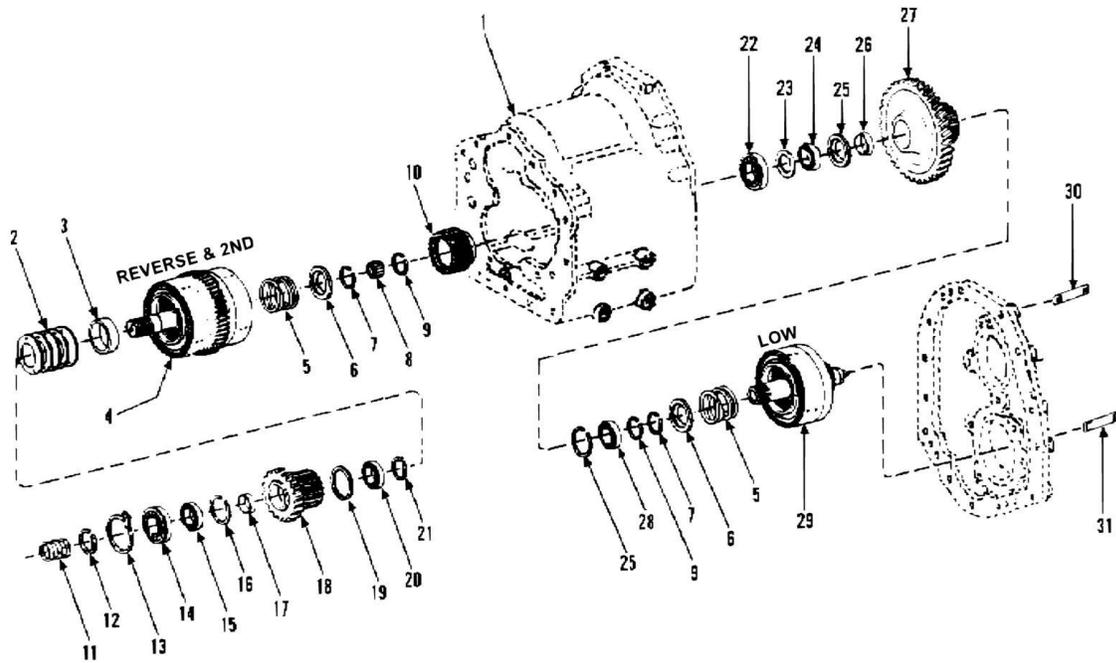
SECTION 5 - DRIVE TRAIN

FIGURE 5-8. TRANSMISSION DRIVE GEARING (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	CONVERTER HOUSING (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	91034247	4	BEARING SUPPORT SCREW AND LOCKWASHER	
3	90204733	AR	BEARING LOCATING RING	
4	90204734	AR	PUMP DRIVE BEARING SUPPORT	
5	90204735	1	BEARING RETAINING RING	
6	90204793	1	PUMP DRIVE GEAR BEARING	
7	90204737	1	PUMP DRIVE GEAR	
8	90204730	1	GASKET	
9	77104048	1	O-RING	
10	90204731	1	CHARGING PUMP ASSY	
10	91034331	1	CHARGE PUMP SEAL KIT	
11	77104085	3	LOCKWASHER	
12	90028641	1	HEX HD CAPSCREW	
13	88201062	2	HEX HD CAPSCREW, 7/16-14X4, GR5	
14	77104204	2	HEX NUT	
15	90204732	1	FILTER	
16	77104181	2	BEARING RETAINING RING	
17	90204740	1	IDLER GEAR	
18	90204741	1	IDLER STUB SHAFT BEARING	
19	90204738	1	IDLER GEAR SHAFT	
20	90205047	1	LOCK BALL	
21	90206377	1	PISTON RING	
22	77104016	1	PISTON RING EXPANDER SPRING	
23	91034248	1	STATOR SUPPORT	
24	90204749	1	SNAP RING	
25	90204748	1	PISTON RING	
26	77104164	1	BEARING RETAINING RING	
27	77104197	1	BEARING LOCATING WASHER	
28	77104022	1	TURBINE SHAFT BEARING	
29	90204744	1	TURBINE SHAFT ASSY (includes item 30)	
30	91034255	1	RETAINING RING	
31	91034249	1	REVERSE IDLER SHAFT	
32	91034250	1	O-RING	
33	91034251	1	LOCK BALL	
34	91034252	2	THRUST PLATE	
35	91034253	6	HEX HD CAPSCREW	
36	77104255	1	BEARING ASSY	
37	90206382	1	REVERSE IDLER GEAR	
38	91034254	1	RETAINING PLATE NUT	
39	90204787	1	BEARING RETAINING RING	
40	90204788	1	AUXILIARY PUMP GEAR BEARING	
41	90204790	1	AUXILIARY PUMP DRIVE GEAR	
42	77104007	6	LOCKWASHER	

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FIGURE 5-9. TRANSMISSION CLUTCH AND GEARING (REVERSE 2ND AND LOW) (SN 8655105G to Present)



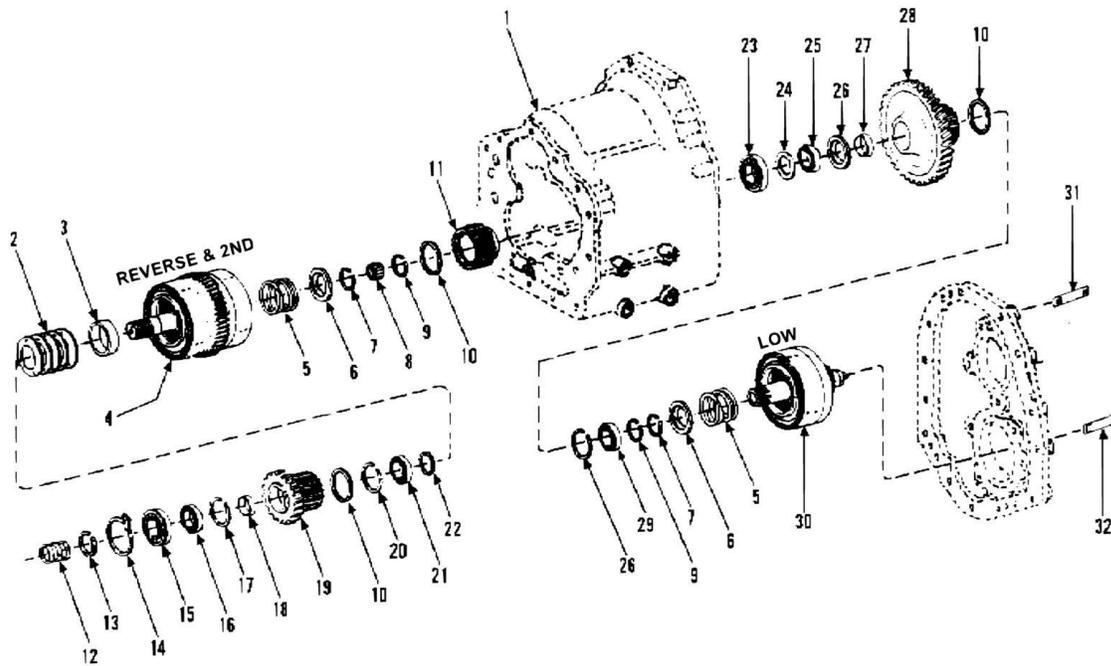
SECTION 5 - DRIVE TRAIN

FIGURE 5-9. TRANSMISSION CLUTCH AND GEARING (REVERSE 2ND AND LOW) (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TRANSMISSION CASE ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	77104207	5	PISTON RETURN SPRING	
3	77104208	1	RETURN SPRING SPACER	
4		Ref	REVERSE AND 2ND SHAFT DRUM AND PLUG ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
5	77104187	1	PISTON RETURN SPRING	
6	77104186	2	SPRING RETAINER	
7	77104185	2	SNAP RING	
8	77104231	1	REVERSE AND 2ND SHAFT REAR BEARING	
9	77104184	2	RETAINING RING	
10	77104232	1	CLUTCH DISC HUB	
11	77104219	3	PISTON RING	
12	77104220	1	RETAINING RING	
13	77104221	1	SNAP RING	
14	77104222	1	REVERSE AND 2ND SHAFT FRONT BEARING	
15	77104223	1	CLUTCH DRIVEN GEAR BEARING	
16	77104224	1	RETAINING RING	
17	77104225	1	SPACER	
18	77104226	1	REVERSE CLUTCH GEAR AND HUB ASSY	
19	77104224	1	RETAINING RING	
20	77104227	1	CLUTCH DRIVEN GEAR BEARING	
21	77104206	1	SNAP RING	
22	77104158	1	LOW SPEED SHAFT FRONT BEARING	
23	77104179	1	SPACER	
24	77104180	1	LOW SPEED GEAR BEARING	
25	77104181	2	LOCATING RING	
26	77104182	1	SPACER	
27	90204874	1	LOW GEAR AND HUB ASSY	
28	77104180	1	LOW SPEED GEAR BEARING	
29		Ref	LOW CLUTCH DRUM AND BLEED VALVE ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
30	77104177	4	BEARING CAP STUD	
31	77104203	4	BEARING CAP STUD	

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FIGURE 5-10. TRANSMISSION CLUTCH AND GEARING (REVERSE 2ND AND LOW) (SN 0155173G to Present)



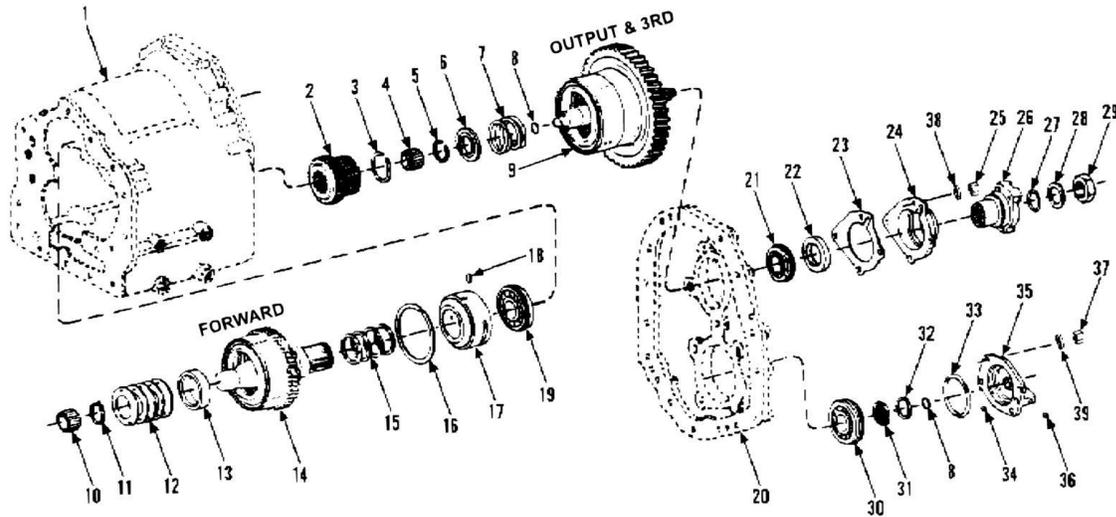
SECTION 5 - DRIVE TRAIN

FIGURE 5-10. TRANSMISSION CLUTCH AND GEARING (REVERSE 2ND AND LOW) (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TRANSMISSION CASE ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	77104207	5	PISTON RETURN SPRING	
3	77104208	1	RETURN SPRING SPACER	
4		Ref	REVERSE AND 2ND SHAFT DRUM AND PLUG ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
5	77104187	1	PISTON RETURN SPRING	
6	77104186	2	SPRING RETAINER	
7	77104185	2	SNAP RING	
8	77104231	1	REVERSE AND 2ND SHAFT REAR BEARING	
9	77104184	2	RETAINING RING	
10	91034255	3	RETAINING RING	
11	90204855	1	CLUTCH DISC HUB (includes item 10)	
12	77104219	3	PISTON RING	
13	77104220	1	RETAINING RING	
14	77104221	1	SNAP RING	
15	77104222	1	REVERSE AND 2ND SHAFT FRONT BEARING	
16	77104223	1	CLUTCH DRIVEN GEAR BEARING	
17	77104224	1	RETAINING RING	
18	77104225	1	SPACER	
19	77104226	1	REVERSE CLUTCH GEAR AND HUB ASSY (includes item 10)	
20	77104224	1	RETAINING RING	
21	77104227	1	CLUTCH DRIVEN GEAR BEARING	
22	77104206	1	SNAP RING	
23	77104158	1	LOW SPEED SHAFT FRONT BEARING	
24	77104179	1	SPACER	
25	77104180	1	LOW SPEED GEAR BEARING	
26	77104181	2	LOCATING RING	
27	77104182	1	SPACER	
28	91034256	1	LOW GEAR AND HUB ASSY (includes item 10)	
29	77104180	1	LOW SPEED GEAR BEARING	
30		Ref	LOW CLUTCH DRUM AND BLEED VALVE ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
31	77104177	4	BEARING CAP STUD	
32	77104203	4	BEARING CAP STUD	

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FIGURE 5-11. TRANSMISSION CLUTCH AND GEARING (FORWARD, OUTPUT AND THIRD) (SN 8655105G to Present)



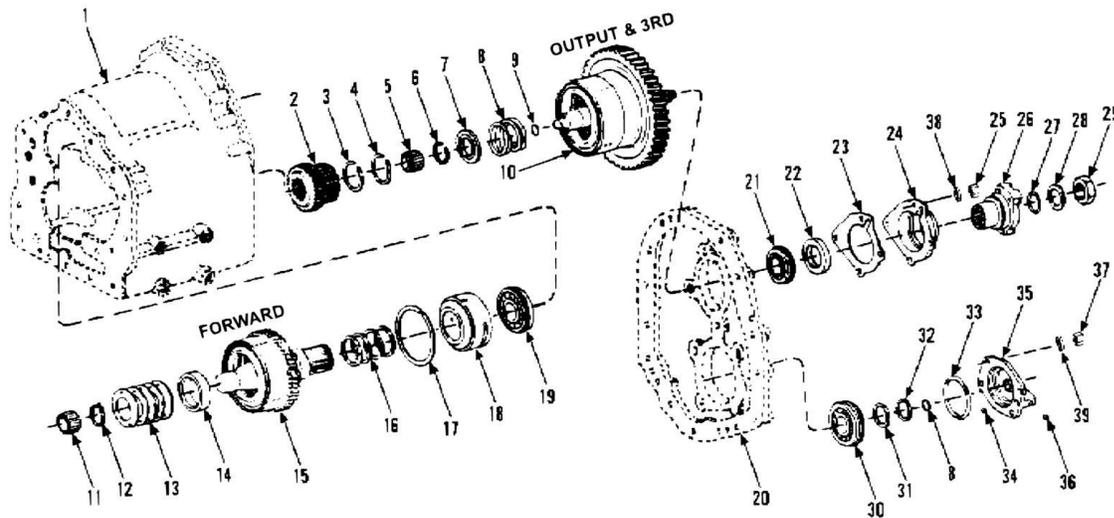
SECTION 5 - DRIVE TRAIN

FIGURE 5-11. TRANSMISSION CLUTCH AND GEARING (FORWARD, OUTPUT AND THIRD) (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TRANSMISSION CASE ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	90204866	1	THIRD GEAR AND HUB ASSY	
3	90204864	1	RETAINING RING	
4	90204862	1	PILOT BEARING	
5	77104185	1	SNAP RING	
6	77104186	1	SPRING RETAINER	
7	77104187	1	PISTON RETURN SPRING	
8	77104198	1	PISTON RING	
9		Ref	OUTPUT SHAFT AND 3RD CLUTCH ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
10	77104205	1	SHAFT PILOT BEARING	
11	77104206	1	SNAP RING	
12	77104207	5	PISTON RETURN SPRING	
13	77104208	1	SPACER	
14		Ref	FORWARD SHAFT DRUM AND PLUG ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
15	77104211	4	PISTON RING	
16	77104212	1	RETAINER RING	
17	77104213	1	PISTON RING SLEEVE	
18	77104214	1	ROLL PIN	
19	77104215	1	FORWARD SHAFT BEARING	
20		Ref	COVER AND PLUG ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
21	90204829	1	OUTPUT SHAFT BEARING	
22	90204831	1	OIL SEAL	
23	90206394	1	GASKET	
24	90206395	1	CAP	
25	77104142	4	HEX NUT	
26	90206396	1	OUTPUT FLANGE	
27	77104128	1	O-RING	
28	77104088	1	FLANGE WASHER	
29	77104087	1	FLANGE NUT	
30	90204842	1	LOW SPEED SHAFT BEARING	
31	77104197	1	BEARING SUPPORT WASHER	
32	77104184	1	BEARING RING	
33	77104202	1	O-RING	
34	77104199	1	O-RING	
35	90204851	1	REAR BEARING CAP AND PLUG ASSY (includes item 36)	
36	77104201	1	PIPE PLUG	
37	77104204	4	HEX NUT	
38	77104143	4	LOCKWASHER	
39	77104085	4	LOCKWASHER	

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FIGURE 5-12. TRANSMISSION CLUTCH AND GEARING (FORWARD, OUTPUT AND THIRD) (SN 0155173G to Present)



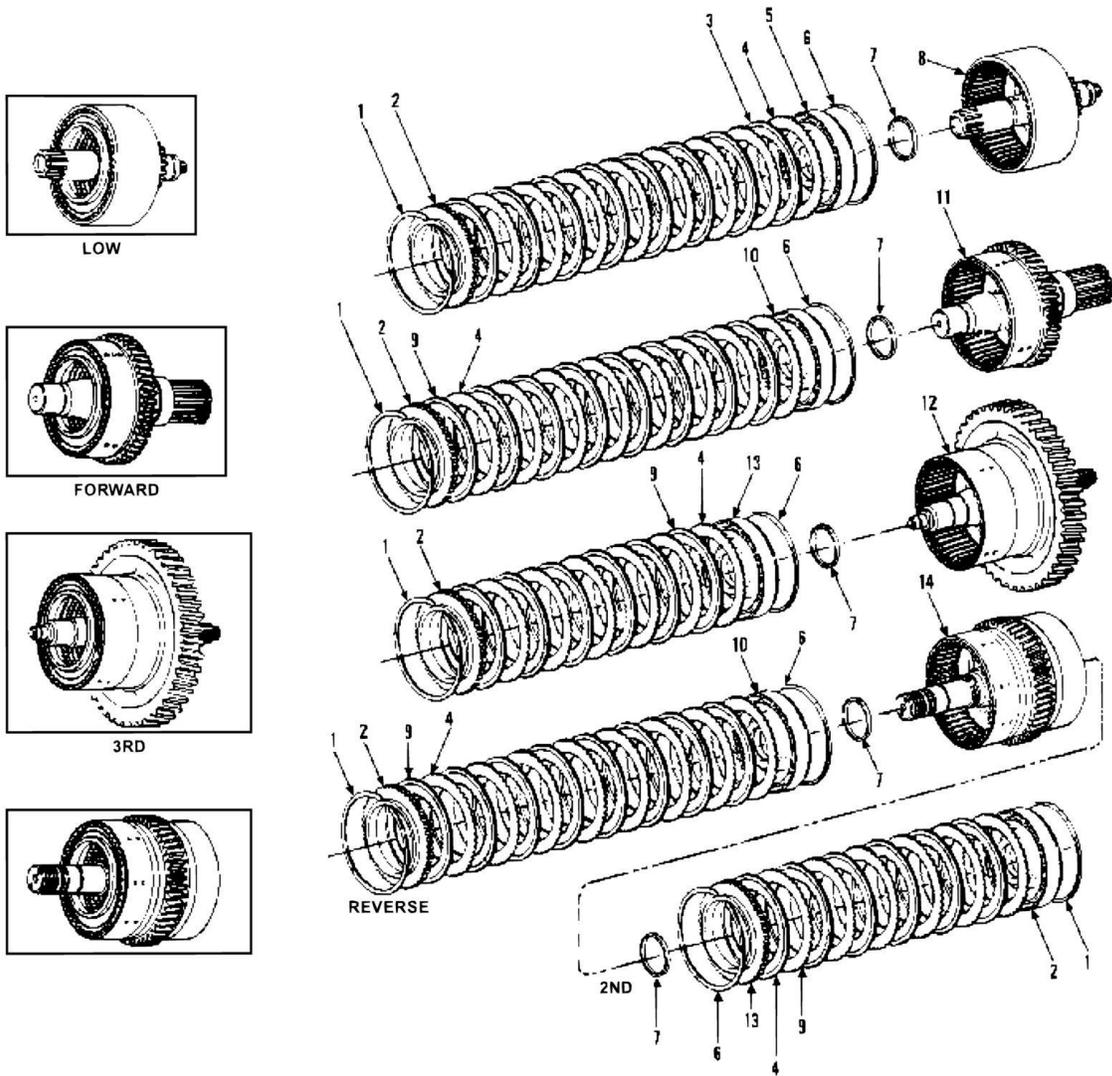
SECTION 5 - DRIVE TRAIN

FIGURE 5-12. TRANSMISSION CLUTCH AND GEARING (FORWARD, OUTPUT AND THIRD) (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TRANSMISSION CASE ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
2	91034257	1	THIRD GEAR AND HUB ASSY	
3	91034255	1	RETAINING RING	
4	77104217	1	RETAINING RING	
5	90204862	1	PILOT BEARING	
6	77104185	1	SNAP RING	
7	77104186	1	SPRING RETAINER	
8	77104187	1	PISTON RETURN SPRING	
9	77104198	1	PISTON RING	
10		Ref	OUTPUT SHAFT AND 3RD CLUTCH ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
11	77104205	1	SHAFT PILOT BEARING	
12	77104206	1	SNAP RING	
13	77104207	5	PISTON RETURN SPRING	
14	77104208	1	SPACER	
15		Ref	FORWARD SHAFT DRUM AND PLUG ASSY (See TRANSMISSION CLUTCH ASSEMBLIES for Breakdown)	
16	77104211	4	PISTON RING	
17	77104212	1	RETAINER RING	
18	77104213	1	PISTON RING SLEEVE	
19	91034258	1	FORWARD SHAFT BEARING	
20		Ref	COVER AND PLUG ASSY (See TRANSMISSION CASE AND CONVERTER HOUSING for Breakdown)	
21	90204829	1	OUTPUT SHAFT BEARING	
22	90204831	1	OIL SEAL	
23	90206394	1	GASKET	
24	90206395	1	CAP	
25	77104142	4	HEX NUT	
26	90206396	1	OUTPUT FLANGE	
27	77104128	1	O-RING	
28	77104088	1	FLANGE WASHER	
29	77104087	1	FLANGE NUT	
30	90204842	1	LOW SPEED SHAFT BEARING	
31	77104197	1	BEARING SUPPORT WASHER	
32	77104184	1	BEARING RING	
33	77104202	1	O-RING	
34	77104199	1	O-RING	
35	91034259	1	REAR BEARING CAP ASSY (includes item 36)	
36	77104201	1	PIPE PLUG	
37	77104204	4	HEX NUT	
38	77104143	4	LOCK WASHER	
39	77104085	4	LOCK WASHER	

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FIGURE 5-13. TRANSMISSION CLUTCH ASSEMBLIES (SN 8655105G to Present)



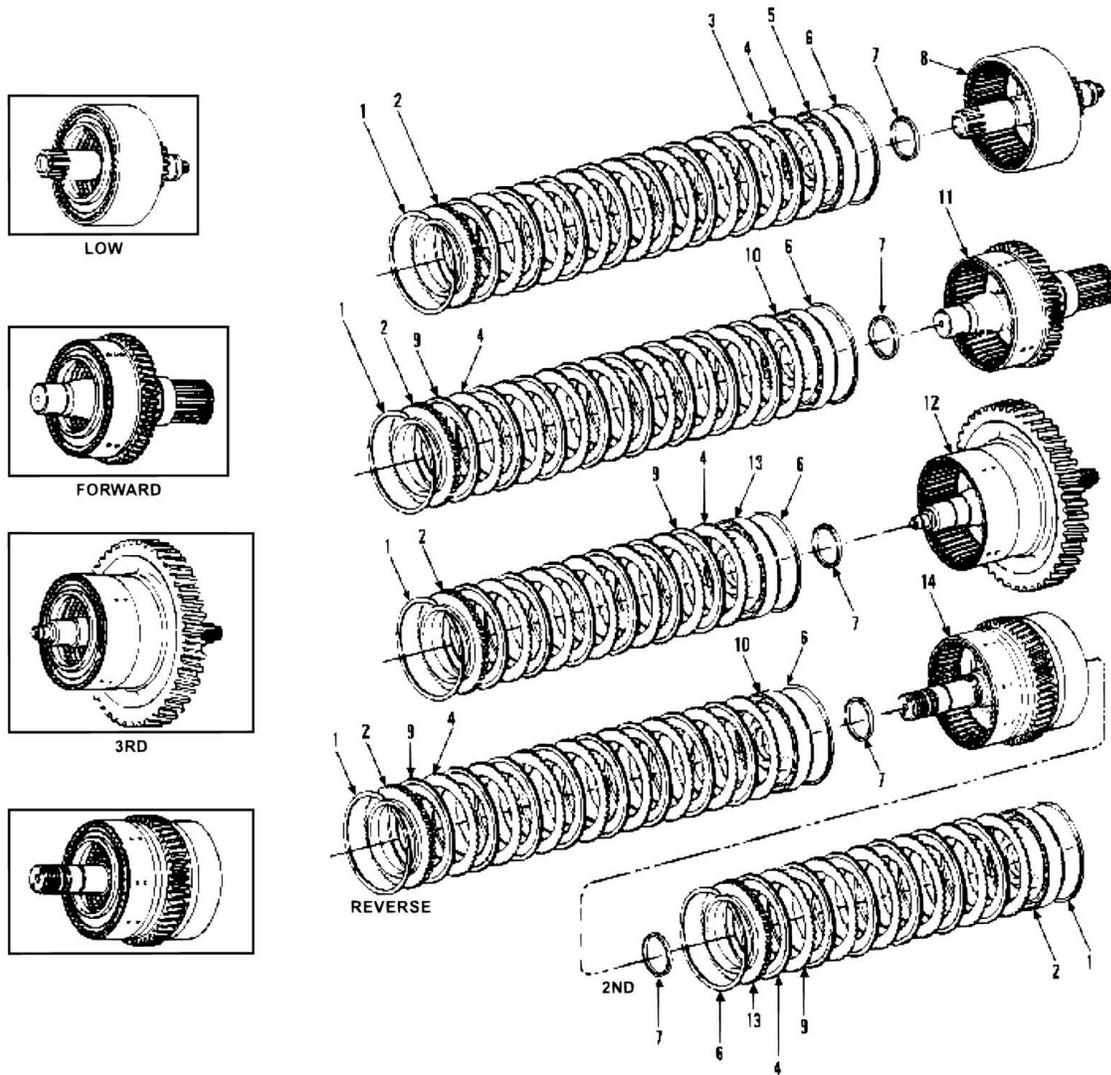
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FIGURE 5-13. TRANSMISSION CLUTCH ASSEMBLIES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	77104188	5	SNAP RING	
2	77104189	5	CLUTCH DISC BACKING PLATE	
3	77104190	8	CLUTCH INNER DISC (low)	
4	77104191	36	CLUTCH OUTER DISC	
5	77104192	1	CLUTCH PISTON (low)	
6	77104193	5	OUTER CLUTCH PISTON RING	
7	77104194	5	INNER CLUTCH PISTON SEAL	
8	90204935	1	LOW CLUTCH SHAFT, DRUM AND BLEED VALVE ASSY	
9	77104209	28	CLUTCH INNER DISC (forward, 3rd, reverse and second)	
10	90204938	2	CLUTCH PISTON (forward, reverse and 2nd)	
11	90204939	1	FORWARD SHAFT, DRUM AND PLUG ASSY	
12	90206403	1	THIRD CLUTCH SHAFT, DRUM AND PLUG ASSY	
13	77104230	2	CLUTCH PISTON (3rd & 2nd)	
14	90204944	1	REVERSE AND 2ND SHAFT, DRUM AND PLUG ASSY	

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FIGURE 5-14. TRANSMISSION CLUTCH ASSEMBLIES (SN 0155173G to Present)



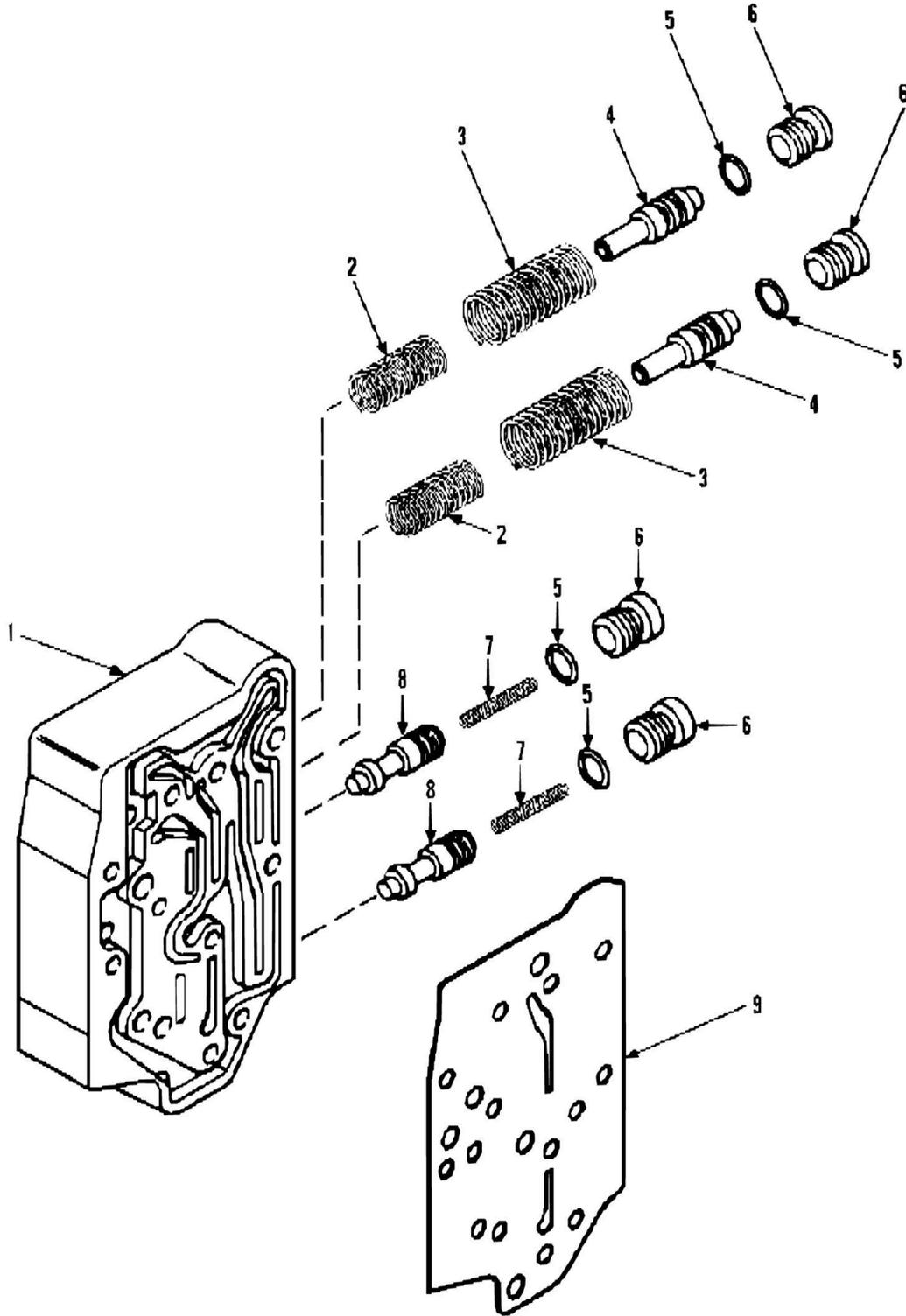
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FIGURE 5-14. TRANSMISSION CLUTCH ASSEMBLIES (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	77104188	5	SNAP RING	
2	77104189	5	CLUTCH DISC BACKING PLATE	
3	77104190	8	CLUTCH INNER DISC (low)	
4	77104191	36	CLUTCH OUTER DISC	
5	77104192	1	CLUTCH PISTON (low)	
6	77104193	5	OUTER CLUTCH PISTON RING	
7	77104194	5	INNER CLUTCH PISTON SEAL	
8	90204935	1	LOW CLUTCH SHAFT, DRUM AND BLEED VALVE ASSY	
9	77104209	28	CLUTCH INNER DISC (forward, 3rd, reverse and second)	
10	90204938	2	CLUTCH PISTON (forward, reverse and 2nd)	
11	90204939	1	FORWARD SHAFT, DRUM AND PLUG ASSY	
12	90206403	1	THIRD CLUTCH SHAFT, DRUM AND PLUG ASSY	
13	77104230	2	CLUTCH PISTON (3rd & 2nd)	
14	90204944	1	REVERSE AND 2ND SHAFT, DRUM AND PLUG ASSY	

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FIGURE 5-15. TRANSMISSION MODULAR VALVE (SN 0155173G to Present)



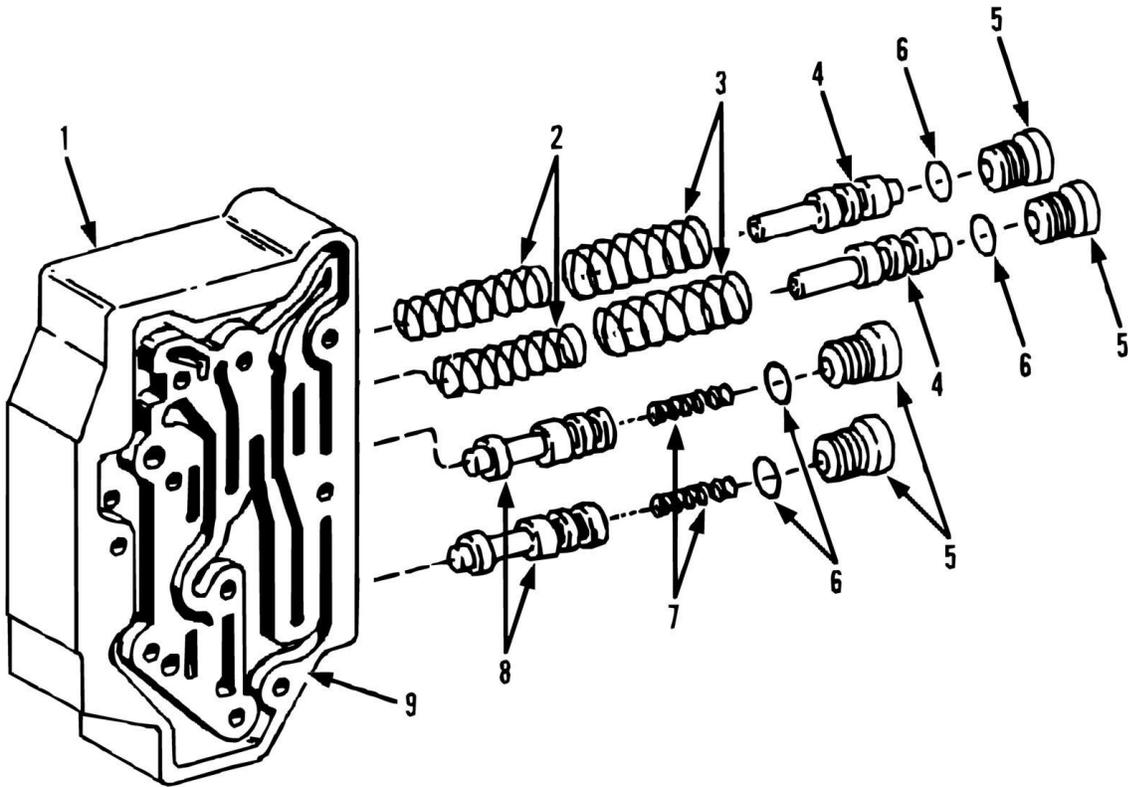
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FIGURE 5-15. TRANSMISSION MODULAR VALVE (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90204990	1	MODULATOR VALVE (includes items 1 thru 8)	
		Ref	VALVE HOUSING	
2	91034263	1	ACCUMULATOR SPRING (inner)	
3	90204992	1	ACCUMULATOR SPRING (outer)	
4		Ref	ACCUMULATOR VALVE (part of valve assy)	
5	90205056	4	O-RING	
6	90205057	4	SPOOL STOP PLUG (includes item 6)	
7	91034264	2	REGULATOR SPRING	
8		Ref	REGULATOR SPOOL (part of valve assy)	
9	90204820	1	GASKET (modulator valve to converter housing)	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 5-16. TRANSMISSION MODULAR VALVE (SN 8655105G to Present)



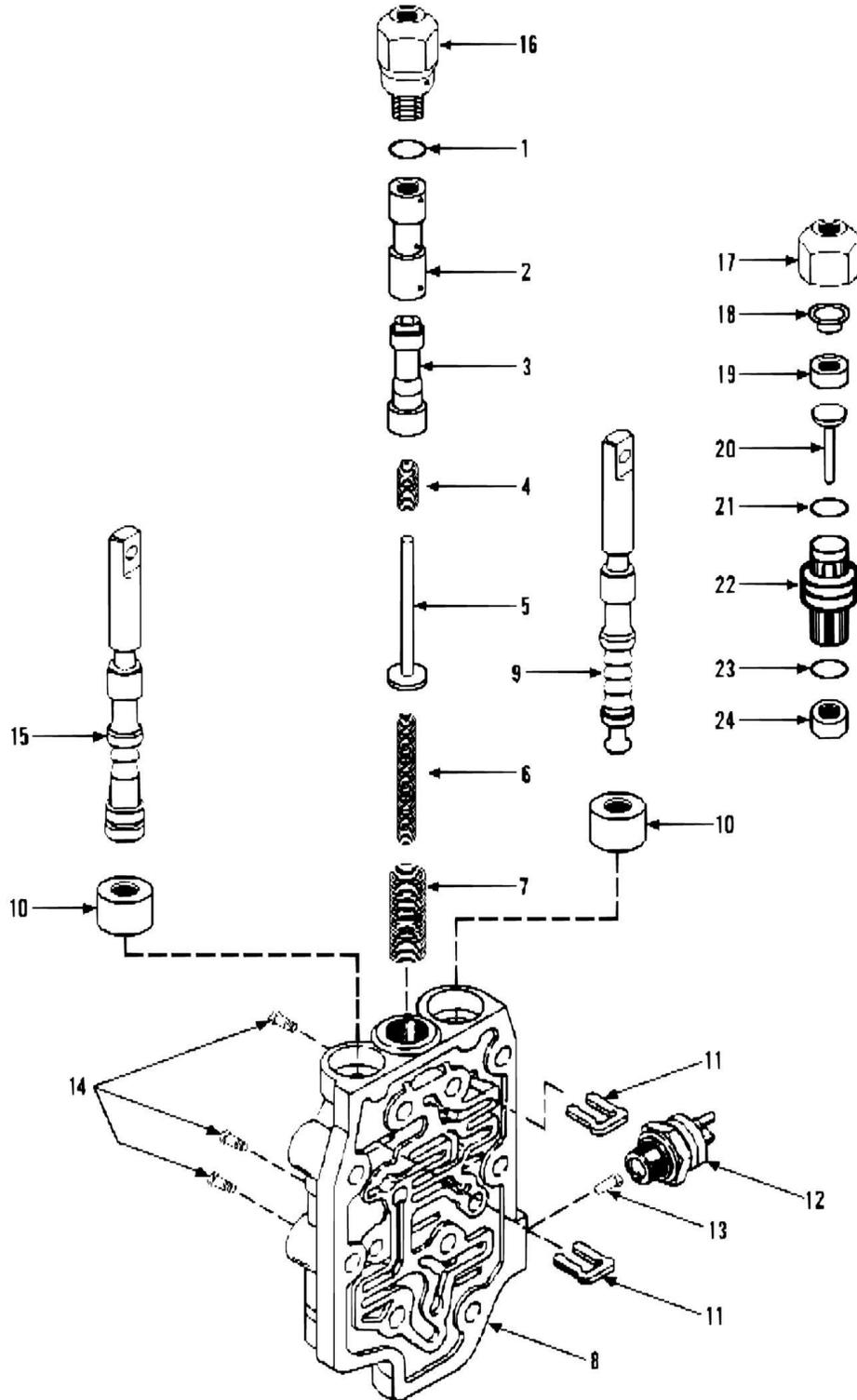
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FIGURE 5-16. TRANSMISSION MODULAR VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90238085	1	MODULATOR VALVE ASSY (includes all items)	
		Ref	VALVE HOUSING	
2	90204991	2	ACCUMULATOR INNER SPRING	
3	90204992	2	ACCUMULATOR OUTER SPRING	
4		Ref	VALVE	
5	90205057	4	SPOOL STOP PLUG (includes item 6)	
6	90205056	4	O-RING	
7	90204822	2	REGULATOR SPRING	
8		Ref	REGULATOR SPOOL	
9	90204820	1	GASKET	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 5-17. TRANSMISSION CONTROL VALVE (SN 8655105G to Present)



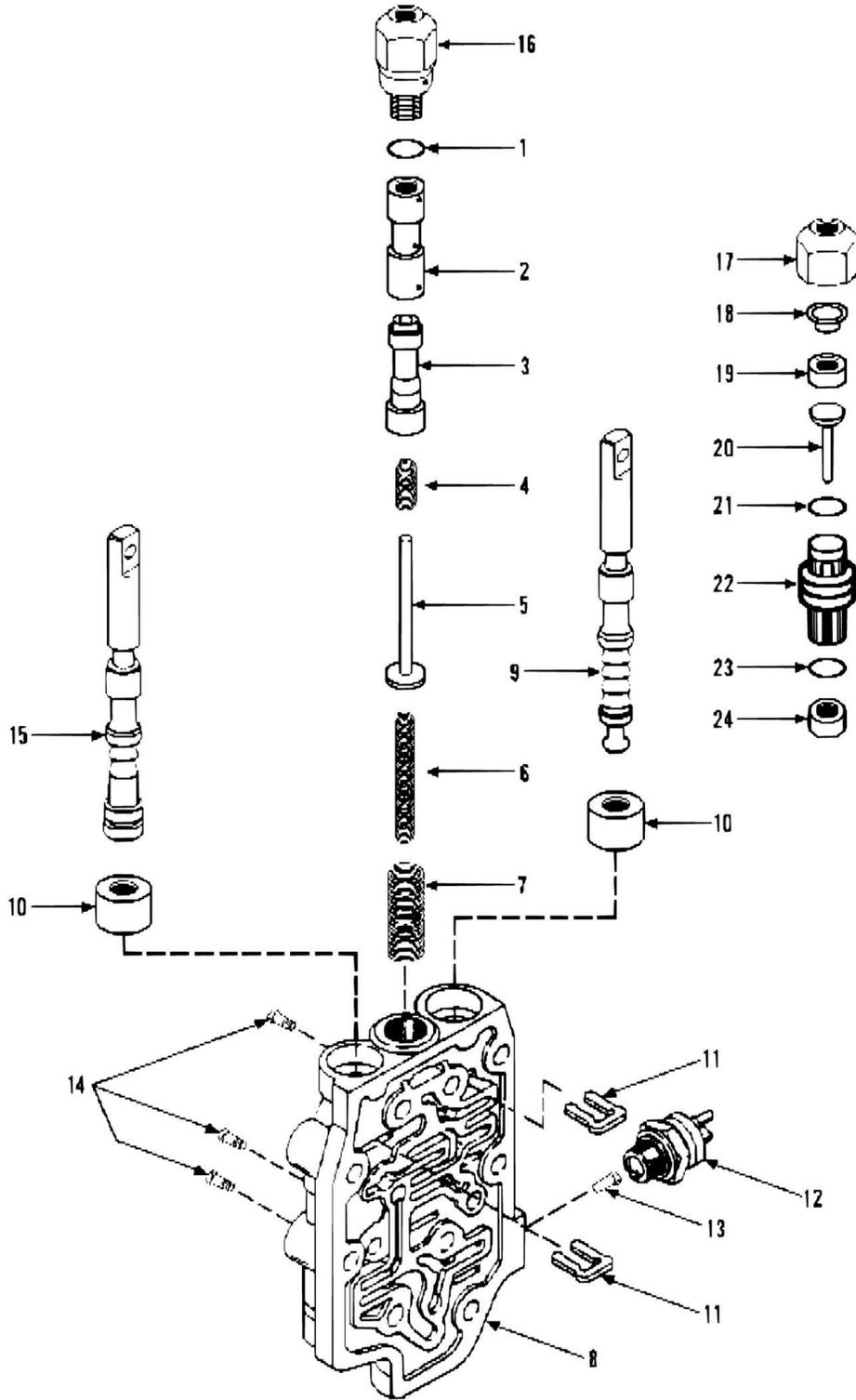
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FIGURE 5-17. TRANSMISSION CONTROL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90204988	1	CONTROL VALVE ASSY (includes all items)	
1	90204957	1	RETAINING RING	
2	90204959	1	INCHING VALVE SLEEVE	
3	90204960	1	VALVE SPOOL	
4	90204962	1	BALANCING SPRING	
5	90204964	1	ROD	
6	90204966	1	INNER SPRING	
7	90204968	1	OUTER SPRING	
8	77104272	1	VALVE HOUSING ASSY (includes items 9 thru 15)	
9	77104276	1	FORWARD AND REVERSE SPOOL	
10	77104275	2	OIL SEAL	
11	77104277	2	SPOOL STOP	
12	77104278	1	NEUTRAL SWITCH	
13	77104279	1	SWITCH ACTUATING PIN	
14	77104008	3	PIPE PLUG	
15	77104273	1	SPEED SELECTOR SPOOL AND PLUG ASSY	
16	90204955	1	INCHING SLAVE CYLINDER ASSY (includes items 17 thru 24)	
17	90204980	1	CAP	
18	90204981	1	PISTON CUP STOP	
19	90204982	1	PISTON CUP	
20	90204983	1	PISTON	
21	90205058	1	O-RING	
22	90204984	1	PISTON HOUSING AND FILTER DISC ASSY	
23	90023115	1	O-RING	
24	90204986	1	OIL SEAL	

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FIGURE 5-18. TRANSMISSION CONTROL VALVE (SN 0155173G to Present)



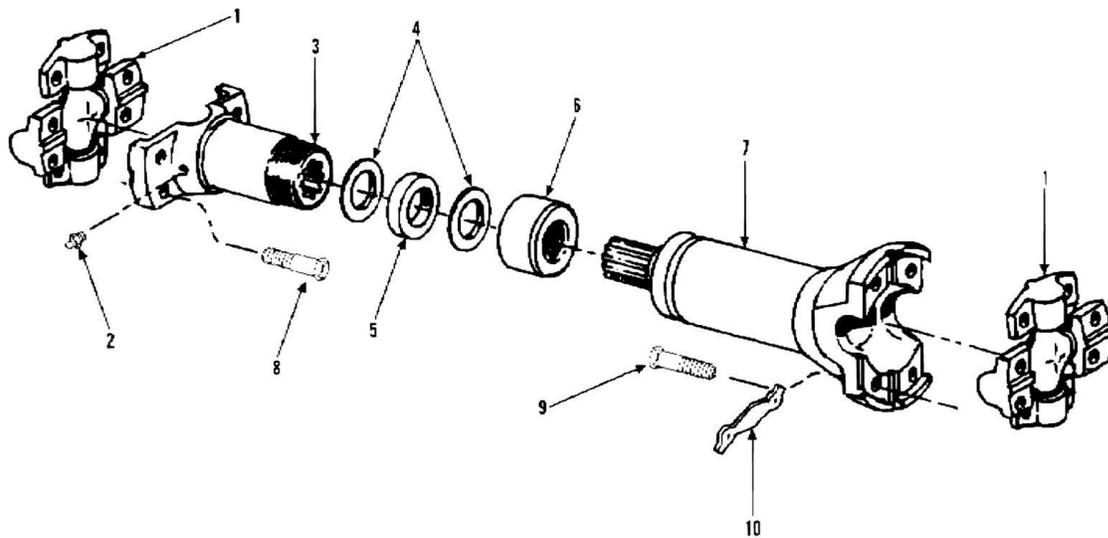
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FIGURE 5-18. TRANSMISSION CONTROL VALVE (SN 0155173G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91034260	1	CONTROL VALVE ASSY (includes all items)	
1	90204957	1	RETAINING RING	
2	90204959	1	INCHING VALVE SLEEVE	
3	90204969	1	VALVE SPOOL	
4	91034261	1	BALANCING SPRING	
5	90204964	1	ROD	
6	90204966	1	INNER SPRING	
7	90204968	1	OUTER SPRING	
8		Ref	VALVE HOUSING	
9	77104276	1	FORWARD AND REVERSE SPOOL	
10	77104275	2	OIL SEAL	
11	77104277	2	SPOOL STOP	
12	77104278	1	NEUTRAL SWITCH	
13	77104279	1	SWITCH ACTUATING PIN	
14	77104008	3	PIPE PLUG	
15	77104273	1	SPEED SELECTOR SPOOL AND PLUG ASSY	
16	91034262	1	INCHING SLAVE CYLINDER ASSY (includes items 17 thru 24)	
17	90204980	1	CAP	
18	90204981	1	PISTON CUP STOP	
19	90207872	1	PISTON CUP	
20	90204983	1	PISTON	
21	90205058	1	O-RING	
22	90204984	1	PISTON HOUSING AND FILTER DISC ASSY	
23	90023115	1	O-RING	
24	90204986	1	OIL SEAL	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 5-19. PROPELLER SHAFT (SN 8655105G to Present)



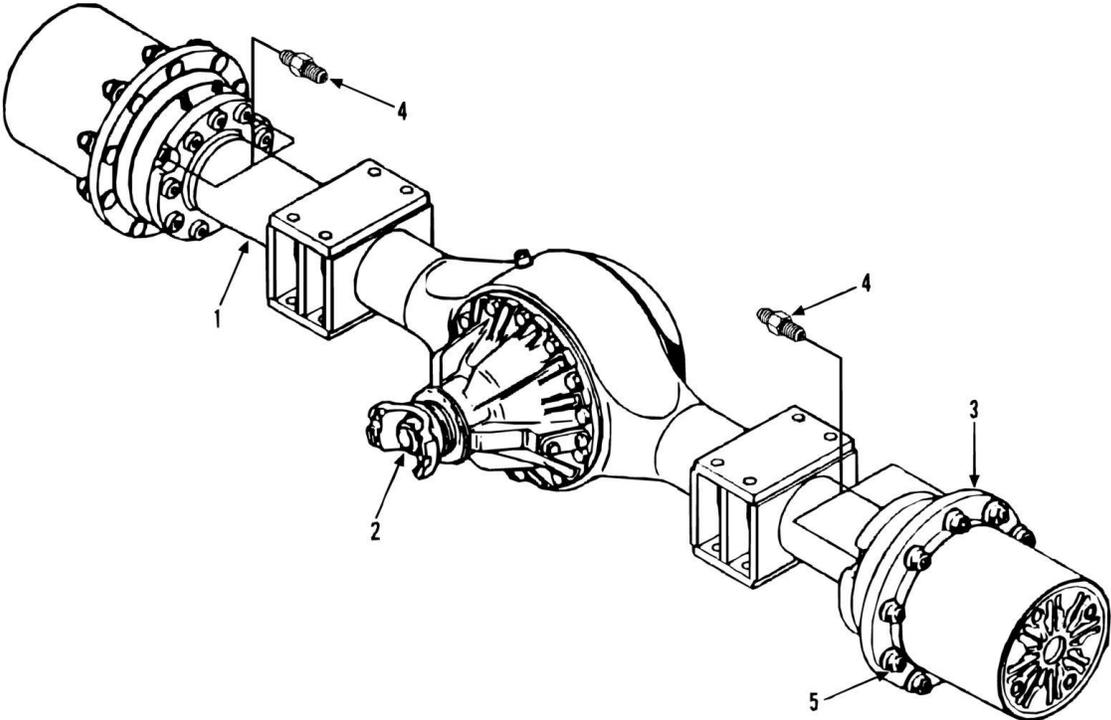
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FIGURE 5-19. PROPELLER SHAFT (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043032	1	DRIVE SHAFT ASSY (includes all items)	
1	90201058	2	SPIDER AND BEARING ASSY	
2	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
3	91044008	1	SLIP YOKE ASSY (includes items 4, 5, 6)	
4	90206545	2	WASHER	
5	90206546	1	FELT SEAL	
6	90206544	1	CAP	
7		Ref	TUBE ASSY	
8	91044009	8	HEX HD CAPSCREW	
9	91044010	8	HEX HD CAPSCREW	
10	91031194	8	LOCKSTRAP	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 5-20. FRONT AXLE ASSY (SN 8655105G to Present)



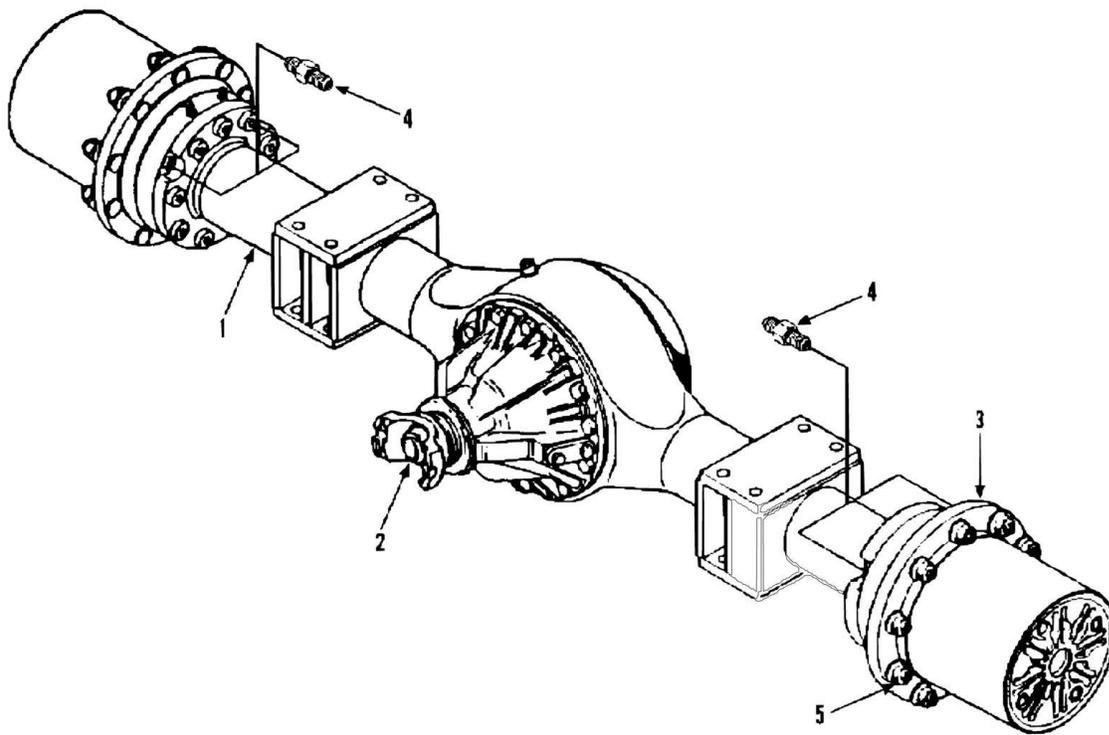
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FIGURE 5-20. FRONT AXLE ASSY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043071	1	FRONT AXLE ASSY (includes items 1 thru 4)	
	91044137	1	AXLE HOUSING ASSY (See FRONT AXLE HOUSING for Breakdown)	
2	91044144	1	DIFFERENTIAL CARRIER ASSY (See FRONT AXLE DIFFERENTIAL CARRIER for Breakdown)	
3	91044165	1	AXLE SHAFT AND PLANETARY WHEEL END ASSY (See FRONT AXLE SHAFT AND PLANETARY WHEEL END for Breakdown)	
4	83193009	4	FITTING	
5	91043146	24	LUG NUT	

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FIGURE 5-21. FRONT AXLE ASSY (SN 0155259 to Present)



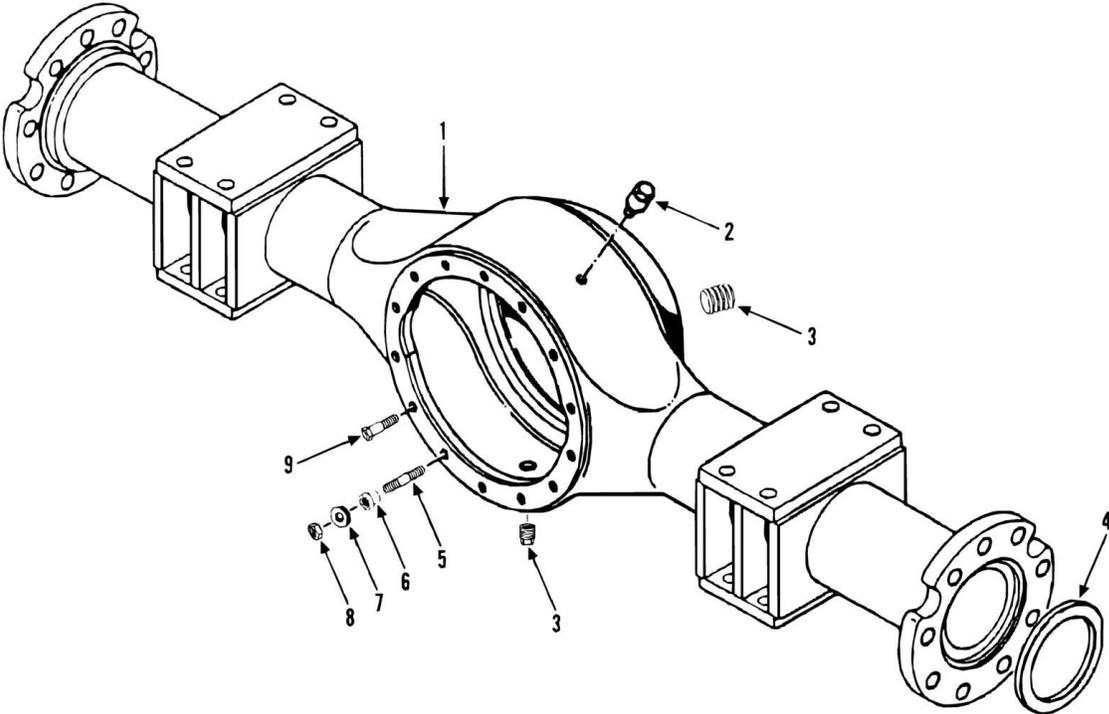
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FIGURE 5-21. FRONT AXLE ASSY (SN 0155259 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043291	1	FRONT AXLE ASSY (includes items 1 thru 4)	
	91044444	1	AXLE HOUSING ASSY (See FRONT AXLE HOUSING for Breakdown)	
2	91044448	1	DIFFERENTIAL CARRIER ASSY (See FRONT AXLE DIFFERENTIAL CARRIER for Breakdown)	
3	91034309	1	AXLE SHAFT AND PLANETARY WHEEL END ASSY (See FRONT AXLE SHAFT AND PLANETARY WHEEL END for Breakdown)	
4	83193009	4	FITTING	
5	91043146	24	LUG NUT	

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FIGURE 5-22. FRONT AXLE HOUSING (SN 8655105G to Present)



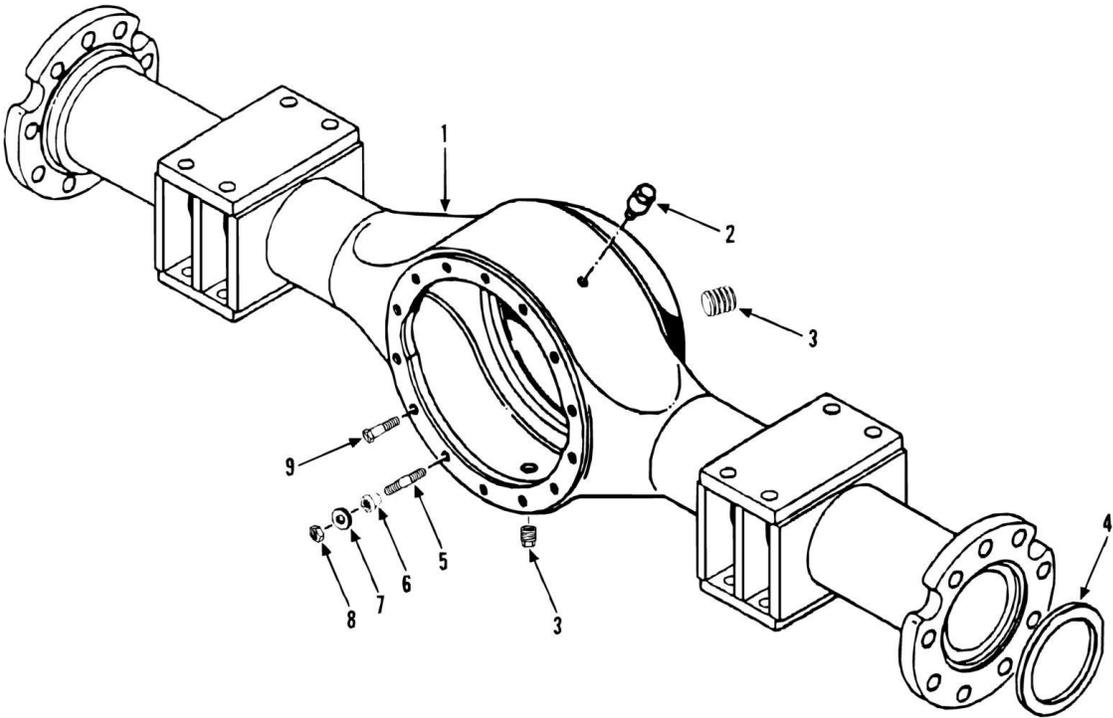
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FIGURE 5-22. FRONT AXLE HOUSING (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91044137	1	AXLE HOUSING	
2	90401203	1	BREATHER	
3	90401204	2	FILLER AND DRAIN PLUG	
4	91044138	2	THRUST WASHER	
5	91044139	3	STUD	
6	91044140	3	CENTERING CONE	
7	91044141	14	FLAT WASHER	
8	91044142	3	HEX NUT	
9	91044143	11	HEX HD CAPSCREW	

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FIGURE 5-23. FRONT AXLE HOUSING (SN 0155259 to Present)



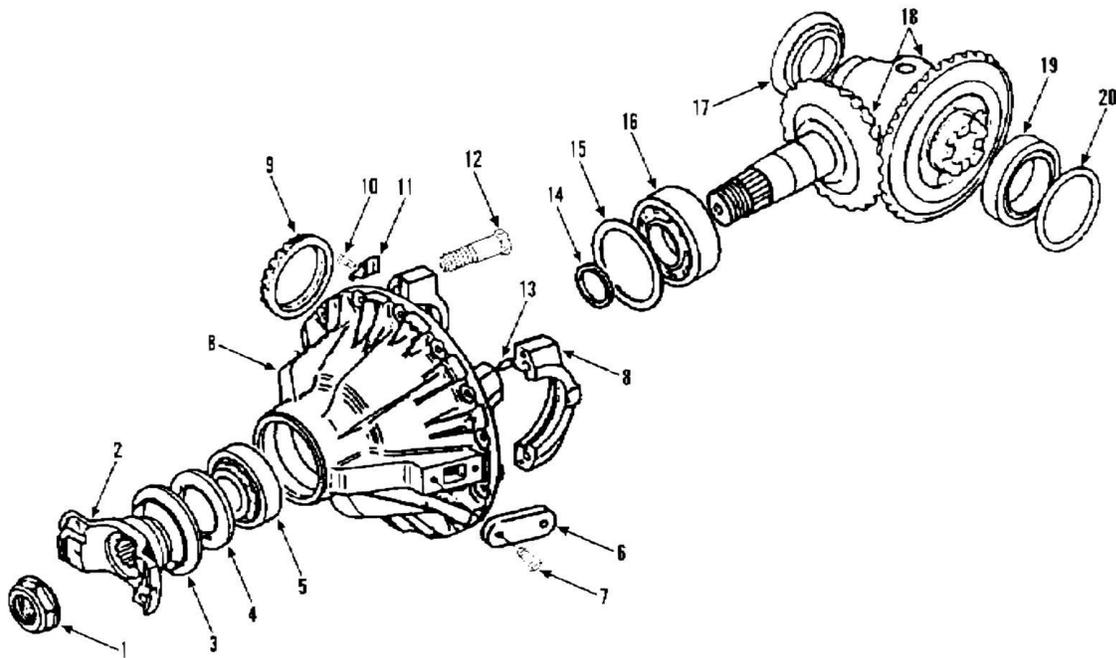
SECTION 5 - DRIVE TRAIN

FIGURE 5-23. FRONT AXLE HOUSING (SN 0155259 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91044447	1	DIFFERENTIAL CARRIER FASTENING SET (includes items 5 thru 9)	
1	91044444	1	AXLE HOUSING	
2	91044445	1	BREATHER	
3	91044446	2	FILLER AND DRAIN PLUG	
4	91044138	2	THRUST WASHER	
5	91044139	3	STUD	
6	91044140	3	CENTERING CONE	
7	91044141	14	FLAT WASHER	
8	91044142	3	HEX NUT	
9	91044143	11	HEX HD CAPSCREW	

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FIGURE 5-24. FRONT AXLE DIFFERENTIAL CARRIER (SN 8655105G to Present)



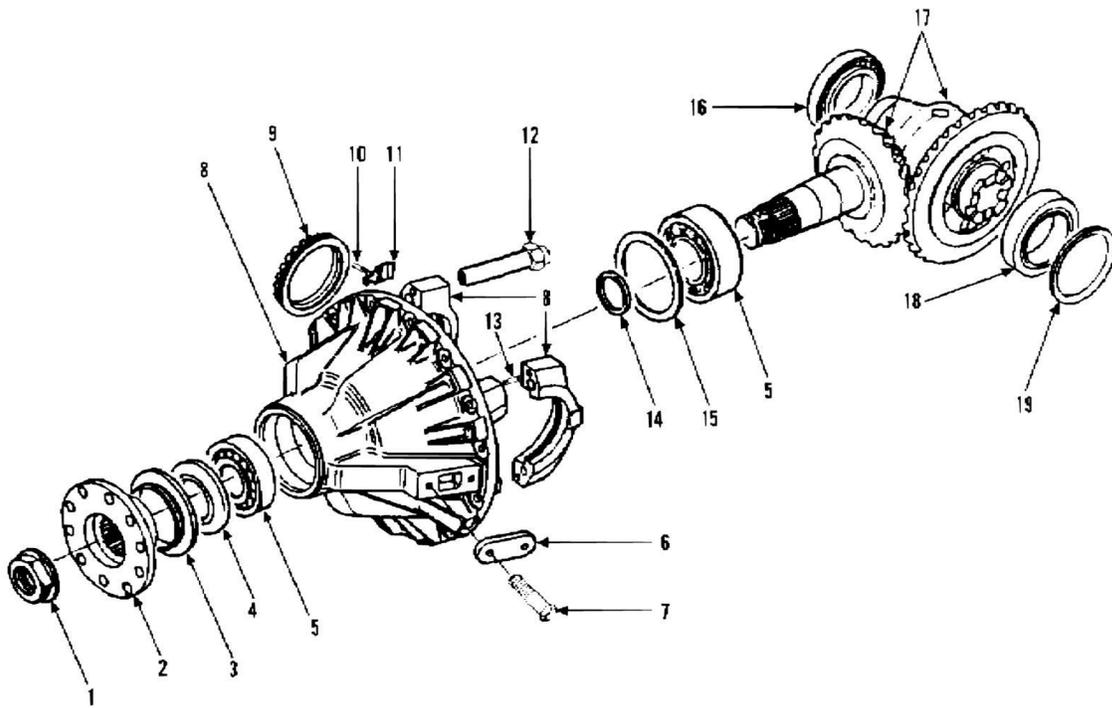
SECTION 5 - DRIVE TRAIN

FIGURE 5-24. FRONT AXLE DIFFERENTIAL CARRIER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91044144	1	DIFFERENTIAL CARRIER ASSY (includes all items)	
1	91044145	1	PINION NUT	
2	91044146	1	YOKE ASSY (includes item 3)	
3	91044147	1	DUST SHIELD	
4	91044148	1	OIL SEAL	
5	91044149	1	BEARING ASSY	
6	91044150	1	COVER PLATE	
7	91044151	2	HEX HD CAPSCREW	
8	91044152	1	DIFFERENTIAL HOUSING ASSY (includes items 9 thru 13)	
9	91044153	1	ADJUSTING NUT	
10	91044154	1	ADJUSTING NUT LOCK BOLT	
11	91044155	1	ADJUSTING NUT LOCK	
12	91044156	4	DIFFERENTIAL CAP BOLT	
13	91044157	4	LOCATING PIN	
14	91044158	1	SHIM KIT	
15	91044159	1	SHIM KIT	
16	91044160	1	BEARING ASSY	
17	91044161	1	BEARING ASSY	
18	91044162	1	DIFFERENTIAL ASSY	
19	91044163	1	BEARING ASSY	
20	91044164	1	ADJUSTING SHIM KIT	

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FIGURE 5-25. FRONT AXLE DIFFERENTIAL CARRIER (SN 0155259 to Present)



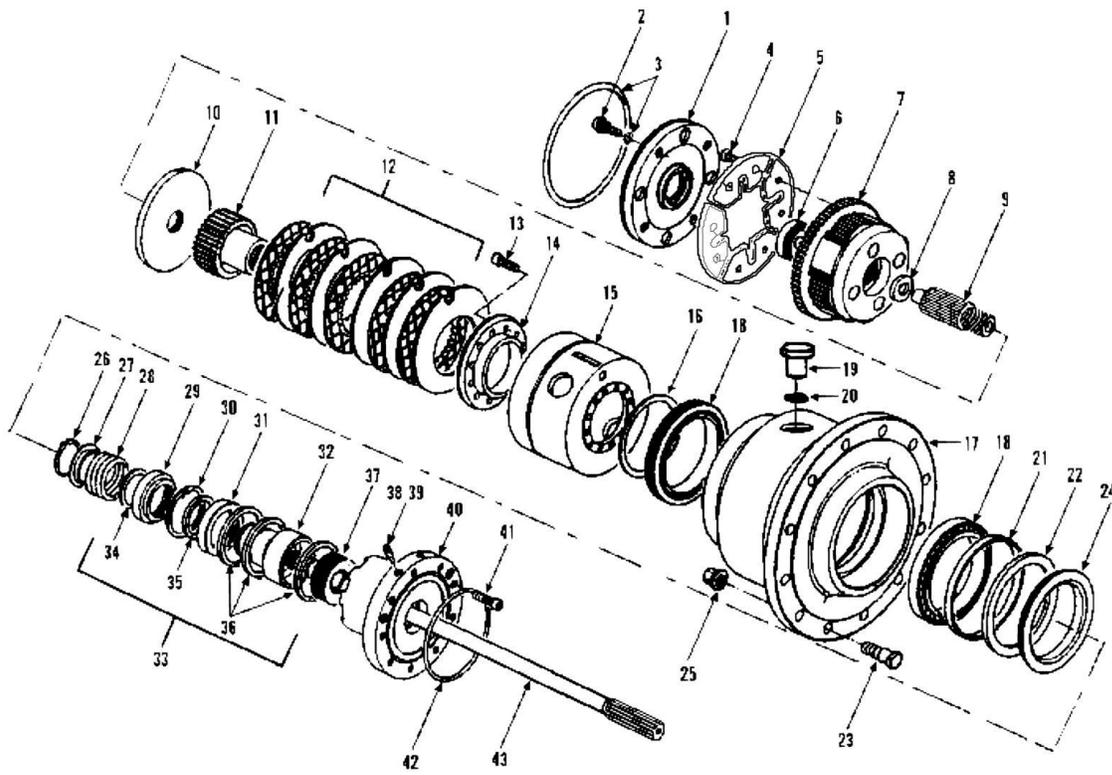
SECTION 5 - DRIVE TRAIN

FIGURE 5-25. FRONT AXLE DIFFERENTIAL CARRIER (SN 0155259 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91044448	1	DIFFERENTIAL CARRIER ASSY (includes all items)	
1	91044145	1	PINION NUT	
2	91044452	1	FLANGE ASSY (includes item 3)	
3	91044147	1	DUST SHIELD	
4	91044451	1	OIL SEAL	
5	91044450	1	TAPER BEARING KIT	
6	91044150	1	COVER PLATE	
7	91044151	2	HEX HD CAPSCREW	
8	91044152	1	DIFFERENTIAL HOUSING ASSY (includes items 9 thru 13)	
9	91044153	1	ADJUSTING NUT	
10	91044154	1	ADJUSTING NUT LOCK BOLT	
11	91044155	1	ADJUSTING NUT LOCK	
12	91044156	4	DIFFERENTIAL CAP BOLT	
13	91044157	4	LOCATING PIN	
14	91044158	1	SHIM KIT	
15	91044159	1	SHIM KIT	
16	91044161	1	BEARING ASSY	
17	91044449	1	DIFFERENTIAL AND BEVEL GEAR SET	
18	91044163	1	BEARING ASSY	
19	91044164	1	ADJUSTING SHIM KIT	

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FIGURE 5-26. (91044165) FRONT AXLE SHAFT AND PLANETARY WHEEL END (SN 8655105G to Present)



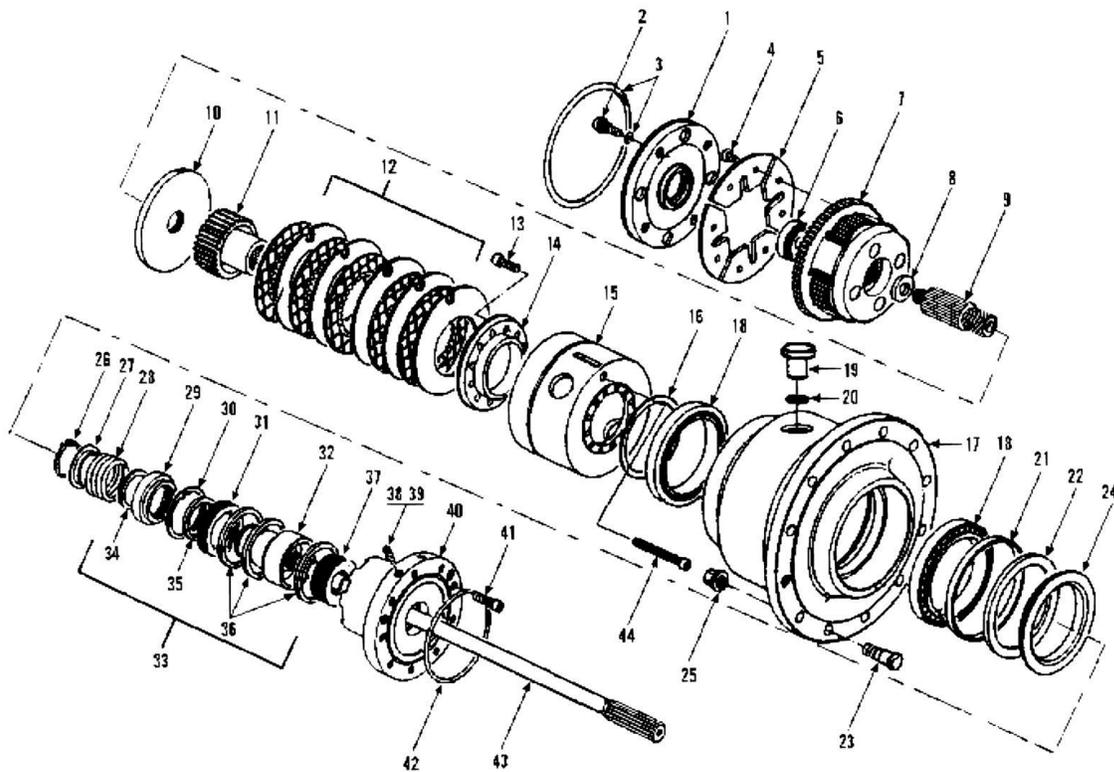
SECTION 5 - DRIVE TRAIN

FIGURE 5-26. (91044165) FRONT AXLE SHAFT AND PLANETARY WHEEL END (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91044165	1	BRAKE WHEEL END ASSY (includes all items)	
1	91044166	1	COVER ASSY (includes items 2 thru 6)	
2	91044167	4	HEX HD CAPSCREW	
3	91044168	1	O-RING KIT	
4	91044169	4	HEX HD CAPSCREW	
5	91044170	4	SECTOR PLATE	
6	91044171	1	BEARING ASSY	
7	91044460	1	PLANETARY CARRIER ASSY	
8	91044173	4	SPACER	
9	91044174	1	MID-SHAFT	
10	91044175	1	ROTATING BRAKE DISC STOP	
11	91044176	1	DISC HUB	
12	91044177	1	BRAKE DISC ASSY	
13	91044178	10	SOCKET HEAD CAPSCREW	
14	91044179	1	FIXED BRAKE DISC STOP	
15	91044180	1	RING GEAR AND CARRIER ASSY	
16	91044181	1	ADJUSTING SHIM KIT	
17	91044182	1	WHEEL HUB ASSY (includes items 18 thru 22)	
18	91044183	2	BEARING ASSY	
19	91044184	1	PLUG	
20	91044185	1	SEALING WASHER	
21	91044186	1	SPACER	
22	91044187	1	HUB SEAL	
23	91044188	1	HUB SEAL RUNNER	
24	91044189	10	WHEEL STUD	
25	91043146	10	SWIVEL NUT	
26	91044191	1	SNAP RING	
27	91044192	1	THRUST WASHER	
28	91044193	1	SPRING	
29	91044194	1	SERVICE BRAKE PISTON	
30	91044195	1	SNAP RING	
31	91044196	1	PARK BRAKE SEAL RING	
32	91044197	1	PARK BRAKE PISTON	
33	91044335	1	SEALING KIT	
34	91044199	1	SPRING WASHER KIT	
35	91044200	2	BLEEDER SCREW	
36	91044201	1	SPINDLE ASSY	
37	91044202	9	SOCKET HD CAPSCREW	
38	91044203	1	O-RING	
39	91044204	1	AXLE SHAFT	
40	91044298	2	BLEEDER SCREW CAP	
41	91034397	1	PIN (holds brake discs in place)	
		Ref	NOTE: QUANTITIES SHOWN ARE FOR ONE BRAKE WHEEL END ASSEMBLY ONLY.	

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FIGURE 5-27. (91034309) FRONT AXLE SHAFT AND PLANETARY WHEEL END (SN 0155259 to Present)



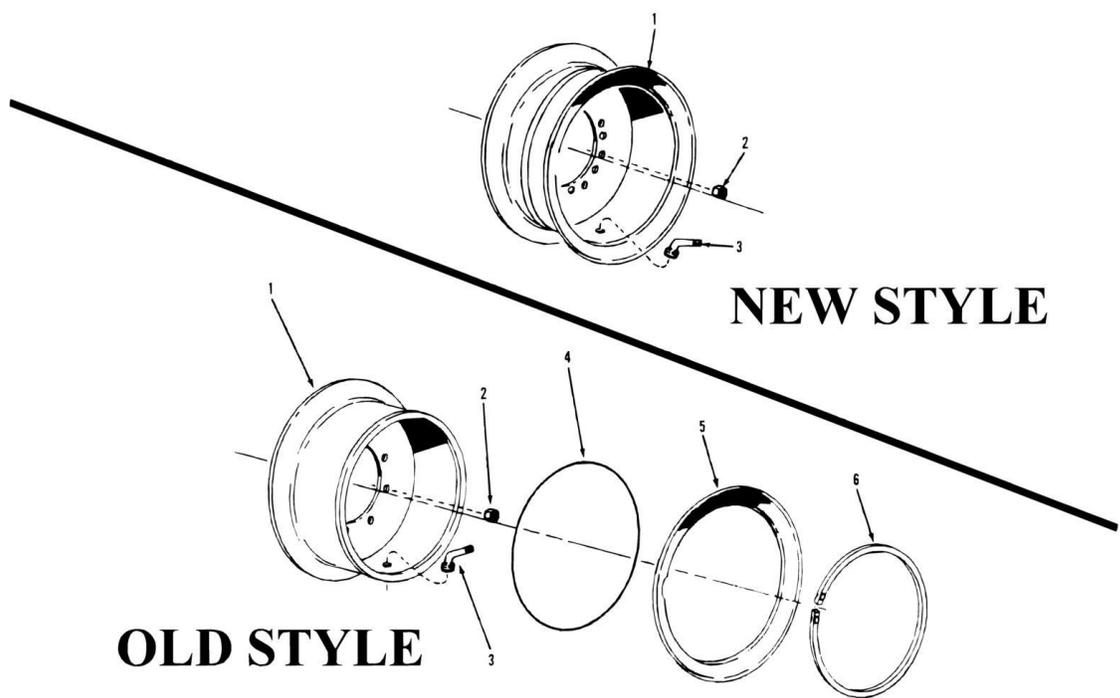
SECTION 5 - DRIVE TRAIN

FIGURE 5-27. (91034309) FRONT AXLE SHAFT AND PLANETARY WHEEL END (SN 0155259 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91034309	1	BRAKE WHEEL END ASSY (includes all items)	
1	91044166	1	COVER ASSY (includes items 2 thru 6)	
2	91044167	4	HEX HD CAPSCREW	
3	91044168	1	O-RING KIT	
4	91044169	4	HEX HD CAPSCREW	
5	91044170	4	SECTOR PLATE	
6	91044171	1	BEARING ASSY	
7	91044460	1	PLANETARY CARRIER ASSY	
8	91044173	4	SPACER	
9	91044174	1	MID-SHAFT	
10	91044175	1	ROTATING BRAKE DISC STOP	
11	91044176	1	DISC HUB	
12	91044177	1	BRAKE DISC ASSY	
13	91044178	10	SOCKET HEAD CAPSCREW	
14	91044179	1	FIXED BRAKE DISC STOP	
15	91044180	1	RING GEAR AND CARRIER ASSY	
16	91044181	1	ADJUSTING SHIM KIT	
17	91044459	1	WHEEL HUB ASSY (includes items 18 thru 23)	
18	91044183	2	BEARING ASSY	
19	91044184	1	PLUG	
20	91044185	1	SEALING WASHER	
21	91044186	1	SPACER	
22	91044187	1	HUB SEAL	
23	91044189	12	WHEEL STUD	
24	91044458	1	SEAL RACE	
25	91043146	12	SWIVEL NUT	
26	91044191	1	SNAP RING	
27	91044192	1	THRUST WASHER	
28	91044193	1	SPRING	
29	91044194	1	SERVICE BRAKE PISTON	
30	91044195	1	SNAP RING	
31	91044196	1	PARK BRAKE SEAL RING	
32	91044197	1	PARK BRAKE PISTON	
33	91044335	1	SEALING KIT (includes items 34, 35 & 36)	
34	Kit	1	OIL SEAL	
35	Kit	1	OIL SEAL	
36	Kit	3	OIL SEAL	
37	91044453	1	SPRING WASHER KIT	
38	91044200	2	BLEEDER SCREW	
39	91044298	1	BLEEDER SCREW CAP	
40	91044201	1	SPINDLE ASSY	
41	91044461	9	SOCKET HD CAPSCREW	
42	91044203	1	O-RING	
43	91044204	1	AXLE SHAFT	
44	91034397	1	PIN (holds brake discs in place)	
		Ref	NOTE: QUANTITIES SHOWN ARE FOR ONE BRAKE WHEEL END ASSEMBLY ONLY.	

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FIGURE 5-28. WHEELS AND TIRES FRONT-STANDARD (SN 8655105G to Present)



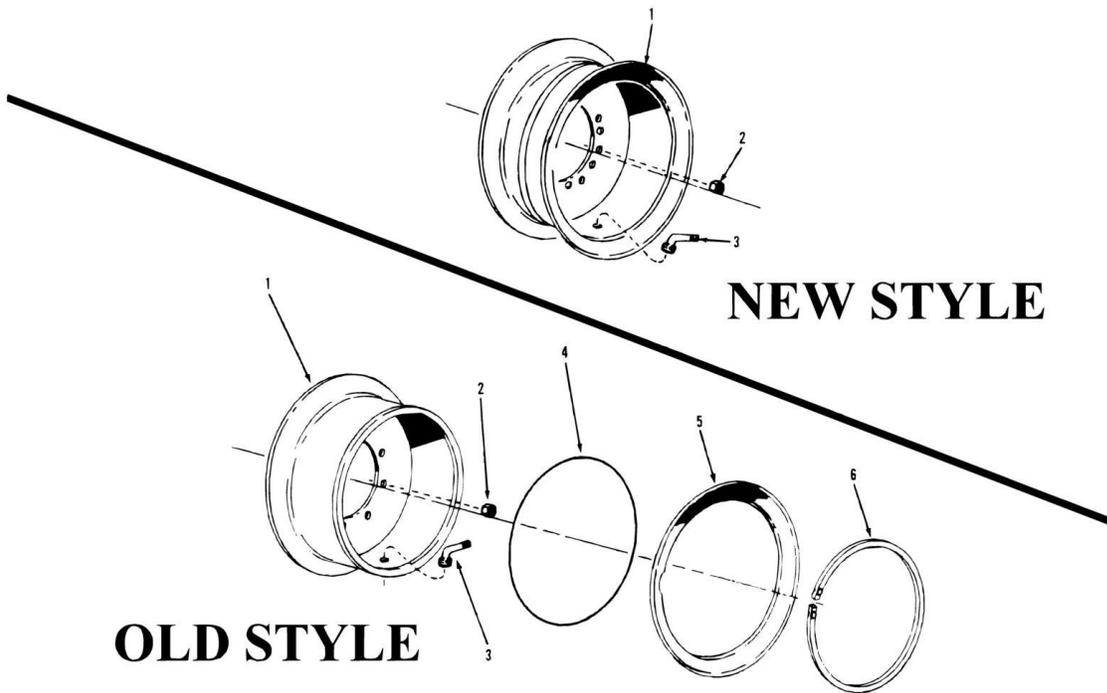
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FIGURE 5-28. WHEELS AND TIRES FRONT-STANDARD (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043080	1	RIM, 8.00 TG X 24 (Note: No longer available replaced by 91033469)	
1	91033469	1	RIM, 9.00 X 24 (New One Piece Style)	
2	91043146	10	LUG NUT (lubricate and torque to 350-400 ft.lbs.) (Note: use with 91043080 only)	
3	91083385	1	VALVE (air/liquid) (Note: use with 91043080 only)	
4	90200561	1	O-RING	
5	90200772	1	GUTTER RING	
6	90201615	1	LOCK RING	
7	91043084	1	TIRE, 14.00 X 24, 12 PLY (G-2 GRADER TUBELESS (not illustrated)	

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FIGURE 5-29. WHEELS AND TIRES REAR-STANDARD (SN 8655105G to Present)



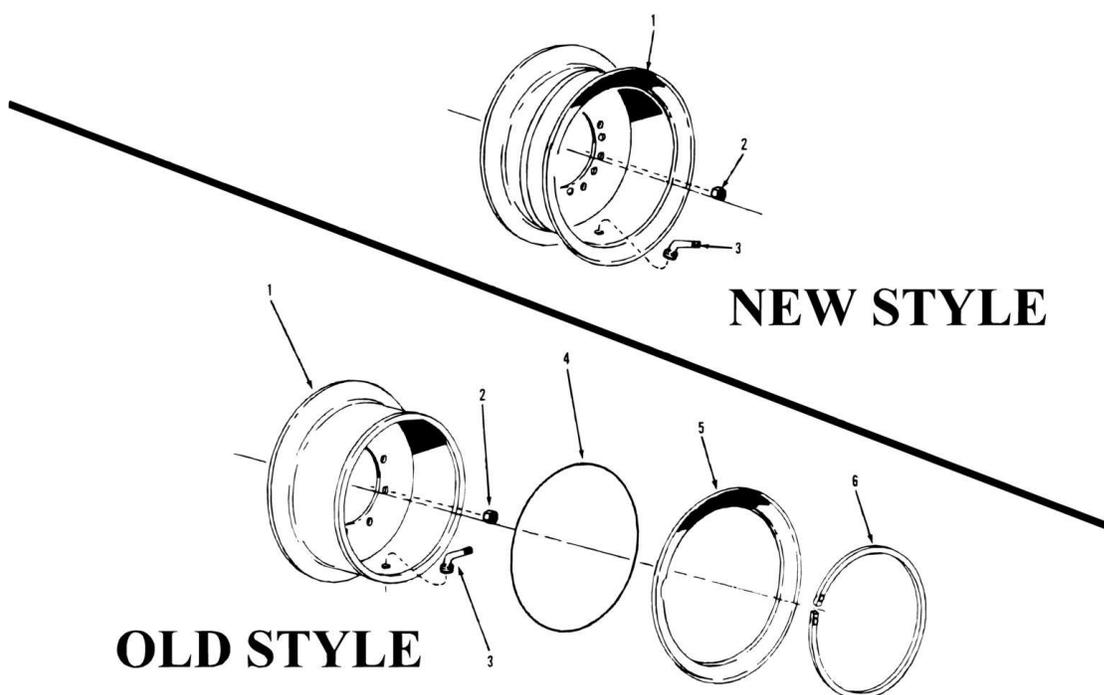
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FIGURE 5-29. WHEELS AND TIRES REAR-STANDARD (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043082	1	RIM, 8.00 TG X 24 (Note: No longer available replaced by 91033470)	
1	91033470	1	RIM, 9.00 X 24 (New One Piece Style)	
2	91043146	10	LUG NUT (lubricate and torque to 350-400 ft.lbs.) (Note: use with 91043082 only)	
3	91083385	1	VALVE (air/liquid) (Note: use with 91043082 only)	
4	90200561	1	O-RING	
5	90200772	1	GUTTER RING	
6	90201615	1	LOCK RING	
7	91043084	1	TIRE, 14.00 X 24, 12 PLY (G-2 GRADER TUBELESS (not illustrated)	

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FIGURE 5-30. WHEELS AND TIRES FRONT-FLOATATION (SN 8655105G to Present)



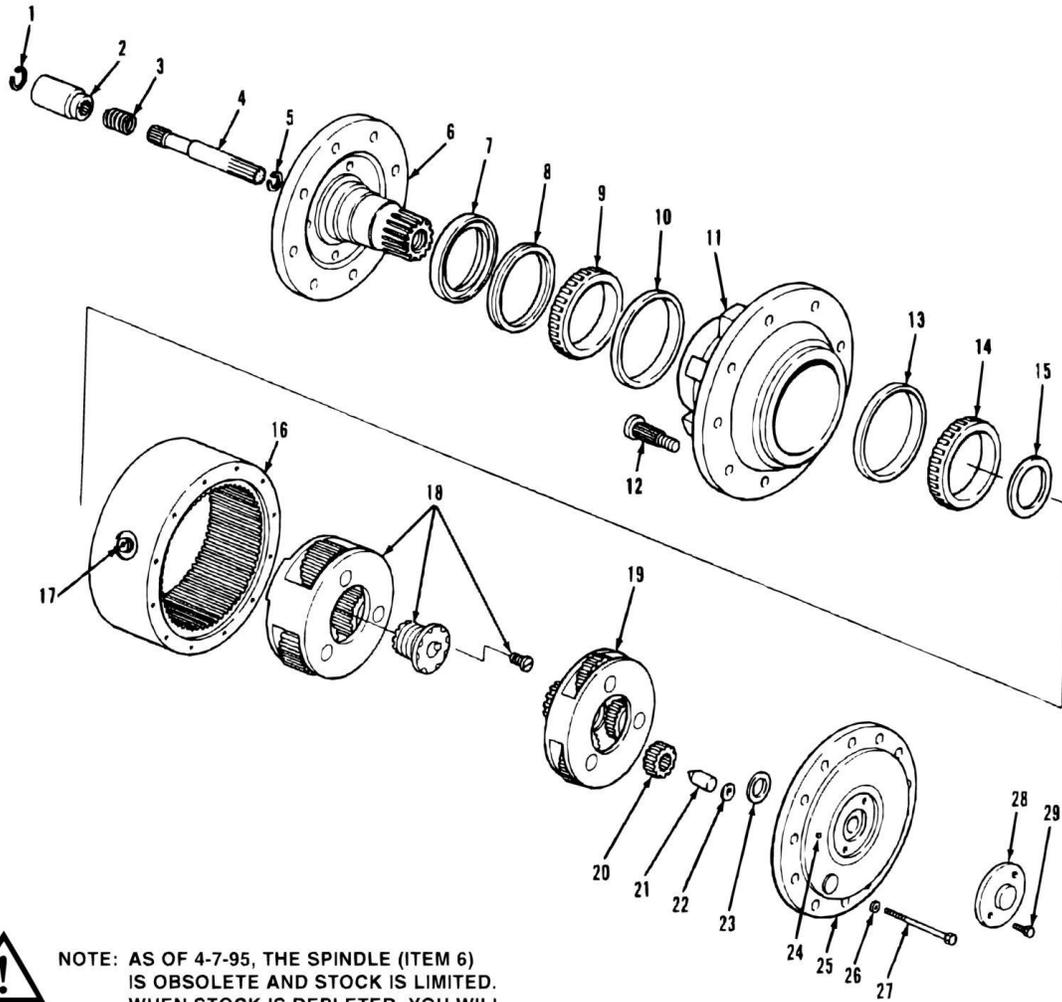
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FIGURE 5-30. WHEELS AND TIRES FRONT-FLOATATION (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043081	1	RIM, 14.00 X 25	
2	91043146	10	LUG NUT (lubricate and torque to 350-400 ft lbs)	
3	90201452	1	VALVE (air/liquid)	
4	90201441	1	O-RING	
5	90201762	1	GUTTER RING	
6	90201766	1	LOCK RING	
7	90201439	1	TIRE, 17.5 X 25,14 PLY (L-2 TRACTION REGULAR TREAD)(not illustrated)	

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FIGURE 5-31. (91043277) REAR STEERING AXLE PLANETARY HUB (SN 8655105G to Present)



NOTE: AS OF 4-7-95, THE SPINDLE (ITEM 6) IS OBSOLETE AND STOCK IS LIMITED. WHEN STOCK IS DEPLETED, YOU WILL NEED TO PURCHASE A NEW WHEEL DRIVE ASSEMBLY, P/N 9104-3489.

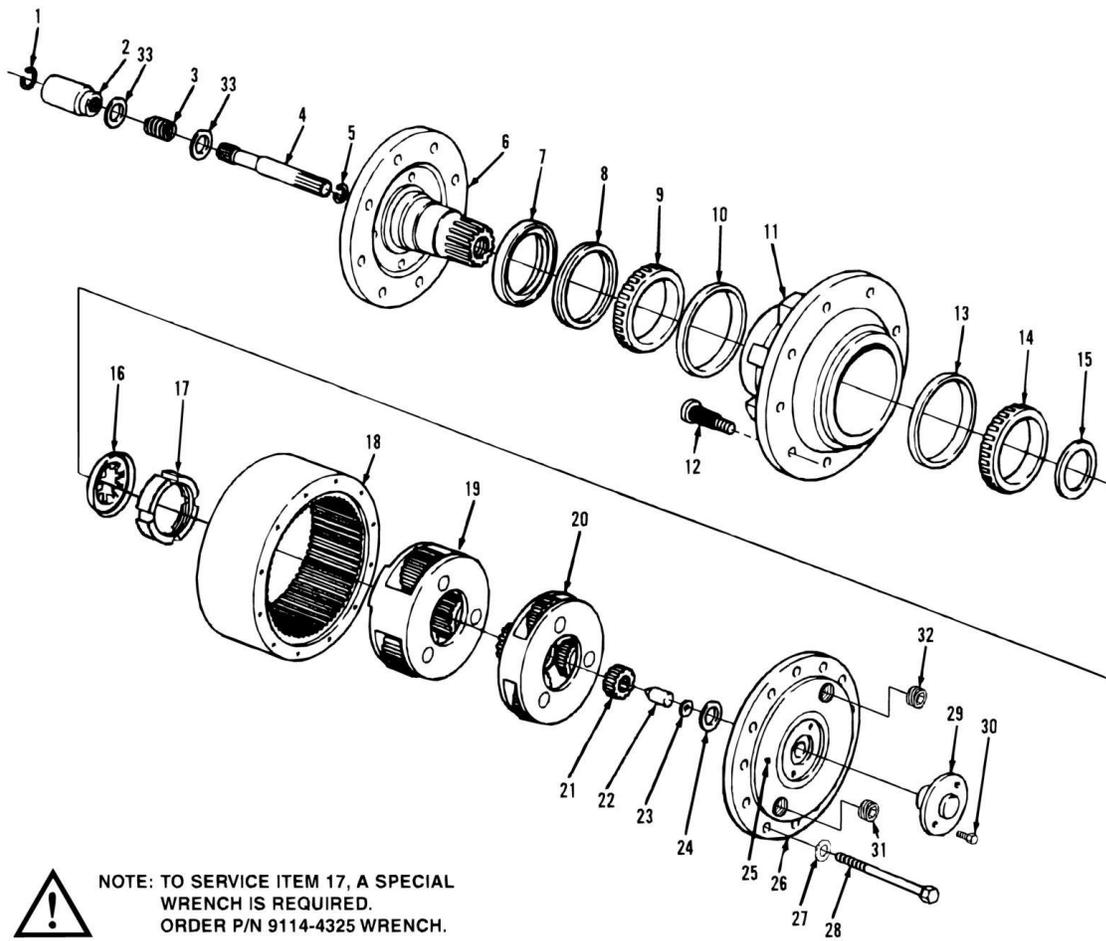
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FIGURE 5-31. (91043277) REAR STEERING AXLE PLANETARY HUB (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043277	2	WHEEL DRIVE ASSY, (includes all items)	
1	91044276	1	RETAINING RING	
2	91044277	1	COUPLING	
3	91044278	1	SPRING	
4	91044279	1	INPUT SHAFT	
5	91044099	1	RETAINING RING	
6	91044280	1	SPINDLE	
7	91044088	1	SEAL	
8	91044281	1	OIL SEAL	
9	91044090	1	OUTER BEARING CONE	
10	91044091	1	OUTER BEARING CUP	
11	91044310	1	HUB, (includes items 10, 12 & 13)	
12	91044311	10	WHEEL BOLT	
13	91064005	1	INNER BEARING CUP	
14	91064006	1	INNER BEARING CONE	
15	91064007	1	THRUST WASHER	
16	91044100	1	RING GEAR	
17	91044101	1	MAGNETIC PLUG	
18	91044282	1	SECONDARY CARRIER ASSY	
19	91044103	1	PRIMARY CARRIER ASSY	
20	91044104	1	PRIMARY SUN GEAR	
21	91044106	1	PLUNGER	
22	91044107	1	O-RING	
23	91044105	1	THRUST WASHER	
24	91044108	1	PIPE PLUG	
25	91044109	1	COVER	
26	91044110	12	FLAT WASHER	
27	91044111	12	HEX HD CAPSCREW	
28	91044112	1	DISENGAGE COVER	
29	91044113	2	HEX HD CAPSCREW	
		Ref	NOTE: QUANTITIES SHOWN ARE FOR ONE WHEEL DRIVE ASSY ONLY.	

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FIGURE 5-32. (91043489) REAR STEERING AXLE DRIVE HUB (FOR SERVICE ONLY) (SN 8655105G to Present)



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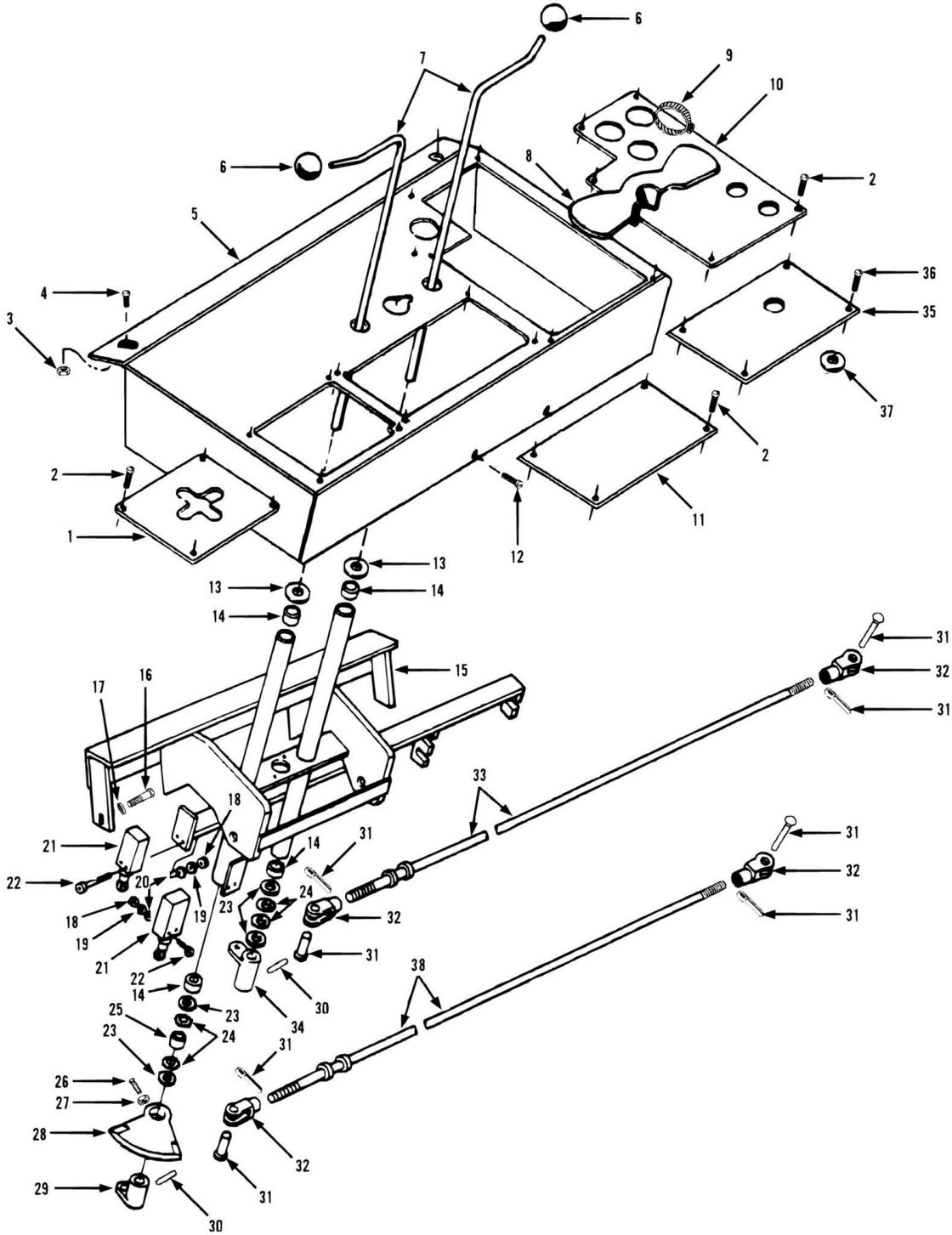
FIGURE 5-32. (91043489) REAR STEERING AXLE DRIVE HUB (FOR SERVICE ONLY) (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043489	2	REAR STEERING AXLE DRIVE HUB, (includes all items)	
	91044462	Ref	REPAIR KIT, (includes items 7, 8 & 30)	
1	91044276	1	RETAINING RING	
2	91044277	1	COUPLING, 8IN	
3	91144175	1	SPRING	
4	91144176	1	INPUT SHAFT, 8IN	
5	91044099	2	RETAINING RING	
6	91144177	1	SPINDLE, 9IN	
7	Kit	1	SEAL	
8	Kit	1	OIL SEAL	
9	90202501	1	OUTER BEARING CONE	
10	90202500	1	OUTER BEARING CUP	
11	91044523	1	HUB, 8IN	
12	91044311	10	WHEEL BOLT	
13	91144179	1	INNER BEARING CUP, 9IN	
14	91144180	1	INNER BEARING CONE, 9IN	
15	91144181	1	THRUST WASHER	
16	91144182	1	LOCKWASHER	
17	91144183	1	LOCK NUT	
18	91144184	1	RING GEAR, 8IN	
19	91144185	1	SECONDARY CARRIER ASSY, 8IN	
20	91144186	1	PRIMARY CARRIER ASSY, 8IN	
21	91144187	1	PRIMARY SUN GEAR, 8IN	
22	91044106	1	PLUNGER	
23	91044107	1	O-RING	
24	91044105	1	THRUST WASHER	
25	91044361	1	PIPE PLUG	
26	91144188	1	COVER	
27	91124027	12	FLAT WASHER	
28	91144189	12	HEX HD BOLT	
29	91124024	1	DISENGAGE COVER	
30	Kit	1	LOCK SCREW	
31	91044101	1	MAGNETIC PLUG	
32	91034389	1	PIPE PLUG	
33	91034390	2	THRUST WASHER	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	
		Ref	NOTE: QUANTITIES SHOWN ARE FOR ONE HUB ASSY ONLY.	

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FIGURE 6-1. FORWARD AND REVERSE SPEED SELECTOR (SN 8655105G to Present)



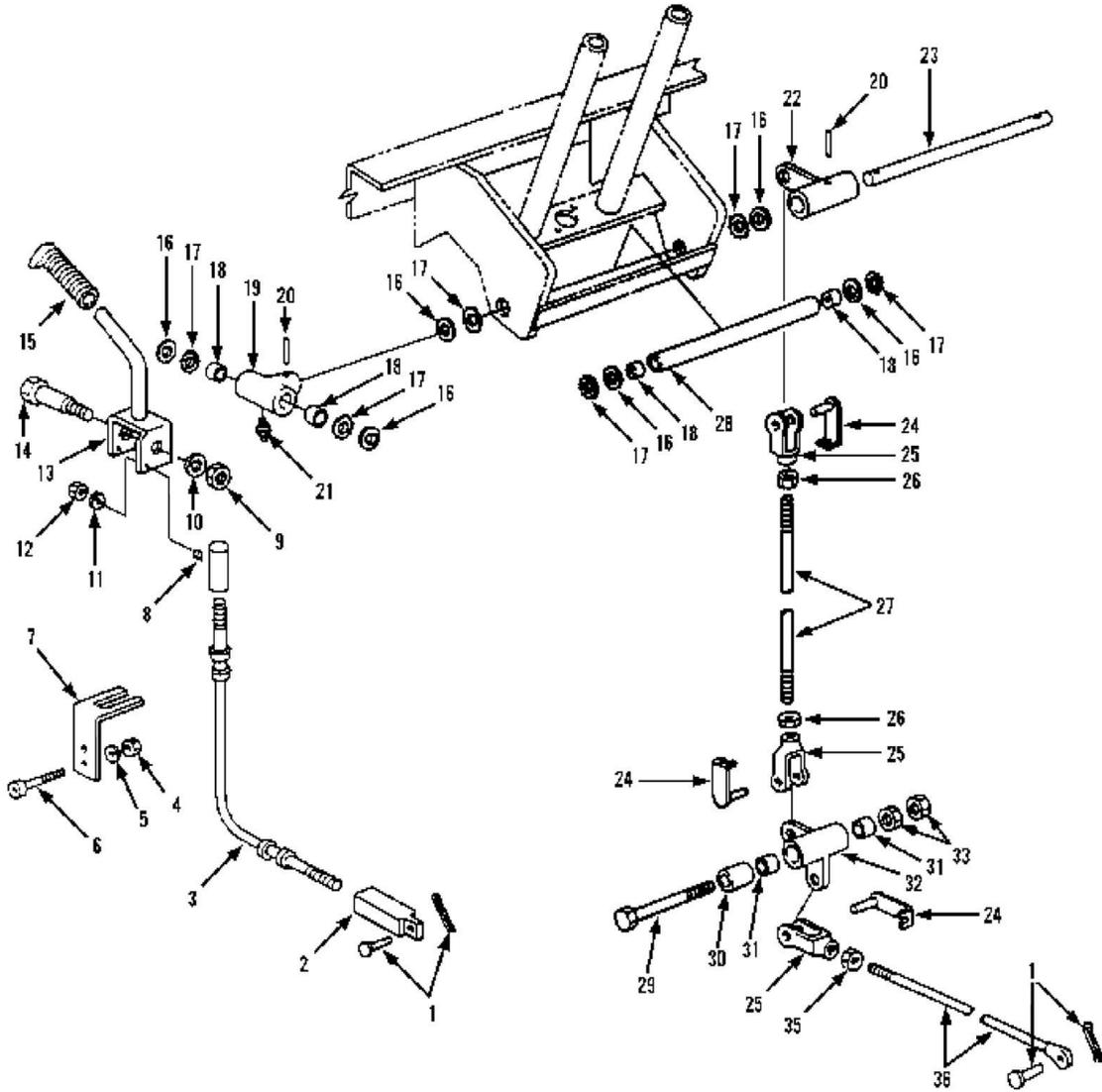
SECTION 6 - CONTROLS

FIGURE 6-1. FORWARD AND REVERSE SPEED SELECTOR (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91033310	1	TILT-SWAY COVER PLATE	
2	88321015	4	SELF-TAPPING SCREW, #6-32X1/2	
3	77143006	2	LOCKNUT	
4	77143004	2	LOCK SCREW	
5	90602789	1	CONTROL AND INSTRUMENT PANEL	
6	90200299	2	KNOB	
7	90205542	2	CONTROL ROD	
8	90402903	1	CONTROL ROD BRACKET	
9	90028695	1	CLAMP	
10		Ref	INSTRUMENT PANEL PLATE, (See ELECTRICAL SECTION for Breakdown)	
11	90205574	1	DASH PANEL	
12	90027319	2	SELF-TAPPING SCREW	
13	90027472	2	HARDENED WASHER	
14	90200290	4	NEEDLE BEARING	
15	90801213	1	CONTROL BRACKET	
16	88201065	2	HEX HD CAPSCREW, 1/2-13X1, GR5	
17	88561111	2	FLAT WASHER, 1/2	
18	88501612	4	HEX NUT, #10-24	
19	88551007	4	LOCK WASHER, #10	
20	88561105	4	FLAT WASHER, #10	
21	91033439	2	FORWARD/REVERSE SWITCH	
22	88211032	4	SOCKET HD CAPSCREW, #10-24X1, GR8	
23	88561113	4	FLAT WASHER, 5/8	
24	90028662	4	WAVE BEND WASHER	
25	91031224	1	SPACER	
26	88224929	1	SOCKET SET SCREW, 1/4-20X3/4	
27	88501616	1	HEX NUT, 1/4-20	
28	91031226	1	CAM	
29	91036042	1	BELLCRANK	
30	88631479	2	ROLL PIN, 3/16X1-1/4	
31	90027720	4	YOKE PIN ASSY	
32	88821003	4	ADJUSTABLE YOKE END, 5/16-24	
33	90203374	1	PUSH-PULL CABLE	
34	90205973	1	BELLCRANK	
35	91033255	1	GAUGE PROTECTOR	
36	88321019	4	SELF-TAPPING SCREW, #6-32X1	
37	91033277	4	RUBBER SPACER	
38	91033427	1	PUSH PULL CABLE	

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FIGURE 6-2. TILT AND SWAY (SN 8655105G to Present)



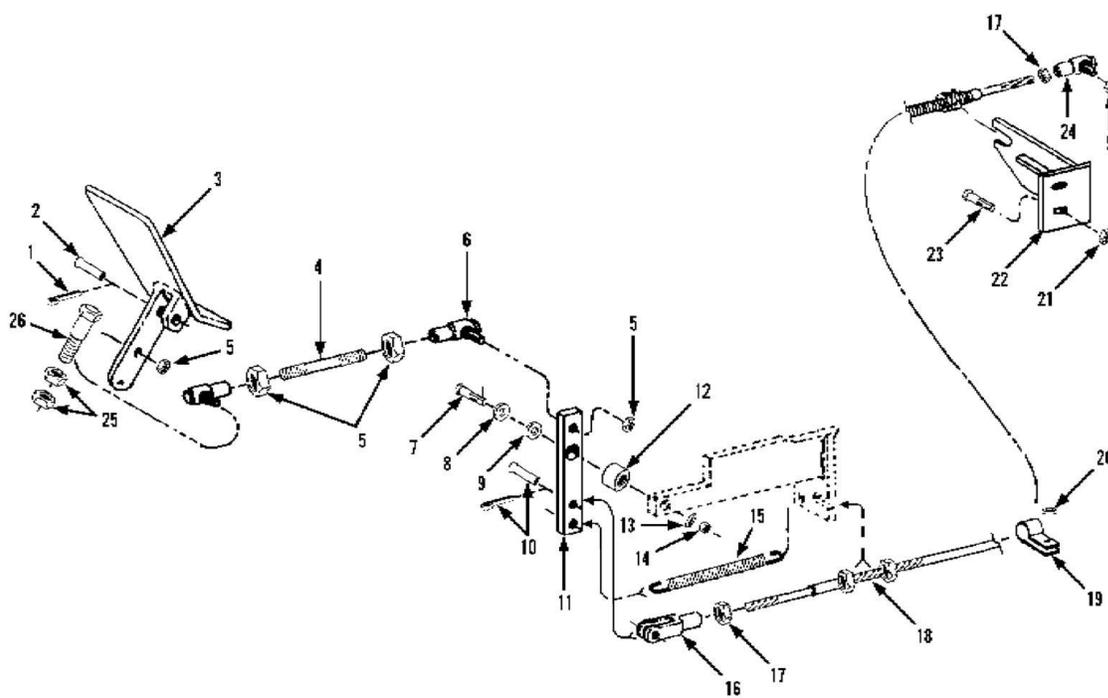
SECTION 6 - CONTROLS

FIGURE 6-2. TILT AND SWAY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90021552	2	CLEVIS PIN	
2	91041236	1	CABLE END	
3	90206861	1	CABLE ASSY	
4	88551011	2	LOCK WASHER, 3/8	
5	88501006	2	HEX NUT, 3/8-16	
6	88261030	2	SOCKET BUTTON HD CAPSCREW, 3/8-16X1-1/4	
7	91031013	1	CABLE BRACKET	
8	86683117	1	BALL JOINT	
9	88501008	1	HEX NUT, 1/2-13	
10	88551013	1	LOCK WASHER, 1/2	
11	88551010	1	LOCK WASHER, 5/16	
12	88501305	1	HEX NUT, 5/16-24	
13	90403406	1	HANDLE WELDMENT	
14	90203502	1	SHOULDER BOLT	
15	90200774	1	HANDLE GRIP	
16	88561113	6	FLAT WASHER, 5/8	
17	90028662	6	WAVE BEND WASHER	
18	90200290	4	NEEDLE BEARING	
19	90206859	1	HOUSING WELDMENT	
20	88631479	2	ROLL PIN, 3/16X1-1/4	
21	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
22	90205541	1	BELLCRANK	
23	90205571	1	SHAFT	
24	90027987	3	SPRING CLEVIS	
25	88821004	3	ADJUSTABLE YOKE END, 3/8-24	
26	88501108	2	HEX NUT, 3/8-24	
27	90202361	1	ROD	
28	90205579	1	SPACER	
29	88201328	1	HEX HD CAPSCREW, 5/8-11X6-1/2, GR5	
30	90205580	1	SPACER	
31	90200290	2	NEEDLE BEARING	
32	90205533	1	BELLCRANK	
33	88501010	2	HEX NUT, 5/8-11	
34	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
35	88501306	1	HEX NUT, 3/8-24	
36	91066019	1	CONTROL ROD	

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FIGURE 6-3. ACCELERATOR LINKAGE (SN 8655105G to Present)



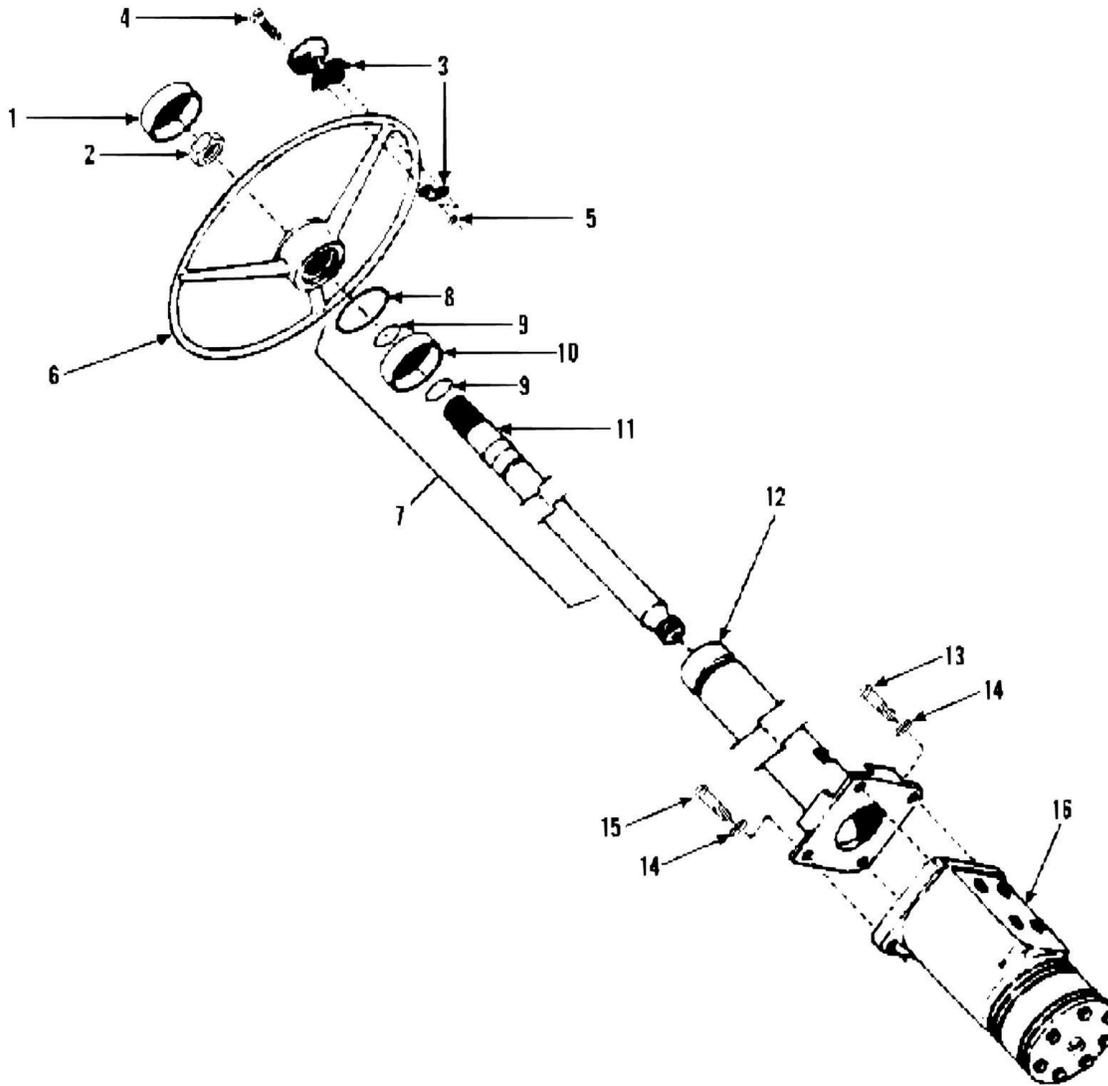
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FIGURE 6-3. ACCELERATOR LINKAGE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88631318	1	COTTER PIN, 1/8X1	
2	90021584	1	CLEVIS PIN	
3	91036022	1	ACCELERATOR PEDAL	
4	91031088	1	LINKAGE ROD	
5	88501404	5	HEX NUT, 1/4-28	
6	86683118	2	BALL JOINT	
7	88251018	1	SOCKET HD SHOULDER SCREW, 3/8X1/2 (5/16-18thread)	
8	88561109	1	FLAT WASHER, 3/8	
9	90028946	AR	WAVY WASHER	
10	90027685	1	CLEVIS AND COTTER PIN	
11	91031087	1	BELLCRANK	
12	91033281	1	BEARING	
13	88561111	1	FLAT WASHER, 1/2	
14	88501105	1	HEAVY HEX JAM NUT, 5/16-18	
15	90207801	1	SPRING	
16	90028977	1	YOKE	
17	88501613	2	HEX NUT, #10-32	
18	90200795	1	ACCELERATOR CABLE	
19	90028660	1	HOSE CLIP	
20	88561109	1	FLAT WASHER, 3/8	
21	88521305	2	HEX LOCKNUT, 5/16-18	
22	91036014	1	CABLE BRACKET	
23	88201021	2	HEX HD CAPSCREW, 5/16-18X1-1/4, GR5	
24	90027908	1	BALL JOINT	
25	88501110	2	HEAVY HEX JAM NUT, 5/8-11	
26	88201103	1	HEX HD CAPSCREW, 5/8-11X3-1/2, GR5	

SECTION 6 - CONTROLS

FIGURE 6-4. STEERING COLUMN (SN 8655105G to Present)



SECTION 6 - CONTROLS

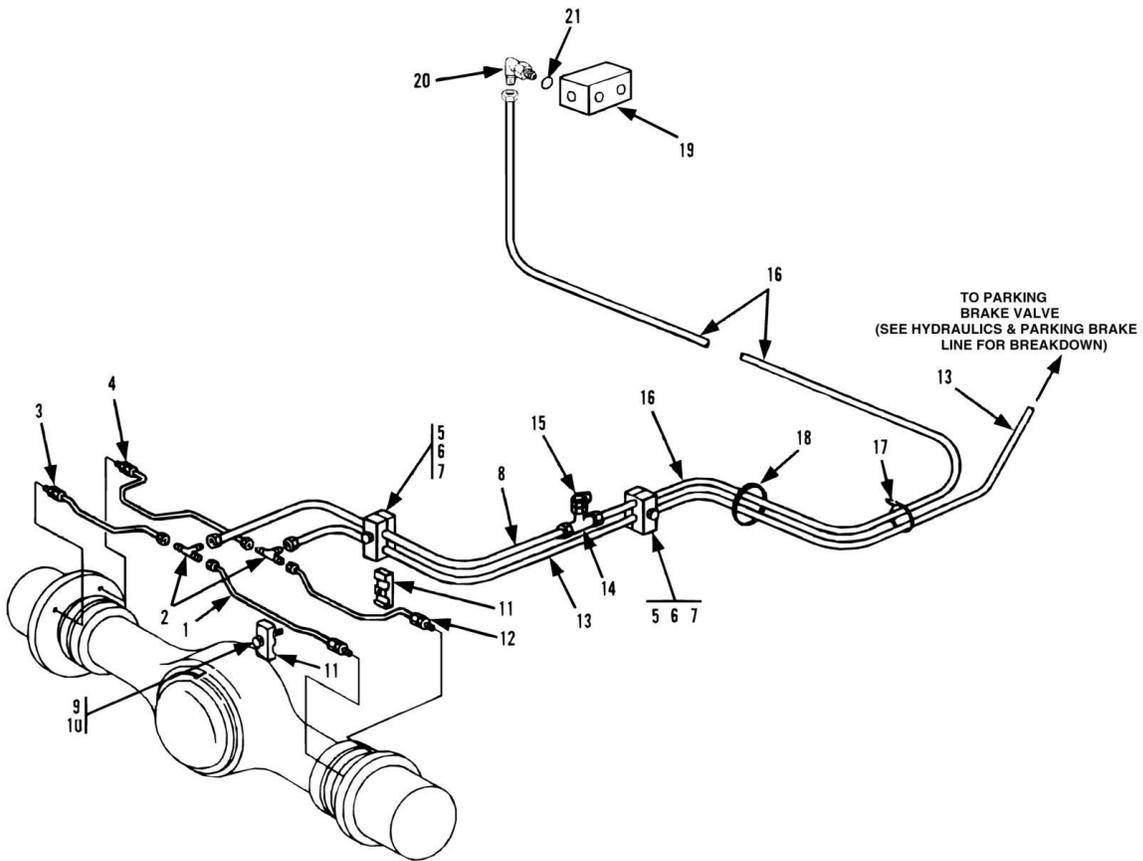
FIGURE 6-4. STEERING COLUMN (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90600274	1	STEERING CAP	
2	90200266	1	STEERING WHEEL NUT	
3	90202230	1	SPINNER KNOB (includes items 4, 5)	
4	88301311	2	FLAT HD MACHINE SCREW, 1/4-20X1	
5	88501615	2	HEX NUT, 1/4-20	
6	90600273	1	STEERING WHEEL	
7	90600267	1	ORBITROL COLUMN ASSY (includes items 8 thru 12)	
8	90201347	1	RETAINING RING	
9	90201346	2	RETAINING RING	
10	90201348	1	BEARING	
11	90201349	1	SHAFT	
12	90201350	1	TUBE AND FLANGE	
13	88201037	2	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
14	88551011	4	LOCKWASHER, 3/8	
15	88201033	2	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
16	90206762	1	ORBITROL	
16	90206567	1	ORBITROL SEAL KIT	

SECTION 7 - BRAKES

SECTION 7 - BRAKES

FIGURE 7-1. HYDRAULICS AND SERVICE BRAKE LINES (SN 8655105G to Present)



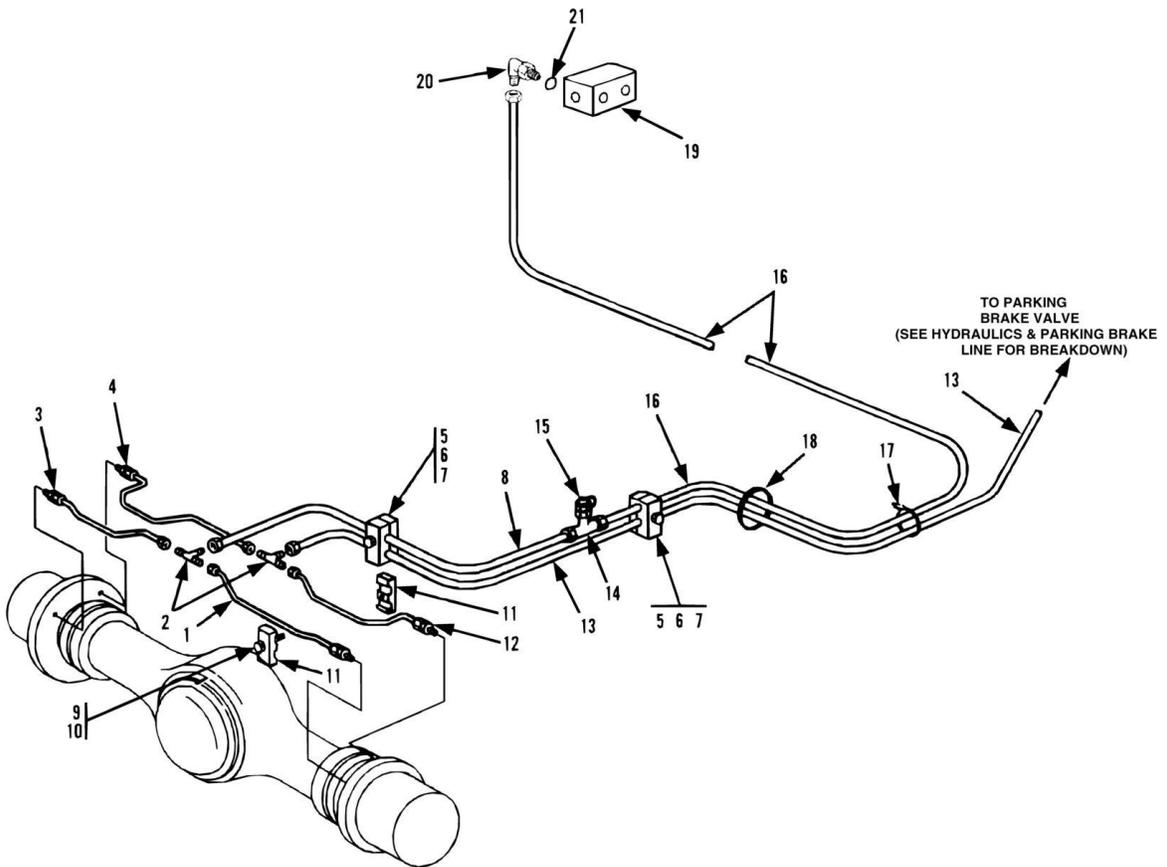
SECTION 7 - BRAKES

FIGURE 7-1. HYDRAULICS AND SERVICE BRAKE LINES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043188	1	TUBE ASSY	
2	88661305	2	UNION TEE, 3/8 TUBE	
3	91043072	1	TUBE ASSY	
4	91043189	1	TUBE ASSY	
5	77133177	2	HEX HD CAPSCREW	
6	77133140	2	COVER PLATE	
7	77133139	2	CLAMP SET	
8	84717524	1	HOSE ASSY	
9	88201005	2	HEX HD CAPSCREW, 1/4-20X1, GR5	
10	88561002	2	FLAT WASHER, 1/4	
11	77133270	2	CLAMP SET	
12	91043190	1	TUBE ASSY	
13	84717522	1	HOSE ASSY	
14	91043091	1	FEMALE BRANCH TEE	
15	91033032	1	MINI-CHECK COUPLING	
16	84717523	1	HOSE ASSY	
17	90027178	AR	NYLON HOSE TIE	
18	91043227	1	GROMMET	
19		Ref	BRAKE VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
20	88662064	1	ELBOW, 90, (includes item 21)	
21	88591204	1	O-RING	

SECTION 7 - BRAKES

FIGURE 7-2. HYDRAULICS AND PARKING BRAKE LINES (Including 0155238)



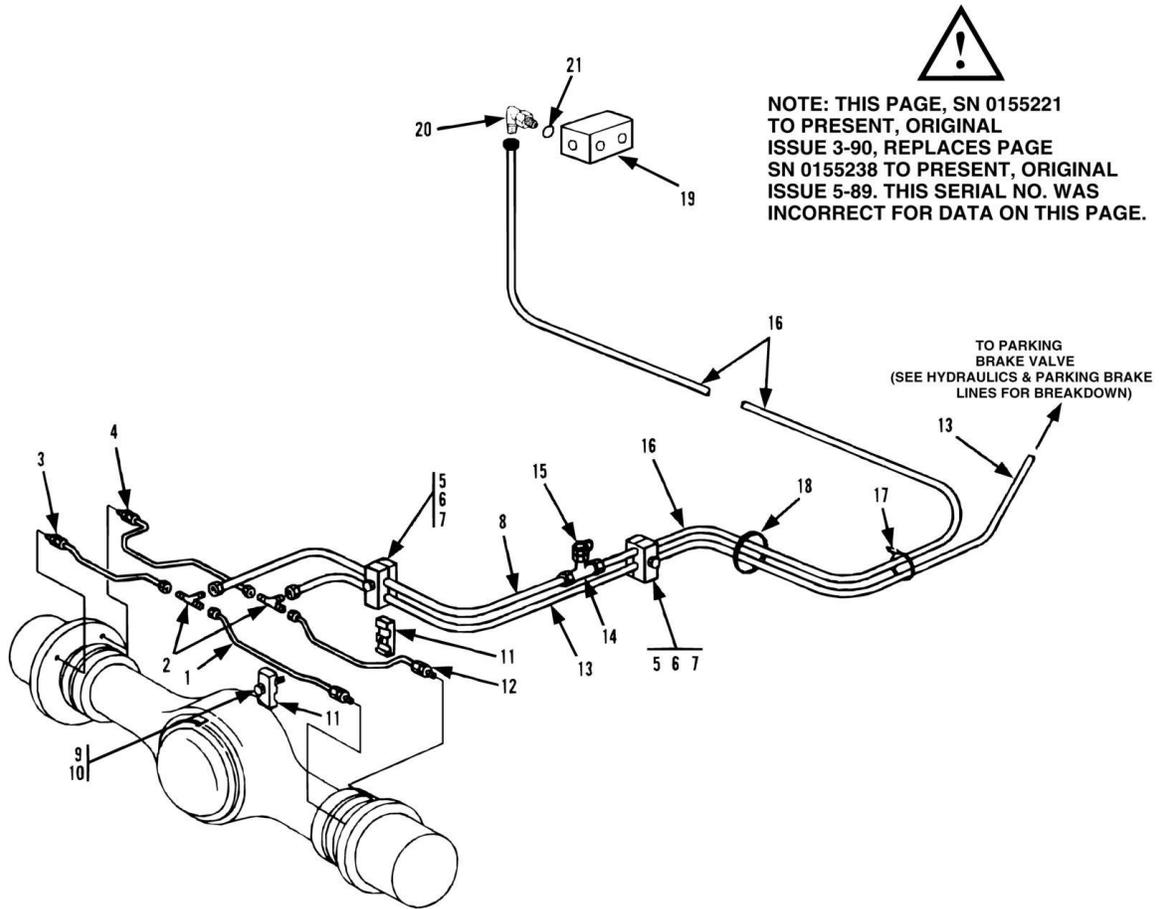
SECTION 7 - BRAKES

FIGURE 7-2. HYDRAULICS AND PARKING BRAKE LINES (Including 0155238)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043188	1	TUBE ASSY	
2	88661305	2	UNION TEE, 3/8 TUBE	
3	91043072	1	TUBE ASSY	
4	91043189	1	TUBE ASSY	
5	77133177	2	HEX HD CAPSCREW	
6	77133140	2	COVER PLATE	
7	77133139	2	CLAMP SET	
8	84717524	1	HOSE ASSY	
9	88201005	2	HEX HD CAPSCREW, 1/4-20X1, GR5	
10	88561002	2	FLAT WASHER, 1/4	
11	77133270	2	CLAMP SET	
12	91043190	1	TUBE ASSY	
13	84717522	1	HOSE ASSY	
14	91043091	1	FEMALE BRANCH TEE	
15	91033032	1	MINI-CHECK COUPLING	
16	84717523	1	HOSE ASSY	
17	90027178	AR	NYLON HOSE TIE	
18	91043227	1	GROMMET	
19		Ref	BRAKE VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
20	88662064	1	ELBOW, 90, (includes item 21)	
21	88591204	1	O-RING	

SECTION 7 - BRAKES

FIGURE 7-3. HYDRAULICS AND PARKING BRAKE LINES (SN 0155221 to Present)



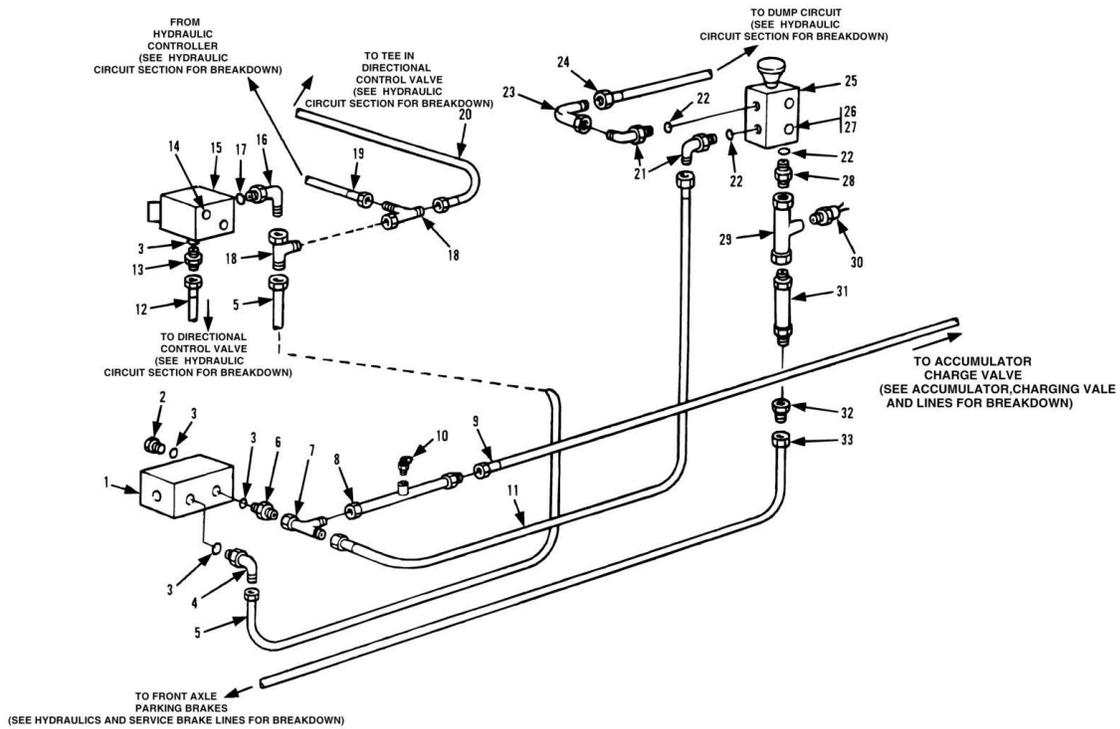
SECTION 7 - BRAKES

FIGURE 7-3. HYDRAULICS AND PARKING BRAKE LINES (SN 0155221 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043188	1	TUBE ASSY	
2	88661305	2	UNION TEE, 3/8 TUBE	
3	91043072	1	TUBE ASSY	
4	91043189	1	TUBE ASSY	
5	77133177	2	HEX HD CAPSCREW	
6	77133140	2	COVER PLATE	
7	77133139	2	CLAMP SET	
8	84717524	1	HOSE ASSY	
9	88201005	2	HEX HD CAPSCREW, 1/4-20X1, GR5	
10	88561002	2	FLAT WASHER, 1/4	
11	77133270	2	CLAMP SET	
12	91043190	1	TUBE ASSY	
13	84717522	1	HOSE ASSY	
14	91043091	1	FEMALE BRANCH TEE	
15	91033032	1	MINI-CHECK COUPLING	
16	84717523	1	HOSE ASSY	
17	90027178	AR	NYLON HOSE TIE	
18	91043227	1	GROMMET	
19		Ref	BRAKE VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
20	88662064	1	ELBOW, 90, (includes item 21)	
21	88591204	1	O-RING	

SECTION 7 - BRAKES

FIGURE 7-4. HYDRAULICS AND PARKING BRAKE LINES (SN 8655105G to Present)



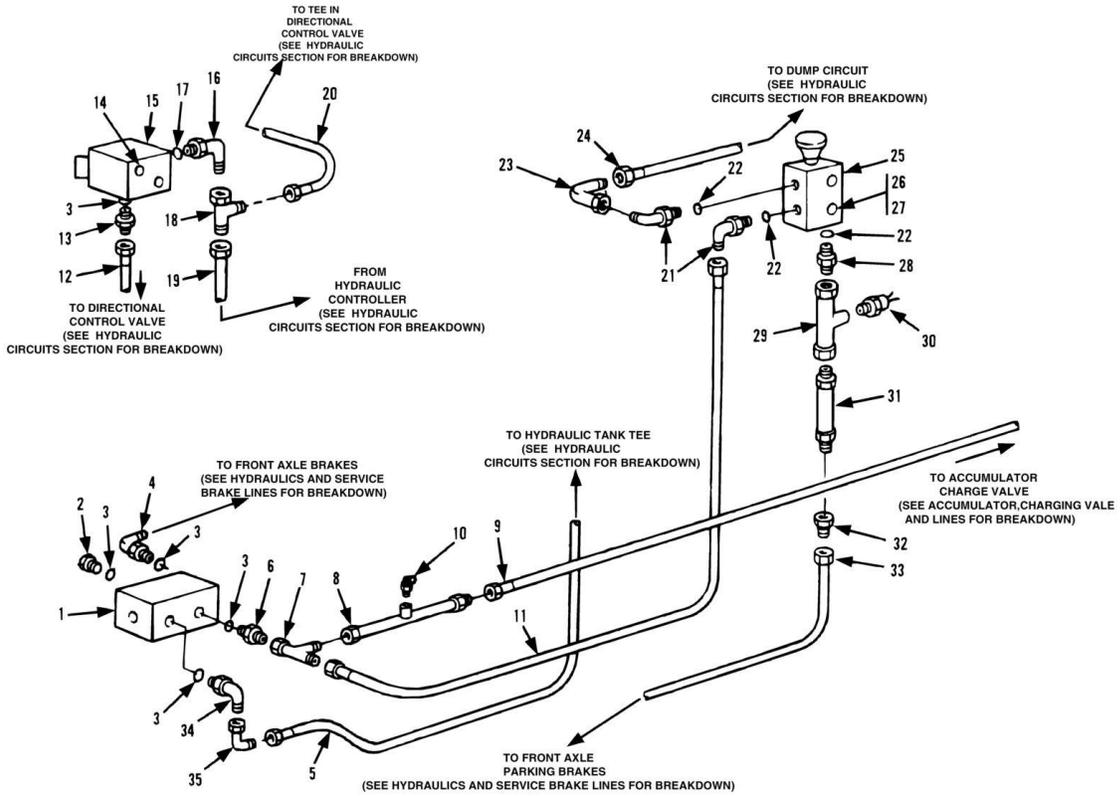
SECTION 7 - BRAKES

FIGURE 7-4. HYDRAULICS AND PARKING BRAKE LINES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	BRAKE VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88662174	1	HEX HD PLUG (includes item 3)	
3	88591204	4	O-RING	
4	88662064	1	ELBOW, 90, (includes item 3)	
5	90207411	1	HOSE ASSY	
6	88662005	1	CONNECTOR (includes item 3)	
7	88662239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
8	91043163	1	TUBE ASSY	
9		Ref	HOSE ASSY (See HYDRAULICS AND PARKING BRAKE LINES for Breakdown)	
10	77133089	1	MINI-CHECK COUPLING	
11	84717508	1	HOSE ASSY	
12	77133342	1	HOSE ASSY	
13	88662005	1	CONNECTOR (includes item 3)	
15	91033096	1	INCHING VALVE ASSY	
15	91034018	1	VALVE SEAL KIT	
16	88662064	1	ELBOW, 90, (includes item 17)	
17	88591204	1	O-RING	
18	88662239	2	SWIVEL NUT RUN TEE, 3/8 TUBE	
19	84717341	1	HOSE ASSY	
20	84717466	1	HOSE ASSY	
21	88662065	2	ELBOW, 90, (includes item 22)	
22	88591205	3	O-RING	
23	88662105	1	ELBOW, 90, (swivel nut)	
24	77133198	1	HOSE ASSY	
25		Ref	PARK BRAKE VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
26	88261021	2	SOCKET BUTTON HD CAPSCREW, 5/16-18X5/8	
27	88551009	2	LOCK WASHER, 5/16	
28	88662018	1	CONNECTOR (includes item 22)	
29	91043131	1	TUBE ASSY	
30	91043077	1	PRESSURE SWITCH	
31	91043143	1	CHECK VALVE	
32	88661342	1	TUBE END REDUCER, 1/2X3/8	
33		Ref	HOSE ASSY (See HYDRAULICS AND SERVICE BRAKE LINES for Breakdown)	

SECTION 7 - BRAKES

FIGURE 7-5. HYDRAULICS AND PARKING BRAKE LINES (SN 0155238 to Present)



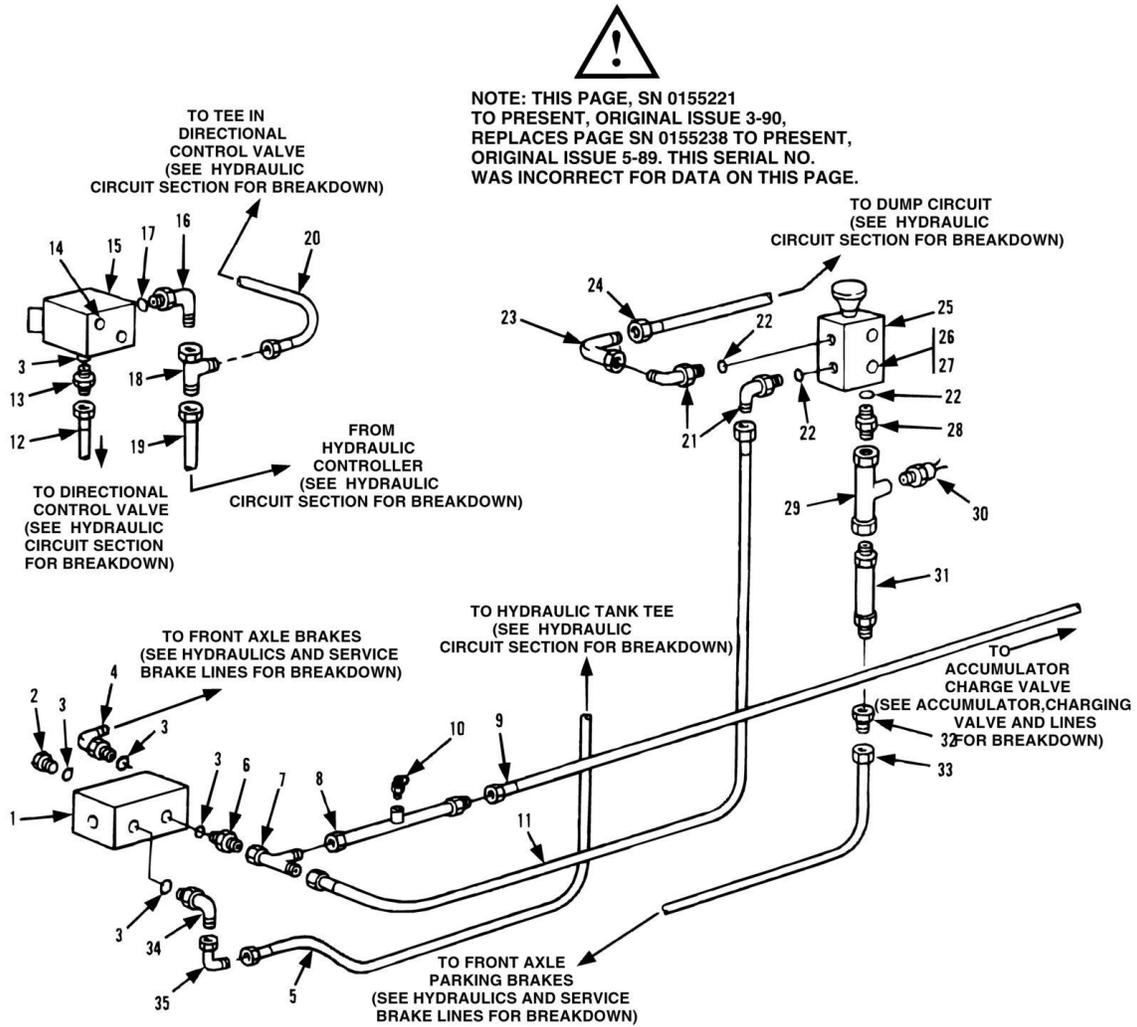
SECTION 7 - BRAKES

FIGURE 7-5. HYDRAULICS AND PARKING BRAKE LINES (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	BRAKE VALVE ASSY (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
2	88662174	1	HEX HD PLUG (includes item 3)	
3	88591204	4	O-RING	
4	88662064	1	ELBOW, 90, (includes item 3)	
5	84717842	1	HOSE ASSY	
6	88662005	1	CONNECTOR (includes item 3)	
7	88662239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
8	91043163	1	TUBE ASSY	
9	84717317	1	HOSE ASSY	
10	77133089	1	MINI-CHECK COUPLING	
11	84717508	1	HOSE ASSY	
12	77133342	1	HOSE ASSY	
13	88662005	1	CONNECTOR (includes item 3)	
15	91033096	1	INCHING VALVE ASSY	
15	91034018	1	INCHING VALVE SEAL KIT	
16	88662064	1	ELBOW, 90, (includes item 17)	
17	88591204	1	O-RING	
18	88662239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
19	84717341	1	HOSE ASSY	
20	84717466	1	HOSE ASSY	
21	88662065	2	ELBOW, 90, (includes item 22)	
22	88591205	3	O-RING	
23	88662105	1	ELBOW, 90, (swivel nut)	
24	77133198	1	HOSE ASSY	
25		Ref	PARK BRAKE VALVE (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
26	88261021	2	SOCKET BUTTON HD CAPSCREW, 5/16-18X5/8	
27	88551009	2	LOCK WASHER, 5/16	
28	88662018	1	CONNECTOR (includes item 22)	
29	91063098	1	TUBE ASSY	
30	91043077	1	PRESSURE SWITCH	
31	91043143	1	CHECK VALVE	
32	88661342	1	TUBE END REDUCER, 1/2X3/8	
33	84717522	1	HOSE ASSY	
34	77131088	1	ELBOW, 90	
35	88662106	1	ELBOW, 90, (swivel nut)	

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FIGURE 7-6. HYDRAULICS AND PARKING BRAKE LINES (SN 0155221 to Present)



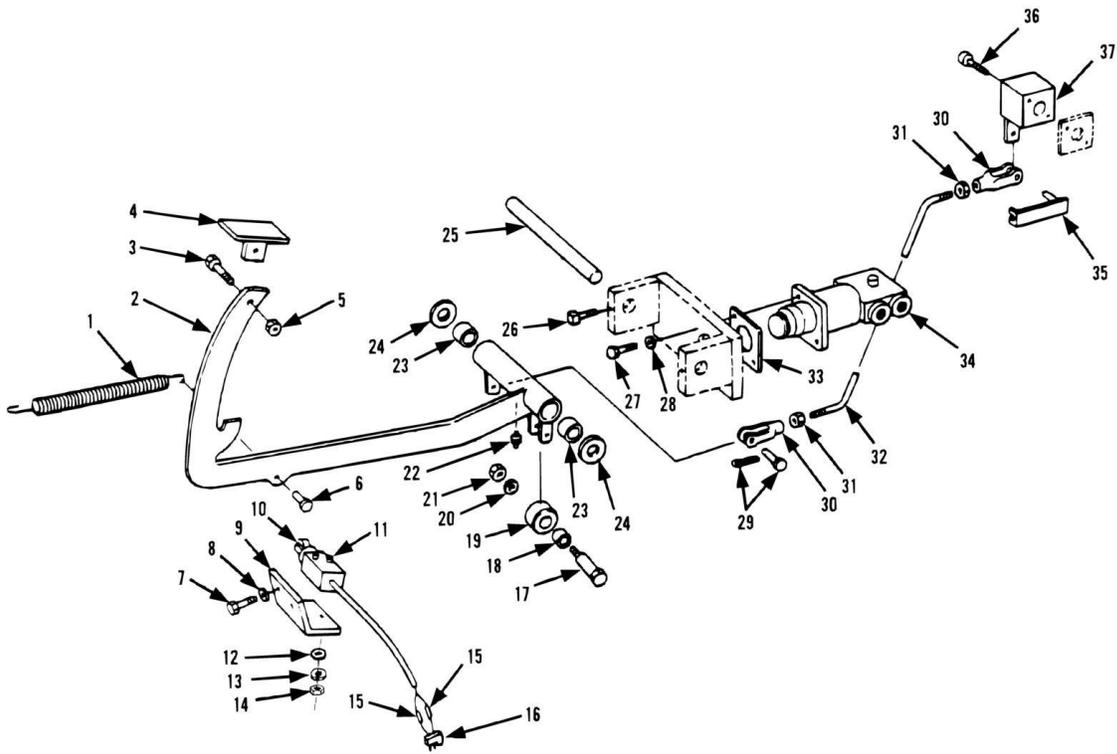
SECTION 7 - BRAKES

FIGURE 7-6. HYDRAULICS AND PARKING BRAKE LINES (SN 0155221 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	BRAKE VALVE ASSY (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
2	88662174	1	HEX HD PLUG (includes item 3)	
3	88591204	5	O-RING	
4	88662064	1	ELBOW, 90, (includes item 3)	
5	84717842	1	HOSE ASSY	
6	88662005	1	CONNECTOR (includes item 3)	
7	88662239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
8	91043163	1	TUBE ASSY	
9	84717317	1	HOSE ASSY	
10	77133089	1	MINI-CHECK COUPLING	
11	84717508	1	HOSE ASSY	
12	77133342	1	HOSE ASSY	
13	88662005	1	CONNECTOR (includes item 3)	
15	91033096	1	INCHING VALVE ASSY	
15	91034018	1	INCHING VALVE SEAL KIT	
16	88662064	1	ELBOW, 90, (includes item 17)	
17	88591204	1	O-RING	
18	88662239	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
19	84717341	1	HOSE ASSY	
20	84717466	1	HOSE ASSY	
21	88662065	2	ELBOW, 90, (includes item 22)	
22	88591205	3	O-RING	
23	88662105	1	ELBOW, 90, (swivel nut)	
24	77133198	1	HOSE ASSY	
25		Ref	PARK BRAKE VALVE (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
26	88261021	2	SOCKET BUTTON HD CAPSCREW, 5/16-18X5/8	
27	88551009	2	LOCK WASHER, 5/16	
28	88662018	1	CONNECTOR (includes item 22)	
29	91063098	1	TUBE ASSY	
30	91043077	1	PRESSURE SWITCH	
31	91043143	1	CHECK VALVE	
32	88661342	1	TUBE END REDUCER, 1/2X3/8	
33	84717522	1	HOSE ASSY	
34	77131088	1	ELBOW, 90	
35	88662106	1	ELBOW, 90, (swivel nut)	

SECTION 7 - BRAKES

FIGURE 7-7. BRAKE PEDAL AND INCHING LINKAGE (SN 8655105G to Present)



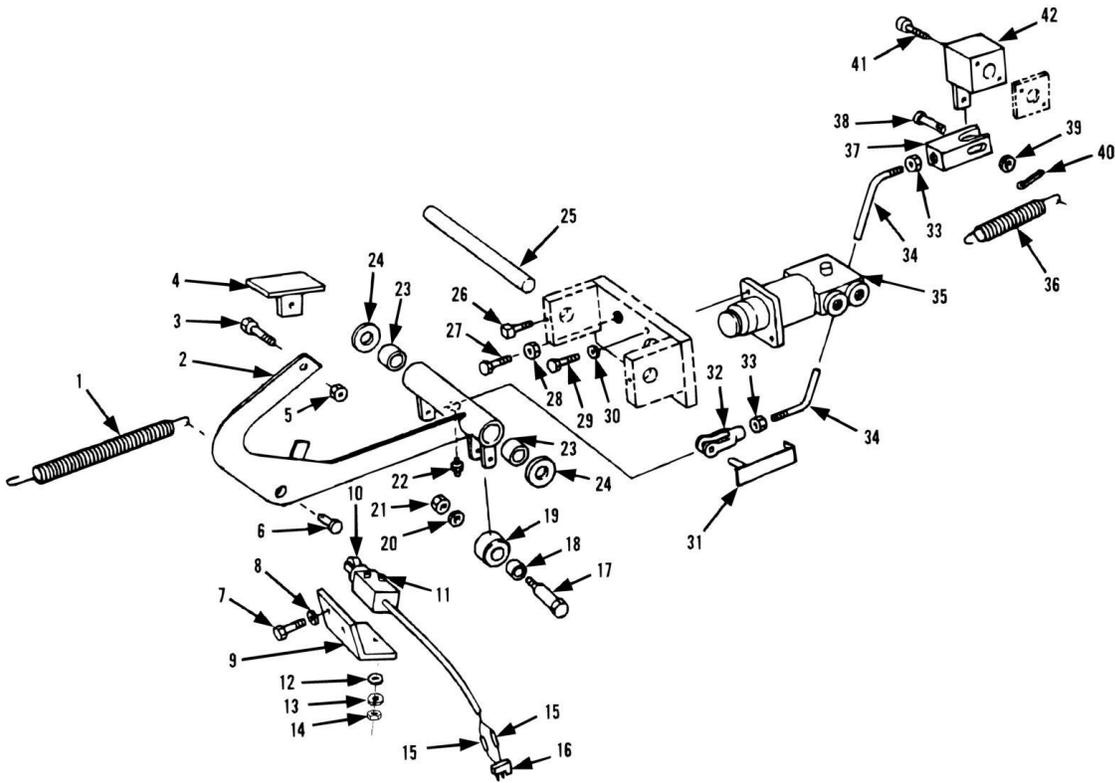
SECTION 7 - BRAKES

FIGURE 7-7. BRAKE PEDAL AND INCHING LINKAGE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043154	1	RETURN SPRING	
2	91046050	1	BRAKE LEVER WELDMENT	
3	88201068	1	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
4	90201463	1	PEDAL WELDMENT	
5	88501008	1	HEX NUT, 1/2-13	
6	90021553	1	YOKE PIN, 5/16	
7	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
8	88551009	2	LOCK WASHER, 1/4	
9	91031232	1	SWITCH MOUNTING BRACKET	
10	91033202	1	TRANSMISSION DISCONNECT SWITCH	
11	88211032	2	SOCKET HD CAPSCREW, #10-24, GR8	
12	88561105	2	FLAT WASHER, #10	
13	88551007	2	LOCK WASHER, #10	
14	88501612	2	HEX NUT, #10-24	
15	86683480	2	CRIMP-ON CONNECTOR	
16	83483114	1	MALE CONNECTOR	
17	88251023	1	SOCKET HD SHOULDER SCREW, 3/8X1-1/2,5/16-18 THREAD	
18	91043086	1	BEARING	
19	91041196	1	ROLLER	
20	88551010	1	LOCK WASHER, 5/16	
21	88501005	1	HEX NUT, 5/16-18	
22	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
23	90200290	2	BEARING	
24	90028662	2	WASHER	
25	90201562	1	PIN	
26	88441001	2	SQUARE HD SET SCREW, 1/4-20X1/2 (cup point)	
27	83191028	2	HEX HD CAPSCREW, M8X1.25	
28	83191011	2	LOCK WASHER, M8	
29	90021558	1	CLEVIS PIN AND COTTER PIN	
30	88821004	2	ADJUSTABLE YOKE END, 3/8-24	
31	88501406	2	HEX JAM NUT, 5/16-24	
32	91031085	1	ROD	
33	91041197	2	SHIM	
34		Ref	BRAKE VALVE ASSY (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
35	90027987	1	CLEVIS SPRING	
37	91033096	1	INCHING VALVE	
37	91034018	1	INCHING VALVE SEAL KIT	

SECTION 7 - BRAKES

FIGURE 7-8. BRAKE PEDAL AND INCHING LINKAGE (SN 0155188G to Present)



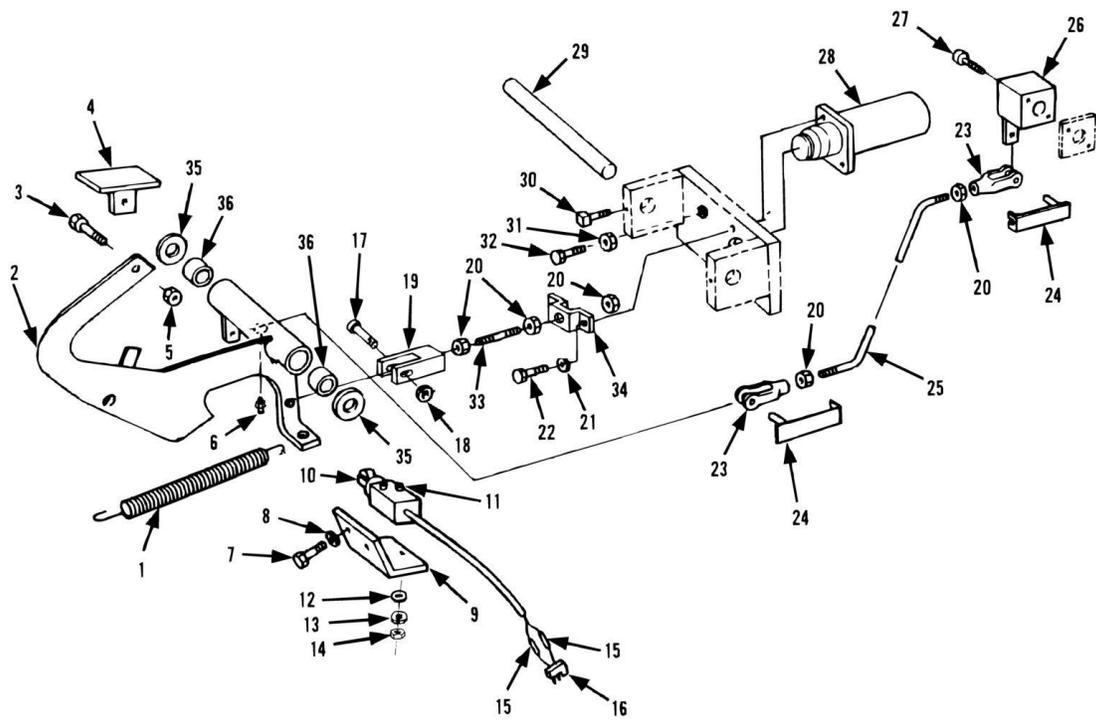
SECTION 7 - BRAKES

FIGURE 7-8. BRAKE PEDAL AND INCHING LINKAGE (SN 0155188G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043214	1	RETURN SPRING	
2	91046083	1	BRAKE LEVER WELDMENT	
3	88201068	1	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
4	90201463	1	PEDAL WELDMENT	
5	88501008	1	HEX NUT, 1/2-13	
6	91041402	1	SPECIAL CLEVIS PIN	
7	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
8	88551009	2	LOCK WASHER, 1/4	
9	91041431	1	SWITCH MOUNTING BRACKET	
10	91033202	1	TRANSMISSION DISCONNECT SWITCH	
11	88211032	2	SOCKET HD CAPSCREW, #10-24, GR8	
12	88561105	2	FLAT WASHER, #10	
13	88551007	2	LOCK WASHER, #10	
14	88501612	2	HEX NUT, #10-24	
15	86683480	2	CRIMP-ON CONNECTOR	
16	83483114	1	MALE CONNECTOR	
17	88251023	1	SOCKET HD SHOULDER SCREW, 3/8X1-1/2,5/16-18 THREAD	
18	91043086	1	BEARING	
19	91041196	1	ROLLER	
20	88551010	1	LOCK WASHER, 5/16	
21	88501005	1	HEX NUT, 5/16-18	
22	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
23	90200290	2	BEARING	
24	90028662	2	WASHER	
25	90201562	1	PIN	
26	88441001	2	SQUARE HD SET SCREW, 1/4-20X1/2 (cup point)	
27	88201038	1	HEX HD CAPSCREW, 3/8-16X1-3/4, GR5	
28	88501106	1	HEX JAM NUT, 3/8-16	
29	83191028	2	HEX HD CAPSCREW, M8X1.25	
30	83191011	2	LOCK WASHER, M8	
31	90027987	1	CLEVIS PIN	
32	88821004	1	ADJUSTABLE YOKE END, 3/8-24	
33	88501406	2	HEX JAM NUT, 5/16-24	
34	91031085	1	ROD	
35		Ref	BRAKE VALVE ASSY (See HYDRAULICS COMPONENTS SECTION for Breakdown)	
36	90207801	1	SPRING	
37	91041424	1	SPECIAL YOKE END	
38	91041425	1	SPECIAL CLEVIS PIN	
39	88561004	1	FLAT WASHER, 3/8	
40	88631303	1	COTTER PIN, 1/16X1	
42	91033096	1	INCHING VALVE	
42	91034018	1	INCHING VALVE SEAL KIT	

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FIGURE 7-9. BRAKE PEDAL AND INCHING LINKAGE (SN 0155238 to Present)



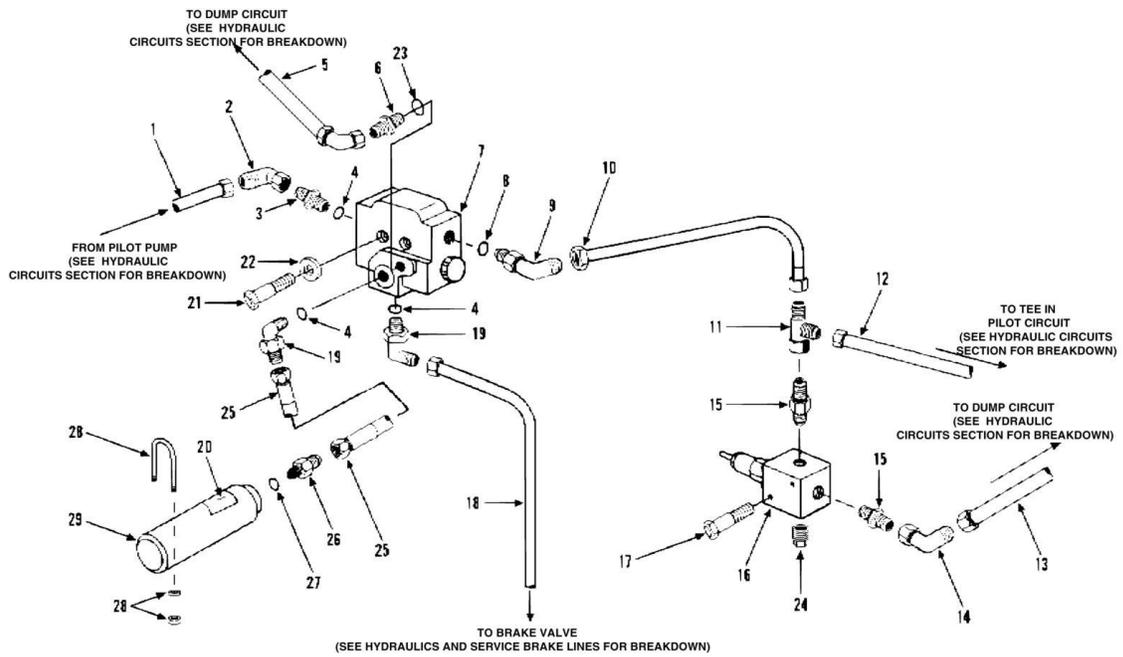
SECTION 7 - BRAKES

FIGURE 7-9. BRAKE PEDAL AND INCHING LINKAGE (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043214	1	SPRING	
2	91046101	1	BRAKE LEVER WELDMENT	
3	88201068	1	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
4	91046104	1	PEDAL WELDMENT	
5	88521208	1	HEX LOCKNUT, 1/2-13	
6	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
7	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
8	88551009	2	LOCKWASHER, 1/4	
9	91041431	1	SWITCH MOUNTING BRACKET	
10	91033202	1	TRANSMISSION DISCONNECT SWITCH	
11	88211032	2	SOCKET HD CAPSCREW, #10-24, GR8	
12	88561105	2	FLAT WASHER, #10	
13	88551007	2	LOCKWASHER, #10	
14	88501612	2	HEX NUT, #10-24	
15	86683480	2	CRIMP-ON CONNECTOR	
16	83483114	1	MALE CONNECTOR	
17	88251021	1	SOCKET HD SHOULDER SCREW, 3/8X1 (5/16-18 thread)	
18	88521205	1	HEX LOCKNUT, 5/16-18	
19	91041521	1	SPECIAL CLEVIS	
20	88501406	5	HEX JAM NUT, 3/8-24	
21	88551011	2	LOCKWASHER, 3/8	
22	88201036	2	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
23	88821004	2	ADJUSTABLE YOKE END, 3/8-24	
24	90027987	2	SPRING CLEVIS	
25	91041522	1	ROD	
26	91033096	1	INCHING VALVE	
26	91034018	AR	SEAL KIT	
28		Ref	BRAKE VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
29	90201562	1	PIN	
30	88441001	2	SQUARE HD SET SCREW, 1/4-20X1/2 (cup point)	
31	88501106	1	HEX JAM NUT, 3/8-16	
32	83201073	1	HEX HD CAPSCREW, 3/8-16X4-1/2	
33	91041536	1	PUSH ROD	
34	91041520	1	BRAKE VALVE RETAINER	
35	90028662	2	WASHER	
36	90200290	2	BEARING	

SECTION 7 - BRAKES

FIGURE 7-10. ACCUMULATOR, CHARGING VALVE AND LINES (SN 8655105G to Present)



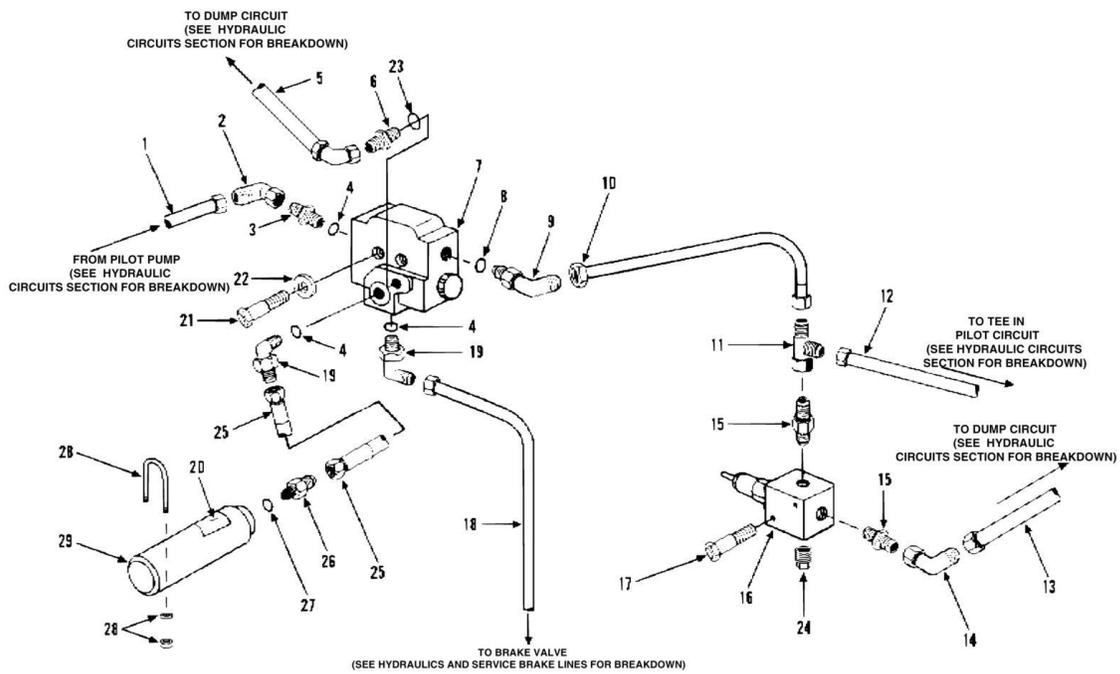
SECTION 7 - BRAKES

FIGURE 7-10. ACCUMULATOR, CHARGING VALVE AND LINES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	84716251	1	HOSE ASSY	
2	88662108	1	ELBOW, 90, (swivel nut)	
3	88662023	1	CONNECTOR (includes item #4)	
4	88591205	3	O-RING	
5	84717489	1	HOSE ASSY	
6	88662003	1	CONNECTOR (includes item #23)	
7		Ref	ACCUMULATOR CHARGE VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
8	88591205	1	O-RING	
9	88662085	1	ELBOW, 45, (includes item #8)	
10	90207360	1	HOSE ASSY	
11	88662225	1	SWIVEL NUT RUN TEE, 1/2 TUBE	
12	84717413	1	HOSE ASSY	
13	84717518	1	HOSE ASSY	
14	88662120	1	ELBOW, 45, (swivel nut)	
15	88743003	2	MALE ADAPTER, 3/8 X 1/2 TUBE	
16	91033128	1	RELIEF VALVE ASSY	
17	88201009	2	HEX HD CAPSCREW 1/4-20 X 2, GR5	
18	84717317	1	HOSE ASSY	
19	88662065	2	ELBOW, 90, (includes item 4)	
20	91043206	2	ACCUMULATOR WARNING DECAL	
21	88211047	2	SOCKET HD CAPSCREW, 1/4-20 X 2- 1/4, GR8	
22	88551105	2	LOCK WASHER, 1/4 (hi-collar)	
23	88591202	1	O-RING	
24	88711282	1	SOCKET HD PIPE PLUG, 3/8	
25	84717610	1	HOSE ASSY	
26	88662020	1	CONNECTOR (includes item #27)	
27	88591207	1	O-RING	
28	83683175	2	CLAMP	
29	91053380	1	ACCUMULATOR	
29	91054003	1	ACCUMULATOR (uncharged)	

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FIGURE 7-11. ACCUMULATOR, CHARGING VALVE AND LINES (SN 0155238 to Present)



SECTION 7 - BRAKES

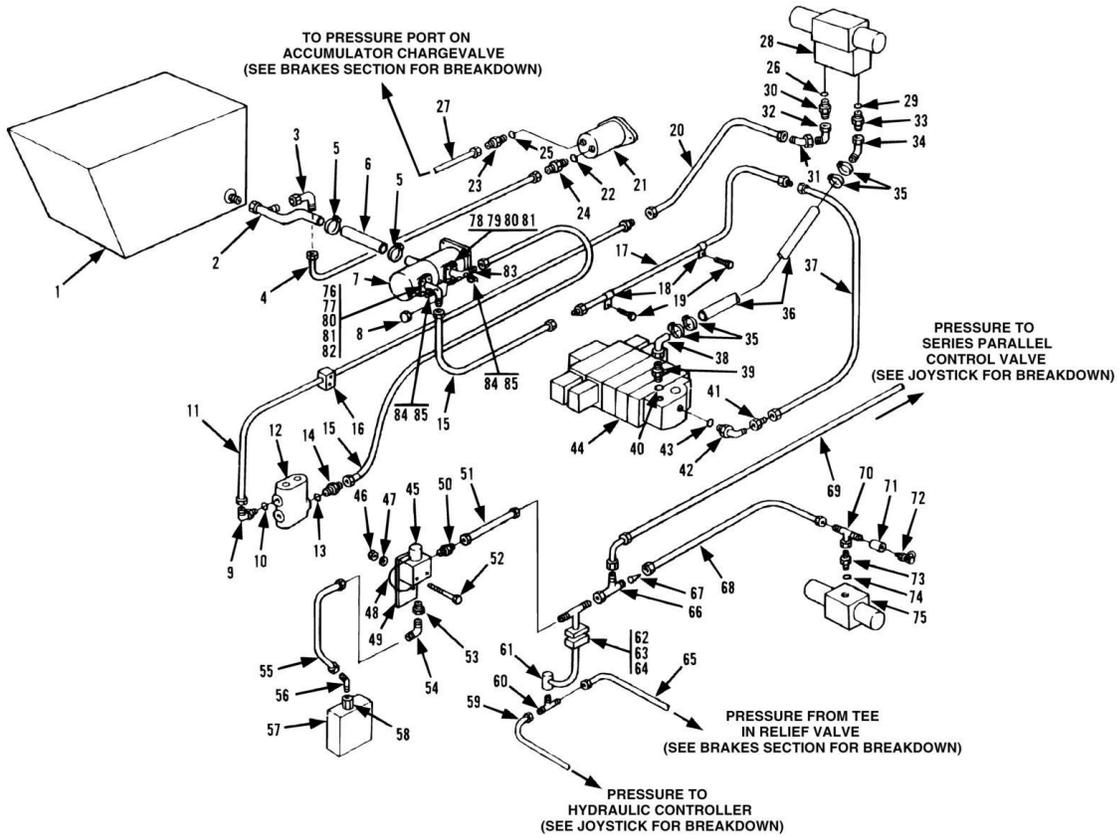
FIGURE 7-11. ACCUMULATOR, CHARGING VALVE AND LINES (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	84716251	1	HOSE ASSY	
2	88662108	1	ELBOW, 90, (swivel nut)	
3	88662023	1	CONNECTOR (includes item #4)	
4	88591205	3	O-RING	
5	84717489	1	HOSE ASSY	
6	88662003	1	CONNECTOR (includes item #23)	
7	91043079	Ref	ACCUMULATOR CHARGE VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
8	88591205	1	O-RING	
9	88662085	1	ELBOW, 45, (includes item #8)	
10	90207360	1	HOSE ASSY	
11	88662225	1	SWIVEL NUT RUN TEE, 1/2 TUBE	
12	84717413	1	HOSE ASSY	
13	84717418	1	HOSE ASSY	
14	88662120	1	ELBOW, 45, (swivel nut)	
15	88743003	2	MALE ADAPTER, 3/8 X 1/2 TUBE	
16	91033128	1	RELIEF VALVE ASSY	
17	88201009	2	HEX HD CAPSCREW 1/4-20 X 2, GR5	
18	84717317	1	HOSE ASSY	
19	88662065	2	ELBOW, 90, (includes item #4)	
20	91043206	2	ACCUMULATOR WARNING DECAL	
21	88211047	2	SOCKET HD CAPSCREW, 1/4-20 X 2- 1/4, GR8	
22	88551105	2	LOCK WASHER, 1/4 (hi-collar)	
23	88591202	1	O-RING	
24	88711282	1	SOCKET HD PIPE PLUG, 3/8	
25	84717610	1	HOSE ASSY	
26	88662020	1	CONNECTOR (includes item #27)	
27	88591207	1	O-RING	
28	83683175	2	CLAMP	
29	91053380	1	ACCUMULATOR	
29	91054003	1	ACCUMULATOR (uncharged)	

SECTION 8 - HYDRAULIC CIRCUITS

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-1. OIL SUPPLY AND PRESSURE LINES (SN 8655105G to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-1. OIL SUPPLY AND PRESSURE LINES (SN 8655105G to Present)

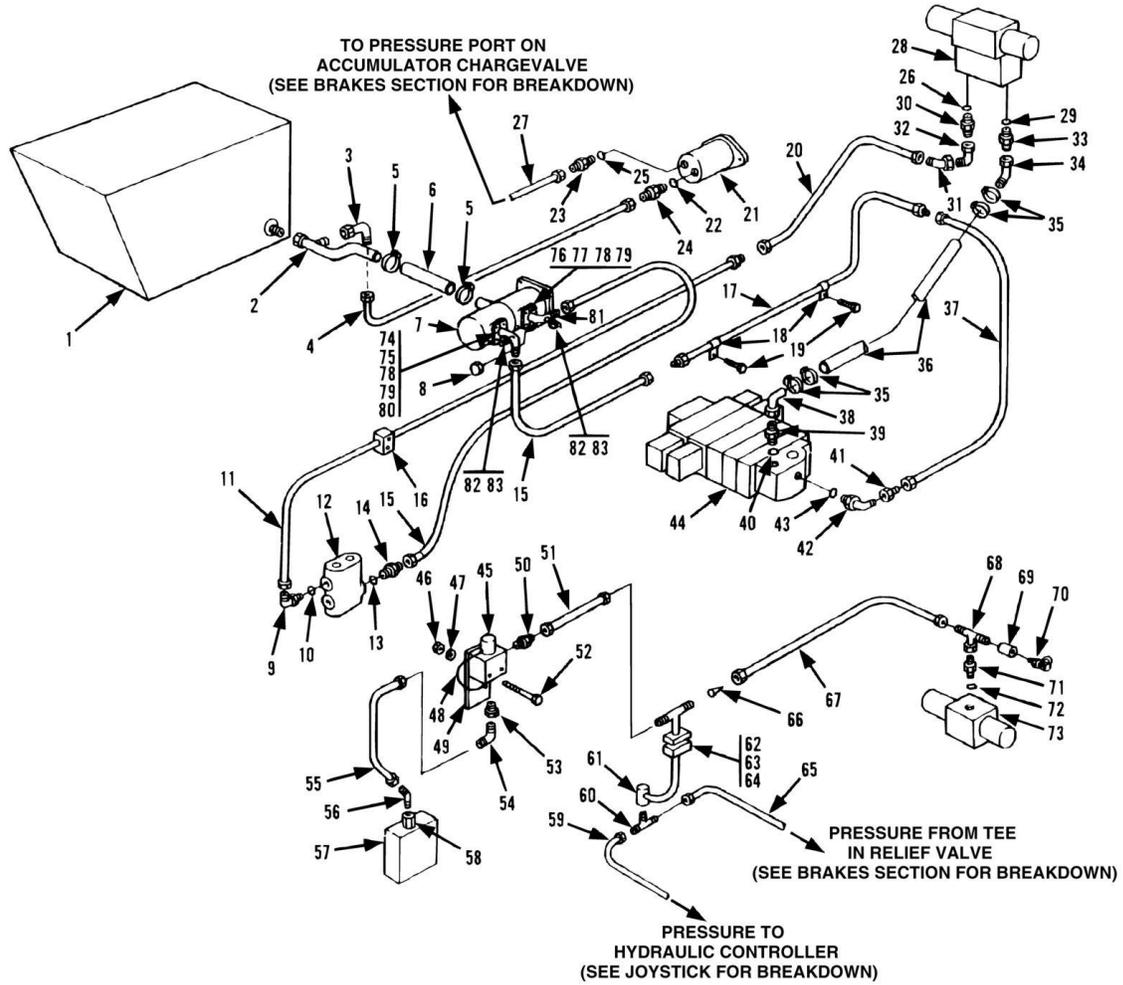
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OIL RESERVOIR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91033257	1	ELBOW	
3	88662110	1	ELBOW, 90, (swivel nut)	
4	77133875	1	HOSE ASSY	
5	90028720	2	HOSE CLAMP	
6	91033125	1	SUCTION HOSE	
7		Ref	MAIN HYDRAULIC PUMP (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
8	88661366	1	HEX CAP, 5/8 TUBE	
9	88662069	1	ELBOW, 90, (includes item 10)	
10	88591209	1	O-RING	
11	90207690	1	TUBE ASSY	
12		Ref	PRIORITY FLOW CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
13	88591209	1	O-RING	
14	88662010	1	CONNECTOR (includes item 13)	
15	90022045	2	HOSE ASSY	
16	90205792	1	CLAMP ASSY	
17	91033069	1	TUBE ASSY	
18	90200481	2	CLAMP	
19	88201033	2	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
20	90022045	1	HOSE ASSY	
21		Ref	PILOT PUMP ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	88591206	1	O-RING	
23	88662024	1	CONNECTOR (includes item 22)	
24	88662027	1	STRAIGHT CONNECTOR (includes item 25)	
25	88591207	1	O-RING	
26	88591210	1	O-RING	
27	84716251	1	HOSE ASSY	
28		Ref	FORWARD-REVERSE CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
29	88591210	1	O-RING	
30	88662028	1	CONNECTOR (includes item 26)	
31	88662124	1	ELBOW, 45, (swivel nut)	
32	88662110	1	ELBOW, 90, (swivel nut)	
33	88662011	1	CONNECTOR (includes item 29)	
34	91033142	1	ELBOW	
35	90028482	4	HOSE CLAMP	
36	91043153	1	HOSE	
37	90022045	1	HOSE ASSY	
38	90205783	1	TUBE ASSY	
39	88662011	1	CONNECTOR (includes item 40)	
40	88591210	1	O-RING	
41	83251262	1	REDUCER	
42	88662070	1	ELBOW, 90, (includes item 43)	
43	88591210	1	O-RING	
44		Ref	MAIN CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

SECTION 8 - HYDRAULIC CIRCUITS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45		Ref	SOLENOID VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
46	88521304	2	HEX LOCKNUT, 1/4-20	
47	88561107	2	FLAT WASHER, 1/4	
48	90207719	1	JUMPER WIRE	
49	91041557	1	MOUNTING PLATE	
50	88743003	1	MALE ADAPTER, 3/8X1/2 TUBE	
51	84717468	1	HOSE ASSY	
52	88201009	2	HEX HD CAPSCREW, 1/4-20X2, GR5	
53	88711381	1	REDUCING BUSHING, 3/8X1/4	
54	88743042	1	MALE ELBOW, 90, 1/4X5/16 TUBE	
55	84716238	1	HOSE ASSY	
56	88743036	1	MALE ELBOW, 45, 1/8X5/16 TUBE	
57		Ref	TRANSMISSION CONTROL VALVE (See DRIVE TRAIN SECTION for Breakdown)	
58	90207872	1	HYDRAULIC CUP	
59	84717490	1	HOSE ASSY	
60	88661306	1	UNION TEE	
61	91033073	1	TUBE ASSY	
62	77133499	4	HEX HD CAPSCREW	
63	77133498	2	COVER PLATE	
64	91033188	2	CLAMP	
65	84717413	1	HOSE ASSY	
66	88662239	1	SWIVEL NUT RUN TEE	
67	91033100	1	INLINE STRAINER	
68	77133147	1	HOSE ASSY	
69	84717485	1	HOSE ASSY	
70	88662225	1	SWIVEL NUT RUN TEE	
71	77241003	1	ADAPTER	
72	77133089	1	MINI-CHECK COUPLING	
73	88662026	1	CONNECTOR (includes item 74)	
74	88591204	1	O-RING	
75		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
76	84711369	2	SPLIT FLANGE CLAMP	
77	85031525	1	SQUARE O-RING -12	
78	84711333	2	SPLIT FLANGE CLAMP	
79	83661304	1	SQUARE O-RING -16	
80	88201036	8	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
81	88551011	8	LOCKWASHER, 3/4X.141X.094	
82	91053345	1	TUBE ASSY	
83	91053344	1	TUBE ASSY	
84	77133089	2	MINI-CHECK COUPLING (includes item 85)	
85	88591204	2	O-RING	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-2. OIL SUPPLY AND PRESSURE LINES (SN 0155238 to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-2. OIL SUPPLY AND PRESSURE LINES (SN 0155238 to Present)

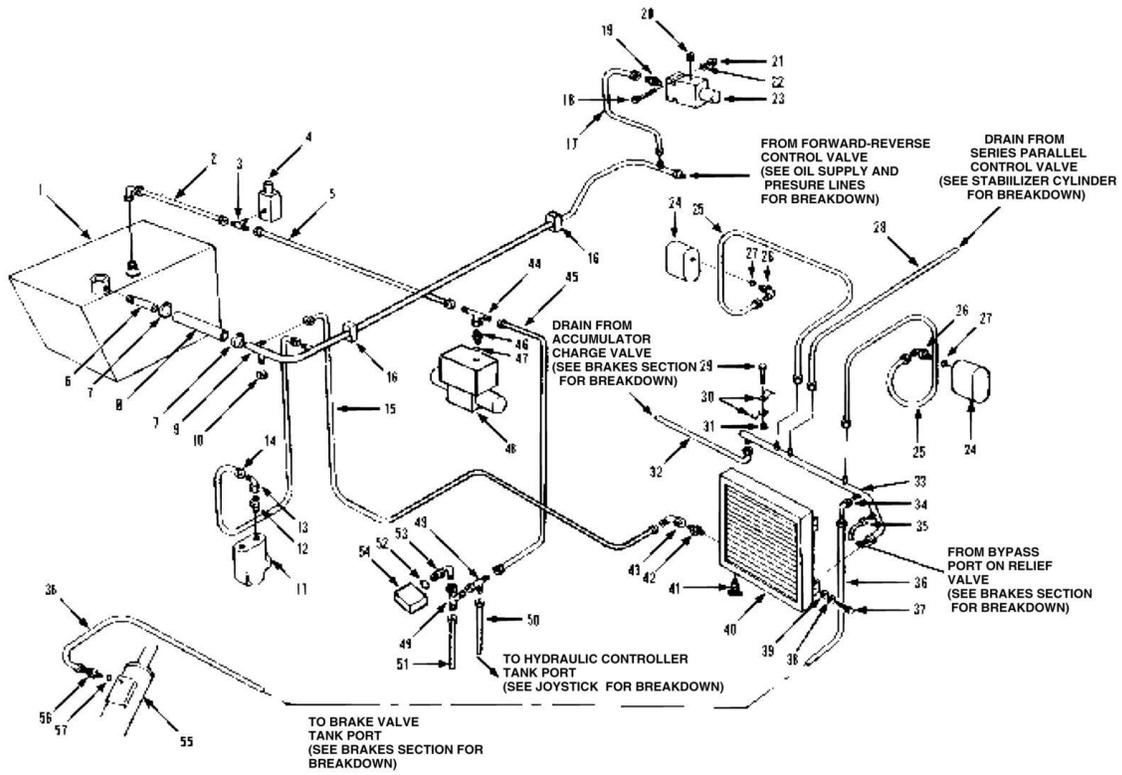
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OIL RESERVOIR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91033257	1	ELBOW	
3	88662110	1	ELBOW, 90, (swivel nut)	
4	77133875	1	HOSE ASSY	
5	90028720	2	HOSE CLAMP	
6	91033125	1	SUCTION HOSE	
7		Ref	MAIN HYDRAULIC PUMP (See ENGINE AND ATTACHING PARTS AND HYDRAULIC COMPONENTS SECTION for Breakdown)	
8	88661366	1	HEX CAP, 5/8 TUBE	
9	88662069	1	ELBOW, 90, (includes item 10)	
10	88591209	1	O-RING	
11	90207690	1	TUBE ASSY	
12		Ref	PRIORITY FLOW CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
13	88591209	1	O-RING	
14	88662010	1	CONNECTOR (includes item 13)	
15	90022045	2	HOSE ASSY	
16	90205792	1	CLAMP ASSY	
17	91033069	1	TUBE ASSY	
18	90200481	2	CLAMP	
19	88201033	2	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
20	90022045	1	HOSE ASSY	
21		Ref	PILOT PUMP ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	88591206	1	O-RING	
23	88662024	1	CONNECTOR (includes item 22)	
24	88662027	1	STRAIGHT CONNECTOR (includes item 25)	
25	88591207	1	O-RING	
26	88591210	1	O-RING	
27	84716251	1	HOSE ASSY	
28		Ref	FORWARD-REVERSE CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
29	88591210	1	O-RING	
30	88662028	1	CONNECTOR (includes item 26)	
31	88662124	1	ELBOW, 45, (swivel nut)	
32	88662110	1	ELBOW, 90, (swivel nut)	
33	88662011	1	CONNECTOR (includes item 29)	
34	91033142	1	ELBOW	
35	90028482	4	HOSE CLAMP	
36	91043153	1	HOSE	
37	90022045	1	HOSE ASSY	
38	90205783	1	TUBE ASSY	
39	88662011	1	CONNECTOR (includes item 40)	
40	88591210	1	O-RING	
41	83251262	1	REDUCER	
42	88662070	1	ELBOW, 90, (includes item 43)	
43	88591210	1	O-RING	
44		Ref	MAIN CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

SECTION 8 - HYDRAULIC CIRCUITS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45		Ref	SOLENOID VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
46	88521304	2	HEX LOCKNUT, 1/4-20	
47	88561107	2	FLAT WASHER, 1/4	
48	90207719	1	JUMPER WIRE	
49	91041557	1	MOUNTING PLATE	
50	88743003	1	MALE ADAPTER, 3/8X1/2 TUBE	
51	84717468	1	HOSE ASSY	
52	88201009	2	HEX HD CAPSCREW, 1/4-20X2, GR5	
53	88711381	1	REDUCING BUSHING, 3/8X1/4	
54	88743042	1	MALE ELBOW, 90, 1/4X5/16 TUBE	
55	84716238	1	HOSE ASSY	
56	88743036	1	MALE ELBOW, 45, 1/8X5/16 TUBE	
57		Ref	TRANSMISSION CONTROL VALVE (See DRIVE TRAIN SECTION for Breakdown)	
58	90207872	1	HYDRAULIC CUP	
59	84717490	1	HOSE ASSY	
60	88661306	1	UNION TEE	
61	91033073	1	TUBE ASSY	
62	77133499	4	HEX HD CAPSCREW	
63	77133498	2	COVER PLATE	
64	91033138	2	CLAMP	
65	84717413	1	HOSE ASSY	
66	91033100	1	INLINE STRAINER	
67	77133147	1	HOSE ASSY	
68	88662225	1	SWIVEL NUT RUN TEE	
69	77241003	1	ADAPTER	
70	77133089	1	MINI-CHECK COUPLING	
71	88662026	1	CONNECTOR (includes item 75)	
72	88591204	1	O-RING	
73		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
74	84711369	2	SPLIT FLANGE CLAMP	
75	85031525	1	SQUARE O-RING -12	
76	84711333	2	SPLIT FLANGE CLAMP	
77	83661304	1	SQUARE O-RING -16	
78	88201036	8	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
79	88551011	8	LOCKWASHER, 3/4X.141X.094	
80	91053345	1	TUBE ASSY	
81	91053344	1	TUBE ASSY	
82	77133089	2	MINI-CHECK COUPLING (includes item 83)	
83	88591204	2	O-RING	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-3. DUMP CIRCUIT (SN 8655105G to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-3. DUMP CIRCUIT (SN 8655105G to Present)

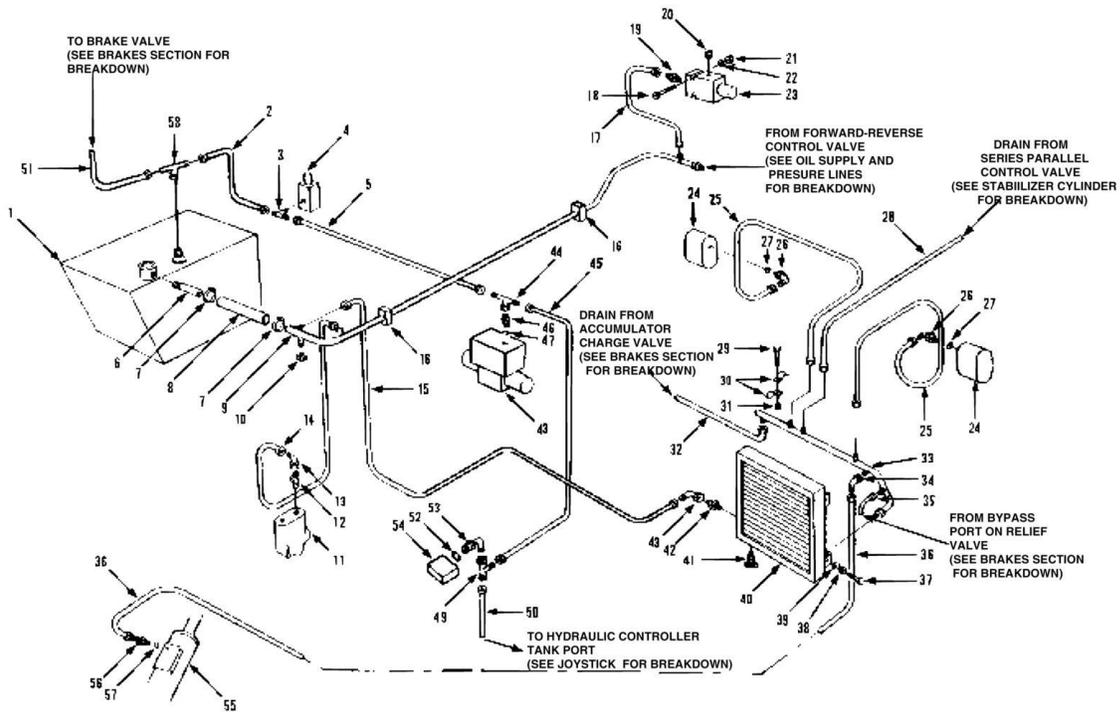
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OIL RESERVOIR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	90207599	1	HOSE ASSY	
3	88661145	1	MALE OUTLET TEE, 3/8X1/2 TUBE	
4		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
5	84717520	1	HOSE ASSY	
6	90205776	1	ADAPTER	
7	90028482	2	HOSE CLAMP	
8	90207365	1	HOSE	
9	91043144	1	TUBE ASSY	
10	88661365	1	HEX CAP, 1/2 TUBE	
11		Ref	PRIORITY FLOW CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
12	83661316	1	CONNECTOR	
13	88662105	1	ELBOW, 90, (swivel nut)	
14	84717842	1	HOSE ASSY	
15	84717797	1	HOSE ASSY	
16	90205793	2	CLAMP ASSY	
17	77133447	1	HOSE ASSY	
18	88201008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	
19	90029915	1	CONNECTOR	
20	88711282	1	HEX SOCKET PIPE PLUG, 3/8	
21	88501004	2	HEX NUT, 1/4-20	
22	88561107	2	FLAT WASHER, 1/4	
23		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
24		Ref	REAR DRIVE MOTOR (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
25	84717526	2	HOSE ASSY	
26	88662064	2	ELBOW, 90, (includes item 27)	
27	88591204	2	O-RING	
28	77133167	1	HOSE ASSY	
29	88201035	1	HEX HD CAPSCREW, 3/8-16X1, GR5	
30	91043147	2	SUPPORT CLAMP	
31	88521006	1	HEX LOCKNUT, 3/8-16	
32	84717489	1	HOSE ASSY	
33	91043145	1	DRAIN MANIFOLD	
34	88662106	1	ELBOW, 90, (swivel nut)	
35	84717518	1	HOSE ASSY	
36	84717521	1	HOSE ASSY	
37	88201031	4	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
38	88551011	4	LOCKWASHER, 3/8	
39	88561109	4	FLAT WASHER, 3/8	
40	91033050	1	OIL COOLER ASSY	
41	84521056	1	DRAIN VALVE	
42	86923006	1	ADAPTER	
43	88662107	1	ELBOW, 90, (swivel nut)	
44	88662224	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
45	84717466	1	HOSE ASSY	
46	88662005	1	CONNECTOR (includes item 47)	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	88591204	1	O-RING	
48		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
49	88662239	2	SWIVEL NUT RUN TEE, 3/8 TUBE	
50	84717341	1	HOSE ASSY	
51	84717842	1	HOSE ASSY	
52	88591204	1	O-RING	
53	88662064	1	ELBOW, 90, (includes item 52)	
54		Ref	INCHING VALVE (See BRAKES SECTION for Breakdown)	
55		Ref	ORBITROL (See CONTROLS SECTION for Breakdown)	
56	88662006	1	CONNECTOR (includes item 57)	
57	88591205	1	O-RING	
58	88662225	1	SWIVEL NUT RUN TEE, 1/2 TUBE	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-4. DUMP CIRCUIT (SN 0155238 to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-4. DUMP CIRCUIT (SN 0155238 to Present)

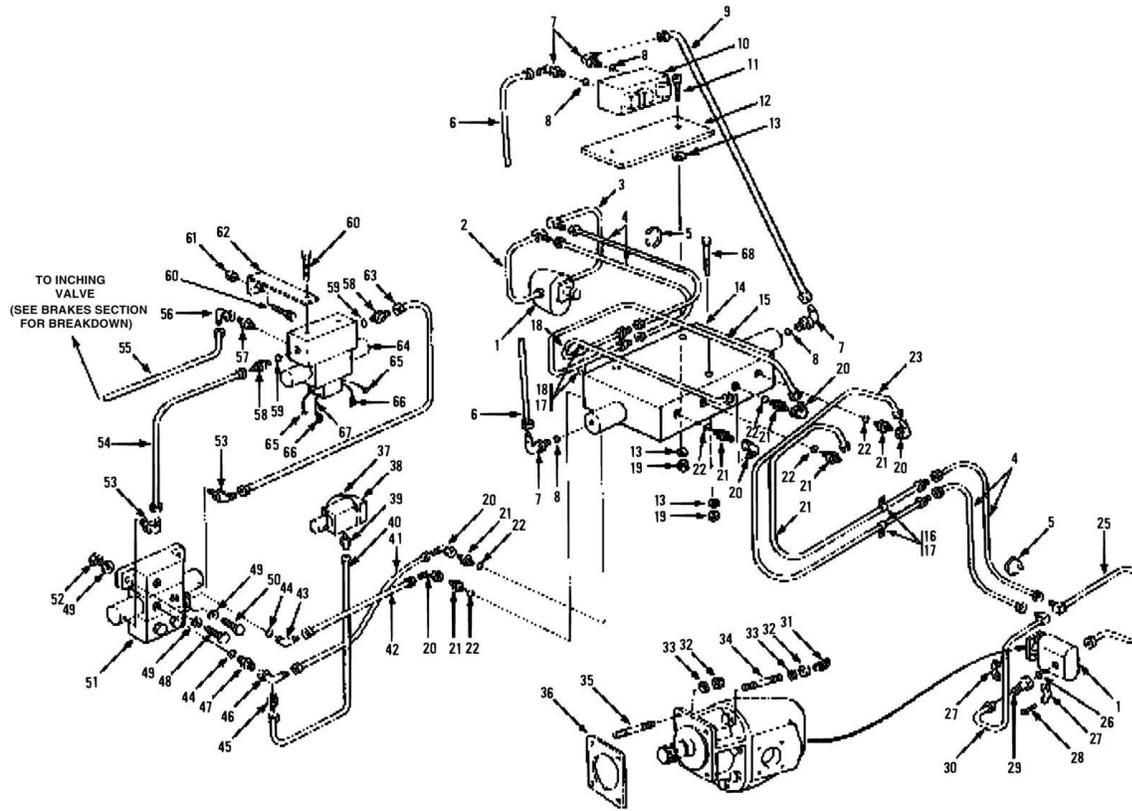
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OIL RESERVOIR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	90207599	1	HOSE ASSY	
3	88661145	1	MALE OUTLET TEE, 3/8X1/2 TUBE	
4		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
5	84717520	1	HOSE ASSY	
6	90205776	1	ADAPTER	
7	90028482	2	HOSE CLAMP	
8	90207365	1	HOSE	
9	91043144	1	TUBE ASSY	
10	88661365	1	HEX CAP, 1/2 TUBE	
11		Ref	PRIORITY FLOW CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
12	83661316	1	CONNECTOR	
13	88662105	1	ELBOW, 90, (swivel nut)	
14	84717842	1	HOSE ASSY	
15	84717797	1	HOSE ASSY	
16	90205793	2	CLAMP ASSY	
17	77133447	1	HOSE ASSY	
18	88201008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	
19	90029915	1	CONNECTOR	
20	88711282	1	HEX SOCKET PIPE PLUG, 3/8	
21	88501004	2	HEX NUT, 1/4-20	
22	88561107	2	FLAT WASHER, 1/4	
23		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
24		Ref	REAR DRIVE MOTOR (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
25	84717526	2	HOSE ASSY	
26	88662064	2	ELBOW, 90, (includes item 27)	
27	88591204	2	O-RING	
28	77133167	1	HOSE ASSY	
29	88201035	1	HEX HD CAPSCREW, 3/8-16X1, GR5	
30	91043147	2	SUPPORT CLAMP	
31	88521006	1	HEX LOCKNUT, 3/8-16	
32	84717489	1	HOSE ASSY	
33	91043145	1	DRAIN MANIFOLD	
34	88662106	1	ELBOW, 90, (swivel nut)	
35	84717518	1	HOSE ASSY	
36	84717521	1	HOSE ASSY	
37	88201031	4	HEX HD CAPSCREW, 3/8-16X1/2, GR5	
38	88551011	4	LOCKWASHER, 3/8	
39	88561109	4	FLAT WASHER, 3/8	
40	91033050	1	OIL COOLER ASSY	
41	84521056	1	DRAIN VALVE	
42	86923006	1	ADAPTER	
43	88662107	1	ELBOW, 90, (swivel nut)	
44	88662224	1	SWIVEL NUT RUN TEE, 3/8 TUBE	
45	84717466	1	HOSE ASSY	
46	88662005	1	CONNECTOR (includes item 47)	

SECTION 8 - HYDRAULIC CIRCUITS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	88591204	1	O-RING	
48		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
49	88662239	2	SWIVEL NUT RUN TEE, 3/8 TUBE	
50	84717341	1	HOSE ASSY	
51	84717842	1	HOSE ASSY	
52	88591204	1	O-RING	
53	88662064	1	ELBOW, 90, (includes item 52)	
54		Ref	INCHING VALVE (See BRAKES SECTION for Breakdown)	
55		Ref	ORBITROL (See CONTROLS SECTION for Breakdown)	
56	88662006	1	CONNECTOR (includes item 57)	
57	88591205	1	O-RING	
58	88662225	1	SWIVEL NUT RUN TEE, 1/2 TUBE	

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FIGURE 8-5. REAR DRIVE (SN 8655105G to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-5. REAR DRIVE (SN 8655105G to Present)

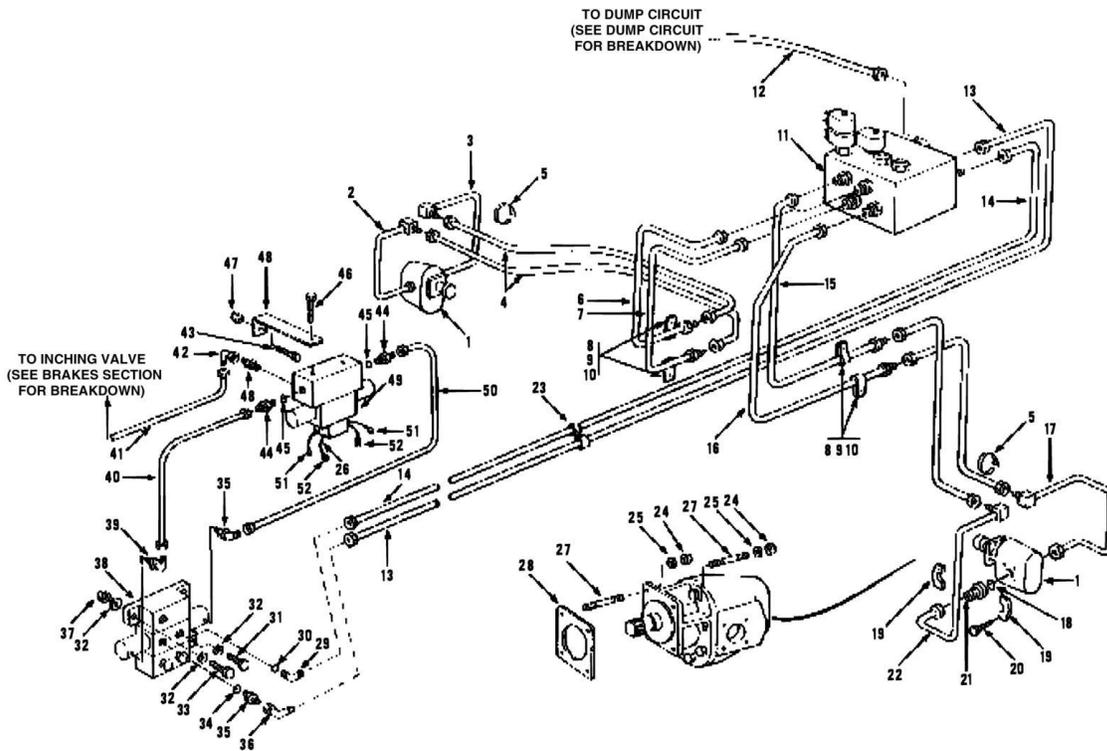
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	REAR DRIVE MOTOR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91043113	1	TUBE ASSY	
3	91043116	1	TUBE ASSY	
4	90207290	4	HOSE ASSY	
5	90027187	AR	NYLON TY-RAP	
6	91043089	1	TUBE ASSY	
7	88662064	4	ELBOW, 90, (includes item 8)	
8	88591204	4	O-RING	
9	91043088	1	TUBE ASSY	
10		Ref	SERIES-PARALLEL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
11	88201107	2	HEX HD CAPSCREW, 5/8-11X5, GR5	
12		Ref	MOUNTING PLATE (See JOYSTICK for Breakdown)	
13	88561113	8	FLAT WASHER, 5/8	
14		Ref	SERIES-PARALLEL (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
15	91043193	1	TUBE ASSY	
16	90202343	4	TUBE CLAMP	
17	88201033	4	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
18	91043168	1	TUBE ASSY	
19	88501010	3	HEX NUT, 5/8-11	
20	88662110	6	ELBOW, 90, (swivel nut)	
21	88662028	6	CONNECTOR (includes item 22)	
22	88591210	6	O-RING	
23	91043194	1	TUBE ASSY	
24	90207376	1	TUBE ASSY	
25	91043115	1	TUBE ASSY	
26	90028225	4	O-RING	
27	84711342	8	FLANGE HALF	
28	88201106	16	HEX HD CAPSCREW, 1/2-13X4-1/2, GR5	
29	90207372	4	ADAPTER	
30	91043114	1	TUBE ASSY	
31	88671027	2	LUBE FITTING, 90, 1/8	
32	88501008	8	HEX NUT, 1/2-13	
33	90203506	8	FLAT WASHER	
34	90206750	2	HOLLOW STUD	
35	90202327	6	STUD	
36	85681076	2	GASKET	
37	90210095	1	JUMPER WIRE	
38		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
39	90029915	1	CONNECTOR	
40	90207491	1	HOSE ASSY	
41	90207370	1	TUBE ASSY	
42	90207377	1	TUBE ASSY	
43	88662069	1	ELBOW, 90, (includes item 44)	
44	88591209	2	O-RING	
45	88743002	1	MALE ADAPTER, 1/4X3/8 TUBE	
46	90207567	1	ELBOW, 90, (swivel nut)	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	88662010	1	CONNECTOR (includes item 44)	
48	88201068	2	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
49	88561111	6	FLAT WASHER, 1/2	
50	88201070	1	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	
51		Ref	FORWARD-REVERSE VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
52	88501008	3	HEX NUT, 1/2-13	
53	90027906	2	ELBOW, 90	
54	84717464	1	HOSE ASSY	
55	77133342	1	HOSE ASSY	
56	88662105	1	ELBOW, 90, (swivel nut)	
57	83661316	1	CONNECTOR	
58	88662003	2	CONNECTOR (includes item 59)	
59	88591202	2	O-RING	
60	88201005	4	HEX HD CAPSCREW, 1/4-20X1, GR5	
61	88501004	4	HEX NUT, 1/4-20	
62	91031086	2	MOUNTING BRACKET	
63	90027485	1	HOSE ASSY	
64		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
65	86983191	2	TERMINAL, 1/4 SCREW SIZE	
66	90028959	2	FEMALE TERMINAL	
67		Ref	BLACK 14 GA WIRE, 40IN LONG	

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FIGURE 8-6. REAR DRIVE (SN 0155238 to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-6. REAR DRIVE (SN 0155238 to Present)

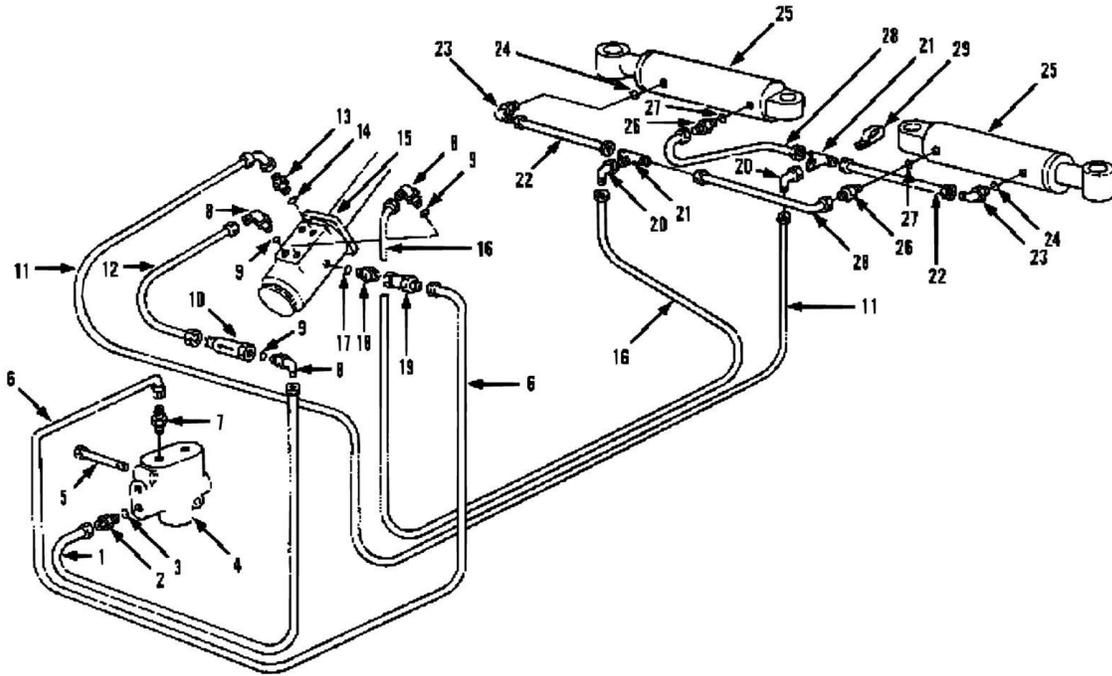
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	REAR DRIVE MOTOR ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91043113	1	TUBE ASSY	
3	91043116	1	TUBE ASSY	
4	90207290	4	HOSE ASSY	
5	90027187	AR	NYLON TY-RAP	
6	91043308	1	TUBE ASSY	
7	91043309	1	TUBE ASSY	
8	90202343	4	TUBE CLAMP	
9	88201033	4	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
10	88561109	4	FLAT WASHER, 3/8	
11		Ref	SERIES PARALLEL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
12	84717900	1	HOSE ASSY	
13	91043312	1	TUBE ASSY	
14	91043311	1	TUBE ASSY	
15	91043307	1	TUBE ASSY	
16	91043310	1	TUBE ASSY	
17	91043115	1	TUBE ASSY	
18	90027372	4	ADAPTER	
19	84711342	8	FLANGE HALF	
20	88201067	16	HEX HD CAPSCREW, 1/2-13X1-1/2, GR5	
21	90207372	4	ADAPTER	
22	91043114	1	TUBE ASSY	
23	90200482	1	TUBE CLAMP	
24	88501008	8	HEX NUT, 1/2-13	
25	90027471	8	HARD WASHER	
26		Ref	BLACK 14 GA WIRE, 40IN LONG	
27	91033481	8	STUD	
28	85681076	2	GASKET	
29	88662069	1	ELBOW, 90, (includes item 30)	
30	88591209	1	O-RING	
31	88201070	1	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	
32	88561111	6	FLAT WASHER, 1/2	
33	88201068	2	HEX HD CAPSCREW, 1/2-13X1-3/4, GR5	
34	88591209	1	O-RING	
35	88662010	1	CONNECTOR (includes item 34)	
36	88662110	1	ELBOW, 90, (swivel nut)	
37	88501008	3	HEX NUT, 1/2-13	
38		Ref	FORWARD-REVERSE VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
39	90027906	2	ELBOW, 90	
40	84717464	1	HOSE ASSY	
41	77133342	1	HOSE ASSY	
42	88662105	1	ELBOW, 90, (swivel nut)	
43	83661316	1	CONNECTOR	
44	88662003	2	CONNECTOR (includes item 45)	
45	88591202	2	O-RING	
46	88201005	4	HEX HD CAPSCREW, 1/4-20X1, GR5	
47	88501004	4	HEX NUT, 1/4-20	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
48	91031086	2	MOUNTING BRACKET	
49		Ref	DIRECTIONAL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
50	90027485	1	HOSE ASSY	
51	86983191	2	TERMINAL, 1/4 SCREW SIZE	
52	90028959	2	FEMALE TERMINAL	

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FIGURE 8-7. STEERING (SN 8655105G to Present)



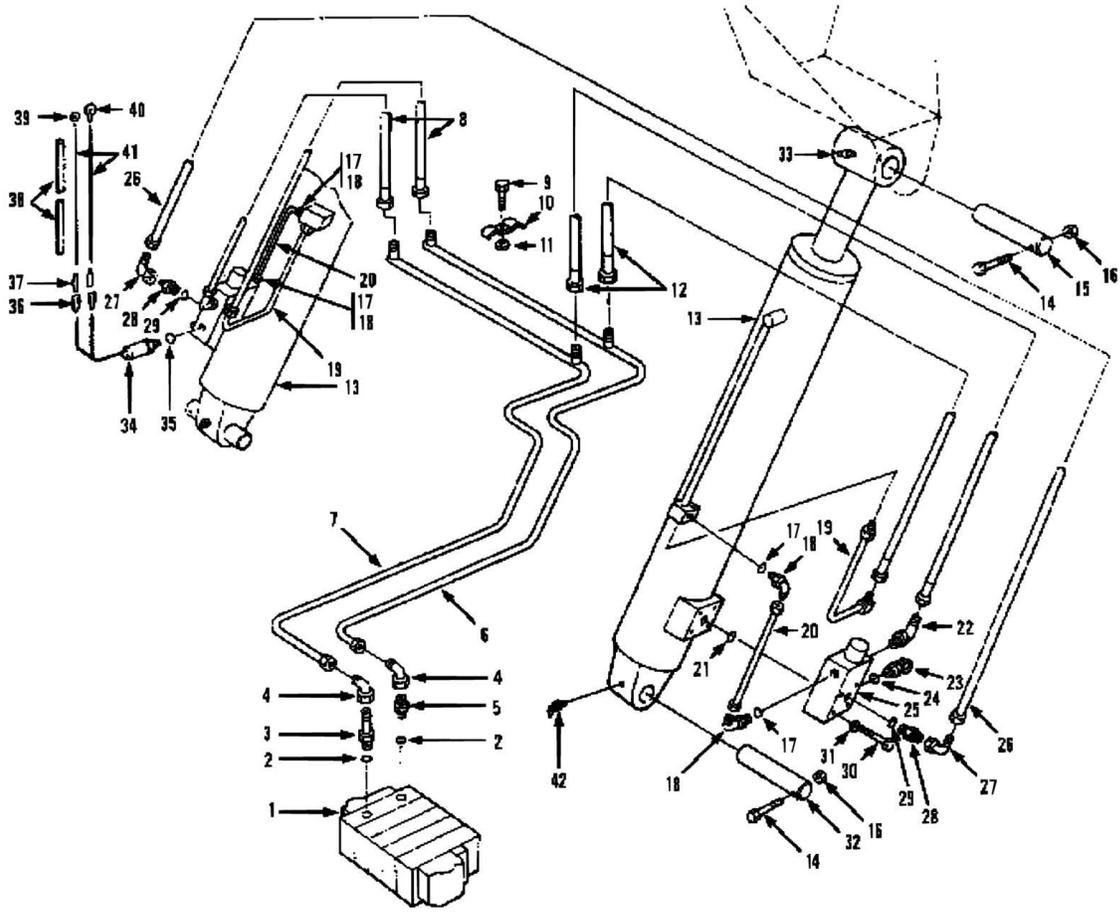
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-7. STEERING (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	84717550	1	HOSE ASSY	
2	88662007	1	CONNECTOR (includes item 3)	
3	88591206	1	O-RING	
4		Ref	PRIORITY FLOW CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
5	88201028	2	HEX HD CAPSCREW, 5/16-18X3, GR5	
6	84717547	1	HOSE ASSY	
7	83661316	1	CONNECTOR	
8	88662065	3	ELBOW, 90, (includes item 9)	
9	88591205	3	O-RING	
10	90202926	1	CHECK VALVE	
11	84717548	1	HOSE ASSY	
12	90206003	1	TUBE ASSY	
13	88662006	1	CONNECTOR (includes item 14)	
14	88591205	1	O-RING	
15		Ref	ORBITROL (See CONTROLS SECTION for Breakdown)	
16	84717549	1	HOSE ASSY	
17	88591204	1	O-RING	
18	88662035	1	CONNECTOR (includes item 17)	
19	86561131	1	REDUCER	
20	88662106	2	ELBOW, 90, (swivel nut)	
21	88661306	2	UNION TEE	
22	84717525	2	HOSE ASSY	
23	88662064	2	ELBOW, 90, (includes item 24)	
24	88591204	2	O-RING	
25		Ref	STEERING CYLINDER (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
26	88662005	2	CONNECTOR (includes item 27)	
27	88591204	2	O-RING	
28	84717546	2	HOSE ASSY	
29	85841150	1	HOSE CLAMP	

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FIGURE 8-8. LIFT CYLINDER (SN 8655105G to Present)



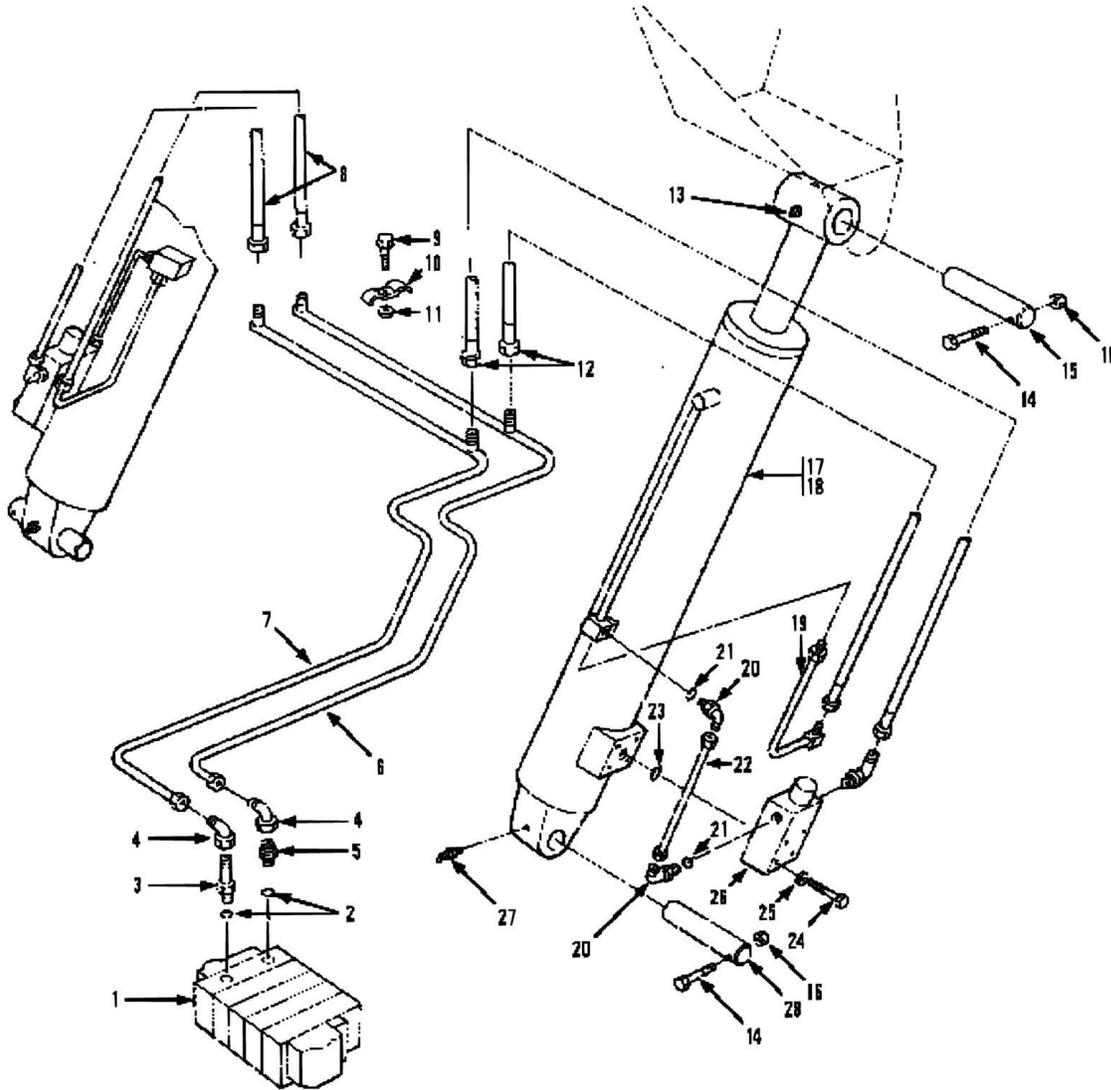
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FIGURE 8-8. LIFT CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88591207	2	O-RING	
3	88662038	1	CONNECTOR (includes item 2)	
4	88662108	2	ELBOW, 90, (swivel nut)	
5	88662008	1	CONNECTOR (includes item 2)	
6	91043095	1	TUBE ASSY	
7	91043096	1	TUBE ASSY	
8	84716448	2	HOSE ASSY	
9	88201035	2	HEX HD CAPSCREW, 3/8-16X1, GR5	
10	90200483	2	TUBE CLAMP	
11	88501006	2	HEX NUT, 3/8-16	
12	84717799	2	HOSE ASSY	
13		Ref	LIFT CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
14	88201104	4	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
15	90206892	2	PIN	
16	88501010	4	HEX NUT, 5/8-11	
17	88591202	4	O-RING	
18	88662062	4	ELBOW, 90, (includes item 17)	
19	91043070	2	TUBE ASSY	
20	91043069	2	TUBE ASSY	
21	88591102	2	O-RING	
22	86821248	2	ELBOW, 90	
23	77133089	1	MINI-CHECK COUPLING	
24	88591204	1	O-RING	
25	91043178	2	COUNTER BALANCE VALVE ASSY	
26	84717609	1	HOSE ASSY	
27	88662105	2	ELBOW, 90, (swivel nut)	
28	91043187	2	GAGE LINE FUSE (includes item 29)	
29	88591204	2	O-RING	
30	88201071	8	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
31	88551013	8	LOCK WASHER, 1/2	
32	90402875	2	PIN	
33	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
34	91043179	1	PRESSURE SWITCH (includes item 35)	
35	88591204	1	O-RING	
36	90028959	2	FEMALE TERMINAL	
37	90028960	2	MALE TERMINAL	
38	82033993	1	LOOM, 5/16 I.D., 24IN LONG	
39	90026816	1	EYELET TERMINAL	
40	86883260	1	RING TERMINAL	
41		Ref	WHITE, 16 GAUGE, WIRE	
42	88671027	2	LUBE FITTING, 90, 1/4-28	

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FIGURE 8-9. LIFT CYLINDER (SN 8755147G to Present)



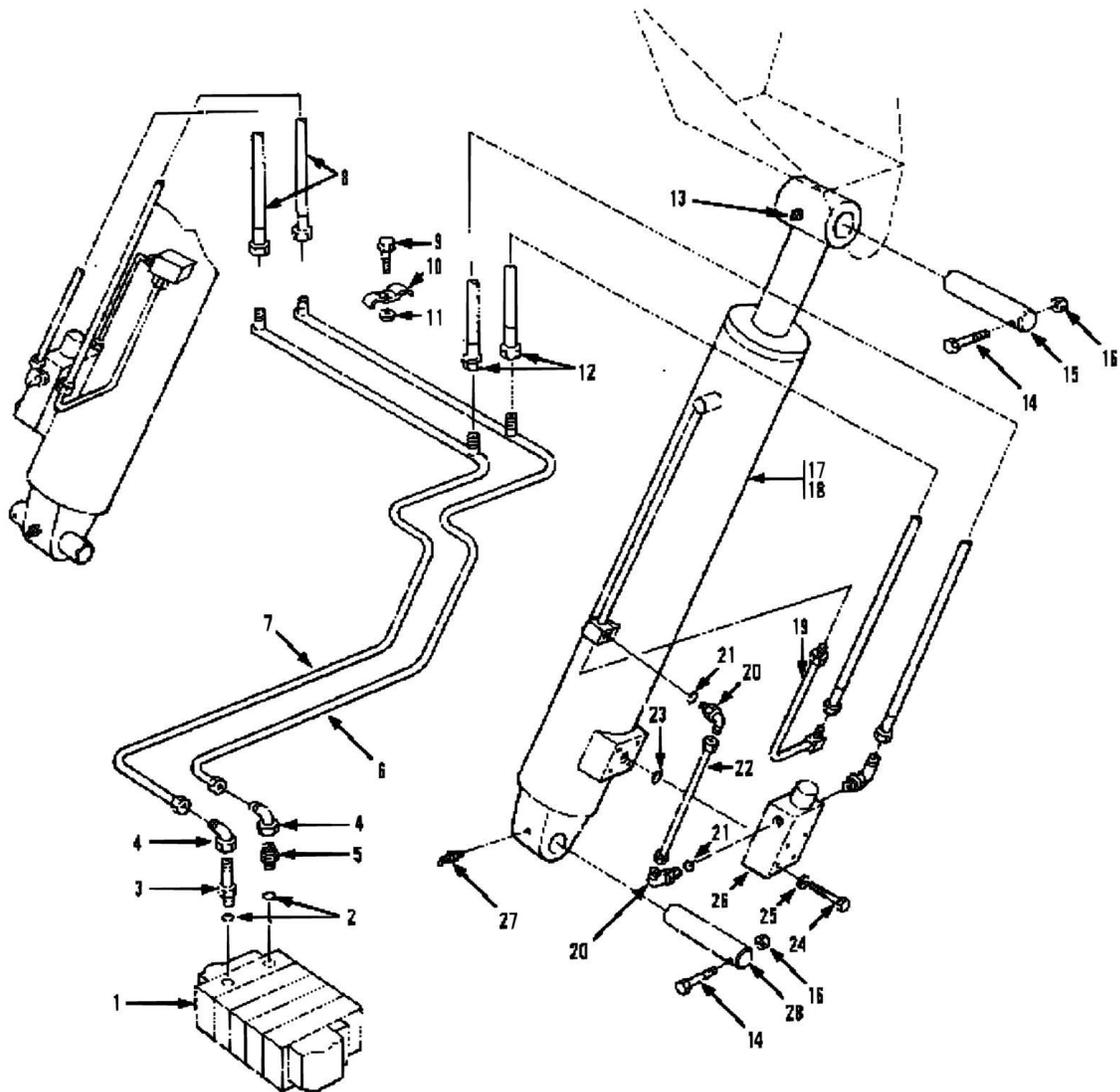
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-9. LIFT CYLINDER (SN 8755147G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88591207	2	O-RING	
3	88662038	1	CONNECTOR (includes item 2)	
4	88662108	2	ELBOW, 90, (swivel nut)	
5	88662008	1	CONNECTOR (includes item 2)	
6	91043095	1	TUBE ASSY	
7	91043096	1	TUBE ASSY	
8	84716448	2	HOSE ASSY	
9	88201035	2	HEX HD CAPSCREW, 3/8-16X1, GR5	
10	90200483	2	TUBE CLAMP	
11	88501006	2	HEX NUT, 3/8-16	
12	84717799	2	HOSE ASSY	
13	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
14	88201104	4	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
15	90206892	2	PIN	
16	88501010	4	HEX NUT, 5/8-11	
17	91045011	2	LIFT CYLINDER ASSY (includes items 13 & 18 thru 27)	
18		Ref	LIFT CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
19	91043070	2	TUBE ASSY	
20	88662062	4	ELBOW, 90, (includes item 21)	
21	88591202	4	O-RING	
22	91043069	2	TUBE ASSY	
23	88591102	2	O-RING	
24	88201071	8	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
25	88551013	8	LOCK WASHER, 1/2	
26	91043232	2	COUNTER BALANCE VALVE ASSY	
27	88671027	2	LUBE FITTING, 90, 1/4-28	
28	90402875	2	PIN	

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FIGURE 8-10. LIFT CYLINDER (SN 0155220 to Present)



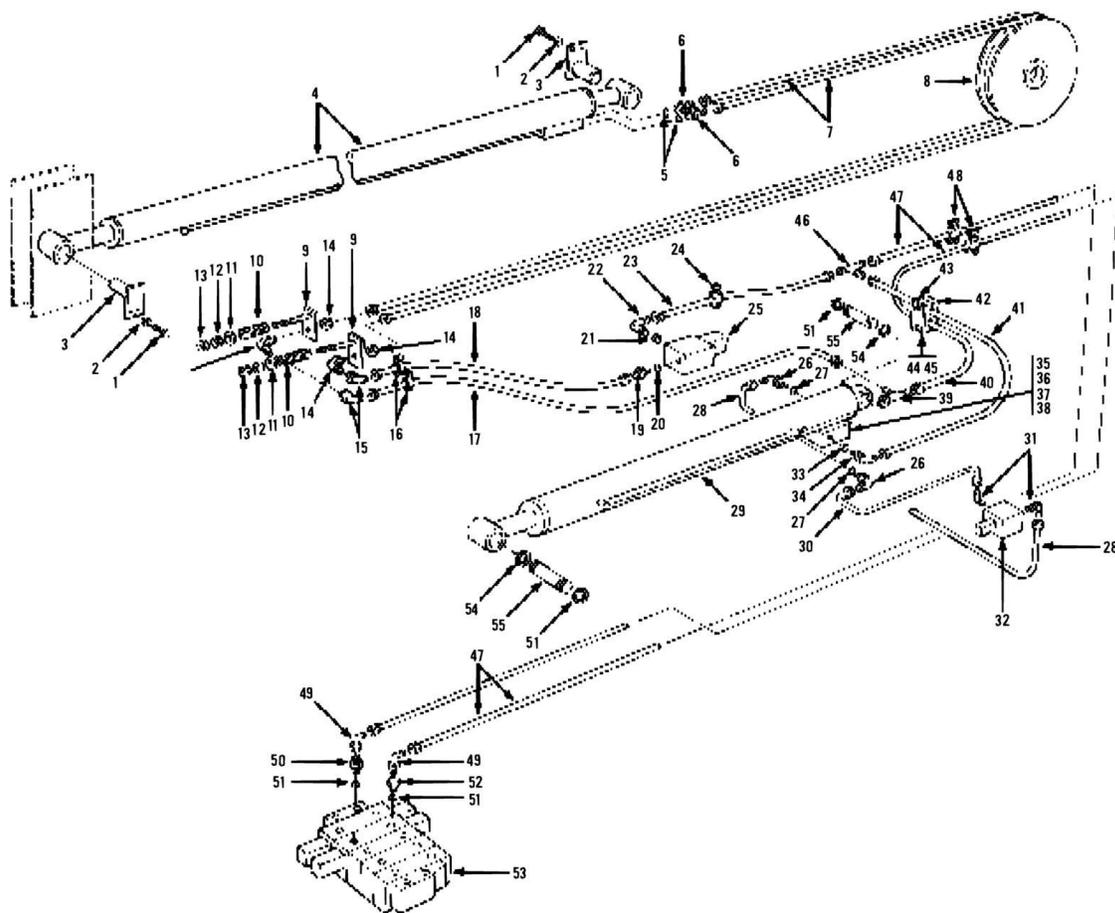
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-10. LIFT CYLINDER (SN 0155220 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88591207	2	O-RING	
3	88662038	1	CONNECTOR (includes item 2)	
4	88662108	2	ELBOW, 90, (swivel nut)	
5	88662008	1	CONNECTOR (includes item 2)	
6	91043095	1	TUBE ASSY	
7	91043096	1	TUBE ASSY	
8	84716448	2	HOSE ASSY	
9	88201035	2	HEX HD CAPSCREW, 3/8-16X1, GR5	
10	90200483	2	TUBE CLAMP	
11	88501006	2	HEX NUT, 3/8-16	
12	84717799	2	HOSE ASSY	
13	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
14	88201104	4	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
15	90206892	2	PIN	
16	88501010	4	HEX NUT, 5/8-11	
17	91045011	2	LIFT CYLINDER ASSY (includes items items 13 & 18 thru 27)	
18		Ref	LIFT CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
19	91043070	2	TUBE ASSY	
20	88662062	4	ELBOW, 90, (includes item 21)	
21	88591202	4	O-RING	
22	91043069	2	TUBE ASSY	
23	88591102	2	O-RING	
24	88201071	8	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5	
25	88551013	8	LOCK WASHER, 1/2	
26	91043232	2	COUNTER BALANCE VALVE ASSY	
27	88671027	2	LUBE FITTING, 90, 1/4-28	
28	90402875	2	PIN	

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FIGURE 8-11. CROWD CYLINDER (SN 8655105G to Present)



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FIGURE 8-11. CROWD CYLINDER (SN 8655105G to Present)

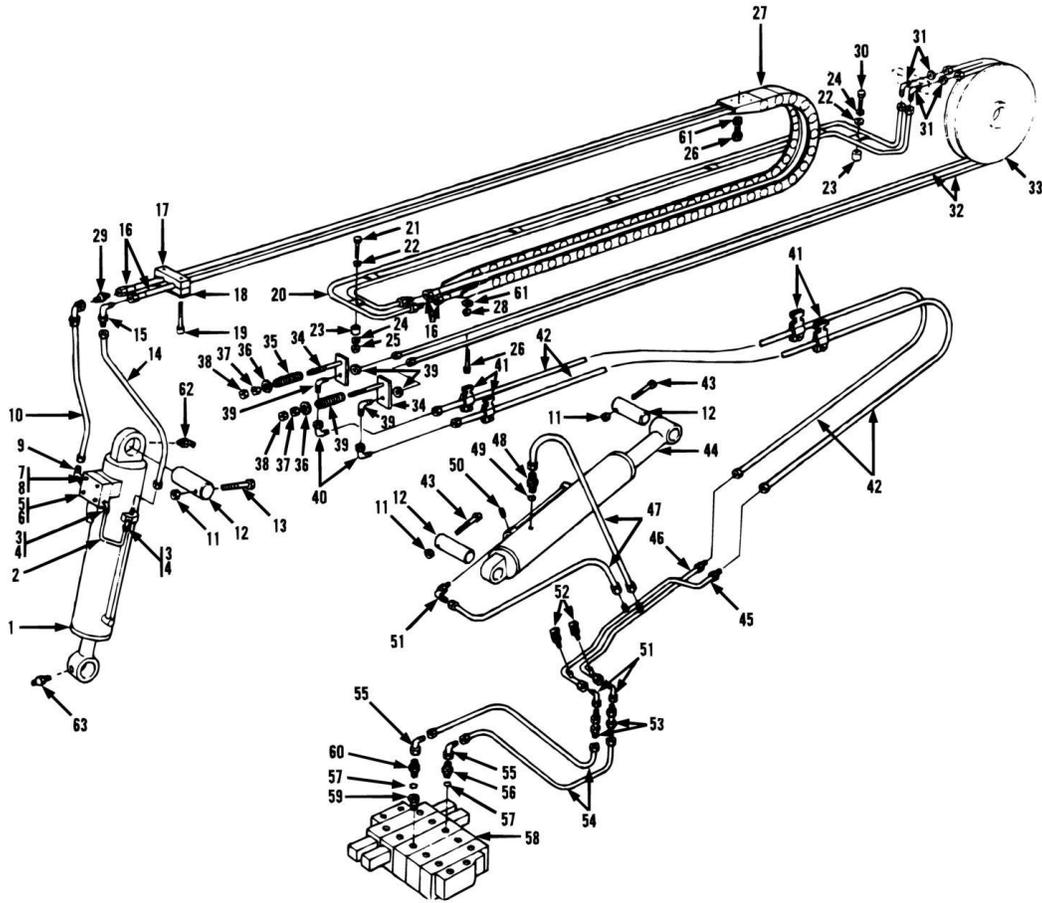
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201035	4	HEX HD CAPSCREW, 3/8-16X1, GR5	
2	88551011	4	LOCKWASHER, 3/8	
3	91046053	2	PIN	
4		Ref	EXTENSION CROWD CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
5	88591205	2	O-RING	
6	88662006	2	CONNECTOR (includes item 5)	
7	84717495	2	HOSE ASSY	
8		Ref	PUSH BEAM AND CABLES (See BOOM SECTION for Breakdown)	
9	90403249	2	HOSE TAKE-UP WELDMENT	
10	90200313	2	SPRING	
11	90207041	2	SPRING RETAINER	
12	88501008	2	HEX NUT, 1/2-13	
13	88501108	2	HEAVY HEX JAM NUT, 1/2-13	
14	90027180	2	BULKHEAD FITTING, 90	
15	88662106	2	ELBOW, 90, (swivel nut)	
16	91053413	2	CUSHION CLAMP	
17	84717500	1	HOSE ASSY	
18	84717501	1	HOSE ASSY	
19	88662020	1	CONNECTOR (includes item 20)	
20	88591207	1	O-RING	
21	88662067	1	ELBOW, 90, (includes o-ring)	
22	88591207	1	O-RING	
23	77133440	1	HOSE ASSY	
24	90205792	1	CUSHION CLAMP	
25		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
26	88662062	2	ELBOW, 90, (includes item 27)	
27	88591202	2	O-RING	
28	91043112	1	TUBE ASSY	
29		Ref	CROWD CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
30	91043110	1	TUBE ASSY	
31	90027906	2	ELBOW, 90	
32		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
33	88662067	1	ELBOW, 90, (includes item 34)	
34	88591207	1	O-RING	
35	91043232	1	COUNTER BALANCE VALVE ASSY	
36	88591106	1	O-RING	
37	88201072	4	HEX HD CAPSCREW, 1/2-13X2-3/4, GR5	
38	88561111	4	FLAT WASHER, 1/2	
39	88662242	1	SWIVEL NUT RUN TEE	
40	91043160	1	TUBE ASSY	
41	91043111	1	TUBE ASSY	
42	90200482	1	TUBE CLAMP	
43	91041060	1	MOUNTING PLATE	
44	88201035	1	HEX HD CAPSCREW, 3/8-16X1, GR5	
45	88551011	1	LOCKWASHER, 3/8	
46	88661308	1	UNION TEE, 3/4 TUBE	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	84717608	2	HOSE ASSY	
48	90205792	2	CUSHION CLAMP	
49	88662108	2	ELBOW, 90, (swivel nut)	
50	88662038	1	CONNECTOR (includes item 51)	
51	88591207	2	O-RING	
52	88662008	1	CONNECTOR (includes item 51)	
53		Ref	MAIN CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
54	90028935	2	RETAINING RING	
55	90207352	1	CROWD CYLINDER ROD PIN	

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FIGURE 8-12. TILT CYLINDER (SN 8655105G to Present)



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FIGURE 8-12. TILT CYLINDER (SN 8655105G to Present)

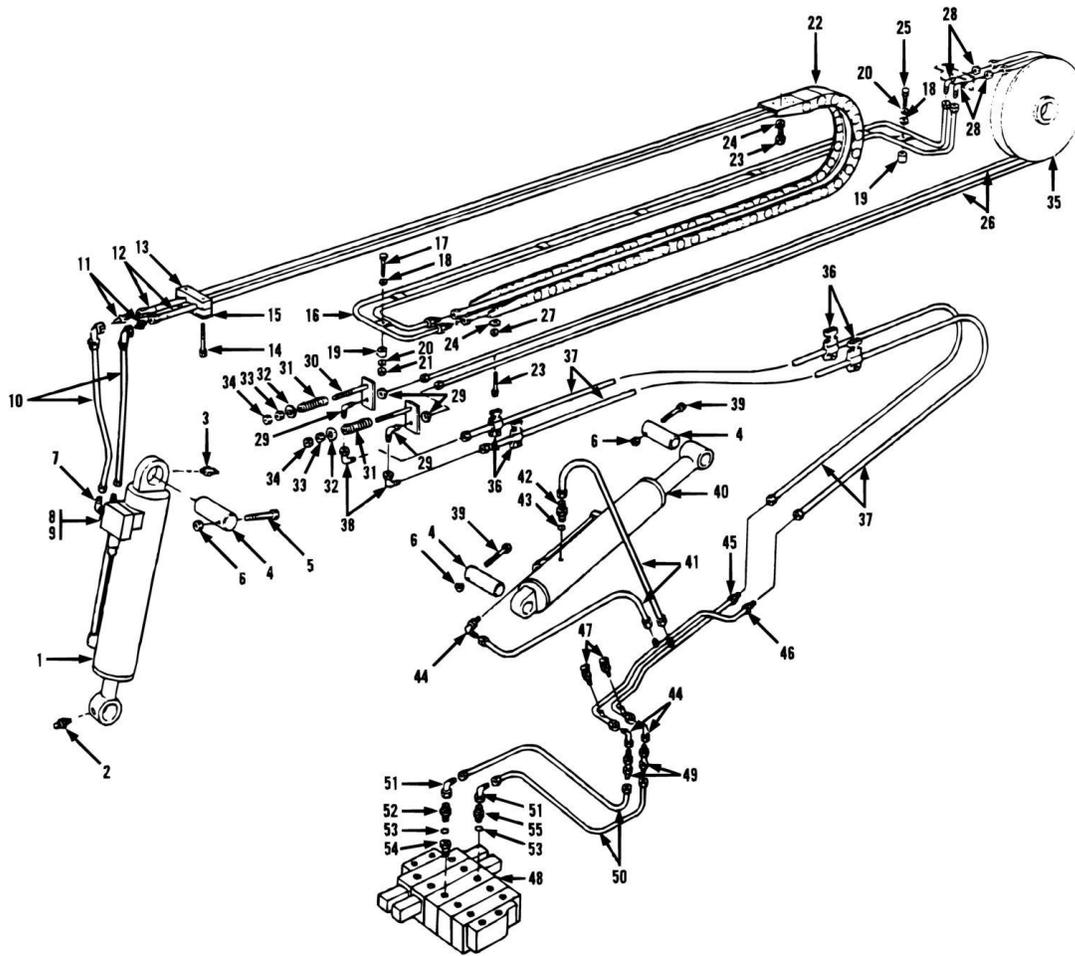
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TILT CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91043174	1	TUBE ASSY	
3	88662062	2	ELBOW, 90, (includes item 4)	
4	88591202	2	O-RING	
5	91043232	1	COUNTER BALANCE VALVE	
6	88591106	1	O-RING	
7	88201071	4	HEX HD CAPSCREW, 1/2-13X2-1/2, GR5 (lubricate and torque to 68-78 ft lbs)	
8	88551013	4	LOCKWASHER, 1/2	
9	91043157	1	ELBOW, 90	
10	84717588	1	HOSE ASSY	
11	88521010	3	HEX LOCKNUT, 5/8-11	
12	90206892	3	PIN	
13	83201044	1	HEX HD CAPSCREW	
14	84717487	1	HOSE ASSY	
15	88661206	1	UNION ELBOW, 90, 1/2 TUBE	
16	84717486	2	HOSE ASSY	
17	77133136	1	CLAMP SET	
18	77133137	1	COVER PLATE	
19	88201023	1	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5	
20	91043098	1	TUBE ASSY	
21	88201038	2	HEX HD CAPSCREW, 3/8-16X1-3/4, GR5	
22	88561109	4	FLAT WASHER, 3/8	
23	91041226	4	SPACER	
24	88551011	4	LOCKWASHER, 3/8	
25	88501006	2	HEX NUT, 3/8-16	
26	88201003	8	HEX HD CAPSCREW, 1/4-20X3/4, GR5 (lubricate and torque to 9-12 ft lbs)	
27	91043093	1	HOSE CARRIER	
28	88551009	4	LOCKWASHER, 1/4	
29	88661065	4	UNION, 1/2 TUBE	
30	88201037	2	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
31	90027180	2	BULKHEAD ELBOW, 90, 1/2 TUBE	
32	84717494	2	HOSE ASSY	
33		Ref	PUSH BEAM AND CABLES (See BOOM SECTION for Breakdown)	
34	90403249	2	HOSE TAKE-UP WELDMENT	
35	90200313	2	SPRING	
36	90207041	2	SPRING RETAINER	
37	88501008	2	HEX NUT, 1/2-13	
38	88501108	2	HEAVY HEX JAM NUT, 1/2-13	
39	90027180	2	BULKHEAD FITTING, 90	
40	88662106	2	ELBOW, 90, (swivel nut)	
41	91053413	12	CUSHION CLAMP	
42	84717503	2	HOSE ASSY	
43	88201104	2	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
44		Ref	COMPENSATING CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
45	90207387	1	TUBE ASSY	
46	90207386	1	TUBE ASSY	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	90022043	2	HOSE ASSY	
48	88662021	1	CONNECTOR (includes item 49)	
49	88591205	1	O-RING	
50	88711280	1	SOCKET HD PIPE PLUG, 1/8-27	
51	88662107	3	ELBOW, 90, (swivel nut)	
52	91033032	2	MINI-CHECK COUPLING	
53	90029939	2	BULKHEAD UNION	
54	90022043	2	HOSE ASSY	
55	88662107	2	ELBOW, 90, (swivel nut)	
56	88662022	1	CONNECTOR (includes item 57)	
57	88591207	2	O-RING	
58		Ref	MAIN CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
59	86923006	1	REDUCER EXPANDER FITTING	
60	88662008	1	CONNECTOR (includes item 57)	
61	88561107	8	FLAT WASHER, 1/4	
62	88671027	1	LUBE FITTING, 45, 1/4-28	
63	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	

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FIGURE 8-13. TILT CYLINDER (SN 0155283 to Present)



SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-13. TILT CYLINDER (SN 0155283 to Present)

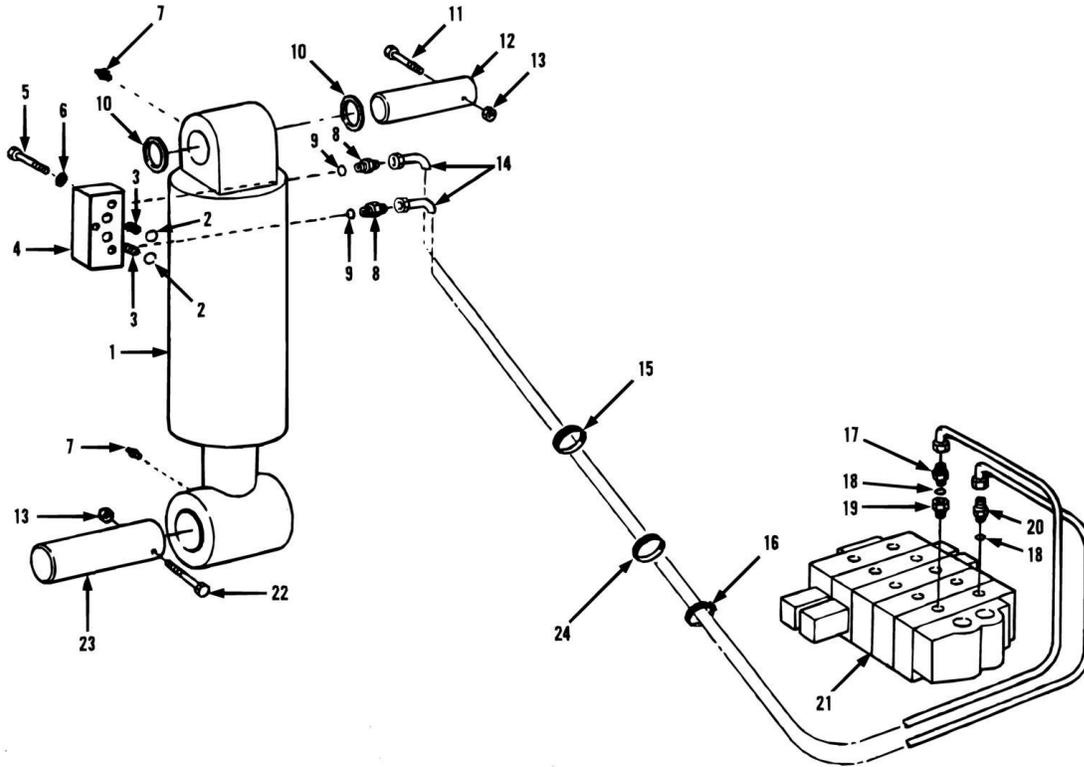
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	TILT CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
3	88671027	1	LUBE FITTING, 45, 1/4-28	
4	90206892	3	PIN	
5	83201044	1	HEX HD CAPSCREW	
6	88521010	3	HEX LOCKNUT, 5/8-11	
7	88662106	2	ELBOW, 90, (swivel nut)	
8	88662020	2	STRAIGHT THREAD CONNECTOR (includes item 9)	
9	88591207	2	O-RING	
10	84717916	2	HOSE ASSY	
11	88661065	3	UNION, 1/2 TUBE	
12	84717486	2	HOSE ASSY	
13	77133136	1	CLAMP SET	
14	88201023	1	HEX HD CAPSCREW, 5/16-18X1-3/4, GR5	
15	77133137	1	COVER PLATE	
16	91043098	1	TUBE ASSY	
17	88201038	2	HEX HD CAPSCREW, 3/8-16X1-3/4, GR5	
18	88561109	4	FLAT WASHER, 3/8	
19	91041226	4	SPACER	
20	88551011	4	LOCKWASHER, 3/8	
21	88501006	2	HEX NUT, 3/8-16	
22	91043093	1	HOSE CARRIER	
23	88201003	8	HEX HD CAPSCREW, 1/4-20X3/4, GR5 (lubricate and torque to 9-12 ft lbs)	
24	88561107	8	FLAT WASHER, 1/4	
25	88201037	2	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
26	84717494	2	HOSE ASSY	
27	88551009	4	LOCKWASHER, 1/4	
28	90027180	2	BULKHEAD ELBOW, 90, 1/2 TUBE	
29	90027180	2	BULKHEAD FITTING, 90	
30	90403249	2	HOSE TAKE-UP WELDMENT	
31	90200313	2	SPRING	
32	90207041	2	SPRING RETAINER	
33	88501008	2	HEX NUT, 1/2-13	
34	88501108	2	HEAVY HEX JAM NUT, 1/2-13	
35		Ref	PUSH BEAM AND CABLES (See BOOM SECTION for Breakdown)	
36	91053413	12	CUSHION CLAMP	
37	84717503	2	HOSE ASSY	
38	88662106	2	ELBOW, 90, (swivel nut)	
39	88201104	2	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
40		Ref	COMPENSATING CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
41	90022043	2	HOSE ASSY	
42	88662021	1	CONNECTOR (includes item 43)	
43	88591205	1	O-RING	
44	88662107	3	ELBOW, 90, (swivel nut)	
45	90207386	1	TUBE ASSY	
46	90207387	1	TUBE ASSY	
47	91033032	2	MINI-CHECK COUPLING	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
48		Ref	MAIN CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
49	90029939	2	BULKHEAD UNION	
50	90022043	2	HOSE ASSY	
51	88662107	3	ELBOW, 90, (swivel nut)	
52	88662008	1	CONNECTOR (includes item 53)	
53	88591207	2	O-RING	
54	86923006	1	REDUCER/EXPANDER FITTING	
55	88662022	1	CONNECTOR (includes item 53)	

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FIGURE 8-14. SWAY CYLINDER (SN 8655105G to Present)



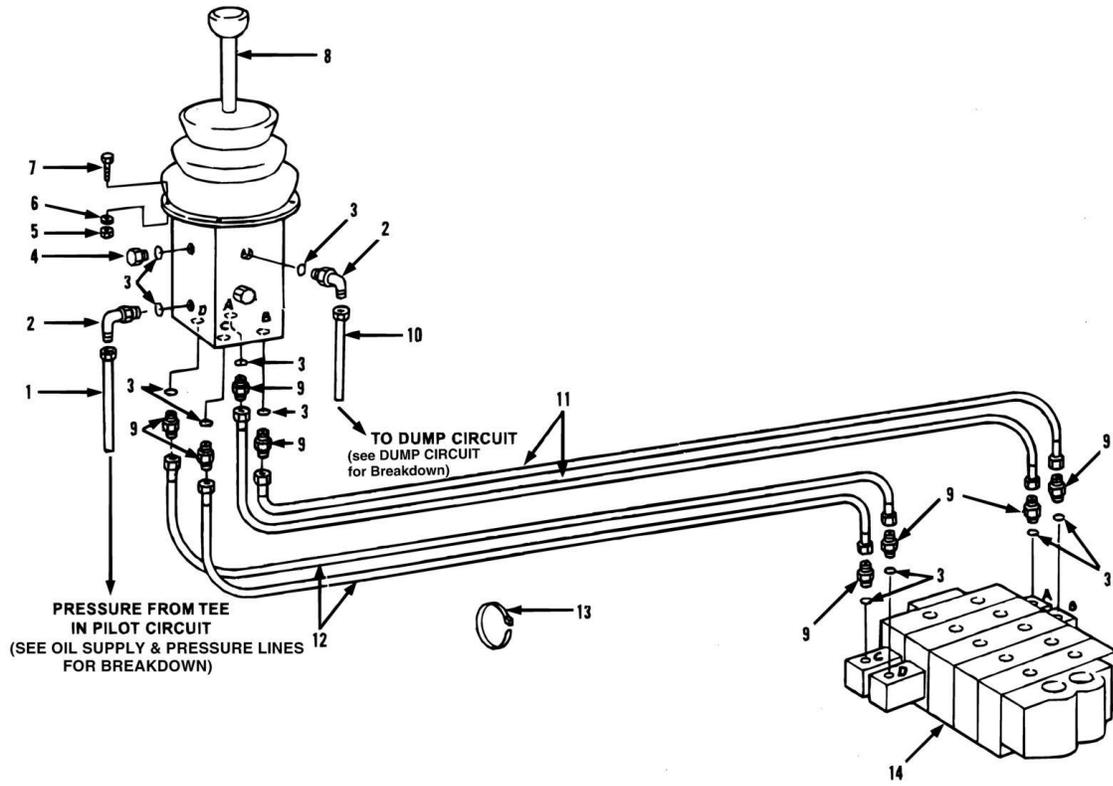
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-14. SWAY CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045032	1	SWAY CYLINDER ASSY (includes items 1 thru 9)	
1		Ref	SWAY CYLINDER (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88591012	2	O-RING	
3	91041387	2	ORIFICE PLUG	
4	91053354	1	DUAL P.O. CHECK VALVE (includes item 2, See HYDRAULIC COMPONENTS SECTION for Breakdown)	
5	88201041	3	HEX HD CAPSCREW, 3/8-16x2-1/2, GR5	
6	88551011	3	LOCK WASHER, 3/8	
7	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
8	88662006	2	CONNECTOR (includes item 9)	
9	88591205	2	O-RING	
10	90207727	AR	SHIM (20 gauge)	
10	90207728	AR	SHIM (16 gauge)	
10	90207729	AR	SHIM (10 gauge)	
10	90207730	AR	SHIM (1/4in gauge)	
11	88201104	1	HEX HD CAPSCREW, 5/8-11X3-3/4, GR5	
12	90402876	1	PIN	
13	88501010	2	HEX NUT, 5/8-11	
14	91033224	2	HOSE ASSY	
15	91043227	1	GROMMET	
16	90027187	AR	NYLON HOSE TIE	
17	88662008	1	CONNECTOR (includes item 18)	
18	88591207	2	O-RING	
19	83651133	1	REDUCER	
20	88662020	1	CONNECTOR (includes item 18)	
21		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	88201106	1	HEX HD CAPSCREW, 5/8-11X4-1/2, GR5	
23	90206847	1	PIN	
24	68473227	1	GROMMET	

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FIGURE 8-15. JOYSTICK (SN 8655105G to Present)



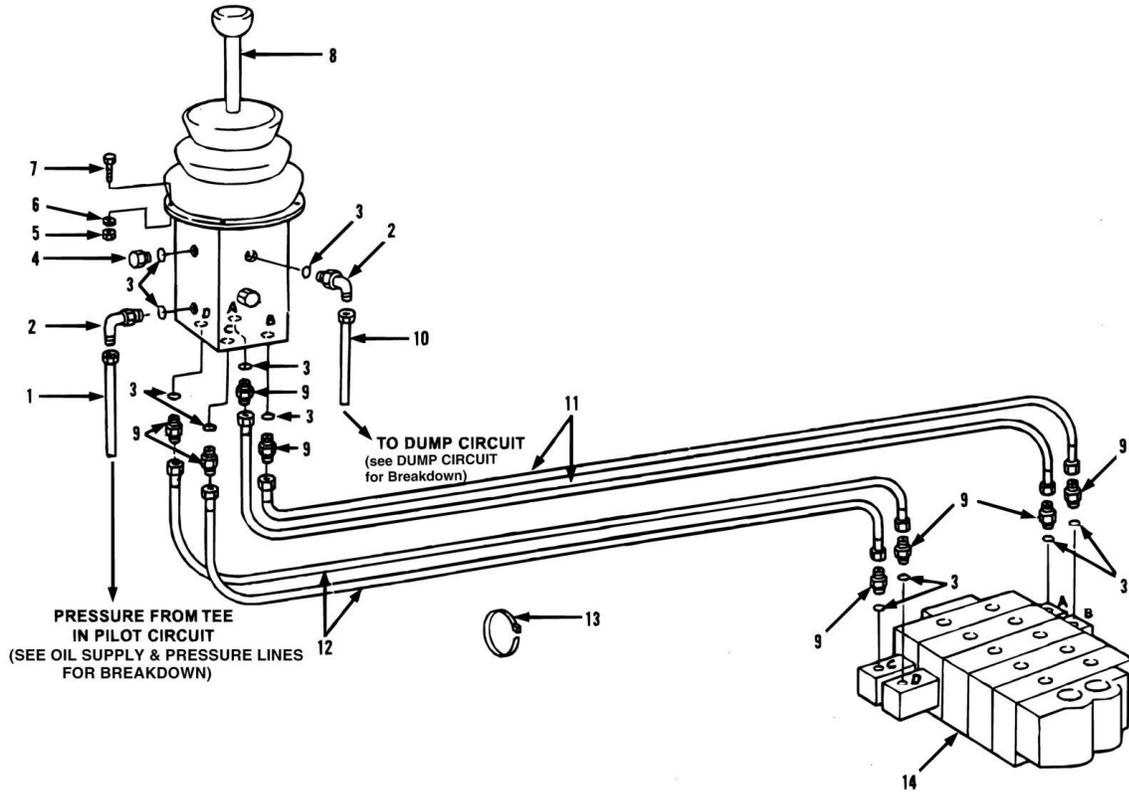
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-15. JOYSTICK (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	84717490	1	HOSE ASSY	
2	88662064	2	ELBOW, 90, (includes item 3)	
3	88591204	12	O-RING	
4	88662174	2	HEX HD PLUG (includes item 3)	
5	88501004	4	HEX NUT, 1/4-20	
6	88551009	4	LOCK WASHER, 1/4	
7	88201006	4	HEX HD CAPSCREW, 1/4-20X1-1/4, GR5	
8		Ref	HYDRAULIC CONTROLLER ASSY	
9	88662005	8	CONNECTOR (includes item 3)	
10	77133167	1	HOSE ASSY	
11	84717458	2	HOSE ASSY	
12	84717519	2	HOSE ASSY	
13	90027187	7	NYLON TIE RAP	
14		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

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FIGURE 8-16. JOYSTICK (SN 0155238 to Present)



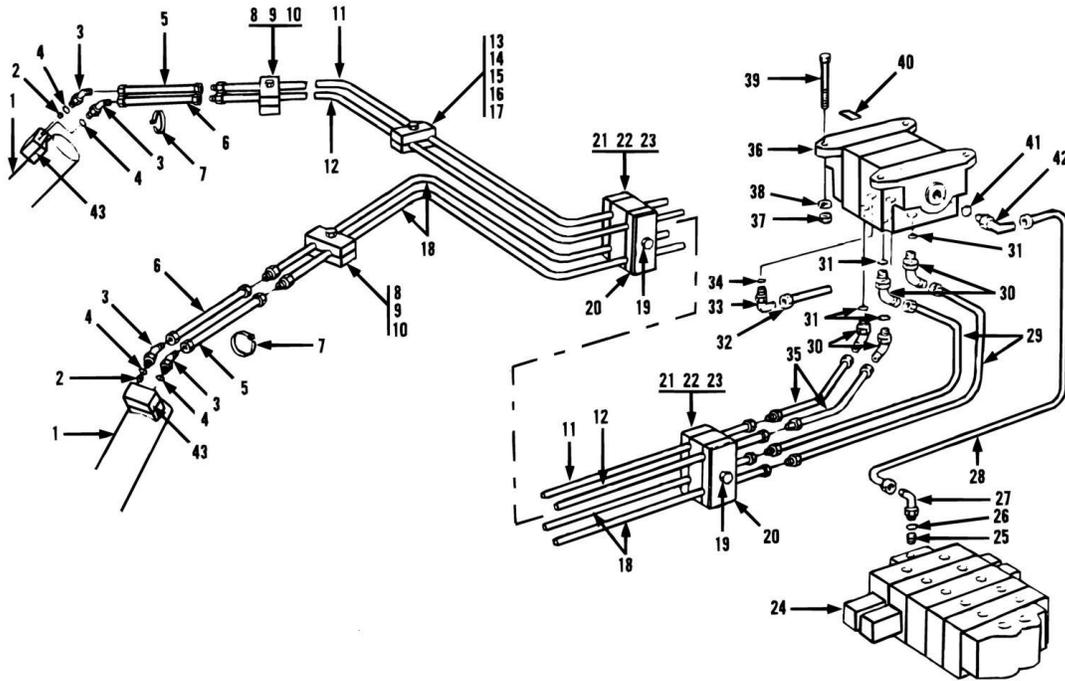
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-16. JOYSTICK (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	84717490	1	HOSE ASSY	
2	88662064	2	ELBOW, 90, (includes item 3)	
3	88591204	12	O-RING	
4	88662174	2	HEX HD PLUG (includes item 3)	
5	88501004	4	HEX NUT, 1/4-20	
6	88551009	4	LOCK WASHER, 1/4	
7	88201006	4	HEX HD CAPSCREW, 1/4-20X1-1/4, GR5	
8		Ref	HYDRAULIC CONTROLLER ASSY	
9	88662005	8	CONNECTOR (includes item 3)	
10	77133167	1	HOSE ASSY	
11	84717458	2	HOSE ASSY	
12	84717519	2	HOSE ASSY	
13	90027187	7	NYLON TIE RAP	
14		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-17. OUTRIGGER CYLINDER (SN 8655105G to Present)



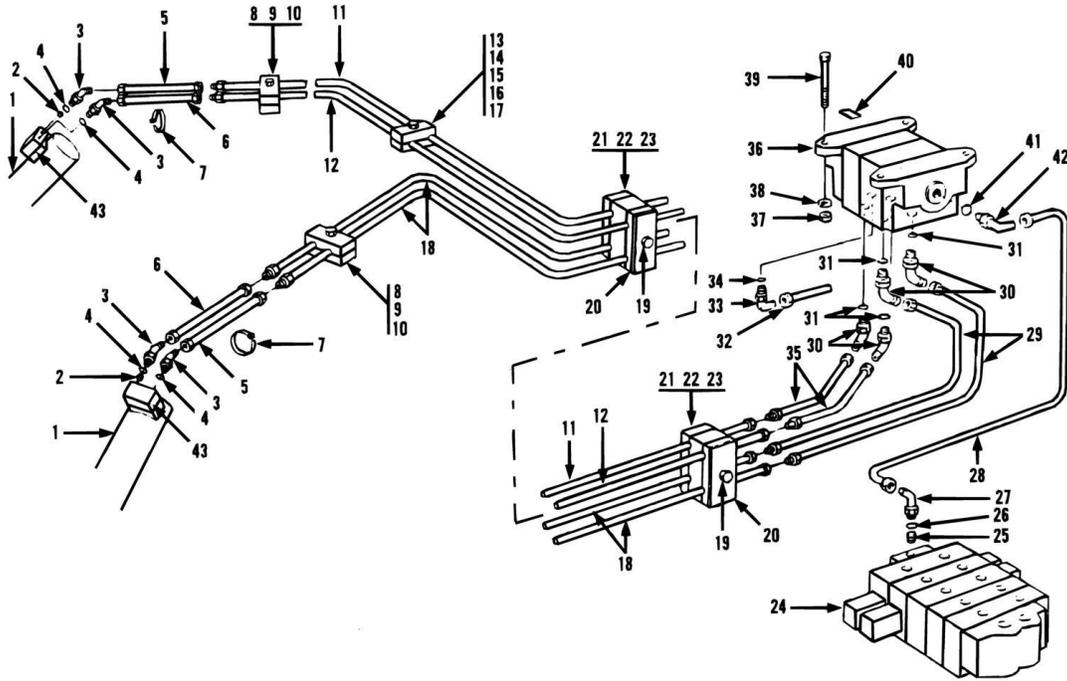
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-17. OUTRIGGER CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OUTRIGGER CYLINDER (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91033201	2	ORIFICE CHECK	
3	88662085	4	ELBOW, 45, (includes item 4)	
4	88591205	4	O-RING	
5	84717527	2	HOSE ASSY	
6	84717528	2	HOSE ASSY	
7	90027187	4	NYLON CLAMP	
8	77133168	2	CLAMP SET	
9	77133140	2	COVER PLATE	
10	77133177	2	HEX HD CAPSCREW	
11	91033141	1	TUBE ASSY	
12	91033198	1	TUBE ASSY	
13	77133499	2	HEX HD CAPSCREW	
14	77133498	1	COVER PLATE	
15	91033138	2	CLAMP	
16	91033199	1	SAFETY PLATE	
17	91033200	2	STACKING BOLT	
18	91033140	2	TUBE ASSY	
19	77133177	2	HEX HD CAPSCREW	
20	77133140	2	COVER PLATE	
21	77133168	4	CLAMP SET	
22	77133390	2	SAFETY CLIP	
23	77133389	2	STACK BOLT	
24		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
25	88711284	1	SOCKET HD PIPE PLUG, 3/4	
26	88591209	1	O-RING	
27	88662061	1	ELBOW, 90, (includes item 26)	
28	84717474	1	HOSE ASSY	
29	84717479	2	HOSE ASSY	
30	88662085	4	ELBOW, 45, (includes item 31)	
31	88591205	4	O-RING	
32	84717473	1	HOSE ASSY	
33	88662060	1	ELBOW, 90, (includes item 34)	
34	88591207	1	O-RING	
35	84717477	2	HOSE ASSY	
36		Ref	OUTRIGGER VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
37	88501006	4	HEX NUT, 3/8-16	
38	88551011	4	LOCKWASHER, 3/8	
39	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
40	91023006	1	STABILIZER DECAL	
41	88591207	1	O-RING	
42	88662067	1	ELBOW, 90, (includes item 41)	
43		Ref	DUAL P.O. CHECK VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-18. OUTRIGGER CYLINDER (SN 0155283 to Present)



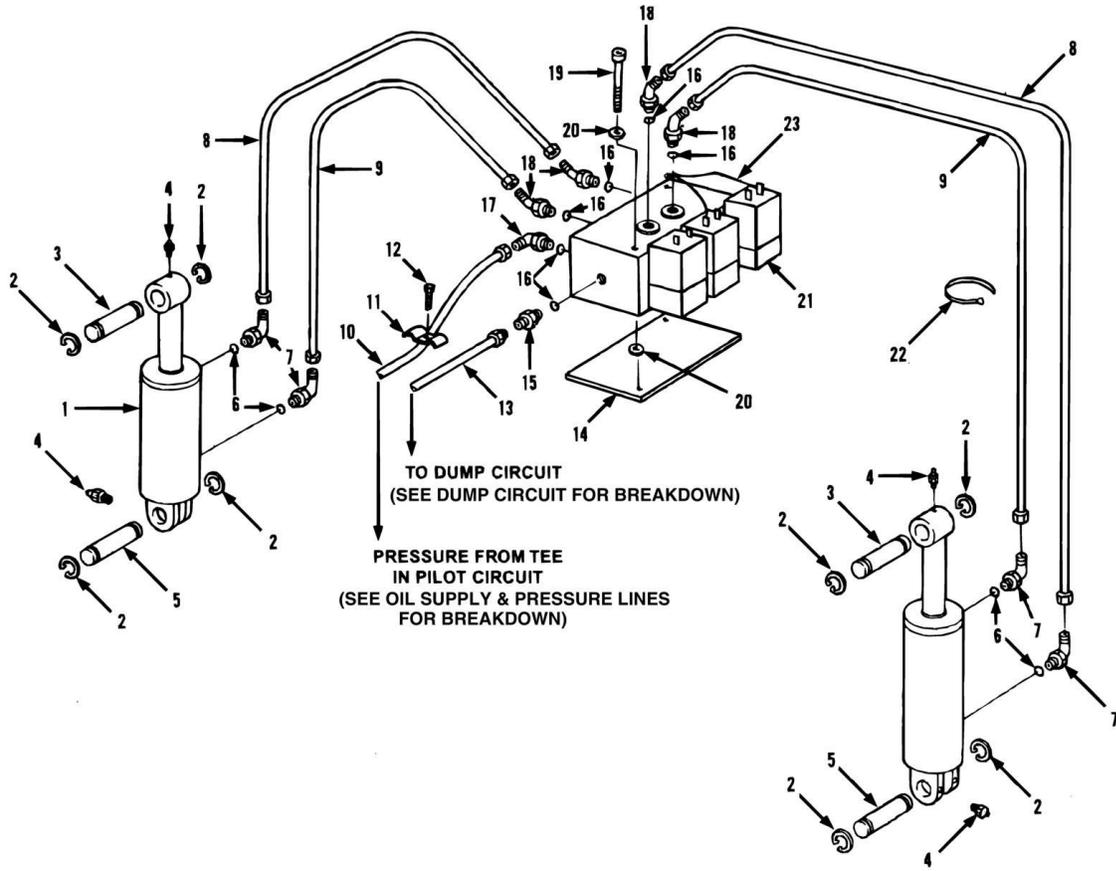
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-18. OUTRIGGER CYLINDER (SN 0155283 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	OUTRIGGER CYLINDER (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	91033201	2	ORIFICE CHECK	
3	88662085	4	ELBOW, 45, (includes item 4)	
4	88591205	4	O-RING	
5	84717527	2	HOSE ASSY	
6	84717528	2	HOSE ASSY	
7	90027187	4	NYLON CLAMP	
8	77133168	2	CLAMP SET	
9	77133140	2	COVER PLATE	
10	77133177	2	HEX HD CAPSCREW	
11	91033141	1	TUBE ASSY	
12	91033198	1	TUBE ASSY	
13	77133499	2	HEX HD CAPSCREW	
14	77133498	1	COVER PLATE	
15	91033138	2	CLAMP	
16	91033199	1	SAFETY PLATE	
17	91033200	2	STACKING BOLT	
18	91033140	2	TUBE ASSY	
19	77133177	2	HEX HD CAPSCREW	
20	77133140	2	COVER PLATE	
21	77133168	4	CLAMP SET	
22	77133390	2	SAFETY CLIP	
23	77133389	2	STACK BOLT	
24		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
25	88711284	1	SOCKET HD PIPE PLUG, 3/4	
26	88591209	1	O-RING	
27	88662061	1	ELBOW, 90, (includes item 26)	
28	84717474	1	HOSE ASSY	
29	84717479	2	HOSE ASSY	
30	88662085	4	ELBOW, 45, (includes item 31)	
31	88591205	4	O-RING	
32	84717473	1	HOSE ASSY	
33	88662060	1	ELBOW, 90, (includes item 34)	
34	88591207	1	O-RING	
35	84717477	2	HOSE ASSY	
36		Ref	OUTRIGGER VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
37	88501006	4	HEX NUT, 3/8-16	
38	88551011	4	LOCKWASHER, 3/8	
39	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
40	91023006	1	STABILIZER DECAL	
41	88591207	1	O-RING	
42	88662067	1	ELBOW, 90, (includes item 41)	
43		Ref	DUAL P.O. CHECK VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-19. STABILIZER CYLINDER (SN 8655105G to Present)



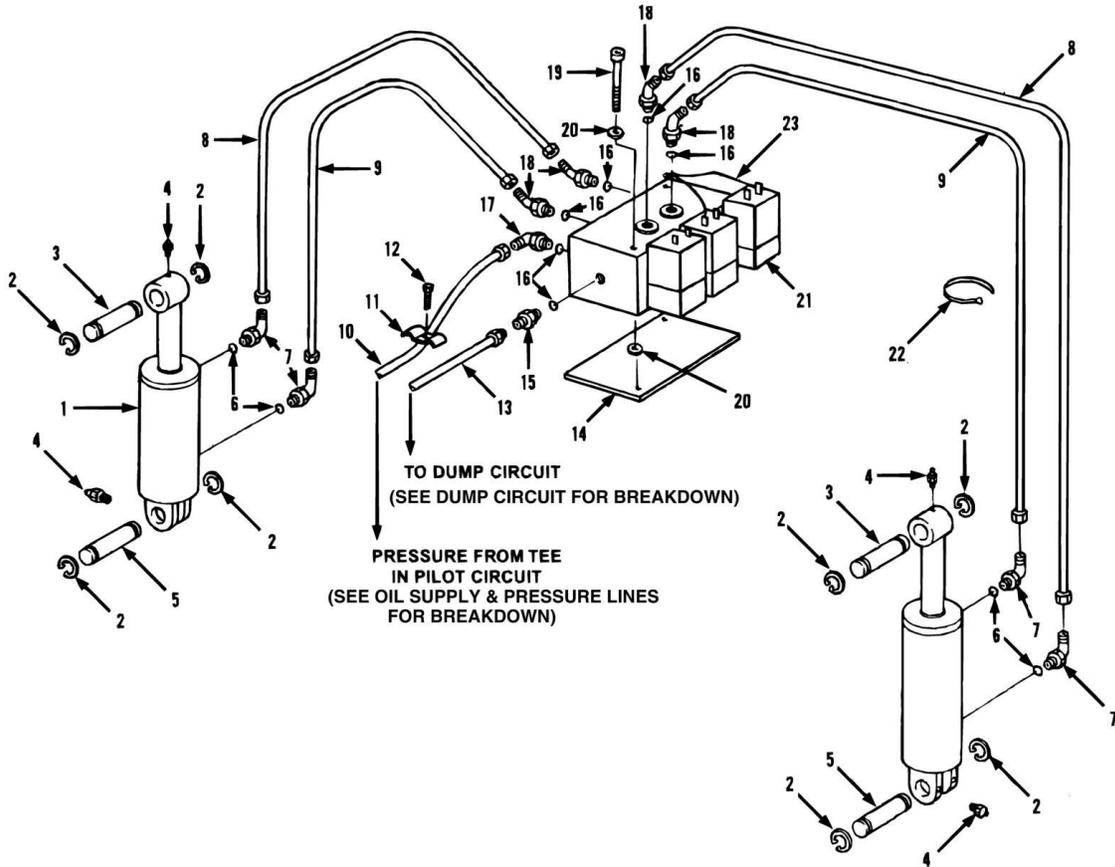
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-19. STABILIZER CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	STABILIZER CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88581140	8	RETAINING RING	
3	91041227	2	UPPER PIN	
4	88671008	6	LUBE FITTING, STRAIGHT, 1/4-28	
5	91041228	2	LOWER PIN	
6	88591205	4	O-RING	
7	88662065	4	ELBOW, 90, (includes item 6)	
8	84717584	2	HOSE ASSY	
9	84717578	2	HOSE ASSY	
10	84717485	1	HOSE ASSY	
11	90200483	1	TUBE CLAMP	
12	88201036	1	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
13	77133167	1	HOSE ASSY	
14	91041202	1	MOUNTING PLATE	
15	88662005	1	CONNECTOR (includes item 16)	
16	88591204	5	O-RING	
17	86971355	1	ELBOW, 90, (long)	
18	88662084	4	ELBOW, 45, (includes item 16)	
19	88201029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5	
20	88561108	4	FLAT WASHER, 5/16	
21		Ref	SERIES-PARALLEL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	90027187	4	NYLON TY-RAP	
23	91045035	1	JUMPER WIRE ASSY	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-20. STABILIZER CYLINDER (SN 0155216 to Present)



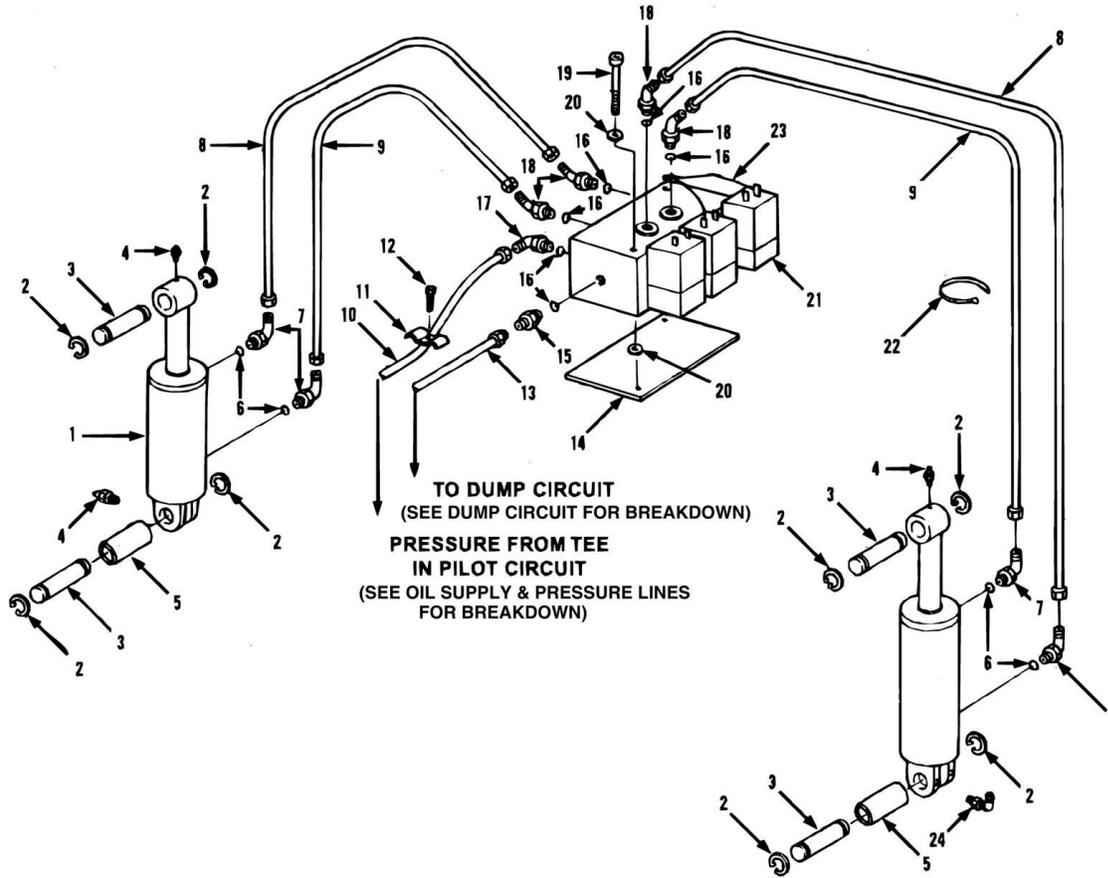
SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-20. STABILIZER CYLINDER (SN 0155216 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	STABILIZER CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88581140	8	RETAINING RING	
3	91041227	2	PIN	
4	88671008	4	LUBE FITTING, STRAIGHT, 1/4-28	
5	91041489	2	BUSHING	
6	88591205	4	O-RING	
7	88662065	4	ELBOW, 90, (includes item 6)	
8	84717584	2	HOSE ASSY	
9	84717578	2	HOSE ASSY	
10	84717485	1	HOSE ASSY	
11	90200483	1	TUBE CLAMP	
12	88201036	1	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
13	77133167	1	HOSE ASSY	
14	91041202	1	MOUNTING PLATE	
15	88662005	1	CONNECTOR (includes item 16)	
16	88591204	5	O-RING	
17	86971355	1	ELBOW, 90, (long)	
18	88662084	4	ELBOW, 45, (includes item 16)	
19	88201029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5	
20	88561108	4	FLAT WASHER, 5/16	
21		Ref	SERIES-PARALLEL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	90027187	4	NYLON TY-RAP	
23	91045035	1	JUMPER WIRE ASSY	
24	88671027	2	LUBE FITTING, 90, 1/4-28	

SECTION 8 - HYDRAULIC CIRCUITS

FIGURE 8-21. STABILIZER CYLINDER (SN 0155238 to Present)



SECTION 8 - HYDRAULIC CIRCUITS

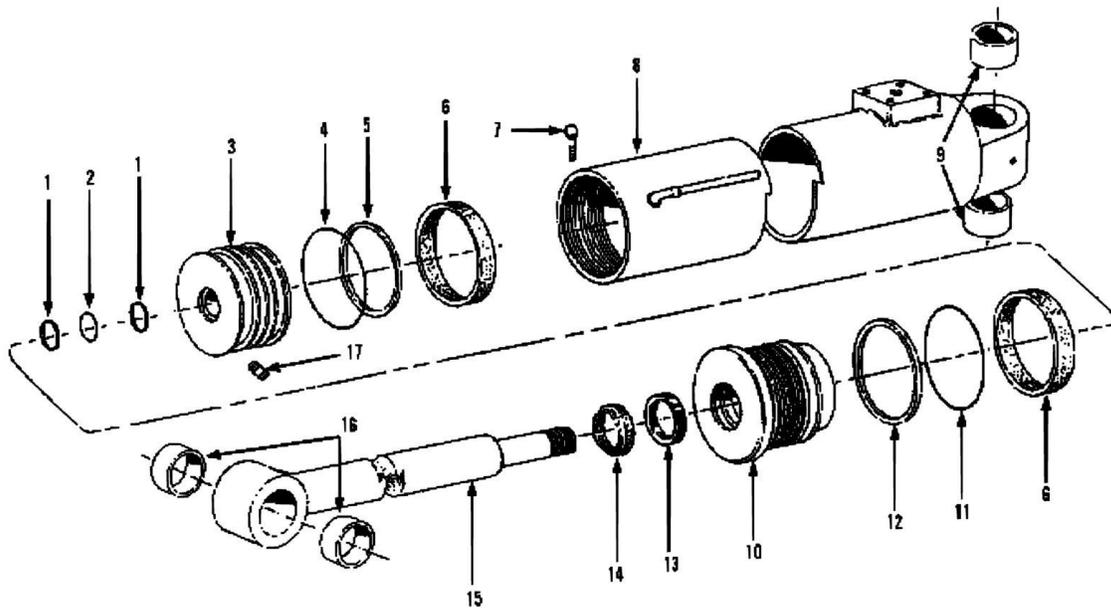
FIGURE 8-21. STABILIZER CYLINDER (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	STABILIZER CYLINDER ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88581140	8	RETAINING RING	
3	91041227	4	PIN	
4	88671008	4	LUBE FITTING, STRAIGHT, 1/4-28	
5	91041489	2	BUSHING	
6	88591205	4	O-RING	
7	88662065	4	ELBOW, 90, (includes item 6)	
8	84717584	2	HOSE ASSY	
9	84717578	2	HOSE ASSY	
10	84717485	1	HOSE ASSY	
11	90200483	1	TUBE CLAMP	
12	88201036	1	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
13	77133167	1	HOSE ASSY	
14	91041202	1	MOUNTING PLATE	
15	88662005	1	CONNECTOR (includes item 16)	
16	88591204	5	O-RING	
17	86971355	1	ELBOW, 90, (long)	
18	88662084	4	ELBOW, 45, (includes item 16)	
19	88201029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5	
20	88561108	4	FLAT WASHER, 5/16	
21		Ref	SERIES-PARALLEL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
22	90027187	4	NYLON TY-RAP	
23	91045035	1	JUMPER WIRE ASSY	
24	88671027	2	LUBE FITTING, 90, 1/4-28	

SECTION 9 - HYDRAULIC COMPONENTS

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-1. LIFT CYLINDER (SN 8655105G to Present)



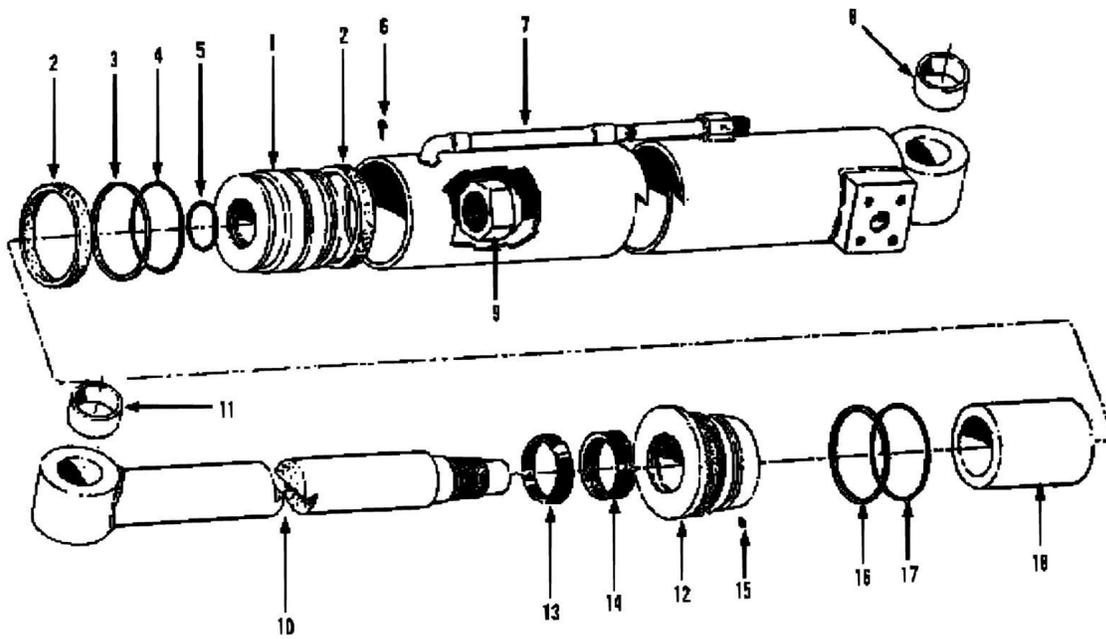
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-1. LIFT CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043067	2	LIFT CYLINDER ASSY (includes all items)	
	91044014	1	SEAL KIT (includes items 1, 2, 4, 5, 6, 11, 12, 13, 14)	
1	Kit	2	BACK UP RING	
2	Kit	1	O-RING	
3	91044015	1	PISTON ASSY (includes items 4 thru 6; lubricate and torque to 1,450-1,550 ft lbs)	
4	Kit	1	O-RING	
5	Kit	1	PISTON SEAL	
6	Kit	2	WEAR RING	
7	91044016	1	HEX HD SELF TAPPING SCREW	
8	91044017	1	BARREL ASSY (includes item 9)	
9	90206793	2	BUSHING	
10	91044018	1	ROD BEARING ASSY (includes items 11 thru 14; lubricate and torque to 250-300 ft. lbs.)	
11	Kit	1	O-RING	
12	Kit	1	BACK UP RING	
13	Kit	1	ROD SEAL	
14	90022280	1	WIPER	
15	91044019	1	PISTON ROD ASSY (includes item 16)	
16	90206793	2	BUSHING	
17	91044020	1	SET SCREW (lubricate and torque to 12-14 ft lbs)	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-2. CROWD CYLINDER (SN 8655105G to Present)



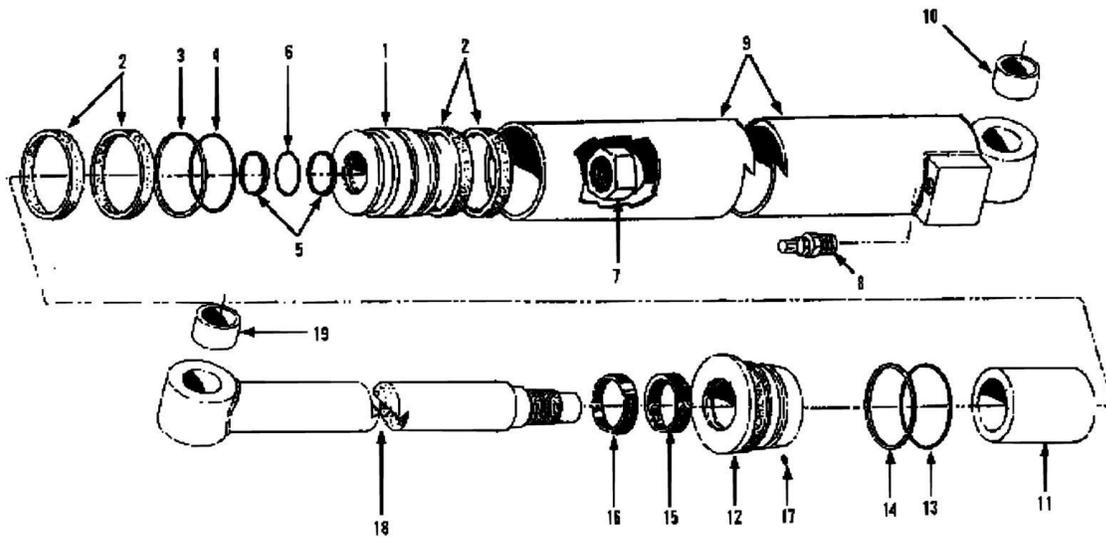
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-2. CROWD CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043058	1	CROWD CYLINDER ASSY (includes all items)	
	90208023	1	SEAL KIT (includes items 2, 3, 4, 5, 13, 14, 15, 16, 17)	
1	91044022	1	PISTON ASSY (includes items 2, 3, 4)	
2	Kit	2	WEAR RING	
3	Kit	1	PISTON SEAL	
4	Kit	1	O-RING	
5	Kit	1	O-RING	
6	91044016	1	HEX HD SELF TAPPING SCREW	
7	91044023	1	BARREL ASSY (includes item 8)	
8	91044024	1	BUSHING	
9	91044025	1	LOCKNUT (lubricate and torque to 600-650 ft lbs)	
10	91044026	1	PISTON ROD ASSY (includes item 11)	
11	91044024	1	BUSHING	
12	91044027	1	ROD BEARING ASSY (includes items 13 thru 16; lubricate and torque to 250- 300 ft lbs)	
13	Kit	1	WIPER	
14	Kit	1	ROD SEAL	
15	Kit	1	NYLON PLUG	
16	Kit	1	BACK UP RING	
17	Kit	1	O-RING	
18	91044028	1	STROKE LIMITER	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-3. CROWD EXTENSION CYLINDER (SN 8655105G to Present)



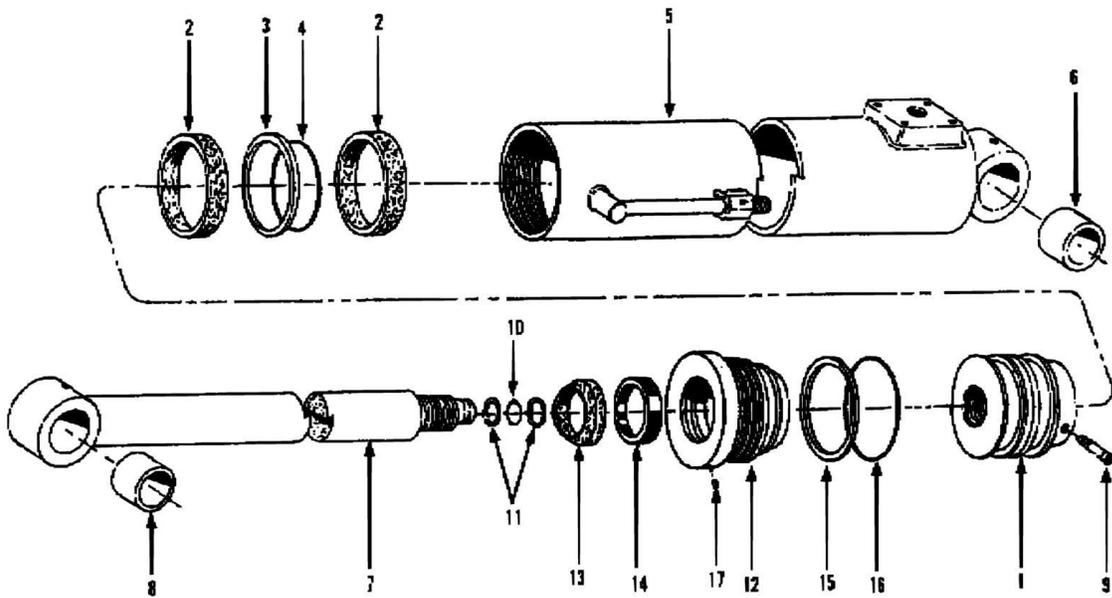
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-3. CROWD EXTENSION CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043030	1	CROWD EXTENSION CYLINDER ASSY (includes all items)	
	91044029	1	SEAL KIT (includes items 2, 3, 4, 5, 6, 13, 14, 15, 16)	
1	91044030	1	PISTON ASSY (includes items 2 thru 6)	
2	Kit	4	WEAR RING	
3	Kit	1	PISTON SEAL	
4	Kit	1	O-RING	
5	Kit	2	BACK-UP RING	
6	Kit	1	O-RING	
7	91044031	1	PISTON NUT (lubricate and torque to 250-300 ft lbs)	
8	91044032	1	COUNTERBALANCE VALVE	
9	91044033	1	BARREL ASSY (includes item 10)	
10	91044034	1	BUSHING	
11	91044035	1	STROKE LIMITER	
12	91044036	1	ROD BEARING ASSY (includes items 13 thru 16)	
13	Kit	1	O-RING	
14	Kit	1	BACK-UP RING	
15	Kit	1	ROD SEAL	
16	Kit	1	WIPER	
17	91044016	1	HEX HD SELF TAPPING SCREW	
18	91044037	1	PISTON ROD ASSY (includes item 19)	
19	91044038	1	BUSHING	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-4. TILT CYLINDER (SN 8655105G to Present)



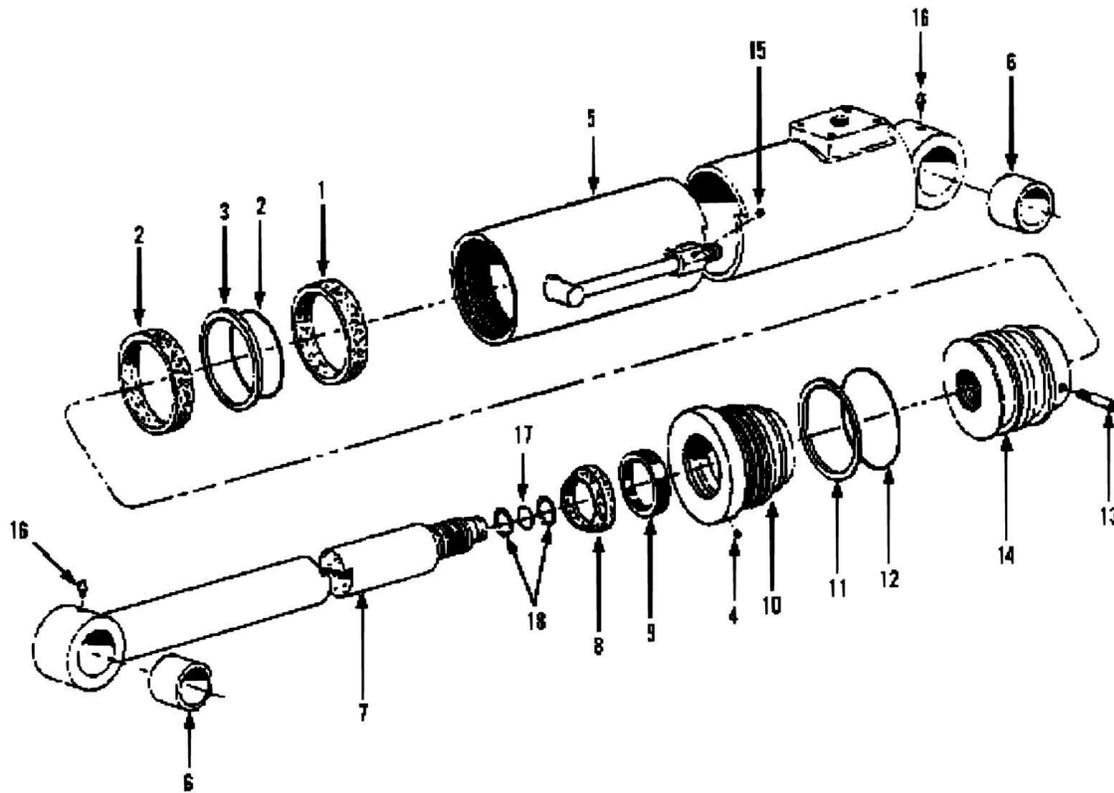
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-4. TILT CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043066	1	TILY CYLINDER ASSY (includes all items)	
	91044014	1	SEAL KIT (includes items 2, 3, 4, 10, 11, 13, 14, 15, 16)	
1	91044015	1	PISTON ASSY (includes items 2 thru 4; lubricate and torque to 1,450-1,550 ft lbs)	
2	Kit	2	WEAR RING	
3	Kit	1	PISTON SEAL	
4	Kit	1	O-RING	
5	91044039	1	BARREL ASSY (includes item 6)	
6	90206793	2	BUSHING	
7	91044040	1	PISTON ROD ASSY (includes item 8)	
8	90206793	2	BUSHING	
9	91044040	1	SET SCREW (lubricate and torque to 12-14 ft lbs)	
10	Kit	1	O-RING	
11	Kit	2	BACK-UP RING	
12	91044018	1	ROD BEARING ASSY (includes items 13 thru 16; lubricate and torque to 250-300 ft lbs)	
13	90022280	1	WIPER	
14	Kit	1	ROD SEAL	
15	Kit	1	BACK-UP RING	
16	Kit	1	O-RING	
17	91044016	1	HEX HD SELF TAPPING SCREW	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-5. COMPENSATING CYLINDER (SN 8655105G to Present)



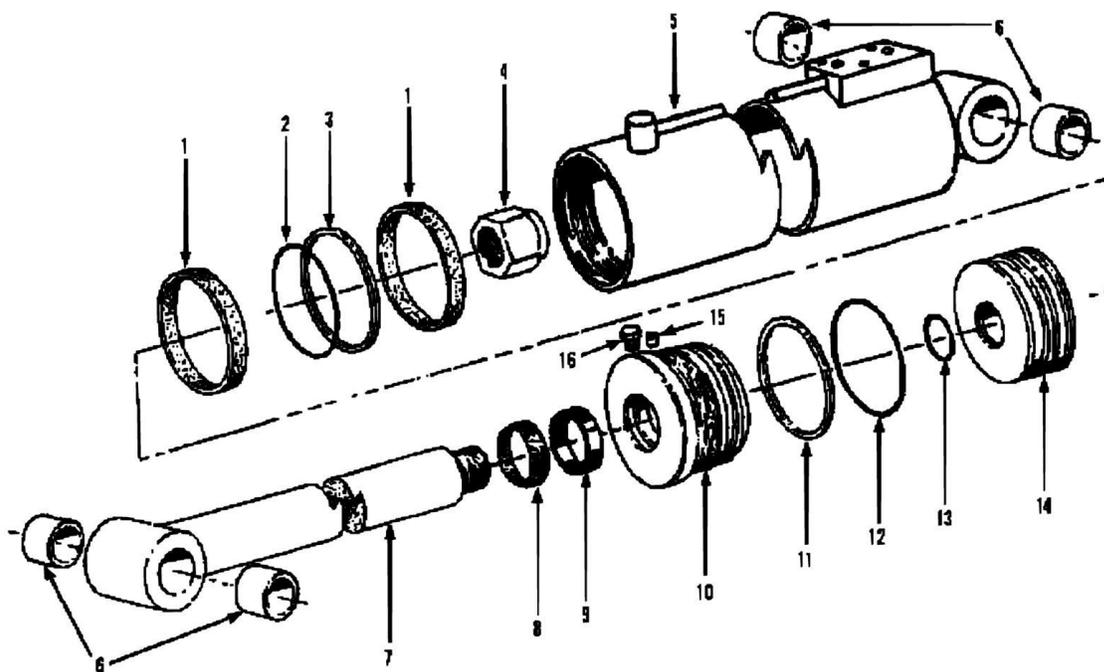
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-5. COMPENSATING CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90801328	1	COMPENSATING CYLINDER ASSY (includes all items)	
	90207954	1	SEAL KIT (includes items 1, 2, 3, 8, 9, 11, 12, 17, 18)	
1	Kit	2	WEAR RING	
2	90073157	1	O-RING	
3	90022240	1	PISTON SEAL	
4	90207535	1	SET SCREW	
5	90207539	1	CYLINDER BARREL	
6	90205414	2	BUSHING	
7	90207541	1	PISTON ROD	
8	90022280	1	WIPER RING	
9	90022250	1	ROD SEAL	
10	90207543	1	ROD BEARING	
11	90025349	1	BACK-UP RING	
12	90023349	1	O-RING	
13	90207544	1	SET SCREW	
14	90207542	1	PISTON	
15	90207536	1	PIPE PLUG	
16	90022217	2	LUBE FITTING	
17	90207533	1	O-RING	
18	90207534	2	BACK-UP RING	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-6. (91043139) SWAY CYLINDER (SN 8655105G to Present)



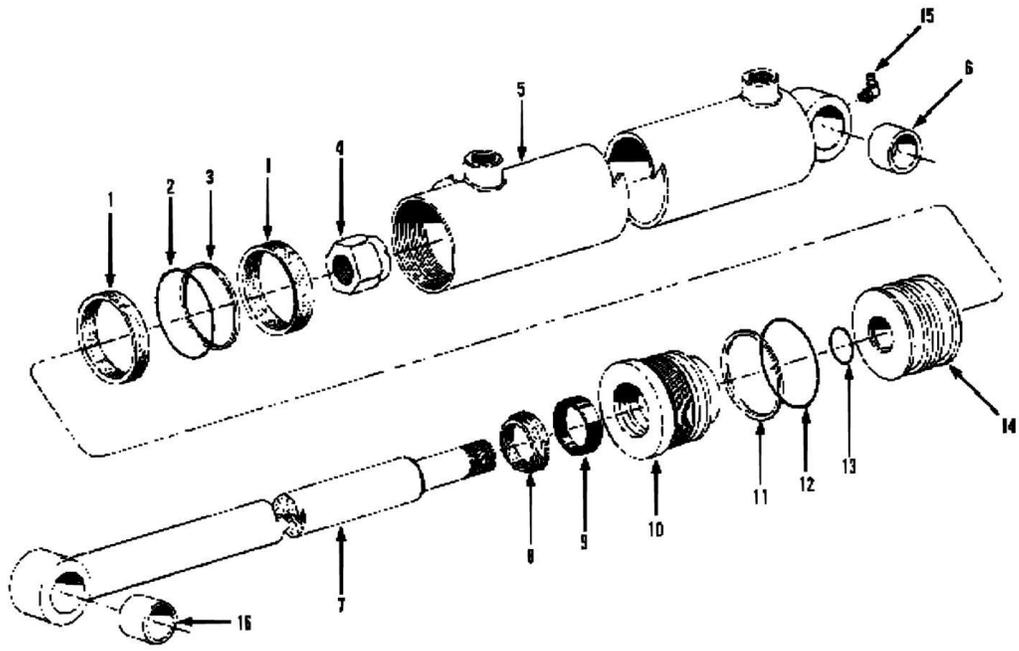
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-6. (91043139) SWAY CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043139	1	SWAY CYLINDER ASSY (includes all items)	
	91044205	1	SEAL KIT (includes items 1, 2, 3, 8, 9, 11, 12, 13 & 15)	
1	91034040	2	WEAR RING	
2	91034041	1	O-RING	
3	Kit	1	PISTON SEAL	
4	91044206	1	SELF-LOCKING NUT (lubricate and torque to 550-600 ft lbs)	
5	91044207	1	CYLINDER BARREL ASSY (includes item 6)	
6	91044075	4	BUSHING	
7	91044208	1	PISTON ROD ASSY (includes item 6)	
8	91034051	1	WIPER RING	
9	91034052	1	ROD SEAL	
10	90400062	1	ROD BEARING (lubricate and torque to 250-300 ft lbs)	
11	91034045	1	BACK-UP RING	
12	91034046	1	O-RING	
13	91044209	1	O-RING	
14	91044210	1	PISTON ASSY (includes items 1, 2, 3 & 13)	
15	90206042	1	NYLON PLUG	
16	91044073	1	HEX HD CAPSCREW	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-7. STEERING CYLINDER (SN 8655105G to Present)



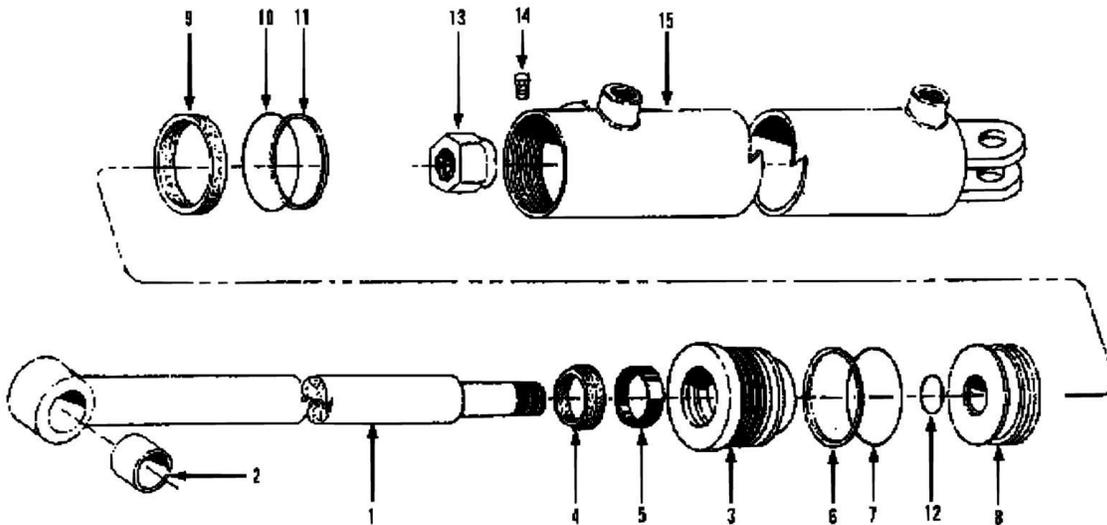
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-7. STEERING CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90801313	2	STEERING CYLINDER ASSY (includes all items)	
	90202551	1	SEAL KIT (includes items 1, 2, 3, 8, 9, 11, 12, 13)	
1	90022257	2	WEAR RING	
2	90023145	1	O-RING	
3	90022237	1	PISTON SEAL	
4	90022230	1	SELF-LOCKING NUT	
5	90207821	1	BARREL	
6	90205450	1	BUSHING	
7	90207822	1	PISTON ROD	
8	90022277	1	WIPER RING	
9	90022247	1	ROD SEAL	
10	90402099	1	ROD BEARING	
11	90024232	1	BACK-UP RING	
12	90023232	1	O-RING	
13	90023117	1	O-RING	
14	90402098	1	PISTON	
15	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
16	91031393	1	BUSHING	

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FIGURE 9-8. STABILIZER CYLINDER (SN 8655105G to Present)



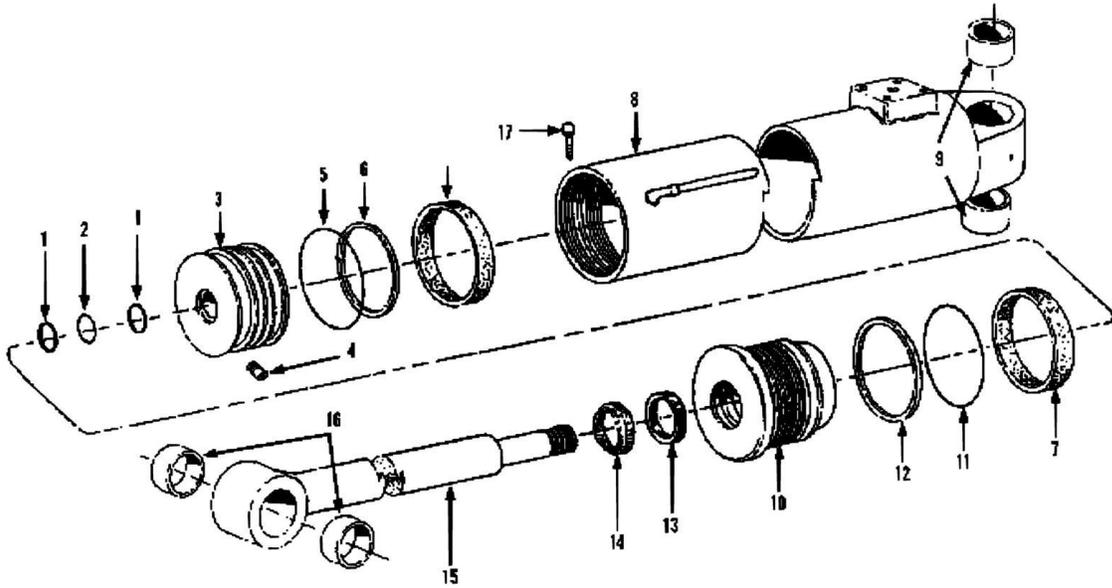
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-8. STABILIZER CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043040	2	STABILIZER CYLINDER ASSY (includes all items)	
	91044041	1	SEAL KIT (includes items 4, 5, 6, 7, 9, 10, 11, 12)	
1	91044042	1	PISTON ROD ASSY (includes item 2)	
2	91044043	2	BUSHING	
3	91044044	1	ROD BEARING ASSY (includes items 4 thru 7)	
4	Kit	1	WIPER	
5	Kit	1	ROD SEAL	
6	Kit	1	BACK-UP RING	
7	Kit	1	O-RING	
8	91044045	1	PISTON ASSY (includes items 9 thru 12)	
9	Kit	1	WEAR RING	
10	Kit	1	O-RING	
11	Kit	1	PISTON SEAL	
12	Kit	1	O-RING	
13	91044046	1	LOCK NUT (lubricate and torque to 250-300 ft lbs)	
14	91044016	1	HEX HD SELF TAPPING SCREW	
15	91044047	1	BARREL	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-9. OUTRIGGER CYLINDER (SN 8655105G to Present)



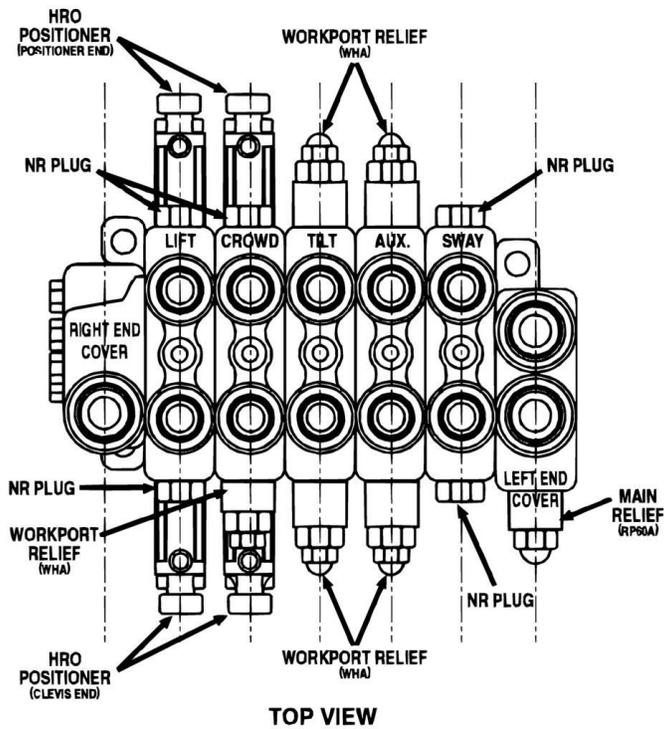
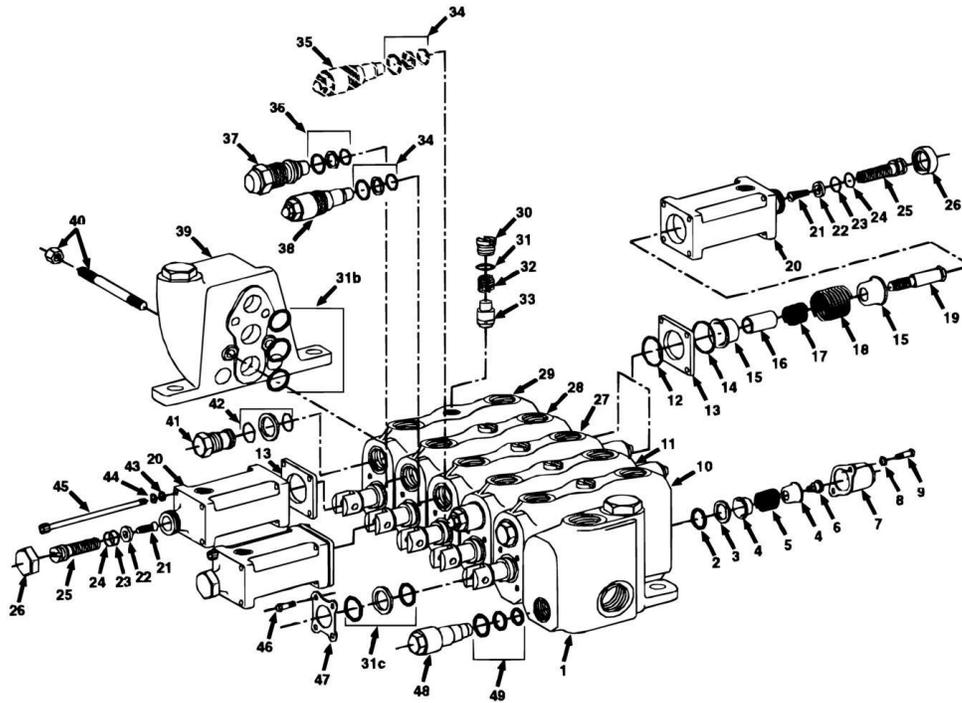
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FIGURE 9-9. OUTRIGGER CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033127	2	OUTRIGGER CYLINDER ASSY (includes all items)	
	91044065	1	SEAL KIT (includes items 1, 2, 5, 6, 7, 11, 12, 13, 14)	
1	Kit	2	BACK-UP RING	
2	Kit	1	O-RING	
3	91044066	1	PISTON ASSY (includes items 5 thru 7; lubricate and torque to 1,450-1,550 ft lbs)	
4	91044067	1	SET SCREW (lubricate and torque to 12-14 ft lbs)	
5	Kit	1	O-RING	
6	Kit	1	PISTON SEAL	
7	Kit	2	WEAR RING	
8	91044068	1	BARREL ASSY (includes item 9)	
9	91044069	2	BUSHING	
10	91044070	1	ROD BEARING ASSY (includes items 11 thru 14; lubricate and torque to 250-300 ft lbs)	
11	Kit	1	O-RING	
12	Kit	1	BACK-UP RING	
13	Kit	1	ROD SEAL	
14	90022280	1	WIPER	
15	91044071	1	PISTON ROD ASSY (includes item 16)	
16	91044072	2	BUSHING	
17	91044073	1	HEX HD SELF TAPPING SCREW	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-10. (91043065) MAIN CONTROL VALVE ASSEMBLY (SN 8655105G to Present)



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FIGURE 9-10. (91043065) MAIN CONTROL VALVE ASSEMBLY (SN 8655105G to Present)

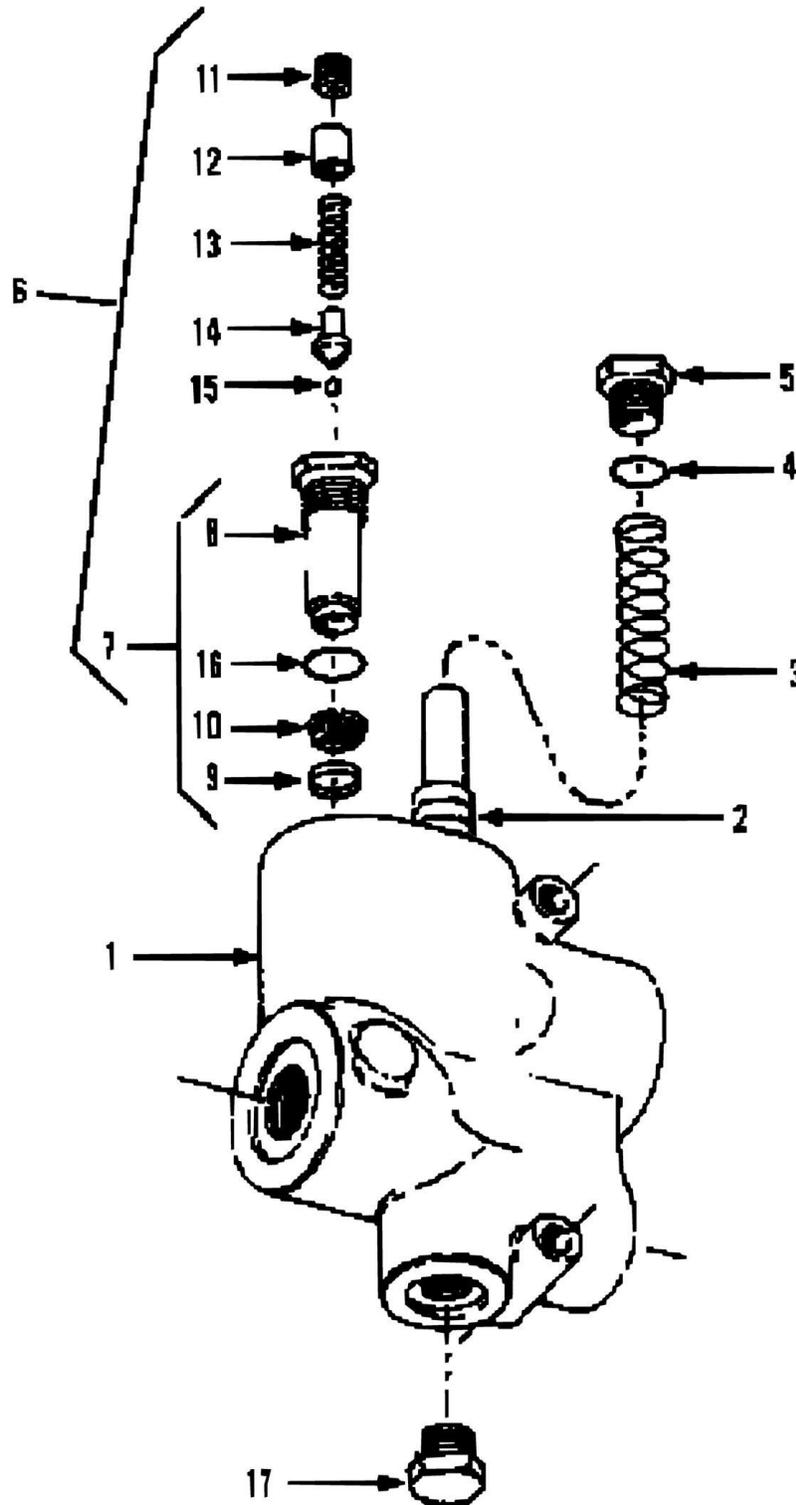
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043065	1	MAIN CONTROL VALVE ASSY, (includes all items)	
	90206417	AR	SEAL KIT, (includes items 31, 31b, & 31c)	
	91044123	AR	SECTION SEAL KIT, (includes item 31b)	
	91034159	AR	SPOOL SEAL KIT, (includes item 31c)	
	90206419	AR	RETAINER PLATE ASSY, (includes items 46 & 47)	
	91044509	AR	HRO POSITIONER SEAL KIT, (includes items 12, 14, 23 & 24)	
	91044526	AR	NR PLUG KIT, (includes items 41 & 42)	
	91044527	AR	NR PLUG SEAL KIT, (includes item 42)	
	90206427	3	NEUTRAL POSITIONER KIT, (includes items 2 thru 9)	
	91044510	2	HRO POSITIONER KIT, SPOOL POSITIONER END, (includes items 12 thru 26)	
	91044534	2	HRO POSITIONER KIT, CLEVIS END, (includes items 13, 20 thru 26, 43, 44 45)	
	91044530	AR	WH TYPE PORT RELIEF VALVE SEAL KIT, (includes item 36)	
	91044533	AR	WHA PORT RELIEF VALVE SEAL KIT, (includes item 34)	
	91034236	AR	MAIN RELIEF VALVE SEAL KIT, (includes item 49)	
1	91044114	1	COVER PLATE ASSY, (left end), (includes items 48 & 49)	
2	Kit	3	O-RING	
3	Kit	3	WASHER	
4	Kit	3	SPRING COLLAR	
5	Kit	3	SPRING	
6	Kit	3	SPOOL COLLAR	
7	Kit	3	BONNET	
8	Kit	6	LOCKWASHER	
9	Kit	6	SCREW	
10	90206421	1	SWAY SECTION	
11	91044117	1	AUXILIARY SECTION	
12	Kit	4	O-RING	
13	91044516	4	SEAL PLATE	
14	Kit		O-RING	
15	91044521	2	STOP COLLAR	
16	91044520	2	STOP SLEEVE	
17	91044519	2	SPRING	
18	91044518	2	SPRING	
19	91044517	2	POSITIONER SPUD	
20	91044515	4	BONNET	
21	91044513	4	SCREW, COUNTER SUNK	
22	91044514	4	TRAVEL STOP	
23	Kit	4	O-RING	
24	Kit	4	BACK-UP RING	
25	91044512	2	SCREW	
26	91044511	4	BOOT	
27	91044119	1	TILT SECTION	
28	91044121	1	CROWD SECTION	
29	91044122	1	LIFT SECTION	
30	91044535	5	LOAD CHECK PLUG	
31	Kit	5	O-RING	
32		Ref	SPRING	
33		Ref	POPPET	
34	Kit	AR	WHA RELIEF SEALS	

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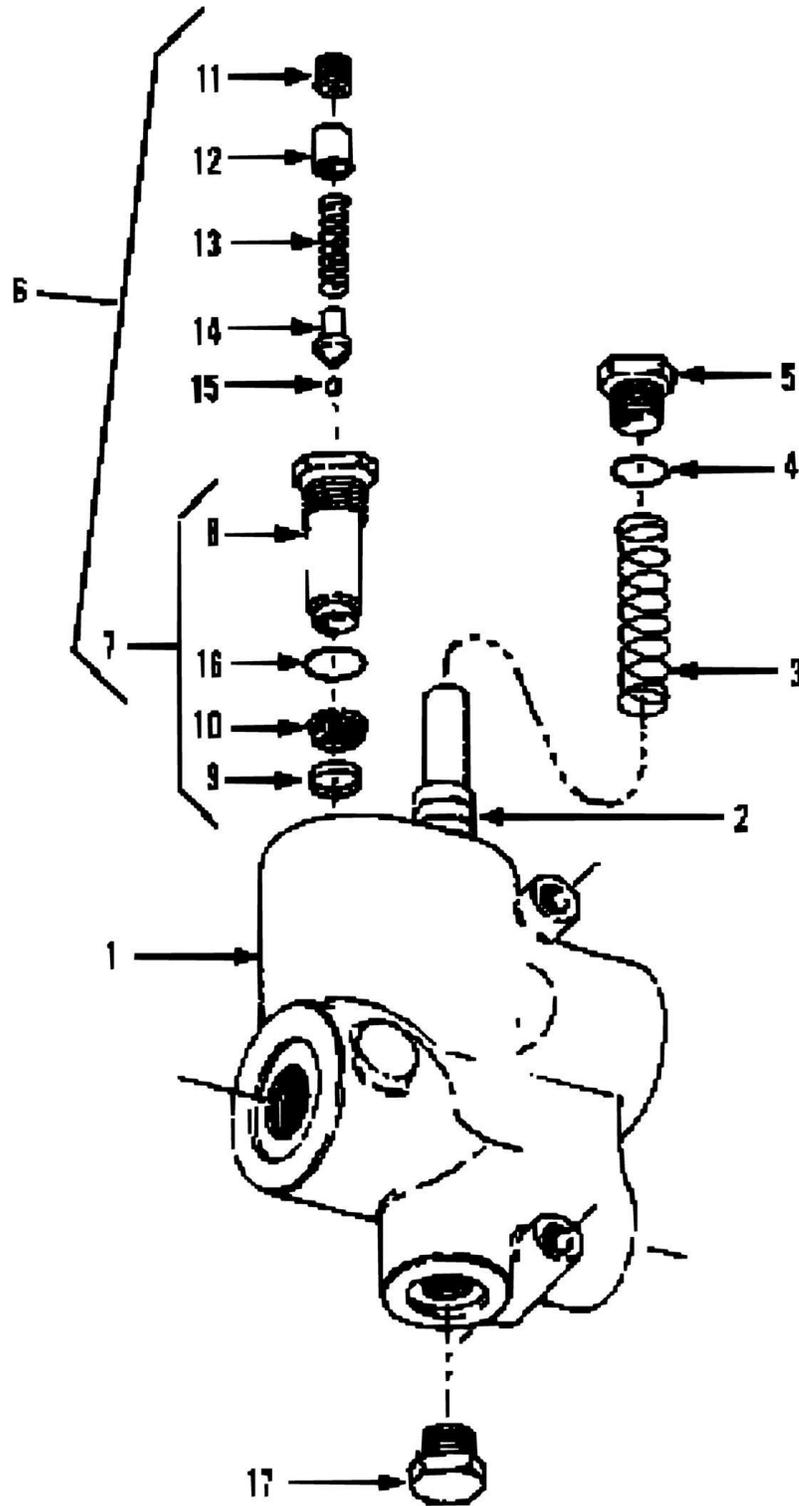
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
35	91044531	2	WHA RELIEF, (1500 p.s.i.)	
36	Kit	AR	WH RELIEF SEALS	
37	91044529	1	WH RELIEF, (2650 p.s.i.)	
38	91044532	2	WHA RELIEF, (3250 p.s.i.)	
39	91044124	1	COVER PLATE ASSY, (right end)	
40	91044125	1	STUD ASSY, (includes four studs and four nuts), (lubricate and torque to 23- 27 ft lbs)	
41	91044526	5	NR PLUG	
42	Kit	AR	NR PLUG SEALS	
43	91084232	16	BEARING PLATE	
44	91084231	16	LOCKWASHER	
45	91044522	16	HEX HD CAPSCREW, 1/4-20X3-1/2	
46		Ref	CAPSCREW	
47		Ref	RETAINER PLATE	
48	9008136	1	MAIN RELIEF VALVE ASSY	
49	91034236	1	MAIN RELIEF SEALS	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-11. PRIORITY FLOW CONTROL VALVE (SN 8655105G to Present)



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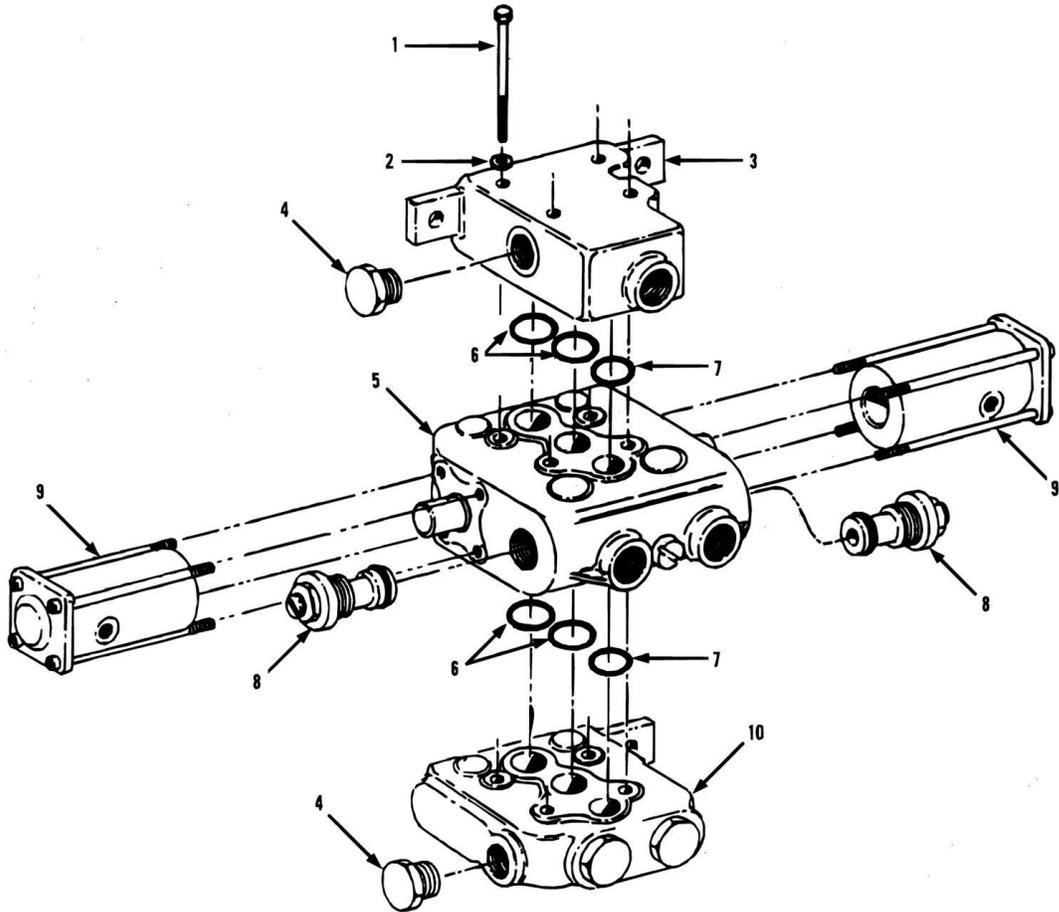
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FIGURE 9-11. PRIORITY FLOW CONTROL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033240	1	PRIORITY FLOW CONTROL VALVE (includes all items; 2,500 PSI relief valve setting)	
1	90206548	1	HOUSING ASSY (includes item 2)	
2	90206549	1	SPOOL	
3	90206550	1	SPRING	
4	88591206	1	O-RING	
5	90206552	1	PLUG	
6	90206553	1	RELIEF CARTRIDGE (includes items 7 thru 16)	
7	90206554	1	RELIEF VALVE SUB BODY (includes items 8 thru 10)	
8	90206555	1	BODY	
9	90206556	1	RING	
10	90206557	1	SCREW	
11	90206558	1	RELIEF VALVE ADJUSTING SCREW	
12	90206559	1	SPRING GUIDE	
13	90206560	1	SPRING	
14	90206561	1	BALL HOLDER	
15	90206562	1	BALL	
16	88591205	1	O-RING	
17	90206564	1	PLUG	

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FIGURE 9-12. FORWARD-REVERSE CONTROL VALVE (SN 8655105G to Present)



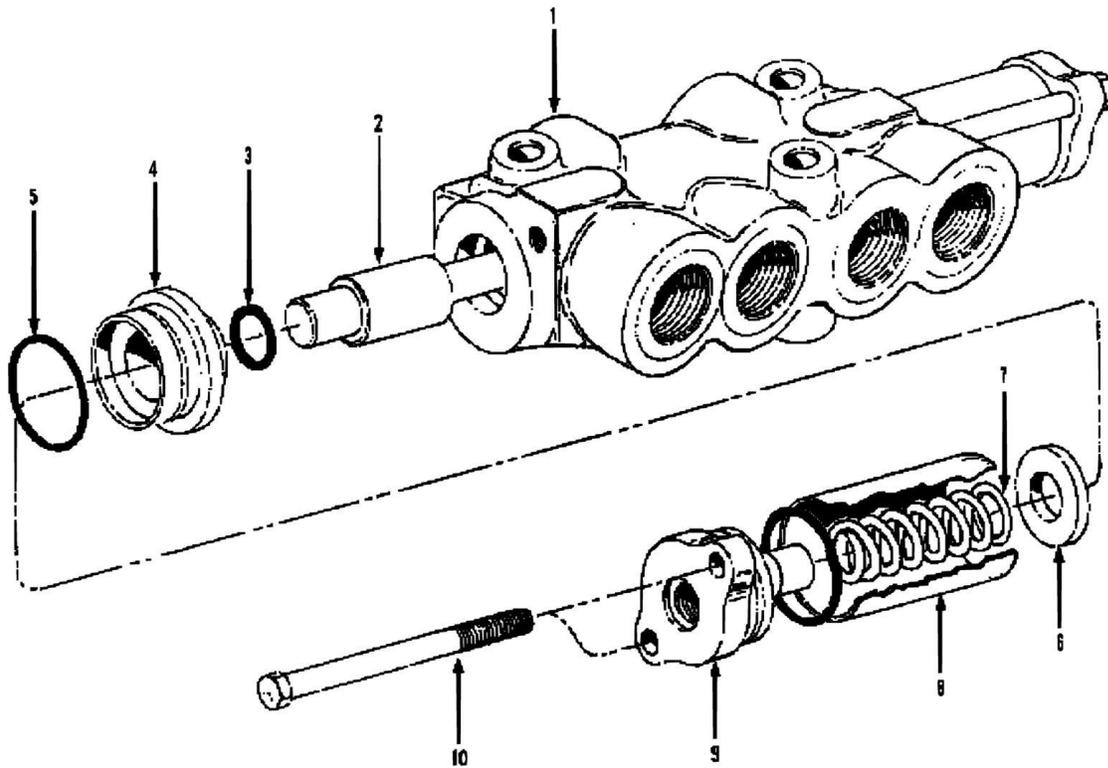
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FIGURE 9-12. FORWARD-REVERSE CONTROL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90206737	1	FORWARD-REVERSE CONTROL VALVE ASSY (includes all items)	
1	90026155	4	HEX HD CAPSCREW, 3/8-16X5	
2	88551011	4	LOCKWASHER, 3/8	
3	90208137	1	OUTLET SECTION	
4	90027918	2	PLUG	
5	90208191	1	WORK SECTION	
6	90206423	4	O-RING	
7	90206422	2	O-RING	
8	90206415	2	PORT RELIEF CARTRIDGE (includes two back up rings and one o-ring; 3,000 PSI)	
9	90208140	2	REMOTE HYDRAULIC ACTUATOR	
10	90208141	1	INLET SECTION	

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FIGURE 9-13. SERIES-PARALLEL VALVE (SN 8655105G to Present)



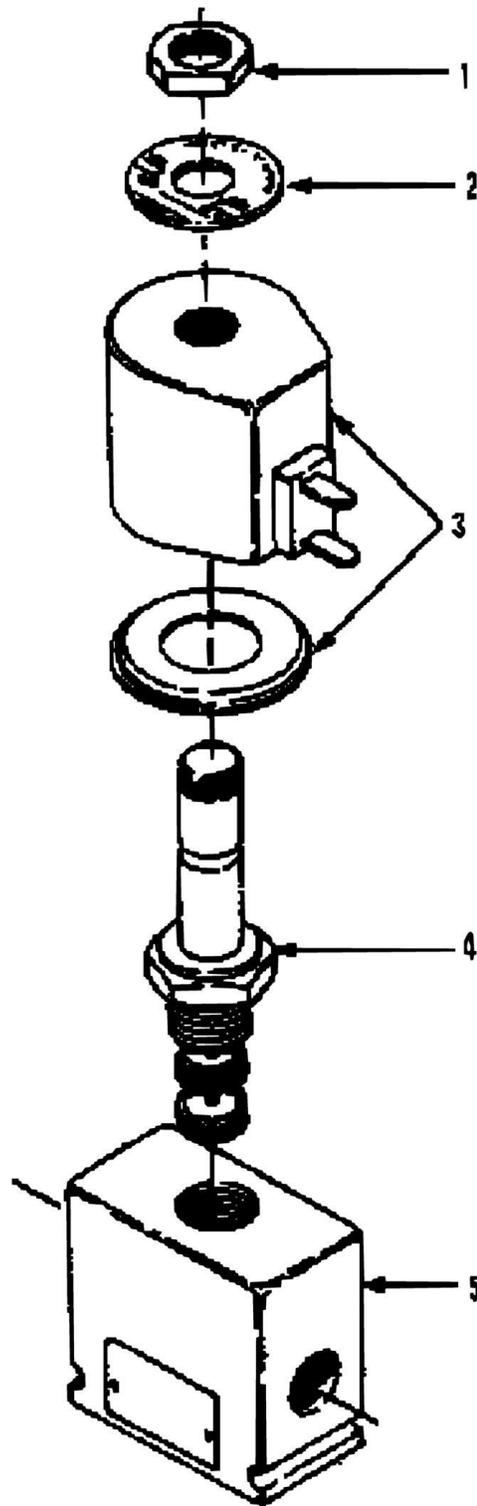
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FIGURE 9-13. SERIES-PARALLEL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90206738	1	SERIES-PARALLEL VALVE ASSY (includes all items)	
1		Ref	HOUSING	
2		Ref	SPOOL	
3	90208060	2	O-RING	
4	90208058	2	PLUG	
5	90208065	4	O-RING	
6	90208062	2	SPACER	
7	90208064	2	SPRING	
8	90208061	2	TUBE	
9	90208059	2	CAP	
10	90208063	4	HEX HD CAPSCREW	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-14. SOLENOID VALVE (SN 8655105G to Present)



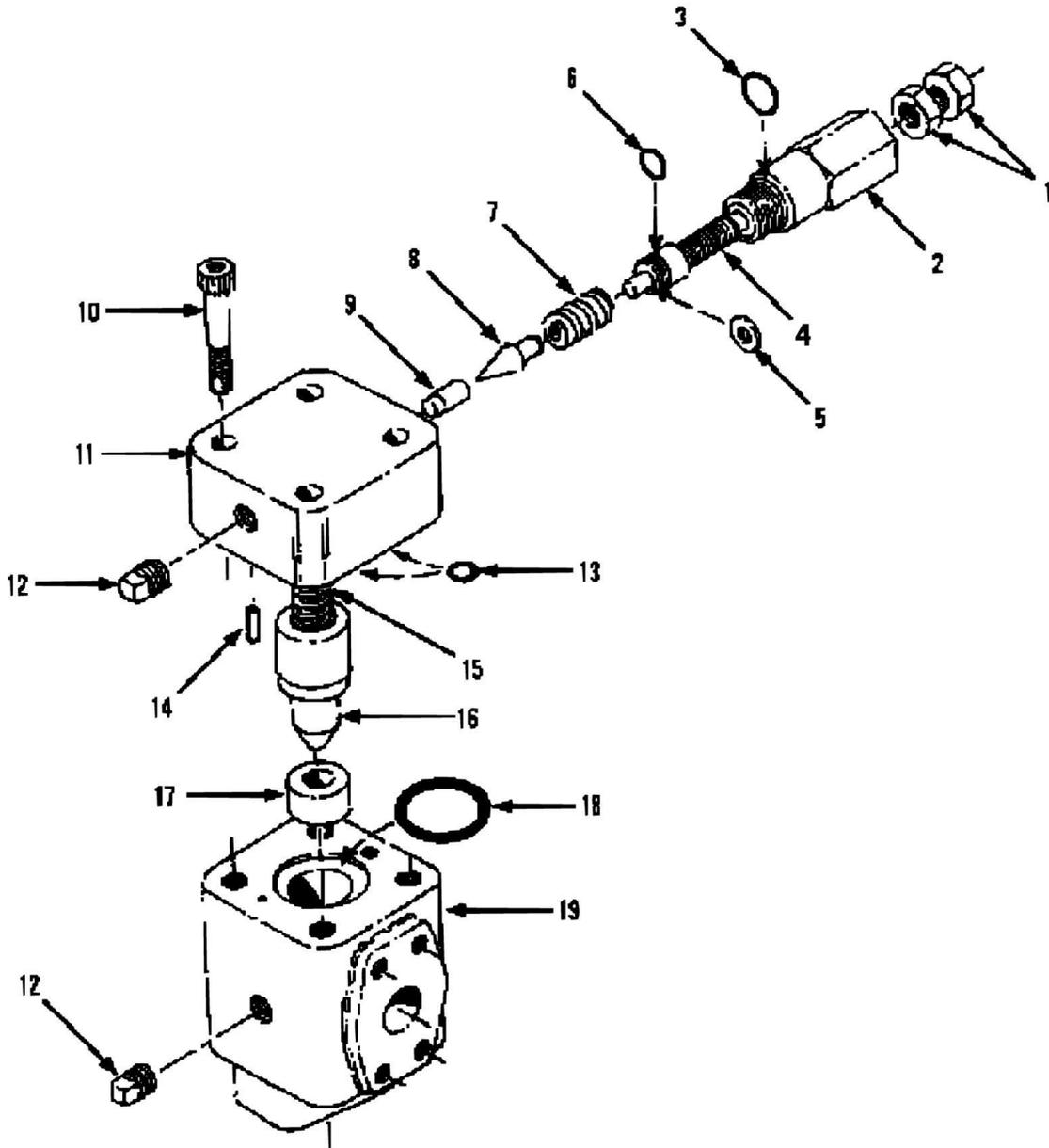
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FIGURE 9-14. SOLENOID VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90206739	1	SOLENOID VALVE ASSY, THREE WAY - TWO POSITION (includes all items)	
	91044001	1	SEAL KIT	
1	90208066	1	NUT	
2	90208067	1	NAME PLATE	
3	77384267	1	SOLENOID COIL ASSY	
4	90208071	1	VALVE ASSY	
5	90208072	1	VALVE BODY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-15. REAR DRIVE MAIN RELIEF VALVE (SN 8655105G to Present)



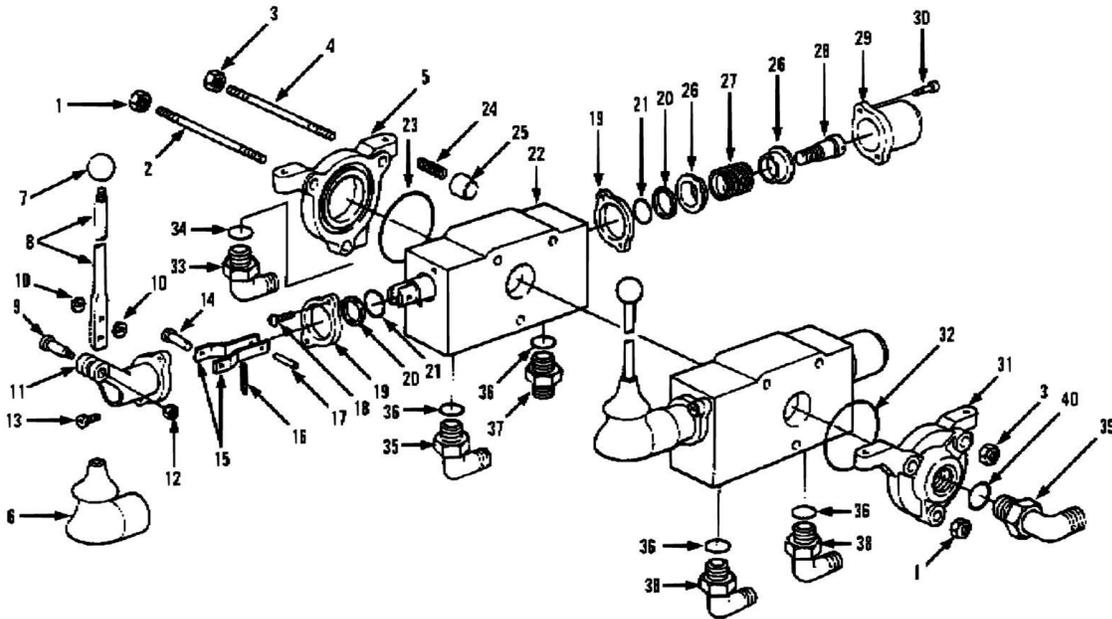
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-15. REAR DRIVE MAIN RELIEF VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90207314	1	REAR DRIVE MAIN RELIEF VALVE ASSY (includes all items)	
	90208057	1	SEAL KIT (includes items 3, 6, 13, 18)	
1	88501406	2	HEX JAM NUT, 3/8-24	
2	90208040	1	HEAD	
3	90208041	1	O-RING	
4	90208042	1	ADJUSTING SCREW	
5	90208043	1	SHIM	
6	90208044	1	O-RING	
7	90208045	1	SPRING	
8	90208046	1	CONE	
9	90208047	1	SEAT	
10	90208048	4	SCREW	
11	90208049	1	CAP	
12	90027462	2	PIPE PLUG	
13	90208050	1	O-RING	
14	90208051	1	PIN	
15	90208052	1	SPRING	
16	90208053	1	PISTON	
17	90208054	1	SEAT	
18	90208055	1	O-RING	
19	90208056	1	VALVE BODY	

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FIGURE 9-16. OUTRIGGER CONTROL VALVE (SN 8655105G to Present)



SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-16. OUTRIGGER CONTROL VALVE (SN 8655105G to Present)

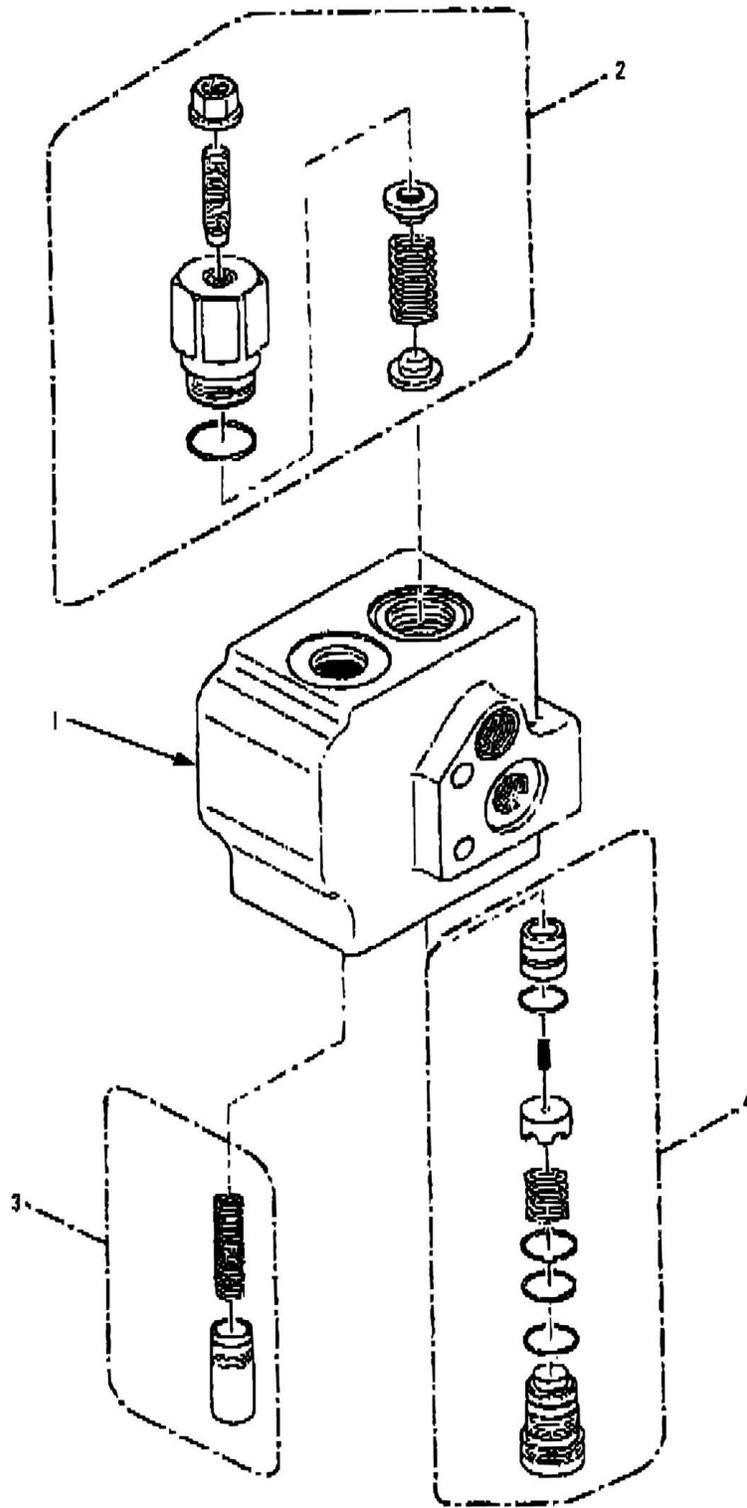
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035090	1	OUTRIGGER CONTROL VALVE ASSY (includes all items)	
	91033144	1	OUTRIGGER CONTROL VALVE ASSY (includes items 1 thru 32)	
	91034124	1	TIE ROD KIT (includes items 1 thru 4)	
	91034125	2	HANDLE ASSY (includes items 6 thru 17)	
	91034126	2	SPOOL SECTION ASSY (includes items 18 thru 30)	
1	Kit	2	SPECIAL NUT	
2	Kit	1	TIE ROD	
3	Kit	4	SPECIAL NUT	
4	Kit	2	TIE ROD	
5		Ref	OUTLET SECTION	
6	91034127	1	BOOT	
7	91034128	1	KNOB	
8	91034129	1	HANDLE	
9		Ref	PIVOT BOLT	
10		Ref	FLAT WASHER	
11		Ref	HANDLE BRACKET	
12		Ref	HEX NUT	
13		Ref	SOCKET HD CAPSCREW	
14		Ref	PIN	
15		Ref	LINK	
16		Ref	RETAINER	
17		Ref	ROLL PIN	
18		Ref	ROUND HD MACHINE SCREW	
19		Ref	SEAL PLATE	
20	91034130	2	WIPER	
21	91034131	2	O-RING	
22		Ref	HOUSING AND SPOOL ASSY (not sold separately, order P/N 91034126)	
23	91034132	1	O-RING	
24	91034133	1	SPRING	
25	91034134	1	O-RING	
26		Ref	SPRING SEAT	
27	91034135	1	SPRING	
28		Ref	SPOOL END	
29		Ref	SPOOL CAP	
30		Ref	SOCKET HD CAPSCREW	
31		Ref	INLET HOUSING ASSY (includes item 32)	
32	91034132	1	O-RING	
33	88662060	1	ELBOW, 90, (includes item 34)	
34	88591206	1	O-RING	
35	88662085	1	ELBOW, 45, (includes item 36)	
36	88591205	4	O-RING	
37	88662036	1	CONNECTOR (includes item 36)	
38	88662065	2	ELBOW, 90, (includes item 36)	
39	88662067	1	ELBOW, 45, (includes item 40)	
40	88591207	1	O-RING	
		Ref	NOTE: QUANTITIES ARE SHOWN FOR ONE HANDLE ASSY AND ONE SPOOL SECTION ASSY.	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	NOTE: WHEN REPLACING A SPOOL SECTION, REMOVE SCREWS (18) AND REPLACE WITH SCREWS (13) TO SECURE THE HANDLE BRACKET.	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR REPLACEMENT.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-17. (91043296) ACCUMULATOR CHARGE VALVE (SN 8655105G to Present)



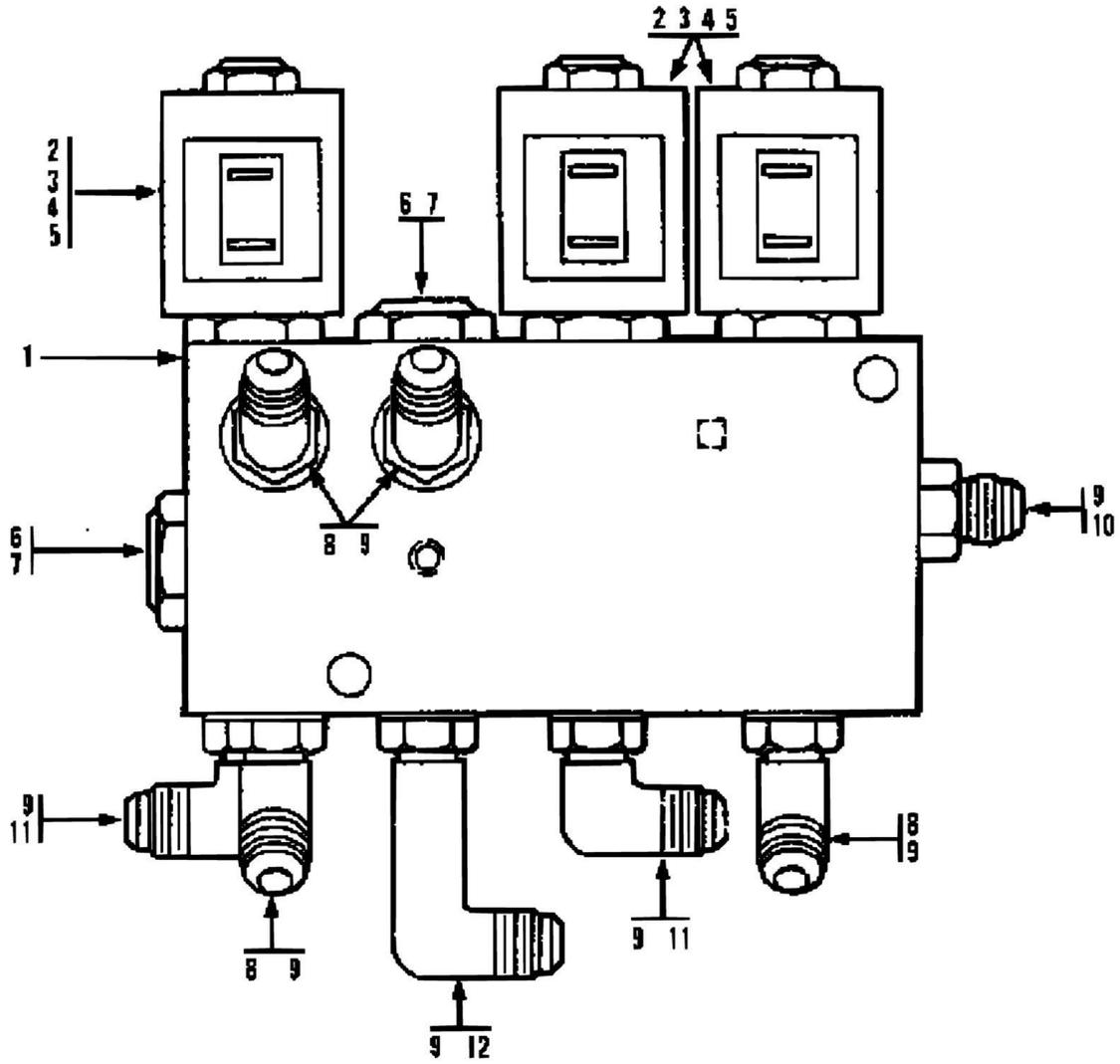
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-17. (91043296) ACCUMULATOR CHARGE VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043296	1	ACCUMULATOR CHARGE VALVE	
2	91044538	1	LG SPRING REPAIR KIT	
3	91044539	1	SPOOL AND SM SPRING REPAIR KIT	
4	91044540	1	ELEMENT AND SEAL KIT	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-18. SERIES-PARALLEL CONTROL VALVE (SN 8655105G to Present)



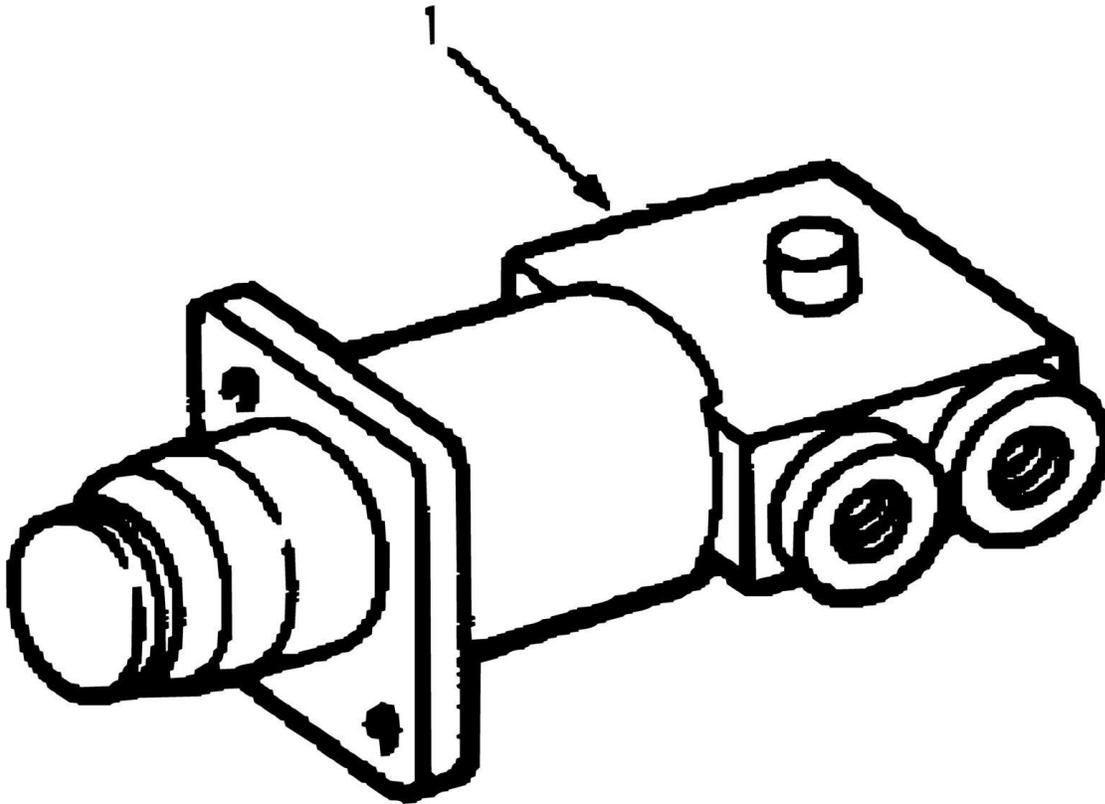
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-18. SERIES-PARALLEL CONTROL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043087	1	SERIES-PARALLEL CONTROL VALVE ASSY (includes all items)	
1		Ref	VALVE BODY W/PLUGS	
2	91044011	3	VALVE CARTRIDGE ASSY W/COIL (includes items 3, 4)	
3	77384267	1	COIL	
4	90208071	1	CARTRIDGE	
5	91044001	AR	CARTRIDGE SEAL KIT	
6	91044013	2	CHECK/RELIEF VALVE ASSY	
7	91044002	AR	CHECK/RELIEF SEAL KIT	
8	88662084	4	ELBOW, 90, (includes item 9)	
9	88591204	8	O-RING	
10	88662005	1	CONNECTOR (includes item 9)	
11	88662064	2	ELBOW, 90, (includes item 9)	
12	86971355	1	ELBOW, 90, LONG (includes item 9)	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-19. BRAKE VALVE (SN 8655105G to Present)



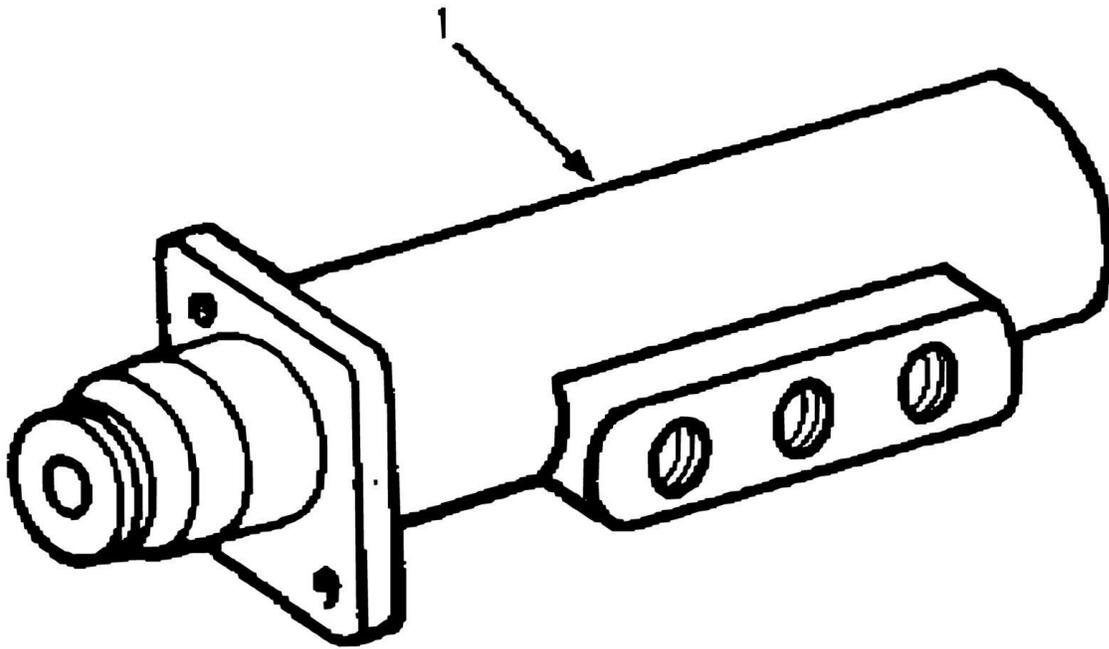
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-19. BRAKE VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043076	1	BRAKE VALVE ASSY (no service parts available)	

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FIGURE 9-20. BRAKE VALVE (SN 0155238 to Present)



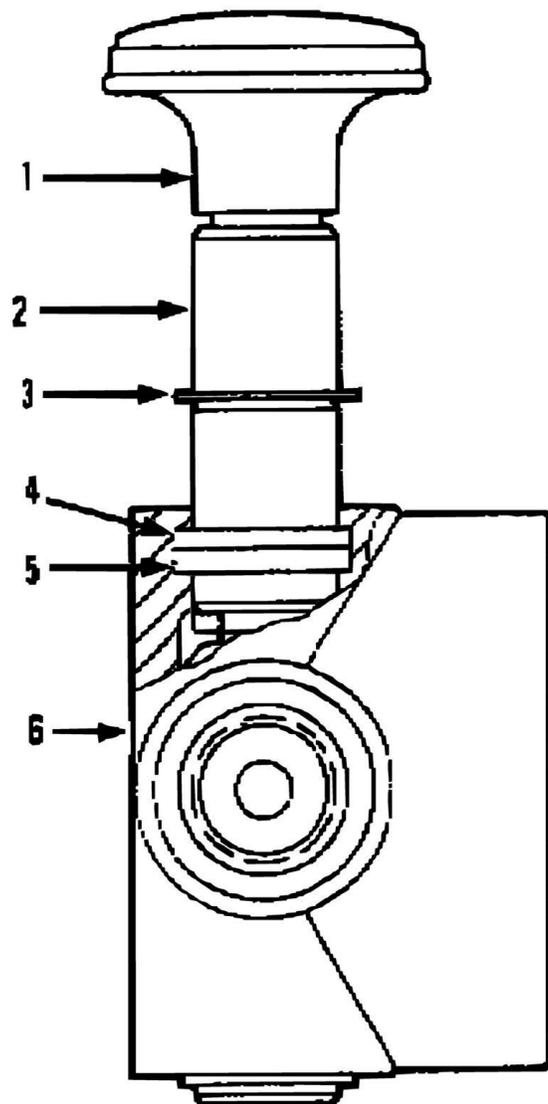
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-20. BRAKE VALVE (SN 0155238 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91083154	1	BRAKE VALVE ASSY	
1	91064057	Ref	REPAIR KIT	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-21. PARKING BRAKE VALVE (SN 8655105G to Present)



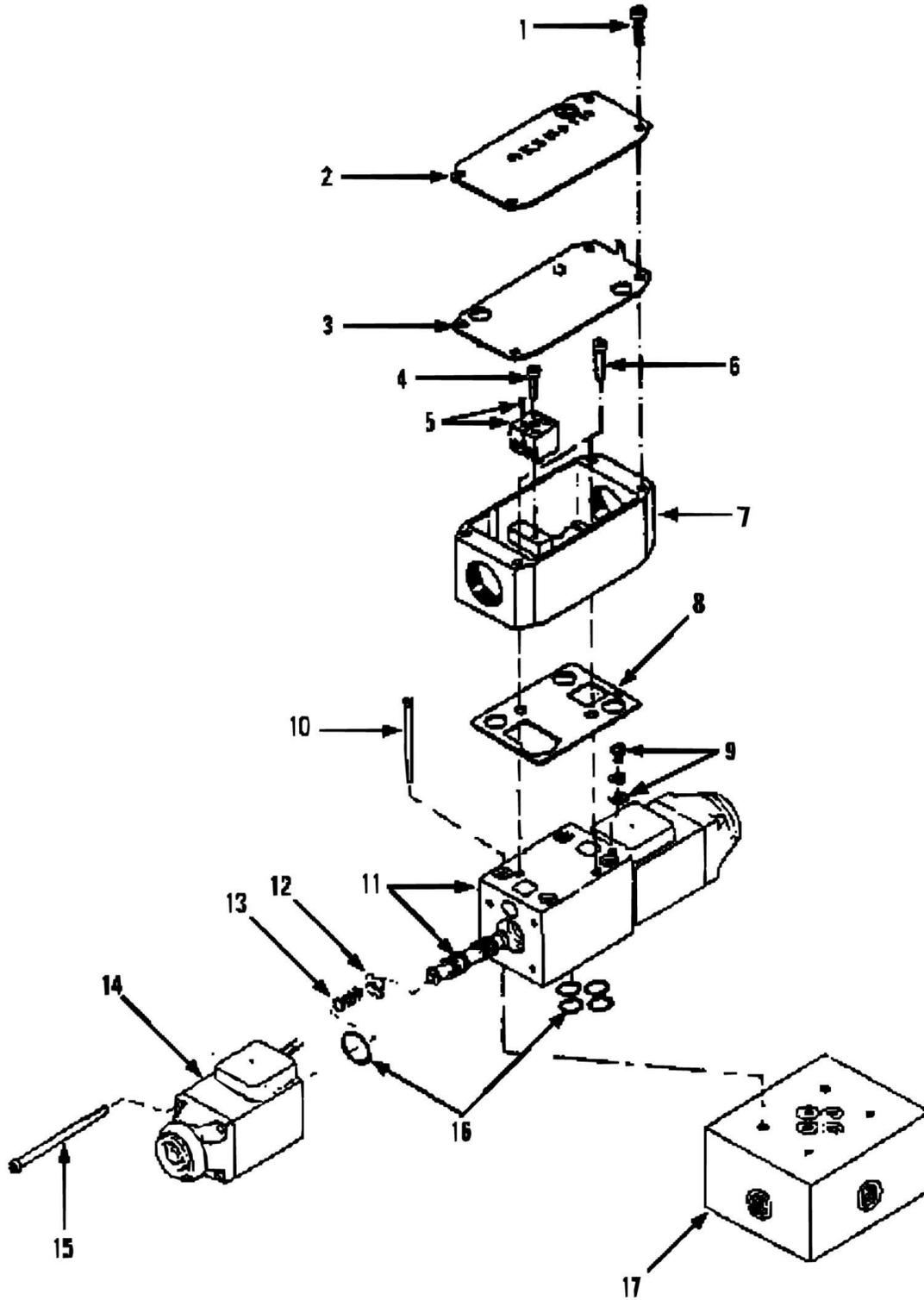
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-21. PARKING BRAKE VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043090	1	PARKING BRAKE VALVE ASSY (includes items 1 thru 6)	
1	91044297	1	KNOB	
2	91044126	1	SPOOL	
3	91044127	1	RETAINING RING	
4	91044128	1	BACK-UP RING	
5	91044129	1	O-RING	
6	91044130	1	HOUSING	
7	91033378	1	RUBBER BOOT (not shown)	

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FIGURE 9-22. DIRECTIONAL CONTROL VALVE (SN 8655105G to Present)



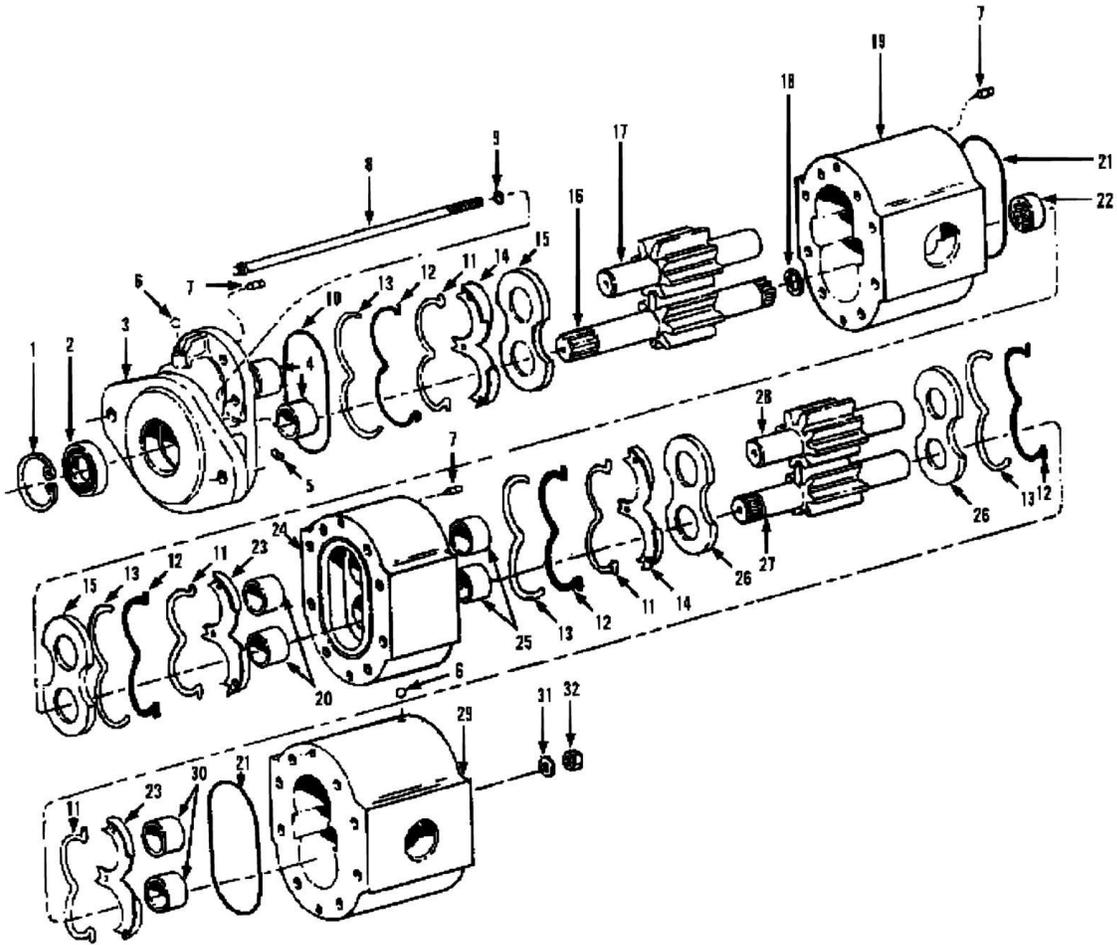
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-22. DIRECTIONAL CONTROL VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033097	1	DIRECTIONAL CONTROL VALVE ASSY (includes all items)	
1		Ref	SCREW	
2		Ref	NAME PLATE	
3	91034011	1	GASKET	
4		Ref	SCREW	
5	91034012	2	TERMINAL BLOCK	
6		Ref	SCREW	
7		Ref	TERMINAL BOX	
8	91034013	1	GASKET	
9		Ref	GROUND SCREW	
10		Ref	MOUNTING BOLT	
11		Ref	SPOOL AND HOUSING	
12	91034014	2	SPACER	
13	91034015	2	SPRING	
14	91034016	2	SOLENOID	
15		Ref	SCREW	
16	91034017	1	O-RING KIT	
17		Ref	MANIFOLD	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR REPLACEMENT.	

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FIGURE 9-23. MAIN HYDRAULIC PUMP (SN 8655105G to Present)



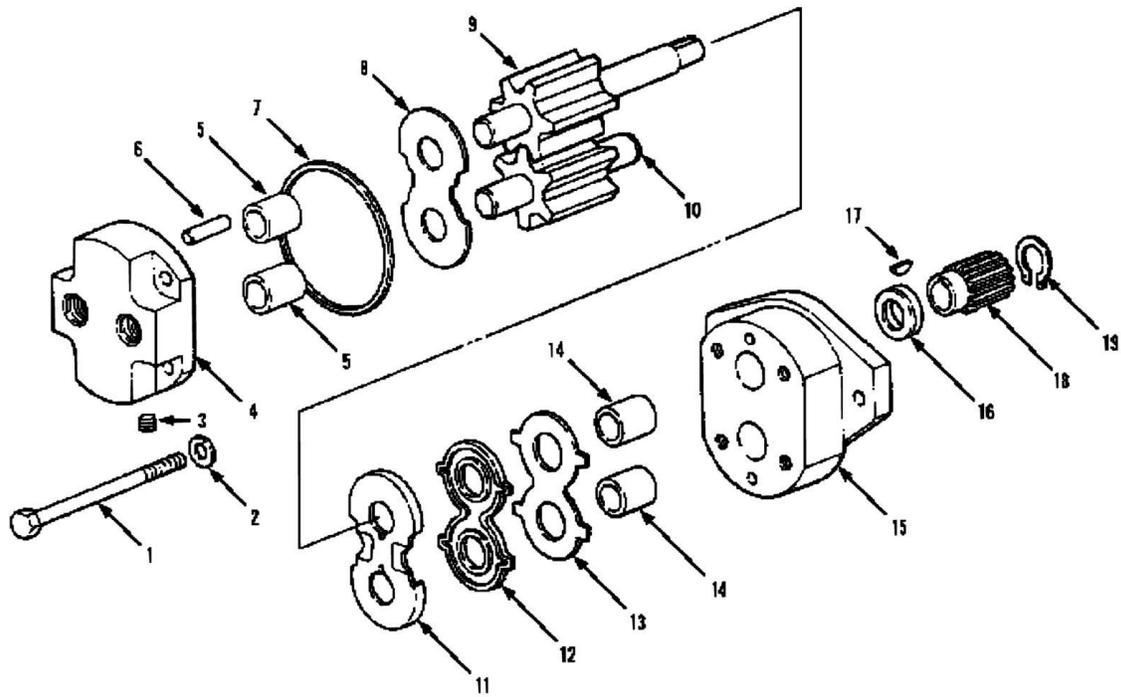
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-23. MAIN HYDRAULIC PUMP (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043175	1	MAIN HYDRAULIC PUMP ASSY (includes all items)	
1	90202372	1	SNAP RING	
2	90202371	1	SEAL	
3	91044211	1	FLANGE ASSY (includes item 4)	
4	91044212	2	BUSHING	
5	91044213	1	PLUG	
6	90202435	2	BALL	
7	90202376	6	DOWEL	
8	91044214	8	STUD	
9	90202383	8	O-RING	
10	90202379	1	O-RING	
11	90202404	4	BACK-UP RING	
12	90202403	4	O-RING	
13	90202405	4	RETAINING RING	
14	90202407	2	BOTTOM ISOLATION PLATE	
15	90202399	2	PRESSURE PLATE	
16	91044215	1	FRONT DRIVE GEAR	
17	91044216	1	FRONT IDLER GEAR	
18	90202402	1	SNAP RING	
19	91044217	1	FRONT GEAR BODY ASSY (includes item 20)	
20	91044212	2	BUSHING	
21	90202396	2	O-RING	
22	91044218	1	SPLINE COUPLING	
23	90202406	2	TOP ISOLATION PLATE	
24	90202419	1	BEARING PLATE ASSY (includes item 25)	
25	91044219	2	BUSHING	
26	91044220	2	PRESSURE PLATE	
27	90202416	1	REAR DRIVE GEAR	
28	90202415	1	REAR IDLER GEAR	
29	91044221	1	REAR GEAR BODY ASSY (includes item 30)	
30	91044219	2	BUSHING	
31	91044222	8	FLAT WASHER	
32	91044223	8	HEX NUT	

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FIGURE 9-24. PILOT PUMP (SN 8655105G to Present)



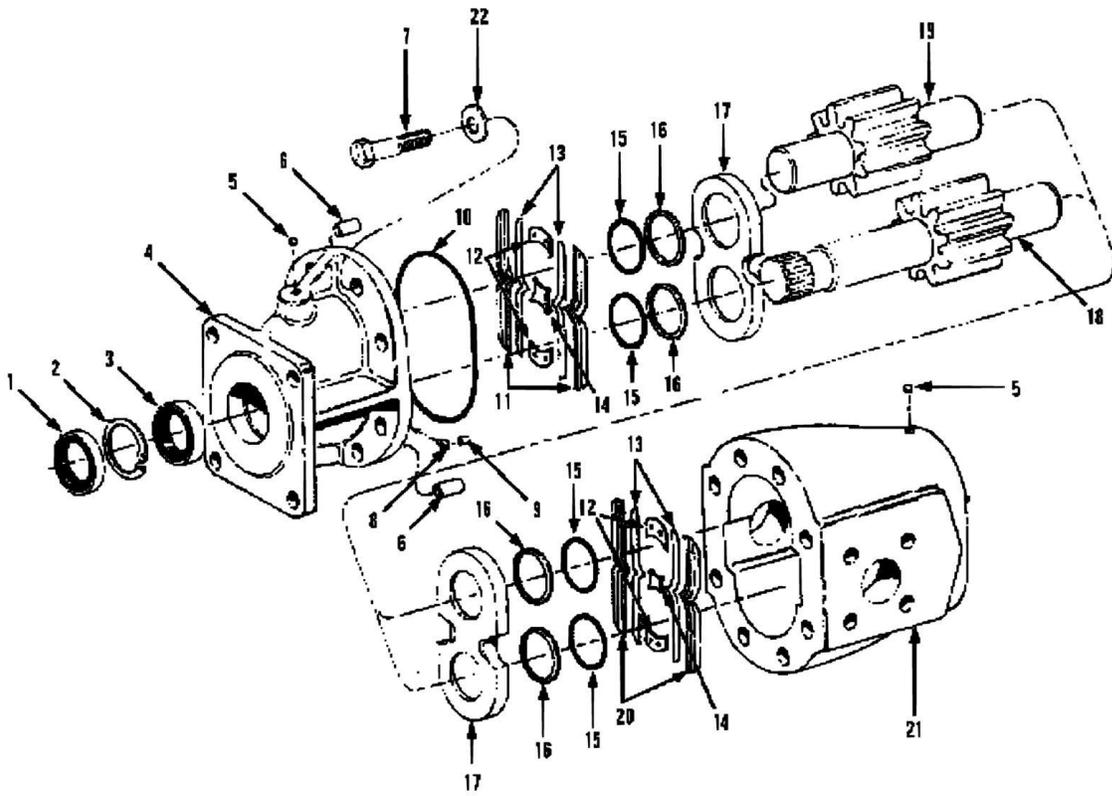
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-24. PILOT PUMP (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033122	1	PILOT PUMP ASSY (includes all items)	
	91034019	1	SEAL KIT (includes items 7, 12, 13, 16, 17)	
1	88201038	4	HEX HD CAPSCREW, 3/8-16X1-3/4, GR5 (lubricate and torque to 34-38 ft lbs)	
2	91034058	4	WASHER	
3	91034059	1	PIPE PLUG	
4	91034060	1	REAR COVER ASSY (includes item 5)	
5	91034061	2	SLEEVE BEARING	
6	91034062	2	DOWEL PIN	
7	Kit	1	SQUARE CUT RING	
8	91034063	1	THRUST PLATE (install with bronze side facing gear)	
9	91034064	1	DRIVE GEAR	
10	91034065	1	DRIVEN GEAR	
11	91034066	1	WEAR PLATE	
12	Kit	1	LOADING SEAL SPACER	
13	Kit	1	LOADING SEAL	
14	91034061	2	SLEEVE BEARING	
15	91034067	1	BODY ASSY (includes item 14)	
16	Kit	1	SHAFT SEAL	
17	Kit	1	WOODRUFF KEY	
18	91034068	1	DRIVE COUPLING	
19	91034069	1	EXTERNAL RETAINING RING	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-25. REAR DRIVE MOTOR (SN 8655105G to Present)



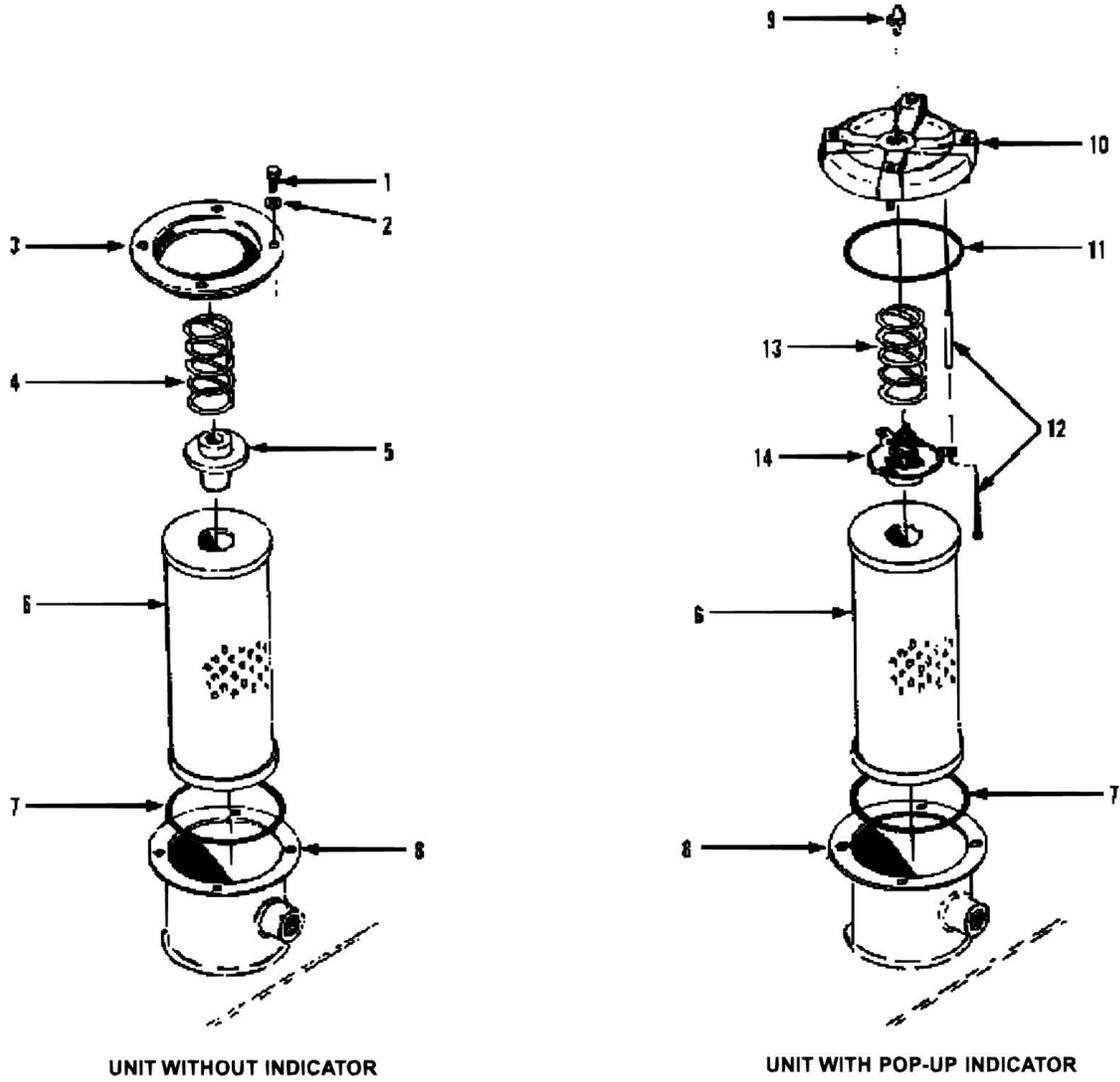
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FIGURE 9-25. REAR DRIVE MOTOR (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90206748	2	REAR DRIVE MOTOR ASSY (includes all items)	
1	90202371	1	OUTER SHAFT SEAL	
2	90202372	1	SNAP RING	
3	90205716	1	INNER SHAFT SEAL	
4	90208193	1	FLANGE (includes bushings)	
5	90202435	2	BALL	
6	90202376	2	DOWEL	
7	90027736	8	HEX HD CAPSCREW	
8	90202377	2	CHECK BALL	
9	90202378	2	BALL CHECK RETAINER	
10	90202379	1	O-RING	
11	90202390	2	TOP ISOLATION PLATE	
12	90202391	4	END SEPARATOR	
13	90202393	4	SEALING STRIP	
14	90202392	2	CENTER SEPARATOR	
15	90208194	4	O-RING	
16	90208195	4	BACK-UP RING	
17	90202382	2	PRESSURE PLATE	
18	90208196	1	DRIVE GEAR	
19	90208197	1	IDLER GEAR	
20	90202389	2	BOTTOM ISOLATION PLATE	
21	90208198	1	BODY (includes bushings)	
22	91044222	8	SPECIAL WASHER	

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FIGURE 9-26. OIL RESERVOIR FILTER (SN 8655105G to Present)



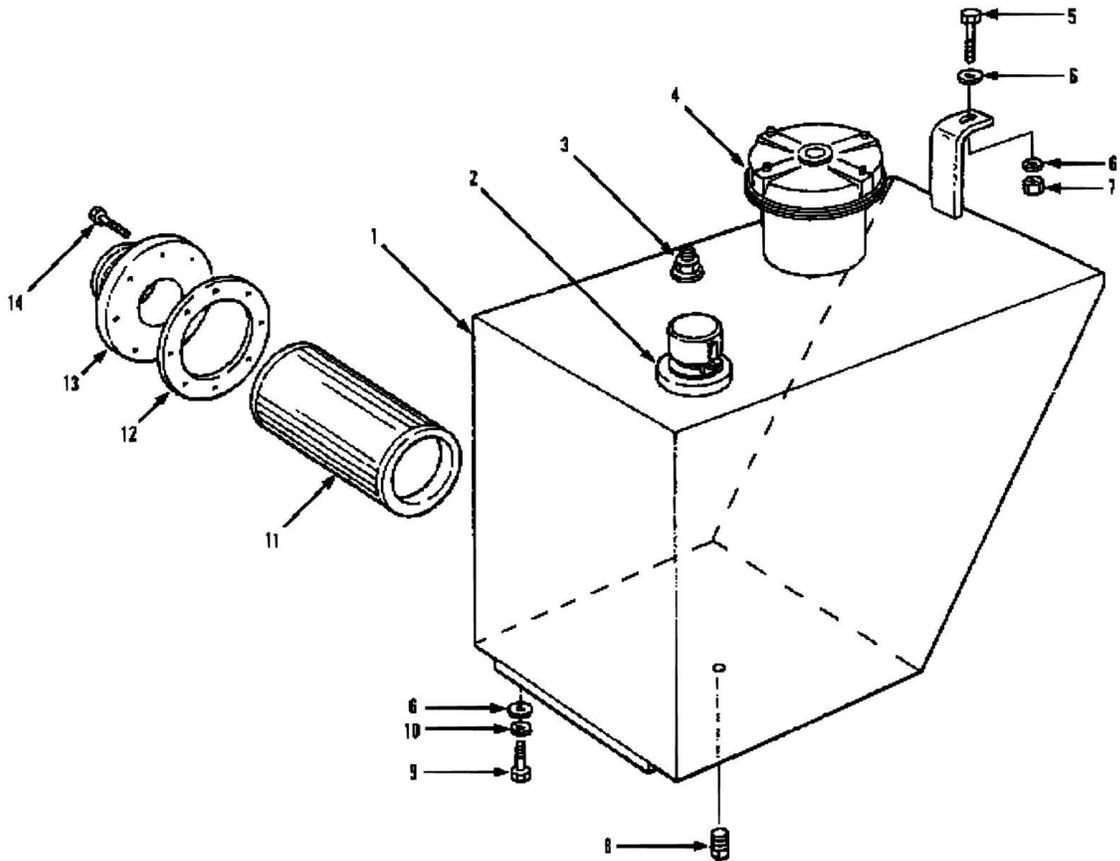
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-26. OIL RESERVOIR FILTER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88201018	4	HEX HD CAPSCREW, 5/16-18X3/4, GR5	
2	88551010	4	LOCKWASHER, 5/16	
3	90208200	1	CAP	
4	90208201	1	SPRING	
5	90208202	1	BYPASS VALVE	
6	91033318	1	ELEMENT	
7	90023246	1	O-RING	
8		Ref	BODY	
9	91034009	1	POP-UP INDICATOR	
10	91034007	1	CAP ASSY (includes items 11 & 12)	
11	91034329	1	O-RING	
12	91034330	4	BOLT	
13	91034010	1	SPRING	
14	91034008	1	BYPASS VALVE	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-27. HYDRAULIC OIL RESERVOIR (SN 8655105G to Present)



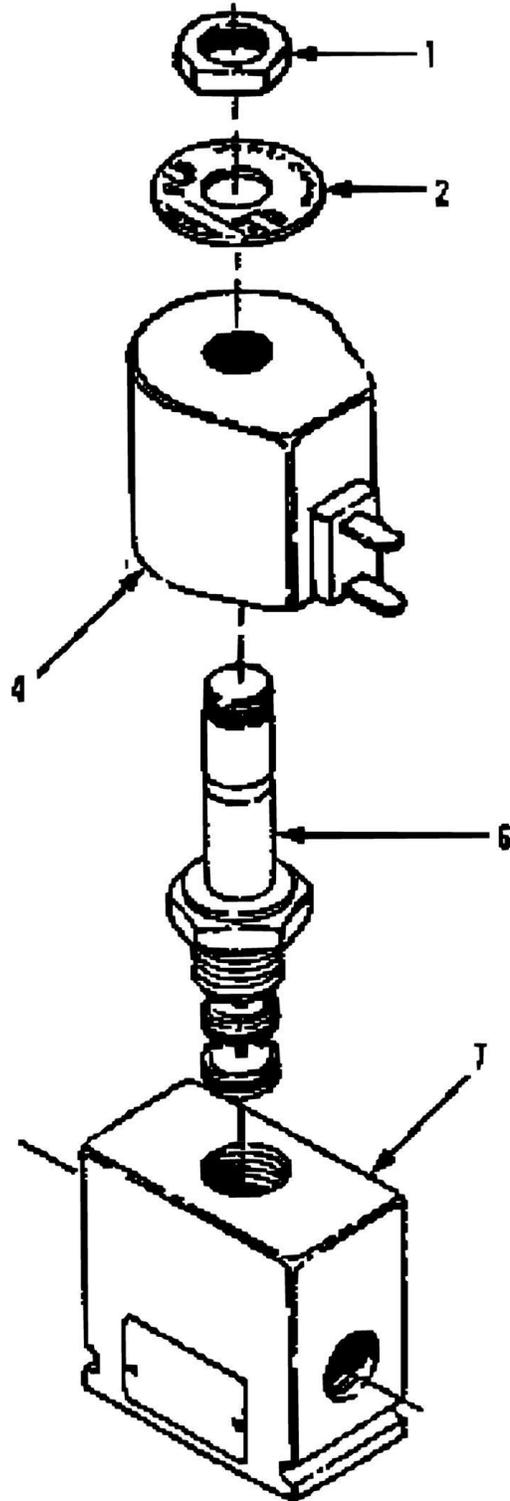
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-27. HYDRAULIC OIL RESERVOIR (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91036002	1	HYDRAULIC OIL TANK	
2	90205222	1	FILLER-BREATHER ASSY(includes gasket and mounting hardware)	
3	90403419	1	STANDPIPE WELDMENT	
4		Ref	OIL RESERVOIR FILER (See OIL RESERVOIR FILTER for Breakdown)	
5	88201070	1	HEX HD CAPSCREW, 1/2-13X2-1/4, GR5	
6	88561111	4	FLAT WASHER, 1/2	
7	88521208	1	HEX LOCKNUT, 1/2-13	
8	88711255	1	SQUARE HD PIPE PLUG, 1IN	
9	88201066	2	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
10	88551013	2	LOCK WASHER, 1/2	
11	90410295	1	SUCTION FILTER	
12	90410294	1	GASKET	
13	91036003	1	FLANGE WELDMENT	
14	88201035	8	HEX HD CAPSCREW, 3/8-16X1, GR5	

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FIGURE 9-28. SOLENOID VALVE (SN 8655105G to Present)



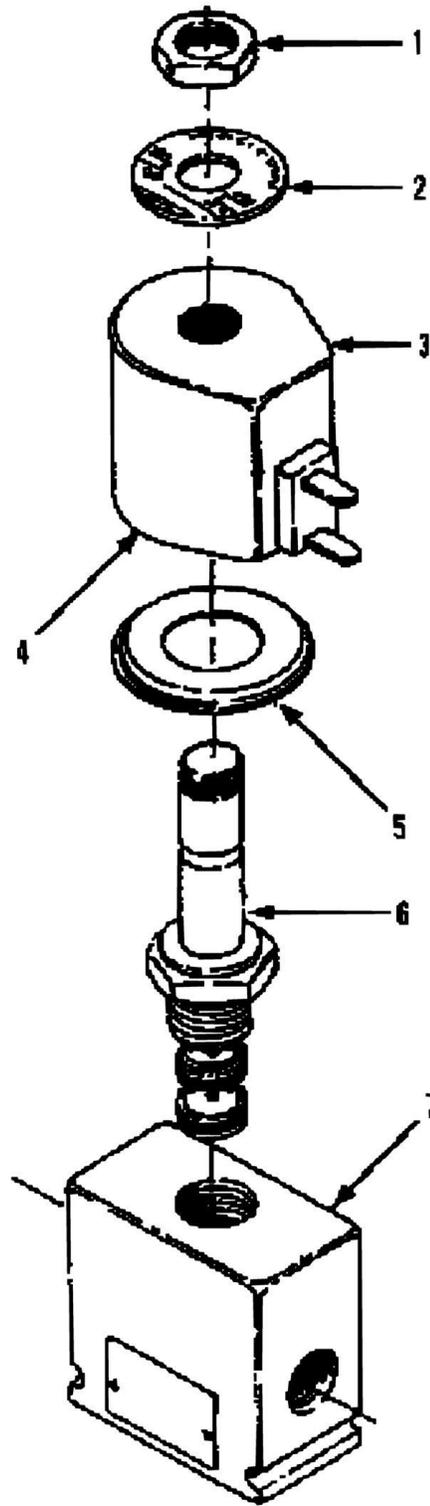
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-28. SOLENOID VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043108	1	SOLENOID VALVE ASSY, TWO-WAY, NORMALLY OPEN (includes all items)	
	91044002	1	SEAL KIT	
1	91044003	1	NUT	
2		Ref	NAME PLATE	
4	77384267	1	SOLENOID COIL	
6	91044004	1	VALVE ASSY	
7	77383338	1	VALVE BODY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-29. SOLENOID VALVE (SN 8655105G to Present)



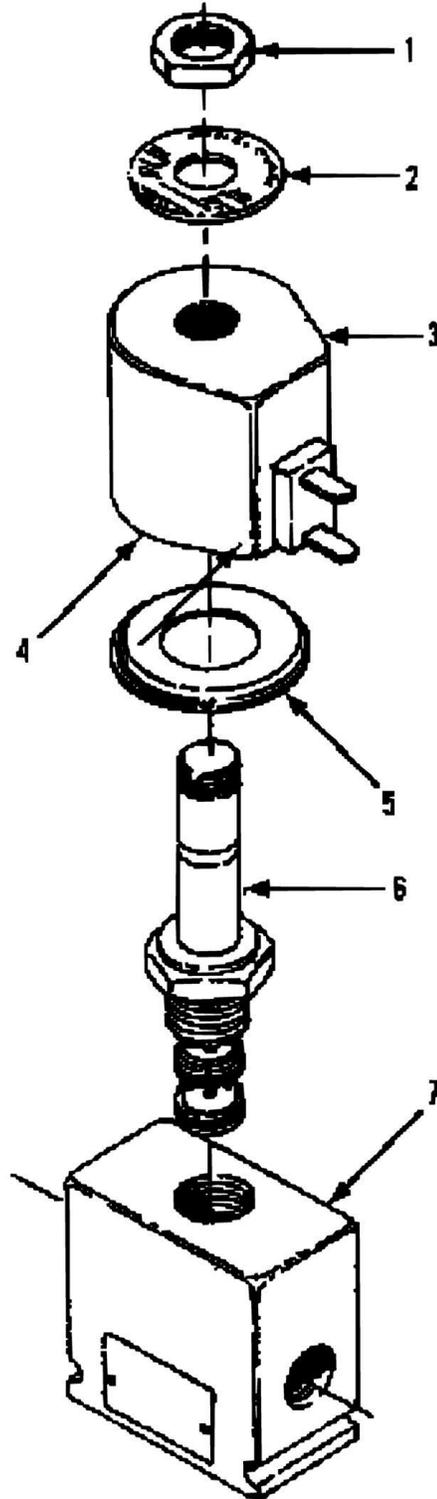
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-29. SOLENOID VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043108	1	SOLENOID VALVE ASSY, TWO-WAY, NORMALLY OPEN (includes all items)	
	91044002	1	SEAL KIT	
1	91044003	1	NUT	
2		Ref	NAME PLATE	
3	90208068	1	COIL HOUSING	
4	77384267	1	SOLENOID COIL	
5	90208070	1	COVER PLATE	
6	91044004	1	VALVE ASSY	
7	77383338	1	VALVE BODY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-30. SOLENOID VALVE (SN 8655105G to Present)



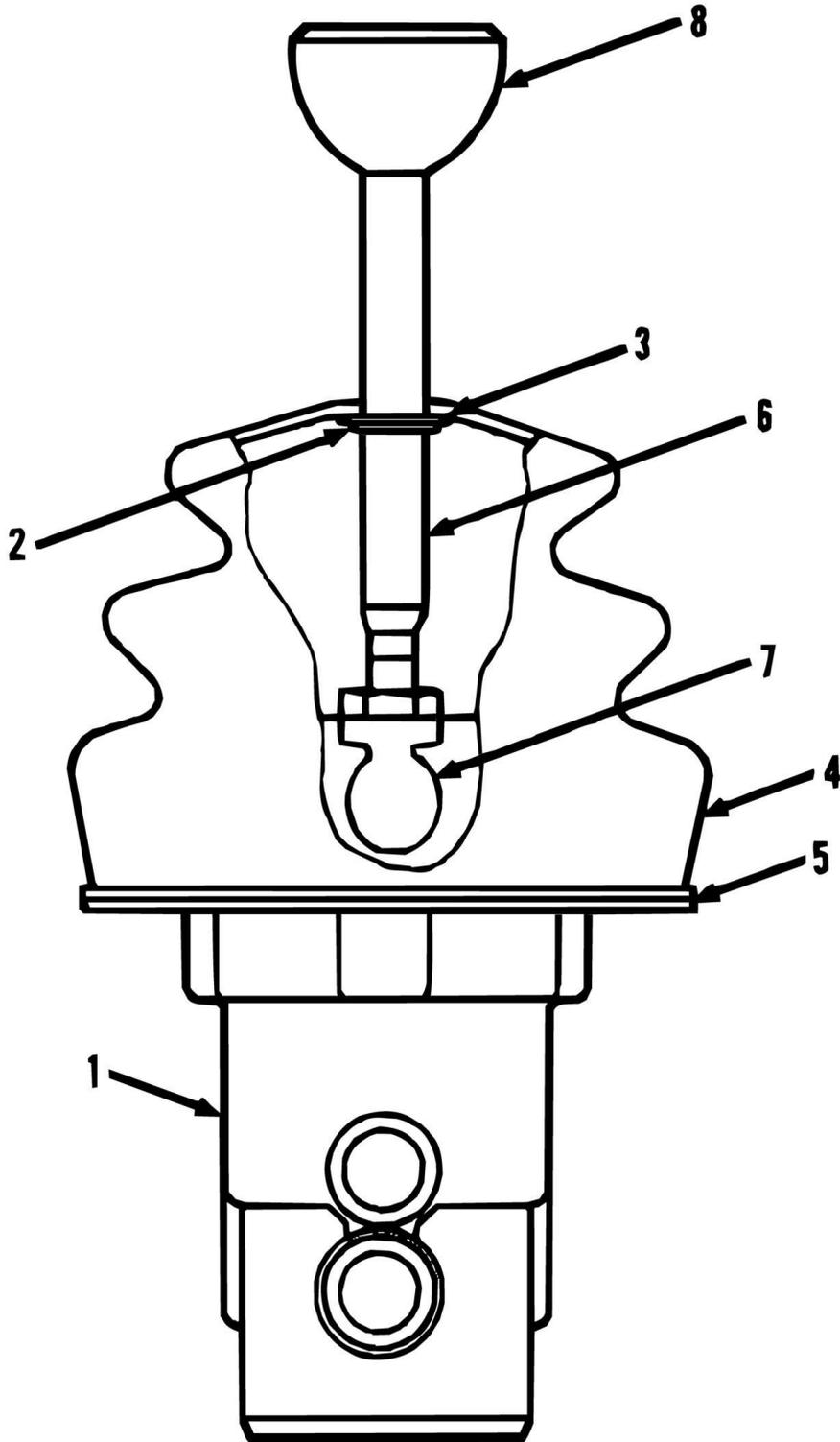
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FIGURE 9-30. SOLENOID VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043107	1	SOLENOID VALVE ASSY, TWO-WAY, NORMALLY CLOSED (includes all items)	
	91044005	1	SEAL KIT	
1	90208066	1	NUT	
2		Ref	NAME PLATE	
3	90208068	1	COIL HOUSING	
4	77384267	1	SOLENOID COIL	
5	90208070	1	COVER PLATE	
6	91044006	1	VALVE ASSY	
7	91044007	1	VALVE BODY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 9-31. HYDRAULIC CONTROLLER (SN 8655105G to Present)



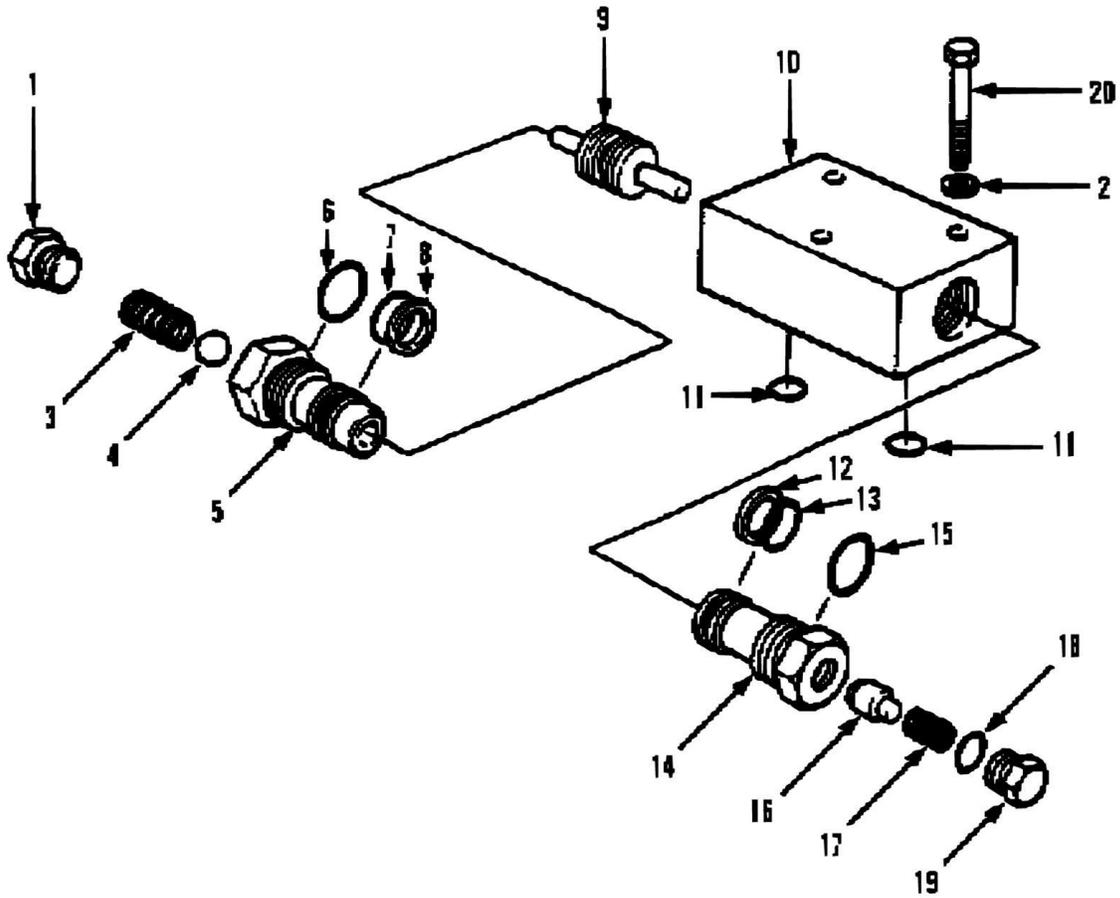
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-31. HYDRAULIC CONTROLLER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043064	1	HYDRAULIC CONTROLER ASSY (includes all items)	
	99007524	4	PLUNGER SEAL KIT (includes one each of the following; u-cup, o-ring seal, retainer and o-ring)	
1	91044131	1	HYDRAULIC CONTROLLER	
2	91044132	1	RETAINING RING	
3	91044133	1	WASHER	
4	91044134	1	BOOT	
5	91044135	1	RETAINER	
6	91044136	1	HANDLE ASSY (includes knob, handle rod and hex jam nut) (lubricate and tighten jam nut to 12-15 ft lbs)	
7	91044474	1	BALL ASSY (includes ball pivot race, ball pivot, cam plate, handle adapter and top mounting plate)	
8	91044525	1	KNOB	

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FIGURE 9-32. DUAL P.O. CHECK VALVE (SN 8655105G to Present)



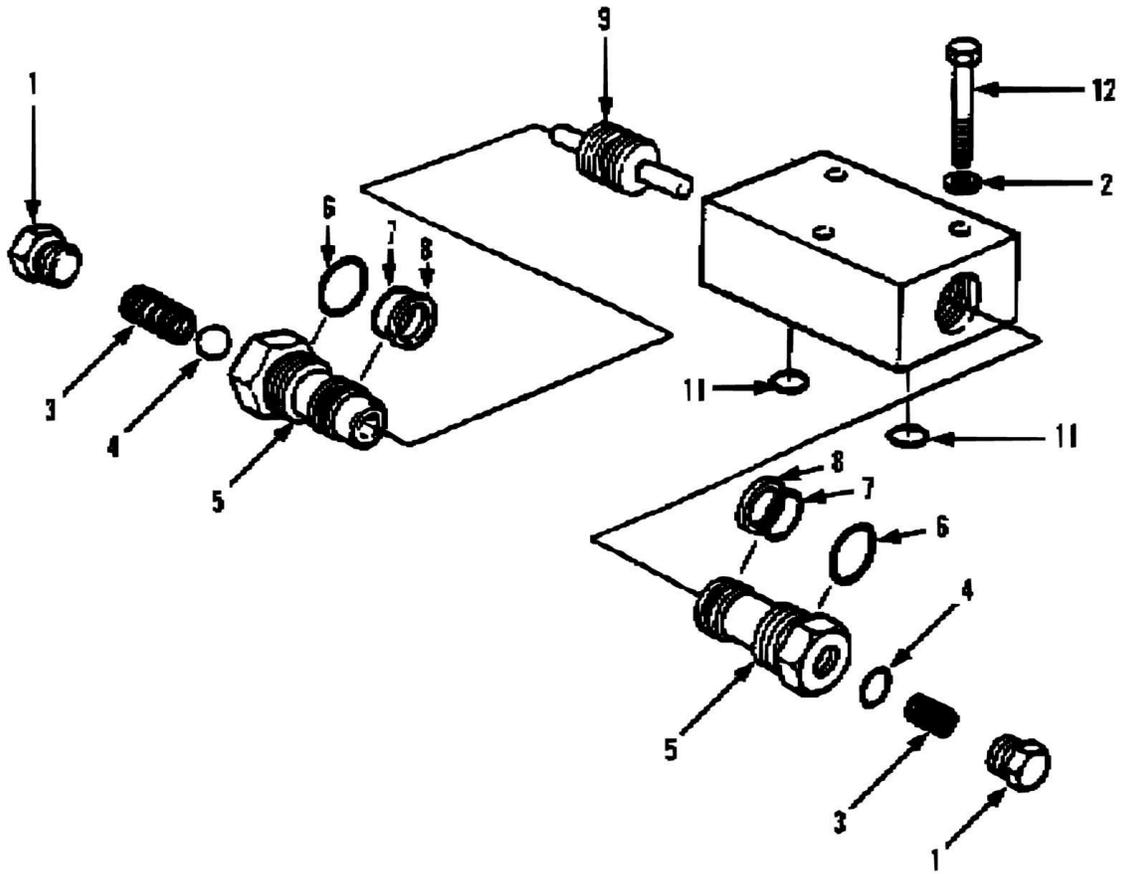
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-32. DUAL P.O. CHECK VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043258		DUAL P.O. CHECK VALVE ASSY (includes all items except items 2 & 20)	
	91044304		CHECK CARTRIDGE ASSY (includes items 1, 3, 4, 5, 6, 7, 8)	
	91034107		CHECK CARTRIDGE ASSY W/THERMAL RELIEF (includes items 12 thru 19)	
1	91044308	1	PLUG	
2	88551011	3	LOCKWASHER, 3/8	
3	91044309	1	SPRING	
4	91034111	1	BALL	
5	91034112	1	CARTRIDGE BODY	
6	91044305	1	O-RING	
7	91044306	1	O-RING	
8	91044307	1	BACK-UP RING	
9	91034116	1	PISTON	
10	91034117	1	BODY	
11	91034118	2	O-RING	
12	91034115	1	BACK-UP RING	
13	91034114	1	O-RING	
14	91034112	1	CARTRIDGE BODY	
15	91034113	1	O-RING	
16	91034119	1	THERMAL RELIEF ASSY	
17	91034120	1	SPRING	
18	91034109	1	O-RING	
19	91034121	1	PLUG	
20	88201040	3	HEX HD CAPSCREW, 3/8-16X2-1/4, GR5	
21	88551011	3	LOCKWASHER, 3/8	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-33. DUAL P.O. CHECK VALVE (SN 8655105G to Present)



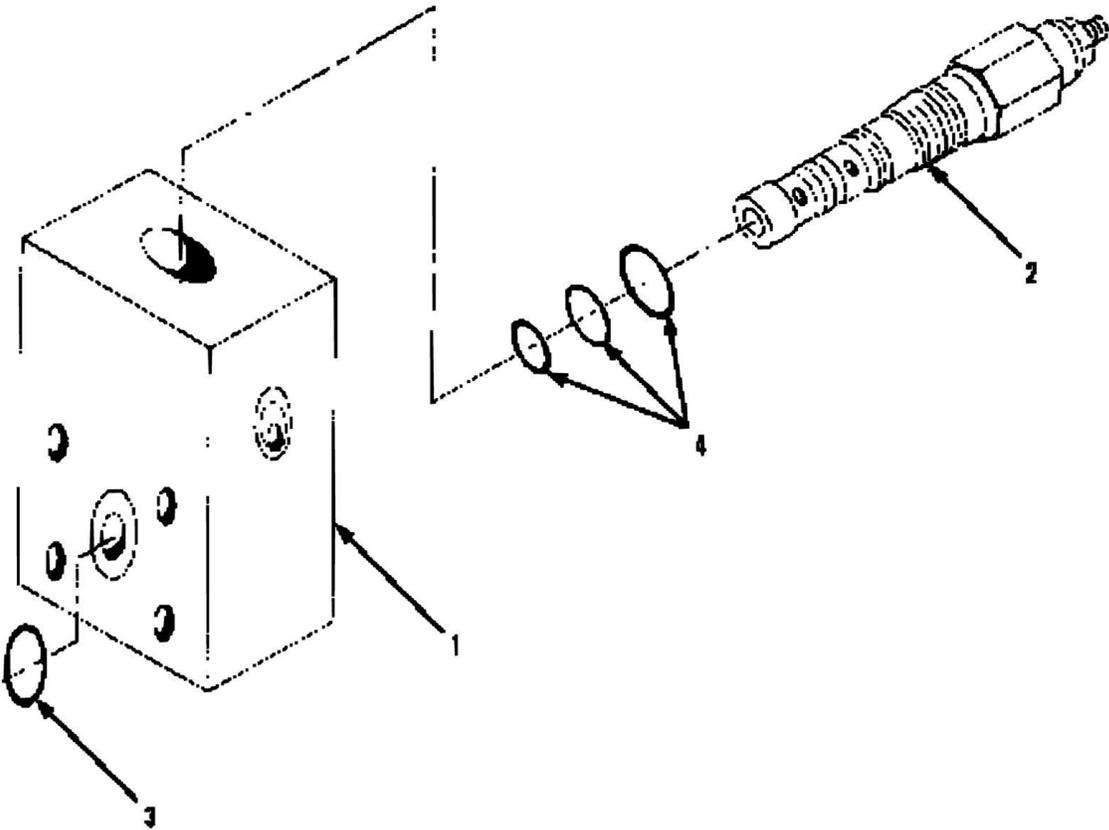
SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-33. DUAL P.O. CHECK VALVE (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91053354	2	DUAL P.O. CHECK VALVE ASSY (includes all items except items 2 & 12)	
1	91034272	1	PLUG	
2	88551011	3	LOCKWASHER, 3/8	
3	91034110	1	SPRING	
4	91034111	1	BALL	
5	91034112	1	CARTRIDGE BODY	
6	91034113	1	O-RING	
7	91034114	1	O-RING	
8	91034115	1	BACK-UP RING	
9	91034116	1	PISTON	
10	91034117	1	BODY	
11	91034273	2	O-RING	
12	88201041	3	HEX HD CAPSCREW, 3/8-16x2-1/2, GR5	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 9 - HYDRAULIC COMPONENTS

FIGURE 9-34. COUNTERBALANCE CONTROL VALVE (SN 0155220 to Present)



SECTION 9 - HYDRAULIC COMPONENTS

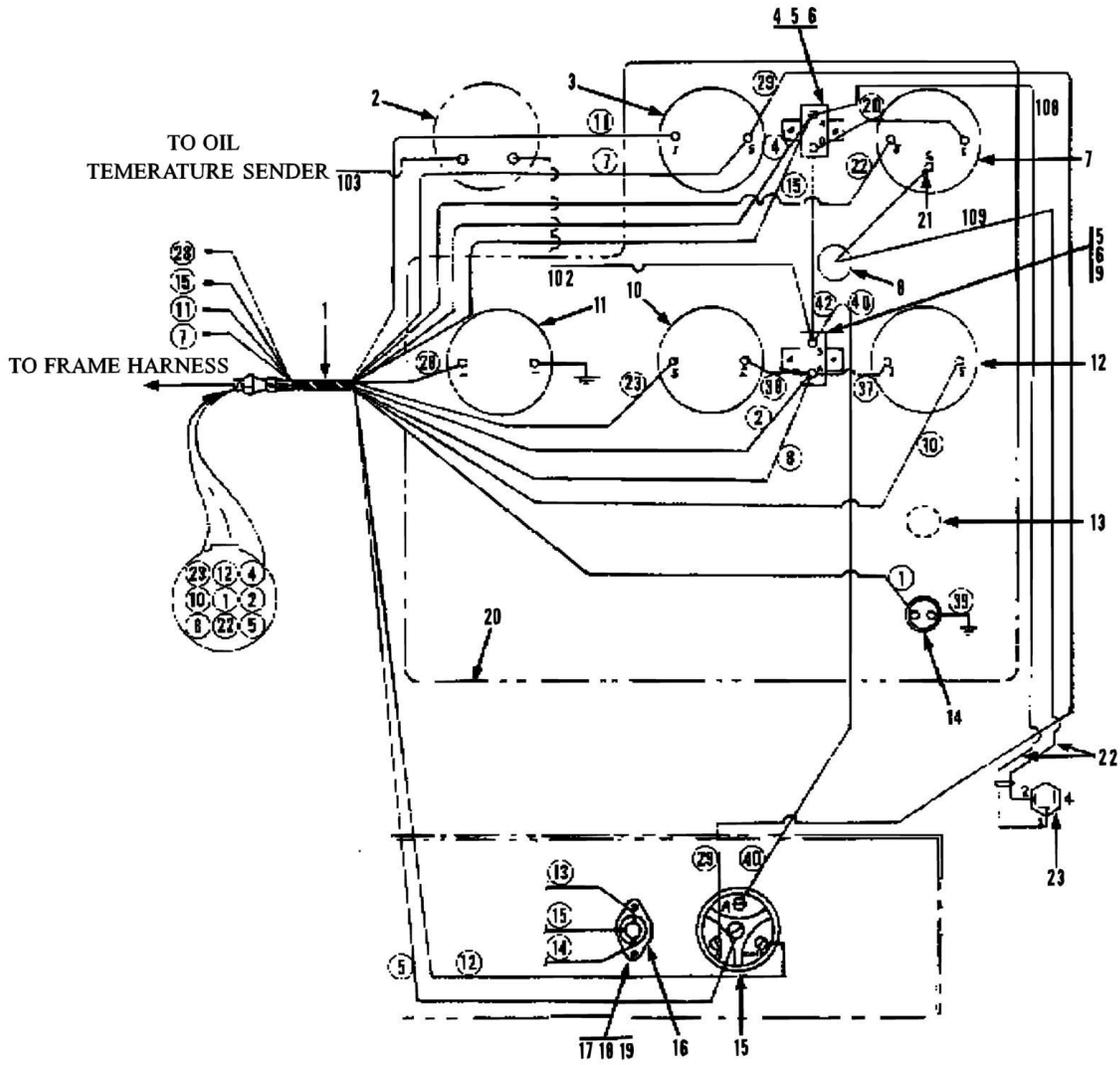
FIGURE 9-34. COUNTERBALANCE CONTROL VALVE (SN 0155220 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91043232	1	COUNTERBALANCE VALVE	
2	91043245	1	LOAD CONTROL VALVE	
3	88591102	1	O-RING	
4	91034276	1	SEAL KIT	

SECTION 10 - ELECTRICAL

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FIGURE 10-1. (91035068) INSTRUMENT PANEL AND WIRING HARNESS (SN 8655105G to Present)



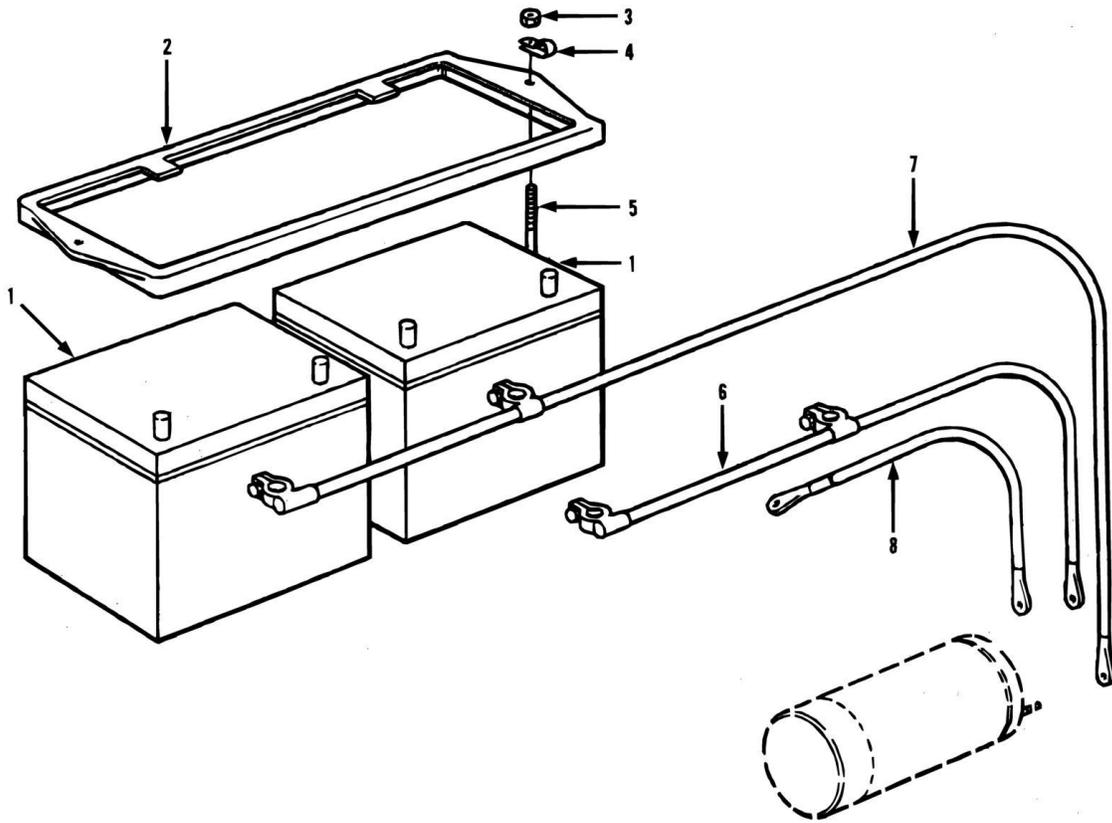
SECTION 10 - ELECTRICAL

FIGURE 10-1. (91035068) INSTRUMENT PANEL AND WIRING HARNESS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035068	1	INSTRUMENT PANEL ASSY (includes all items except items 2,8,15 thru 19, 22, 23)	
1	91033112	1	DASH WIRING HARNESS	
2	91033282	1	TRANSMISSION TEMPERATURE GAUGE	
3	90205685	1	AMMETER	
4	91033111	1	CIRCUIT BREAKER, 10 AMP	
5	88501613	4	HEX NUT, #10-32	
6	88554917	4	LOCK WASHER, #10	
7	90205686	1	FUEL GAUGE	
8	91033084	1	BRAKE WARNING LIGHT	
9	90200506	1	CIRCUIT BREAKER, 30 AMP	
10	90205687	1	WATER TEMPERATURE GAUGE	
11	90205688	1	HOURMETER	
12	90205690	1	OIL PRESSURE GAUGE	
13	86661083	1	PLUG BUTTON	
14	90200434	1	HORN BUTTON	
15	91033317	1	IGNITION/START SWITCH	
16	91053378	1	DIODE ASSY	
17	88301052	2	ROUND HD MACHINE SCREW, #6-32x 3/8	
18	88551005	2	LOCK WASHER, #6	
19	88501608	2	HEX NUT, #6-32	
20	91031102	1	INSTRUMENT PANEL	
21	83483075	1	EYELET TERMINAL	
22	91045033	1	BRAKE LIGHT HARNESS	
23	91043077	1	PRESSURE SWITCH	

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FIGURE 10-2. BATTERIES AND CABLES (SN 8655105G to Present)



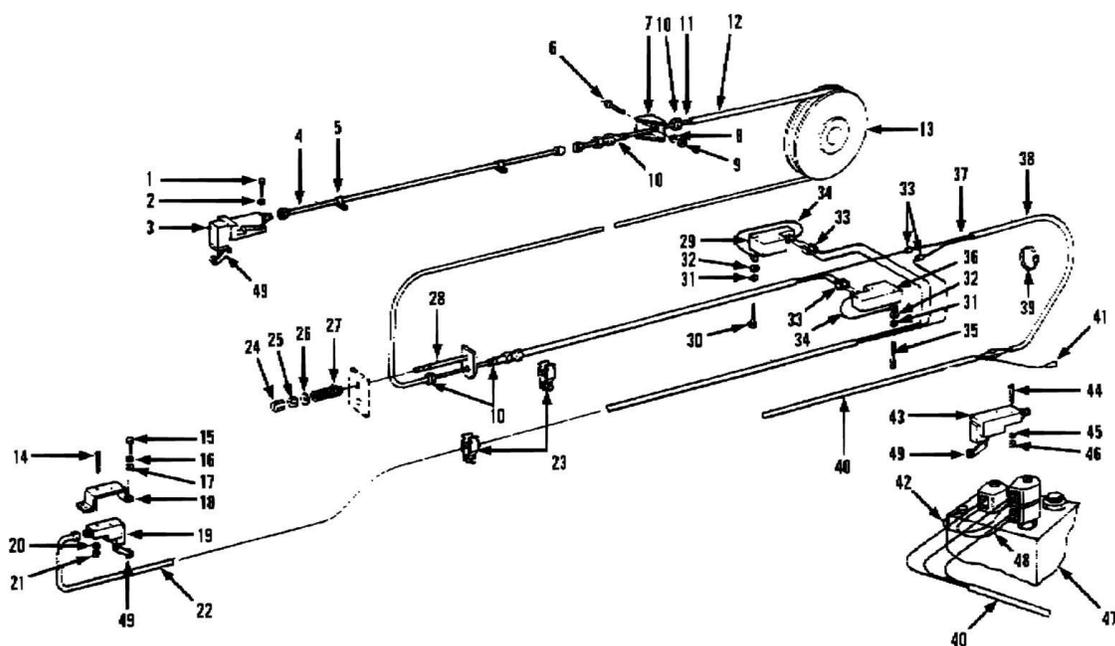
SECTION 10 - ELECTRICAL

FIGURE 10-2. BATTERIES AND CABLES (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90203359	2	BATTERY (12 volts, 590 amps), TOP STUD, BCI GROUP 27	
2	90403432	1	BATTERY HOLD DOWN	
3	77143006	2	LOCK NUT	
4	85841094	1	SUPPORT CLAMP	
5	90200382	2	HOLD DOWN STUD	
6	91033042	1	NEGATIVE BATTERY CABLE	
7	91033086	1	POSITIVE BATTERY CABLE	
8	90200811	1	GROUND CABLE	

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FIGURE 10-3. BOOM SECTION WIRING (SN 8655105G to Present)



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FIGURE 10-3. BOOM SECTION WIRING (SN 8655105G to Present)

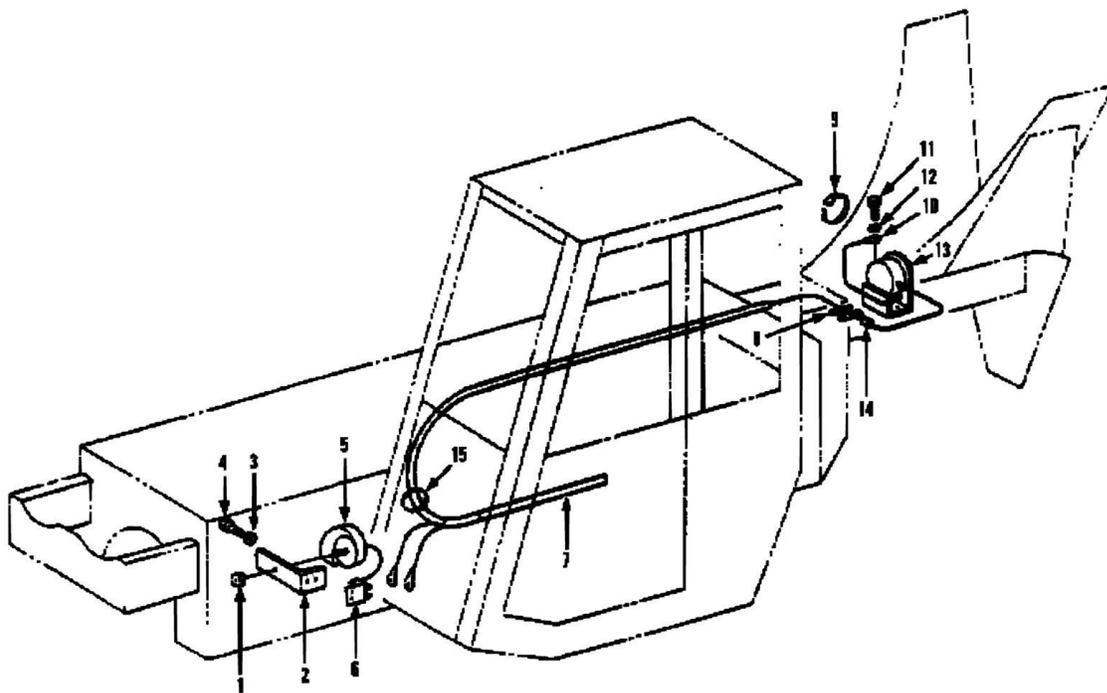
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88301099	2	ROUND HEAD MACHINE SCREW, #10-24X1-3/4	
2	88551007	2	LOCKWASHER, #10	
3	91043061	1	SWITCH (includes item 49)	
4	91043118	1	WIRING HARNESS ASSY	
5	85941016	2	SUPPORT CLAMP	
6	88201004	2	HEX HD CAPSCREW, 1/4-20X7/8, GR5	
7	91046001	1	HOSE SUPPORT	
8	88551009	2	LOCKWASHER, 1/4	
9	88501004	2	HEX NUT, 1/4-20	
10	91043161	2	NYLON TUBE FITTING, 3/4X1/2	
11	91043119	1	WIRING HARNESS ASSY	
12		Ref	NYLON TUBE, 3/4 O.D.	
13		Ref	PUSH BEAM AND CABLES (See BOOMS SECTION for Breakdown)	
14	88301099	2	ROUND HD MACHINE SCREW, #10-24X1-3/4	
15	88201004	4	HEX HD CAPSCREW, 1/4-20X7/8, GR5	
16	88551009	4	LOCKWASHER, 1/4	
17	88561107	4	FLAT WASHER, 1/4	
18	91046002	1	SWITCH COVER	
19	91043061	1	SWITCH (includes item 49)	
20	88551007	2	LOCKWASHER, #10	
21	88501612	2	HEX NUT, #10-24	
22	91043117	1	WIRING HARNESS ASSY	
23	91043120	6	CUSHION CLAMP	
24	88501108	1	HEAVY HEX JAM NUT, 1/2-13	
25	88501008	1	NEX NUT, 1/2-13	
26	90207041	1	SPRING RETAINER	
27	90200313	1	SPRING	
28	91046007	1	HOSE TAKE-UP WELDMENT	
29		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
30	88201010	2	HEX HD CAPSCREW, 1/4-20X2-1/4, GR5	
31	88551009	4	LOCKWASHER, 1/4	
32	88561107	6	FLAT WASHER, 1/4	
33	90028959	4	FEMALE TERMINAL	
34	91041014	2	JUMPER WIRE	
35	88201008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	
36		Ref	SOLENOID VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
37	91043122	1	WIRING HARNESS ASSY	
38		Ref	SPLIT WIRE LOOM, 1/2 I.D.	
39	86683122	1	TY-RAP	
40	91033079	1	WIRING HARNESS ASSY	
41	90028960	1	MALE TERMINAL	
42	91041554	1	JUMPER WIRE	
43	91043123	1	SWITCH (includes item 49)	
44	88301099	2	ROUND HD MACHINE SCREW, #10-24X1-3/4	
45	88551007	2	LOCKWASHER, #10	
46	91043199	2	SQUARE NUT, #10-24	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47		Ref	SERIES PARALLEL CONTROL VALVE (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
48	91045035	1	JUMPER WIRE	
49	91044475	3	LEVER/ROLLER ASSY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 10-4. MISCELLANEOUS ELECTRICAL COMPONENTS (SN 8655105G to Present)



SECTION 10 - ELECTRICAL

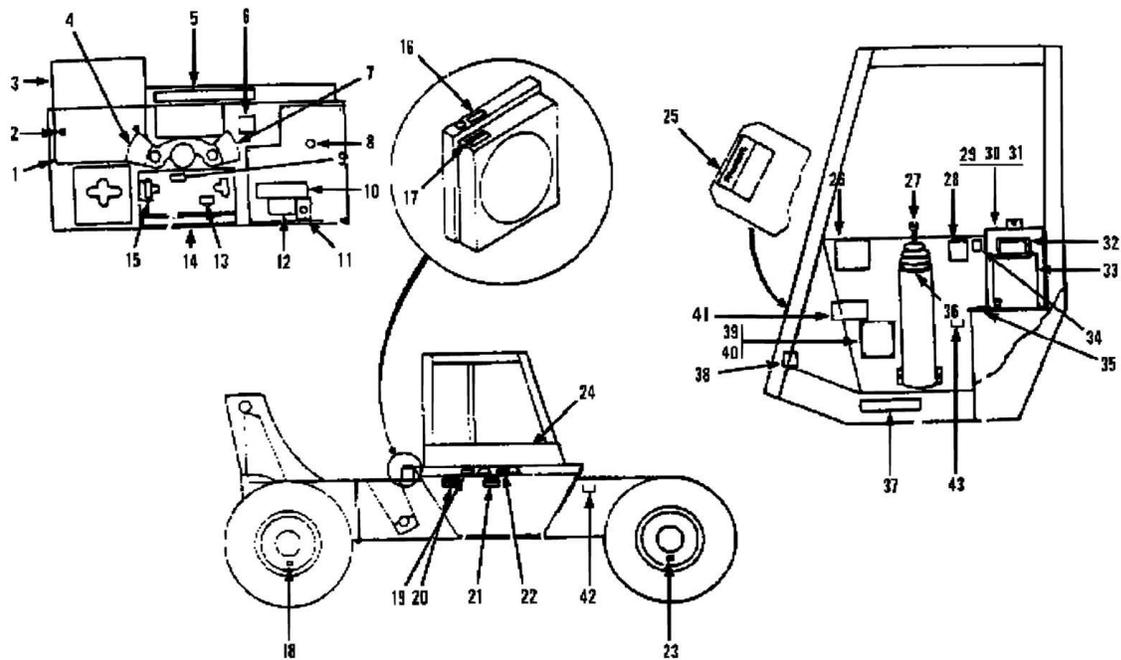
FIGURE 10-4. MISCELLANEOUS ELIECTRICAL COMPONENTS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	24921395	1	HORN NUT	
2	24921394	1	HORN BRACKET	
3	88551009	2	LOCKWASHER, 1/4	
4	88201003	2	HEX HD CPASCREW, 1/4-20X3/4, GR5	
5	24921393	1	HORN	
6	86661084	1	HORN RELAY	
7		Ref	WIRE HARNESS ASSY (See ENGINE AND ATTACHING PARTS SECTION AND BOOM SECTION WIRING for Breakdown)	
8	83683181	2	TY-RAP BASE	
9	90027187	2	TY-RAP	
10	86883260	1	RING TERMINAL	
11	88201018	2	HEX HD CAPSCREW, 5/16-18X3/4, GR5	
12	88551010	2	LOCKWASHER, 5/16	
13	77223003	1	TRAVEL ALARM	
14	86683480	1	BUTT CONNECTOR	
15	91043228	1	GROMMET	

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FIGURE 11-1. FRAME DECALS (SN 8655105G to Present)



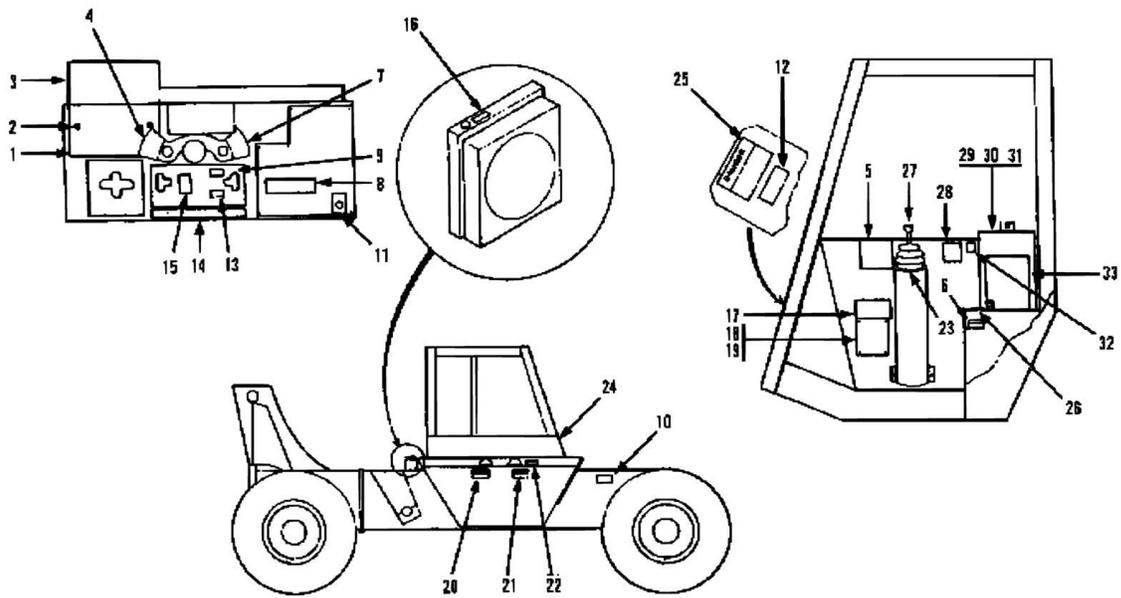
SECTION 11 - MISCELLANEOUS

FIGURE 11-1. FRAME DECALS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90207488	1	MOUNTING PLATE	
2	88302128	2	ROUND HD MACHINE SCREW, 1/4-20X1	
3	91043033	1	LIFT CAPACITY DECAL	
4	91003040	1	FORWARD-REVERSE DECAL	
5	91033014	1	SAFETY WARNING DECAL	
6	91003041	1	TRANSMISSION TEMPERATURE DECAL	
7	91003039	1	SHIFT DECAL	
8	91043128	1	BRAKE LIGHT DECAL	
9	91043171	1	SWING FORK DECAL, RIGHT (Used on Machines with Swing Forks)	
10	91033157	1	ENGINE CAUTION DECAL	
11	91033089	1	HORN DECAL	
12	91033175	1	ENGINE CAUTION DECAL	
13	91043172	1	SWING FORK DECAL, LEFT (Used on Machines with Swing Forks)	
14	91033024	1	HUB LOCKOUT DECAL	
15	91033090	1	WINCH DECAL (used on machines with winch and truss Boom)	
16	91033011	1	HANDS WARNING DECAL	
17	91003032	1	COOLANT DECAL	
18	91033009	2	TIRE PRESSURE DECAL	
19	77023008	1	DIESEL FUEL DECAL	
20	91003052	1	WARNING DECAL	
21	91003051	1	WARNING DECAL	
22	77023006	1	HYDRAULIC OIL DECAL	
23	91043170	2	TIRE PRESSURE DECAL, 65 PSI	
24	83641675	1	GRADALL DECAL, WHITE	
24	83641674	1	GRADALL DECAL, BLUE	
25	83601011	1	DANGER DECAL	
26	91043130	1	WARNING DECAL	
27	91003044	1	BOOM OPERATING DECAL	
28	91043169	1	SWING FORK LOAD CHART	
29	91033102	1	MANUAL HOLDER	
30	88301193	4	ROUND HD MACHINE SCREW, #10-32X1/2	
31	88554900	4	INTERNAL TOOTH WASHER	
32	91033103	1	SAFETY WARNING DECAL	
33	91043141	1	SERVICE DECAL	
34	91043173	1	SWING FORK CAUTION DECAL (used on machines with swing forks)	
35	91043129	1	PARKING BRAKE DECAL	
36	90206194	1	TRIM, 17IN LONG	
37	91003036	1	OPERATOR PROTECTION DECAL	
38	77023003	1	CLIMBING DECAL	
39	88343901	4	DRIVE SCREW, #10x1/2	
40	91043184	1	SERIAL NO. AND ATTACHMENT PLATE	
41	91003030	1	PATENT DECAL	
42	77023007	1	INSTRUCTION STICKER	
43	77333027	1	MADE IN U.S.A. DECAL	

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FIGURE 11-2. FRAME DECALS (SN 0155253 to Present)



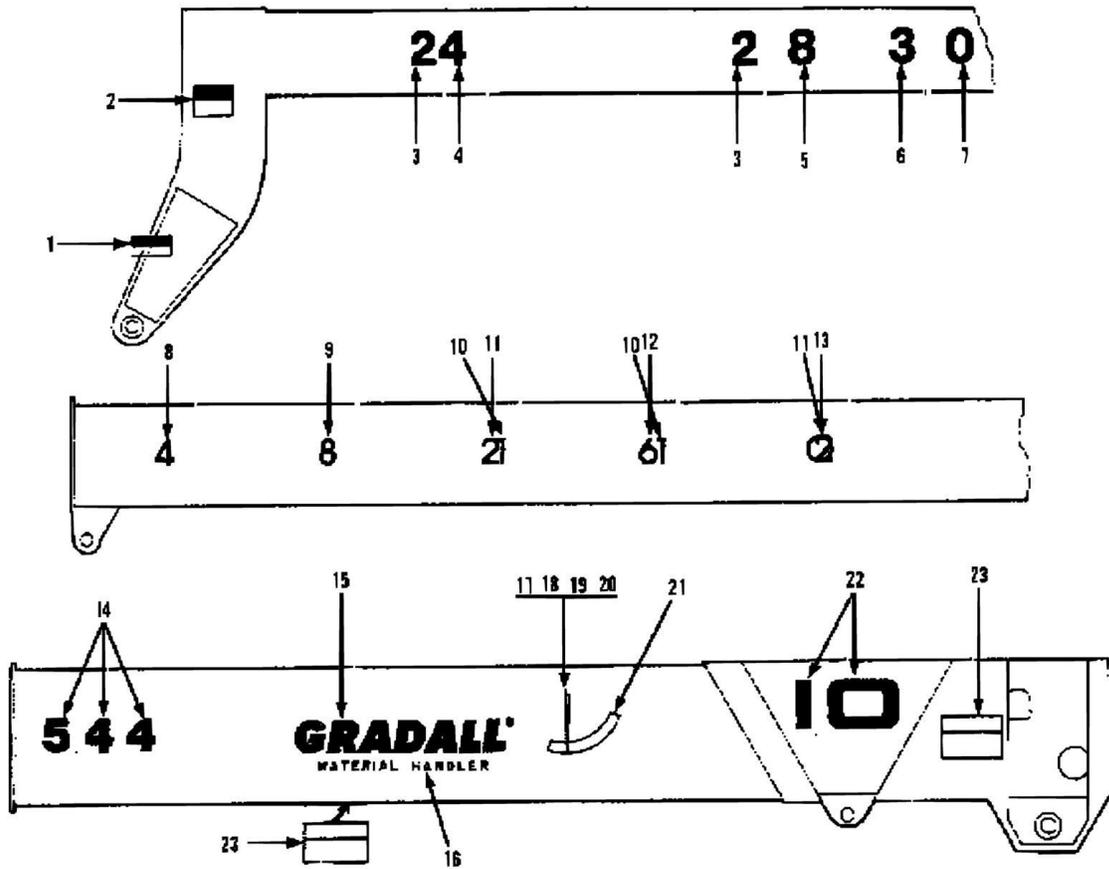
SECTION 11 - MISCELLANEOUS

FIGURE 11-2. FRAME DECALS (SN 0155253 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90207488	1	MOUNTING PLATE	
2	88302128	2	ROUND HD MACHINE SCREW, 1/4-20X1	
3	91043033	1	LIFT CAPACITY DECAL	
4	91003040	1	FORWARD-REVERSE DECAL	
5	91063047	1	WARNING DECAL	
6	77333027	1	MADE IN U.S.A. DECAL	
7	91003039	1	SHIFT DECAL	
8	91033362	1	CAUTION DECAL	
9	91043171	1	SWING FORK DECAL, LEFT (Used on Machines with Swing Forks)	
10	77023007	1	BATTERY INSTRUCTION STICKER	
11	91033089	1	HORN DECAL	
12	91043215	1	WARNING DECAL	
13	91043172	1	SWING FORK DECAL, RIGHT (Used on Machines with Swing Forks)	
14	91033024	1	HUB LOCKOUT DECAL	
15	91033090	1	WINCH DECAL (Used on Machines with Winch and Truss Boom)	
16	91033011	1	HANDS WARNING DECAL	
17	91003030	1	PATENT DECAL	
18	91043184	1	SERIAL NO. AND ATTACHMENT PLATE	
19	88343901	4	DRIVE SCREW, #10x1/2	
20	91003052	1	WARNING DECAL	
21	91003051	1	WARNING DECAL	
22	77023006	1	HYDRAULIC OIL DECAL	
23	90206194	1	TRIM, 17IN LONG	
24	83641675	1	GRADALL DECAL, WHITE	
24	77333011	1	GRADALL DECAL, BLACK	
25	83601011	1	DANGER DECAL	
26	91043129	1	PARKING BRAKE DECAL	
27	91003044	1	BOOM OPERATING DECAL	
28	91043169	1	SWING FORK LOAD CHART	
29	91033102	1	MANUAL HOLDER	
30	88301193	4	ROUND HD MACHINE SCREW, #10-32X1/2	
31	88554900	4	INTERNAL TOOTH WASHER	
32	91043173	1	SWING FORK CAUTION DECAL (Used on Machines with Swing Forks)	
33	91043141	1	SERVICE DECAL	

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FIGURE 11-3. BOOM DECALS (SN 8655105G to Present)



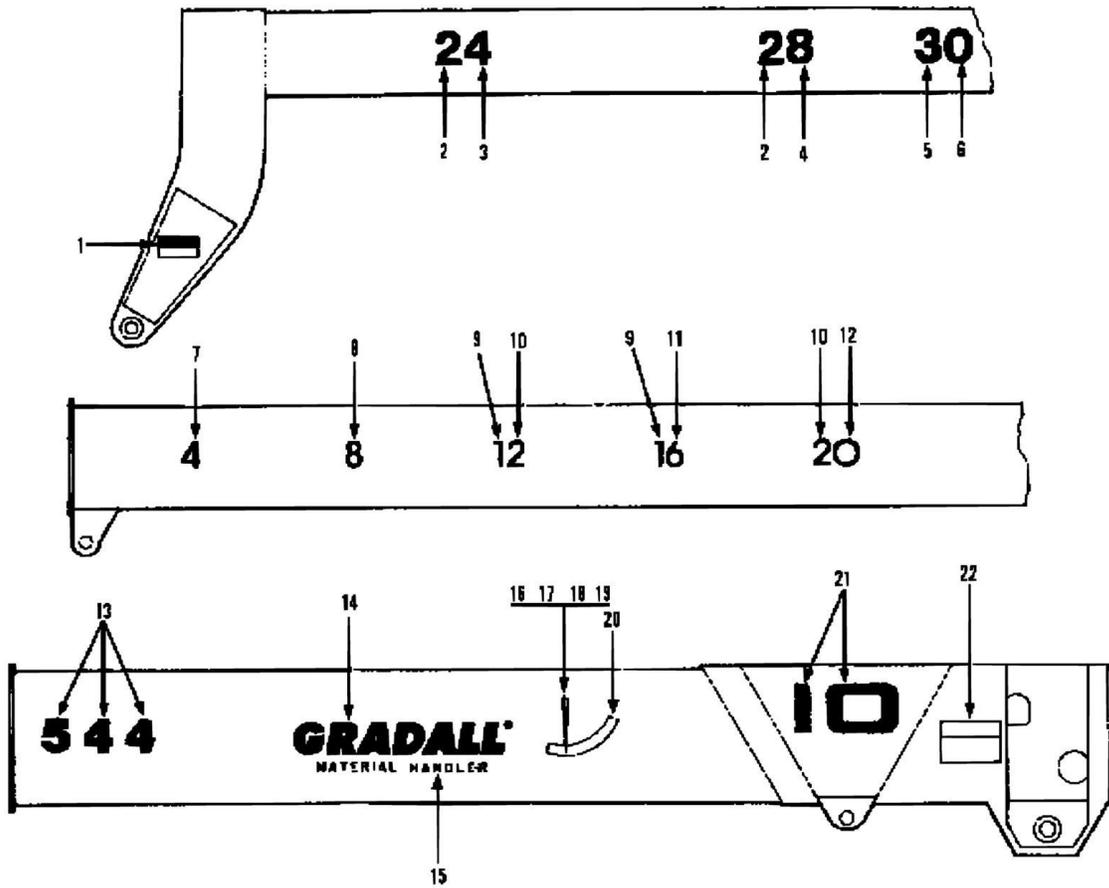
SECTION 11 - MISCELLANEOUS

FIGURE 11-3. BOOM DECALS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91033023	1	WARNING DECAL	
2	83601011	1	DANGER DECAL	
3	91043042	2	"2" DECAL, BLACK	
3	91043043	2	"2" DECAL, WHITE	
4	91043046	1	"4" DECAL, BLACK	
4	91043048	1	"4" DECAL, WHITE	
5	91043049	1	"8" DECAL, BLACK	
5	91043050	1	"8" DECAL, WHITE	
6	91043044	1	"3" DECAL, BLACK	
6	91043045	1	"3" DECAL, WHITE	
7	91043051	1	"0" DECAL, BLACK	
7	91043052	1	"0" DECAL, WHITE	
8	91043136	1	"4" DECAL, BLACK	
8	91003020	1	"4" DECAL, WHITE	
9	91043138	1	"8" DECAL, BLACK	
9	91003027	1	"8" DECAL, WHITE	
10	91043134	2	"1" DECAL, BLACK	
10	91003016	2	"1" DECAL, WHITE	
11	91043135	2	"2" DECAL, BLACK	
11	91003018	2	"2" DECAL, WHITE	
12	91043137	1	"6" DECAL, BLACK	
12	91003025	1	"6" DECAL, WHITE	
13	91043133	1	"0" DECAL, BLACK	
13	91003014	1	"0" DECAL, WHITE	
14	91043037	2	"544" DECAL, BLACK	
14	91043036	2	"544" DECAL, WHITE	
15	91043132	2	GRADALL DECAL, BLACK	
15	91003006	2	GRADALL DECAL, WHITE	
16	91043038	2	MATERIAL HANDLER DECAL, BLACK	
16	91043039	2	MATERIAL HANDLER DECAL, WHITE	
17	90200445	1	PENDULUM	
18	90200688	1	BEARING	
19	90026491	1	SHOULDER BOLT	
20	88561108	1	FLAT WASHER, 5/16	
21	91003031	1	ANGLE INDICATOR DECAL	
22	91043035	2	"10" DECAL, BLACK	
22	91043034	2	"10" DECAL, WHITE	
23	77023009	7	WARNING DECAL	

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FIGURE 11-4. BOOM DECALS (SN 0155253 to Present)



SECTION 11 - MISCELLANEOUS

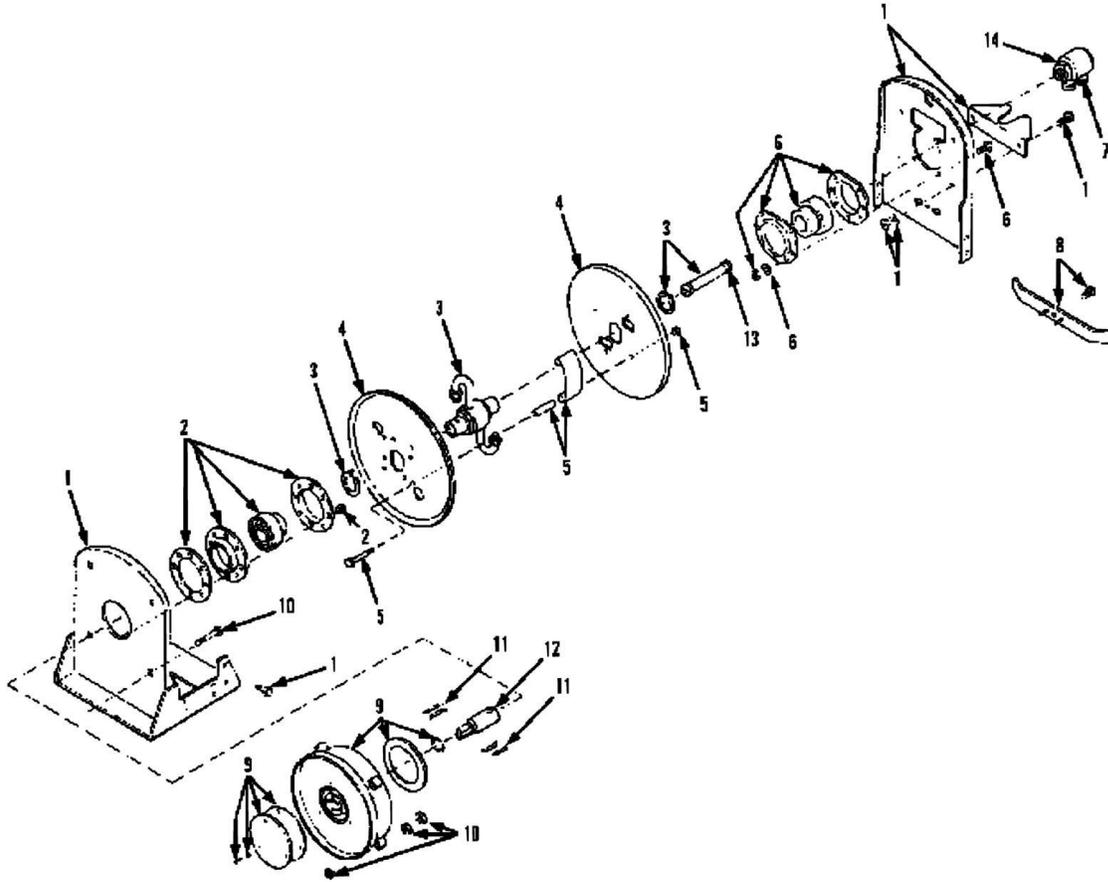
FIGURE 11-4. BOOM DECALS (SN 0155253 to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	91033023	1	WARNING DECAL	
2	91043042	2	"2" DECAL, BLACK	
2	91043043	2	"2" DECAL, WHITE	
3	91043046	1	"4" DECAL, BLACK	
3	91043048	1	"4" DECAL, WHITE	
4	91043049	1	"8" DECAL, BLACK	
4	91043050	1	"8" DECAL, WHITE	
5	91043044	1	"3" DECAL, BLACK	
5	91043045	1	"3" DECAL, WHITE	
6	91043051	1	"0" DECAL, BLACK	
6	91043052	1	"0" DECAL, WHITE	
7	91043136	1	"4" DECAL, BLACK	
7	91003020	1	"4" DECAL, WHITE	
8	91043138	1	"8" DECAL, BLACK	
8	91003027	1	"8" DECAL, WHITE	
9	91043134	2	"1" DECAL, BLACK	
9	91003016	2	"1" DECAL, WHITE	
10	91043135	2	"2" DECAL, BLACK	
10	91003018	2	"2" DECAL, WHITE	
11	91043137	1	"6" DECAL, BLACK	
11	91003025	1	"6" DECAL, WHITE	
12	91043133	1	"0" DECAL, BLACK	
12	91003014	1	"0" DECAL, WHITE	
13	91043037	2	"544" DECAL, BLACK	
13	91043036	2	"544" DECAL, WHITE	
14	91043132	2	GRADALL DECAL, BLACK	
14	91003006	2	GRADALL DECAL, WHITE	
15	91043038	2	MATERIAL HANDLER DECAL, BLACK	
15	91043039	2	MATERIAL HANDLER DECAL, WHITE	
16	90200445	1	PENDULUM	
17	90200688	1	BEARING	
18	90026491	1	SHOULDER BOLT	
19	88561108	1	FLAT WASHER, 5/16	
20	91003031	1	ANGLE INDICATOR DECAL	
21	91043035	2	"10" DECAL, BLACK	
21	91043034	2	"10" DECAL, WHITE	
22	77023009	2	WARNING DECAL	

SECTION 12 - OPTIONAL EQUIPMENT

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-1. (91043106) DUAL HOSE REEL ASSY (SN 8655105G to Present)



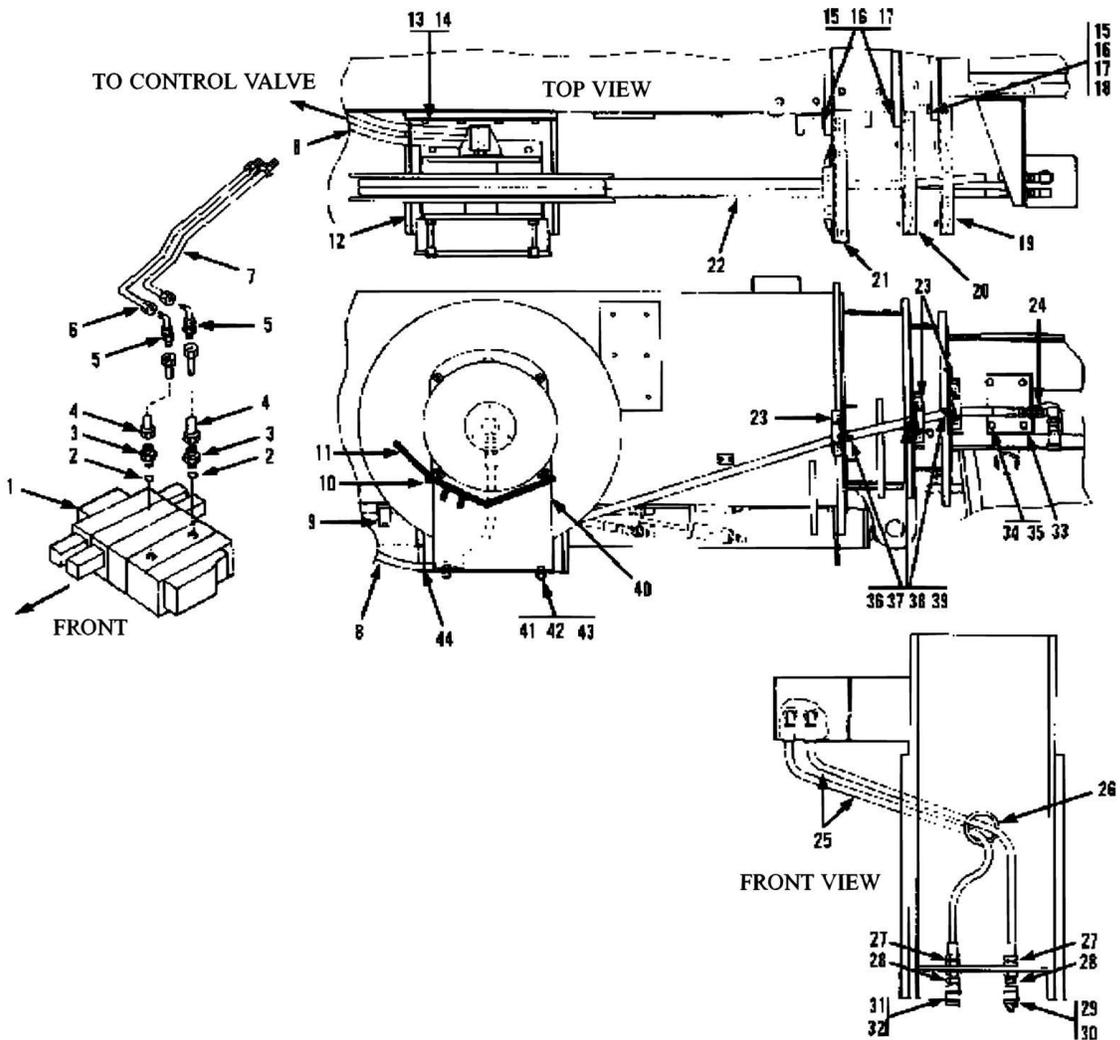
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-1. (91043106) DUAL HOSE REEL ASSY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043106	1	DUAL HOSE REEL ASSY (includes all items)	
	91044225	1	SEAL KIT (includes items 13, 14)	
1	91044226	1	FRAME ASSY	
2	91044227	1	BEARING KIT, SPRING END	
3	91044228	1	SHAFT KIT	
4	91044229	1	DISC KIT	
5	91044230	1	WRAPPER KIT	
6	91044231	1	BEARING KIT, SWIVEL END	
7	91044232	1	SWIVEL KIT	
8	91044233	1	TENSION WRENCH KIT	
9	91044234	1	SPRING MOTOR KIT	
10	91044235	1	SPRING MOUNTING KIT	
11	91044236	1	PAWL KIT	
12	91044237	1	STUB SHAFT	
13		Ref	O-RING (included in seal kit)	
14		Ref	SEAL ASSY (included in seal kit)	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-2. DUAL HOSE REEL AND HYDRAULIC SYSTEM (SN 8655105G to Present)



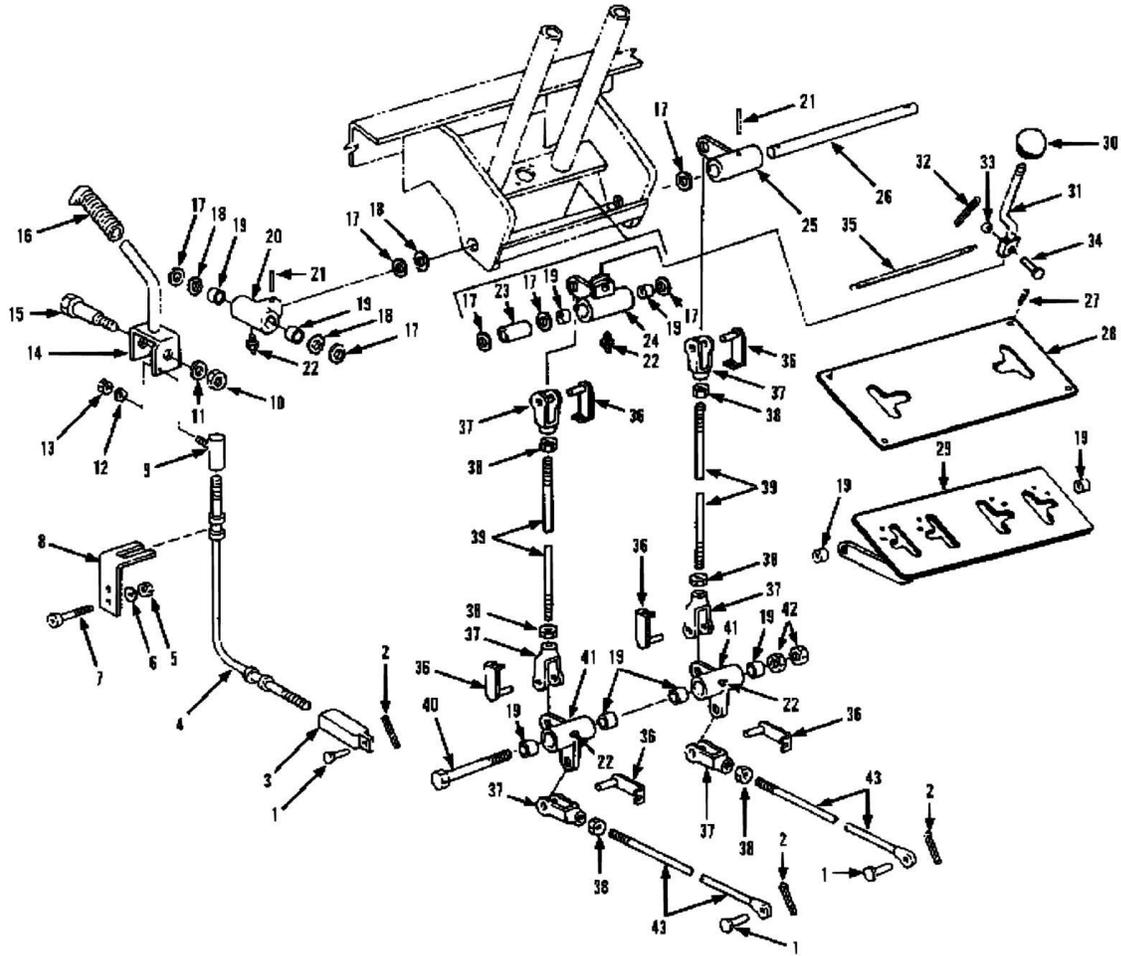
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-2. DUAL HOSE REEL AND HYDRAULIC SYSTEM (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1		Ref	MAIN CONTROL VALVE ASSY (See HYDRAULIC COMPONENTS SECTION for Breakdown)	
2	88591207	2	O-RING	
3	88662022	2	CONNECTOR (includes item 2)	
4	90022043	2	HOSE ASSY	
5	90029938	2	BULKHEAD ELBOW, 90	
6	91043196	1	TUBE ASSY	
7	90207393	1	TUBE ASSY	
8	84717505	2	HOSE ASSY	
9	90207464	12	CUSHION CLAMP	
10	90027187	2	NYLON TIE	
11		Ref	SPRING TENSIONING SPANNER WRENCH (supplied with hose reel)	
12	91046054	1	REEL BRACKET WELDMENT	
13	88201064	8	HEX HD CAPSCREW, 1/2-13X7/8, GR5	
14	88551013	8	LOCKWASHER, 1/2	
15	88201069	6	HEX HD CAPSCREW, 1/2-13X2, GR5	
16	88551013	6	LOCKWASHER, 1/2	
17	88501008	6	HEX NUT, 1/2-13	
18	88561006	1	FLAT WASHER, 1/2	
19	91041243	1	ROLLER SUPPORT	
20	91041244	1	ROLLER SUPPORT	
21	91041245	1	ROLLER SUPPORT	
22	91043159	1	HOSE ASSY	
23	91043121	3	ROLLER ASSY	
24	90029939	2	BULKHEAD UNION	
25	84717925	2	HOSE ASSY	
26	91041565	1	GROMMET, 16-1/4IN LONG	
27	91043321	2	BULKHEAD UNION	
28	88712304	2	REDUCING BUSHING, 1/2X3/8	
29	90204244	1	HYDRAULIC COUPLER, MALE	
30	91043126	1	DUST CAP	
31	90204245	1	HYDRAULIC COUPLER, FEMALE	
32	91043125	1	DUST CAP	
33	91046059	1	SUPPORT WELDMENT	
34	88201033	4	HEX HD CAPSCREW, 3/8-16X3/4, GR5	
35	88551011	4	LOCKWASHER, 3/8	
36	88201036	6	HEX HD CAPSCREW, 3/8-16X1-1/4, GR5	
37	88561004	6	FLATWASHER, 3/8	
38	88551011	6	LOCKWASHER, 3/8	
39	88501006	6	HEX NUT, 3/8-16	
40		Ref	DUAL HOSE REEL ASSY (See DUAL HOSE REEL ASSY for Breakdown)	
41	88201066	4	HEX HD CAPSCREW, 1/2-13X1-1/4, GR5	
42	88551013	4	LOCKWASHER, 1/2	
43	88501008	4	HEX NUT, 1/2-13	
44		Ref	FLEX GUARD, 5IN	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-3. SWAY, AUXILIARY AND TILT CONTROLS (SN 8655105G to Present)



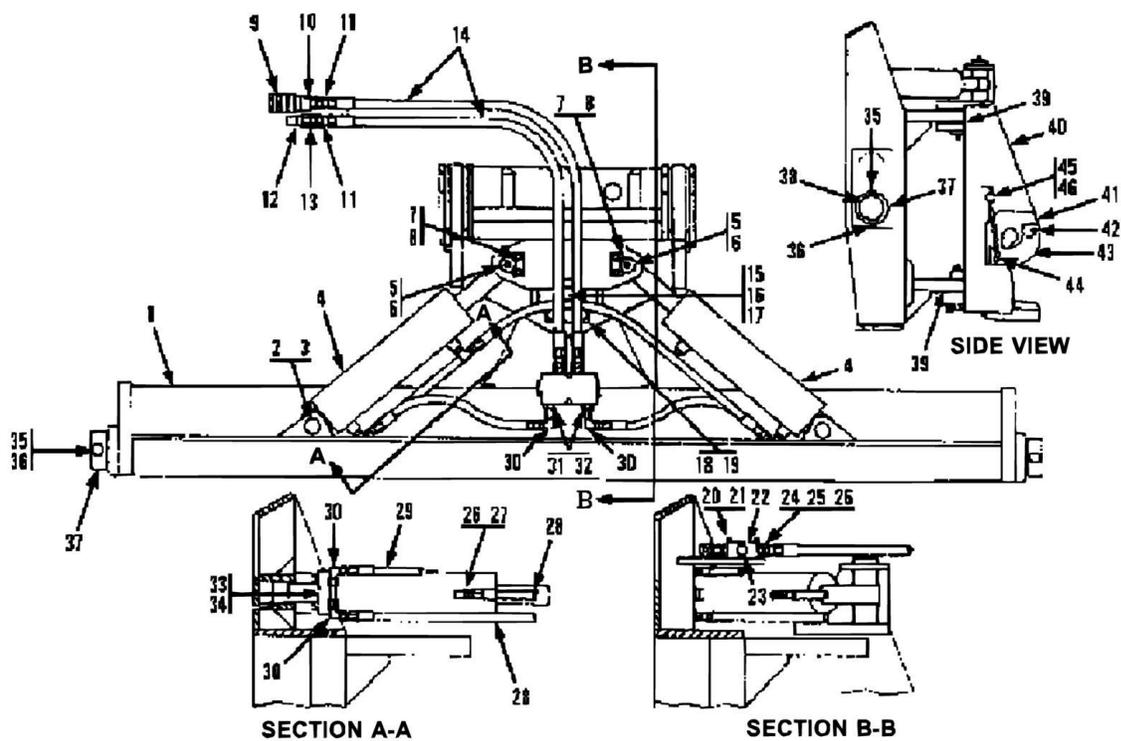
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-3. SWAY, AUXILIARY AND TILT CONTROLS (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90021552	3	CLEVIS PIN	
2	88631301	3	COTTER PIN, 1/16X1/2	
3	91041236	1	CABLE END	
4	90206861	1	CABLE ASSY	
5	88521204	2	HEX LOCKNUT, 3/8-16	
6	88501006	2	HEX NUT, 3/8-16	
7	88261030	2	SOCKET BUTTON HD CAPSCREW, 3/8-16X1-1/4	
8	91031013	1	CABLE BRACKET	
9	86683117	1	BALL JOINT	
10	88501008	1	HEX NUT, 1/2-13	
11	88551013	1	LOCKWASHER, 1/2	
12	88551010	1	LOCKWASHER, 5/16	
13	88501305	1	HEX NUT, 5/16-24	
14	90403406	1	HANDLE WELDMENT	
15	90203502	1	SHOULDER BOLT	
16	90200774	1	HANDLE GRIP	
17	88561113	10	FLAT WASHER, 5/8	
18	90028662	6	WAVE BEND WASHER	
19	90200290	10	NEEDLE BEARING	
20	90206859	1	HOUSING WELDMENT	
21	88631479	2	ROLL PIN, 3/16X1-1/4	
22	88671008	4	LUBE FITTING, STRAIGHT, 1/4-28	
23	91031189	1	SPACER	
24	90205983	1	BELL CRANK	
25	90205541	1	BELL CRANK	
26	90205571	1	SHAFT	
27	90020489	4	PAN HEAD SCREW, #2	
28	90206045	1	CONTROL PANEL	
29	90402904	1	CONTROL PANEL	
30	90200299	1	KNOB	
31	90205981	1	HANDLE, R.H.	
32	88631309	1	COTTER PIN, 3/32X3/4	
33	90200688	1	BEARING	
34	90021557	1	CLEVIS PIN	
35	90200559	1	SPRING	
36	90027987	6	SPRING CLEVIS	
37	88821004	6	ADJUSTABLE YOKE END, 3/8-24	
38	88501406	6	HEX JAM NUT, 3/8-24	
39	90202361	2	ROD	
40	88201328	1	HEX HD CAPSCREW, 5/8-11X6-1/2, GR5	
41	90205533	2	BELL CRANK	
42	88501010	2	HEX NUT, 5/8-11	
43	91046051	2	CONTROL ROD	

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FIGURE 12-4. (91045030) 100, SWING FORK ASSY (SN 8655105G to Present)



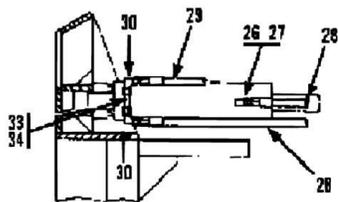
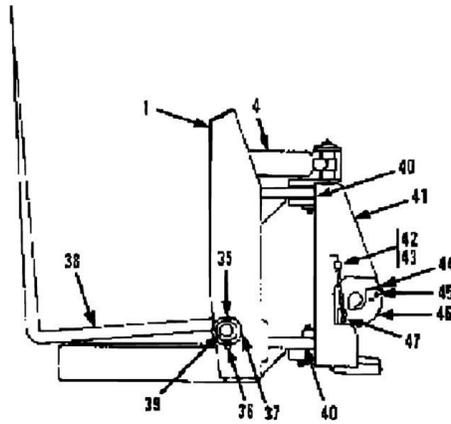
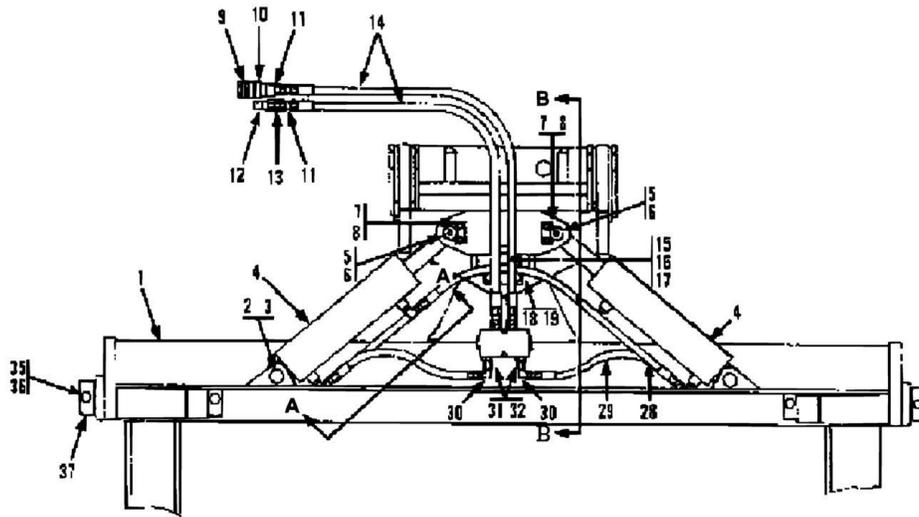
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-4. (91045030) 100, SWING FORK ASSY (SN 8655105G to Present)

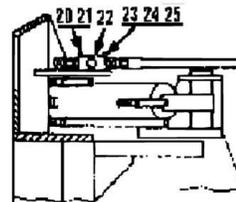
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045030	1	100, SWING FORK ASSY (includes all items)	
1	91046061	1	SWING FORK CARRIAGE WELDMENT	
2	91041326	2	PIVOT PIN	
3	88581136	4	EXTERNAL RETAINING RING	
4		Ref	HYDRAULIC CYLINDER ASSY (See HYDRAULIC CYLINDER ASSEMBLIES for Breakdown)	
5	91041324	2	PIVOT PIN	
6	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
7	91041322	2	LOCKING PLATE	
8	83201024	4	HEX HD CAPSCREW	
9	91043125	1	DUST CAP	
10	90204245	1	HYDRAULIC COUPLER, FEMALE	
11	88661013	2	MALE CONNECTOR, 1/2X1/2 TUBE	
12	91043126	1	DUST CAP	
13	90204244	1	HYDRAULIC COUPLER, MALE	
14	84716392	2	HOSE ASSY	
15	91041325	2	PIVOT PIN	
16	91041327	2	BUSHING	
17	88671022	2	LUBE FITTING, 90, 1/8	
18	91041323	2	LOCKING PLATE	
19	83201026	4	HEX HD CAPSCREW	
20	88201008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	
21	88561002	2	FLAT WASHER, 1/4	
22	91043186	1	DOUBLE PILOT CHECK VALVE	
23	91041361	2	FITTING	
24	91041362	2	ORIFICE FITTING	
25	88591205	2	O-RING	
26	88662084	2	ELBOW, 45, (includes item 27)	
27	88591204	2	O-RING	
28	90204097	2	HOSE ASSY	
29	77133201	2	HOSE ASSY	
30	88662105	6	ELBOW, 90, (swivel nut)	
31	88662018	2	CONNECTOR (includes item 32)	
32	88591205	2	O-RING	
33	88662152	2	BRANCH TEE (includes item 34)	
34	88591204	2	O-RING	
35	88201105	4	HEX HD CAPSCREW, 5/8-11X4, GR5	
36	88521310	4	HEX LOCKNUT, 5/8-11	
37	90200003	4	COLLAR	
38	90551013	1	FORK PIN	
39	91041356	6	SPACER	
40	91046062	1	PIVOT WELDMENT	
41	88221054	4	SOCKET SET SCREW (cup point) 1/4-20	
42	91041355	2	PIN	
43	91046069	1	SUPPORT BRACKET, L.H.	
43	91046078	1	SUPPORT BRACKET, R.H.	
44	91043221	2	DETENT PIN	
45	91033038	1	CHAIN, 24IN	
46	91033039	2	CHAIN CONNECTION	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-5. (90555013) 100, SWING FORK ASSY (SN 8655105G to Present)



SECTION A-A



SECTION B-B

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-5. (90555013) 100, SWING FORK ASSY (SN 8655105G to Present)

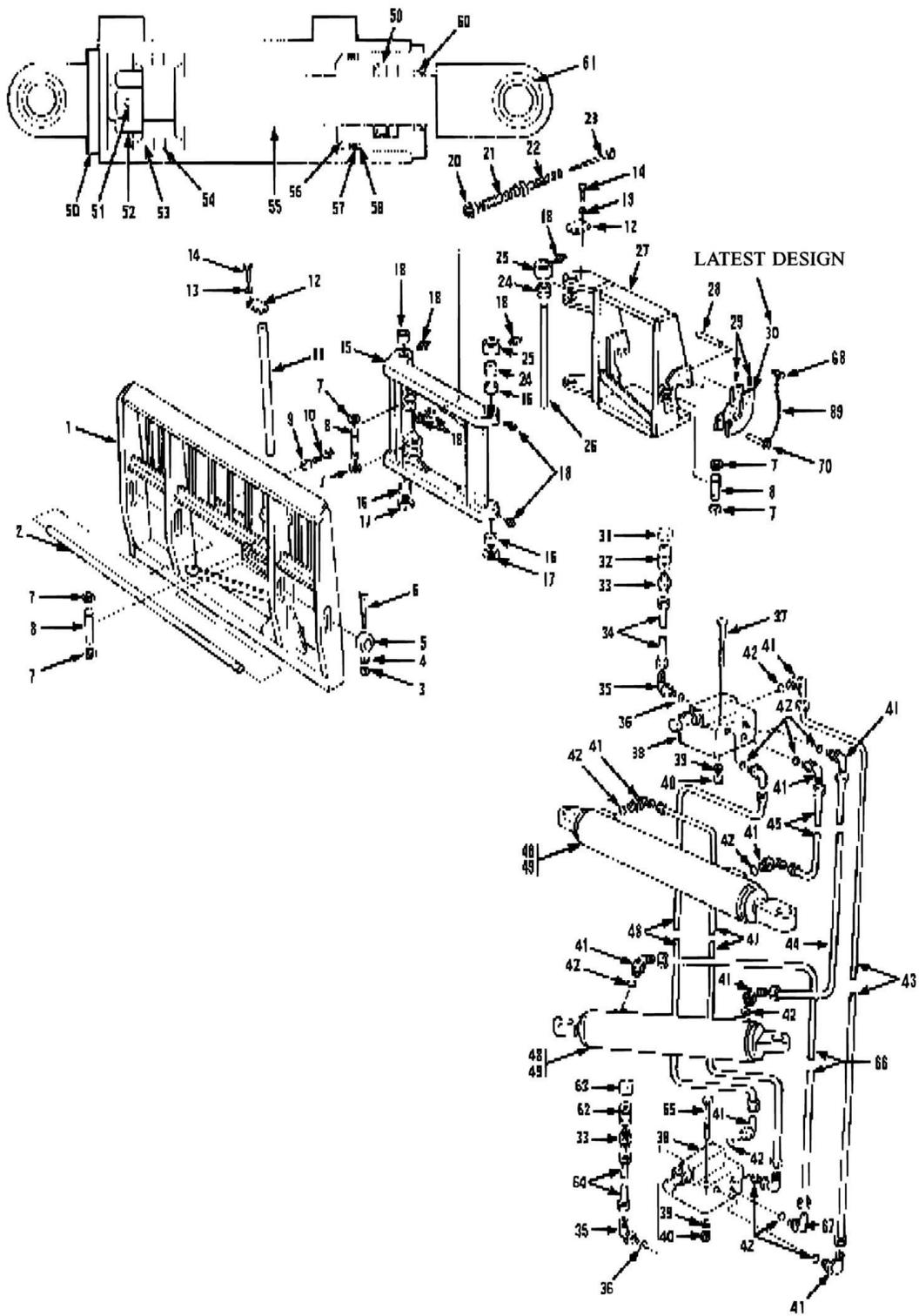
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90555013	1	100, DRYWALL SWING FORK ASSY (includes all items)	
1	90556004	1	DRYWALL CARRIAGE WELDMENT	
2	91041326	2	PIVOT PIN	
3	88581136	4	EXTERNAL RETAINING RING	
4	90453034	2	HYDRAULIC CYLINDER ASSY	
5	91041324	2	PIVOT PIN	
6	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
7	91041322	2	LOCKING PLATE	
8	83201024	4	HEX HD CAPSCREW	
9	91043125	1	DUST CAP	
10	90204245	1	HYDRAULIC COUPLER, FEMALE (Prior to S/N 2005283-01)	
10	91403413	1	HYDRAULIC COUPLER, FEMALE, (S/N 2005283-01 to present)	
11	88661013	2	MALE CONNECTOR, 1/2X1/2 TUBE (Prior to S/N 2005283-01)	
11	88662006	1	CONNECTOR, (includes 8859-1205 o-ring) (S/N 2005283-01 to present)	
12	91043126	1	DUST CAP	
13	90204244	1	HYDRAULIC COUPLER, MALE	
13	91403414	1	HYDRAULIC COUPLER, MALE, (S/N 2005283-01 to present)	
14	84716392	2	HOSE ASSY	
15	91041325	2	PIVOT PIN	
16	91041327	2	BUSHING	
17	88671022	2	LUBE FITTING, 90, 1/8	
18	91041323	2	LOCKING PLATE	
19	83201026	4	HEX HD CAPSCREW	
20	88201008	2	HEX HD CAPSCREW, 1/4-20X1-3/4, GR5	
21	88561002	2	FLAT WASHER, 1/4	
22	91043186	1	DOUBLE PILOT CHECK VALVE	
23	91041361	2	FITTING	
24	91041362	2	ORIFICE FITTING	
25	88591205	2	O-RING	
26	88662084	2	ELBOW, 45, (includes item 27)	
27	88591204	2	O-RING	
28	90204097	2	HOSE ASSY	
29	77133201	2	HOSE ASSY	
30	88662105	6	ELBOW, 90, (swivel nut)	
31	88662018	2	CONNECTOR (includes item 32)	
32	88591205	2	O-RING	
33	88662152	2	BRANCH TEE (includes item 34)	
34	88591204	2	O-RING	
35	88201105	4	HEX HD CAPSCREW, 5/8-11X4, GR5	
36	88521310	4	HEX LOCKNUT, 5/8-11	
37	90200003	4	COLLAR	
38	90453013	2	DRYWALL FORK	
39	90451020	1	FORK PIN	
40	91041356	6	SPACER	
41	91046062	1	PIVOT WELDMENT	
42	91033038	1	CHAIN, 24IN	
43	91033039	2	CHAIN CONNECTION	
44	88221054	4	SOCKET SET SCREW (cup point) 1/4-20	
45	91041355	2	PIN	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
46	91046069	1	SUPPORT BRACKET, L.H.	
46	91046078	1	SUPPORT BRACKET, R.H.	
47	91043221	2	DETENT PIN	
48	90153001	1	SERIAL NO. PLATE	
49	88341022	4	DRIVE SCREW, #10X3/8	
50	90553012	2	SIDE DRYWALL GUARD	
51	88241053	14	SOCKET FLAT HD CAPSCREW, 3/8-16X1-1/2	
52	88551011	8	LOCKWASHER, 3/8	
53	88501006	8	HEX NUT, 3/8-16	
54	90553013	2	BOTTOM DRYWALL GUARD	
55	91083249	1	CLAMP SET	
56	77133140	1	COVER PLATE	
57	77133177	1	HEX HD CAPSCREW, 5/16-18X1-3/8	
58	91143282	2	PINCH POINT DECAL	
59	88662106	2	ELBOW, 90, (swivel nut)	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-6. (90553004) 180, SWING FRAME ASSY (SN 8655105G to Present)



SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-6. (90553004) 180, SWING FRAME ASSY (SN 8655105G to Present)

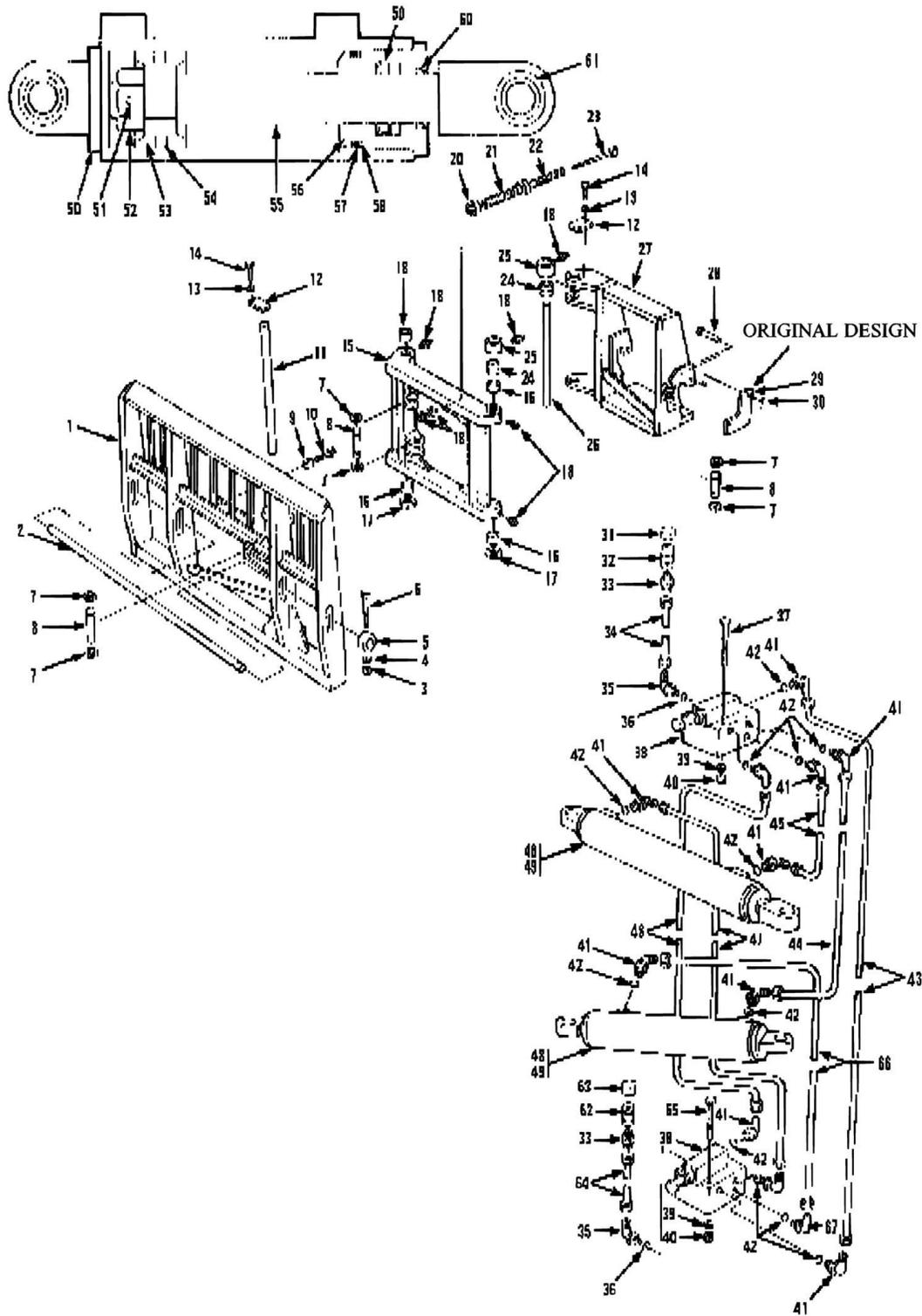
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90553004	1	SWING FRAME ASSY, 180, (includes all items)	
1	91044238	1	FORK BASE WELDMENT	
2	90551013	1	FORK PIN	
3	88501008	2	HEX NUT, 1/2-13	
4	88551013	2	LOCKWASHER, 1/2	
5	90200003	2	COLLAR	
6	88201074	2	HEX HD CAPSCREW, 1/2-13X3-1/4, GR5	
7	91044239	8	SNAP RING	
8	91044240	4	PIN	
9	88501112	1	HEAVY HEX JAM NUT, 3/4-10	
10	88201111	1	HEX HD CAPSCREW, 3/4-10X2, GR5	
11	91044241	1	SHAFT	
12	91044242	2	PIN RETAINER	
13	88551015	4	LOCKWASHER, 5/8	
14	88201094	4	HEX HD CAPSCREW, 5/8-11X1-1/4, GR5	
15	91044243	1	INTERMEDIATE LINK ASSY (includes item 16)	
16	91044244	4	BRONZE BUSHING	
17	91044245	AR	SHIM	
18	88671001	6	LUBE FITTING, STRAIGHT, 1/8	
19	88501006	2	HEX NUT, 3/8-16	
20	88501116	1	HEAVY HEX JAM NUT, 1-8	
21	91044246	1	PLUNGER BODY	
22	91044247	1	COMPRESSION SPRING	
23	91044248	1	PLUNGER WELDMENT	
24	91044249	2	THRUST BEARING	
25	91044250	2	LUBRICATION COLLAR	
26	91044251	1	SHAFT	
27	91044252	1	FIXED FRAME	
28	91041355	2	PIN	
29	88221054	4	SOCKET SET SCREW (cup point) 1/4-20	
30	91046069	1	SUPPORT BRACKET, L.H.	
30	91046078	1	SUPPORT BRACKET, R.H.	
31	91043126	1	DUST CAP, FEMALE	
32	90204245	1	QUICK DISCONNECT HYDRAULIC FITTING, FEMALE, 1/2 NPT	
33	88661013	2	STRAIGHT FITTING	
34	91044256	1	HOSE ASSY W/ SPRING GUARD	
35	88662065	2	ELBOW, 90, (includes item 36)	
36	88591205	2	O-RING	
37	90020115	2	HEX HD CAPSCREW, 5/16-18X4-1/2	
38		Ref	SWING VALVE ASSY (See SWING VALVE ASSEMBLY for Breakdown)	
39	88551010	4	LOCKWASHER, 5/16	
40	88501005	4	HEX NUT, 5/16-18	
41	88662064	11	ELBOW, 90, (includes item 42)	
42	88591204	12	O-RING	
43	91044257	1	HOSE ASSY W/SPRING GUARD	
44	91044258	1	HOSE ASSY W/SPRING GUARD	
45	91044259	1	HOSE ASSY W/SPRING GUARD	
46	91044260	1	HOSE ASSY W/SPRING GUARD	
47	91044261	1	HOSE ASSY W/SPRING GUARD	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
48	91044262	2	HYDRAULIC CYLINDER ASSY (includes items 49 thru 60)	
49	91044263	AR	HYDRAULIC REPAIR KIT (includes items 54, 57, 58, 59 & 60)	
50	91044264	1	TUBE ASSY	
51	91044265	1	ROLL PIN	
52	88501316	1	HEX NUT, 1-14	
53	91044266	1	PISTON	
54	Kit	2	PISTON SEAL	
55	91044267	1	ROD ASSY	
56	91044268	1	GLAND	
57	Kit	1	O-RING	
58	Kit	1	BACK-UP RING	
59	Kit	1	ROD SEAL	
60	Kit	1	ROD WIPER	
61	90400910	4	SPHERICAL BEARING	
62	91043125	1	DUST CAP, MALE	
63	91044244	1	QUICK DISCONNECT HYDRAULIC FITTING, MALE, 1/2 NPT	
64	91044269	1	HOSE ASSY W/ SPRING GUARD	
65	88201029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5	
66	91044270	1	HOSE ASSY W/ SPRING GUARD	
67	86971355	1	ELBOW, 90, LONG (includes item 42)	
68	91033039	2	CHAIN CONNECTION	
69	91033038	1	CHAIN, 24IN	
70	91043221	2	DETENT PIN	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-7. (90553004) 180, SWING FRAME ASSY (SN 8655105G to Present)



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FIGURE 12-7. (90553004) 180, SWING FRAME ASSY (SN 8655105G to Present)

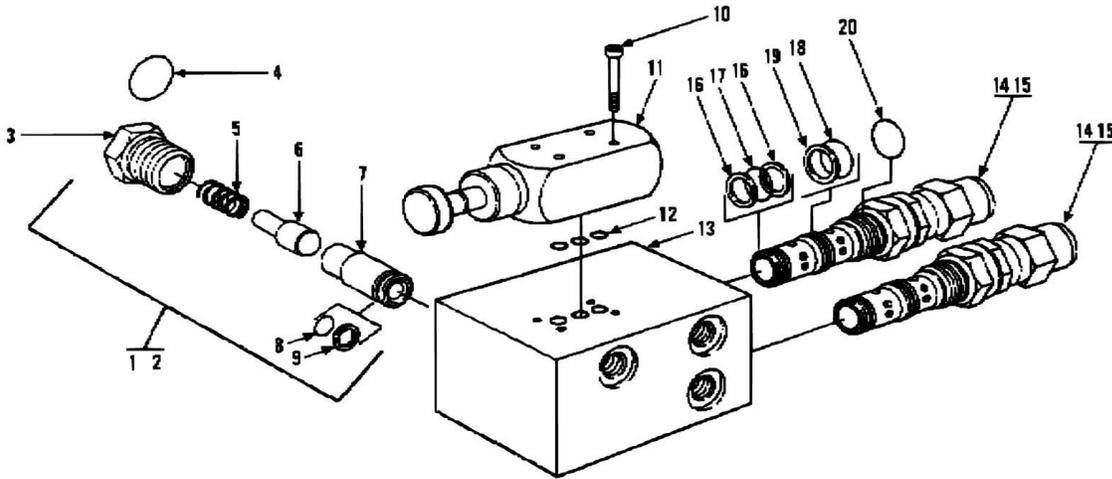
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90553004	1	SWING FRAME ASSY, 180, (includes all items)	
1	91044238	1	FORK BASE WELDMENT	
2	90551013	1	FORK PIN	
3	88501008	2	HEX NUT, 1/2-13	
4	88551013	2	LOCKWASHER, 1/2	
5	90200003	2	COLLAR	
6	88201074	2	HEX HD CAPSCREW, 1/2-13X3-1/4, GR5	
7	91044239	8	SNAP RING	
8	91044240	4	PIN	
9	88501112	1	HEAVY HEX JAM NUT, 3/4-10	
10	88201111	1	HEX HD CAPSCREW, 3/4-10X2, GR5	
11	91044241	1	SHAFT	
12	91044242	2	PIN RETAINER	
13	88551015	4	LOCKWASHER, 5/8	
14	88201094	4	HEX HD CAPSCREW, 5/8-11X1-1/4, GR5	
15	91044243	1	INTERMEDIATE LINK ASSY (includes item 16)	
16	91044244	4	BRONZE BUSHING	
17	91044245	AR	SHIM	
18	88671001	6	LUBE FITTING, STRAIGHT, 1/8	
19	88501006	2	HEX NUT, 3/8-16	
20	88501116	1	HEAVY HEX JAM NUT, 1-8	
21	91044246	1	PLUNGER BODY	
22	91044247	1	COMPRESSION SPRING	
23	91044248	1	PLUNGER WELDMENT	
24	91044249	2	THRUST BEARING	
25	91044250	2	LUBRICATION COLLAR	
26	91044251	1	SHAFT	
27	91044252	1	FIXED FRAME	
28	91044253	4	PIN	
29	91044254	1	LOCKING PLATE, L.H.	
29	91044255	1	LOCKING PLATE, R.H.	
30	83211042	4	HAIR PIN	
31	91043126	1	DUST CAP, FEMALE	
32	90204245	1	QUICK DISCONNECT HYDRAULIC FITTING, FEMALE, 1/2 NPT	
33	88661013	2	STRAIGHT FITTING	
34	91044256	1	HOSE ASSY W/ SPRING GUARD	
35	88662065	2	ELBOW, 90, (includes item 36)	
36	88591205	2	O-RING	
37	90020115	2	HEX HD CAPSCREW, 5/16-18X4-1/2	
38		Ref	SWING VALVE ASSY (See SWING VALVE ASSEMBLY for Breakdown)	
39	88551010	4	LOCKWASHER, 5/16	
40	88501005	4	HEX NUT, 5/16-18	
41	88662064	11	ELBOW, 90, (includes item 42)	
42	88591204	12	O-RING	
43	91044257	1	HOSE ASSY W/SPRING GUARD	
44	91044258	1	HOSE ASSY W/SPRING GUARD	
45	91044259	1	HOSE ASSY W/SPRING GUARD	
46	91044260	1	HOSE ASSY W/SPRING GUARD	
47	91044261	1	HOSE ASSY W/SPRING GUARD	

SECTION 12 - OPTIONAL EQUIPMENT

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
48	91044262	2	HYDRAULIC CYLINDER ASSY (includes items 49 thru 60)	
49	91044263	AR	HYDRAULIC REPAIR KIT (includes items 54, 57, 58, 59 & 60)	
50	91044264	1	TUBE ASSY	
51	91044265	1	ROLL PIN	
52	88501316	1	HEX NUT, 1-14	
53	91044266	1	PISTON	
54	Kit	2	PISTON SEAL	
55	91044267	1	ROD ASSY	
56	91044268	1	GLAND	
57	Kit	1	O-RING	
58	Kit	1	BACK-UP RING	
59	Kit	1	ROD SEAL	
60	Kit	1	ROD WIPER	
61	90400910	4	SPHERICAL BEARING	
62	91043125	1	DUST CAP, MALE	
63	91044244	1	QUICK DISCONNECT HYDRAULIC FITTING, MALE, 1/2 NPT	
64	91044269	1	HOSE ASSY W/ SPRING GUARD	
65	88201029	2	HEX HD CAPSCREW, 5/16-18X3-1/4, GR5	
66	91044270	1	HOSE ASSY W/ SPRING GUARD	
67	86971355	1	ELBOW, 90, LONG (includes item 42)	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-8. (90553007) SWING VALVE ASSY (SN 8655105G to Present)



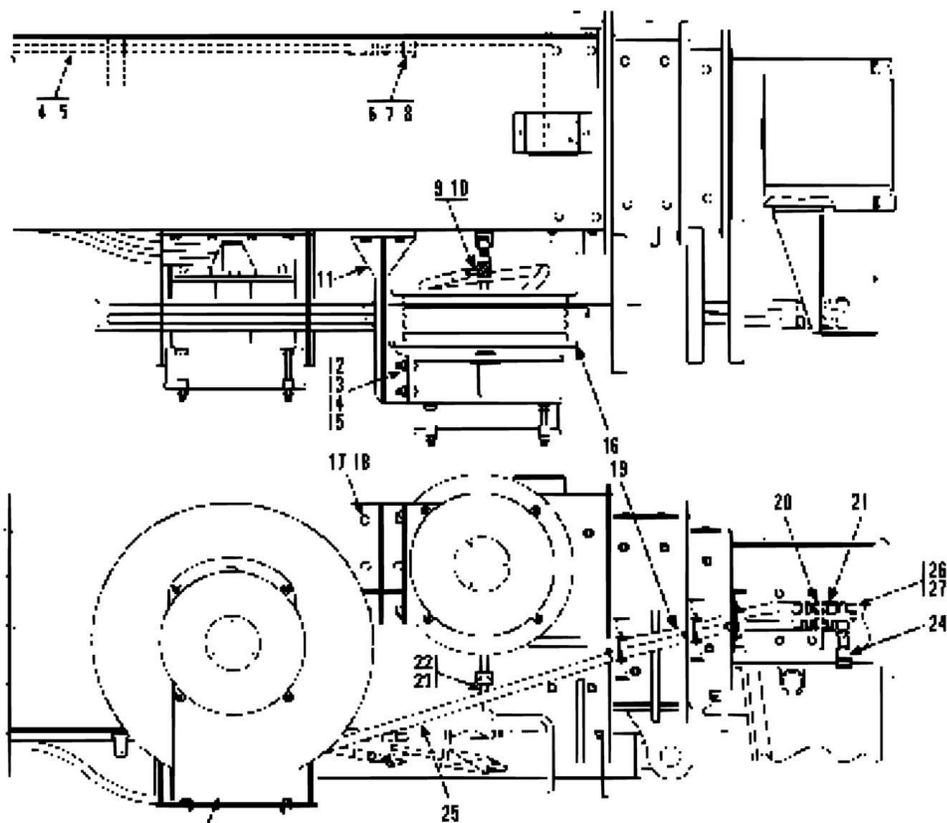
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-8. (90553007) SWING VALVE ASSY (SN 8655105G to Present)

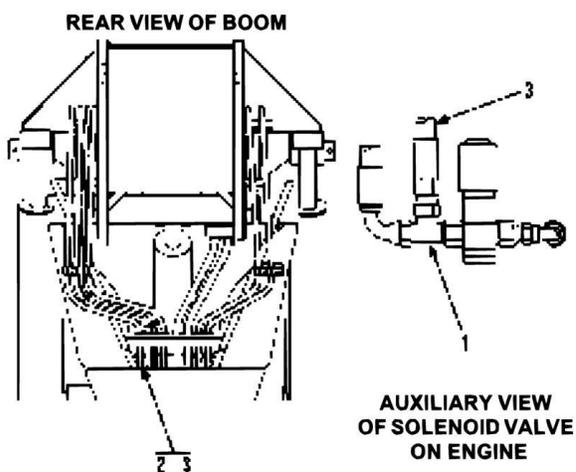
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90553007	2	SWING VALVE ASSY (includes all items except seal kits)	
	90553016	2	SWING VALVE ASSY (includes all items except seal kits)	
	91044303	1	SWING VALVE SEAL KIT (includes quantity of (1) Seal Kit item 2, quantity of (3) O-Rings item 12, quantity of (2) Seal Kits item15)	
1	91044284	1	CHECK VALVE ASSY (includes items 3 thru 9)	
2	91044002	AR	CHECK VALVE SEAL KIT (includes items 4, 8 & 9)	
3		Ref	RETAINER	
4	Kit	1	O-RING	
5		Ref	SPRING	
6		Ref	BALL AND SPRING GUIDE ASSY	
7		Ref	CAGE	
8	Kit	1	O-RING	
9	Kit	1	BACK-UP WASHER	
10	88211034	4	SOCKET HD CAPSCREW, #10-24X1-1/2,GR8	
11	91044285	1	GAGE ISOLATOR VALVE (use with 9055-3007 only)	
11	90553014	1	GAGE ISOLATOR VALVE (use with 9055-3016 only)	
12	Kit	3	O-RING	
13		Ref	VALVE BODY	
14	91044301	2	COUNTERBALANCE VALVE ASSY (includes item 16 thru 20)	
15	91044302	AR	COUNTERBALANCE VALVE SEAL KIT (includes items 16 thru 20)	
16	Kit	2	BACK-UP WASHER	
17	Kit	1	O-RING	
18	Kit	1	O-RING	
19	Kit	1	BACK-UP WASHER	
20	Kit	1	O-RING	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 12-9. SINGLE HOSE REEL AND HYDRAULIC SYSTEM (SN 8655105G to Present)



SEE PAGE 13-2 FOR DUAL
HOSE REEL & HYDRAULIC SYSTEM



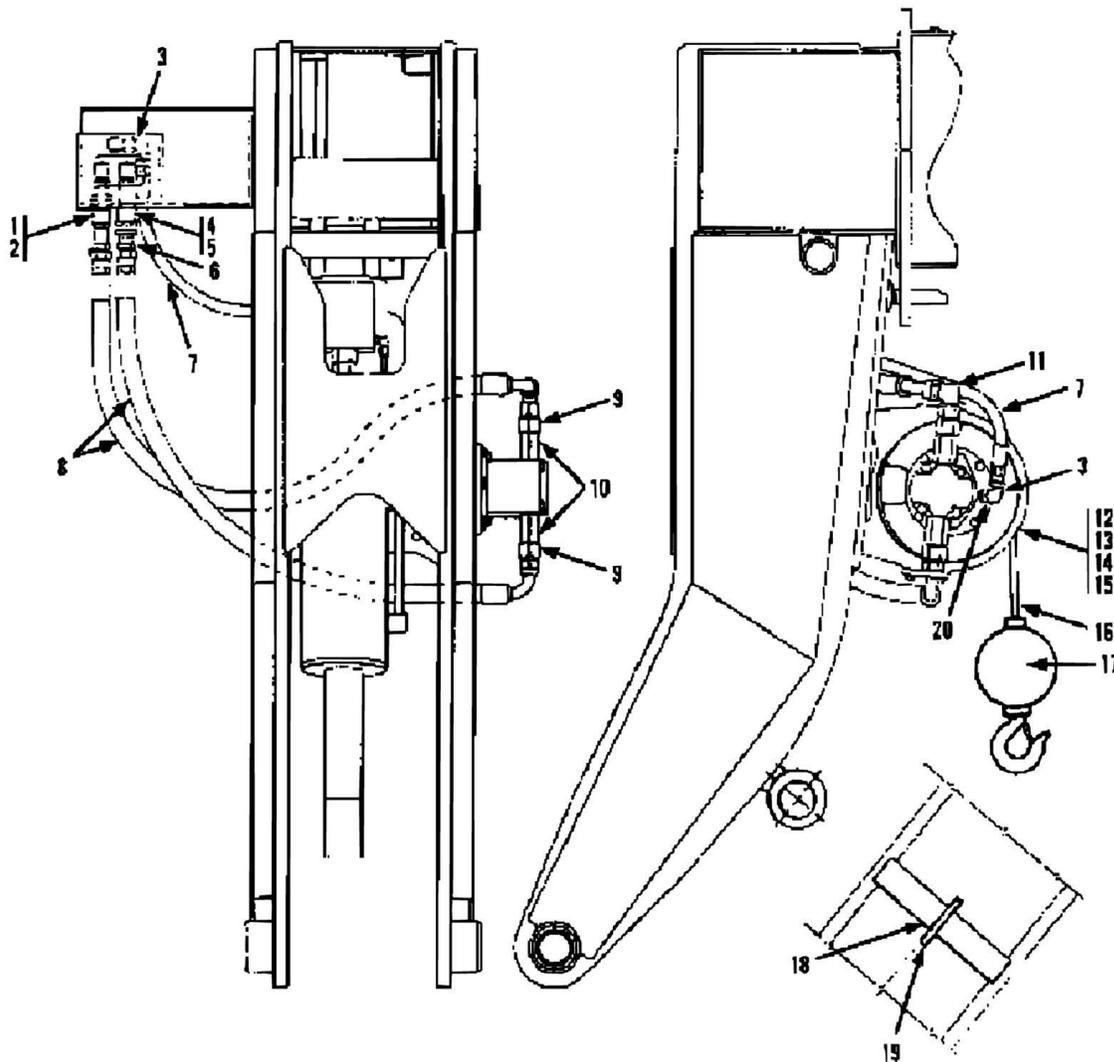
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-9. SINGLE HOSE REEL AND HYDRAULIC SYSTEM (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	88662240	1	SWIVEL NUT RUN TEE, 1/2 TUBE	
2	88661065	1	UNION, 1/2 TUBE	
3	84716377	1	HOSE ASSY	
4	84717530	1	HOSE ASSY	
5	90207464	8	HYDRA-ZORB CLAMP	
6	77133497	2	CLAMP SET	
7	77133498	2	COVER PLATE	
8	77133499	4	HEX HD CAPSCREW	
9	88661013	2	MALE CONNECTOR, 1/2X1/2 TUBE	
10	88662120	1	ELBOW, 45, (swivel nut)	
11	91046060	1	SINGLE REEL BRACKET	
12	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
13	88561004	4	FLAT WASHER, 3/8	
14	88551011	4	LOCKWASHER, 3/8	
15	88501006	4	HEX NUT, 3/8-16	
16		Ref	SINGLE HOSE REEL ASSY (See SINGLE HOSE REEL ASSEMBLY for Breakdown)	
17	88201064	6	HEX HD CAPSCREW, 1/2-13X7/8, GR5	
18	88551013	6	LOCKWASHER, 1/2	
19	84717531	1	HOSE ASSY	
20	90029939	2	BULKHEAD UNION, 5/8 TUBE	
21	90029935	1	REDUCER, 5/8 TUBE TO 1/2 TUBE	
22	90205120	1	HOSE ASSY	
23	91043322	1	DRAIN TUBE ASSY	
24	84717925	2	HOSE ASSY	
25	91043159	1	HOSE ASSY	
26	88662106	2	ELBOW, 90, (swivel nut)	
27	77133256	1	HOSE ASSY	

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FIGURE 12-10. (91045025) WINCH AND HYDRUALIC SYSTEM (SN 8655105G to Present)



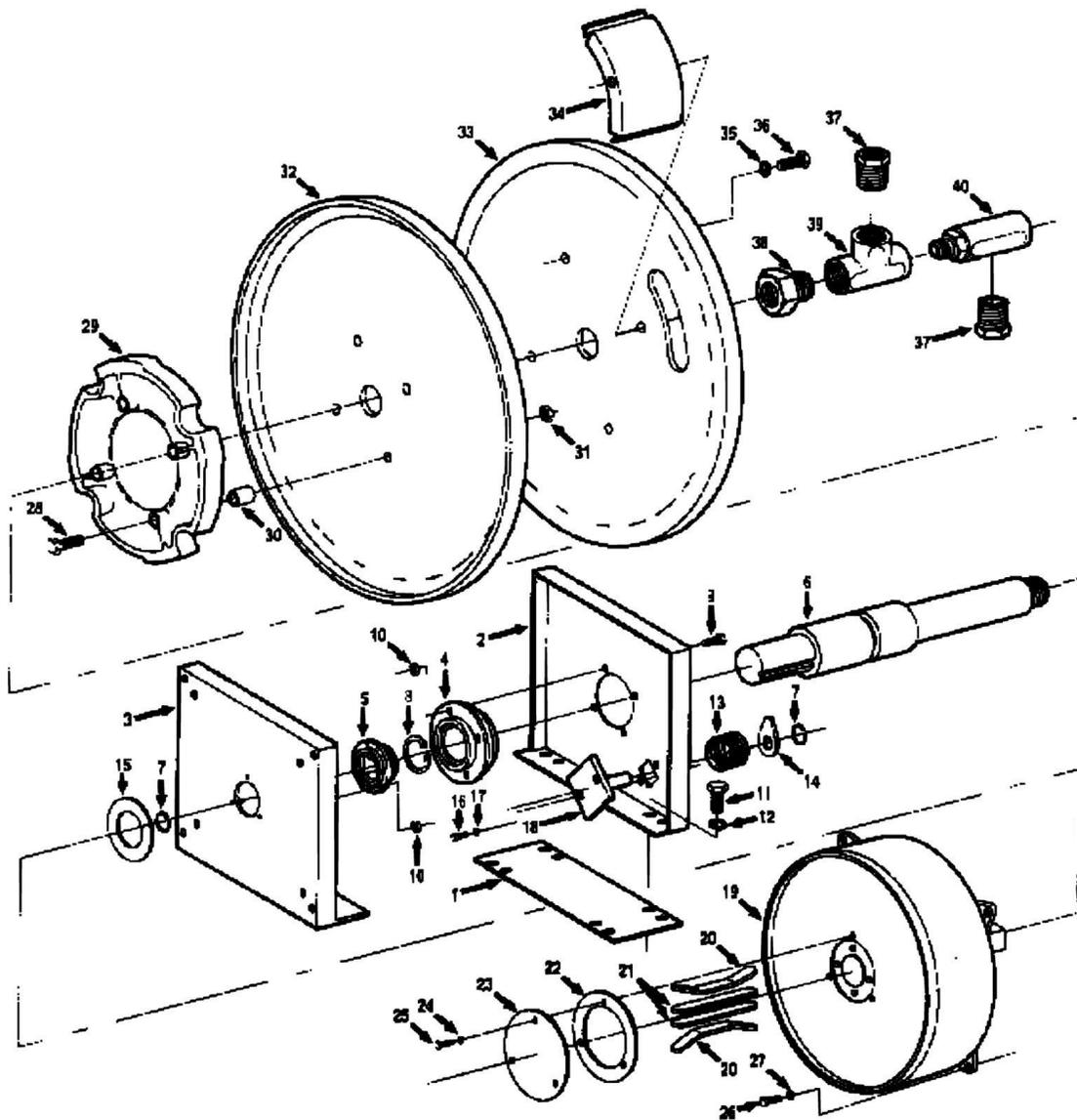
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-10. (91045025) WINCH AND HYDRUALIC SYSTEM (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	90204244	1	MALE HYDRAULIC COUPLER	
2	91043126	1	DUST CAP	
3	88662106	3	ELBOW, 90, (swivel nut)	
4	90204245	1	FEMALE HYDRAULIC COUPLER	
5	91043125	1	DUST PLUG	
6	88661017	2	MALE CONNECTOR, 1/2X3/4 TUBE	
7	77133256	1	HOSE ASSY	
8	84716404	2	HOSE ASSY	
9	91033159	2	TUBE END REDUCER, 1 TO 3/4	
10	91033161	2	FLOW REGULATOR	
11	88662108	1	ELBOW, 90, (swivel nut)	
12		Ref	WINCH ASSY (See WINCH ASSEMBLIES for Breakdown)	
13	88201069	4	HEX HD CAPSCREW, 1/2-13X2, GR5	
14	88551013	4	LOCKWASHER, 1/2	
15	88501008	4	HEX NUT, 1/2-13	
16	90207882	1	CABLE	
17	90201443	1	HOOK AND BALL	
18	91031077	1	BAR	
19	91021009	1	RING	
20	88661011	1	MALE CONNECTOR, 1/4X1/2 TUBE	

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FIGURE 12-11. (91043165) SINGLE HOSE REEL ASSY (SN 8655105G to Present)



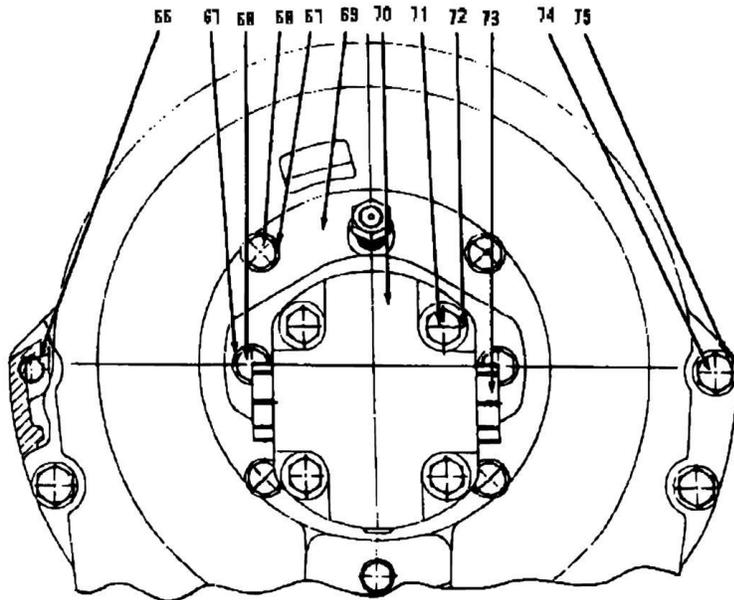
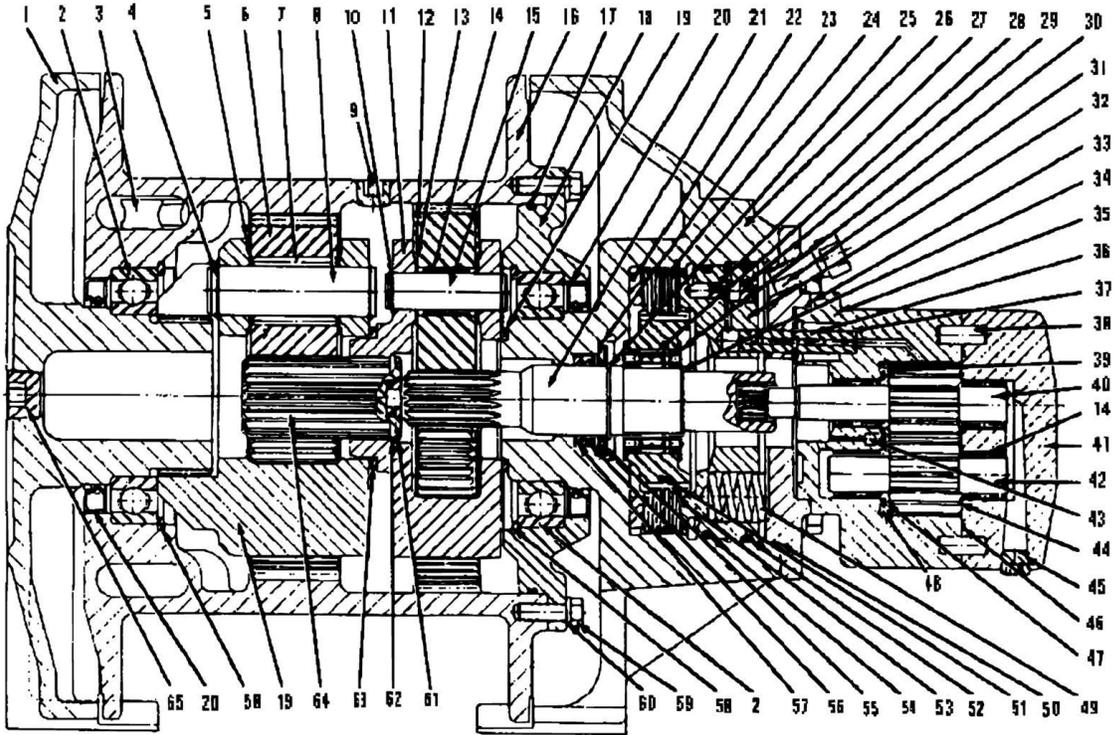
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-11. (91043165) SINGLE HOSE REEL ASSY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91043165	1	SINGLE HOSE REEL ASSY (includes all items)	
	91044287	1	FRAME ASSY (includes items 1 2, 3, 4, 5, 8, 9, 11 & 12)	
	91044476	1	HOLDING DOG AND RACHET KIT (optional) (includes items 13 thru 18)	
1	91044477	1	BASE PLATE	
2	91044478	1	FRAME, DRUM END	
3	91044479	1	FRAME, SPRING END	
4	91044294	1	BEARING, FLANGETTE	
5	91044293	1	BEARING, FLANGETTE	
6	91044480	1	SHAFT	
7	91044481	2	RETAINING RING	
8	91044482	1	RETAINING RING	
9	91044483	4	BOLT	
10	91044484	7	NUT	
11	91044485	4	BOLT	
12	91044486	8	LOCKWASHER	
13	91044487	1	SPRING	
14	91044488	1	HOLDING DOG	
15	91044292	1	GASKET	
16	91044489	2	BOLT	
17	91044490	2	LOCKWASHER	
18	91044491	1	SHAFT ASSY	
19	91044291	1	SPRING MOTOR KIT (standard)	
19	91044492	1	SPRING MOTOR KIT (opt. reverse)	
20	91044289	2	PAWL SPRING	
21	91044290	2	PAWL	
22	91044288	1	GASKET	
23	91044493	1	HUB COVER	
24	88551006	3	LOCKWASHER, #8	
25	91044494	3	ROUND HD MACHINE SCREW	
26	88201075	4	HEX HD CAPSCREW, 1/2-13X3-1/2, GR5	
27	91044495	8	LOCKWASHER	
28	91044496	4	BOLT	
29	91044497	1	RATCHET PLATE	
30	91044498	4	SPACER	
31	91044499	4	NUT	
32	91044500	1	DRUM DISC	
33	91044501	1	DRUM DISC	
34	91044502	4	DRUM CORE SEGMENT	
35	88551009	4	LOCKWASHER, 1/4	
36	88201001	4	HEX HD CAPSCREW, 1/4-20X1/2, GR5	
37	91044503	2	REDUCER	
38	91044504	1	REDUCER	
39	91044505	1	TEE	
40	91044296	1	SWIVEL JOINT	

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FIGURE 12-12. (91033196) WINCH ASSY (SN 8655105G to Present)



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FIGURE 12-12. (91033196) WINCH ASSY (SN 8655105G to Present)

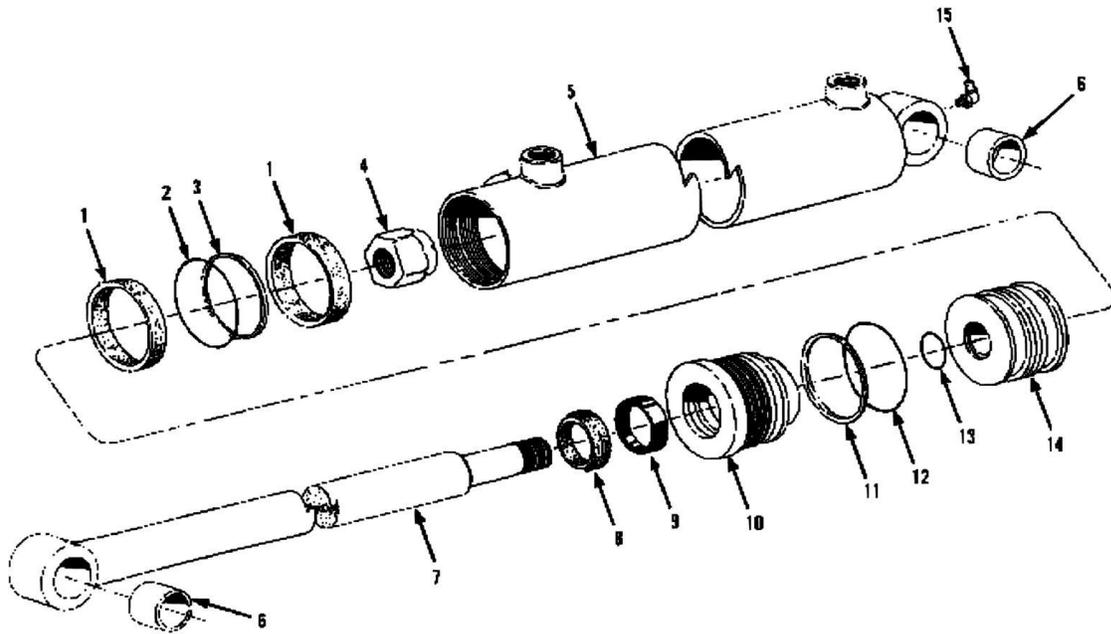
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033196	1	WINCH ASSY (includes all items)	
	91034161	1	SEAL KIT (includes items 20, 33, 37, 46, 47, 48, 52, 54 & 57)	
	91034162	1	HYDRAULIC MOTOR SEAL KIT (includes items 46, 47 & 48)	
	91034163	1	FINAL PLANET HUB ASSY (includes items 4, 5, 6, 7, 8 & 64)	
	91034164	1	PRIMARY PLANET HUB ASSY (includes items 10 thru 14, 15, 19, 61, 62 & 63)	
1	91034187	1	END HOUSING	
2	91034196	2	BALL BEARING	
3	91034193	1	WEDGE	
4	91034194	6	CIRCLIP	
5	91034201	6	THRUSTWASHER	
6	91034177	3	FINAL PLANET GEAR	
7	91034204	60	NEEDLE ROLLER	
8	91034176	3	FINAL PLANET PIN	
9		Ref	HEX SOCKET PIPE PLUG	
10	91034198	6	CIRCLIP	
11	91034180	1	PRIMARY PLANET HUB	
12	91034178	3	PRIMARY PLANET GEAR	
13	91034200	6	THRUSTWASHER	
14	91034199	7	NEEDLE BEARING	
15	91034166	3	PRIMARY PLANET PIN	
16	91034172	1	CABLE DRUM	
17		Ref	O-RING	
18	91034173	1	BEARING FLANGE	
19	91034179	2	NYLON SPACER	
20	Kit	2	OIL SEAL	
21	91034190	1	PRIMARY SUN GEAR	
22	91034168	1	BRAKE SPACER	
23	91034206	2	THRUSTWASHER	
24	91034197	5	DIVIDER PLATE	
25	91034208	1	CIRCLIP	
26	91034186	1	BRAKE HOUSING	
27	91034185	1	ORIFICE PLUG	
28	91034202	1	SPRAG CLUTCH	
29		Ref	HEX SOCKET PIPE PLUG	
30	91034169	2	SPRAG CLUTCH ALIGNER	
31	91034192	1	SAFETY VALVE	
32	91034184	1	PISTON	
33	Kit	1	O-RING	
34	91034203	1	CIRCLIP	
35	91034191	1	MOTOR BODY	
36	91034181	1	CONNECTING TUBE	
37	Kit	2	O-RING	
38	91034213	2	DOWEL PIN	
39	91034211	1	WEAR PLATE	
40	91034216	1	DRIVE GEAR	
41	91034212	1	COVER	
42	91034217	1	DRIVEN GEAR	
43	91034215	2	DOWEL PIN	
44	91034210	1	THRUST PLATE	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45		Ref	HEX SOCKET PIPE PLUG	
46	Kit	1	SQUARE CUT SEAL RING	
47	Kit	1	RUBBER SPACER	
48	Kit	1	NYLATRON	
49	91034171	6	BRAKE SPRING	
50		Ref	O-RING	
51	91034170	1	BRAKE HUB	
52	Kit	1	O-RING	
53	91034165	4	BRAKE PLATE	
54	Kit	1	O-RING	
55	91034207	1	THRUST BEARING	
56		Ref	OIL SEAL	
57	91034182	1	BACKUP WASHER	
58	91034195	2	CIRCLIP	
59	88201019	6	HEX HD CAPSCREW, 5/16-18X7/8, GR5	
60	88551010	6	LOCKWASHER, 5/16	
61	91034167	1	PRIMARY SUN GEAR STOPPER	
62	91034205	1	CIRCLIP	
63	91034174	1	FINAL SUN GEAR	
64	91034175	1	FINAL PLANET HUB	
65		Ref	HEX SOCKET PIPE PLUG	
66	91034188	2	TIE BAR	
67	88551011	6	LOCKWASHER, 3/8	
68	88201035	6	HEX HD CAPSCREW, 3/8-16X1, GR5	
69	91034183	1	MOTOR ADAPTER	
70	91034189	1	HYDRAULIC MOTOR ASSY (includes items 14, 35, 38 thru 47, 71 & 72)	
71	91034209	4	HEX HD CAPSCREW	
72	91034214	4	WASHER	
73		Ref	CAPLUG	
74	88221051	8	HEX HD CAPSCREW, 7/16-14X1-1/4, GR5	
75	88551012	8	LOCKWASHER, 7/16	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 12-13. (90801313) (JARP) HYDRAULIC CYLINDER ASSY (SN 8655105G to Present)



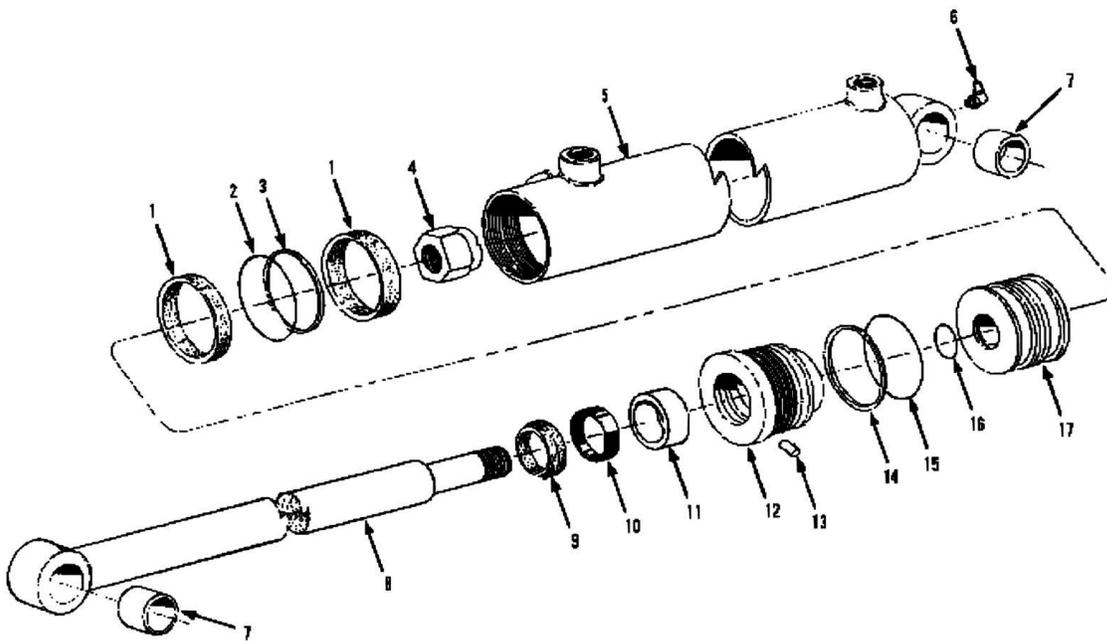
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-13. (90801313) (JARP) HYDRAULIC CYLINDER ASSY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	90801313	2	HYDRAULIC CYLINDER ASSY (includes all items)	
	90202551	1	SEAL KIT (includes items 1, 2, 3, 8, 9, 11, 12 & 13)	
1	90022257	2	WEAR RING	
2	90023145	1	O-RING	
3	90022237	1	PISTON SEAL	
4	90022230	1	SELF-LOCKING NUT	
5	90207821	1	BARREL	
6	90205450	2	BUSHING	
7	90207822	1	PISTON ROD	
8	90022277	1	WIPER RING	
9	90022247	1	ROD SEAL	
10	90402099	1	ROD BEARING	
11	90024232	1	BACK-UP RING	
12	90023232	1	O-RING	
13	90023117	1	O-RING	
14	90402098	1	PISTON	
15	90022218	1	LUBE FITTING	

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FIGURE 12-14. (91033291) (IOWA) HYDRAULIC CYLINDER ASSY (SN 8655105G to Present)



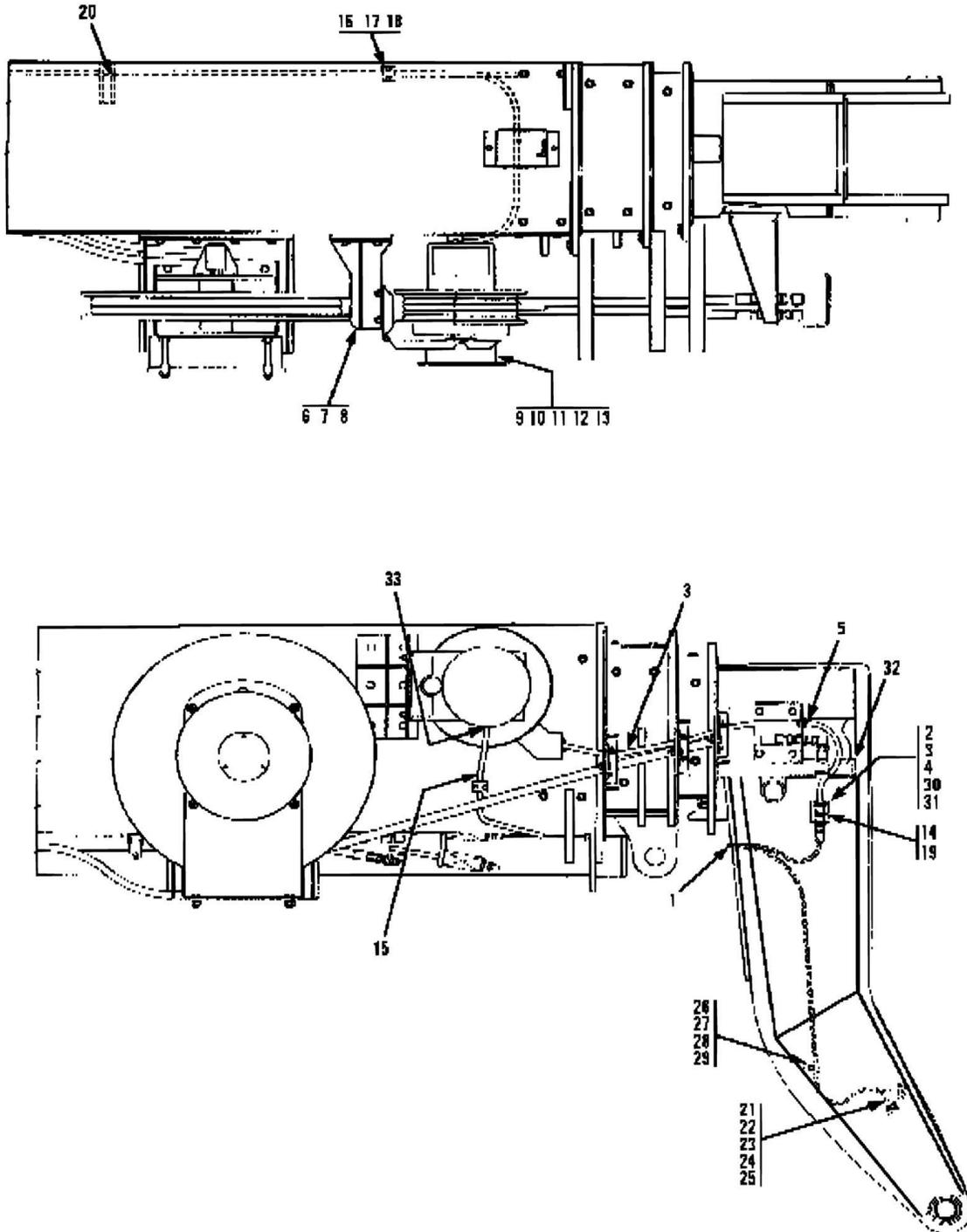
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FIGURE 12-14. (91033291) (IOWA) HYDRAULIC CYLINDER ASSY (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91033291	2	HYDRAULIC CYLINDER ASSY (includes all items)	
	91034145	1	SEAL KIT (includes items 1, 2, 3, 9, 10, 11, 13, 14, 15 & 16)	
1	Kit	2	WEAR RING	
2	Kit	1	O-RING	
3	Kit	1	PISTON SEAL	
4	91034156	1	HEX LOCKNUT (lubricate and torque to 250 ft lbs)	
5	91034143	1	CASE ASSY (includes item 7)	
6	88671027	1	LUBE FITTING, 90, 1/4-28	
7	91034157	2	BUSHING	
8	91034142	1	SHAFT ASSY (includes item 7)	
9	Kit	1	WIPER	
10	Kit	1	U-CUP	
11	Kit	1	WEAR RING	
12	91034141	1	HEAD	
13	Kit	1	NYLON PLUG	
14	Kit	1	BACK-UP RING	
15	Kit	1	O-RING	
16	Kit	1	O-RING	
17	91034144	1	PISTON	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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FIGURE 12-15. ELECTRICS FOR AUXILIARY HYDRAULICS



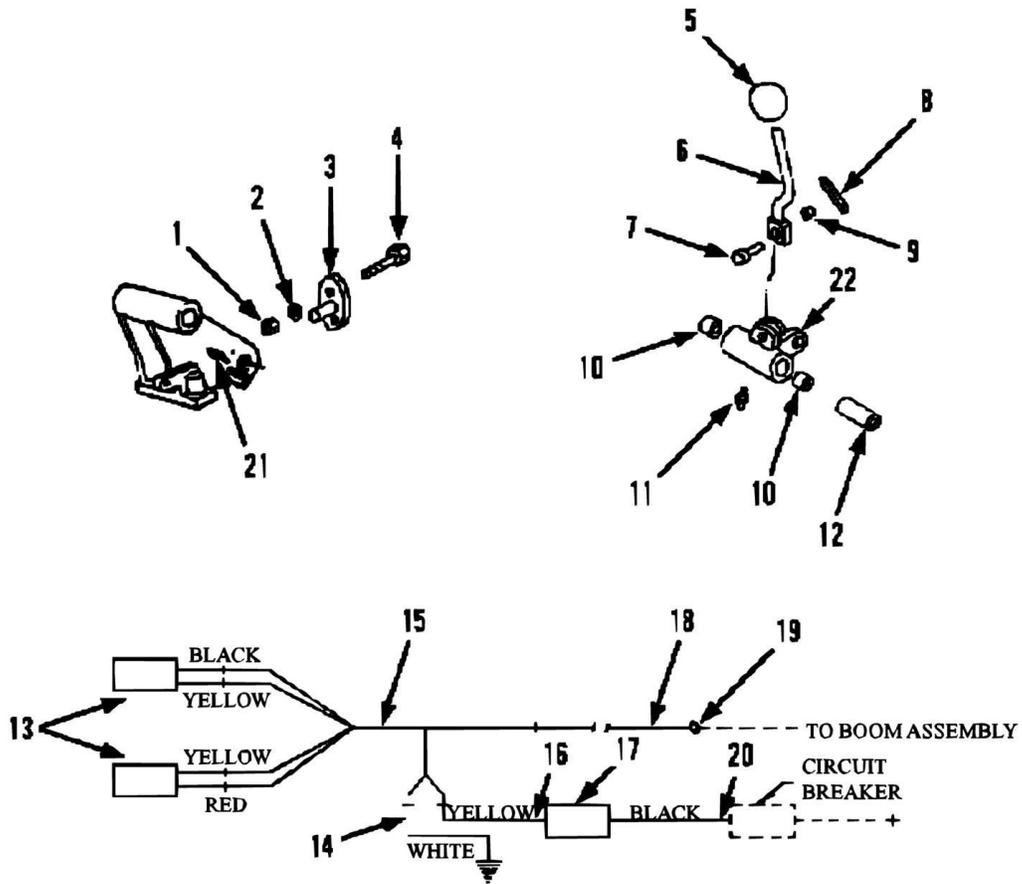
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FIGURE 12-15. ELECTRICS FOR AUXILIARY HYDRAULICS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045067	Ref	ELECTRICS FOR AUXILIARY HYDRAULICS (includes items 1 thru 33)	
1	90207470	1	HEAD WIRING HARNESS	
2	90028955	1	CONNECTOR BODY	
3	90028957	6	MALE PIN CONNECTOR	
4	90028978	1	CABLE CLAMP	
5	90204263	1	CABLE CLAMP	
6	91046093	1	ELECTRIC REEL BRACKET	
7	88201064	6	HEX HD CAPSCREW, 1/2-13X7/8, GR5	
8	88551013	6	LOCKWASHER, 1/2	
9	91043265	1	ELECTRIC CABLE REEL	
10	88201037	4	HEX HD CAPSCREW, 3/8-16X1-1/2, GR5	
11	88561004	4	FLAT WASHER, 3/8	
12	88551011	4	LOCKWASHER, 3/8	
13	88501006	4	HEX NUT, 3/8-16	
14	91061115	1	HARNESS HANGER	
15	91043263	1	BOOM HARNESS	
16	91033138	2	CLAMP SET	
17	77133498	2	COVER PLATE	
18	77133499	4	HEX HD CAPSCREW, 1/4-20X1-5/16	
19	88321048	4	SELF TAPPING SCREW, 1/4-20X5/8	
20	86683122	8	TY-RAP	
21	90207661	Ref	ELECTRICAL SOCKET	
22	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
23	88551009	2	LOCKWASHER, 1/4	
24	88501004	2	HEX NUT, 1/4-20	
25	90207711	2	MOUNTING EAR	
26	77133271	1	BASE PLATE	
27	77133270	1	CLAMP SET	
28	88201005	1	HEX HD CAPSCREW, 1/4-20X1, GR5	
29	88561002	1	FLAT WASHER, 1/4	
30	88321008	4	SELF TAPPING SCREW, #4-40X5/16	
31	88561102	4	FLAT WASHER, #4	
32	90206200	17 in	TRIM LOCK	
33	91043278	1	CABLE CLAMP	

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FIGURE 12-16. AUXILIARY HYDRAULICS



ELECTRIC SCHEMATIC

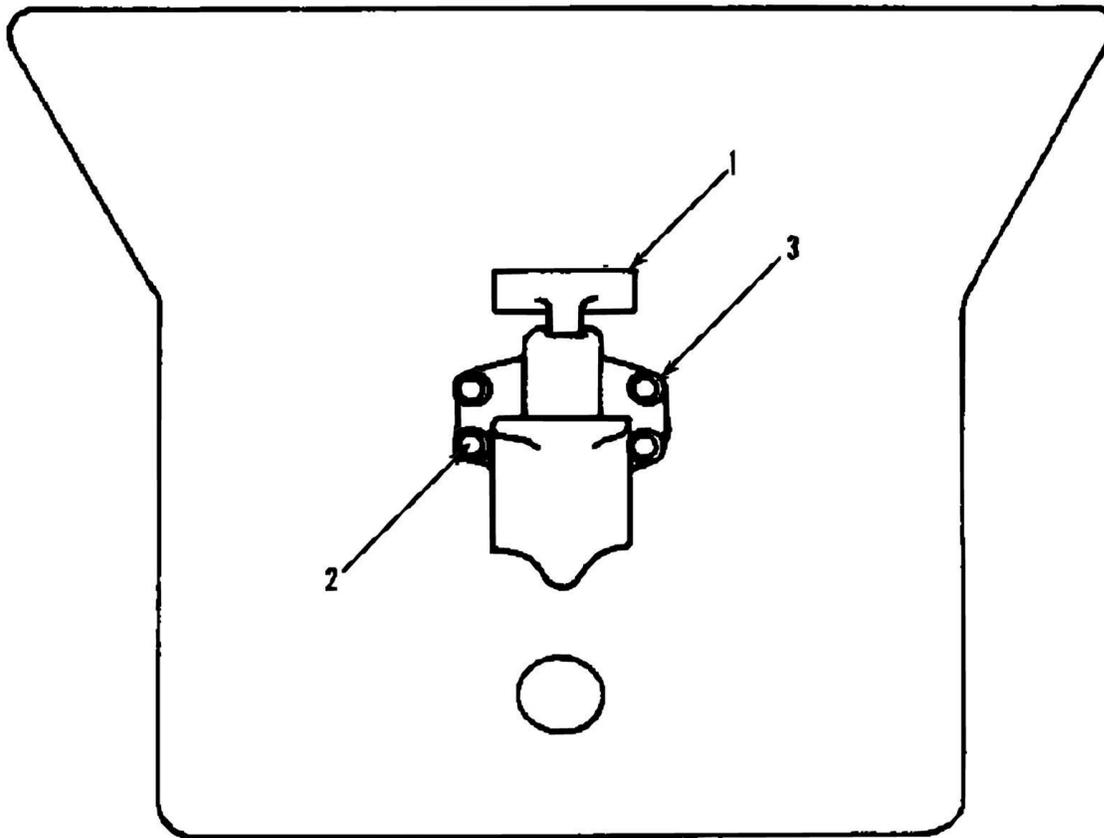
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-16. AUXILIARY HYDRAULICS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035082	Ref	AUXILIARY ELECTRICS - CHASSIS (includes all items)	
1	88501004	2	HEX NUT, 1/4-20	
2	88551009	2	LOCKWASHER, 1/4	
3	90207661	1	SIX CONTACT SOCKET	
4	88201003	2	HEX HD CAPSCREW, 1/4-20X3/4, GR5	
5	90200299	1	KNOB	
6	90206128	1	HANDLE	
7	90021557	1	CLEVIS PIN	
8	88631309	1	COTTER PIN, 3/32X3/4	
9	90200688	1	BEARING	
10	90200290	2	BEARING	
11	88671008	1	LUBE FITTING, STRAIGHT, 1/4-28	
12	90206222	1	SPACER	
13	90207634	2	SWITCH ASSY	
14	90207716	1	JUMPER WIRE	
15	90403360	1	AUXILIARY DASH HARNESS	
16	90207645	1	JUMPER WIRE	
17	90206347	1	CIRCUIT BREAKER	
18	90403396	1	AUXILIARY WIRE HARNESS	
19	90027187	4	PLASTIC TIE	
20	90200351	1	JUMPER WIRE	
21	90207711	1	MOUNTIN GEAR	
22	90205983	1	BELL CRANK	

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FIGURE 12-17. PINTLE HOOK



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FIGURE 12-17. PINTLE HOOK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91035101	Ref	PINTLE HOOK INSTALLATION (includes all items)	
1	90200602	1	PINTLE	
2	83201120	4	HEX HD CAPSCREW, 1/2-13X1-3/4 GR8	
3	88551013	4	LOCKWASHER, 1/2	

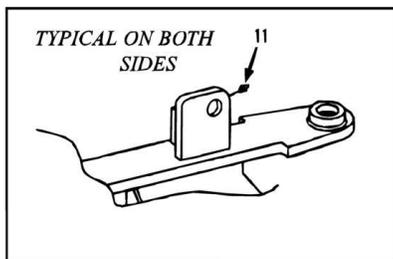
SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-18. (91045129) STEER AXLE ADVANTAGE KIT; FOR SERVICE ONLY

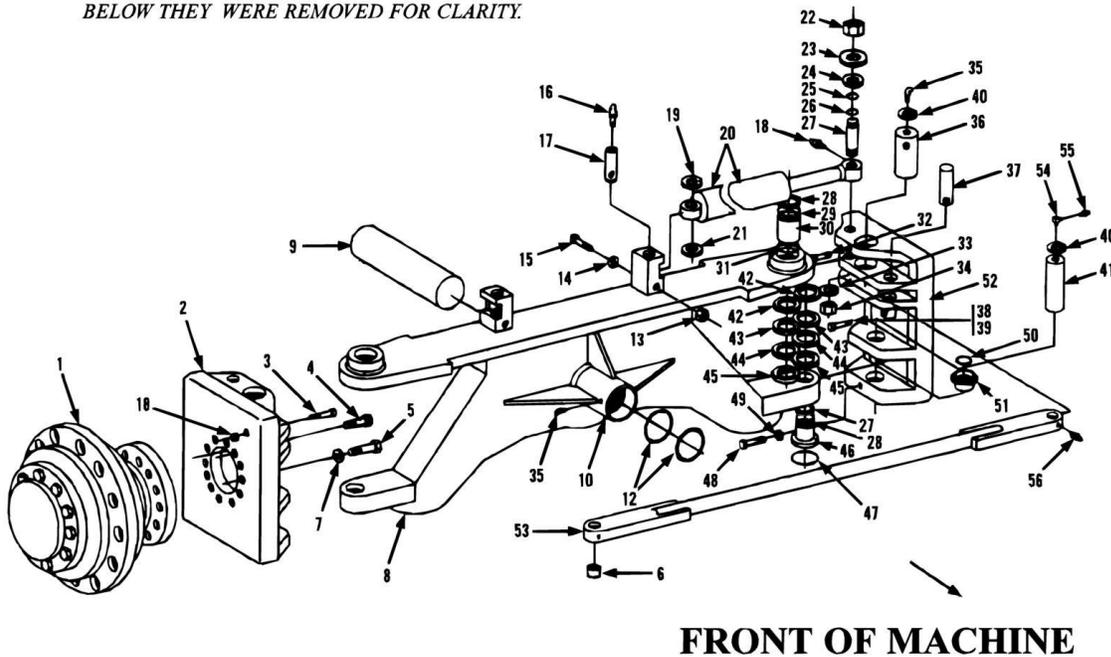
NOTE #1: CUSTOMER TO USE EXISTING WHEEL HUBS & HARDWARE, DRIVE MOTORS, DRIVE MOTOR TUBE ASSEMBLIES, AND DRAIN LINE HOSES OR ORDER SEPARATELY IF REPLACEMENT IS REQUIRED

NOTE #2: CYLINDER BASE END MUST BE FREE TO ROTATE. SHIM STEER CYLINDER BASE END AS REQUIRED TO MAINTAIN A TOTAL MAX. GAP OF 1/16".

*** NOTE #3: SHIM BOTTOM KNUCKLES AS REQUIRED TO MAINTAIN NO MORE THAN 1/32" MOVEMENT. SHIM TOP KNUCKLES AS REQUIRED TO MAINTAIN NO MORE THAN 1/16" GAP. MUST HAVE A MINIMUM OF ONE SHIM.**



VIEW SHOWING STABILIZER EARS IN PLACE.
BELOW THEY WERE REMOVED FOR CLARITY.



SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-18. (91045129) STEER AXLE ADVANTAGE KIT; FOR SERVICE ONLY

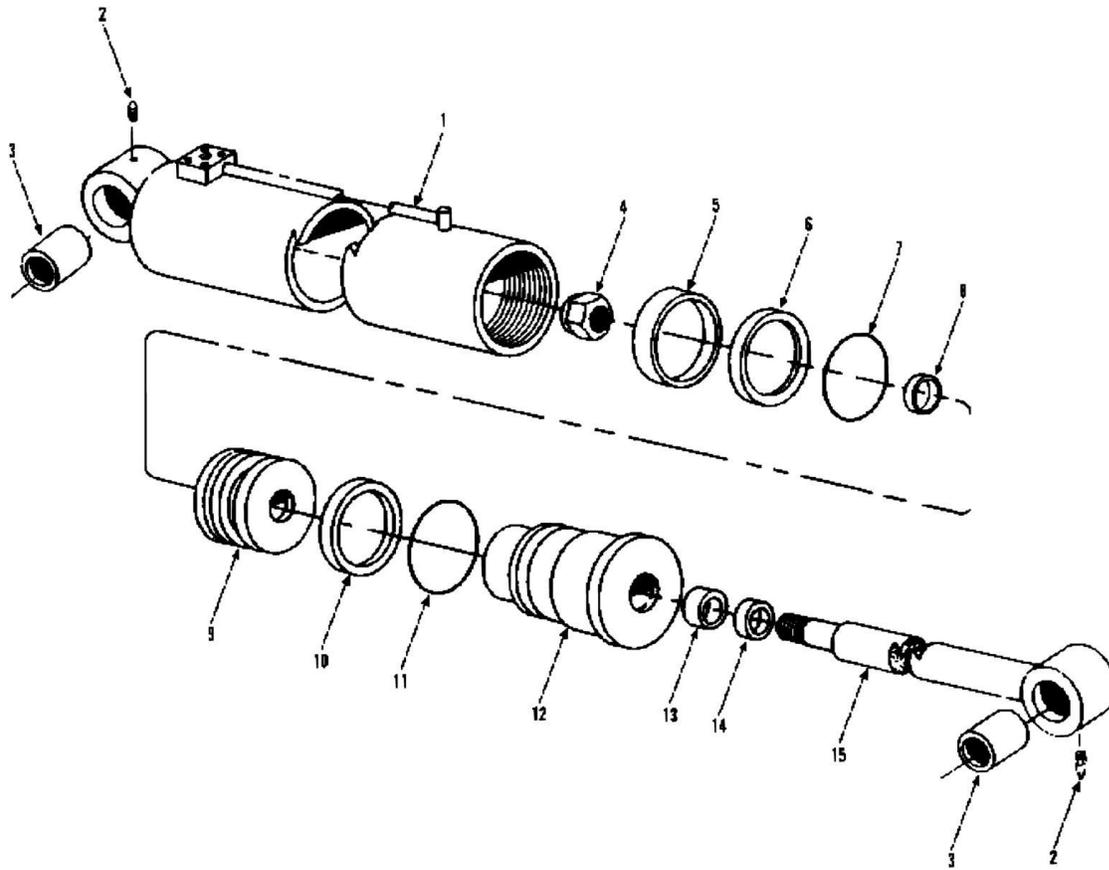
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91045129	Ref	STEER AXLE ADVANTAGE KIT (includes all items except 1, 5, 7 & 9)	
	91035240	1	STEERING KNUCKLE KIT (includes items 23, thru 26, 28 thru 32, 35, 36 & 40 thru 51- one kit does both sides)	
	91045152	Ref	STEERING CYLINDER PIN KIT (includes one each of items 22 thru 27, 33 & 34 -one kit needed for each side)	
1		Ref	DRIVE HUB (use existing hubs)	
2	91120002	1	R.H. STEERING KNUCKLE	
3	88212321	2	SOCKET HD CAPSCREW, 5/8-11X3-3/4, GR8	
4	91043222	2	CAPSCREW, 12 PT., 3/4-10X2 (lubricate and torque to 270-290 ft lbs)	
5	83201006	12	HEX HD CAPSCREW, 3/4-10X2 (use existing hardware)	
6	91043247	2	SELF-ALIGNING BUSHING	
7	86681572	12	HARDENED WASHER, 3/4 (use existing hardware)	
8	91046126	1	REAR AXLE WELDMENT (includes items 10, 30 & 46)	
9		Ref	REAR AXLE PIN (use existing pin)	
10	91123031	2	BUSHING	
11	88671008	2	LUBE FITTING, STRAIGHT, 1/4-28	
12	24601570	2	LIP SEAL	
13	88501006	2	HEX NUT, 3/8-16	
14	88551011	2	LOCKWASHER, 3/8	
15	83201144	2	HEX HD CAPSCREW, 3/8-16X5-3/4, GR5	
16	88711280	2	HEX SOCKET PIPE PLUG, 1/8	
17	91081695	2	STEERING CYLINDER PIVOT PIN	
18	88501110	2	HEAVY HEX JAM NUT, 5/8-11	
19	91041598	2	SHIM (see note #2)	
20	91033478	2	STEERING CYLINDER ASSY	
20	91034301	AR	SEAL KIT	
20	91043246	2	RADIAL BUSHING (rod end)	
21	90201918	2	SHIM (10 gauge thick, see note #2)	
22	88521312	2	HEX LOCKNUT, 3/4-10	
23	91081415	2	DIRT SHIELD	
24	91041732	2	SPACER	
25	88591019	2	O-RING	
26	88591105	2	O-RING	
27	91041481	2	STEERING CYLINDER PIN	
28	91123030	4	BACK-UP RING	
29	88591032	4	O-RING	
30	91123028	2	BUSHING	
31	86921268	2	LIP SEAL	
32	88211121	2	HD CAPSCREW, SOCKET 1/2-13X6-1/2, GR8	
32	88521208	2	HEX LOCKNUT, 1/2	
33	91041459	2	WASHER	
34	88501416	2	HEX JAM NUT, 1-14 (lubricate and torque to 425-475 ft lbs)	
35	88671022	4	LUBE FITTING, 30, 1/8	
36	91081693	2	UPPER KING PIN	
37	91041439	2	TIE ROD PIN	
38	83201140	2	HEX HD CAPSCREW, 3/8-16X2-3/4, GR8	
39	88521306	2	LOCKNUT, 3/8-16	
40	88581323	4	RETAINING RING	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
41	91141424	2	LOWER KING PIN	
42	91041596	4	SHIM (20 gauge thick, see note #3)	
43	91041449		SHIM (.060 thick, see note #3)	
44	91041450	4	SHIM (.0478 thick, see note #3)	
45	91041451	6	SHIM (.106 thick, see note #3)	
46	91123027	2	BUSHING	
47	91123029	2	O-RING	
48	88212321	2	SLOT HD CAPSCREW, 5/8-11X3-3/4, GR8	
49	88551153	2	LOCKWASHER, 5/8	
50	88591104	2	O-RING	
51	91121091	2	THRUST BUSHING	
52	91120001	1	L.H. STEERING KNUCKLE	
53	91166063	1	TIE ROD (includes item 6)	
54	91033444	2	STREET ELBOW	
55	91033445	2	LUBE FITTING	
56	88671001	2	LUBE FITTING, STRAIGHT, 1/8	

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FIGURE 12-19. (91083286) SWAY CYLINDER (SN 8655105G to Present)



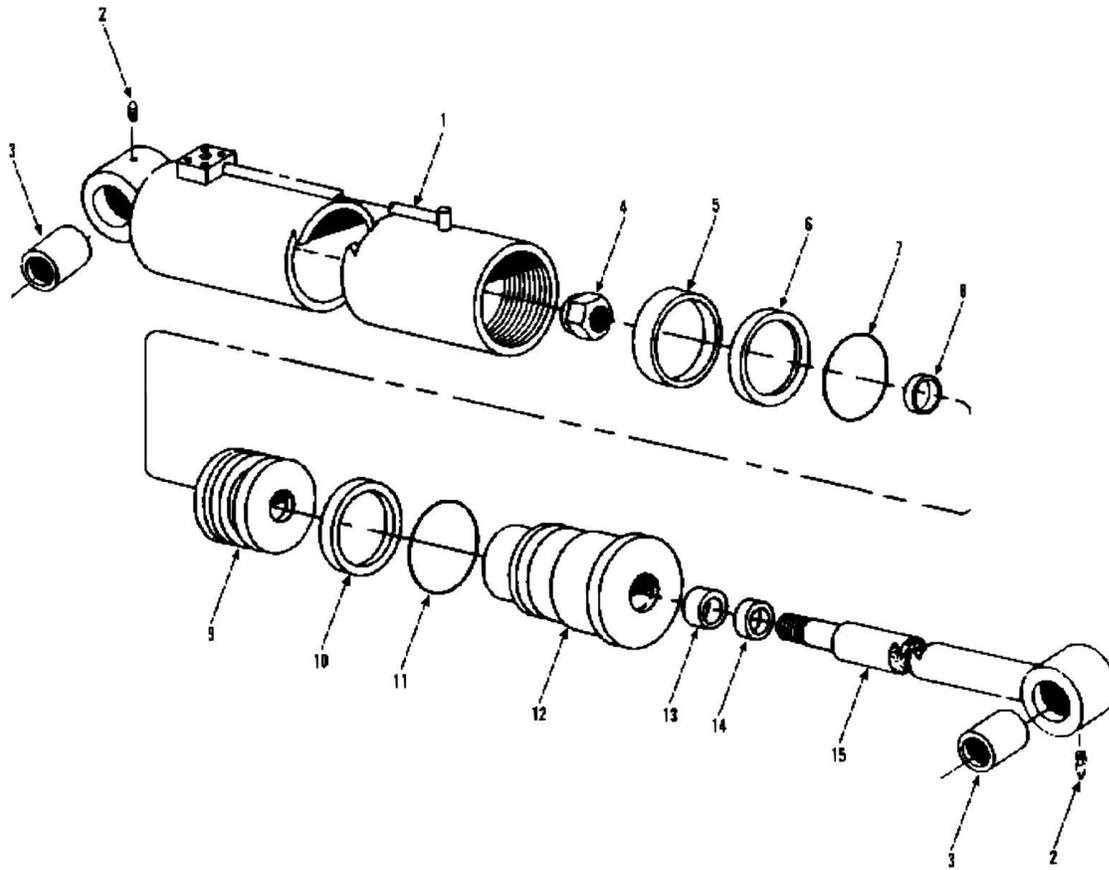
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FIGURE 12-19. (91083286) SWAY CYLINDER (SN 8655105G to Present)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91083286	1	SWAY CYLINDER ASSY (includes all items)	
	91084189	Ref	SEAL KIT (includes items 5, 6, 7, 8, 10, 11, 13 & 14)	
1	91084185	1	TUBE ASSY	
2	88671033	2	LUBE FITTING - STRAIGHT, 1/4-28	
3	91084176	2	BUSHING	
4	91084184	1	NUT	
5	91084219	1	WEAR RING	
6	91084220	1	SEAL	
7	91084221	1	O-RING	
8	91084222	1	O-RING	
9	91084186	1	PISTON	
10	91084223	1	BACK-UP RING	
11	91084224	1	O-RING	
12	91084188	1	GLand	
13	91084225	1	SEAL	
14	91084226	1	WIPER	
15	91084187	1	ROD ASSY	

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FIGURE 12-20. (91083471) SWAY CYLINDER



SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-20. (91083471) SWAY CYLINDER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91083471	1	SWAY CYLINDER ASSY, (includes all items)	
	91084308	Ref	SEAL KIT, (includes items 6 thru 9, 11, 12 & 14 thru 16)	
1	91064016	2	BUSHING	
2	91144128	2	GREASE FITTING	
3	91124083	1	CASE ASSY	
4	91144017	1	CAPSCREW, #8X32X.375	
5	91034156	1	LOCKNUT, (lubricate and torque to 350-400 ft lbs)	
6	Kit	2	WEAR RING	
7	Kit	1	PISTON SEAL	
8	Kit	1	O-RING	
9	Kit	1	O-RING	
10	91124084	1	PISTON	
11	Kit	1	O-RING	
12	Kit	1	BACK-UP RING	
13	91124085	1	CYLINDER HEAD	
14	Kit	1	STEP SEAL	
15	Kit	1	U-CUP	
16	Kit	1	WIPER	
17	91124086	1	ROD ASSY	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE	

SECTION 12 - OPTIONAL EQUIPMENT

FIGURE 12-21. (91083262) DUAL P.O. CHECK VALVE

ARTWORK NOT AVAILABLE AT THE TIME OF PRINTING

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FIGURE 12-21. (91083262) DUAL P.O. CHECK VALVE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	91083262	1	DUAL P.O. CHECK VALVE ASSY	
	91044002	Ref	SEAL KIT, (includes items 3 & 4)	
1		Ref	BODY	
2	77133248	2	CHECK VALVE, (includes items 3 & 4)	
3	91084227	2	O-RING	
4	91084228	2	O-RING	
5	88591009	2	O-RING	
		Ref	NOTE: ONLY ITEMS WITH PART NUMBERS ARE AVAILABLE FOR SERVICE.	

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