



# Illustrated Parts Manual

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An Oshkosh Corporation Company



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# REVISION LOG

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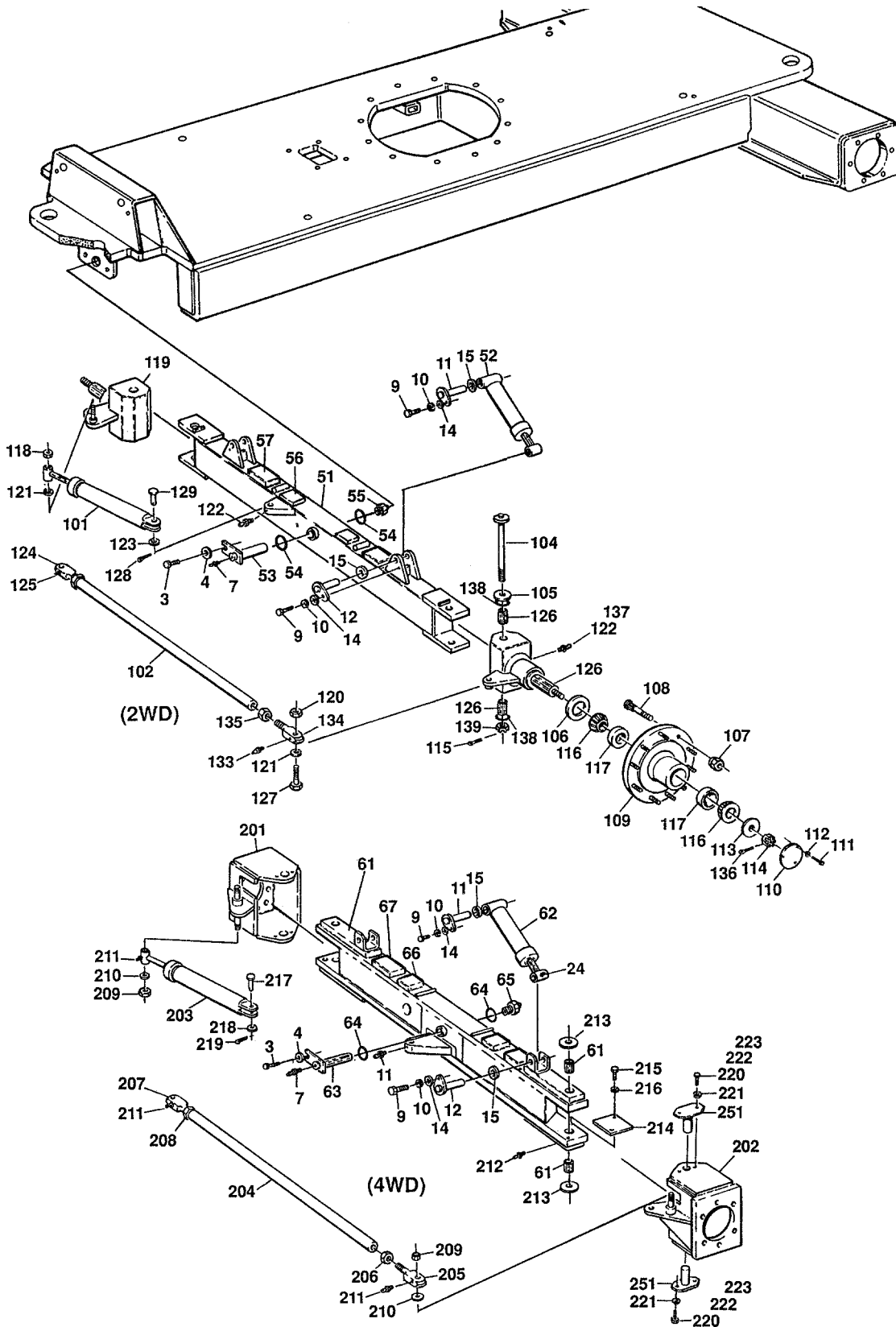
# SECTION 1 FRAME

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# SECTION 1 FRAME

FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER)

SECTION  
1  
FRAME



# SECTION 1 FRAME

**FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER)</b>	Ref.	
	2360299	Frame (2WD Fixed Axle)	1	
	2360300	Frame (4WD Fixed Axle)	1	
	2360305	Frame (All With Oscillating Axle - Prior to October 1994)	1	
	2360386	Frame (All With Oscillating Axle - October 1994 to Present)	1	
		<b>AXLE INSTALLATION - MACHINES WITH OPTION ALOSCILLATING AXLE (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	Not Used			
3	0641610	Bolt 3/8"-16NC x 1 1/4"	A/R	
4	4740185	Washer, Hardened	A/R	
5	0100019	Loctite #271 (Not Shown)	A/R	
6	Not Used			
7	2160002	Fitting, Grease	1	
8	Not Used			
9	0641406	Bolt 1/4"-20NC x 3/4"	4	
10	4761400	Lockwasher 1/4"	4	
11	4843286	Pin	2	
12	4842794	Pin	2	
13	Not Used			
14	4751400	Flatwasher 1/4"	4	
15	4712600	Flatwasher 1"	A/R	
		<b>AXLE INSTALLATION - 2WD MACHINES WITH OPTIONAL OSCILLATING AXLE (VARIABLE PARTS)</b>	Ref.	
	0250382	<b>BUILT PRIOR TO SEPTEMBER 1990</b>	Ref.	D
	0251330	<b>BUILT SEPTEMBER 1990 TO OCTOBER 1994</b>	Ref.	C
	0255069	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	C
51		Front Axle Weldment Options:	1	
	4843477	Prior to October 1994		
	4844848	October 1994 to Present		
52		Lockout Cylinder Assembly Options (See Section 5 for Breakdown):	2	
	1681785	Built Prior to September 1990		
	1682406	September 1990 to June 1992		
	1682757	June 1992 to October 1994		
53		Pin Options:	1	
	4842621	Prior to October 1994		
	3422401	October 1994 to Present		
54		O-Ring Options:	2	
	Not Required	Prior to October 1994		
	3780183	October 1994 to Present		

# SECTION 1 FRAME

SECTION 1 FRAME

**FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
55	Not Required 4640812	Valve, Relief Options: Prior to October 1994	1	
		October 1994 to Present		
		<b>AXLE INSTALLATION - 4WD MACHINES WITH OPTIONAL OSCILLATING AXLE (VARIABLE PARTS)</b>	Ref.	
	0250334	<b>BUILT PRIOR TO SEPTEMBER 1990</b>	Ref.	E
	0251329	<b>BUILT SEPTEMBER 1990 TO OCTOBER 1994</b>	Ref.	D
	0255070	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	—
61	4843447	Front Axle Weldment Options: Prior to October 1994	1	
		October 1994 to Present		
	0961029	Bushing, Bronze	4	
62		Lockout Cylinder Assembly Options (See Section 5 for Breakdown):	2	
	1681785	Cylinder - Prior to September 1990		
	1682406	Cylinder - September 1990 to June 1992		
	1682757	Cylinder - June 1992 to Present		
63		Pin Options:	1	
	4842621	Prior to October 1994		
	3422401	October 1994 to Present		
64		O-Ring Options:	2	
	Not Required 3780183	Prior to October 1994		
		October 1994 to Present		
65		Valve, Relief Options:	1	
	Not Required 4640812	Prior to October 1994		
		October 1994 to Present		
		<b>STEERING AND SPINDLES INSTALLATION - 2WD MACHINES</b>	Ref.	
	0236449	<b>STANDARD</b>	Ref.	O
	0251521	<b>CSA</b>	Ref.	F
101	1681562	Steer Cylinder Assembly (See Section 5 for Break- down)	1	
102	3840863	Tie-Rod	1	
103	Not Used			
104		Kingpin Options:	2	
	3421243	Domestic (Prior to February 1994)		
	3421835	CSA (Prior to February 1994)		
	3422261	All (February 1994 to Present)		
105	0440183	Bearing, Thrust	2	
106	3960098	Seal, Hub	2	
107	3300012	Nut, Wheel	18	
108	0630137	Stud, Wheel	18	
109	2780091	Hub Assembly	2	
110	1120032	Cap, Hub	2	

# SECTION 1 FRAME

**FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
111	0721003	Bolt #10-24NC x 3/8"	6	
112	4761000	Lockwasher #10	6	
113	4740016	Washer, Hardened	2	
114	3323403	Nut 1 1/2"- 6NF	2	
115	3451012	Pin, Cotter 5/16" x 3"	2	
116	0440019	Cone, Bearing	4	
117	0440018	Cup, Bearing	4	
118	3300175	Locknut	1	
119	4130160	Spindle (Right Side)	1	
	0961778	Bushing, Excel	2	
120	3312602	Nut, Jam 1"-8NC	2	
121	0440091	Bearing, Thrust	3	
122	2160002	Fitting, Grease	3	
123	4712600	Flatwasher 1" Narrow	1	
124	0560605	Block, Tie-Rod (Right Side)	1	
125	3323002	Nut, Jam 1 1/4"-12NF (Right Side)	1	
126	4130161	Spindle (Left Side)	1	
	0961778	Bushing, Excel	2	
127	0630425	Bolt 1"-8NC x 3 3/4"	2	
128	3450606	Pin, Cotter 3/16" x 1 1/2"	1	
129	3431622	Pin, Clevis 1" x 2 3/4"	1	
130	Not Used			
131	Not Used			
132	0100011	Loctite #242 (Not Shown)	A/R	
133	2160003	Fitting, Grease - 45°	2	
134	0560714	Block, Tie-Rod (Left Side)	1	
135	3300229	Nut, Jam 1 1/4"-12NF LH (Left Side)	1	
136	3450810	Pin, Cotter 1/4" x 2 1/2"	2	
137	4640812	Valve, Relief (After February 1994)	2	
138	3780183	O-Ring (After February 1994)	4	
139	3323403	Nut, Slotted 1 1/2" - 6NF (Prior to May 1994)	2	
	3313403	Nut, Slotted 1 1/2" - 6NC (May 1994 to Present)	2	
		<b>STEERING AND SPINDLES INSTALLATION - 4WD MACHINES (STANDARD PARTS)</b>	Ref.	
201	4130221	Spindle (Right Side)	1	
202	4130222	Spindle (Left Side)	1	
203	1681555	Steer Cylinder Assembly (See Section 5 for Break-down)	1	
204	3841018	Tie-Rod	1	
205	0560714	Block, Tie-Rod (Left Side)	1	
206	3300229	Nut, Jam 1 1/4"-12NF (Left Side)	1	
207	0560605	Block, Tie-Rod (Right Side)	1	
208	3323002	Nut, Jam 1 1/4"-12NF	1	
209	3300175	Locknut	3	
210	0440091	Bearing, Thrust	3	
211	2160002	Fitting, Grease	4	
212	2160003	Fitting, Grease - 45°	4	

# SECTION 1 FRAME

SECTION 1 FRAME

**FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
213	0440161	Bearing, Thrust	4	
214		Cover Options:	4	
	3530244	(Prior to August 1992)		
	3536411	(August 1992 to Present)		
215		Fastener Options:	A/R	
	0641404	Bolt 1/4"-20NC x 1/2" (Prior to August 1992)		
	2080026	Stud, Drive (August 1992 to May 1994)		
	4300106	Stud, Drive (May 1994 to Present)		
216	4761400	Lockwasher 1/4" (Prior to August 1992 Only)	8	
217	3431622	Pin, Clevis	1	
218	4712600	Flatwasher, 1"	1	
219	3450606	Pin, Cotter 3/16" x 1 1/2"	1	
220	0641608	Bolt 3/8"-16NC x 1"	8	
221	4751600	Flatwasher 3/8"	8	
222	1380124	Clip, Retainer	8	
223	4920096	Wire, Safety	4 ft./ 1.22m	
	0250085	<b>STEERING AND SPINDLES INSTALLATION - 4WD DOMESTIC MACHINES (VARIABLE PARTS)</b>	Ref.	E
	0252333	<b>STEERING AND SPINDLES INSTALLATION - CSA 4WD MACHINES (VARIABLE PARTS)</b>	Ref.	B
251		Kingpin Options:	4	
	3421190	Standard		
	3421887	CSA		
				B

# SECTION 1 FRAME

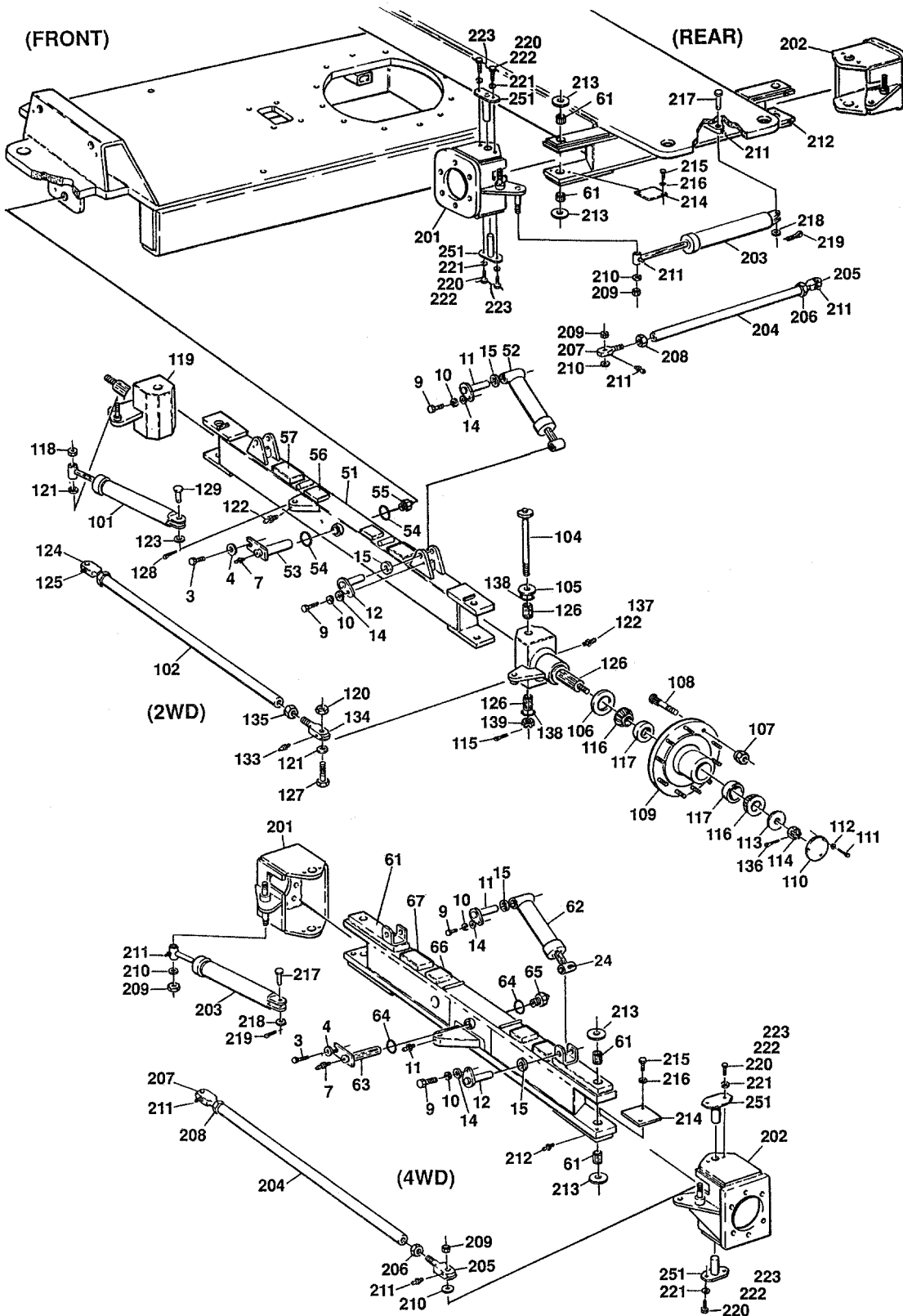
FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

**S  
E  
C  
T  
I  
O  
N  
  
1  
  
F  
R  
A  
M  
E**

# SECTION 1 FRAME

FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER)





# SECTION 1 FRAME

**FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER)</b>	Ref.	
	2360380	Frame (2WD Fixed Axle)	1	
	2360381	Frame (4WD Fixed Axle)	1	
	2360334	Frame (All With Oscillating Axle - Prior to October 1994)	1	
	2360385	Frame (All With Oscillating Axle - October 1994 to Present)	1	
	0961029	Bushing, Bronze (Rear Axle)	4	
		<b>FRONT AXLE INSTALLATION (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	Not Used			
3	0641610	Bolt 3/8"-16NC x 1 1/4"	A/R	
4	4740185	Washer, Hardened	A/R	
5	0100019	Loctite #271 (Not Shown)	A/R	
6	Not Used			
7	2160002	Fitting, Grease	1	
8	Not Used			
9	0641406	Bolt 1/4"-20NC x 3/4"	4	
10	4761400	Lockwasher 1/4"	4	
11	4843286	Pin (Oscillating Axle Only)	2	
12	4842794	Pin (Oscillating Axle Only)	2	
13	Not Used			
14	4751400	Flatwasher 1/4"	4	
15	4712600	Flatwasher 1"	A/R	
		<b>FRONT AXLE INSTALLATION - 2WD MACHINES WITH FIXED AXLE (VARIABLE PARTS)</b>	Ref.	
	0253173	<b>BUILT PRIOR TO OCTOBER 1994</b>	Ref.	—
	0255075	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	—
		<b>FRONT AXLE INSTALLATION - 2WD MACHINES WITH OSCILLATING AXLE (VARIABLE PARTS)</b>	Ref.	
	0250382	<b>BUILT PRIOR TO SEPTEMBER 1990</b>	Ref.	D
	0251330	<b>BUILT SEPTEMBER 1990 TO OCTOBER 1994</b>	Ref.	C
	0255069	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	—
51		Front Axle Weldment Options:	1	
	4843477	Prior to October 1994		
	4844848	October 1994 to Present		
52		Lockout Cylinder Assembly Options (See Section 5 for Breakdown):	2	
	Not Required	Fixed Axle		
		Oscillating Axle		
	1681785	Prior to September 1990		
	1682406	September 1990 to June 1992		
	1682757	June 1992 to October 1994		

# SECTION 1 FRAME

**FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
53	4842621 3422401	Pin Options: Prior to October 1994 October 1994 to Present	1	
54	Not Required Not Required 3780183	O-Ring Options: Fixed Axle Oscillating Axle Prior to October 1994 October 1994 to Present	2	
55	Not Required 4640812	Valve, Relief Options: Prior to October 1994 October 1994 to Present	1	
56	0361953 Not Required	Bar, Axle Block Options: Fixed Axle Oscillating Axle	2	
57	0361954 Not Required	Bar, Axle Block Options: Fixed Axle Oscillating Axle	2	
		<b>FRONT AXLE INSTALLATION - 4WD MACHINES WITH FIXED AXLE (VARIABLE PARTS)</b>	Ref.	
	0253174	<b>BUILT PRIOR TO OCTOBER 1994</b>	Ref.	—
	0255076	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	B
		<b>FRONT AXLE INSTALLATION - 4WD MACHINES WITH OSCILLATING AXLE (VARIABLE PARTS)</b>	Ref.	
	0250334	<b>BUILT PRIOR TO SEPTEMBER 1990</b>	Ref.	E
	0251329	<b>BUILT SEPTEMBER 1990 TO OCTOBER 1994</b>	Ref.	D
	0255070	<b>BUILT OCTOBER 1994 TO PRESENT</b>	Ref.	—
61	4843447 4844849 0961029	Front Axle Weldment Options: Prior to October 1994 October 1994 to Present Bushings, Bronze	1  4	
62	Not Required 1681785 1682406 1682757	Lockout Cylinder Assembly Options (See Section 5 for Breakdown): Fixed Axle Oscillating Axle Prior to September 1990 September 1990 to June 1992 June 1992 to October 1994	2	
63	4842621 3422401	Pin Options: Prior to October 1994 October 1994 to Present	1	
64	Not Required Not Required 3780183	O-Ring Options: Fixed Axle Oscillating Axle Prior to October 1994 October 1994 to Present	2	

# SECTION 1 FRAME

**FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
65	Not Required	Valve, Relief Options:	1	
	4640812	Prior to October 1994		
		October 1994 to Present		
66	0361951	Bar, Axle Blocking Options:	2	
	0361953	Fixed Axle (Prior to October 1994)		
	0362531	Fixed Axle (October 1994 to March 1995)		
	Not Required	Fixed Axle (March 1995 to Present)		
		Oscillating Axle		
67	0361952	Bar, Axle Blocking Options:	2	
	0361954	Fixed Axle (Prior to October 1994)		
	0361952	Fixed Axle (October 1994 to August 1995)		
	0361952	Fixed Axle (August 1995 to Present)		
	Not Required	Oscillating Axle		
	0236449	<b>STEERING AND SPINDLES INSTALLATION - 2WD FRONT (STANDARD)</b>	Ref.	O
	0251521	<b>STEERING AND SPINDLES INSTALLATION - 2WD FRONT (CSA)</b>	Ref.	F
101	1681562	Steer Cylinder Assembly (See Section 5 for Break-down)	1	
102	3840863	Tie-Rod	1	
103	Not Used			
104		Kingpin Options:	2	
	3421243	Domestic (Prior to February 1994)		
	3421835	CSA (Prior to February 1994)		
	3422261	All (February 1994 to Present)		
105	0440183	Bearing, Thrust	2	
106	3960098	Seal, Hub	2	
107	3300012	Nut, Wheel	18	
108	0630137	Stud, Wheel	18	
109	2780091	Hub Assembly	2	
110	1120032	Cap, Hub	2	
111	0721003	Bolt #10-24NC x 3/8"	6	
112	4761000	Lockwasher #10	6	
113	4740016	Washer, Hardened	2	
114	3323403	Nut 1 1/2"-6NF	2	
115	3451012	Pin, Cotter 5/16" x 3"	2	
116	0440019	Cone, Bearing	4	
117	0440018	Cup, Bearing	4	
118	3300175	Locknut	1	
119	4130160	Spindle (Right Side)	1	
	0961778	Bushing, Excel	2	
120	3312602	Nut, Jam 1"- 8NC	2	
121	0440091	Bearing, Thrust	3	
122	2160002	Fitting, Grease	3	
123	4712600	Flatwasher 1" Narrow	1	
124	0560605	Block, Tie-Rod (Right Side)	1	
125	3323002	Nut, Jam 1 1/4"-12NF (Right Side)	1	

# SECTION 1 FRAME

**FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
126	4130161	Spindle (Left Side)	1	
	0961778	Bushing, Excel	2	
127	0630425	Bolt 1"-8NC x 3 3/4"	2	
128	3450606	Pin, Cotter 3/16" x 1 1/2"	1	
129	3431622	Pin, Clevis 1" x 2 3/4"	1	
130	Not Used			
131	Not Used			
132	0100011	Loctite #242 (Not Shown)	A/R	
133	2160003	Fitting, Grease - 45°	2	
134	0560714	Block, Tie-Rod (Left Side)	1	
135	3300229	Nut, Jam 1 1/4"-12NF LH (Left Side)	1	
136	3450810	Pin, Cotter 1/4" x 2 1/2"	2	
137	4640812	Valve, Relief (After February 1994)	2	
138	3780183	O-Ring (After February 1994)	4	
139	3323403	Nut, Slotted 1 1/2"-6NF (Prior to May 1994)	2	
	3313403	Nut, Slotted 1 1/2"-6NC (May 1994 to Present)	2	
		<b>STEERING AND SPINDLES INSTALLATION - 4WD FRONT AND ALL REAR STEER (STANDARD PARTS)</b>	Ref.	
201	4130221	Spindle (Front Right Side and Rear Left Side)	1	
202	4130222	Spindle (Front Left Side and Front Right Side)	1	
203	1681555	Steer Cylinder Assembly (See Section 5 for Break-down)	1	
204	3841018	Tie-Rod	1	
205	0560714	Block, Tie-Rod (Left Side)	1	
206	3300229	Nut, Jam 1 1/4"-12NF (Left Side)	1	
207	0560605	Block, Tie-Rod (Right Side)	1	
208	3323002	Nut, Jam 1 1/4"-12NF	1	
209	3300175	Locknut	3	
210	0440091	Bearing, Thrust	3	
211	2160002	Fitting, Grease	4	
212	2160003	Fitting, Grease - 45°	4	
213	0440161	Bearing, Thrust	4	
214		Cover Options:	4	
	3530244	(Prior to August 1992)		
	3536411	(August 1992 to Present)		
215		Fastener Options:	A/R	
	0641404	Bolt 1/4"-20NC x 1/2" (Prior to August 1992)		
	2080026	Stud, Drive (August 1992 to May 1994)		
	4300106	Stud, Drive (May 1994 to Present)		
216	4761400	Lockwasher 1/4" (Prior to August 1992 Only)	8	
217	3431622	Pin, Clevis	1	
218	4712600	Flatwasher 1"	1	
219	3450606	Pin, Cotter 3/16" x 1 1/2"	1	
220	0641608	Bolt 3/8"-16NC x 1"	8	
221	4751600	Flatwasher 3/8"	8	
222	1380124	Clip, Retainer	8	

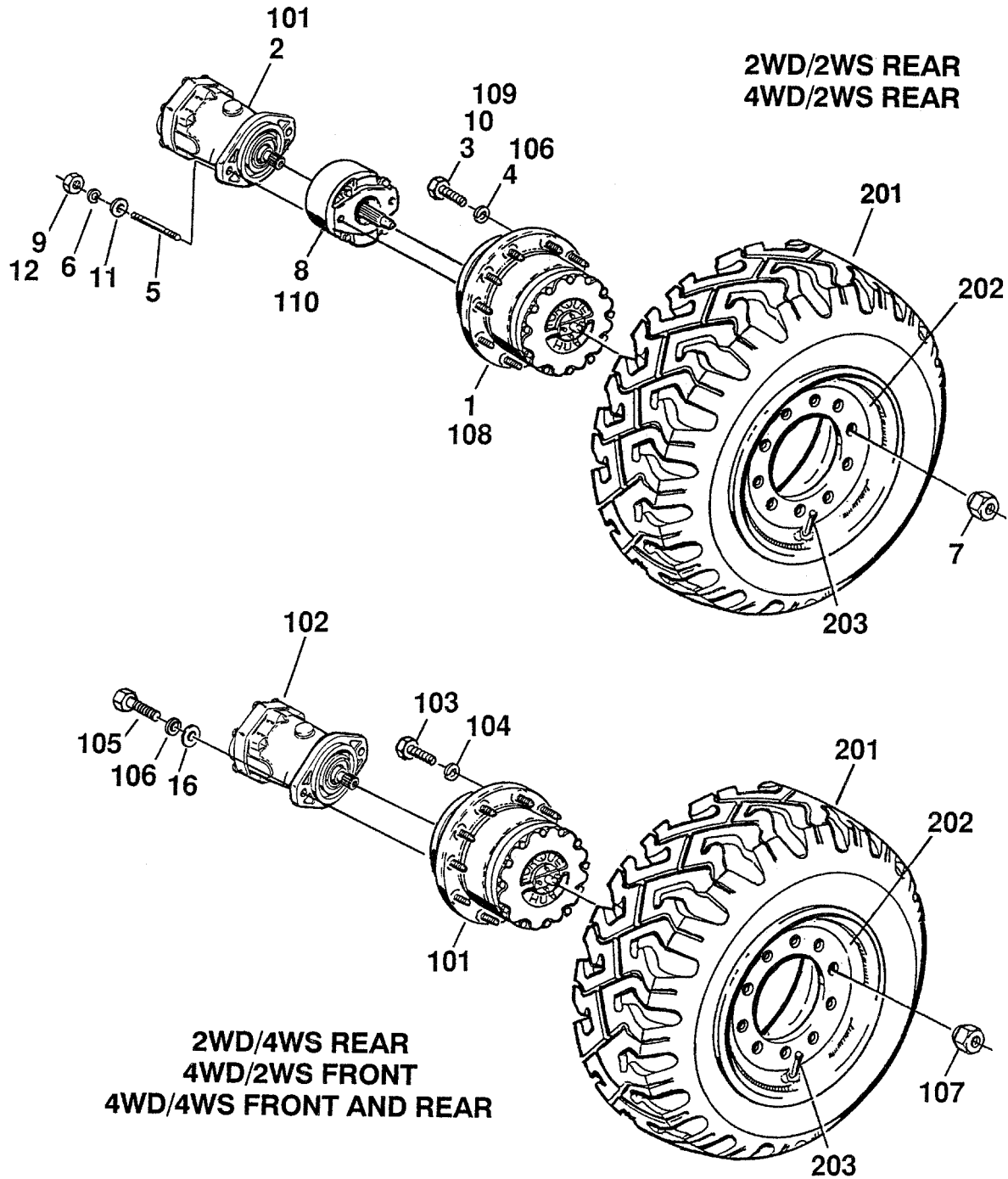
# SECTION 1 FRAME

**FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
223	4920096	Wire, Safety	4 ft./1.22m	
		<b>STEERING AND SPINDLES INSTALLATION - DOMESTIC 4WD FRONT AND DOMESTIC REAR (VARIABLE PARTS)</b>	Ref.	
	0250085	<b>DOMESTIC 4WD FRONT AND DOMESTIC REAR</b>	Ref.	E
	0252333	<b>CSA 4WD FRONT AND CSA REAR</b>	Ref.	C
251		Kingpin	4	
	3421190	Standard		
	3421887	CSA (Prior to S/N 24769)		
	3421190	CSA (S/N 24769 to Present)		
	0251662	<b>STEERING AND SPINDLES INSTALLATION - 2WD Uses: 0256449 (Front) and 0250085 (Rear) Installations</b>	Ref.	—
	0251663	<b>STEERING AND SPINDLES INSTALLATION - 4WD DOMESTIC Uses: (2) 0250085 (Front and Rear) Installations</b>	Ref.	—
0253986	<b>STEERING AND SPINDLES INSTALLATION - 4WD CSA Uses: (2) 0252333 (Front and Rear) Installations</b>	Ref.	—	

# SECTION 1 FRAME

FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS



# SECTION 1 FRAME

**FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250148	<b>WHEEL DRIVE INSTALLATION - 2WD/2WS</b>	Ref.	6
	0270215	<b>WHEEL DRIVE INSTALLATION - 2WD/2WS (POST PRODUCTION ALTERNATIVE)</b>	Ref.	1
1	2780169	Drive Hub Assembly (See Figure 1-7 for Breakdown)	2	
2	3160158	Drive Motor Assembly (See Figure 1-4 for Breakdown)	2	
3	0642016	Bolt 5/8"-11NC x 2"	12	
4	4762000	Lockwasher 5/8"	12	
5	4300092	Stud 1/2"-13NC x 5 1/2"	4	
6	4761800	Lockwasher 1/2"	4	
7	3300012	Lugnut 1/2"-20NF	18	
8		Drive Brake Options:	2	
	0920072	Brake (Prior to March 1992) (See Figure 1-5 for Breakdown)		
		Brake (March 1992 to Present) (See Figure 1-6 for Breakdown)		
	0920084	March 1992 to S/N 33896		
	0920110	S/N 33896 to Present		
	0920117	Post Production Alternative		
9	3311801	Nut 1/2"-13NC	4	
10	0100011	Loctite #242 (Not Shown)	A/R	
11	4751800	Flatwasher 1/2"	4	
12	0100019	Loctite #271	A/R	
		<b>WHEEL DRIVE INSTALLATIONS</b>	Ref.	
	0251661	<b>2WD/4WS</b>	Ref.	B
	0250093	<b>4WD/2WS</b>	Ref.	H
	0270122	<b>4WD/2WS (POST PRODUCTION ALTERNATIVE)</b>	Ref.	1
	0251660	<b>4WD/4WS</b>	Ref.	B
101		Drive Hub/Brake Assembly Options:	2	
		Hub/Brake (See Figure 1-8 for Breakdown)		
	2780157	2WD/4WS (Prior to September 1992)		
	2780172	4WD/2WS & 4WD/4WS (Prior to February 1992)		
		Hub/Brake (See Figure 1-9 for Breakdown)		
	2780195	2WD/4WS (September 1992 to Present)		
	2780191	4WD/2WS & 4WD/4WS (February 1992 to Present)		
102	3160158	Drive Motor Assembly (See Figure 1-4 for Breakdown)	A/R	
		2WD/4WS & 4WD/2WS	2	
		4WD/4WS	4	
103		Bolt Options:	A/R	
	0642014	2WD/4WS & 4WD/4WS - Bolt 5/8"-11NC x 1 3/4"		
	0642016	4WD/2WS - Bolt 5/8"-11NC x 2"		
104	4762000	Lockwasher 5/8"	A/R	
105	0641810	Bolt 1/2"-13NC	4	
106	4761800	Lockwasher 1/2"	4	

# SECTION 1 FRAME

**FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
107	3300012	Lugnut 1/2"-20NF <b>Note: Items 108-110 Not Required on 2WD/4WS Machines.</b>	A/R Ref.	
108	2780167	Drive Hub Assembly (Rear) (See Figure 1-7 for Breakdown)	2	
109	0641844	Bolt 1/2"-20NC x 5 1/2"	4	
110		Drive Brake (Rear) Options:	2	
	0920072	Brake (Prior to March 1992) (See Figure 1-5 for Breakdown)		
		Brake (See Figure 1-6 for Breakdown)		
	0920084	March 1992 to S/N 33896		
	0920110	S/N 33896 to Present		
	0920117	Post Production Alternative		
	0254486	<b>TIRE AND WHEEL INSTALLATION - 7.50 x 15-30 NON-MARKING (2WD)</b>	Ref.	—
	0253132	<b>TIRE AND WHEEL INSTALLATION - 8.75 x 16.5 PNEUMATIC (2WD)</b>	Ref.	—
	0253133	<b>TIRE AND WHEEL INSTALLATION - 8.75 x 16.5 FOAM-FILLED (2WD AND 4WD)</b>	Ref.	—
	0250102	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (2WD)</b>	Ref.	—
	0250100	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (4WD) (PRIOR TO JULY 1995)</b>	Ref.	—
	0255805	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (4WD) (JULY 1995 TO PRESENT)</b>	Ref.	—
	0250975	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 NHS PNEUMATIC (4WD)</b>	Ref.	—
	0250930	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (2WD)</b>	Ref.	—
	0250172	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD) (PRIOR TO JULY 1995)</b>	Ref.	—
	0255808	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD) (JULY 1995 TO PRESENT)</b>	Ref.	—
	0254860	<b>TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD)</b>	Ref.	—
		2WD Options:		
	4520133	Tire and Wheel Assembly - 7.50 x 15-30 Non-Marking	4	
	0253130	Tire and Wheel Assembly - 8.75 x 16.5 LT Pneumatic Goodyear Unisteel	4	
	0253131	Tire and Wheel Assembly - 8.75 x 16.5 LT Foam-Filled Goodyear Unisteel	4	
	0239287	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear Hi-Miler	2	
	0239288	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear X-Tra Grip (Prior to July 1995)	2	
	0255806	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Galaxy (Right Side) (July 1995 to Present)	2	
	0255807	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Galaxy (Left Side) (July 1995 to Present)	2	



# SECTION 1 FRAME

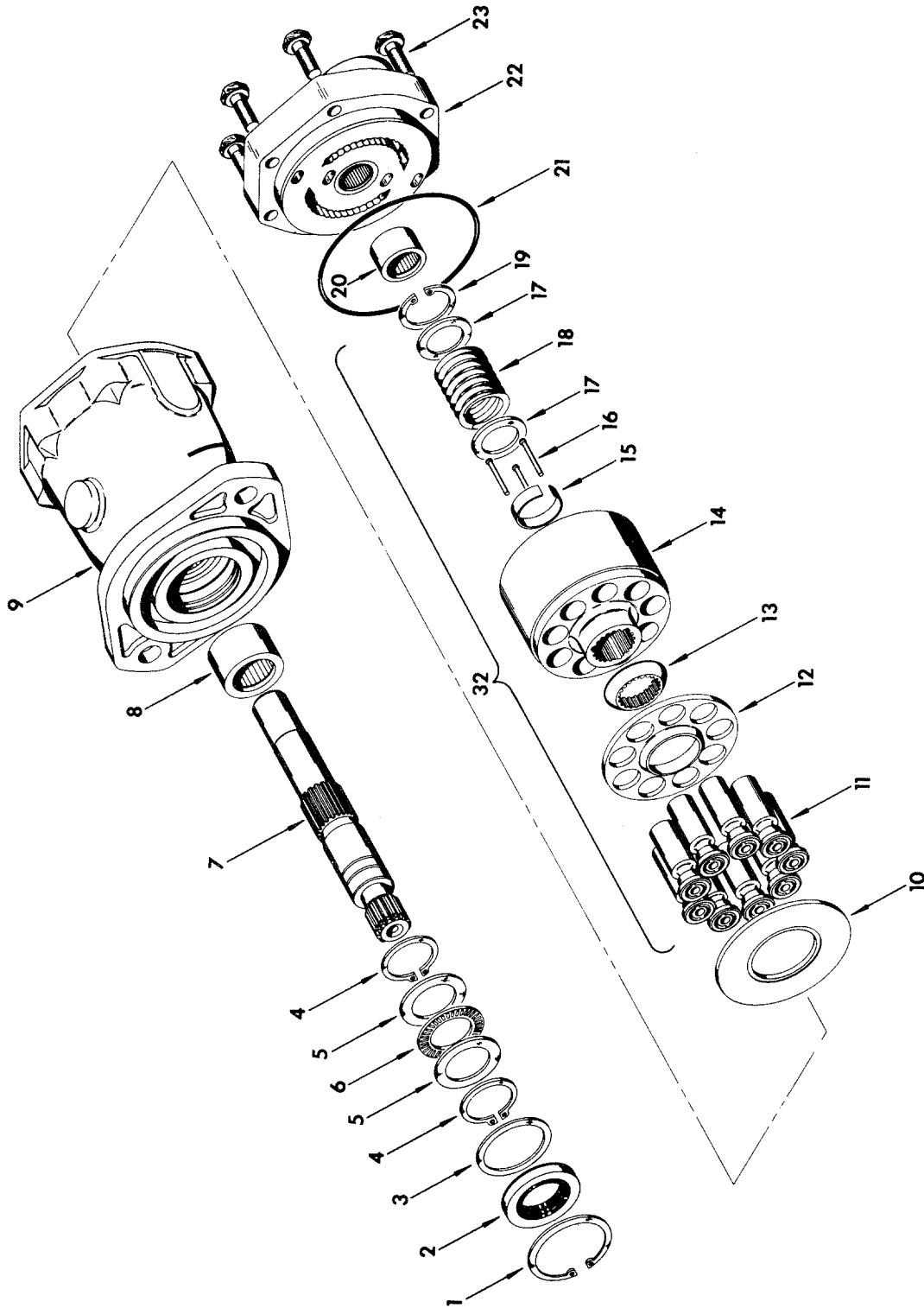
**FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250929	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Goodyear Hi-Miler	2	
	0250171	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Goodyear X-Tra Grip	2	
		4WD Options:		
	0253131	Tire and Wheel Assembly - 8.75 x 16.5 LT Foam-Filled Goodyear Unisteel	4	
	0239288	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear X-Tra Grip	4	
	0250973	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Non-Highway Style (NHS) (Left Side)	2	
	0250974	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Non-Highway Style (NHS) (Right Side)	2	
	0250171	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Traction Tread (Right Side)	2	
	0250170	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Traction Tread (Left Side)	2	
	0254859	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Non-Highway Style (NHS) (Left Side)	2	
	0254858	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Non-Highway Style (NHS) (Right Side)	2	
		<b>Note: Assemblies may require ballast/foam filling to manufacturer's specifications prior to installing on a machine. Refer to Operators &amp; Safety or Service &amp; Maintenance Manuals. Purchase individual tire and/or rim only if able to foam fill tire &amp; wheel assembly, otherwise, purchase complete assembly.</b>		
201	4520143	Tire 8.75 x 16.5 LT Goodyear Unisteel	1	
	4520024	Tire 14 x 17.5 Goodyear Hi-Miler	1	
	4520025	Tire 14 x 17.5 Goodyear X-Tra Grip	1	
	4520124	Tire 14 x 17.5 Non-Highway Style	1	
	4520171	Tire 14 x 17.5 Galaxy	1	
202	4842561	Rim, Wheel - 16.5"	1	
	4860115	Rim, Wheel - 17.5"	1	
203	4640392	Stem, Valve 8.75 x 16.5 Tires	1	
	4640113	Stem, Valve 14 x 17.5 Tires	1	
204	1702738	Decal - Tire Pressure (Not Shown)	1	

# SECTION 1 FRAME

## SECTION 1 FRAME

FIGURE 1-4. DRIVE MOTOR ASSEMBLY



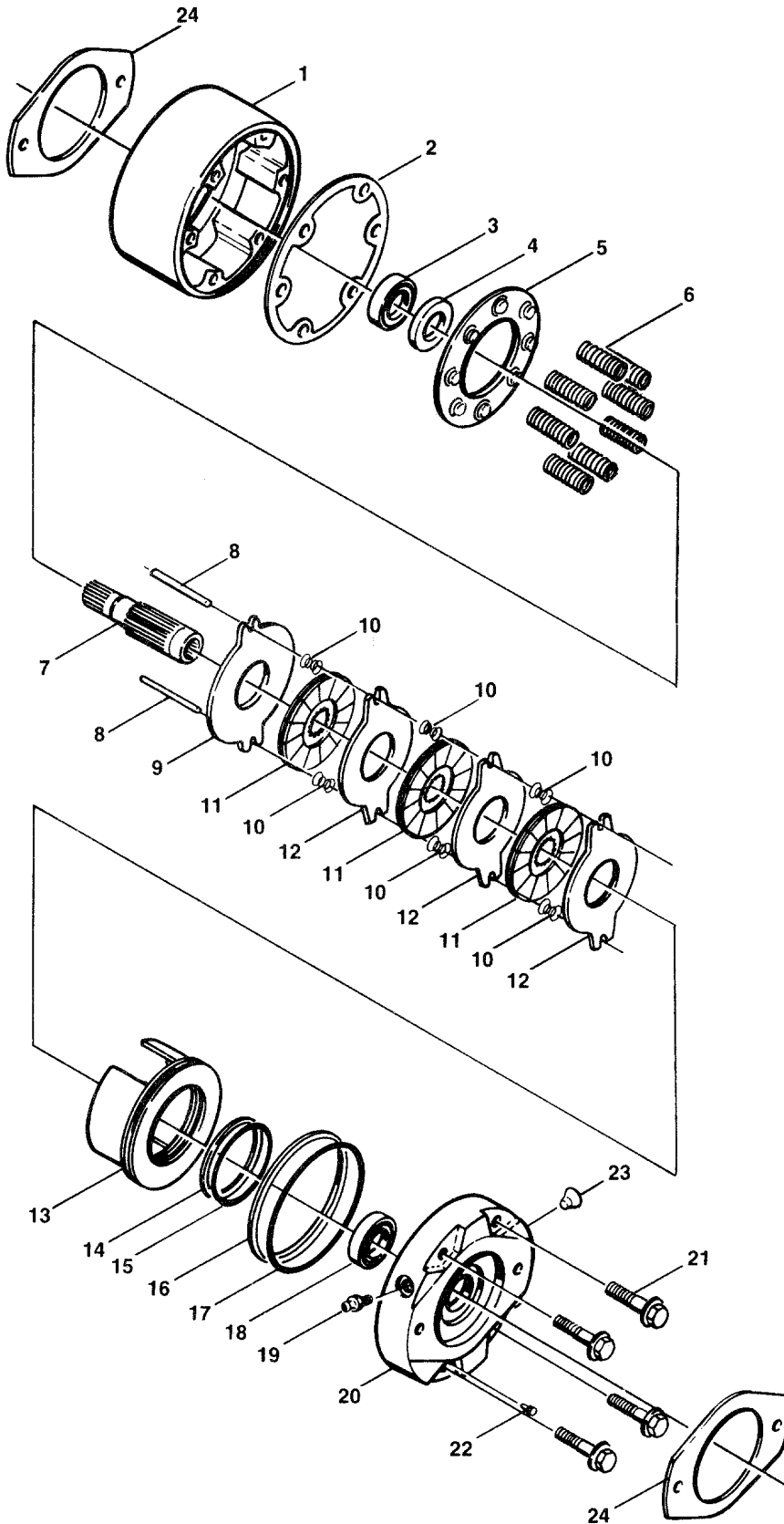
# SECTION 1 FRAME

**FIGURE 1-4. DRIVE MOTOR ASSEMBLY**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3160158	<b>DRIVE MOTOR ASSEMBLY</b>	Ref.	—
1	Kit	Ring, Retaining	1	
2	Kit	Seal, Shaft	1	
3	7004906	Washer	1	
4	Kit	Ring, Retaining	2	
5	7004907	Race, Thrust	2	
6	7004908	Bearing	1	
7	7007874	Shaft, Drive	1	
8	7004910	Bearing	1	
9	7007875	Housing Assembly (Includes Item 8)	1	
10	7007876	Camplate	1	
11	7007880	Rotating Kit Assembly	1	
12	7004917	Bearing	1	
13	Kit	O-Ring	1	
14	7007878	Backplate Assembly (Includes Item 12)	1	
15	7007879	Bolt	6	
		-----		
	2900714	Repair Kit Includes Items 1,2,4 and 13)	1	

# SECTION 1 FRAME

FIGURE 1-5. DRIVE BRAKE ASSEMBLY - AUSCO (PRIOR TO MARCH 1992)



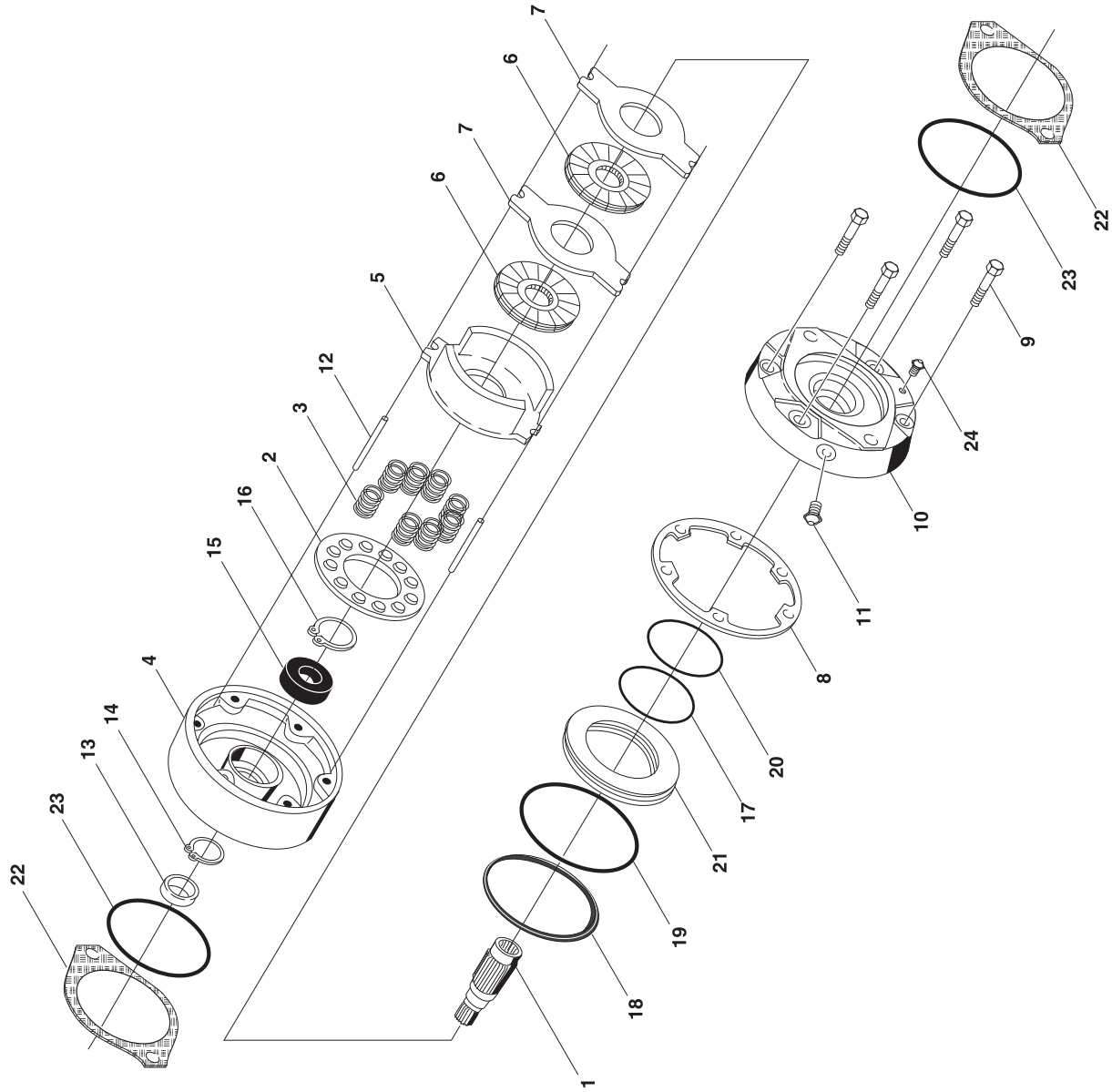
# SECTION 1 FRAME

**FIGURE 1-5. DRIVE BRAKE ASSEMBLY - AUSCO (PRIOR TO MARCH 1992)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0920072	<b>DRIVE BRAKE ASSEMBLY - AUSCO (PRIOR TO MARCH 1992)</b>	Ref.	D
1	7003047	Housing	1	
2	Kit	Gasket	1	
3	7003049	Bearing	1	
4	Kit	Seal, Oil	1	
5	7003051	Retainer, Spring	1	
6	7003052	Spring, Compression	8	
7	7003070	Shaft, Splined	1	
8	7000717	Pin, Torque	2	
9	7003054	Disc, Primary	1	
10	7003006	Spring, Separator	6	
11	7003055	Disc, Rotating	3	
12	7003056	Disc, Stationary	3	
13	7003057	Piston	1	
14	Kit	Ring, Backup	1	
15	Kit	O-Ring	1	
16	Kit	Ring, Backup	1	
17	Kit	O-Ring	1	
18	7000760	Bearing	1	
19	7000796	Screw, Bleeder	1	
20	7003071	Plate, Power	1	
21	7003007	Screw	4	
22	7003059	Valve, Pressure	1	
23	7000728	Plug	1	
24	Kit	Gasket	2	
	2900662	Seal Kit (Includes Items 2,4,14,15,16,17 and 24)	1	

# SECTION 1 FRAME

FIGURE 1-6. DRIVE BRAKE ASSEMBLY - MICO (MARCH 1992 TO PRESENT)



# SECTION 1 FRAME

**FIGURE 1-6. DRIVE BRAKE ASSEMBLY - MICO (MARCH 1992 TO PRESENT)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DRIVE BRAKE ASSEMBLY OPTIONS:</b>	Ref.	
	0920084	<b>March 1992 to S/N 33896</b>	Ref.	A
	0920110	<b>S/N 33896 to Present</b>	Ref.	C
1	7011712	Shaft	1	
2		Guide, Spring Options:	1	
	7011717	0920084 Brake (March 1992 to S/N 33896)		
	7018606	0920110 Brake (S/N 33896 to Present)		
3		Spring Options:	A/R	
	7007979	0920084 Brake (Inner) (March 1992 to S/N 33896)	6	
	7007980	0920084 Brake (Outer) (March 1992 to S/N 33896)	6	
	7007970	0920110 Brake (Red) (S/N 33896 to Present)	6	
	7018602	0920110 Brake (Blue) (S/N 33896 to Present)	3	
4		Housing Options:	1	
	7011713	0920084 Brake (March 1992 to S/N 33896)		
	7018605	0920110 Brake (S/N 33896 to Present)		
5		Return Plate & Separator Assembly Options:	A/R	
	Kit	Return, Plate - 0920084 Brake (March 1992 to S/N 33896)	1	
	7011715	Separator Assy - 0920084 Brake (March 1992 to S/N 33896)	2	
	7011714	Pin	4	
	7007983	Separator	2	
	Kit	Return Plate & Separator - 0920110 Brake (S/N 33896 to Present)	1	
6	Kit	Rotor	2	
7	Kit	Stator	2	
8	Kit	Seal, Case	1	
9		Bolt, Washer Head Options:	4	
	7007985	0920084 Brake (March 1992 to S/N 33896)		
	7018607	0920110 Brake (S/N 33896 to Present)		
10	7007986	Cover	1	
11		Hardware Options:	1	
	7000796	Screw, Bleeder (Prior to S/N 33906)		
	7018609	Plug, Pipe (S/N 33906 to S/N 56536)		
12	7007987	Pin, Dowel	2	
13	Kit	Seal, Oil	1	
14	7011716	Ring, Retaining	1	
15	Kit	Bearing	1	
16	7007977	Ring, Retaining	1	
17	Kit	Ring, Back-Up	1	
18	Kit	Ring, Back-Up	1	
19	Kit	O-Ring	1	
20	Kit	O-Ring	1	
21		Piston Options:	1	
	7007923	0920084 Brake (March 1992 to S/N 33896)		
	7018603	0920110 Brake (S/N 33896 to Present)		
22	7007933	Gasket	2	
23	Kit	O-Ring	2	

# SECTION 1 FRAME

**FIGURE 1-6. DRIVE BRAKE ASSEMBLY - MICO (MARCH 1992 TO PRESENT)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
24	7007924	Plug, Pipe -----	1	
	2900766	Seal Kit (Includes Items 8,13,17,18,19,20,22 & 23)	1	
	2900768	Seal Kit (Includes Items 8,13,15,22 & 23)	1	
		Lining Kit Options: (Includes Items 5,6,7,8,22 & 23)	1	
	2900767	0920084 Brake (March 1992 to S/N 33896)		
	7018608	0920110 Brake (S/N 33896 to Present)		
	0920117	<b>DRIVE BRAKE ASSEMBLY (NOT SHOWN) (Post Production Alternative)</b>	Ref.	B
	7018612	Kit, Repair <b>Note: Repair Kit is the only thing available</b>	1 Ref.	



# SECTION 1 FRAME

FIGURE 1-6. DRIVE BRAKE ASSEMBLY - MICO (MARCH 1992 TO PRESENT)

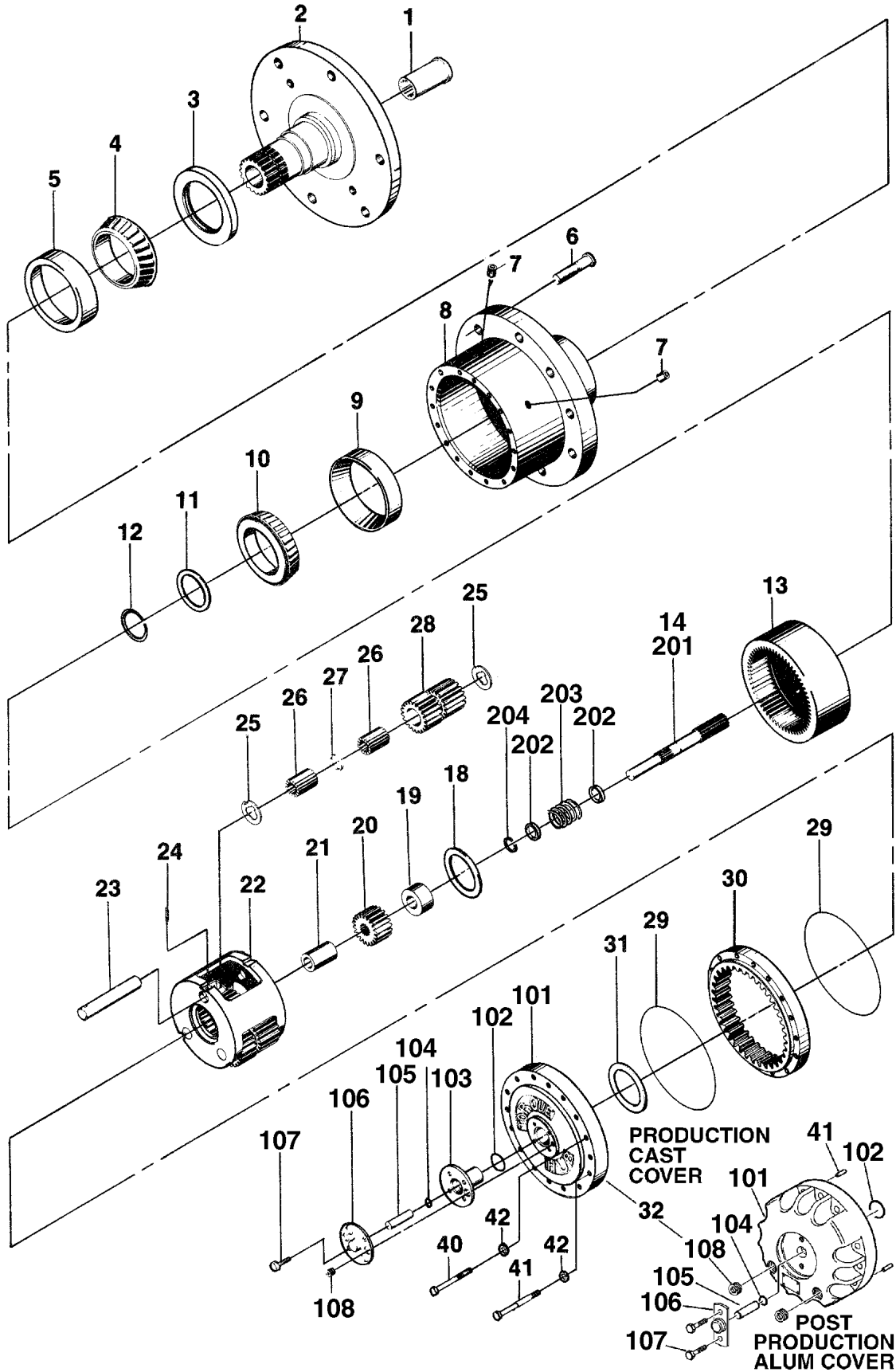
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 1 FRAME

SECTION  
1  
FRAME

FIGURE 1-7. DRIVE HUB ASSEMBLY



# SECTION 1 FRAME

**FIGURE 1-7. DRIVE HUB ASSEMBLY**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2780169	<b>DRIVE HUB ASSEMBLY (2WD/2WS)</b>	Ref.	—
	2780167	<b>DRIVE HUB ASSEMBLY (4WD/2WS REAR)</b>	Ref.	—
1	7000206	Coupling -----	1	
		Hub-Spindle Sub-Assembly	1	
2	7001997	Spindle	1	
3	7001998	Seal	1	
4	Kit	Cone, Bearing	1	
5	Kit	Cup, Bearing	1	
6	7007697	Bolt, Wheel	9	
7	7000242	Plug, Pipe	2	
8	7007601	Hub	1	
9	7000257	Cup, Bearing	1	
10	7000258	Cone, Bearing	1	
11	7000232	Spacer	1	
12	7000229	Ring, Retaining	1	
13	7000246	Gear, Internal	1	
14		Input Shaft Assembly Options: (See Items 201-204 for Breakdown)	1	
15 to 17	Not Used			
18	7000253	Washer, Thrust	1	
19	7000252	Spacer (2780169)	1	
	7007653	Spacer	1	
20	7000251	Gear, Input (2780169)	1	
	7007652	Gear, Input (2780167)	1	
21	7007654	Spacer (1780167 Only)	1	
	7000247	Carrier Assembly	1	
22	7001931	Carrier	1	
23	7001911	Shaft	3	
24	7001913	Pin, Roll	3	
25	7001985	Washer, Thrust	6	
26	7001909	Roller, Needle	96	
27	7000263	Spacer	3	
28	7001912	Gear, Cluster	3	
29	7000230	O-Ring	2	
30	7000248	Gear, Ring	1	
31	7000253	Washer, Thrust	1	
	7001989	Cover Assembly	1	
32		Cover Assembly (Includes Items 101-108)	1	
33 to 39	Not Used			
40		Bolt Options:	12	
	7000217	Production Cast Cover		
	7017067	Post Production Aluminum Cover		
41		Hardware Options:	4	
	7000214	Bolt, Shoulder (Production Cast Cover)		
	7017080	Dowel Pin (Post Production Aluminum Cover)		
42	7007603	Flatwasher -----	16	

# SECTION 1 FRAME

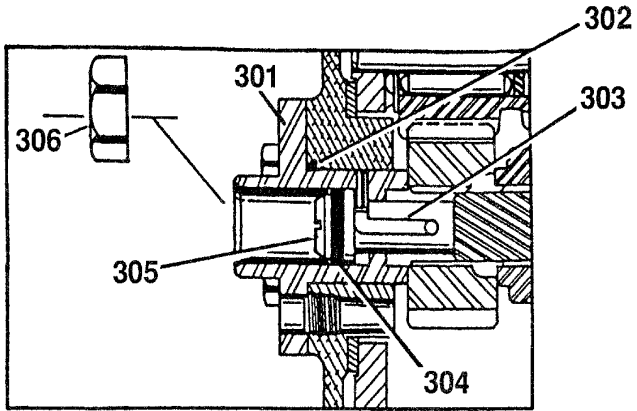
SECTION 1 FRAME

**FIGURE 1-7. DRIVE HUB ASSEMBLY (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION (CONTINUED)	QTY.	REV.
	7010429	Bearing Kit (Includes Items 4 and 5)	1	
		<b>COVER ASSEMBLY</b>	Ref.	
	See Kit Options	Production Cast Cover		
	See Kit Options	Post Production Aluminum Cover		
101		Cover Options:	1	
	See Kit Options	Production Cast Cover (Was p/n 7000226)		
	7017091	Post Production Aluminum Cover		
102		O-Ring Options:	1	
	Kit	Production Cast Cover		
	7017070	Post Production Aluminum Cover		
103		Cap, Cover	1	
	Kit	Production Cast Cover		
	Not Required	Post Production Aluminum Cover		
104		O-Ring Options:	1	
	Kit	Production Cast Cover		
	7017095	Post Production Aluminum Cover		
105		Rod, Disconnect Options:	1	
	Kit	Production Cast Cover		
	7017092	Post Production Aluminum Cover		
106		Cap, Disconnect	1	
	Kit	Production Cast Cover		
	7017093	Post Production Aluminum Cover		
107		Bolt Options:	A/R	
	7000216	Production Cast Cover	4	
	7000216	Post Production Aluminum Cover	2	
108		Plug, Pipe Options:	A/R	
	7000243	Production Cast Cover	1	
	7017094	Post Production Aluminum Cover	2	
		<b>INPUT SHAFT ASSEMBLY</b>	Ref.	
	7000250	2WD	Ref.	
	7007650	4WD	Ref.	
201		Shaft Options:	1	
	7000260	2WD		
	7007651	4WD		
202	7000263	Spacer	2	
203	7000262	Spring	1	
204	7000261	Ring, Retaining	1	
		-----		
		Kit Options:	Ref.	
	7010429	Bearing Kit (Includes Items 4 and 5)	1	
	2900034	Seal Kit (Includes Items 3, 11, 12 and 29)	1	
		Cover Kit Options:	1	
	No Longer Available	Production Cast Cover (Was p/n 7001989)		

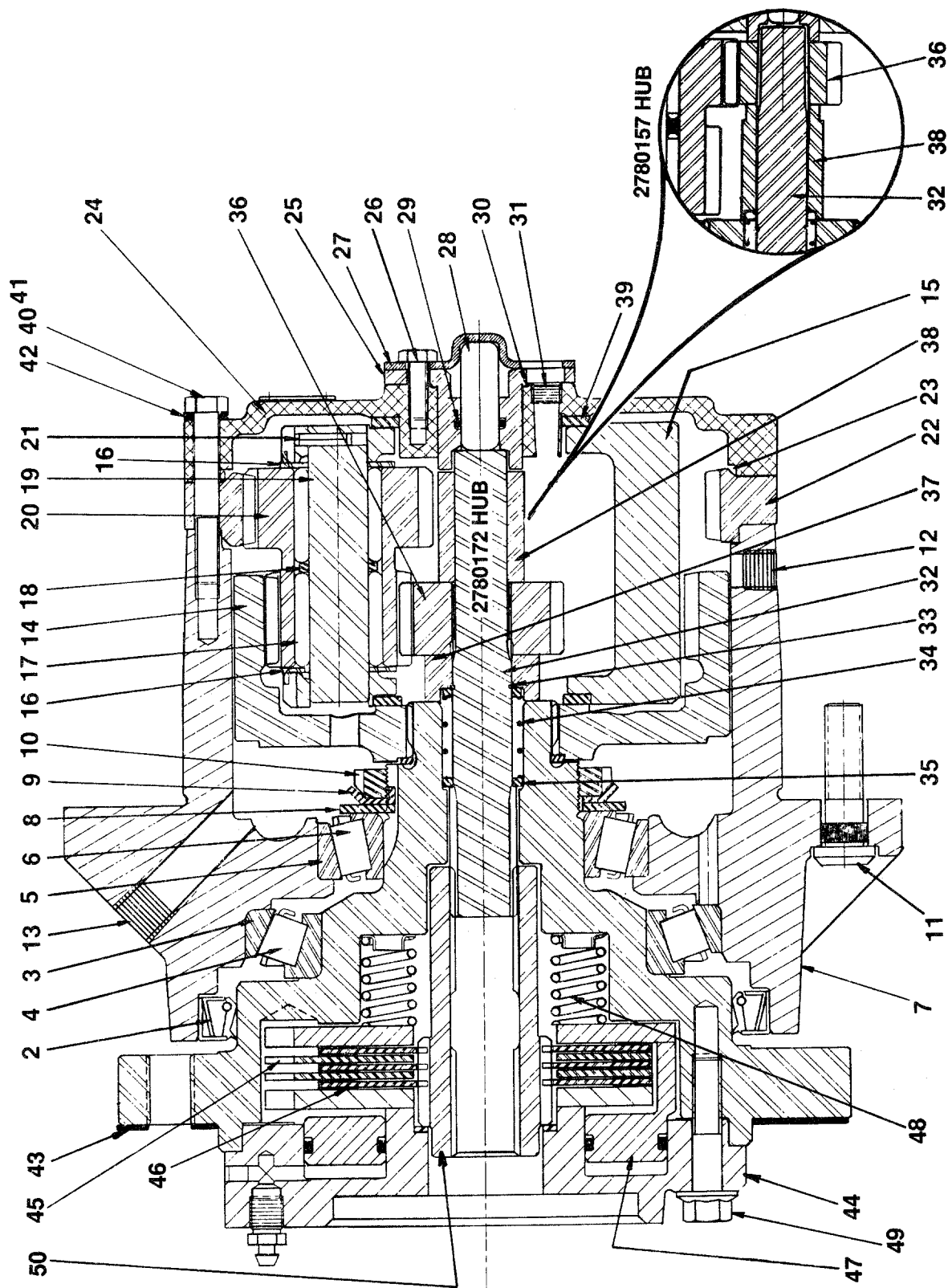
# SECTION 1 FRAME

**FIGURE 1-7. DRIVE HUB ASSEMBLY (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION (CONTINUED)	QTY.	REV.
	7017099	Aluminum Replacement for Production Cast Cover (Includes 29, 31 (Spacer), 40, 41 (Dowel Pins), 101, 102 & 104-108)		
	7017090	Post Production Aluminum Cover (Includes 29, 101 & 104-107)		
				
<b>LOCATED ON FRONT OF TORQUE HUB</b>				
	2901157	DISCONNECT HUB ASSEMBLY (OPTIONAL)	Ref.	
301	7002025	Cover	1	
302	7000215	O-Ring	1	
303	7007669	Pin, Spring	1	
304	7010446	Seal	1	
305	7010444	Rod, Disconnect	1	
306	7010447	Cap, Dust	1	
	7010448	O-Ring	1	

# SECTION 1 FRAME

FIGURE 1-8. DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992)



# SECTION 1 FRAME

**FIGURE 1-8. DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992)</b>	Ref.	
	2780172	<b>DRIVE HUB/BRAKE ASSEMBLIES - 4WD (PRIOR TO FEBRUARY 1992)</b>	Ref.	—
	2780157	<b>DRIVE HUB/BRAKE ASSEMBLIES - 2WD/4WS (PRIOR TO SEPTEMBER 1992)</b>	Ref.	A
		Hub Assembly	1	
1	Not Used			
2	Kit	Seal	1	
3	7007683	Cup, Bearing	1	
4	7007684	Cone, Bearing	1	
5	7007685	Cup, Bearing	1	
6	7007686	Cone, Bearing	1	
7	7007687	Hub	1	
8	7007688	Washer, Tongued	1	
9	7007689	Lockwasher	1	
10	7007690	Locknut	1	
11	7000241	Stud	9	
12	7000242	Plug, Pipe	2	
13	7007617	Plug, Magnetic	2	
14	7007691	Gear, Internal	1	
		Carrier Assembly	1	
15	7001931	Carrier	1	
16	7001985	Washer, Thrust	6	
17	7001909	Roller, Needle	96	
18	7000263	Spacer	3	
19	7001911	Shaft, Planet	3	
20	7001912	Gear, Cluster	3	
21	7001913	Pin, Roll	3	
22	7000248	Gear, Ring	1	
23	Kit	O-Ring	2	
	7001989	Cover Assembly	1	
24	7000226	Cover	1	
25	7000227	Cap, Cover	1	
26	7000220	Bolt	4	
27	7000211	Cap, Disconnect	1	
28	7000212	Rod, Disconnect	1	
29	Kit	O-Ring	1	
30	Kit	O-Ring	1	
31	7000243	Plug, Pipe	2	
	7007650	Input Shaft Assembly (2780172)	1	
	7000250	Input Shaft Assembly (2780157)	1	
32	7007651	Shaft, Input (2780172)	1	
	7000260	Shaft, Input (2780157)	1	
33	7000261	Ring, Retaining	1	
34	7000262	Spring	1	
35	7000263	Spacer	2	

# SECTION 1 FRAME

**FIGURE 1-8. DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
36	7007652	Gear, Input (2780172)	1	
	7000251	Gear, Input (2780157)	1	
37	7007653	Spacer, Input (2780172)	1	
	Not Required	Spacer, Input (2780157)	0	
38	7000252	Spacer, Input (2780157)	1	
39	7000253	Washer, Thrust	2	
40	7000217	Bolt	12	
41	7000215	Bolt, Shoulder	4	
42	7007603	Flatwasher	16	
43	Kit	Gasket	1	
44	7010454	Spindle (No longer available - purchase 7010473 as replacement)		
		Brake Assembly Options (No longer available - purchase 7010473 as replacement):		
	7010453	Brake Assembly (Hub Model W1BJ4Y)	1	
	7010452	Brake Assembly (Hub Model W1BJ4U)	1	
45	7003087	Disc, Stationary	2	
46	7003089	Disc, Rotating	3	
47	7003088	Piston	1	
48	7003432	Spring	10	
49	7003433	Screw	8	
50	7010455	Coupling	1	
	2900754	Seal Kit - Hub (Includes Items 2,23,29,30 and 43)	1	
	2900755	Seal Kit - Brake (Includes Piston Rings and Gaskets)	1	



# SECTION 1 FRAME

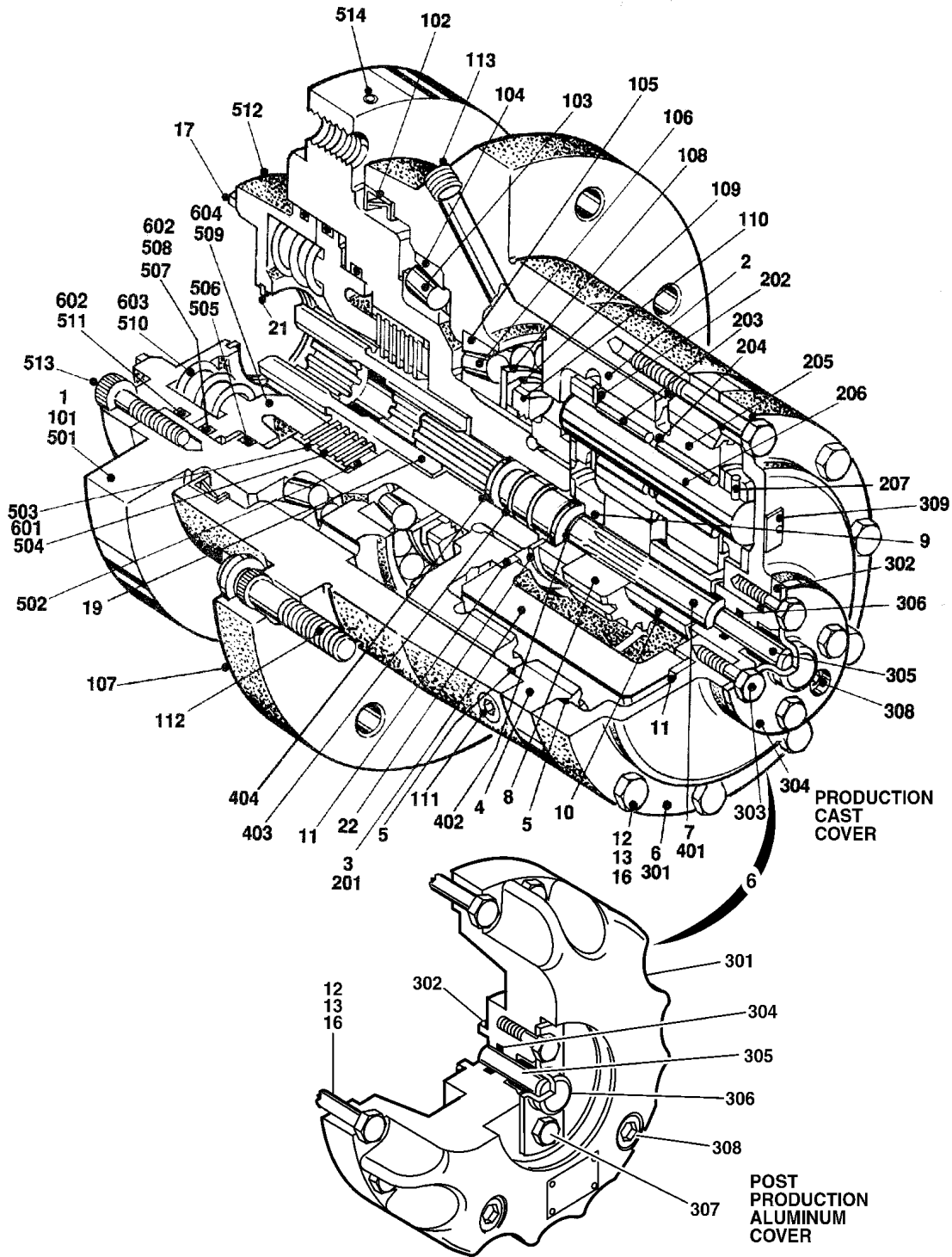
FIGURE 1-8. DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 1 FRAME

FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)



SECTION 1 FRAME

# SECTION 1 FRAME

**FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)</b>	Ref.	
		<b>DRIVE HUB/BRAKE ASSEMBLIES (STANDARD PARTS)</b>	Ref.	
1		Hub/Spindle/Brake Assembly (See Items 101-113 for Breakdown)	1	
2	7007691	Gear, Internal	1	
3		Carrier Assembly (See Variable Parts)	1	
4	7000248	Gear, Internal	1	
5	Kit	O-Ring	2	
6		Cover Assembly (See Items 301-308 for Breakdown)	1	
7		Input Shaft Assembly (See Variable Parts)	1	
8		Gear, Input (See Variable Parts)	1	
9		Spacer, Input (See Variable Parts)	1	
10		Spacer, Input (See Variable Parts)	1	
11	7000253	Washer, Thrust	2	
	7017096	Spacer (Post Production Aluminum Cover Only)	1	
12		Bolt Options:	12	
	7000217	Production Cast Cover		
	7017067	Post Production Aluminum Cover		
13		Hardware Options:	4	
	7000214	Bolt Used on Production Cast Cover		
	7017067	Dowel Pin Used on Post Production Aluminum Cover		
14 to 15	Not Used			
16	7007603	Flatwasher	16	
17	7007692	Gasket	1	
18	Not Used			
19	7010470	Coupling	1	
20	Not Used			
21	7010459	Ring, Retainer	1	
22	7001922	Washer, Thrust	1	
	2780191	<b>DRIVE HUB/BRAKE ASSEMBLY - 4WD FEBRUARY 1992 TO PRESENT (VARIABLE PARTS)</b>	Ref.	—
	2780195	<b>DRIVE HUB/BRAKE ASSEMBLY - 2WD/4WS SEPTEMBER TO PRESENT (VARIABLE PARTS)</b>	Ref.	—
51	Not Used			
52	Not Used			
53	7000247	Carrier Assembly (2780191) (See Items 201-207 for Breakdown)	1	
	NPN	Carrier Assembly (2780195) (See Items 201-207 for Breakdown)	1	
54	Not Used			
55	Not Used			
56	Not Used			
57	7007650	Input Shaft Assembly (2780191) (See Items 401-404 for Breakdown)	1	

# SECTION 1 FRAME

**FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
57 (cont'd)	7000250	Input Shaft Assembly (2780195) (See items 401-404 for Breakdown)	1	
58	7007652	Gear, Input (2780191)	1	
	7000251	Gear, Input (2780195)	1	
59	7007653	Spacer, Input (2780191)	1	
	7000252	Spacer, Input (2780195)	1	
60	7007654	Spacer, Input (2780191)	1	
	Not Required	Spacer, Input (2780195)	1	
		<b>SPINDLE/BRAKE SUB-ASSEMBLY</b>	Ref.	
101	7010469	Brake Assembly With I.D. Plate (Item 309) Stamped June 1992 or Earlier (See Items 501-514 for Breakdown)	1	
	7010473	Brake Assembly With I.D. Plate (Item 309) Stamped July 1992 or Later (See Items 601-604 for Breakdown)	1	
102	Kit	Seal, Lip	1	
103	7007683	Cup, Bearing	1	
104	7007684	Cone, Bearing	1	
105	7007685	Cup, Bearing	1	
106	7007686	Cone, Bearing	1	
107	7007687	Housing	1	
108	7007688	Flatwasher, Tanged	1	
109	7007689	Flatwasher, Tanged	1	
110	7007690	Nut, Bearing	1	
111	7000242	Plug, Pipe 1/4" NPT	2	
112	7000241	Stud, Wheel	9	
113	7007617	Plug, Pipe 3/8" NPT (Magnetic)	2	
	7000247	<b>CARRIER ASSEMBLY (2780191)</b>	Ref.	
	NPN	<b>CARRIER ASSEMBLY (2780195)</b>	Ref.	
201	7001931	Carrier	1	
202	7001985	Washer, Thrust - Tanged	6	
203	7001909	Bearing, Needle	96	
204	7000263	Spacer, Thrust	3	
205	7001911	Shaft, Planet	3	
206	7001912	Gear, Cluster	3	
207	7001913	Rollpin (2780191)	3	
	7010474	Rollpin (1780195)	3	
		<b>COVER ASSEMBLY</b>	Ref.	
	See Kit Options	<b>Production Cast Cover</b>		
	See Kit Options	<b>Post Production Aluminum Cover</b>		
301	See Kit Options	Cover Options:	1	
	7017091	Production Cast Cover (Was p/n 7000226)		
		Post Production Aluminum Cover		

# SECTION 1 FRAME

**FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
302		O-Ring Options:	1	
	Kit	Production Cast Cover		
	7017070	Post Production Aluminum Cover		
303		Cap, Cover	1	
	Kit	Production Cast Cover		
	Not Required	Post Production Aluminum Cover		
304		O-Ring Options:	1	
	Kit	Production Cast Cover		
	7017095	Post Production Aluminum Cover		
305		Rod, Disconnect Options:	1	
	7000212	Production Cast Cover		
	7017092	Post Production Aluminum Cover		
306		Cap, Disconnect Options:	1	
	7000211	Production Cast Cover		
	7017093	Post Production Aluminum Cover		
307		Bolt Options:	A/R	
	7000220	Production Cast Cover	4	
	7000216	Post Production Aluminum Cover	2	
308		Plug, Pipe Options:	A/R	
	7000243	Production Cast Cover	1	
	7017094	Post Production Aluminum Cover	2	
		-----		
		Cover Kit Options:	1	
	No Longer Available	Production Cast Cover (Was p/n 7001989)		
	7017099	Aluminum Replacement for Production Cast Cover (Includes 5, 11 (Spacer), 12, 13 (Dowel Pins), 301, 302 & 304-308)		
	7017090	Post Production Aluminum Cover (Includes 5, 301 & 304-307)		
	7007650	<b>INPUT SHAFT ASSEMBLY (2780191)</b>	Ref.	
	7000250	<b>INPUT SHAFT ASSEMBLY (2780195)</b>	Ref.	
401	7007651	Shaft (2780191)	1	
	7000260	Shaft (2780195)	1	
402	7000261	Ring, Retaining	1	
403	7000262	Spring	1	
404	7000263	Spacer, Thrust	2	
	7010469	<b>BRAKE/SPINDLE ASSEMBLY WITH I.D. PLATE (ITEM 309) STAMPED JUNE 1992 OR EARLIER</b>	Ref.	
501	7014100	Spindle	1	
502	7014101	Spacer	1	
503	7014102	Disc, Stationary	7	
504	7014103	Disc, Rotating	6	
505	Kit	Ring, Back-up	1	
506	Kit	O-Ring	1	
507	Kit	Ring, Back-up Ring	1	

# SECTION 1 FRAME

SECTION 1 FRAME

**FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
508	Kit	O-Ring	1	
509	7014108	Piston	1	
510	7014109	Spring	6	
	7014110	Spring	2	
511	Kit	O-Ring	1	
512	7014112	Cover	1	
513	Not Available	Bolt, Socket Head 3/8"-16NC x 1 1/4"	8	
514	7014113	Expander	1	
	2900816	Brake O-Ring Kit (Includes Items 505-508 and 511)	1	
	7010473	<b>BRAKE/SPINDLE ASSEMBLY WITH I.D. PLATE (ITEM 309) STAMPED JULY 1992 OR LATER</b>	Ref.	
601	7010475	Brake Lining Kit	1	
602	7010476	Brake O-Ring Kit	1	
603	7010477	Brake Spring Repair Kit	1	
604	7010478	Brake Piston Repair Kit	1	
	2900754	Seal Kit - Hub (Includes items 5,17,102,306 and 307)	1	

# SECTION 1 FRAME

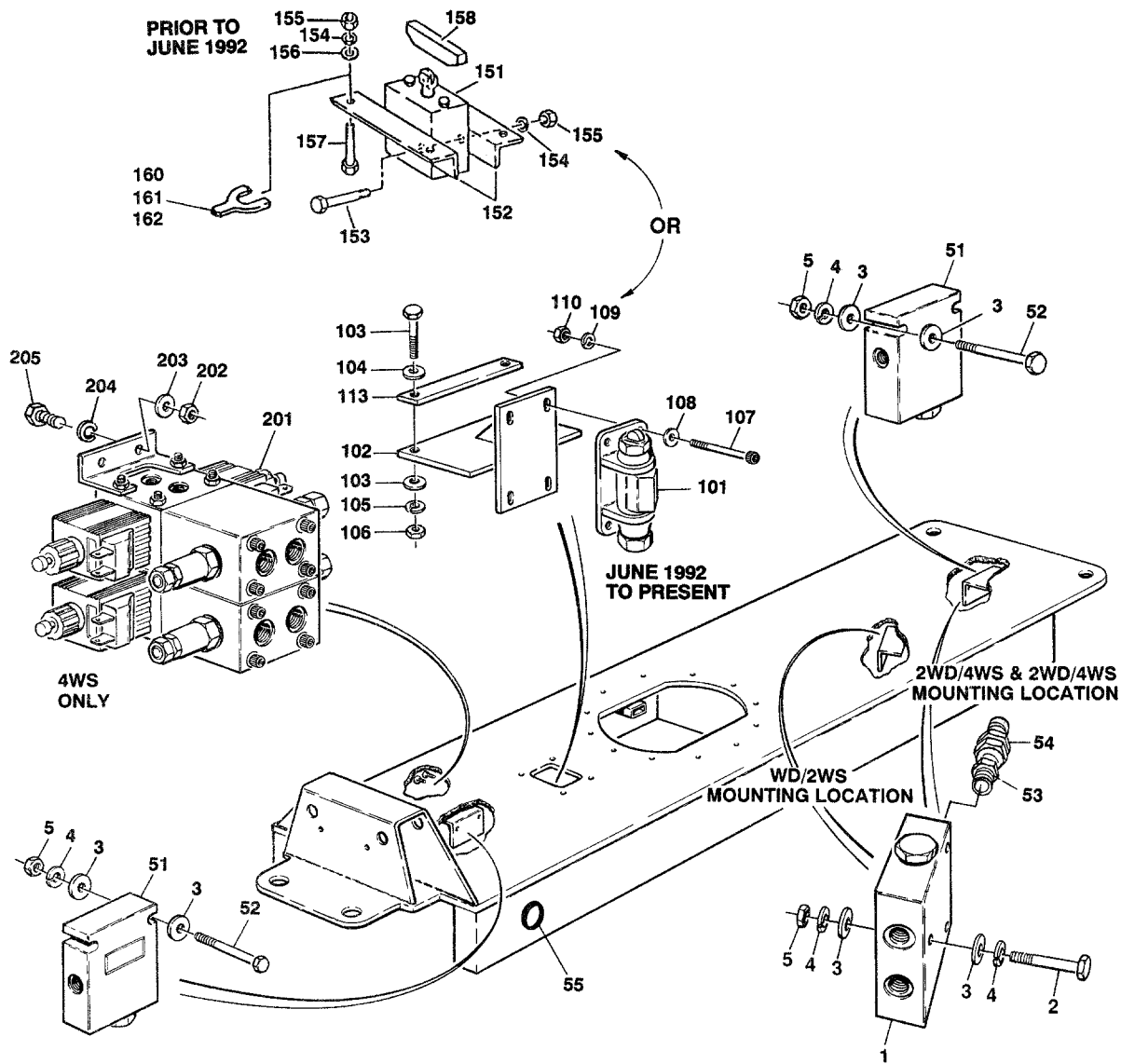
FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 1 FRAME

FIGURE 1-10. VALVES INSTALLATION - FRAME-MOUNTED





# SECTION 1 FRAME

**FIGURE 1-10. VALVES INSTALLATION - FRAME-MOUNTED**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DRIVE VALVES INSTALLATION (STANDARD PARTS)</b>	Ref.	
1	4640629	Positive Traction Valve Assembly	1	
	2900745	Seal Kit - 4640629 Valve	1	
2	0641528	Bolt 5/16"-18NC x 3 1/2"	2	
3	4751500	Flatwasher 5/16"	A/R	
4	4761500	Lockwasher 5/16"	A/R	
5	3311501	Nut 5/16"-18NC	A/R	
	0250144	<b>DRIVE VALVES INSTALLATION - 2WD/2WS (VARIABLE PARTS)</b>	Ref.	B
51 to 56	Not Required			
	0250109	<b>DRIVE VALVES INSTALLATION - 4WD/2WS (VARIABLE PARTS)</b>	Ref.	C
51	4640260	Flow Divider Valve Assembly	2	
	Not Available	Cartridge (Vickers/Modular Controls)	1	
	7009739	Seal Kit (Vickers/Modular Controls)	1	
	7007321	Cartridge (Fluid Controls)	1	
	7003723	Seal Kit (Fluid Controls)	1	
52	0641522	Bolt 5/16"-18NC x 2 3/4"	4	
53 to 56	Not Required			
	0251668	<b>DRIVE VALVES INSTALLATION - 2WD/4WS (VARIABLE PARTS)</b>	Ref.	B
51 to 54	Not Required			
55	4060806	Flex-Guard	6 ft./1.8m	
56	Not Required			
	0251669	<b>DRIVE VALVES INSTALLATION - 4WD/4WS (VARIABLE PARTS)</b>	Ref.	B
51	4640260	Flow Divider Valve Assembly	2	
	Not Available	Cartridge (Vickers/Modular Controls)	1	
	7009739	Seal Kit (Vickers/Modular Controls)	1	
	7007321	Cartridge (Fluid Controls)	1	
	7007323	Seal Kit (Fluid Controls)	1	
52	0641522	Bolt 5/16"-18NC x 2 3/4"	2	
53	2220844	Fitting	1	
54	2220376	Fitting	1	
55	4060806	Flex-Guard	3 ft./ .9m	
56	4060808	Flex-Guard (Not Shown)	6 ft./1.8m	

# SECTION 1 FRAME

**FIGURE 1-10. VALVES INSTALLATION - FRAME-MOUNTED (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0251310	<b>OSCILLATION LOCKOUT VALVE INSTALLATION - (USED ON OPTIONAL OSCILLATING AXLE) (JUNE 1992 TO PRESENT)</b>	Ref.	D
101	4640668	Valve Assembly	1	
	7012516	Repair Kit - 4640668 Valve	1	
102	4643742	Mounting Weldment	1	
103	0641620	Bolt 3/8"-16NC x 2 1/2"	2	
104	4751600	Flatwasher 3/8"	4	
105	4761600	Lockwasher 3/8"	2	
106	3311601	Nut 3/8"-16NC	2	
107	3931016	Bolt, Socket Head #10-24NC x 1"	4	
108	4751000	Flatwasher #10	8	
109	4761000	Lockwasher #10	4	
110	3311001	Nut #10-24NC	4	
111	Not Used			
112	Not Used			
113	3534778	Plate, Spacer	1	
	0238908	<b>OSCILLATION LOCKOUT VALVE INSTALLATION (USED OPTIONAL OSCILLATING AXLE (PRIOR TO JUNE 1992))</b>	Ref.	C
151	4640485	Lockout Valve Assembly (See Figure 1-11 for Break-down)	1	
152	0181333	Angle, Mounting	2	
153	0641634	Bolt 3/8"-16NC x 4 1/4"	2	
154	4761600	Lockwasher 3/8"	6	
155	3311601	Nut 3/8"-16NC	6	
156	4751600	Flatwasher 3/8"	4	
157	0641626	Bolt 3/8"-16NC x 3 1/4"	4	
158	1100041	Cam (Welded to T/T)	1	
159	4070410	Shim (1/16"-1.6mm)	A/R	
160	4070411	Shim (1/8"-3.1mm)	A/R	
161	4070412	Shim (3/16"-4.8mm)	A/R	
		<b>CONTROL VALVES INSTALLATION - 4WD</b>	Ref.	
	0251716/ 0253774	<b>MACHINES WITH BANG-BANG VALVES WITHOUT ROTATE</b>	Ref.	B/D
	0251717/ 0253773	<b>MACHINES WITH BANG-BANG VALVES WITH ROTATE</b>	Ref.	B/E
	0252099	<b>MACHINES WITH PARKER PROPORTIONAL VALVES WITHOUT ROTATE</b>	Ref.	C
	0252098	<b>MACHINES WITH PARKER PROPORTIONAL VALVES WITH ROTATE</b>	Ref.	D
201	4640693	Valve Assembly - 4WS Valve (See Figure 1-12 for Breakdown)	1	
202	3311401	Nut 1/4"-20NC	4	
203	4761400	Lockwasher 1/4"	4	
204	4751400	Flatwasher 1/4"	4	

# SECTION 1 FRAME

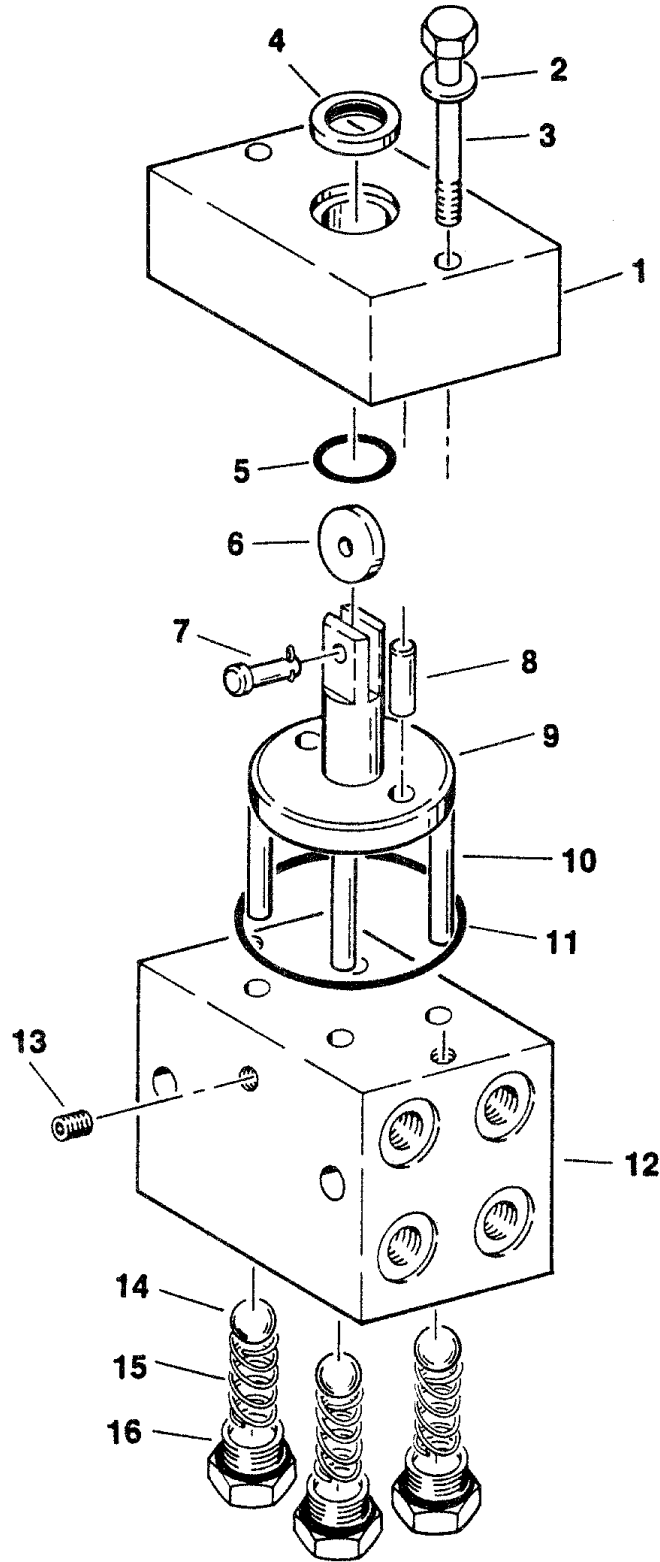
FIGURE 1-10. VALVES INSTALLATION - FRAME-MOUNTED (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
205	0641407	Bolt 1/4"-20NC x 7/8"	4	

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# SECTION 1 FRAME

FIGURE 1-11. LOCKOUT VALVE ASSEMBLY



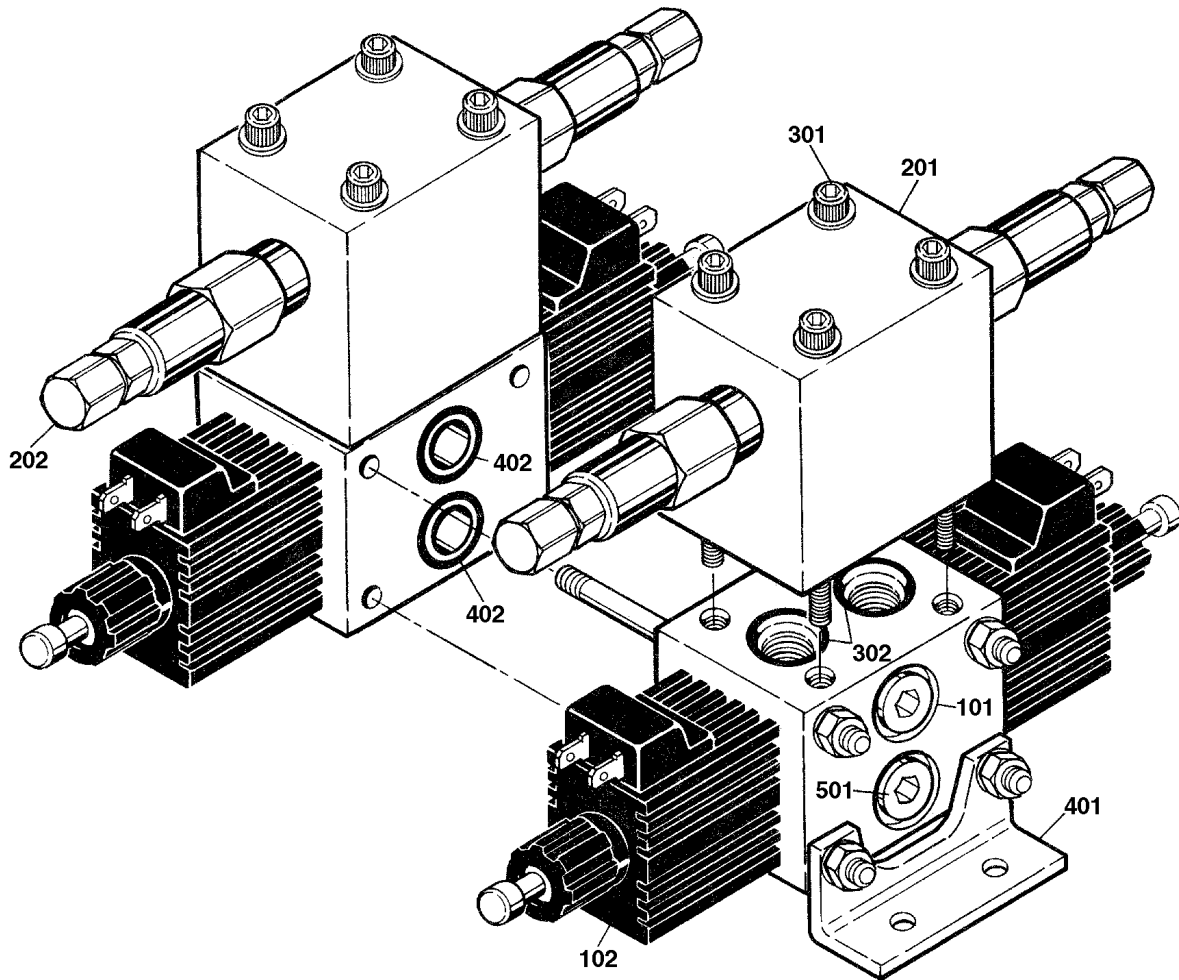
# SECTION 1 FRAME

**FIGURE 1-11. LOCKOUT VALVE ASSEMBLY**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	4640485	<b>LOCKOUT VALVE ASSEMBLY (PRIOR TO JUNE 1992 ONLY)</b>	Ref.	
1	0560679	Block, Top Valve	1	
2	0641518	Bolt 5/16"-18NC x 2 1/4"	2	
3	4761500	Lockwasher 5/16"	2	
4	3960047	Seal, Rod	1	
5	3790116	O-Ring	1	
6	3860037	Roller, Cam	1	
7	3430407	Clevis Pin With Cotter Pin	1	
8	3421284	Pin	2	
9	3840833	Plunger, Rod	1	
10	3840854	Rod	4	
11	3790231	O-Ring	1	
12	0560467	Block, Bottom Valve	1	
13	2200202	Plug	1	
	0100011	Loctite	A/R	
14	0320008	Ball	4	
15	4160078	Spring	4	
16	2180658	Plug	4	

# SECTION 1 FRAME

FIGURE 1-12. VALVE ASSEMBLY (USED WITH OPTIONAL 4WS)



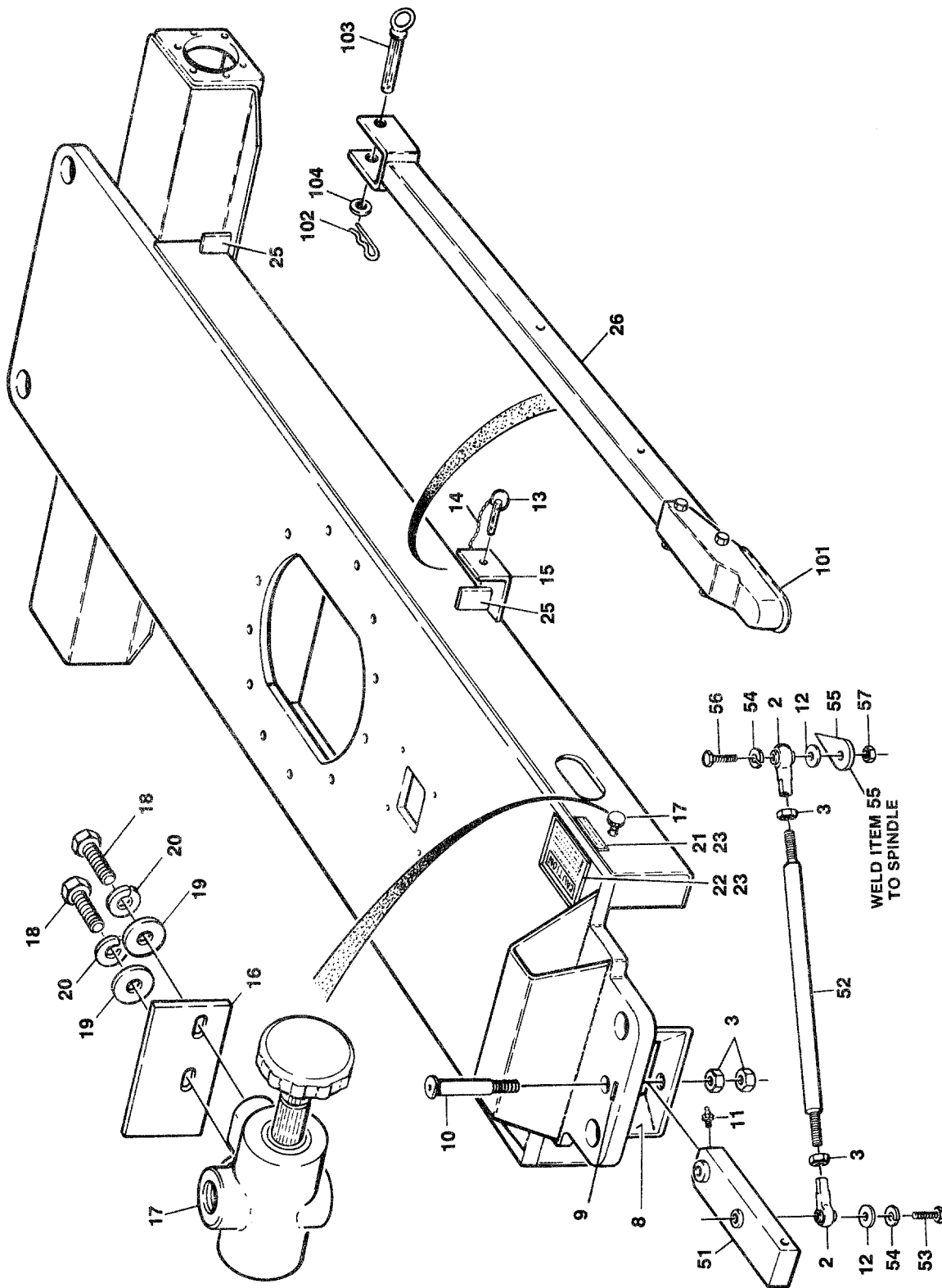
# SECTION 1 FRAME

**FIGURE 1-12. VALVE ASSEMBLY (USED WITH OPTIONAL 4WS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	4640693	<b>VALVE ASSEMBLY (USED WITH OPTIONAL 4WS)</b>	Ref.	—
101	7010766	Valve Section Without Relief Valve	2	
102	7010772	Coil (2 Per Section)	4	
201	7010767	Valve, Relief Block	2	
202	7010768	Cartridge, Valve (2 Per Block)	4	
203	7010769	Seal Kit - 7010768 (1 Per Cartridge)	4	
301	7010763	Stacking Kit	2	
302	7010773	O-Ring (Between Valve Section and Relief Block) (2 Per Kit)	4	
401	7010770	Mounting Kit	1	
402	7010774	O-Ring	2	
501	7010771	Plug	2	
		-----		
	2900794	Seal Kit - 4640693 Valve (Includes Quantity 4 of Items 203, 302 and 402)	1	

# SECTION 1 FRAME

FIGURE 1-13. TOW PACKAGE INSTALLATIONS





# SECTION 1 FRAME

**FIGURE 1-13. TOW PACKAGE INSTALLATIONS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>Note: See Section 10 for Boeing Spec Machines.</b>		
		<b>TOW PACKAGE INSTALLATION (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	1660114	Coupling, Tie-Rod	2	
3	3323002	Nut, Jam 1 1/4"-12NF	4	
4	Not Used			
5	Not Used			
6	Not Used			
7	Not Used			
8	4340575	Plate, Support	1	
9	2880410	Keystock	1	
10	3421151	Pin	1	
11	2160001	Fitting, Grease	1	
12	4712600	Flatwasher 1"	2	
13	3420292	Pin, Quick Release	1	
14	1260017	Chain	8"/20cm	
15	3532649	Plate	1	
16	0900479	Bracket, Valve Mounting	1	
17	4640261	Valve, Select	1	
18	0641507	Bolt 5/16"-18NC x 7/8"	2	
19	4751500	Flatwasher 5/16"	2	
20	4761500	Lockwasher 5/16"	2	
21	3250872	Nameplate - Tow Select	1	
22		Nameplate - Instructions	1	
	3250840	(Prior to May 1994)		
	1702305	(May 1994 to Present)		
23	3820001	Rivet	8	
24	Not Used			
25	0361651	Bar	2	
26	0360016	Tow Bar Assembly (See Items 101-104 for Breakdown)	1	
27	0100003	Loctite (#277) (Not Shown)	A/R	
	0250384	<b>TOW PACKAGE INSTALLATION (2WD) (VARIABLE PARTS)</b>	Ref.	C
51	2620034	Hitch, Tow	1	
52	3840643	Tie-Rod	1	
53	0642628	Bolt 1"-8NC x 3 1/2"	1	
54	4762600	Lockwasher 1"	2	
55	3040464	Lug, Spindle	1	
56	0642622	Bolt 1"-8NC x 2 3/4"	1	
57	3312602	Nut, Jam 1"-8NC (Prior to October 1990 Only)	1	
	0251753	<b>TOW PACKAGE INSTALLATION (4WD - PRIOR TO MARCH 1993) (VARIABLE PARTS)</b>	Ref.	A
51	2620034	Hitch, Tow	1	
52	3840822	Tie-Rod	1	

# SECTION 1 FRAME

SECTION 1 FRAME

**FIGURE 1-13. TOW PACKAGE INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
53	0642628	Bolt 1"-8NC x 3 1/2"	1	
54	4562346	Spacer	3	
55	Not Required			
56	0642636	Bolt 1"-8NC x 4 1/2"	1	
57	3312605	Locknut, 1"-8NC	1	
	0254095	<b>TOW PACKAGE INSTALLATION (4WD - MARCH 1993 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	A
51	2620038	Hitch, Tow	1	
52	3841048	Tie-Rod	1	
53	0642636	Bolt 1"-8NC x 4 1/2"	1	
54	4562346	Spacer	2	
55	Not Required			
56	0642636	Bolt 1"-8NC x 4 1/2"	1	
57	3312605	Locknut 1"-8NC	2	
	0360016	<b>TOW BAR ASSEMBLY</b>	Ref.	I
101	1660009	Coupling	1	
102	3420158	Hairpin	1	
103	3420352	Pin, Tow	1	
104	4751900	Flatwasher	1	

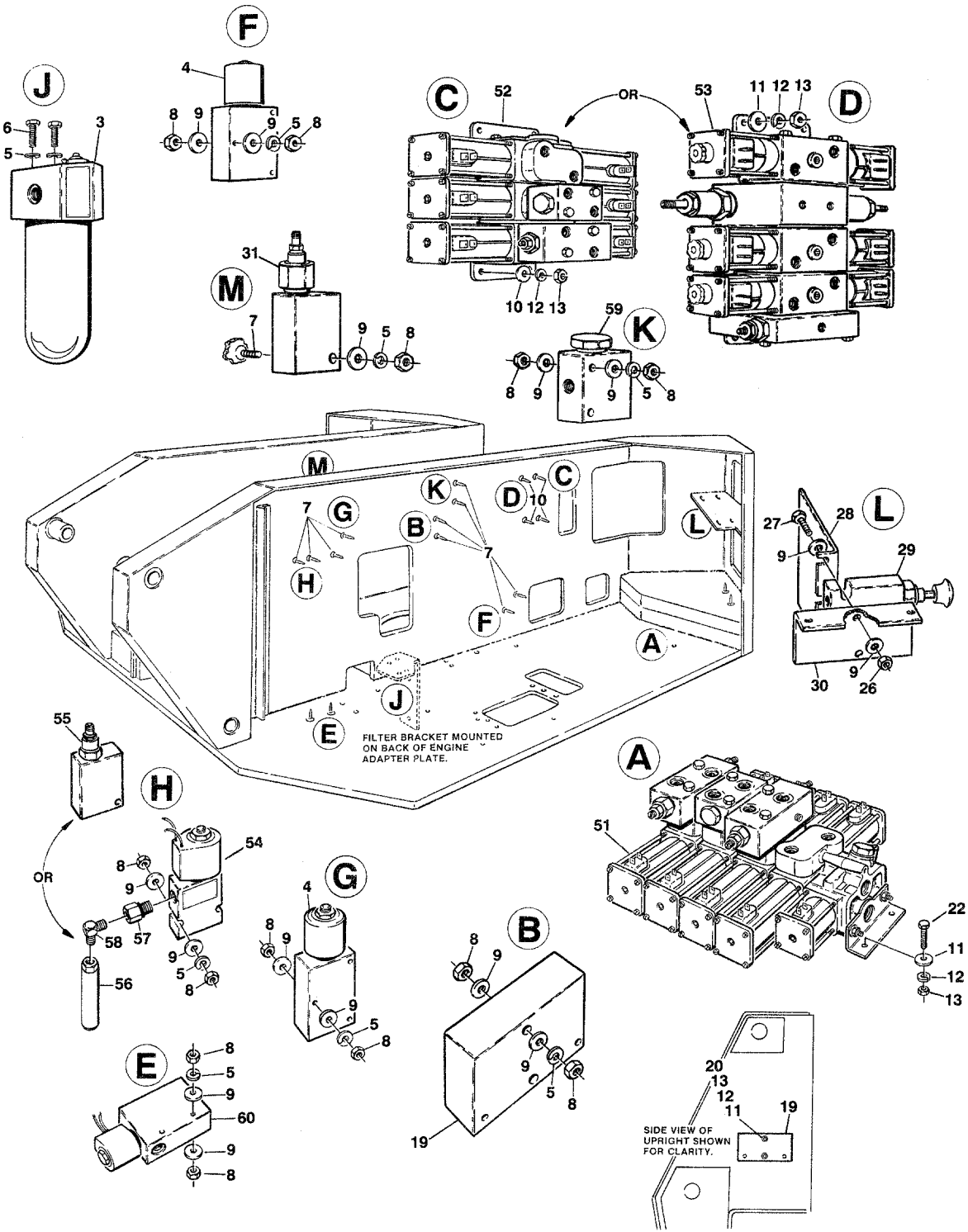
# SECTION 2 TURNTABLE

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FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES)

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**FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281170	<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (STANDARD PARTS)</b>	Ref.	I
	1281347	<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (STANDARD PARTS)</b>	Ref.	C
1	Not Used			
2	Not Used			
3	2120122	Filter, Pressure	1	
	2120125	Element	1	
4	4640123	Solenoid Valve Assembly	2	
	7004368	Coil (Hydraforce Version)		
	7000558	Coil (FPS Version)		
	7012518	Seal Kit (Hydraforce Version)		
	7006075	Seal Kit (FPS Version)		
5	4761400	Lockwasher 1/4"	A/R	
6	0641406	Bolt 1/4"-20NC x 3/4"	2	
7	4300042	Stud (Welded on Part)	8	
8	3311401	Nut 1/4"-20NC	A/R	
9	4751400	Flatwasher 1/4"	A/R	
10	4300038	Stud (Welded on Part)	4	
11	4751500	Flatwasher 5/16"	A/R	
12	4761500	Lockwasher 5/16"	A/R	
13	3311501	Nut 5/16"-18NC	A/R	
14 to 18	Not Used			
19	4640150	Valve, Check (Standard Bang-Bang Qty. 1/Proportional Qty. 2)	A/R	
20	4300033	Stud (Welded on Part)	2	
21	Not Used			
22	0641514	Bolt 5/16"-18NC x 1 3/4"	4	
23	Not Used			
24	4060804	Flex-Guard - 3/16" (Not Shown)	6 ft./1.8m	
25	4060808	Flex-Guard - 1/2" (Not Shown)	6 ft./1.8m	
26	3311405	Locknut 1/4"-20NC	2	
27	0641416	Bolt 1/4"-20NC x 2 1/4"	2	
28	0902051	Bracket - Decal (November 1994 to Present Only)	1	
29	4640866	Valve, Manual Descent (November 1994 to Present Only)	1	
	2900708	Seal Kit	1	
	7012959	Knob	1	
30	0902090	Bracket - Valve (November 1994 to Present Only)	1	
31	4640818	Valve (November 1994 to Present Only)	1	
	7011321	Seal Kit	1	

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**FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)</b>	Ref.	
	0250132	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	C
	0250133	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	C
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640246	3 Stack (Non-Rotate) (Prior to August 1992)		
	4640646	3 Stack (Non-Rotate) (August 1992 to Present)		
	4640247	4 Stack (With Rotate) (Prior to August 1992)		
	4640645	4 Stack (With Rotate) (August 1992 to Present)		
52	4640601	Control Valve Assembly (See Figure 2-4 for Breakdown)	1	
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Versions)		
55	Not Required			
56	4640627	Valve, Flow Control	1	
	7001508	Seal Kit		
57	2180029	Fitting	1	
58	2220820	Fitting, 90°	1	
59	Not Required			
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	
	0253772	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	D
	0253771	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	E
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640646	3 Stack (Non-Rotate)		
	4640645	4 Stack (With Rotate) (Prior to January 1995)		
	4640909	4 Stack (With Rotate) (January 1995 to Present)		
52		Control Valve Assembly (See Figure 2-4 for Breakdown)	1	
	4640601	(Prior to October 1993)		
	4640850	(October 1993 to Present)		
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		
55	4640623	Valve, Flow Control	1	
56	Not Required			
57	2220651	Fitting	1	

## SECTION 2 TURNTABLE

**FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
58	2220373	Fitting	1	
59	4640673	Valve, Check	1	
	7011325	Cartridge	1	
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)</b>	Ref.	
	0251716	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	B
	0251717	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	B
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640462	2 Stack (Non-Rotate) (Prior to August 1992)		
	4640710	2 Stack (Non-Rotate) (August 1992 to Present)		
	4640692	3 Stack (With Rotate) (Prior to August 1992)		
	4640720	3 Stack (With Rotate) (August 1992 to Present)		
52	4640601	Control Valve Assembly (See Figure 2-4 for Breakdown)	1	
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		
55	Not Required			
56	4640627	Valve, Flow Control	1	
	7001508	Seal Kit		
57	2180029	Fitting	1	
58	2220820	Fitting, 90°	1	
59	Not Required			
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	
	0253774	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	D
	0253773	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	E
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640710	2 Stack (Non-Rotate)		
	4640720	3 Stack (With Rotate) (Prior to August 1995)		
	4640950	3 Stack (With Rotate) (August 1995 to Present)		
52		Control Valve Assembly (See Figure 2-4 for Breakdown)		
	4640601	(Prior to October 1993)		
	4640850	(October 1993 to Present)		
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		

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**FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
55	4640623	Valve, Flow Control	1	
56	Not Required			
57	2220651	Fitting	1	
58	2220373	Fitting	1	
59	4640673	Valve, Check	1	
	7011325	Cartridge	1	
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (2WS) (VARIABLE PARTS)</b>	Ref.	
	0250985	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	C
	0250984	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	D
51		Control Valve Assembly Options (See Figure 2-3 for breakdown)	1	
	4640246	3 Stack (Non-Rotate) (Prior to June 1991)		
	4640646	3 Stack (Non-Rotate) (June 1991 to Present)		
	4640247	4 Stack (With Rotate) (Prior to June 1991)		
	4640645	4 Stack (With Rotate) (June 1991 to January 1995)		
	4640909	4 Stack (With Rotate) (January 1995 to Present)		
52	Not Required			
53	4640643	Control Valve Assembly (See Figure 2-5 for Breakdown)	1	
54 to 59	Not Required			
60	4640360	Dump Valve Assembly	1	
	7009745	Coil (Vickers/Modular Controls Version)		
	7004368	Coil (Hydraforce Version)		
	7004289	Cartridge Without Coil (Vickers/Modular Controls Version)		
	Not Available	Seal Kit - 7004289 Cartridge (Vickers Modular Controls Version)		
	7012910	Cartridge Without Coil (Hydraforce Version)		
	2900708	Seal Kit - 7012910 Cartridge (Hydraforce Version)		
	7003635	Cartridge, Check (Vickers/Modular Controls Version)		
	7012930	Cartridge, Check (Hydraforce Version)		
		<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (4WS) (VARIABLE PARTS)</b>	Ref.	
	0252099	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	C
	0252098	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	D
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown)	1	
	4640462	3 Stack (Non-Rotate) (Prior to August 1992)		
	4640710	3 Stack (Non-Rotate) (August 1992 to Present)		
	4640692	4 Stack (With Rotate) (Prior to August 1992)		



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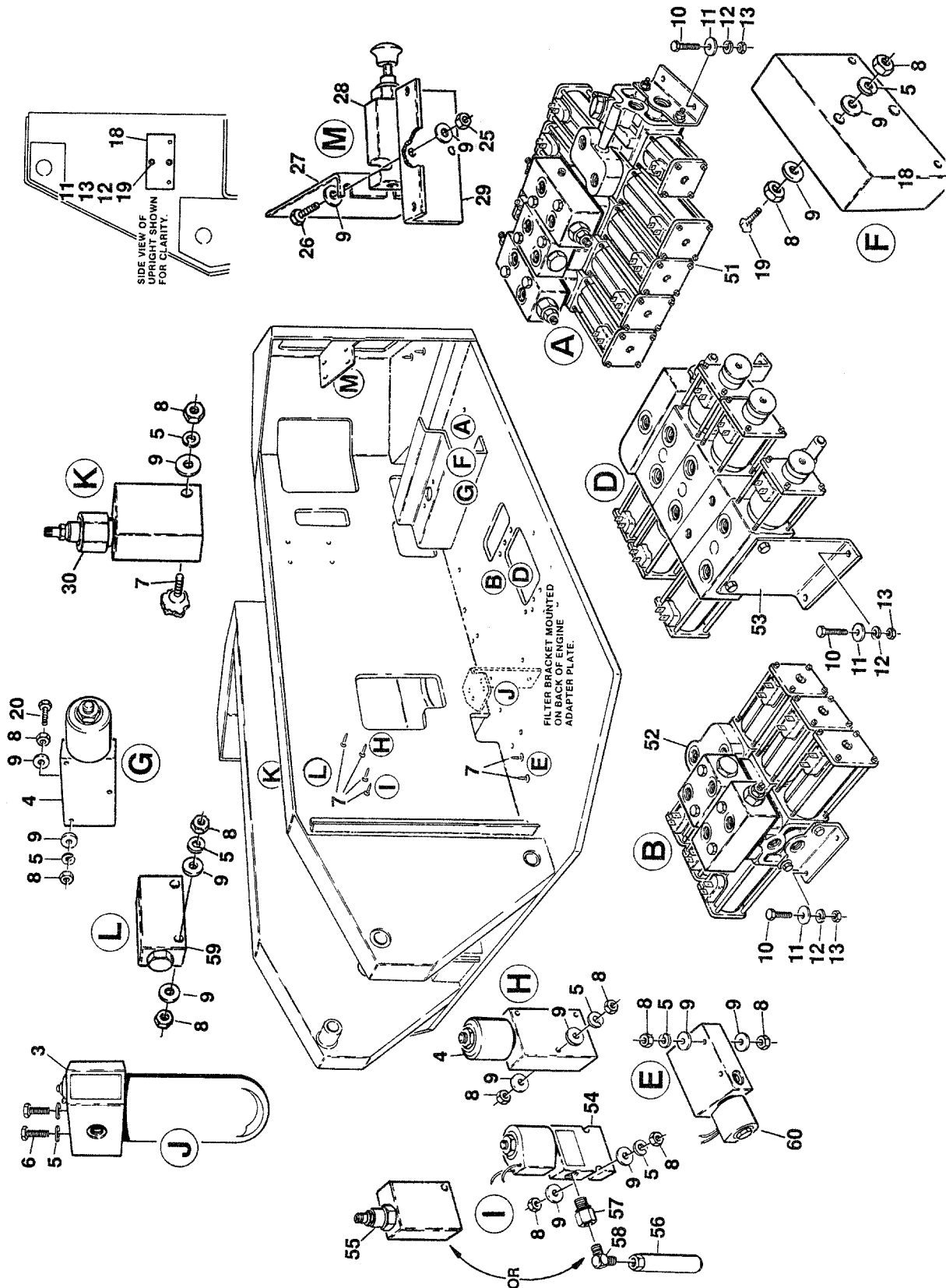
**FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
51 (cont'd)	4640720	4 Stack (With Rotate) (August 1992 to August 1995)		
	4640950	4 Stack (With Rotate) (August 1995 to Present)		
52	Not Required			
53	4640643	Control Valve Assembly (See Figure 2-5 for Break-down)	1	
54 to 59	Not Required			
60	4640360	Dump Valve Assembly	1	
	7009745	Coil (Vickers/Modular Controls Version)		
	7004368	Coil (Hydraforce Version)		
	7004289	Cartridge Without Coil (Vickers/Modular Controls Version)		
	Not Available	Seal Kit - 7004289 Cartridge (Vickers/Modular Controls Version)		
	7012910	Cartridge Without Coil (Hydraforce Version)		
	2900708	Seal Kit - 7012910 Cartridge (Hydraforce Version)		
	7003635	Cartridge, Check (Vickers/Modular Controls Version)		
	7012930	Cartridge, Check (Hydraforce Version)		

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FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES)



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**FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281168	<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (STANDARD PARTS)</b>	Ref.	H
	1281345	<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (STANDARD PARTS)</b>	Ref.	D
1	Not Used			
2	Not Used			
3	2120122	Filter, Pressure	1	
	2120125	Element	1	
4	4640123	Solenoid Valve Assembly	2	
	7004368	Coil (Hydraforce Version)		
	7000558	Coil (FPS Version)		
	7012518	Seal Kit (Hydraforce Version)		
	7006075	Seal Kit (FPS Version)		
5	4761400	Lockwasher 1/4"	A/R	
6	0641406	Bolt 1/4"-20NC x 3/4"	2	
7	4300042	Stud (Welded on Part)	8	
8	3311401	Nut 1/4"-20NC	A/R	
9	4751400	Flatwasher 1/4"	A/R	
10	0641514	Bolt 5/16"-18NC x 1 3/4"	8	
11	4751500	Flatwasher 5/16"	A/R	
12	4761500	Lockwasher 5/16"	A/R	
13	3311501	Nut 5/16"-18NC	A/R	
14 to 17	Not Used			
18	4640150	Valve, Check (Standard Bang-Bang Qty. 1/Proportional Qty. 2)	A/R	
19	4300033	Stud (Welded on Part)	2	
20	0641420	Bolt 1/4"-20NC x 2 1/2"	2	
21 to 24	Not Used			
25	3311405	Locknut 1/4"-20NC	2	
26	0641416	Bolt 1/4"-20NC x 2 1/4"	2	
27	0902051	Bracket - Decal (November 1994 to Present Only)	1	
28	4640866	Valve, Manual Descent (November 1994 to Present Only)	1	
	2900708	Seal Kit	1	
	7012959	Knob	1	
29	0902090	Bracket - Valve (November 1994 to Present Only)	1	
30	4640818	Valve (November 1994 to Present Only)	1	
	7011321	Seal Kit	1	
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)</b>	Ref.	
	0250121	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	D
	0250131	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	D
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640246	3 Stack (Non-Rotate) (Prior to August 1992)		

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**FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
51 (cont'd)	4640646	3 Stack (Non-Rotate) (August 1992 to Present)		
	4640247	4 Stack (With Rotate) (Prior to August 1992)		
	4640645	4 Stack (With Rotate) (August 1992 to Present)		
52	4640601	Control Valve Assembly (See Figure 2-4 for Break-down)	1	
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Versions)		
55	Not Required			
56	4640627	Valve, Flow Control	1	
	7001508	Seal Kit		
57	2180029	Fitting	1	
58	2220820	Fitting, 90°	1	
59	Not Required			
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	
	0253768	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	D
	0253767	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	E
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640646	3 Stack (Non-Rotate)		
	4640645	4 Stack (With Rotate) (Prior to January 1995)		
	4640909	4 Stack (With Rotate) (January 1995 to Present)		
52		Control Valve Assembly (See Figure 2-4 for Break-down)	1	
	4640601	(Prior to October 1993)		
	4640850	(October 1993 to Present)		
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		
55	4640623	Valve, Flow Control	1	
56	Not Required			
57	2220651	Fitting	1	
58	2220373	Fitting	1	
59	4640673	Valve, Check	1	
	7011325	Cartridge	1	
60	Not Required			

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**FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)</b>	Ref.	
	0251710	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	B
	0251709	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	B
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640462	2 Stack (Non-Rotate) (Prior to August 1992)		
	4640710	2 Stack (Non-Rotate) (August 1992 to Present)		
	4640692	3 Stack (With Rotate) (Prior to August 1992)		
	4640720	3 Stack (With Rotate) (August 1992 to Present)		
52	4640601	Control Valve Assembly (See Figure 2-4 for Breakdown)	1	
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		
55	Not Required			
56	4640627	Valve, Flow Control	1	
	7001508	Seal Kit		
57	2180029	Fitting	1	
58	2220820	Fitting, 90°	1	
59	Not Required			
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	
	0253769	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	D
	0253770	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	E
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown):	1	
	4640710	2 Stack (Non-Rotate)		
	4640720	3 Stack (With Rotate) (Prior to August 1995)		
	4640950	3 Stack (With Rotate) (August 1995 to Present)		
52		Control Valve Assembly (See Figure 2-4 for Breakdown)		
	4640601	(Prior to October 1993)		
	4640850	(October 1993 to Present)		
53	Not Required			
54	4640543	Valve, Dump	1	
	7004368	Coil (Hydraforce Version)		
	7009745	Coil (Vickers/Modular Controls Version)		
55	4640623	Valve, Flow Control	1	
56	Not Required			
57	2220651	Fitting	1	
58	2220373	Fitting	1	

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
59	4640673	Valve, Check	1	
	7011325	Cartridge	1	
60	Not Required			
		<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (2WS) (VARIABLE PARTS)</b>	Ref.	
	0250980	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	E
	0250979	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	F
51		Control Valve Assembly Options (See Figure 2-3 for breakdown)	1	
	4640246	3 Stack (Non-Rotate) (Prior to June 1991)		
	4640646	3 Stack (Non-Rotate) (June 1991 to Present)		
	4640247	4 Stack (With Rotate) (Prior to June 1991)		
	4640645	4 Stack (With Rotate) (June 1991 to January 1995)		
	4640909	4 Stack (With Rotate) (January 1995 to Present)		
52	Not Required			
53	4640643	Control Valve Assembly (See Figure 2-5 for Breakdown)	1	
-54 to 59	Not Required			
60	4640360	Dump Valve Assembly	1	
	7009745	Coil (Vickers/Modular Controls Version)		
	7004368	Coil (Hydraforce Version)		
	7004289	Cartridge Without Coil (Vickers/Modular Controls Version)		
	Not Available	Seal Kit - 7004289 Cartridge (Vickers Modular Controls Version)		
	7012910	Cartridge Without Coil (Hydraforce Version)		
	2900708	Seal Kit - 7012910 Cartridge (Hydraforce Version)		
	7003635	Cartridge, Check (Vickers/Modular Controls Version)		
	7012930	Cartridge, Check (Hydraforce Version)		
		<b>CONTROL VALVES INSTALLATION - PROPORTIONAL (4WS) (VARIABLE PARTS)</b>	Ref.	
	0252723	<b>CONTROL VALVES - NON-ROTATE</b>	Ref.	C
	0252722	<b>CONTROL VALVES - WITH ROTATE</b>	Ref.	D
51		Control Valve Assembly Options (See Figure 2-3 for Breakdown)	1	
	4640710	3 Stack (Non-Rotate)		
	4640720	3 Stack (With Rotate) (Prior to August 1995)		
	4640950	3 Stack (With Rotate) (August 1995 to Present)		
52	Not Required			
53	4640643	Control Valve Assembly (See Figure 2-5 for Breakdown)	1	
54 to 59	Not Required			

# SECTION 2 TURNTABLE

**FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES) (CONTINUED)**

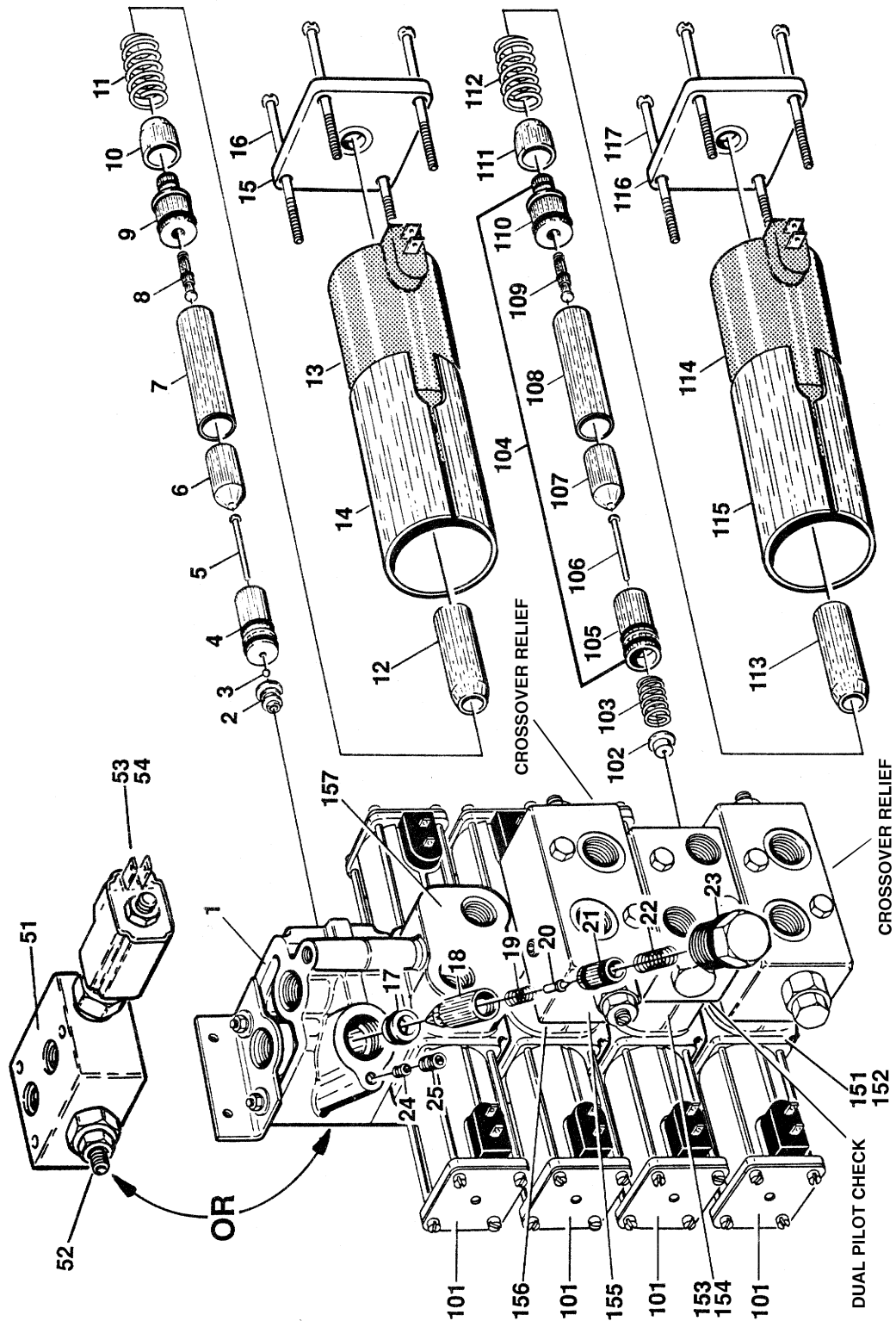
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
60	4640360	Dump Valve Assembly	1	
	7009745	Coil (Vickers/Modular Controls Version)		
	7004368	Coil (Hydraforce Version)		
	7004289	Cartridge Without Coil (Vickers/Modular Controls Version)		
	Not Available	Seal Kit - 7004289 Cartridge (Vickers/Modular Controls Version)		
	7012910	Cartridge Without Coil (Hydraforce Version)		
	2900708	Seal Kit - 7012910 Cartridge (Hydraforce Version)		
	7003635	Cartridge, Check (Vickers/Modular Controls Version)		
	7012930	Cartridge, Check (Hydraforce Version)		

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

FIGURE 2-3. CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION

SECTION 2 TURNTABLE





# SECTION 2 TURNTABLE

**FIGURE 2-3. CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>Usage Chart:</b>		
	4640246	2WS Without Rotate 3 Stack (Prior to August 1992)		
	4640646	3 Stack (August 1992 to Present)		
		2WS With Rotate		
	4640247	4 Stack (Prior to August 1992)		
	4640645	4 Stack (August 1992 to January 1995)		
	4640909	4 Stack (January 1995 to Present)		
		4WS Without Rotate		
	4640462	2 Stack (Prior to August 1992)		
	4640710	2 Stack (August 1992 to Present)		
		4WS With Rotate		
	4640692	3 Stack (Prior to August 1992)		
	4640720	3 Stack (August 1992 to August 1995)		
	4640950	3 Stack (August 1995 to Present)		
1	7002304	<b>DUMP SECTION - COMPLETE (ALL EXCEPT 4640909 &amp; 4640950)</b>	Ref.	
		Solenoid Assembly	1	
2	7004823	Seat	1	
	Kit	O-Ring	1	
3	7002229	Ball	1	
		Guide Tube Assembly	1	
4	7004822	Cone, Female	1	
	Kit	O-Ring	1	
5	7002346	Pin, Push	1	
6	7004839	Plunger	1	
7	7004838	Tube, Guide	1	
8	7004841	Pin, Push	1	
	Kit	O-Ring	1	
9	7002340	Guide, External Push Pin	1	
	Kit	O-Ring	1	
10	7004834	Sleeve, Inner Flux	1	
11	7002334	Spring	1	
12	7004835	Sleeve, Outer, Flux	1	
13	7000417	Coil	1	
14	7004836	Case, Solenoid	1	
15	7002338	Plate, End	1	
	7002327	Nameplate	1	
16	7004837	Screw	4	
17	7002322	Seat	1	
	Kit	O-Ring	1	
		Main Relief (Poppet) Valve	1	
18	7002321	Case, Poppet	1	
19	7002328	Spring	1	
20	7002294	Poppet	1	
21	7002320	Seat, Adjustable	1	
	Kit	O-Ring	1	

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# SECTION 2 TURNTABLE

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**FIGURE 2-3. CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
22	7002329	Spring	1	
23	7002323	Plug	1	
	Kit	O-Ring	1	
24	7002326	Orifice	1	
25	7002324	Plug	1	
		-----		
	7000413	Seal Kit - 7002304 Dump Section	1	
51	7002447	<b>DUMP SECTION - COMPLETE (4640909 &amp; 4640950)</b>	Ref.	
52	7002448	Cartridge	1	
	7002449	Seal Kit - 7002448 Cartridge	1	
53	7002450	Coil	1	
54	7002451	Cartridge Without Coil	1	
	7011118	Seal Kit - 7002451 Cartridge	1	
		-----		
	7000448	O-Ring (Between Sections)	2	
		<b>WORKING SECTIONS (STANDARD PARTS)</b>	Ref.	
101	7004859	Solenoid Assembly	2	
102	7002274	Washer (4640246, 4640247)	1	
	7003825	Washer (4640646, 4640645, 4640909, 4640462, 4640710, 4640692, 4640720, 4640950)	1	
103	7002348	Spring	1	
104	7002305	Guide Tube Assembly	1	
105	7002345	Cone, Female	1	
	Kit	O-Ring	1	
	Kit	O-Ring	1	
106	7002346	Pin, Push	1	
107	7002344	Plunger	1	
108	7000470	Tube, Guide	1	
109	7002341	Pin, Actuator	1	
	Kit	Ring, Quad	1	
110	7002340	Guide, External Push Pin	1	
	Kit	O-Ring	1	
111	7002333	Sleeve, Inner Flux	1	
112	7002334	Spring	1	
113	7002336	Sleeve, Outer Flux	1	
114	7000418	Coil	1	
115	7002335	Case, Solenoid	1	
116	7002338	Plate, End	1	
	7002327	Nameplate	1	
117	7002339	Screw	4	
		-----		
	7000414	Seal Kit - Working Section (1 Per Section)	A/R	

# SECTION 2 TURNTABLE

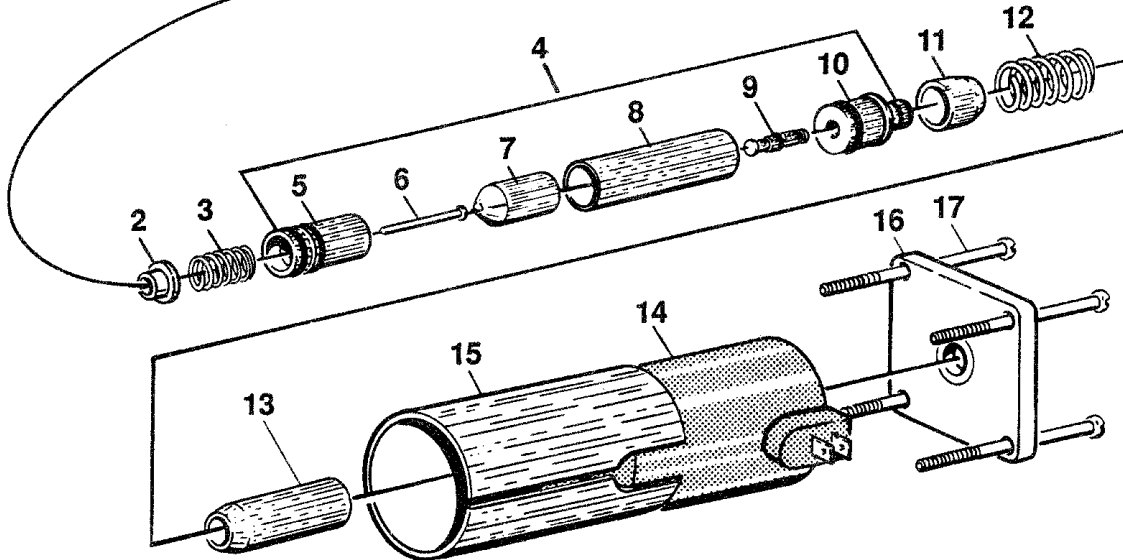
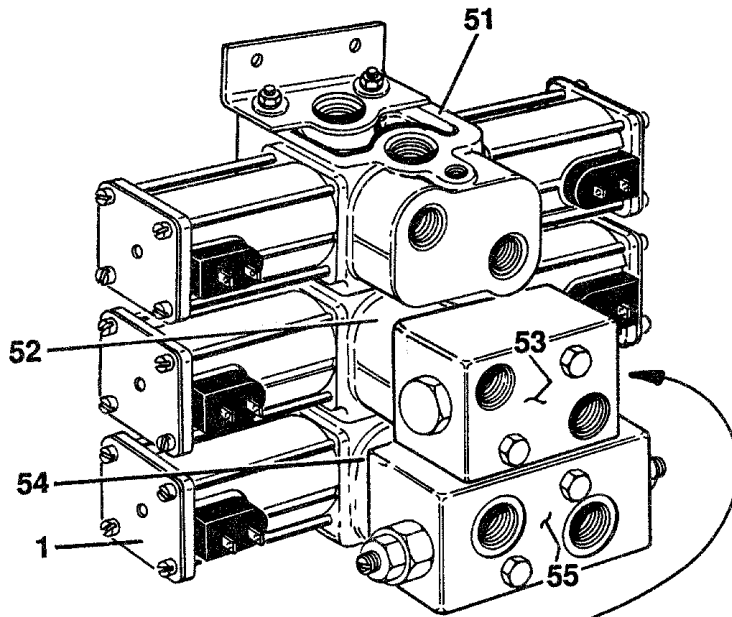
**FIGURE 2-3. CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>WORKING SECTIONS - COMPLETE (INCLUDES ITEMS 101-117)</b>	Ref.	
151	7002315	Steer Section (4640246, 4640247, 4640462, 4640692)	1	
	7003855	Telescope Section (4640646, 4640645, 4640909, 4640710, 4640720, 4640950)		
152	7000468	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable)	1	
153	Use 7011182	Level Section (All Models) (was p/n 7002316)	1	
154	Use 7011183	Dual Pilot Check Valve (Due to various suppliers, internal components are longer field serviceable) (was p/n 7002262)	1	
155	7002315	Telescope Section (4640246, 4640247)	1	
	7002315	Steer Section (4640645, 4640646, 4640909)	1	
	Not Required	Not Used (4640462, 4640692, 4640710, 4640720, 4640950)	0	
156	7000468	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable) (4640246, 4640247, 4640645, 4640646, 4640909 Only)	1	
157	7002317	Rotate Section (4640247, 4640645, 4640909, 4640692, 4640720, 4640950)		
	Not Required	Not Used (4640246, 4640646, 4640462, 4640710)	0	

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# SECTION 2 TURNTABLE

FIGURE 2-4. CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS)



SECTION 2 TURNTABLE

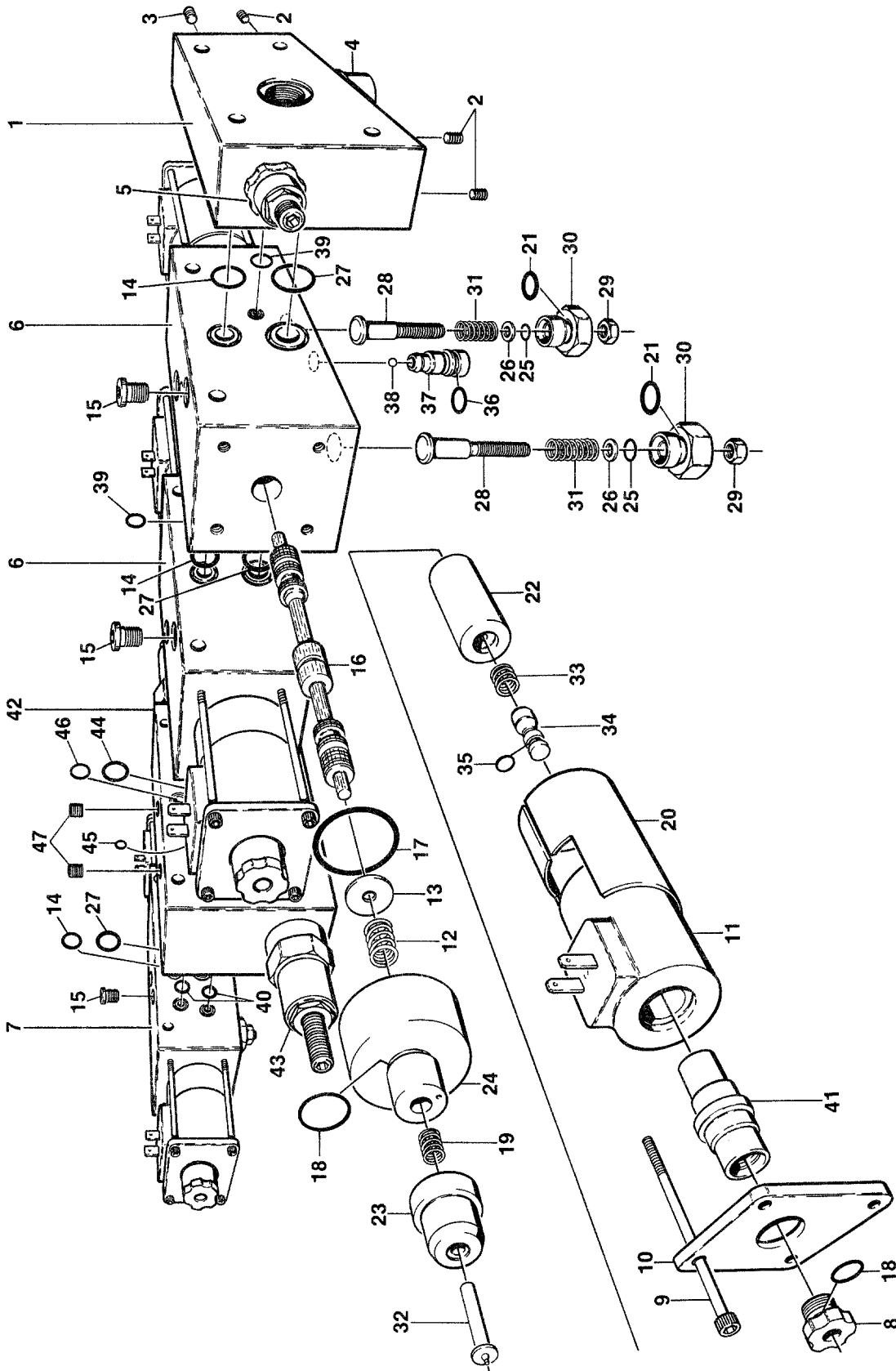
# SECTION 2 TURNTABLE

**FIGURE 2-4. CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>USAGE CHART:</b>		
	4640601	3 Stack (Prior to October 1993)	Ref.	
	4640850	3 Stack (October 1993 to Present)	Ref.	
		<b>WORKING SECTIONS (STANDARD PARTS)</b>	Ref.	
1	7004859	Solenoid Assembly	2	
2	7003825	Washer	1	
3	7002348	Spring	1	
4	7002305	Guide Tube Assembly	1	
5	7002345	Cone, Female	1	
	Kit	O-Ring	1	
	Kit	O-Ring	1	
6	7002346	Pin, Push	1	
7	7002344	Plunger	1	
8	7000470	Tube, Guide	1	
9	7002341	Pin, Actuator	1	
	Kit	Ring, Quad	1	
10	7002340	Guide, External Push Pin	1	
	Kit	O-Ring	1	
11	7002333	Sleeve, Inner Flux	1	
12	7002334	Spring	1	
13	7002336	Sleeve, Outer Flux	1	
14	7000418	Coil	1	
15	7002335	Case, Solenoid	1	
16	7002338	Plate, End	1	
17	7002339	Screw	4	
	7000414	Seal Kit - Working Section	3	
		<b>WORKING SECTIONS - COMPLETE (INCLUDES ITEMS 1-17)</b>	Ref.	
51	7002317	Main Lift Section	1	
52	7003841	Tower Lift Section (4640601)	1	
	7003855	Tower Lift Section (4640850)	1	
53	Use 7011183	Dual Pilot Check Valve (Due to various suppliers, internal components are longer field serviceable) (4640601) (was p/n 7002262)	1	
	7000468	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable) (4640850)	1	
54	7003855	Swing Section	1	
55	7000468	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable)	1	

# SECTION 2 TURNTABLE

FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL



SECTION 2 TURNTABLE

# SECTION 2 TURNTABLE

**FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	4640643	<b>CONTROL VALVE ASSEMBLY - PROPORTIONAL</b>	Ref.	B
1	7010701	Inlet Section Assembly	1	
2	7010703	Plug	3	
3	7010704	Plug	1	
4	7010705	Cartridge, Unloader Spool	1	
5	7010706	Cartridge, System Relief	1	
6	7010707	Working Section Assembly (Tower Lift)	1	
	7010785	Working Section Assembly (Main Lift)	1	
7	7010743	Working Section Assembly (Swing)	1	
8	7010708	Plug	2	
9	7010709	Bolt, Socket Head	8	
10	7010710	Plate, End	2	
11	7010711	Coil	2	
12	7010712	Spring	2	
13	7010713	Washer	2	
14	Kit	O-Ring	2	
15	7010716	Plug	1	
16	7010717	Spool (Swing and Tower Lift)	1	
	7010784	Spool (Main Lift)	1	
17	Kit	O-Ring	2	
18	Kit	O-Ring	4	
19	7010720	Spring (Main Lift and Tower Lift)	2	
	7010745	Spring (Swing)	2	
20	7010721	Case, Solenoid	2	
21	Kit	O-Ring	2	
22	7010723	Armature	2	
23	7010724	Tube, Flux	2	
24	7010725	Armature	2	
25	Kit	O-Ring	2	
26	7010727	Washer	2	
27	Kit	O-Ring	1	
28	7010729	Needle	2	
29	7010730	Nut	2	
30	7010731	Body, Cartridge	2	
31	7010732	Spring	2	
32	7010733	Pin, Push	2	
33	7010734	Spring	2	
34	7010735	Pin, Push	2	
35	Kit	Ring, Quad	2	
36	Kit	O-Ring	1	
37	7010738	Body, Shuttle Cartridge	1	
38	7010739	Ball	1	
39	Kit	O-Ring	2	
40	Kit	O-Ring (Swing Only)	4	
41	7010724	Guide	2	
42	7010741	Crossover Relief Section Assembly	1	
43	7010742	Cartridge, System Relief	2	
44	Kit	O-Ring	2	

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# SECTION 2 TURNTABLE

**SECTION 2 TURNTABLE**

**FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
45	Kit	O-Ring	2	
46	Kit	O-Ring	2	
47	7010704	Plug	2	
		-----		
	2900761	Seal Kit - Inlet Section	1	
	2900759	Seal Kit - Working Section	3	
	2900760	Seal Kit - Crossover Relief Section	1	



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FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL (CONTINUED)

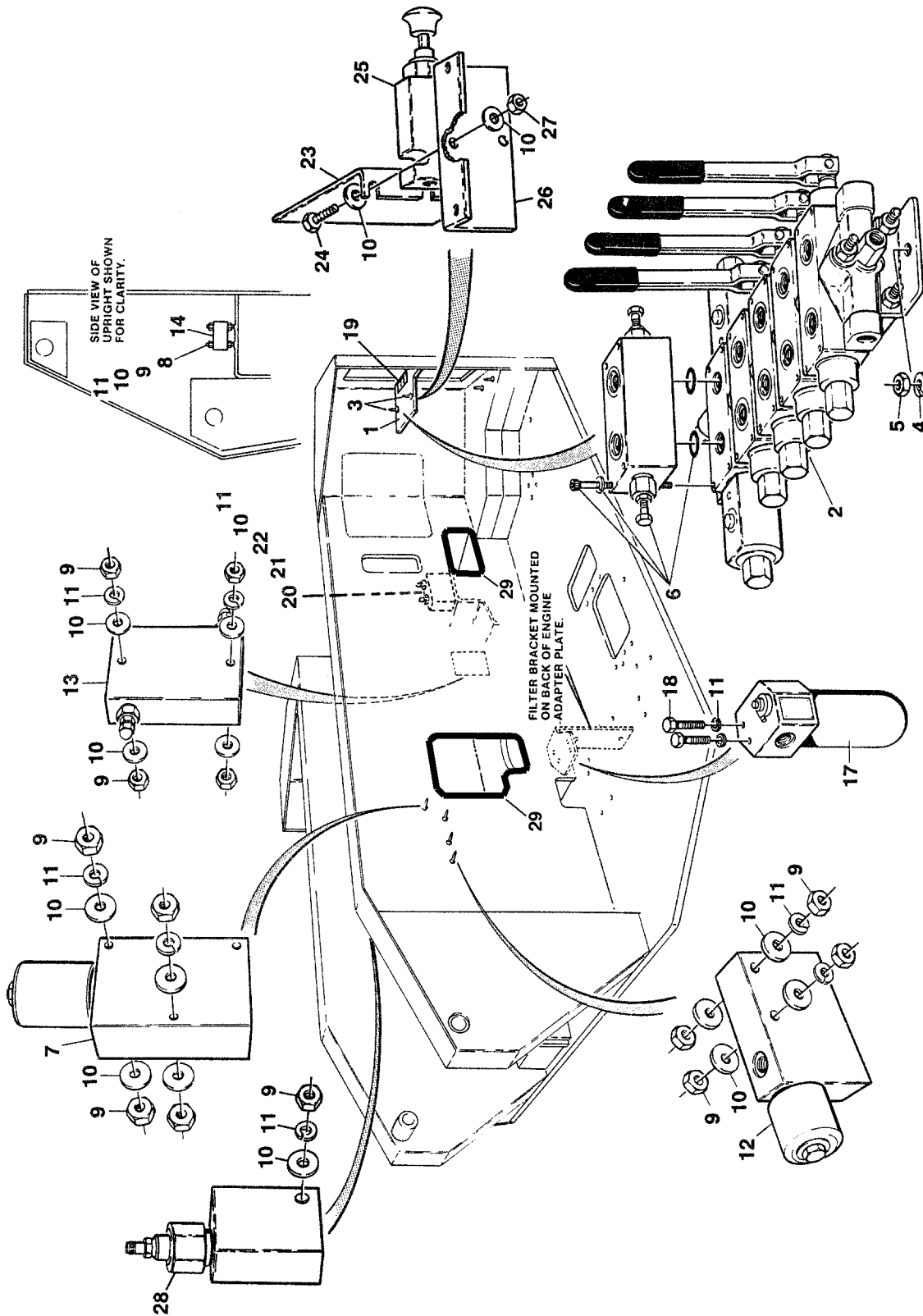
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-6. CONTROL VALVES INSTALLATION (HYDRAULIC CONTROLS)

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# SECTION 2 TURNTABLE

**FIGURE 2-6. CONTROL VALVES INSTALLATION (HYDRAULIC CONTROLS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250873	<b>CONTROL VALVES INSTALLATION - HYDRAULIC CONTROLS (FORD MACHINES)</b>	Ref.	E
1	3534263	Plate, Valve Mounting	1	
2	4640506	Ground Control Valve Assembly (See Figure 2-7 for Breakdown)	1	
4	4761500	Lockwasher 5/16"	2	
5	3311501	Nut 5/16"-18NC	2	
6	4640122	Valve Block Assembly	1	
7	4640123	Solenoid Valve Assembly	1	
	7004368	Coil (Hydraforce Version)		
	7000558	Coil (FPS Version)		
	7012518	Seal Kit (Hydraforce Version)		
	7006075	Seal Kit (FPS Version)		
8	4300042	Stud (Welded on Part)	9	
9	3311401	Nut 1/4"-20NC	15	
10	4751400	Flatwasher 1/4"	21	
11	4761400	Lockwasher 1/4"	13	
12	4640360	Dump Valve Assembly	1	
	7009745	Coil (Vickers/Modular Controls Version)		
	7004368	Coil (Hydraforce Version)		
	7004289	Cartridge Without Coil (Vickers/Modular Controls Version)		
	Not Available	Seal Kit - 7004289 Cartridge		
	7012910	Cartridge Without Coil (Hydraforce Version)		
	2900708	Seal Kit (7012910 Cartridge)		
	7003635	Cartridge, Check (Vickers/Modular Controls Version)		
	7012930	Cartridge, Check (Hydraforce Version)		
13	4640035	Valve, Relief	1	
14	4640150	Valve, Check	1	
15 to 16	Not Used			
17	2120122	Hydraulic Filter Assembly	1	
	2120125	Element, Filter	1	
18	0641406	Bolt 1/4"-20NC x 3/4"	2	
19	1700853	Decal - Ground Control Selection	1	
20	4640479	Valve, Control	1	
	7011320	Cartridge	2	
	2900770	Seal Kit (1 Per Cartridge)	2	
21	4300036	Stud (Welded on Part)	2	
22	3311401	Nut 1/4"-20NC	2	
23	0902051	Bracket - Decal (November 1994 to Present Only)	1	
24	0641416	Bolt 1/4"-20NC x 2"	2	
25	4640866	Valve, Manual Descent (November 1994 to Present Only)	1	
	2900708	Seal Kit	1	
	7012959	Knob	1	
26	0902090	Bracket - Valve (November 1994 to Present Only)	1	
27	3311405	Locknut 1/4"-20NC	2	
28	4640818	Valve (November 1994 to Present Only)	1	
	7011321	Seal Kit	1	

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FIGURE 2-6. CONTROL VALVES INSTALLATION (HYDRAULIC CONTROLS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
29	4060806	Shield, Flex Trim	9ft.	

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FIGURE 2-6. CONTROL VALVES INSTALLATION (HYDRAULIC CONTROLS) (CONTINUED)

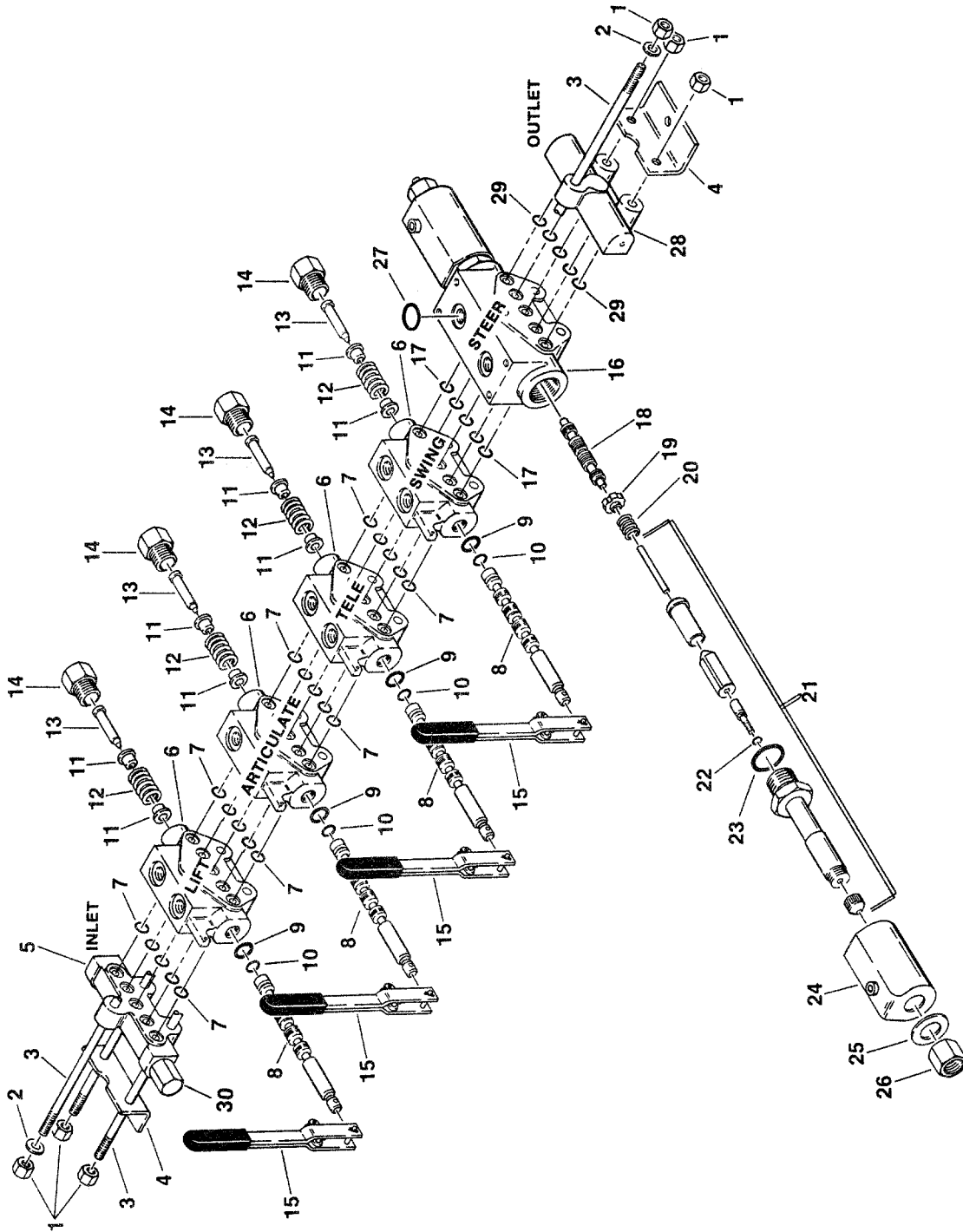
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-7. VALVE ASSEMBLY - GROUND CONTROL (HYDRAULIC CONTROLS)

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# SECTION 2 TURNTABLE

**FIGURE 2-7. VALVE ASSEMBLY - GROUND CONTROL (HYDRAULIC CONTROLS)**

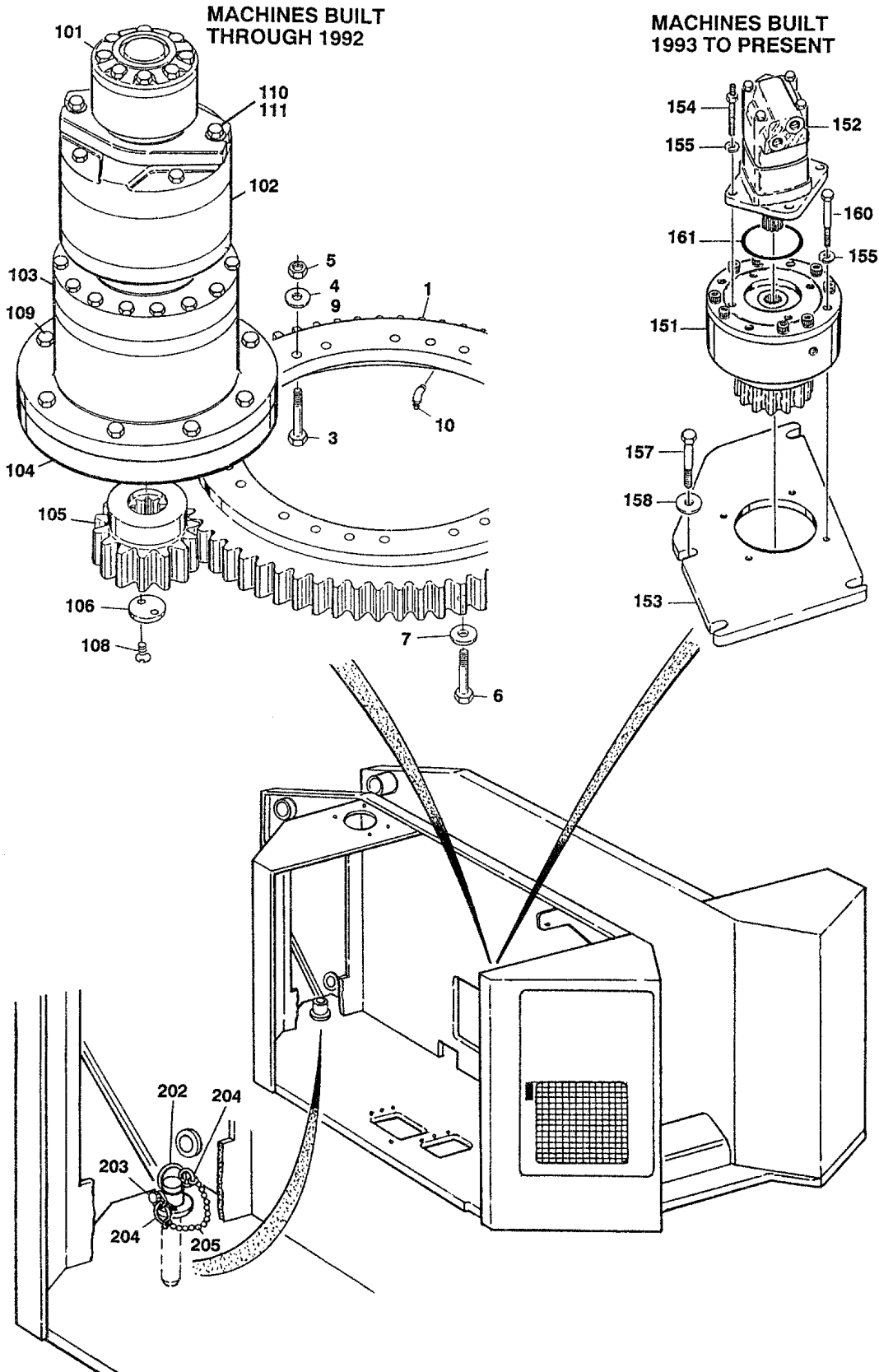
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	4640506	<b>VALVE ASSEMBLY - GROUND CONTROL (HYDRU- ALIC CONTROLS)</b>	Ref.	
1	7000585	Nut	6	
2	7000586	Washer	2	
3	7006052	Rod, Threaded	3	
4	7006039	Bracket	2	
5	7006040	Section, Valve - Inlet	1	
	7000588	O-Ring	1	
	7006050	O-Ring	2	
6	7006046	Section, Valve - Lift, Articulate, Tele and Swing	4	
7	7000589	O-Ring	20	
8		Spool (Not Sold Separately)	4	
9	7006029	O-Ring	4	
10	7000588	O-Ring	4	
11	7006022	Guide	8	
12	7006020	Spring	4	
13	7006021	Shaft	4	
14	7006019	Cap	4	
15	7006012	Handle (With Linkage and Hardware)	4	
16	7006041	Section, Valve with Coils - Steer	1	
17	7000588	O-Ring	5	
18		Spool (Not Sold Separately)	1	
19	7006037	Retainer	2	
20	7006036	Spring	2	
21	7006049	Tube Assembly	2	
22	7006048	O-Ring	2	
23	7006035	O-Ring	2	
24	4640049	Coil, Solenoid	2	
25		Nameplate	2	
26	7006033	Nut	2	
27	7000596	O-Ring	2	
28	7000600	Section, Valve - Outlet	1	
29	7000588	O-Ring	5	
30	7006053	Valve, Cartridge Relief	1	
	7006051	Seal Kit - Complete (Includes Qty. 1 of 7000550, 7000549 and 7006047 Seal Kits and Qty. 4 of 7000556 Seal Kit)	1	
	7000550	Seal Kit - Inlet Section (Includes O-Rings Listed in Item 5)	1	
	7000556	Seal Kit - Manual Valve Section (Includes Qty. 5 of Item 7, 4 Qty. 1 of Item 9 and Qty. 1 of Item 10)		
	7000549	Seal Kit - Valve Section with Coils (Includes Qty. 10 of Item 17, Qty. 2 of Items 22, 23 and 27)	1	
	7006047	Seal Kit - Outlet Section (Includes Qty. 5 of item 29)	1	

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# SECTION 2 TURNTABLE

FIGURE 2-8. TURNTABLE, BEARING AND SWING DRIVE INSTALLATION

SECTION 2 TURNTABLE





# SECTION 2 TURNTABLE

**FIGURE 2-8. TURNTABLE, BEARING AND SWING DRIVE INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>TURNTABLE OPTIONS (DEUTZ POWERED MACHINES)</b>	Ref.	
	4620073	Turntable - Domestic Machines Built Prior to May 1993	1	
	4620094	Turntable - Domestic Machines Built May 1993 to Present	1	
	4620074	Turntable - CSA Machines Built Prior to May 1993	1	
	4620095	Turntable - CSA Machines Built May 1993 to Present	1	
		<b>TURNTABLE OPTIONS (FORD AND KOBUTA POWERED MACHINES)</b>	Ref.	
	4620059	Turntable - Domestic Standard Bang-Bang or Proportional Machines Built Prior to May 1993	1	
	4920092	Turntable - Domestic Standard Bang-Bang or Proportional Machines Built May 1993 to Present	1	
	4620060	Turntable - Domestic Hydraulic Controls and All CSA Built Prior to May 1993	1	
	4620093	Turntable - Domestic Hydraulic Controls and All CSA Built May 1993 to Present	1	
	0250136	<b>TURNTABLE BEARING INSTALLATION</b>	Ref.	F
1	0440067	Bearing, Turntable	1	
2	Not used			
3	0682020	Bolt 5/8"-11NC x 2 1/2" (Grade 8)	15	
4	4740004	Washer, Hardened	9	
5	3300183	Nut 5/8"-11NC (Grade 8)	15	
6	0681818	Bolt 1/2"-13NC x 2 1/4" (Grade 8)	12	
7	4740003	Washer, Hardened	12	
8	Not Used			
9	4740048	Washer, Special	3	
10	2160001	Fitting, Grease - 90°	3	
		-----		
	0100019	Loctite #271	A/R	
	0100004	Devcon (Not Required on Machines with Milled Frame and Turntable)	A/R	
	0250139	<b>SWING DRIVE INSTALLATION - MACHINES BUILT THROUGH 1992</b>	Ref.	C
101		Swing Motor Options:	1	
	3160156	Motor - Prior to August 1991 (See Figure 2-9 for Breakdown)		
	3160181	Motor - August 1991 Through 1992 (See Figure 2-10 for Breakdown)		
102		Swing Brake Options:	1	
	0920068	Brake - Prior to August 1991 (See Figure 2-12 for Breakdown)		
	0920086	Brake - August 1991 Through 1992 (See Figure 2-13 for Breakdown)		
103	2780055	Swing Hub Assembly (See Figure 2-14 for Breakdown)	1	

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**FIGURE 2-8. TURNTABLE, BEARING AND SWING DRIVE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
104	3200249	Plate, Swing Drive Mounting	1	
105	2440059	Gear, Pinion	1	
106	4740367	Washer, Special	1	
107	0100019	Loctite #271 (Not Shown)	A/R	
108	0741606	Screw, Countersunk 3/8"-16NC x 3/4"	2	
109	0641912	Bolt 9/16"-12NC x 1 1/2"	9	
110	0681836	Bolt 1/2"-13NC x 4 1/2" (Grade 8)	2	
111	4740171	Washer, Hardened	2	
112	0100009	Sealant - RTV #738 (Not Shown)	A/R	
		<b>SWING DRIVE INSTALLATIONS:</b>	Ref.	
	0252578	<b>MACHINES BUILT 1993 TO MAY 1994</b>	Ref.	D
	0255010	<b>MACHINES BUILT MAY 1994 TO PRESENT</b>	Ref.	—
151		Swing Brake Assembly Options:	A/R	
	0920089	Machines Built 1993 to May 1994	1	
	7012570	Seal Kit - 0920089 Brake (Includes Seals, O-Rings, 1 Back-up Rings and Retaining Ring)	1	
	7012571	Rebuild Kit - 0920089 Brake (Includes 7012570 Seal Kit, Inner and Outer Discs and Pressure Plate)	1	
	0920095	Machines Built May 1994 to Present	1	
	7012651	Seal Kit - 0920095 Brake (Includes Seals, O-Rings, Back-up Rings and Retaining Ring)	1	
	7012650	Rebuild Kit - 0920095 Brake (Includes 7012651 Seal Kit, Inner and Outer Discs and Pressure Plate)	1	
152	3160183	Swing Motor Assembly (See Figure 2-11 for Break-down)	1	
153	3535607	Plate, Mounting	1	
154	4300107	Stud 1/2"-13NC x 2"	4	
	3311801	Nut 1/2"-13NC	4	
155		Hardware Options:	8	
	4761800	Lockwasher 1/2" (Machines Built 1993 to May 1994)		
	4740252	Washer, Hardened (Machines Built May 1994 to Present)		
156	Not Used			
157	0642014	Bolt 5/8"-11NC x 1 3/4"	4	
158	4740004	Washer, Hardened	4	
159	Not Used			
160		Bolt Options:	4	
	0641830	Bolt 1/2"-13NC x 3 3/4" (Machines Built 1993 to May 1994)		
	0641834	Bolt 1/2"-13NC x 4 1/4" (Machines Built May 1994 to Present)		
161	3790155	O-Ring	1	
	0100019	Loctite #271	A/R	
	0100021	Primer	A/R	

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**FIGURE 2-8. TURNTABLE, BEARING AND SWING DRIVE INSTALLATION (CONTINUED)**

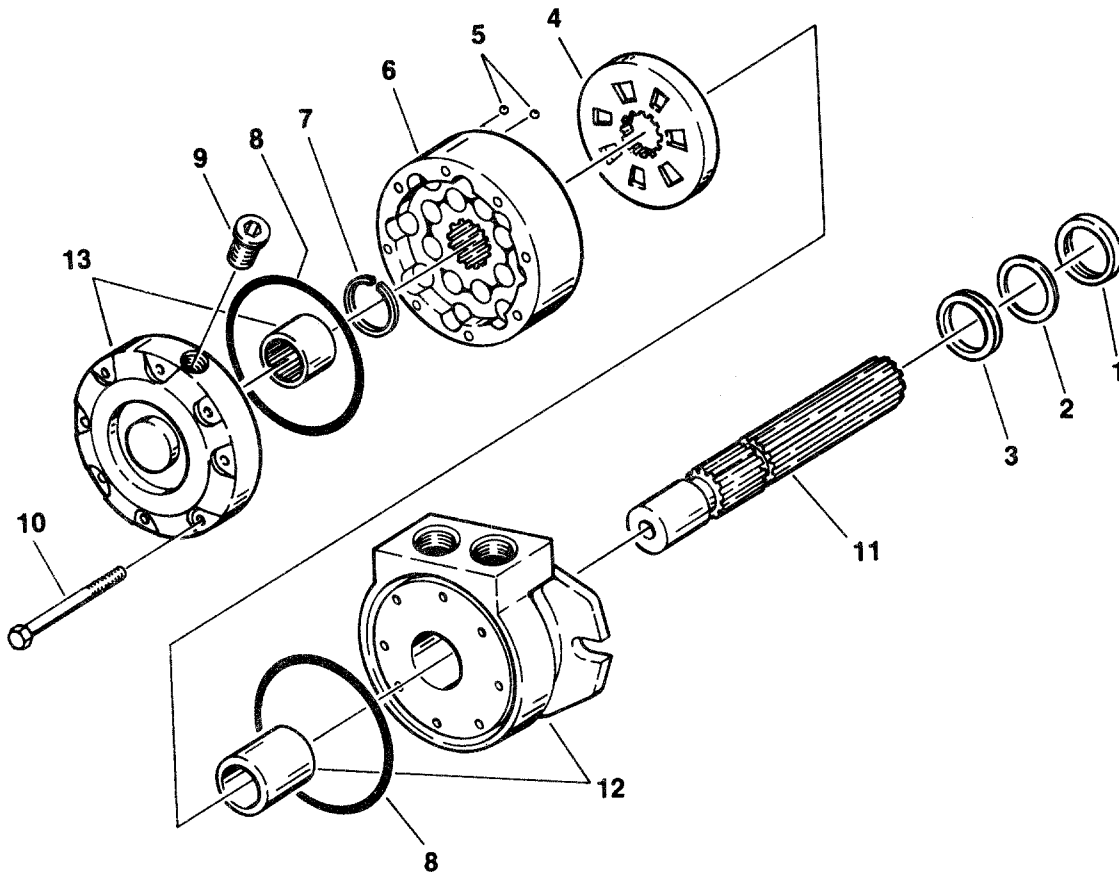
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0239585	<b>TURNTABLE LOCK INSTALLATION</b>	Ref.	B
201	Not Used			
202	3421627	Pin, Lock	1	
203	3421565	Snap - Pin	1	
204	3760170	Ring, Quick Release	2	
205	1260017	Chain	9 in./23cm	

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FIGURE 2-9. SWING MOTOR ASSEMBLY (PRIOR TO AUGUST 1991)

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**FIGURE 2-9. SWING MOTOR ASSEMBLY (PRIOR TO AUGUST 1991)**

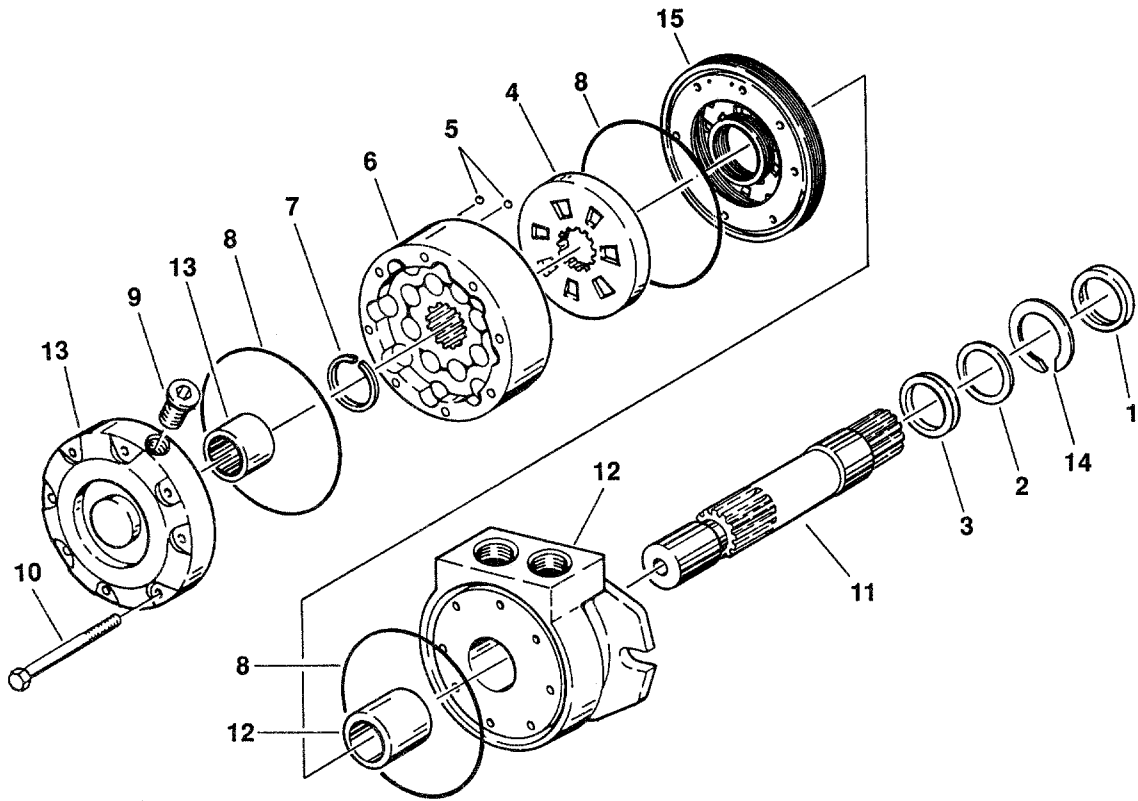
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3160156	<b>SWING MOTOR ASSEMBLY (PRIOR TO AUGUST 1991)</b>	Ref.	—
1	Kit	Seal, Dust	1	
2	Kit	Ring, Back-Up	1	
3	Kit	Seal, Quad Ring	1	
4	7004166	Valve, Rotary	1	
5	7004167	Ball, Check Valve	2	
6	7004193	IGR Assembly	1	
7	7004191	Ring, Snap (Standard)	1	
8	Kit	Seal, Ring	2	
9	7004171	Plug, Vent (Includes O-Ring)	1	
10	7004173	Bolt	8	
11	7004194	Shaft, Spline	1	
12	7004195	Body/Bearing Assembly	1	
13	7004192	Cover/Bearing Assembly	1	
	7004177	----- Seal Kit (Includes Items 1,2,3,8 and Vent Plug O-Ring)	1	

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FIGURE 2-10. SWING MOTOR ASSEMBLY (AUGUST 1991 THROUGH 1992)

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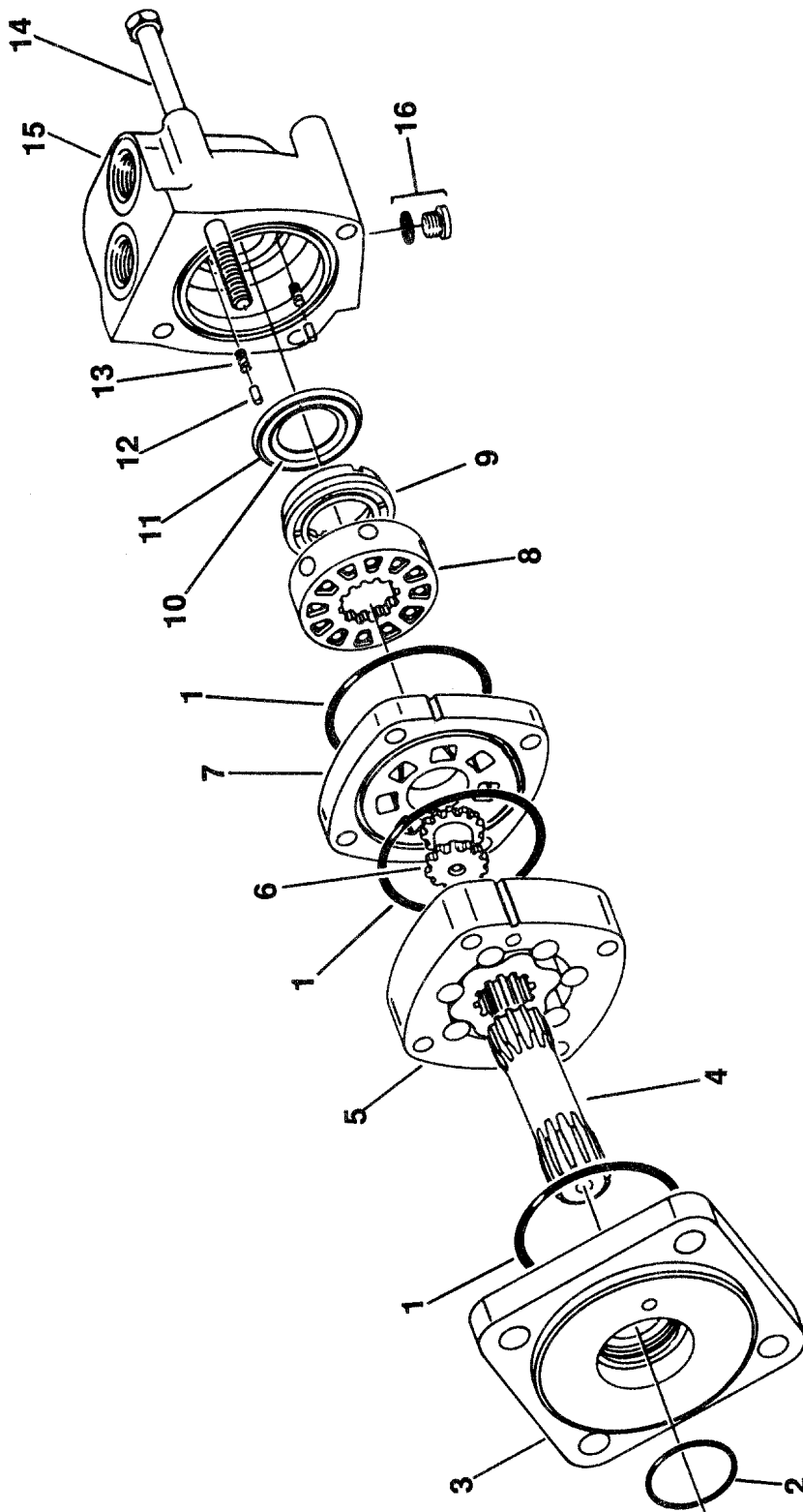
**FIGURE 2-10. SWING MOTOR ASSEMBLY (AUGUST 1991 THROUGH 1992)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3160181	<b>SWING MOTOR ASSEMBLY (AUGUST 1991 THROUGH 1992)</b>	Ref.	—
1	Kit	Seal, Dust	1	
2	7010775	Ring, Back-Up	1	
3	Kit	Seal, Quad Ring	1	
4	7004196	Valve, Rotary	1	
5	7004167	Ball, Check Valve	2	
6	7004193	IGR Assembly	1	
7	Kit	Ring, Snap	1	
8	Kit	Seal, Ring	3	
9	7004171	Plug, Vent (Includes O-Ring)	1	
10	7010777	Bolt	8	
11	7010779	Shaft, Spline	1	
12	7010778	Body/Bearing Assembly	1	
13	7004192	Cover/Bearing Assembly	1	
14	Kit	Ring, Snap	1	
15	7010776	Plate, Commutator	1	
		-----		
	2900798	Seal Kit (Includes Items 1,3,7 and 8)	1	

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FIGURE 2-11. SWING MOTOR ASSEMBLY (1993 TO PRESENT)



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**FIGURE 2-11. SWING MOTOR ASSEMBLY (1993 TO PRESENT)**

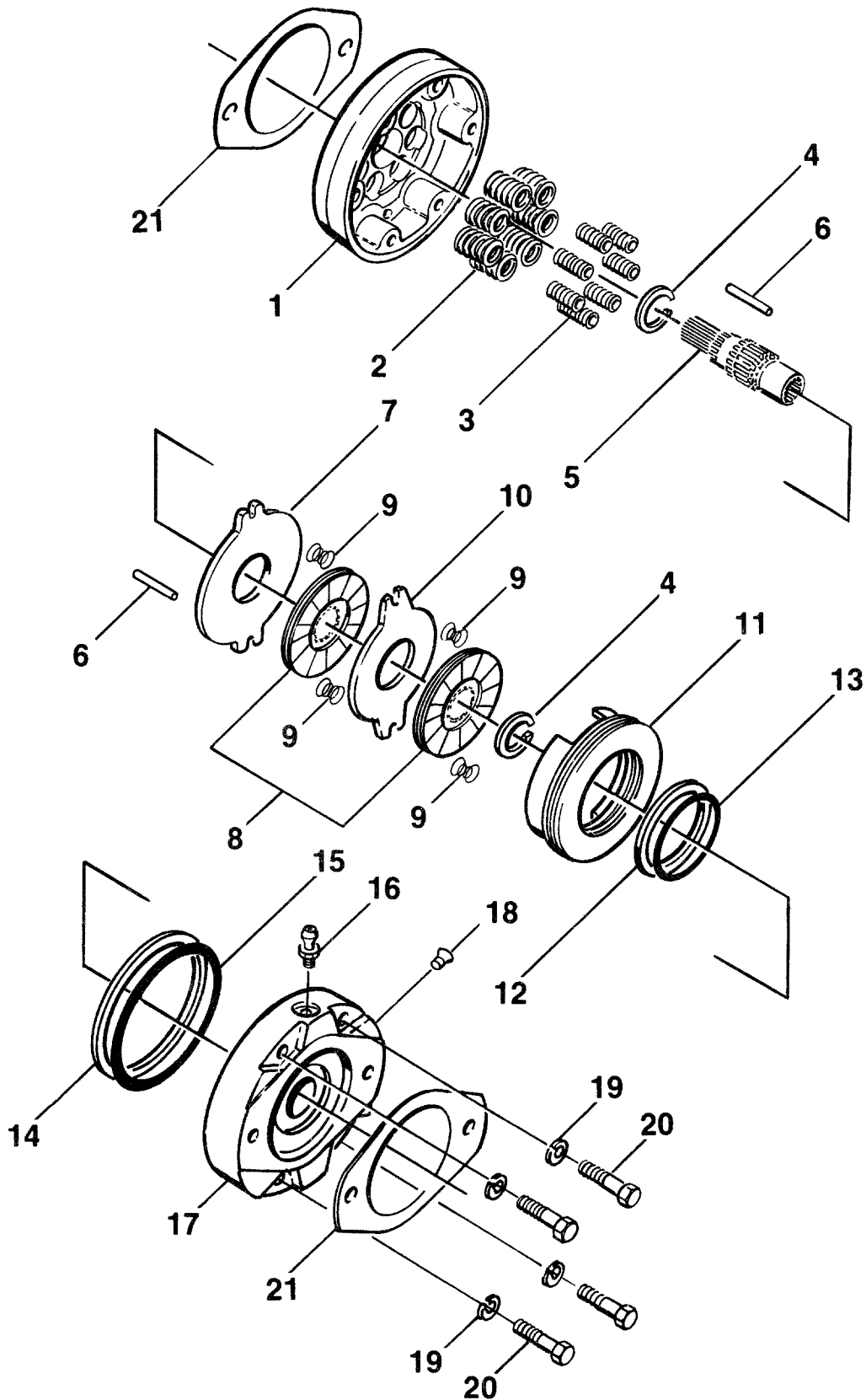
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3160183	<b>SWING MOTOR ASSEMBLY (1993 TO PRESENT)</b>	Ref.	—
1	Kit	Seal	3	
2	Kit	O-Ring	1	
3	7009984	Flange, Mounting	1	
4	7009988	Drive	1	
5	7009989	Geroler	1	
6	7009905	Drive, Valve	1	
7	7009983	Plate, Valve	1	
8	7009927	Valve	1	
9	7009909	Ring, Balance	1	
10	Kit	Seal, Face - Inner	1	
11	Kit	Seal, Face - Outer	1	
12	7009912	Pin	2	
13	7009913	Spring	2	
14	7009990	Bolt	4	
15	7009930	Housing, Valve	1	
16	7002157	Plug Assembly	1	
	Kit	O-Ring	1	
	7009987	Seal Kit (Includes Items 1,2,10,11 and 19 O-Ring)	1	

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FIGURE 2-12. SWING BRAKE ASSEMBLY (PRIOR TO AUGUST 1991)

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**FIGURE 2-12. SWING BRAKE ASSEMBLY (PRIOR TO AUGUST 1991)**

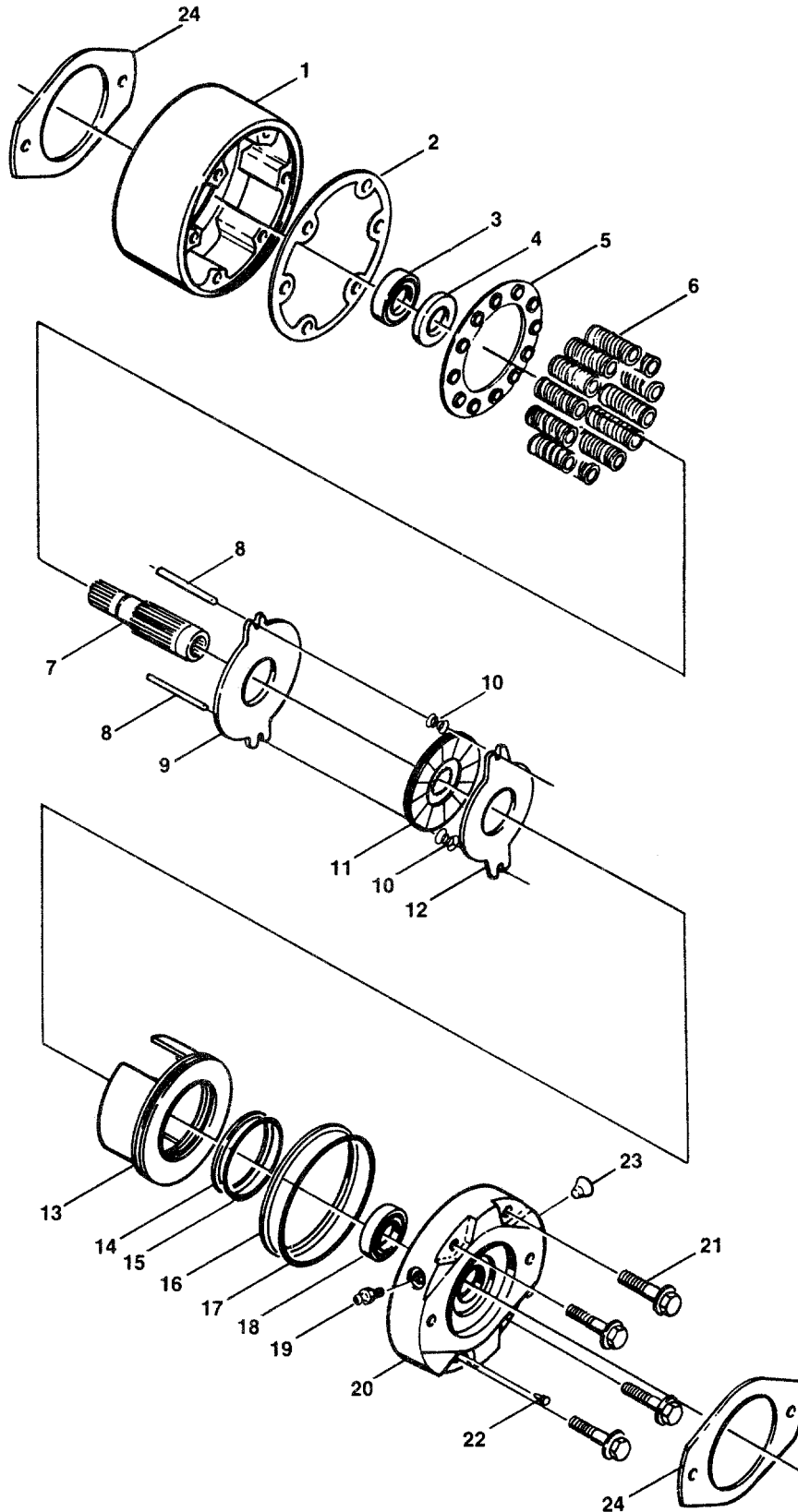
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0920068	<b>SWING BRAKE ASSEMBLY (PRIOR TO AUGUST 1991)</b>	Ref.	—
1	7003067	Housing	1	
2	7000782	Spring, Compression	7	
3	7000798	Spring, Compression	7	
4	Kit	Ring, Retaining	2	
5	7003061	Shaft, Splined	1	
6	7003062	Pin, Torque	2	
7	7000718	Disc, Primary	1	
8	7000732	Disc, Rotating	2	
9	7003006	Spring, Compression	4	
10	7003063	Disc, Stationary	1	
11	7003064	Piston	1	
12	Kit	Ring, Back-Up	1	
13	Kit	O-Ring	1	
14	Kit	Ring, Back-Up	1	
15	Kit	O-Ring	1	
16	7000796	Bleeder	1	
17	7003065	Plate, Power	1	
18	7000728	Plug	1	
19	7000729	Lockwasher	4	
20	7003066	Bolt	4	
21	Kit	Gasket	2	
		-----		
	2900649	Seal Kit (Includes Items 4, 12, 13, 14, 15 and 21)	1	

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FIGURE 2-13. BRAKE ASSEMBLY - AUSCO 37845 (AUGUST 1991 THROUGH 1992)

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**FIGURE 2-13. BRAKE ASSEMBLY - AUSCO 37845 (AUGUST 1991 THROUGH 1992)**

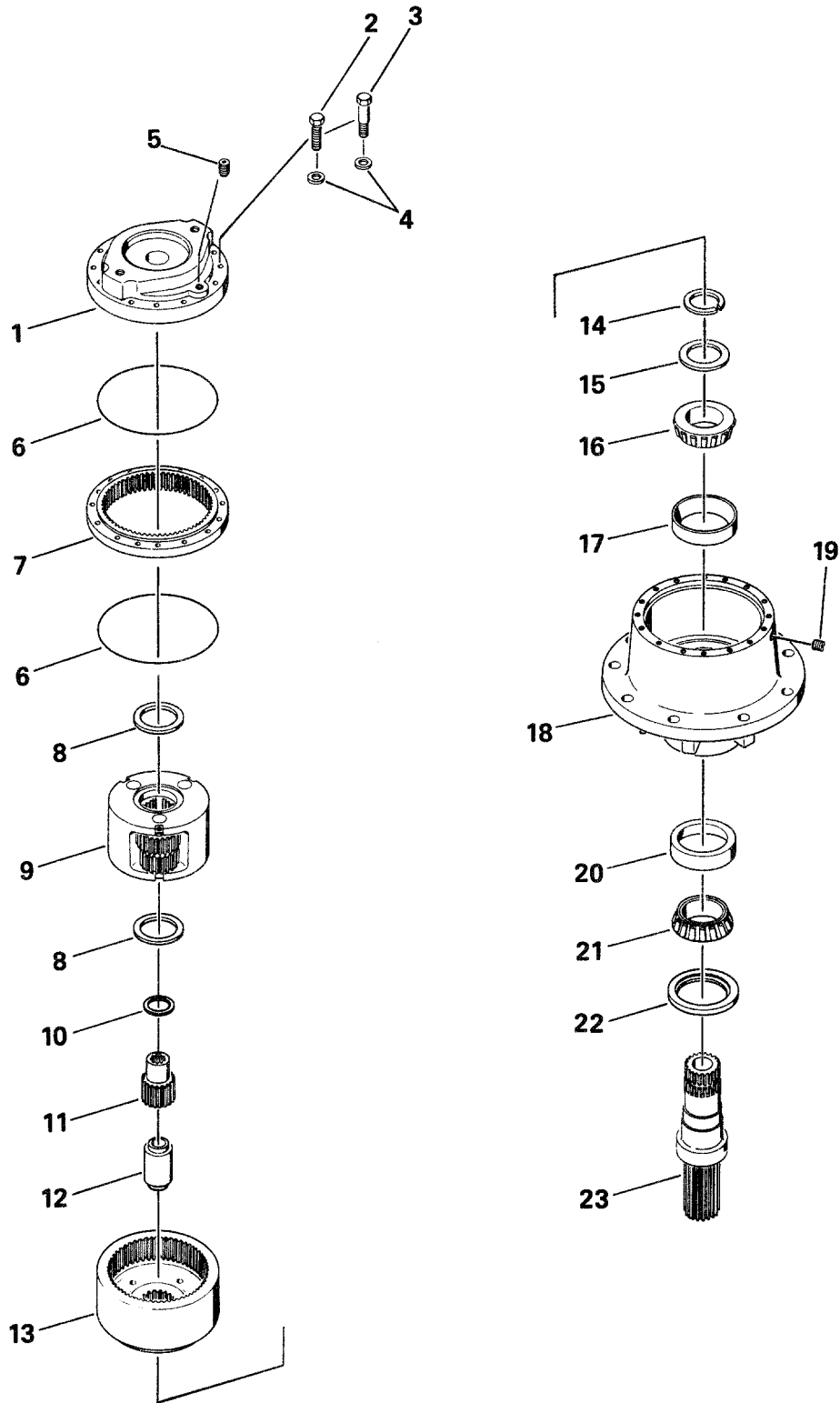
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0920086	<b>BRAKE ASSEMBLY - AUSCO 37845 (AUGUST 1991 THROUGH 1992)</b>	Ref.	A
1	7003092	Housing	1	
2	Kit	Gasket	1	
3	7003049	Ball Bearing	1	
4	7003050	Oil Seal	1	
5	7003051	Spring Retainer	1	
6	7003052	Compression Spring	12	
7	7003093	Shaft	1	
8	7003094	Torque Pin	2	
9	7003054	Primary Disc	1	
10	7003006	Compression Spring	2	
11	7003055	Rotating Disc	1	
12	7003056	Stationary Disc	1	
13	7003095	Piston	1	
14	Kit	Back-Up Ring	1	
15	Kit	O-Ring	1	
16	Kit	Back-Up Ring	1	
17	Kit	O-Ring	1	
18	7000760	Ball Bearing	1	
19	7000796	Bleeder Screw	1	
20	7003096	Power Plate	1	
21	7003007	Hex Screw	4	
22	7003059	Pressure Relief Valve	1	
23	N.S.	Plug, Shipping	1	
24	Kit	Gasket	2	
		-----		
	2900662	O-Ring Kit (Includes Items 2, 14-17 and 24)	1	
	7003069	Gasket Kit (Includes Item 24)	1	

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FIGURE 2-14. SWING HUB ASSEMBLY (MACHINES BUILT THROUGH 1992 ONLY)

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**FIGURE 2-14. SWING HUB ASSEMBLY (MACHINES BUILT THROUGH 1992 ONLY)**

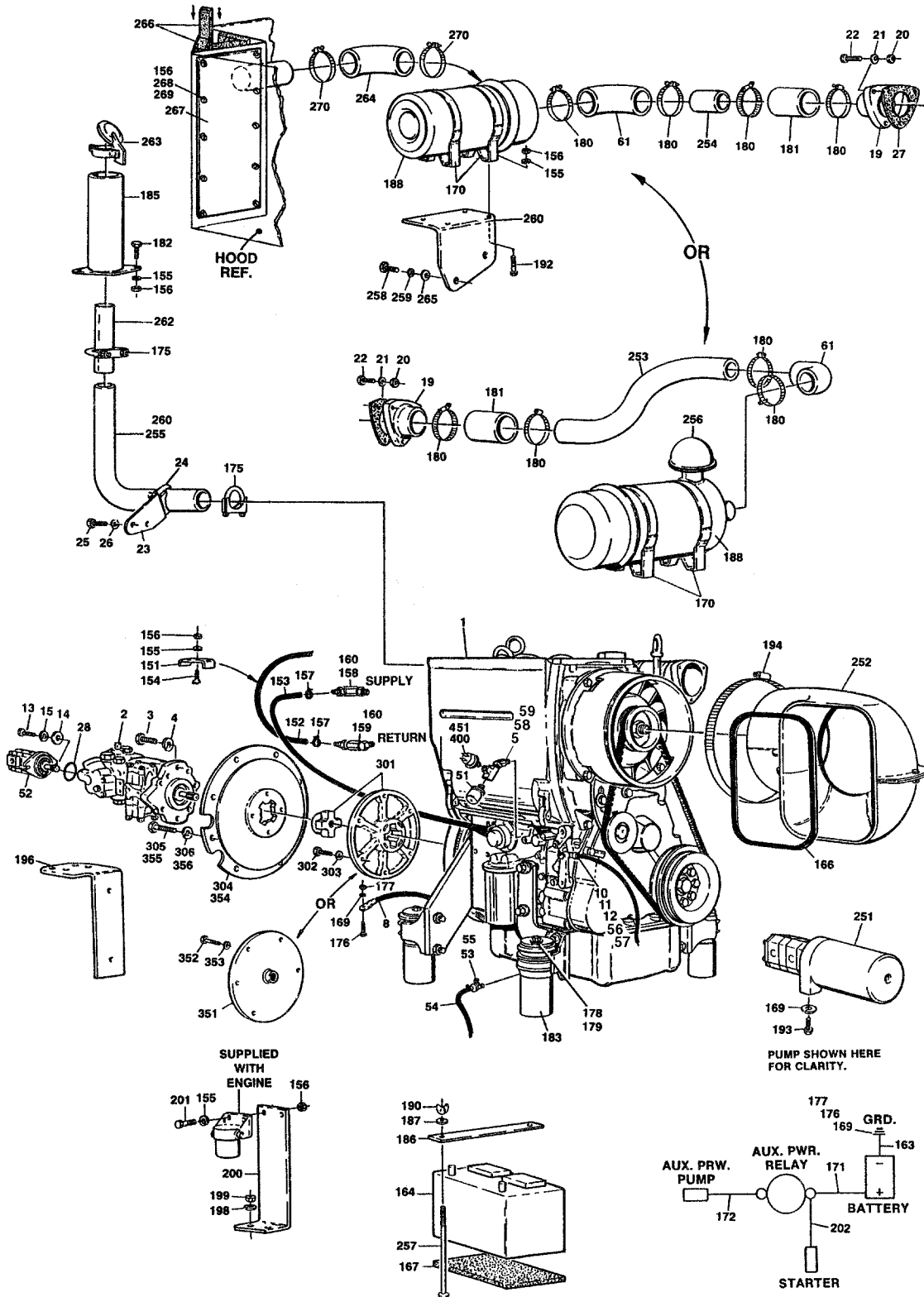
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2780055	<b>SWING HUB ASSEMBLY (MACHINES BUILT THROUGH 1992 ONLY)</b>	Ref.	—
1	7000209	Cover	1	
2	7000217	Bolt, Hex Head	8	
3	7000214	Bolt, Hex Head, Shoulder	4	
4	4751500	Flatwasher	12	
5	7000242	Plug, Pipe	1	
6	Kit	O-Ring	2	
7	7000208	Gear, Ring	1	
8	7000253	Washer, Thrust	2	
9	7000207	Planet Carrier Assembly (No Service Breakdown Parts Purchase Entire Assembly)	1	
10	7000270	Washer, Thrust	1	
11	7000268	Gear, Sun-Input	1	
12	7000269	Spacer, Sun Gear	1	
13	7000246	Gear, Internal	1	
	7000271	<b>HUB ASSEMBLY</b>	Ref.	
14	Kit	Ring, Retaining	1	
15	Kit	Spacer	1	
16	7000258	Bearing, Tapered Roller	1	
17	7000257	Cup, Bearing	1	
18	7000210	Hub	1	
19	7000242	Plug, Pipe	1	
20	7000255	Cup, Bearing	1	
21	7000256	Bearing, Tapered Roller	1	
22	Kit	Seal	1	
23	7000233	Shaft, Output	1	
	2900034	----- Kit, Repair (Includes Items 6, 14,15 and 22)	1	

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FIGURE 2-15. DEUTZ ENGINE INSTALLATION

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**FIGURE 2-15. DEUTZ ENGINE INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>Note: See Section 10 for Machines with Hydraulic Tool Circuit and Deutz Engine Combination or Special UCON Hydraulic Fluid.</b>		
		<b>DEUTZ ENGINE ASSEMBLY (STANDARD PARTS)</b>	Ref.	
1	2000106 2000137	Engine - Deutz F2L-1011 Diesel Options: Engine - Deutz F2L-1011 (Prior to August 1995) Engine - Deutz F2L-1011 (August 1995 to Present)	1	
2	3600164 3600260	Pump Assembly - Sunstrand Options (See Figure 2-21 for Breakdown): Prior to S/N 27991 S/N 27991 to Present	1	
3	0641812	Bolt 1/2"-13NC x 1 1/2"	2	
4	4761800	Lockwasher 1/2"	2	
5	2180730	Fitting, Special	1	
6 to 7	Not Used			
8	1060221	Cable, Battery (Engine to Ground)	1	
9	Not Used			
10	0080172 4460302	Adapter, Throttle Options: Prior to August 1995 August 1995 to Present	1	
11	3450202	Pin, Cotter 1/16" x 1/2"	1	
12	3951003 0902244	Hardware Options: Setscrew #10-24NC x 3/8" (Prior to August 1995) Bracket, Throttle (August 1995 to Present)	1	
13	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
14	4751600	Flatwasher 3/8"	2	
15	4761600	Lockwasher 3/8"	2	
16 to 18	Not Used			
19	0080177	Adapter Weldment	1	
20	3311501	Nut 5/16"-18NC	3	
21	4761500	Lockwasher 5/16"	3	
22	0641512	Bolt 5/16"-18NC x 1 1/2"	3	
23	0901705	Bracket, Exhaust	1	
24	1320176	Clamp, Muffler	1	
25	0701010	Bolt, Metric 10mm x 20mm	2	
26	4832000	Lockwasher, Metric 10mm	2	
27	3960407	Gasket, Intake Adapter	1	
28	3790152	O-Ring	1	
	0250377	<b>STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991</b>	Ref.	E
51	2420131	Sender, Oil Pressure	1	
52	3600165 2900660	Pump Assembly Options: Pump - Vickers (Not Field Serviceable) (Prior to April 1990) Shaft Seal Kit - 3600165 Pump	1	

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**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
52 (cont'd)	3600172	Pump - Barnes (April 1990 to October 1991) (See Figure 2-22 for Breakdown)		
	3600176	Pump Assembly - Barnes (See Figure 2-24 for Breakdown)	1	
53 to 59	Not Used			
	0251056	<b>DEUTZ ENGINE ASSEMBLY - HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)</b>	Ref.	D
51	2420131	Sender, Oil Pressure	1	
52	3600176	Pump Assembly - Barnes (See Figure 2-24 for Breakdown)	1	
53 to 59	Not Used			
	0252106	<b>DEUTZ ENGINE ASSEMBLY - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)</b>	Ref.	G
51	2420110	Sender, Oil Pressure	1	
52		Pump Assembly Options:	1	
	3600172	Pump-Barnes (October 1991 to January 1993) (See Figure 2-22 for Breakdown)		
	3600199	Pump-Barnes (January 1993 to Present) (See Figure 2-23 for Breakdown)		
53	4640751	Valve, Oil Drain	1	
54	2750532	Hose	1 ft./3m	
55	1320022	Clamp	1	
56	4711400	Flatwasher 1/4" (August 1995 to Present)	1	
57	0700605	Bolt Metric 6mm x 10mm (August 1995 to Present)	2	
58	2180104	Fitting, Nipple (August 1995 to Present)	1	
59	2200261	Fitting, Coupling (August 1995 to Present)	1	
	0252108	<b>DEUTZ ENGINE ASSEMBLY - HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)</b>	Ref.	H
51	2420110	Sender, Oil Pressure	1	
52		Pump Assembly Options:	1	
	3600143	Pump-Vickers (Not Field Serviceable) (October 1991 to April 1993)		
	2900660	Shaft Seal Kit - 3600143 Pump		
	3600202	Pump-Barnes (April 1993 to Present) (See Figure 2-25 for Breakdown)		
53	4640751	Valve, Oil Drain	1	
54	2750532	Hose	1 ft./3m	
55	1320022	Clamp	1	
56	4711400	Flatwasher 1/4" (August 1995 to Present)	1	
57	0700605	Bolt Metric 6mm x 10mm (August 1995 to Present)	2	
58	2180104	Fitting, Nipple (August 1995 to Present)	1	
59	2200261	Fitting, Coupling (August 1995 to Present)	1	

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**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DEUTZ ENGINE INSTALLATION (STANDARD PARTS)</b>	Ref.	
151	1320041	Clamp	1	
152	2720271	Line, Fuel Return	10 ft./3m	
153	2720058	Line, Fuel Supply	10 ft./3m	
154	4300032	Stud (Welded on Part)	A/R	
155	4761400	Lockwasher 1/4"	A/R	
156	3311401	Nut 1/4"-20NC	A/R	
157	1320022	Clamp	4	
158	2220805	Fitting, 90°	1	
159	2220063	Fitting, 90° Swivel	1	
160	4420001	Tape, Sealant	A/R	
161	0080039	Adaptor, Elbow	1	
162	Not Used			
163	1060172	Cable, Battery	1	
164	0400075	Battery	1	
165	Not Used			
166	3960389	Seal, Rubber Grip	51 in./1.3m	
167	3980007	Seat, Battery	1	
168	Not Used			
169	4761600	Lockwasher 3/8"	4	
170	0340002	Band, Air Cleaner	2	
171	1060273	Cable, Battery (Battery to Auxiliary Relay)	1	
172	1060099	Cable, Battery (Starter to Auxiliary Power Relay)	1	
173	Not Used			
174	Not Used			
175	1320019	Clamp, Exhaust	A/R	
176	4300034	Stud (Welded on Parts)	2	
177	3311601	Nut 3/8"-16NC	2	
178	0641856	Bolt 1/2"-13NC x 7"	4	
179	4761800	Lockwasher 1/2"	4	
180	1320031	Clamp	4	
181	2720351	Hose	3 in./7.6cm	
182	0641406	Bolt 1/4"-20NC x 3/4"	4	
183	0080178	Adapter, Engine Mounting	4	
184	Not Used			
185	4843372	Snorkel, Exhaust	1	
186	0361810	Holddown, Battery	1	
187	4751600	Flatwasher 3/8"	4	
188	1340020	Air Cleaner Assembly	1	
	7004214	Element	1	
189	Not Used			
190	3300029	Wingnut 3/8"-16NC	2	
191	Not Used			
192	0641406	Bolt 1/4"-20NC x 3/4"	4	
193	0641614	Bolt 3/8"-16NC x 1 3/4"	2	
194	1320059	Clamp	1	
195	Not Used			
196	0961664	Bracket - Hydraulic Filter	1	

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**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
197	4300038	Stud (Welded on Parts)	2	
198	4761500	Lockwasher 5/16"	2	
199	3311501	Nut 5/16"-18NC	2	
200	0901673	Bracket, Fuel Filter	1	
201	0641418	Bolt 1/4"-20NC x 2 1/4"	2	
202	1060149	Cable, Battery (Auxiliary Relay to Starter)	1	
203	2220273	Reducer, Bushing	2	
204	2180536	Fitting	1	
	0250378	<b>DEUTZ ENGINE INSTALLATION - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)</b>	Ref.	E
251	3600050	Auxiliary Pump Assembly	1	
		Barnes Version Components:		
	7004249	Coupling		
	7004248	Motor		
	7010923	Pump		
		Stone/Fenner Version Components:		
	7004412	Coupling		
	7000482	Motor		
	Not Available	Pump (Purchase Complete Assembly)		
252	1840005	Scoop, Air Intake	1	
253	4564558	Tube, Air Intake	1	
254	Not Required			
255	4564557	Tube, Exhaust	1	
256	1120161	Cap, Air Inlet	1	
257	0630370	Rod, Holddown	2	
	1380032	Clip, Battery (Not Shown)	2	
258 to 270	Not Required			
	0251057	<b>DEUTZ ENGINE INSTALLATION - HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)</b>	Ref.	D
251		Auxiliary Pump Options:	1	
	3600141	Auxiliary Pump (Prior to January 1991 - Purchase 3600071 as replacement)		
	3600071	Auxiliary Pump (January 1991 to October 1991)		
	7004249	Coupling		
	7004248	Motor		
	7004436	Motor with Mounting Bracket		
	7012576	Bracket		
	7004247	Pump Only		
252	1840005	Scoop, Air Intake	1	
253	4564558	Tube, Air Intake	1	
254	Not Required			
255	4564557	Tube, Exhaust	1	
256	1120161	Cap, Air Inlet	1	

# SECTION 2 TURNTABLE

**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
257	0236768	Rod, Holddown	2	
258 to 270	Not Required			
	0252107	<b>DEUTZ ENGINE INSTALLATION - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)</b>	Ref.	F
251		Auxiliary Pump Options:	1	
	3600050	Auxiliary Pump (October 1991 to April 1993)		
		Barnes Version Components:		
	7004249	Coupling		
	7004248	Motor		
	7010923	Pump		
		Stone/Fenner Version Components:		
	7004412	Coupling		
	7000482	Motor		
	Not Available	Pump (Purchase Complete Assembly)		
	3600208	Auxiliary Pump (April 1993 to Present)		
	7013711	Coupling		
	7013710	Motor		
	7013712	Pump		
	7013753	Seal Kit - 7013712 Pump		
252		Scoop (Air Intake) Options:	1	
	1840005	Prior to March 1995		
	1840011	March 1995 to Present		
253	Not Required			
254	4565301	Tube	1	
255	4565271	Tube, Exhaust	1	
256	Not Required			
257	0630370	Rod, Holddown	2	
	1380032	Clip, Battery (Not Shown)	2	
258	0701010	Bolt, Metric 10mm x 20mm	2	
259	4832000	Lockwasher, Metric 10mm	2	
260	0901781	Bracket, Air Cleaner	1	
261	4100025	Sleeve, Exhaust	2 ft./6m	
262	4565278	Extension, Exhaust	1	
263	1120405	Raincap	1	
264	0080046	Elbow	1	
265	4711600	Flatwasher 3/8"	2	
266	2820042	Foam, Acoustical	4	
267	1670608	Cover, Intake Box	1	
268	3941406	Screw, Self-Tapping 1/4" x 3/4"	10	
269	4761400	Lockwasher 1/4"	16	
270	1320016	Clamp	2	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0252109	<b>DEUTZ ENGINE INSTALLATION - HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)</b>	Ref.	E
251		Auxiliary Pump Options:	1	
	3600071	Auxiliary Pump (October 1991 to April 1993)		
	7004249	Coupling		
	7004248	Motor		
	7004436	Motor with Mounting Bracket		
	7012576	Bracket		
	7004247	Pump Only		
	3600210	Auxiliary Pump (April 1993 to Present)		
	7013711	Coupling		
	7013710	Motor		
	7013757	Brush and Spring Kit - 7013710 Motor		
	7013771	Pump		
	7013701	Seal Kit		
252		Scoop (Air Intake) Options:	1	
	1840005	Prior to March 1995		
	1840011	March 1995 to Present		
253	Not Required			
254	4565301	Tube	1	
255	4565271	Tube, Exhaust	1	
256	Not Required			
257	0236768	Rod, Holddown	2	
258	0701010	Bolt, Metric 10mm x 20mm	2	
259	4832000	Lockwasher, Metric 10mm	2	
260	0901781	Bracket, Air Cleaner	1	
261	4100025	Sleeve, Exhaust	2 ft./6m	
262	4565278	Extension, Exhaust	1	
263	1120405	Raincap	1	
264	0080046	Elbow	1	
265	4711600	Flatwasher 3/8"	2	
266	2820042	Foam, Acoustical	4	
267	1670608	Cover, Intake Box	1	
268		Hardware Options:	A/R	
	3941406	Screw, Self-Tapping 1/4" x 3/4" (Prior to September 1995)	10	
	4751400	Flatwasher 1/4" (September 1995 to Present)	16	
269	4761400	Lockwasher 1/4"	10	
270	1320016	Clamp	2	
	0250125	<b>COUPLING INSTALLATION - LOVEJOY OPTION</b>	Ref.	—
301		Coupling Options:	1	
	1660169	Coupling - 13 Teeth		
	1660234	Coupling - 15 Teeth		
302	0700814	Bolt, Metric 8mm x 30mm	6	
303	4831900	Lockwasher, Metric 8mm	6	
304	0080163	Plate, Adapter	1	

# SECTION 2 TURNTABLE

**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
305	0701013	Bolt, Metric 10mm x 28mm	8	
306	4832000	Lockwasher, Metric 10mm	8	
		<b>COUPLING INSTALLATION - HAYES OPTION</b>	Ref.	
	0250597	<b>HAYES 13 TEETH</b>	Ref.	—
	0256848	<b>HAYES 15 TEETH</b>	Ref.	2
351		<b>Coupling Options:</b>	1	
	1660184	Coupling - 13 Teeth		
	1660234	Coupling - 15 Teeth		
		<b>Note: Coupling Internal spines must be lubed with Lithium based grease prior to installation.</b>		
352	0700810	Bolt, Metric 8mm x 20mm	6	
353	4831900	Lockwasher, Metric 8mm	6	
354	0080163	Plate, Adapter	1	
355	0701013	Bolt, Metric 10mm x 28mm	8	
356	4832000	Lockwasher, Metric 10mm	8	
		<b>ENGINE COMPONENTS - DEUTZ F2L1011</b>	Ref.	
	2000106	<b>Prior to August 1995</b>		
	2000137	<b>August 1995 to Present</b>		
	7000693	Muffler - Deutz F2L1011	1	
	7012598	Filter, Fuel	1	
	7012599	Pump, Fuel Injector	1	
	7020426	Injector	2	
	7020425	Nozzle, Injector	2	
	7020424	Gasket, Injector Tip	2	
	Use 7024413	Pump, Fuel (was p/n 7012698)	1	
	1670680	Cover, Timing Belt	1	
		<b>Starter Options:</b>	1	
	7012626	Prior to August 1995		
	7020416	August 1995 to Present		
	7014502	Filter, Engine Oil (Case of 12) (Kit Includes 1 Filter)	1	
	7014683	Oil Change and Gasket Kit (Includes Fuel Line Washer or Plug Washer, Oil Filter, Fuel Filter Injector Tip Gasket and Valve Cover Gasket)	1	
	7020417	Alternator	1	
	0251682	<b>OPTIONAL ENGINE SHUTDOWN INSTALLATION</b>	Ref.	—
400	2180360	Fitting, Tee	1	
	2180643	Fitting, Nipple	1	
	2220318	Fitting, 90°	1	
	4360065	Switch, Pressure	1	

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# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
451	0251537	<b>OPTIONAL ENGINE DISTRESS INSTALLATION</b>	Ref.	D
	0250229	<b>OPTIONAL 110V GENERATOR INSTALLATION (PRIOR TO AUGUST 1994)</b>	Ref.	L
	0255102	<b>OPTIONAL 110V GENERATOR INSTALLATION (AUGUST 1994 TO PRESENT)</b>	Ref.	B
	4360037	Switch, Pressure	1	
	2180360	Fitting, Tee (Prior to S/N 23615)	1	
	2180749	Fitting, 45°	1	
		Fitting Options:	1	
	2180537	Fitting, Nipple (Prior to S/N 23615)		
	2180730	Fitting, Adapter (S/N 23615 to Present)		
	2200261	Fitting, Adapter (Prior to S/N 23615)	1	
	0252301	<b>OPTIONAL COLD WEATHER START INSTALLATION (NOT SHOWN)</b>	Ref.	B
	0254240	<b>OPTIONAL ETHER ASSIST SYSTEM INSTALLATION (NOT SHOWN)</b>	Ref.	—
	2901111	Cold Weather Start Kit		
	0256127	<b>OPTIONAL SPARK ARRESTOR INSTALLATION (NOT SHOWN)</b>	Ref.	—



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FIGURE 2-15. DEUTZ ENGINE INSTALLATION (CONTINUED)

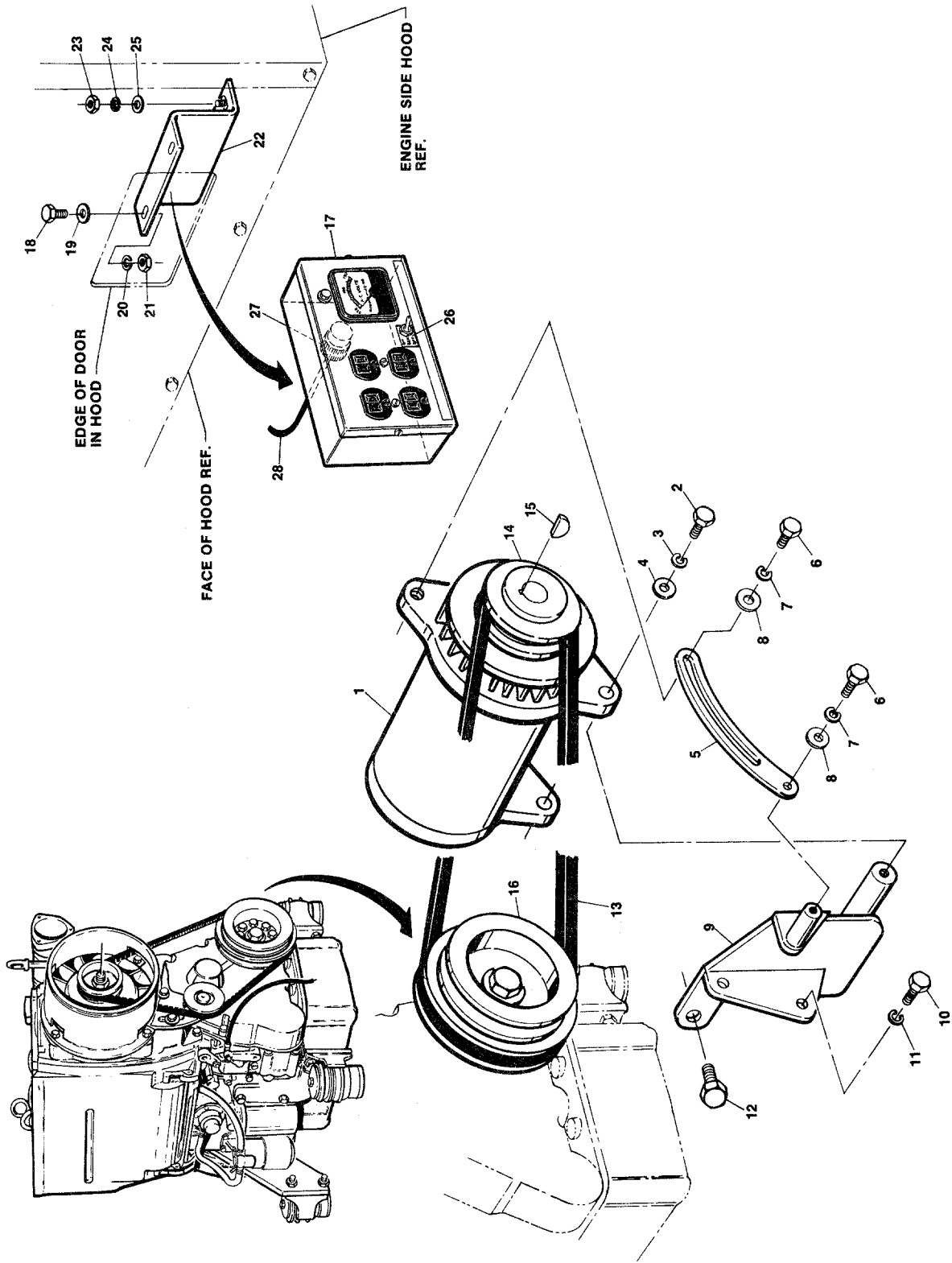
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-16. 110 VOLT GENERATOR INSTALLATION (DEUTZ)

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# SECTION 2 TURNTABLE

**FIGURE 2-16. 110 VOLT GENERATOR INSTALLATION (DEUTZ)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250229	<b>110 VOLT GENERATOR INSTALLATION (DEUTZ) (PRIOR TO AUGUST 1994)</b>	Ref.	L
	0255102	<b>110 VOLT GENERATOR INSTALLATION (DEUTZ) (AUGUST 1994 TO PRESENT)</b>	Ref.	B
1	2460011	Generator Assembly with Control Box	1	
	7012558	Generator Assembly	1	
	7026199	Armature with Slip Rings	1	
	7012513	Holder, Brush	4	
	7012514	Fan	1	
	7020108	Brush	4	
	7020109	Holder, Brush	4	
	7020110	Bell, Front	1	
	7020111	Bell, Rear	1	
	7020190	Bearing	2	
	7020193	Cord, Power	1	
	7003657	Control Box Assembly	1	
		<b>Note: Replacement 110V Control Box comes with 2 std Receptacles p/n 4460190. Optional Industrial Twist Lock Receptacles p/n 4460027 must be ordered separately.</b>		
	2420203	Voltmeter	1	
	3520028	Plug, Hole	1	
	4360542	Breaker, Circuit	1	
	2920162	Lamp Assembly	1	
	7020191	Switch, Toggle	1	
2	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	2	
3	4761600	Lockwasher 3/8"	2	
4	4751600	Flatwasher 3/8"	2	
5	0361815	Arm, Adjustable	1	
6	0681510	Bolt 5/16"-18NC x 1 1/4" (Grade 8)	2	
7	4761500	Lockwasher 5/16"	2	
8	4751500	Flatwasher 5/16"	2	
9	4843410	Bracket, Mounting - Generator	1	
10	0701012	Bolt, Metric 10MM x 25M	2	
11	4812000	Flatwasher, Metric 10MM	2	
	0100011	Loctite	A/R	
12	0701414	Bolt, Metric 14MM x 30MM	1	
13	0480059	V-Belt	1	
14	3580134	Pulley	1	
15	7027887	Key	1	
16	3580158	Pulley	1	
17	See Item 1	Box, Control	1	
18	0641406	Bolt 1/4"-20NC x 3/4" (Prior to August 1994 Only)	2	
19	4751400	Flatwasher 1/4" (Prior to August 1994 Only)	2	
20	4761400	Lockwasher 1/4" (Prior to August 1994 Only)	2	
21	3311401	Nut 1/4"-20NC (Prior to August 1994 Only)	2	
22	0901633	Bracket, mounting - Box (Prior to August 1994 Only)	1	
23	3311401	Nut 1/4"-20NC (Prior to August 1994 Only)	2	
24	4761400	Lockwasher 1/4" (Prior to August 1994 Only)	2	

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FIGURE 2-16. 110 VOLT GENERATOR INSTALLATION (DEUTZ) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
25	4751400	Flatwasher 1/4" (Prior to August 1994 Only)	2	
	4300068	Stud (Welded on Part) (Prior to August 1994 Only)	2	
26	3251476	Decal - Generator	1	
27	4460023	Terminal	1	
28	1060012	Cable - 12/4	A/R	

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FIGURE 2-16. 110 VOLT GENERATOR INSTALLATION (DEUTZ) (CONTINUED)

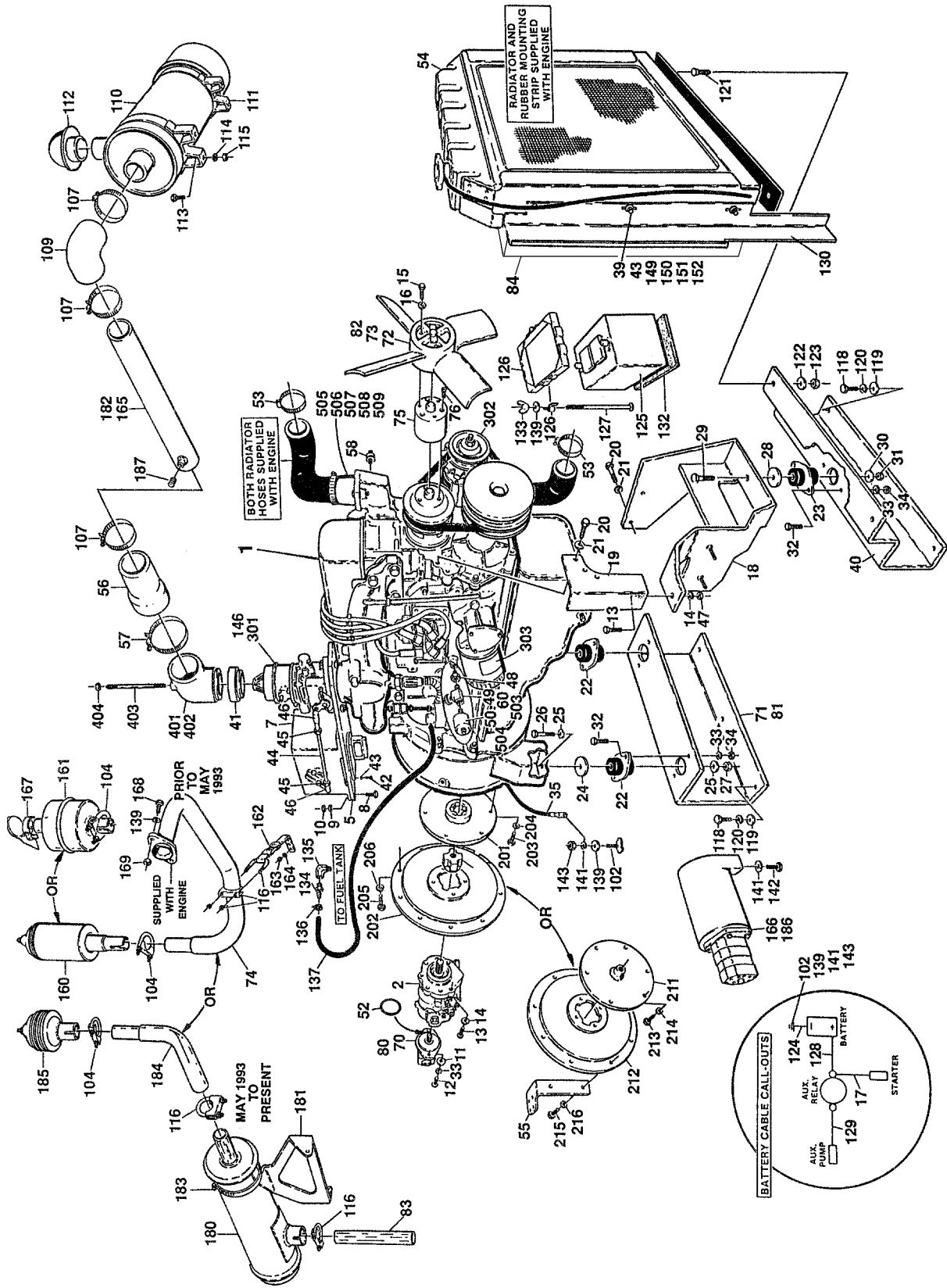
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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FIGURE 2-17. FORD ENGINE INSTALLATION

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# SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>FORD ENGINE ASSEMBLY (STANDARD PARTS)</b>	Ref.	
1		Engine Options:	1	
	2000109	Engine - Ford VSG-411 (Industrial Flywheel) (Prior to November 1992)		
	2000117	Engine - Ford VSG-411 (Automotive Flywheel) (November 1992 to October 1994)		
	2000129	Engine - Ford VSG-411 (October 1994 to March 1995)		
	2000130	Engine - Ford VSG-411 (March 1995 to S/N 4331)		
	2000147	Engine - Ford VSG-411 (S/N 43319 to Present)		
2		Pump Assembly - Sunstrand Options (See Figure 2-21 for Breakdown):	1	
	3600164	Prior to S/N 43319		
	3600260	S/N 43319 to Present		
3	Not Used			
4	Not Used			
5	3533445	Plate, Mounting - Governor and Carburetor	1	
6	Not Used			
7	2500005	Governor, Precision	1	
8	0641410	Bolt 1/4"-20NC x 1 1/4"	4	
9	4761400	Lockwasher 1/4"	4	
10	3311401	Nut 1/4"-20NC	4	
11	4740185	Flatwasher 3/8" (Hardened)	2	
12	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
13	0641812	Bolt 1/2"-13NC x 1 1/2"	4	
14	4761800	Lockwasher 1/2"	4	
15	0700814	Bolt, Metric 8mm x 30mm	3	
16	4831900	Lockwasher, Metric 8mm	3	
17	1060149	Cable, Battery (Auxiliary Relay to Starter)	1	
18	4843497	Bracket, Engine Mounting - Front	1	
19	3533291	Plate	1	
20	0701014	Bolt, Metric 10mm x 30mm	5	
21	4832000	Lockwasher, Metric 10mm	5	
22	3200202	Mount, Engine - Rear	2	
23	3200201	Mount, Engine - Front	1	
24	4740273	Washer, Snubbing	2	
25	4751700	Flatwasher 7/16"	4	
26	0641728	Bolt 7/16"-14NC x 3 1/2"	2	
27	3311705	Locknut 7/16"-14NC	2	
28	4740274	Washer, Snubbing	1	
29	0641826	Bolt 1/2"-13NC x 3 1/4"	1	
30	4751800	Flatwasher 1/2"	1	
31	3311805	Locknut 1/2"-13NC	1	
32	0641608	Bolt 3/8"-16NC x 1"	8	
33	4761600	Lockwasher 3/8" (Prior to S/N 43319)	8	
34	3311605	Locknut 3/8"-16NC	8	
35	1060093	Cable, Battery (Engine to Ground)	1	
36 to 38	Not Used			
39	3941005	Screw, Self-Tapping #10 x 5/8"	6	

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SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
40	0901635	Bracket, Mounting - Engine (Front)	1	
41	0080092	Adapter, Carburetor	1	
42	3911012	Bolt #10-24NC x 3/4"	2	
43	4761000	Lockwasher #10	8	
44	3841049	Rod, Throttle	1	
45	3321401	Nut, Jam 1/4"-20NC	2	
46	1660157	Balljoint	2	
47	3311801	Nut 1/2"-13NC	2	
48	2220273	Fitting, Reducer	1	
49	2180360	Fitting, Tee	1	
50		Oil Pressure Sender Options:	1	
	2420033	Sender (Prior to May 1990)		
	2420131	Sender (May 1990 to Present)		
51	Not Used			
52	3790152	O-Ring	1	
53	1320014	Clamp, Hose	4	
54	3620027	Radiator	1	
55		Bracket, Filter Options:	1	
	0901664	Prior to S/N 43319		
	0902184	S/N 43319 to Present		
56	2720341	Hose, Air Cleaner	1	
57	1320058	Clamp, Hose	1	
58		Temperature Sender Options:	1	
	2420118	Sender (Prior to May 1990)		
	2420130	Sender (May 1990 to Present)		
59	0100011	Loctite #242 (Not Shown)	A/R	
60	4360037	Switch, Oil Pressure	1	
61	Not Used			
62	Not Used			
63	0630360	Bolt, Carriage	1	
64	4761500	Lockwasher 5/16"	1	
65	3311501	Nut 5/16"-18NC	1	
		<b>FORD ENGINE ASSEMBLIES (VARIABLE PARTS):</b>	Ref.	
	0250040/ 0250588	<b>STANDARD BANG-BANG PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY 1993)</b>	Ref.	H/I
	0250851/ 0250902	<b>HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY 1993)</b>	Ref.	H/I
70		Pump Assembly Options:	1	
		Standard Bang-Bang:		
	3600165	Pump - Vickers (Not Field Serviceable) (Recommend using 3600199 as Replacement) (Prior to May 1990)		
	2900660	Shaft Seal Kit - 3600165 Pump		
	3600172	Pump - Barnes (See Figure 2-22 for Break-down) (May 1990 to January 1993)		



# SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
70 (cont'd)	3600199	Pump - Barnes (See Figure 2-23 for Break-down) (January 1993 to May 1993)		
		Hydraulic Controls:		
	3600143	Pump - Vickers (Not Field Serviceable) (Recommend using 3600202 as Replacement) (Prior to February 1993)		
	2900660	Shaft Seal Kit - 3600145 Pump		
	3600202	Pump - Barnes (See Figure 2-25 for Break-down) (February 1993 to May 1993)		
71		Mount, Engine - Rear Options:	1	
	0901634	Standard Bang-Bang		
	0901689	Hydraulic Controls		
72	2060016	Fan	1	
73	4240096	Strap, Fan	1	
74	4564623	Tube, Exhaust	1	
75	0080168	Adapter, Fan Spacer	1	
76	4031713	Capscrew, Socket Head 6mm x 45mm	3	
		<b>FORD ENGINE ASSEMBLIES (VARIABLE PARTS):</b>	Ref.	
	0253748/ 0253750	<b>STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)</b>	Ref.	B
	0255752/ 0255754	<b>STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)</b>	Ref.	A
	0253752/ 0253754	<b>HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)</b>	Ref.	D
	0255758/ 0255760	<b>HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)</b>	Ref.	A/B
80		Pump Assembly Options:	1	
	3600199	Standard Bang-Bang - Barnes (See Figure 2-23 for Breakdown)		
	3600202	Hydraulic Controls - Barnes (See Figure 2-25 for Breakdown)		
81		Mount, Engine - Rear Options:	1	
	0901634	Standard Bang-Bang		
	0901689	Hydraulic Controls		
82	2060019	Fan Kit	1	
83	4566039	Tube, Exhaust	1	
	3100073	Manifold, Exhaust (Not Shown)	1	
84	2680402	Shroud, Radiator (July 1995 to Present)	1	
		<b>FORD ENGINE INSTALLATION (STANDARD PARTS)</b>	Ref.	
101	Not Used			
102	4300034	Stud (Welded on Part)	2	
103	Not Used			

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SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
104	1320020	U-Clamp	1	
105 to 106	Not Used			
107	1320031	Clamp, Hose	3	
108	Not Used			
109	0080039	Elbow	1	
110	1340020	Air Cleaner Assembly	1	
	7004214	Element, Filter	1	
111	0340002	Band, Air Cleaner	2	
112	1120161	Cap, Air Inlet	1	
113	0641406	Bolt 1/4"-20NC x 3/4"	4	
114	4761400	Lockwasher 1/4"	4	
115	3311401	Nut 1/4"-20NC	4	
116	1320026	Clamp, Muffler	2	
117	Not Used			
118	0641810	Bolt 1/2"-13NC x 1 1/4"	5	
119	4751800	Flatwasher 1/2"	5	
120	4761800	Lockwasher 1/2"	5	
121	0630403	Bolt, Carriage 7/16"-14NC x 1 1/2"	2	
122	4751700	Flatwasher 7/16"	2	
123	3311705	Locknut 7/16"-14NC	2	
124	1060046	Cable, Battery (Battery to Ground)	1	
125	0400003	Battery	1	
126	0400002	Holddown, Battery	1	
126A	2910479	Clips, Hold-Down (Not Shown)	2	
127	0630370	Rod, Holddown	2	
128	1060273	Cable, Battery (Battery to Auxiliary Relay)	1	
129	1060099	Cable, Battery (Auxiliary Relay to Auxiliary Pump)	1	
130	4060727	Shield	1	
131	1380032	Clip, Battery Box (Not Shown)	2	
132	3980003	Seat, Battery	1	
133	3300029	Wingnut 3/8"-16NC	2	
134	2220273	Fitting, Reducer	1	
135	2220805	Fitting, 90°	1	
136	1320022	Clamp	2	
137	2720058	Hose, Fuel Line	9 ft./2.7m	
138	Not Used			
139	4751600	Flatwasher 3/8"	4	
140	Not Used			
141	4761600	Lockwasher 3/8"	4	
142	0641614	Bolt 3/8"-16NC x 1 3/4"	2	
143	3311601	Nut 3/8"-16NC	2	
144	2720042	Hose, Heater	3 in./8cm	
145	1320032	Clamp, Hose	2	
146	2220296	Fitting, 90°	1	
147 to 148	Not Used			
149	3911008	Screw, Machine #10-24NC x 1/2"	3	
150	4761000	Lockwasher #10	3	
151	3311001	Nut #10-24NC	3	
152	4751000	Flatwasher #10	3	

# SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>FORD ENGINE INSTALLATION (VARIABLE PARTS)</b>	Ref.	
	0250041/ 0250589	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)</b>	Ref.	H/F
	0250852/ 0250903	<b>HYDRAULIC CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)</b>	Ref.	D/F
160		Muffler Options:	1	
	3220067	Muffler (Dual Fuel Machines)		
	3220061	Muffler (Standard Gas Built Prior to October 1991)		
161		Muffler Options (Standard Gas Built October 1991 to May 1993):		
	3220076	Standard Bang-Bang		
	Not Required	Hydraulic Controls		
162	0901387	Bracket, Exhaust	1	
163	3311501	Nut 5/16"-18NC	1	
164	4751500	Flatwasher 5/16"	1	
165		Air Intake Tube Options:	1	
	4564523	Tube (Standard Gas)		
	4843552	Tube (Dual Fuel)		
166		Auxiliary Pump Options:	1	
		Standard Bang-Bang:		
	3600050	Pump Assembly (When Replacing Complete Unit Recommend using 3600208) (Prior to April 1993)		
		Barnes Version Replacement Parts:		
	7004249	Coupling		
	7004248	Motor		
	7010923	Pump		
		Stone/Fenner Version Replacement Parts:		
	7004412	Coupling		
	7000482	Motor		
	7004414	Pump		
	3600208	Pump Assembly (April 1993 to May 1993)		
	7013711	Coupling		
	7013710	Motor		
	7013753	Brush Kit		
	7013712	Pump		
		Hydraulic Controls:		
	3600141	Pump Assembly (When Replacing or Repairing Unit Recommend Using 3600071) (Used on Standard Gas Prior to January 1991 and Dual Fuel Prior to May 1993)		
	3600071	Pump Assembly (Standard Gas January 1991 to May 1993)		
	7004249	Coupling		
	7004436	Motor With Bracket		
	7004248	Motor		
	7004247	Pump		
	7012576	Bracket		

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
167	1120218	Cap, Exhaust Rain Options (Standard Gas October 1991 to May 1993 Only):		
	Not Required	Standard Bang-Bang		
		Hydraulic Controls		
168	0701010	Bolt, Metric 10mm x 20mm	2	
169	3291001	Nut, Metric 10mm	2	
		<b>FORD ENGINE INSTALLATION (VARIABLE PARTS)</b>	Ref.	
	0253749/ 0253751	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)</b>	Ref.	B/A
	0255753/ 0255757	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)</b>	Ref.	A/A
	0253753/ 0253755	<b>HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)</b>	Ref.	B/A
	0255759/ 0255761	<b>HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)</b>	Ref.	A/A
180	3220084	Muffler	1	
181	0901924	Bracket, Muffler	1	
182	4843552	Tube, Air Intake	1	
183	1320037	Clamp	1	
184	4565829	Tube, Exhaust	1	
185	3220087	Arrestor, Spark	1	
186		Auxiliary Pump Assembly Options:	1	
		Standard Bang-Bang:		
	3600208	Auxiliary Pump Assembly		
	7013711	Coupling		
	7013710	Motor		
	7013753	Brush Kit		
	7013712	Pump		
		Hydraulic Controls:		
	3600210	Auxiliary Pump Assembly	1	
	7013711	Coupling		
	7013710	Motor		
	7013757	Brush Kit		
	7013771	Pump		
	7013701	Seal Kit - Pump		
187	2200213	Plug, Pipe (Standard Gas Only)	1	
	0250324	<b>PUMP COUPLING INSTALLATION - LOVEJOY OPTION WITH INDUSTRIAL FLYWHEEL (PRIOR TO AUGUST 1992)</b>	Ref.	—
201	1660169	Coupling	1	
202	0080163	Adapter, Pump	1	
203	0641510	Bolt 5/16"-18NC x 1 1/4"	6	
204	4761500	Lockwasher 5/16"	6	
205	0641610	Bolt 3/8"-16NC x 1 1/4"	8	
206	4761600	Lockwasher 3/8"	8	

# SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>PUMP COUPLING INSTALLATION - HAYES</b>	Ref.	
		<b>OPTIONS:</b>		
	0250598	<b>OPTION WITH INDUSTRIAL FLYWHEEL (PRIOR TO NOVEMBER 1992)</b>	Ref.	—
	0252808	<b>STANDARD WITH AUTOMOTIVE FLYWHEEL (NOVEMBER 1992 TO PRESENT)</b>	Ref.	—
211		Coupling Options:	1	
		Industrial Flywheel:		
	1660184	Coupling - 13 Teeth		
	1660234	Coupling - 15 Teeth		
		Automotive Flywheel:		
	1660207	Coupling - 13 Teeth		
	7019684	Coupling - 15 Teeth		
		<b>Note: Coupling Internal Spines must be lubed with Lithium based grease prior to installation.</b>		
212	0080163	Adapter, Pump	1	
213		Bolt Options:	6	
	0641507	Industrial Flywheel - Bolt 5/16"-18NC x 7/8"		
	0700808	Automotive Flywheel - Bolt, Metric 8mm x 16mm		
214		Lockwasher Options:	6	
	4761500	Industrial Flywheel - Lockwasher 5/16"		
	4831900	Automotive Flywheel - Lockwasher, Metric 8mm		
215	0641610	Bolt 3/8"-16NC x 1 1/4"	8	
216	4761600	Lockwasher 3/8"	8	
		-----		
	3020021	Grease, Coupling	A/R	
		<b>ENGINE COMPONENTS</b>	Ref.	
301	7000892	Carburetor - Ford LSG-411	1	
	7019933	Rebuild Kit - 7000892 Carburetor (was p/n 7000878)	1	
	7012577	Fitting, Carburetor Vacuum Line	1	
	7012578	Carburetor Vacuum Line Assembly	1	
	7000894	Choke, Automatic	1	
	7000877	Fuel Shut-Off - Has Wire Connection	1	
	7000884	Fuel Shut-Off - Has Terminal Post	1	
302		Alternator Options:	1	
	7000893	Alternator - Bosch		
	7012653	Alternator - Prestolite		
	7019670	Alternator - Leece-Neville		
		-----		
	7019954	Engine Wiring Harness (was p/n 7012564)	1	
	7014682	Tune-Up Kit (Includes Oil and Fuel Filters, Spark Plugs and Wire Set) ("Push On" Spark Plug Wires)	1	
	7019998	Coil Pack ("Push On" Spark Plug Wires)	1	
	7022103	Wire - Spark Plug #1	1	
	7022101	Wire - Spark Plug #2	1	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

**FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
302 (cont'd)	7022102	Wire - Spark Plug #3	1	
	7022104	Wire - Spark Plug #4	1	
	7023669	Plug Wire Set ("Push On" Spark Plug Wires)	1	
	7023668	Tune-Up Kit (Includes Oil and Fuel Filters, Spark Plugs and Wire Set) ("Clip On" Spark Plug Wires)	1	
	7019987	Coil Pack ("Clip On" Spark Plug Wires)	1	
	7019989	Plug Wire Set ("Clip On" Spark Plug Wires)	1	
		Main Components Kit Options: (Includes 1 each of Carburetor, Fuel and Water Pumps, Alternator, Starter, and Ignition Control)	1	
	7014680	Kit With Bosch Alternator		
	7014687	Kit With Prestolite Alternator		
	7014681	Engine Kit (Includes Hoses, Gasket St., Thermostat, V-Belt and Coil)	1	
	7023650	Ignition Control (was p/n 7019665)	1	
303	7019949	Filter, Oil (Case of 12)	1	
304	3960423	Gasket, Thermostat (Not Shown)	1	
	0250806	<b>AIR HORN INSTALLATION (STANDARD GAS ONLY)</b> <b>Note: See Dual Fuel Installation for Dual Fuel and Straight LP Machines.</b>	Ref.	B
401	0080175	Horn, Air	1	
402	3960388	Gasket	1	
403	4300057	Stud	1	
404	3311405	Locknut 1/4"-20NC	1	
	0252625	<b>OPTIONAL ENGINE DISTRESS INSTALLATION</b>	Ref.	5
501	Not Used			
502	Not Used			
503	2180360	Fitting, Tee	1	
504	4360182	Switch, Oil Pressure	1	
505	0080200	Fitting, Adapter	1	
506	3960423	Gasket	1	
507	0700819	Bolt, Metric 8mm x 55mm	2	
508	4831900	Lockwasher 8mm	2	
509	4360157	Switch, Water Temperature	1	
	0252300	<b>OPTIONAL COLD WEATHER PACKAGE INSTALLATION</b>	Ref.	B
	2580026	Heater, Engine Block	1	
	2580001	Heater, Battery	1	

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FIGURE 2-17. FORD ENGINE INSTALLATION (CONTINUED)

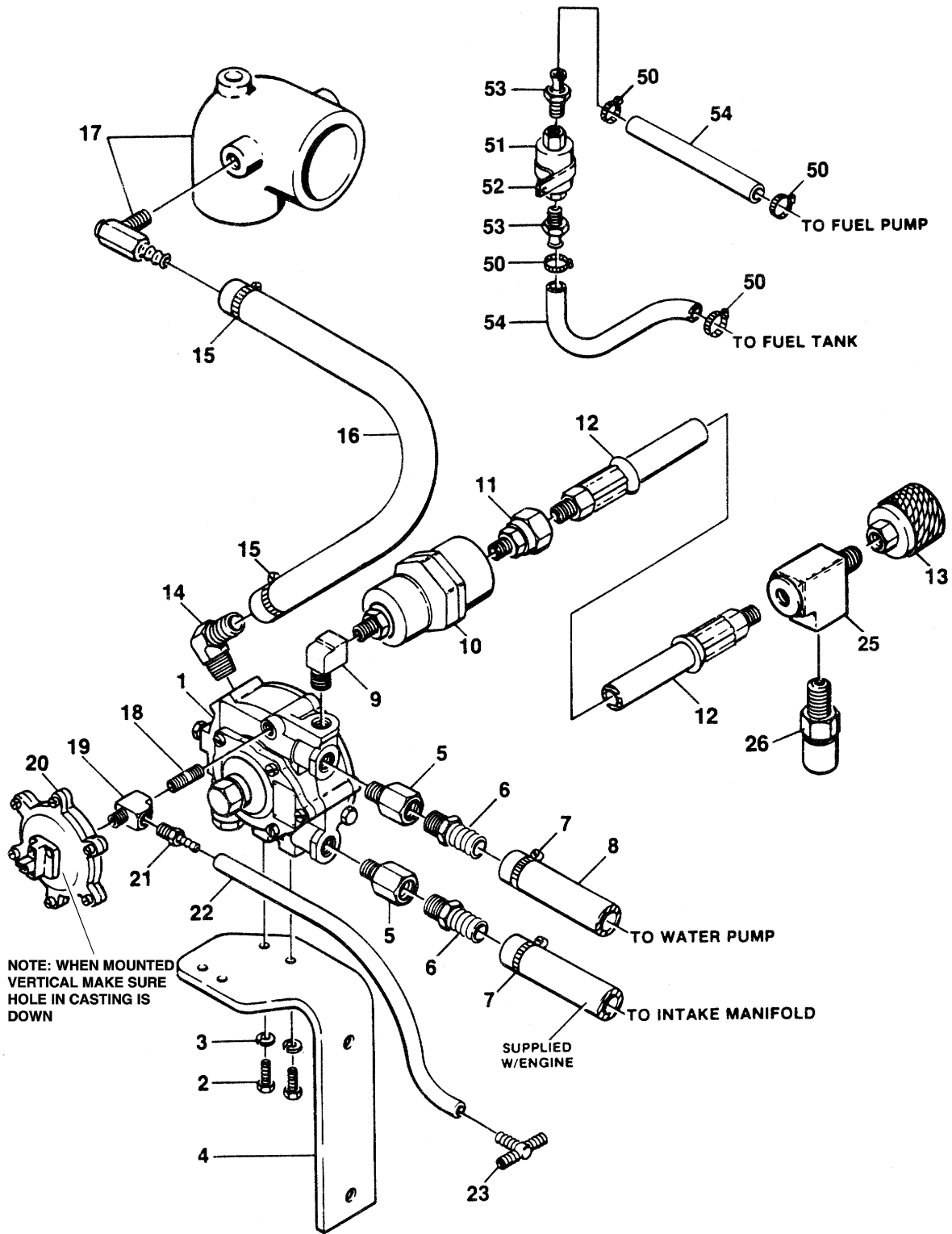
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-18. DUAL FUEL INSTALLATION (FORD)

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# SECTION 2 TURNTABLE

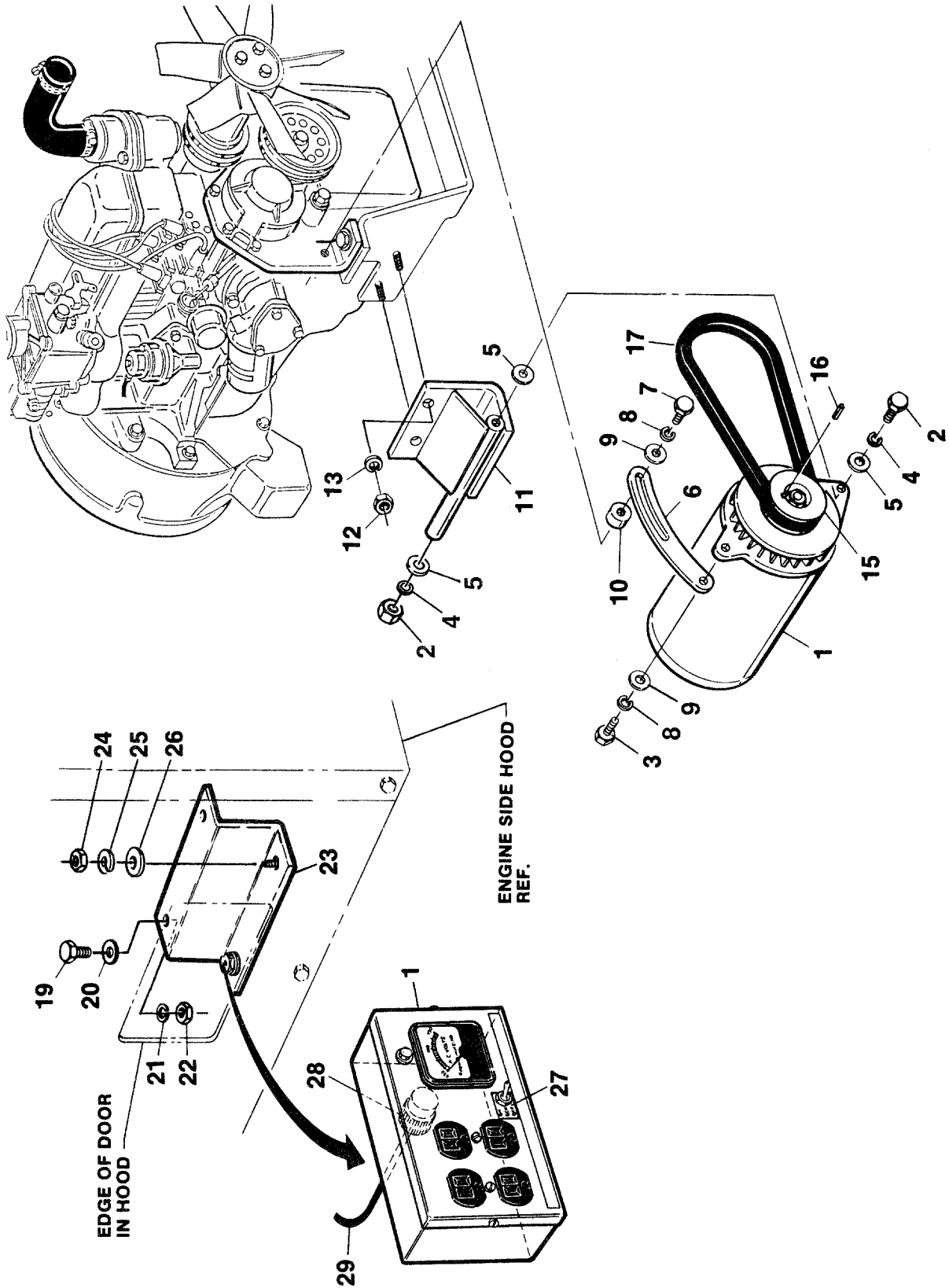
**FIGURE 2-18. DUAL FUEL INSTALLATION (FORD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281296	<b>DUAL FUEL INSTALLATION (FORD)</b>	Ref.	G
1	3720011	Regulator	1	
	7017516	Rebuilt Kit	1	
2	0641405	Bolt 1/4"-20NC x 5/8"	2	
3	4761400	Lockwasher 1/4"	2	
4	0901664	Bracket	1	
5	2220364	Fitting, Adapter	2	
6	2180535	Fitting, Barbed	2	
7	1320032	Clamp	4	
8	2720042	Hose	32 in./82cm	
9	2220648	Fitting, 90°	1	
10	2120077	Filterlock	1	
11	2220003	Fitting, Swivel	1	
12	2720170	Hose	1	
13	2180387	Fitting, Tank	1	
14	2220675	Fitting, 90° Barbed	1	
15	1320017	Clamp	2	
16	2720112	Hose	2 ft./61cm	
17	0080167	Adapter	1	
	3960388	Gasket	1	
	3840979	Rod, Adaptor	1	
18	2180104	Fitting, Nipple	1	
19	2180360	Fitting, Tee	1	
20	4360188	Switch, Vacuum	1	
21	2180536	Fitting, Barbed	1	
22		Hose (Supplied with Engine)	A/R	
23	2180623	Fitting, Tee	1	
24	Not Used			
25	2220290	Fitting, Tee	1	
26	2180389	Fitting, Pressure Relief	1	
	0250772	<b>DUAL FUEL INSTALLATION</b>	Ref.	H
50	1320022	Clamp	4	
51	4640391	Valve, Gas Lock	1	
52	1320095	Clamp, Mounting	1	
53	2220315	Fitting, Barbed	2	
54	2720058	Hose, Fuel Line	6 ft./1.8m	
	0251417	<b>STRAIGHT LP GAS INSTALLATION</b>	Ref.	C
	2901184	Blanking Plate Kit (Cover Fuel Pump Location) (Not Shown)	1	

# SECTION 2 TURNTABLE

FIGURE 2-19. 110 VOLT GENERATOR INSTALLATION (FORD)

SECTION 2 TURNTABLE



# SECTION 2 TURNTABLE

**FIGURE 2-19. 110 VOLT GENERATOR INSTALLATION (FORD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250668	<b>110 VOLT GENERATOR INSTALLATION</b>	Ref.	G
1	2460011	Generator Assembly with Control Box	1	
	7012558	Generator Assembly	1	
	7026199	Armature with Slip Rings	1	
	7012513	Holder, Brush	4	
	7012514	Fan	1	
	7020108	Brush	4	
	7020109	Holder, Brush	4	
	7020110	Bell, Front	1	
	7020111	Bell, Rear	1	
	7020190	Bearing	2	
	7020193	Cord, Power	1	
	7003657	Control Box Assembly	1	
		<b>Note: Replacement 110V Control Box comes with 2 std Receptacles p/n 4460190. Optional Industrial Twist Lock Receptacles p/n 4460027 must be ordered separately.</b>		
	2420203	Voltmeter	1	
	3520028	Plug, Hole	1	
	4360542	Breaker, Circuit	1	
	2920162	Lamp Assembly	1	
	7020191	Switch, Toggle	1	
2	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	2	
3	0641507	Bolt 5/16"-18NC x 7/8"	1	
4	4761600	Lockwasher 3/8"	2	
5	4751600	Flatwasher 3/8"	3	
6	4340569	Support	1	
7	0641511	Bolt 5/16"-18NC x 1 3/8"	1	
8	4761500	Lockwasher 5/16"	2	
9	4751500	Flatwasher 5/16"	2	
10	0961247	Bushing	1	
11		Mounting Bracket Options:	1	
	0901650	Bracket (Prior to May 1991)		
	0901774	Bracket (May 1991 to Present)		
12	3311601	Nut 3/8"-16NC	2	
13	4761600	Lockwasher 3/8"	2	
14	Not Used			
15	3580134	Pulley (Attaching Hardware Supplied with Generator)	1	
16	2860012	Key, Woodruff	1	
17	0480057	V-Belt	1	
18	Not Used			
19	0721006	Bolt #10-24NC x 3/4"	2	
20	4751000	Flatwasher #10	2	
21	4761100	Lockwasher #10	2	
22	3311001	Nut #10-24NC	2	
23	0901633	Bracket, Mounting - Box	1	
24	3311401	Nut 1/4"-20NC	2	
25	4761400	Lockwasher 1/4"	2	

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

FIGURE 2-19. 110 VOLT GENERATOR INSTALLATION (FORD) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
26	4751400	Flatwasher 1/4"	2	
	4300068	Stud (Welded on Part)	2	
27	3251476	Decal - Generator	1	
28	4460027	Connector	1	
	4460023	Terminal	1	
29	1060012	Cable - 12/4	A/R	

# SECTION 2 TURNTABLE

FIGURE 2-19. 110 VOLT GENERATOR INSTALLATION (FORD) (CONTINUED)

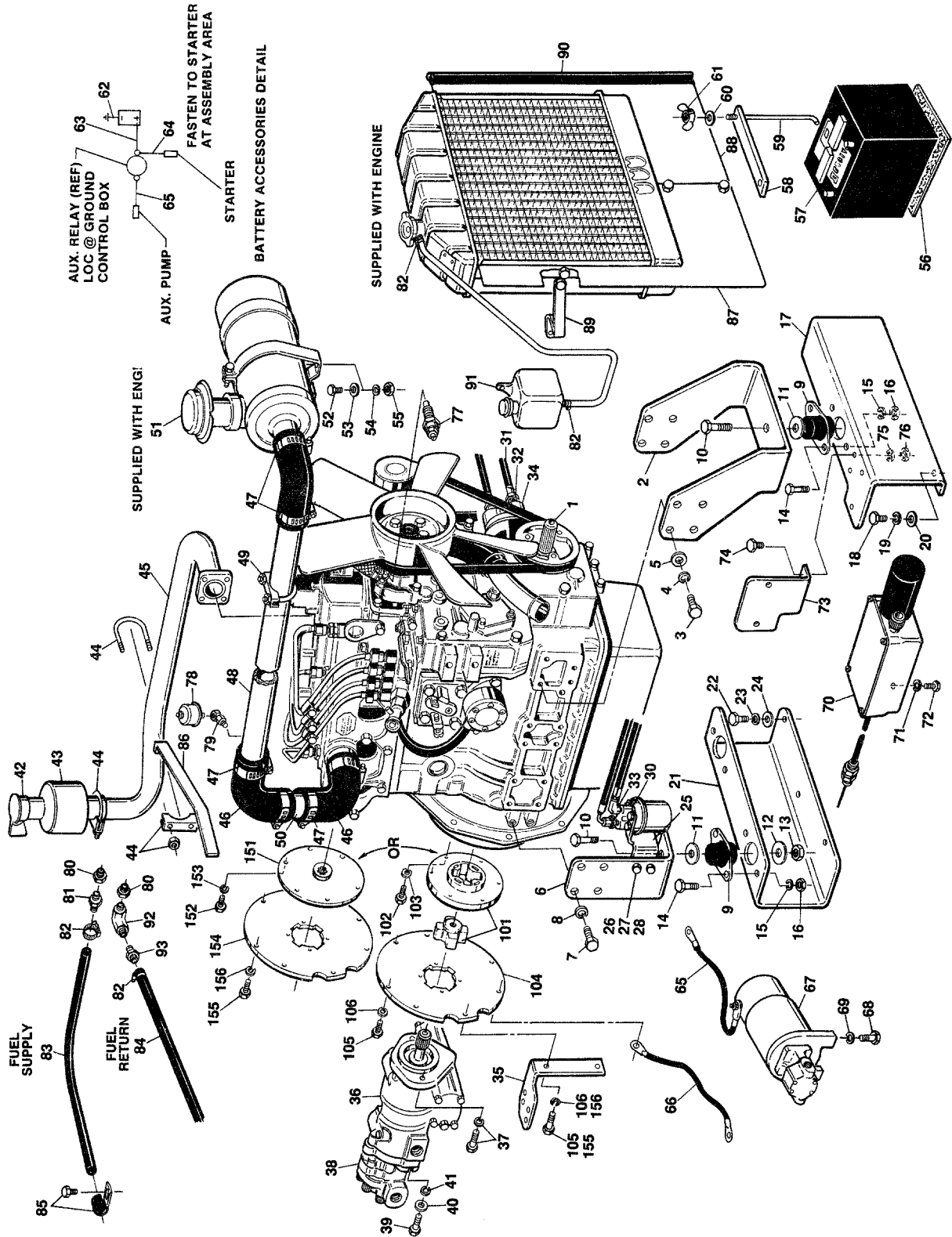
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION

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# SECTION 2 TURNTABLE

**FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250961	<b>KUBOTA V1200B DIESEL ENGINE INSTALLATION</b>	Ref.	F
1	2000113	Engine, Kubota V1200-B Diesel	1	
2	3200312	Bracket, Mounting - Engine (Front)	1	
3	0630394	Bolt, Metric 10MM - 1.25 x 25MM	8	
4	4832000	Lockwasher 10MM	8	
5	4812000	Flatwasher 10MM	8	
6	0901698	Bracket, Mounting - Engine (Rear)	2	
7	0630161	Bolt, Metric 12MM - 1.25 x 30MM	4	
8	4832100	Lockwasher 12MM	4	
9	3200318	Mount, Resilient	3	
10	0641728	Bolt 7/16"-14NC x 3 1/2"	1	
11	4740273	Washer, Special	1	
12	4751700	Flatwasher 7/16"	1	
13	3311705	Locknut 7/16"-14NC	1	
14	0641610	Bolt 3/8"-16NC x 1 1/4"	2	
15	4761600	Lockwasher 3/8"	2	
16	3311601	Nut 3/8"-16NC	2	
17	0901696	Support, Engine (Front)	1	
18	0641810	Bolt 1/2"-13NC x 1 1/4"	2	
19	4761800	Lockwasher 1/2"	2	
20	4751800	Flatwasher 1/2"	2	
21	0901665	Support, Engine (Rear)	1	
22	0641810	Bolt 1/2"-13NC x 1 1/4"	3	
23	4761800	Lockwasher 1/2"	3	
24	4751800	Flatwasher 1/2"	3	
25	0901733	Bracket, Remote Engine Oil Filter	1	
26	0641508	Bolt 5/16"-18NC x 1"	2	
27	4761500	Lockwasher 5/16"	2	
28	3311501	Nut 5/16"-18NC	2	
29	Not Used			
30	0080188	Adapter, Remote Filter Head	1	
31	2750757	Hose	2	
32	2220346	Fitting, Reducer	2	
33	2220470	Fitting, 90°	2	
34	0080187	Adapter, Remote	1	
35	0901664	Bracket, Filter	1	
36	3600164	Pump Assembly - Sunstrand (See Figure 2-21 for Breakdown)	1	
37	0641812	Bolt 1/2"-13NC x 1 1/2"	2	
	4761800	Lockwasher 1/2"	2	
38		Pump Assembly Options:	1	
	3600172	Pump (Prior to January 1993) (See Figure 2-22 for Breakdown)	1	
	3600199	Pump (January 1993 to Present) (See Figure 2-23 for Breakdown)	1	
39	0641610	Bolt 3/8"-16NC x 1 1/8"	2	
40	4761600	Lockwasher 3/8"	2	
41	4751600	Flatwasher 3/8"	2	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
42	1120218	Raincap	1	
43	3220076	Muffler	1	
44	1320020	Clamp, Muffler	2	
45	4843691	Pipe, Exhaust	1	
	4100025	Sleeve, Exhaust	2.5 ft.	
46	2720084	Elbow, Rubber	2	
47	1320031	Clamp	5	
48	4564685	Tube, Air Intake	1	
49	1320026	Clamp, Muffler	1	
50	4564696	Tube	1	
51		Air Cleaner Assembly (Supplied with Engine - Refer to Engine Dealer for Parts)	1	
	3538254	Spacer (Not Shown - Located Under Bracket)	1	
52	0641408	Bolt 1/4"-20NC x 1"	2	
53	4711400	Flatwasher 1/4" Narrow	2	
54	4761400	Lockwasher 1/4"	2	
55	3311401	Nut 1/4"-20NC	2	
56	3980007	Seat, Battery	1	
57	0400075	Battery	1	
58	0361810	Hold-Down, Battery	1	
59	0630370	Rod, Hold-Down	2	
60	4751600	Flatwasher 3/8"	2	
61	3300029	Wingnut 3/8"-16NC	2	
	1380032	Clip, Battery (Welded on Part - Not Shown)	2	
62	1060172	Cable, Battery (Negative to Ground)	1	
63	1060273	Cable, Battery (Positive to Aux Relay)	1	
64	1060149	Cable, Battery (Aux Relay to Starter)	1	
65	1060099	Cable, Battery (Aux Relay to Aux Power)	1	
66	1060093	Cable, Battery (Engine to Ground)	1	
67		Auxiliary Pump Options:	1	
	3600050	Pump Assembly (Prior to April 1993)		
		Replacement Parts:		
	7004412	Coupling (Stone/Fenner Industries Version)		
	7004249	Coupling (John S. Barnes Version)		
	7000482	Motor (Stone/Fenner Industries Version)		
	7004248	Motor (John S. Barnes Version)		
	7004414	Pump (Stone/Fenner Industries Version)		
	7010923	Pump (John S. Barnes Version)		
	3600208	Pump Assembly (April 1993 to Present)		
		Replacement Parts:		
	7013711	Coupling		
	7013710	Motor		
	7013753	Brush Kit		
	7013712	Pump		
68	0641614	Bolt 3/8"-16NC x 1 3/4"	2	
69	4761600	Lockwasher 3/8"	2	
70	0060023	Actuator, Adeco	1	
	7008804	Bellows	1	
	7008829	PC Board	1	
	7008821	Motor	1	



# SECTION 2 TURNTABLE

**FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
70 (cont'd)	7008828	Cable	1	
	3740074	Engine Shutdown Kit (Not Shown)	1	
	0901686	Bracket, Governor Cable (Not Shown)	1	
71	0641408	Bolt 1/4"-20NC x 1"	2	
72	4761400	Lockwasher 1/4"	2	
73	0901699	Bracket (Prior to March 1992 Only)	1	
74	0641408	Bolt 1/4"-20NC x 1"	2	
75	4761400	Lockwasher 1/4"	2	
76	3311401	Nut 1/4"-20NC	2	
77	2420024	Sender, Water Temperature	1	
78	2420033	Sender, Oil Pressure	1	
79	2180749	Fitting	1	
	2180730	Fitting	1	
80	2220273	Fitting, Reducer	2	
81	2220805	Fitting, Barbed	1	
82	1320022	Clamp	6	
83	2720058	Hose (Fuel Supply)	11.5 ft.	
84	2720271	Hose (Fuel Return)	10 ft.	
85	1320041	Clamp	2	
	3311401	Nut 1/4"-20NC	1	
	4761400	Lockwasher 1/4"	1	
	4300032	Stud (Welded on Part)	1	
86	0901702	Bracket, Support - Exhaust	1	
87	4060742	Shield, Radiator - RH Side	1	
88	4060743	Shield, Radiator - LH Side	1	
89	0901674	Support, Radiator	1	
90	3960389	Seal (Attach to Radiator Shield)	22 in.	
91	4400327	Tank, Recovery (June 1994 to Present Only)	1	
92	2220063	Fitting, 90°	1	
93	2180536	Fitting, Straight	1	
	0250324	<b>COUPLING INSTALLATION - LOVEJOY OPTION</b>	Ref.	
151		Coupling Options:	1	
	1660169	Lovejoy Coupling - 13 Teeth	1	
	1660173	Disc, Coupling	1	
	1660172	Hub, Coupling	1	
	1660234	Hayes Coupling - 15 Teeth	1	
102	0641510	Bolt 5/16"-18NC x 1 1/4"	6	
103	4761500	Lockwasher 5/16"	6	
104	0080163	Adapter, Pump Mounting	1	
105	0641610	Bolt 3/8"-16NC x 1 1/4"	8	
106	4761600	Lockwasher 3/8"	8	

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# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250598	<b>COUPLING INSTALLATION - HAYES OPTION</b>	Ref.	—
151		Coupling Options:	1	
	1660184	Coupling - 13 Teeth		
	1660234	Coupling - 15 Teeth		
152	0641507	Bolt 5/16"-18NC x 7/8"	6	
153	4761500	Lockwasher 5/16"	6	
154	0080163	Adapter, Pump Mounting	1	
155	0641607	Bolt 3/8"-16NC x 7/8"	8	
156	4761600	Lockwasher 3/8"	8	
	0232302	<b>COLD WEATHER PACKAGE INSTALLATION</b>	Ref.	B
	2580001	Heater, Battery	1	
	2580029	Heater, Engine Block	1	

# SECTION 2 TURNTABLE

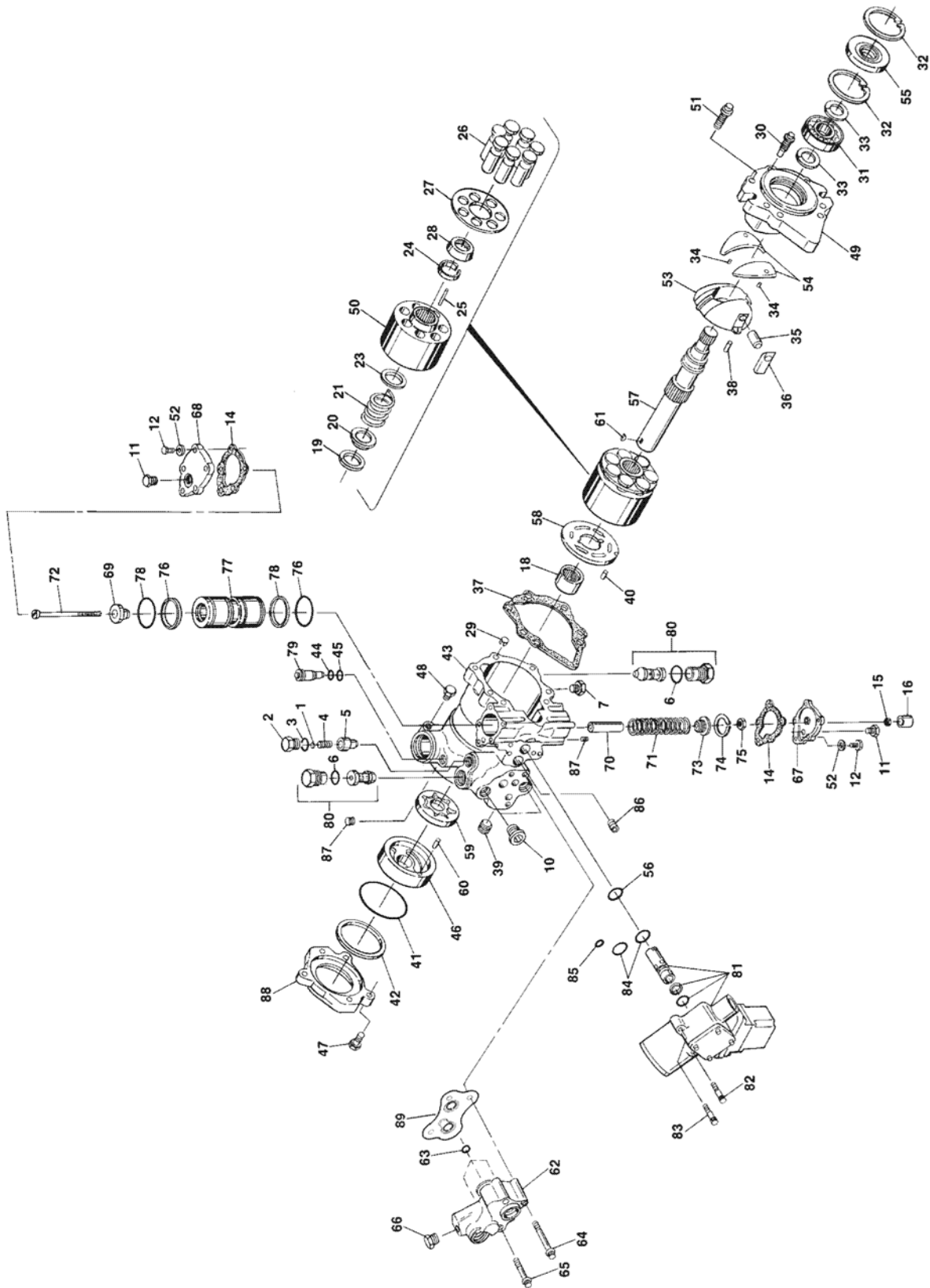
FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND



# SECTION 2 TURNTABLE

**FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>PISTON PUMP ASSEMBLIES</b>	Ref.	
	3600164	<b>13 Tooth Pump Spline (Prior to S/N 29318)</b>	Ref.	A
	3600260	<b>15 Tooth Pump Spline (S/N 29318 to S/N 69000)</b>	Ref.	—
1	7007413	Shim Kit	1	
2	7007414	Plug	1	
3	Kit	O-Ring	1	
4	7007416	Spring, Relief Valve	1	
5	7007417	Valve, Relief	1	
6	Kit	O-Ring	2	
7	7007419	Plug	2	
8	Not Used			
9	Not Used			
10	7007420	Plug	2	
11	7007208	Plug	2	
12	7007421	Screw	10	
13	Not Used			
14	Kit	Gasket, Servo Cover	2	
15	7007423	Nut, Special	1	
16	7007424	Cover, Adjustment	1	
17	Not Used			
18	7007425	Bearing, Needle	1	
19	Kit	Ring, Retaining	1	
20	Kit	Washer	1	
21	Kit	Spring	1	
22	Not Used			
23	Kit	Washer	1	
24	Kit	Retainer	1	
25	Kit	Pin, Slipper Holddown	3	
26	Kit	Piston Assembly	7	
27	Kit	Retainer, Slipper	1	
28	Kit	Guide, Retainer	1	
29	7007435	Pin, Spring	1	
30	7007436	Screw, 12 Point Head	1	
31	7007437	Bearing, Ball	1	
32	7007438	Ring, Retainer	2	
33	7007439	Ring	2	
34	7007440	Pin, Spring	2	
35	7007441	Handle, Pin	1	
36	7007442	Sleeve, Bearing	1	
37	Kit	Gasket, Front Cover	1	
38	7007444	Pin	1	
39	7007445	Plug, Expansion	1	
40	Kit	Pin	1	
41	Kit	O-Ring	1	
42	Kit	Ring, Load Temper	1	
43	7007449	Housing, Pump	1	
44	Kit	Ring, Back-Up	1	
45	Kit	O-Ring	1	

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
46	Kit	Cover, Gerotor	1	
47	7007453	Bolt, Hex	3	
48	7007208	Plug	1	
49	7007454	Cover, Front	1	
50	Kit	Block, Cylinder	1	
51	7007456	Screw	6	
52	7001438	Washer	10	
53	Kit	Swashplate	1	
54	7007458	Journal, Bearing	1	
55	Kit	Seal, Lip	1	
56	Kit	O-Ring	1	
57		Shaft, Main Pump Options:	1	
	7007461	13 Tooth Spline (Prior to S/N 29318)		
	7010121	15 Tooth Spline (S/N 29318 to S/N 69000)		
58	7021214	Plate, Valve	1	
59	7007463	Gerotor Assembly	1	
60	Kit	Pin	1	
61	Kit	Key, Woodruff	1	
62	7007466	Adaptor, Remote Filtration (Without By-Pass)	1	
63	Kit	O-Ring	3	
64	7007468	Screw	2	
65	7007469	Screw	2	
66	7007470	Plug	1	
67	7007471	Cover, Servo (With Adjuster)	1	
	7007490	Stop, Servo (Not Shown)	2	
	7007491	Nut, Special (Not Shown)	2	
	7007492	Ring, External (Not Shown)	2	
68	7007482	Cover, Servo (Without Adjuster)	1	
69	7007483	Guide, Spring	1	
70	7007484	Stop, Servo	1	
71	7007485	Spring	1	
72	7007486	Screw	1	
73	7007487	Guide, Spring	1	
74	7007488	Ring, Retaining	1	
75	7007499	Locknut	1	
76	Kit	Ring, Piston	2	
77	7007494	Piston, Servo	1	
78	Kit	O-Ring	2	
79	7007472	Valve, Bypass	1	
80	Use 7010122	Valve, Pressure Relief (Includes Item 6) (was p/n 7007473)	2	
81	7007474	Control, Dual Oil-Filled	1	
	7007496	Coil Assembly (Pilot)	1	
	7007497	Plug (Pump)	1	
	7007498	Plug (Valve Harness)	1	
82	7007478	Screw	2	
83	7001498	Screw	2	
84	Kit	O-Ring	2	
85	Kit	O-Ring	1	
86	7007475	Plug, Orifice/Screen (.156)	1	

# SECTION 2 TURNTABLE

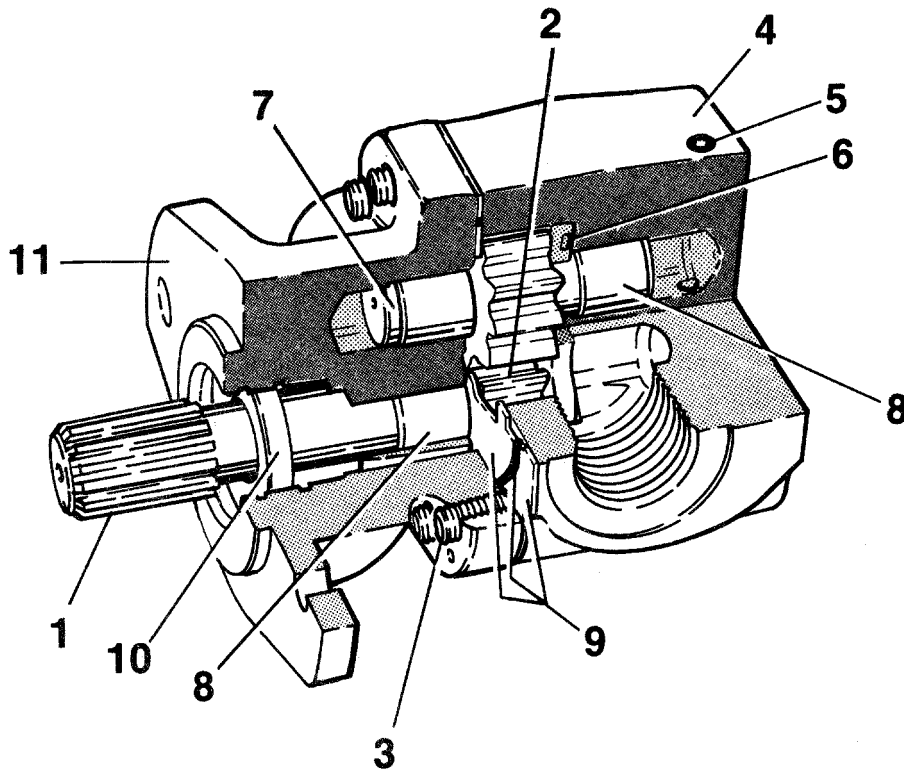
**FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
87	7007477	Plug, Orifice (.37)	2	
88	7007476	Adapter, Auxiliary Pump	1	
89	7010120	Spacer/Gasket	1	
	2900752	Seal Kit - Complete (Includes Items 3, 6, 14, 37, 41, 42, 44, 45, 55, 56, 63, 76, 78, 84 & 85)	1	
	7007412	Seal Kit - Servo Piston (Includes Items 76 & 78)	1	
	2900826	Charge Pump Kit (Includes Items 41,42,46,59,60 & 61)	1	
	2900827	Cylinder Block Kit (Includes Items 19-28,40,-50,53,55 & 58)	1	

SECTION 2 TURNTABLE

## SECTION 2 TURNTABLE

FIGURE 2-22. PUMP ASSEMBLY - BARNES. (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT APRIL /MAY 1990 TO JANUARY 1993)





# SECTION 2 TURNTABLE

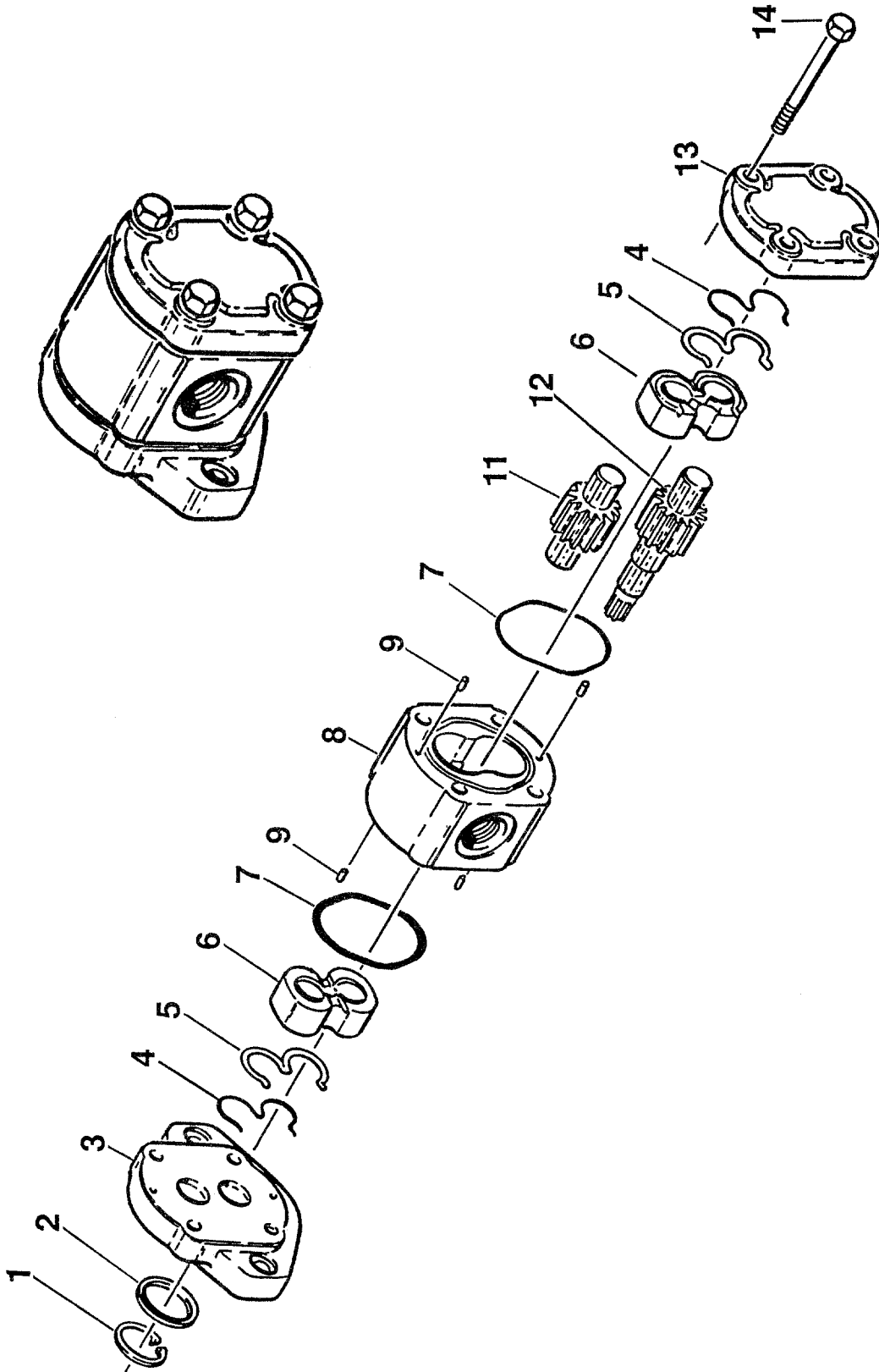
**FIGURE 2-22. PUMP ASSEMBLY - BARNES. (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT APRIL /MAY 1990 TO JANUARY 1993)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3600172	<b>PUMP ASSEMBLY - BARNES</b>	Ref.	
1	7010925	Shaft, Drive	1	
2	7010926	Gear (.750)	1	
	7010927	Pin, Shear .093 x .750 Lg.	1	
3	7010928	Screw	8	
4	7010929	Housing, Gear	1	
5	7010905	Plug	1	
6	7010914	Plate, Pressure	1	
	Kit	Seal	1	
	Kit	Back-Up	1	
7	7010930	Idler Shaft	1	
	7010926	Gear (.750)	1	
	7010918	Ball, Steel (.094)	1	
8	7010907	Bearing	4	
9	7010919	Plate, Wear	1	
	Kit	Plate, Seal	1	
	7010902	Ring, Crescent	4	
	Kit	Seal	1	
10	Kit	Seal, Shaft	1	
11	7010909	Stator	1	
	7010911	Pin, Shear .210 x .50 lg.	2	
		-----		
	2900740	Seal Kit	1	

**SECTION 2 TURNTABLE**

## SECTION 2 TURNTABLE

FIGURE 2-23. PUMP ASSEMBLY - BARNES (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT JANUARY 1993 TO PRESENT)



# SECTION 2 TURNTABLE

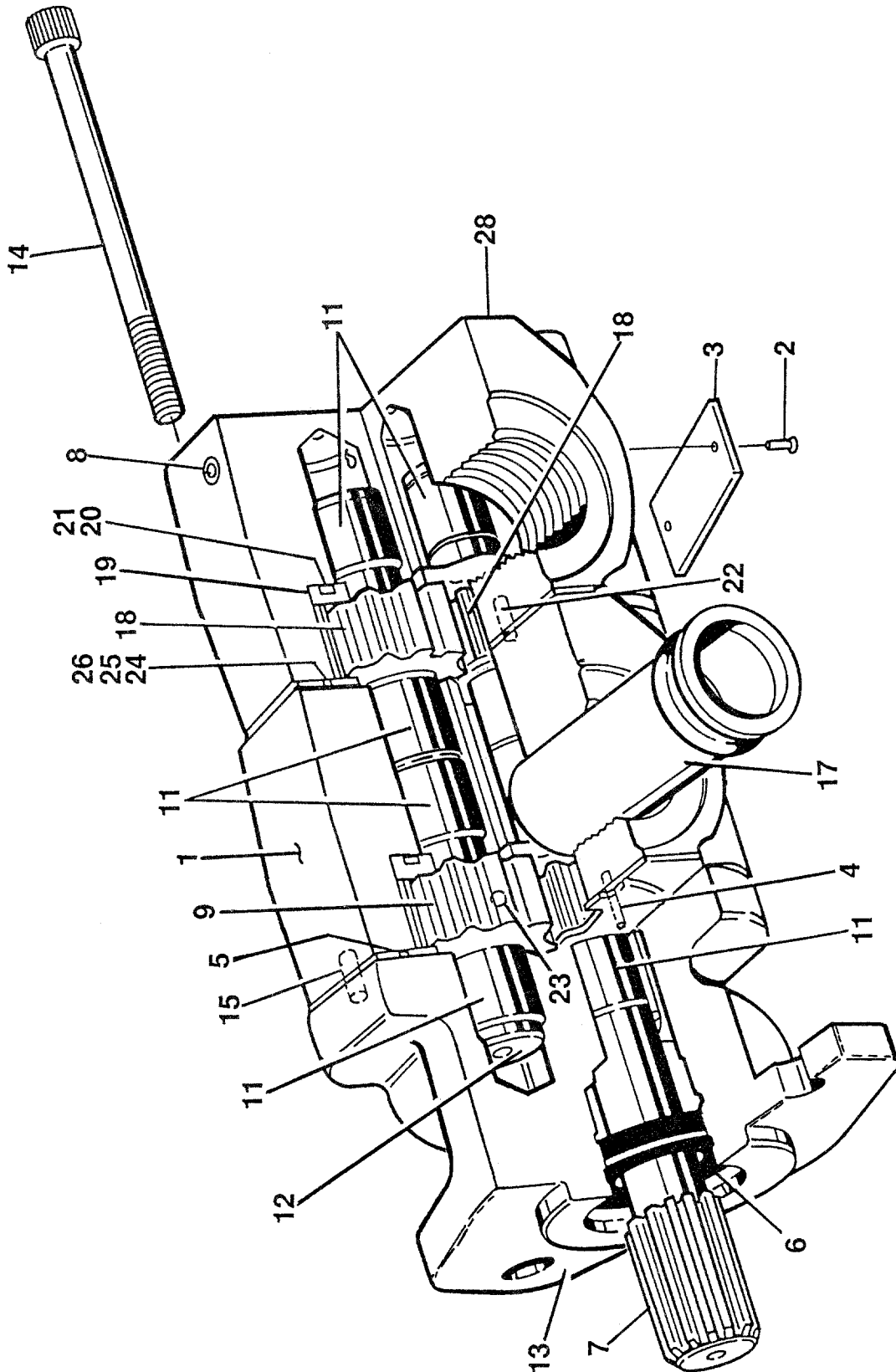
**FIGURE 2-23. PUMP ASSEMBLY - BARNES (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT JANUARY 1993 TO PRESENT)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3600199	<b>PUMP ASSEMBLY - BARNES</b>	Ref.	—
1	7010955	Ring, Retaining	1	
2	Kit	Seal, Shaft	1	
3	7010956	Flange, Mounting	1	
4	Kit	Ring, Backup	2	
5	Kit	E-Seal	2	
6	7010957	Bearing	2	
7	Kit	O-Ring	2	
8	7010958	Housing	1	
9	7010959	Pin, Dowel	4	
10	Not Used			
11	7010954	Gear, Idler	1	
12	7010978	Gear, Drive	1	
13	7010960	Cover, End	1	
14	7010961	Bolt	4	
		-----		
	7010953	Seal Kit (Includes Items 2,4,5 and 7)	1	

**SECTION 2 TURNTABLE**

## SECTION 2 TURNTABLE

FIGURE 2-24. PUMP ASSEMBLY - BARNES (USED ON HYDRAULIC CONTROL MACHINES WITH DEUTZ POWER BUILT PRIOR TO OCTOBER 1991)



SECTION 2 TURNTABLE

# SECTION 2 TURNTABLE

**FIGURE 2-24. PUMP ASSEMBLY - BARNES (USED ON HYDRAULIC CONTROL MACHINES WITH DEUTZ POWER BUILT PRIOR TO OCTOBER 1991)**

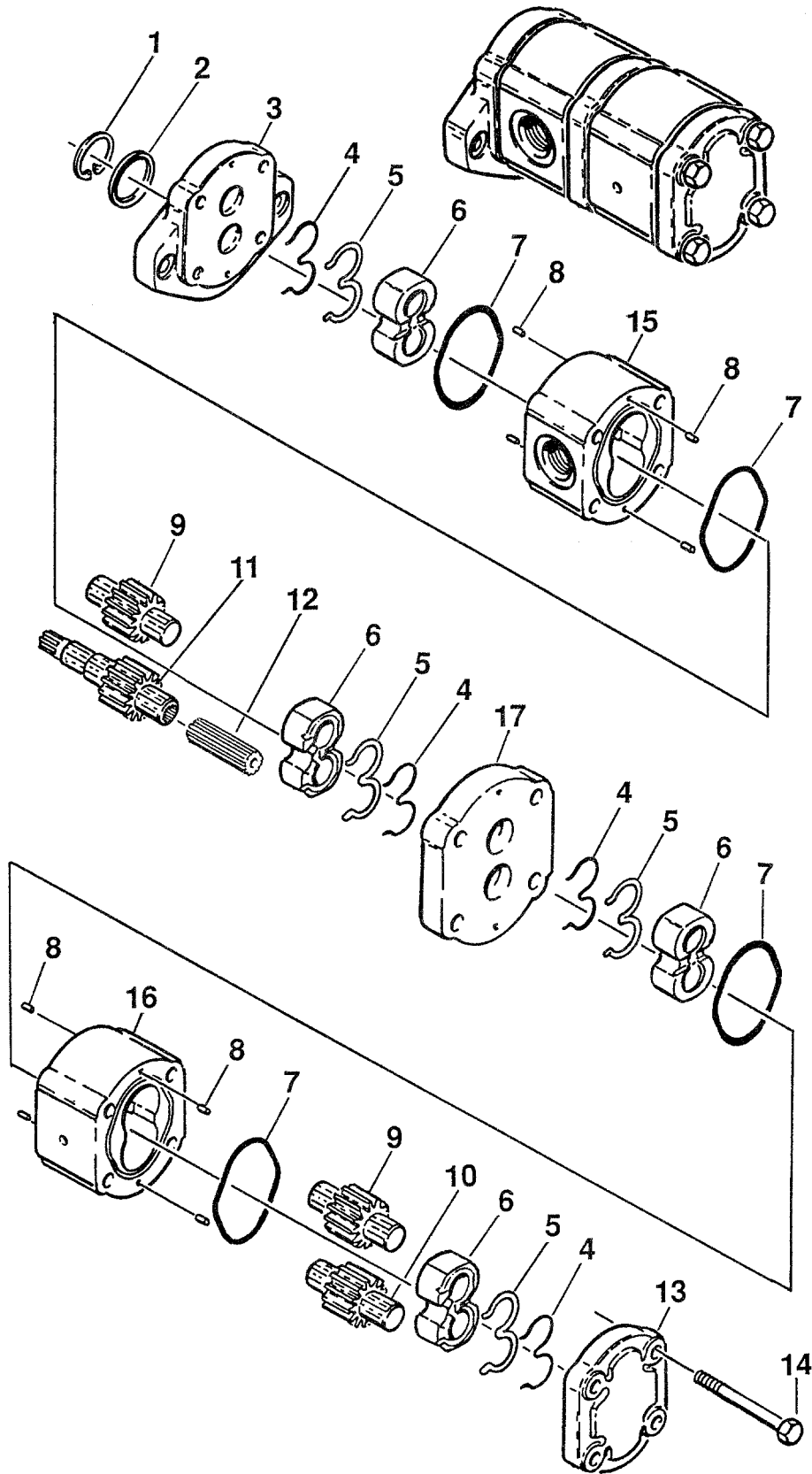
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3600176	<b>PUMP ASSEMBLY - BARNES</b>	Ref.	—
1	Not Serviced	Housing, Gear - Center	1	
2	7004435	Rivet, Tag	2	
3	Not Serviced	Nameplate	1	
4	7010901	Pin, Shear (1" Length)	1	
5	7010902	Ring, Crescent	4	
6	Kit	Seal, Oil	1	
7	Not Serviced	Shaft, Drive	1	
8	7010905	Plug, Lee	1	
9	7010906	Gear Set	1	
10	Not Used			
11	7010907	Bearing	8	
12	Not Serviced	Shaft, Idler	1	
13	7010909	Stator	1	
14	7010910	Bolt, Socket Head	8	
15	7010911	Pin, Shear (1/2" Length)	4	
16	Not Used			
17	7010912	Tube	1	
18	7010913	Gear (Not a Set)	2	
19	7010938	Plate, Pressure	2	
20	Kit	Seal, Back-up (Pressure Plate)	2	
21	Kit	Seal	2	
22	7010917	Pin, Shear (5/8" Length)	1	
23	7010918	Ball	1	
24	7010937	Plate, Wear	2	
25	Kit	Seal, Wear Plate	2	
26	Kit	Seal, Wear Plate	2	
27	7010922	Shaft, Idler	1	
28	Not Serviced	Housing, Gear - End	1	
		-----		
	2900740	Seal Kit (Includes Items 6,20,21,25 and 26)	1	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

FIGURE 2-25. PUMP ASSEMBLY - BARNES (USED ON HYDRAULIC CONTROLS MACHINES WITH DEUTZ POWER BUILT APRIL 1993 TO PRESENT AND FORD POWER BUILT FEBRUARY 1993 TO PRESENT



# SECTION 2 TURNTABLE

**FIGURE 2-25. PUMP ASSEMBLY - BARNES (USED ON HYDRAULIC CONTROLS MACHINES WITH DEUTZ POWER BUILT APRIL 1993 TO PRESENT AND FORD POWER BUILT FEBRUARY 1993 TO PRESENT**

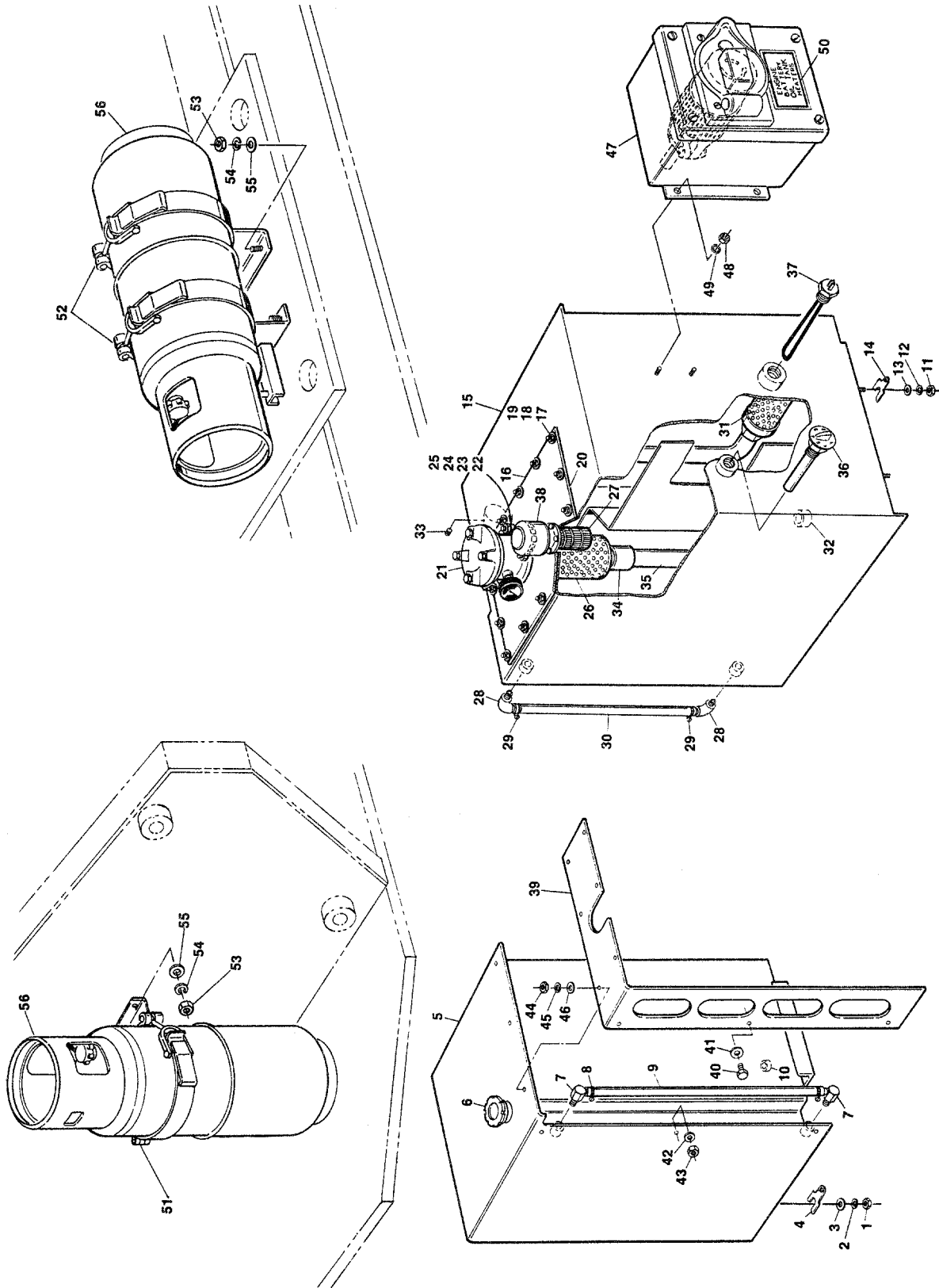
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3600202	<b>PUMP ASSEMBLY - BARNES</b>	Ref.	
1	7010955	Ring, Retaining	1	
2	Kit	Seal, Shaft	1	
3	7010956	Flange, Mounting	1	
4	Kit	Ring, Backup	4	
5	Kit	E-Seal	4	
6	7010957	Bearing	4	
7	Kit	O-Ring	4	
8	7010959	Pin, Dowel	8	
9	7010983	Gear, Idler (Section 1)	2	
10	7010984	Gear, Idler (Section 2)	1	
11	7010985	Gear, Drive	1	
12	7010965	Coupling	1	
13	7010960	Cover, End	1	
14	7010986	Bolt	4	
15	7010987	Housing (Section 1)	1	
16	7010988	Housing (Section 2)	1	
17	7010970	Plate, Distance (Section 2)	1	
		-----		
	7010962	Seal Kit (Includes Items 2,4,5 and 7)	1	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

FIGURE 2-26. TANKS INSTALLATION

SECTION 2 TURNTABLE





# SECTION 2 TURNTABLE

**FIGURE 2-26. TANKS INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>TANKS INSTALLATION</b>	Ref.	
	0239417	<b>FUEL AND HYDRAULIC TANKS INSTALLATION (STANDARD)</b>	Ref.	C
	0250231	<b>FUEL AND HYDRAULIC TANKS INSTALLATION (WITH HEATERS)</b>	Ref.	B
	0253822	<b>HYDRAULIC TANK INSTALLATION (LP ONLY MACHINES)</b>	Ref.	—
1	3311501	Nut 5/16"-18NC	4	
2	4761500	Lockwasher 5/16"	4	
3	4751500	Flatwasher 5/16"	4	
	4300073	Stud (Welded on Part)	4	
4	4070410	Shim (1/16")	A/R	
	4070411	Shim (1/8")	A/R	
	4070412	Shim (3/16")	A/R	
	4400264	Fuel Tank Assembly	1	2
5	4400263	Fuel Tank Weldment	1	
6	1120314	Cap	1	
7	2180467	Fitting, 90°	2	
	0100020	Sealant	A/R	
8	1320022	Clamp	2	
9	4562516	Tube, Sight	26 in.	
10	2200222	Plug, Pipe - 1/4"	1	
11	3311501	Nut 5/16"-18NC	4	
12	4761500	Lockwasher 5/16"	4	
13	4751500	Flatwasher 5/16"	4	
	0641516	Bolt 5/16"-18NC x 2"	4	
14	4070410	Shim (1/16")	A/R	
	4070411	Shim (1/8")	A/R	
	4070412	Shim (3/16")	A/R	
	4400266	Hydraulic Tank Assembly (Standard)	1	C
	4400291	Hydraulic Tank Assembly (With Heater)	1	B
15	4400265	Hydraulic Tank Weldment (Standard)	1	
	4400290	Hydraulic Tank Weldment (With Heater)	1	
16	1670468	Lid	1	
17	3311401	Nut 1/4"-20NC	14	
18	4761400	Lockwasher 1/4"	14	A
19	4751400	Flatwasher 1/4"	14	
20	3960371	Gasket	1	—
21	2120103	Filter, Return (Includes Item 26)	1	
	7004244	Gauge, Sight	1	
	7012559	Gasket (Located Between Filter & Tank)	1	
	7016333	O-Ring (Located Under Cap)	1	
22	0641612	Bolt 3/8"-16NC x 1 1/2"	4	
23	4761600	Lockwasher 3/8"	4	
24	4740322	Washer, Sealing	4	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

## SECTION 2 TURNTABLE

**FIGURE 2-26. TANKS INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
25	3311601	Nut 3/8"-16NC	4	
26	2120107	Element (Part of Item 26)	1	
27	1340045	Filler, Strainer	1	
	4740338	Washer, Sealing	6	
28	2180467	Fitting, 90°	2	
	0100020	Sealant	A/R	
29	1320022	Clamp	2	
30	4562516	Tube, Sight	26 in.	
31	2120104	Filter, Suction	1	
	0100020	Sealant	A/R	
32	3520022	Plug - 3/4"	1	
	0100020	Sealant	A/R	
33	2180527	Plug - 1/16"	1	
	0100020	Sealant	A/R	
34	2200268	Fitting, Coupling	1	
	0100020	Sealant	A/R	
35	2180711	Pipe, Return	1	
36	1600043	Controller, Thermostat (With Heater Only)	1	
37	2580018	Heater, Immersion (With Heater Only)	1	
38	1340046	Breather	1	
39	4060695	Filler/Shield (Standard)	1	
	4060849	Filler/Shield (LPG Only)	1	
40	0721005	Screw, Machine #10-24NC x 5/8"	6	
41	4751000	Flatwasher #10	12	
42	4761000	Lockwasher #10	6	
43	3311001	Nut #10-24NC	6	
44	3311401	Nut 1/4"-20NC	6	
45	4761400	Lockwasher 1/4"	6	
46	4751400	Flatwasher 1/4"	6	
	0252300	<b>COLD WEATHER PACKAGE INSTALLATION - FORD</b>	Ref.	B
	0252301	<b>COLD WEATHER PACKAGE INSTALLATION - DEUTZ</b>	Ref.	B
	0252302	<b>COLD WEATHER PACKAGE INSTALLATION - KUBOTA</b>	Ref.	B
47	0231756	Junction Box Assembly	1	C
	1670199	Cover	1	
	4460049	Connector, Strain Relief	3	
48	3311401	Nut 1/4"-20NC	4	
49	4761400	Lockwasher 1/4"	4	
50	3251837	Decal - Battery and Oil Tank Heaters	1	
	3251243	Decal - 120V/60HZ	1	
	0250149	<b>LP TANK AND BRACKETS INSTALLATION</b>	Ref.	D
51	1320126	Bracket	1	
	1320127	Clamp, Latch	1	
52	1320023	Bracket	1 set	
53	3311601	Nut 3/8"-16NC	4	

# SECTION 2 TURNTABLE

**FIGURE 2-26. TANKS INSTALLATION (CONTINUED)**

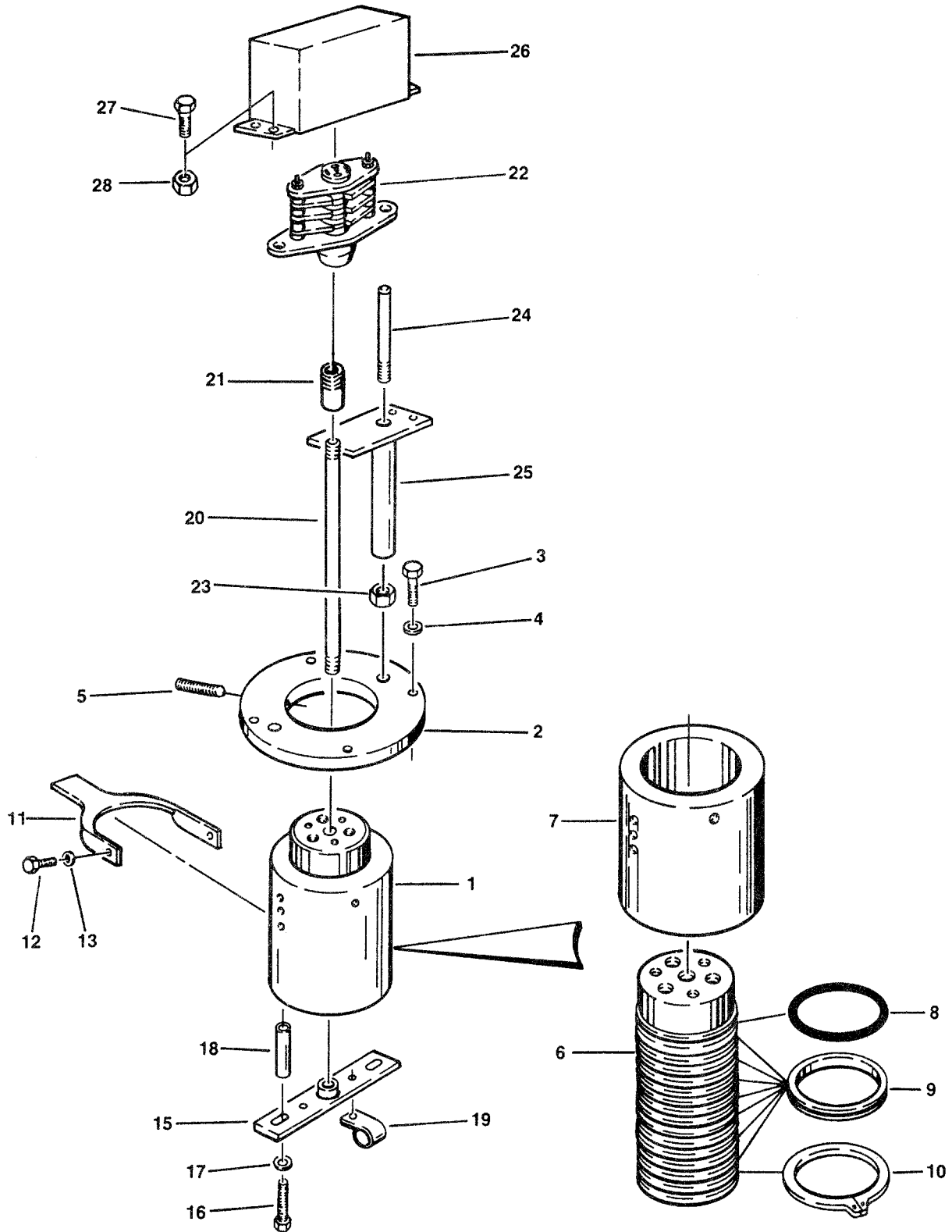
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
54	4761600	Lockwasher 3/8"	4	
55	4751600	Flatwasher 3/8"	4	
56	4400164	Tank, LP (20 Lb.)	2	
	4400040	Tank, LP (33.5 Lb.)	2	
	4400275	Tank, LP (43.5 Lb.)	2	
57	Not Used			
58	4751800	Flatwasher 1/2" (Not Shown - Located between clamp and turntable)	6	

SECTION 2 TURNTABLE

# SECTION 2 TURNTABLE

FIGURE 2-27. ROTARY COUPLING AND COLLECTOR ASSEMBLY AND INSTALLATION

SECTION 2 TURNTABLE



# SECTION 2 TURNTABLE

**FIGURE 2-27. ROTARY COUPLING AND COLLECTOR ASSEMBLY AND INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0238615	<b>ROTARY OIL COUPLING INSTALLATION (2WS)</b>	Ref.	A
	0250611	<b>ROTARY OIL COUPLING INSTALLATION (4WS)</b>	Ref.	C
1	1660160	Oil Coupling Assembly (2WS) (Includes Items 6-10)	1	B
	1660185	Oil Coupling Assembly (4WS) (Includes Items 6-10)	1	B
2	1440154	Collar	1	
3	0641512	Bolt 5/16"-18NC x 1 1/2"	4	
4	4761500	Lockwasher 5/16"	4	
5	3951820	Setscrew, Socket 1/2"-13NC x 2 1/2"	2	
	0100011	Loctite #242	A/R	
-----				
6	0620058	Body, Swivel (2WS)	1	
	0620106	Body, Swivel (4WS)	1	
7	2760091	Housing, Swivel	1	
8	Kit	O-Ring	1	
9	Kit	Seal	7	
10	3760004	Ring, Retaining	1	
		Seal Kit Options:	1	
	2901146	1660160 & 1660185 Couplings (Includes items 8 & 9)	1	
	Use 1660213EX	1660213 Couplings (was p/n 7013175)	1	
<p><b>Note: Due to complexity of repair, seal kit no longer available. Use rebuilt unit as replacement.</b></p>				
-----				
11	3530403	Fork, Retaining	1	
12	0641807	Bolt 1/2"-13NC x 7/8"	2	
13	4761800	Lockwasher 1/2"	2	
	0100019	Loctite #271	A/r	
14	Not Used			
	0251561	<b>COLLECTOR RING ASSEMBLY (4WS ONLY) (PRIOR TO JULY 1991)</b>	Ref.	B
	0252059	<b>COLLECTOR RING ASSEMBLY (4WS ONLY) (JULY 1991 TO PRESENT)</b>	Ref.	A
15	4843822	Bracket Weldment	1	
16	0641418	Bolt 1/4"-20NC x 2 1/4"	2	
17	4761400	Lockwasher 1/4"	2	
	4751400	Flatwasher 1/4"	2	
18	0960224	Bushing	2	
19	1320040	Clamp	1	
	3911012	Screw, Machine #10-24NC x 3/4"	1	
	4751000	Flatwasher #10	1	
	4761000	Lockwasher #10	1	
	3311001	Nut #10-24NC	1	
20	2180763	Pipe	1	
21	0961531	Bushing, Collector Ring	1	
22	3760053	Collector Ring Assembly	1	
23	3311801	Nut 1/2"-13NC	2	
24	3420290	Pin, Drive	2	

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# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

FIGURE 2-27. ROTARY COUPLING AND COLLECTOR ASSEMBLY AND INSTALLATION

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
25	0231047	Guide, Drive (Prior to July 1991)	2	
	4844033	Guide, Drive (July 1991 to Present)	2	
26	1670594	Cover	1	
27	0721004	Screw, Round Head #10-24NC x 1/2"	4	
28	3311001	Nut #10-24NC	4	

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FIGURE 2-27. ROTARY COUPLING AND COLLECTOR ASSEMBLY AND INSTALLATION

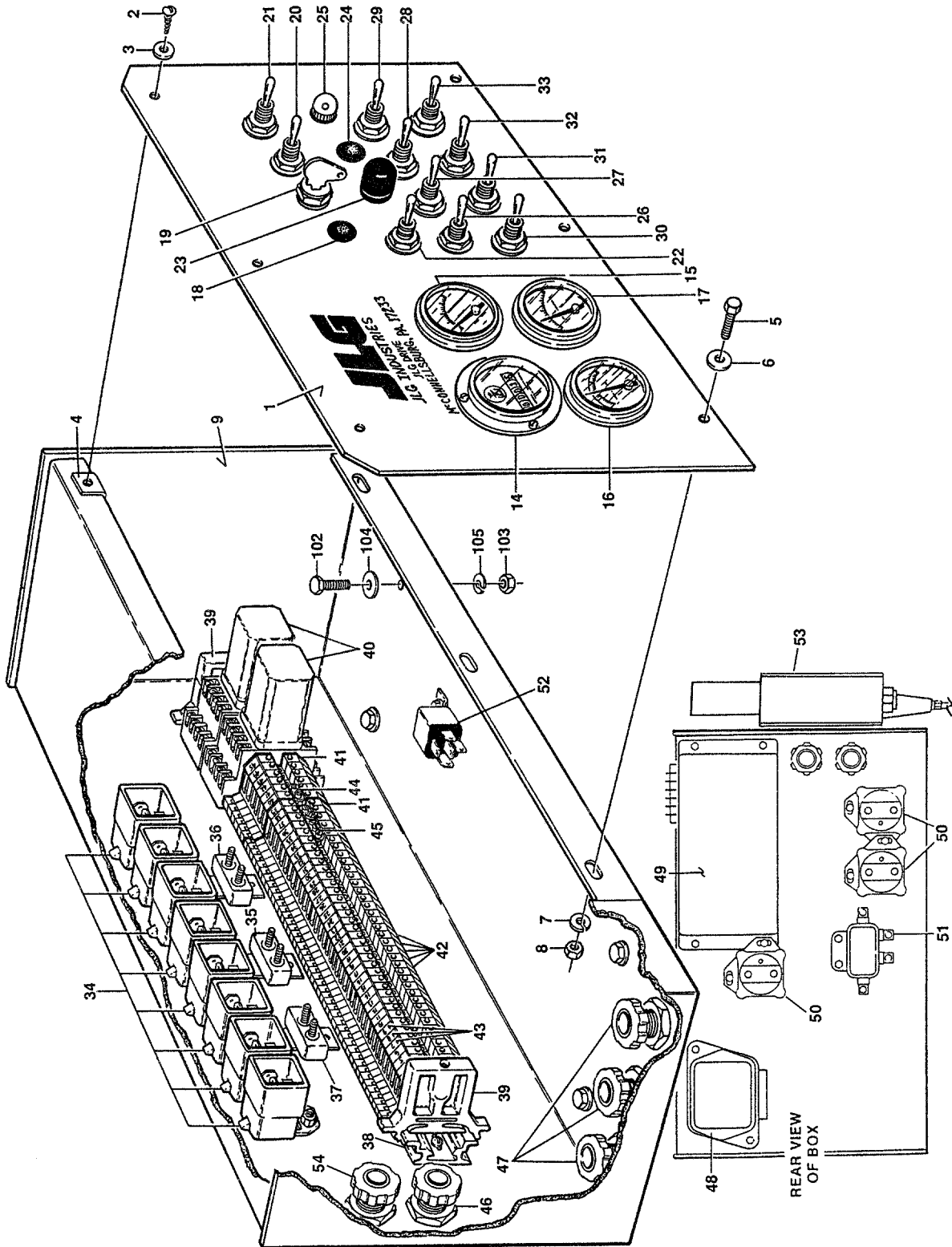
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS

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# SECTION 2 TURNTABLE

**FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281180	<b>GROUND CONTROL BOX ASSEMBLIES</b>	Ref.	X
	0860613	<b>DEUTZ WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	12
	0860751	<b>DEUTZ WITH PROPORTIONAL CONTROLS</b>	Ref.	4
	0860663	<b>DEUTZ WITH HYDRAULIC CONTROLS</b>	Ref.	7
	0860612	<b>FORD WITH STANDARD BANG-BANG CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)</b>	Ref.	1
	0860959	<b>FORD WITH STANDARD BANG-BANG CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	2
	0860780	<b>FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (PRIOR TO FEBRUARY 1993)</b>	Ref.	A
	0860843	<b>FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (FEBRUARY 1993 TO SEPTEMBER 1994)</b>	Ref.	B
	0860957	<b>FORD WITH PROPORTIONAL CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	2
	0860652	<b>FORD WITH HYDRAULIC CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)</b>	Ref.	F
	0860958	<b>FORD WITH HYDRAULIC CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	2
	0860661	<b>KUBOTA WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	F
	0860656	<b>KUBOTA WITH PROPORTIONAL CONTROLS</b>	Ref.	F
1	3251895	Lid		
	4420037	Strip, Rubber (Not Shown)		
2	0750806	Screw, Self-Tapping #8 x 3/4"		
3	4740120	Washer, Fiber		
4	3300177	Nut, Tinnerman		
5	3911412	Screw, Round Head 1/4"-20NC x 3/4"		
6	4751400	Flatwasher 1/4"		
7	4761400	Lockwasher 1/4"		
8	3311401	Nut 1/4"-20NC		
9	0860576	Box		
10 to 13	Not Used			
14	2420009	Hourmeter		
15	2420129	Voltmeter (Ford)		
	2420091	Voltmeter (Deutz and Kubota)		
16	2420128	Gage, Oil Pressure (Ford)		
	2420111	Gage, Oil Pressure (Deutz)		
	2420035	Gage, Oil Pressure (Kubota)		
17	2420127	Gage, Water Temperature (Ford)		
	2420019	Gage, Water Temperature (Kubota)		
	2420125	Gage, Water Temperature (Deutz)		
18	3520026	Plug, Hole (Ford)		
	4360212	Breaker, Circuit (Deutz and Kubota)		
19	4360003	Switch, Key (Master Switch)	1	
	2860002	Key	1	

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
20	4360073	Switch, Toggle (Select)	1	
	3790012	O-Ring	1	
21	3520028	Plug, Hole	1	
	4360201	Switch, Toggle (Dual Fuel)	1	
22	4360199	Switch, Toggle (Ignition)	1	
	4360141	Guard, Switch (Not Shown)	1	
	3790012	O-Ring	1	
23	4360274	Switch, Push Button (Start)	1	
	3790015	O-Ring	1	
24	3520028	Plug, Hole	1	
	4360199	Switch, Toggle (Choke/Glow Plugs) (Kubota)	1	
	3790012	O-Ring (Kubota)	1	
25	3520026	Plug, Hole	1	
26	4360202	Switch, Toggle (Tower Lift) (Standard and Proportional Controls)	1	
	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Main Lift) (Standard and Proportional Controls)	1	
27	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Swing) (Standard and Proportional Controls)	1	
28	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Platform Level) (Standard and Proportional Controls)	1	
29	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Main Tele.) (Standard and Proportional Controls)	1	
30	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Platform Rotate) (Standard and Proportional Controls)	1	
31	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Auxiliary Power)	1	
32	3790012	O-Ring	1	
	3520028	Plug (Hydraulic Controls)	1	
	4360202	Switch, Toggle (Auxiliary Power)	1	
	3790012	O-Ring	1	
33	3740049	Relay - SPDT	A/R	
	3311001	Nut #10-24NC	A/R	
	4761000	Lockwasher #10	A/R	
	4751000	Flatwasher #10	A/R	
34	4360216	Switch, Circuit Breaker - 30 Amp	1	
35	4360232	Switch, Circuit Breaker - 15 Amp	1	
36	4360232	Switch, Circuit Breaker - 15 Amp (Kubota)	1	
37	3640711	Rail	16 5/8"	
	3910606	Screw #6-32NC x 3/8"	2	

# SECTION 2 TURNTABLE

**FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.	
38 (cont'd)	4750600	Flatwasher #6	2		
	4760600	Lockwasher #6	2		
	3310601	Nut #6-32NC	2		
39	4460299	Stop, Terminal	2		
40	3740058	Relay - 4PDT	A/R		
	4120013	Base, Relay	A/R		
	3740063	Spring	A/R		
41	4460300	Barrier, Terminal	2		
42	4460298	Block, Terminal	45		
43	4460301	Marker, Terminal	1		
44	4460308	Bar, Buss - 2 Position (Bang-Bang and Proportional Controls - Qty. 1 and Hydraulic Controls - Qty. 2)	A/R		
	4460305	Screw	A/R		
	4460306	Washer	A/R		
	4460307	Sleeve	A/R		
	45	4460311	Bar, Buss - 5 Position	1	
		4460305	Screw	5	
		4460306	Washer	5	
4460307		Sleeve	5		
46		Connector, Strain Relief Options:	1		
	4460244	Prior to S/N 33813			
	4460071	S/N 33813 to Present			
	0960238	Bushing	1		
	3300048	Nut, Conduit	1		
47	4460051	Connector, Strain Relief	3		
	0960238	Bushing	3		
	3300048	Nut, Conduit	3		
48		Regulator, Voltage (Ford Only) (Supplied with Engine)	1		
	3311001	Nut #10-24NC	2		
	4761000	Lockwasher #10	2		
	4751000	Flatwasher #10	2		
	49	1600117	Controller (Ford Only)	1	
3311001		Nut #10-24NC	4		
4761000		Lockwasher #10	4		
4751000		Flatwasher #10	4		
50		3740067	Relay (Auxiliary Power) (Ford and Deutz)	1	
	3740067	Relay (Auxiliary Power and Glow Plug) (Kubota)	2		
	3740059	Relay (Start) (Kubota Only)	1		
	3311001	Nut #10-24NC	3		
	4761000	Lockwasher #10	3		
	4751000	Flatwasher #10	3		
51	3740029	Relay, Adlo (Ford and Kubota) (Prior to August 1991)	1		
	3740030	Relay, Adlo (Deutz) (Prior to August 1991)	1		
52	3740077	Relay, Bosch (Deutz and Ford) (August 1991 to Present)	1		
	3740049	Relay (Kubota) (August 1991 to Present)	1		
	3311001	Nut #10-24NC	2		
	4761000	Lockwasher #10	2		
	4751000	Flatwasher #10	2		

# SECTION 2 TURNTABLE

SECTION 2 TURNTABLE

**FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
53	0060023	Actuator, Adeco Throttle (Deutz Only)	1	
	7008804	Bellows	1	
	7008829	PC Board	1	
	7008821	Motor	1	
	7008828	Cable	1	
54	4460244	Connector, Strain Relief (S/N 33813 to Present)	1	
	0960238	Bushing	1	
	3300048	Nut, Conduit	1	
55		Plug Options (Not Shown):	A/R	
	3520034	Plug - 5/16"	2	
	3520054	Plug - 7/16"	4	
	3520028	Plug - 1/2"	1	
	3520026	Plug - 5/8"	1	
	3520168	Plug - 3/16"	3	
	1281317	<b>GROUND CONTROL BOX ASSEMBLIES</b>	Ref.	J
	0250911	<b>DEUTZ WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	B
	0252334	<b>DEUTZ WITH PROPORTIONAL CONTROLS</b>	Ref.	A
	0251120	<b>DEUTZ WITH HYDRAULIC CONTROLS</b>	Ref.	B
	0250910	<b>FORD WITH STANDARD BANG-BANG CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)</b>	Ref.	A
	0255142	<b>FORD WITH STANDARD BANG-BANG CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	A
	0252719	<b>FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (PRIOR TO FEBRUARY 1993)</b>	Ref.	—
0253780	<b>FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (FEBRUARY 1993 TO SEPTEMBER 1994)</b>	Ref.	—	
0255140	<b>FORD WITH PROPORTIONAL CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	A	
0250841	<b>FORD WITH HYDRAULIC CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)</b>	Ref.	A	
0255139	<b>FORD WITH HYDRAULIC CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)</b>	Ref.	A	
0251031	<b>KUBOTA WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	C	
0250986	<b>KUBOTA WITH PROPORTIONAL CONTROLS</b>	Ref.	B	
101	Not Used			
102	0641408	Bolt 1/4"-20NC x 1"	4	
103	3311401	Nut 1/4"-20NC	4	
104	4751400	Flatwasher 1/4"	8	
105	4761400	Lockwasher 1/4"	4	

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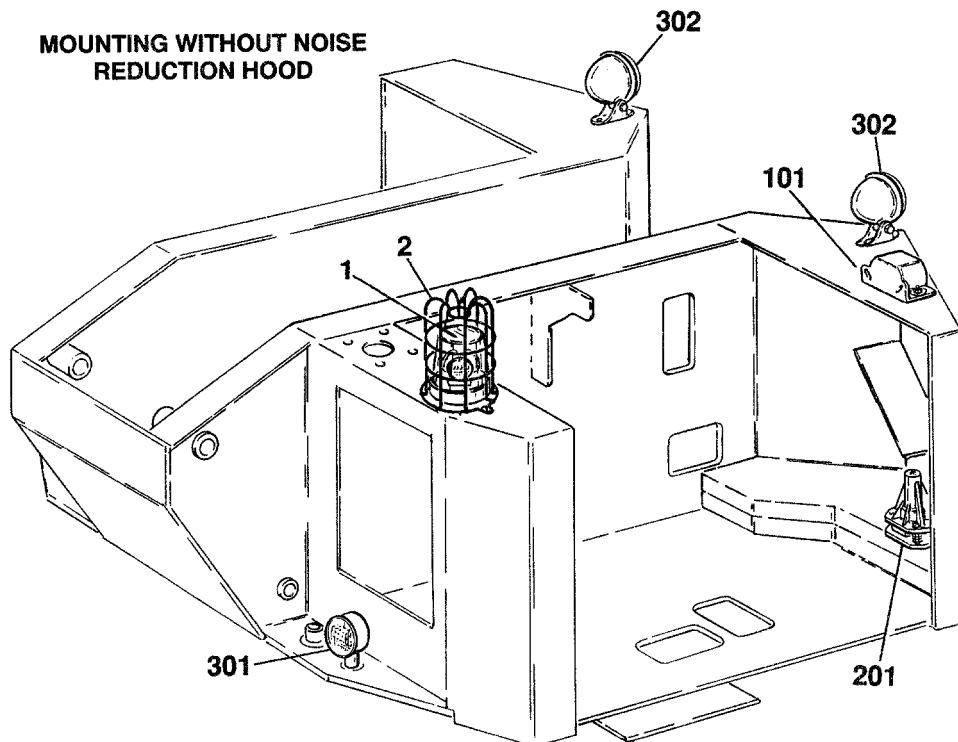
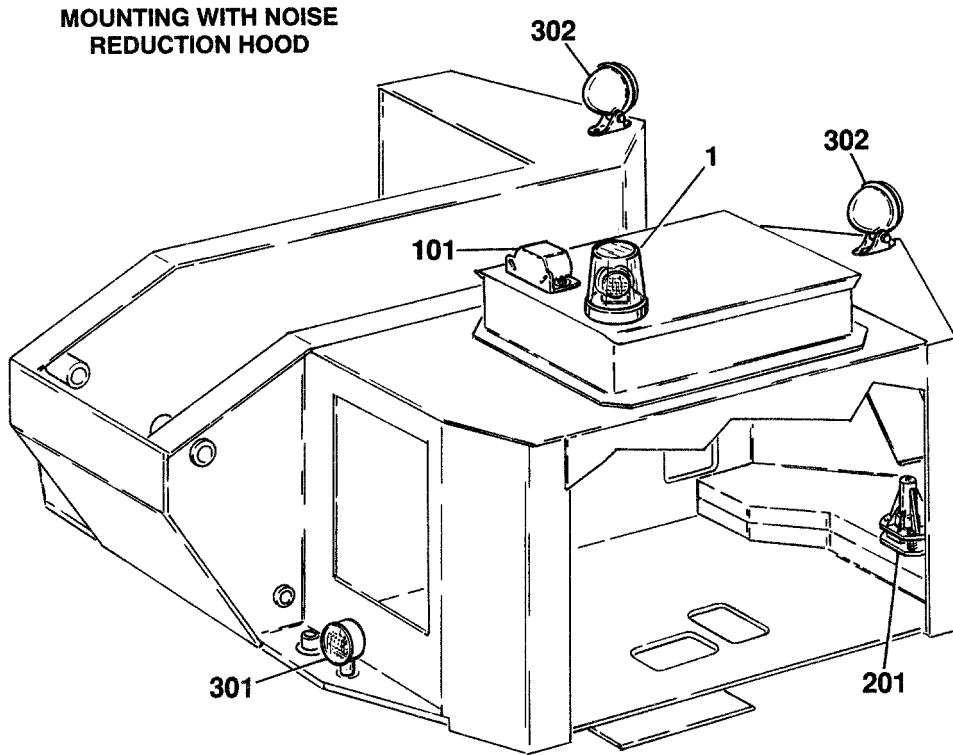
FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

**S  
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# SECTION 2 TURNTABLE

FIGURE 2-29. ELECTRICAL COMPONENTS INSTALLATION (TURNTABLE MOUNTED)



# SECTION 2 TURNTABLE

**FIGURE 2-29. ELECTRICAL COMPONENTS INSTALLATION (TURNTABLE MOUNTED)**

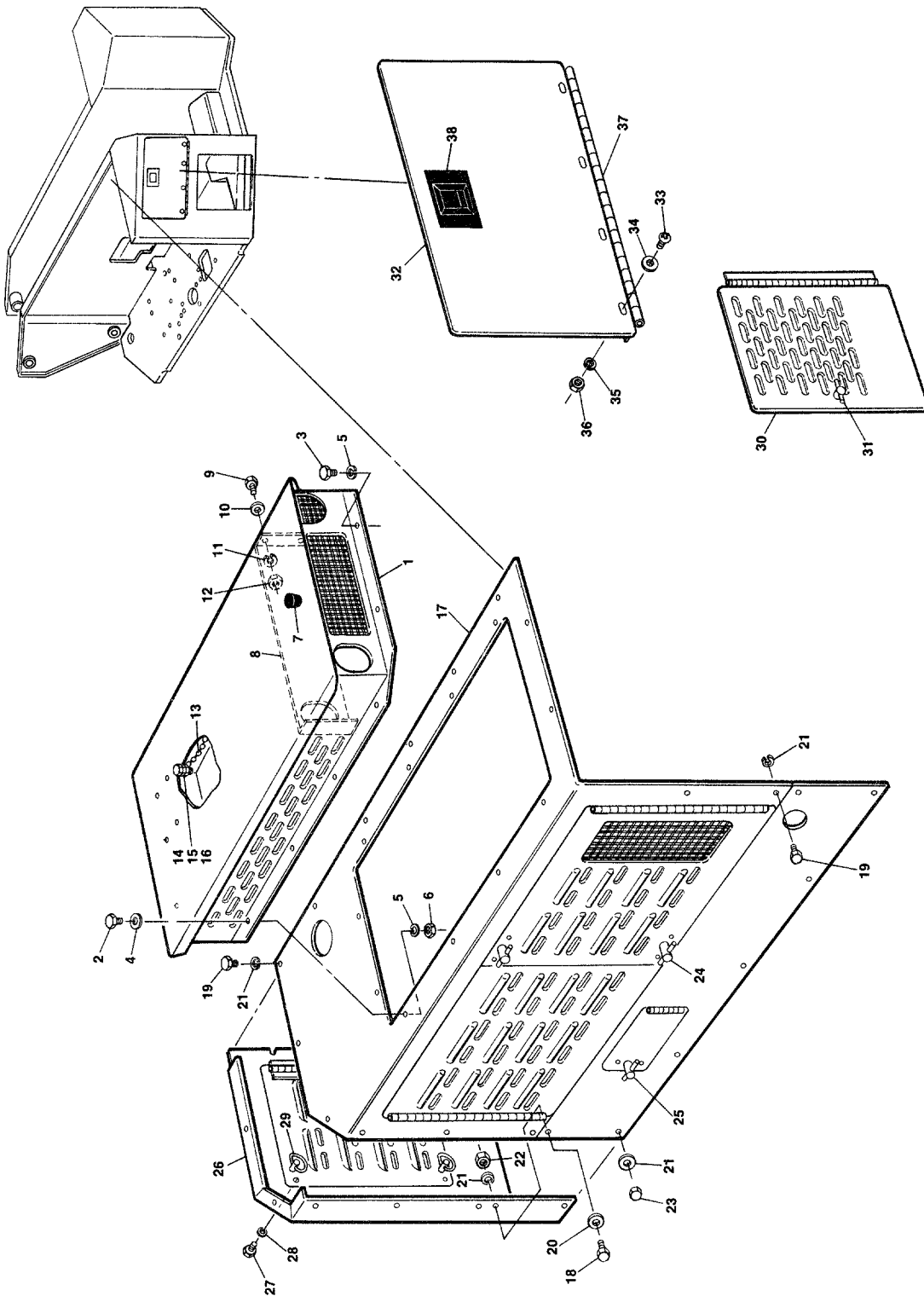
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>ELECTRICAL COMPONENTS INSTALLATION</b>	Ref.	
	0238864	<b>BEACON LIGHT INSTALLATION (AMBER) (PRIOR TO DECEMBER 1990)</b>	Ref.	—
	0251639	<b>BEACON LIGHT INSTALLATION (AMBER) (JANUARY 1990 TO PRESENT)</b>	Ref.	C
	0238865	<b>BEACON LIGHT INSTALLATION (RED) (PRIOR TO DECEMBER 1990)</b>	Ref.	—
	0251640	<b>BEACON LIGHT INSTALLATION (RED) (DECEMBER 1990 TO PRESENT)</b>	Ref.	C
1		Beacon/Strobe Light Options:	1	
	2920018	Beacon - Amber (Prior to January 1993)		
	2920105	Strobe - Amber (January 1993 to Present)		
	2920009	Beacon - Red (Prior to January 1993)		
	2920109	Strobe - Red (January 1993 to Present)		
	2540016	Grommet	1	
	3941404	Screw, Self-Tapping 1/4" x 1/2"	2	
2	4060829	Guard, Beacon (January 1993 to Present Only)	1	
	0641406	Bolt 1/4"-20NC x 3/4"	2	
	3311405	Locknut 1/4"-20NC	2	
	4751400	Flatwasher 1/4" (S/N 27521 to Present)	4	
	0250878	<b>ALARM INSTALLATION</b>	Ref.	E
101		Alarm Options:	1	
	0140024	Alarm (Prior to February 1993)		
	0140032	Alarm (February 1993 to Present)		
	0641406	Bolt 1/4"-20NC x 3/4"	4	
	3311405	Locknut 1/4"-20NC	4	
	4751400	Flatwasher 1/4"	4	
	2540016	Grommet	1	
	0250164	<b>TILT INDICATOR INSTALLATION</b>	Ref.	D
201	4360171	Sensor, Level	1	
	2820022	Tubing, Vinyl	6 in./21cm	
	4300106	Stud, Grooved	2	
	0251697	<b>HEADLIGHTS AND TAILLIGHTS INSTALLATION</b>	Ref.	3
		<b>Note: See Section 10 for Boeing Machines.</b>		
301	2920019	Taillight	2	
	0181739	Angle, Mounting	2	
	4300106	Stud, Drive	6	
302	Use 2920152	Headlight (was p/n 2920001)	2	
	4300031	Stud (Welded on Part)	4	
	4751400	Flatwasher 1/4"	4	
	4761400	Lockwasher 1/4"	4	
	3311401	Nut 1/4"-20NC	4	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

FIGURE 2-30. HOODS INSTALLATIONS (WITH 2 DOORS AT GROUND CONTROL BUILT PRIOR TO AUGUST 1990)

SECTION 2 TURNTABLE





# SECTION 2 TURNTABLE

**FIGURE 2-30. HOODS INSTALLATIONS (WITH 2 DOORS AT GROUND CONTROL BUILT PRIOR TO AUGUST 1990)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281172	<b>HOODS INSTALLATIONS</b>	Ref.	D
	0250166	<b>HOODS INSTALLATION - FORD</b>	Ref.	B
	0250497	<b>HOODS INSTALLATION - DEUTZ</b>	Ref.	B
1	4843567	Ventilator	1	
2	0641406	Bolt 1/4"-20NC x 3/4"	6	
3	3941406	Screw, Self-Tapping 1/4" x 3/4"	6	
4	4751400	Flatwasher 1/4"	6	
5	4761400	Lockwasher 1/4"	12	
6	3311405	Locknut 1/4"-20NC	6	
7	2940051	Latch	1	
8	3533788	Plate, Baffle (Ford Only)	1	
9	0641406	Bolt 1/4"-20NC x 3/4"	4	
10	4751400	Flatwasher 1/4"	4	
11	4761400	Lockwasher 1/4"	4	
12	3311405	Locknut 1/4"-20NC	4	
13	1260017	Chain	15 in.	
14	0641406	Bolt 1/4"-20NC x 3/4"	2	
15	3311401	Nut 1/4"-20NC	2	
16	3311405	Locknut 1/4"-20NC	2	
17	4843395	Hood (Ford)	1	
	4843517	Hood (Deutz) (Not Shown)	1	
		<b>Note: Replacement Decals Must be Ordered Separately - See Section 8.</b>	Ref.	
18	0641406	Bolt 1/4"-20NC x 3/4"	6	
19	3941406	Screw, Self-Tapping 1/4" x 3/4"	5	
20	4751400	Flatwasher 1/4"	6	
21	4761400	Lockwasher 1/4"	16	
22	3311405	Locknut 1/4"-20NC	6	
23	3300151	Nut, Acorn	5	
	4300031	Stud (Welded on Part)	5	
24	2940048	Latch (Main Doors)	2	
	3820019	Rivet	4	
25	2940050	Latch (Access Door)	1	
	3820012	Rivet	2	
26	4843396	Cover, Front (Standard and Proportional Controls)	1	
	4843701	Cover, Front (Hydraulic Controls)	1	
27	3941406	Screw, Self-Tapping 1/4" x 3/4"	3	
28	4761400	Lockwasher 1/4"	3	
29	2940048	Latch	2	
	3820019	Rivet	4	
30	4843398	Door, Battery Access	1	
31	2940048	Latch	1	
	3820019	Rivet	2	
32	1780245	Door, Ground Control	1	
33	3911412	Screw, Machine 1/4"-20NC x 3/4"	4	
34	4751400	Flatwasher 1/4"	4	

# SECTION 2 TURNTABLE

FIGURE 2-30. HOODS INSTALLATIONS (WITH 2 DOORS AT GROUND CONTROL BUILT PRIOR TO AUGUST 1990)

SECTION 2 TURNTABLE

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
35	4761400	Lockwasher 1/4"	4	
36	3311401	Nut 1/4"-20NC	4	
37	2600157	Hinge	1	
38	2940057	Latch, Sliding	1	

# SECTION 2 TURNTABLE

FIGURE 2-30. HOODS INSTALLATIONS (WITH 2 DOORS AT GROUND CONTROL BUILT PRIOR TO AUGUST 1990)

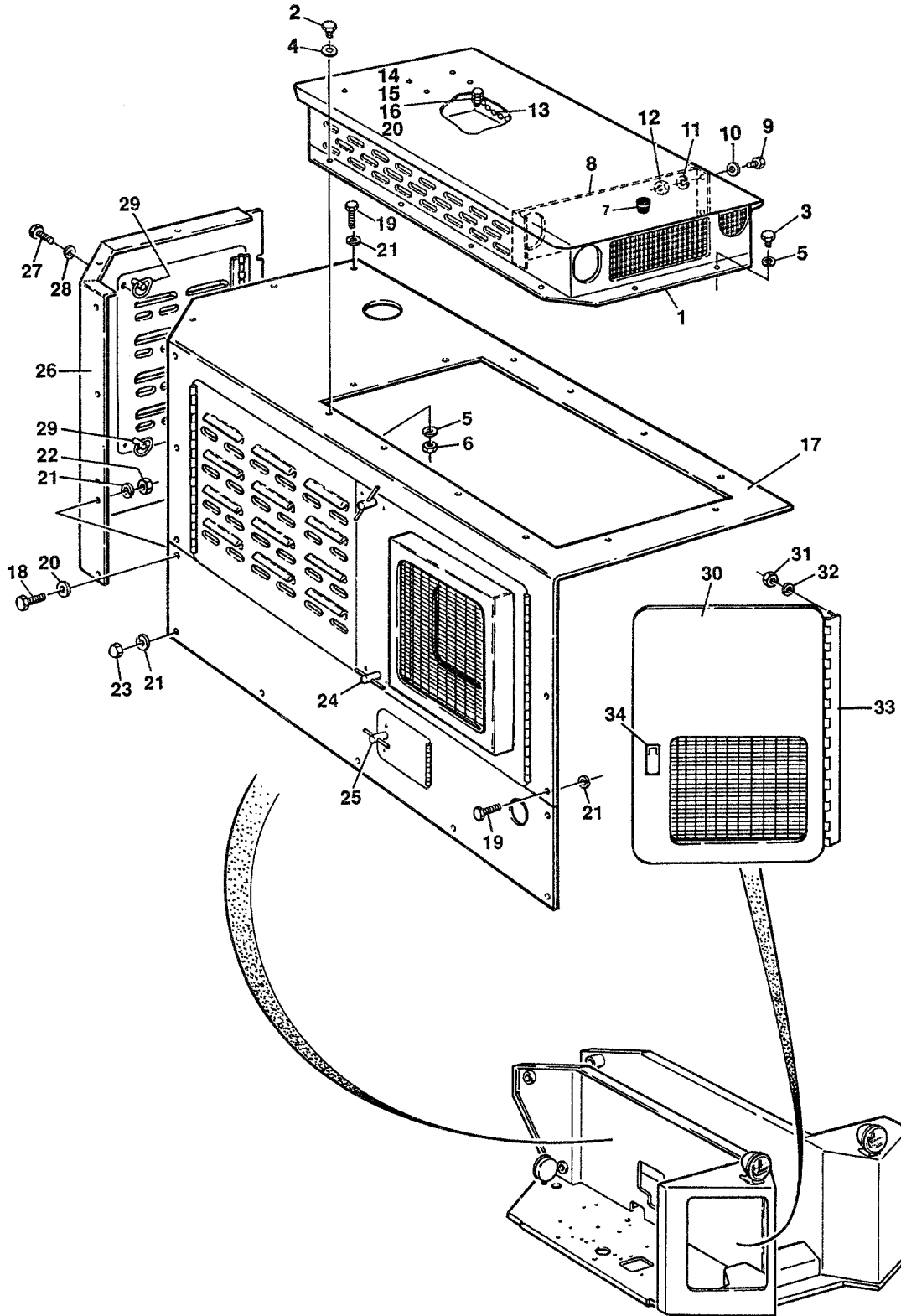
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-31. HOODS INSTALLATIONS (WITH SINGLE DOOR AT GROUND CONTROL) (AUGUST 1990 TO PRESENT WITHOUT NOISE REDUCTION OPTION)

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# SECTION 2 TURNTABLE

**FIGURE 2-31. HOODS INSTALLATIONS (WITH SINGLE DOOR AT GROUND CONTROL) (AUGUST 1990 TO PRESENT WITHOUT NOISE REDUCTION OPTION)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1281318	<b>HOODS INSTALLATIONS</b>	Ref.	E
	0250857	<b>HOODS INSTALLATION - DEUTZ (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)</b>	Ref.	D
	0250858	<b>HOODS INSTALLATION - DEUTZ (HYDRAULIC CONTROLS)</b>	Ref.	E
	0250856	<b>HOODS INSTALLATION - FORD/KUBOTA (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)</b>	Ref.	D
	0250842	<b>HOODS INSTALLATION - FORD/KUBOTA (HYDRAULIC CONTROLS) (AUGUST 1990 TO MAY 1993)</b>	Ref.	E
	0253619	<b>HOOD INSTALLATION - FORD/KUBOTA (MAY 1993 TO PRESENT)</b>	Ref.	2
1	4843567	Ventilator (Deutz - August 1990 to October 1991)	1	
	4843567	Ventilator (Ford/Kubota - August 1990 to May 1993)	1	
	4843744	Ventilator (Ford/Kubota - May 1993 to Present)	1	
2	0641406	Bolt 1/4"-20NC x 3/4"	6	
3	3941406	Screw, Self-Tapping 1/4" x 3/4"	6	
4	4751400	Flatwasher 1/4"	12	
5	4761400	Lockwasher 1/4"	12	
6	3311405	Locknut 1/4"-20NC	A/R	
7	2940051	Latch	1	
8	4843788	Plate, Baffle (Ford/Kubota August 1990 to May 1993 Only)	1	
9	0641406	Bolt 1/4"-20NC x 3/4"	4	
10	4751400	Flatwasher 1/4"	4	
11	4761400	Lockwasher 1/4"	4	
12	3311405	Locknut 1/4"-20NC	4	
13	1260017	Chain	15 in./38cm	
14	0641408	Bolt 1/4"-20NC x 7/8"	A/R	
15	3311405	Locknut 1/4"-20NC	A/R	
16	4711400	Flatwasher 1/4"	A/R	
17	4843517	Hood (Deutz - August 1990 to October 1991)	1	
	4843585	Hood (Ford, Kubota - August 1990 to May 1993)	1	
	4843746	Hood (Ford/Kubota - May 1993 to Present)	1	
		<b>Note: Replacement Decals Must be Ordered Separately - See Section 8.</b>	Ref.	
18	0641406	Bolt 1/4"-20NC x 3/4"	A/R	
19	3941406	Screw, Self-Tapping 1/4" x 3/4"	5	
20	4751400	Flatwasher 1/4"	A/R	
21	4761400	Lockwasher 1/4"	16	
22	3311405	Locknut 1/4"-20NC	A/R	
23	3300151	Nut, Acorn	A/R	
	4300031	Stud (Welded on Part)	5	
24	2940048	Latch (Main Doors)	2	
	3820019	Rivet	4	
25	2940050	Latch (Access Door)	1	
	3820012	Rivet	2	

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**FIGURE 2-31. HOODS INSTALLATIONS (WITH SINGLE DOOR AT GROUND CONTROL) (AUGUST 1990 TO PRESENT WITHOUT NOISE REDUCTION OPTION)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
26		Cover Options:	1	
	4843396	Deutz with Standard Bang-Bang and Proportional Controls August 1990 to October 1991		
	4843701	Deutz with Hydraulic Controls August 1990 to October 1991		
	4843396	Ford with Standard Bang-Bang and Proportional Controls August 1990 to May 1993		
	4843701	Ford with Hydraulic Controls August 1990 to May 1993		
	4843701	Ford May 1993 to Present (All Types)		
27	3941406	Screw, Self-Tapping 1/4" x 3/4"	3	
28	4761400	Lockwasher 1/4"	3	
29	2940048	Latch	2	
	3820019	Rivet	4	
30	4843621	Door, Ground Control	1	
31	3311405	Locknut 1/4"-20NC	8	
32	4751400	Flatwasher 1/4"	8	
	4300031	Stud (Welded on Part)	4	
33	2600170	Hinge	1	
	1260017	Chain (Not Shown)	6 in./ 15cm	
	4300031	Stud (Welded on Part)	2	
	3300151	Nut, Acorn 1/4"-20NC	2	
34	2940042	Latch (Includes Mounting Hardware)	1	

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FIGURE 2-31. HOODS INSTALLATIONS (WITH SINGLE DOOR AT GROUND CONTROL) (AUGUST 1990 TO PRESENT WITHOUT NOISE REDUCTION OPTION)

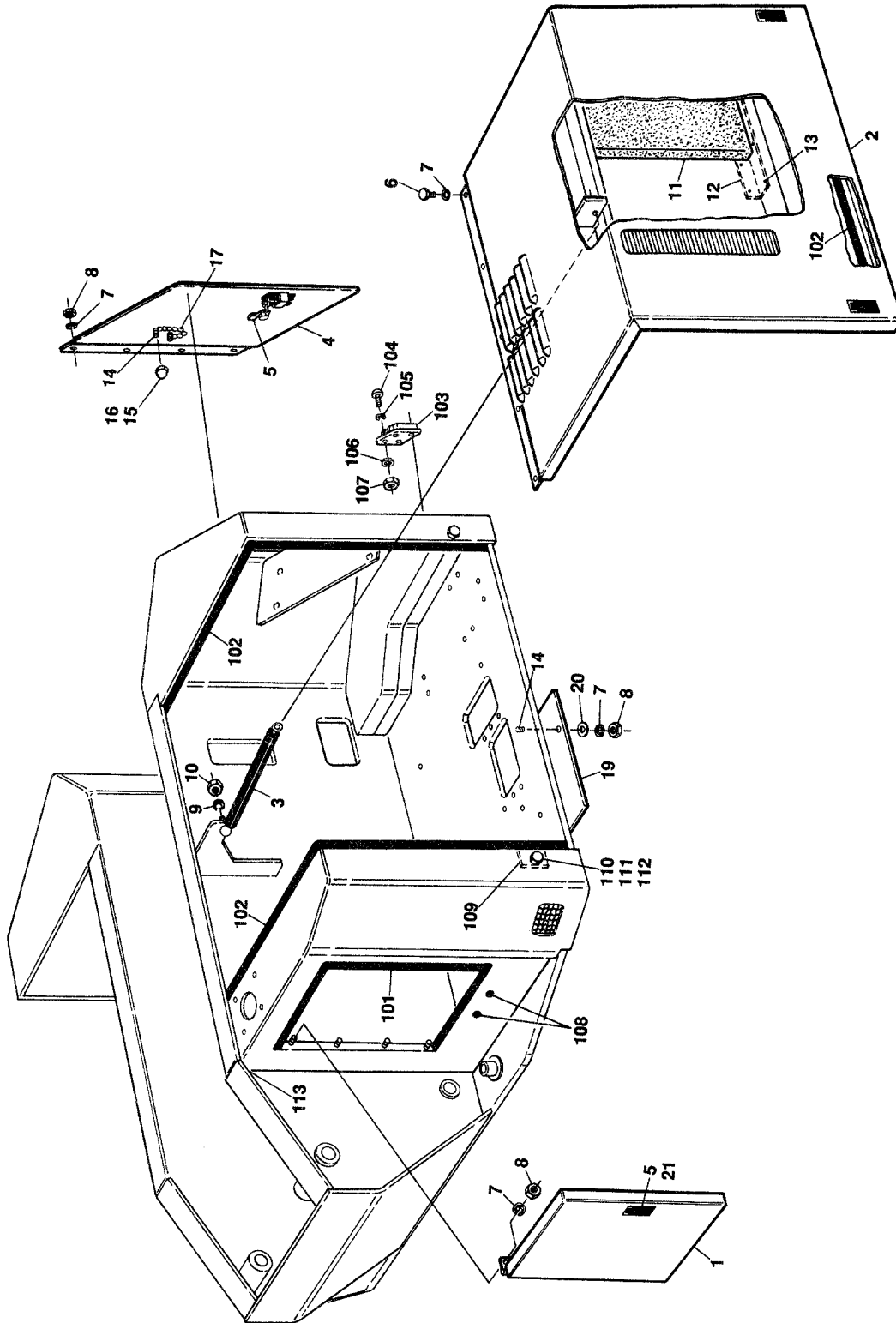
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 2 TURNTABLE

FIGURE 2-32. HOODS INSTALLATIONS (WITH NOISE REDUCTION OPTION)

SECTION 2 TURNTABLE





# SECTION 2 TURNTABLE

**FIGURE 2-32. HOODS INSTALLATIONS (WITH NOISE REDUCTION OPTION)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0252223	<b>HOODS INSTALLATION - DEUTZ OCTOBER 1991 TO PRESENT</b>	Ref.	2
1	4843945	Door	1	
2	4843944	Hood	1	
		<b>Note: Replacement Decals Must be Ordered Separately - See Section 8.</b>	Ref.	
3	4160105	Spring, Gas	1	
4	4843948	Door, Ground Control	1	
5		Latch Options:	4	
	2940042	Prior to S/N 33711		
	2940113	S/N 33711 to Present		
6	3941406	Screw, Self-Tapping 1/4" x 3/4"	5	
7	4761400	Lockwasher 1/4"	17	
8	3311401	Nut 1/4"-20NC	12	
9	4761500	Lockwasher 5/16"	2	
10	3311501	Nut 5/16"-18NC	2	
11	2820043	Foam, Acoustical	1	
12	3535519	Plate, Cover	1	
13	2820012	Rivet	8	
14	4300031	Stud (Welded on Part)	6	
15	0100011	Loctite #242 (Not Shown)	A/R	
16	3300151	Nut, Acorn 1/4"-20NC	2	
17	1260017	Chain	6"/21cm	
18	Not Used			
19	1670609	Cover	1	
20	4751400	Flatwasher 1/4"	4	
21	2940070	Pawl, Latch (Prior to S/N 33711)	1	
	0252231	<b>HARDWARE INSTALLATION</b>	Ref.	C
101	3960417	Seal, Door	10 ft./3m	
102	3960418	Seal	14 ft./4.3m	
103	1670612	Cover, Access	1	
104	0721008	Screw, Machine #10-24NC x 1"	4	
105	4761000	Lockwasher #10	4	
106	4751000	Flatwasher #10	4	
107	3311001	Nut #10-24NC	4	
108	3520030	Plug, Hole	2	
109	4060832	Shield, Seal	2	
110	0641404	Bolt 1/4"-20NC x 1/2"	2	
111	4751400	Flatwasher 1/4"	2	
112	3311405	Locknut 1/4"-20NC	2	
113	0100040	Sealant	A/R	

**SECTION 2 TURNTABLE**

# SECTION 2 TURNTABLE

FIGURE 2-32. HOODS INSTALLATIONS (WITH NOISE REDUCTION OPTION)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 3 BOOM

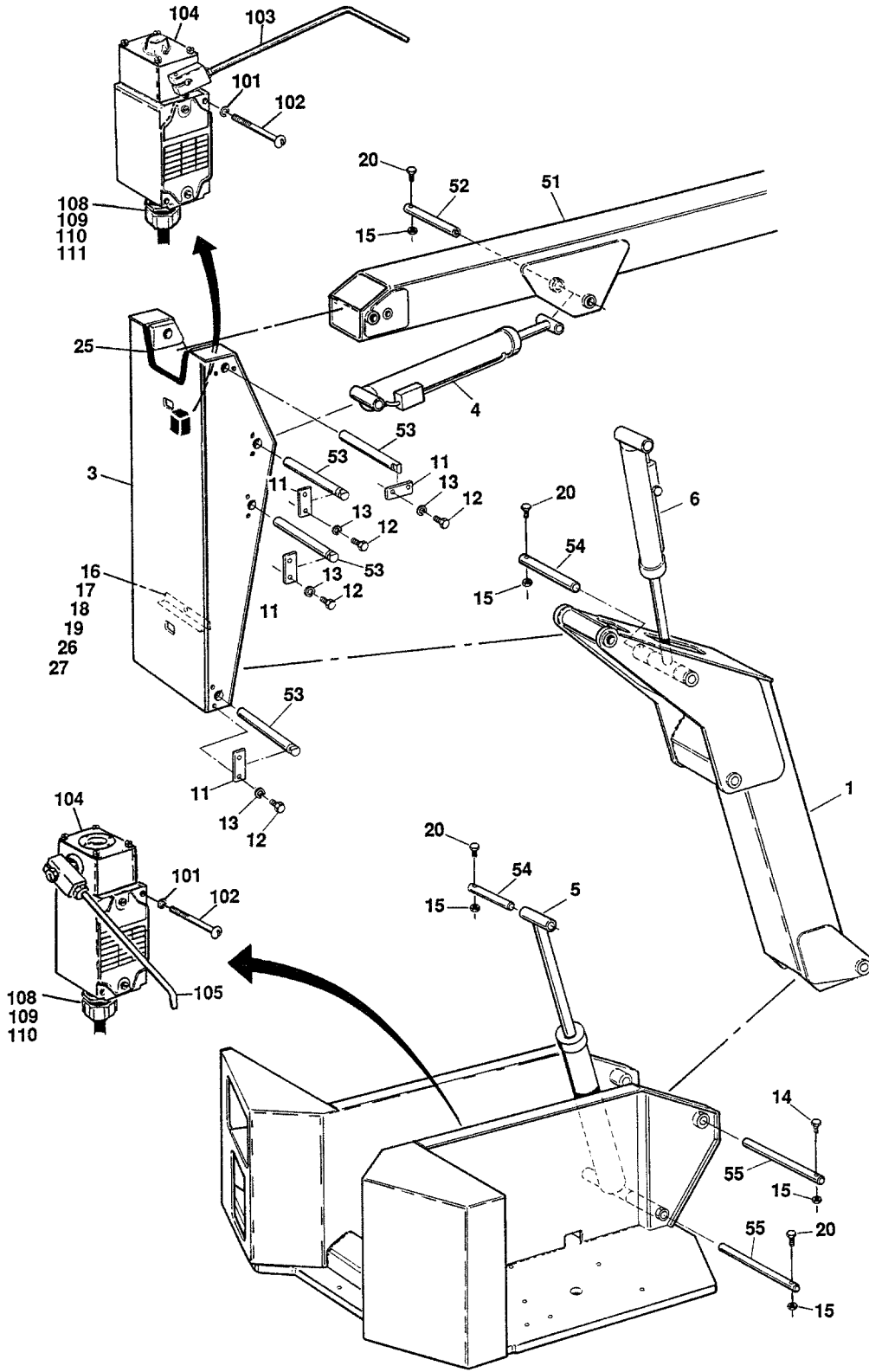
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# SECTION 3 BOOM

FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS

SECTION 3 BOOM



# SECTION 3 BOOM

**FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>BOOM INSTALLATION (STANDARD PARTS)</b>	Ref.	
1	0800618	Boom, Tower	1	D
	0960827	Bushing, Bronze	4	
2	Not Used			
3		Upright Weldment Options:	1	
	4843330	Upright (Prior to October 1992)		
	4844453	Upright (October 1992 to Present)		
4		Main Lift Cylinder Assembly Options (See Section 5 for Breakdown):	1	
	1682124	Cylinder (Prior to October 1992)		
	1682799	Cylinder - 4 ft., 5 ft. and 6 ft. (1.2m, 1.5m, 1.8m)		
		Wide Platform (October 1992 to Present)		
	9983275	Cylinder - 8 ft. (2.4m) Wide Platform (Prior to October 1992)		
	9983596	Cylinder - 8 ft. (2.4m) Wide Platform (October 1992 to Present)		
5		Tower Lift Cylinder Assembly Options (See Section 5 for Breakdown):	1	
	1682085	Cylinder (Prior to October 1992)		
	1682785	Cylinder (October 1992 to Present)		
	1683528	Cylinder (Post Production Alternative)		
6		Upright Level Cylinder Assembly Options (See Section 5 for Breakdown):	1	
	1682255	Cylinder (Prior to October 1992)		
	1682796	Cylinder (October 1992 to Present)		
7	Not Used			
8	Not Used			
9	Not Used			
10	Not Used			
11	3532054	Plate, Retainer	4	
12	0641508	Bolt 5/16"-18NC x 1"	8	
13	4761500	Lockwasher 5/16"	8	
14	0641528	Bolt 5/16"-18NC x 3 1/2"	1	
15	3311505	Locknut 5/16"-19NC	5	
16	0181565	Angle, Hose Retainer	1	
17	4300033	Stud (Welded on Part)	2	
18	3311501	Nut 5/16"-18NC	2	
19	4761600	Lockwasher 3/8"	2	
20	0641522	Bolt 5/16"-18NC x 2 3/4"	4	
21	Not Used			
22	Not Used			
23	Not Used			
24	Not Used			
25	4060808	Flex-Guard	6 ft./1.8m	
26	2720058	Hose	6 in./15cm	
27	4420038	Rubber, Self-Stick	1 ft./ 30.5cm	

**SECTION 3 BOOM**

# SECTION 3 BOOM

**FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>BOOM INSTALLATION (VARIABLE PARTS):</b>	Ref.	
	0239965	<b>DOMESTIC STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH 4 FT., 5 FT. AND 6 FT. (1.2m, 1.5m AND 1.8m) WIDE PLATFORMS</b>	Ref.	J
	0254222	<b>DOMESTIC STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH 8 FT., (2.4m) WIDE PLATFORM</b>	Ref.	B
	0252331	<b>CSA BANG-BANG AND PROPORTIONAL CONTROLS</b>	Ref.	D
	0257467	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH WIDE POWER TRACK</b>	Ref.	3
	0250763	<b>DOMESTIC HYDRAULIC CONTROLS</b>	Ref.	O
	0252332	<b>CSA HYDRAULIC CONTROLS</b>	Ref.	D
51		Main Boom Assembly Options (See Figure 3-2 for Breakdown):	1	
	0800623	Domestic/CSA - Standard Bang-Bang		
	0800676	Domestic/CSA - Standard Bang-Bang W/Wide Power Track & Hydraulic Controls		
	0800676	Standard Bang-Bang W/Wide Power Track		
52		Pin Options:	1	
	3421780	Standard		
	3421994	CSA		
53		Pin Options:	4	
	3421686	Standard		
	3422007	CSA		
54		Pin Options:	2	
	3421687	Standard		
	3422008	CSA		
55		Pin Options:	2	
	3421688	Standard		
	3422009	CSA		
	0250154	<b>BOOM LIMIT SWITCHES INSTALLATION (ABOVE HORIZONTAL)</b>	Ref.	D
101	4761000	Lockwasher #10	4	
102	0721014	Screw, Machine #10-24NC x 1 3/4"	4	
103	0200333	Arm	1	
104	4360057	Switch, Limit	2	
105	4360056	Lever	1	
106	Not Used			
107	Not Used			
108	4460049	Connector, Strain Relief	2	
109	3300047	Locknut, Conduit	2	
110	0960239	Bushing	2	
111	1060300	Cable, Electrical 16/3 (August 1995 to Present)	30ft	

# SECTION 3 BOOM

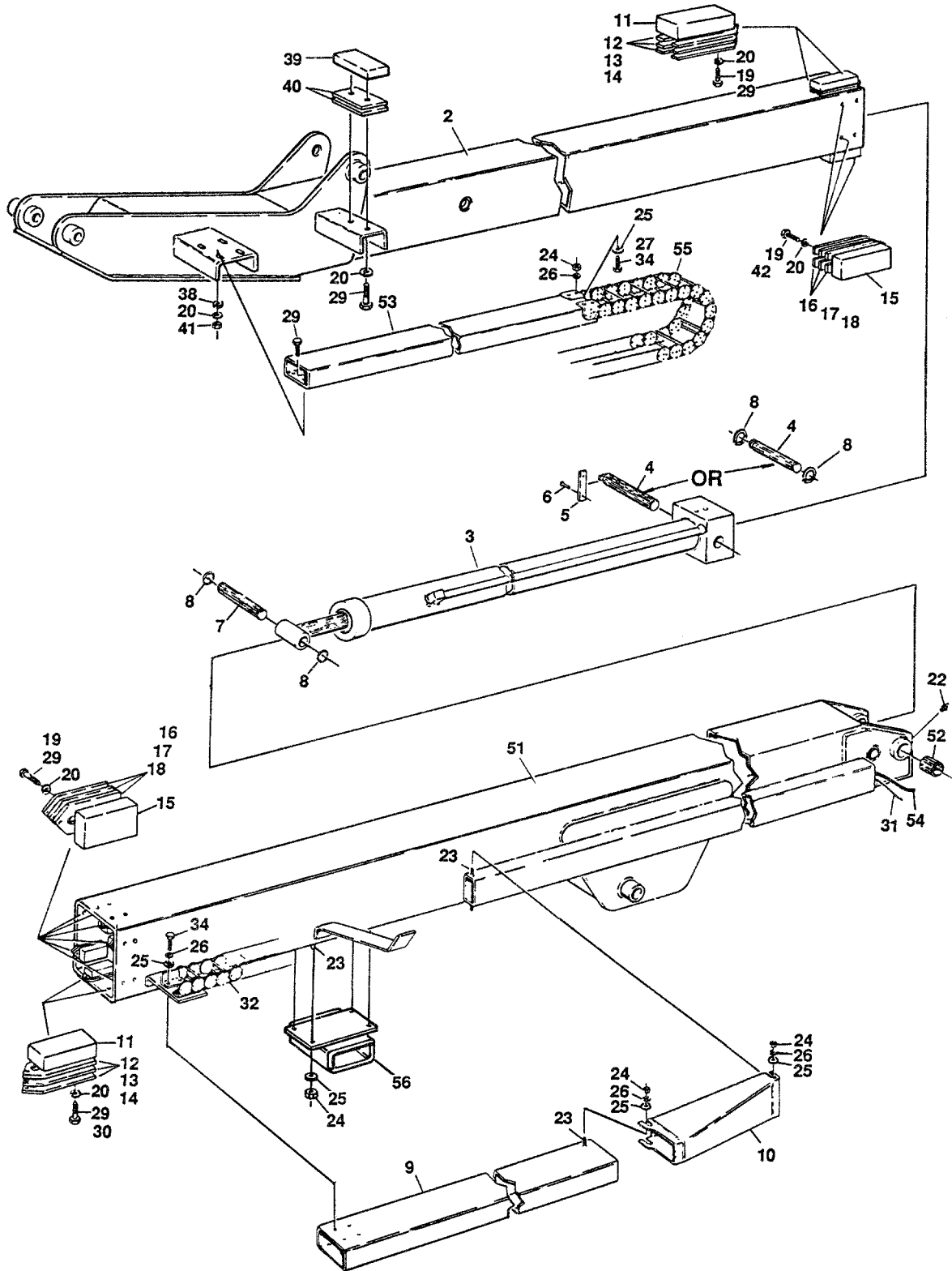
FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 3 BOOM

FIGURE 3-2. MAIN BOOM ASSEMBLY



SECTION 3 BOOM



# SECTION 3 BOOM

**FIGURE 3-2. MAIN BOOM ASSEMBLY**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>BOOM ASSEMBLY (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	0800714	Fly Weldment	1	
3	1681880	Telescope Cylinder Assembly (Machines Built Prior to June 1991) (See Section 5 for Breakdown)	1	
	1682492	Telescope Cylinder Assembly (Machines Built June 1991 to Present) (See Section 5 for Breakdown)	1	
4	3421493	Pin, Attach (Machines Built Prior to February 1992)	1	
	3421771	Pin, Attach (Machines Built February 1992 to Present)	1	
5	3532054	Plate, Retainer (Machines Built Prior to February 1992 Only)	1	
6	0641506	Bolt 5/16"-18NC x 3/4" (Machines Built Prior to February 1992 Only)	2	
7	3421492	Pin, Attach	1	
8	3760133	Ring, Retaining	A/R	
9	4843076	Tube, Hose	1	
10	1670450	Cover, Hose (Machines Built Prior to March 1990)	1	
	1670576	Cover, Hose (Machines Built March 1990 to Present)	1	
11	3340473	Pad, Wear	4	
12	4070676	Shim - 1/8"	A/R	
13	4070677	Shim - 1/16"	A/R	
14	4070678	Shim - 1/32"	A/R	
15	3340552	Pad, Wear	12	
16	4070670	Shim - 1/32"	A/R	
17	4070671	Shim - 1/16"	A/R	
18	4070672	Shim - 1/8"	A/R	
19	0641607	Bolt 3/8"-16NC x 7/8"	16	
20	4761600	Lockwasher 3/8"	46	
21	Not Used			
22	2160007	Fitting, Grease	2	
23	4300031	Stud (Welded on Part)	A/R	
24	3311405	Locknut 1/4"-20NC	A/R	
25	4751400	Flatwasher 1/4"	A/R	
26	4761400	Lockwasher 1/4"	16	
27	Not Used			
28	Not Used			
29	0641608	Bolt 3/8"-16NC x 1"	22	
30	Not Used		A/R	
31		Cable/Harness Options:		
	4920865	Harness (Prior to August 1990)	1	
	1060268	Cable - 12/3 (August 1990 to July 1993)	89.3 ft./ 2.27m	
	1060514	Cable - 12/3 (July 1993 to S/N 33218)	89.3 ft./ 2.27m	
32	Not Used			
33	0641609	Bolt 3/8"-16NC x 1 1/8"	6	
34	0641405	Bolt 1/4"-20NC x 5/8"	8	
35	Not Used			

**SECTION 3 BOOM**

# SECTION 3 BOOM

**FIGURE 3-2. MAIN BOOM ASSEMBLY (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
36		Cable, Electrical - 12/4	65 ft./ 31.8m	
	1060012	Cable (Prior to July 1993)		
	1060515	Cable (July 1993 to Present)		
37	Not Used			
38	4751600	Flatwasher 3/8"	12	
39	0560923	Block	1	
40	4070559	Shim	A/R	
41	3311605	Locknut 3/8"-16NC	8	
42	0641606	Bolt 3/8"-16NC x 3/4"	4	
43	4460052	Connector	1	
44	3300047	Nut, Conduit	1	
45	0960239	Bushing	1	
	0100011	Loctite #242	A/R	
	0800623	<b>BOOM ASSEMBLY - STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (VARIABLE PARTS)</b>	Ref.	12
	0800676	<b>BOOM ASSEMBLY - HYDRAULIC CONTROLS (VARIABLE PARTS)</b>	Ref.	10
51		Base Weldment Options:	1	
	0800573	Standard Bang-Bang & Proportional Controls		
	0800675	Hydraulic Controls		
52	0961597	Bushing, Pivot	2	
53		Cover, Hose Options:	1	
	4843068	Standard Bang-Bang & Proportional Controls		
	4843901	Hydraulic Controls		
54		Cable Options:	65 ft./31.8m	
		Standard Bang-Bang & Proportional Controls		
	1060229	Cable - 16/30 (Prior to July 1993)		
	1060516	Cable - 16/30 (July 1993 to Present)		
		Hydraulic Controls		
	1060019	Cable - 16/12		
55		Carrier Options:	1	
		Standard Bang-Bang & Proportional Controls		
	1180179	Carrier	1	
	7006139	One Foot Section of Powertrack	A/R	
	7006151	Mounting Feet - Powertrack	2 Pr.	
	7006152	Pin Kit (Includes 1 pin, set of 4 washers (different sizes & 1 retaining ring)	A/R	
		Hydraulic Controls		
	1180256	Carrier	1	
	7006141	One Foot Section of Powertrack	A/R	
	7006151	Mounting Feet - Powertrack	2 Pr.	
	7006152	Pin Kit	A/R	
56		Tube, Crossover Options:	1	
	Not Required	Standard Bang-Bang & Proportional Controls		
	4843609	Hydraulic Controls		

SECTION 3 BOOM

# SECTION 3 BOOM

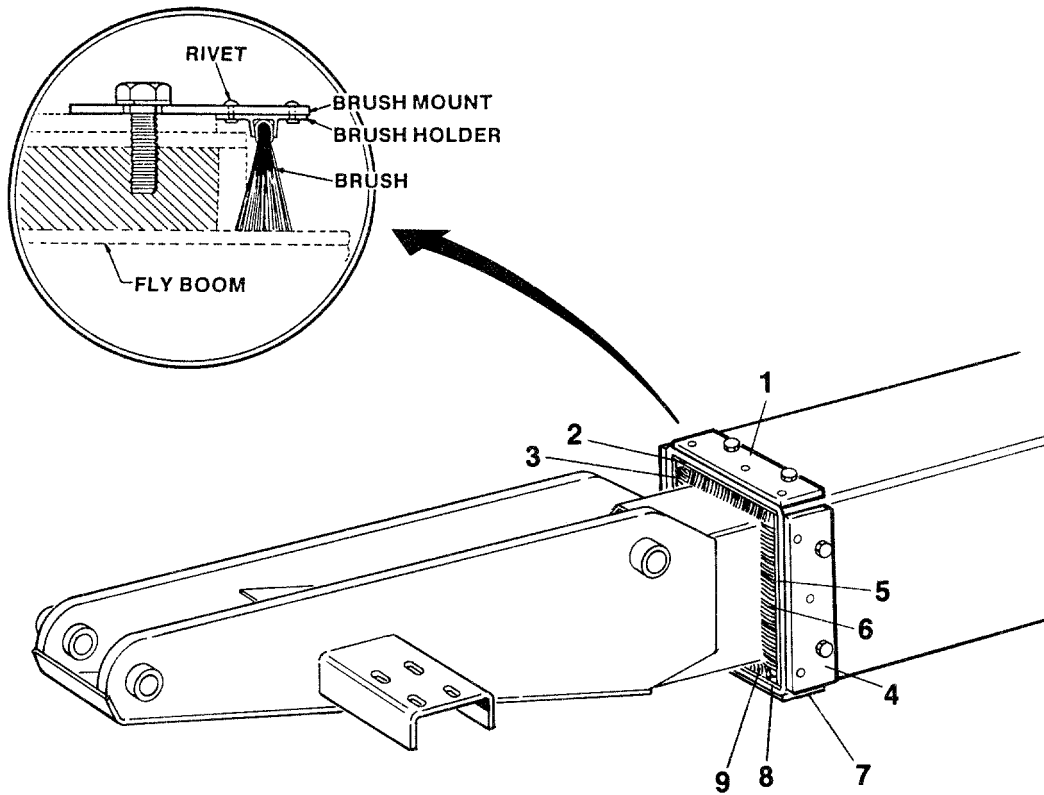
FIGURE 3-2. MAIN BOOM ASSEMBLY (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 3 BOOM

FIGURE 3-3. BOOM WIPERS INSTALLATION



SECTION 3 BOOM

# SECTION 3 BOOM

**FIGURE 3-3. BOOM WIPERS INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250861	<b>BOOM WIPERS INSTALLATION</b>	Ref.	—
1	3200316	Mount, Wiper (Top)	1	
2	2660080	Holder, Blade (Top)	1	
3	0540084	Blade, Wiper (Top)	1	
	3820001	Rivet	3	
4	3200317	Mount, Wiper (Sides)	2	
5	2660081	Holder, Blade (Sides)	2	
6	0540085	Blade, Wiper (Sides)	2	
	3820001	Rivet	6	
7	3200316	Mount, Wiper (Bottom)	1	
8	2660082	Holder, Blade (Bottom)	1	
9	0540086	Blade, Wiper (Bottom)	1	
	3820001	Rivet	3	

**SECTION 3 BOOM**

# SECTION 3 BOOM

FIGURE 3-3. BOOM WIPERS INSTALLATION

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 4 PLATFORM

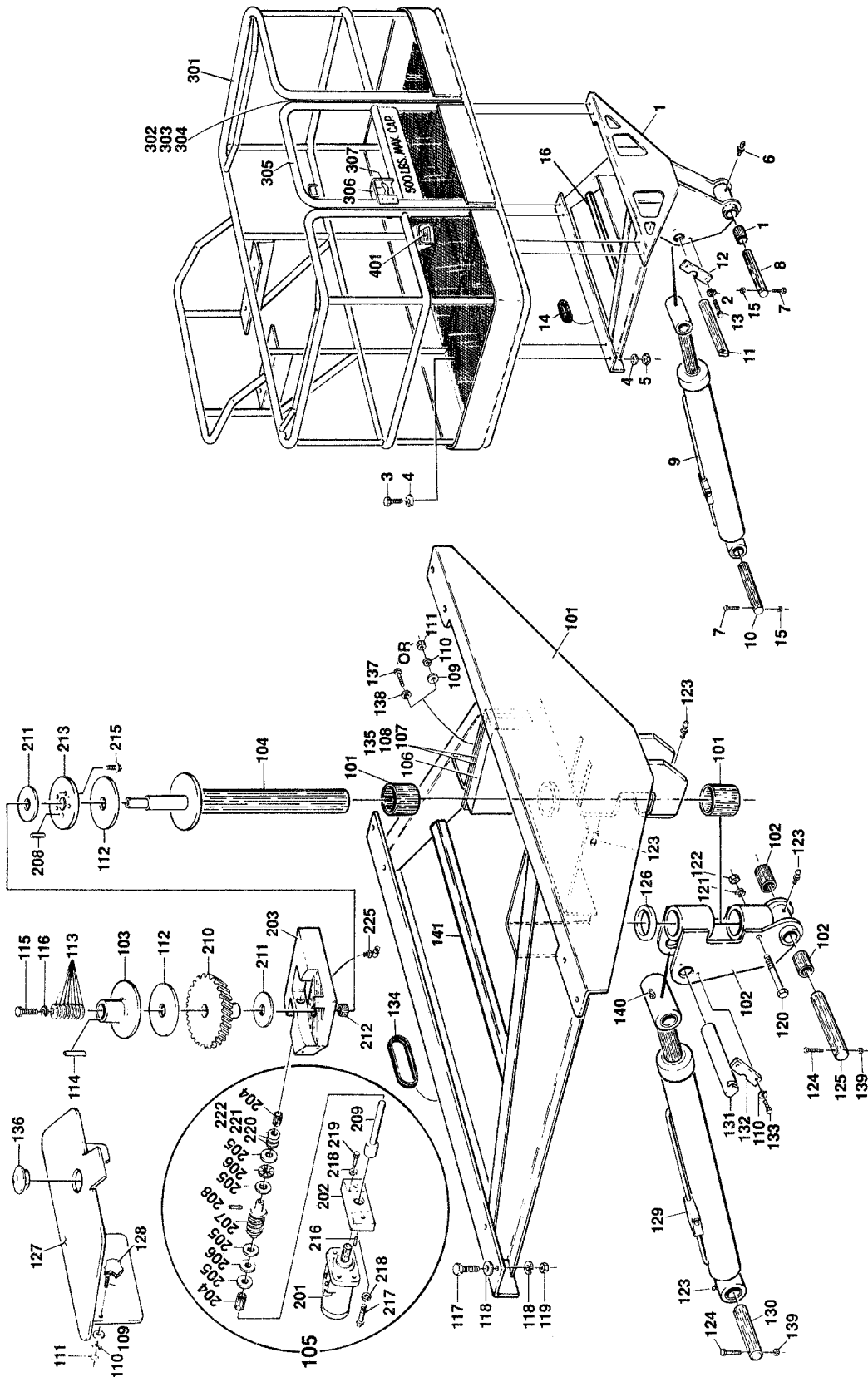
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# SECTION 4 PLATFORM

# SECTION 4 PLATFORM

FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION



SECTION 4 PLATFORM



# SECTION 4 PLATFORM

**FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0238727	<b>FIXED SUPPORT INSTALLATION (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)</b>	Ref.	E
	0251037	<b>FIXED SUPPORT INSTALLATION (HYDRAULIC CONTROLS)</b>	Ref.	B
1	4842978	Support Weldment	1	
	0961257	Bushing, Bronze	2	
2	4761500	Lockwasher 5/16"	2	
3	0681610	Bolt 3/8"-16NC x 1 1/4" (Grade 8)	8	
4	4751600	Flatwasher 3/8"	16	
5	3300143	Locknut 3/8"-16NC	8	
6	2160002	Fitting, Grease	1	
7	0641522	Bolt 5/16"-18NC x 2 3/4"	2	
8	3421490	Pin, Nose	1	
9	1681866	Platform Level Cylinder Assembly (Machines Built Prior to January 1990) (See Section 5 for Breakdown)	1	
	1682178	Platform Level Cylinder Assembly (Machines Built January 1990 to October 1992) (See Section 5 for Breakdown)	1	
	1682793	Platform Level Cylinder Assembly - TUV (Machines Built October 1992 to Present) (See Section 5 for Breakdown)	1	
10	3421491	Pin, Attach (Lower)	1	
11	3421494	Pin, Attach (Upper)	1	
12	3532054	Plate, Retainer	1	
13	0641506	Bolt 5/16"-18NC x 3/4"	2	
14	4060804	Shield, Hose (1/2" Flex-Guard)	10 in./26cm	
15	3311505	Locknut 5/16"-18NC	2	
16	4340596	Support, Hose (Hydraulic Controls Only)	1	
	4300031	Stud (Welded on Part)	2	
	4751400	Flatwasher 1/4"	2	
	3311405	Locknut 1/4"-20NC	2	
	0238568	<b>ROTATING SUPPORT INSTALLATION DOMESTIC (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)</b>	Ref.	M
	0252220	<b>ROTATING SUPPORT INSTALLATION (CSA STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)</b>	Ref.	5
	0251038	<b>ROTATING SUPPORT INSTALLATION (DOMESTIC HYDRAULIC CONTROLS)</b>	Ref.	D
	0252404	<b>ROTATING SUPPORT INSTALLATION (CSA HYDRAULIC CONTROLS)</b>	Ref.	4
101	4843636	Support Weldment	1	
	0961259	Bushing, Bronze	2	
102	0238540	Pivot Attach Weldment (Machines Built Prior to October 1992)	1	
	0253730	Pivot Attach Weldment (TUV Cylinders) (Machines Built October 1992 to Present)	1	
	0961257	Bushing, Bronze	2	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

**FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
103	1120299	Cap	1	
104	4842915	Shaft Weldment (Standard)	1	
	Use 4842915	Shaft Weldment (C.S.A.) (was p/n 4040220)	1	
105	0235238	Rotator Assembly (See Items 201-225 for Break-down)	1	
106	0361675	Block, Stop	1	
107	4070705	Shim 1/8"	A/R	
108	4070706	Shim 1/16"	A/R	
109	4751500	Flatwasher 5/16"	2	
110	4761500	Lockwasher 5/16"	4	
111	3311501	Nut 5/16"-18NC	2	
112	3340454	Pad, Brake	2	
113	4160026	Washer, Bellville	8	
114	2880404	Key, Square	1	
115	0652014	Bolt 5/8"-18NF x 1 3/4"	1	
116	4752000	Flatwasher 5/8"	1	
117	0681610	Bolt 3/8"-16NC x 1 1/4"	8	
118	4751600	Flatwasher 3/8"	16	
119	3300143	Locknut 3/8"-16NC	8	
120	0641836	Bolt 1/2"-13NC x 4 1/2"	1	
121	4751800	Flatwasher 1/2"	1	
122	3311805	Locknut 1/2"-13NC	1	
123	2160002	Fitting, Grease	4	
124	0641522	Bolt 5/16"-18NC x 2 3/4"	2	
125	3421490	Pin, Attach (Standard)	1	
	3421968	Pin, Attach (C.S.A.)	1	
126	4740158	Washer, Thrust	1	
127	1670451	Cover, Rotator	1	
128	4300038	Stud (Welded on Part)	2	
129	1681866	Slave Cylinder Assembly (Machines Built Prior to January 1990) (See Section 5 for Breakdown)	1	
	1682178	Slave Cylinder Assembly (Machines Built January 1990 to October 1992) (See Section 5 for Break-down)	1	
	1682793	Slave Cylinder Assembly - TUV (Machines Built October 1992 to Present) (See Section 5 for Break-down)	1	
130	3421491	Pin, Attach (Lower)	1	
131	3421494	Pin, Attach (Upper)	1	
132	3532054	Plate, Retainer	1	
133	0641506	Bolt 5/16"-18NC x 3/4"	2	
134	4060804	Shield, Hose (Flexguard)	10 in./ 2.6cm	
135	4070707	Shim 1/32"	A/R	
136	3520035	Plug	1	
137	0641816	Bolt 1/2"-13NC x 2"	2	
138	4761800	Lockwasher 1/2"	2	
139	3311505	Locknut 5/16"-18NC	2	
140	2160001	Fitting, Grease	1	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

**FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
141	4340596	Support, Hose (Hydraulic Controls Only)	1	
	4300031	Stud (Welded on Part)	2	
	4751400	Flatwasher 1/4"	2	
	3311405	Locknut 1/4"-20NC	2	
	0235238	<b>ROTATOR ASSEMBLY</b> <b>Note: For Machines Built Prior to September 1991 refer to Service Information Bulletin #91-5 for required upgrade.</b>	Ref.	E
201	3160083	Rotator Motor Assembly (See Figure 4-4 for Break-down)	1	
202	0080099	Adapter, Motor	1	
203	2760064	Housing, Gear	1	
204	0440134	Bearing, Sleeve	2	
205	4740199	Washer, Thrust	4	
206	0440120	Bearing, Thrust	2	
207	2440043	Gear, Worm	1	
208	3440816	Rollpin 1/4" x 1"	4	
209	0080098	Adapter, Motor to Worm Gear	1	
210	2440044	Gear, Worm	1	
211	4740256	Washer, Thrust	2	
212	0440135	Bearing, Sleeve	1	
213	1760068	Disc, Brake	1	
214	Not Used			
215	3931010	Bolt, Socket Head #10-24NC x 5/8"	5	
216	3441228	Rollpin 3/8" x 1 3/4"	2	
217	3931620	Bolt, Socket Head 3/8"-16NC x 1 1/4"	2	
218	4761600	Lockwasher 3/8"	6	
219	3931612	Bolt, Socket Head 3/8"-16NC x 3/4"	4	
220	4070585	Shim .010	A/R	
221	4070586	Shim .005	A/R	
222	4070587	Shim .002	A/R	
223	0100019	Loctite #271 (Not Shown)	A/R	
224	0100021	Primer (Not Shown)	A/R	
225	2160001	Fitting, Grease - 90°	1	
226	3020025	Grease (Not Shown)	A/R	

# SECTION 4 PLATFORM

**FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
301		<b>PLATFORM WELDMENTS</b>	Ref.	
		<b>Note: Replacement Decals Must be Ordered Separately - See Section 8.</b>	Ref.	
		Standard Platform Options:	1	
		30" x 48" Platforms:		
		3510176 Platform for Machines Built Prior to October 1990) (Use 3510236)		
		3510236 Platform for Machines Built October 1990 to Present		
		30" x 60" Platforms:		
		3510170 Platform for Machines with Standard Bang-Bang and Proportional Controls Built Prior to October 1990 (Use 3510237)		
		3510237 Platform for Machines with Standard Bang-Bang and Proportional Controls Built October 1990 to Present		
		3510406 Platform with Slide Bar Gate		
		3510483 Platform for Machines with Standard Bang-Bang and Proportional Controls with Mesh from Bottom to Top Rail		
		3510247 Platform for Machines with Hydraulic Controls		
		3510307 Platform for Machines with Hydraulic Controls with Mesh to Mid-Rail Built April 1991 to Present		
		3510481 Platform for Machines with Hydraulic Controls with Mesh from Bottom Rail to Midrail Built April 1991 to Present		
		3510386 Platform for Ford Spec Machines with Hydraulic Controls		
		30" x 72" Platforms:		
		3510177 Platform for Machines with Standard Bang-Bang and Proportional Controls Built Prior to October 1990 (Use 3510238)		
		3510238 Platform for Machines with Standard Bang-Bang and Proportional Controls Built October 1990 to Present		
		3510656 Platform for Machines with Standard Bang-Bang and Proportional Controls with Mesh from Bottom to Top Rail		
		3510356 Platform for Machines with Hydraulic Controls		
	30" x 96" Platforms:			
	3510253 Platform for Machines with Standard Bang-Bang and Proportional Controls			
	Standard Platform Components	A/R		
302	2600143	Pin, Hinge	2	
303	3311805	Locknut 1/2"-13NC	2	
304	2160006	Fitting, Grease	2	
305	1780224	Door Weldment (Machines Built Prior to October 1990)		
	1780250	Door Weldment (Machines October 1990 to Present)		
306	2940006	Latch, Door	1	
307	2560010	Handle	1	

**SECTION 4 PLATFORM**

# SECTION 4      PLATFORM

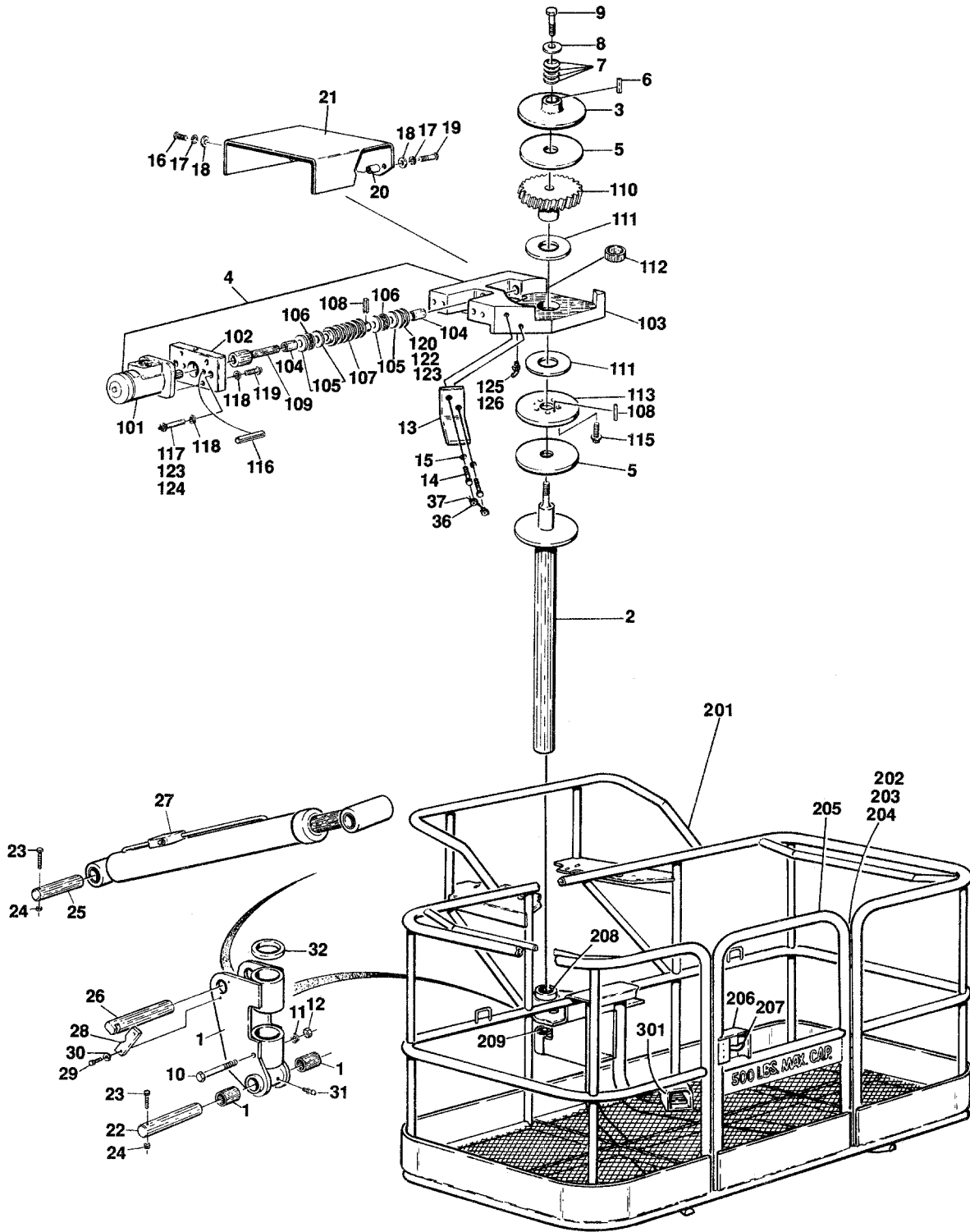
**FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0237963	<b>FOOTSWITCH INSTALLATION</b>	Ref.	7
401	0641408	Bolt 1/4"-20NC x 1"	3	
	3311405	Locknut 1/4"-20NC	3	
	4740362	Washer, Fender	3	
	4360031	Footswitch	1	
	7000625	Block, Contact	2	
	4460071	Connector, Strain Relief	1	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

## FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS



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# SECTION 4 PLATFORM

**FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>SUPPORT INSTALLATIONS</b>	Ref.	
	0250593	<b>ROTATING SUPPORT INSTALLATION - DOMESTIC</b>	Ref.	H
	0252135	<b>ROTATING SUPPORT INSTALLATION - CSA</b>	Ref.	C
	0251252	<b>FIXED SUPPORT INSTALLATION - DOMESTIC (NOT SHOWN)</b>	Ref.	B
	0252136	<b>FIXED SUPPORT INSTALLATION - CSA (NOT SHOWN)</b>	Ref.	A
1	0238540	Pivot Attach Weldment	1	
	0961257	Bushing, Bronze	2	
2		Shaft Weldment Options:	1	
		Rotating Support		
	4040215	Standard		
	4040222	C.S.A.		
		Fixed Support		
	4564579	Standard		
	4040227	C.S.A.		
		<b>Note: Items 3-9 Rotating Support Installation Only.</b>		
3	1120299	Cap	1	
4	0235238	Rotator Assembly (See Items 101-126 for Break-down)	1	
5	3340454	Pad, Brake	2	
6	2880404	Key	1	
7	4160026	Washer, Belleville	8	
8	4752000	Flatwasher 5/8"	1	
9	0652014	Bolt 5/8"-18NF x 1 3/4"	1	
10	0641836	Bolt 1/2"-13NC x 4 1/2"	1	
11	4751800	Flatwasher 1/2"	3	
12	3311805	Locknut 1/2"-13NC	1	
		<b>Note: Items 13-21 Rotating Support Installation Only.</b>		
13	0901756	Bracket	1	
14	0641811	Bolt 1/2"-13NC x 1 3/8"	2	
15	4761800	Lockwasher 1/2"	2	
16	0641404	Bolt 1/4"-20NC x 1/2"	1	
17	4761400	Lockwasher 1/4"	2	
18	4751400	Flatwasher 1/4"	2	
19	0641408	Bolt 1/4"-20NC x 1"	1	
20	4562083	Tube, Spacer	1	
21	1670630	Cover	1	
22	3421490	Pin, Nose (Standard)	1	
	3421968	Pin, Nose (C.S.A.)	1	
23	0641522	Bolt 5/16"-18NC x 2 3/4"	2	
24	3311505	Locknut 5/16"-18NC	2	
25	3421491	Pin, Attach (Lower)	1	
26	3421494	Pin, Attach (Upper)	1	

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# SECTION 4 PLATFORM

**FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
27	1682178	Slave Cylinder Assembly (Machines Built Prior to October 1992) (See Section 5 for Breakdown)	1	
	1682793	Slave Cylinder Assembly - TUV (Machines Built October 1992 to Present)		
28	3532054	Plate, Retainer	1	
29	0741506	Bolt 5/16"-18NC x 3/4"	2	
30	4761500	Lockwasher 5/16"	2	
31	2160002	Fitting, Grease	3	
32	4740158	Washer, Thrust	1	
		<b>Note: Items 33-35 Fixed Support Installation Only.</b>		
33	4220137	Bar, Stop	2	
34	1320160	Clamp (Not Shown)	1	
35	3520035	Plug	1	
		<b>Note: Items 36-37 Rotating Support Installation Only.</b>		
36	1380137	Clip Retainer	1	
37	4920986	Wire, Mechanics	1 ft./3m	
	0235238	<b>ROTATOR ASSEMBLY:</b>	Ref.	E
		<b>Note: For Machines Built Prior to September 1991 refer to Service Information Bulletin #91-5 for required upgrade.</b>		
101	3160083	Rotator Motor Assembly (See Figure 4-4 for Breakdown)	1	
102	0080099	Adapter, Motor	1	
103	2760064	Housing, Gear	1	
104	0440134	Bearing, Sleeve	2	
105	4740199	Washer, Thrust	4	
106	0440120	Bearing, Thrust	2	
107	2440043	Gear, Worm	1	
108	3440816	Rollpin 1/4" x 1"	4	
109	0080098	Adapter, Motor to Worm Gear	1	
110	2440044	Gear, Worm	1	
111	4740256	Washer, Thrust	2	
112	0440135	Bearing, Sleeve	1	
113	1760068	Disc, Brake	1	
114	Not Used			
115	3931010	Bolt, Socket Head #10-24NC x 5/8"	5	
116	3441228	Rollpin 3/8" x 1 3/4"	2	
117	3931620	Bolt, Socket Head 3/8"-16NC x 1 1/4"	2	
118	4761600	Lockwasher 3/8"	6	
119	3931612	Bolt, Socket Head 3/8"-16NC x 3/4"	4	
120	4070585	Shim .010	A/R	
121	4070586	Shim .005	A/R	
122	4070587	Shim .002	A/R	
123	0100019	Loctite #271	A/R	
124	0100021	Primer	A/R	
125	2160001	Fitting, Grease - 90°	1	
126	3020025	Grease	A/R	

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# SECTION 4 PLATFORM

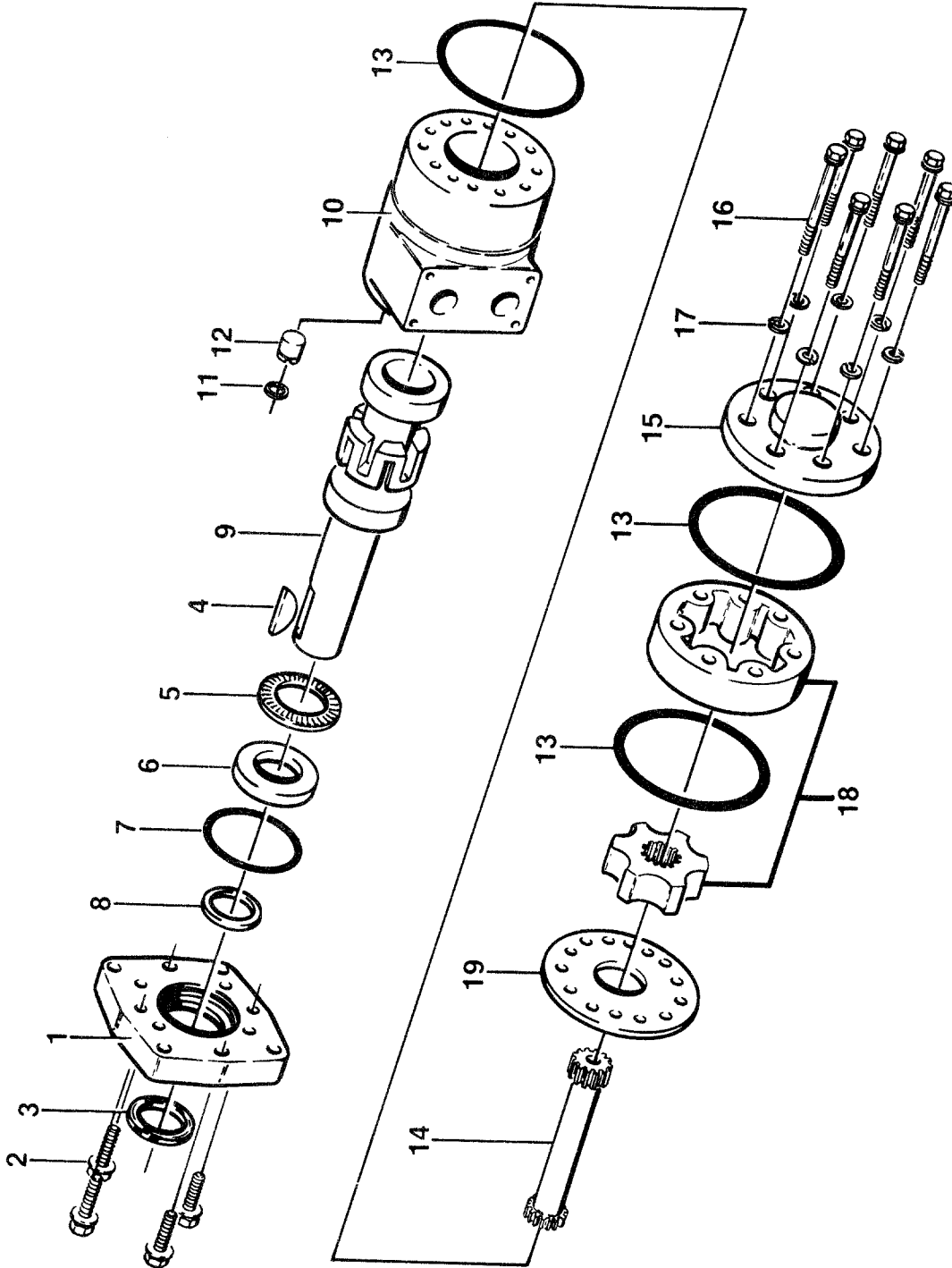
**FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>PLATFORM WELDMENTS</b>	Ref.	
		<b>Note: Replacement Decals Must be Ordered Separately - See Section 8.</b>	Ref.	
201		Low Mount Platform Options:	1	
	3510239	30" x 48" Platforms: Platform		
	3510323	Platform with Bumpers		
		30" x 60" Platforms:		
	3510240	Platform		
	3510261	Platform with Bumpers		
	3510480	Platform with Mesh to Mid-Rail		
	3510482	Platform with Mesh to Top Rail		
		30" x 72" Platforms:		
	3510241	Platform		
		30" x 96" Platforms:		
	3510242	Platform with Bumpers		
		Standard Platform Components	A/R	
202	2600143	Pin, Hinge	2	
203	3311805	Locknut 1/2"-13NC	2	
204	2160006	Fitting, Grease	2	
205	1780224	Door Weldment (Machines Built Prior to April 1990)	1	
	1780250	Door Weldment (Machines Built April 1990 to Present)	1	
	1780285	Door Weldment (Mesh to Mid Rail)	1	
	1780286	Door Weldment (Mesh to Top Rail)	1	
206	2940006	Latch, Door	1	
207	2560010	Handle	1	
208	0961450	Bushing, Bronze (Top)	1	
209	0961259	Bushing, Bronze (Bottom)	1	
	0237963	<b>FOOTSWITCH INSTALLATION</b>	Ref.	F
301	0641408	Bolt 1/4"-20NC x 1"	3	
	3311401	Nut 1/4"-20NC	3	
	4740362	Washer, Fender	3	
	4360031	Footswitch	1	
	7000625	Block, Contact	2	
	4460071	Connector, Strain Relief	1	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

FIGURE 4-3. ROTATOR MOTOR ASSEMBLY



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# SECTION 4 PLATFORM

**FIGURE 4-3. ROTATOR MOTOR ASSEMBLY**

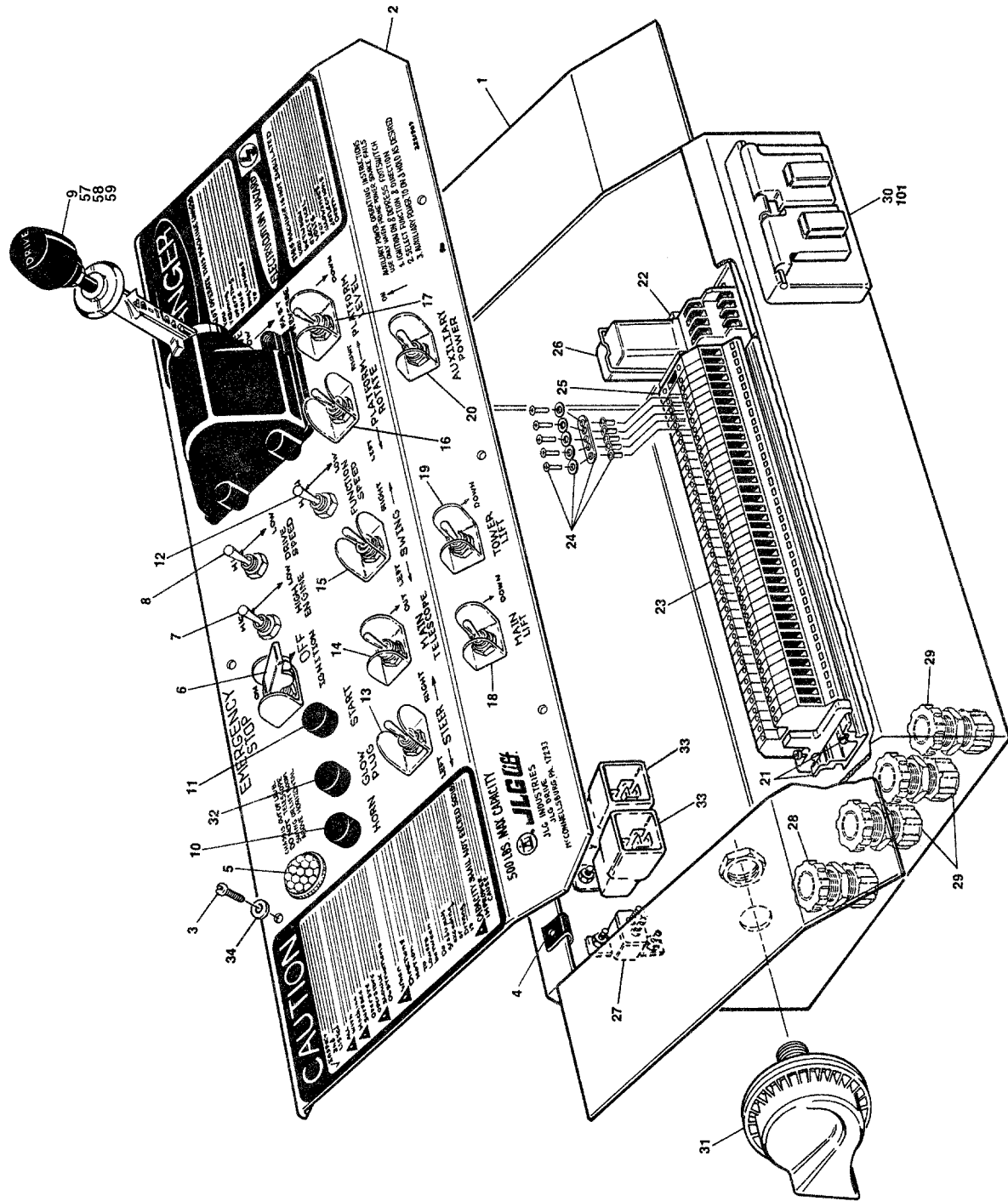
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3160083	<b>ROTATOR MOTOR ASSEMBLY</b>	Ref.	B
1	7002105	Flange, Mounting	1	
2	7002123	Screw, Cap	4	
3	Kit	Seal, Dust	1	
4	7002104	Key, Woodruff	1	
5	7002111	Bearing, Thrust Needle	1	
6	7002117	Thrust, Bearing Race	1	
7	Kit	Seal, O-Ring	1	
8	Kit	Seal, Pressure	1	
9	7002116	Shaft, Output	1	
10	7002103	Housing	1	
11	Kit	Seal	1	
12	7009992	Plug, Housing	1	
13	Kit	Seal, O-Ring	3	
14	7002112	Drive	1	
15	7002107	Cap, End	1	
16	7002100	Screw, Cap	7	
17	7000166	Lockwasher	7	
18	7002125	Gerotor Sub-Assembly	1	
19	7002110	Plate, Spacer	1	
	2900455	Seal Kit (Includes Items 3,7,8,11 and 13) (P/N 101-1009-007)	1	
	2900733	Seal Kit (Includes Items 3,7,8,11 and 13) (P/N 101-1009-008 and 101-1009-009)	1	
		<b>Note: Identify by P/N stamped on nameplate located on Item 10.</b>		

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# SECTION 4 PLATFORM

FIGURE 4-4. CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS)

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**FIGURE 4-4. CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>CONSOLE BOX ASSEMBLIES</b>	Ref.	
	0860622	<b>CONSOLE BOX ASSEMBLY - 2WS FORD/DEUTZ</b>	Ref.	L
	0860660	<b>CONSOLE BOX ASSEMBLY - 2WS KUBOTA</b>	Ref.	I
	0860714	<b>CONSOLE BOX ASSEMBLY - 4WS FORD/DEUTZ</b>	Ref.	F
	0860715	<b>CONSOLE BOX ASSEMBLY - 4WS KUBOTA</b>	Ref.	F
1	4842892	Box, Console	1	
2		Lid Options:	1	
	3251909	Lid (Prior to May 1994)		
	3252362	Lid (May 1994 to November 1994)		
	1702399	Decal, Lid (November 1994 to Present)		
	3538389	Lid, Plate (November 1994 to Present)		
	4420008	Tape, Insulation	52 in./1.3m	
3	0751006	Screw, Pan Head #10-24NC x 3/4"	6	
4	3300177	Nut, Tinnerman	6	
5	2920015	Lamp (Out of Level)	1	
6	4360199	Switch, Toggle (Ignition/Emergency Stop)	1	
	3790012	O-Ring	1	
	4360141	Guard, Switch	1	
7	4360199	Switch, Toggle (High Engine)	1	
	3790012	O-Ring	1	
8	4360199	Switch, Toggle (Drive Speed)	1	
	3790012	O-Ring	1	
9		Controller Options:	1	
	1600116	Controller (2WS)		
	7003783	Electrical Assembly	1	
	2560041	Knob (2WS)		
	1600135	Controller (4WS)		
	7003797	Electrical Assembly	1	
	7003789	Switch, Roller	2	
10	4360274	Switch, Push Button (Horn)	1	
	3790015	O-Ring	1	
11	4360274	Switch, Push Button (Start)	1	
	3790015	O-Ring	1	
12	4360199	Switch, Toggle (Function Speed)	1	
	3790012	O-Ring	1	
13	4360202	Switch, Toggle (Steer)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
14	4360202	Switch, Toggle (Main Telescope)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
15	4360202	Switch, Toggle (Swing)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
16	4360202	Switch, Toggle (Platform Rotate) (With Rotating Platform Only)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	

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# SECTION 4 PLATFORM

**FIGURE 4-4. CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
17	4360202	Switch, Toggle (Platform Level)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
18	4360202	Switch, Toggle (Main Lift)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
19	4360202	Switch, Toggle (Tower Lift)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
20	4360200	Switch, Toggle (Auxiliary Power)	1	
	4060229	Guard, Switch	1	
	3790012	O-Ring	1	
21		Rail Options:	1	
	3640500	Rail (2WS)		
	3640970	Rail (4WS)		
	3910606	Screw, Machine #6-32NC x 3/8"	2	
	4760600	Lockwasher #6	2	
	3310601	Nut #6-32NC	2	
22	4460299	Stop, Terminal	2	
23	4460298	Block, Terminal	A/R	
		2WS - Qty. 40		
		4WS - Qty. 45		
	4460301	Strip, Marking	1	
24	4460311	Bar, Buss - 5 Position	1	
	4460305	Screw	5	
	4460306	Washer	5	
	4460307	Sleeve	5	
25	4460300	Barrier, Terminal	1	
26	3740058	Relay	1	
	4120013	Socket, Relay	1	
	3740063	Spring, Relay	1	
27	4360209	Breaker, Circuit - 20 Amp	1	
	3311001	Nut #10-24NC	1	
	4761000	Lockwasher #10	1	
28	4460244	Connector	1	
	0960238	Bushing	1	
	3300048	Nut, Conduit	1	
29	4460052	Connector	3	
	0960239	Bushing	3	
	3300047	Nut, Conduit	3	
30	0860038	Box	1	
	4460190	Receptacle	1	
	4060092	Cover	1	
	3910608	Screw, Machine #6-32NC x 1/2"	4	
	4760600	Lockwasher #6	4	
	4460071	Connector	1	
31	0140001	Horn	1	
32	4360274	Switch, Push Button (Glow Plugs) (Kubota)	1	
	3520026	Plug, Hole (Ford and Deutz)	1	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

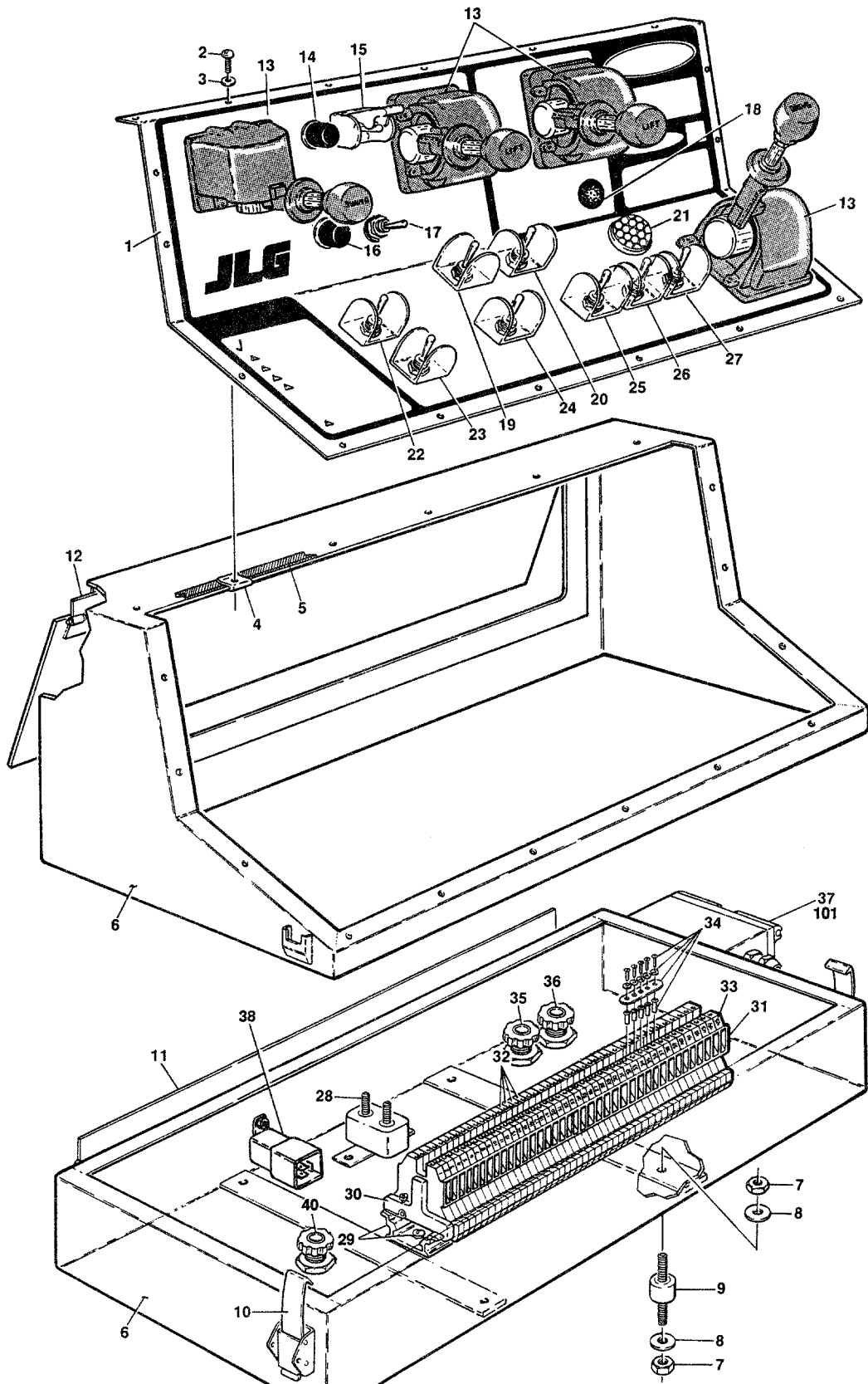
**FIGURE 4-4. CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
33	3740049	Relay (4WS Only)	2	
	4761000	Lockwasher #10	2	
	3311001	Nut #10-24NC	2	
34	4740120	Washer, Nylon	6	
35 to 56	Not Used			
57	0720804	Screw, Machine #8-32NC x 1/2 (October 1995 to Present)	4	
58	4750800	Flatwasher #8 (October 1995 to Present)	4	
59	4760800	Lockwasher #8 (October 1995 to Present)	4	
		<b>110V POWER CORD INSTALLATIONS</b>	Ref.	
	0252405	<b>PRIOR TO OCTOBER 1993</b>	Ref.	—
	0254438	<b>OCTOBER 1993 PRESENT</b>	Ref.	3
101		Cable, Electrical - 12/3 Options:	A/R	
	1060300	Prior to October 1993	32 ft./9.8m	
	Use 1060514	October 1993 to Present (was p/n 1060268)	70 ft./21.3m	
	4460205	Plug	1	

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# SECTION 4 PLATFORM

FIGURE 4-5. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - PRIOR TO FEBRUARY 1993)



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# SECTION 4 PLATFORM

**FIGURE 4-5. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - PRIOR TO FEBRUARY 1993)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>CONSOLE BOX ASSEMBLIES</b>	Ref.	
	0860752	<b>CONSOLE BOX ASSEMBLY - 2WS DEUTZ</b>	Ref.	B
	0860753	<b>CONSOLE BOX ASSEMBLY - 4WS DEUTZ</b>	Ref.	A
	0860779	<b>CONSOLE BOX ASSEMBLY - 2WS FORD</b>	Ref.	A
	0860777	<b>CONSOLE BOX ASSEMBLY - 4WS FORD</b>	Ref.	—
	0860655	<b>CONSOLE BOX ASSEMBLY - 2WS KUBOTA</b>	Ref.	F
	0860718	<b>CONSOLE BOX ASSEMBLY - 4WS KUBOTA</b>	Ref.	—
1	3251894	Lid	1	
2	0751006	Screw, Pan Head #10-24NC x 3/4"	18	
3	4740120	Washer, Nylon	18	
4	3300177	Nut, Tinnerman	18	
5	4420038	Tape, Insulation	37 in./1m	
	0100001	Adhesive	A/R	
6	0860538	Box, Control (Includes Items 10-12)	1	
7	3311505	Nut 5/16"-18NC	8	
8	4751500	Flatwasher 5/16"	8	
9	4320002	Stud, Mounting	4	
10	2940052	Latch	2	
11	2600132	Hinge (Top to Bottom)	1	
12	2600105	Hinge (Access Door)	1	
13	1600126	Controller, PQ (Swing and Lifts)	3	
	7003782	Electrical Assembly	1	
	1600116	Controller, PQ (Drive)	1	
	7003783	Electrical Assembly	1	
	2560038	Knob (Lift)	2	
	2560040	Knob (Swing)	1	
	2560041	Knob (Drive)	1	
14	4360274	Switch, Push Button (Horn)	1	
	3790015	O-Ring	1	
15	4360199	Switch, Toggle (Ignition)	1	
	3790012	O-Ring	1	
	4360141	Guard, Switch	1	
16	4360274	Switch, Push Button (Start)	1	
	3790015	O-Ring	1	
17	4360199	Switch, Toggle (Glow Plug - Kubota/Choke - Ford)	1	
	3790012	O-Ring	1	
	3251872	Nameplate - Glow Plug (Kubota Only)	1	
18	3520026	Plug, Hole	1	
19	4360202	Switch, Toggle (Rotate)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
20	4360202	Switch, Toggle (Level)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
21	2920015	Lamp (Chassis Out of Level)	1	

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**FIGURE 4-5. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - PRIOR TO FEBRUARY 1993) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
22	4360200	Switch, Toggle (Auxiliary Power)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
23	4360202	Switch, Toggle (Steer)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
24	4360202	Switch, Toggle (Main Tele)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
25	4360199	Switch, Toggle (High Engine)	1	
	3790012	O-Ring	1	
26	4360199	Switch, Toggle (Pump Volume)	1	
	3790012	O-Ring	1	
27	4360199	Switch, Toggle (Wheel Motor Speed)	1	
	3790012	O-Ring	1	
28	4360209	Breaker, Circuit - 20 Amp	1	
	3910608	Screw #6-32NC x 1/2"	1	
	4750600	Flatwasher #6	1	
	4760600	Lockwasher #6	1	
	3310601	Nut #6-32NC	1	
29	3640500	Rail, Mounting	1	
	3910608	Screw, Round Head #6-32NC x 1/2"	2	
	4750600	Flatwasher #6	2	
	4760600	Lockwasher #6	2	
	3310601	Nut #6-32NC	2	
30	4460299	Stop, Terminal Strip	2	
31	4460300	Barrier, Terminal End	1	
32	4460298	Block, Terminal	45	
33	4460301	Strip, Marking	1	
34	4460311	Bar, Buss	1	
	4460305	Screw, Terminal Block	3	
	4460306	Washer, Terminal Block	3	
	4460307	Sleeve, Terminal Block	3	
	35	4460244	Connector	1
36	0960238	Bushing, Insulating	1	
	3300048	Nut, Conduit	1	
	4460071	Connector	1	
37	0960238	Bushing, Insulating	1	
	3300048	Nut, Conduit	1	
	0860038	Box, Receptacle	1	
38	4460190	Receptacle (Not Shown)	1	
	3911008	Screw, Round Head #10-24NC x 1/2"	4	
	4761000	Lockwasher #10	4	
	4060092	Shield, Weatherproof	1	
	4460071	Connector, Terminal	1	
38	3740049	Relay - SPDT	1	
	3311001	Nut #10-24NC	1	
	4761000	Lockwasher #10	1	

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# SECTION 4 PLATFORM

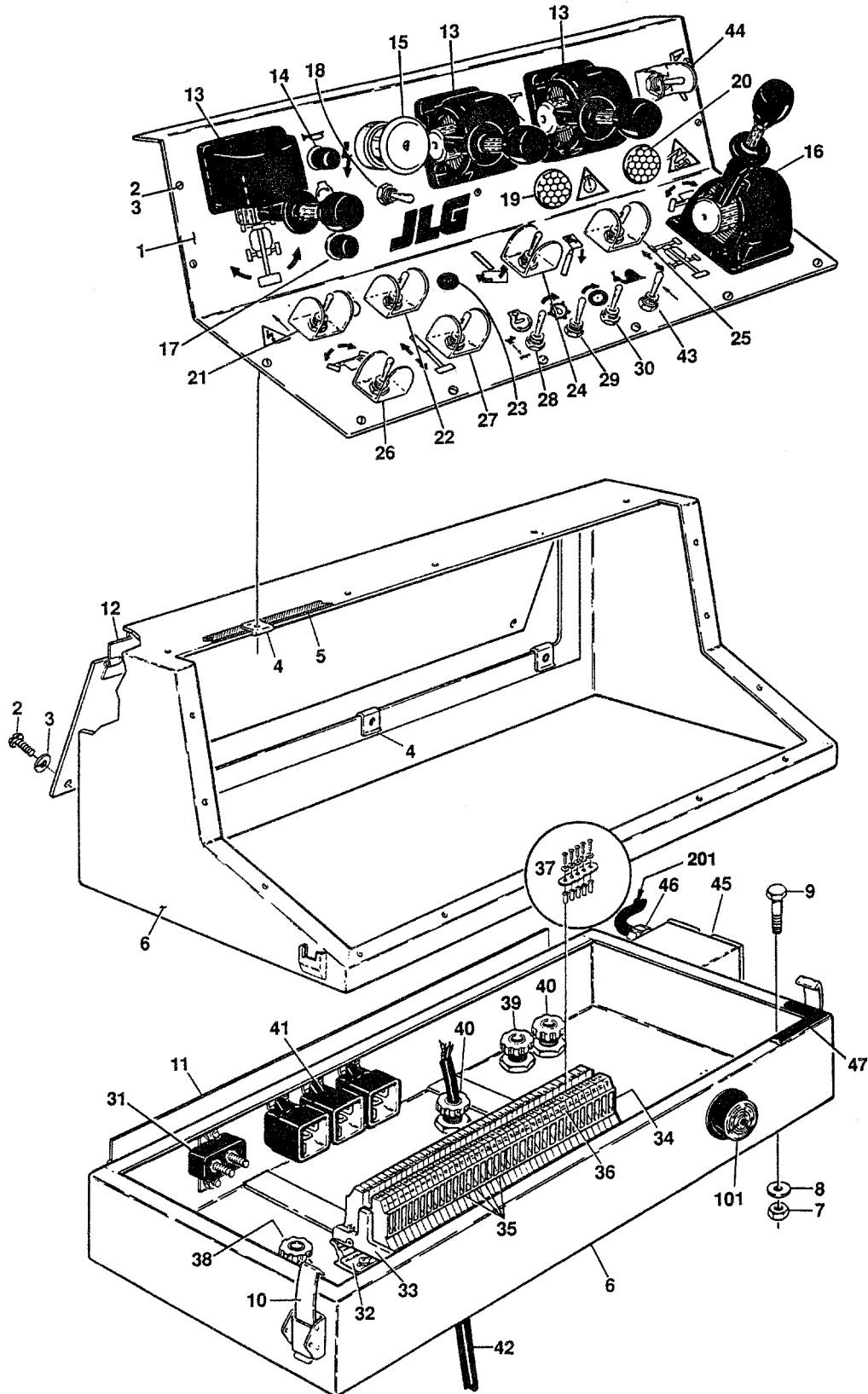
**FIGURE 4-5. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - PRIOR TO FEBRUARY 1993) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
39	1060309	Cable, Control - 12/4 (To Footswitch) (Not Shown)	8 ft./2.4m	
40	4460052	Connector, Strain Relief	1	
	3300047	Locknut, Conduit	1	
	0960239	Bushing	1	
		<b>110V POWER CORD INSTALLATIONS</b>	Ref.	
	0252405	<b>PRIOR TO OCTOBER 1993</b>	Ref.	—
	0254438	<b>OCTOBER 1993 PRESENT</b>	Ref.	3
101		Cable, Electrical - 12/3 Options:	A/R	
	1060300	Prior to October 1993	32 ft./9.8m	
	Use 1060514	October 1993 to Present (was p/n 1060268)	70 ft./21.3m	
	4460205	Plug	1	

SECTION 4 PLATFORM

# SECTION 4 PLATFORM

FIGURE 4-6. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - FEBRUARY 1993 TO PRESENT)



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# SECTION 4 PLATFORM

**FIGURE 4-6. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - FEBRUARY 1993 TO PRESENT)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>CONSOLE BOX ASSEMBLIES</b>	Ref.	
	0860839	<b>CONSOLE BOX ASSEMBLY - 2WS WITH CREEP</b>	Ref.	5
	0860850	<b>CONSOLE BOX ASSEMBLY - 2WS WITH THUMB STEER AND CREEP</b>	Ref.	6
	0860840	<b>CONSOLE BOX ASSEMBLY - 4WS WITH CREEP</b>	Ref.	6
1	3252224	Lid (February 1993 to May 1994)	1	
	3252382	Lid (May 1994 to January 1995)	1	
	3538392	Plate, Lid (January 1995 to Present)	1	
	1702402	Decal (January 1995 to Present)	1	
2	0751006	Screw, Pan Head #10-24NC x 3/4"	18	
3	4740120	Washer, Nylon	18	
4	3300177	Nut, Tinnerman	18	
5	4420037	Tape, Insulation	14 ft./2m	
6	0860538	Box, Control (Includes Items 10,11 and 12)	1	
7	3311505	Nut 5/16"-18NC	4	
8	4751500	Flatwasher 5/16"	4	
9	0641508	Bolt 5/16"-18NC x 1"	4	
10	2940052	Latch	2	
11	2600132	Hinge (Top to Bottom)	1	
12	2600105	Hinge (Access Door)	1	
13	1600126	Controller, PQ (Swing and Lift) (Machines Without Steer Switch in Drive Controller)	3	
	7003782	Electrical Assembly	3	
	1600141	Controller, PQ (Swing and Lift) (Machines With Steer Switch in Drive Controller)	3	
	7011907	Electrical Assembly	1	
	7003751	Potentiometer	1	
	2560112	Knob	A/R	
14	4360274	Switch, Push Button (Horn)	1	
	3790015	O-Ring	1	
15	4360289	Switch, Push-Pull (Emergency Stop)	1	
	7012611	Mushroom Head	1	
	7012612	Boot	1	
	4360282	Block, Contact - 2 P.N.C.	1	
16	1600116	Controller, PQ (Drive) (2WS Without Steer Switch in Drive Controller)	1	
	7003783	Electrical Assembly	1	
	1600140	Controller, PQ (Drive) (2WS With Steer Switch in Drive Controller)	1	
	7011903	Electrical Assembly	1	
	7003789	Switch, Roller	2	
	1600135	Controller, PQ (Drive) (4WS Without Steer Switch in Drive Controller)	1	
	7003797	Electrical Assembly	1	
	7003789	Switch, Roller	2	
	2560112	Knob	1	

SECTION 4 PLATFORM

# SECTION 4 PLATFORM

**FIGURE 4-6. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - FEBRUARY 1993 TO PRESENT) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
17	4360274	Switch, Push Button (Start)	1	
	3790015	O-Ring	1	
18	3520026	Plug, Hole (Standard)	1	
	4360199	Switch, Toggle (Glow Plug - Optional)	1	
	3790012	O-Ring (Glow Plug - Option)	1	
	3251872	Nameplate (Glow Plug Option)	1	
19	2920015	Lamp (Engine Distress) (Optional)	1	
20	2920015	Lamp (Chassis Out of Level)	1	
21	4360200	Switch, Toggle (Auxiliary Power)	1	
	3790012	O-Ring	1	
	4060229	Shield	1	
22	4360199	Switch, Toggle (Lights) (Optional)	1	
	3790012	O-Ring	1	
23	3520028	Plug, Hole	1	
24	4360202	Switch, Toggle (Rotate) (Optional)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
25	4360202	Switch, Toggle (Level)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
26	4360202	Switch, Toggle (Steer) (Machines Without Steer Switch in Drive Controller Only)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
	4360202	Switch, Toggle (Main Tele)	1	
27	4060229	Shield	1	
	3790012	O-Ring	1	
	4360199	Switch, Toggle (Engine Speed)	1	
28	3790012	O-Ring	1	
	4360199	Switch, Toggle (Pump Volume)	1	
29	3790012	O-Ring	1	
	4360199	Switch, Toggle (Wheel Speed)	1	
30	3790012	O-Ring	1	
	4360209	Breaker, Circuit - 20 Amp	1	
32	3640500	Rail, Mounting	1	
	3910608	Screw, Round Head #6-32NC x 1/2"	2	
	4750600	Flatwasher #6	2	
	4760600	Lockwasher #6	2	
	3310601	Nut #6-32NC	2	
	4460299	Stop, Terminal Strip	2	
34	4460300	Barrier, Terminal End	1	
35	4460298	Block, Terminal	A/R	
36	4460301	Strip, Marking	1	
37	4460311	Bar, Buss	1	
	4460305	Screw, Terminal Block	3	
	4460306	Washer, Terminal Block	3	
	4460307	Sleeve, Terminal Block	3	

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# SECTION 4 PLATFORM

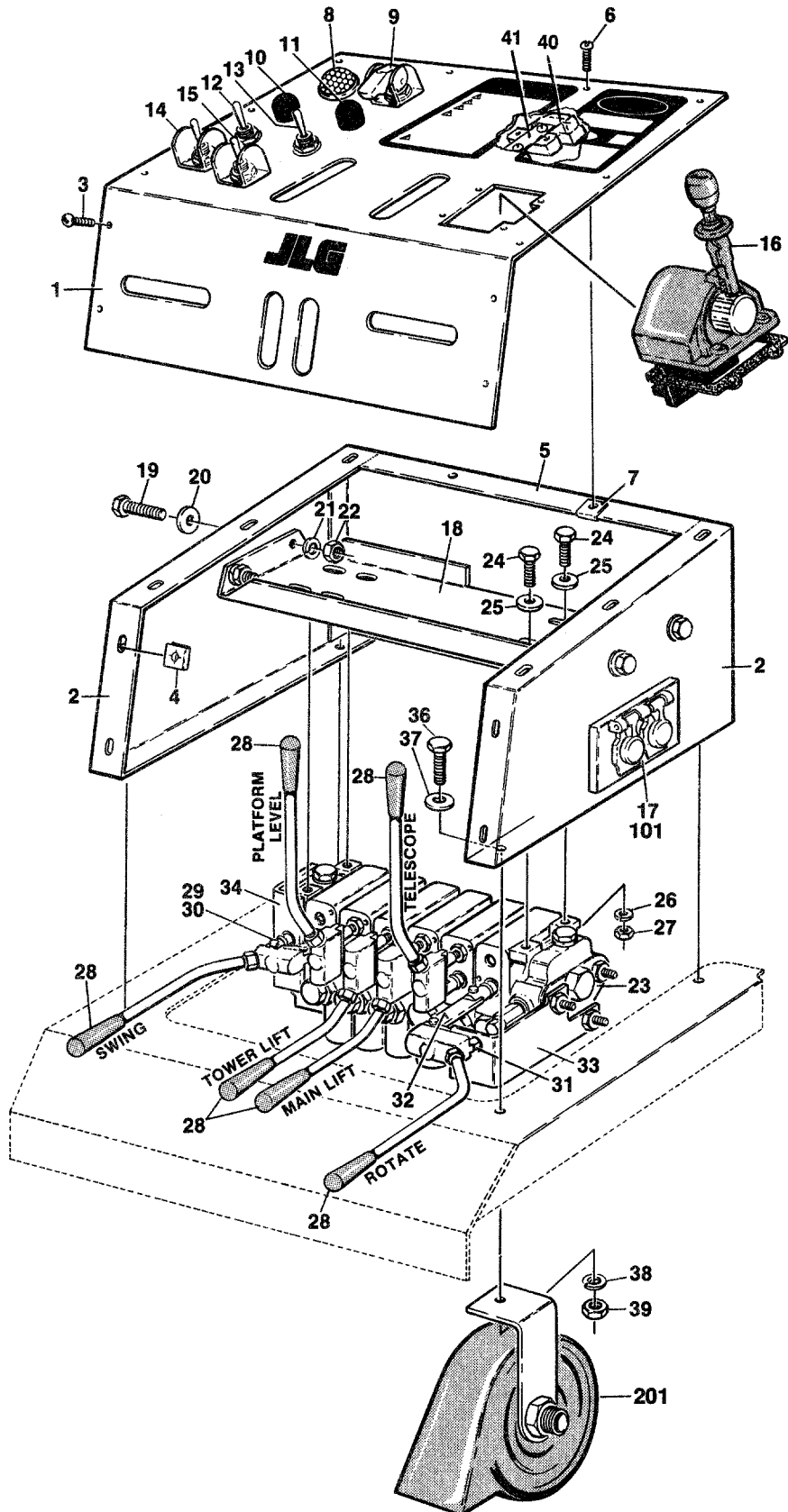
**FIGURE 4-6. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - FEBRUARY 1993 TO PRESENT) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
38	4460052	Connector	1	
	0960239	Bushing, Insulating	1	
	3300047	Nut, Conduit	1	
39	4460244	Connector	1	
	0960238	Bushing, Insulating	1	
	3300048	Nut, Conduit	1	
40	4460071	Connector	2	
	0960238	Bushing, Insulating	2	
	3300048	Nut, Conduit	2	
41	3740049	Relay - SPDT	A/R	
	3311001	Nut #10-24NC	1	
	4761000	Lockwasher #10	1	
42	1060309	Cable, Control - 12/4 (To Footswitch)	2.4m	
43	4360199	Switch, Toggle (Creep)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
44	4360202	Switch, Toggle (Tower Tele)	1	
	4060229	Shield	1	
	3790012	O-Ring	1	
45	0860038	Box, Receptacle	1	
	4460190	Receptacle - 110VAC (Consult Factory for Optional Voltages)	1	
	4060092	Cover, Weatherproof - 100VAC (Consult Factory for Optional Voltages)	1	
	3900294	Screw Self Drilling #10-16NC x 1"	4	
	4751000	Flatwasher #10	4	
	4761000	Lockwasher #10	4	
46	4460071	Connector, Strain Relief	1	
47	4420008	Tape, Insulation	6 ft./1.8m	
	0253077	<b>TILT ALARM INSTALLATION</b>	Ref.	A
101	0140026	Alarm	1	
102	1540002	Capacitor	1	
		<b>110V POWER CORD INSTALLATIONS</b>	Ref.	
	0252405	<b>PRIOR TO OCTOBER 1993</b>	Ref.	—
	0254438	<b>OCTOBER 1993 PRESENT</b>	Ref.	3
201		Cable, Electrical - 12/3 Options:	A/R	
	1060300	Prior to October 1993	32 ft./9.8m	
	Use 1060514	October 1993 to Present (was p/n 1060268)	70 ft./21.3m	
	4460205	Plug	1	

SECTION 4 PLATFORM

# SECTION 4 PLATFORM

FIGURE 4-7. CONTROL BOX ASSEMBLY (HYDRAULIC CONTROLS)



SECTION 4 PLATFORM



# SECTION 4 PLATFORM

**FIGURE 4-7. CONTROL BOX ASSEMBLY (HYDRAULIC CONTROLS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0250844	<b>CONTROL BOX ASSEMBLY</b>	Ref.	F
1	3251987	Lid, Control Box (Prior to May 1994)	1	
	3252390	Lid, Control Box (May 1994 to Present)	1	
2	3534232	Plate, Side (LH)	1	
	3534233	Plate, Side (RH)	1	
3	0751006	Screw, Machine #10-24NC x 3/4"	5	
4	3300177	Nut, Tinnerman	5	
	4420008	Tape, Insulation	A/R	
5	1670568	Plate, Back	1	
6	0751006	Screw, Machine #10-24NC x 3/4"	4	
7	3300177	Nut, Tinnerman	4	
	4420008	Tape, Insulation	A/R	
8	2920015	Lamp (Out of Level)	1	
9	4360199	Switch, Toggle (Emergency Stop)	1	
	4360141	Guard, Switch	1	
	3790012	O-Ring	1	
10	4360274	Switch, Push Button (Horn)	1	
	3790015	O-Ring	1	
11	4360274	Switch, Push Button (Start)	1	
	3790015	O-Ring	1	
12	4360199	Switch, Toggle (Drive Speed)	1	
	3790012	O-Ring	1	
13	4360199	Switch, Toggle (High Engine)	1	
	3790012	O-Ring	1	
14	4360200	Switch, Toggle (Aux. Power)	1	
	4060229	Shield, Switch	1	
	3790012	O-Ring	1	
15	4360198	Switch, Toggle (Steer)	1	
	4060229	Shield, Switch	1	
	3790012	O-Ring	1	
16	1600116	Controller - PQ (Drive)	1	
	7003783	Electrical Assembly	1	
	2560041	Knob	1	
17	4060092	Cover, Weather Proof	1	
	4460190	Receptacle	1	
	0860038	Box, Electrical	1	
	3910604	Screw, Machine #6-32NC x 1/2"	4	
	4760600	Lockwasher #6	4	
	4460071	Connector, Strain Relief	1	
18	0901393	Bracket, Mounting - Valve	1	
19	0641608	Bolt 3/8"-16NC x 1"	4	
20	4751600	Flatwasher 3/8"	8	
21	4761600	Lockwasher 3/8"	4	
22	3311605	Locknut 3/8"-16NC	4	
23	4640640	Valve Assembly (See Figure 4-8 for Breakdown)	1	
24	0641612	Bolt 3/8"-16NC x 1 1/2"	3	
25	4751600	Flatwasher 3/8"	3	

# SECTION 4 PLATFORM

**FIGURE 4-7. CONTROL BOX ASSEMBLY (HYDRAULIC CONTROLS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
26	4740341	Flatwasher, Special	3	
27	3311605	Locknut 3/8"-16NC	3	
28	2980091	Lever	6	
29	3430507	Pin, Clevis	1	
30	3450403	Pin, Cotter 1/8" x 3/4"	1	
31	3531543	Plate, Link	1	
32	3534256	Plate, Link	1	
33	0901690	Bracket, Rotate	1	
34	0901392	Bracket, Swing	1	
35	Not Used			
36	0641608	Bolt 3/8"-16NC x 1"	1	
37	4751600	Flatwasher 3/8"	1	
38	4761600	Lockwasher 3/8"	1	
39	3311605	Locknut 3/8"-16NC	1	
40	3740049	Relay - SPDT	1	
41	4360209	Breaker, Circuit - 20 Amp	1	
	3911012	Screw #10-24NC x 3/4"	2	
	4761000	Lockwasher #10	2	
	3311001	Nut #10-24NC	2	
		<b>110V POWER CORD INSTALLATIONS</b>	Ref.	
	0252405	<b>PRIOR TO OCTOBER 1993</b>	Ref.	—
	0254438	<b>OCTOBER 1993 PRESENT</b>	Ref.	3
101		Cable, Electrical - 12/3 Options:	A/R	
	1060300	Prior to October 1993	32 ft./9.8m	
	Use 1060514	October 1993 to Present (was p/n 1060268)	70 ft./21.3m	
	4460205	Plug	1	
	0239762	<b>HORN INSTALLATION</b>	Ref.	—
201	0140001	Horn	1	

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# SECTION 4 PLATFORM

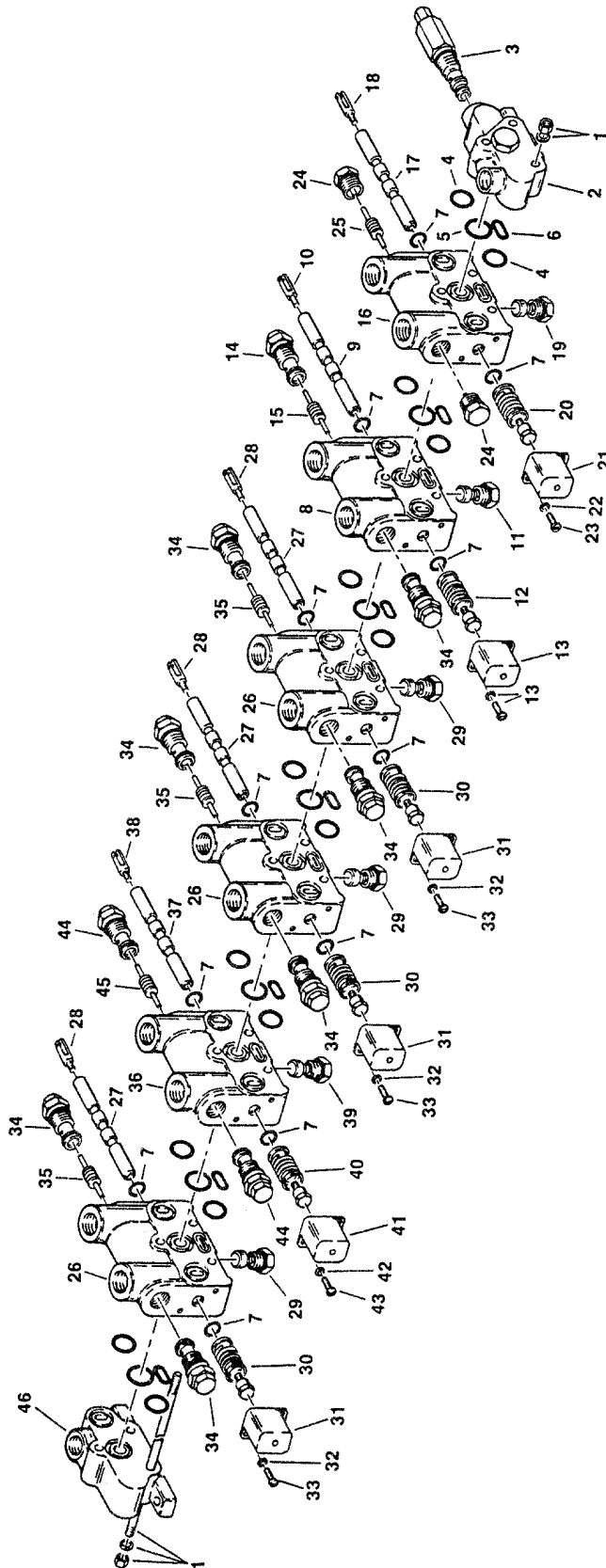
FIGURE 4-7. CONTROL BOX ASSEMBLY (HYDRAULIC CONTROLS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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4  
  
P  
L  
A  
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F  
O  
R  
M**

# SECTION 4 PLATFORM

FIGURE 4-8. CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY)



SECTION 4 PLATFORM

# SECTION 4 PLATFORM

**FIGURE 4-8. CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	4640640	<b>CONTROL VALVE ASSEMBLY - GRESEN (6-STACK)</b>	Ref.	
1	7002408	Tie Rod Kit (Includes 3 tie rods, 6 hex nuts, and 6 washers)	1	
2	7002409	Inlet Section Assembly	1	
3	7002410	Cartridge, Relief Valve	1	
4	Kit	O-Ring	14	
5	Kit	O-Ring	7	
6	Kit	O-Ring	7	
7	Kit	O-Ring	14	
8	7002430	Working Section Assembly - Telescope	1	
9	7002425	Spool	1	
10	7002415	Spool End	1	
11	7002416	Load Check Assembly	1	
12	7002417	Spring Centering Kit	1	
13	7002418	Cover	1	
	7002419	Lockwasher	2	
	7002420	Screw	2	
14	7002426	Cartridge, Cylinder Lock Valve	1	
15	7002424	Ram, Pilot	1	
16	7002421	Working Section Assembly - Rotate	1	
17	7002422	Spool	1	
18	7002415	Spool End	1	
19	7002416	Load Check Assembly	1	
20	7002417	Spring Centering Kit	1	
21	7002418	Cover	1	
22	7002419	Lockwasher	2	
23	7002420	Screw	2	
24	7002423	Plug	2	
25	7002424	Ram, Pilot	1	
26	7011100	Working Section Assembly - Lift, Articulate & Swing	3	
27	4140017	Spool	3	
28	7002415	Spool End	3	
29	7002416	Load Check Assembly	3	
30	7002417	Spring Centering Kit	3	
31	7002418	Cover	3	
32	7002419	Lockwasher	6	
33	7002420	Screw	6	
34	7002426	Cartridge, Cylinder Lock Valve	6	
35	7002424	Ram, Pilot	3	
36	7002427	Working Section Assembly - Level	1	
37	7002422	Spool	1	
38	7002415	Spool End	1	
39	7002416	Load Check Assembly	1	
40	7002417	Spring Centering Kit	1	
41	7002418	Cover	1	
42	7002419	Lockwasher	2	
43	7002420	Screw	2	

# SECTION 4      PLATFORM

**FIGURE 4-8. CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
44	7002426	Cartridge, Cylinder Lock Valve	2	
45	7002424	Ram, Pilot	1	
46	7002428	Outlet Section Assembly	1	
	7002429	Seal Kit (Includes two of Item 4, one of Item 5, one of Item 6 and two of Item 7.)	7	

**SECTION 4 PLATFORM**

# SECTION 4 PLATFORM

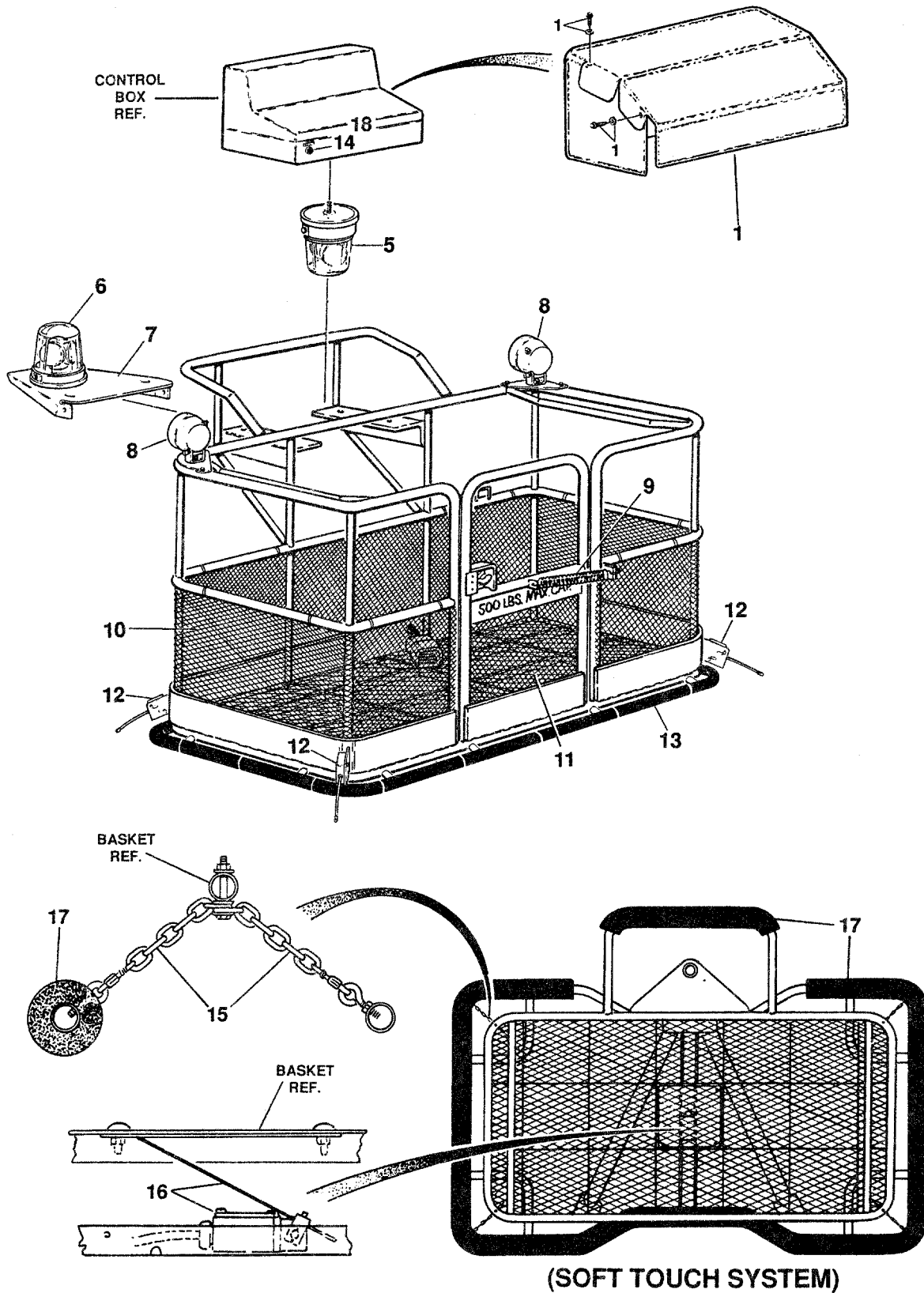
FIGURE 4-8. CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

**S  
E  
C  
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I  
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4  
P  
L  
A  
T  
F  
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R  
M**

# SECTION 4 PLATFORM

FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS



SECTION 4 PLATFORM



# SECTION 4 PLATFORM

**FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
1	0252054	<b>CONSOLE BOX COVER INSTALLATION (BLACK)</b>	Ref.	2
	0251203	<b>CONSOLE BOX COVER INSTALLATION (YELLOW)</b>	Ref.	2
	0252848	<b>CONSOLE BOX COVER INSTALLATION (CLEAR PLEXI-GLASS)</b>	Ref.	—
	1670607	Cover (Black)	1	
	1670526	Cover (Yellow)	1	
	1670641	Cover, Plexi-Glass (Not Shown)	1	
	3941406	Screw, Self-Tapping 1/4"-20NC	4	
	4751400	Flatwasher 1/4"	4	
	0901842	Bracket (Right Side) (Use with Plexi-Glass Cover Only)	1	
	0901843	Bracket (Left Side) (Use with Plexi-Glass Cover Only)	1	
2 to 4	Not Used			
		<b>BEACON LIGHT OPTIONS</b>	Ref.	
5	0252210/ 0252211	Beacon Mounted Under Console (September 1991 to Present)	A/R	3/3
	2920009	Beacon (Red)		
	2920018	Beacon (Amber)		
6	0238864/ 0238865	Beacon Mounted in Front of Console (Prior to September 1991)	A/R	—/—
	2920009	Beacon (Red)		
	2920018	Beacon (Amber)		
7	0901449	Bracket, Mounting		
		<b>WORKLIGHT OPTIONS:</b>	Ref.	
	2900068	<b>PRIOR TO NOVEMBER 1992</b>	Ref.	F
	0253987	<b>NOVEMBER 1992 TO PRESENT</b>	Ref.	C
8	2920013	Floodlight	2	
	2920111	Halogen Light (Uses PN 3536089 Mounting Plate)	2	
	0250143	<b>SELF-CLOSING GATE INSTALLATION</b>	Ref.	A
9	4160028	Spring	1	
	0900232	Bracket (Door Mounted)	1	
	0901056	Bracket (Platform Mounted)	1	
	4220007	Stop, Door	1	
		<b>MESH TO MIDRAIL INSTALLATIONS</b>	Ref.	
	0253846	<b>LOW MOUNT PLATFORM</b>	Ref.	—
	0254130	<b>STANDARD PLATFORM</b>	Ref.	—
10	0480083	Mesh (Sides) (Low-Mount Platform)	2	
	0480086	Mesh (Sides) (Standard Platform)	2	
11	0480084	Mesh (Door)	1	

SECTION 4 PLATFORM

# SECTION 4 PLATFORM

**FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>PLATFORM BUMPERS INSTALLATION</b>	Ref.	
	0251611	<b>30" x 48" PLATFORM</b>	Ref.	E
	0254178	<b>30" x 60" FIXED PLATFORM</b>	Ref.	A
	0251024	<b>30" x 60" ROTATING PLATFORM</b>	Ref.	C
	0251239	<b>30" x 96" PLATFORM</b>	Ref.	B
12	4360305	Switch, Proximity - U/L Machines	4	
	4360215	Switch, Proximity - Standard Machines	4	
	4460521	Connector, Strain Relief	4	
13	0940038	Padding, Bumper	A/R	
14	4360274	Switch, Push Button (Override)	1	
	3251596	Nameplate - Override	1	
	3740049	Relay (Not Shown)	1	
		<b>PLATFORM BUMPERS INSTALLATION - SOFT TOUCH SYSTEM (CHAIN MOUNTED TYPE)</b>	Ref.	
	0254728	<b>30"x 96" PLATFORM</b>	Ref.	B
	0254948	<b>30"x 72" PLATFORM</b>	Ref.	A
15	0630440	Eyebolt	8	
	3010088	Link, Quick	8	
	1260136	Chain	A/R	
16	4360057	Switch, Limit	1	
	0200048	Arm, Actuator	1	
17	0940038	Padding (Bottom Rail)	A/R	
	1670663	Padding (Rail Behind Console Box)	1	
	1670733	Padding (LH Top Rail - 36" x 72" Platform)	1	
	1670699	Padding (LH Top Tail - 36" x 96" Platform)	1	
	1670665	Padding (Vertical Rails)	4	
	1670666	Padding (Gate)	1	
	1670734	Padding (RH Top Rail - 36" x 72" Platform)	1	
	1670700	Padding (RH Top Rail - 36" x 96" Platform)	1	
	1670735	Padding (LH Mid Rail - 36" x 72" Platform)	1	
	1670701	Padding (LH Mid Rail - 36" x 96" Platform)	1	
	1670736	Padding (RH Mid Rail - 36" x 72" Platform)	1	
	1670702	Padding (RH Mid Rail - 36" x 96" Platform)	1	
	1670737	Padding (Bumper Rail - 36" x 72" Platform)	1	
	1670703	Padding (Bumper Rail - 36" x 96" Platform)	1	
18	4360274	Switch, Push Button	1	
	3252238	Decal - Soft Touch System	1	

**SECTION 4 PLATFORM**

# SECTION 5 CYLINDER

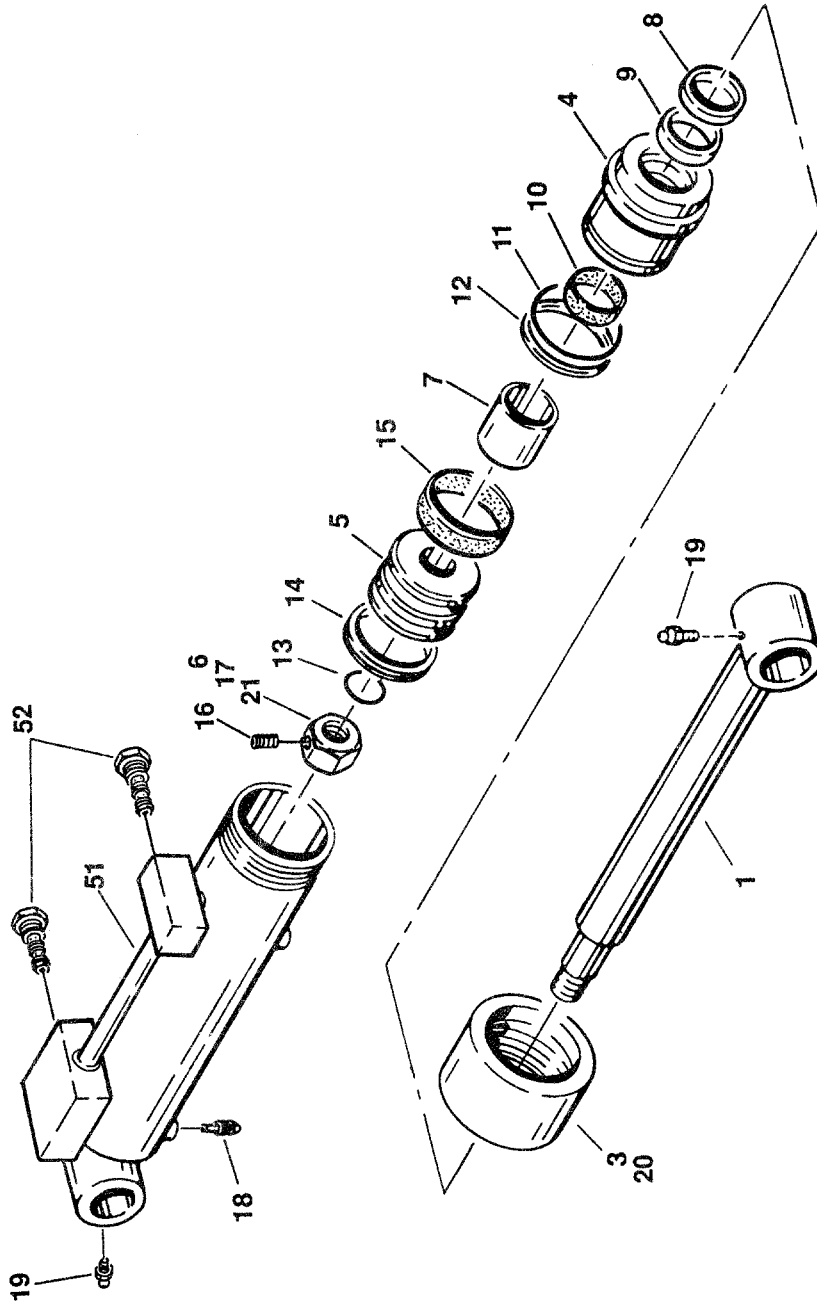
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SECTION 5 CYLINDER

# SECTION 5 CYLINDER

FIGURE 5-1. AXLE LOCKOUT CYLINDER ASSEMBLIES - 4WD/4WS (STANDARD PARTS) (USE WITH OPTIONAL OSCILLATING AXLE)



SECTION 5 CYLINDER

# SECTION 5 CYLINDER

**FIGURE 5-1. AXLE LOCKOUT CYLINDER ASSEMBLIES - 4WD/4WS (STANDARD PARTS) (USE WITH OPTIONAL OSCILLATING AXLE)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>AXLE LOCKOUT CYLINDER ASSEMBLIES (STANDARD PARTS)</b>	Ref.	
1	1681787	Rod	1	
2	Not Used			
3	1120179	Retainer	1	
4	1680892	Head	1	
5	3480120	Piston	1	
6	3300187	Nut (Prior to April 1992)	1	
	3300273	Nut, Hex (April 1992 to Present)	1	
7	4563647	Tube, Spacer	1	
8	Kit	Seal, Wiper	1	
9	Kit	Seal, Rod	1	
10	Kit	Ring, Wear	1	
11	Kit	O-Ring	1	
12	Kit	Ring, Back-up	2	
13	Kit	O-Ring	1	
14	Kit	Seal, Piston	1	
15	Kit	Ring, Wear	1	
16	3900141	Setscrew 1/4"-20NC x 3/8" (Prior to August 1992)	2	
	3900170	Setscrew 3/8"-16NC x 3/8" (August 1992 to Present)	1	
17	0100011	Loctite #242	A/R	
18	3900175	Setscrew 1/4"-28NF x 3/4"	2	
	3960416	Seal, Thread	2	
	3321401	Nut 1/4"-28NF	2	
		<b>Note: Replace existing bleeders with these components when ordering parts.</b>		
19	2160002	Fitting, Grease	2	
20	0100035	Compound, Locking	A/R	
21	0100038	Primer, Locking	A/R	
	2900381	Seal Kit (Includes Items 8-15)	1	
		<b>AXLE LOCKOUT CYLINDER ASSEMBLY (VARIABLE PARTS)</b>	Ref.	
	1681785	<b>PRIOR TO SEPTEMBER 1990</b>	Ref.	D
	1682406	<b>SEPTEMBER 1990 TO JUNE 1992</b>	Ref.	C
	1682757	<b>JUNE 1992 TO PRESENT</b>	Ref.	A
51		Barrel Options:	1	
	1681788	Prior to September 1990		
	1682407	September 1990 to June 1992		
	1682758	June 1992 to Present		
52		Valve, Holding Options:	A/R	
	Not Required	Prior to September 1990		
	4640438	Valve, Holding (September 1990 to June 1992)	2	
	2900770	Seal Kit - 4640438 (1 Per Valve)	2	
	4640509	Valve, Holding (June 1992 to Present)	2	

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FIGURE 5-1. AXLE LOCKOUT CYLINDER ASSEMBLIES - 4WD/4WS (STANDARD PARTS) (USE WITH OPTIONAL OSCILLATING AXLE) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2900792	Seal Kit - 4640509 (1 Per Valve)	2	

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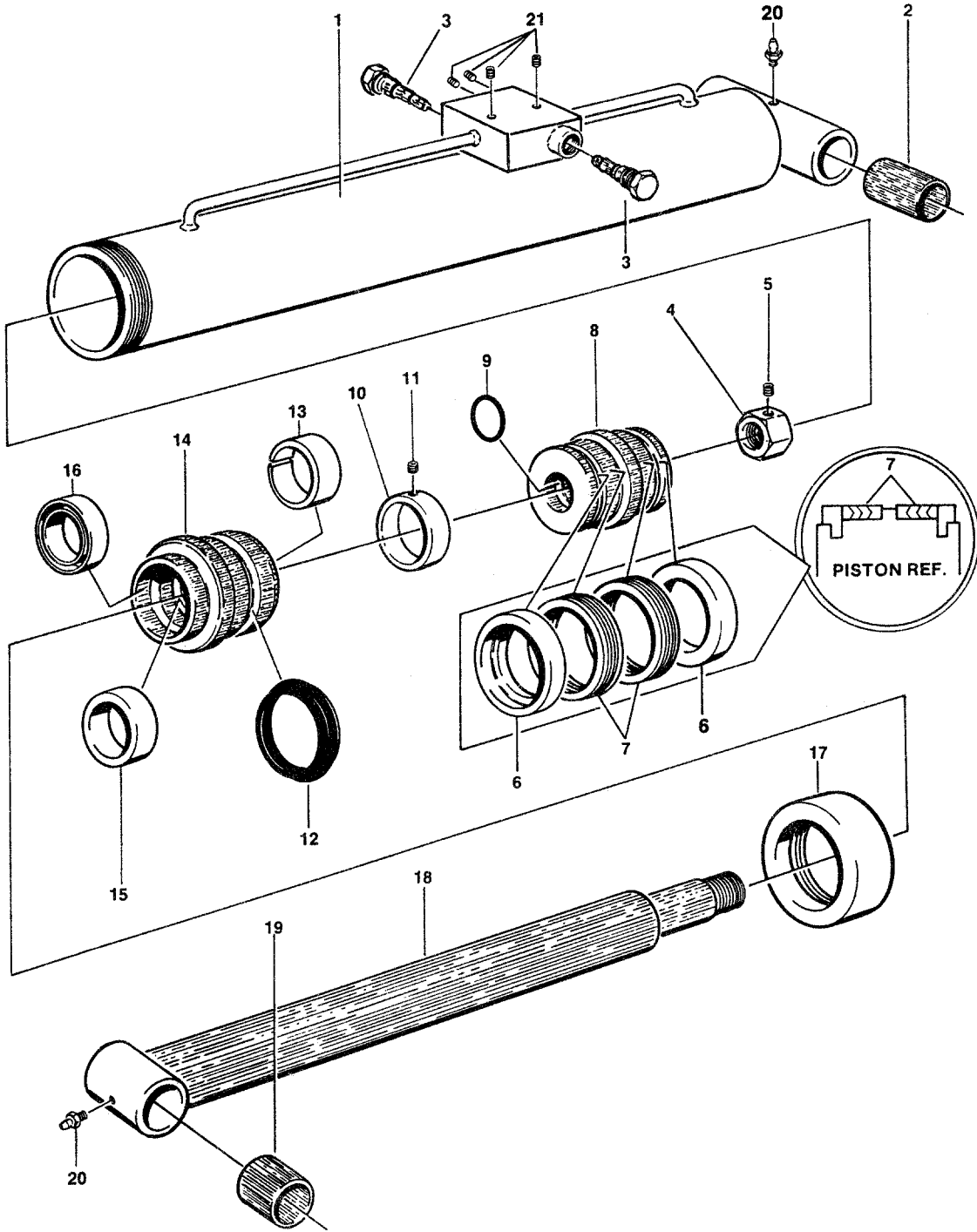
FIGURE 5-1. AXLE LOCKOUT CYLINDER ASSEMBLIES - 4WD/4WS (STANDARD PARTS) (USE WITH OPTIONAL OSCILLATING AXLE) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 5 CYLINDER

FIGURE 5-2.PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT PRIOR TO JANUARY 1990)



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# SECTION 5 CYLINDER

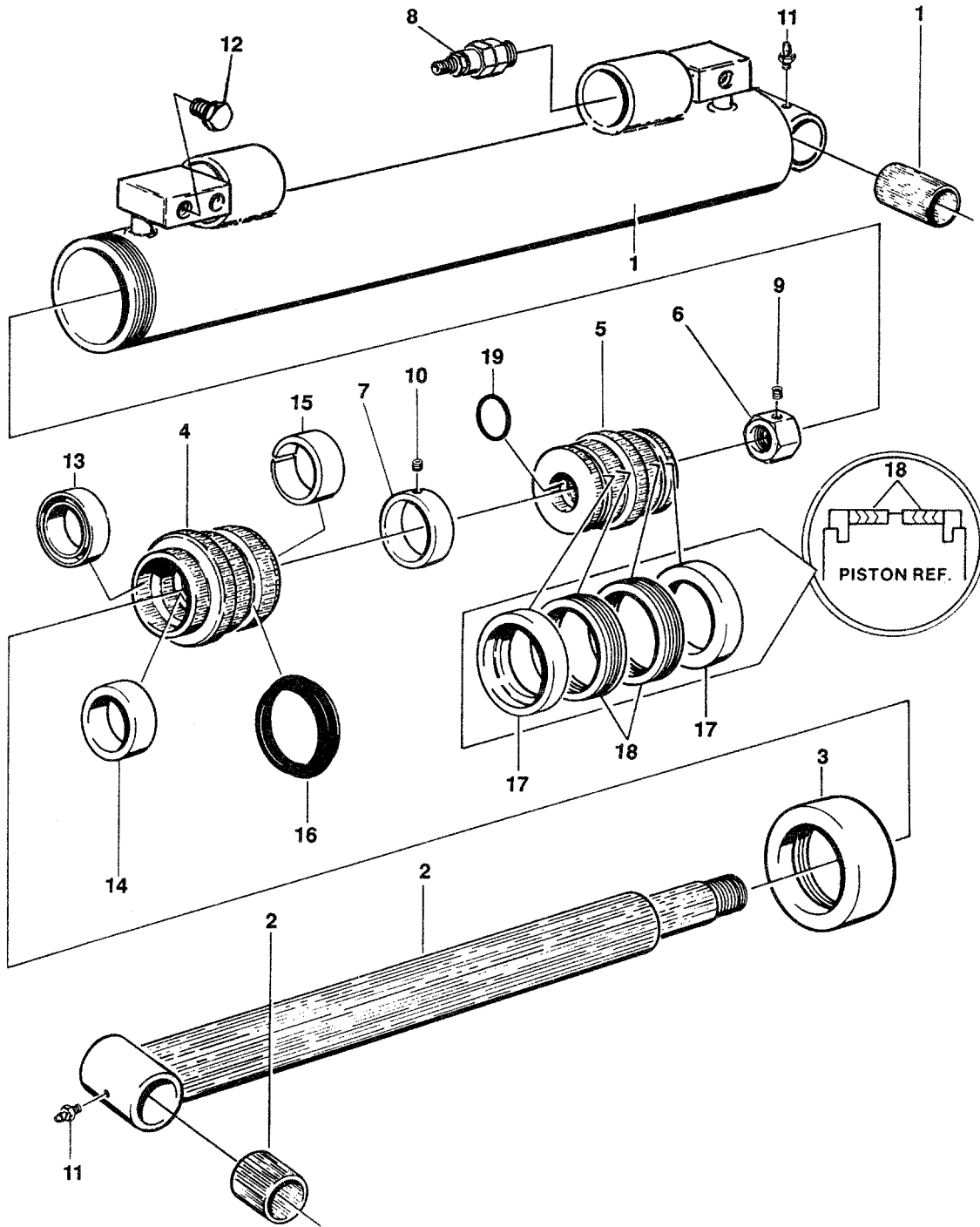
**FIGURE 5-2. PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT PRIOR TO JANUARY 1990)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1681866	PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT PRIOR TO JANUARY 1990)	Ref.	C
	1682178	PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT JANUARY 1990 TO OCTOBER 1992)	Ref.	C
1	1681869	Barrel Assembly	1	
2	0960613	Bushing, Bronze	2	
3	4640509	Valve	2	
	2900792	Seal Kit - 4640509 Valve	1	
4	3300271	Nut, Hex (Prior to January 1990)	1	
	3300284	Nut, Hex (January 1990 to October 1992)	1	
	0100011	Loctite #242	A/R	
	0100038	Primer, Locking	A/R	
5	3900170	Setscrew 3/8"-16NC x 3/8"	1	
	0100011	Loctite #242	A/R	
6	Kit	Lock-Ring	2	
7	Kit	Seal, Piston	2	
8	3480130	Piston (Prior to January 1990)	1	
	3480141	Piston (January 1990 to October 1992)	1	
9	Kit	O-Ring	1	
10	4563771	Spacer, Tube	1	
11	3900141	Setscrew 1/4"-20NC x 3/8"	1	
	0100011	Loctite	A/R	
12	Kit	T-Seal	1	
13	Kit	Ring, Wear	1	
14	1681847	Head	1	
15	Kit	Seal, Rod	1	
16	Kit	Wiper, Rod	1	
17	1120336	Cap	1	
	0100035	Loctite	A/R	
18	1681867	Rod Assembly (Prior to January 1990)	1	
	1682177	Rod Assembly (January 1990 to October 1992)	1	
19	0961254	Bushing, Bronze	2	
20	2160002	Fitting, Grease	2	
21	2200202	Plug 1/4"	2	
	2200201	Plug 1/8"	2	
	0100020	Sealant, Pipe	A/R	
	2901103	Seal Kit (Includes Items 6,7,9,12,13,15 and 16)	1	
		<b>Note: Refer to number stamped on barrel for identification.</b>		

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# SECTION 5 CYLINDER

FIGURE 5-3.PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT OCTOBER 1992 TO PRESENT)



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# SECTION 5      CYLINDER

**FIGURE 5-3. PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT OCTOBER 1992 TO PRESENT)**

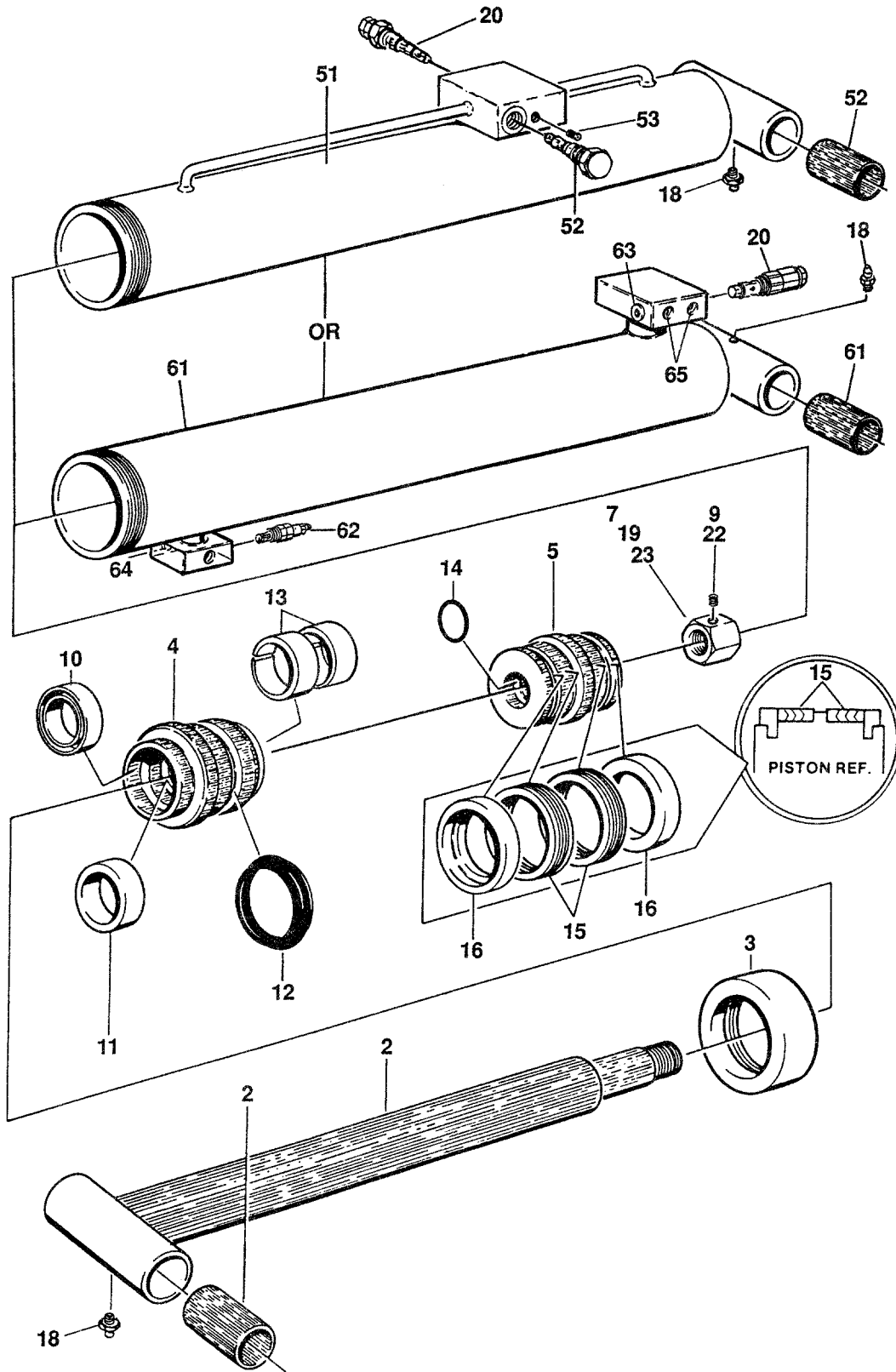
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1682793	<b>PLATFORM LEVEL CYLINDER ASSEMBLY</b>	Ref.	A
1	1682794	Barrel Weldment	1	
	0960613	Bushing, Bronze	2	
2	1682177	Rod Weldment	1	
	0961254	Bushing, Bronze	2	
3	1120336	Cap	1	
	0100035	Loctite #222	A/R	
4	1681847	Head	1	
5	3480141	Piston	1	
6	3300284	Nut, Hex	1	
	0100011	Loctite #242	A/R	
	0100038	Primer, Loctite	A/R	
7	4563771	Spacer	1	
8	4640634	Cartridge, Vented Valve	2	
	2900770	Seal Kit - 4640634 Valve	1	
9	3900170	Setscrew 3/8"-16NC x 3/8	1	
10	3900141	Setscrew 1/4"-20NC x 3/8"	1	
	0100011	Loctite #242	A/R	
11	2160002	Fitting, Grease	2	
12	2220885	Plug, O-Ring	2	
13	Kit	Wiper, Rod	1	
14	Kit	Seal, Rod	1	
15	Kit	Ring, Wear	1	
16	Kit	T-Seal	1	
17	Kit	Ring, Lock	2	
18	Kit	Seal	2	
19	Kit	O-Ring	1	
		-----		
	2901103	Seal Kit - Cylinder (Includes Items 13-19)	1	

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# SECTION 5 CYLINDER

FIGURE 5-4. LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS)

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# SECTION 5 CYLINDER

**FIGURE 5-4. LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	1682091	Rod	1	
	0960946	Bushing, Bronze	2	
3	1120343	Retainer	1	
4	1681294	Head	1	
5	3480102	Piston	1	
6	Not Used			
7	3300283	Nut, Hex	1	
8	Not Used			
9	3900170	Setscrew 3/8"-16NC x 3/8"	1	
10	Kit	Wiper, Rod	1	
11	Kit	Seal, Rod	1	
12	Kit	O-Ring	1	
13	Kit	Ring, Wear	2	
14	Kit	O-Ring	1	
15	Kit	Seal, Piston	2	
16	Kit	Ring, Lock	2	
17	Not Used			
18	2160002	Fitting, Grease	2	
19	0100011	Loctite #242	A/R	
20	4640605	Valve, Holding	1	
	2900792	Seal Kit - 4640605 Valve	1	
21	Not Used			
22	0100035	Loctite	A/R	
23	0100038	Primer, Locking	A/R	
	2900340	Seal Kit (Includes Items 10-16)	1	
	1682255	<b>LEVEL (UPRIGHT) CYLINDER ASSEMBLY (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)</b>	Ref.	A
51	1682256	Barrel	1	
	0961422	Bushing, Bronze	2	
52	4640509	Valve, Cartridge	1	
	2900792	Seal Kit - 4640509 Valve	1	
53	2200201	Plug, Pipe	1	
	1682796	<b>LEVEL (UPRIGHT) CYLINDER ASSEMBLY (OCTOBER 1992 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	—
61	1682797	Barrel	1	
	0961422	Bushing, Bronze	2	
62	4640634	Valve, Cartridge	1	
	2900770	Seal Kit - 4640634 Valve	1	
63	2220887	Plug 5/8"	1	
64	2220885	Plug 3/8"	1	

**SECTION 5 CYLINDER**

# SECTION 5 CYLINDER

FIGURE 5-4. LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
65	2220883	Plug 1/4"	2	

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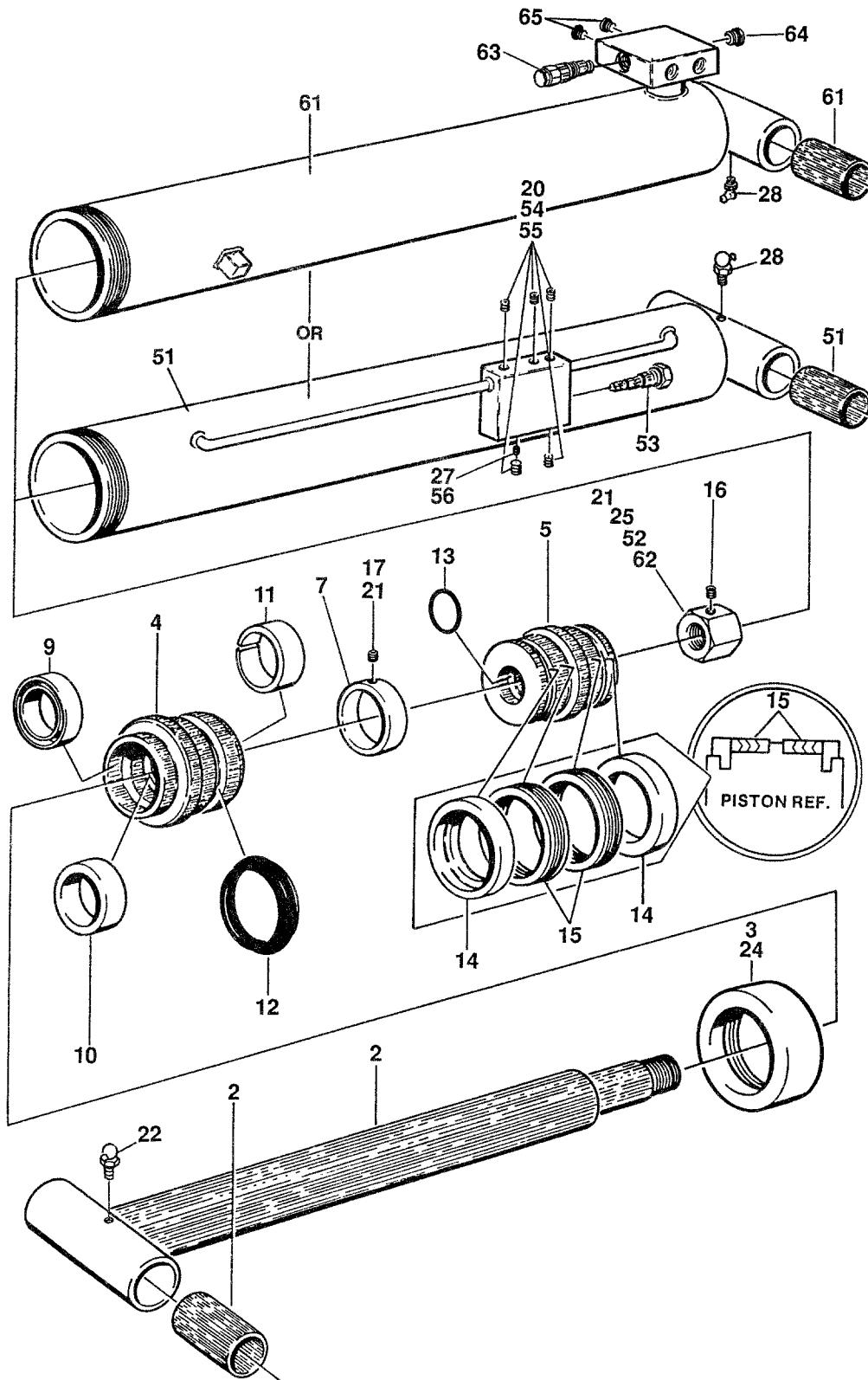
FIGURE 5-4. LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)



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# SECTION 5 CYLINDER

**FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	1681841	Rod		
	0960946	Bushing, Bronze	2	
3	1120340	Cap	1	
4	1681843	Head	1	
5	3480102	Piston	1	
6	Not Used			
7	4563769	Spacer	1	
8	Not Used			
9	Kit	Wiper, Rod	1	
10	Kit	Seal, Rod	1	
11	Kit	Ring, Wear	1	
12	Kit	T-Seal	1	
13	Kit	O-Ring	1	
14	Kit	Ring, Lock	2	
15	Kit	Seal	2	
16	3900170	Setscrew 3/8"-16NC x 3/8" (February 1991 to Present)	1	
	3951403	Setscrew 1/4"-20NC x 3/8" (Prior to February 1991)	1	
17	3951402	Setscrew 1/4"-20NC x 1/4"	1	
18	Not Used			
19	Not Used			
20	0100020	Sealant, Pipe	A/R	
21	0100011	Loctite #242	A/R	
22	2160001	Fitting, Grease - 90°	1	
23	Not Used			
24	0100035	Loctite	A/R	
25	0100038	Primer, Locking	A/R	
26	Not Used			
27	0100034	Loctite	A/R	
28	2160003	Fitting, Grease - 45°	1	
	2901102	Seal Kit (Includes Items 9-15)	1	
	1682124	<b>LIFT CYLINDER ASSEMBLY (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)</b>	Ref.	E
	9983275	<b>LIFT CYLINDER ASSEMBLY - 8 FT. PLATFORMS (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)</b>	Ref.	A
51	1682125	Barrel	1	
	0961422	Bushing, Bronze	2	
52	3300190	Nut (Prior to February 1991)	1	
	3300281	Nut (February 1991 to Present)	1	
	3300323	Nut (Cylinder - p/n 9983275 Only)	1	
53	4640634	Valve, Cartridge	1	
	2900770	Seal Kit - 4640634 Valve	1	
54	2200233	Plug, Pipe 3/8"	4	

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**FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
55	2200221	Plug, Pipe 1/4"	1	
56	2180448	Orifice .062	1	
	1682799	<b>LIFT CYLINDER ASSEMBLY - 4FT. 5 FT. AND 6 FT. PLATFORMS (OCTOBER 1992 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	A
	9983596	<b>LIFT CYLINDER ASSEMBLY - 8 FT. PLATFORMS (OCTOBER 1992 TO PRESENT) (VARIABLE PARTS)</b>	Ref.	A
61	1682800	Barrel	1	
	0961422	Bushing, Bronze	2	
62	3300281	Nut (1682799 Cylinder)	1	
	9983276	Nut (9983596 Cylinder) (Prior to August 1995)	1	
	3300323	Nut (9983596 Cylinder) (August 1995 to Present)	1	
63	4640605	Valve, Cartridge	1	
	2900792	Seal Kit - 4640605 Valve	1	
64	2220887	Plug 5/8"	1	
65	2220883	Plug 1/4"	2	

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# SECTION 5 CYLINDER

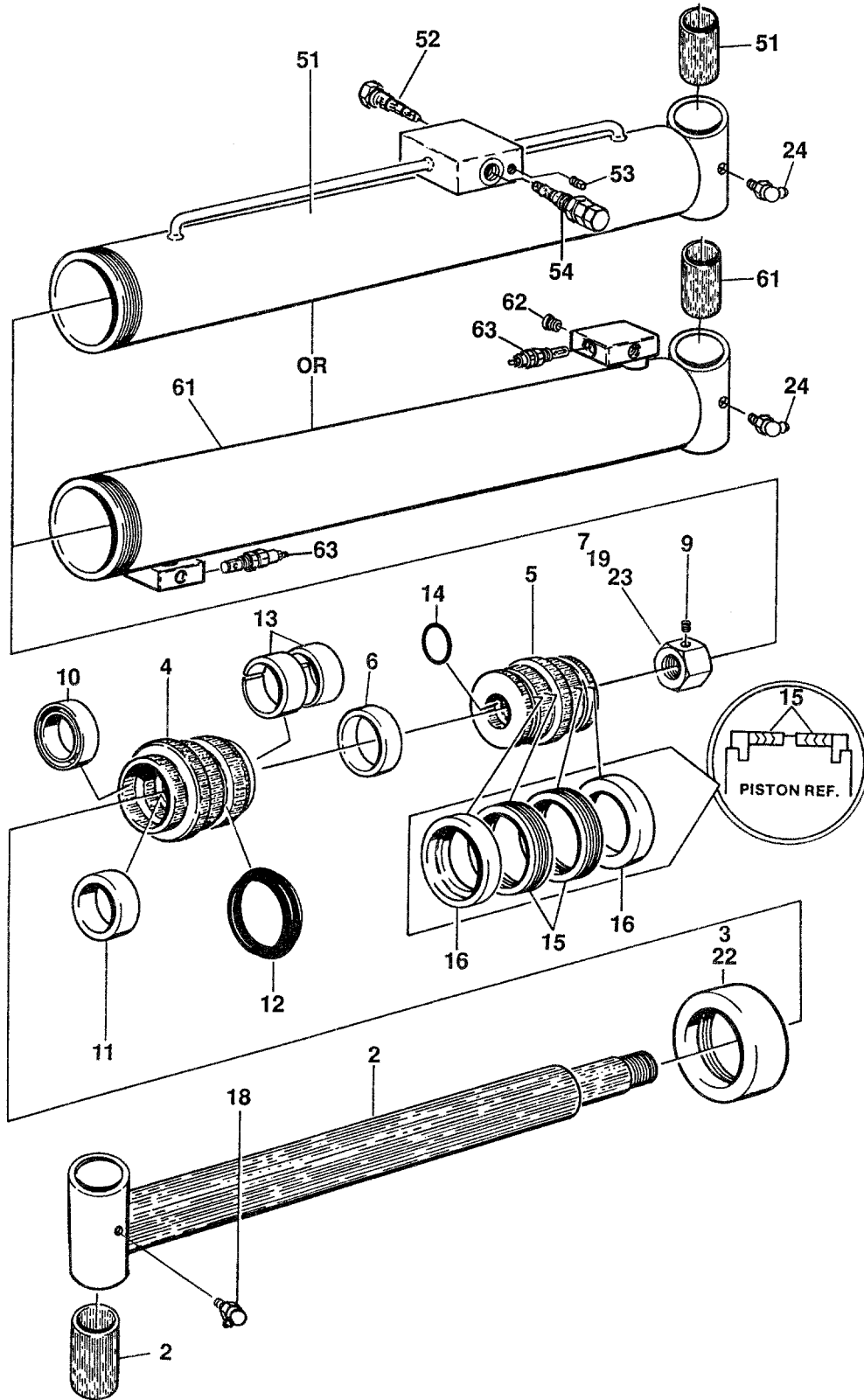
FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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FIGURE 5-6. LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS)



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# SECTION 5      CYLINDER

**FIGURE 5-6. LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	1682086	Rod	1	
	0960946	Bushing, Bronze	2	
3	1120427	Retainer	1	
4	1681294	Head	1	
5	3480102	Piston	1	
6	4563930	Spacer	1	
7	3300190	Nut (Prior to August 1991)	1	
	3300281	Nut, Hex (August 1991 to Present)	1	
8	Not Used			
9	3951404	Setscrew 1/4"-20NC x 1/4" (Prior to August 1991)	1	
	3900170	Setscrew 3/8"-16NC x 3/8" (August 1991 to Present)	1	
10	Kit	Wiper, Rod	1	
11	Kit	Seal, Rod	1	
12	Kit	O-Ring	1	
13	Kit	Ring, Wear	2	
14	Kit	O-Ring	1	
15	Kit	Seal, Piston	2	
16	Kit	Ring, Lock	2	
17	Not Used			
18	2160001	Fitting, Grease - 90°	1	
19	0100011	Loctite #242	A/R	
20	Not Used			
21	Not Used			
22	0100035	Loctite	A/R	
23	0100038	Primer, Locking	A/R	
24	2160003	Fitting, Grease - 45°	1	
	2900340	Seal Kit (Includes Items 10-16)	1	
	1682085	<b>LIFT CYLINDER ASSEMBLY - TOWER BOOM USED PRIOR TO OCTOBER 1992 (VARIABLE PARTS)</b>	Ref.	D
51	1682271	Barrel	1	
	0960946	Bushing, Bronze	2	
52	4640509	Valve, Cartridge	1	
	2900792	Seal Kit - 4640509 Valve	1	
53	2200201	Plug, Pipe 1/8" NPT	2	
54	4640605	Valve, Cartridge	1	
	2900792	Seal Kit - 4640605 Valve	1	

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# SECTION 5      CYLINDER

**FIGURE 5-6. LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1682785	LIFT CYLINDER ASSEMBLY - TOWER BOOM USED OCTOBER 1992 TO PRESENT (VARIABLE PARTS)		
	1683528	LIFT CYLINDER ASSEMBLY - TOWER BOOM USED POST PRODUCTION ALTERNATIVE (VARIABLE PARTS)		
61	1682786	Barrel (Production)	1	
	1683527	Barrel (Post Production Alternative)	1	
	0960946	Bushing, Bronze	2	
62	2220885	Plug	1	
63	4640634	Valve, Cartridge	1	
	2900770	Seal Kit - 4640634 Valve		

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# SECTION 5 CYLINDER

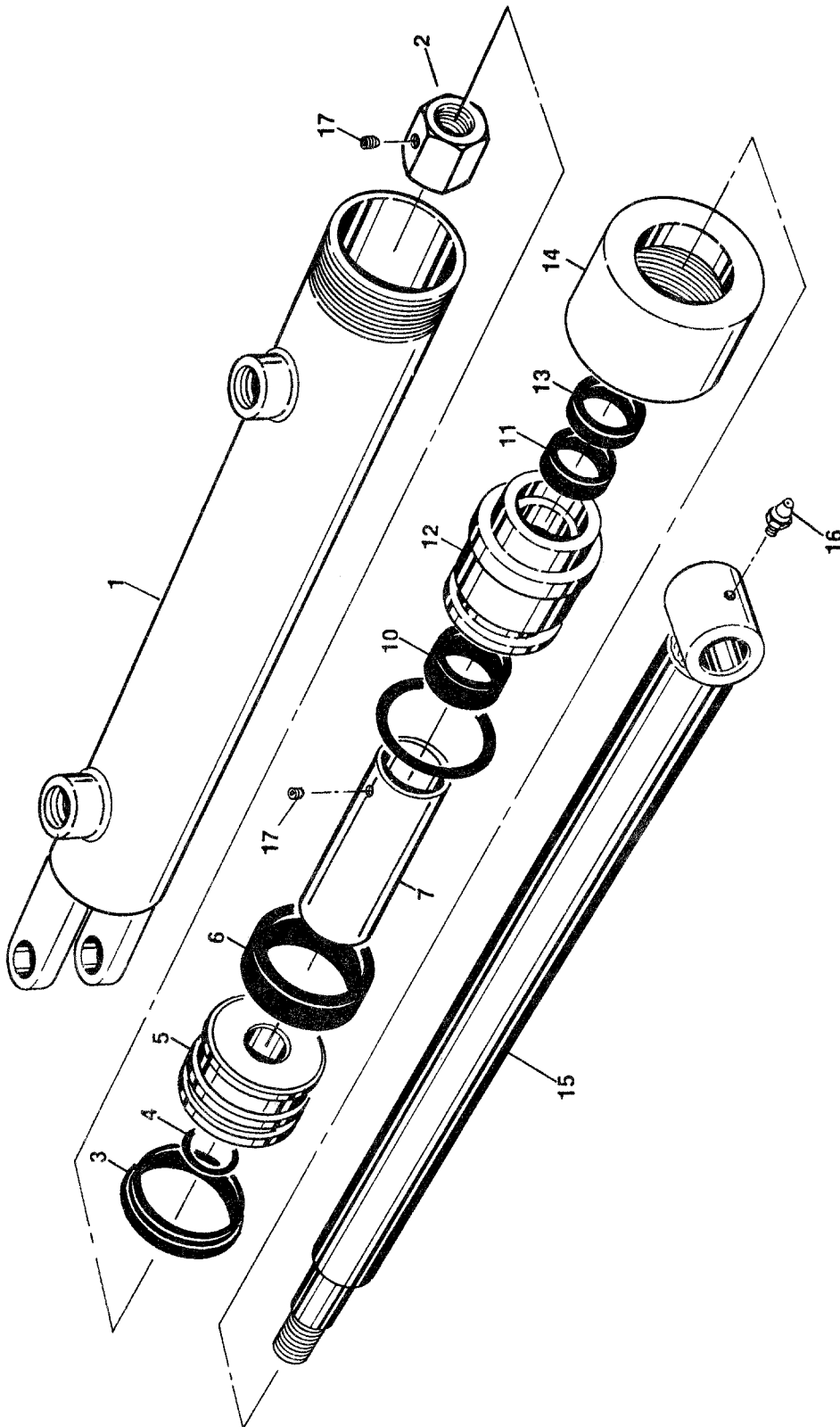
FIGURE 5-6. LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 5 CYLINDER

FIGURE 5-7. STEER CYLINDER ASSEMBLIES



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# SECTION 5 CYLINDER

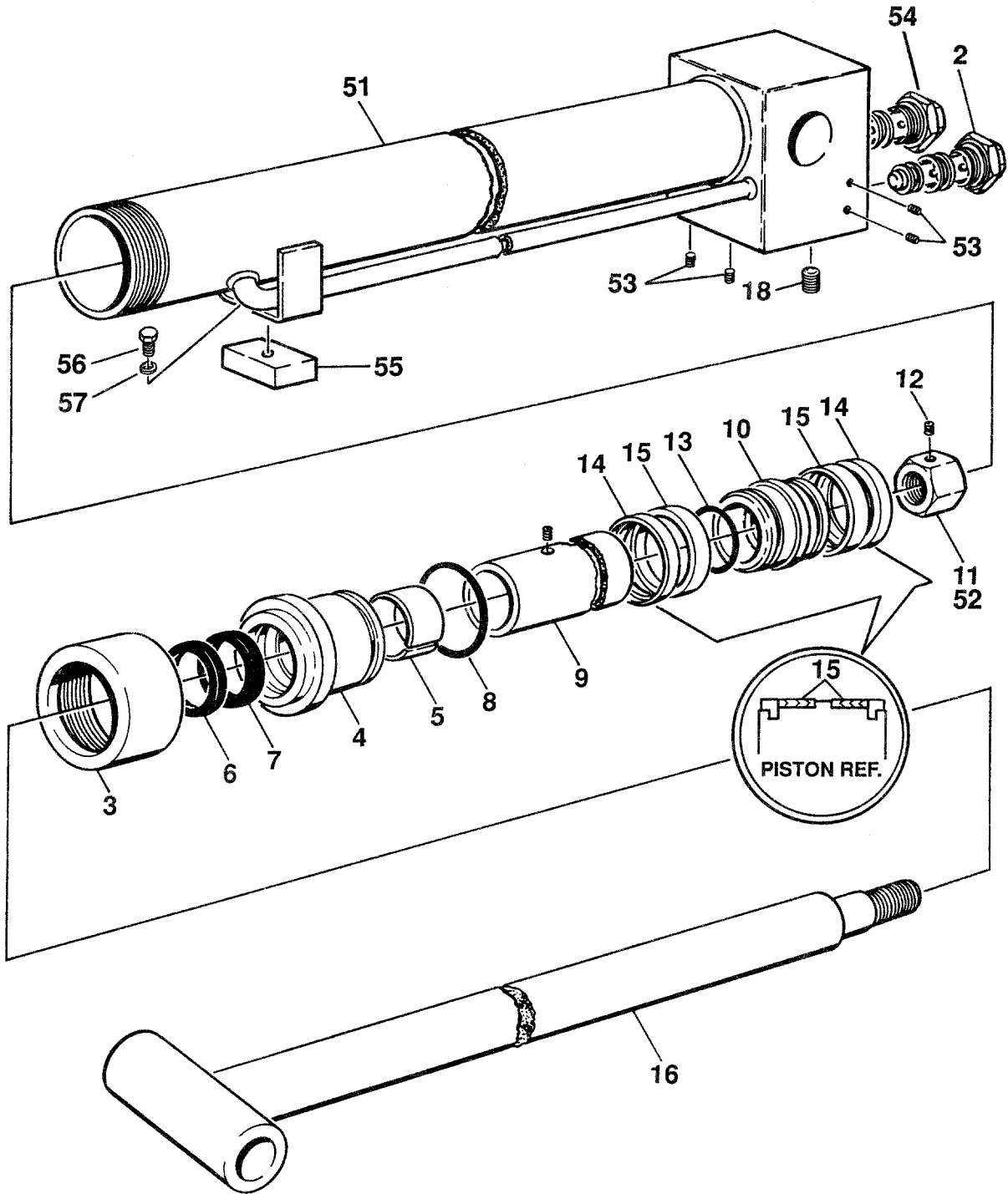
**FIGURE 5-7. STEER CYLINDER ASSEMBLIES**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1681562	<b>STEER CYLINDER ASSEMBLY (2WD FRONT AXLE)</b>	Ref.	H
	1681555	<b>STEER CYLINDER ASSEMBLY (4WD FRONT AND ALL REAR AXLES)</b>	Ref.	D
1	1681433	Barrel (1681562 Cylinder)	1	
	1681413	Barrel (1681555 Cylinder)	1	
2	3300273	Nut, Hex (February 1991 to Present)	1	
	3300187	Nut, Special (Prior to February 1991)	1	
	0100011	Loctite #242	A/R	
	0100038	Primer, Locking	A/R	
3	Kit	Seal	1	
4	Kit	O-Ring	1	
5	3480134	Piston	1	
6	Kit	Ring, Wear	1	
7	4562687	Spacer (1681562 Cylinder)	1	
	4562851	Spacer (1681555 Cylinder)	1	
8	Not Used			
9	Kit	O-Ring	1	
10	Kit	Ring, Wear	1	
11	Kit	Seal, Rod	1	
12	1681322	Head, Cylinder (1681562 Cylinder)	1	
	1681344	Head, Cylinder (1681555 Cylinder)	1	
13	Kit	Wiper, Rod	1	
14	1120108	Cap	1	
15	1681435	Rod (1681562 Cylinder)	1	
	1681411	Rod (1681555 Cylinder)	1	
16	2160002	Fitting, Grease - Straight	1	
	2160001	Fitting, Grease - 90°	1	
	2160006	Fitting, Grease (4WD/4WS Only)	1	
17	3900141	Setscrew 1/4"-20NC x 3/8" (Prior to February 1991)	3	
	3900170	Setscrew 3/8"-16NC x 3/8" (February 1991 to Present)	1	
	0100011	Loctite #242	A/R	
	2901148	Kit, Seal (Includes Items 3,4,6,9,10,11 and 13) (1681562 Cylinder)	1	
	2901123	Kit, Seal (Includes Items 3,4,6,9,10,11 and 13) (1681555 Cylinder)	1	

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# SECTION 5 CYLINDER

FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)



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# SECTION 5 CYLINDER

**FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)</b>	Ref.	
1	Not Used			
2	4640495	Cartridge, Valve (Machines Built Prior to June 1990)	1	
	4640634	Cartridge, Valve (Machines Built June 1990 to Present)	1	
	2900770	Seal Kit - 4640495 and 4640634 Valves	1	
3	1120108	End Cap	1	
	0100035	Loctite #222	A/R	
4	1681283	Head	1	
5	Kit	Ring, Wear	1	
6	Kit	Seal, Wiper	1	
7	Kit	Seal, Rod	1	
8	Kit	O-Ring	1	
9	4563330	Spacer, Tube	1	
	3951603	Setscrew 3/8"-16NC x 3/8"	2	
	0100011	Loctite #242	A/R	
10	3480092	Piston	1	
11	0100011	Loctite #242	A/R	
	0100038	Primer, Locking	A/R	
12	3900170	Setscrew 1/4"-20NC x 3/8"	2	
13	Kit	O-Ring	1	
14	Kit	Ring, Guidelock	2	
15	Kit	Seal, Piston	2	
16	1681883	Rod Assembly	1	
17	Not Used			
18	2200222	Plug 1/4"	2	
	0100020	Sealant, Pipe	A/R	
	2900396	Seal Kit (Includes Items 5,6,7,8,13,14 and 15)		
		<b>TELESCOPE CYLINDER ASSEMBLIES - MAIN BOOM (VARIABLE PARTS)</b>	Ref.	
	1681880	<b>PRIOR TO JUNE 1991</b>	Ref.	B
	1682492	<b>JUNE 1991 TO PRESENT</b>	Ref.	A
51		Barrel Options:	1	
	1681881	Prior to June 1991		
	1682493	June 1991 to Present		
52		Nut, Hex Options:	1	
	3300282	Prior to June 1991		
	3300286	June 1991 to Present		
53		Plug Options:	A/R	
	2200201	Plug 1/8" (Prior to June 1991)	2	
	2180527	Plug 1/16" (June 1991 to Present)	4	
54		Cartridge, Valve Options:	1	
	Not Required	Prior to June 1991		
	4640495	June 1991 to Present		
	2900770	Seal Kit - 4640495 Valve	1	

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# SECTION 5      CYLINDER

**FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
55	Not Required 3340545	Pad, Wear Options: Prior to June 1991 June 1991 to Present	1	
56	Not Required 0641604	Bolt 3/8"-16NC x 1/2" Options: Prior to June 1991 June 1991 to Present	1	
57	Not Required 4761600	Lockwasher 3/8" Options: Prior to June 1991 June 1991 to Present	1	

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# SECTION 5 CYLINDER

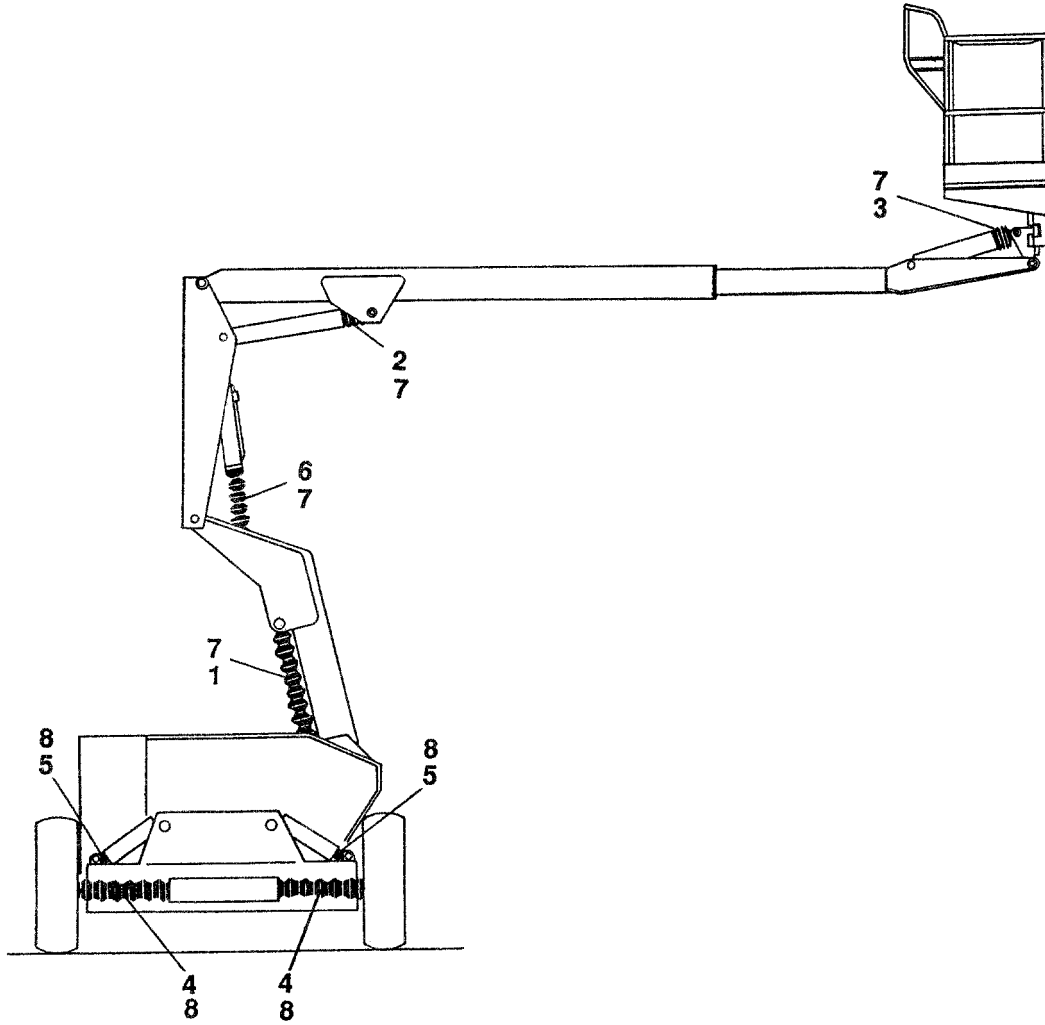
FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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# SECTION 5 CYLINDER

FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL)



SECTION 5 CYLINDER

# SECTION 5 CYLINDER

**FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>BELLOWS INSTALLATIONS</b>	Ref.	
	0250862	<b>2WD MACHINES WITH FIXED AXLE</b>	Ref.	F
	0256324	<b>2WD/4WS MACHINES WITH FIXED AXLE (S/N 23615 to Present)</b>	Ref.	
	0250863	<b>2WD MACHINES WITH OSCILLATING AXLE</b>	Ref.	F
	0256326	<b>2WD/4WS MACHINES WITH OSCILLATING AXLE (S/N 23615 to Present)</b>	Ref.	
	0250864	<b>4WD MACHINES WITH FIXED AXLE</b>	Ref.	F
	0256325	<b>4WD/4WS MACHINES WITH FIXED AXLE (S/N 23615 to Present)</b>	Ref.	
	0250865	<b>4WD MACHINES WITH OSCILLATING AXLE</b>	Ref.	F
	0256327	<b>4WD/4WS MACHINES WITH OSCILLATING AXLE (S/N 23615 to Present)</b>	Ref.	
1	0460092	Bellows (With Zipper) (Tower Lift Cylinder)	1	
2	0460093	Bellows (With Zipper) (Main Lift Cylinder)	1	
3	0460084	Bellows (With Zipper) (Platform Level Cylinder)	1	
4		Bellows (With Zipper) (Steer Cylinder) Options:	A/R	
	0460073	2WD	1	
	0460075	4WD	1	
	0460075	4WS	1	
5		Bellows (With Zipper) (Lockout Cylinder) Options:	2	
	Not Used	2WD Machines With Fixed Axle		
	0460083	2WD Machines With Oscillating Axle		
6	0460099	Bellows (With Zipper) (Upright Level Cylinder)	1	
7	1320122	Clamp, Worm Gear (5 1/8"-6" Dia.)	4	
8	1320037	Clamp, Worm Gear (3"-5 1/8" Dia.)	A/R	
		2WD/4WD Machines With Fixed Axle	1	
		2WD/4WD Machines With Oscillating Axle	3	

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# SECTION 5 CYLINDER

FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

**S  
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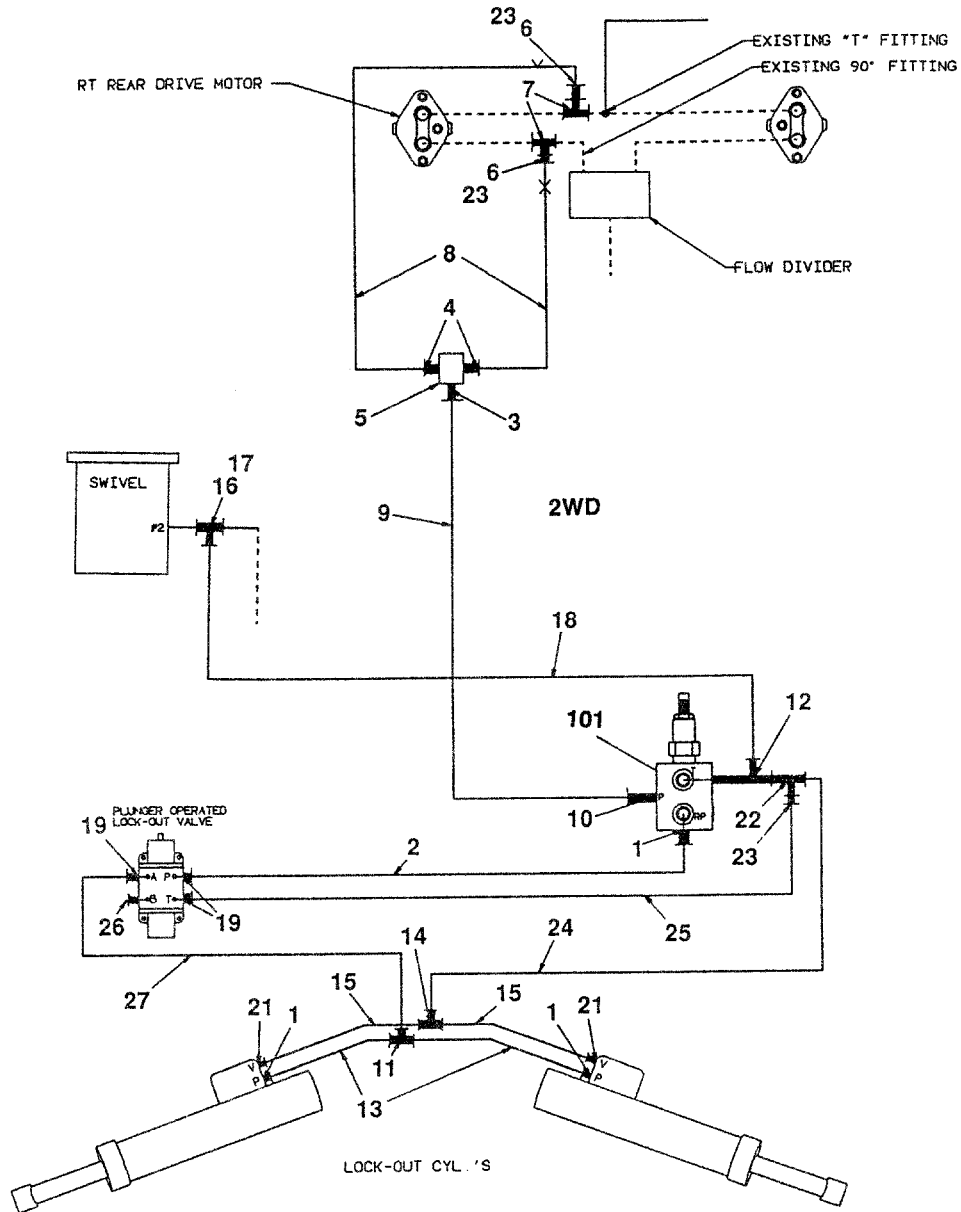
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FIGURE 6-1. HYDRAULIC DIAGRAM - AXLE LOCKOUT (2WD)



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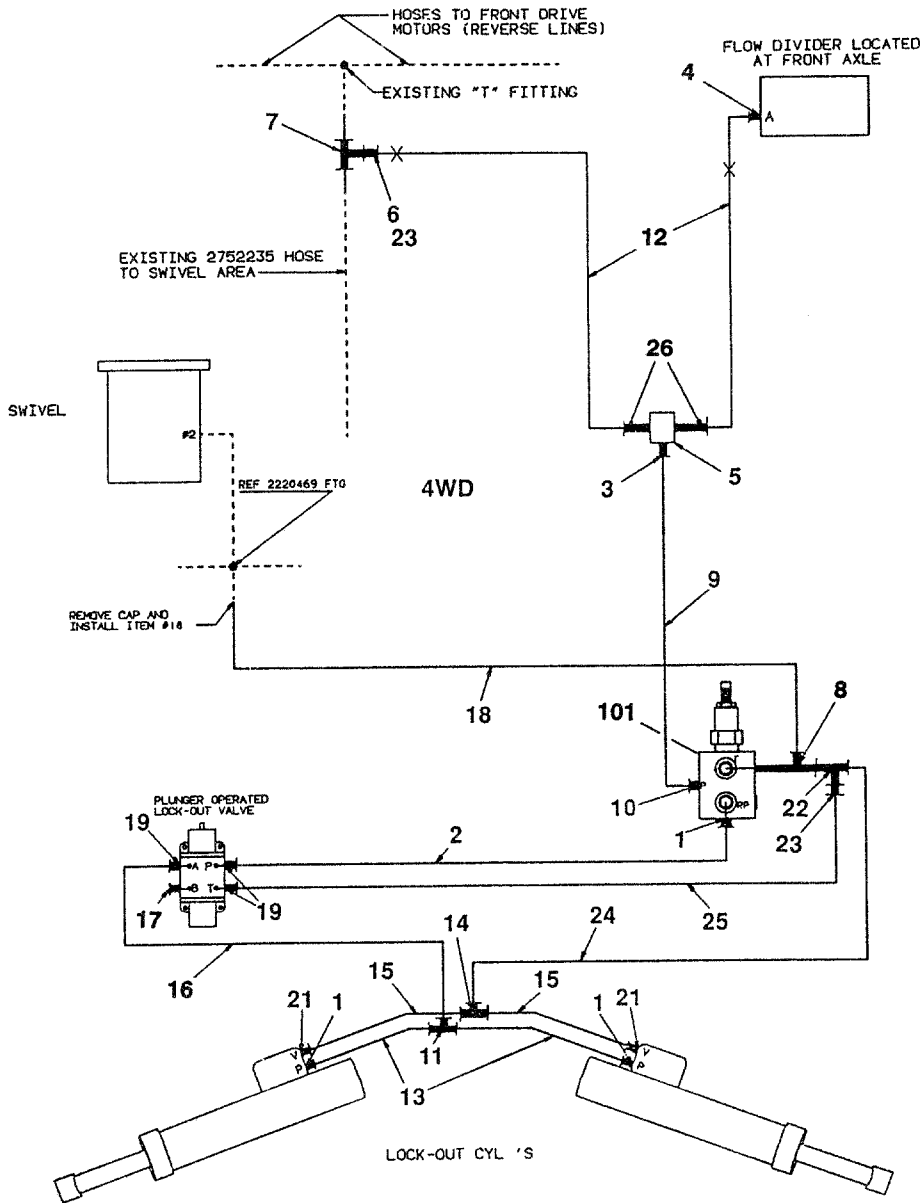
**FIGURE 6-1. HYDRAULIC DIAGRAM - AXLE LOCKOUT (2WD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2791866	<b>HYDRAULIC DIAGRAM - AXLE LOCKOUT (2WD)</b>	Ref.	A
1	2220582	Fitting, Straight	3	
2	2751397	Hose	1	
3	2220414	Fitting, Straight	1	
4	2220416	Fitting, 90°	2	
5	4640013	Valve, Shuttle	1	
6	2220621	Fitting, Reducer	2	
7	2220700	Fitting, Tee	2	
8	2750902	Hose	2	
9	2751906	Hose	1	
10	2220472	Fitting, 90°	1	
11	2220504	Fitting, Tee	1	
12	2220606	Fitting, Tee	1	
13	2752433	Hose	2	
14	2220490	Fitting, Tee	1	
15	2750910	Hose	2	
16	2220679	Fitting, Tee	1	
17	2220619	Fitting, Reducer	1	
18	2750779	Hose	1	
19	2220466	Fitting, 90°	3	
20	Not Used			
21	2220371	Fitting, Straight	2	
22	2220635	Fitting, Tee	1	
23	2220609	Fitting, Reducer	3	
24	2750786	Hose	1	
25	2751020	Hose	1	
26	2220235	Fitting, Plug	1	
27	2751013	Hose	1	
	0251599	<b>PRESSURE REDUCING VALVE INSTALLATION</b>	Ref.	—
101	4640689	Valve, Pressure Reducing	1	
	7010530	Cartridge	1	
	2900698	Seal Kit	1	
	7010531	Plug, Sense Check	1	
	3780149	O-Ring	1	
	4300087	Stud (Welded on Part)	2	
	4751400	Flatwasher 1/4"	2	
	4761400	Lockwasher 1/4"	2	
	3311401	Nut 1/4"-20NC	2	

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FIGURE 6-2.HYDRAULIC DIAGRAM - AXLE LOCKOUT (4WD)



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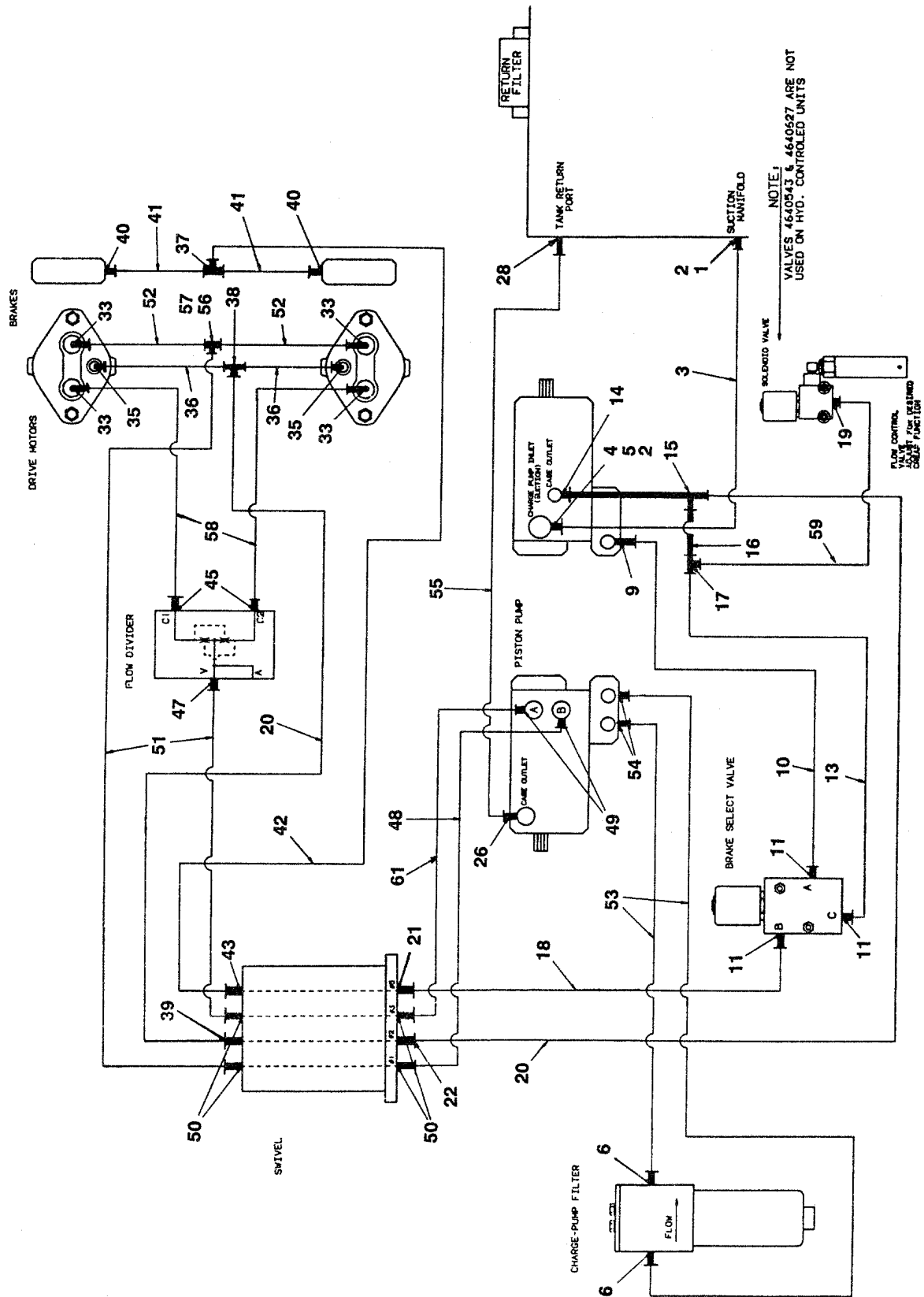
**FIGURE 6-2. HYDRAULIC DIAGRAM - AXLE LOCKOUT (4WD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2791865	<b>HYDRAULIC DIAGRAM - AXLE LOCKOUT (4WD)</b>	Ref.	A
1	2220582	Fitting, Straight	3	
2	2751397	Hose	1	
3	2220414	Fitting, Straight	1	
4	2220415	Fitting, Straight	1	
5	4640013	Valve, Shuttle	1	
6	2220621	Fitting, Reducer	1	
7	2220700	Fitting, Tee	1	
8	2220606	Fitting, Tee	1	
9	2751015	Hose	1	
10	2220472	Fitting, 90°	1	
11	2220504	Fitting, Tee	1	
12	2751018	Hose	2	
13	2752433	Hose	2	
14	2220490	Fitting, Tee	1	
15	2750910	Hose	2	
16	2751013	Hose	1	
17	2220235	Hose, Plug	1	
18	2750779	Hose	1	
19	2220466	Fitting, 90°	3	
20	Not Used			
21	2220371	Fitting, Straight	2	
22	2220635	Fitting, Tee	1	
23	2220609	Fitting, Reducer	2	
24	2750786	Hose	1	
25	2751020	Hose	1	
26	2220416	Fitting, 90°	2	
	0251599	<b>PRESSURE REDUCING VALVE INSTALLATION</b>	Ref.	—
101	4640689	Valve, Pressure Reducing	1	
	7010530	Cartridge	1	
	2900698	Seal Kit	1	
	7010531	Plug, Sense Check	1	
	3780149	O-Ring	1	
	4300087	Stud (Welded on Part)	2	
	4751400	Flatwasher 1/4"	2	
	4761400	Lockwasher 1/4"	2	
	3311401	Nut 1/4"-20NC	2	

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FIGURE 6-3. HYDRAULIC DIAGRAM - DRIVE (2WD)



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**FIGURE 6-3. HYDRAULIC DIAGRAM - DRIVE (2WD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2791627	<b>DEUTZ WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	E
	2791678	<b>DEUTZ WITH PROPORTIONAL AND HYDRAULIC CONTROLS</b>	Ref.	B
	2791577	<b>FORD WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	G
	2791679	<b>FORD WITH PROPORTIONAL AND HYDRAULIC CONTROLS</b>	Ref.	B
1	2210007	Fitting, Barbed	1	
2	1320033	Clamp	4	
3		Hose Options:		
	2720335	Deutz Machines	53 in./ 1.35m	
	2720281	Ford Machines	64 in./ 1.63m	
4	2220646	Fitting, 90°	1	
5		Fitting Options:	1	
	2210014	Deutz Machines		
	2210003	Ford Machines		
6	2220578	Fitting	2	
7	Not Used			
8	Not Used			
9	2220472	Fitting, 90°	1	
10	2750899	Hose	1	
11	2220417	Fitting	3	
12	Not Used			
13	2751013	Hose	1	
14	2220375	Fitting, Straight	1	
15	2220385	Fitting, Tee	1	
16	2220618	Fitting, Reducer	1	
17		Fitting Options:	A/R	
	2220605	Fitting, Tee (Standard Bang-Bang Controls)	1	
	Not Required	Fitting (Proportional and Hydraulic Controls)	0	
18	2751010	Hose	1	
19		Fitting Options:	1	
	2220372	(Standard Bang-Bang Controls)		
	2220582	(Proportional and Hydraulic Controls)		
20	2750977	Hose	2	
21	2220496	Fitting, 45°	1	
22	2220355	Fitting, 45°	1	
23	Not Used			
24	Not Used			
25	Not Used			
26	2220498	Fitting, 45°	1	
27	Not Used			
28	2220494	Fitting, 90°	1	
29	Not Used			
30	Not Used			
31	Not Used			
32	Not Used			

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**FIGURE 6-3. HYDRAULIC DIAGRAM - DRIVE (2WD) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
33	2220451	Fitting, Straight	4	
34	Not Used			
35	2220600	Fitting, Straight	2	
36	2751517	Hose	2	
37	2220504	Fitting, Tee	1	
38	2220362	Fitting, Tee	1	
39	2220345	Fitting, Straight	1	
40	2220466	Fitting, 90°	2	
41	2751014	Hose	2	
42	2751443	Hose	1	
43	2220414	Fitting, Straight	1	
44	0100020	Sealant, Thread (Not Shown)	A/R	
45	2220465	Fitting, 90°	2	
46	Not Used			
47	2220377	Fitting, Straight	1	
48	2752319	Hose	1	
49	2220365	Fitting, 45°	2	
50	2220348	Fitting, Straight	4	
51	2752349	Hose	2	
52	2752238	Hose	2	
53		Hose Options:	2	
	2751614	Deutz Machines		
	2751626	Ford Machines		
54	2220408	Fitting, Straight	2	
55	2751635	Hose	1	
56	2220363	Fitting, Tee	1	
57	2220710	Fitting, Reducer	2	
58	2752242	Hose	2	
59		Hose Options:	A/R	
	2752461	Standard Controls	1	
	Not Required	Proportional and Hydraulic Controls	0	
60	Not Used			
61	2752319	Hose	1	
62		Fitting Options:	A/R	
	2220619	Standard Controls	1	
	Not Required	Proportional and Hydraulic Controls	0	

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FIGURE 6-3. HYDRAULIC DIAGRAM - DRIVE (2WD) (CONTINUED)

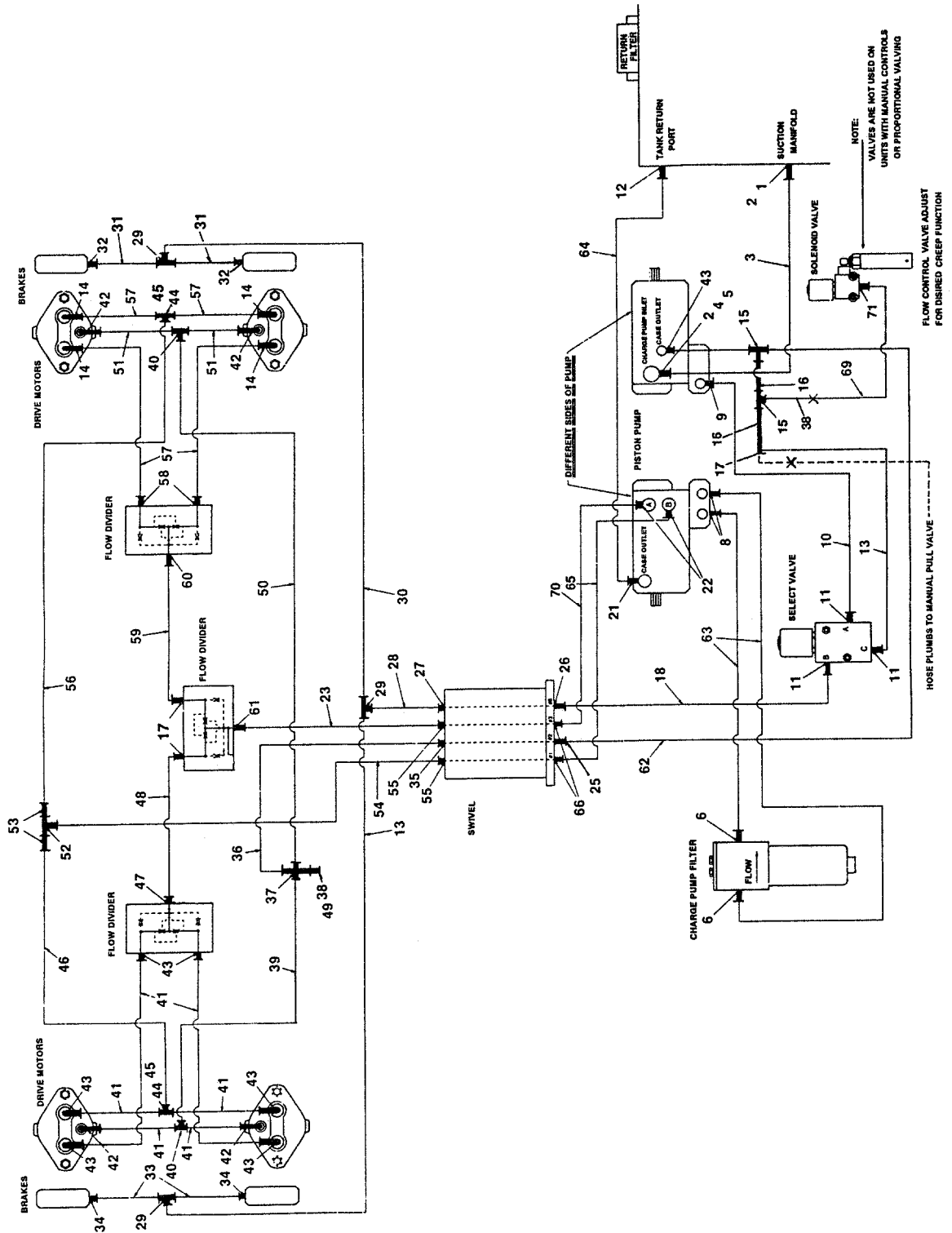
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

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FIGURE 6-4. HYDRAULIC DIAGRAM - DRIVE (4WD)

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# SECTION 6      HYDRAULIC

**FIGURE 6-4. HYDRAULIC DIAGRAM - DRIVE (4WD)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2791632	<b>DEUTZ WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	D
	2791680	<b>DEUTZ WITH PROPORTIONAL AND HYDRAULIC CONTROLS</b>	Ref.	A
	2791617	<b>FORD WITH STANDARD BANG-BANG CONTROLS</b>	Ref.	F
	2791681	<b>FORD WITH PROPORTIONAL AND HYDRAULIC CONTROLS</b>	Ref.	B
1	2210007	Fitting, Barbed	1	
2	1320033	Clamp	4	
3		Hose Options:		
	2720335	Deutz Machines	53 in./ 1.35m	
	2720281	Ford Machines	64 in./ 1.63m	
4	2220646	Fitting, 90°	1	
5		Fitting Options:	1	
	2210014	Deutz Machines		
	2210003	Ford Machines		
6	2220578	Fitting	2	
7	Not Used			
8	2220408	Fitting, Straight	2	
9	2220472	Fitting, 90°	1	
10	2750899	Hose	1	
11	2220417	Fitting	3	
12	2220494	Fitting, Tee	1	
13	2751013	Hose	2	
14	2220451	Fitting, Straight	6	
15	2220385	Fitting, Tee	2	
16	2220618	Fitting, Reducer	1	
17		Fitting Options:	A/R	
	2220605	Fitting, Tee (Standard Bang-Bang Controls)	1	
	Not Required	Fitting, (Proportional and Hydraulic Controls)	0	
18	2751010	Hose	1	
19	Not Used			
20	Not Used			
21	2220498	Fitting, 45°	1	
22	2220365	Fitting, 45°	2	
23	2752317	Hose	1	
24	Not Used			
25	2220355	Fitting, 45°	1	
26	2220496	Fitting, 45°	1	
27	2220414	Fitting, Straight	1	
28	2750902	Hose	1	
29	2220504	Fitting, 3-Way	3	
30	2751026	Hose	1	
31	2751014	Hose	2	
32	2220466	Fitting, 90°	2	
33	2751398	Hose	2	
34	2220415	Fitting	2	

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**FIGURE 6-4. HYDRAULIC DIAGRAM - DRIVE (4WD) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
35	2220345	Fitting, Straight	1	
36	2750972	Hose	1	
37	2220469	Fitting, 4-Way	1	
38	2220619	Fitting, Reducer	2	
39	2750774	Hose	1	
40	2220362	Fitting, Tee	2	
41	2750979	Hose	6	
42	2220600	Fitting, Straight	4	
43	2220375	Fitting, Straight	7	
44	2220481	Fitting, Tee	2	
45	2220622	Fitting, Reducer	2	
46	2752235	Hose	1	
47	2220568	Fitting, 45°	1	
48	2752236	Hose	1	
49	2220516	Fitting, Cap	1	
50	2751483	Hose	1	
51	2751517	Hose	2	
52	2220363	Fitting, Tee	1	
53	2220710	Fitting, Reducer	2	
54	2752318	Hose	1	
55	2220627	Fitting, 45°	2	
56	2752237	Hose	1	
57	2752242	Hose	4	
58	2220578	Fitting, 90°	2	
59	2752239	Hose	1	
60	2220435	Fitting, Straight	1	
61	2220377	Fitting, Straight	1	
62	2750977	Hose	1	
63		Hose Options:	2	
	2751614	Deutz Machines		
	2751626	Ford Machines		
64	2751635	Hose	1	
65	2752319	Hose	1	
66	2220348	Fitting, Straight	2	
67	Not Used			
68	0100020	Sealant, Thread (Not Shown)	A/R	
69		Hose Options:	A/R	
	2752461	Standard Controls	1	
	Not Required	Proportional and Hydraulic Controls	0	
70	Not Used			
71	2752319	Hose	1	
72		Fitting Options:	A/R	
	2220619	Standard Controls	1	
	Not Required	Proportional and Hydraulic Controls	0	

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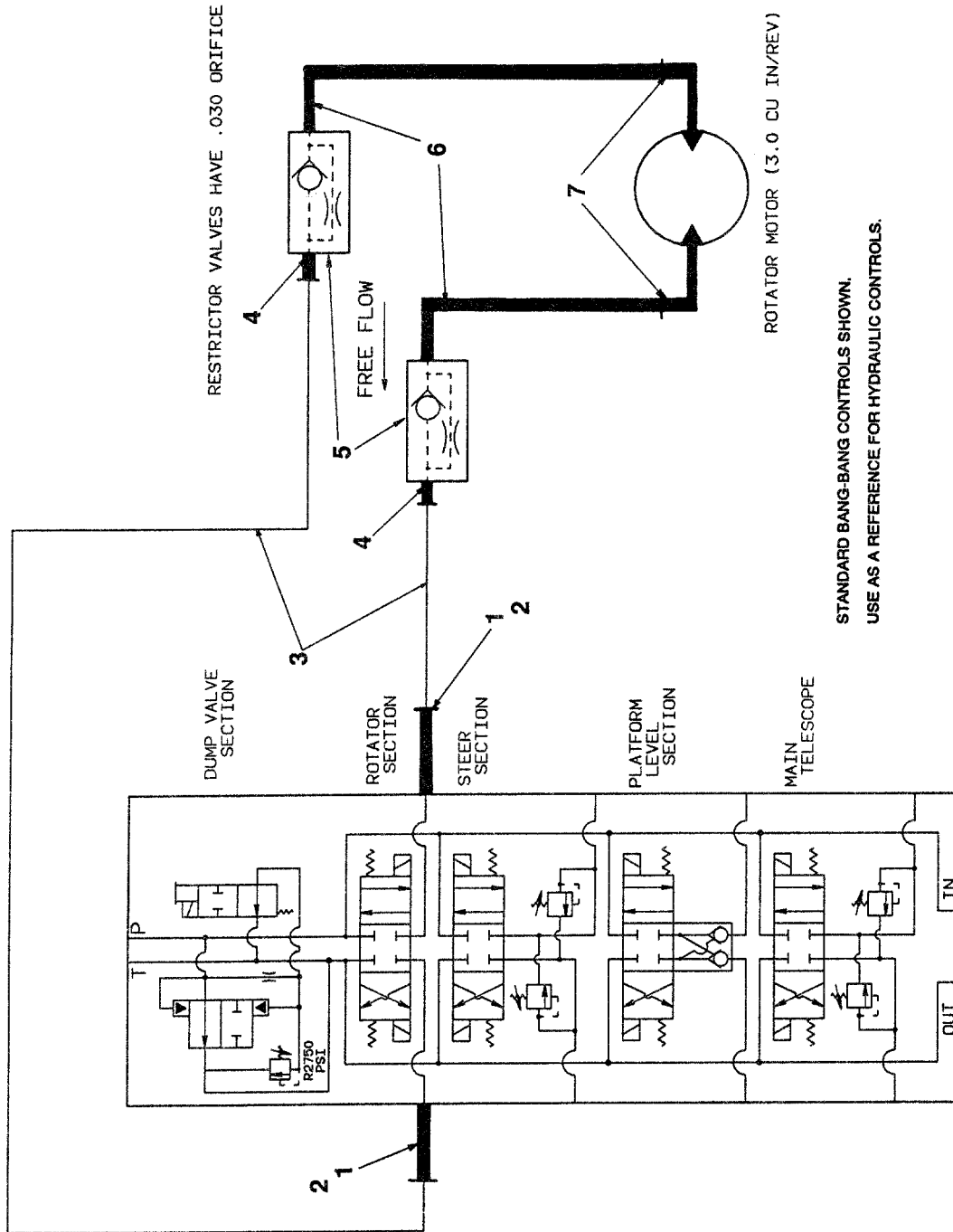
FIGURE 6-4. HYDRAULIC DIAGRAM - DRIVE (4WD) (CONTINUED)

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.

**S  
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FIGURE 6-5. HYDRAULIC DIAGRAM - ROTATE



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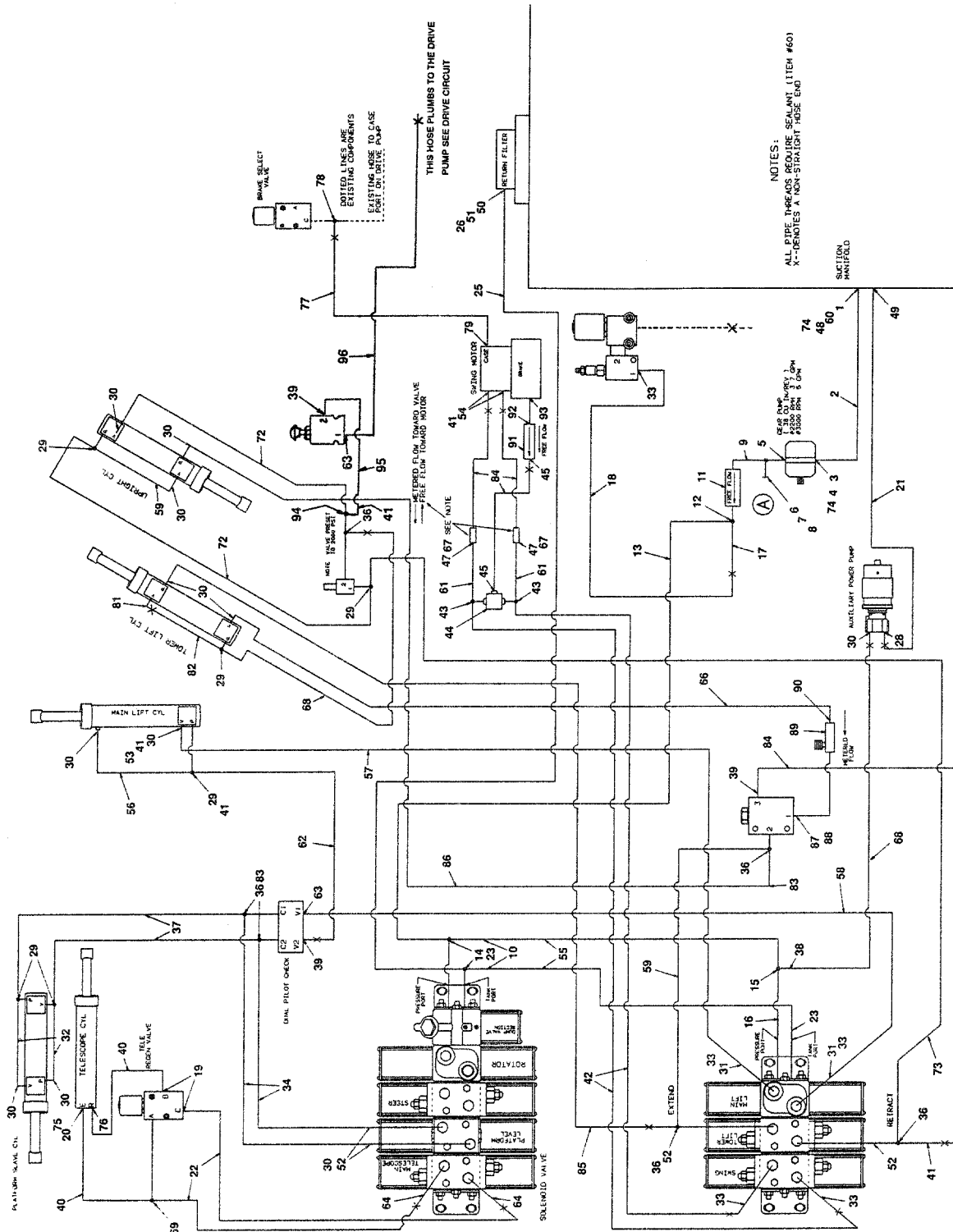
**FIGURE 6-5. HYDRAULIC DIAGRAM - ROTATE**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>HYDRAULIC DIAGRAM - ROTATE</b>	Ref.	
	2791578	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS</b>	Ref.	B
	2791673	<b>HYDRAULIC CONTROLS</b>	Ref.	A
1		Fitting, Straight Options:	2	
	2220582	Standard - Fitting, Straight		
	2220468	Hydraulic Controls - Fitting, Straight		
2		Fitting, 90° Options:	2	
	2220654	Standard		
	Not Required	Hydraulic Controls		
3		Hose Options:	2	
	2751454	Standard		
	2751011	Hydraulic Controls		
4		Fitting, 90° Options:	2	
	2220416	Standard		
	2220466	Hydraulic Controls		
5		Valve, Restrictor Options:	2	
	4640383	Standard		
	4640778	Hydraulic Controls		
6		Fitting Options:	2	
	2220261	Standard - Fitting, Nipple		
	2220895	Hydraulic Controls - Fitting, Straight		
7		Fitting Options:	2	
	2220816	Standard		
	2220218	Hydraulic Controls		

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FIGURE 6-6. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS /DEUTZ MACHINES)



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# SECTION 6      HYDRAULIC

**FIGURE 6-6. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS /DEUTZ MACHINES)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2792002	<b>HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/DEUTZ MACHINES)</b>	Ref.	I
1	2210006	Fitting, Barbed	1	
2	2720344	Hose	56"/17m	
3	2210027	Fitting, 45°	1	
4	2220408	Fitting	1	
5	2180491	Fitting, 90°	1	
6	2220820	Fitting, 90°	1	
7	2220429	Cap, Dust	1	
8	2220428	Fitting, Quick Disconnect	1	
9	2220651	Fitting	1	
10	2220683	Fitting	2	
11	4640776	Valve, Check	1	
12	2220602	Fitting	1	
13	2751483	Hose	1	
14	2220383	Fitting, Tee	2	
15	2220385	Fitting, Tee	1	
16	2220600	Fitting	1	
17	2220618	Fitting, Reducer	1	
18	2751017	Hose	1	
19	2220495	Fitting, 90°	2	
20	2220064	Fitting, 90°	1	
21	2750766	Hose	1	
22	2750913	Hose	2	
23	2220373	Fitting	3	
24	Not Used			
25	2750973	Hose	1	
26	2220471	Fitting, 90°	1	
27	Not Used			
28	2220726	Fitting, 90°	1	
29	2220899	Fitting, Tee	6	
30	2220473	Fitting, 90°	12	
31	2220654	Fitting, 90°	2	
32	2750918	Hose	2	
33	2220468	Fitting	5	
34	2751123	Hose	2	
35	Not Used			
36	2220606	Fitting, Tee	6	
37	2751161	Hose	2	
38	2220619	Fitting, Reducer	1	
39	2220472	Fitting	3	
40	2751163	Hose	2	
41	2220609	Fitting, Reducer	7	
42	2750901	Hose	2	
43	2220584	Fitting, Tee	2	
44	4640013	Valve, Shuttle	1	

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**FIGURE 6-6. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS /DEUTZ MACHINES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
45	2220414	Fitting	2	
46	Not Used			
47	2220415	Fitting	4	
48	2220263	Fitting, Reducer	1	
49	2220346	Fitting	1	
50	2220329	Fitting, Reducer	1	
51	2220800	Fitting, Straight	1	
52	2220591	Fitting, Reducer	4	
53	2220908	Fitting, Orifice	1	
54	2220497	Fitting	2	
55	2750762	Hose	2	
56	2750998	Hose	1	
57	2751418	Hose	1	
58	2751421	Hose	1	
59	2751101	Hose	2	
60	Not Used			
61	2751394	Hose	2	
62	2751020	Hose	1	
63	2220582	Fitting	2	
64	2220372	Fitting	2	
65	Not Used			
66	2751852	Hose	1	
67	4640817	Valve, Restrictor (.040)	2	
68	2750991	Hose	2	
69	2220604	Fitting, Tee	1	
70	Not Used			
71	Not Used			
72	2751150	Hose	2	
73	2750999	Hose	1	
74	1320030	Clamp	4	
75	2180652	Fitting, Modified	1	
76	2220773	Fitting, 90°	1	
77	2751391	Hose	1	
78	2220605	Fitting, Tee	1	
79	2220466	Fitting, 90°	1	
80	4640818	Valve	1	
81	2220371	Fitting	1	
82	2750921	Hose	1	
83	2220507	Fitting, 90°	3	
84	2751010	Hose	4	
85	2752163	Hose	1	
86	2751007	Hose	1	
87	2220727	Fitting	1	
88	2220261	Fitting, Nipple	1	
89	4640128	Valve, Flow Control	1	
90	2220399	Fitting	1	
91	4640213	Valve, Restrictor (.015)	1	
92	2220261	Fitting, Straight	1	

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# SECTION 6      HYDRAULIC

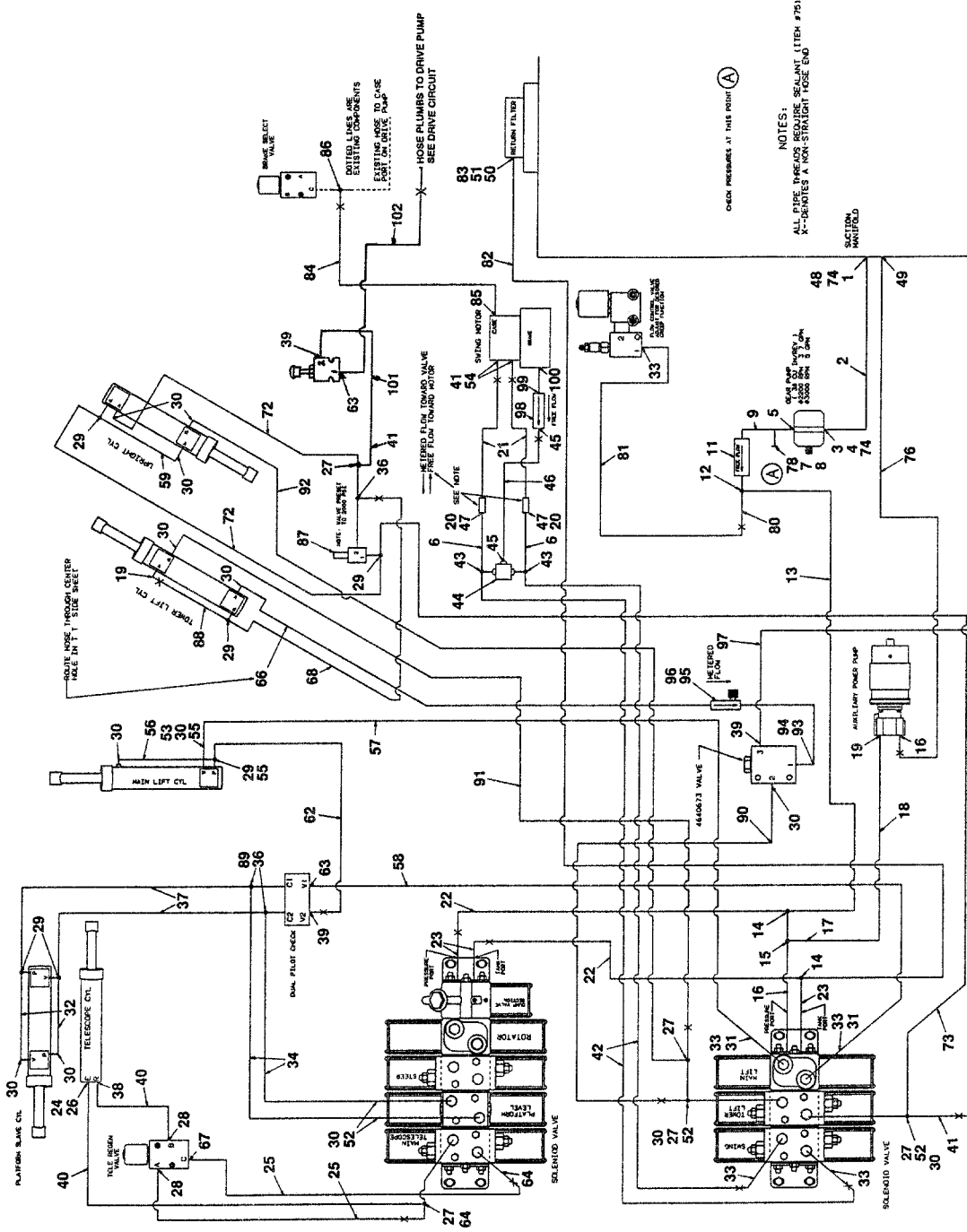
**FIGURE 6-6. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS /DEUTZ MACHINES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
93	2220110	Fitting, 90°	1	
94	2220635	Fitting, Tee	1	
95	2751026	Hose	1	
96	2750892	Hose	1	
	0100020	----- Sealant, Thread	A/R	

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FIGURE 6-7. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/FORD AND KUBOTA MACHINES)



NOTES:  
ALL PIPE THREADS REQUIRE SEALANT (ITEM #70)  
X--DENOTES A NON-STANDARD HOSE END

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**FIGURE 6-7. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/FORD AND KUBOTA MACHINES)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2792001	HYDRAULIC DIAGRAM - STANDARD	Ref.	I
1	2210006	Fitting, Barbed	1	
2	2720344	Hose	56"	
3	2210027	Fitting, 45°	1	
4	2220408	Fitting	1	
5	2180491	Fitting, 90°	1	
6	2751394	Hose	2	
7	2220429	Cap, Dust	1	
8	2220428	Fitting, Quick Disconnect	1	
9	2220651	Fitting	1	
10	Not Used			
11	4640776	Valve, Check	1	
12	2220602	Fitting	1	
13	2750773	Hose	1	
14	2220383	Fitting, Tee	2	
15	2220385	Fitting, Tee	1	
16	2220600	Fitting	2	
17	2220619	Fitting, Reducer	1	
18	2750779	Hose	1	
19	2220371	Fitting	2	
20	4640817	Valve, Restrictor (.040)	2	
21	2751010	Hose	2	
22	2750928	Hose	2	
23	2220373	Fitting	3	
24	2180652	Fitting	1	
25	2751003	Hose	2	
26	2220064	Fitting	1	
27	2220635	Fitting, Tee	5	
28	2220495	Fitting	2	
29	2220899	Fitting, Tee	6	
30	2220473	Fitting, 90°	14	
31	2220654	Fitting, 90°	2	
32	2750918	Hose	2	
33	2220468	Fitting	5	
34	2751123	Hose	2	
35	Not Used			
36	2220606	Fitting, Tee	3	
37	2751161	Hose	2	
38	2220773	Fitting	1	
39	2220472	Fitting	3	
40	2751163	Hose	2	
41	2220609	Fitting, Reducer	4	
42	2750901	Hose	2	
43	2220584	Fitting, Tee	2	
44	4640013	Valve, Shuttle	1	
45	2220414	Fitting	2	

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**FIGURE 6-7. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/FORD AND KUBOTA MACHINES) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
46	2750899	Hose	1	
47	2220415	Fitting	4	
48	2220263	Fitting, Reducer	1	
49	2220346	Fitting	1	
50	2220329	Fitting, Reducer	1	
51	2220800	Fitting	1	
52	2220591	Fitting, Reducer	4	
53	2220908	Fitting, Restrictor	1	
54	2220497	Fitting	2	
55	2220609	Fitting, Reducer	2	
56	2750998	Hose	1	
57	2751418	Hose	1	
58	2751421	Hose	1	
59	2751101	Hose	1	
60	Not Used			
61	Not Used			
62	2751020	Hose	1	
63	2220582	Fitting	2	
64	2220372	Fitting	2	
65	Not Used			
66	2751852	Hose	1	
67	2220343	Fitting	1	
68	2750991	Hose	1	
69	Not Used			
70	Not Used			
71	Not Used			
72	2751150	Hose	2	
73	2750999	Hose	1	
74	1320030	Clamp	4	
75	Not Used			
76	2750777	Hose	1	
77	Not Used			
78	2220820	Fitting, 90°	1	
79	2220657	Fitting, 45°	1	
80	2220618	Fitting, Reducer	1	
81	2751017	Hose	1	
82	2751489	Hose	1	
83	2220471	Fitting, 90°	1	
84	2751391	Hose	1	
85	2220466	Fitting, 90°	1	
86	2220605	Fitting, Tee	1	
87	Not Used			
88	2750921	Hose	1	
89	2220507	Fitting, 90°	2	
90	2751006	Hose	1	
91	2752163	Hose	1	
92	2751007	Hose	1	
93	2220727	Fitting	1	

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**FIGURE 6-7. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/FORD AND KUBOTA MACHINES) (CONTINUED)**

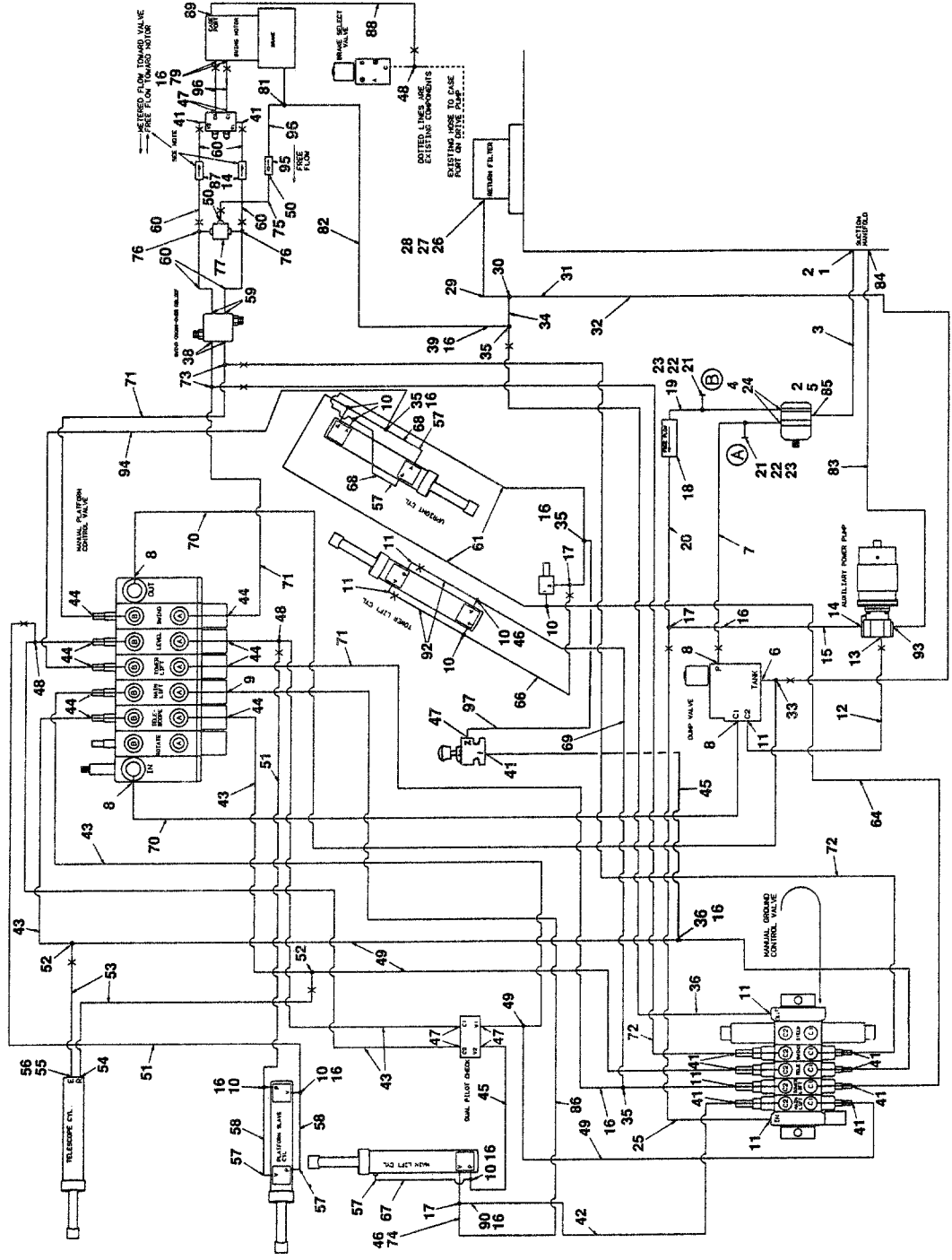
FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
94	2220261	Fitting, Nipple	1	
95	4640128	Valve, Flow Control	1	
96	2220399	Fitting	1	
97	2751396	Hose	1	
98	4640213	Valve, Restrictor	1	
99	2220261	Fitting, Straight	1	
100	2220110	Fitting, 90°	1	
101	2751026	Hose	1	
102	2750892	Hose	1	
		-----		
	0100020	Sealant, Thread	A/R	

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## FIGURE 6-8. HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS)

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# SECTION 6      HYDRAULIC

**FIGURE 6-8. HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2792005	<b>HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS)</b>	Ref.	H
1	2210007	Fitting, Barbed	1	
2	1320033	Clamp	4	
3	2720335	Hose	54"	
4	2220810	Fitting	2	
5	2210028	Fitting, Nipple	1	
6	2220596	Fitting, 90°	1	
7	2750928	Hose	1	
8	2220373	Fitting	4	
9	2220372	Fitting	1	
10	2220899	Fitting, Tee	8	
11	2220371	Fitting	6	
12	2750913	Hose	1	
13	2220603	Fitting	1	
14	2220415	Fitting	5	
15	2751397	Hose	1	
16	2220609	Fitting, Reducer	12	
17	2220606	Fitting	3	
18	4640776	Valve, Check	1	
19	2220651	Fitting	1	
20	2220591	Fitting	1	
21	2220820	Fitting, 90°	2	
22	2220428	Fitting, Quick Disconnect	2	
23	2220429	Cap, Dust	2	
24	2180491	Fitting, 90°	2	
25	2751102	Hose	1	
26	2220329	Fitting, Reducer	1	
27	2220550	Fitting, Reducer	1	
28	2220451	Fitting	1	
29	2220407	Fitting, 90°	1	
30	2220700	Fitting, Tee	1	
31	2220622	Fitting, Reducer	1	
32	2751467	Hose	1	
33	2220385	Fitting, Tee	1	
34	2220621	Fitting, Reducer	1	
35	2220635	Fitting, Tee	5	
36	2750909	Hose	1	
37	Not Used			
38	2220250	Fitting, Reducer	2	
39	2220909	Fitting	1	
40	Not Used			
41	2220582	Fitting	10	
42	2751418	Hose	1	
43	2751030	Hose	5	
44	2220468	Fitting	9	
45	2751015	Hose	2	

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# SECTION 6 HYDRAULIC

**FIGURE 6-8. HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
46	2220907	Fitting, Restrictor	2	
47	2220472	Fitting, 90°	6	
48	2220605	Fitting, Tee	4	
49	2751421	Hose	3	
50	2220414	Fitting	3	
51	2751432	Hose	2	
52	2220504	Fitting, Tee	2	
53	2751435	Hose	2	
54	2220416	Fitting, 90°	1	
55	2200064	Fitting, 90°	1	
56	2180651	Fitting, Modified	1	
57	2220473	Fitting	5	
58	2750918	Hose	2	
59	2220417	Fitting	2	
60	2750901	Hose	2	
61	2751150	Hose	2	
62	Not Used			
63	Not Used			
64	2750999	Hose	1	
65	Not Used			
66	2750991	Hose	1	
67	2750998	Hose	1	
68	2751101	Hose	2	
69	2751852	Hose	1	
70	2751520	Hose	2	
71	2751457	Hose	3	
72	2751398	Hose	2	
73	2220684	Fitting, Tee	2	
74	2220507	Fitting	1	
75	2751394	Hose	3	
76	2220584	Fitting, Tee	2	
77	4640013	Valve, Shuttle	1	
78	2750902	Hose	2	
79	2220497	Fitting	2	
80	2751017	Hose	1	
81	2220711	Fitting, Tee	1	
82	2750891	Hose	1	
83	2750773	Hose	1	
84	2220346	Fitting	1	
85	2220376	Fitting	1	
86	2752159	Hose	1	
87	4640817	Valve, Restrictor (.045)	2	
88	2751391	Hose	1	
89	2220466	Fitting	1	
90	2220908	Fitting, Restrictor (.047)	1	
91	4640818	Valve, Relief	1	
92	2750921	Hose	2	
93	2220671	Fitting	1	
94	2751921	Hose	1	

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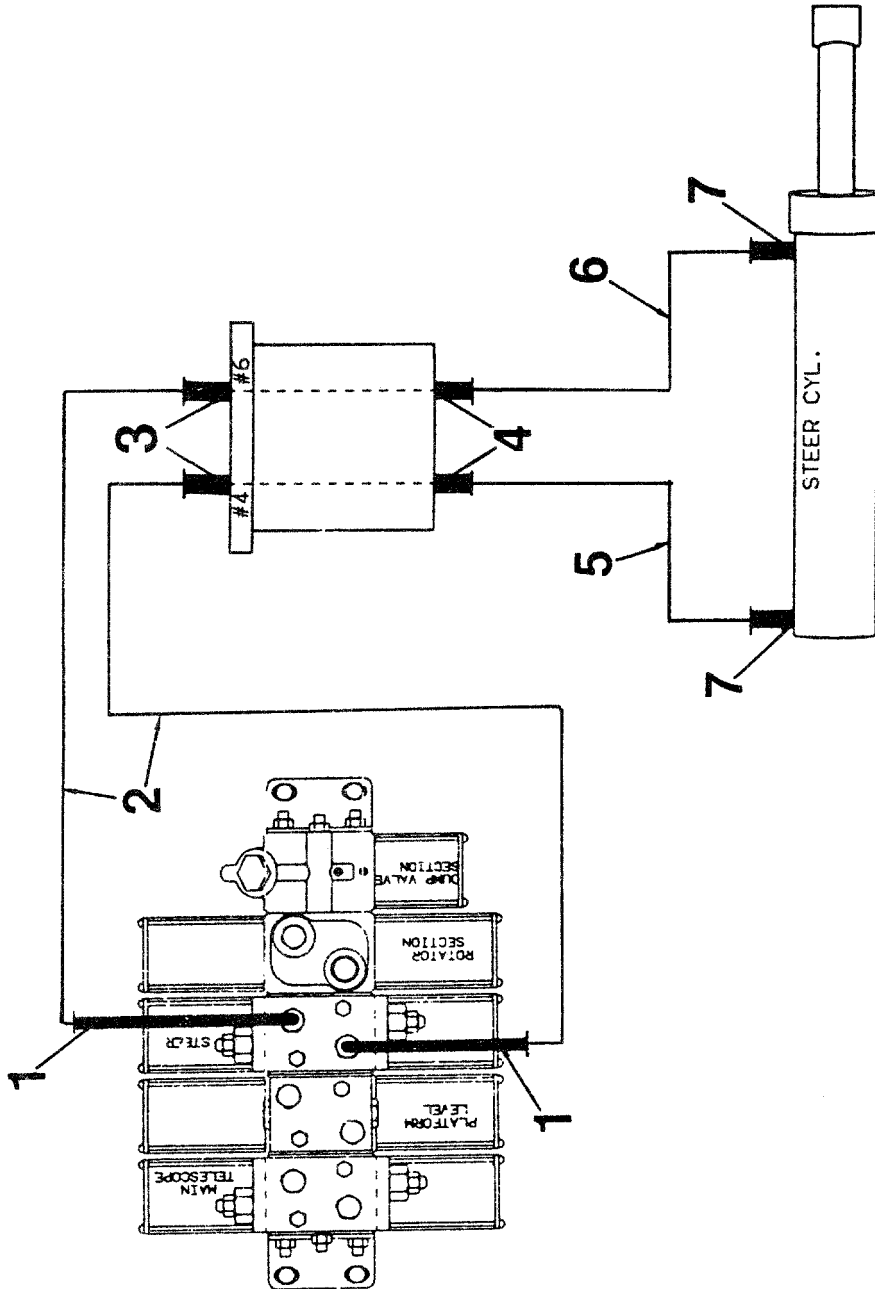
**FIGURE 6-8. HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS) (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
95	4640213	Valve, Restrictor (.015)	1	
96	2751017	Hose	3	
97	2751026	Hose	1	
98	2750899	Hose	2	
	0100020	----- Sealant, Thread	A/R	

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FIGURE 6-9.HYDRAULIC DIAGRAM - STEER



STANDARD BANG-BANG CONTROLS SHOWN  
USE AS A REFERENCE FOR HYDRAULIC CONTROLS

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**FIGURE 6-9. HYDRAULIC DIAGRAM - STEER**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	2791625	HYDRAULIC DIAGRAM - STEER (2WD FIXED AXLE/ BANG-BANG OR PROPORTIONAL CONTROLS)	Ref.	A
	2791626	HYDRAULIC DIAGRAM - STEER (2WD OSCILLATING AXLE/BANG-BANG OR PROPORTIONAL CONTROLS)	Ref.	A
	2791633	HYDRAULIC DIAGRAM - STEER (4WD/BANG-BANG OR PROPORTIONAL CONTROLS)	Ref.	A
	2791667	HYDRAULIC DIAGRAM - STEER (2WD FIXED AXLE/ HYDRAULIC CONTROLS)	Ref.	—
	2791668	HYDRAULIC DIAGRAM - STEER (2WD OSCILLATING AXLE/HYDRAULIC CONTROLS)	Ref.	—
	2791669	HYDRAULIC DIAGRAM - STEER (4WD/HYDRAULIC CONTROLS)	Ref.	—
1		Fitting, Straight Options:	2	
	2220468	Standard - Bang-Bang or Proportional Controls		
	2220582	Hydraulic Controls		
2		Hose Options:	2	
	2751391	Standard - Bang-Bang or Proportional Controls		
	2750760	Hydraulic Controls		
3	2220496	Fitting, 45°	2	
4	2220414	Fitting, Straight	2	
5		Hose Options:	1	
	2750894	2WD Fixed Axle/Bang-Bang		
	2750894	2WD Fixed Axle/Hydraulic Controls		
	2750897	2WD Oscillating Axle/Bang-Bang		
	2750897	2WD Oscillating Axle/Hydraulic Controls		
	2750892	4WD Bang-Bang or Proportional Controls		
	2750892	4WD Bang-Bang - Hydraulic Controls		
6		Hose Options:	1	
	2750895	2WD Fixed Axle/Bang-Bang		
	2750895	2WD Fixed Axle/Hydraulic Controls		
	2750897	2WD Oscillating Axle/Bang-Bang		
	2750897	2WD Oscillating Axle/Hydraulic Controls		
	2750892	4WD Bang-Bang or Proportional Controls		
	2750892	4WD Bang-Bang - Hydraulic Controls		
7	2220416	Fitting, 90°	2	

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**FIGURE 6-10.HYDRAULIC DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTIONHYDRAULIC DIAGRAM LIST	QTY.	REV.
		<b>Note: Diagrams with asterick (*) are shown in the preceding pages. Diagrams not shown are available from JLG service department.</b>		
	2791624	<b>Axle Lockout Hydraulic Diagrams:</b> All Machines Built Prior to June 1992		
	2791866*	2WD Machines Built June 1992 to Present		
	2791865*	4WD Machines Built June 1992 to Present		
	2792007	<b>Boeing Modifications Hydraulic Diagram</b>		
	1281328	<b>Drive Hydraulic Diagram - 2WD/2WS Without Swivel:</b>		
	2791645	Deutz With Standard Bang-Bang Controls		
	2791677	Deutz With Proportional and Hydraulic Controls		
	2791646	Ford With Standard Bang-Bang Controls		
	2791676	Ford With Proportional and Hydraulic Controls		
	2791914	Kubota With Standard Bang-Bang Controls		
	2791915	Kubota With Proportional and Hydraulic Controls		
	1281327*	<b>Drive Hydraulic Diagram - 2WD/2WS With Swivel:</b>		
	2791627	Deutz With Standard Bang-Bang Controls		
	2791678	Deutz With Proportional and Hydraulic Controls		
	2791577	Ford With Standard Bang-Bang Controls		
	2791679	Ford With Proportional and Hydraulic Controls		
	2791914	Kubota With Standard Bang-Bang Controls		
	2791915	Kubota With Proportional and Hydraulic Controls		
	1281547	<b>Drive Hydraulic Diagram - 2WS/4WS With Swivel:</b>		
	2791803	Deutz With Standard Bang-Bang Controls		
	2791804	Deutz With Proportional and Hydraulic Controls		
	2791801	Ford With Standard Bang-Bang Controls		
	2791802	Ford With Proportional and Hydraulic Controls		
	2791930	Kubota With Standard Bang-Bang Controls		
	2791929	Kubota With Proportional and Hydraulic Controls		
	1281330	<b>Drive Hydraulic Diagram - 4WD/2WS Without Swivel:</b>		
	2791660	Deutz With Standard Bang-Bang Controls		
	2791682	Deutz With Proportional and Hydraulic Controls		
	2791661	Ford With Standard Bang-Bang Controls		
	2791683	Ford With Proportional and Hydraulic Controls		
	1281329*	<b>Drive Hydraulic Diagram - 4WD/2WS With Swivel:</b>		
	2791632	Deutz With Standard Bang-Bang Controls		
	2791680	Deutz With Proportional Controls		
	2791617	Ford With Standard Bang-Bang Controls		
	2791681	Ford With Proportional and Hydraulic Controls		

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FIG & ITEM #	PART NUMBER	DESCRIPTIONHYDRAULIC DIAGRAM LIST	QTY.	REV.
	2791617	Kubota With Standard Bang-Bang Controls (Prior to March 1992)		
	2791892	Kubota With Standard Bang-Bang Controls (March 1992 to July 1993)		
	2792087	Kubota With Standard Bang-Bang Controls (July 1993 to Present)		
	2791681	Kubota Proportional and Hydraulic Controls (Prior to March 1992)		
	2791893	Kubota With Proportional and Hydraulic Controls (March 1992 to July 1993)		
	2792088	Kubota With Proportional and Hydraulic Controls (July 1993 to Present)		
	1281548	<b>Drive Hydraulic Diagram - 4WD/4WS With Swivel:</b>		
	2791805	Deutz With Standard Bang-Bang Controls		
	2791807	Deutz With Proportional and Hydraulic Controls		
	2791806	Ford With Standard Bang-Bang Controls		
	2791808	Ford With Proportional and Hydraulic Controls		
	2791916	Kubota With Standard Bang-Bang Controls		
	2791917	Kubota With Proportional and Hydraulic Controls		
		<b>Manual Descent Hydraulic Diagrams:</b>		
	0251299	Valves and Hosing (Prior to June 1992)		
	0253239	Valves and Hosing (June 1992 to Present)		
	2791785	Hydraulic Diagram (Prior to June 1992)		
	2791968	Hydraulic Diagram (June 1992 to Present)		
	0253393	<b>Oil Cooler Hydraulic Diagram</b>		
		<b>Rotate Hydraulic Diagrams:</b>		
	2791578*	Standard Bang-Bang and Proportional Controls		
	2791673*	Hydraulic Controls		
		<b>Standard Hydraulic Diagrams:</b>		
	2791592	Deutz With Standard Bang-Bang Controls (Prior to June 1992)		
	2791957	Deutz With Standard Bang-Bang Controls (June 1992 to May 1993)		
	2792002*	Deutz With Standard Bang-Bang Controls (May 1993 to Present)		
	2791857	Deutz With Proportional Controls (Prior to June 1992)		
	2791960	Deutz With Proportional Controls (June 1992 to May 1993)		
	2792003	Deutz With Proportional Controls (May 1993 to Present)		
	2791576	Ford/Kubota With Standard Bang-Bang Controls (Prior to June 1992)		
	2791958	Ford/Kubota With Standard Bang-Bang Controls (June 1992 to May 1993)		
	2792001*	Ford/Kubota With Standard Bang-Bang Controls (May 1993 to Present)		

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FIG & ITEM #	PART NUMBER	DESCRIPTIONHYDRAULIC DIAGRAM LIST	QTY.	REV.
	2791693	Ford/Kubota Proportional Controls (Prior to June 1992)		
	2791959	Ford/Kubota Proportional Controls (June 1992 to May 1993)		
	2792004	Ford/Kubota Proportional Controls (May 1993 to Present)		
	2791664	Ford/Kubota Proportional Controls (May 1993 to Present)		
	2791956	Hydraulic Controls (June 1992 to May 1993)		
	2792005*	Hydraulic Controls (May 1993 to Present)		
	1281326	<b>Steer Hydraulic Diagram Without Swivel (2WS)</b>		
	2791655	2WD Fixed Axle With Standard Bang-Bang or Proportional Controls		
	2791656	2WD Oscillating Axle With Standard Bang-Bang or Proportional Controls		
	2791657	4WD With Standard Bang-Bang or Proportional Controls		
	2791670	2WD Fixed Axle With Hydraulic Controls		
	2791671	2WD Oscillating Axle With Hydraulic Controls		
	2791672	4WD With Hydraulic Controls		
	1281284*	<b>Steer Hydraulic Diagram With Swivel (2WS)</b>		
	2791625	2WD Fixed Axle With Standard Bang-Bang or Proportional Control		
	2791626	2WD Oscillating Axle With Standard Bang-Bang or Proportional Control		
	2791633	4WD With Standard Bang-Bang or Proportional Control		
	2791667	2WD Fixed Axle With Hydraulic Controls		
	2791668	2WD Oscillating Axle With Hydraulic Controls		
	2791669	4WD With Hydraulic Controls		
	1281553	<b>Steer Hydraulic Diagram (4WS)</b>		
	2791812	2WD Fixed Axle		
	2791813	2WD Oscillating Axle		
	2791814	4WD		
		<b>Tow Hydraulic Diagrams</b>		
	2791295	Prior to March 1993		
	2791764	March 1993 to Present		



# SECTION 7 ELECTRICAL

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# SECTION 7 ELECTRICAL

**FIGURE 7-1.ELECTRICAL DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>ELECTRICAL DIAGRAM LIST</b>	Ref.	
		<b>Note: Diagrams with asterisks (*) are shown in the following pages. Diagrams not shown re available from the JLG Service Department.</b>		
		<b>Alarm Electrical Diagrams Options</b>	Ref.	
		<b>Machines Built Prior to January 1993:</b>		
	4931947/1281985	<b>Travel/Back-up/Swing Descent Electrical Diagram</b>	Ref.	G/G
	0610091	Card, Circuit	1	
	3740049	Relay	1	
	4931946	<b>Motion Electrical Diagram</b>	Ref.	—
	3990010	Diode - 6 Amp	2	
	3740049	Relay, Bosch - SPDT	1	
	0140016	Alarm, Horn	1	
	4931954	<b>Tilt Electrical Diagram (5<sup>º</sup>)</b>	Ref.	B
	0140016	Alarm, Horn	1	
	3740049	Relay, Bosch - SPDT	1	
	4360089	Flasher - 12V	1	
		<b>Machines Built January 1993 to Present:</b>		
	4932638/1282091	<b>Travel Electrical Diagram</b>	Ref.	2/D
	0610104	Card, Circuit	1	
	4932639/1282091	<b>Motion Electrical Diagram (Standard Bang-Bang and Proportional Controls)</b>	Ref.	2/D
	4932676	<b>Motion Electrical Diagram (Hydraulic Controls)</b>	Ref.	—
	3740049	Relay	1	
	3990010	Diode - 6 Amp	2	
	1060341	Cable, Electrical - 16/2	11ft./3.4m	
	0253077	<b>Tilt Electrical Diagram</b>	Ref.	5
	0140026	Alarm	1	
	1540002	Capacitor	1	
	0254240/1281701	<b>Cold Weather Electrical Diagram (Deutz)</b>	Ref.	B/D
	4932362/1281526	<b>Collector Ring Electrical Diagram (4WS)</b>	Ref.	A/C
	1060042	Cable, Electrical - 16/5	15 ft.	
	4460049	Connector, Strain Relief (At Ground Control Box)	1	
	0960239	Bushing	1	
	3300047	Nut, Conduit	1	
	4932047/1281479*	<b>Dual Fuel Electrical Diagram (Ford)</b>	Ref.	B/—
	4921305	Harness (M.T.B. to Gas and LP Solenoid Valves)	1	
	4360201	Switch, Toggle	1	
	0251537/1281525	<b>Engine Distress Electrical Diagram - Deutz Machines</b>	Ref.	D/E
	4921361	Harness	1	
	4360065	Switch, Pressure	1	
	2920026	Lamp, Indicator (At Platform Console)	1	

**SECTION 7 ELECTRICAL**

# SECTION 7 ELECTRICAL

**FIGURE 7-1.ELECTRICAL DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0252625	<b>Engine Distress Electrical Diagram - Ford Machines</b>	Ref.	5
	2920026	Light (At Platform Console)	1	
	4360182	Switch, Oil Pressure	1	
	4360157	Switch, Water Temperature	1	
	3740049	Relay	1	
	2920029	Bulb	1	
	0252394	<b>Engine Distress Electrical Diagram - Kubota Machines</b>	Ref.	—
	2920026	Lamp, Indicator (At Platform Console)	1	
	4360182	Switch, Oil Pressure	1	
	4360157	Switch, Water Temperature	1	
	3740049	Relay	1	
	0251682	<b>Engine Shutdown Electrical Diagram (Deutz) (1991 to Present)</b>	Ref.	—
	3990010	Diode - 6 Amp	1	
	3740049	Relay, Bosch - SPDT	1	
	4360065	Switch, Pressure - N.C.	1	
	4931945*	<b>Generator Electrical Diagram (110V) (Deutz and Kubota)</b>	Ref.	A
	4932046*	<b>Generator Electrical Diagram (110V) (Ford)</b>	Ref.	5
	4460027	Outlet, Electrical - Female Twist Lock	1	
	3990001	Diode - 3.5 Amp (Deutz and Kubota)	1	
	3990010	Diode - 6.5 Amp (Ford)	2	
	3740049	Relay, Bosch - SPDT	2	
	4360294	Breaker, Circuit - 30 Amp Marine Type	1	
		<b>Glow Plug Electrical Diagram (Kubota Engines)</b>	Ref.	
	4921555	Harness	1	
	4931998	<b>Heaters Electrical Diagram</b>	Ref.	A
	1060016	Cable, Electrical - 16/3 (Heaters to Junction Box)	20 ft.	
	Use 1060515	Cable, Electrical - 12/4 (Thermostat to Junction Box) (was p/n 1060012)	3 ft.	
		<b>Lights Electrical Diagram Options</b>	Ref.	
	4931942	<b>Beacon Light On Hood Electrical Diagram (December 1990 to Present)</b>	Ref.	5
	4931740	<b>Beacon Light On Hood Electrical Diagram (Prior to December 1990)</b>	Ref.	A
	1281671	<b>Beacon Light On Platform Electrical Diagram (September 1991 to Present)</b>	Ref.	D
	2920018	Light, Beacon - Amber	1	
	2920009	Light, Beacon - Red	1	
	0253816	<b>Fuel Indicator Light Electrical Diagram</b>	Ref.	
	4360265	Switch, LPG	1	
	2920026	Lamp, Indicator		

**SECTION 7 ELECTRICAL**

# SECTION 7 ELECTRICAL

**FIGURE 7-1.ELECTRICAL DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	3252269	Nameplate - LP Light		
	4931941	<b>Headlights and Taillights Electrical Diagram</b>	Ref.	E
	3740049	Relay, Bosch - SPDT (At Ground Control Box)	1	
	4360199	Switch, Toggle (At Platform Console Box)	1	
	3251019	Nametag - Light On	1	
	1060016	Cable, Electrical - 16/3	A/R	
	2920019	Taillight/Clearance Light	2	
	3740002	Relay, Power	1	
	0251619/ 1281525	<b>Panel Lights Electrical Diagram (Standard Bang-Bang and Proportional Controls)</b>	Ref.	A/D
	0251690	<b>Panel Lights Electrical Diagram (Hydraulic Controls)</b>	Ref.	B
	2920024	Light, Panel	3	
	4931943	<b>Worklights Electrical Diagram (Prior to November 1992)</b>	Ref.	
	4360232	Breaker, Circuit - 15 Amp	1	
	2920013	Worklight	2	
	0253987	<b>Worklights Electrical Diagram (November 1992 to Present)</b>	Ref.	C
	2920111	Worklight, Halogen	2	
	0253393	<b>Oil Cooler Electrical Diagram</b>	Ref.	—
	4921529	Harness	1	
	4360181	Switch, Temperature	1	
		<b>Platform Electrical Diagrams Options</b>	Ref.	
	1281356*	<b>Bang-Bang (Standard) Controls:</b>	Ref.	F
	4932007	<b>Platform Electrical Diagram - Deutz/Ford 2WS</b>	Ref.	E
	4932375	<b>Platform Electrical Diagram - Deutz/Ford 4WS</b>	Ref.	A
	4932074	<b>Platform Electrical Diagram - Kubota 2WS</b>	Ref.	C
	4932376	<b>Platform Electrical Diagram - Kubota 4WS</b>	Ref.	A
	1540002	Capacitor 1000MFD/25VDC	1	
	3990010	Diode - 6 Amp	A/R	
	Use 1060515	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	8 ft./2.4m	
		<b>Hydraulic Controls:</b>	Ref.	
	4932054*	<b>Platform Electrical Diagram</b>	Ref.	B
	3990010	Diode - 6 Amp	1	
	1540002	Capacitor - 1000MFD/25VDC	1	
	Use 1060515	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	8 ft./2.4m	

**SECTION 7 ELECTRICAL**

# SECTION 7 ELECTRICAL

**FIGURE 7-1.ELECTRICAL DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>Proportional Controls:</b>	Ref.	
	4932441/ 1281712	<b>Platform Electrical Diagram - Deutz 2WS (Prior to February 1993)</b>	Ref.	B/B
	4932442/ 1281712	<b>Platform Electrical Diagram - Deutz 4WS (Prior to February 1993)</b>	Ref.	A/B
	4932486/ 1281712	<b>Platform Electrical Diagram - Ford 2WS (Prior to February 1993)</b>	Ref.	A/B
	4932487/ 1281712	<b>Platform Electrical Diagram - Ford 4WS (Prior to February 1993)</b>	Ref.	A/B
	4932067/ 1281571	<b>Platform Electrical Diagram - Kubota 2WS (Prior to February 1993)</b>	Ref.	B/B
	4932379/ 1281571	<b>Platform Electrical Diagram - Kubota 4WS (Prior to February 1993)</b>	Ref.	—/B
	9983562	<b>Platform Electrical Diagram - 2WS With Steer In Controller (February 1993 to Present)</b>	Ref.	1
	4932600/ 1282004	<b>Platform Electrical Diagram - 2WS Without Steer In Controller (February 1993 to Present)</b>	Ref.	A/A
	4932601/ 1282004	<b>Platform Electrical Diagram - 4WS Without Steer In Controller (February 1993 to Present)</b>	Ref.	A/A
	3990010	Diode - 6 Amp	3	
	1540002	Capacitor 1000mfd/25V	1	
	Use 1060515	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	8 ft./2.4m	
	0255619	<b>Remote Control Electrical Diagram Options</b>	Ref.	
		<b>Remote Control Box Electrical Diagram</b>	Ref.	
	0238954	<b>Prior to July1995</b>	Ref.	
	0253604	<b>July1995 to Present</b>	Ref.	
	0251687	<b>Remote Control Electrical Diagram (Box to Ground Control)</b>	Ref.	
		<b>Standard Electrical Diagram Options:</b>	Ref.	
		<b>Deutz Machines:</b>		
	4931991*	<b>Standard Bang-Bang Controls</b>	Ref.	13
	1060016	Cable, Electrical - 16/3 (To Limit Switches) (was p/n 1060300)	10ft./3.0m	
		<b>Harness - Engine and Valves Options:</b>	1	
	4921250	Prior to August 1995		
	4921788	August 1995 to Present		
	3990010	Diode - 6 Amp	1	
	4932440	<b>Proportional Controls</b>	Ref.	E
	1060300	Cable, Electrical - 16/3 (To Limit Switches)	10ft./3.0m	
		<b>Harness - Engine and Valves Options:</b>	1	
	4921391	Prior to August 1995		
	4921790	August 1995 to Present		
	3990010	Diode - 6 Amp	4	
	4932076*	<b>Hydraulic Controls</b>	Ref.	H
	3990010	Diode - 6 Amp	2	
		<b>Harness - Engine and Valves Options:</b>	1	
	4921284	Prior to August 1995		
	4921789	August 1995 to Present		

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# SECTION 7 ELECTRICAL

**FIGURE 7-1.ELECTRICAL DIAGRAM LIST**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	1060300	Cable, Electrical - 16/3	10ft./3.0m	
		<b>Ford Machines:</b>		
	4931962	<b>Standard Bang-Bang Controls with Bosch Alternator (Prior to September 1994)</b>	Ref.	F
	4932754*	<b>Standard Bang-Bang Controls with Prestolite Alternator (September 1994 to Present)</b>	Ref.	A
	4932485	<b>Proportional Controls with Bosch Alternator (Prior to February 1993)</b>	Ref.	A
	4932615	<b>Proportional Controls with Bosch Alternator (February 1993 to September 1994)</b>	Ref.	B
	4932751	<b>Proportional Controls with Prestolite Alternator (September 1994 to Present)</b>	Ref.	A
	1060300	Cable, Electrical - 16/3 (To Limit Switches)	10ft./3.0m	
	4921251	Harness - Engine and Valves	1	
	3990010	Diode - 6 Amp	3	
	4932055	<b>Hydraulic Controls with Bosch Alternator (Prior to September 1994)</b>	Ref.	D
	4932753*	<b>Hydraulic Controls with Prestolite Alternator (September 1994 to Present)</b>	Ref.	A
	1060300	Cable, Electrical - 16/3 (To Limit Switches)	8 ft./2.4m	
	4921262	Harness - Engine and Valves	1	
	3990010	Diode - 6 Amp	2	
		<b>Kubota Machines:</b>		
	4932072	<b>Standard Bang-Bang Controls</b>	Ref.	E
	1060300	Cable, Electrical - 16/3 (To Limit Switches)	10ft./3.0m	
	4921286	Harness - Engine and Valves	1	
	3990010	Diode - 6 Amp	2	
		<b>Proportional Controls</b>	Ref.	I
	1060300	Cable, Electrical - 16/3 (To Limit Switches)	10ft./3.0m	
	4921278	Harness - Engine and Valves	1	
	3990010	Diode - 6 Amp	2	
	4932362/ 1281526	<b>Steer Electrical Diagram (4WS)</b>	Ref.	—/A
	1060042	Cable, Electrical - 16/5	15ft./4.6m	
	4460260	Connector, Strain Relief (At Ground Control Box)	1	
	0960239	Bushing	1	
	3300047	Nut, Conduit	1	

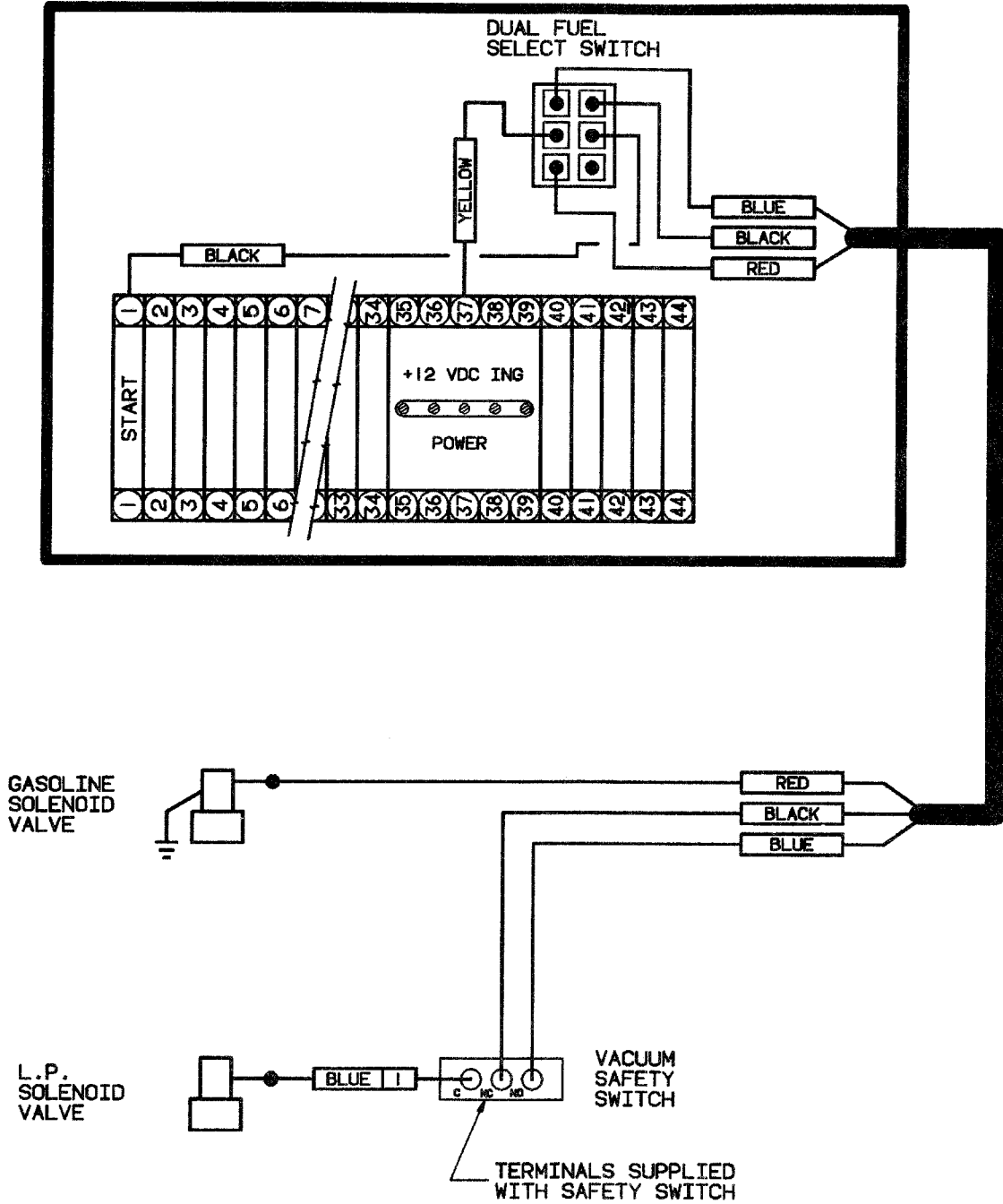
**SECTION 7 ELECTRICAL**

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FIGURE 7-2. DUAL FUEL ELECTRICAL DIAGRAM (FORD)

## DUAL FUEL WIRING

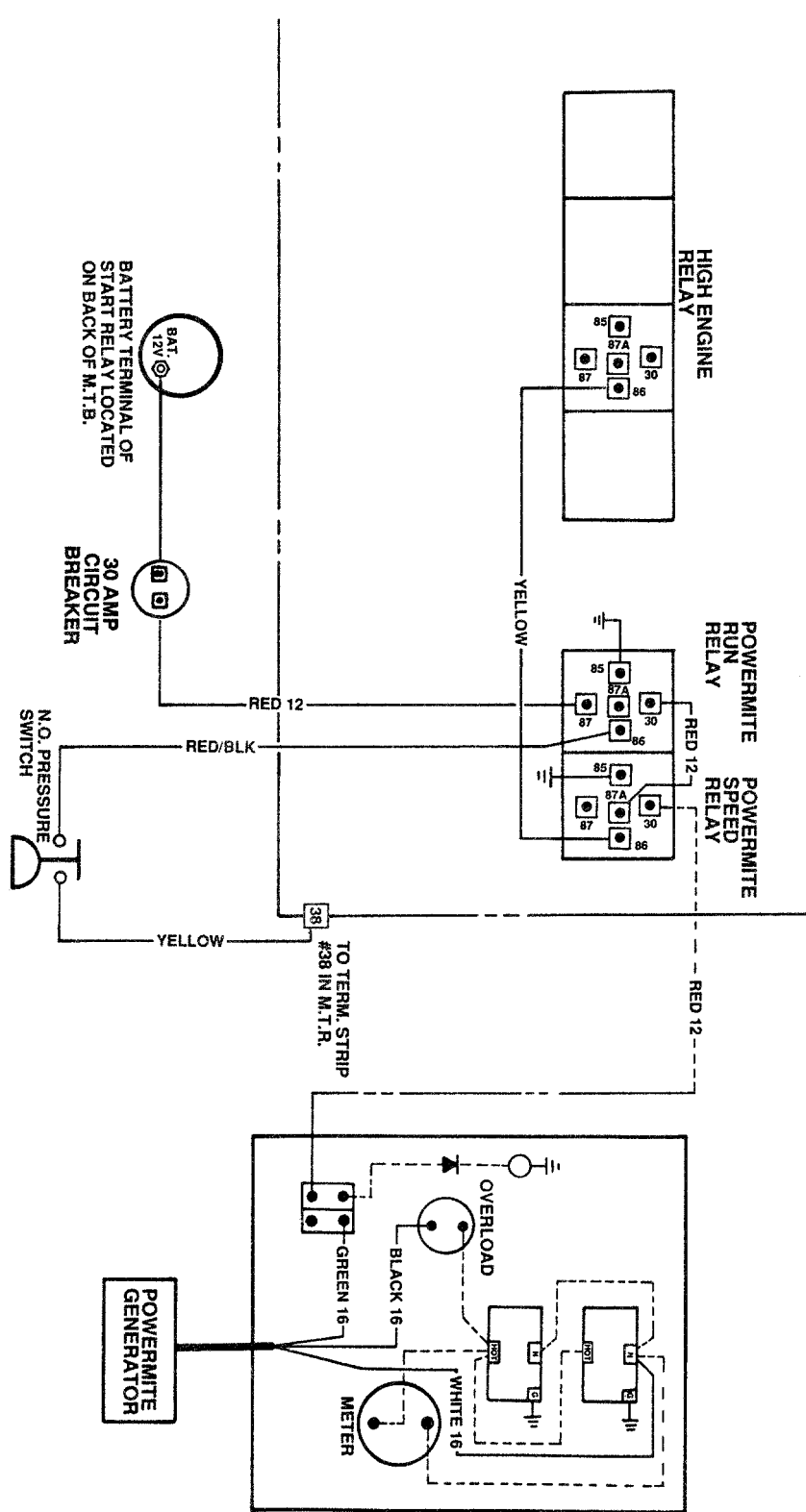
MAIN TERMINAL BOX REF.



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# SECTION 7 ELECTRICAL

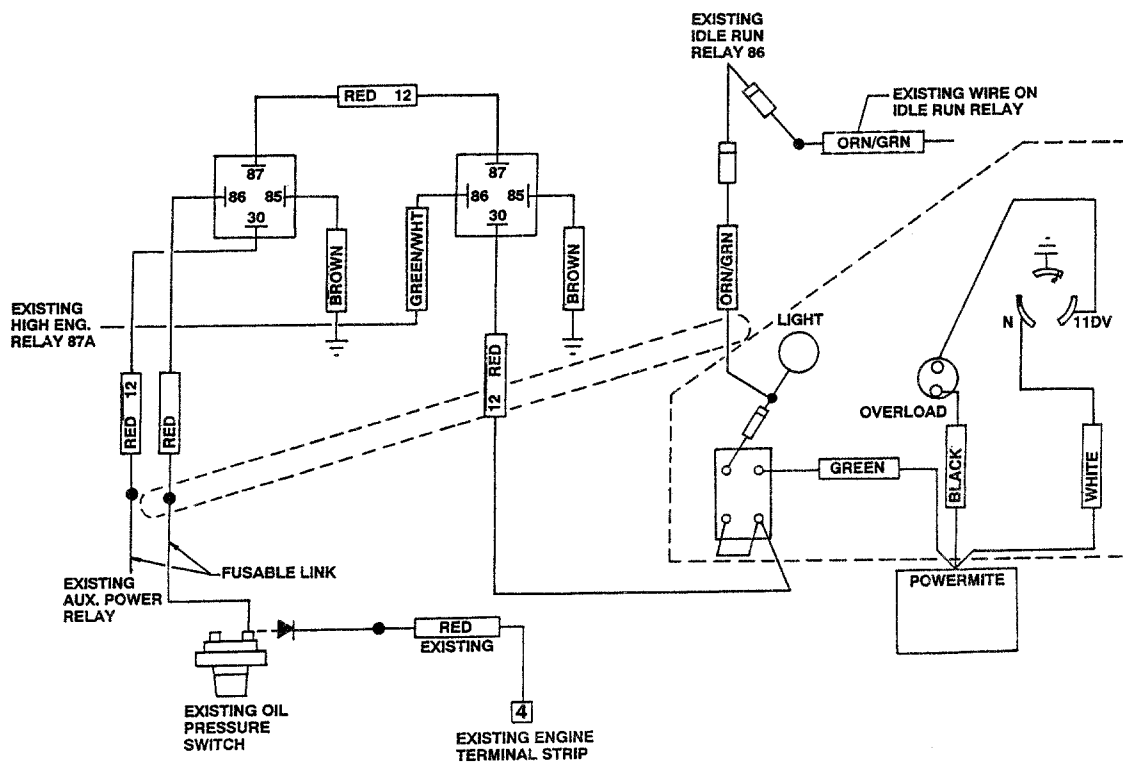
FIGURE 7-3. GENERATOR ELECTRICAL DIAGRAM (110V) (DEUTZ)





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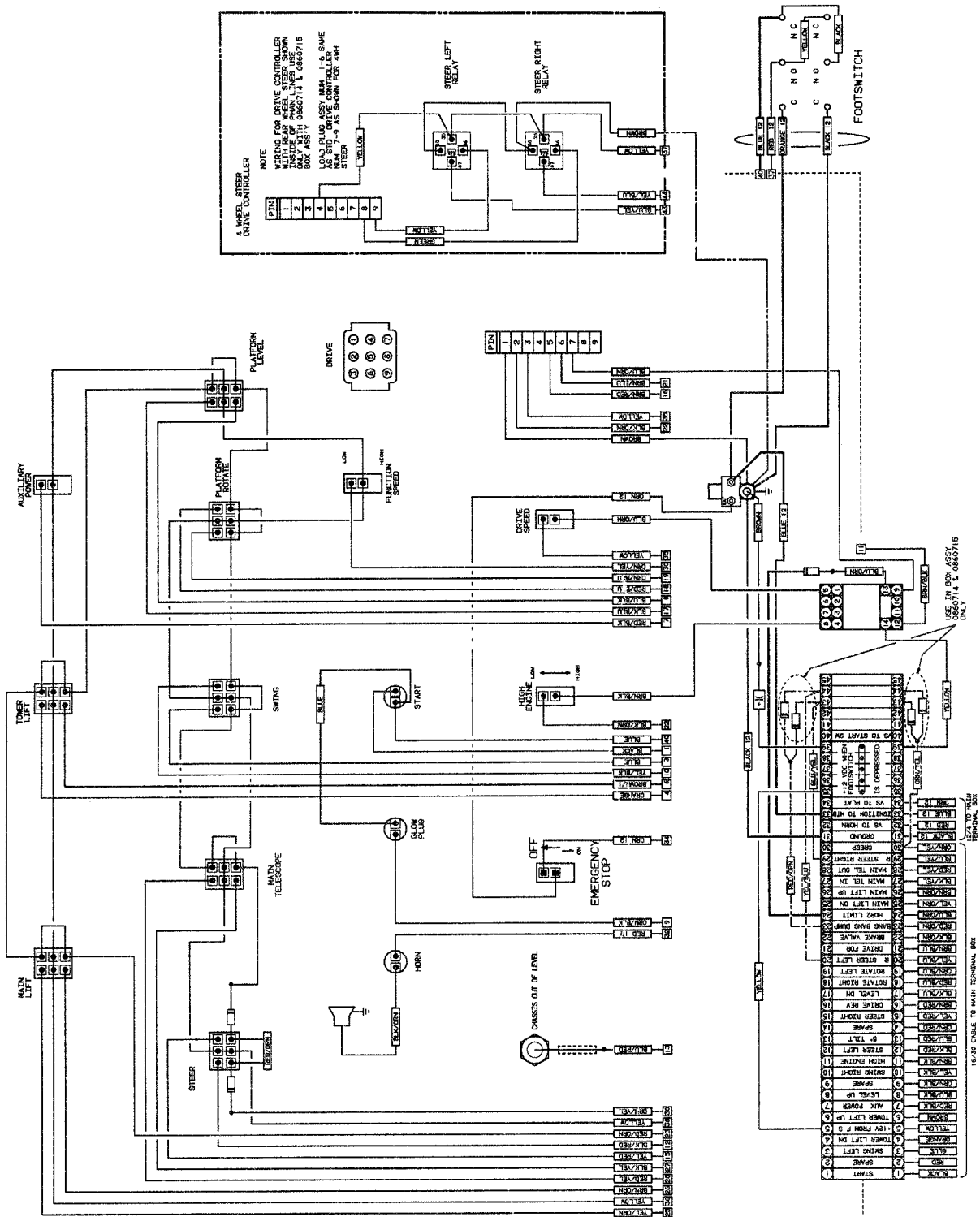
FIGURE 7-4. GENERATOR ELECTRICAL DIAGRAM (110V) (FORD)



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# SECTION 7 ELECTRICAL

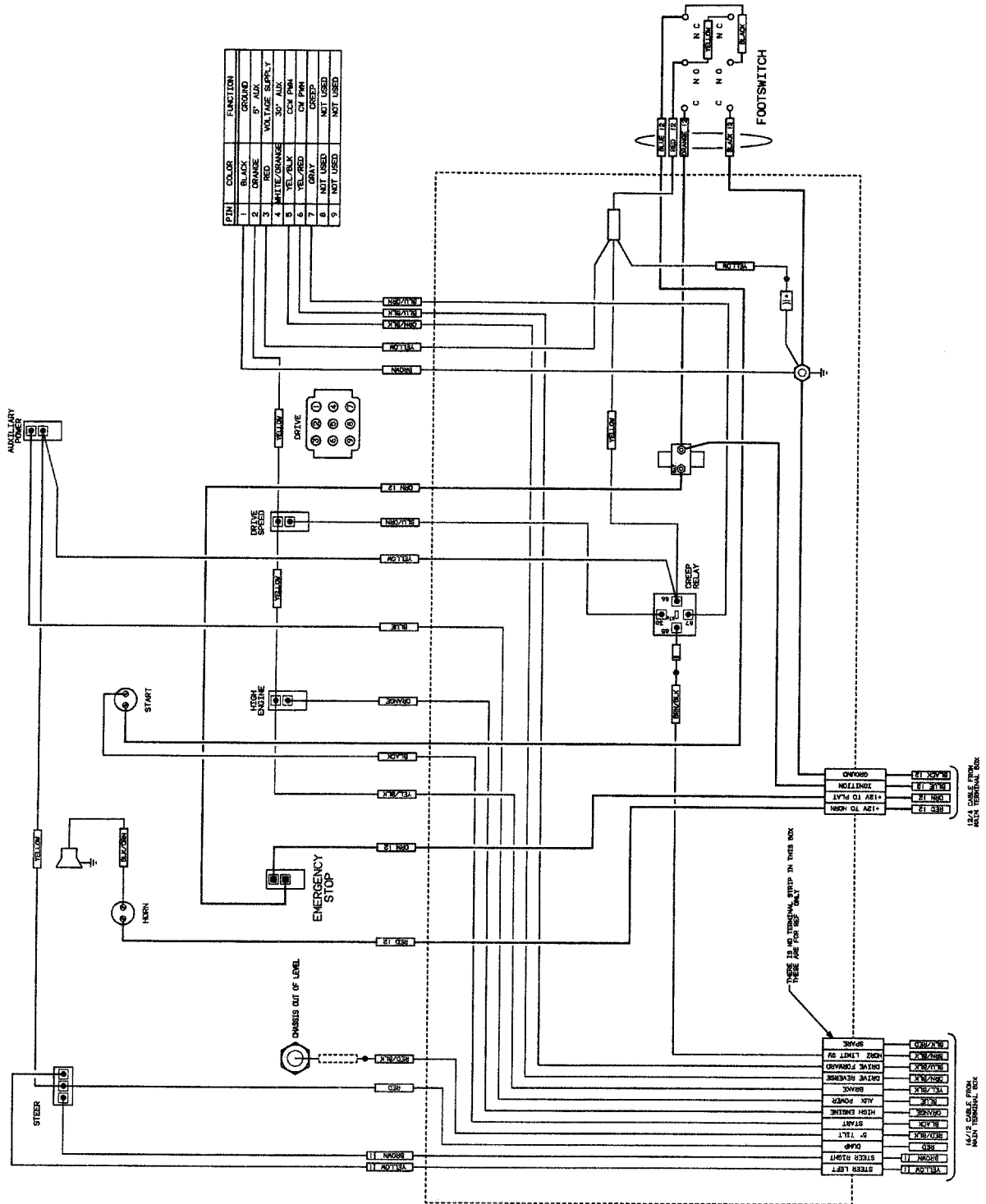
FIGURE 7-5.PLATFORM ELECTRICAL DIAGRAM - BANG-BANG (STANDARD) CON- TROLS



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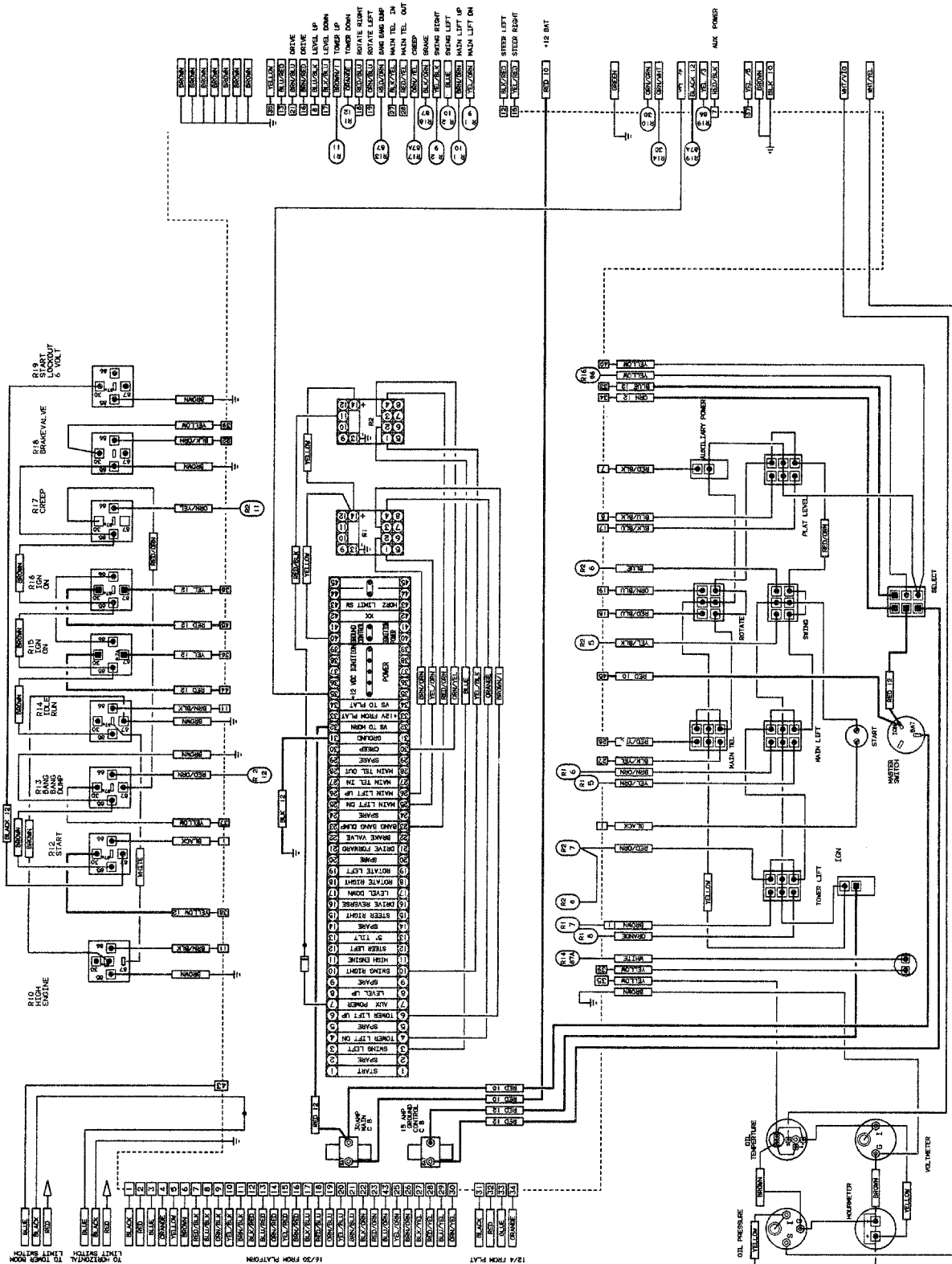
## FIGURE 7-6.PLATFORM ELECTRICAL DIAGRAM - HYDRAULIC CONTROLS



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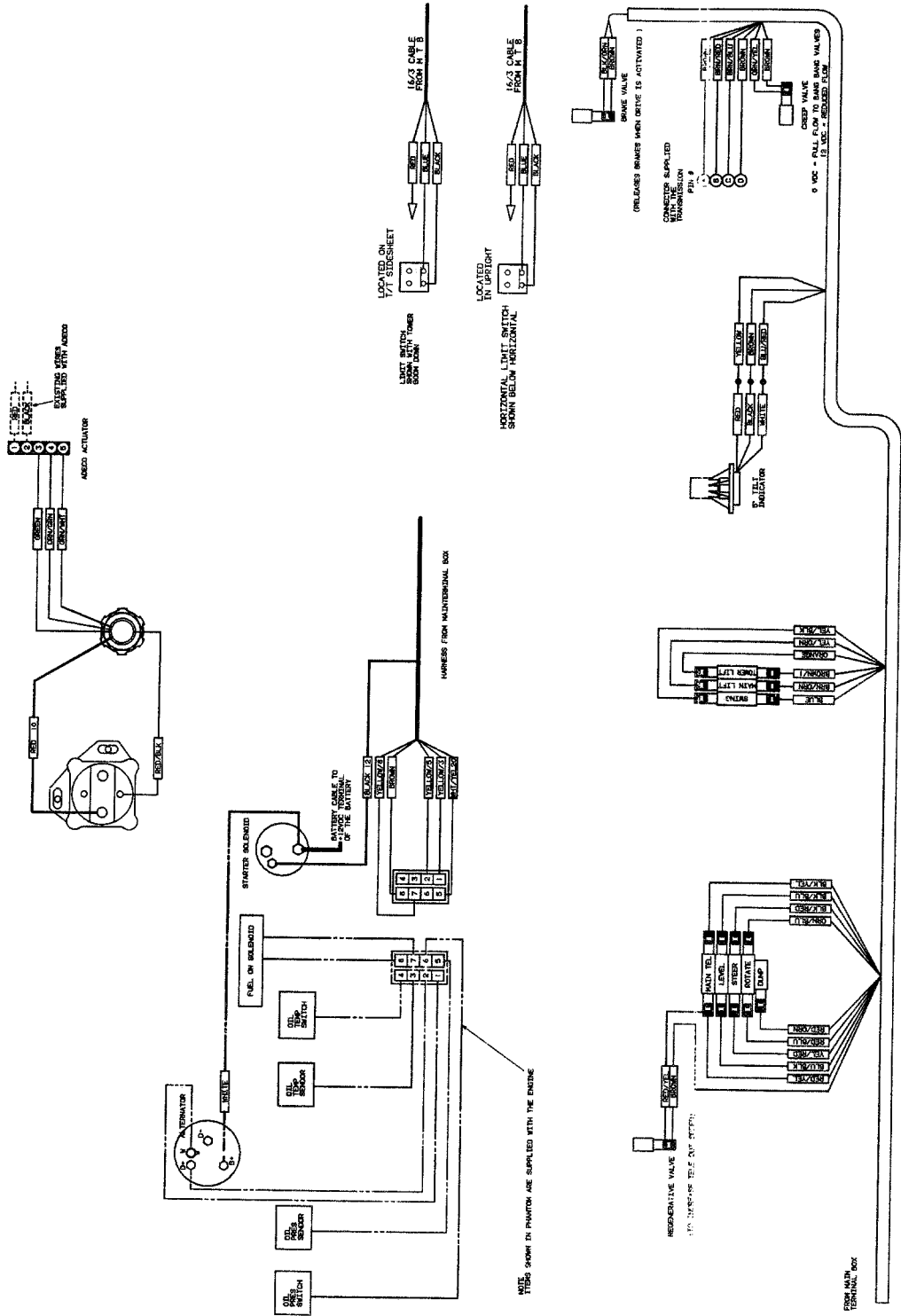
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## FIGURE 7-7. STANDARD ELECTRICAL DIAGRAM - DEUTZ WITH STANDARD BANG-BANG CONTROLS



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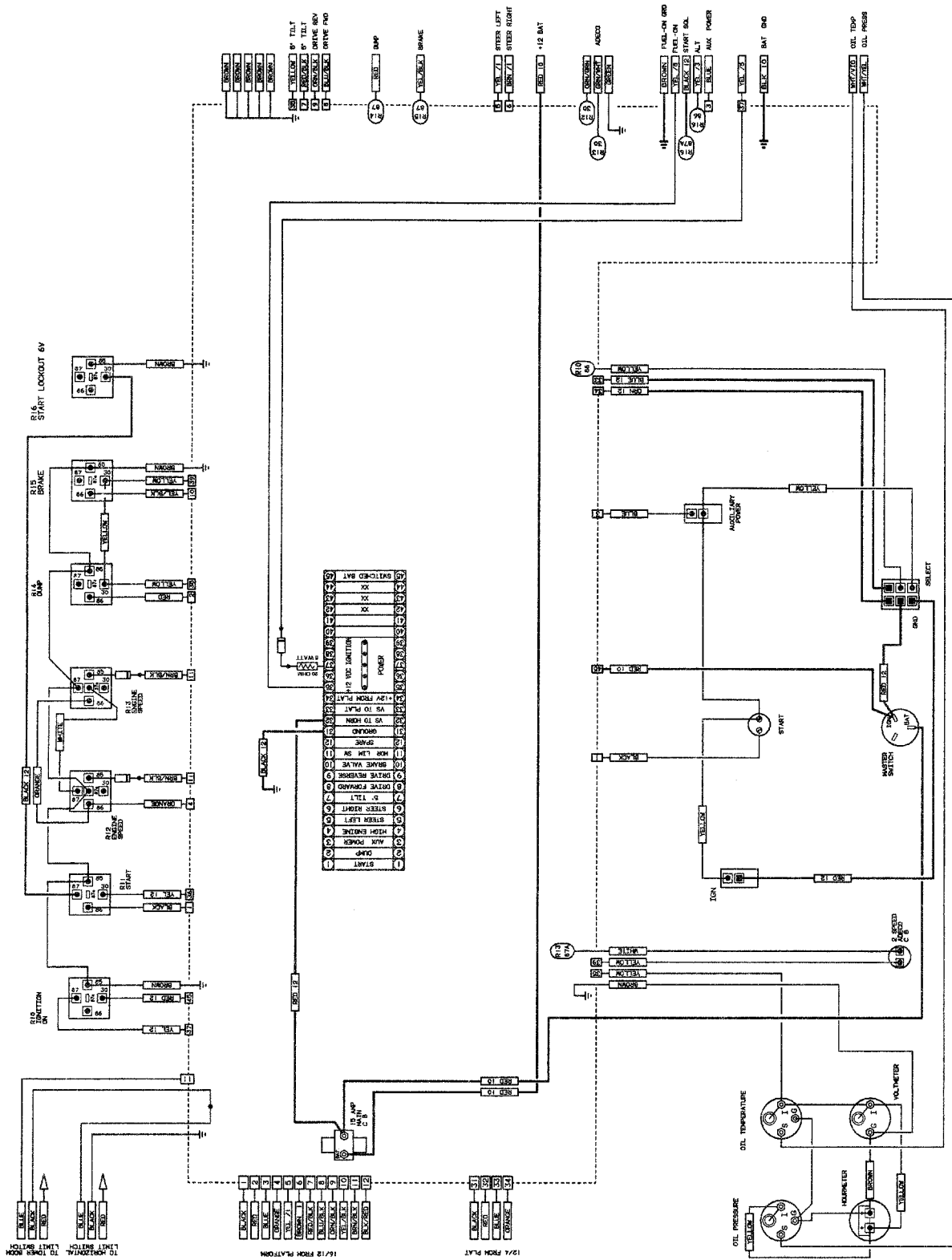
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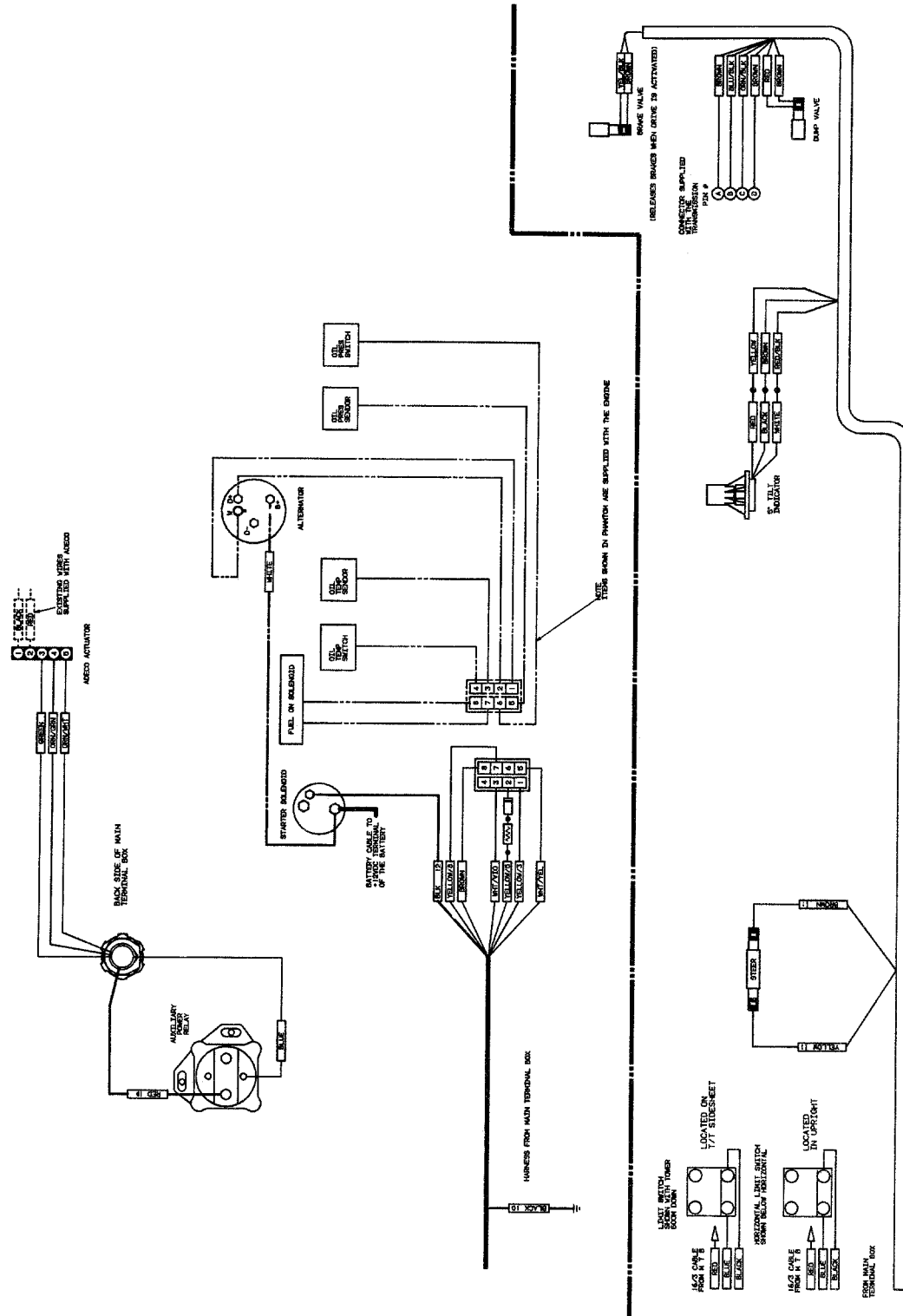
FIGURE 7-8. STANDARD ELECTRICAL DIAGRAM - DEUTZ WITH HYDRAULIC CONTROLS



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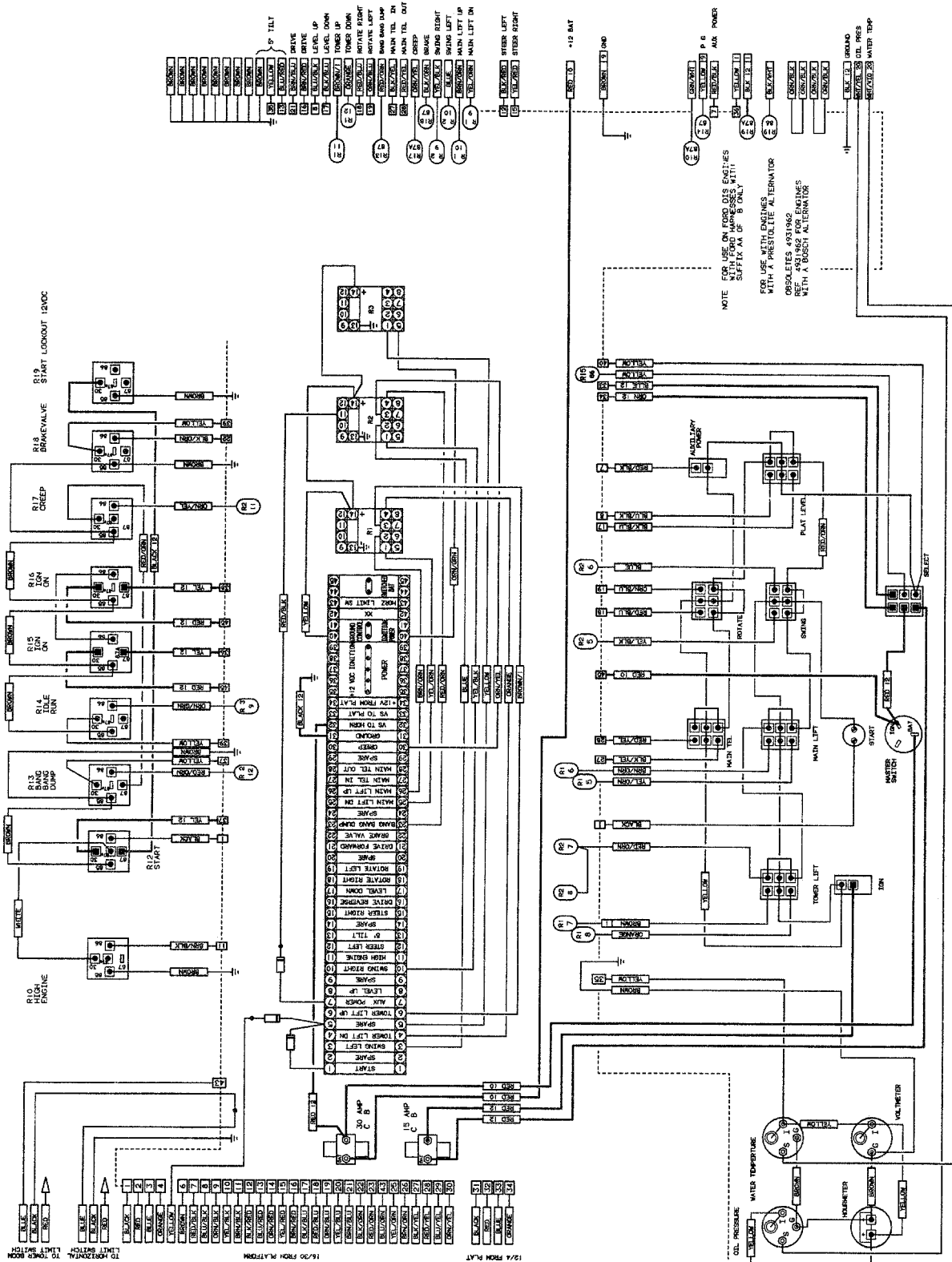
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FIGURE 7-9. STANDARD ELECTRICAL DIAGRAM - FORD WITH STANDARD BANG-BANG CONTROLS



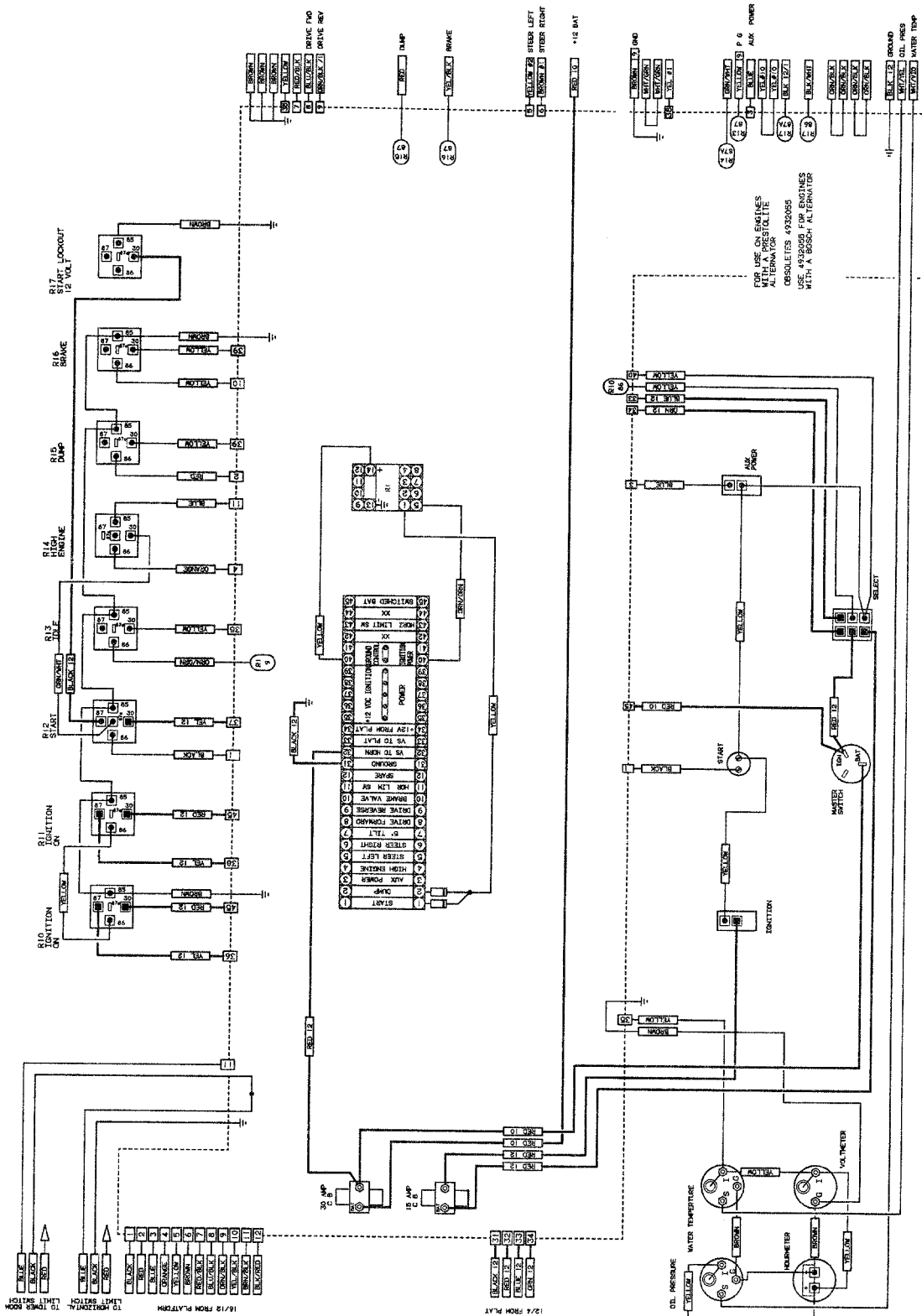
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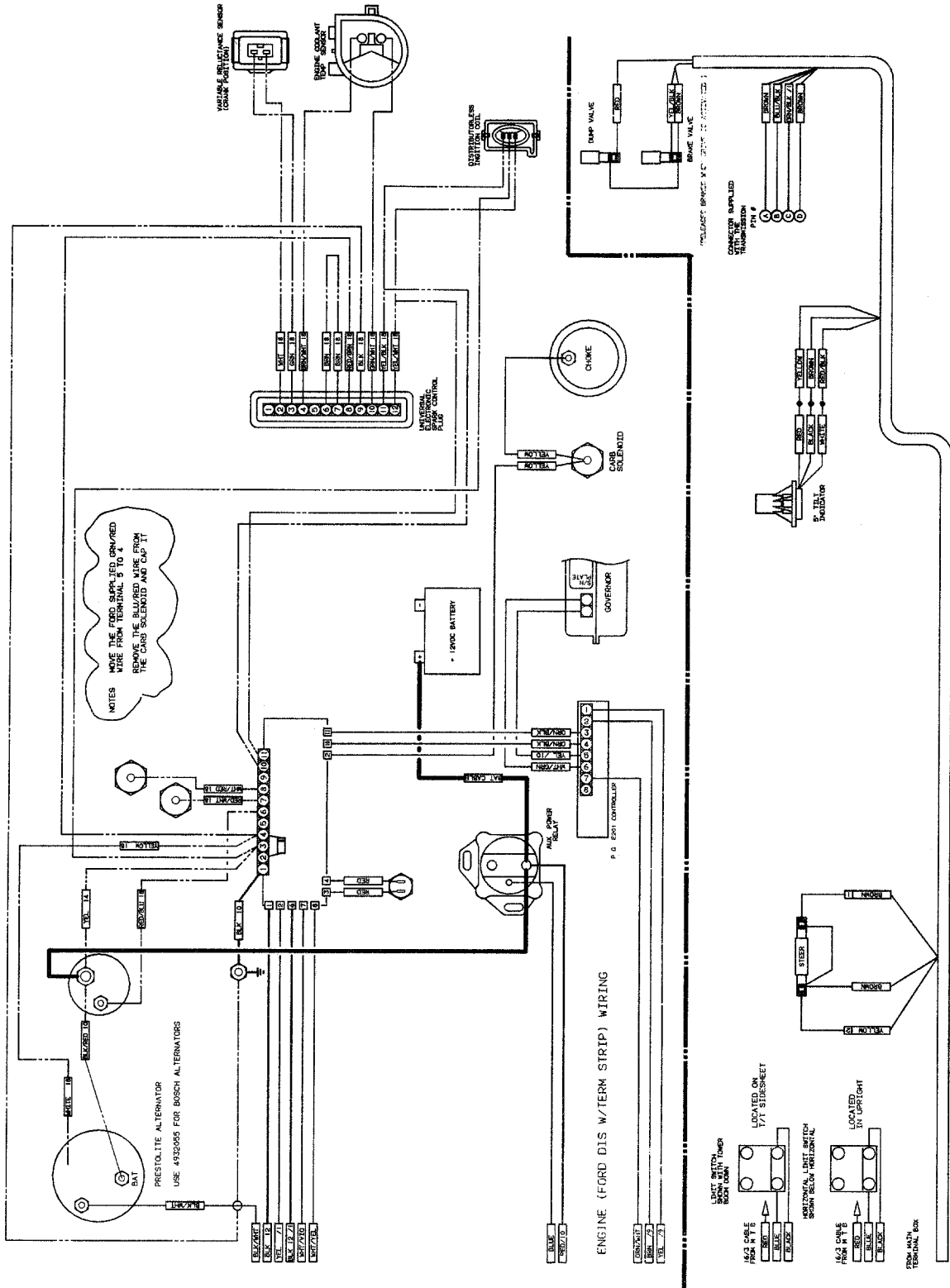
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**FIGURE 7-10. STANDARD ELECTRICAL DIAGRAM - FORD WITH HYDRAULIC CONTROLS**



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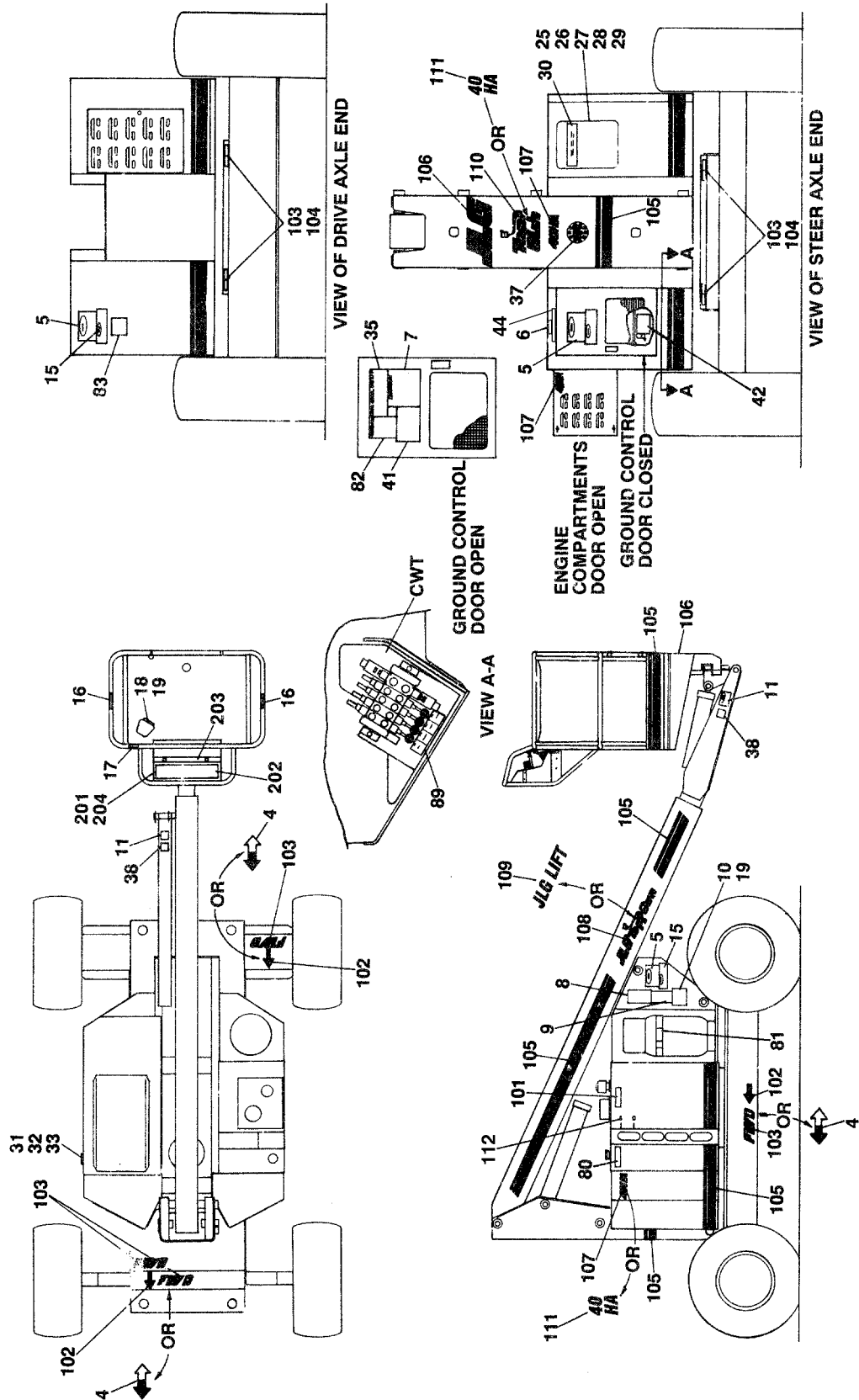
# SECTION 8 DECALS

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# SECTION 8 DECALS

FIGURE 8-1.DECALS INSTALLATION



# SECTION 8      DECALS

**FIGURE 8-1. DECALS INSTALLATION**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>DECALS INSTALLATION (STANDARD PARTS)</b>	Ref.	
	1281358	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS</b>	Ref.	S
	1282027	<b>HYDRAULIC CONTROLS</b>	Ref.	B
1 to 3	Not Used			
4	1701529	Decal - Arrow (February 1993 to Present)	4	
5		Decal - Crushing Options:	4	
	1700585	Prior to May 1994		
	1702277	May 1994 to Present		
6	1700037	Decal - Ground Controls	1	
7		Decal - Important Options:	1	
	1700643	Prior to May 1994		
	1702299	May 1994 to Present		
8	1700584	Decal - Patent	1	
9		Decal - Inspection Options:	1	
	1700593	Prior to May 1994		
	1702153	May 1994 to Present		
10	Not Available	Nameplate - Serial Number	1	
11		Decal - Crushing Options:	3	
	1700640	Prior to May 1994		
	1702284	May 1994 to Present		
12 to 14	Not Used			
15		Decal - Electrocutation Options:	4	
	1700580	Prior to May 1994		
	1702292	May 1994 to Present		
16	1700476	Decal - No Hands (Prior to May 1994)	2	
	1702294	Decal - No Hands (May 1994 to Present)	2	
17		Decal - Attach Belt Options:	2	
	1700477	Prior to May 1994		
	1702276	May 1994 to September 1995		
	1702612	September 1995 to S/N 27521		
	1704277	S/N 27521 to Present		
18	3251766	Nameplate - Footswitch (Prior to July 1992)	1	
19	3820001	Rivet	A/R	
20 to 24	Not Used			
25	0860520	Box, Manual Storage	1	
26	4751400	Flatwasher 1/4"	6	
27	3311405	Locknut 1/4"-20NC	5	
28	1060279	Lanyard	1	
29	0641408	Bolt 1/4"-20NC x 1"	1	
30	1700157	Decal - Manual	1	
31	0961127	Bushing, Snap	1	
32	0100010	Adhesive	A/R	
33	3251243	Nameplate - 120V	1	
34	1700756	Decal - Add/Full	1	

**SECTION 8 DECALS**

# SECTION 8      DECALS

**FIGURE 8-1. DECALS INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
35	1700582	Decal - Ground Control Operation (Prior to May 1994)	1	
	1702293	Decal - Ground Control Operation (May 1994 to Present)	1	
36	Not Used			
37	3251813	Nameplate - Made in U.S.A.	1	
38	1701460	Decal - Caution (Prior to May 1994)	2	
	1702280	Decal - Caution (May 1994 to Present)	2	
39 to 40	Not Used			
41	1702282	Decal - Warning (May 1994 to Present Only)	1	
42	1702265	Decal - Important (May 1994 to Present Only)	1	
43	Not Available	Decal - Bar Code (S/N 27521 to Present)	1	
44	1702688	Decal - Max Capacity (500 Lbs.) (S/N 27521 to Present)	1	
45	Not Used			
		<b>DECALS INSTALLATION (OPTIONAL PARTS)</b>	Ref.	
80		Decal - Fuel Options:	1	
	1700428	Diesel (Brown)		
	1702600	Diesel (Brown) (Latin American Spec)		
	1700196	Diesel (Black)		
	1700430	Gasoline (Brown)		
	1702722	Gasoline (Brown) (Latin American Spec)		
	1700194	Gasoline (Black)		
81		Decal - LP Gas Options:	1	
	1700429	LP Gas (Brown)		
	1700197	LP Gas (Black)		
82	3251028	Decal - Dual Fuel (Prior to May 1994)	1	
	3252356	Decal - Dual Fuel (May 1994 to Present)	1	
83	1700818	Decal - LP Gas Liquid Withdraw System	1	
84	1700853	Decal - Ground Control Selection (Hydraulic Controls Only)	1	
		<b>DECAL INSTALLATIONS (VARIABLE PARTS)</b>	Ref.	
		<b>DECAL INSTALLATION - BROWN</b>	Ref.	
	0250026	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS</b>	Ref.	11
	0251034	<b>HYDRAULIC CONTROLS (PRIOR TO FEBRUARY 1992)</b>	Ref.	
	0253756	<b>HYDRAULIC CONTROLS (DECEMBER 1992 TO PRESENT)</b>	Ref.	5
		<b>DECAL INSTALLATION - BLACK</b>	Ref.	
	0252821	<b>STANDARD BANG-BANG AND PROPORTIONAL CONTROLS</b>	Ref.	8
	0253757	<b>HYDRAULIC CONTROLS</b>	Ref.	5
101		Decal - Hydraulic Fluid	1	
	1700419	Decal - Brown		
	1700195	Decal - Black		

**SECTION 8 DECALS**



# SECTION 8 DECALS

**FIGURE 8-1. DECALS INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
102		Decal Options: (Prior to February 1993)	4	
	1700977	Decal - FWD (Brown)		
	1700978	Decal - Arrow (Brown)		
	1700053	Decal - FWD (Black)		
	1700058	Decal - Arrow (Black)		
103		Decal - Lift Here Options:	4	
	1700975	Decal - Brown (Prior to S/N 27521)		
	1700232	Decal - Black (Prior to S/N 27521)		
	1701500	Decal - Brown/Black (S/N 27521 to Present)		
104		Decal - Tie Down Options:	4	
	1700976	Decal - Brown (Prior to S/N 27521)		
	1700326	Decal - Black (Prior to S/N 27521)		
	1702300	Decal - Brown/Black (S/N 27521 to Present)		
105		Decal - Stripe Options:	48 ft./14.6m	
	1700431	Decal - Brown (Prior to S/N 27521)		
	1701703	Decal - Brown (S/N 27521 to Present)		
	1701334	Decal - Black	48 ft./14.6m	
106		Decal - JLG	2	
	1700981	Decal - Brown		
	1701321	Decal - Black		
107		Decal - 40HA Options:	A/R	
107	1701239	Decal - Brown (Qty. 2 - Prior to February 1992/ Qty. 1 - February 1992 to Present Located on Engine Door)		
	1701725	Decal - Black (Located on Engine Door Only)		
108		Decal - Top Gun (Prior to February 1992)	2	
	1700979	Decal - Brown		
	Not Used	Decal - Black		
109		Decal - JLG Lift Options:	2	
	1701441	Decal - Brown (February 1992 to Present)		
	1701550	Decal - Black		
110		Decal - Top Gun (Prior to February 1992)	1	
	1700980	Decal - Brown		
	Not Used	Decal - Black		
111		Decal - 40HA Options:	2	
	1701470	Decal - Brown (February 1992 to Present)		
	1701594	Decal - Black		
112		Decal - Full/Add Options:	1	
	1700756	Decal - Brown		
		Decal - Black		
	1700755	Prior to May 1994		
	1701336	May 1994 to Present		
		-----		
	2900763	Decal Kit - Brown	1	
	2910025	Decal Kit - Black (Includes Items 202 & 203)	1	

**SECTION 8 DECALS**

# SECTION 8      DECALS

**FIGURE 8-1. DECALS INSTALLATION (CONTINUED)**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0253639	<b>CAUTION/DANGER NAMEPLATE INSTALLATION (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS BUILT FEBRUARY 1993 TO PRESENT)</b>	Ref.	A
201	3536671	Plate, Mounting	1	
202	3252144	Nameplate (February 1993 to May 1994)	1	
	3252369	Nameplate (May 1994 to Present)	1	
203	1702289	Decal - Symbols	1	
204	3820019	Rivet	4	
	2910025	Decal Kit (Includes Items 202 & 203)	1	

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DECALS

# SECTION 9 RECOMMENDED SERVICE PARTS STOCK

## Model 40HA WITH STANDARD BANG-BANG CONTROLS

The following lists will service fleets of machines (built to current production per date on the front cover with emergency repair parts which can be installed in the field. Parts from the list should be replaced when inventory is depleted to keep service parts stock supplied. For further information, contact your JLG dealer or the JLG Industries Parts Department.

JLG PART NUMBER	DESCRIPTION	QTY PER FLEET		
		1-10	10-20	20 OR MORE
<b>STANDARD PARTS</b>				
2120125	Element, Pump Charge Filter (Figures 2-1, 2-2 & 2-6)	4	8	12
7004368	Coil (Figures 2-1, 2-2 & 2-6)	1	1	1
7009745	Coil (Figures 2-1, 2-2 & 2-6)	1	1	1
7000417	Coil (Figure 2-3)	1	1	1
7002450	Coil (Figure 2-3)	1	1	1
7000418	Coil (Figures 2-3 & 2-4)	1	1	1
7007496	Coil (Figure 2-21)	1	1	1
2120107	Element, Hydraulic Oil Filter (Figure 2-26)	4	8	12
1340046	Breather, Hydraulic Oil (Figure 2-26)	1	2	3
4360003	Switch, Key (Figure 2-28)	1	1	1
2860002	Key, Replacement (Figure 2-28)	1	1	1
4360073	Switch, Toggle (Figure 2-28)	1	1	1
4360199	Switch, Toggle (Figures 2-28, 4-4, 4-6 & 4-7)	1	1	1
4360202	Switch, Toggle (Figures 2-28, 4-4 & 4-6)	1	1	1
4360200	Switch, Toggle (Figures 2-28, 4-4, 4-6 & 4-7)	1	1	1
4360274	Switch, Push Button (Figures 2-28, 4-4, 4-6 & 4-7)	1	1	1
3740049	Relay (Figure 2-28)	1	1	1
4360216	Breaker, Circuit (Figure 2-28)	1	1	1
4360232	Breaker, Circuit (Figure 2-28)	1	1	1
3740058	Relay - 4PDT (Figures 2-28 & 4-4)	1	1	1
3740067	Relay (Figure 2-28)	1	1	1
3740077	Relay (Figure 2-28)	1	1	1
4360171	Switch, Level Sensor (Figure 2-29)	1	1	1
4360057	Switch, Limit (Figure 3-1)	1	1	1
7006139	Powertrack - 1 Ft. Section (Figure 3-2)	2	2	2
7006152	Pin Kit (Figure 3-2)	24	24	24
2940006	Latch, Platform Door (Figures 4-1 & 4-2)	1	1	1
4360031	Foot Switch (Figures 4-1 & 4-2)	1	1	1
3990010	Diode (Figure 7-1)	2	2	2
<b>VARIABLE PARTS</b>				
7010772	Coil (4WS) (Figure 1-12)	1	1	1
7004214	Element, Air Filter (Deutz & Ford) (Figures 2-15 & 2-17)	1 Dozen	1 Dozen	1 Dozen
1660184	Coupling - 13 Teeth, Pump/Engine (Deutz) (Figure 2-15)	1	1	1
1660234	Coupling - 15 Teeth, Pump/Engine (Deutz) (Figure 2-15)	1	1	1
7012598	Element, Fuel Filter (Deutz) (Figure 2-15)	4	8	12
7014502	Element, Engine Oil Filter (Deutz) (Figure 2-15)	1 Box	1Box	1 Box
7019949	Element, Engine Oil Filter (Ford) (Figure 2-17)	1 Box	1Box	1 Box
1660207	Coupling - 13 Teeth, Pump/Engine (Ford) (Figure 2-17)	1	1	1
7019684	Coupling - 15 Teeth, Pump/Engine (Ford) (Figure 2-17)	1	1	1

# SECTION 9 RECOMMENDED SERVICE PARTS STOCK

## Model 40HA WITH STANDARD BANG-BANG CONTROLS

The following lists will service fleets of machines (built to current production per date on the front cover with emergency repair parts which can be installed in the field. Parts from the list should be replaced when inventory is depleted to keep service parts stock supplied. For further information, contact your JLG dealer or the JLG Industries Parts Department.

JLG PART NUMBER	DESCRIPTION	QTY PER FLEET		
		1-10	10-20	20 OR MORE
7008829	PC Board - Adeco (Kubota & Deutz) (Figures 2-20 & 2-28)	1	1	1
7008828	Cable - Adeco (Kubota & Deutz) (Figures 2-20 & 2-28)	1	1	1
1660184	Coupling - 13 Teeth, Pump/Engine (Kubota) (Figure 2-20)	1	1	1
1660234	Coupling - 15 Teeth, Pump/Engine (Kubota) (Figure 2-20)	1	1	1
4360212	Breaker, Circuit (Kubota & Deutz) (Figure 2-28)	1	1	1
4360201	Switch, Toggle (Dual Fuel) (Figure 2-28)	1	1	1
3740059	Relay (Kubota) (Figure 2-28)	1	1	1
1600117	Relay (Kubota) (Figure 2-28)	1	1	1
1600116	PQ Controller (2WS) (Figures 4-4, 4-6 & 4-7)	1	1	1
1600135	PQ Controller (4WS) (Figures 4-4 & 4-6)	1	1	1
7003783	Electrical Assembly - Controller (2WS) (Figures 4-4, 4-6 & 4-7)	1	1	1
7003797	Electrical Assembly - Controller (4WS) (Figures 4-4 & 4-6)	1	1	1
7003789	Switch, Steer (Figures 4-4 & 4-6)	1	1	1

# SECTION 10 SPECIAL OPTIONS

**Note: This list is to accommodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
10—1		<b>MISCELLANEOUS SPECIAL OPTIONS</b>	Ref.	
		<b>Airline Installations</b>	Ref.	
	0252046	Airline - 1/2" Single Line	Ref.	D
	0251053	Airline - 1/2" Single Line (Boeing Spec)	Ref.	D
	0255617	Airline - 1/2" Dual Line	Ref.	—
	0254446	Airline - 3/4" Single Line	Ref.	A
		<b>Axle Conversions</b>	Ref.	—
	1281498	2WD Oscillating to Fixed	Ref.	—
	0251444	4WD Oscillating to Fixed	Ref.	—
		<b>Battery Kit and Disconnect Switch Installations</b>	Ref.	—
	0253817	Switch - Battery Disconnect	1	
	4360256	Nameplate - Disconnect Switch On/Off	1	
	3252027	Switch, Pushbutton	2	
	4360104	Switch, Lense	2	
	4360131	Switch, Operator	2	
	3252028	Nameplate - Battery Disconnect	1	
	3252029	Nameplate - Auxiliary Switch Location	1	
	1060044	Cable - Battery	1	
	0270723	<b>Beacon Light Installation - Platform</b>	Ref.	A
	0253824	<b>Boeing Spec Installations</b>	Ref.	B
		<b>Bubble Level Installation</b>	Ref.	—
	0251042	Gauge, Level	1	
	2420038			
	0256789	<b>Camera Mount Assembly</b>	Ref.	
		<b>Decals Installations:</b>	Ref.	—
	0250733	<b>Decals Installation - Capacity Nameplates</b>	Ref.	—
	1700919	Decal - 500 Lbs.	3	
	3534137	Plate, Mounting	3	
	0253550	<b>Decals Installation - CSA</b>	Ref.	A
	3252221	Nameplate	1	
	0257492	<b>Decals Installation - Brazil Spec</b>	Ref.	4
	0257914	<b>Decals Installation - Brazil Spec (Pictogram)</b>	Ref.	1
	2900940	<b>Decal Kit - Brazil Spec (Brown)</b>	Ref.	
	0255736	<b>Decals Installation - Latin American Spec</b>	Ref.	5
	1702669	Decal - Important - Latin American Spec	1	
	1702721	Decal - LP Gas (Brown) - Latin American Spec	1	
	1702722	Decal - Fuel Gas (Brown) - Latin American Spec	1	
	1702600	Decal - Fuel Diesel - Latin American Spec	1	
	0255755	<b>Nameplate Installation - Latin American Spec</b>	Ref.	—
	0252822	<b>Decals Installation - Common (Japanese Spec)</b>	Ref.	6

# SECTION 10 SPECIAL OPTIONS

Note: This list is to accomodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.

SECTION 10 SPECIAL OPTIONS

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0253262	<b>Decals Installation - Japanese Spec</b>	Ref.	2
	0252062	<b>Decals Installation - Manual Descent</b>	Ref.	—
	0251830	<b>Decals Installation - Manual Descent (Japanese Spec)</b>	Ref.	A
	0256487	<b>Decal Installation - Warning Prop 65 (Diesel)</b>	Ref.	
	0256488	<b>Decal Installation -Warning Prop 65 (Gas)</b>	Ref.	
	0256956	<b>Decal Installation -Lanyard Attach (GM K-1 Spec)</b>	Ref.	
	1281955	<b>Deutz Engine Installation - With Auxiliary Pump Drive for Hydraulic Tool Circuit</b>	Ref.	B
	0253464	<b>Engine Installation (B/M Only)</b>	Ref.	C
	0253463	<b>Engine Assembly (B/M Only)</b>	Ref.	E
	2000119	Engine - F2L1011 (Non-Standard)	1	
	3600202	Pump - Barnes (Non-Standard)	1	
	3600203	Pump - Barnes (Non-Standard)	1	
	1281643	<b>Deutz Engine Installation With Ucon Hydraulic Fluid</b>	Ref.	G
	0255202	<b>Engine Installation (B/M Only)</b>	Ref.	B
	0255201	<b>Engine Assembly (B/M Only)</b>	Ref.	D
	3600241	Pump - Commercial (Non-Standard)	1	
		<b>Engine Manuals:</b>	Ref.	
	3120044	Deutz FL1011	1	
	3120045	Kubota V1200	1	
	3120077	Ford VSG-411	1	
		<b>Fuel Caps:</b>	Ref.	
	0257365	<b>Standard</b>	Ref.	1
	1120314	Cap	1	
	0257366	<b>Red - Lockable Cap</b>	Ref.	2
	1120367	Cap	1	
	0258626	<b>Blue - Lockable Cap</b>	Ref.	1
	1120512	Cap	1	
	0253816	<b>Fuel Indicator Light Installation</b>	Ref.	A
	4360265	Switch, LPG	1	
	2920026	Light, Indicator	1	
	3252269	Nameplate, LP Light	1	
		<b>Ground Control Box Installation - Brazil Spec</b>	Ref.	
	0257634	<b>Deutz with Standard Bang-Bang Controls</b>	Ref.	1
	0257635	<b>Deutz with Proportional Controls</b>	Ref.	1
	0253836	<b>Lights Installation - Headlights and Spot Lights (Boeing Machines)</b>	Ref.	3
	2920001	Headlight	4	
	2920013	Spotlight (Prior to S/N 32554)	4	
	2920111	Spotlight (S/N 32554 to Present)	4	

# SECTION 10 SPECIAL OPTIONS

**Note: This list is to accomodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.**

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
	0254067	<b>Lights Installation - Headlights and Taillights (4WS Kubota Machines)</b>	Ref.	—
	1060016	Cable, Electrical - 16/3	65 ft./ 19.8m	
		<b>Lights Installation - Panel</b>	Ref.	
	0251619	<b>Standard Bang-Bang and Proportional Controls</b>	Ref.	A
	0251690	Hydraulic Controls	Ref.	B
	2920024	Light, Panel	A/R	
	0253239	<b>Manual Descent Installation</b>	Ref.	D
	0253393	<b>Oil Cooler Installation</b>	Ref.	
	3620003	Oil Cooler Assembly	1	
	2060012	Fan	1	
	4360181	Switch, Temperature	1	
	4640760	Valve, Check	1	
	4060843	Shield	1	
	0256426	<b>Pipe Rack Installation</b>	Ref.	
	0251140	<b>Receptacle Installation - GFI</b>	Ref.	D
	0860038	Box, Switch	1	
	4460346	Receptacle	1	
	4060700	Shield, Cover	1	
	0254793	<b>Receptacle Mounting Plate Installation - Argentina Machines</b>	Ref.	
	3538039	Plate, Mounting	1	
	3251242	Nameplate - 240V - 50HZ	1	
	0251274	<b>Remote Bearing Lube Installation (Japanese Spec)</b>	Ref.	—
	0255619	<b>Remote Control Box Installation</b>	Ref.	—
	0238954	Remote Box Assembly	1	
	0256829	<b>Spring Loaded Gate Assembly</b>	Ref.	A
		<b>Tank, LP Options:</b>	Ref.	
	4400281	33.5 LB. Liquid (Aluminum)	2	
	4400421	33.5 LB. Liquid (Steel)	2	
	4400275	43.5 LB. Liquid (Aluminum)	2	
	4400420	43.5 LB. Liquid (Steel)	2	
		<b>Technical Supplements:</b>	Ref.	
	3120322	Spec Data Handbook	1	
	3120351	PQ Controller Supplement	1	
	3124003	Sunstrand Sauer Service Manual	1	

SECTION 10 SPECIAL OPTIONS

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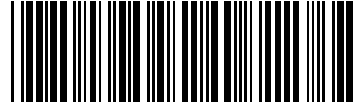
Note: This list is to accommodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.

SECTION 10 SPECIAL OPTIONS

FIG & ITEM #	PART NUMBER	DESCRIPTION	QTY.	REV.
		<b>Tools for Service</b>	Ref.	
	7002828	Wire Stripper	1	
	7002821	Wire Crimper (To install wire ends to wires)	1	
	7002823	Pin/Socket Extractor - Universal (To Remove Pins/Sockets from Connectors)	1	
	7002822	Screwdriver, Potentiometer (To Adjust Drive Controllers)	1	
	7016654	Screwdriver, Magnetic	1	
	7004275	Seal Installation Tool - 1"	1	
	7004276	Seal Installation Tool - 1 1/2"	1	
	7002826	Seal Installation Tool - 2"	1	
	0253823	<b>Tow Package Installation - Boeing Spec</b>	Ref.	A
	0257728	<b>Tube Rack Installation</b>	Ref.	
	0253879	<b>Weld Leads Installation</b>	Ref.	A
	1060097	Cable, Weld Leads	140 ft./ 42.7m	
	3251963	Nameplate - Weld Leads	2	







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