



Illustrated Parts Manual

Model 40HA

P/N
3120673

October 10, 2012

ANSI



An Oshkosh Corporation Company

REVISION LOG

June 15, 1990 - Original Issue Of Manual

April, 1995 - Revised Manual

August 22, 2003 - Revised Manual (Edited to 0010392 Revision 42)

August 1, 2006 - Revised Manual (Edited to 0010392 Revision 42)

October 26, 2010 - Revised Manual

October 10, 2012 - Revised Manual (Revision 1)

TABLE OF CONTENTS

SECTION 1 - FRAME.....	9
FIGURE 1-1. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 2 WHEEL STEER).....	10
FIGURE 1-2. FRAME, STEERING AND AXLE INSTALLATIONS - 2WD AND 4WD (WITH 4 WHEEL STEER).....	14
FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS.....	20
FIGURE 1-4. DRIVE MOTOR ASSEMBLY	24
FIGURE 1-5. DRIVE BRAKE ASSEMBLY - AUSCO (PRIOR TO MARCH 1992)	26
FIGURE 1-6. DRIVE BRAKE ASSEMBLY - MICO (MARCH 1992 TO PRESENT).....	28
FIGURE 1-7. DRIVE HUB ASSEMBLY	32
FIGURE 1-8. DRIVE HUB ASSEMBLY	36
FIGURE 1-9. DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992)	38
FIGURE 1-10. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT).....	42
FIGURE 1-11. VALVES INSTALLATION - FRAME-MOUNTED.....	46
FIGURE 1-12. LOCKOUT VALVE ASSEMBLY	50
FIGURE 1-13. VALVE ASSEMBLY (USED WITH OPTIONAL 4WS).....	52
FIGURE 1-14. TOW PACKAGE INSTALLATIONS.....	54
SECTION 2 - TURNTABLE.....	57
FIGURE 2-1. CONTROL VALVES INSTALLATION (DEUTZ ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES).....	58
FIGURE 2-2. CONTROL VALVES INSTALLATION (FORD/KUBOTA ENGINES WITH STANDARD BANG-BANG OR PROPORTIONAL VALVES).....	64
FIGURE 2-3. CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION.....	70
FIGURE 2-4. CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS).....	74
FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL	76
FIGURE 2-6. CONTROL VALVES INSTALLATION (HYDRAULIC CONTROLS)	80
FIGURE 2-7. VALVE ASSEMBLY - GROUND CONTROL (HYDRAULIC CONTROLS).....	82
FIGURE 2-8. TURNTABLE, BEARING AND SWING DRIVE INSTALLATION.....	84
FIGURE 2-9. SWING MOTOR ASSEMBLY (PRIOR TO AUGUST 1991).....	88
FIGURE 2-10. SWING MOTOR ASSEMBLY (AUGUST 1991 THROUGH 1992)	90
FIGURE 2-11. SWING MOTOR ASSEMBLY (1993 TO PRESENT)	92
FIGURE 2-12. SWING BRAKE ASSEMBLY (PRIOR TO AUGUST 1991).....	94
FIGURE 2-13. BRAKE ASSEMBLY - AUSCO 37845 (AUGUST 1991 THROUGH 1992).....	96
FIGURE 2-14. SWING HUB ASSEMBLY (MACHINES BUILT THROUGH 1992 ONLY).....	98
FIGURE 2-15. DEUTZ ENGINE INSTALLATION.....	100
FIGURE 2-16. 110 VOLT GENERATOR INSTALLATION (DEUTZ)	108
FIGURE 2-17. FORD ENGINE INSTALLATION.....	112
FIGURE 2-18. DUAL FUEL INSTALLATION (FORD)	122
FIGURE 2-19. 110 VOLT GENERATOR INSTALLATION (FORD)	124
FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION.....	128
FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND.....	134
FIGURE 2-22. PUMP ASSEMBLY - BARNES (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT APRIL/MAY 1990 TO JANUARY 1993).....	138
FIGURE 2-23. PUMP ASSEMBLY - BARNES (USED ON STANDARD BANG-BANG AND PROPORTIONAL CONTROLS MACHINES BUILT JANUARY 1993 TO PRESENT).....	140
FIGURE 2-24. PUMP ASSEMBLY - BARNES (USED ON HYDRAULIC CONTROL MACHINES WITH DEUTZ POWER BUILT PRIOR TO OCTOBER 1991)	142

TABLE OF CONTENTS

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)	144
FIGURE 2-26. TANKS INSTALLATION	146
FIGURE 2-27. ROTARY COUPLING AND COLLECTOR ASSEMBLY AND INSTALLATION	150
FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS	152
FIGURE 2-29. ELECTRICAL COMPONENTS INSTALLATION (TURNABLE MOUNTED)	158
FIGURE 2-30. HOODS INSTALLATIONS (WITH 2 DOORS AT GROUND CONTROL BUILT PRIOR TO AUGUST 1990)	160
FIGURE 2-31. HOODS INSTALLATIONS (WITH SINGLE DOOR AT GROUND CONTROL) (AUGUST 1990 TO PRESENT WITHOUT NOISE REDUCTION OPTION)	164
FIGURE 2-32. HOODS INSTALLATIONS (WITH NOISE REDUCTION OPTION)	168
SECTION 3 - BOOM	171
FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS	172
FIGURE 3-2. MAIN BOOM ASSEMBLY	176
FIGURE 3-3. BOOM WIPERS INSTALLATION	180
SECTION 4 - PLATFORM	183
FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION	184
FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS	190
FIGURE 4-3. ROTATOR MOTOR ASSEMBLY	194
FIGURE 4-4. CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS)	196
FIGURE 4-5. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - PRIOR TO FEBRUARY 1993)	200
FIGURE 4-6. CONSOLE BOX ASSEMBLY (PROPORTIONAL CONTROLS - FEBRUARY 1993 TO PRESENT)	204
FIGURE 4-7. CONTROL BOX ASSEMBLY (HYDRAULIC CONTROLS)	208
FIGURE 4-8. CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY)	212
FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS	216
SECTION 5 - CYLINDER	219
FIGURE 5-1. AXLE LOCKOUT CYLINDER ASSEMBLIES - 4WD/4WS (STANDARD PARTS) (USE WITH OPTIONAL OSCILLATING AXLE)	220
FIGURE 5-2. PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT PRIOR TO JANUARY 1990)	222
FIGURE 5-3. PLATFORM LEVEL CYLINDER ASSEMBLY (MACHINES BUILT OCTOBER 1992 TO PRESENT)	224
FIGURE 5-4. LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS)	226
FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)	228
FIGURE 5-6. LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS)	232
FIGURE 5-7. STEER CYLINDER ASSEMBLIES	234
FIGURE 5-8. TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)	236
FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL)	240
SECTION 6 - HYDRAULIC	243
FIGURE 6-1. HYDRAULIC DIAGRAM - AXLE LOCKOUT (2WD)	244
FIGURE 6-2. HYDRAULIC DIAGRAM - AXLE LOCKOUT (4WD)	246
FIGURE 6-3. HYDRAULIC DIAGRAM - DRIVE (2WD)	248
FIGURE 6-4. HYDRAULIC DIAGRAM - DRIVE (4WD)	252
FIGURE 6-5. HYDRAULIC DIAGRAM - ROTATE	256
FIGURE 6-6. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/DEUTZ MACHINES)	258
FIGURE 6-7. HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/FORD AND KUBOTA MACHINES)	262

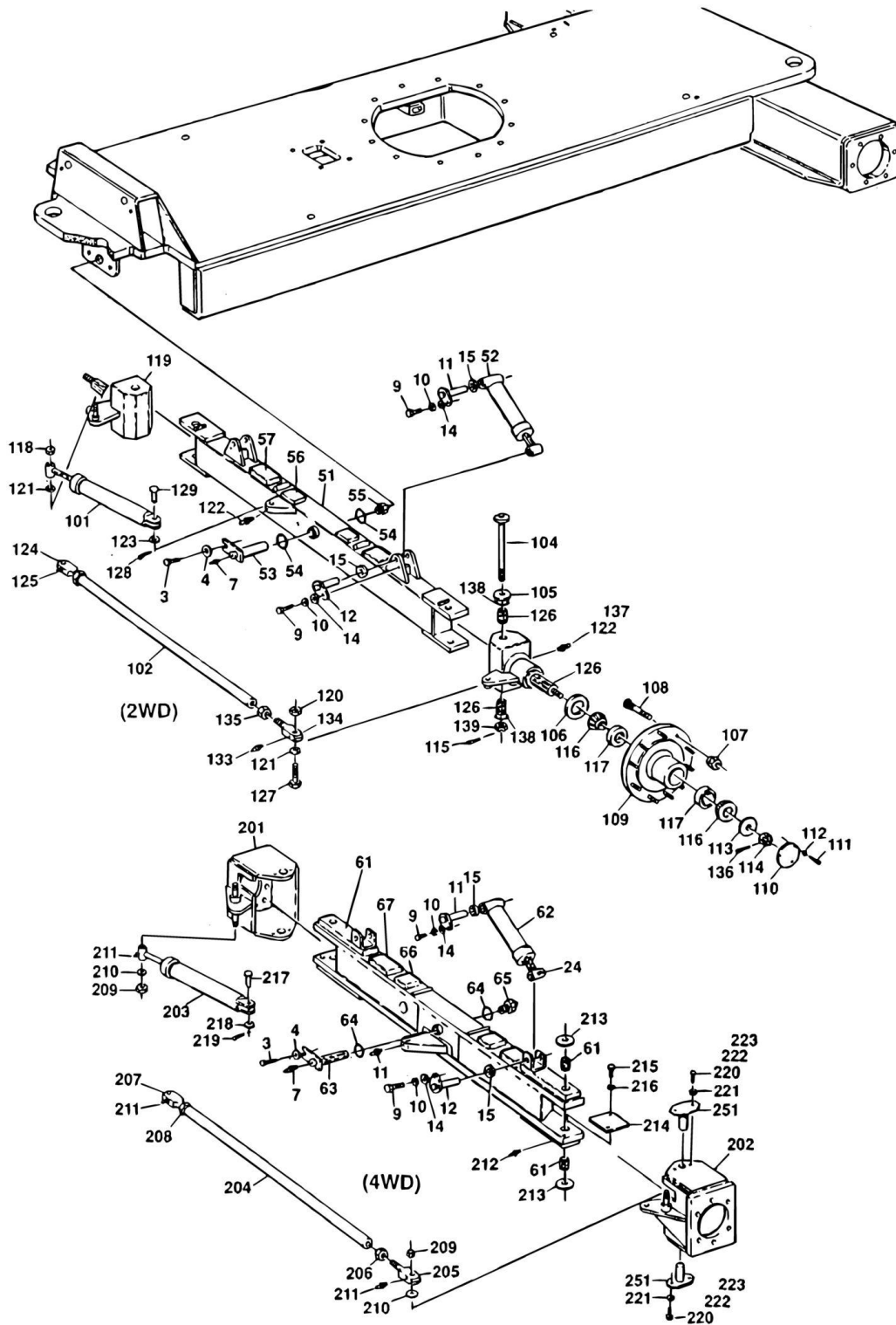
TABLE OF CONTENTS

FIGURE 6-8. HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS)	266
FIGURE 6-9. HYDRAULIC DIAGRAM - STEER	270
FIGURE 6-10. HYDRAULIC DIAGRAM LIST	272
SECTION 7 - ELECTRICAL	275
FIGURE 7-1. ELECTRICAL DIAGRAM LIST	276
FIGURE 7-2. DUAL FUEL ELECTRICAL DIAGRAM (FORD)	282
FIGURE 7-3. GENERATOR ELECTRICAL DIAGRAM (110V) (DEUTZ).....	284
FIGURE 7-4. GENERATOR ELECTRICAL DIAGRAM (110V) (FORD)	286
FIGURE 7-5. PLATFORM ELECTRICAL DIAGRAM - BANG-BANG (STANDARD) CONTROLS	288
FIGURE 7-6. PLATFORM ELECTRICAL DIAGRAM - HYDRAULIC CONTROLS	290
FIGURE 7-7. STANDARD ELECTRICAL DIAGRAM - DEUTZ WITH STANDARD BANG-BANG CONTROLS	292
FIGURE 7-8. STANDARD ELECTRICAL DIAGRAM - DEUTZ WITH HYDRAULIC CONTROLS	294
FIGURE 7-9. STANDARD ELECTRICAL DIAGRAM - FORD WITH STANDARD BANG-BANG CONTROLS	296
FIGURE 7-10. STANDARD ELECTRICAL DIAGRAM - FORD WITH HYDRAULIC CONTROLS.....	298
SECTION 8 - DECALS.....	301
FIGURE 8-1. DECALS INSTALLATION	302
SECTION 9 - RECOMMENDED SERVICE PARTS STOCK	307
FIGURE 9-1. MODEL 40HA WITH STANDARD BANG-BANG CONTROLS STANDARD PARTS.....	308
FIGURE 9-2. MODEL 40HA WITH STANDARD BANG-BANG CONTROLS VARIABLE PARTS.....	310
SECTION 10 - SPECIAL OPTIONS.....	313
FIGURE 10-1. SPECIAL OPTIONS.....	314
PART NUMBER INDEX	317

SECTION 1 - FRAME

SECTION 1 - FRAME

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



SECTION 1 - FRAME

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	FRAME, STEERING AND AXLE INSTALLATIONS - 2WD & 4WD (WITH 2 WHEEL STEER)	
	2360299	1	Frame (2WD Fixed Axle)	
	2360300	1	Frame (4WD Fixed Axle)	
	2360305	1	Frame (All With Oscillating Axle - Prior to October 1994)	
	2360386	1	Frame (All With Oscillating Axle - October 1994 to Present)	
		Ref	AXLE INSTALLATION - MACHINES WITH OPTIONAL OSCILLATING AXLE (STANDARD PARTS)	
3	0641610	AR	Bolt 3/8in-16NC x 1 1/4in	
4	4740185	AR	Washer, Hardened	
5	0100019	AR	Loctite #271 (Not Shown)	
7	2160002	1	Fitting, Grease	
9	0641406	4	Bolt 1/4in-20NC x 3/4in	
10	4761400	4	Lockwasher 1/4in	
11	4843286	2	Pin	
12	4842794	2	Pin	
14	4751400	4	Flatwasher 1/4in	
15	4712600	AR	Flatwasher 1in	
		Ref	AXLE INSTALLATION - 2WD MACHINES WITH OPTIONAL OSCILLATING AXLE (VARIABLE PARTS)	
	0250382	Ref	BUILT PRIOR TO SEPTEMBER 1990	D
	0251330	Ref	BUILT SEPTEMBER 1990 TO OCTOBER 1994	C
	0255069	Ref	BUILT OCTOBER 1994 TO PRESENT	C
51		Ref	Front Axle Weldment Options:	
51	4843477	1	Front Axle Weldment (Prior to October 1994)	
51	4844848	1	Front Axle Weldment (October 1994 to Present)	
52		Ref	Lockout Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
52	1681785	2	Lockout Cylinder Assembly (Built Prior to September 1990)	
52	1682406	2	Lockout Cylinder Assembly (September 1990 to June 1992)	
52	1682757	2	Lockout Cylinder Assembly (June 1992 to October 1994)	
53		Ref	Pin Options:	
53	4842621	1	Pin (Prior to October 1994)	
53	3422401	1	Pin (October 1994 to Present)	
54		Ref	O-Ring Options:	
54	Not Required	2	O-Ring (Prior to October 1994)	
54	3780183	2	O-Ring (October 1994 to Present)	
55		Ref	Valve, Relief Options:	
55	Not Required	1	Valve, Relief (Prior to October 1994)	
55	4640812	1	Valve, Relief (October 1994 to Present)	
		Ref	AXLE INSTALLATION - 4WD MACHINES WITH OPTIONAL OSCILLATING AXLE (VARIABLE PARTS)	
	0250334	Ref	BUILT PRIOR TO SEPTEMBER 1990	E
	0251329	Ref	BUILT SEPTEMBER 1990 TO OCTOBER 1994	D
	0255070	Ref	BUILT OCTOBER 1994 TO PRESENT	-
61		Ref	Front Axle Weldment Options:	
61	4843447	1	Front Axle Weldment (Prior to October 1994)	
61	4844849	1	Front Axle Weldment (October 1994 to Present)	
61	0961029	4	Bushing, Bronze	

SECTION 1 - FRAME

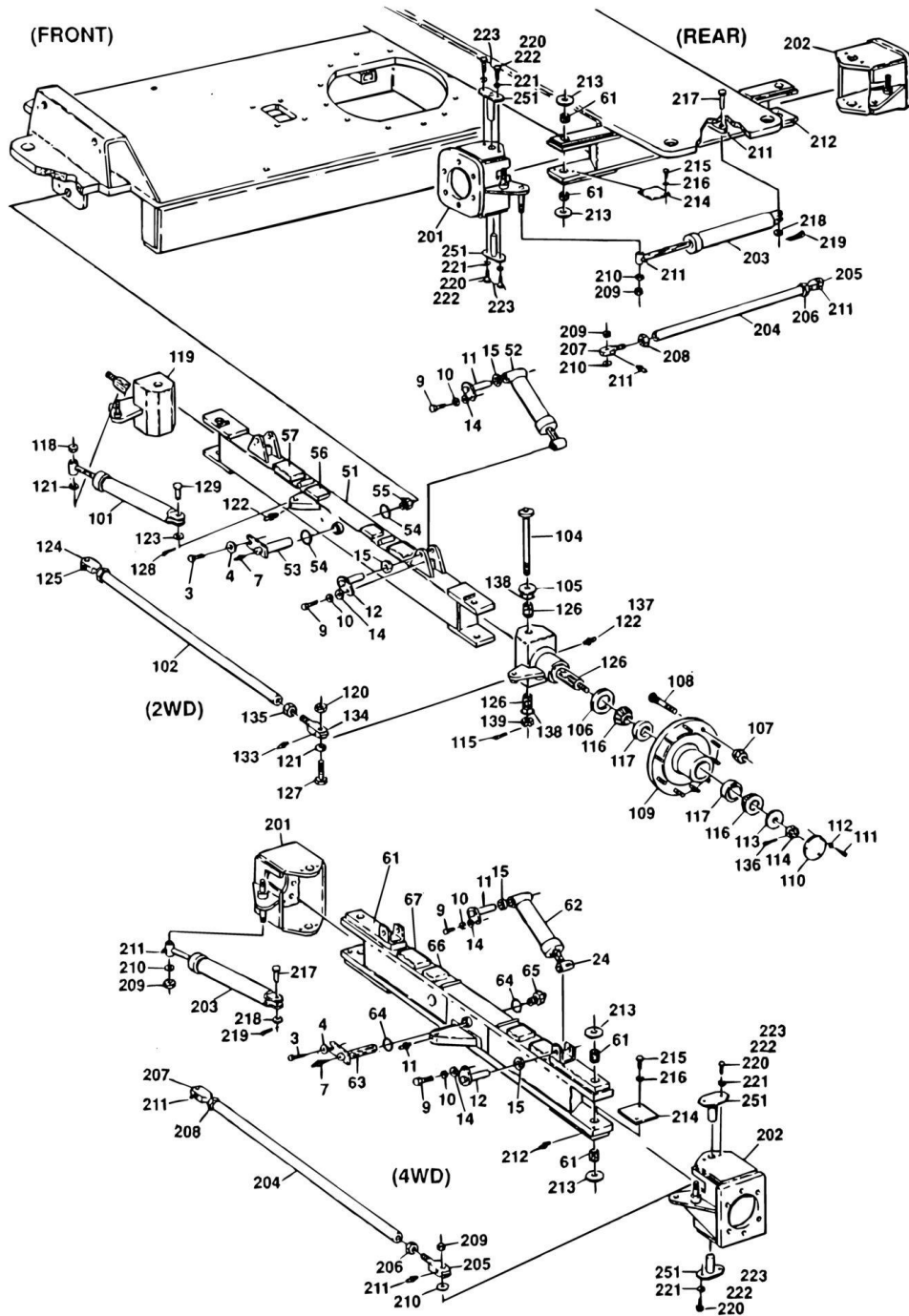
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
62		Ref	Lockout Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
62	1681785	2	Cylinder - (Prior to September 1990)	
62	1682406	2	Cylinder - (September 1990 to June 1992)	
62	1682757	2	Cylinder - (June 1992 to Present)	
63		Ref	Pin Options:	
63	4842621	1	Pin (Prior to October 1994)	
63	3422401	1	Pin (October 1994 to Present)	
64		Ref	O-Ring Options:	
64	Not Required	2	O-Ring (Prior to October 1994)	
64	3780183	2	O-Ring (October 1994 to Present)	
65		Ref	Valve, Relief Options:	
65	Not Required	1	Valve, Relief (Prior to October 1994)	
65	4640812	1	Valve, Relief (October 1994 to Present)	
		Ref	STEERING AND SPINDLES INSTALLATION - 2WD MACHINES	
	0236449	Ref	STANDARD	O
	0251521	Ref	CSA	F
101	1681562	1	Steer Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
102	3840863	1	Tie-Rod	
104		Ref	Kingpin Options:	
104	3421243	2	Domestic (Prior to February 1994)	
104	3421835	2	CSA (Prior to February 1994)	
104	3422261	2	All (February 1994 to Present)	
105	0440183	2	Bearing, Thrust	
106	3960098	2	Seal, Hub	
107	3300012	18	Nut, Wheel	
108	0630137	18	Stud, Wheel	
109	2780091	2	Hub Assembly	
110	1120032	2	Cap, Hub	
111	0721003	6	Bolt #10-24NC x 3/8in	
112	4761000	6	Lockwasher #10	
113	4740016	2	Washer, Hardened	
114	3323403	2	Nut 1 1/2in- 6NF	
115	3451012	2	Pin, Cotter 5/16in x 3in	
116	0440019	4	Cone, Bearing	
117	0440018	4	Cup, Bearing	
118	3300175	1	Locknut	
119	4130160	1	Spindle (Right Side)	
119	0961778	2	Bushing, Excel	
120	3312602	2	Nut, Jam 1in-8NC	
121	0440091	3	Bearing, Thrust	
122	2160002	3	Fitting, Grease	
123	4712600	1	Flatwasher 1in Narrow	
124	0560605	1	Block, Tie-Rod (Right Side)	
125	3323002	1	Nut, Jam 1 1/4in-12NF (Right Side)	
126	4130161	1	Spindle (Left Side)	
126	0961778	2	Bushing, Excel	
127	0630425	2	Bolt 1in-8NC x 3 3/4in	
128	3450606	1	Pin, Cotter 3/16in x 1 1/2in	
129	3431622	1	Pin, Clevis 1in x 2 3/4in	
132	0100011	AR	Loctite #242 (Not Shown)	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
133	2160003	2	Fitting, Grease - 45	
134	0560714	1	Block, Tie-Rod (Left Side)	
135	3300229	1	Nut, Jam 1 1/4in-12NF LH (Left Side)	
136	3450810	2	Pin, Cotter 1/4in x 2 1/2in	
137	4640812	2	Valve, Relief (February 1994 to Present)	
138	3780183	4	O-Ring (February 1994 to Present)	
139	3323403	2	Nut, Slotted 1 1/2in - 6NF (Prior to May 1994)	
139	3313403	2	Nut, Slotted 1 1/2in - 6NC (May 1994 to Present)	
		Ref	STEERING AND SPINDLES INSTALLATION - 4WD MACHINES (STANDARD PARTS)	
201	4130221	1	Spindle (Right Side)	
202	4130222	1	Spindle (Left Side)	
203	1681555	1	Steer Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
204	3841018	1	Tie-Rod	
205	0560714	1	Block, Tie-Rod (Left Side)	
206	3300229	1	Nut, Jam 1 1/4in-12NF (Left Side)	
207	0560605	1	Block, Tie-Rod (Right Side)	
208	3323002	1	Nut, Jam 1 1/4in-12NF	
209	3300175	3	Locknut	
210	0440091	3	Bearing, Thrust	
211	2160002	4	Fitting, Grease	
212	2160003	4	Fitting, Grease - 45	
213	0440161	4	Bearing, Thrust	
214		Ref	Cover Options:	
214	3530244	4	Cover (Prior to August 1992)	
214	3536411	4	Cover (August 1992 to Present)	
215		Ref	Fastener Options:	
215	0641404	AR	Bolt 1/4in-20NC x 1/2in (Prior to August 1992)	
215	2080026	AR	Stud, Drive (August 1992 to May 1994)	
215	4300106	AR	Stud, Drive (May 1994 to Present)	
216	4761400	8	Lockwasher 1/4in (Prior to August 1992 Only)	
217	3431622	1	Pin, Clevis	
218	4712600	1	Flatwasher, 1in	
219	3450606	1	Pin, Cotter 3/16in x 1 1/2in	
220	0641608	8	Bolt 3/8in-16NC x 1in	
221	4751600	8	Flatwasher 3/8in	
222	1380124	8	Clip, Retainer	
223	4920096	4 ft/1.22m	Wire, Safety	
	0250085	Ref	STEERING AND SPINDLES INSTALLATION - 4WD DOMESTIC MACHINES (VARIABLE PARTS)	E
	0252333	Ref	STEERING AND SPINDLES INSTALLATION - CSA 4WD MACHINES (VARIABLE PARTS)	B
251		Ref	Kingpin Options:	
251	3421190	4	Standard	
251	3421887	4	CSA	B

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)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	FRAME, STEERING AND AXLE INSTALLATIONS - 2WD & 4WD (WITH 4 WHEEL STEER)	
	2360380	1	Frame (2WD Fixed Axle)	
	2360381	1	Frame (4WD Fixed Axle)	
	2360334	1	Frame (All With Oscillating Axle - Prior to October 1994)	
	2360385	1	Frame (All With Oscillating Axle - October 1994 to Present)	
	0961029	4	Bushing, Bronze (Rear Axle)	
		Ref	FRONT AXLE INSTALLATION (STANDARD PARTS)	
3	0641610	AR	Bolt 3/8in-16NC x 1 1/4in	
4	4740185	AR	Washer, Hardened	
5	0100019	AR	Loctite #271 (Not Shown)	
7	2160002	1	Fitting, Grease	
9	0641406	4	Bolt 1/4in-20NC x 3/4in	
10	4761400	4	Lockwasher 1/4in	
11	4843286	2	Pin (Oscillating Axle Only)	
12	4842794	2	Pin (Oscillating Axle Only)	
14	4751400	4	Flatwasher 1/4in	
15	4712600	AR	Flatwasher 1in	
		Ref	FRONT AXLE INSTALLATION - 2WD MACHINES WITH FIXED AXLE (VARIABLE PARTS)	
	0253173	Ref	BUILT PRIOR TO OCTOBER 1994	-
	0255075	Ref	BUILT OCTOBER 1994 TO PRESENT	-
		Ref	FRONT AXLE INSTALLATION - 2WD MACHINES WITH OSCILLATING AXLE (VARIABLE PARTS)	
	0250382	Ref	BUILT PRIOR TO SEPTEMBER 1990	D
	0251330	Ref	BUILT SEPTEMBER 1990 TO OCTOBER 1994	C
	0255069	Ref	BUILT OCTOBER 1994 TO PRESENT	-
51		Ref	Front Axle Weldment Options:	
51	4843477	1	Front Axle Weldment (Prior to October 1994)	
51	4844848	1	Front Axle Weldment (October 1994 to Present)	
52		Ref	Lockout Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
52	Not Required	2	Fixed Axle	
52		Ref	Oscillating Axle	
52	1681785	2	Lockout Cylinder Assembly (Prior to September 1990)	
52	1682406	2	Lockout Cylinder Assembly (September 1990 to June 1992)	
52	1682757	2	Lockout Cylinder Assembly (June 1992 to October 1994)	
53		Ref	Pin Options:	
53	4842621	1	Pin (Prior to October 1994)	
53	3422401	1	Pin (October 1994 to Present)	
54		Ref	O-Ring Options:	
54	Not Required	2	Fixed Axle	
54		Ref	Oscillating Axle	
54	Not Required	2	O-Ring (Prior to October 1994)	
54	3780183	2	O-Ring (October 1994 to Present)	
55		Ref	Valve, Relief Options:	
55	Not Required	1	Valve, Relief (Prior to October 1994)	
55	4640812	1	Valve, Relief (October 1994 to Present)	
56		Ref	Bar, Axle Block Options:	
56	0361953	2	Fixed Axle	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
56	Not Required	2	Oscillating Axle	
57		Ref	Bar, Axle Block Options:	
57	0361954	2	Fixed Axle	
57	Not Required	2	Oscillating Axle	
		Ref	FRONT AXLE INSTALLATION - 4WD MACHINES WITH FIXED AXLE (VARIABLE PARTS)	
	0253174	Ref	BUILT PRIOR TO OCTOBER 1994	-
	0255076	Ref	BUILT OCTOBER 1994 TO PRESENT	B
		Ref	FRONT AXLE INSTALLATION - 4WD MACHINES WITH OSCILLATING AXLE (VARIABLE PARTS)	
	0250334	Ref	BUILT PRIOR TO SEPTEMBER 1990	E
	0251329	Ref	BUILT SEPTEMBER 1990 TO OCTOBER 1994	D
	0255070	Ref	BUILT OCTOBER 1994 TO PRESENT	-
61		Ref	Front Axle Weldment Options:	
61	4843447	1	Front Axle Weldment (Prior to October 1994)	
61	4844849	1	Front Axle Weldment (October 1994 to Present)	
61	0961029	4	Bushing, Bronze	
62		Ref	Lockout Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
62	Not Required	2	Fixed Axle	
62		Ref	Oscillating Axle	
62	1681785	2	Lockout Cylinder Assembly (Prior to September 1990)	
62	1682406	2	Lockout Cylinder Assembly (September 1990 to June 1992)	
62	1682757	2	Lockout Cylinder Assembly (June 1992 to October 1994)	
63		Ref	Pin Options:	
63	4842621	1	Pin (Prior to October 1994)	
63	3422401	1	Pin (October 1994 to Present)	
64		Ref	O-Ring Options:	
64	Not Required	2	Fixed Axle	
64		Ref	Oscillating Axle	
64	Not Required	2	O-Ring (Prior to October 1994)	
64	3780183	2	O-Ring (October 1994 to Present)	
65		Ref	Valve, Relief Options:	
65	Not Required	0	Valve, Relief (Prior to October 1994)	
65	4640812	1	Valve, Relief (October 1994 to Present)	
66		Ref	Bar, Axle Blocking Options:	
66	0361951	2	Fixed Axle (Prior to October 1994)	
66	0361953	2	Fixed Axle (October 1994 to March 1995)	
66	0362531	2	Fixed Axle (March 1995 to Present)	
66	Not Required	2	Oscillating Axle	
67		Ref	Bar, Axle Blocking Options:	
67	0361952	2	Fixed Axle (Prior to October 1994)	
67	0361954	2	Fixed Axle (October 1994 to August 1995)	
67	0361952	2	Fixed Axle (August 1995 to Present)	
67	Not Required	2	Oscillating Axle	
	0236449	Ref	STEERING AND SPINDLES INSTALLATION - 2WD FRONT (STANDARD)	O
	0251521	Ref	STEERING AND SPINDLES INSTALLATION - 2WD FRONT (CSA)	F
101	1681562	1	Steer Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
102	3840863	1	Tie-Rod	
104		Ref	Kingpin Options:	

SECTION 1 - FRAME

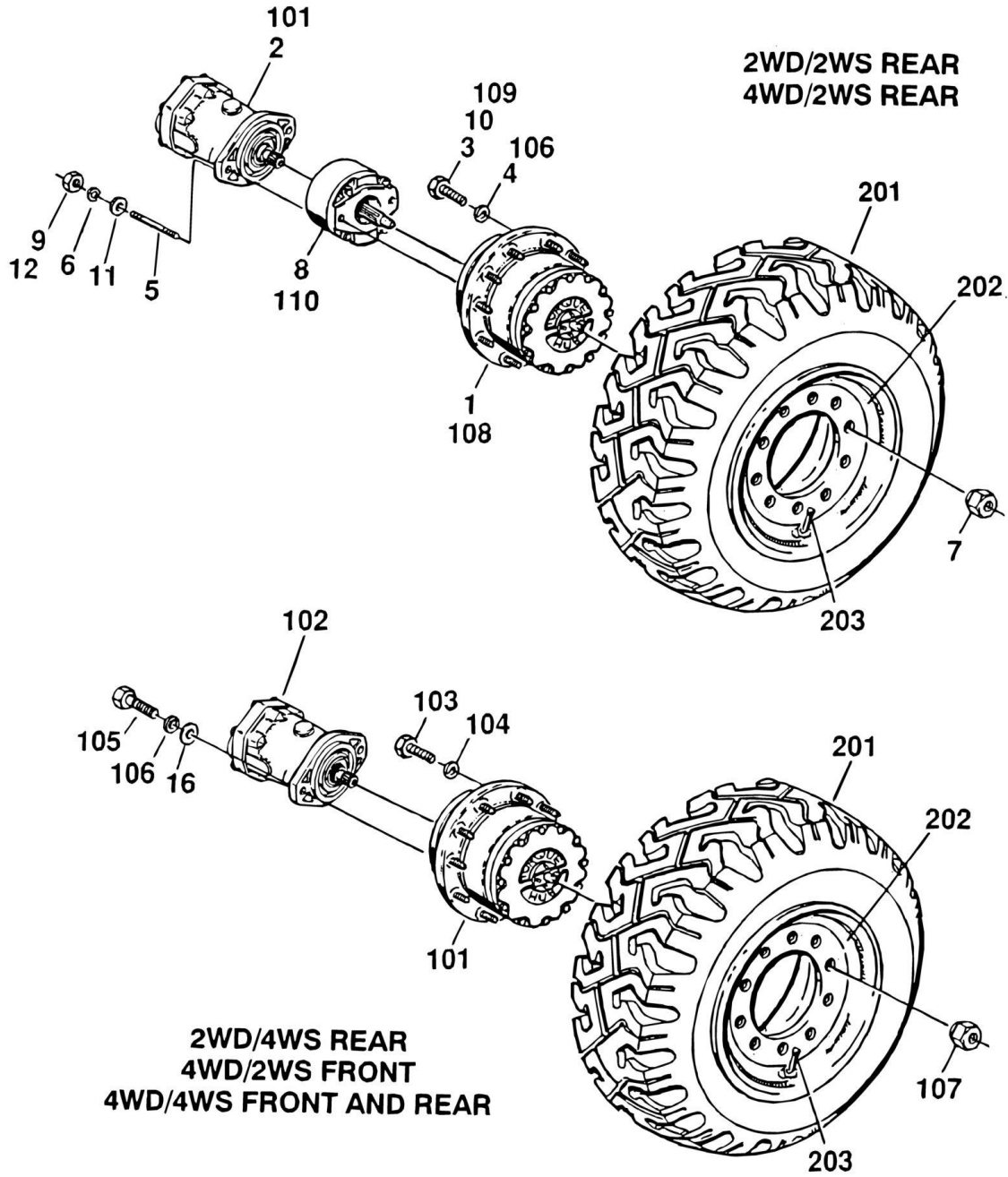
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
104	3421243	2	Domestic (Prior to February 1994)	
104	3421835	2	CSA (Prior to February 1994)	
104	3422261	2	All (February 1994 to Present)	
105	0440183	2	Bearing, Thrust	
106	3960098	2	Seal, Hub	
107	3300012	18	Nut, Wheel	
108	0630137	18	Stud, Wheel	
109	2780091	2	Hub Assembly	
110	1120032	2	Cap, Hub	
111	0721003	6	Bolt #10-24NC x 3/8in	
112	4761000	6	Lockwasher #10	
113	4740016	2	Washer, Hardened	
114	3323403	2	Nut 1 1/2in-6NF	
115	3451012	2	Pin, Cotter 5/16in x 3in	
116	0440019	4	Cone, Bearing	
117	0440018	4	Cup, Bearing	
118	3300175	1	Locknut	
119	4130160	1	Spindle (Right Side)	
119	0961778	2	Bushing, Excel	
120	3312602	2	Nut, Jam 1in- 8NC	
121	0440091	3	Bearing, Thrust	
122	2160002	3	Fitting, Grease	
123	4712600	1	Flatwasher 1in Narrow	
124	0560605	1	Block, Tie-Rod (Right Side)	
125	3323002	1	Nut, Jam 1 1/4in-12NF (Right Side)	
126	4130161	1	Spindle (Left Side)	
126	0961778	2	Bushing, Excel	
127	0630425	2	Bolt 1in-8NC x 3 3/4in	
128	3450606	1	Pin, Cotter 3/16in x 1 1/2in	
129	3431622	1	Pin, Clevis 1in x 2 3/4in	
132	0100011	AR	Loctite #242 (Not Shown)	
133	2160003	2	Fitting, Grease - 45	
134	0560714	1	Block, Tie-Rod (Left Side)	
135	3300229	1	Nut, Jam 1 1/4in-12NF LH (Left Side)	
136	3450810	2	Pin, Cotter 1/4in x 2 1/2in	
137	4640812	2	Valve, Relief (February 1994 to Present)	
138	3780183	4	O-Ring (February 1994 to Present)	
139	3323403	2	Nut, Slotted 1 1/2in-6NF (Prior to May 1994)	
139	3313403	2	Nut, Slotted 1 1/2in-6NC (May 1994 to Present)	
		Ref	STEERING AND SPINDLES INSTALLATION - 4WD FRONT AND ALL REAR STEER (STANDARD PARTS)	
201	4130221	1	Spindle (Front Right Side and Rear Left Side)	
202	4130222	1	Spindle (Front Left Side and Front Right Side)	
203	1681555	1	Steer Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
204	3841018	1	Tie-Rod	
205	0560714	1	Block, Tie-Rod (Left Side)	
206	3300229	1	Nut, Jam 1 1/4in-12NF (Left Side)	
207	0560605	1	Block, Tie-Rod (Right Side)	
208	3323002	1	Nut, Jam 1 1/4in-12NF	
209	3300175	3	Locknut	
210	0440091	3	Bearing, Thrust	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
211	2160002	4	Fitting, Grease	
212	2160003	4	Fitting, Grease - 45	
213	0440161	4	Bearing, Thrust	
214		Ref	Cover Options:	
214	3530244	4	Cover (Prior to August 1992)	
214	3536411	4	Cover (August 1992 to Present)	
215		Ref	Fastener Options:	
215	0641404	AR	Bolt 1/4in-20NC x 1/2in (Prior to August 1992)	
215	2080026	AR	Stud, Drive (August 1992 to May 1994)	
215	4300106	AR	Stud, Drive (May 1994 to Present)	
216	4761400	8	Lockwasher 1/4in (Prior to August 1992 Only)	
217	3431622	1	Pin, Clevis	
218	4712600	1	Flatwasher 1in	
219	3450606	1	Pin, Cotter 3/16in x 1 1/2in	
220	0641608	8	Bolt 3/8in-16NC x 1in	
221	4751600	8	Flatwasher 3/8in	
222	1380124	8	Clip, Retainer	
223	4920096	4 ft/1.22m	Wire, Safety	
		Ref	STEERING AND SPINDLES INSTALLATION - DOMESTIC 4WD FRONT AND DOMESTIC REAR (VARIABLE PARTS)	
	0250085	Ref	DOMESTIC 4WD FRONT AND DOMESTIC REAR	E
	0252333	Ref	CSA 4WD FRONT AND CSA REAR	C
251		Ref	Kingpin	
251	3421190	4	Standard	
251	3421887	4	CSA (Prior to SN 24769)	
251	3421190	4	CSA (SN 24769 to Present)	
	0251662	Ref	STEERING AND SPINDLES INSTALLATION - 2WD Uses: 0256449 (Front) & 0250085 (Rear) Installations	-
	0251663	Ref	STEERING AND SPINDLES INSTALLATION - 4WD DOMESTIC Uses: (2) 0250085 (Front and Rear) Installations	-
	0253986	Ref	STEERING AND SPINDLES INSTALLATION - 4WD CSA Uses: (2) 0252333 (Front and Rear) Installations	-

SECTION 1 - FRAME

FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS



SECTION 1 - FRAME

FIGURE 1-3. TIRE AND WHEEL DRIVE INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250148	Ref	WHEEL DRIVE INSTALLATION - 2WD/2WS	6
	0270215	Ref	WHEEL DRIVE INSTALLATION - 2WD/2WS (SERVICE REPLACEMENT ALTERNATIVE)	1
1	2780169	2	Drive Hub Assembly (See DRIVE HUB ASSEMBLY for Breakdown)	
2	3160158	2	Drive Motor Assembly (See DRIVE MOTOR ASSEMBLY for Breakdown)	
3	0642016	12	Bolt 5/8in-11NC x 2in	
4	4762000	12	Lockwasher 5/8in	
5	4300092	4	Stud 1/2in-13NC x 5 1/2in	
6	4761800	4	Lockwasher 1/2in	
7	3300012	18	Lugnut 1/2in-20NF	
8		Ref	Drive Brake Options:	
8	0920072	2	Brake (Prior to March 1992) (See DRIVE BRAKE ASSEMBLY - AUSCO for Breakdown)	
8		Ref	Brake (March 1992 to Present) (See DRIVE BRAKE ASSEMBLY - MICO for Breakdown)	
8	0920084	2	Drive Brake (March 1992 to SN 33895)	
8	0920110	2	Drive Brake (SN 33896 to Present)	
8	0920117	2	Service Replacement Alternative	
9	3311801	4	Nut 1/2in-13NC	
10	0100011	AR	Loctite #242 (Not Shown)	
11	4751800	4	Flatwasher 1/2in	
12	0100019	AR	Loctite #271	
		Ref	WHEEL DRIVE INSTALLATIONS	
	0251661	Ref	2WD/4WS	B
	0250093	Ref	4WD/2WS	H
	0270122	Ref	4WD/2WS (Service Replacement alternative)	1
	0251660	Ref	4WD/4WS	B
101		Ref	Drive Hub/Brake Assembly Options:	
101		Ref	Hub/Brake (See DRIVE HUB/BRAKE ASSEMBLIES for Breakdown)	
101	2780157	2	2WD/4WS (Prior to September 1992)	
101	2780172	2	4WD/2WS & 4WD/4WS (Prior to February 1992)	
101		Ref	Hub/Brake (See DRIVE HUB/BRAKE ASSEMBLIES for Breakdown)	
101	2780195	2	2WD/4WS (September 1992 to Present)	
101	2780191	2	4WD/2WS & 4WD/4WS (February 1992 to Present)	
102	3160158	AR	Drive Motor Assembly (See DRIVE MOTOR ASSEMBLY for Breakdown)	
102	3160158	2	2WD/4WS & 4WD/2WS	
102	3160158	4	4WD/4WS	
103		Ref	Bolt Options:	
103	0642014	AR	2WD/4WS & 4WD/4WS - Bolt 5/8in-11NC x 1 3/4in	
103	0642016	AR	4WD/2WS - Bolt 5/8in-11NC x 2in	
104	4762000	AR	Lockwasher 5/8in	
105	0641810	4	Bolt 1/2in-13NC	
106	4761800	4	Lockwasher 1/2in	
107	3300012	AR	Lugnut 1/2in-20NF	
		Ref	Note: Items 108-110 Not Required on 2WD/4WS Machines.	
108	2780167	2	Drive Hub Assembly (Rear) (See DRIVE HUB ASSEMBLY for Breakdown)	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
109	0641844	4	Bolt 1/2in-20NC x 5 1/2in	
110		Ref	Drive Brake (Rear) Options:	
110	0920072	2	Brake (Prior to March 1992) (See DRIVE BRAKE ASSEMBLY - AUSCO for Breakdown)	
110		Ref	Brake (See DRIVE BRAKE ASSEMBLY - MICO for Breakdown)	
110	0920084	2	Drive Brake (Rear) (March 1992 to SN 33895)	
110	0920110	2	Drive Brake (Rear) (SN 33896 to Present)	
110	0920117	2	Service Replacement Alternative	
	0254486	Ref	TIRE AND WHEEL INSTALLATION - 7.50 x 15-30 NON-MARKING (2WD)	-
	0253132	Ref	TIRE AND WHEEL INSTALLATION - 8.75 x 16.5 PNEUMATIC (2WD)	-
	0253133	Ref	TIRE AND WHEEL INSTALLATION - 8.75 x 16.5 FOAM-FILLED (2WD & 4WD)	-
	0250102	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (2WD)	-
	0250100	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (4WD) (PRIOR TO JULY 1995)	-
	0255805	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 PNEUMATIC (4WD) (JULY 1995 TO PRESENT)	-
	0250975	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 NHS PNEUMATIC (4WD)	-
	0250930	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (2WD)	-
	0250172	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD) (PRIOR TO JULY 1995)	-
	0255808	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD) (JULY 1995 TO PRESENT)	-
	0254860	Ref	TIRE AND WHEEL INSTALLATION - 14 x 17.5 FOAM-FILLED (4WD)	-
		Ref	2WD Options:	
	4520133	4	Tire and Wheel Assembly - 7.50 x 15-30 Non-Marking	
	0253130	4	Tire and Wheel Assembly - 8.75 x 16.5 LT Pneumatic Goodyear Unisteel	
	0253131	4	Tire and Wheel Assembly - 8.75 x 16.5 LT Foam-Filled Goodyear Unisteel	
	0239287	2	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear Hi-Miler	
	0239288	2	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear X-Tra Grip (Prior to July 1995)	
	0255806	2	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Galaxy (Right Side) (July 1995 to Present)	
	0255807	2	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Galaxy (Left Side) (July 1995 to Present)	
	0250929	2	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Goodyear Hi-Miler	
	0250171	2	Tire and Wheel Assembly - 14 x 17.5 Foam-Filled Goodyear X-Tra Grip	
		Ref	4WD Options:	
	0253131	4	Tire and Wheel Assembly - 8.75 x 16.5 LT Foam-Filled Goodyear Unisteel	
	0239288	4	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Goodyear X-Tra Grip	
	0250973	2	Tire and Wheel Assembly - 14 x 17.5 Pneumatic Non-Highway Style (NHS) (Left Side)	

SECTION 1 - FRAME

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

SECTION 1 - FRAME

FIGURE 1-4. DRIVE MOTOR ASSEMBLY

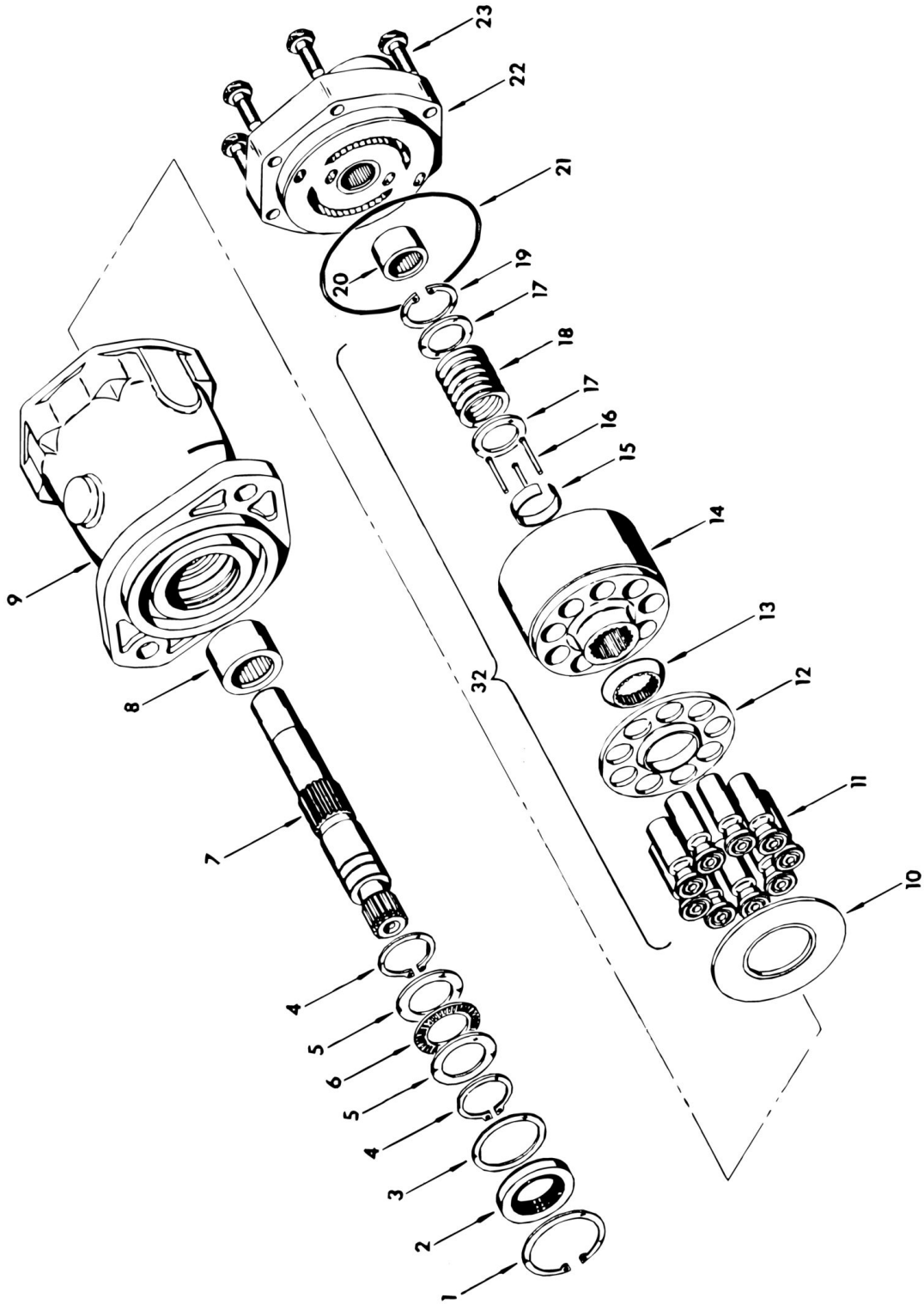
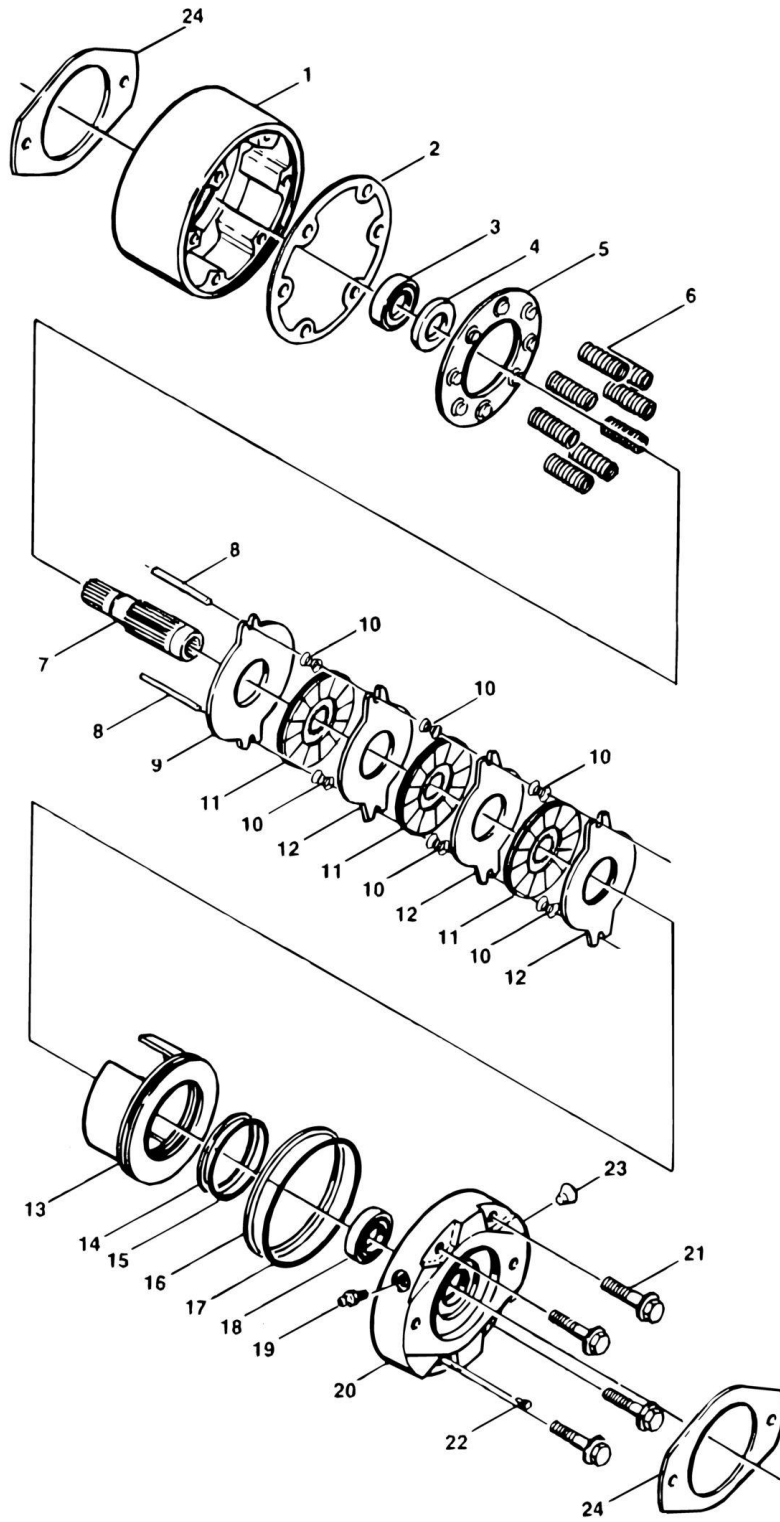


FIGURE 1-4. DRIVE MOTOR ASSEMBLY

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

SECTION 1 - FRAME

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



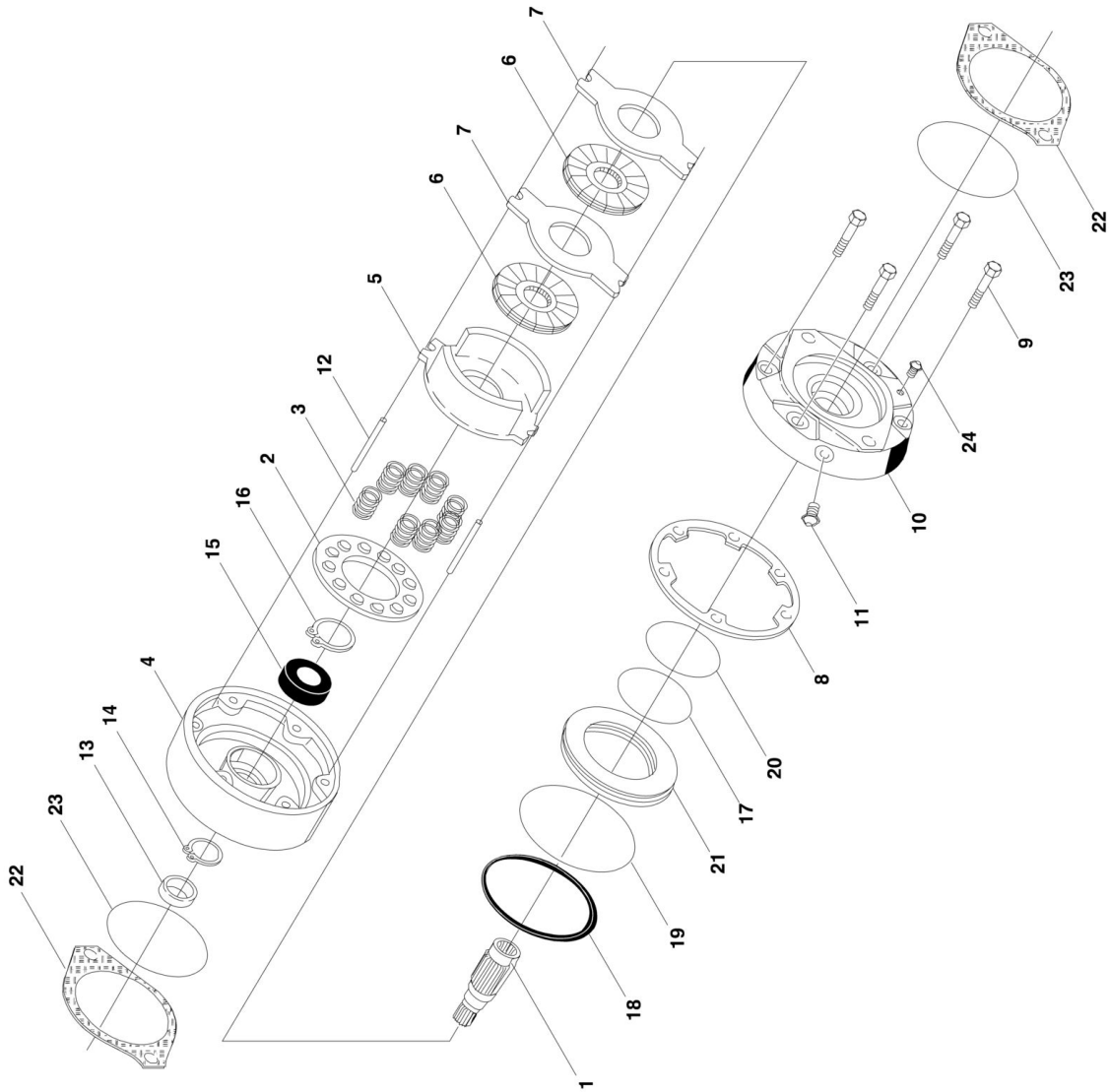
SECTION 1 - FRAME

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

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

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)

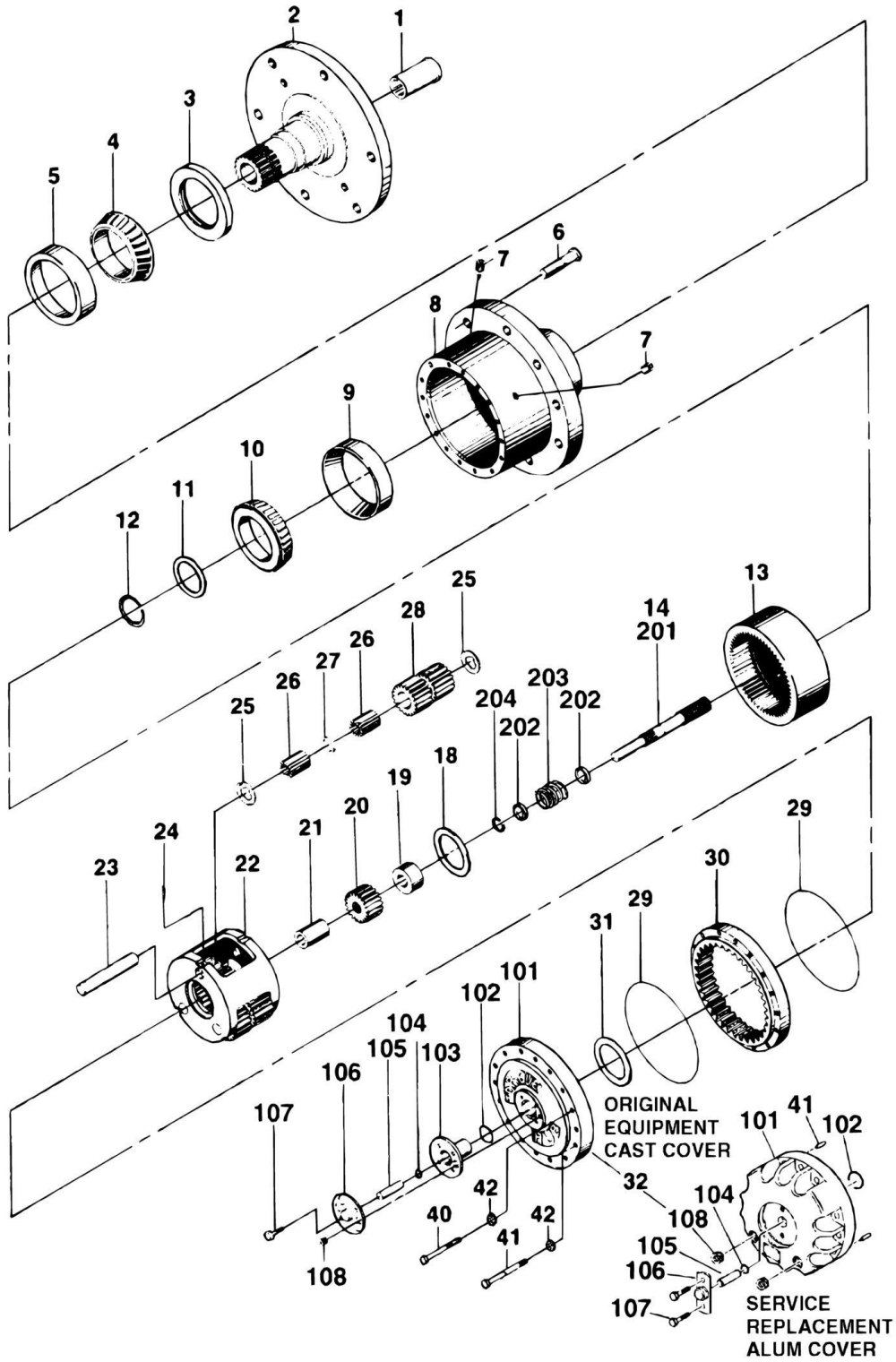
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DRIVE BRAKE ASSEMBLY OPTIONS:	
	0920084	Ref	Drive Brake Assembly (March 1992 to SN 33895)	A
	0920110	Ref	Drive Brake Assembly (SN 33896 to Present)	C
1	7011712	1	Shaft	
2		Ref	Guide, Spring Options:	
2	7011717	1	0920084 Brake (March 1992 to SN 33895)	
2	7018606	1	0920110 Brake (SN 33896 to Present)	
3		Ref	Spring Options:	
3	7007979	6	0920084 Brake (Inner) (March 1992 to SN 33895)	
3	7007980	6	0920084 Brake (Outer) (March 1992 to SN 33895)	
3	7007970	6	0920110 Brake (Red) (SN 33896 to Present)	
3	7018602	3	0920110 Brake (Blue) (SN 33896 to Present)	
4		Ref	Housing Options:	
4	7011713	1	0920084 Brake (March 1992 to SN 33895)	
4	7018605	1	0920110 Brake (SN 33896 to Present)	
5		Ref	Return Plate and Separator Assembly Options:	
5	Kit	1	Return, Plate - 0920084 Brake (March 1992 to SN 33895)	
5	7011715	2	Separator Assy - 0920084 Brake (March 1992 to SN 33895)	
5	7011714	4	Pin	
5	7007983	2	Separator	
5	Kit	1	Return Plate and Separator - 0920110 Brake (SN 33896 to Present)	
6	Kit	2	Rotor	
7	Kit	2	Stator	
8	Kit	1	Seal, Case	
9		Ref	Bolt, Washer Head Options:	
9	7007985	4	0920084 Brake (March 1992 to SN 33895)	
9	7018607	4	0920110 Brake (SN 33896 to Present)	
10	7007986	1	Cover	
11		Ref	Hardware Options:	
11	7000796	1	Screw, Bleeder (Prior to SN 33906)	
11	7018609	1	Plug, Pipe (SN 33906 through 56536)	
12	7007987	2	Pin, Dowel	
13	Kit	1	Seal, Oil	
14	7011716	1	Ring, Retaining	
15	Kit	1	Bearing	
16	7007977	1	Ring, Retaining	
17	Kit	1	Ring, Back-up	
18	Kit	1	Ring, Back-up	
19	Kit	1	O-Ring	
20	Kit	1	O-Ring	
21		Ref	Piston Options:	
21	7007923	1	0920084 Brake (March 1992 to SN 33895)	
21	7018603	1	0920110 Brake (SN 33896 to Present)	
22	7007933	2	Gasket	
23	Kit	2	O-Ring	
24	7007924	1	Plug, Pipe	
	2900766	1	Seal Kit (Includes Items 8, 13, 17, 18, 19, 20, 22 & 23)	
	2900768	1	Seal Kit (Includes Items 8, 13, 15, 22 & 23)	
		Ref	Lining Kit Options: (Includes Items 5, 6, 7, 8, 22 & 23)	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2900767	1	0920084 Brake (March 1992 to SN 33895)	B
	7018608	1	0920110 Brake (SN 33896 to Present)	
	0920117	Ref	DRIVE BRAKE ASSEMBLY (NOT SHOWN) (Service Replacement Alternative)	
	7018612	1	Kit, Repair	
		Ref	Note: Repair Kit is the only thing available	

SECTION 1 - FRAME

FIGURE 1-7. DRIVE HUB ASSEMBLY



SECTION 1 - FRAME

FIGURE 1-7. DRIVE HUB ASSEMBLY

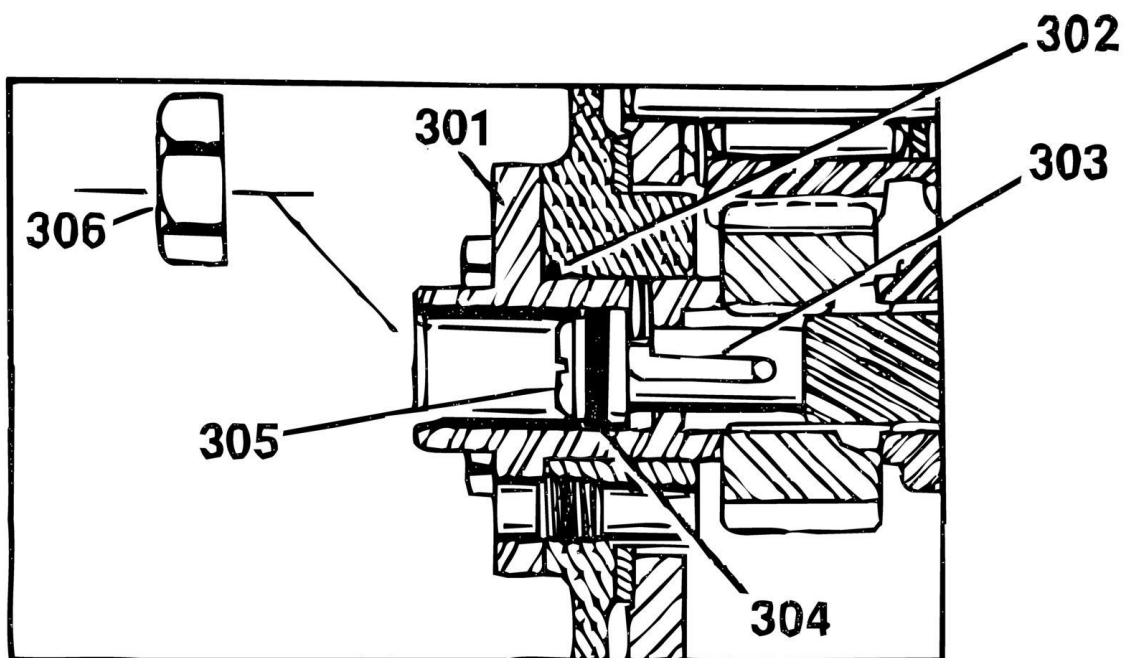
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2780169	Ref	DRIVE HUB ASSEMBLY (2WD/2WS)	-
	2780167	Ref	DRIVE HUB ASSEMBLY (4WD/2WS REAR)	-
1	7000206	1	Coupling	
		Ref	Hub-Spindle Sub-Assembly	
2	7001997	1	Spindle	
3	7001998	1	Seal	
4	Kit	1	Cone, Bearing	
5	Kit	1	Cup, Bearing	
6	7007697	9	Bolt, Wheel	
7	7000242	2	Plug, Pipe	
8	7007601	1	Hub	
9	7000257	1	Cup, Bearing	
10	7000258	1	Cone, Bearing	
11	7000232	1	Spacer	
12	7000229	1	Ring, Retaining	
13	7000246	1	Gear, Internal	
14		Ref	Input Shaft Assembly Options: (See Items 201-204 for Breakdown)	
18	7000253	1	Washer, Thrust	
19	7000252	1	Spacer (2780169)	
19	7007653	1	Spacer	
20	7000251	1	Gear, Input (2780169)	
20	7007652	1	Gear, Input (2780167)	
21	7007654	1	Spacer (1780167 Only)	
21	7000247	1	Carrier Assembly	
22	7001931	1	Carrier	
23	7001911	3	Shaft	
24	7001913	3	Pin, Roll	
25	7001985	6	Washer, Thrust	
26	7001909	96	Roller, Needle	
27	7000263	3	Spacer	
28	7001912	3	Gear, Cluster	
29	7000230	2	O-Ring	
30	7000248	1	Gear, Ring	
31	7000253	1	Washer, Thrust	
32		Ref	Cover Assembly (Includes Items 101-108)	
40		Ref	Bolt Options:	
40	7000217	12	Original Equipment Cast Cover	
40	7017067	12	Service Replacement Aluminum Cover	
41		Ref	Hardware Options:	
41	7000214	4	Bolt, Shoulder (Original Equipment Cast Cover)	
41	7017080	4	Dowel Pin (Service Replacement Aluminum Cover)	
42	7007603	16	Flatwasher	
	7010429	1	Bearing Kit (Includes Items 4 & 5)	
		Ref	COVER ASSEMBLY	
	70001111	1	Original Equipment Cast Cover	
	70001349	1	Service Replacement Aluminum Cover	
101		Ref	Cover Options:	
101	70001111	1	Original Equipment Cast Cover (was p/n 7000226)	
101	70001349	1	Service Replacement Aluminum Cover (was p/n 7017091)	
102		Ref	O-Ring Options:	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
102	Kit	1	Original Equipment Cast Cover	
102	7017070	1	Service Replacement Aluminum Cover	
103		Ref	Cap, Cover	
103	70001111	1	Original Equipment Cast Cover	
103	Not Required	0	Service Replacement Aluminum Cover	
104		Ref	O-Ring Options:	
104	Kit	1	Original Equipment Cast Cover	
104	7017095	1	Service Replacement Aluminum Cover	
105		Ref	Rod, Disconnect Options:	
105	70001111	1	Original Equipment Cast Cover	
105	70001349	1	Service Replacement Aluminum Cover (was p/n 7017092)	
106		Ref	Cap, Disconnect	
106	70001111	1	Original Equipment Cast Cover	
106	70001349	1	Service Replacement Aluminum Cover (was p/n 7017093)	
107		Ref	Bolt Options:	
107	7000216	1	Original Equipment Cast Cover	
107	7000216	2	Service Replacement Aluminum Cover	
108		Ref	Plug, Pipe Options:	
108	7000243	1	Original Equipment Cast Cover	
108	7017094	2	Service Replacement Aluminum Cover	
		Ref	INPUT SHAFT ASSEMBLY	
	7000250	Ref	2WD	
	7007650	Ref	4WD	
201		Ref	Shaft Options:	
201	7000260	1	2WD	
201	7007651	1	4WD	
202	7000263	2	Spacer	
203	7000262	1	Spring	
204	7000261	1	Ring, Retaining	
		Ref	Kit Options:	
	7010429	1	Bearing Kit (Includes Items 4 & 5)	
	2900034	1	Seal Kit (Includes Items 3, 11, 12 & 29)	
		Ref	Cover Kit Options:	
	70001111	1	Original Equipment Cast Cover (was p/n 7001989)	
	70001111	1	Aluminum Replacement for Original Equipment Cast Cover (Includes 29, 31 (Spacer), 40, 41 (Dowel Pins), 101, 102 & 104-108) (was p/n 7017099)	
	70001349	1	Service Replacement Aluminum Cover (Includes 29, 101 & 104-107) (was p/n 7017090)	

SECTION 1 - FRAME

FIGURE 1-8. DRIVE HUB ASSEMBLY



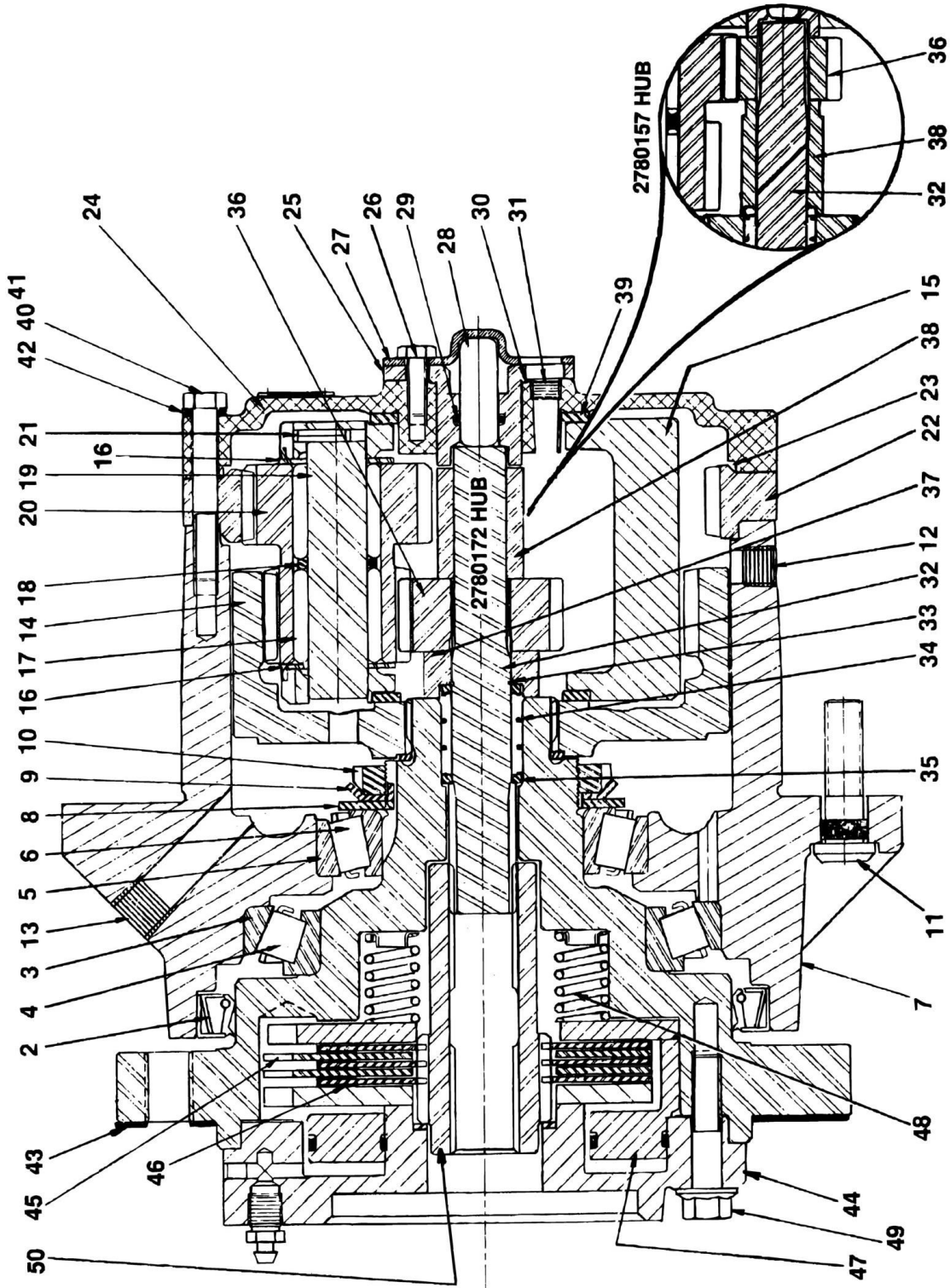
LOCATED ON FRONT OF TORQUE HUB

FIGURE 1-8. DRIVE HUB ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2901157	Ref	DISCONNECT HUB ASSEMBLY (OPTIONAL)	
301	7002025	1	Cover	
302	7000215	1	O-Ring	
303	7007669	1	Pin, Spring	
304	7010446	1	Seal	
305	7010444	1	Rod, Disconnect	
306	7010447	1	Cap, Dust	
306	7010448	1	O-Ring	

SECTION 1 - FRAME

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



SECTION 1 - FRAME

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

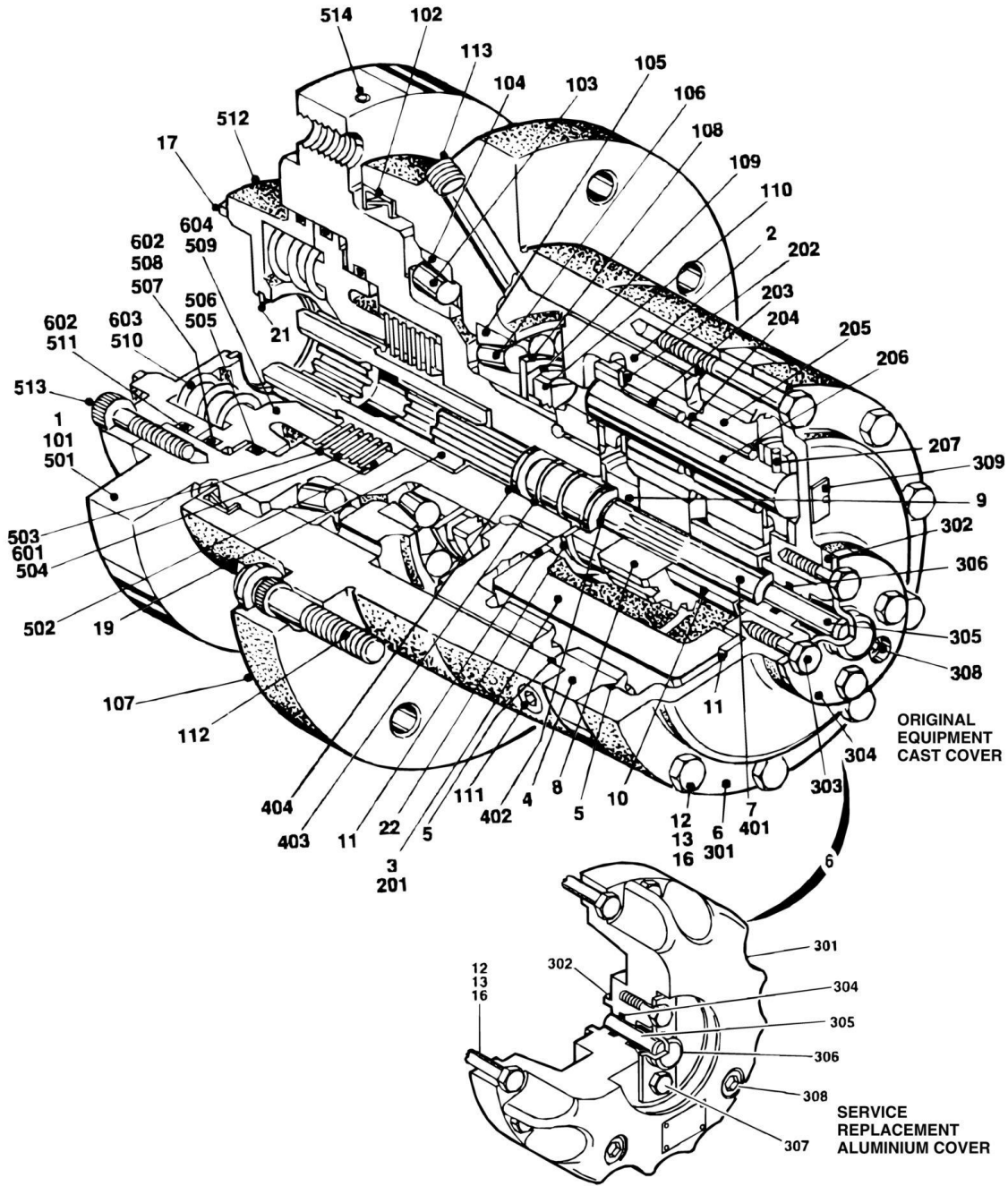
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DRIVE HUB/BRAKE ASSEMBLIES (THROUGH 1992)	
	2780172	Ref	DRIVE HUB/BRAKE ASSEMBLIES - 4WD (PRIOR TO FEBRUARY 1992)	-
	2780157	Ref	DRIVE HUB/BRAKE ASSEMBLIES - 2WD/4WS (PRIOR TO SEPTEMBER 1992)	A
		Ref	Hub Assembly	
2	Kit	1	Seal	
3	7007683	1	Cup, Bearing	
4	7007684	1	Cone, Bearing	
5	7007685	1	Cup, Bearing	
6	7007686	1	Cone, Bearing	
7	7007687	1	Hub	
8	7007688	1	Washer, Tongued	
9	7007689	1	Lockwasher	
10	7007690	1	Locknut	
11	7000241	9	Stud	
12	7000242	2	Plug, Pipe	
13	7007617	2	Plug, Magnetic	
14	7007691	1	Gear, Internal	
		Ref	Carrier Assembly	
15	7001931	1	Carrier	
16	7001985	6	Washer, Thrust	
17	7001909	96	Roller, Needle	
18	7000263	3	Spacer	
19	7001911	3	Shaft, Planet	
20	7001912	3	Gear, Cluster	
21	7001913	3	Pin, Roll	
22	7000248	1	Gear, Ring	
23	Kit	2	O-Ring	
	70001111	1	Cover Assembly (was p/n 7001989)	
24	70001111	1	Cover (was p/n 7000226)	
25	70001111	1	Cap, Cover (was p/n 7000227)	
26	7000220	4	Bolt	
27	70001111	1	Cap, Disconnect (was p/n 7000211)	
28	70001111	1	Rod, Disconnect (was p/n 7000212)	
29	Kit	1	O-Ring	
30	Kit	1	O-Ring	
31	7000243	2	Plug, Pipe	
	7007650	1	Input Shaft Assembly (2780172)	
	7000250	1	Input Shaft Assembly (2780157)	
32	7007651	1	Shaft, Input (2780172)	
32	7000260	1	Shaft, Input (2780157)	
33	7000261	1	Ring, Retaining	
34	7000262	1	Spring	
35	7000263	2	Spacer	
36	7007652	1	Gear, Input (2780172)	
36	7000251	1	Gear, Input (2780157)	
37	7007653	1	Spacer, Input (2780172)	
37	Not Required	0	Spacer, Input (2780157)	
38	7000252	1	Spacer, Input (2780157)	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
39	7000253	2	Washer, Thrust	
40	7000217	12	Bolt	
41	7000215	4	Bolt, Shoulder	
42	7007603	16	Flatwasher	
43	Kit	1	Gasket	
44	7010454	NLA	Spindle (No longer available - purchase 7010473 as replacement)	
		Ref	Brake Assembly Options (No Longer available - purchase 7010473 as replacement):	
	7010453	1	Brake Assembly (Hub Model W1BJ4Y)	
	7010452	1	Brake Assembly (Hub Model W1BJ4U)	
45	7003087	2	Disc, Stationary	
46	7003089	3	Disc, Rotating	
47	7003088	1	Piston	
48	7003432	10	Spring	
49	7003433	8	Screw	
50	7010455	1	Coupling	
	2900754	1	Seal Kit - Hub (Includes Items 2, 23, 29, 30 & 43)	
	2900755	1	Seal Kit - Brake (Includes Piston Rings and Gaskets)	

SECTION 1 - FRAME

FIGURE 1-10. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)



SECTION 1 - FRAME

FIGURE 1-10. DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DRIVE HUB/BRAKE ASSEMBLIES (1992 TO PRESENT)	
		Ref	DRIVE HUB/BRAKE ASSEMBLIES (STANDARD PARTS)	
1		Ref	Hub/spindle/Brake Assembly (See Items 101-113 for Breakdown)	
2	7007691	1	Gear, Internal	
3		Ref	Carrier Assembly (See Variable Parts)	
4	7000248	1	Gear, Internal	
5	Kit	2	O-Ring	
6		Ref	Cover Assembly (See Items 301-308 for Breakdown)	
7		Ref	Input Shaft Assembly (See Variable Parts)	
8		Ref	Gear, Input (See Variable Parts)	
9		Ref	Spacer, Input (See Variable Parts)	
10		Ref	Spacer, Input (See Variable Parts)	
11	7000253	2	Washer, Thrust	
11	7017096	1	Spacer (Service Replacement Aluminum Cover Only)	
12		Ref	Bolt Options:	
12	7000217	12	Original Equipment Cast Cover	
12	7017067	12	Service Replacement Aluminum Cover	
13		Ref	Hardware Options:	
13	7000214	4	Bolt Used on Original Equipment Cast Cover	
13	7017067	4	Dowel Pin Used on Service Replacement Aluminum Cover	
16	7007603	16	Flatwasher	
17	7007692	1	Gasket	
19	7010470	1	Coupling	
21	7010459	1	Ring, Retainer	
22	7001922	1	Washer, Thrust	
	2780191	Ref	DRIVE HUB/BRAKE ASSEMBLY - 4WD FEBRUARY 1992 TO PRESENT (VARIABLE PARTS)	-
	2780195	Ref	DRIVE HUB/BRAKE ASSEMBLY - 2WD/4WS SEPTEMBER TO PRESENT (VARIABLE PARTS)	-
53	7000247	1	Carrier Assembly (2780191) (See Items 201-207 for Breakdown)	
53	NPN	1	Carrier Assembly (2780195) (See Items 201-207 for Breakdown)	
57	7007650	1	Input Shaft Assembly (2780191) (See Items 401-404 for Breakdown)	
57	7000250	1	Input Shaft Assembly (2780195) (See items 401-404 for Breakdown)	
58	7007652	1	Gear, Input (2780191)	
58	7000251	1	Gear, Input (2780195)	
59	7007653	1	Spacer, Input (2780191)	
59	7000252	1	Spacer, Input (2780195)	
60	7007654	1	Spacer, Input (2780191)	
60	Not Required	0	Spacer, Input (2780195)	
		Ref	SPINDLE/BRAKE SUB-ASSEMBLY	
101	7010469	1	Brake Assembly With ID Plate (Item 309) Stamped June 1992 or Earlier (See Items 501-514 for Breakdown)	
101	7010473	1	Brake Assembly With ID Plate (Item 309) Stamped July 1992 or Later (See Items 601-604 for Breakdown)	
102	Kit	1	Seal, Lip	
103	7007683	1	Cup, Bearing	
104	7007684	1	Cone, Bearing	
105	7007685	1	Cup, Bearing	
106	7007686	1	Cone, Bearing	

SECTION 1 - FRAME

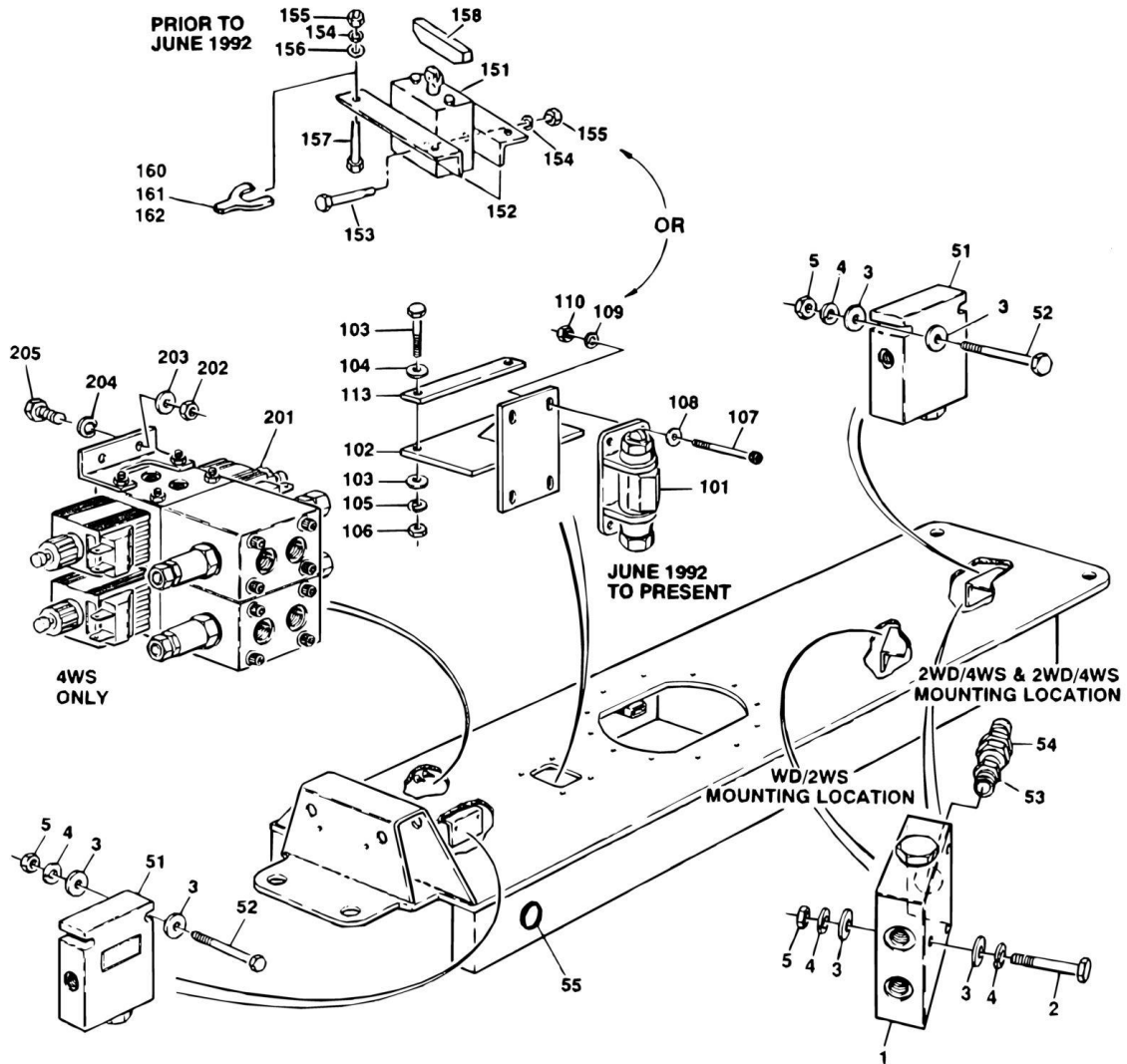
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
107	7007687	1	Housing	
108	7007688	1	Flatwasher, Tanged	
109	7007689	1	Flatwasher, Tanged	
110	7007690	1	Nut, Bearing	
111	7000242	2	Plug, Pipe 1/4in NPT	
112	7000241	9	Stud, Wheel	
113	7007617	2	Plug, Pipe 3/8in NPT (Magnetic)	
	7000247	Ref	CARRIER ASSEMBLY (2780191)	
	NPN	Ref	CARRIER ASSEMBLY (2780195)	
201	7001931	1	Carrier	
202	7001985	6	Washer, Thrust - Tanged	
203	7001909	96	Bearing, Needle	
204	7000263	3	Spacer, Thrust	
205	7001911	3	Shaft, Planet	
206	7001912	3	Gear, Cluster	
207	7001913	3	Rollpin (2780191)	
207	7010474	3	Rollpin (1780195)	
		Ref	COVER ASSEMBLY	
	See Kit Options	Ref	Original Equipment Cast Cover	
	See Kit Options	Ref	Service Replacement Aluminum Cover	
301		Ref	Cover Options:	
301	70001111	1	Original Equipment Cast Cover (was p/n 7000226)	
301	70001349	1	Service Replacement Aluminum Cover (was p/n 7017091)	
302		Ref	O-Ring Options:	
302	Kit	1	Original Equipment Cast Cover	
302	7017070	1	Service Replacement Aluminum Cover	
303		Ref	Cap, Cover	
303	70001111	1	Original Equipment Cast Cover	
303	Not Required	1	Service Replacement Aluminum Cover	
304		Ref	O-Ring Options:	
304	Kit	1	Original Equipment Cast Cover	
304	7017095	1	Service Replacement Aluminum Cover	
305		Ref	Rod, Disconnect Options:	
305	70001111	1	Original Equipment Cast Cover (was p/n 7000212)	
305	70001349	1	Service Replacement Aluminum Cover (was p/n 7017092)	
306		Ref	Cap, Disconnect Options:	
306	70001111	1	Original Equipment Cast Cover (was p/n 7000211)	
306	70001349	1	Service Replacement Aluminum Cover (was p/n 7017093)	
307		Ref	Bolt Options:	
307	7000220	4	Original Equipment Cast Cover	
307	7000216	2	Service Replacement Aluminum Cover	
308		Ref	Plug, Pipe Options:	
308	7000243	1	Original Equipment Cast Cover	
308	7017094	2	Service Replacement Aluminum Cover	
		Ref	Cover Kit Options:	
	70001111	1	Original Equipment Cast Cover (was p/n 7001989)	
	70001111	1	Aluminum Replacement for Original Equipment Cast Cover (Includes 5, 11 (Spacer), 12, 13 (Dowel Pins), 301, 302 & 304-308) (was p/n 7017099)	
	70001349	1	Service Replacement Aluminum Cover (Includes 5, 301 & 304-307) (was p/n 7017090)	
	7007650	Ref	INPUT SHAFT ASSEMBLY (2780191)	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	7000250	Ref	INPUT SHAFT ASSEMBLY (2780195)	
401	7007651	1	Shaft (2780191)	
401	7000260	1	Shaft (2780195)	
402	7000261	1	Ring, Retaining	
403	7000262	1	Spring	
404	7000263	2	Spacer, Thrust	
	7010469	Ref	BRAKE/SPINDLE ASSEMBLY WITH ID PLATE (ITEM 309) STAMPED JUNE 1992 OR EARLIER	
501	7014100	1	Spindle	
502	7014101	1	Spacer	
503	7014102	7	Disc, Stationary	
504	7014103	6	Disc, Rotating	
505	Kit	1	Ring, Back-up	
506	Kit	1	O-Ring	
507	Kit	1	Ring, Back-up Ring	
508	Kit	1	O-Ring	
509	7014108	1	Piston	
510	7014109	6	Spring	
510	7014110	2	Spring	
511	Kit	1	O-Ring	
512	7014112	1	Cover	
513	Not Available	8	Bolt, Socket Head 3/8in-16NC x 1 1/4in	
514	7014113	1	Expander	
	2900816	1	Brake O-Ring Kit (Includes Items 505-508 & 511)	
	7010473	Ref	BRAKE/SPINDLE ASSEMBLY WITH ID PLATE (ITEM 309) STAMPED JULY 1992 OR LATER	
601	7010475	1	Brake Lining Kit	
602	7010476	1	Brake O-Ring Kit	
603	7010477	1	Brake Spring Repair Kit	
604	7010478	1	Brake Piston Repair Kit	
	2900754	1	Seal Kit - Hub (Includes items 5, 17, 102, 306 & 307)	

SECTION 1 - FRAME

FIGURE 1-11. VALVES INSTALLATION - FRAME-MOUNTED



SECTION 1 - FRAME

FIGURE 1-11. VALVES INSTALLATION - FRAME-MOUNTED

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DRIVE VALVES INSTALLATION (STANDARD PARTS)	
1	4640629	1	Positive Traction Valve Assembly	
1	2900745	1	Seal Kit - 4640629 Valve	
2	0641528	2	Bolt 5/16in-18NC x 3 1/2in	
3	4751500	AR	Flatwasher 5/16in	
4	4761500	AR	Lockwasher 5/16in	
5	3311501	AR	Nut 5/16in-18NC	
	0250144	Ref	DRIVE VALVES INSTALLATION - 2WD/2WS (VARIABLE PARTS)	B
51 to 56	Not Required	0	Not Required	
	0250109	Ref	DRIVE VALVES INSTALLATION - 4WD/2WS (VARIABLE PARTS)	C
51	4640260	2	Flow Divider Valve Assembly	
51	Not Available	1	Cartridge (Vickers/Modular Controls)	
51	7009739	1	Seal Kit (Vickers/Modular Controls)	
51	7007321	1	Cartridge (Fluid Controls)	
51	7003723	1	Seal Kit (Fluid Controls)	
52	0641522	4	Bolt 5/16in-18NC x 2 3/4in	
53 to 56	Not Required	0	Not Required	
	0251668	Ref	DRIVE VALVES INSTALLATION - 2WD/4WS (VARIABLE PARTS)	B
51 to 54	Not Required	0	Not Required	
55	4060806	6 ft/1.8m	Flex-Guard	
56	Not Required	0	Not Required	
	0251669	Ref	DRIVE VALVES INSTALLATION - 4WD/4WS (VARIABLE PARTS)	B
51	4640260	2	Flow Divider Valve Assembly	
51	Not Available	1	Cartridge (Vickers/Modular Controls)	
51	7009739	1	Seal Kit (Vickers/Modular Controls)	
51	7007321	1	Cartridge (Fluid Controls)	
51	7007323	1	Seal Kit (Fluid Controls)	
52	0641522	2	Bolt 5/16in-18NC x 2 3/4in	
53	2220844	1	Fitting	
54	2220376	1	Fitting	
55	4060806	3 ft/.9m	Flex-Guard	
56	4060808	6 ft/1.8m	Flex-Guard (Not Shown)	
	0251310	Ref	OSCILLATION LOCKOUT VALVE INSTALLATION - (USED ON OPTIONAL OSCILLATING AXLE) (JUNE 1992 TO PRESENT)	D
101	4640668	1	Valve Assembly	
101	7012516	1	Repair Kit - 4640668 Valve	
102	4643742	1	Mounting Weldment	
103	0641620	2	Bolt 3/8in-16NC x 2 1/2in	
104	4751600	4	Flatwasher 3/8in	
105	4761600	2	Lockwasher 3/8in	
106	3311601	2	Nut 3/8in-16NC	
107	3931016	4	Bolt, Socket Head #10-24NC x 1in	
108	4751000	8	Flatwasher #10	
109	4761000	4	Lockwasher #10	
110	3311001	4	Nut #10-24NC	
113	3534778	1	Plate, Spacer	

SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0238908	Ref	OSCILLATION LOCKOUT VALVE INSTALLATION (USED OPTIONAL OSCILLATING AXLE (PRIOR TO JUNE 1992))	C
151	4640485	1	Lockout Valve Assembly (See LOCKOUT VALVE ASSEMBLY for Breakdown)	
152	0181333	2	Angle, Mounting	
153	0641634	2	Bolt 3/8in-16NC x 4 1/4in	
154	4761600	6	Lockwasher 3/8in	
155	3311601	6	Nut 3/8in-16NC	
156	4751600	4	Flatwasher 3/8in	
157	0641626	4	Bolt 3/8in-16NC x 3 1/4in	
158	1100041	1	Cam (Welded to T/T)	
159	4070410	AR	Shim (1/16in-1.6mm)	
160	4070411	AR	Shim (1/8in-3.1mm)	
161	4070412	AR	Shim (3/16in-4.8mm)	
		Ref	CONTROL VALVES INSTALLATION - 4WD	
	0251716	Ref	MACHINES WITH BANG-BANG VALVES WITHOUT ROTATE	B
	0253774	Ref	MACHINES WITH BANG-BANG VALVES WITHOUT ROTATE	D
	0251717	Ref	MACHINES WITH BANG-BANG VALVES WITH ROTATE	B
	0253773	Ref	MACHINES WITH BANG-BANG VALVES WITH ROTATE	E
	0252099	Ref	MACHINES WITH PARKER PROPORTIONAL VALVES WITHOUT ROTATE	C
	0252098	Ref	MACHINES WITH PARKER PROPORTIONAL VALVES WITH ROTATE	D
201	4640693	1	Valve Assembly - 4WS Valve (See VALVE ASSEMBLY (USED WITH OPTIONAL 4WS) for Breakdown)	
202	3311401	4	Nut 1/4in-20NC	
203	4761400	4	Lockwasher 1/4in	
204	4751400	4	Flatwasher 1/4in	
205	0641407	4	Bolt 1/4in-20NC x 7/8in	

SECTION 1 - FRAME

FIGURE 1-12. LOCKOUT VALVE ASSEMBLY

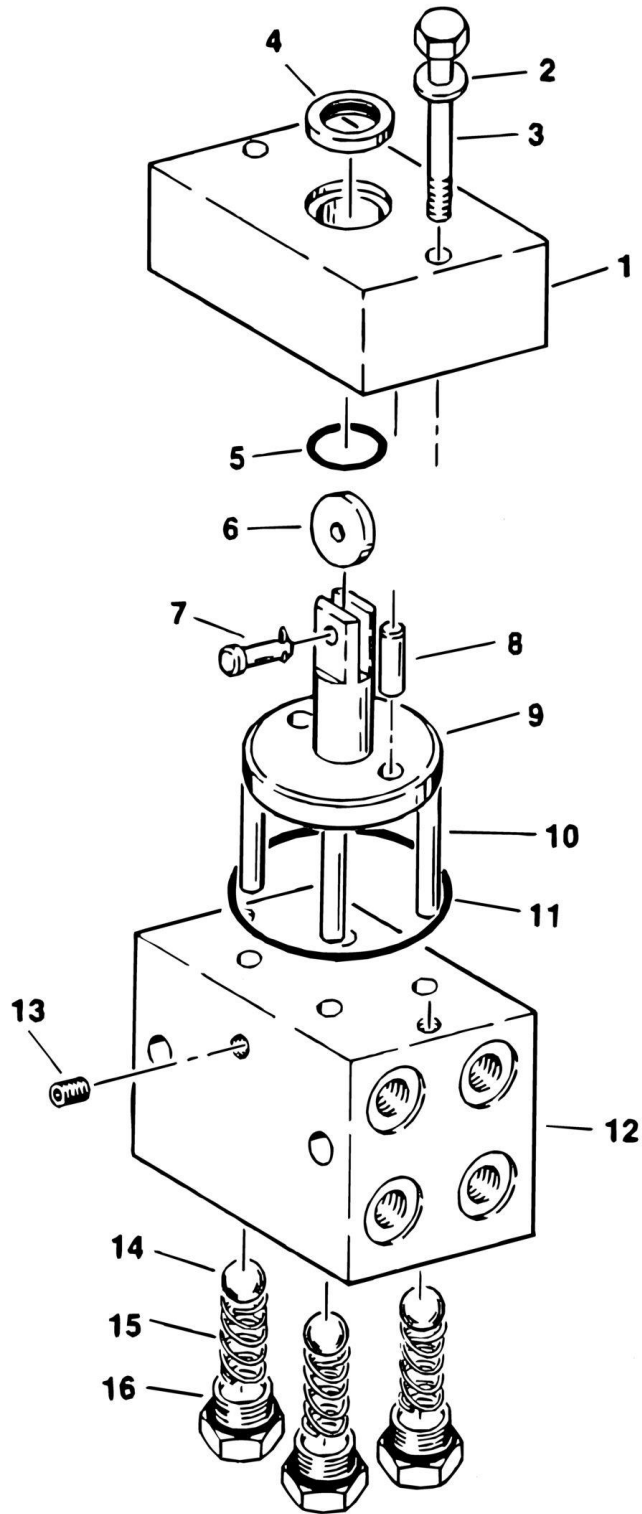
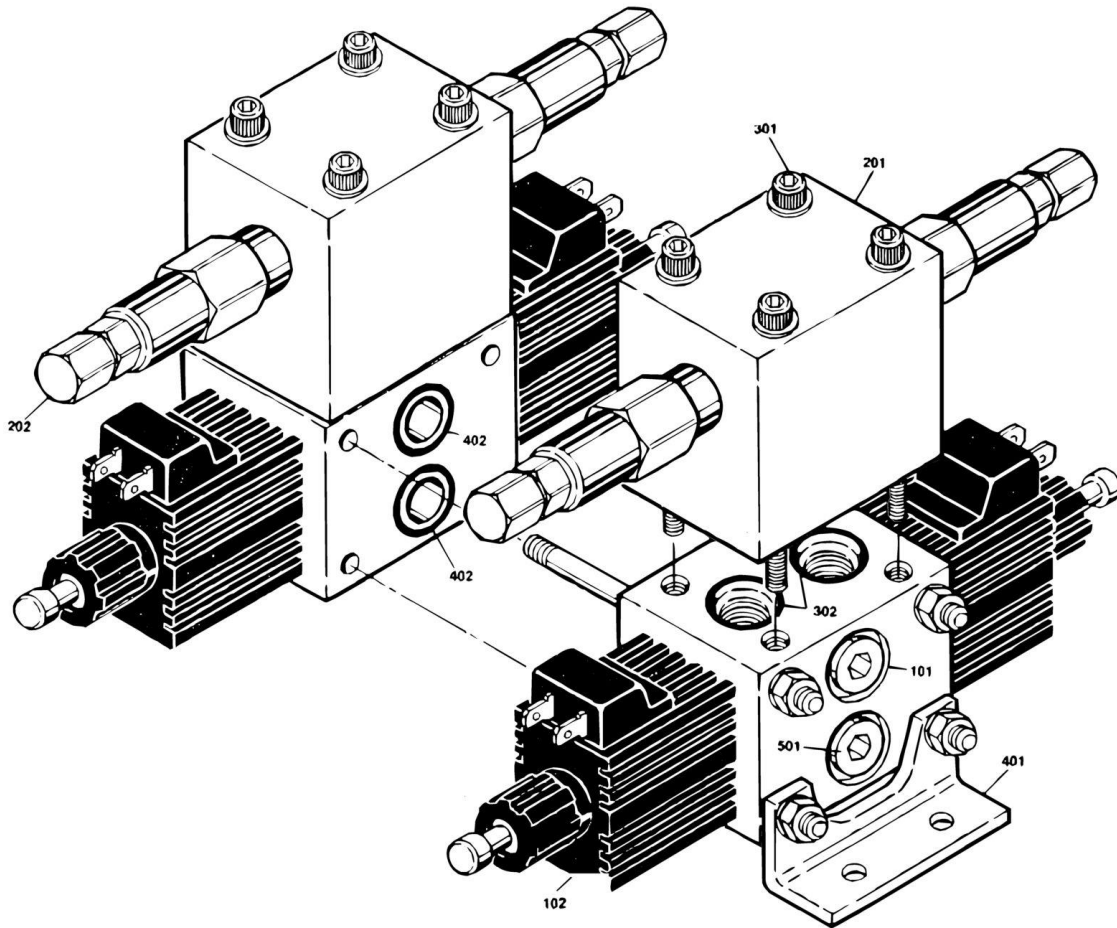


FIGURE 1-12. LOCKOUT VALVE ASSEMBLY

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

SECTION 1 - FRAME

FIGURE 1-13. VALVE ASSEMBLY (USED WITH OPTIONAL 4WS)



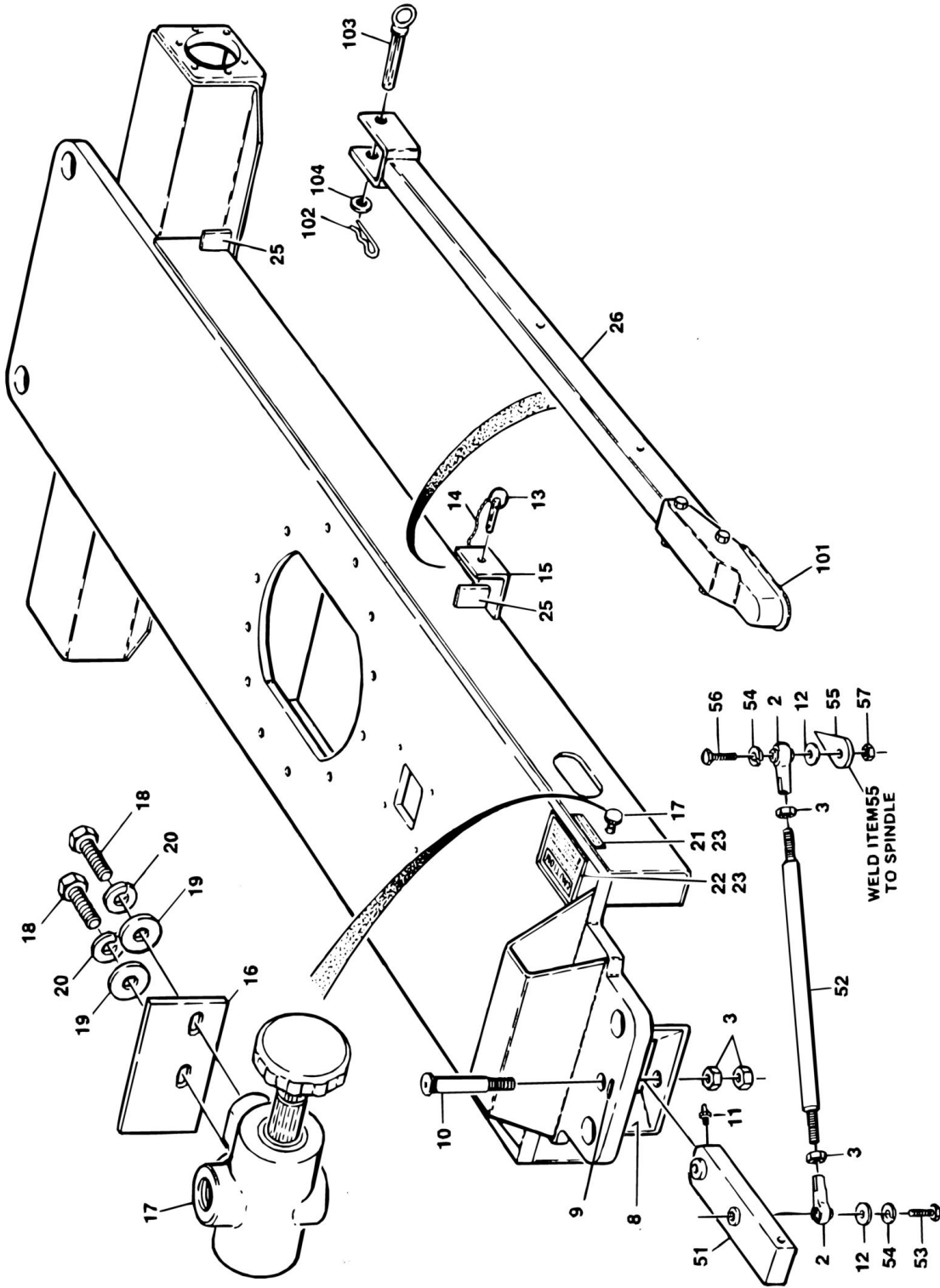
SECTION 1 - FRAME

FIGURE 1-13. VALVE ASSEMBLY (USED WITH OPTIONAL 4WS)

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

SECTION 1 - FRAME

FIGURE 1-14. TOW PACKAGE INSTALLATIONS



SECTION 1 - FRAME

FIGURE 1-14. TOW PACKAGE INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: See SPECIAL OPTIONS SECTION for Boeing Spec Machines	
		Ref	TOW PACKAGE INSTALLATION (STANDARD PARTS)	
2	1660114	2	Coupling, Tie-Rod	
3	3323002	4	Nut, Jam 1 1/4in-12NF	
8	4340575	1	Plate, Support	
9	2880410	1	Keystock	
10	3421151	1	Pin	
11	2160001	1	Fitting, Grease	
12	4712600	2	Flatwasher 1in	
13	3420292	1	Pin, Quick Release	
14	1260017	8 in/20cm	Chain	
15	3532649	1	Plate	
16	0900479	1	Bracket, Valve Mounting	
17	4640261	1	Valve, Select	
18	0641507	2	Bolt 5/16in-18NC x 7/8in	
19	4751500	2	Flatwasher 5/16in	
20	4761500	2	Lockwasher 5/16in	
21	3250872	1	Nameplate - Tow Select	
22		Ref	Nameplate - Instructions	
22	3250840	1	Nameplate - Instructions (Prior to May 1994)	
22	1702305	1	Nameplate - Instructions (May 1994 to Present)	
23	3820001	8	Rivet	
25	0361651	2	Bar	
26	0360016	1	Tow Bar Assembly (See Items 101-104 for Breakdown)	
27	0100003	AR	Loctite (#277) (Not Shown)	
	0250384	Ref	TOW PACKAGE INSTALLATION (2WD) (VARIABLE PARTS)	C
51	2620034	1	Hitch, Tow	
52	3840643	1	Tie-Rod	
53	0642628	1	Bolt 1in-8NC x 3 1/2in	
54	4762600	2	Lockwasher 1in	
55	3040464	1	Lug, Spindle	
56	0642622	1	Bolt 1in-8NC x 2 3/4in	
57	3312602	1	Nut, Jam 1in-8NC (Prior to October 1990 Only)	
	0251753	Ref	TOW PACKAGE INSTALLATION (4WD - PRIOR TO MARCH 1993) (VARIABLE PARTS)	A
51	2620034	1	Hitch, Tow	
52	3840822	1	Tie-Rod	
53	0642628	1	Bolt 1in-8NC x 3 1/2in	
54	4562346	3	Spacer	
55	Not Required	0	Not Required	
56	0642636	1	Bolt 1in-8NC x 4 1/2in	
57	3312605	1	Locknut, 1in-8NC	
	0254095	Ref	TOW PACKAGE INSTALLATION (4WD - MARCH 1993 TO PRESENT) (VARIABLE PARTS)	A
51	2620038	1	Hitch, Tow	
52	3841048	1	Tie-Rod	
53	0642636	1	Bolt 1in-8NC x 4 1/2in	
54	4562346	2	Spacer	
55	Not Required	0	Not Required	

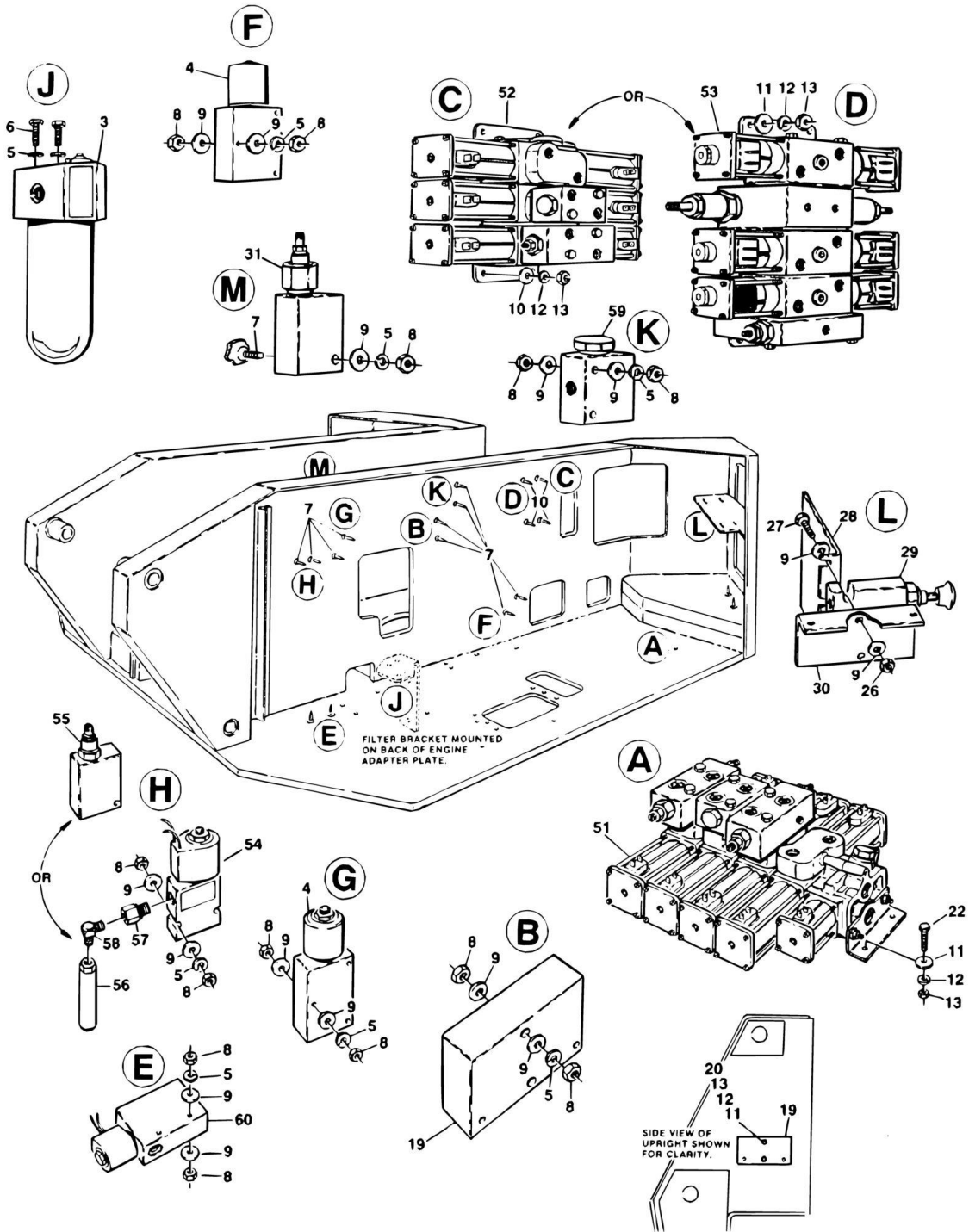
SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
56	0642636	1	Bolt 1in-8NC x 4 1/2in	I
57	3312605	2	Locknut 1in-8NC	
	0360016	Ref	TOW BAR ASSEMBLY	
101	1660009	1	Coupling	
102	3420158	1	Hairpin	
103	3420352	1	Pin, Tow	
104	4751900	1	Flatwasher	

SECTION 2 - TURNTABLE

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281170	Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (STANDARD PARTS)	I
	1281347	Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (STANDARD PARTS)	C
3	2120122	1	Filter, Pressure	
3	2120125	1	Element	
4	4640123	2	Solenoid Valve Assembly	
4	7004368		Coil (Hydraforce Version)	
4	7000558		Coil (FPS Version)	
4	7012518		Seal Kit (Hydraforce Version)	
4	7006075		Seal Kit (FPS Version)	
5	4761400	AR	Lockwasher 1/4in	
6	0641406	2	Bolt 1/4in-20NC x 3/4in	
7	4300042	8	Stud (Welded on Part)	
8	3311401	AR	Nut 1/4in-20NC	
9	4751400	AR	Flatwasher 1/4in	
10	4300038	4	Stud (Welded on Part)	
11	4751500	AR	Flatwasher 5/16in	
12	4761500	AR	Lockwasher 5/16in	
13	3311501	AR	Nut 5/16in-18NC	
19	4640150	AR	Valve, Check (Standard Bang-Bang Qty 1/Proportional Qty 2)	
20	4300033	2	Stud (Welded on Part)	
22	0641514	4	Bolt 5/16in-18NC x 1 3/4in	
24	4060804	6 ft/1.8m	Flex-Guard - 3/16in (Not Shown)	
25	4060808	6 ft/1.8m	Flex-Guard - 1/2in (Not Shown)	
26	3311405	2	Locknut 1/4in-20NC	
27	0641416	2	Bolt 1/4in-20NC x 2 1/4in	
28	0902051	1	Bracket - Decal (November 1994 to Present Only)	
29	4640866	1	Valve, Manual Descent (November 1994 to Present Only)	
29	2900708	1	Seal Kit	
29	7012959	1	Knob	
30	0902090	1	Bracket - Valve (November 1994 to Present Only)	
31	4640818	1	Valve (November 1994 to Present Only)	
31	7011321	1	Cartridge	
31	7024574	1	Seal Kit – 7011321 Cartridge	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)	
	0250132	Ref	CONTROL VALVES - NON-ROTATE	C
	0250133	Ref	CONTROL VALVES - WITH ROTATE	C
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640246	1	3 Stack (Non-Rotate) (Prior to August 1992)	
51	4640646	1	3 Stack (Non-Rotate) (August 1992 to Present)	
51	4640247	1	4 Stack (With Rotate) (Prior to August 1992)	
51	4640645	1	4 Stack (With Rotate) (August 1992 to Present)	
52	4640601	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Versions)	
55	Not Required	0	Not Required	
56	4640627	1	Valve, Flow Control	
56	7001508		Seal Kit	
57	2180029	1	Fitting	
58	2220820	1	Fitting, 90	
59	Not Required	0	Not Required	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)	
	0253772	Ref	CONTROL VALVES - NON-ROTATE	D
	0253771	Ref	CONTROL VALVES - WITH ROTATE	E
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640646	1	3 Stack (Non-Rotate)	
51	4640645	1	4 Stack (With Rotate) (Prior to January 1995)	
51	4640909	1	4 Stack (With Rotate) (January 1995 to Present)	
52		Ref	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
52	4640601	1	Control Valve Assembly (Prior to October 1993)	
52	4640850	1	Control Valve Assembly (October 1993 to Present)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	4640623	1	Valve, Flow Control	
56	Not Required	0	Not Required	
57	2220651	1	Fitting	
58	2220373	1	Fitting	
59	4640673	1	Valve, Check	
59	7011325	1	Cartridge	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)	
	0251716	Ref	CONTROL VALVES - NON-ROTATE	B
	0251717	Ref	CONTROL VALVES - WITH ROTATE	B
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640462	1	2 Stack (Non-Rotate) (Prior to August 1992)	
51	4640710	1	2 Stack (Non-Rotate) (August 1992 to Present)	
51	4640692	1	3 Stack (With Rotate) (Prior to August 1992)	
51	4640720	1	3 Stack (With Rotate) (August 1992 to Present)	
52	4640601	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	Not Required	0	Not Required	
56	4640627	1	Valve, Flow Control	

SECTION 2 - TURNTABLE

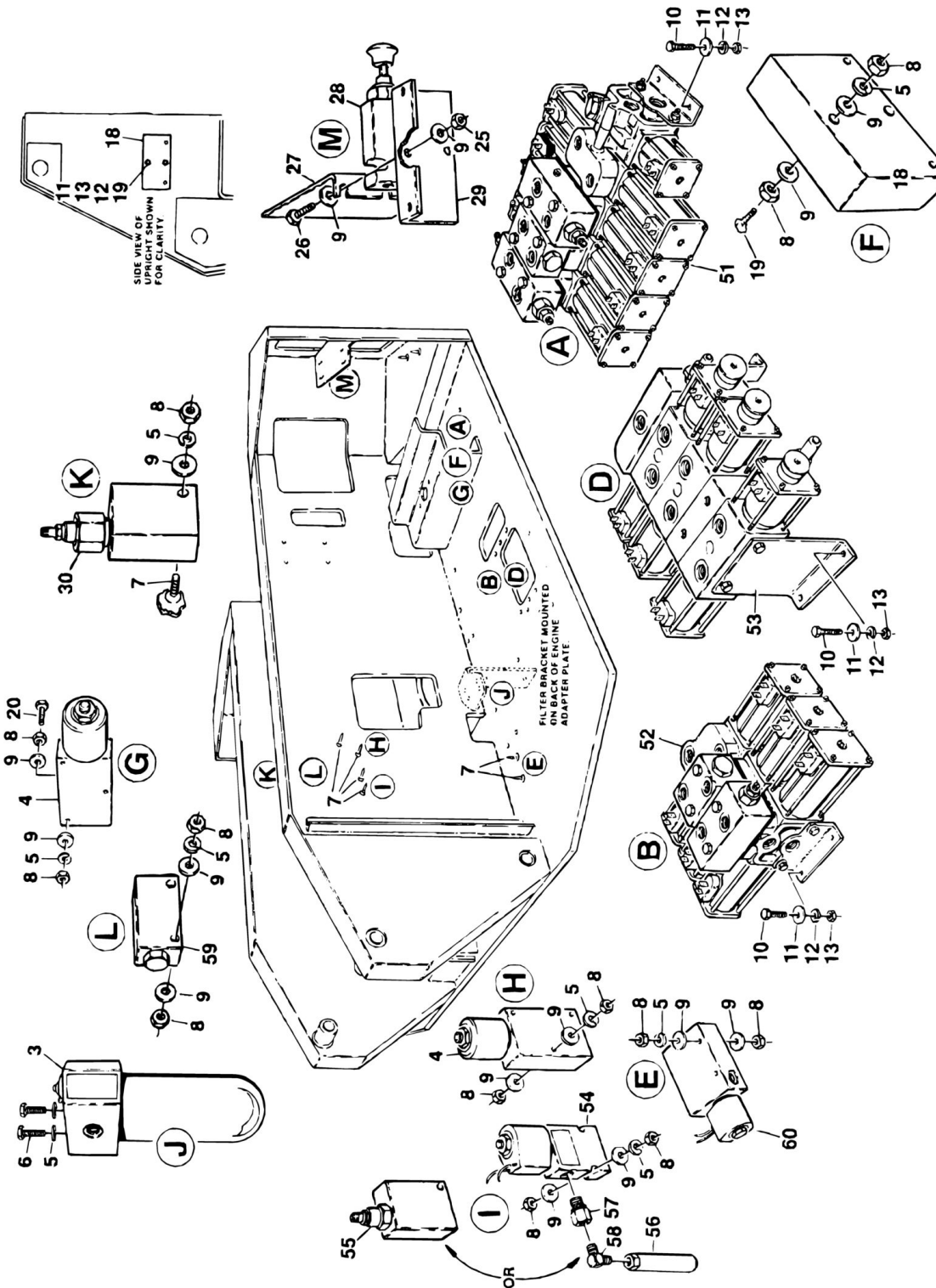
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
56	7001508	1	Seal Kit	
57	2180029	1	Fitting	
58	2220820	1	Fitting, 90	
59	Not Required	0	Not Required	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)	
	0253774	Ref	CONTROL VALVES - NON-ROTATE	D
	0253773	Ref	CONTROL VALVES - WITH ROTATE	E
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640710	1	2 Stack (Non-Rotate)	
51	4640720	1	3 Stack (With Rotate) (Prior to August 1995)	
51	4640950	1	3 Stack (With Rotate) (August 1995 to Present)	
52		Ref	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
52	4640601		Control Valve Assembly (Prior to October 1993)	
52	4640850		Control Valve Assembly (October 1993 to Present)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	4640623	1	Valve, Flow Control	
56	Not Required	0	Not Required	
57	2220651	1	Fitting	
58	2220373	1	Fitting	
59	4640673	1	Valve, Check	
59	7011325	1	Cartridge	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (2WS) (VARIABLE PARTS)	
	0250985	Ref	CONTROL VALVES - NON-ROTATE	C
	0250984	Ref	CONTROL VALVES - WITH ROTATE	D
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for breakdown)	
51	4640246	1	3 Stack (Non-Rotate) (Prior to June 1991)	
51	4640646	1	3 Stack (Non-Rotate) (June 1991 to Present)	
51	4640247	1	4 Stack (With Rotate) (Prior to June 1991)	
51	4640645	1	4 Stack (With Rotate) (June 1991 to January 1995)	
51	4640909	1	4 Stack (With Rotate) (January 1995 to Present)	
52	Not Required	0	Not Required	
53	4640643	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - PROPORTIONAL for Breakdown)	
54 to 59	Not Required	0	Not Required	
60	4640360	1	Dump Valve Assembly	
60	7009745	1	Coil (Vickers/Modular Controls Version)	
60	7004368	1	Coil (Hydraforce Version)	
60	7004289	1	Cartridge Without Coil (Vickers/Modular Controls Version)	
60	Not Available		Seal Kit - 7004289 Cartridge (Vickers Modular Controls Version)	
60	7012910	1	Cartridge Without Coil (Hydraforce Version)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
60	2900708	1	Seal Kit - 7012910 Cartridge (Hydraforce Version)	
60	7003635	1	Cartridge, Check (Vickers/Modular Controls Version)	
60	7012930	1	Cartridge, Check (Hydraforce Version)	
		Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (4WS) (VARIABLE PARTS)	
	0252099	Ref	CONTROL VALVES - NON-ROTATE	C
	0252098	Ref	CONTROL VALVES - WITH ROTATE	D
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for breakdown)	
51	4640462	1	3 Stack (Non-Rotate) (Prior to August 1992)	
51	4640710	1	3 Stack (Non-Rotate) (August 1992 to Present)	
51	4640692	1	4 Stack (With Rotate) (Prior to August 1992)	
51	4640720	1	4 Stack (With Rotate) (August 1992 to August 1995)	
51	4640950	1	4 Stack (With Rotate) (August 1995 to Present)	
52	Not Required	0	Not Required	
53	4640643	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - PROPORTIONAL for Breakdown)	
54 to 59	Not Required	0	Not Required	
60	4640360	1	Dump Valve Assembly	
60	7009745	1	Coil (Vickers/Modular Controls Version)	
60	7004368	1	Coil (Hydraforce Version)	
60	7004289		Cartridge Without Coil (Vickers/Modular Controls Version)	
60	Not Available		Seal Kit - 7004289 Cartridge (Vickers/Modular Controls Version)	
60	7012910		Cartridge Without Coil (Hydraforce Version)	
60	2900708		Seal Kit - 7012910 Cartridge (Hydraforce Version)	
60	7003635		Cartridge, Check (Vickers/Modular Controls Version)	
60	7012930		Cartridge, Check (Hydraforce Version)	

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281168	Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (STANDARD PARTS)	H
	1281345	Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (STANDARD PARTS)	D
3	2120122	1	Filter, Pressure	
3	2120125	1	Element	
4	4640123	2	Solenoid Valve Assembly	
4	7004368	2	Coil (Hydraforce Version)	
4	7000558	2	Coil (FPS Version)	
4	7012518	2	Seal Kit (Hydraforce Version)	
4	7006075	2	Seal Kit (FPS Version)	
5	4761400	AR	Lockwasher 1/4in	
6	0641406	2	Bolt 1/4in-20NC x 3/4in	
7	4300042	8	Stud (Welded on Part)	
8	3311401	AR	Nut 1/4in-20NC	
9	4751400	AR	Flatwasher 1/4in	
10	0641514	8	Bolt 5/16in-18NC x 1 3/4in	
11	4751500	AR	Flatwasher 5/16in	
12	4761500	AR	Lockwasher 5/16in	
13	3311501	AR	Nut 5/16in-18NC	
18	4640150	AR	Valve, Check (Standard Bang-Bang Qty 1/Proportional Qty 2)	
19	4300033	2	Stud (Welded on Part)	
20	0641420	2	Bolt 1/4in-20NC x 2 1/2in	
25	3311405	2	Locknut 1/4in-20NC	
26	0641416	2	Bolt 1/4in-20NC x 2 1/4in	
27	0902051	1	Bracket - Decal (November 1994 to Present Only)	
28	4640866	1	Valve, Manual Descent (November 1994 to Present Only)	
28	2900708	1	Seal Kit	
28	7012959	1	Knob	
29	0902090	1	Bracket - Valve (November 1994 to Present Only)	
30	4640818	1	Valve (November 1994 to Present Only)	
30	7011321	1	Cartridge	
30	7024574	1	Seal Kit - 7011321 Cartridge	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)	
	0250121	Ref	CONTROL VALVES - NON-ROTATE	D
	0250131	Ref	CONTROL VALVES - WITH ROTATE	D
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640246	1	3 Stack (Non-Rotate) (Prior to August 1992)	
51	4640646	1	3 Stack (Non-Rotate) (August 1992 to Present)	
51	4640247	1	4 Stack (With Rotate) (Prior to August 1992)	
51	4640645	1	4 Stack (With Rotate) (August 1992 to Present)	
52	4640601	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Versions)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
55	Not Required	0	Not Required	
56	4640627	1	Valve, Flow Control	
56	7001508	1	Seal Kit	
57	2180029	1	Fitting	
58	2220820	1	Fitting, 90	
59	Not Required	0	Not Required	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (2WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)	
	0253768	Ref	CONTROL VALVES - NON-ROTATE	D
	0253767	Ref	CONTROL VALVES - WITH ROTATE	E
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640646	1	3 Stack (Non-Rotate)	
51	4640645	1	4 Stack (With Rotate) (Prior to January 1995)	
51	4640909	1	4 Stack (With Rotate) (January 1995 to Present)	
52		Ref	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
52	4640601	1	Control Valve Assembly (Prior to October 1993)	
52	4640850	1	Control Valve Assembly (October 1993 to Present)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	4640623	1	Valve, Flow Control	
56	Not Required	0	Not Required	
57	2220651	1	Fitting	
58	2220373	1	Fitting	
59	4640673	1	Valve, Check	
59	7011325	1	Cartridge	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (PRIOR TO MAY 1993) (VARIABLE PARTS)	
	0251710	Ref	CONTROL VALVES - NON-ROTATE	B
	0251709	Ref	CONTROL VALVES - WITH ROTATE	B
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640462	1	2 Stack (Non-Rotate) (Prior to August 1992)	
51	4640710	1	2 Stack (Non-Rotate) (August 1992 to Present)	
51	4640692	1	3 Stack (With Rotate) (Prior to August 1992)	
51	4640720	1	3 Stack (With Rotate) (August 1992 to Present)	
52	4640601	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	Not Required	0	Not Required	
56	4640627	1	Valve, Flow Control	
56	7001508	1	Seal Kit	
57	2180029	1	Fitting	

SECTION 2 - TURNTABLE

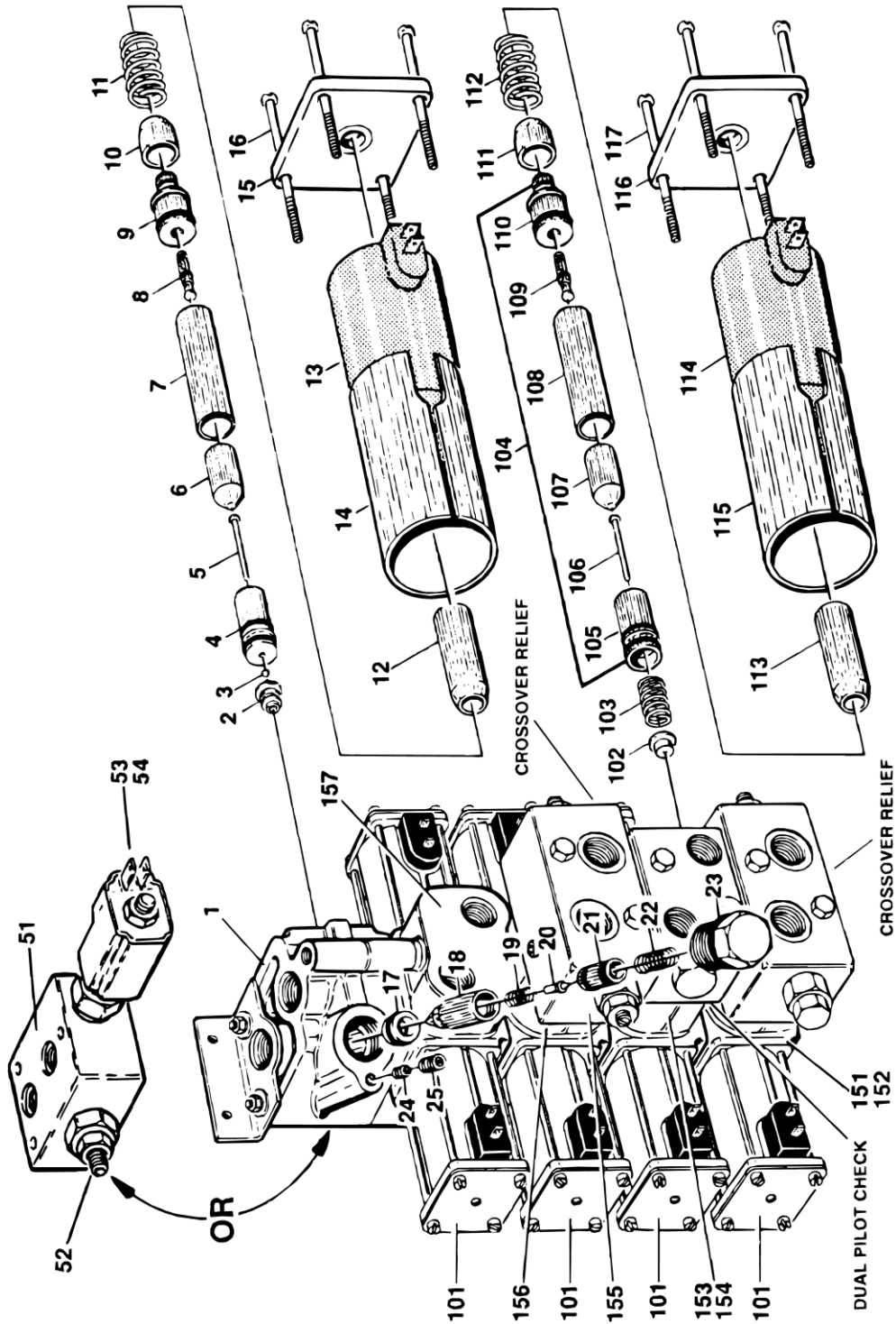
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
58	2220820	1	Fitting, 90	
59	Not Required	0	Not Required	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - STANDARD BANG-BANG (4WS) (MAY 1993 TO PRESENT) (VARIABLE PARTS)	
	0253769	Ref	CONTROL VALVES - NON-ROTATE	D
	0253770	Ref	CONTROL VALVES - WITH ROTATE	E
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown):	
51	4640710	1	2 Stack (Non-Rotate)	
51	4640720	1	3 Stack (With Rotate) (Prior to August 1995)	
51	4640950	1	3 Stack (With Rotate) (August 1995 to Present)	
52		Ref	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG (STANDARD CONTROLS) for Breakdown)	
52	4640601		Control Valve Assembly (Prior to October 1993)	
52	4640850		Control Valve Assembly (October 1993 to Present)	
53	Not Required	0	Not Required	
54	4640543	1	Valve, Dump	
54	7004368	1	Coil (Hydraforce Version)	
54	7009745	1	Coil (Vickers/Modular Controls Version)	
55	4640623	1	Valve, Flow Control	
56	Not Required	0	Not Required	
57	2220651	1	Fitting	
58	2220373	1	Fitting	
59	4640673	1	Valve, Check	
59	7011325	1	Cartridge	
60	Not Required	0	Not Required	
		Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (2WS) (VARIABLE PARTS)	
	0250980	Ref	CONTROL VALVES - NON-ROTATE	E
	0250979	Ref	CONTROL VALVES - WITH ROTATE	F
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for breakdown)	
51	4640246	1	3 Stack (Non-Rotate) (Prior to June 1991)	
51	4640646	1	3 Stack (Non-Rotate) (June 1991 to Present)	
51	4640247	1	4 Stack (With Rotate) (Prior to June 1991)	
51	4640645	1	4 Stack (With Rotate) (June 1991 to January 1995)	
51	4640909	1	4 Stack (With Rotate) (January 1995 to Present)	
52	Not Required	0	Not Required	
53	4640643	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for Breakdown)	
54 to 59	Not Required	0	Not Required	
60	4640360	1	Dump Valve Assembly	
60	7009745	1	Coil (Vickers/Modular Controls Version)	
60	7004368	1	Coil (Hydraforce Version)	
60	7004289	1	Cartridge Without Coil (Vickers/Modular Controls Version)	
60	Not Available		Seal Kit - 7004289 Cartridge (Vickers Modular Controls Version)	
60	7012910	1	Cartridge Without Coil (Hydraforce Version)	
60	2900708	1	Seal Kit - 7012910 Cartridge (Hydraforce Version)	
60	7003635	1	Cartridge, Check (Vickers/Modular Controls Version)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
60	7012930	1	Cartridge, Check (Hydraforce Version)	
		Ref	CONTROL VALVES INSTALLATION - PROPORTIONAL (4WS) (VARIABLE PARTS)	
	0252723	Ref	CONTROL VALVES - NON-ROTATE	C
	0252722	Ref	CONTROL VALVES - WITH ROTATE	D
51		Ref	Control Valve Assembly Options (See CONTROL VALVE ASSEMBLY - BANG-BANG WITH DUMP SECTION for breakdown)	
51	4640710	1	3 Stack (Non-Rotate)	
51	4640720	1	3 Stack (With Rotate) (Prior to August 1995)	
51	4640950	1	3 Stack (With Rotate) (August 1995 to Present)	
52	Not Required	0	Not Required	
53	4640643	1	Control Valve Assembly (See CONTROL VALVE ASSEMBLY - PROPORTIONAL for Breakdown)	
54 to 59	Not Required	0	Not Required	
60	4640360	1	Dump Valve Assembly	
60	7009745	1	Coil (Vickers/Modular Controls Version)	
60	7004368	1	Coil (Hydraforce Version)	
60	7004289	1	Cartridge Without Coil (Vickers/Modular Controls Version)	
60	Not Available		Seal Kit - 7004289 Cartridge (Vickers/Modular Controls Version)	
60	7012910	1	Cartridge Without Coil (Hydraforce Version)	
60	2900708	1	Seal Kit - 7012910 Cartridge (Hydraforce Version)	
60	7003635	1	Cartridge, Check (Vickers/Modular Controls Version)	
60	7012930	1	Cartridge, Check (Hydraforce Version)	

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Usage Chart:	
		Ref	2WS Without Rotate	
	4640246		3 Stack (Prior to August 1992)	
	4640646		3 Stack (August 1992 to Present)	
		Ref	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)	
		Ref	4WS Without Rotate	
	4640462		2 Stack (Prior to August 1992)	
	4640710		2 Stack (August 1992 to Present)	
		Ref	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	Ref	DUMP SECTION - COMPLETE (ALL EXCEPT 4640909 & 4640950)	
		Ref	Solenoid Assembly	
2	7004823	1	Seat	
2	Kit	1	O-Ring	
3	7002229	1	Ball	
3		Ref	Guide Tube Assembly	
4	7004822	1	Cone, Female	
4	Kit	1	O-Ring	
5	7002346	1	Pin, Push	
6	7004839	1	Plunger	
7	7004838	1	Tube, Guide	
8	7004841	1	Pin, Push	
8	Kit	1	O-Ring	
9	7002340	1	Guide, External Push Pln	
9	Kit	1	O-Ring	
10	7004834	1	Sleeve, Inner Flux	
11	7002334	1	Spring	
12	7004835	1	Sleeve, Outer, Flux	
13	7000417	1	Coil	
14	7004836	1	Case, Solenoid	
15	7002338	1	Plate, End	
15	7002327	1	Nameplate	
16	7004837	4	Screw	
17	7002322	1	Seat	
17	Kit	1	O-Ring	
17		Ref	Main Relief (Poppet) Valve	
18	7002321	1	Case, Poppet	
19	7002328	1	Spring	
20	7002294	1	Poppet	
21	7002320	1	Seat, Adjustable	
21	Kit	1	O-Ring	
22	7002329	1	Spring	
23	7002323	1	Plug	
23	Kit	1	O-Ring	

SECTION 2 - TURNTABLE

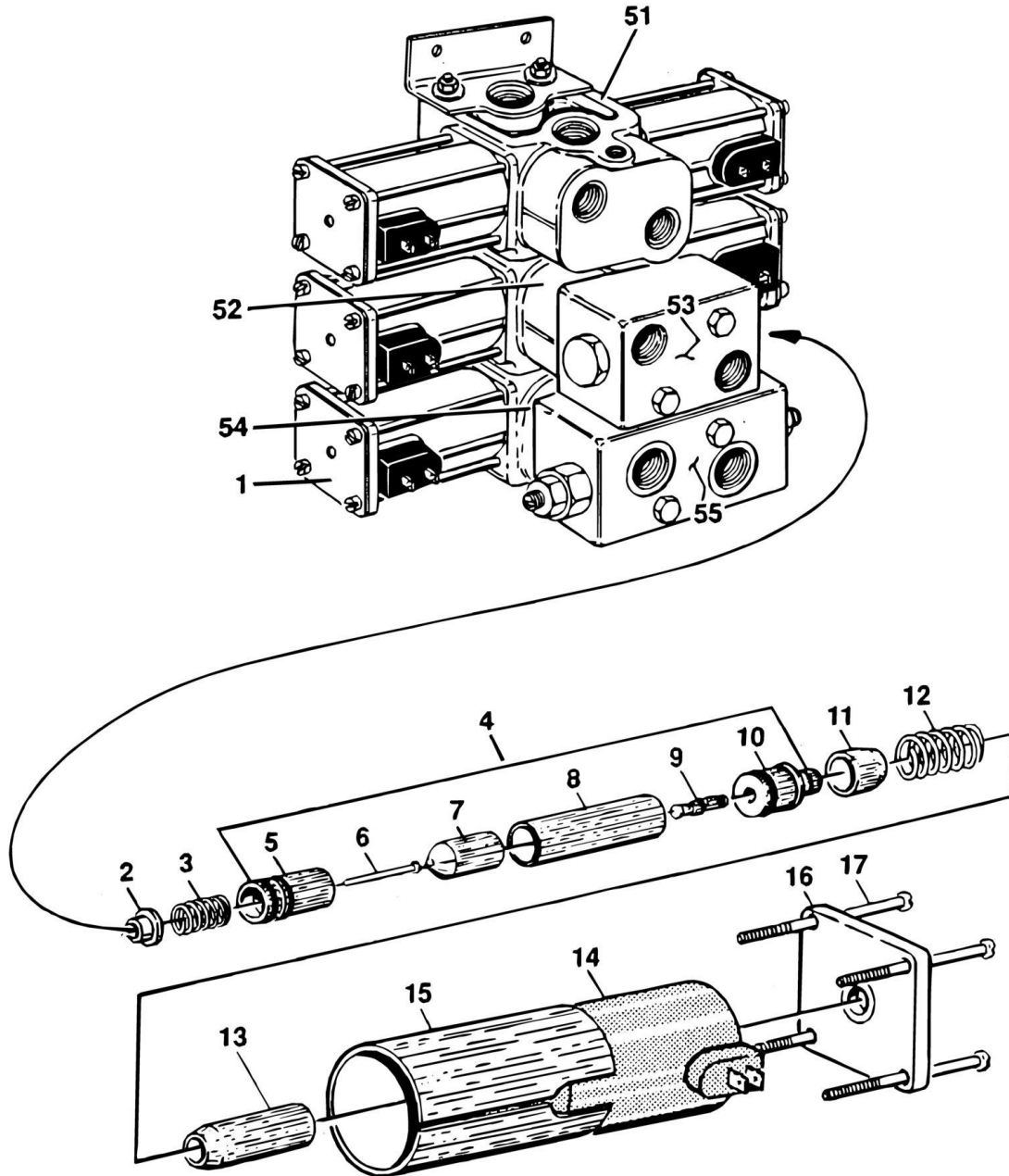
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
24	7002326	1	Orifice	
25	7002324	1	Plug	
	7000413	1	Seal Kit - 7002304 Dump Section	
51	7002447	Ref	DUMP SECTION - COMPLETE (4640909 & 4640950)	
52	7002448	1	Cartridge	
52	7002449	1	Seal Kit - 7002448 Cartridge	
53	7002450	1	Coil	
54	7002451	1	Cartridge without Coil	
54	7011118	1	Seal Kit - 7002451 Cartridge	
	7000448	2	O-Ring (Between Sections)	
		Ref	WORKING SECTIONS (STANDARD PARTS)	
101	7004859	2	Solenoid Assembly	
102	7002274	1	Washer (4640246, 4640247)	
102	7003825	1	Washer (4640646, 4640645, 4640909, 4640462, 4640710, 4640692, 4640720, 4640950)	
103	7002348	1	Spring	
104	7002305	1	Guide Tube Assembly	
105	7002345	1	Cone, Female	
105	Kit	1	O-Ring	
105	Kit	1	O-Ring	
106	7002346	1	Pin, Push	
107	7002344	1	Plunger	
108	7000470	1	Tube, Guide	
109	7002341	1	Pin, Actuator	
109	Kit	1	Ring, Quad	
110	7002340	1	Guide, External Push Pln	
110	Kit	1	O-Ring	
111	7002333	1	Sleeve, Inner Flux	
112	7002334	1	Spring	
113	7002336	1	Sleeve, Outer Flux	
114	7000418	1	Coil	
115	7002335	1	Case, Solenoid	
116	7002338	1	Plate, End	
116	7002327	1	Nameplate	
117	7002339	4	Screw	
	7000414	AR	Seal Kit - Working Section (1 Per Section)	
		Ref	WORKING SECTIONS - COMPLETE (INCLUDES ITEMS 101-117)	
151	7002315	1	Steer Section (4640246, 4640247, 4640462, 4640692)	
151	7003855		Telescope Section (4640646, 4640645, 4640909, 4640710, 4640720, 4640950)	
152	7000468	1	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable)	
153	7011182	1	Level Section (All Models) (was p/n 7002316)	
154	7011183	1	Dual Pilot Check Valve (Due to various suppliers, internal components are longer field serviceable) (was p/n 7002262)	
155	7002315	1	Telescope Section (4640246, 4640247)	
155	7002315	1	Steer Section (4640645, 4640646, 4640909)	
155	Not Required	0	Not Used (4640462, 4640692, 4640710, 4640720, 4640950)	
156	7000468	1	Crossover Relief Valve Assembly (Due to various suppliers, internal components are longer field serviceable) (4640246, 4640247, 4640645, 4640646, 4640909 Only)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
157	7002317		Rotate Section (4640247, 4640645, 4640909, 4640692, 4640720, 4640950)	
157	Not Required	0	Not Used (4640246, 4640646, 4640462, 4640710)	

SECTION 2 - TURNTABLE

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



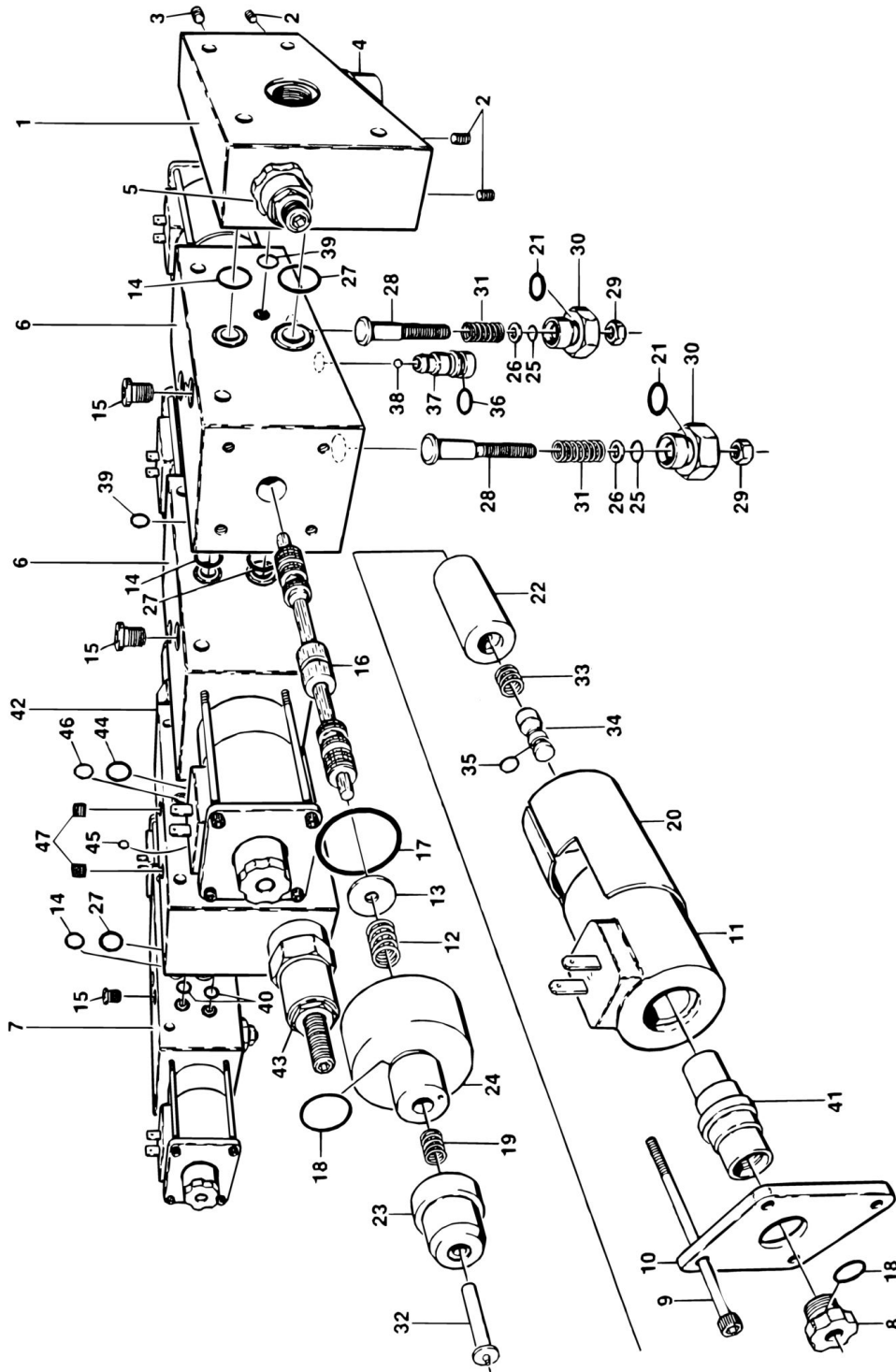
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL



SECTION 2 - TURNTABLE

FIGURE 2-5. CONTROL VALVE ASSEMBLY - PROPORTIONAL

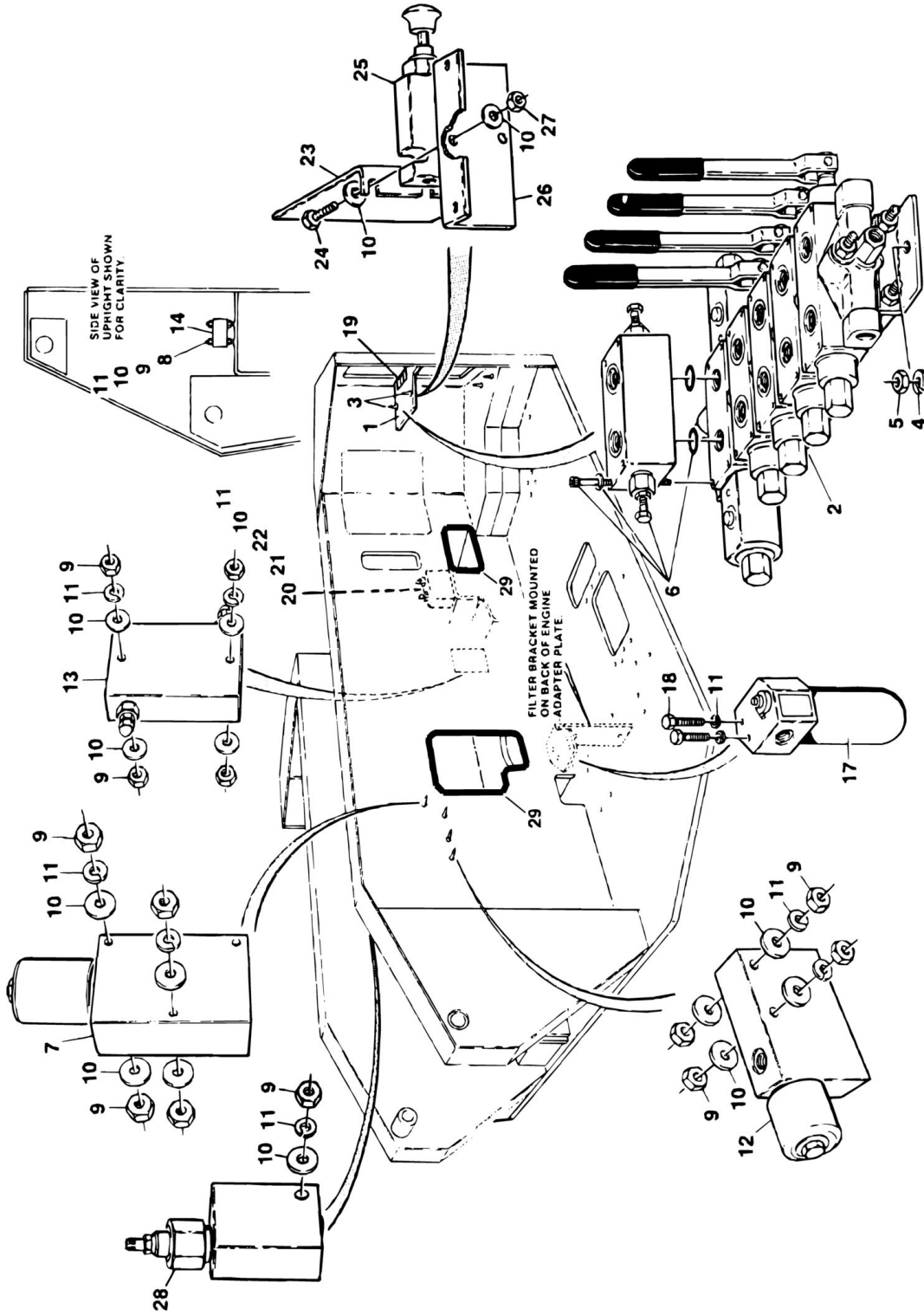
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4640643	Ref	CONTROL VALVE ASSEMBLY - PROPORTIONAL	B
1	7010701	1	Inlet Section Assembly	
2	7010703	3	Plug	
3	7010704	1	Plug	
4	7010705	1	Cartridge, Unloader Spool	
5	7010706	1	Cartridge, System Relief	
6	7010707	1	Working Section Assembly (Tower Lift)	
6	7010785	1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

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
47	7010704	2	Plug	
	2900761	1	Seal Kit - Inlet Section	
	2900759	3	Seal Kit - Working Section	
	2900760	1	Seal Kit - Crossover Relief Section	

SECTION 2 - TURNTABLE

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



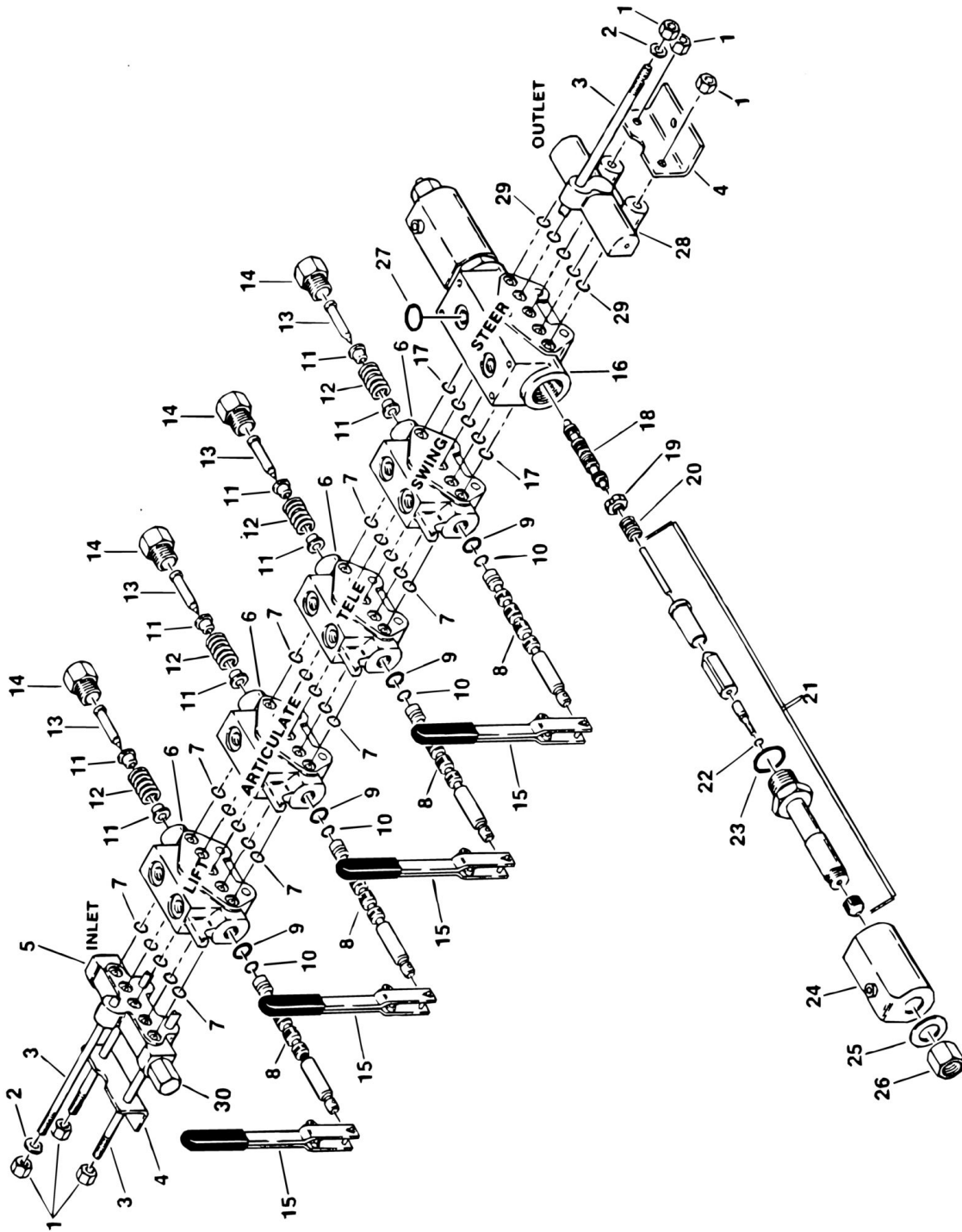
SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250873	Ref	CONTROL VALVES INSTALLATION - HYDRAULIC CONTROLS (FORD MACHINES)	E
1	3534263	1	Plate, Valve Mounting	
2	4640506	1	Ground Control Valve Assembly (See VALVE ASSEMBLY - GROUND CONTROL (HYDRAULIC CONTROLS) for Breakdown)	
4	4761500	2	Lockwasher 5/16in	
5	3311501	2	Nut 5/16in-18NC	
6	4640122	1	Valve Block Assembly	
7	4640123	1	Solenoid Valve Assembly	
7	7004368	1	Coil (Hydraforce Version)	
7	7000558	1	Coil (FPS Version)	
7	7012518	1	Seal Kit (Hydraforce Version)	
7	7006075	1	Seal Kit (FPS Version)	
8	4300042	9	Stud (Welded on Part)	
9	3311401	15	Nut 1/4in-20NC	
10	4751400	21	Flatwasher 1/4in	
11	4761400	13	Lockwasher 1/4in	
12	4640360	1	Dump Valve Assembly	
12	7009745	1	Coil (Vickers/Modular Controls Version)	
12	7004368	1	Coil (Hydraforce Version)	
12	7004289	1	Cartridge Without Coil (Vickers/Modular Controls Version)	
12	Not Available		Seal Kit - 7004289 Cartridge	
12	7012910	1	Cartridge Without Coil (Hydraforce Version)	
12	2900708	1	Seal Kit (7012910 Cartridge)	
12	7003635	1	Cartridge, Check (Vickers/Modular Controls Version)	
12	7012930	1	Cartridge, Check (Hydraforce Version)	
13	4640035	1	Valve, Relief	
14	4640150	1	Valve, Check	
17	2120122	1	Hydraulic Filter Assembly	
17	2120125	1	Element, Filter	
18	0641406	2	Bolt 1/4in-20NC x 3/4in	
19	1700853	1	Decal - Ground Control Selection	
20	4640479	1	Valve, Control	
20	7011320	2	Cartridge	
20	2900770	2	Seal Kit (1 Per Cartridge)	
21	4300036	2	Stud (Welded on Part)	
22	3311401	2	Nut 1/4in-20NC	
23	0902051	1	Bracket - Decal (November 1994 to Present Only)	
24	0641416	2	Bolt 1/4in-20NC x 2in	
25	4640866	1	Valve, Manual Descent (November 1994 to Present Only)	
25	2900708	1	Seal Kit	
25	7012959	1	Knob	
26	0902090	1	Bracket - Valve (November 1994 to Present Only)	
27	3311405	2	Locknut 1/4in-20NC	
28	4640818	1	Valve (November 1994 to Present Only)	
28	7011321	1	Cartridge	
28	7024574	1	Seal Kit - 7011321 Cartridge	
29	4060806	9 ft	Shield, Flex Trim	

SECTION 2 - TURNTABLE

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



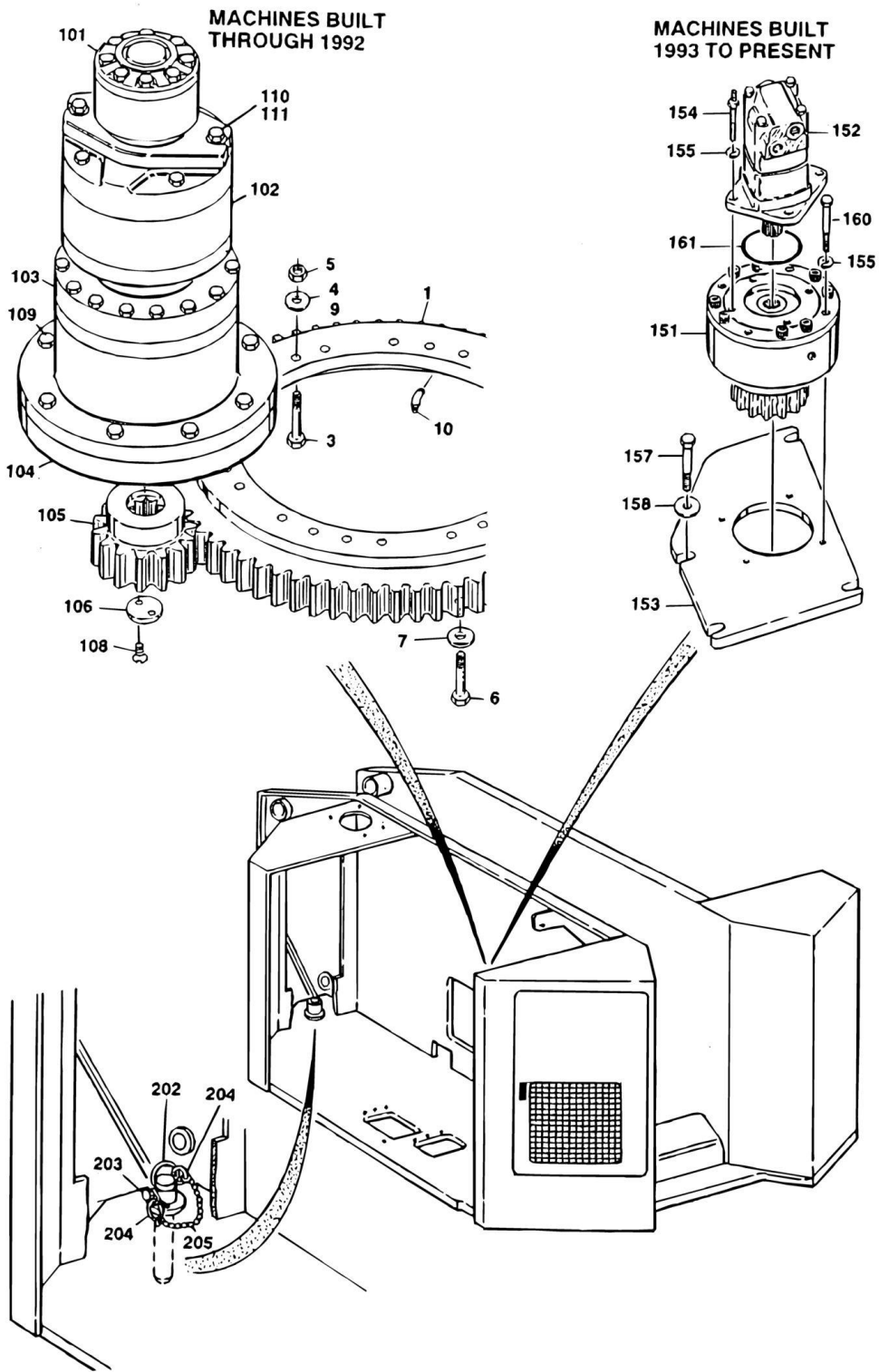
SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4640506	Ref	VALVE ASSEMBLY - GROUND CONTROL (HYDRUALIC CONTROLS)	
1	7000585	6	Nut	
2	7000586	2	Washer	
3	7006052	3	Rod, Threaded	
4	7006039	2	Bracket	
5	7006040	1	Section, Valve - Inlet	
5	7000588	1	O-Ring	
5	7006050	2	O-Ring	
6	7006046	4	Section, Valve - Lift, Articulate, Tele and Swing	
7	7000589	20	O-Ring	
8	N.S.S.	4	Spool	
9	7006029	4	O-Ring	
10	7000588	4	O-Ring	
11	7006022	8	Guide	
12	7006020	4	Spring	
13	7006021	4	Shaft	
14	7006019	4	Cap	
15	7006012	4	Handle (With Linkage and Hardware)	
16	7006041	1	Section, Valve with Coils - Steer	
17	7000588	5	O-Ring	
18	N.S.S.	1	Spool	
19	7006037	2	Retainer	
20	7006036	2	Spring	
21	7006049	2	Tube Assembly	
22	7006048	2	O-Ring	
23	7006035	2	O-Ring	
24	4640049	2	Coil, Solenoid	
25		Ref	Nameplate	
26	7006033	2	Nut	
27	7000596	2	O-Ring	
28	7000600	1	Section, Valve - Outlet	
29	7000588	5	O-Ring	
30	7006053	1	Valve, Cartridge Relief	
	7006051	1	Seal Kit - Complete (Includes Qty 1 of 7000550, 7000549 & 7006047 Seal Kits & Qty 4 of 7000556 Seal Kit)	
	7000550	1	Seal Kit - Inlet Section (Includes O-Rings Listed in Item 5)	
	7000556		Seal Kit - Manual Valve Section (Includes Qty 5 of Item 7, 4 Qty 1 of Item 9 & Qty 1 of Item 10)	
	7000549	1	Seal Kit - Valve Section with Coils (Includes Qty 10 of Item 17, Qty 2 of Items 22, 23 & 27)	
	7006047	1	Seal Kit - Outlet Section (Includes Qty 5 of item 29)	

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

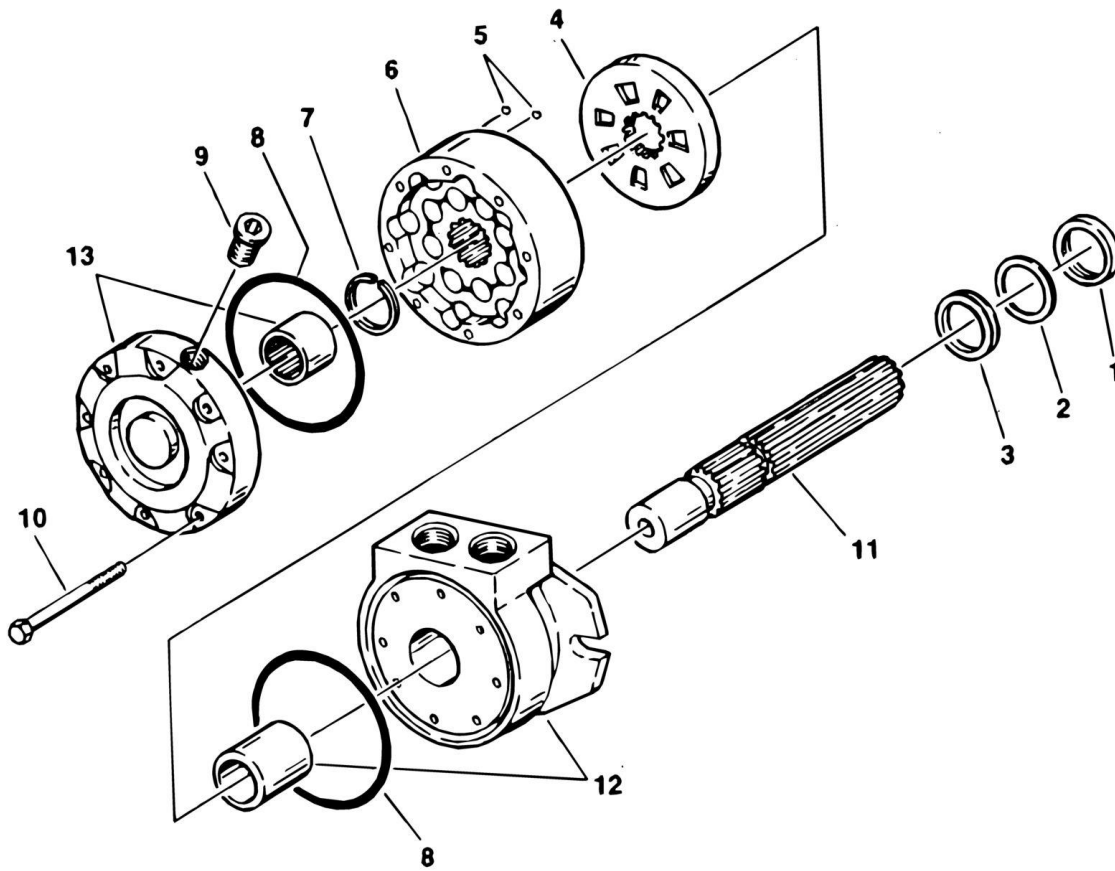
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	TURNTABLE OPTIONS (DEUTZ POWERED MACHINES)	
	4620073	1	Turntable - Domestic Machines Built Prior to May 1993	
	4620094	1	Turntable - Domestic Machines Built May 1993 to Present	
	4620074	1	Turntable - CSA Machines Built Prior to May 1993	
	4620095	1	Turntable - CSA Machines Built May 1993 to Present	
		Ref	TURNTABLE OPTIONS (FORD AND KOBUTA POWERED MACHINES)	
	4620059	1	Turntable - Domestic Standard Bang-Bang or Proportional Machines Built Prior to May 1993	
	4920092	1	Turntable - Domestic Standard Bang-Bang or Proportional Machines Built May 1993 to Present	
	4620060	1	Turntable - Domestic Hydraulic Controls and All CSA Built Prior to May 1993	
	4620093	1	Turntable - Domestic Hydraulic Controls and All CSA Built May 1993 to Present	
	0250136	Ref	TURNTABLE BEARING INSTALLATION	F
1	2915080	1	Bearing Kit (was p/n 0440067) (Kit Includes Bearing and Mounting Hardware)	
3	0682020	15	Bolt 5/8in-11NC x 2 1/2in (Grade 8)	
4	4740004	9	Washer, Hardened	
5	3300183	15	Nut 5/8in-11NC (Grade 8)	
6	0681818	12	Bolt 1/2in-13NC x 2 1/4in (Grade 8)	
7	4740003	12	Washer, Hardened	
9	4740048	3	Washer, Special	
10	2160001	3	Fitting, Grease - 90	
	0100019	AR	Loctite #271	
	0100004	AR	Devcon (Not Required on Machines with Milled Frame and Turntable)	
	0250139	Ref	SWING DRIVE INSTALLATION - MACHINES BUILT THROUGH 1992	C
101		Ref	Swing Motor Options:	
101	3160156	1	Motor - (Prior to August 1991) (See SWING MOTOR ASSEMBLY for Breakdown)	
101	3160181	1	Motor - (August 1991 Through 1992) (See SWING MOTOR ASSEMBLY for Breakdown)	
102		Ref	Swing Brake Options:	
102	0920068	1	Brake - (Prior to August 1991) (See SWING BRAKE ASSEMBLY for Breakdown)	
102	0920086	1	Brake - (August 1991 Through 1992) (See BRAKE ASSEMBLY - AUSCO 37845 for Breakdown)	
103	2780055	1	Swing Hub Assembly (See SWING HUB ASSEMBLY for Breakdown)	
104	3200249	1	Plate, Swing Drive Mounting	
105	2440059	1	Gear, Pinion	
106	4740367	1	Washer, Special	
107	0100019	AR	Loctite #271 (Not Shown)	
108	0741606	2	Screw, Countersunk 3/8in-16NC x 3/4in	
109	0641912	9	Bolt 9/16in-12NC x 1 1/2in	
110	0681836	2	Bolt 1/2in-13NC x 4 1/2in (Grade 8)	
111	4740171	2	Washer, Hardened	
112	0100009	AR	Sealant - RTV #738 (Not Shown)	
		Ref	SWING DRIVE INSTALLATIONS:	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0252578	Ref	MACHINES BUILT 1993 TO MAY 1994	D
	0255010	Ref	MACHINES BUILT MAY 1994 TO PRESENT	-
151		Ref	Swing Brake Assembly Options:	
151	0920089	1	Machines Built 1993 to May 1994	
151	7012570	1	Seal Kit - 0920089 Brake (Includes Seals, O-Rings, 1 Back-up Rings and Retaining Ring)	
151	7012571	1	Rebuild Kit - 0920089 Brake (Includes 7012570 Seal Kit, Inner and Outer Discs and Pressure Plate)	
151	0920095	1	Machines Built May 1994 to Present	
151	7012651	1	Seal Kit - 0920095 Brake (Includes Seals, O-Rings, Back-up Rings and Retaining Ring)	
151	7012650	1	Rebuild Kit - 0920095 Brake (Includes 7012651 Seal Kit, Inner and Outer Discs and Pressure Plate)	
152	3160183	1	Swing Motor Assembly (See SWING MOTOR ASSEMBLY for Breakdown)	
153	3535607	1	Plate, Mounting	
154	4300107	4	Stud 1/2in-13NC x 2in	
154	3311801	4	Nut 1/2in-13NC	
155		Ref	Hardware Options:	
155	4761800	8	Lockwasher 1/2in (Machines Built 1993 to May 1994)	
155	4740252	8	Washer, Hardened (Machines Built May 1994 to Present)	
157	0642014	4	Bolt 5/8in-11NC x 1 3/4in	
158	4740004	4	Washer, Hardened	
160		Ref	Bolt Options:	
160	0641830	4	Bolt 1/2in-13NC x 3 3/4in (Machines Built 1993 to May 1994)	
160	0641834	4	Bolt 1/2in-13NC x 4 1/4in (Machines Built May 1994 to Present)	
161	3790155	1	O-Ring	
	0100019	AR	Loctite #271	
	0100021	AR	Primer	
	0239585	Ref	TURNTABLE LOCK INSTALLATION	B
202	3421627	1	Pin, Lock	
203	3421565	1	Snap - Pin	
204	3760170	2	Ring, Quick Release	
205	1260017	9 in/23cm	Chain	

SECTION 2 - TURNTABLE

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



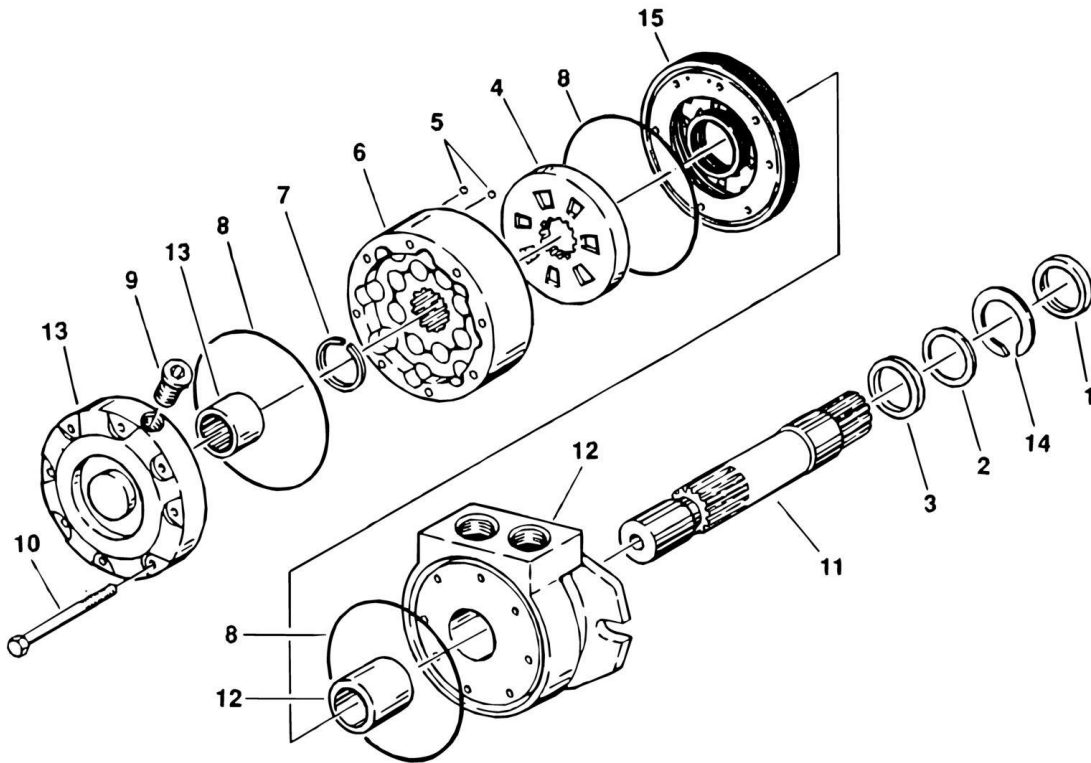
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



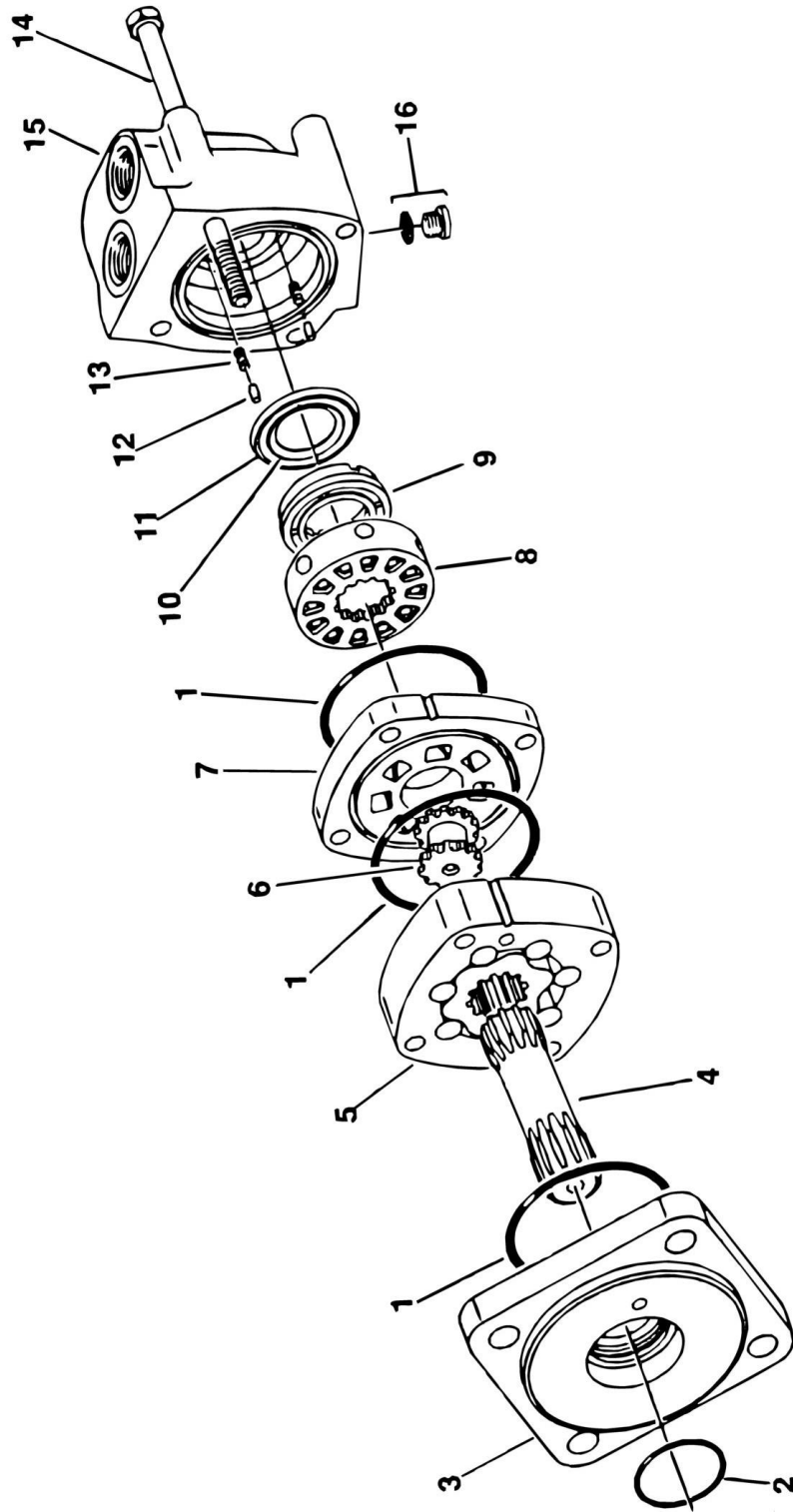
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



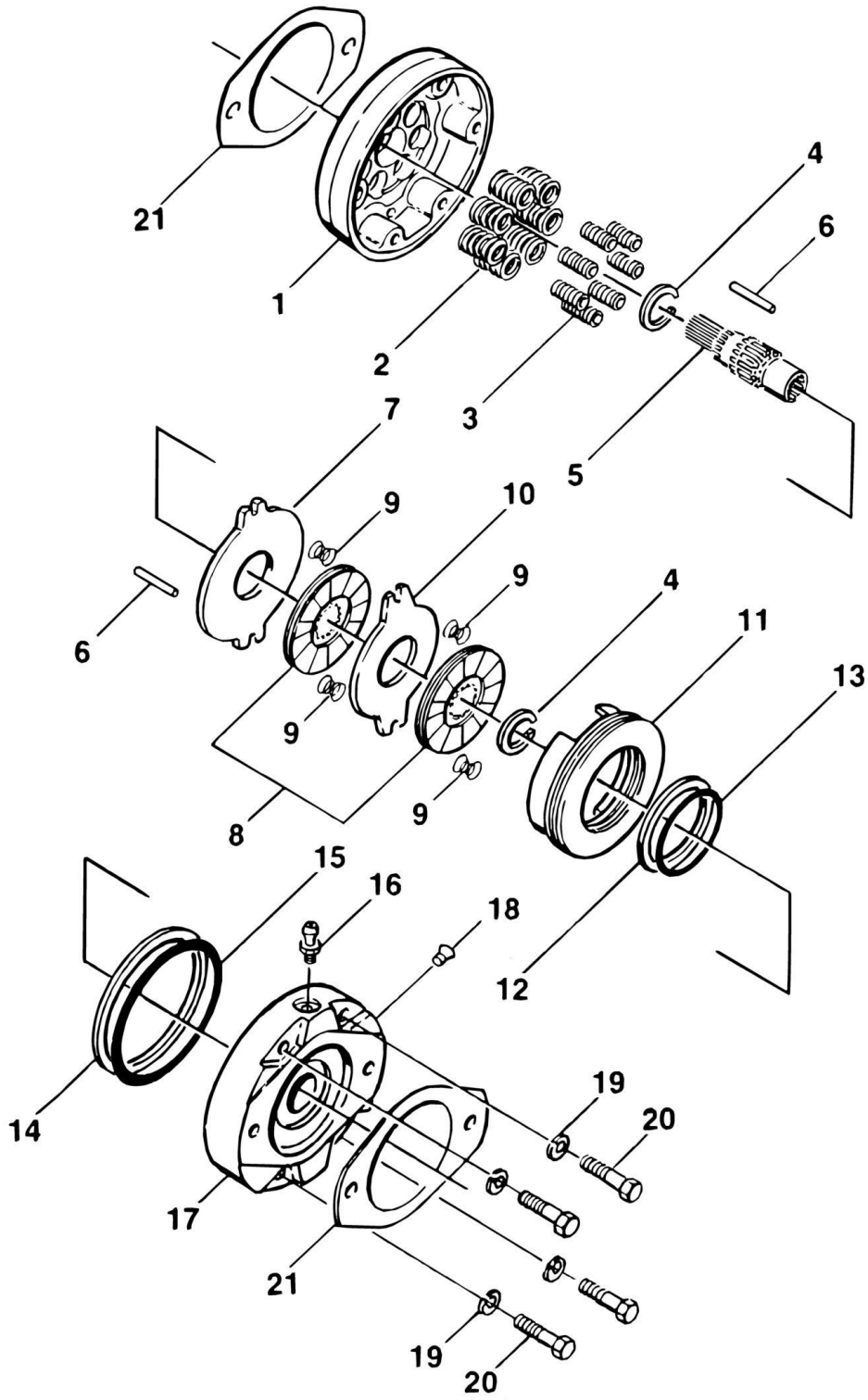
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



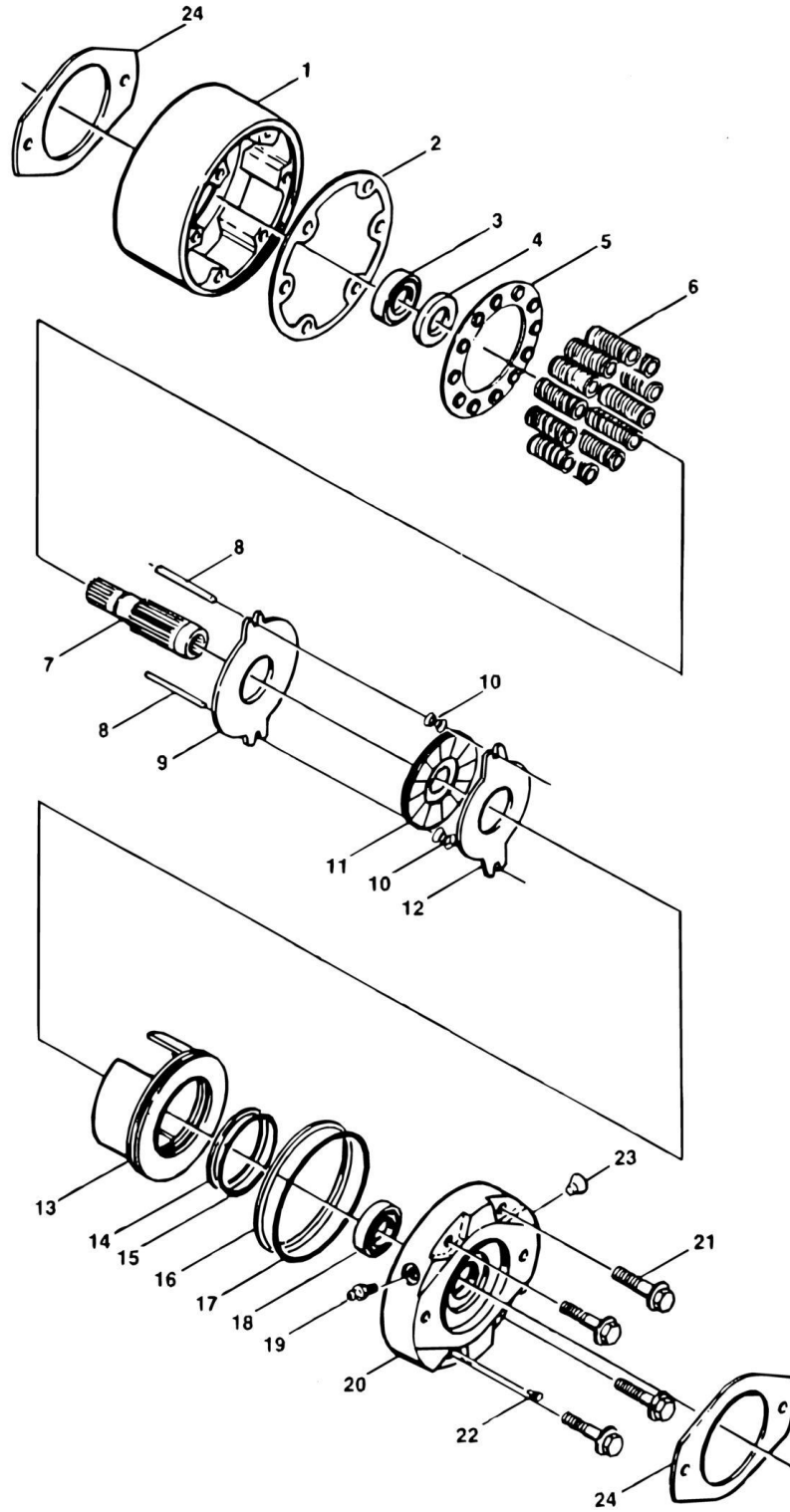
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



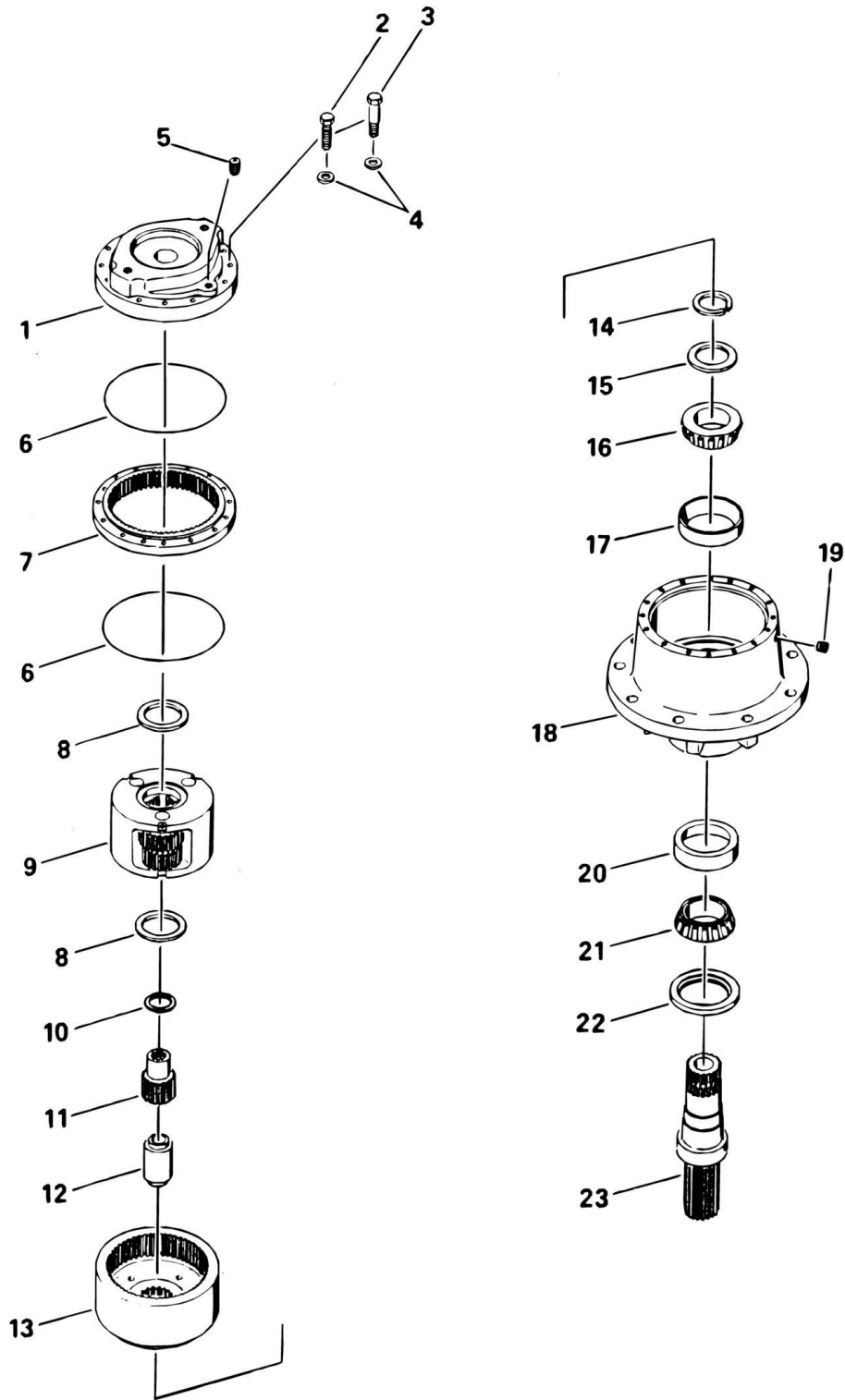
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



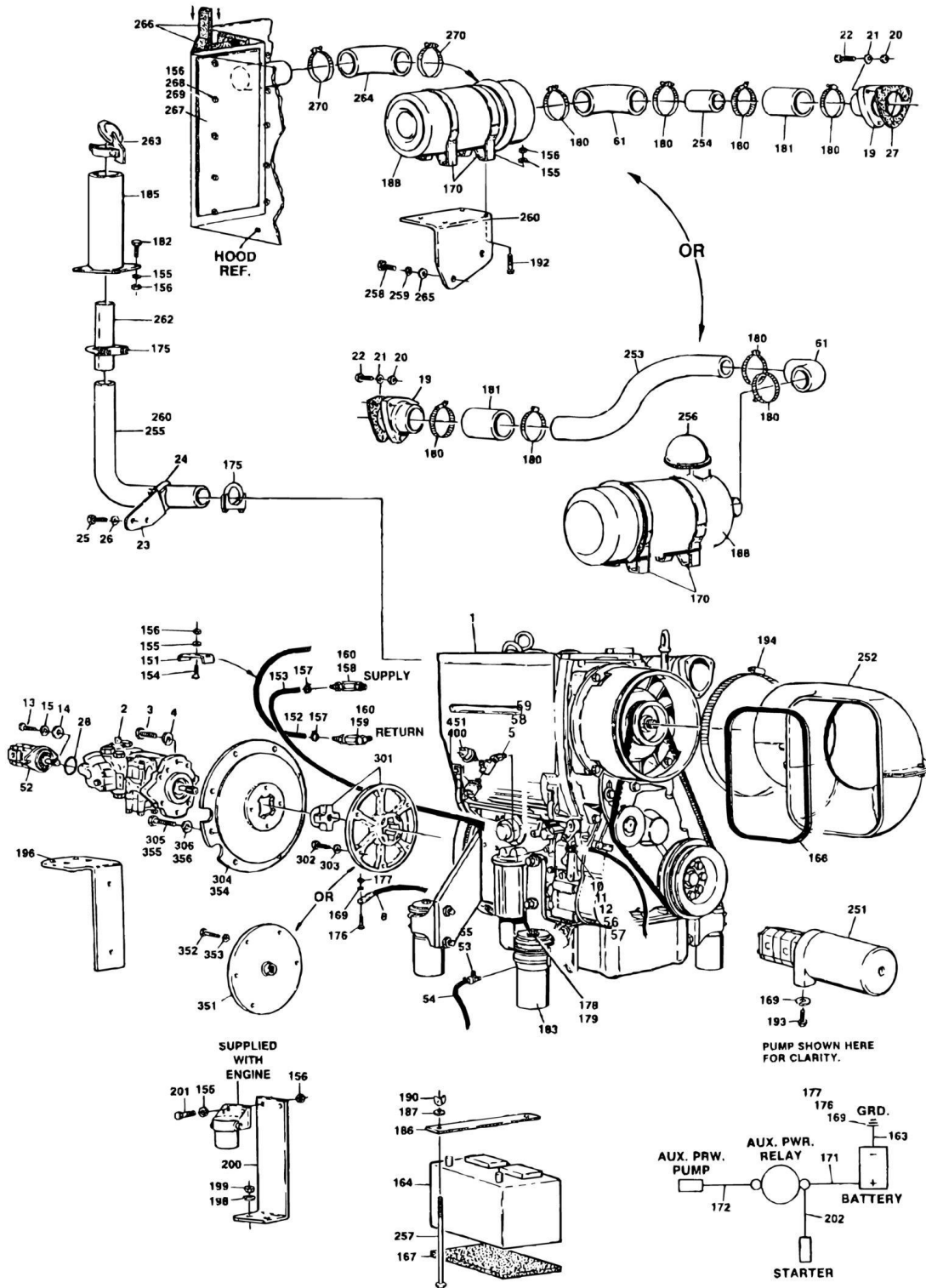
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

FIGURE 2-15. DEUTZ ENGINE INSTALLATION



SECTION 2 - TURNTABLE

FIGURE 2-15. DEUTZ ENGINE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: See SPECIAL OPTIONS SECTION for Machines with Hydraulic Tool Circuit and Deutz Engine Combination or Special UCON Hydraulic Fluid.	
		Ref	DEUTZ ENGINE ASSEMBLY (STANDARD PARTS)	
		Ref	Engine - Deutz F2L-1011 Diesel Options:	
1		1	Engine - Deutz F2L-1011 (Prior to August 1995)	
1	2000106	1	Engine - Deutz F2L-1011 (August 1995 to Present)	
1	2000137	1	Engine - Deutz F2L-1011 (August 1995 to Present)	
2		Ref	Pump Assembly - Sunstrand Options (See PUMP ASSEMBLY - SUNSTRAND for Breakdown):	
2	3600164	1	Pump Assembly - Sunstrand (Prior to SN 27991)	
2	3600260	1	Pump Assembly - Sunstrand (SN 27991 to Present)	
3	0641812	2	Bolt 1/2in-13NC x 1 1/2in	
4	4761800	2	Lockwasher 1/2in	
5	2180730	1	Fitting, Special	
8	1060221	1	Cable, Battery (Engine to Ground)	
10		Ref	Adapter, Throttle Options:	
10	0080172	1	Adapter, Throttle (Prior to August 1995)	
10	4460302	1	Adapter, Throttle (August 1995 to Present)	
11	3450202	1	Pin, Cotter 1/16in x 1/2in	
12		Ref	Hardware Options:	
12	3951003	1	Setscrew #10-24NC x 3/8in (Prior to August 1995)	
12	0902244	1	Bracket, Throttle (August 1995 to Present)	
13	0641610	2	Bolt 3/8in-16NC x 1 1/4in	
14	4751600	2	Flatwasher 3/8in	
15	4761600	2	Lockwasher 3/8in	
19	0080177	1	Adapter Weldment	
20	3311501	3	Nut 5/16in-18NC	
21	4761500	3	Lockwasher 5/16in	
22	0641512	3	Bolt 5/16in-18NC x 1 1/2in	
23	0901705	1	Bracket, Exhaust	
24	1320176	1	Clamp, Muffler	
25	0701010	2	Bolt, Metric 10mm x 20mm	
26	4832000	2	Lockwasher, Metric 10mm	
27	3960407	1	Gasket, Intake Adapter	
28	3790152	1	O-Ring	
	0250377	Ref	STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991	E
51	2420131	1	Sender, Oil Pressure	
52		Ref	Pump Assembly Options:	
52	3600165	1	Pump - Vickers (Not Field Serviceable) (Prior to April 1990)	
52	2900660	1	Shaft Seal Kit - 3600165 Pump	
52	3600172	1	Pump - Barnes (April 1990 to October 1991) (See PUMP ASSEMBLY - BARNES for Breakdown)	
52	3600176	1	Pump Assembly - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown)	
	0251056	Ref	DEUTZ ENGINE ASSEMBLY - HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)	D
51	2420131	1	Sender, Oil Pressure	
52	3600176	1	Pump Assembly - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0252106	Ref	DEUTZ ENGINE ASSEMBLY - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)	G
51	2420110	1	Sender, Oil Pressure	
52		Ref	Pump Assembly Options:	
52	3600172	1	Pump-Barnes (October 1991 to January 1993) (See PUMP ASSEMBLY - BARNES for Breakdown)	
52	3600199	1	Pump-Barnes (January 1993 to Present) (See PUMP ASSEMBLY - BARNES for Breakdown)	
53	4640751	1	Valve, Oil Drain	
54	2750532	1 ft/.3m	Hose	
55	1320022	1	Clamp	
56	4711400	1	Flatwasher 1/4in (August 1995 to Present)	
57	0700605	2	Bolt Metric 6mm x 10mm (August 1995 to Present)	
58	2180104	1	Fitting, Nipple (August 1995 to Present)	
59	2200261	1	Fitting, Coupling (August 1995 to Present)	
	0252108	Ref	DEUTZ ENGINE ASSEMBLY - HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)	H
51	2420110	1	Sender, Oil Pressure	
52		Ref	Pump Assembly Options:	
52	3600143	1	Pump-Vickers (Not Field Serviceable) (October 1991 to April 1993)	
52	2900660	1	Shaft Seal Kit - 3600143 Pump	
52	3600202	1	Pump-Barnes (April 1993 to Present) (See PUMP ASSEMBLY - BARNES for Breakdown)	
53	4640751	1	Valve, Oil Drain	
54	2750532	1 ft/.3m	Hose	
55	1320022	1	Clamp	
56	4711400	1	Flatwasher 1/4in (August 1995 to Present)	
57	0700605	2	Bolt Metric 6mm x 10mm (August 1995 to Present)	
58	2180104	1	Fitting, Nipple (August 1995 to Present)	
59	2200261	1	Fitting, Coupling (August 1995 to Present)	
		Ref	DEUTZ ENGINE INSTALLATION (STANDARD PARTS)	
151	1320041	1	Clamp	
152	2720271	10 ft/3m	Line, Fuel Return	
153	2720058	10 ft/3m	Line, Fuel Supply	
154	4300032	AR	Stud (Welded on Part)	
155	4761400	AR	Lockwasher 1/4in	
156	3311401	AR	Nut 1/4in-20NC	
157	1320022	4	Clamp	
158	2220805	1	Fitting, 90	
159	2220063	1	Fitting, 90 Swivel	
160	4420001	AR	Tape, Sealant	
161	0080039	1	Adaptor, Elbow	
163	1060172	1	Cable, Battery	
164	0400075	1	Battery	
166	3960389	51 in/1.3m	Seal, Rubber Grip	
167	3980007	1	Seat, Battery	
169	4761600	4	Lockwasher 3/8in	
170	0340002	2	Band, Air Cleaner	
171	1060273	1	Cable, Battery (Battery to Auxiliary Relay)	
172	1060099	1	Cable, Battery (Starter to Auxiliary Power Relay)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
175	1320019	AR	Clamp, Exhaust	
176	4300034	2	Stud (Welded on Parts)	
177	3311601	2	Nut 3/8in-16NC	
178	0641856	4	Bolt 1/2in-13NC x 7in	
179	4761800	4	Lockwasher 1/2in	
180	1320031	4	Clamp	
181	2720351	3 in/7.6cm	Hose	
182	0641406	4	Bolt 1/4in-20NC x 3/4in	
183	0080178	4	Adapter, Engine Mounting	
185	4843372	1	Snorkel, Exhaust	
186	0361810	1	Holddown, Battery	
187	4751600	4	Flatwasher 3/8in	
188	1340020	1	Air Cleaner Assembly	
188	7004214	1	Element	
190	3300029	2	Wingnut 3/8in-16NC	
192	0641406	4	Bolt 1/4in-20NC x 3/4in	
193	0641614	2	Bolt 3/8in-16NC x 1 3/4in	
194	1320059	1	Clamp	
196	0961664	1	Bracket - Hydraulic Filter	
197	4300038	2	Stud (Welded on Parts)	
198	4761500	2	Lockwasher 5/16in	
199	3311501	2	Nut 5/16in-18NC	
200	0901673	1	Bracket, Fuel Filter	
201	0641418	2	Bolt 1/4in-20NC x 2 1/4in	
202	1060149	1	Cable, Battery (Auxiliary Relay to Starter)	
203	2220273	2	Reducer, Bushing	
204	2180536	1	Fitting	
	0250378	Ref	DEUTZ ENGINE INSTALLATION - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)	E
251	3600050	1	Auxiliary Pump Assembly	
251		Ref	Barnes Version Components:	
251	7004249	1	Coupling	
251	7004248	1	Motor	
251	7010923	1	Pump	
251		Ref	Stone/Fenner Version Components:	
251	7004412	1	Coupling	
251	7000482	1	Motor	
251	Not Available		Pump (Purchase Complete Assembly)	
252	1840005	1	Scoop, Air Intake	
253	4564558	1	Tube, Air Intake	
254	Not Required	0	Not Required	
255	4564557	1	Tube, Exhaust	
256	1120161	1	Cap, Air Inlet	
257	0630370	2	Rod, Holddown	
257	1380032	2	Clip, Battery (Not Shown)	
258 to 270	Not Required	0	Not Required	
	0251057	Ref	DEUTZ ENGINE INSTALLATION - HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE PRIOR TO OCTOBER 1991 (VARIABLE PARTS)	D
251		Ref	Auxiliary Pump Options:	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
251	3600141	1	Auxiliary Pump (Prior to January 1991 - Purchase 3600071 as replacement)	
251	3600071	1	Auxiliary Pump (January 1991 to October 1991)	
251	7004249	1	Coupling	
251	7004248	1	Motor	
251	7004436	1	Motor with Mounting Bracket	
251	7012576	1	Bracket	
251	7004247	1	Pump Only	
252	1840005	1	Scoop, Air Intake	
253	4564558	1	Tube, Air Intake	
254	Not Required	0	Not Required	
255	4564557	1	Tube, Exhaust	
256	1120161	1	Cap, Air Inlet	
257	0236768	2	Rod, Holddown	
258 to 270	Not Required	0	Not Required	
	0252107	Ref	DEUTZ ENGINE INSTALLATION - STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)	F
251		Ref	Auxiliary Pump Options:	
251	3600050	1	Auxiliary Pump (October 1991 to April 1993)	
251		Ref	Barnes Version Components:	
251	7004249	1	Coupling	
251	7004248	1	Motor	
251	7010923	1	Pump	
251		Ref	Stone/Fenner Version Components:	
251	7004412	1	Coupling	
251	7000482	1	Motor	
251	Not Available		Pump (Purchase Complete Assembly)	
251	3600208	1	Auxiliary Pump (April 1993 to Present)	
251	7013711	1	Coupling	
251	7013710	1	Motor	
251	7013712	1	Pump	
251	7013753	1	Seal Kit - 7013712 Pump	
252		Ref	Scoop (Air Intake) Options:	
252	1840005	1	Scoop (Prior to March 1995)	
252	1840011	1	Scoop (March 1995 to Present)	
253	Not Required	0	Not Required	
254	4565301	1	Tube	
255	4565271	1	Tube, Exhaust	
256	Not Required	0	Not Required	
257	0630370	2	Rod, Holddown	
257	1380032	2	Clip, Battery (Not Shown)	
258	0701010	2	Bolt, Metric 10mm x 20mm	
259	4832000	2	Lockwasher, Metric 10mm	
260	0901781	1	Bracket, Air Cleaner	
261	4100025	2 ft/.6m	Sleeve, Exhaust	
262	4565278	1	Extension, Exhaust	
263	1120405	1	Raincap	
264	0080046	1	Elbow	
265	4711600	2	Flatwasher 3/8in	
266	2820042	4	Foam, Acoustical	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
267	1670608	1	Cover, Intake Box	
268	3941406	10	Screw, Self-Tapping 1/4in x 3/4in	
269	4761400	16	Lockwasher 1/4in	
270	1320016	2	Clamp	
	0252109	Ref	DEUTZ ENGINE INSTALLATION - HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE OCTOBER 1991 TO PRESENT (VARIABLE PARTS)	E
251		Ref	Auxiliary Pump Options:	
251	3600071	1	Auxiliary Pump (October 1991 to April 1993)	
251	7004249	1	Coupling	
251	7004248	1	Motor	
251	7004436	1	Motor with Mounting Bracket	
251	7012576	1	Bracket	
251	7004247	1	Pump Only	
251	3600210	1	Auxiliary Pump (April 1993 to Present)	
251	7013711	1	Coupling	
251	7013710	1	Motor	
251	7013757	1	Brush and Spring Kit - 7013710 Motor	
251	7013771	1	Pump	
251	7016701	4	O-Ring	
251	7000754	1	Seal, Shaft	
252		Ref	Scoop (Air Intake) Options:	
252	1840005	1	Scoop (Prior to March 1995)	
252	1840011	1	Scoop (March 1995 to Present)	
253	Not Required	0	Not Required	
254	4565301	1	Tube	
255	4565271	1	Tube, Exhaust	
256	Not Required	0	Not Required	
257	0236768	2	Rod, Holddown	
258	0701010	2	Bolt, Metric 10mm x 20mm	
259	4832000	2	Lockwasher, Metric 10mm	
260	0901781	1	Bracket, Air Cleaner	
261	4100025	2 ft/.6m	Sleeve, Exhaust	
262	4565278	1	Extension, Exhaust	
263	1120405	1	Raincap	
264	0080046	1	Elbow	
265	4711600	2	Flatwasher 3/8in	
266	2820042	4	Foam, Acoustical	
267	1670608	1	Cover, Intake Box	
268		Ref	Hardware Options:	
268	3941406	10	Screw, Self-Tapping 1/4in x 3/4in (Prior to September 1995)	
268	4751400	16	Flatwasher 1/4in (September 1995 to Present)	
269	4761400	10	Lockwasher 1/4in	
270	1320016	2	Clamp	
	0250125	Ref	COUPLING INSTALLATION - LOVEJOY OPTION	-
301		Ref	Coupling Options:	
301	1660169	1	Coupling - 13 Teeth	
301	1660234	1	Coupling - 15 Teeth	
302	0700814	6	Bolt, Metric 8mm x 30MM	
303	4831900	6	Lockwasher, Metric 8mm	
304	0080163	1	Plate, Adapter	
305	0701013	8	Bolt, Metric 10mm x 28mm	

SECTION 2 - TURNTABLE

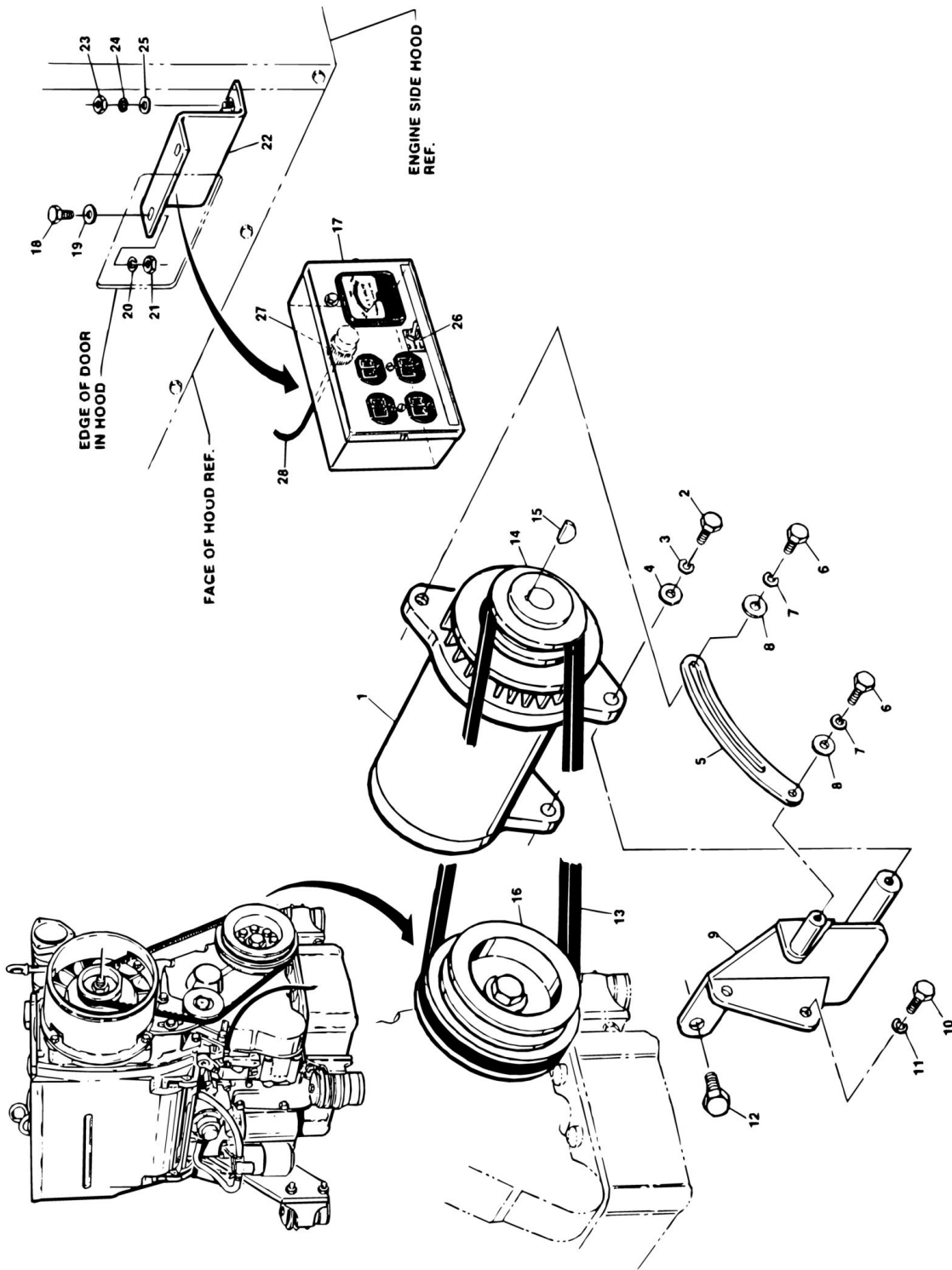
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
306	4832000	8	Lockwasher, Metric 10mm	
		Ref	COUPLING INSTALLATION - HAYES OPTION	
	0250597	Ref	HAYES 13 TEETH	-
	0256848	Ref	HAYES 15 TEETH	2
351		Ref	Coupling Options:	
351	1660184	1	Coupling - 13 Teeth	
351	1660234	1	Coupling - 15 Teeth	
		Ref	Note: Coupling Internal spines must be lubed with Lithium based grease prior to installation.	
352	0700810	6	Bolt, Metric 8mm x 20mm	
353	4831900	6	Lockwasher, Metric 8mm	
354	0080163	1	Plate, Adapter	
355	0701013	8	Bolt, Metric 10mm x 28mm	
356	4832000	8	Lockwasher, Metric 10mm	
		Ref	ENGINE COMPONENTS - DEUTZ F2L1011	
	2000106	Ref	Engine Components - Deutz F2L1011 (Prior to August 1995)	
	7000693	1	Muffler - Deutz F2L1011	
	3600213	1	Pump, Drive (was p/n 7012572)	
	3520078	1	Plug (was p/n 7012573)	
	1670680	1	Cover, Timing Chain (was p/n 7012574)	
	7012575	1	Pulley, Crankshaft	
	7020023	1	Filter, Fuel (was p/n 7012598)	
	7012599	1	Pump, Fuel Injector	
	7012698	1	Pump, Fuel	
	1670680	1	Cover, Timing Belt	
	7012626	1	Starter	
	7014502	1	Filter, Oil (Case of 12) (Kit Includes 1 Filter)	
	7014683	1	Oil Change and Gasket Kit (Includes Fuel Line Washer or Plug Washer, Oil Filter, Fuel Filter Injector Tip Gasket and Valve Cover Gasket)	
	7020417	1	Alternator	
	7016308	1	Ring, Plastic Air Intake	
	7019607	2	Shutdown Device (was p/n 7016359)	
	7020414	1	V-Belt	
	7020437	1	Flywheel	
	7020496	1	Gear, Ring (Flywheel)	
	7020456	1	Dipstick	
	2000137	Ref	Engine Components - Deutz F2L1011 (August 1995 to Present)	
	7020417	1	Alternator	
	7000693	1	Muffler - Deutz F2L1011	
	8320270	1	Filter, Fuel (was p/n7016328)	
	7012599	1	Pump, Fuel Injector	
	7016309	1	Washer, Copper (Engine p/n 2000137)	
		Ref	Gasket, Cylinder Head Options:	
	70003160	1	1 Notch	
	70003161	1	2 Notches	
	70003162	1	3 Notches	
	7000699	1	Gasket, Exhaust (Doughnut) (Fits Between Pipe Flange and Manifold)	
	7016332	1	Starter (was p/n 7020416)	
	7016331	1	Filter, Oil	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	7019607	2	Shutdown Device (was p/n 7016359)	
	7020414	1	V-Belt	
	7020027	1	Assy, Flywheel/Ring Gear	
	7020477		Ring Gear Only	
	7020404	1	Ring, Sealing - Oil Drain	
	7020406	1	Ring, Sealing	
	7020411	1	Gasket, Fuel Supply Lift Pump	
	7020415	1	Fitting, Tee	
	7020419	1	Hose, Fuel Return	
	7020424	2	Gasket, Injector Tip	
	7020425	2	Nozzle, Injector	
	7020426	2	Injector	
	7024413	1	Pump, Fuel Lift (was p/n 7020428)	
	7020429	1	Gasket, Valve Cover	
	7020434	1	Dipstick	
	7020465	1	Cap, Oil Fill	
	0251682	Ref	OPTIONAL ENGINE SHUTDOWN INSTALLATION	-
400	2180360	1	Fitting, Tee	
400	2180643	1	Fitting, Nipple	
400	2220318	1	Fitting, 90	
400	4360065	1	Switch, Pressure	
	0251537	Ref	OPTIONAL ENGINE DISTRESS INSTALLATION	D
	0250229	Ref	OPTIONAL 110V GENERATOR INSTALLATION (PRIOR TO AUGUST 1994)	L
	0255102	Ref	OPTIONAL 110V GENERATOR INSTALLATION (AUGUST 1994 TO PRESENT)	B
451	4360037	1	Switch, Pressure	
451	2180360	1	Fitting, Tee (Prior to SN 23615)	
451	2180749	1	Fitting, 45	
451		Ref	Fitting Options:	
451	2180537	1	Fitting, Nipple (Prior to SN 23615)	
451	2180730	1	Fitting, Adapter (SN 23615 to Present)	
451	2200261	1	Fitting, Adapter (Prior to SN 23615)	
	0252301	Ref	OPTIONAL COLD WEATHER START INSTALLATION (NOT SHOWN)	B
	0254240	Ref	OPTIONAL ETHER ASSIST SYSTEM INSTALLATION (NOT SHOWN)	-
	2901111	Ref	Cold Weather Start Kit	
	0256127	Ref	OPTIONAL SPARK ARRESTOR INSTALLATION (NOT SHOWN)	-

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

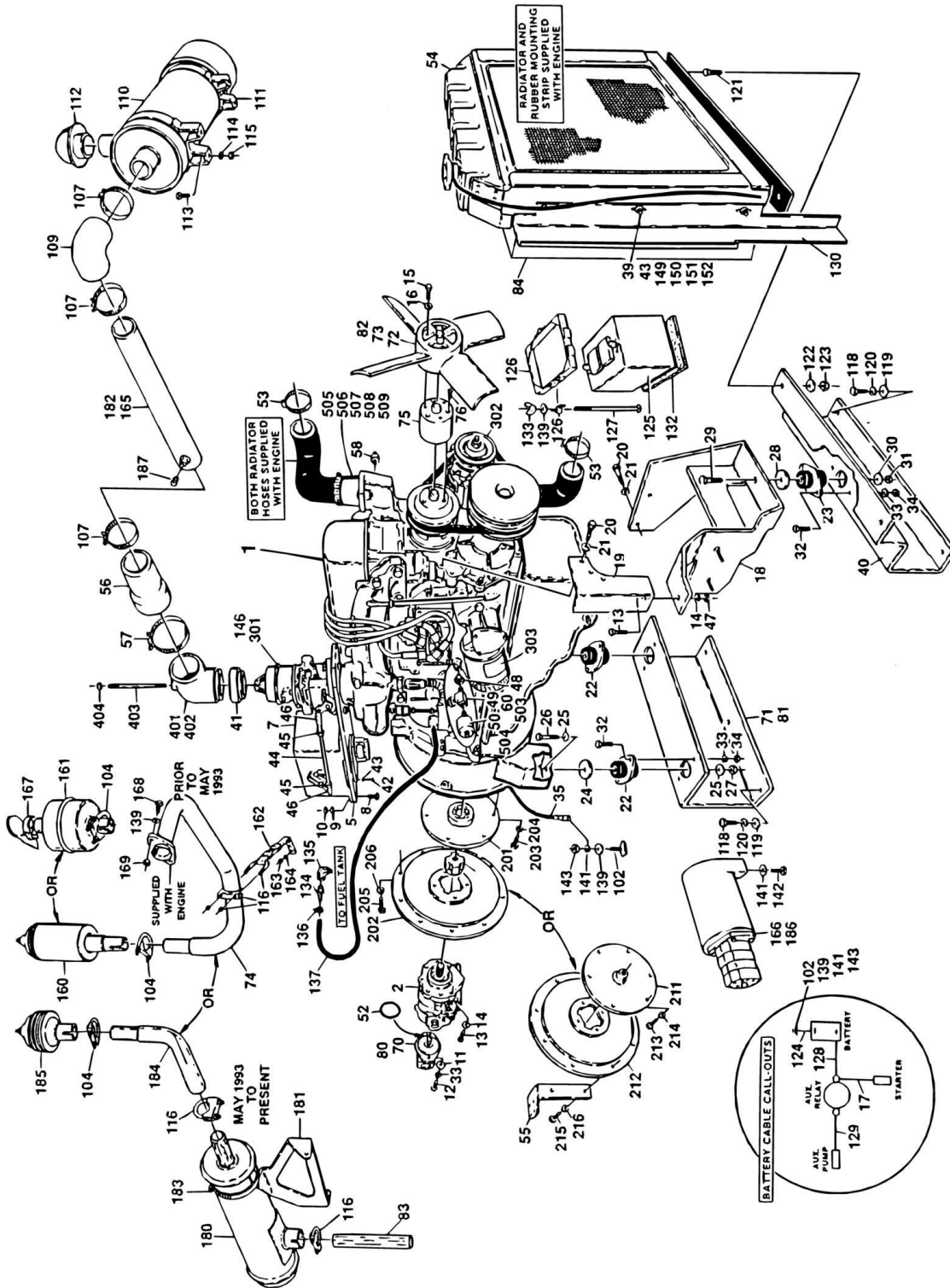
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250229	Ref	110 VOLT GENERATOR INSTALLATION (DEUTZ) (PRIOR TO AUGUST 1994)	L
	0255102	Ref	110 VOLT GENERATOR INSTALLATION (DEUTZ) (AUGUST 1994 TO PRESENT)	B
1	2460011	1	Generator Assembly with Control Box	
1	7012558	1	Generator Assembly	
1	7026199	1	Armature with Slip Rings	
1	7012513	4	Holder, Brush	
1	7012514	1	Fan	
1	7020108	4	Brush	
1	7020109	4	Holder, Brush	
1	7020110	1	Bell, Front	
1	7020111	1	Bell, Rear	
1	7020190	2	Bearing	
1	7020193	1	Cord, Power	
1	7003657	1	Control Box Assembly	
		Ref	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.	
1	2420203	1	Voltmeter	
1	3520028	1	Plug, Hole	
1	4360542	1	Breaker, Circuit	
1	2920162	1	Lamp Assembly	
1	7020191	1	Switch, Toggle	
2	0681610	2	Bolt 3/8in-16NC x 1 1/4in (Grade 8)	
3	4761600	2	Lockwasher 3/8in	
4	4751600	2	Flatwasher 3/8in	
5	0361815	1	Arm, Adjustable	
6	0681510	2	Bolt 5/16in-18NC x 1 1/4in (Grade 8)	
7	4761500	2	Lockwasher 5/16in	
8	4751500	2	Flatwasher 5/16in	
9	4843410	1	Bracket, Mounting - Generator	
10	0701012	2	Bolt, Metric 10MM x 25M	
11	4812000	2	Flatwasher, Metric 10MM	
11	0100011	AR	Loctite	
12	0701414	1	Bolt, Metric 14MM x 30MM	
13	0480059	1	V-Belt	
14	3580134	1	Pulley	
15	7027887	1	Key	
16	3580158	1	Pulley	
17	See Item 1	1	Box, Control	
18	0641406	2	Bolt 1/4in-20NC x 3/4in (Prior to August 1994 Only)	
19	4751400	2	Flatwasher 1/4in (Prior to August 1994 Only)	
20	4761400	2	Lockwasher 1/4in (Prior to August 1994 Only)	
21	3311401	2	Nut 1/4in-20NC (Prior to August 1994 Only)	
22	0901633	1	Bracket, mounting - Box (Prior to August 1994 Only)	
23	3311401	2	Nut 1/4in-20NC (Prior to August 1994 Only)	
24	4761400	2	Lockwasher 1/4in (Prior to August 1994 Only)	
25	4751400	2	Flatwasher 1/4in (Prior to August 1994 Only)	
25	4300068	2	Stud (Welded on Part) (Prior to August 1994 Only)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
26	3251476	1	Decal - Generator	
27	4460023	1	Terminal	
28	1060012	AR	Cable - 12/4	

SECTION 2 - TURNTABLE

FIGURE 2-17. FORD ENGINE INSTALLATION



SECTION 2 - TURNTABLE

FIGURE 2-17. FORD ENGINE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	FORD ENGINE ASSEMBLY (STANDARD PARTS)	
1		Ref	Engine Options:	
1	2000109	1	Engine - Ford VSG-411 (Industrial Flywheel) (Prior to November 1992)	
1	2000117	1	Engine - Ford VSG-411 (Automotive Flywheel) (November 1992 to October 1994)	
1	2000129	1	Engine - Ford VSG-411 (October 1994 to March 1995)	
1	2000130	1	Engine - Ford VSG-411 (March 1995 to SN 4331)	
1	2000147	1	Engine - Ford VSG-411 (SN 43319 to Present)	
2		Ref	Pump Assembly - Sunstrand Options (See PUMP ASSEMBLY - SUNSTRAND for Breakdown):	
2	3600164	1	Pump Assembly - Sunstrand (Prior to SN 43319)	
2	3600260	1	Pump Assembly - Sunstrand (SN 43319 to Present)	
5	3533445	1	Plate, Mounting - Governor and Carburetor	
7	2500005	1	Governor, Precision	
8	0641410	4	Bolt 1/4in-20NC x 1 1/4in	
9	4761400	4	Lockwasher 1/4in	
10	3311401	4	Nut 1/4in-20NC	
11	4740185	2	Flatwasher 3/8in (Hardened)	
12	0641610	2	Bolt 3/8in-16NC x 1 1/4in	
13	0641812	4	Bolt 1/2in-13NC x 1 1/2in	
14	4761800	4	Lockwasher 1/2in	
15	0700814	3	Bolt, Metric 8mm x 30mm	
16	4831900	3	Lockwasher, Metric 8mm	
17	1060149	1	Cable, Battery (Auxiliary Relay to Starter)	
18	4843497	1	Bracket, Engine Mounting - Front	
19	3533291	1	Plate	
20	0701014	5	Bolt, Metric 10mm x 30mm	
21	4832000	5	Lockwasher, Metric 10mm	
22	3200202	2	Mount, Engine - Rear	
23	3200201	1	Mount, Engine - Front	
24	4740273	2	Washer, Snubbing	
25	4751700	4	Flatwasher 7/16in	
26	0641728	2	Bolt 7/16in-14NC x 3 1/2in	
27	3311705	2	Locknut 7/16in-14NC	
28	4740274	1	Washer, Snubbing	
29	0641826	1	Bolt 1/2in-13NC x 3 1/4in	
30	4751800	1	Flatwasher 1/2in	
31	3311805	1	Locknut 1/2in-13NC	
32	0641608	8	Bolt 3/8in-16NC x 1in	
33	4761600	8	Lockwasher 38 (Prior to SN 43319)	
34	3311605	8	Locknut 3/8in-16NC	
35	1060093	1	Cable, Battery (Engine to Ground)	
39	3941005	6	Screw, Self-Tapping #10 x 5/8in	
40	0901635	1	Bracket, Mounting - Engine (Front)	
41	0080092	1	Adapter, Carburetor	
42	3911012	2	Bolt #10-24NC x 3/4in	
43	4761000	8	Lockwasher #10	
44	3841049	1	Rod, Throttle	
45	3321401	2	Nut, Jam 1/4in-20NC	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
46	1660157	2	Balljoint	
47	3311801	2	Nut 1/2in-13NC	
48	2220273	1	Fitting, Reducer	
49	2180360	1	Fitting, Tee	
50		Ref	Oil Pressure Sender Options:	
50	2420033	1	Sender (Prior to May 1990)	
50	2420131	1	Sender (May 1990 to Present)	
52	3790152	1	O-Ring	
53	1320014	4	Clamp, Hose	
54	3620027	1	Radiator	
55		Ref	Bracket, Filter Options:	
55	0901664	1	Bracket, Filter (Prior to SN 43319)	
55	0902184	1	Bracket, Filter (SN 43319 to Present)	
56	2720341	1	Hose, Air Cleaner	
57	1320058	1	Clamp, Hose	
58		Ref	Temperature Sender Options:	
58	2420118	1	Sender (Prior to May 1990)	
58	2420130	1	Sender (May 1990 to Present)	
59	0100011	AR	Loctite #242 (Not Shown)	
60	4360037	1	Switch, Oil Pressure	
63	0630360	1	Bolt, Carriage	
64	4761500	1	Lockwasher 5/16in	
65	3311501	1	Nut 5/16in-18NC	
		Ref	FORD ENGINE ASSEMBLIES (VARIABLE PARTS):	
	0250040	Ref	STANDARD BANG-BANG PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY 1993)	H
	0250588	Ref	STANDARD BANG-BANG PROPORTIONAL CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY 1993)	I
	0250851	Ref	HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY1993)	H
	0250902	Ref	HYDRAULIC CONTROLS AND WITHOUT NOISE REDUCTION PACKAGE (MACHINES BUILT PRIOR TO MAY1993)	I
70		Ref	Pump Assembly Options:	
70		Ref	Standard Bang-Bang:	
70	3600165	1	Pump - Vickers (Not Field Serviceable) (Recommend using 3600199 as Replacement) (Prior to May 1990)	
70	2900660	1	Shaft Seal Kit - 3600165 Pump	
70	3600172	1	Pump - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown) (May 1990 to January 1993)	
70	3600199	1	Pump - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown) (January 1993 to May 1993)	
70		Ref	Hydraulic Controls:	
70	3600143	1	Pump - Vickers (Not Field Serviceable) (Recommend using 3600202 as Replacement) (Prior to February 1993)	
70	2900660	1	Shaft Seal Kit - 3600145 Pump	
70	3600202	1	Pump - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown) (February 1993 to May 1993)	
71		Ref	Mount, Engine - Rear Options:	
71	0901634	1	Standard Bang-Bang	
71	0901689	1	Hydraulic Controls	
72	2060016	1	Fan	
73	4240096	1	Strap, Fan	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
74	4564623	1	Tube, Exhaust	
75	0080168	1	Adapter, Fan Spacer	
76	4031713	3	Capscrew, Socket Head 6mm x 45mm	
		Ref	FORD ENGINE ASSEMBLIES (VARIABLE PARTS):	
	0253748	Ref	STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)	B
	0253750	Ref	STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)	B
	0255752	Ref	STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)	A
	0255754	Ref	STANDARD BANG-BANG OR PROPORTIONAL CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)	A
	0253752	Ref	HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)	D
	0253754	Ref	HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT MAY 1993 TO JULY 1995)	D
	0255758	Ref	HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)	A
	0255760	Ref	HYDRAULIC CONTROLS AND WITH NOISE REDUCTION PACKAGE (MACHINES BUILT JULY 1995 TO PRESENT)	B
80		Ref	Pump Assembly Options:	
80	3600199	1	Standard Bang-Bang - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown)	
80	3600202	1	Hydraulic Controls - Barnes (See PUMP ASSEMBLY - BARNES for Breakdown)	
81		Ref	Mount, Engine - Rear Options:	
81	0901634	1	Standard Bang-Bang	
81	0901689	1	Hydraulic Controls	
82	2060019	1	Fan Kit	
83	4566039	1	Tube, Exhaust	
83	3100073	1	Manifold, Exhaust (Not Shown)	
84	2680402	1	Shroud, Radiator (July 1995 to Present)	
		Ref	FORD ENGINE INSTALLATION (STANDARD PARTS)	
102	4300034	2	Stud (Welded on Part)	
104	1320020	1	U-Clamp	
107	1320031	3	Clamp, Hose	
109	0080039	1	Elbow	
110	1340020	1	Air Cleaner Assembly	
110	7004214	1	Element, Filter	
111	0340002	2	Band, Air Cleaner	
112	1120161	1	Cap, Air Inlet	
113	0641406	4	Bolt 1/4in-20NC x 3/4in	
114	4761400	4	Lockwasher 1/4in	
115	3311401	4	Nut 1/4in-20NC	
116	1320026	2	Clamp, Muffler	
118	0641810	5	Bolt 1/2in-13NC x 1 1/4in	
119	4751800	5	Flatwasher 1/2in	
120	4761800	5	Lockwasher 1/2in	
121	0630403	2	Bolt, Carriage 7/16in-14NC x 1 1/2in	
122	4751700	2	Flatwasher 7/16in	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
123	3311705	2	Locknut 7/16in-14NC	
124	1060046	1	Cable, Battery (Battery to Ground)	
125	0400003	1	Battery	
126	0400002	1	Holddown, Battery	
126A	2910479	2	Clips, Hold-Down (Not Shown)	
127	0630370	2	Rod, Holddown	
128	1060273	1	Cable, Battery (Battery to Auxiliary Relay)	
129	1060099	1	Cable, Battery (Auxiliary Relay to Auxiliary Pump)	
130	4060727	1	Shield	
131	1380032	2	Clip, Battery Box (Not Shown)	
132	3980003	1	Seat, Battery	
133	3300029	2	Wingnut 3/8in-16NC	
134	2220273	1	Fitting, Reducer	
135	2220805	1	Fitting, 90	
136	1320022	2	Clamp	
137	2720058	9 ft/2.7m	Hose, Fuel Line	
139	4751600	4	Flatwasher 3/8in	
141	4761600	4	Lockwasher 3/8in	
142	0641614	2	Bolt 3/8in-16NC x 1 3/4in	
143	3311601	2	Nut 3/8in-16NC	
144	2720042	3 in/8cm	Hose, Heater	
145	1320032	2	Clamp, Hose	
146	2220296	1	Fitting, 90	
149	3911008	3	Screw, Machine #10-24NC x 1/2in	
150	4761000	3	Lockwasher #10	
151	3311001	3	Nut #10-24NC	
152	4751000	3	Flatwasher #10	
		Ref	FORD ENGINE INSTALLATION (VARIABLE PARTS)	
	0250041	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)	H
	0250589	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)	F
	0250852	Ref	HYDRAULIC CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)	D
	0250903	Ref	HYDRAULIC CONTROLS (WITHOUT NOISE REDUCTION PACKAGE - BUILT PRIOR TO MAY 1993)	F
160		Ref	Muffler Options:	
160	3220067	1	Muffler (Dual Fuel Machines)	
160	3220061	1	Muffler (Standard Gas Built Prior to October 1991)	
161		Ref	Muffler Options (Standard Gas Built October 1991 to May 1993):	
161	3220076	1	Standard Bang-Bang	
161	Not Required	0	Hydraulic Controls	
162	0901387	1	Bracket, Exhaust	
163	3311501	1	Nut 5/16in-18NC	
164	4751500	1	Flatwasher 5/16in	
165		Ref	Air Intake Tube Options:	
165	4564523	1	Tube (Standard Gas)	
165	4843552	1	Tube (Dual Fuel)	
166		Ref	Auxiliary Pump Options:	
166		Ref	Standard Bang-Bang:	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
166	3600050	1	Pump Assembly (When Replacing Complete Unit Recommend using 3600208) (Prior to April 1993)	
166		Ref	Barnes Version Replacement Parts:	
166	7004249	1	Coupling	
166	7004248	1	Motor	
166	7010923	1	Pump	
166		Ref	Stone/Fenner Version Replacement Parts:	
166	7004412	1	Coupling	
166	7000482	1	Motor	
166	7004414	1	Pump	
166	3600208	1	Pump Assembly (April 1993 to May 1993)	
166	7013711	1	Coupling	
166	7013710	1	Motor	
166	7013753	1	Brush Kit	
166	7013712	1	Pump	
166		Ref	Hydraulic Controls:	
166	3600141	1	Pump Assembly (When Replacing or Repairing Unit Recommend Using 3600071) (Used on Standard Gas Prior to January 1991 and Duel Fuel Prior to May 1993)	
166	3600071	1	Pump Assembly (Standard Gas January 1991 to May 1993)	
166	7004249	1	Coupling	
166	7004436	1	Motor with Bracket	
166	7004248	1	Motor	
166	7004247	1	Pump	
166	7012576	1	Bracket	
167		Ref	Cap, Exhaust Rain Options (Standard Gas October 1991 to May 1993 Only):	
167	1120218		Standard Bang-Bang	
167	Not Required	0	Hydraulic Controls	
168	0701010	2	Bolt, Metric 10mm x 20mm	
169	3291001	2	Nut, Metric 10mm	
		Ref	FORD ENGINE INSTALLATION (VARIABLE PARTS)	
	0253749	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)	B
	0253751	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)	A
	0255753	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)	A
	0255757	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)	A
	0253753	Ref	HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)	B
	0253755	Ref	HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT MAY 1993 TO JULY 1995)	A
	0255759	Ref	HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)	A
	0255761	Ref	HYDRAULIC CONTROLS (WITH NOISE REDUCTION PACKAGE - BUILT JULY 1995 TO PRESENT)	A
180	3220084	1	Muffler	
181	0901924	1	Bracket, Muffler	
182	4843552	1	Tube, Air Intake	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
183	1320037	1	Clamp	
184	4565829	1	Tube, Exhaust	
185	3220087	1	Arrestor, Spark	
186		Ref	Auxiliary Pump Assembly Options:	
186		Ref	Standard Bang-Bang:	
186	3600208	1	Auxiliary Pump Assembly	
186	7013711	1	Coupling	
186	7013710	1	Motor	
186	7013753	1	Brush Kit	
186	7013712	1	Pump	
186		Ref	Hydraulic Controls:	
186	3600210	1	Auxiliary Pump Assembly	
186	7013711	1	Coupling	
186	7013710	1	Motor	
186	7013757	1	Brush Kit	
186	7013771	1	Pump	
186	7016701	4	O-Ring	
186	7000754	1	Seal, Shaft	
187	2200213	1	Plug, Pipe (Standard Gas Only)	
	0250324	Ref	PUMP COUPLING INSTALLATION - LOVEJOY OPTION WITH INDUSTRIAL FLYWHEEL (PRIOR TO AUGUST 1992)	-
201	1660169	1	Coupling	
202	0080163	1	Adapter, Pump	
203	0641510	6	Bolt 5/16in-18NC x 1 1/4in	
204	4761500	6	Lockwasher 5/16in	
205	0641610	8	Bolt 3/8in-16NC x 1 1/4in	
206	4761600	8	Lockwasher 3/8in	
		Ref	PUMP COUPLING INSTALLATION - HAYES OPTIONS:	
	0250598	Ref	OPTION WITH INDUSTRIAL FLYWHEEL (PRIOR TO NOVEMBER 1992)	-
	0252808	Ref	STANDARD WITH AUTOMOTIVE FLYWHEEL (NOVEMBER 1992 TO PRESENT)	-
211		Ref	Coupling Options:	
211		Ref	Industrial Flywheel:	
211	1660184	1	Coupling - 13 Teeth	
211	1660234	1	Coupling - 15 Teeth	
211		Ref	Automotive Flywheel:	
211	1660207	1	Coupling - 13 Teeth	
211	7019684	1	Coupling - 15 Teeth	
		Ref	Note: Coupling Internal spines must be lubed with Lithium based grease prior to installation.	
212	0080163	1	Adapter, Pump	
213		Ref	Bolt Options:	
213	0641507	6	Industrial Flywheel - Bolt 5/16in-18NC x 7/8in	
213	0700808	6	Automotive Flywheel - Bolt, Metric 8mm x 16mm	
214		Ref	Lockwasher Options:	
214	4761500	6	Industrial Flywheel - Lockwasher 5/16in	
214	4831900	6	Automotive Flywheel - Lockwasher, Metric 8mm	
215	0641610	8	Bolt 3/8in-16NC x 1 1/4in	
216	4761600	8	Lockwasher 3/8in	
	3020021	AR	Grease, Coupling	
		Ref	ENGINE COMPONENTS	

SECTION 2 - TURNTABLE

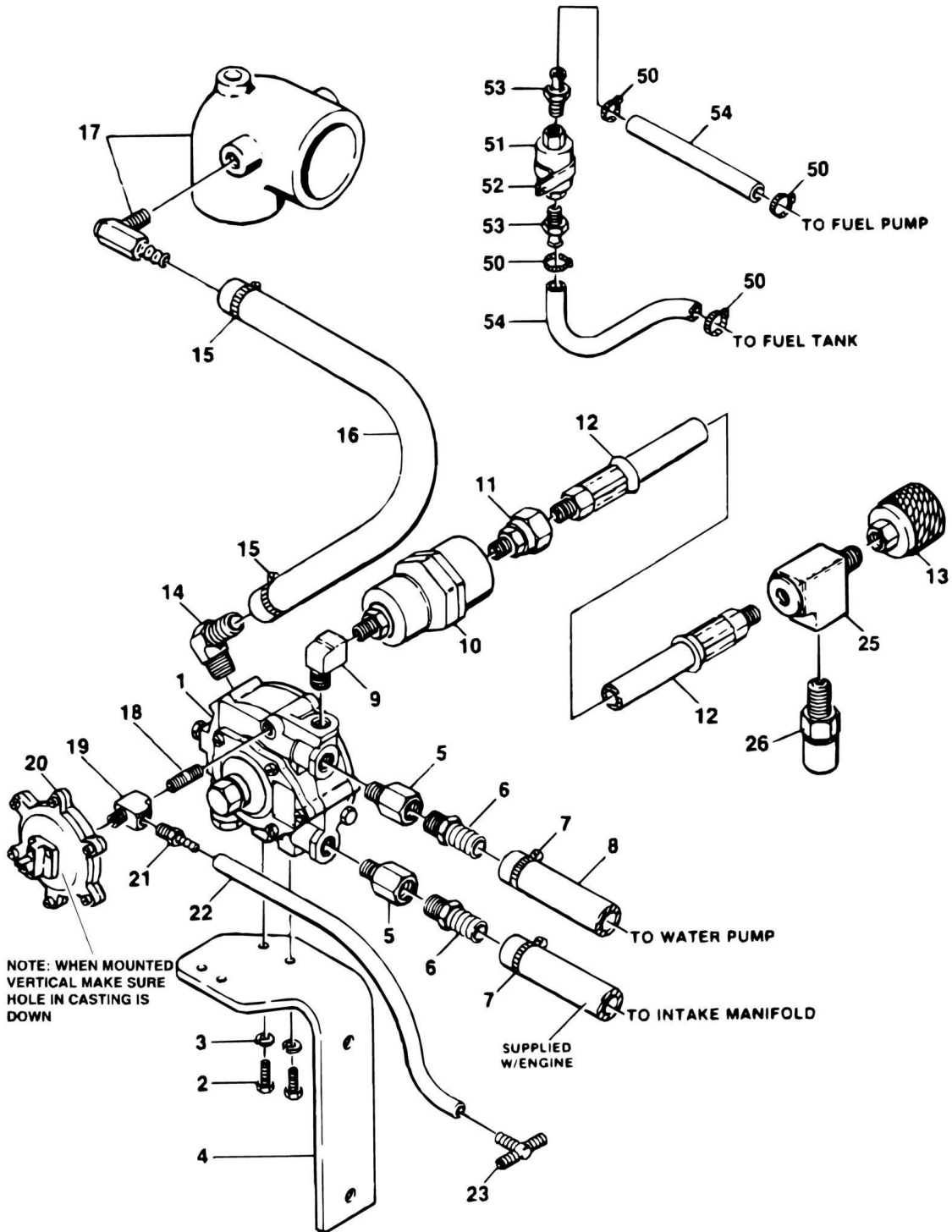
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2000109	Ref	Engine - Ford VSG-411 (Industrial Flywheel) (Prior to November 1992)	
	2000117	Ref	Engine - Ford VSG-411 (Automotive Flywheel) (November 1992 to October 1994)	
	2000129	Ref	Engine - Ford VSG-411 (October 1994 to March 1995)	
	2000130	Ref	Engine - Ford VSG-411 (March 1995 to SN 4331)	
	2000147	Ref	Engine - Ford VSG-411 (SN 43319 to Present)	
301	7000892	1	Carburetor - Ford LSG-411	
301	7019933	1	Rebuild Kit - 7000892 Carburetor (was p/n 7000878)	
301	7012577	1	Fitting, Carburetor Vacuum Line	
301	7012578	1	Carburetor Vacuum Line Assembly	
301	70000163	1	Needle, Spring Loaded	
301	7023471	1	Float Assembly	
301	7024321	1	Gasket, Carburetor (Top)	
301	7027607	1	Gasket, Carburetor (Bottom)	
301	7000646	1	Gasket, Carburetor	
301	7000894	1	Choke, Automatic	
301	7000877	1	Fuel Shut-Off - Has Wire Connection	
301	7000884	1	Fuel Shut-Off - Has Terminal Post	
302		Ref	Alternator Options:	
302	7000893	1	Alternator - Bosch	
302	7012653	1	Alternator - Prestolite	
302	7019670	1	Alternator - Leece-Neville	
302	7019935	1	Pulley, Alternator	
302	7019954	1	Engine Wiring Harness (was p/n 7012564)	
302	7019944	1	Block Assy, 11-Stud Terminal	
302	7014682	1	Tune-Up Kit (Includes Oil and Fuel Filters, Spark Plugs and Wire Set) ("Push On" Spark Plug Wires)	
302	7019998	1	Coil Pack ("Push On" Spark Plug Wires) (Engines p/n 2000109 & p/n 2000147)	
302	7023669	1	Plug Wire Set ("Push On" Spark Plug Wires) (Engine p/n 2000147)	
302	7023668	1	Tune-Up Kit (Includes Oil and Fuel Filters, Spark Plugs and Wire Set) ("Clip On" Spark Plug Wires)	
302	7019987	1	Coil Pack ("Clip On" Spark Plug Wires)	
302	7019989	1	Plug Wire Set ("Clip On" Spark Plug Wires)	
302		Ref	Main Components Kit Options: (Includes 1 each of Carburetor, Fuel and Water Pumps, Alternator, Starter, and Ignition Control)	
302	7014680	1	Kit With Bosch Alternator	
302	7014687	1	Kit With Prestolite Alternator	
302	7014681	1	Engine Kit (Includes Hoses, Gasket St, Thermostat, V-Belt and Coil)	
302	7023670	1	Ignition Control (was p/n 7019665)	
303	7019949	1	Filter, Oil (Case of 12)	
303	3960423	1	Gasket, Thermostat	
303	7019667	1	Cap, Oil Fill	
303	7019917	1	Pump, Oil (Engines p/n 2000130 & p/n 2000147)	
303	7019666	1	Pump, Fuel	
303	7025153	1	Gasket, Fuel Pump	
303	7019939	1	Filter, Fuel	
303	7019668	1	Starter	
303	7016602	1	Flywheel (Engine p/n 2000130)	
303	7022180	1	Gear, Ring (132 Teeth) (Engine p/n 2000130)	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
303	7019919	1	Gear, Ring (Flywheel) (Engines p/n 2000109, p/n 2000117 & p/n 2000147)	
303	7016661	1	Coupling, 15 Tooth Pump (Engine p/n 2000147)	
303	7019936	1	Pulley, Crankshaft	
303	7019937	1	Pulley, Water Pump	
303	7019938	1	Outlet, Water	
303	7019945	1	Hose, Bypass	
303	7019946	1	Flange, Exhaust Pipe	
303	7019947	1	Gasket, Exhaust Pipe Flange	
303	7019948	1	Manifold, Exhaust Outlet	
303	7019951	1	Pump, Water	
303	2120112	1	Separator, Fuel	
303	7019959	1	Dipstick	
303	7019960	1	Tube, Dipstick	
303	70000929	1	Sensor, Crankshaft (Engines p/n 2000130 & p/n 2000147)	
303	7020119	1	Housing, Bell (Engine p/n 2000147)	
303	7020121	1	Plate, Starter (Engine p/n 2000147)	
303	7023676	1	Sensor, Water Temperature (Engine p/n 2000147)	
303	7019941	1	Hose, Radiator (Upper)	
303	7019942	1	Hose, Water Pump/Intake Inlet	
303	7019934	1	Belt, Alternator	
303	7019943	1	Hose, Radiator (Lower)	
303	7020029	1	Gasket Set, Upper	
303	7025149	1	Gasket Set, Lower	
303	7019950	1	Thermostat, 160	
	0250806	Ref	AIR HORN INSTALLATION (STANDARD GAS ONLY)	B
		Ref	Note: See Dual Fuel Installation for Dual Fuel and Straight LP Machines.	
401	0080175	1	Horn, Air	
402	3960388	1	Gasket	
403	4300057	1	Stud	
404	3311405		Locknut 1/4in-20NC	
	0252625	Ref	OPTIONAL ENGINE DISTRESS INSTALLATION	5
503	2180360	1	Fitting, Tee	
504	4360182	1	Switch, Oil Pressure	
505	0080200	1	Fitting, Adapter	
506	3960423	1	Gasket	
507	0700819	2	Bolt, Metric 8mm x 55mm	
508	4831900	2	Lockwasher 8mm	
509	4360157	1	Switch, Water Temperature	
	0252300	Ref	OPTIONAL COLD WEATHER PACKAGE INSTALLATION	B
	2580026	1	Heater, Engine Block	
	2580001	1	Heater, Battery	

SECTION 2 - TURNTABLE

FIGURE 2-18. DUAL FUEL INSTALLATION (FORD)



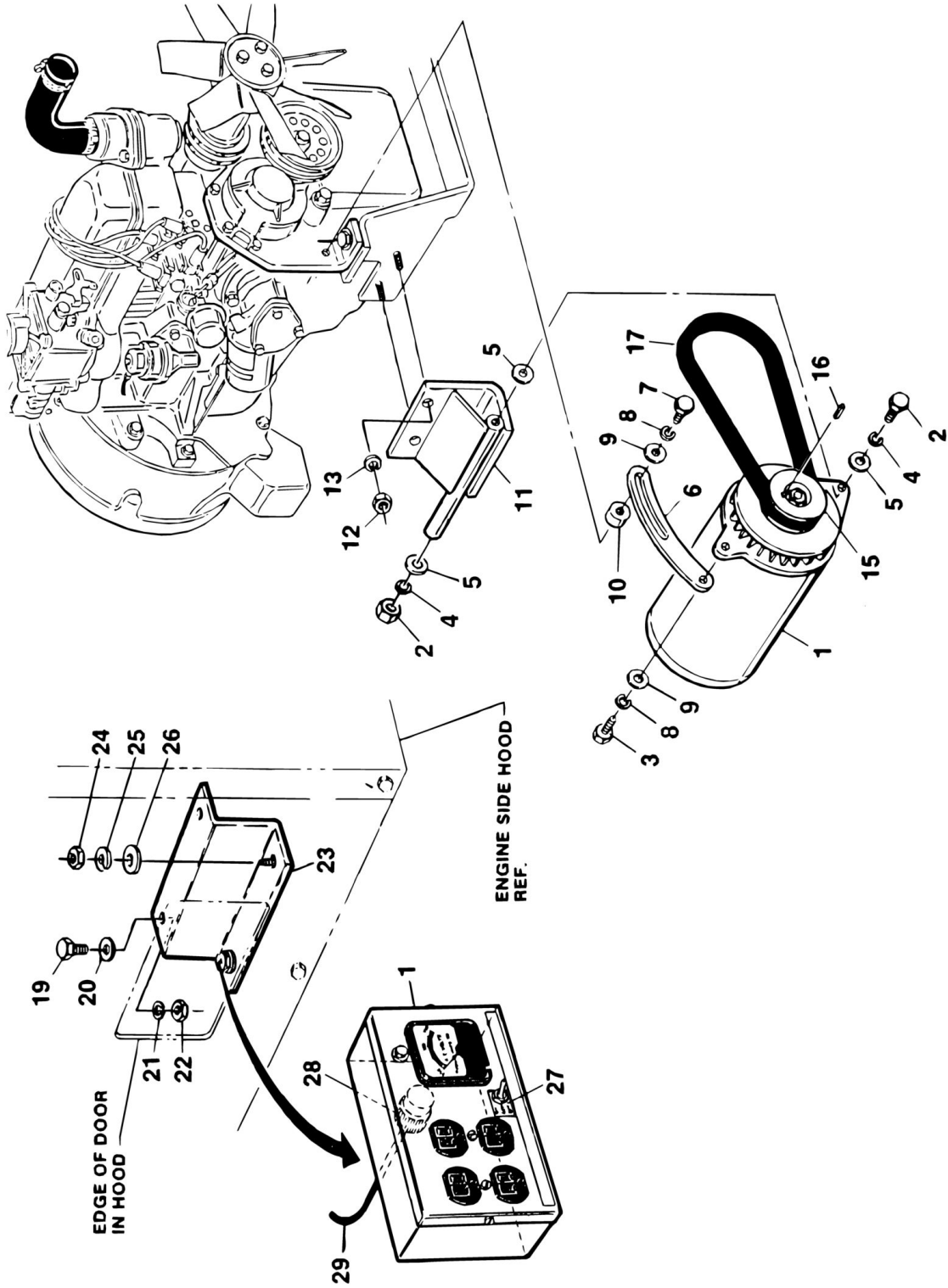
SECTION 2 - TURNTABLE

FIGURE 2-18. DUAL FUEL INSTALLATION (FORD)

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

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

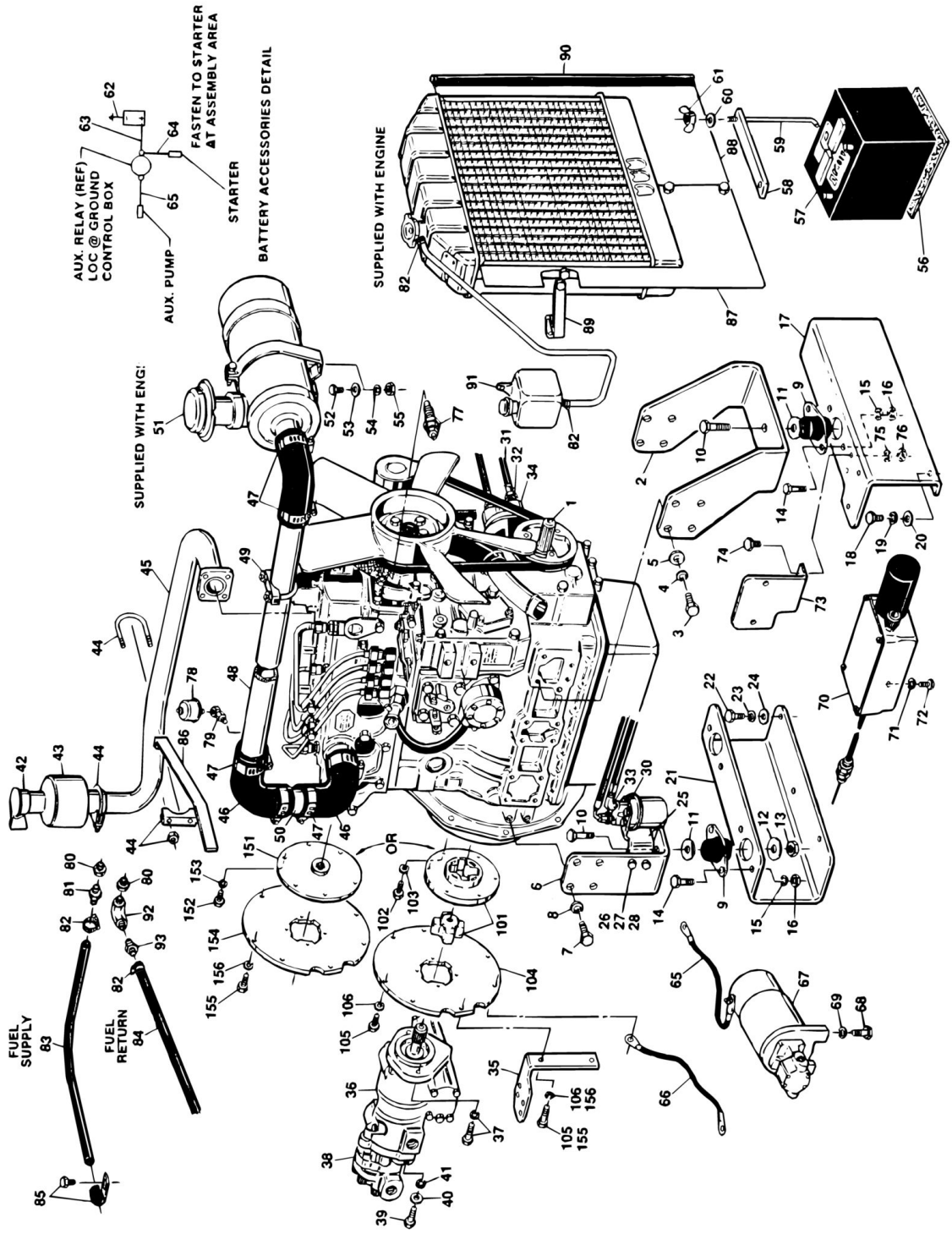
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250668	Ref	110 VOLT GENERATOR INSTALLATION	G
1	2460011	1	Generator Assembly with Control Box	
1	7012558	1	Generator Assembly	
1	7026199	1	Armature with Slip Rings	
1	7012513	4	Holder, Brush	
1	7012514	1	Fan	
1	7020108	4	Brush	
1	7020109	4	Holder, Brush	
1	7020110	1	Bell, Front	
1	7020111	1	Bell, Rear	
1	7020190	2	Bearing	
1	7020193	1	Cord, Power	
1	7003657	1	Control Box Assembly	
		Ref	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.	
1	2420203	1	Voltmeter	
1	3520028	1	Plug, Hole	
1	4360542	1	Breaker, Circuit	
1	2920162	1	Lamp Assembly	
1	7020191	1	Switch, Toggle	
2	0681610	2	Bolt 3/8in-16NC x 1 1/4in (Grade 8)	
3	0641507	1	Bolt 5/16in-18NC x 7/8in	
4	4761600	2	Lockwasher 3/8in	
5	4751600	3	Flatwasher 3/8in	
6	4340569	1	Support	
7	0641511	1	Bolt 5/16in-18NC x 1 3/8in	
8	4761500	2	Lockwasher 5/16in	
9	4751500	2	Flatwasher 5/16in	
10	0961247	1	Bushing	
11		Ref	Mounting Bracket Options:	
11	0901650	1	Bracket (Prior to May 1991)	
11	0901774	1	Bracket (May 1991 to Present)	
12	3311601	2	Nut 3/8in-16NC	
13	4761600	2	Lockwasher 3/8in	
15	3580134	1	Pulley (Attaching Hardware Supplied With Generator)	
16	2860012	1	Key, Woodruff	
17	0480057	1	V-Belt	
19	0721006	2	Bolt #10-24NC x 3/4in	
20	4751000	2	Flatwasher #10	
21	4761100	2	Lockwasher #10	
22	3311001	2	Nut #10-24NC	
23	0901633	1	Bracket, Mounting - Box	
24	3311401	2	Nut 1/4in-20NC	
25	4761400	2	Lockwasher 1/4in	
26	4751400	2	Flatwasher 1/4in	
26	4300068	2	Stud (Welded on Part)	
27	3251476	1	Decal - Generator	
28	4460027	1	Connector	
28	4460023	1	Terminal	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
29	1060012	AR	Cable - 12/4	

SECTION 2 - TURNTABLE

FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION



SECTION 2 - TURNTABLE

FIGURE 2-20. KUBOTA V1200B DIESEL ENGINE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250961	Ref	KUBOTA V1200B DIESEL ENGINE INSTALLATION	F
1	2000113	1	Engine, Kubota V1200-B Diesel	
2	3200312	1	Bracket, Mounting - Engine (Front)	
3	0630394	8	Bolt, Metric 10MM - 1.25 x 25MM	
4	4832000	8	Lockwasher 10MM	
5	4812000	8	Flatwasher 10MM	
6	0901698	2	Bracket, Mounting - Engine (Rear)	
7	0630161	4	Bolt, Metric 12MM - 1.25 x 30MM	
8	4832100	4	Lockwasher 12MM	
9	3200318	3	Mount, Resilient	
10	0641728	1	Bolt 7/16in-14NC x 3 1/2in	
11	4740273	1	Washer, Special	
12	4751700	1	Flatwasher 7/16in	
13	3311705	1	Locknut 7/16in-14NC	
14	0641610	2	Bolt 3/8in-16NC x 1 1/4in	
15	4761600	2	Lockwasher 3/8in	
16	3311601	2	Nut 3/8in-16NC	
17	0901696	1	Support, Engine (Front)	
18	0641810	2	Bolt 1/2in-13NC x 1 1/4in	
19	4761800	2	Lockwasher 1/2in	
20	4751800	2	Flatwasher 1/2in	
21	0901665	1	Support, Engine (Rear)	
22	0641810	3	Bolt 1/2in-13NC x 1 1/4in	
23	4761800	3	Lockwasher 1/2in	
24	4751800	3	Flatwasher 1/2in	
25	0901733	1	Bracket, Remote Engine Oil Filter	
26	0641508	2	Bolt 5/16in-18NC x 1in	
27	4761500	2	Lockwasher 5/16in	
28	3311501	2	Nut 5/16in-18NC	
30	0080188	1	Adapter, Remote Filter Head	
31	2750757	2	Hose	
32	2220346	2	Fitting, Reducer	
33	2220470	2	Fitting, 90	
34	0080187	1	Adapter, Remote	
35	0901664	1	Bracket, Filter	
36	3600164	1	Pump Assembly - Sunstrand (See PUMP ASSEMBLY - SUNSTRAND for Breakdown)	
37	0641812	2	Bolt 1/2in-13NC x 1 1/2in	
37	4761800	2	Lockwasher 1/2in	
38		Ref	Pump Assembly Options:	
38	3600172	1	Pump (Prior to January 1993) (See PUMP ASSEMBLY - BARNES for Breakdown)	
38	3600199	1	Pump (January 1993 to Present) (See PUMP ASSEMBLY - BARNES for Breakdown)	
39	0641610	2	Bolt 3/8in-16NC x 1 1/8in	
40	4761600	2	Lockwasher 3/8in	
41	4751600	2	Flatwasher 3/8in	
42	1120218	1	Raincap	
43	3220076	1	Muffler	
44	1320020	2	Clamp, Muffler	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45	4843691	1	Pipe, Exhaust	
45	4100025	2.5 ft	Sleeve, Exhaust	
46	2720084	2	Elbow, Rubber	
47	1320031	5	Clamp	
48	4564685	1	Tube, Air Intake	
49	1320026	1	Clamp, Muffler	
50	4564696	1	Tube	
51		Ref	Air Cleaner Assembly (Supplied with Engine - Refer to Engine Dealer for Parts)	
51	3538254	1	Spacer (Not Shown - Located Under Bracket)	
52	0641408	2	Bolt 1/4in-20NC x 1in	
53	4711400	2	Flatwasher 1/4in Narrow	
54	4761400	2	Lockwasher 1/4in	
55	3311401	2	Nut 1/4in-20NC	
56	3980007	1	Seat, Battery	
57	0400075	1	Battery	
58	0361810	1	Hold-Down, Battery	
59	0630370	2	Rod, Hold-Down	
60	4751600	2	Flatwasher 3/8in	
61	3300029	2	Wingnut 3/8in-16NC	
61	1380032	2	Clip, Battery (Welded on Part - Not Shown)	
62	1060172	1	Cable, Battery (Negative to Ground)	
63	1060273	1	Cable, Battery (Positive to Aux Relay)	
64	1060149	1	Cable, Battery (Aux Relay to Starter)	
65	1060099	1	Cable, Battery (Aux Relay to Aux Power)	
66	1060093	1	Cable, Battery (Engine to Ground)	
67		Ref	Auxiliary Pump Options:	
67	3600050	1	Pump Assembly (Prior to April 1993)	
67		Ref	Replacement Parts:	
67	7004412	1	Coupling (Stone/Fenner Industries Version)	
67	7004249	1	Coupling (John S. Barnes Version)	
67	7000482	1	Motor (Stone/Fenner Industries Version)	
67	7004248	1	Motor (John S. Barnes Version)	
67	7004414	1	Pump (Stone/Fenner Industries Version)	
67	7010923	1	Pump (John S. Barnes Version)	
67	3600208	1	Pump Assembly (April 1993 to Present)	
67		Ref	Replacement Parts:	
67	7013711	1	Coupling	
67	7013710	1	Motor	
67	7013753	1	Brush Kit	
67	7013712	1	Pump	
68	0641614	2	Bolt 3/8in-16NC x 1 3/4in	
69	4761600	2	Lockwasher 3/8in	
70	0060023	1	Actuator, Adeco	
70	7008804	1	Bellows	
70	7008829	1	PC Board	
70	7008821	1	Motor	
70	7008828	1	Cable	
70	3740074	1	Engine Shutdown Kit (Not Shown)	
70	0901686	1	Bracket, Governor Cable (Not Shown)	
71	0641408	2	Bolt 1/4in-20NC x 1in	
72	4761400	2	Lockwasher 1/4in	

SECTION 2 - TURNTABLE

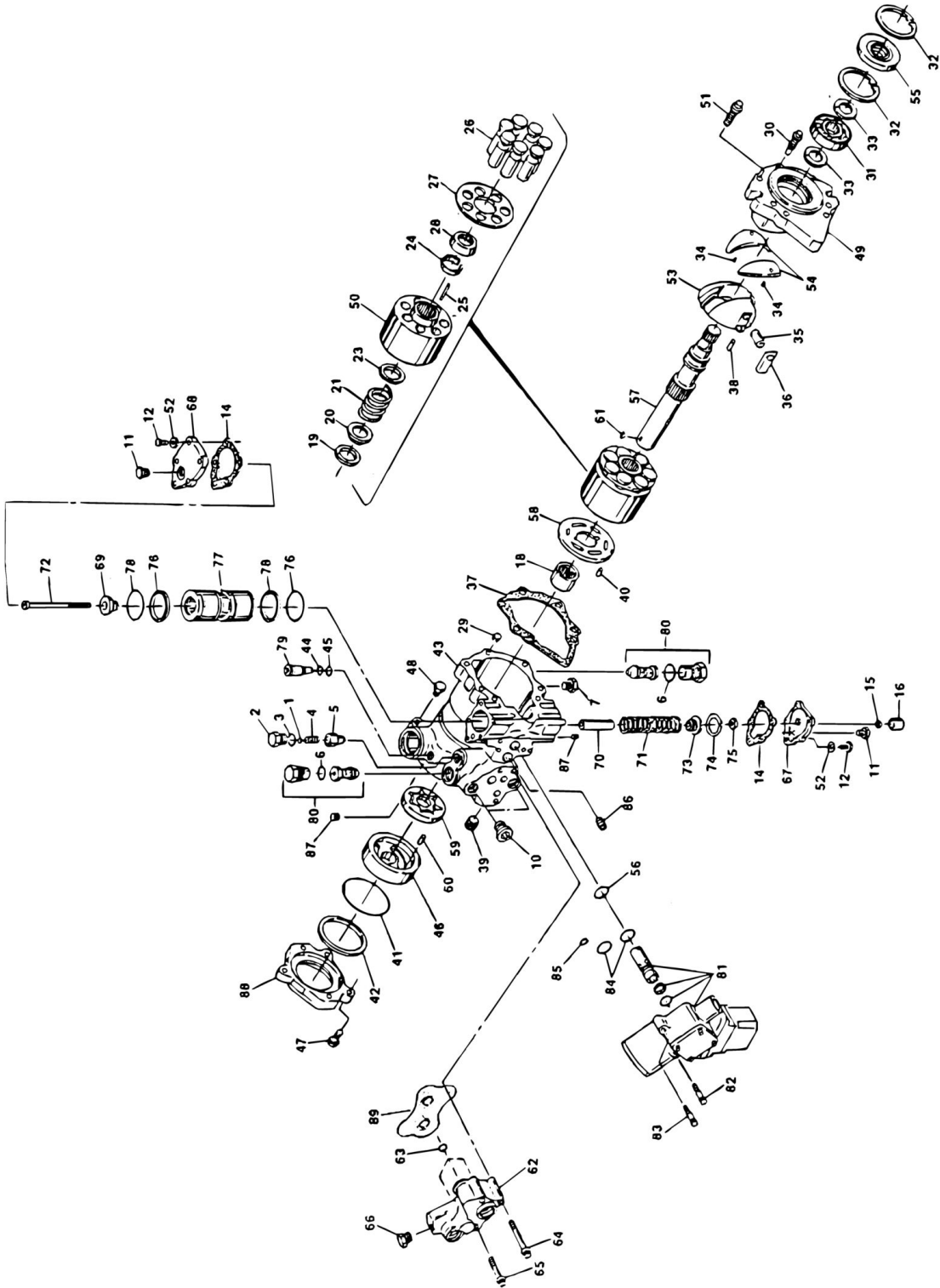
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
73	0901699	1	Bracket (Prior to March 1992 Only)	
74	0641408	2	Bolt 1/4in-20NC x 1in	
75	4761400	2	Lockwasher 1/4in	
76	3311401	2	Nut 1/4in-20NC	
77	2420024	1	Sender, Water Temperature	
78	2420033	1	Sender, Oil Pressure	
79	2180749	1	Fitting	
79	2180730	1	Fitting	
80	2220273	2	Fitting, Reducer	
81	2220805	1	Fitting, Barbed	
82	1320022	6	Clamp	
83	2720058	11.5 ft	Hose (Fuel Supply)	
84	2720271	10 ft	Hose (Fuel Return)	
85	1320041	2	Clamp	
85	3311401	1	Nut 1/4in-20NC	
85	4761400	1	Lockwasher 1/4in	
85	4300032	1	Stud (Welded on Part)	
86	0901702	1	Bracket, Support - Exhaust	
87	4060742	1	Shield, Radiator - RH Side	
88	4060743	1	Shield, Radiator - LH Side	
89	0901674	1	Support, Radiator	
90	3960389	22 in	Seal (Attach to Radiator Shield)	
91	4400327	1	Tank, Recovery (June 1994 to Present Only)	
92	2220063	1	Fitting, 90	
93	2180536	1	Fitting, Straight	
	0250324	Ref	COUPLING INSTALLATION - LOVEJOY OPTION	
101		Ref	Coupling Options:	
101	1660169	1	Lovejoy Coupling - 13 Teeth	
101	1660173	1	Disc, Coupling	
101	1660172	1	Hub, Coupling	
101	1660234	1	Hayes Coupling - 15 Teeth	
102	0641510	6	Bolt 5/16in-18NC x 1 1/4in	
103	4761500	6	Lockwasher 5/16in	
104	0080163	1	Adapter, Pump Mounting	
105	0641610	8	Bolt 3/8in-16NC x 1 1/4in	
106	4761600	8	Lockwasher 3/8in	
	0250598	Ref	COUPLING INSTALLATION - HAYES OPTION	-
151		Ref	Coupling Options:	
151	1660184	1	Coupling - 13 Teeth	
151	1660234	1	Coupling - 15 Teeth	
152	0641507	6	Bolt 5/16in-18NC x 7/8in	
153	4761500	6	Lockwasher 5/16in	
154	0080163	1	Adapter, Pump Mounting	
155	0641607	8	Bolt 3/8in-16NC x 7/8in	
156	4761600	8	Lockwasher 3/8in	
	0232302	Ref	COLD WEATHER PACKAGE INSTALLATION	B
	2580001	1	Heater, Battery	
	2580029	1	Heater, Engine Block	
	2000113	Ref	ENGINE COMPONENTS	
	7026200	1	Alternator	
	70000600	1	Belt, Fan	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	70000617	1	Filter, Oil	
	70000618	1	Filter, Fuel	
	7000898	1	Fuel Filter Kit	
	7016200	1	Filter, Air	
	7017903	1	Plug, Drain	
	7017904	1	Seal, Drain Plug	
	7023113		Thermostat Assembly	

SECTION 2 - TURNTABLE

FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND



SECTION 2 - TURNTABLE

FIGURE 2-21. PUMP ASSEMBLY - SUNSTRAND

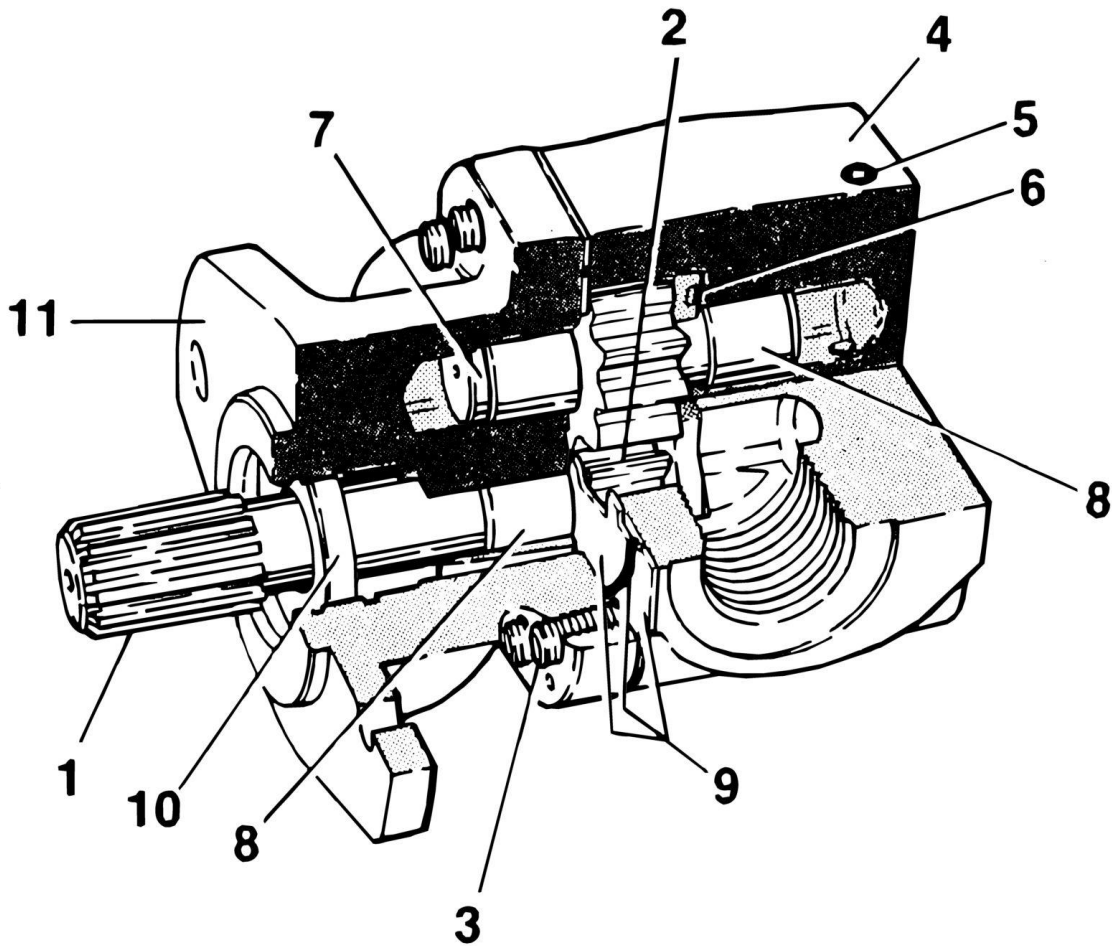
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	PISTON PUMP ASSEMBLIES	
	3600164	Ref	13 Tooth Pump Spline (Prior to SN 29318)	A
	3600260	Ref	15 Tooth Pump Spline (SN 29318 through 69000)	-
1	7007413	1	Shim Kit	
2	7007414	1	Plug	
3	Kit	1	O-Ring	
4	7007416	1	Spring, Relief Valve	
5	7007417	1	Valve, Relief	
6	Kit	2	O-Ring	
7	7007419	2	Plug	
10	7007420	2	Plug	
11	7007208	2	Plug	
12	7007421	10	Screw	
14	Kit	2	Gasket, Servo Cover	
15	7007423	1	Nut, Special	
16	7007424	1	Cover, Adjustment	
18	7007425	1	Bearing, Needle	
19	Kit	1	Ring, Retaining	
20	Kit	1	Washer	
21	Kit	1	Spring	
23	Kit	1	Washer	
24	Kit	1	Retainer	
25	Kit	3	Pin, Slipper Holddown	
26	Kit	7	Piston Assembly	
27	Kit	1	Retainer, Slipper	
28	Kit	1	Guide, Retainer	
29	7007435	1	Pin, Spring	
30	7007436	1	Screw, 12 Point Head	
31	7007437	1	Bearing, Ball	
32	7007438	2	Ring, Retainer	
33	7007439	2	Ring	
34	7007440	2	Pin, Spring	
35	7007441	1	Handle, Pin	
36	7007442	1	Sleeve, Bearing	
37	Kit	1	Gasket, Front Cover	
38	7007444	1	Pin	
39	7007445	1	Plug, Expansion	
40	Kit	1	Pin	
41	Kit	1	O-Ring	
42	Kit	1	Ring, Load Temper	
43	7007449	1	Housing, Pump	
44	Kit	1	Ring, Back-up	
45	Kit	1	O-Ring	
46	Kit	1	Cover, Gerotor	
47	7007453	3	Bolt, Hex	
48	7007208	1	Plug	
49	7007454	1	Cover, Front	
50	Kit	1	Block, Cylinder	
51	7007456	6	Screw	
52	7001438	10	Washer	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
53	Kit	1	Swashplate	
54	7007458	1	Journal, Bearing	
55	Kit	1	Seal, Lip	
56	Kit	1	O-Ring	
57		Ref	Shaft, Main Pump Options:	
57	7007461	1	13 Tooth Spline (Prior to SN 29318)	
57	7010121	1	15 Tooth Spline (SN 29318 through 69000)	
58	7021214	1	Plate, Valve	
59	7007463	1	Gerotor Assembly	
60	Kit	1	Pin	
61	Kit	1	Key, Woodruff	
62	7007466	1	Adaptor, Remote Filtration (Without By-Pass)	
63	Kit	3	O-Ring	
64	7007468	2	Screw	
65	7007469	2	Screw	
66	7007470	1	Plug	
67	7007471	1	Cover, Servo (With Adjuster)	
67	7007490	2	Stop, Servo (Not Shown)	
67	7007491	2	Nut, Special (Not Shown)	
67	7007492	2	Ring, External (Not Shown)	
68	7007482	1	Cover, Servo (Without Adjuster)	
69	7007483	1	Guide, Spring	
70	7007484	1	Stop, Servo	
71	7007485	1	Spring	
72	7007486	1	Screw	
73	7007487	1	Guide, Spring	
74	7007488	1	Ring, Retaining	
75	7007499	1	Locknut	
76	Kit	2	Ring, Piston	
77	7007494	1	Piston, Servo	
78	Kit	2	O-Ring	
79	7007472	1	Valve, Bypass	
80	7010122	2	Valve, Pressure Relief (Includes Item 6) (was p/n 7007473)	
81	7007474	1	Control, Dual Oil-Filled	
81	7007496	1	Coil Assembly (Pilot)	
81	7007497	1	Plug (Pump)	
81	7007498	1	Plug (Valve Harness)	
82	7007478	2	Screw	
83	7001498	2	Screw	
84	Kit	2	O-Ring	
85	Kit	1	O-Ring	
86	7007475	1	Plug, Orifice/Screen (.156)	
87	7007477	2	Plug, Orifice (.37)	
88	7007476	1	Adapter, Auxiliary Pump	
89	7010120	1	Spacer/Gasket	
	2900752	1	Seal Kit - Complete (Includes Items 3, 6, 14, 37, 41, 42, 44, 45, 55, 56, 63, 76, 78, 84 & 85)	
	7007412	1	Seal Kit - Servo Piston (Includes Items 76 & 78)	
	2900826	1	Charge Pump Kit (Includes Items 41, 42, 46, 59, 60 & 61)	
	2900827	1	Cylinder Block Kit (Includes Items 19-28, 40-50, 53, 55 & 58)	

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)



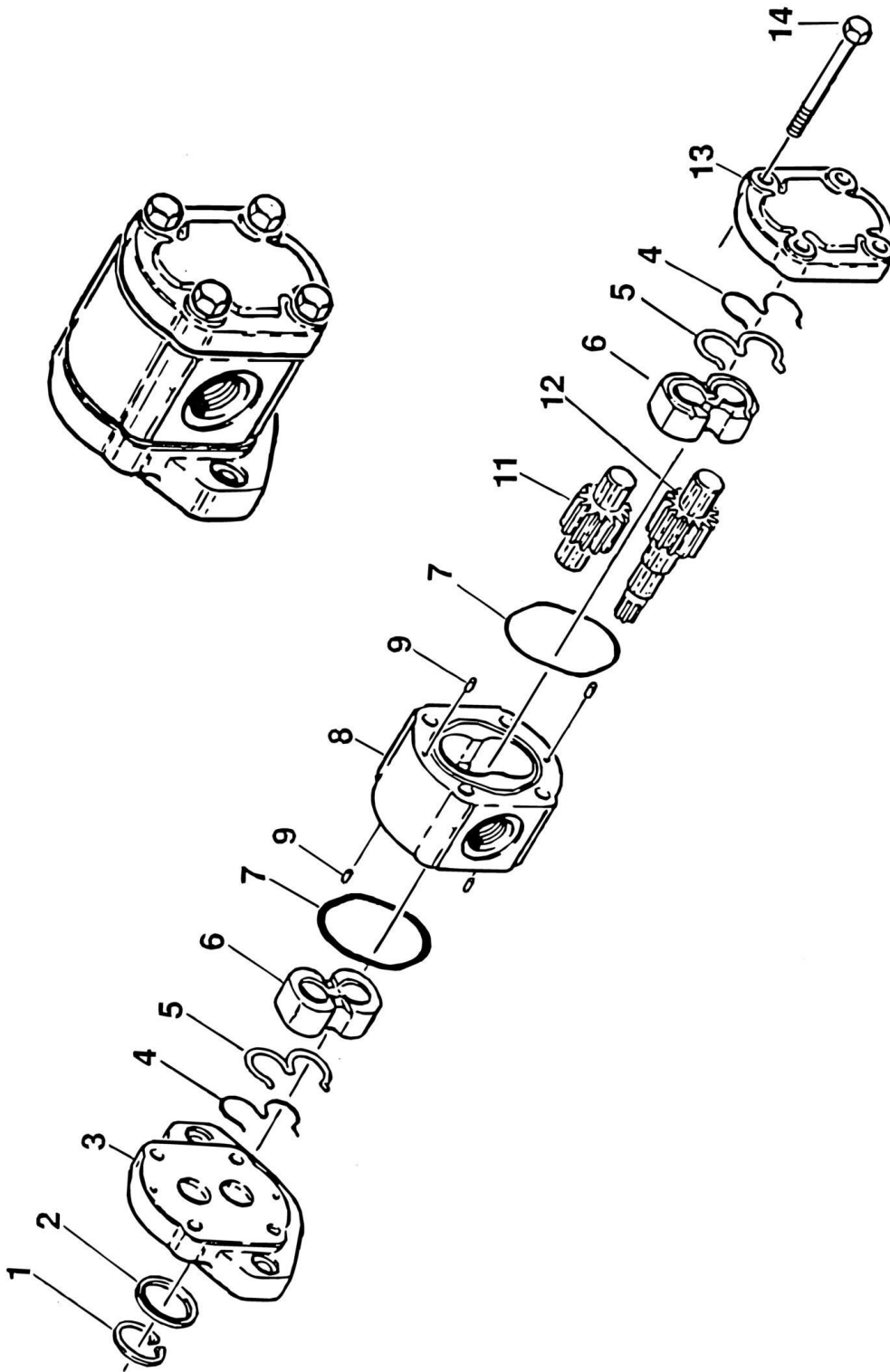
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



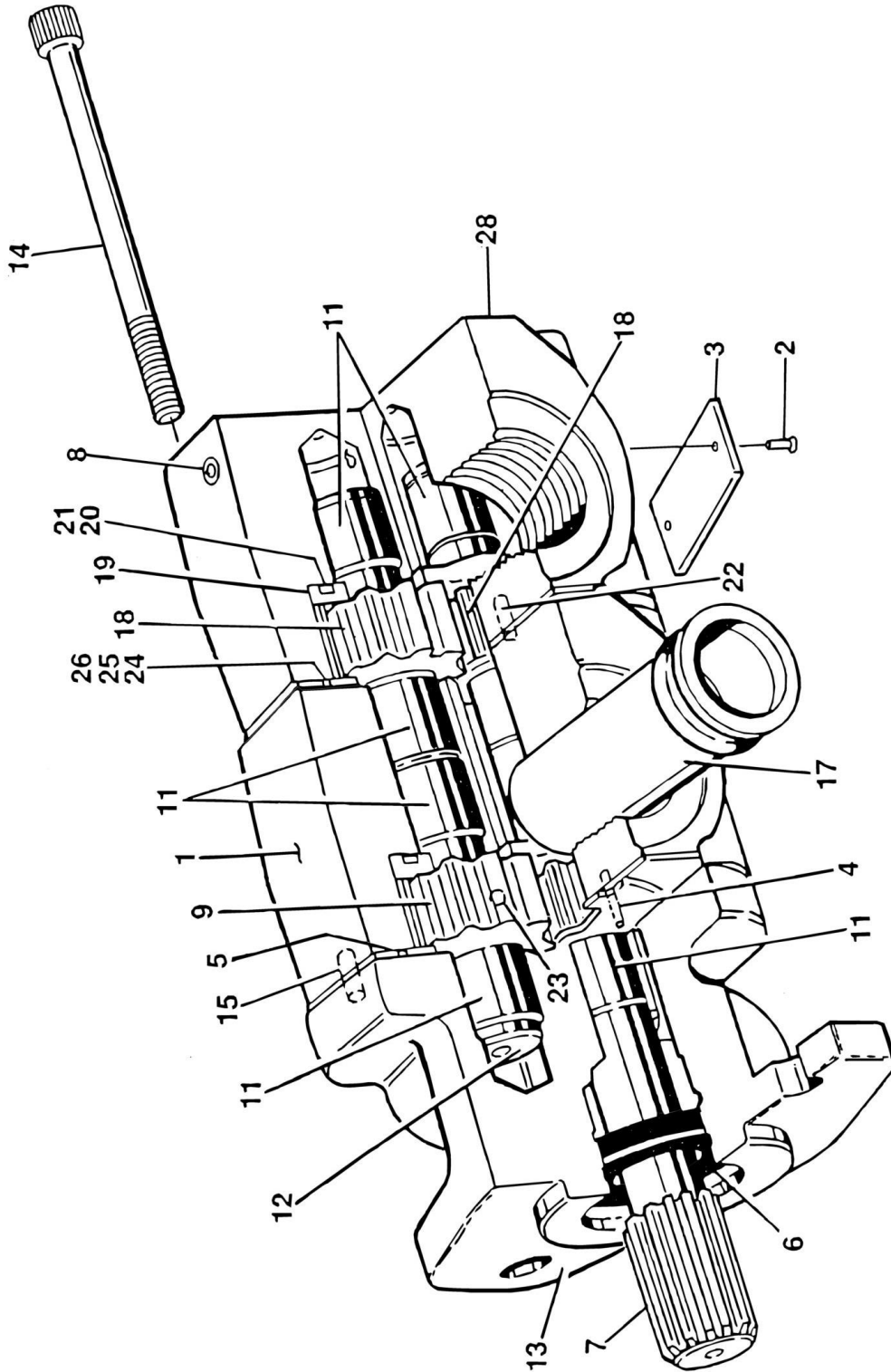
SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	3600199	Ref	PUMP ASSEMBLY - BARNES	-
1	7010955	1	Ring, Retaining	
2	Kit	1	Seal, Shaft	
3	7010956	1	Flange, Mounting	
4	Kit	2	Ring, Backup	
5	Kit	2	E-Seal	
6	7010957	2	Bearing	
7	Kit	2	O-Ring	
8	7010958	1	Housing	
9	7010959	4	Pin, Dowel	
11	7010954	1	Gear, Idler	
12	7010978	1	Gear, Drive	
13	7010960	1	Cover, End	
14	7010961	4	Bolt	
	7010953	1	Seal Kit (Includes Items 2, 4, 5 & 7)	

SECTION 2 - TURNTABLE

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



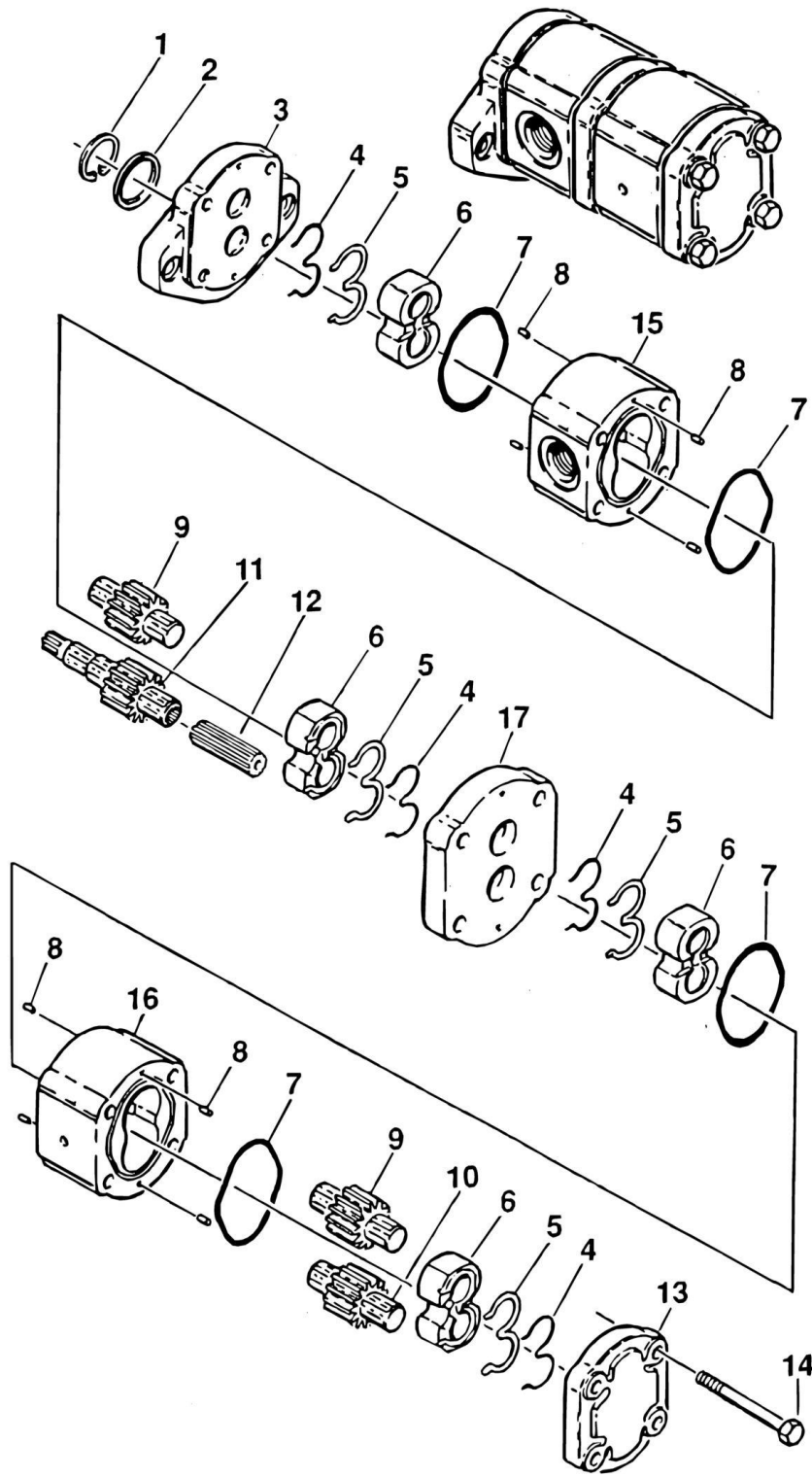
SECTION 2 - TURNTABLE

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

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

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)



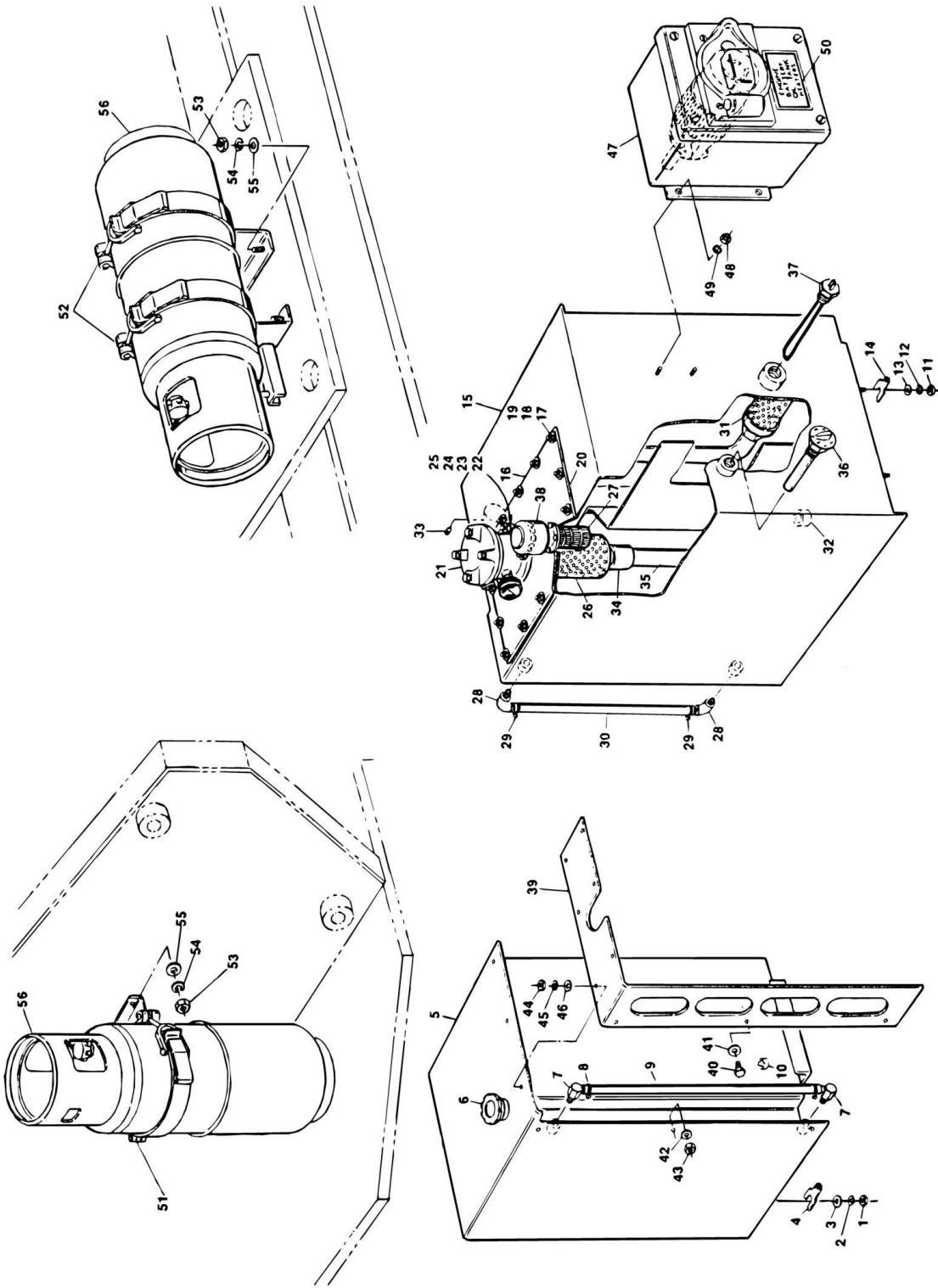
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

FIGURE 2-26. TANKS INSTALLATION



SECTION 2 - TURNTABLE

FIGURE 2-26. TANKS INSTALLATION

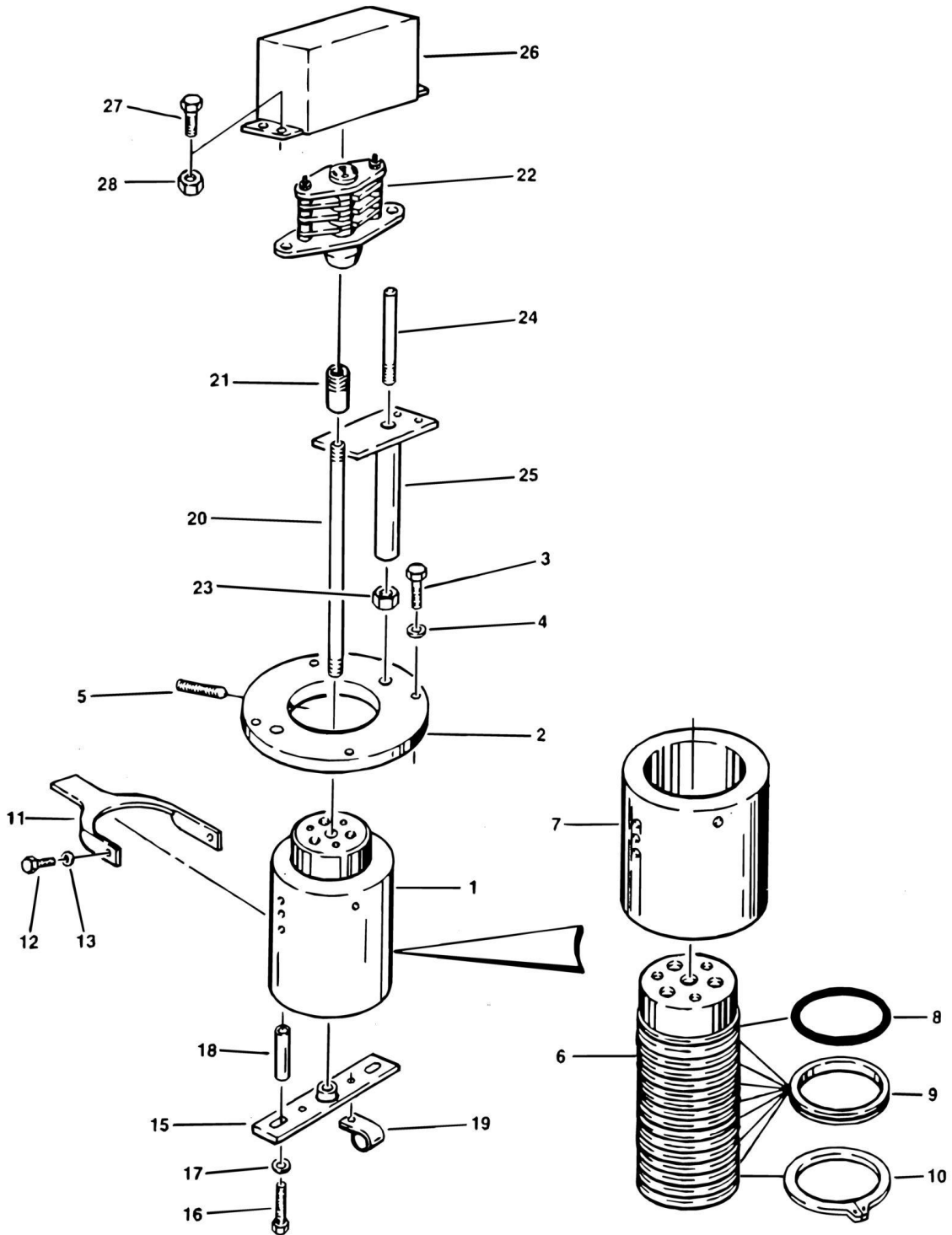
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	TANKS INSTALLATION	
	0239417	Ref	FUEL AND HYDRAULIC TANKS INSTALLATION (STANDARD)	C
	0250231	Ref	FUEL AND HYDRAULIC TANKS INSTALLATION (WITH HEATERS)	B
	0253822	Ref	HYDRAULIC TANK INSTALLATION (LP ONLY MACHINES)	-
1	3311501	4	Nut 5/16in-18NC	
2	4761500	4	Lockwasher 5/16in	
3	4751500	4	Flatwasher 5/16in	
3	4300073	4	Stud (Welded on Part)	
4	4070410	AR	Shim (1/16in)	
4	4070411	AR	Shim (1/8in)	
4	4070412	AR	Shim (3/16in)	
	4400264	1	Fuel Tank Assembly	2
5	4400263	1	Fuel Tank Weldment	
6	1120314	1	Cap	
7	2180467	2	Fitting, 90	
7	0100020	AR	Sealant	
8	1320022	2	Clamp	
9	4562516	26 in	Tube, Sight	
10	2200222	1	Plug, Pipe - 1/4in	
11	3311501	4	Nut 5/16in-18NC	
12	4761500	4	Lockwasher 5/16in	
13	4751500	4	Flatwasher 5/16in	
13	0641516	4	Bolt 5/16in-18NC x 2in	
14	4070410	AR	Shim (1/16in)	
14	4070411	AR	Shim (1/8in)	
14	4070412	AR	Shim (3/16in)	
	4400266	1	Hydraulic Tank Assembly (Standard)	C
	4400291	1	Hydraulic Tank Assembly (With Heater)	B
15	4400265	1	Hydraulic Tank Weldment (Standard)	
15	4400290	1	Hydraulic Tank Weldment (With Heater)	
16	1670468	1	Lid	
17	3311401	14	Nut 1/4in-20NC	
18	4761400	14	Lockwasher 1/4in	A
19	4751400	14	Flatwasher 1/4in	
20	3960371	1	Gasket	-
21	2120103	1	Filter, Return (Includes Item 26)	
21	7004244	1	Gauge, Sight	
21	7012559	1	Gasket (Located Between Filter and Tank)	
21	7016333	1	O-Ring (Located Under Cap)	
22	0641612	4	Bolt 3/8in-16NC x 1 1/2in	
23	4761600	4	Lockwasher 3/8in	
24	4740322	4	Washer, Sealing	
25	3311601	4	Nut 3/8in-16NC	
26	2120107	1	Element (Part of Item 26)	
27	1340045	1	Filler, Strainer	
27	4740338	6	Washer, Sealing	
28	2180467	2	Fitting, 90	
28	0100020	AR	Sealant	
29	1320022	2	Clamp	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
30	4562516	26 in	Tube, Sight	
31	2120104	1	Filter, Suction	
31	0100020	AR	Sealant	
32	3520022	1	Plug - 3/4in	
32	0100020	AR	Sealant	
33	2180527	1	Plug - 1/16in	
33	0100020	AR	Sealant	
34	2200268	1	Fitting, Coupling	
34	0100020	AR	Sealant	
35	2180711	1	Pipe, Return	
36	1600043	1	Controller, Thermostat (With Heater Only)	
37	2580018	1	Heater, Immersion (With Heater Only)	
38	1340046	1	Breather	
39	4060695	1	Filler/Shield (Standard)	
39	4060849	1	Filler/Shield (LPG Only)	
40	0721005	6	Screw, Machine #10-24NC x 5/8in	
41	4751000	12	Flatwasher #10	
42	4761000	6	Lockwasher #10	
43	3311001	6	Nut #10-24NC	
44	3311401	6	Nut 1/4in-20NC	
45	4761400	6	Lockwasher 1/4in	
46	4751400	6	Flatwasher 1/4in	
	0252300	Ref	COLD WEATHER PACKAGE INSTALLATION - FORD	B
	0252301	Ref	COLD WEATHER PACKAGE INSTALLATION - DEUTZ	B
	0252302	Ref	COLD WEATHER PACKAGE INSTALLATION - KUBOTA	B
47	0231756	1	JUNCTION BOX ASSEMBLY	C
47	1670199	1	Cover	
47	4460049	3	Connector, Strain Relief	
48	3311401	4	Nut 1/4in-20NC	
49	4761400	4	Lockwasher 1/4in	
50	3251837	1	Decal - Battery and Oil Tank Heaters	
50	3251243	1	Decal - 120V/60HZ	
	0250149	Ref	LP TANK AND BRACKETS INSTALLATION	D
51	1320126	1	Bracket	
51	1320127	1	Clamp, Latch	
52	1320023	1 set	Bracket	
53	3311601	4	Nut 3/8in-16NC	
54	4761600	4	Lockwasher 3/8in	
55	4751600	4	Flatwasher 3/8in	
56	4400164	2	Tank, LP (20 Lb)	
56	4400040	2	Tank, LP (33.5 Lb)	
56	4400275	2	Tank, LP (43.5 Lb)	
58	4751800	6	Flatwasher 1/2in (Not Shown - Located between clamp and turntable)	

SECTION 2 - TURNTABLE

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



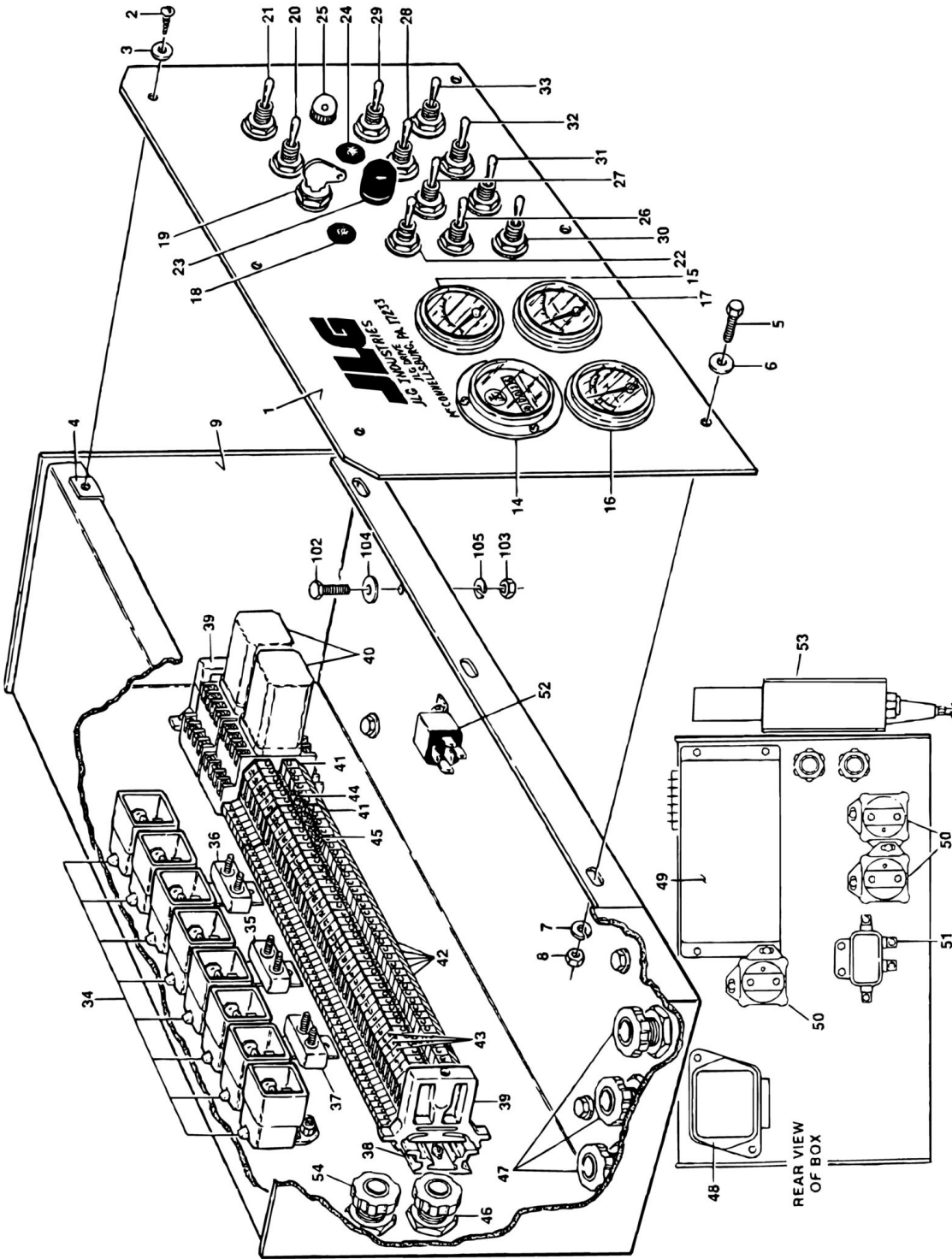
SECTION 2 - TURNTABLE

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0238615	Ref	ROTARY OIL COUPLING INSTALLATION (2WS)	A
	0250611	Ref	ROTARY OIL COUPLING INSTALLATION (4WS)	C
1	1660160	1	Oil Coupling Assembly (2WS) (Includes Items 6-10)	B
1	1660185	1	Oil Coupling Assembly (4WS) (Includes Items 6-10)	B
2	1440154	1	Collar	
3	0641512	4	Bolt 5/16in-18NC x 1 1/2in	
4	4761500	4	Lockwasher 5/16in	
5	3951820	2	Setscrew, Socket 1/2in-13NC x 2 1/2in	
5	0100011	AR	Loctite #242	
6	0620058	1	Body, Swivel (2WS)	
6	0620106	1	Body, Swivel (4WS)	
7	2760091	1	Housing, Swivel	
8	Kit	1	O-Ring	
9	Kit	7	Seal	
10	3760004	1	Ring, Retaining	
10		Ref	Seal Kit Options:	
10	2901146	1	1660160 & 1660185 Couplings (Includes items 8 & 9)	
10	1660213EX	1	1660213 Couplings (was p/n 7013175)	
		Ref	Note: Due to complexity of repair, seal kit no longer available. Use rebuilt unit as replacement.	
11	3530403	1	Fork, Retaining	
12	0641807	2	Bolt 1/2in-13NC x 7/8in	
13	4761800	2	Lockwasher 1/2in	
13	0100019	AR	Loctite #271	
	0251561	Ref	COLLECTOR RING ASSEMBLY (4WS ONLY) (PRIOR TO JULY 1991)	B
	0252059	Ref	COLLECTOR RING ASSEMBLY (4WS ONLY) (JULY 1991 TO PRESENT)	A
15	4843822	1	Bracket Weldment	
16	0641418	2	Bolt 1/4in-20NC x 2 1/4in	
17	4761400	2	Lockwasher 1/4in	
17	4751400	2	Flatwasher 1/4in	
18	0960224	2	Bushing	
19	1320040	1	Clamp	
19	3911012	1	Screw, Machine #10-24NC x 3/4in	
19	4751000	1	Flatwasher #10	
19	4761000	1	Lockwasher #10	
19	3311001	1	Nut #10-24NC	
20	2180763	1	Pipe	
21	0961531	1	Bushing, Collector Ring	
22	3760053	1	Collector Ring Assembly	
23	3311801	2	Nut 1/2in-13NC	
24	3420290	2	Pin, Drive	
25	0231047	2	Guide, Drive (Prior to July 1991)	
25	4844033	2	Guide, Drive (July 1991 to Present)	
26	1670594	1	Cover	
27	0721004	4	Screw, Round Head #10-24NC x 1/2in	
28	3311001	4	Nut #10-24NC	

SECTION 2 - TURNTABLE

FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS



SECTION 2 - TURNTABLE

FIGURE 2-28. GROUND CONTROL BOX INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281180	Ref	GROUND CONTROL BOX ASSEMBLIES	X
	0860613	Ref	DEUTZ WITH STANDARD BANG-BANG CONTROLS	12
	0860751	Ref	DEUTZ WITH PROPORTIONAL CONTROLS	4
	0860663	Ref	DEUTZ WITH HYDRAULIC CONTROLS	7
	0860612	Ref	FORD WITH STANDARD BANG-BANG CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)	1
	0860959	Ref	FORD WITH STANDARD BANG-BANG CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	2
	0860780	Ref	FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (PRIOR TO FEBRUARY 1993)	A
	0860843	Ref	FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (FEBRUARY 1993 TO SEPTEMBER 1994)	B
	0860957	Ref	FORD WITH PROPORTIONAL CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	2
	0860652	Ref	FORD WITH HYDRAULIC CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)	F
	0860958	Ref	FORD WITH HYDRAULIC CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	2
	0860661	Ref	KUBOTA WITH STANDARD BANG-BANG CONTROLS	F
	0860656	Ref	KUBOTA WITH PROPORTIONAL CONTROLS	F
1	3251895		Lid	
1	4420037		Strip, Rubber (Not Shown)	
2	0750806		Screw, Self-Tapping #8 x 3/4in	
3	4740120		Washer, Fiber	
4	3300177		Nut, Tinnerman	
5	3911412		Screw, Round Head 1/4in-20NC x 3/4in	
6	4751400		Flatwasher 1/4in	
7	4761400		Lockwasher 1/4in	
8	3311401		Nut 1/4in-20NC	
9	0860576		Box	
14	2420009		Hourmeter	
15	2420129		Voltmeter (Ford)	
15	2420091		Voltmeter (Deutz and Kubota)	
16	2420128		Gage, Oil Pressure (Ford)	
16	2420111		Gage, Oil Pressure (Deutz)	
16	2420035		Gage, Oil Pressure (Kubota)	
17	2420127		Gage, Water Temperature (Ford)	
17	2420019		Gage, Water Temperature (Kubota)	
17	2420125		Gage, Water Temperature (Deutz)	
18	3520026		Plug, Hole (Ford)	
18	4360212		Breaker, Circuit (Deutz and Kubota)	
19	4360003	1	Switch, Key (Master Switch)	
19	2860002	1	Key	
20	4360073	1	Switch, Toggle (Select)	
20	3790012	1	O-Ring	
21	3520028	1	Plug, Hole	
21	4360201	1	Switch, Toggle (Dual Fuel)	
22	4360199	1	Switch, Toggle (Ignition)	
22	4360141	1	Guard, Switch (Not Shown)	
22	3790012	1	O-Ring	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
23	4360274	1	Switch, Push Button (Start)	
23	3790015	1	O-Ring	
24	3520028	1	Plug, Hole	
24	4360199	1	Switch, Toggle (Choke/Glow Plugs) (Kubota)	
24	3790012	1	O-Ring (Kubota)	
25	3520026	1	Plug, Hole	
26	4360202	1	Switch, Toggle (Tower Lift) (Standard and Proportional Controls)	
26	3790012	1	O-Ring	
26	3520028	1	Plug (Hydraulic Controls)	
27	4360202	1	Switch, Toggle (Main Lift) (Standard and Proportional Controls)	
27	3790012	1	O-Ring	
27	3520028	1	Plug (Hydraulic Controls)	
28	4360202	1	Switch, Toggle (Swing) (Standard and Proportional Controls)	
28	3790012	1	O-Ring	
28	3520028	1	Plug (Hydraulic Controls)	
29	4360202	1	Switch, Toggle (Platform Level) (Standard and Proportional Controls)	
29	3790012	1	O-Ring	
29	3520028	1	Plug (Hydraulic Controls)	
30	3520028	1	Plug, Hole	
31	4360202	1	Switch, Toggle (Main Tele) (Standard and Proportional Controls)	
31	3790012	1	O-Ring	
31	3520028	1	Plug (Hydraulic Controls)	
32	4360202	1	Switch, Toggle (Platform Rotate) (Standard and Proportional Controls)	
32	3790012	1	O-Ring	
32	3520028	1	Plug (Hydraulic Controls)	
33	4360200	1	Switch, Toggle (Auxiliary Power)	
33	3790012	1	O-Ring	
34	3740049	AR	Relay - SPDT	
34	3311001	AR	Nut #10-24NC	
34	4761000	AR	Lockwasher #10	
34	4751000	AR	Flatwasher #10	
35	4360216	1	Switch, Circuit Breaker - 30 Amp	
36	4360232	1	Switch, Circuit Breaker - 15 Amp	
37	4360232	1	Switch, Circuit Breaker - 15 Amp (Kubota)	
38	3640711	16 5/8in	Rail	
38	3910606	2	Screw #6-32NC x 3/8in	
38	4750600	2	Flatwasher #6	
38	4760600	2	Lockwasher #6	
38	3310601	2	Nut #6-32NC	
39	4460299	2	Stop, Terminal	
40	3740058	AR	Relay - 4PDT	
40	4120013	AR	Base, Relay	
40	3740063	AR	Spring	
41	4460300	2	Barrier, Terminal	
42	4460298	45	Block, Terminal	
43	4460301	1	Marker, Terminal	
44	4460308	AR	Bar, Buss - 2 Position (Bang-Bang and Proportional Controls - Qty 1 and Hydraulic Controls - Qty 2)	
44	4460305	AR	Screw	
44	4460306	AR	Washer	

SECTION 2 - TURNTABLE

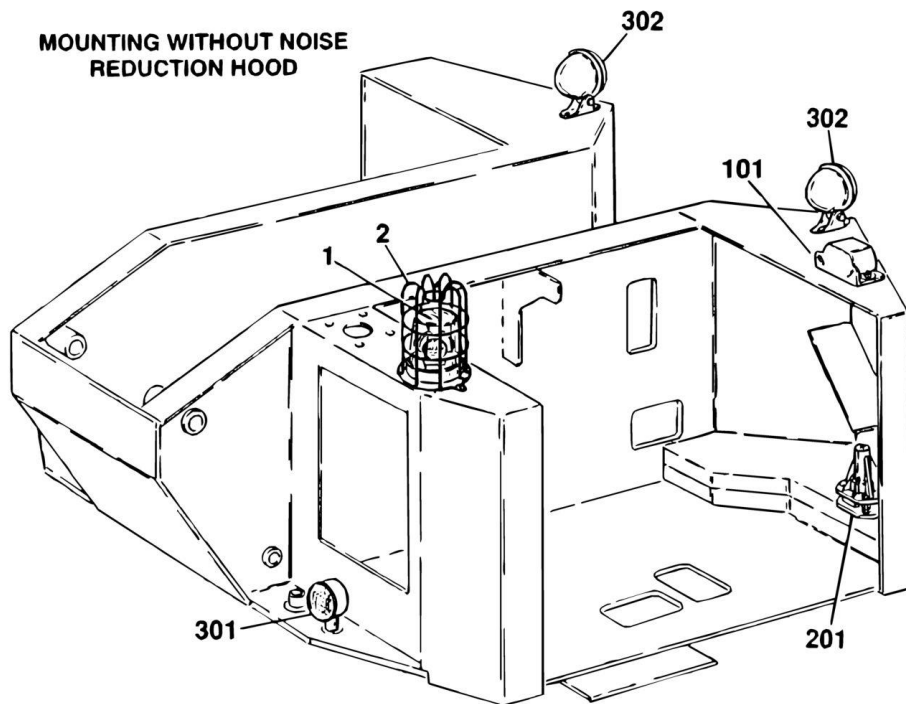
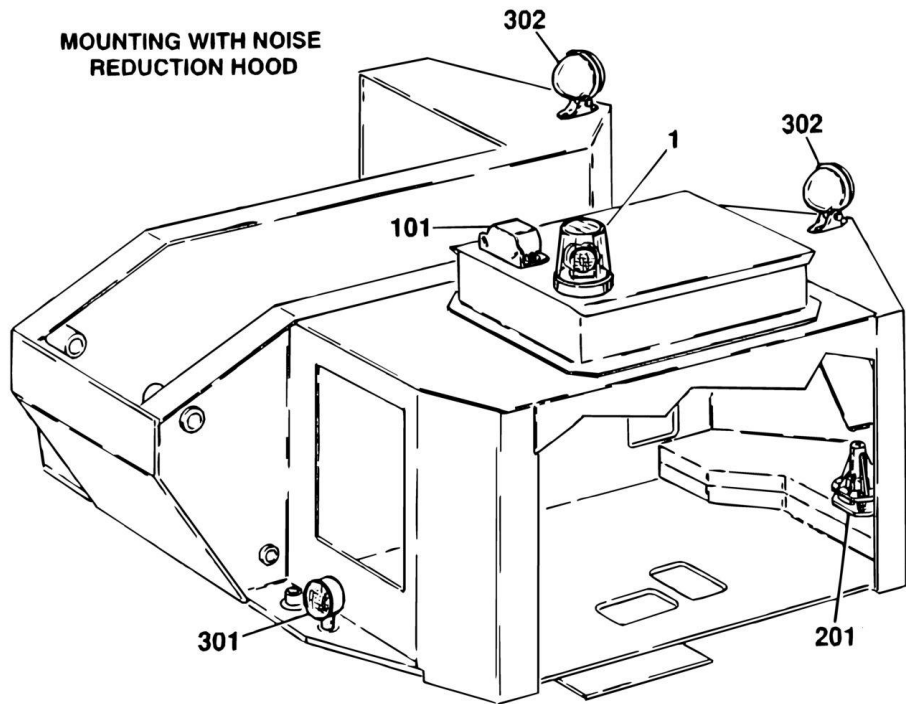
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
44	4460307	AR	Sleeve	
45	4460311	1	Bar, Buss - 5 Position	
45	4460305	5	Screw	
45	4460306	5	Washer	
45	4460307	5	Sleeve	
46		Ref	Connector, Strain Relief Options:	
46	4460244	1	Connector, Strain Relief (Prior to SN 33813)	
46	4460071	1	Connector, Strain Relief (SN 33813 to Present)	
46	0960238	1	Bushing	
46	3300048	1	Nut, Conduit	
47	4460051	3	Connector, Strain Relief	
47	0960238	3	Bushing	
47	3300048	3	Nut, Conduit	
48		Ref	Regulator, Voltage (Ford Only) (Supplied with Engine)	
48	3311001	2	Nut #10-24NC	
48	4761000	2	Lockwasher #10	
48	4751000	2	Flatwasher #10	
49	1600117	1	Controller (Ford Only)	
49	3311001	4	Nut #10-24NC	
49	4761000	4	Lockwasher #10	
49	4751000	4	Flatwasher #10	
50	3740067	1	Relay (Auxiliary Power) (Ford and Deutz)	
50	3740067	2	Relay (Auxiliary Power and Glow Plug) (Kubota)	
50	3740059	1	Relay (Start) (Kubota Only)	
50	3311001	3	Nut #10-24NC	
50	4761000	3	Lockwasher #10	
50	4751000	3	Flatwasher #10	
51	3740029	1	Relay, Adlo (Ford and Kubota) (Prior to August 1991)	
51	3740030	1	Relay, Adlo (Deutz) (Prior to August 1991)	
52	3740077	1	Relay, Bosch (Deutz and Ford) (August 1991 to Present)	
52	3740049	1	Relay (Kubota) (August 1991 to Present)	
52	3311001	2	Nut #10-24NC	
52	4761000	2	Lockwasher #10	
52	4751000	2	Flatwasher #10	
53	0060023	1	Actuator, Adeco Throttle (Deutz Only)	
53	7008804	1	Bellows	
53	7008829	1	PC Board	
53	7008821	1	Motor	
53	7008828	1	Cable	
54	4460244	1	Connector, Strain Relief (SN 33813 to Present)	
54	0960238	1	Bushing	
54	3300048	1	Nut, Conduit	
55		Ref	Plug Options (Not Shown):	
55	3520034	2	Plug - 5/16in	
55	3520054	4	Plug - 7/16in	
55	3520028	1	Plug - 1/2in	
55	3520026	1	Plug - 5/8in	
55	3520168	3	Plug - 3/16in	
	1281317	Ref	GROUND CONTROL BOX ASSEMBLIES	J
	0250911	Ref	DEUTZ WITH STANDARD BANG-BANG CONTROLS	B
	0252334	Ref	DEUTZ WITH PROPORTIONAL CONTROLS	A

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0251120	Ref	DEUTZ WITH HYDRAULIC CONTROLS	B
	0250910	Ref	FORD WITH STANDARD BANG-BANG CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)	A
	0255142	Ref	FORD WITH STANDARD BANG-BANG CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	A
	0252719	Ref	FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (PRIOR TO FEBRUARY 1993)	-
	0253780	Ref	FORD WITH PROPORTIONAL CONTROLS AND BOSCH ALTERNATOR (FEBRUARY 1993 TO SEPTEMBER 1994)	-
	0255140	Ref	FORD WITH PROPORTIONAL CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	A
	0250841	Ref	FORD WITH HYDRAULIC CONTROLS AND BOSCH ALTERNATOR (PRIOR TO SEPTEMBER 1994)	A
	0255139	Ref	FORD WITH HYDRAULIC CONTROLS AND PRESTOLITE ALTERNATOR (SEPTEMBER 1994 TO PRESENT)	A
	0251031	Ref	KUBOTA WITH STANDARD BANG-BANG CONTROLS	C
	0250986	Ref	KUBOTA WITH PROPORTIONAL CONTROLS	B
102	0641408	4	Bolt 1/4in-20NC x 1in	
103	3311401	4	Nut 1/4in-20NC	
104	4751400	8	Flatwasher 1/4in	
105	4761400	4	Lockwasher 1/4in	

SECTION 2 - TURNTABLE

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



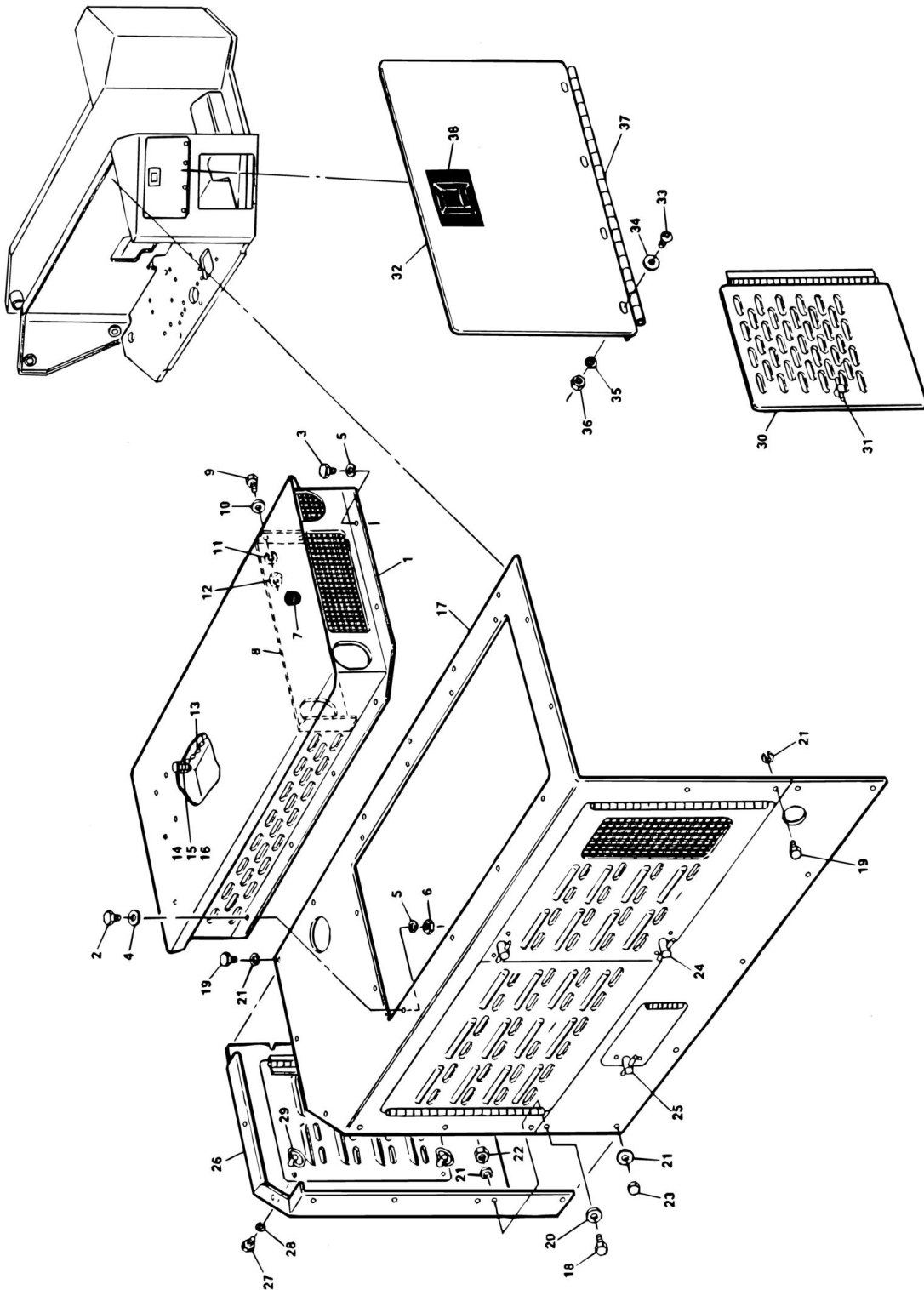
SECTION 2 - TURNTABLE

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

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

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

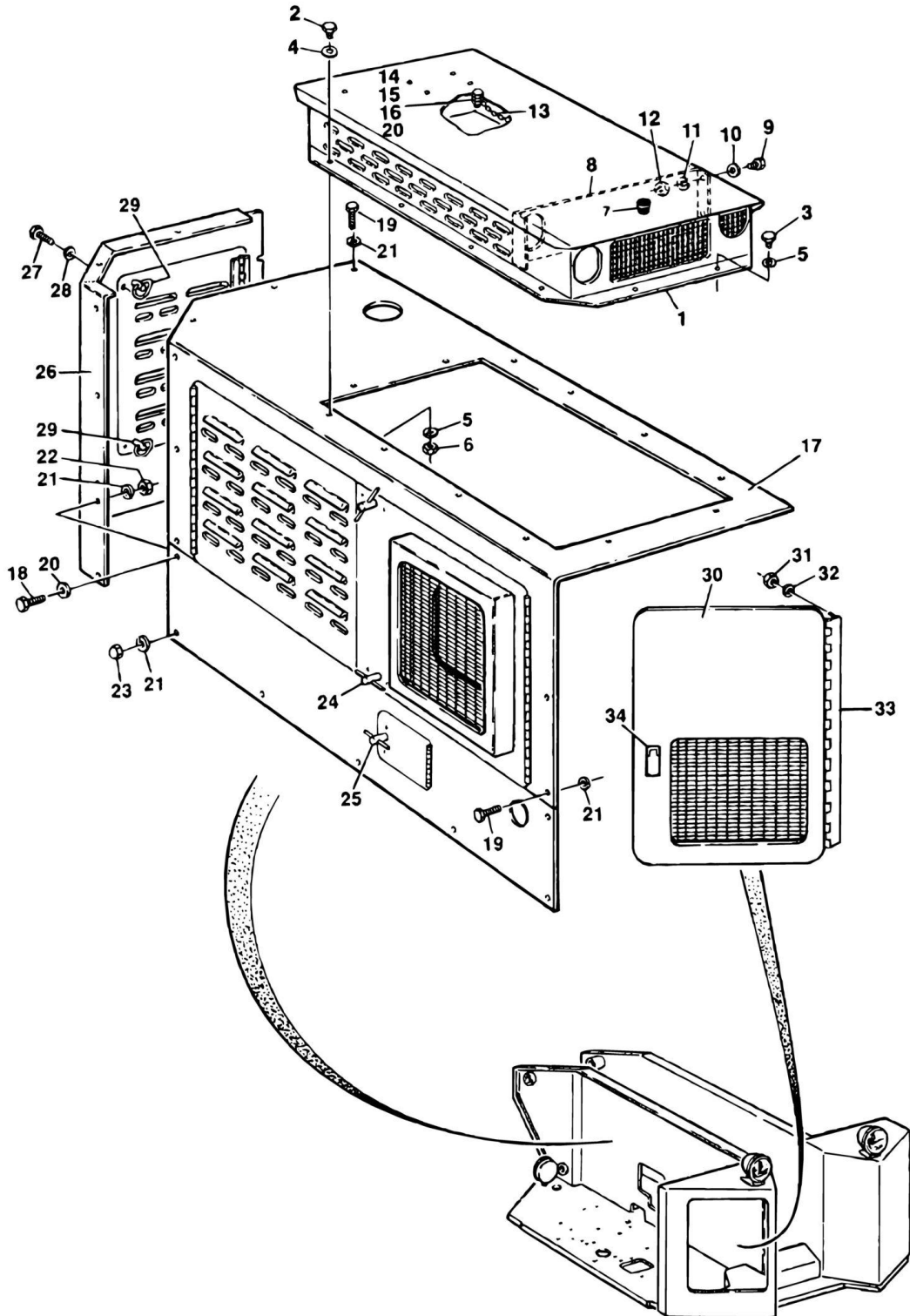
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281172	Ref	HOODS INSTALLATIONS	D
	0250166	Ref	HOODS INSTALLATION - FORD	B
	0250497	Ref	HOODS INSTALLATION - DEUTZ	B
1	4843567	1	Ventilator	
2	0641406	6	Bolt 1/4in-20NC x 3/4in	
3	3941406	6	Screw, Self-Tapping 1/4in x 3/4in	
4	4751400	6	Flatwasher 1/4in	
5	4761400	12	Lockwasher 1/4in	
6	3311405	6	Locknut 1/4in-20NC	
7	2940051	1	Latch	
8	3533788	1	Plate, Baffle (Ford Only)	
9	0641406	4	Bolt 1/4in-20NC x 3/4in	
10	4751400	4	Flatwasher 1/4in	
11	4761400	4	Lockwasher 1/4in	
12	3311405	4	Locknut 1/4in-20NC	
13	1260017	15 in	Chain	
14	0641406	2	Bolt 1/4in-20NC x 3/4in	
15	3311401	2	Nut 1/4in-20NC	
16	3311405	2	Locknut 1/4in-20NC	
17	4843395	1	Hood (Ford)	
17	4843517	1	Hood (Deutz) (Not Shown)	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
18	0641406	6	Bolt 1/4in-20NC x 3/4in	
19	3941406	5	Screw, Self-Tapping 1/4in x 3/4in	
20	4751400	6	Flatwasher 1/4in	
21	4761400	16	Lockwasher 1/4in	
22	3311405	6	Locknut 1/4in-20NC	
23	3300151	5	Nut, Acorn	
23	4300031	5	Stud (Welded on Part)	
24	2940048	2	Latch (Main Doors)	
24	3820019	4	Rivet	
25	2940050	1	Latch (Access Door)	
25	3820012	2	Rivet	
26	4843396	1	Cover, Front (Standard and Proportional Controls)	
26	4843701	1	Cover, Front (Hydraulic Controls)	
27	3941406	3	Screw, Self-Tapping 1/4in x 3/4iin	
28	4761400	3	Lockwasher 1/4in	
29	2940048	2	Latch	
29	3820019	4	Rivet	
30	4843398	1	Door, Battery Access	
31	2940048	1	Latch	
31	3820019	2	Rivet	
32	1780245	1	Door, Ground Control	
33	3911412	4	Screw, Machine 1/4in-20NC x 3/4in	
34	4751400	4	Flatwasher 1/4in	
35	4761400	4	Lockwasher 1/4in	
36	3311401	4	Nut 1/4in-20NC	
37	2600157	1	Hinge	

SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
38	2940057	1	Latch, Sliding	

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

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

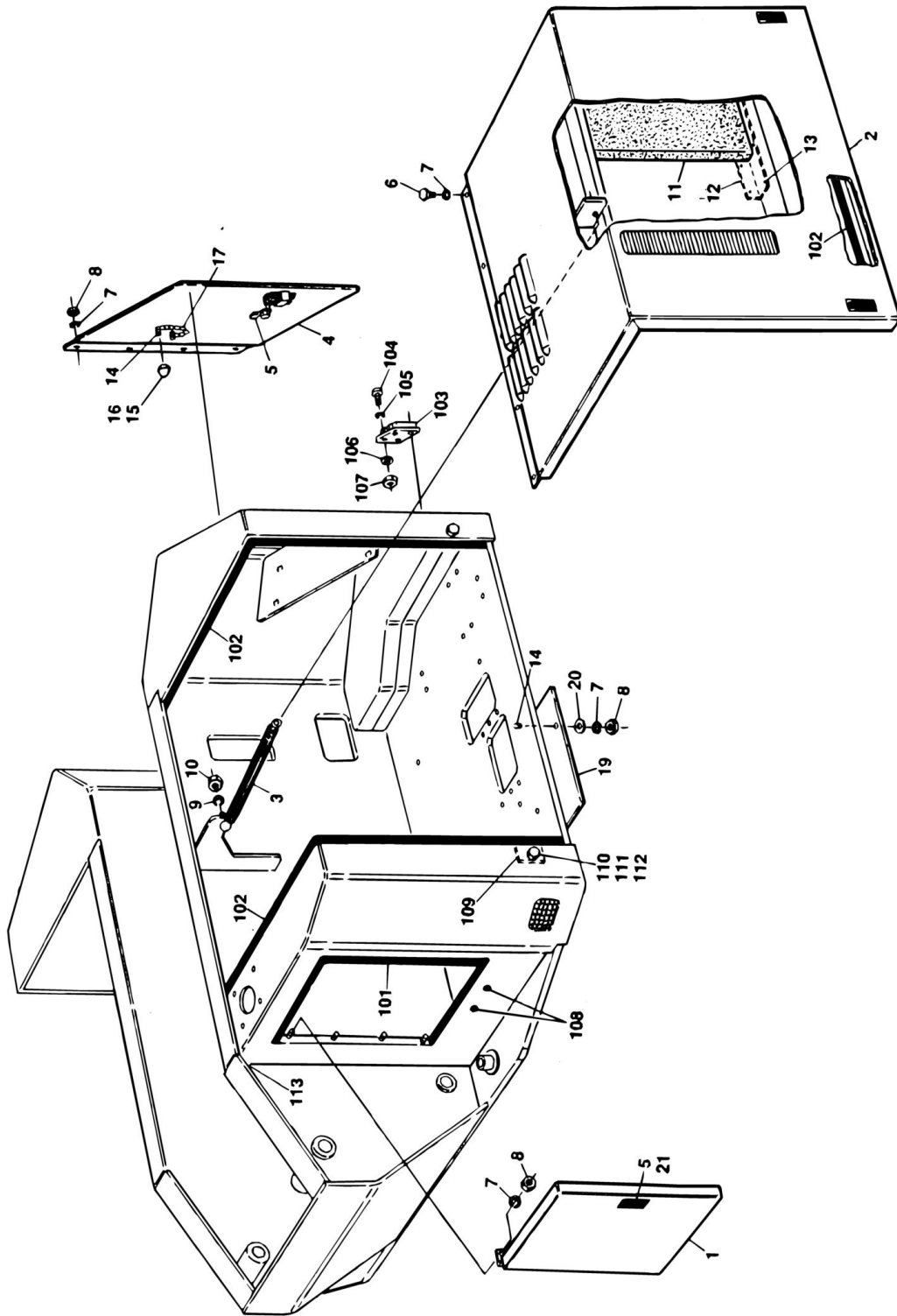
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281318	Ref	HOODS INSTALLATIONS	E
	0250857	Ref	HOODS INSTALLATION - DEUTZ (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)	D
	0250858	Ref	HOODS INSTALLATION - DEUTZ (HYDRAULIC CONTROLS)	E
	0250856	Ref	HOODS INSTALLATION - FORD/KUBOTA (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)	D
	0250842	Ref	HOODS INSTALLATION - FORD/KUBOTA (HYDRAULIC CONTROLS) (AUGUST 1990 TO MAY 1993)	E
	0253619	Ref	HOOD INSTALLATION - FORD/KUBOTA (MAY 1993 TO PRESENT)	2
1	4843567	1	Ventilator (Deutz - August 1990 to October 1991)	
1	4843567	1	Ventilator (Ford/Kubota - August 1990 to May 1993)	
1	4843744	1	Ventilator (Ford/Kubota - May 1993 to Present)	
2	0641406	6	Bolt 1/4in-20NC x 3/4in	
3	3941406	6	Screw, Self-Tapping 1/4in x 3/4in	
4	4751400	12	Flatwasher 1/4in	
5	4761400	12	Lockwasher 1/4in	
6	3311405	AR	Locknut 1/4in-20NC	
7	2940051	1	Latch	
8	4843788	1	Plate, Baffle (Ford/Kubota August 1990 to May 1993 Only)	
9	0641406	4	Bolt 1/4in-20NC x 3/4in	
10	4751400	4	Flatwasher 1/4in	
11	4761400	4	Lockwasher 1/4in	
12	3311405	4	Locknut 1/4in-20NC	
13	1260017	15	Chain	
		in/38cm		
14	0641408	AR	Bolt 1/4in-20NC x 7/8in	
15	3311405	AR	Locknut 1/4in-20NC	
16	4711400	AR	Flatwasher 1/4in	
17	4843517	1	Hood (Deutz - August 1990 to October 1991)	
17	4843585	1	Hood (Ford, Kubota - August 1990 to May 1993)	
17	4843746	1	Hood (Ford/Kubota - May 1993 to Present)	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
18	0641406	AR	Bolt 1/4in-20NC x 3/4in	
19	3941406	5	Screw, Self-Tapping 1/4in x 3/4in	
20	4751400	AR	Flatwasher 1/4in	
21	4761400	16	Lockwasher 1/4in	
22	3311405	AR	Locknut 1/4in-20NC	
23	3300151	AR	Nut, Acorn	
23	4300031	5	Stud (Welded on Part)	
24	2940048	2	Latch (Main Doors)	
24	3820019	4	Rivet	
25	2940050	1	Latch (Access Door)	
25	3820012	2	Rivet	
26		Ref	Cover Options:	
26	4843396	1	Deutz with Standard Bang-Bang and Proportional Controls (August 1990 to October 1991)	
26	4843701	1	Deutz with Hydraulic Controls (August 1990 to October 1991)	

SECTION 2 - TURNTABLE

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

SECTION 2 - TURNTABLE

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



SECTION 2 - TURNTABLE

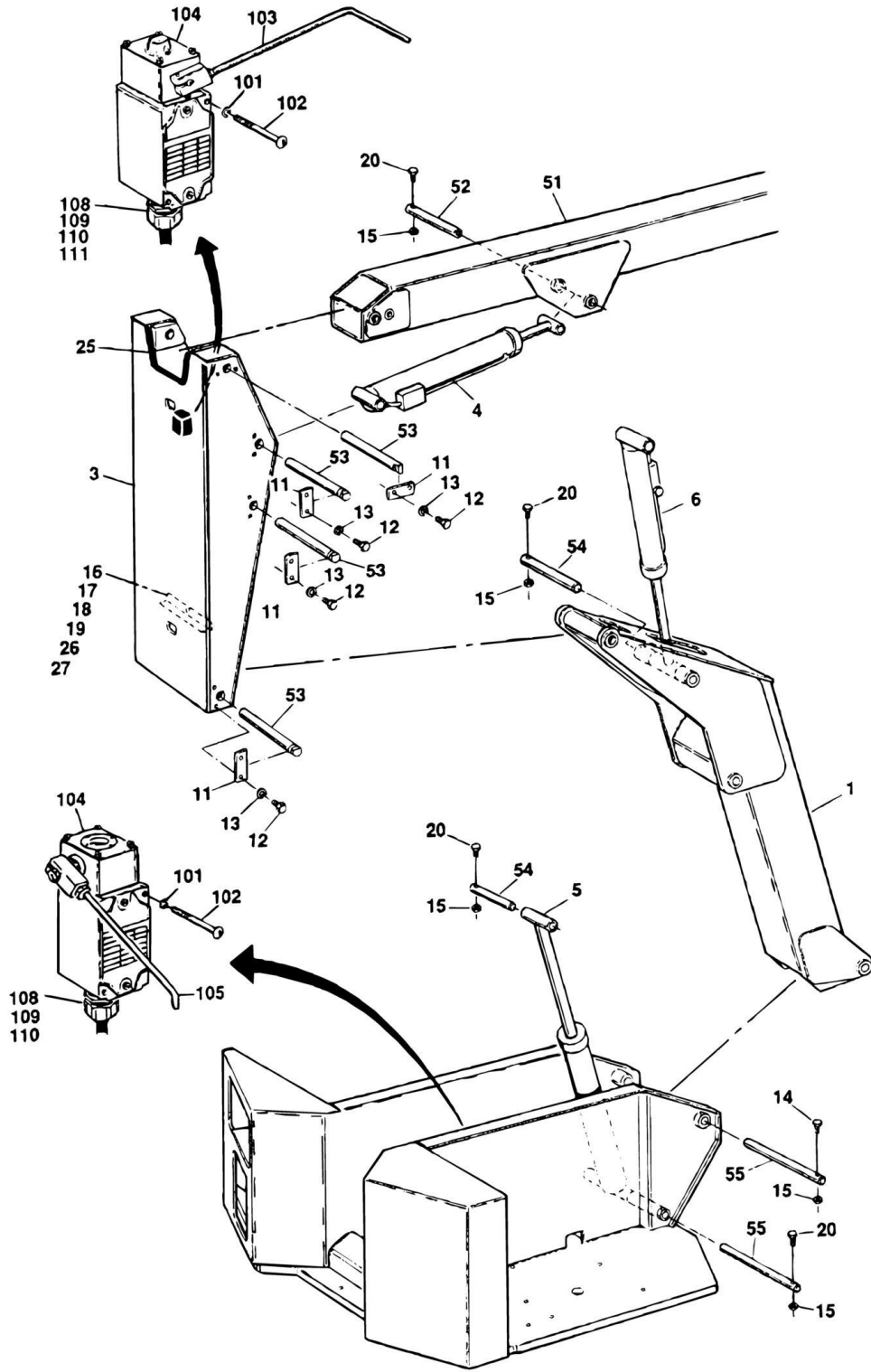
FIGURE 2-32. HOODS INSTALLATIONS (WITH NOISE REDUCTION OPTION)

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

SECTION 3 - BOOM

SECTION 3 - BOOM

FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS



SECTION 3 - BOOM

FIGURE 3-1. BOOMS AND LIMIT SWITCHES INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	BOOM INSTALLATION (STANDARD PARTS)	
1	0800618	1	Boom, Tower	D
1	0960827	4	Bushing, Bronze	
3		Ref	Upright Weldment Options:	
3	4843330	1	Upright (Prior to October 1992)	
3	4844453	1	Upright (October 1992 to Present)	
4		Ref	Main Lift Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
4	1682124	1	Cylinder (Prior to October 1992)	
4	1682799	1	Cylinder - 4 ft, 5 ft & 6 ft (1.2m, 1.5m, 1.8m)	
4		Ref	Wide Platform (October 1992 to Present)	
4	9983275	1	Cylinder - 8 ft (2.4m) Wide Platform (Prior to October 1992)	
4	9983596	1	Cylinder - 8 ft (2.4m) Wide Platform (October 1992 to Present)	
5		Ref	Tower Lift Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
5	1682085	1	Cylinder (Prior to October 1992)	
5	1682785	1	Cylinder (October 1992 to Present)	
5	1683528	1	Cylinder (Service Replacement Alternative)	
6		Ref	Upright Level Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
6	1682255	1	Cylinder (Prior to October 1992)	
6	1683524	1	Cylinder (October 1992 to Present) (was p/n 1682796)	
11	3532054	4	Plate, Retainer	
12	0641508	8	Bolt 5/16in-18NC x 1in	
13	4761500	8	Lockwasher 5/16in	
14	0641528	1	Bolt 5/16in-18NC x 3 1/2in	
15	3311505	5	Locknut 5/16in-19NC	
16	0181565	1	Angle, Hose Retainer	
17	4300033	2	Stud (Welded on Part)	
18	3311501	2	Nut 5/16in-18NC	
19	4761600	2	Lockwasher 3/8in	
20	0641522	4	Bolt 5/16in-18NC x 2 3/4in	
25	4060808	6 ft/1.8m	Flex-Guard	
26	2720058	6 in/15cm	Hose	
27	4420038	1 ft/30.5cm	Rubber, Self-Stick	
		Ref	BOOM INSTALLATION (VARIABLE PARTS):	
	0239965	Ref	DOMESTIC STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH 4 FT, 5 FT & 6 FT (1.2m, 1.5m & 1.8m) WIDE PLATFORMS	J
	0254222	Ref	DOMESTIC STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH 8 FT, (2.4m) WIDE PLATFORM	B
	0252331	Ref	CSA BANG-BANG AND PROPORTIONAL CONTROLS	D
	0257467	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS WITH WIDE POWER TRACK	3
	0250763	Ref	DOMESTIC HYDRAULIC CONTROLS	O
	0252332	Ref	CSA HYDRAULIC CONTROLS	D
51		Ref	Main Boom Assembly Options (See MAIN BOOM ASSEMBLY for Breakdown):	
51	0800623	1	Domestic/CSA - Standard Bang-Bang	
51	0800676	1	Domestic/CSA - Standard Bang-Bang W/Wide Power Track and Hydraulic Controls	

SECTION 3 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
51	0800676	1	Standard Bang-Bang W/Wide Power Track	
52		Ref	Pin Options:	
52	3421780	1	Standard	
52	3421994	1	CSA	
53		Ref	Pin Options:	
53	3421686	4	Standard	
53	3422007	4	CSA	
54		Ref	Pin Options:	
54	3421687	2	Standard	
54	3422008	2	CSA	
55		Ref	Pin Options:	
55	3421688	2	Standard	
55	3422009	2	CSA	
	0250154	Ref	BOOM LIMIT SWITCHES INSTALLATION (ABOVE HORIZONTAL)	D
101	4761000	4	Lockwasher #10	
102	0721014	4	Screw, Machine #10-24NC x 1 3/4in	
103	0200333	1	Arm	
104	4360057	2	Switch, Limit	
105	4360056	1	Lever	
108	4460049	2	Connector, Strain Relief	
109	3300047	2	Locknut, Conduit	
110	0960239	2	Bushing	
111	1060300	30 ft	Cable, Electrical 16/3 (August 1995 to Present)	

SECTION 3 - BOOM

FIGURE 3-2. MAIN BOOM ASSEMBLY

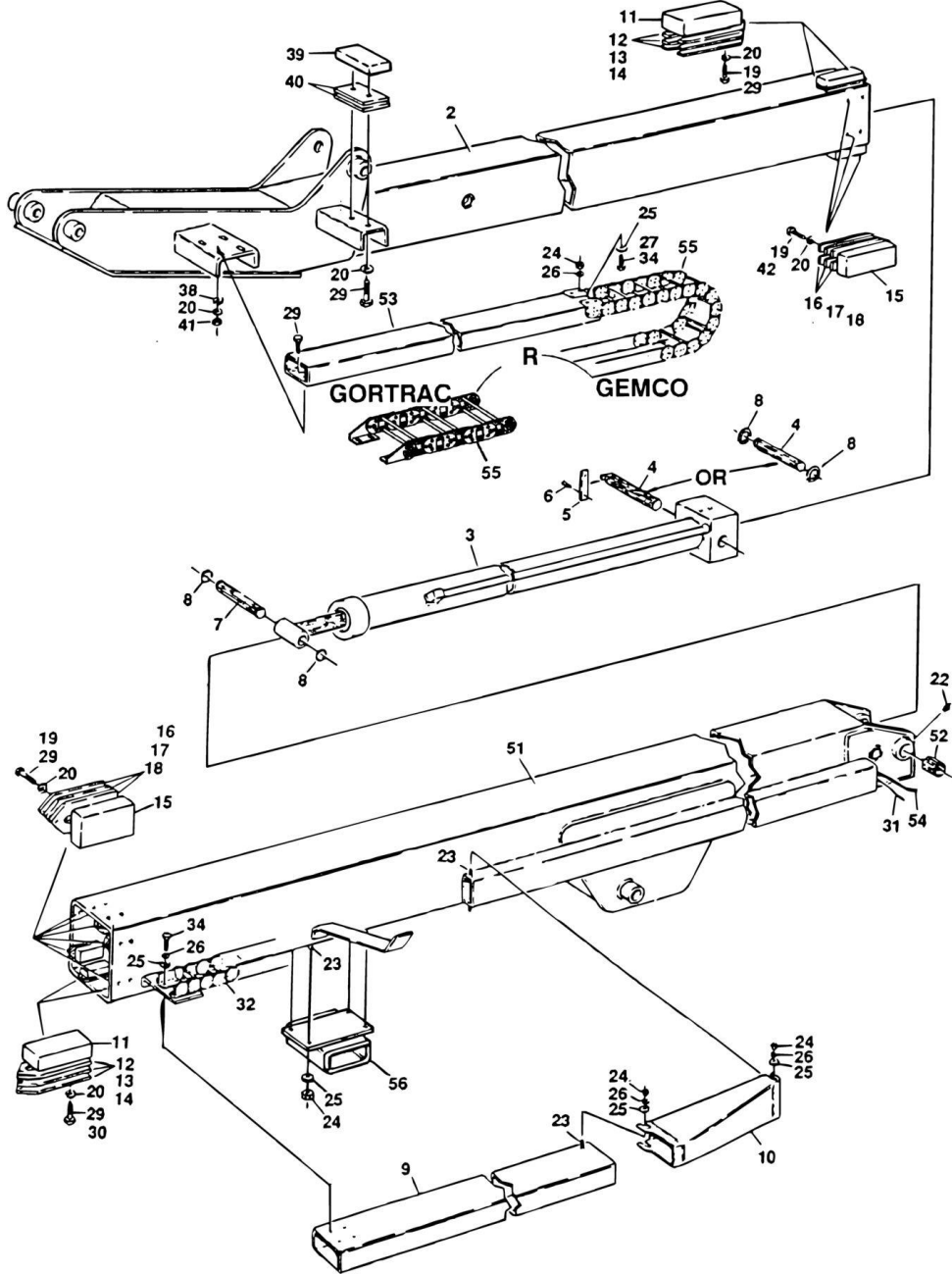


FIGURE 3-2. MAIN BOOM ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	BOOM ASSEMBLY (STANDARD PARTS)	
2	0800714	1	Fly Weldment	
3	1681880	1	Telescope Cylinder Assembly (Machines Built Prior to June 1991) (See CYLINDER SECTION for Breakdown)	
3	1682492	1	Telescope Cylinder Assembly (Machines Built June 1991 to Present) (See CYLINDER SECTION for Breakdown)	
4	3421493	1	Pin, Attach (Machines Built Prior to February 1992)	
4	3421771	1	Pin, Attach (Machines Built February 1992 to Present)	
5	3532054	1	Plate, Retainer (Machines Built Prior to February 1992 Only)	
6	0641506	2	Bolt 5/16in-18NC x 3/4in (Machines Built Prior to February 1992 Only)	
7	3421492	1	Pin, Attach	
8	3760133	AR	Ring, Retaining	
9	4843076	1	Tube, Hose	
10	1670450	1	Cover, Hose (Machines Built Prior to March 1990)	
10	1670576	1	Cover, Hose (Machines Built March 1990 to Present)	
11	3340473	4	Pad, Wear	
12	4070676	AR	Shim - 1/8in	
13	4070677	AR	Shim - 1/16in	
14	4070678	AR	Shim - 1/32in	
15	3340552	12	Pad, Wear	
16	4070670	AR	Shim - 1/32in	
17	4070671	AR	Shim - 1/16in	
18	4070672	AR	Shim - 1/8in	
19	0641607	16	Bolt 3/8in-16NC x 7/8in	
20	4761600	46	Lockwasher 3/8in	
22	2160007	2	Fitting, Grease	
23	4300031	AR	Stud (Welded on Part)	
24	3311405	AR	Locknut 1/4in-20NC	
25	4751400	AR	Flatwasher 1/4in	
26	4761400	16	Lockwasher 1/4in	
29	0641608	22	Bolt 3/8in-16NC x 1in	
31		Ref	Cable/Harness Options:	
31	4920865	1	Harness (Prior to August 1990)	
31	1060268	89.3 ft/2.27m	Cable - 12/3 (August 1990 to July 1993)	
31	1060514	89.3 ft/2.27m	Cable - 12/3 (July 1993 to SN 33218)	
33	0641609	6	Bolt 3/8in-16NC x 1 1/8in	
34	0641405	8	Bolt 1/4in-20NC x 5/8in	
36		Ref	Cable, Electrical - 12/4	
36	1060012	65 ft/31.8m	Cable (Prior to July 1993)	
36	1060515	65 ft/31.8m	Cable (July 1993 to Present)	
38	4751600	12	Flatwasher 3/8in	
39	0560923	1	Block	
40	4070559	AR	Shim	
41	3311605	8	Locknut 3/8in-16NC	
42	0641606	4	Bolt 3/8in-16NC x 3/4in	
43	4460052	1	Connector	

SECTION 3 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
44	3300047	1	Nut, Conduit	
45	0960239	1	Bushing	
	0100011	AR	Loctite #242	
	0800623	Ref	BOOM ASSEMBLY - STANDARD BANG-BANG AND PROPORTIONAL CONTROLS (VARIABLE PARTS)	12
	0800676	Ref	BOOM ASSEMBLY - HYDRAULIC CONTROLS (VARIABLE PARTS)	10
51		Ref	Base Weldment Options:	
51	0800573	1	Standard Bang-Bang and Proportional Controls	
51	0800675	1	Hydraulic Controls	
52	0961597	2	Bushing, Pivot	
53		Ref	Cover, Hose Options:	
53	4843068	1	Standard Bang-Bang and Proportional Controls	
53	4843901	1	Hydraulic Controls	
54		Ref	Cable Options:	
54		Ref	Standard Bang-Bang and Proportional Controls	
54	1060229	65 ft/31.8m	Cable - 16/30 (Prior to July 1993)	
54	1060516	65 ft/31.8m	Cable - 16/30 (July 1993 to Present)	
54		Ref	Hydraulic Controls	
54	1060019	65 ft/31.8m	Cable - 16/12	
55		Ref	Carrier Options:	
55		Ref	Standard Bang-Bang and Proportional Controls	
		Ref	Note: Original Equipment Power Track may have been replaced with a Service Replacement. Visually identify the power track before ordering parts.	
		Ref	Original Equipment (Gemco)	
55	1180179	1	Carrier	
55	7006139	AR	One Foot Section of Powertrack	
55	7006151	2 pr	Mounting Feet - Powertrack	
55	7006152	AR	Pin Kit (Includes 1 pin, set of 4 washers (different sizes and 1 retaining ring)	
		Ref	Service Replacement (Gortrac)	
55	100119695	1	Carrier	
55	70003153	1	Repair Kit (Included 8 Links, 8 Screws, 4 Spacers, 18 Pins, 18 Washers and 18 Snap Rings)	
55	70003154	1	Mounting Feet - Powertrack	
55		Ref	Hydraulic Controls	
55	1180256	1	Carrier	
55	7006141	AR	One Foot Section of Powertrack	
55	7006151	2 pr	Mounting Feet - Powertrack	
55	7006152	AR	Pin Kit	
56		Ref	Tube, Crossover Options:	
56	Not Required	1	Standard Bang-Bang and Proportional Controls	
56	4843609	1	Hydraulic Controls	

SECTION 3 - BOOM

FIGURE 3-3. BOOM WIPERS INSTALLATION

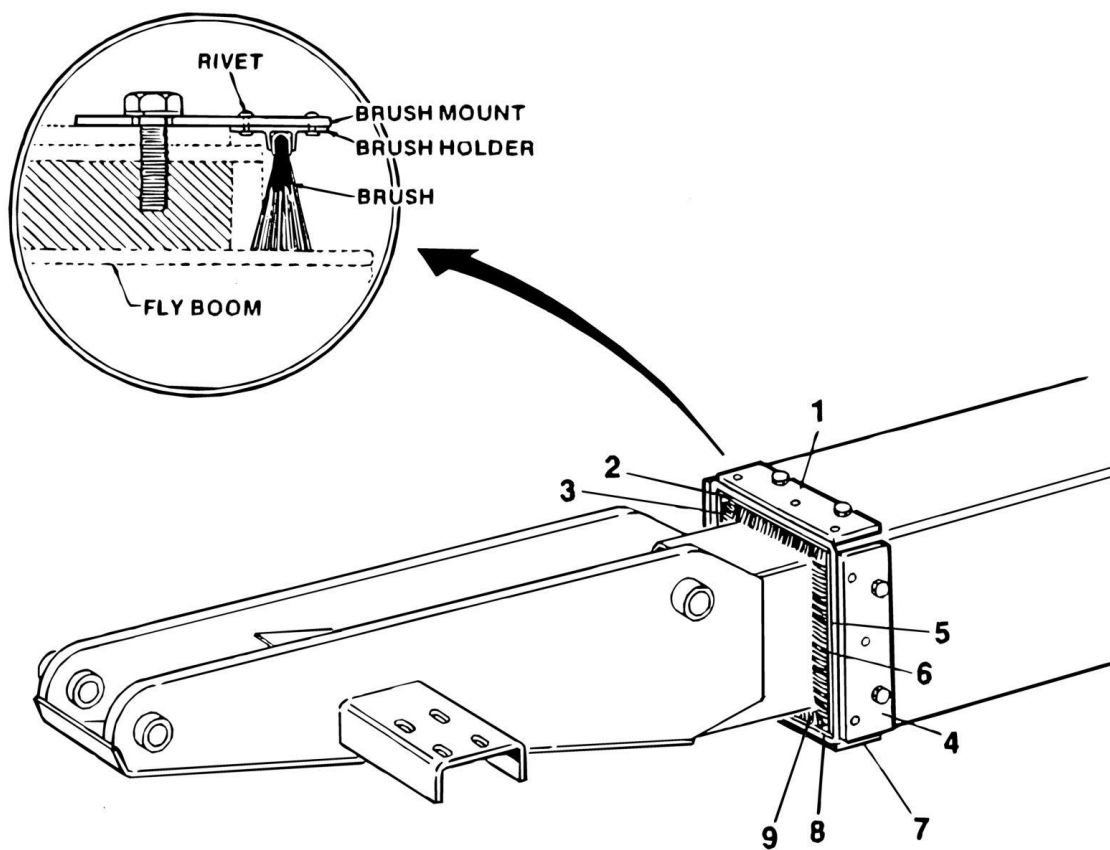


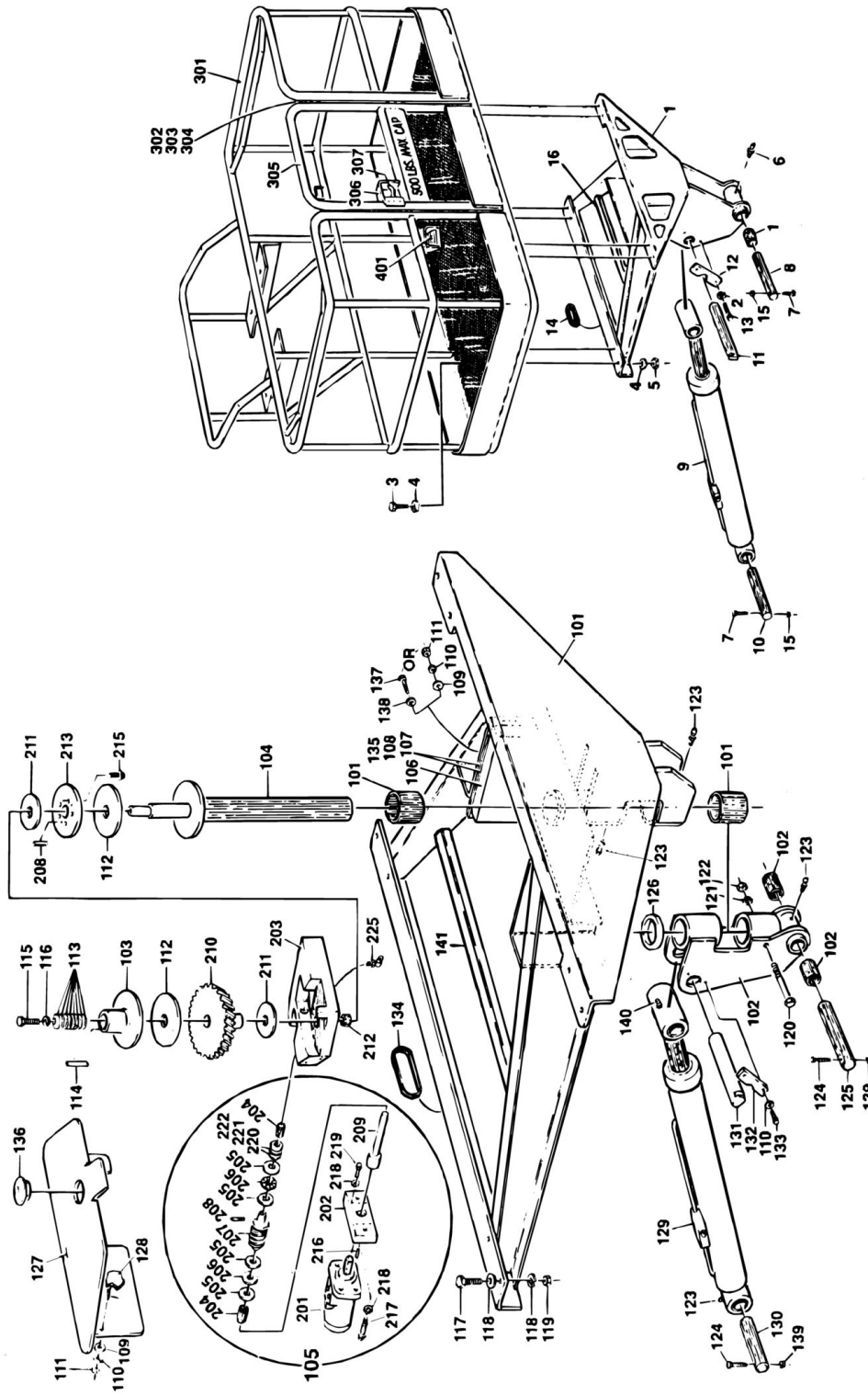
FIGURE 3-3. BOOM WIPERS INSTALLATION

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

SECTION 4 - PLATFORM

SECTION 4 - PLATFORM

FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION



SECTION 4 - PLATFORM

FIGURE 4-1. STANDARD PLATFORM AND FOOTSWITCH INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0238727	Ref	FIXED SUPPORT INSTALLATION (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)	E
	0251037	Ref	FIXED SUPPORT INSTALLATION (HYDRAULIC CONTROLS)	B
1	4842978	1	Support Weldment	
1	0961257	2	Bushing, Bronze	
2	4761500	2	Lockwasher 5/16in	
3	0681610	8	Bolt 3/8in-16NC x 1 1/4in (Grade 8)	
4	4751600	16	Flatwasher 3/8in	
5	3300143	8	Locknut 3/8in-16NC	
6	2160002	1	Fitting, Grease	
7	0641522	2	Bolt 5/16in-18NC x 2 3/4in	
8	3421490	1	Pin, Nose	
9	1681866	1	Platform Level Cylinder Assembly (Machines Built Prior to January 1990) (See CYLINDER SECTION for Breakdown)	
9	1682178	1	Platform Level Cylinder Assembly (Machines Built January 1990 to October 1992) (See CYLINDER SECTION for Breakdown)	
9	1682793	1	Platform Level Cylinder Assembly - TUV (Machines Built October 1992 to Present) (See CYLINDER SECTION for Breakdown)	
10	3421491	1	Pin, Attach (Lower)	
11	3421494	1	Pin, Attach (Upper)	
12	3532054	1	Plate, Retainer	
13	0641506	2	Bolt 5/16in-18NC x 3/4in	
14	4060804	10	Shield, Hose (1/2in Flex-Guard)	
		in/26cm		
15	3311505	2	Locknut 5/16in-18NC	
16	4340596	1	Support, Hose (Hydraulic Controls Only)	
16	4300031	2	Stud (Welded on Part)	
16	4751400	2	Flatwasher 1/4in	
16	3311405	2	Locknut 1/4in-20NC	
	0238568	Ref	ROTATING SUPPORT INSTALLATION DOMESTIC (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)	M
	0252220	Ref	ROTATING SUPPORT INSTALLATION (CSA STANDARD BANG-BANG AND PROPORTIONAL CONTROLS)	5
	0251038	Ref	ROTATING SUPPORT INSTALLATION (DOMESTIC HYDRAULIC CONTROLS)	D
	0252404	Ref	ROTATING SUPPORT INSTALLATION (CSA HYDRAULIC CONTROLS)	4
101	4843636	1	Support Weldment	
101	0961259	2	Bushing, Bronze	
102	0238540	1	Pivot Attach Weldment (Machines Built Prior to October 1992)	
102	0253730	1	Pivot Attach Weldment (TUV Cylinders) (Machines Built October 1992 to Present)	
102	0961257	2	Bushing, Bronze	
103	1120299	1	Cap	
104	4842915	1	Shaft Weldment (Standard)	
104	4842915	1	Shaft Weldment (C.S.A.) (was p/n 4040220)	
105	0235238	1	Rotator Assembly (See Items 201-225 for Breakdown)	
106	0361675	1	Block, Stop	
107	4070705	AR	Shim 1/8in	
108	4070706	AR	Shim 1/16in	
109	4751500	2	Flatwasher 5/16in	
110	4761500	4	Lockwasher 5/16in	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
111	3311501	2	Nut 5/16in-18NC	
112	3340454	2	Pad, Brake	
113	4160026	8	Washer, Bellville	
114	2880404	1	Key, Square	
115	0652014	1	Bolt 5/8in-18NF x 1 3/4in	
116	4752000	1	Flatwasher 5/8in	
117	0681610	8	Bolt 3/8in-16NC x 1 1/4in	
118	4751600	16	Flatwasher 3/8in	
119	3300143	8	Locknut 3/8in-16NC	
120	0641836	1	Bolt 1/2in-13NC x 4 1/2in	
121	4751800	1	Flatwasher 1/2in	
122	3311805	1	Locknut 1/2in-13NC	
123	2160002	4	Fitting, Grease	
124	0641522	2	Bolt 5/16in-18NC x 2 3/4in	
125	3421490	1	Pin, Attach (Standard)	
125	3421968	1	Pin, Attach (C.S.A.)	
126	4740158	1	Washer, Thrust	
127	1670451	1	Cover, Rotator	
128	4300038	2	Stud (Welded on Part)	
129	1681866	1	Slave Cylinder Assembly (Machines Built Prior to January 1990) (See CYLINDER SECTION for Breakdown)	
129	1682178	1	Slave Cylinder Assembly (Machines Built January 1990 to October 1992) (See CYLINDER SECTION for Breakdown)	
129	1682793	1	Slave Cylinder Assembly - TUV (Machines Built October 1992 to Present) (See CYLINDER SECTION for Breakdown)	
130	3421491	1	Pin, Attach (Lower)	
131	3421494	1	Pin, Attach (Upper)	
132	3532054	1	Plate, Retainer	
133	0641506	2	Bolt 5/16in-18NC x 3/4in	
134	4060804	10	Shield, Hose (Flexguard)	
		in/2.6cm		
135	4070707	AR	Shim 1/32in	
136	3520035	1	Plug	
137	0641816	2	Bolt 1/2in-13NC x 2in	
138	4761800	2	Lockwasher 1/2in	
139	3311505	2	Locknut 5/16in-18NC	
140	2160001	1	Fitting, Grease	
141	4340596	1	Support, Hose (Hydraulic Controls Only)	
141	4300031	2	Stud (Welded on Part)	
141	4751400	2	Flatwasher 1/4in	
141	3311405	2	Locknut 1/4in-20NC	
	0235238	Ref	ROTATOR ASSEMBLY	E
		Ref	Note: For Machines Built Prior to September 1991 refer to Service Information Bulletin #91-5 for required upgrade.	
201	3160083	1	Rotator Motor Assembly (See CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS) for Breakdown)	
202	0080099	1	Adapter, Motor	
203	2760064	1	Housing, Gear	
204	0440134	2	Bearing, Sleeve	
205	4740199	4	Washer, Thrust	
206	0440120	2	Bearing, Thrust	
207	2440043	1	Gear, Worm	
208	3440816	4	Rollpin 1/4in x 1in	

SECTION 4 - PLATFORM

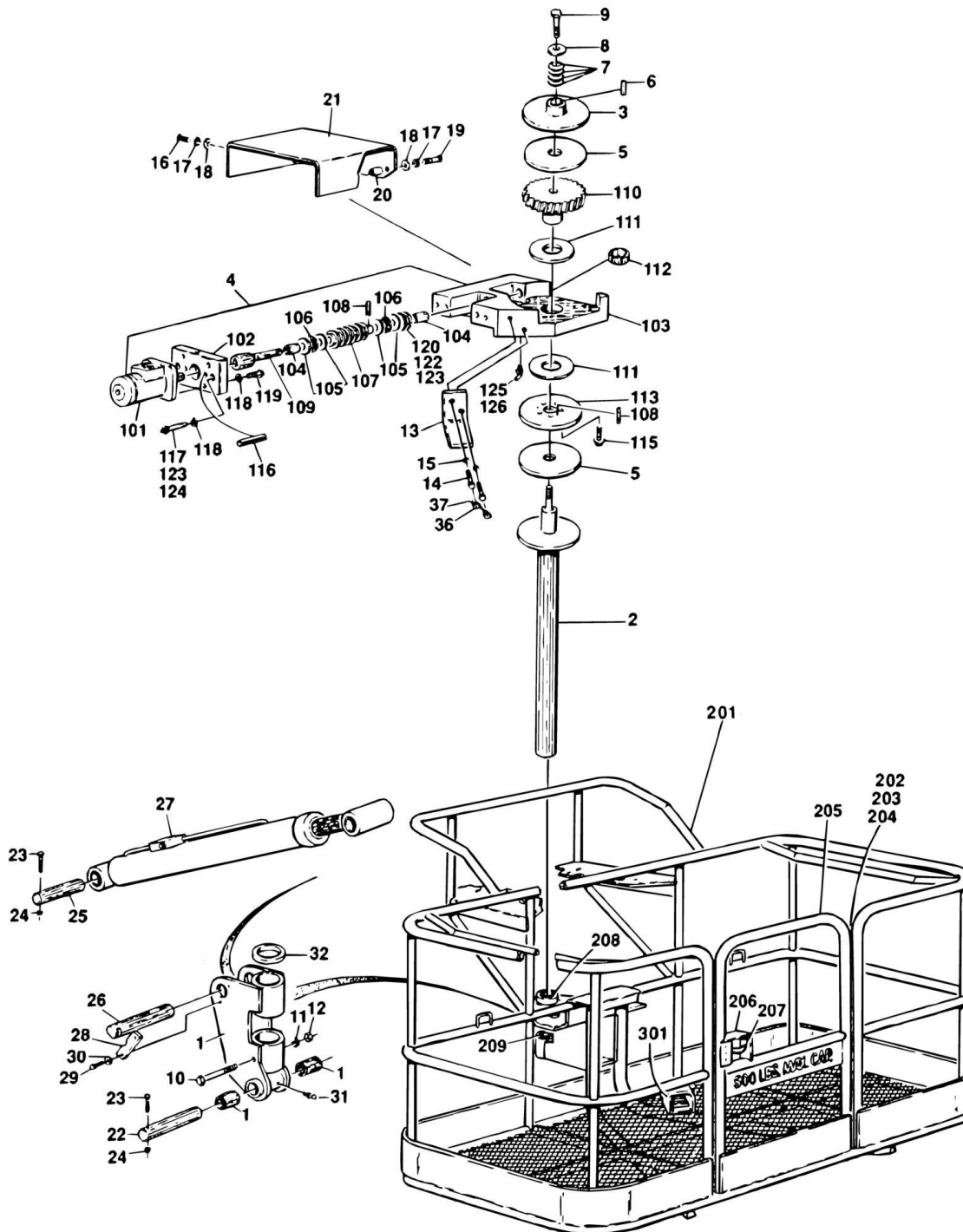
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
209	0080098	1	Adapter, Motor to Worm Gear	
210	2440044	1	Gear, Worm	
211	4740256	2	Washer, Thrust	
212	0440135	1	Bearing, Sleeve	
213	1760068	1	Disc, Brake	
215	3931010	5	Bolt, Socket Head #10-24NC x 5/8in	
216	3441228	2	Rollpin 3/8in x 1 3/4in	
217	3931620	2	Bolt, Socket Head 3/8in-16NC x 1 1/4in	
218	4761600	6	Lockwasher 3/8in	
219	3931612	4	Bolt, Socket Head 3/8in-16NC x 3/4in	
220	4070585	AR	Shim .010	
221	4070586	AR	Shim .005	
222	4070587	AR	Shim .002	
223	0100019	AR	Loctite #271 (Not Shown)	
224	0100021	AR	Primer (Not Shown)	
225	2160001	1	Fitting, Grease - 90	
226	3020025	AR	Grease (Not Shown)	
		Ref	PLATFORM WELDMENTS	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
301		Ref	Standard Platform Options:	
301		Ref	30in x 48in Platforms:	
301	3510176	1	Platform for Machines Built Prior to October 1990 (Use 3510236)	
301	3510236	1	Platform for Machines Built October 1990 to Present	
301		Ref	30in x 60in Platforms:	
301	3510170	1	Platform for Machines with Standard Bang-Bang and Proportional Controls Built Prior to October 1990 (Use 3510237)	
301	3510237	1	Platform for Machines with Standard Bang-Bang and Proportional Controls Built October 1990 to Present	
301	3510406	1	Platform with Slide Bar Gate	
301	3510483	1	Platform for Machines with Standard Bang-Bang and Proportional Controls with Mesh from Bottom to Top Rail	
301	3510247	1	Platform for Machines with Hydraulic Controls	
301	3510307	1	Platform for Machines with Hydraulic Controls with Mesh to Mid-Rail Built April 1991 to Present	
301	3510481	1	Platform for Machines with Hydraulic Controls with Mesh from Bottom Rail to Midrail Built April 1991 to Present	
301	3510386	1	Platform for Ford Spec Machines with Hydraulic Controls	
301		Ref	30in x 72in Platforms:	
301	3510177	1	Platform for Machines with Standard Bang-Bang and Proportional Controls Built Prior to October 1990 (Use 3510238)	
301	3510238	1	Platform for Machines with Standard Bang-Bang and Proportional Controls Built October 1990 to Present	
301	3510656	1	Platform for Machines with Standard Bang-Bang and Proportional Controls with Mesh from Bottom to Top Rail	
301	3510356	1	Platform for Machines with Hydraulic Controls	
301		Ref	30in x 96in Platforms:	
301	3510253	1	Platform for Machines with Standard Bang-Bang and Proportional Controls	
301		Ref	Standard Platform Components	
302	2600143	2	Pin, Hinge	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
303	3311805	2	Locknut 1/2in-13NC	
304	2160006	2	Fitting, Grease	
305	1780224		Door Weldment (Machines Built Prior to October 1990)	
305	1780250		Door Weldment (Machines October 1990 to Present)	
306	2940006	1	Latch, Door	
307	2560010	1	Handle	
	0237963	Ref	FOOTSWITCH INSTALLATION	7
401	0641408	3	Bolt 1/4in-20NC x 1in	
401	3311405	3	Locknut 1/4in-20NC	
401	4740362	3	Washer, Fender	
401	4360031	1	Footswitch	
401	7000625	2	Block, Contact	
401	4460071	1	Connector, Strain Relief	

SECTION 4 - PLATFORM

FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS



SECTION 4 - PLATFORM

FIGURE 4-2. LOW MOUNT PLATFORMS AND FOOTSWITCH INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	SUPPORT INSTALLATIONS	
	0250593	Ref	ROTATING SUPPORT INSTALLATION - DOMESTIC	H
	0252135	Ref	ROTATING SUPPORT INSTALLATION - CSA	C
	0251252	Ref	FIXED SUPPORT INSTALLATION - DOMESTIC (NOT SHOWN)	B
	0252136	Ref	FIXED SUPPORT INSTALLATION - CSA (NOT SHOWN)	A
1	0238540	1	Pivot Attach Weldment	
1	0961257	2	Bushing, Bronze	
2		Ref	Shaft Weldment Options:	
2		Ref	Rotating Support	
2	4040215	1	Standard	
2	4040222	1	C.S.A.	
2		Ref	Fixed Support	
2	4564579	1	Standard	
2	4040227	1	C.S.A.	
		Ref	Note: Items 3-9 Rotating Support Installation Only.	
3	1120299	1	Cap	
4	0235238	1	Rotator Assembly (See Items 101-126 for Breakdown)	
5	3340454	2	Pad, Brake	
6	2880404	1	Key	
7	4160026	8	Washer, Belleville	
8	4752000	1	Flatwasher 5/8in	
9	0652014	1	Bolt 5/8in-18NF x 1 3/4in	
10	0641836	1	Bolt 1/2in-13NC x 4 1/2in	
11	4751800	3	Flatwasher 1/2in	
12	3311805	1	Locknut 1/2in-13NC	
		Ref	Note: Items 13-21 Rotating Support Installation Only.	
13	0901756	1	Bracket	
14	0641811	2	Bolt 1/2in-13NC x 1 3/8in	
15	4761800	2	Lockwasher 1/2in	
16	0641404	1	Bolt 1/4in-20NC x 1/2in	
17	4761400	2	Lockwasher 1/4in	
18	4751400	2	Flatwasher 1/4in	
19	0641408	1	Bolt 1/4in-20NC x 1in	
20	4562083	1	Tube, Spacer	
21	1670630	1	Cover	
22	3421490	1	Pin, Nose (Standard)	
22	3421968	1	Pin, Nose (C.S.A.)	
23	0641522	2	Bolt 5/16in-18NC x 2 3/4in	
24	3311505	2	Locknut 5/16in-18NC	
25	3421491	1	Pin, Attach (Lower)	
26	3421494	1	Pin, Attach (Upper)	
27	1682178	1	Slave Cylinder Assembly (Machines Built Prior to October 1992) (See CYLINDER SECTION for Breakdown)	
27	1682793	1	Slave Cylinder Assembly - TUV (Machines Built October 1992 to Present)	
28	3532054	1	Plate, Retainer	
29	0741506	2	Bolt 5/16in-18NC x 3/4in	
30	4761500	2	Lockwasher 5/16in	
31	2160002	3	Fitting, Grease	
32	4740158	1	Washer, Thrust	

SECTION 4 - PLATFORM

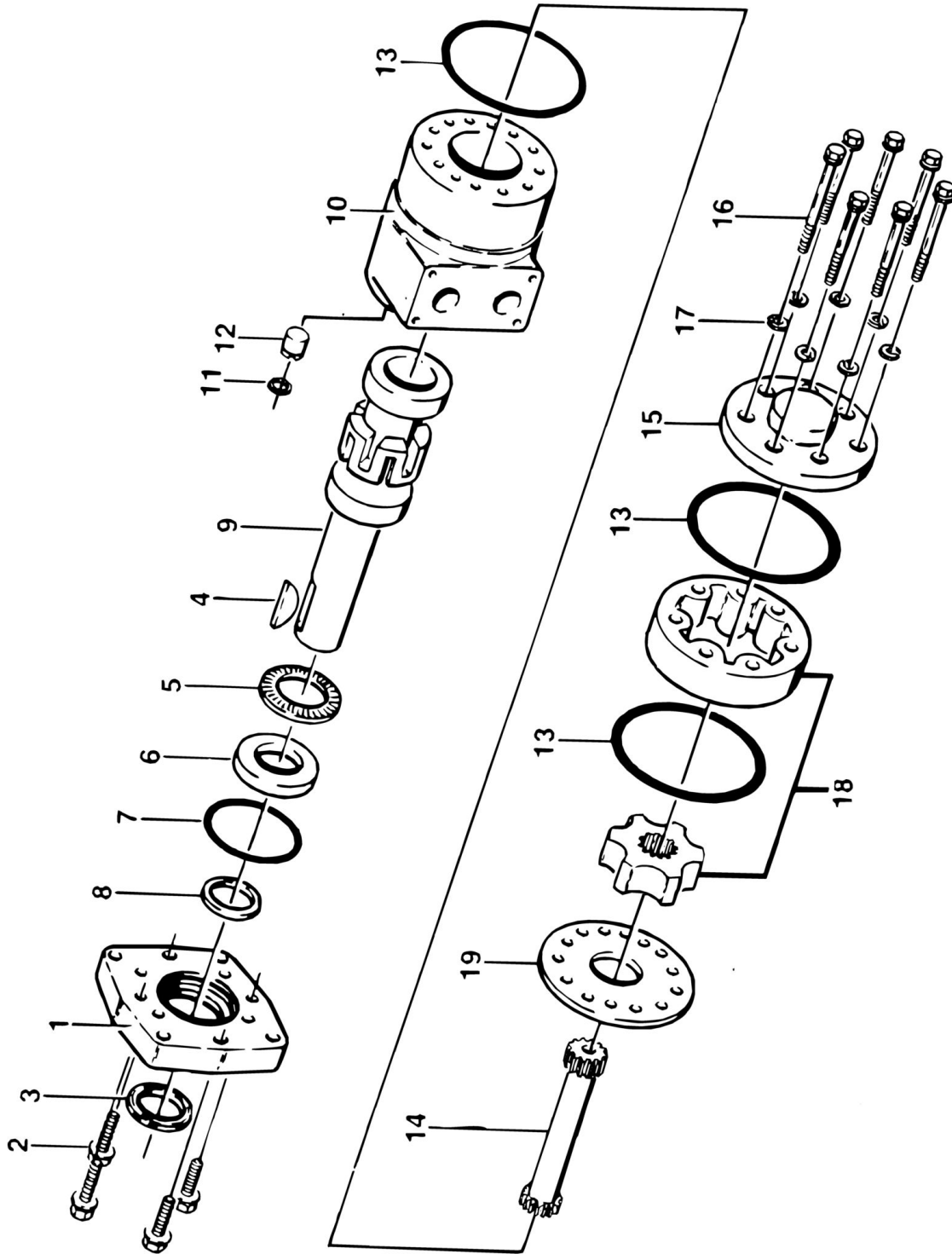
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: Items 33-35 Fixed Support Installation Only.	
33	4220137	2	Bar, Stop	
34	1320160	1	Clamp (Not Shown)	
35	3520035	1	Plug	
		Ref	Note: Items 36-37 Rotating Support Installation Only.	
36	1380137	1	Clip Retainer	
37	4920986	1 ft/.3m	Wire, Mechanics	
	0235238	Ref	ROTATOR ASSEMBLY:	E
		Ref	Note: For Machines Built Prior to September 1991 refer to Service Information Bulletin #91-5 for required upgrade.	
101	3160083	1	Rotator Motor Assembly (See CONSOLE BOX ASSEMBLY (STANDARD BANG-BANG CONTROLS) for Breakdown)	
102	0080099	1	Adapter, Motor	
103	2760064	1	Housing, Gear	
104	0440134	2	Bearing, Sleeve	
105	4740199	4	Washer, Thrust	
106	0440120	2	Bearing, Thrust	
107	2440043	1	Gear, Worm	
108	3440816	4	Rollpin 1/4in x 1in	
109	0080098	1	Adapter, Motor to Worm Gear	
110	2440044	1	Gear, Worm	
111	4740256	2	Washer, Thrust	
112	0440135	1	Bearing, Sleeve	
113	1760068	1	Disc, Brake	
115	3931010	5	Bolt, Socket Head #10-24NC x 5/8in	
116	3441228	2	Rollpin 3/8in x 1 3/4in	
117	3931620	2	Bolt, Socket Head 3/8in-16NC x 1 1/4in	
118	4761600	6	Lockwasher 3/8in	
119	3931612	4	Bolt, Socket Head 3/8in-16NC x 3/4in	
120	4070585	AR	Shim .010	
121	4070586	AR	Shim .005	
122	4070587	AR	Shim .002	
123	0100019	AR	Loctite #271	
124	0100021	AR	Primer	
125	2160001	1	Fitting, Grease - 90	
126	3020025	AR	Grease	
		Ref	PLATFORM WELDMENTS	
		Ref	Note: Replacement Decals Must be Ordered Separately -See DECALS SECTION	
201		Ref	Low Mount Platform Options:	
201		Ref	30in x 48in Platforms:	
201	3510239	1	Platform	
201	3510323	1	Platform with Bumpers	
201		Ref	30in x 60in Platforms:	
201	3510240	1	Platform	
201	3510261	1	Platform with Bumpers	
201	3510480	1	Platform with Mesh to Mid-Rail	
201	3510482	1	Platform with Mesh to Top Rail	
201		Ref	30in x 72in Platforms:	
201	3510241	1	Platform	
201		Ref	30in x 96in Platforms:	
201	3510242	1	Platform with Bumpers	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
201		Ref	Standard Platform Components	
202	2600143	2	Pin, Hinge	
203	3311805	2	Locknut 1/2in-13NC	
204	2160006	2	Fitting, Grease	
205	1780224	1	Door Weldment (Machines Built Prior to April 1990)	
205	1780250	1	Door Weldment (Machines Built April 1990 to Present)	
205	1780285	1	Door Weldment (Mesh to Mid Rail)	
205	1780286	1	Door Weldment (Mesh to Top Rail)	
206	2940006	1	Latch, Door	
207	2560010	1	Handle	
208	0961450	1	Bushing, Bronze (Top)	
209	0961259	1	Bushing, Bronze (Bottom)	
	0237963	Ref	FOOTSWITCH INSTALLATION	F
301	0641408	3	Bolt 1/4in-20NC x 1in	
301	3311401	3	Nut 1/4in-20NC	
301	4740362	3	Washer, Fender	
301	4360031	1	Footswitch	
301	7000625	2	Block, Contact	
301	4460071	1	Connector, Strain Relief	

SECTION 4 - PLATFORM

FIGURE 4-3. ROTATOR MOTOR ASSEMBLY



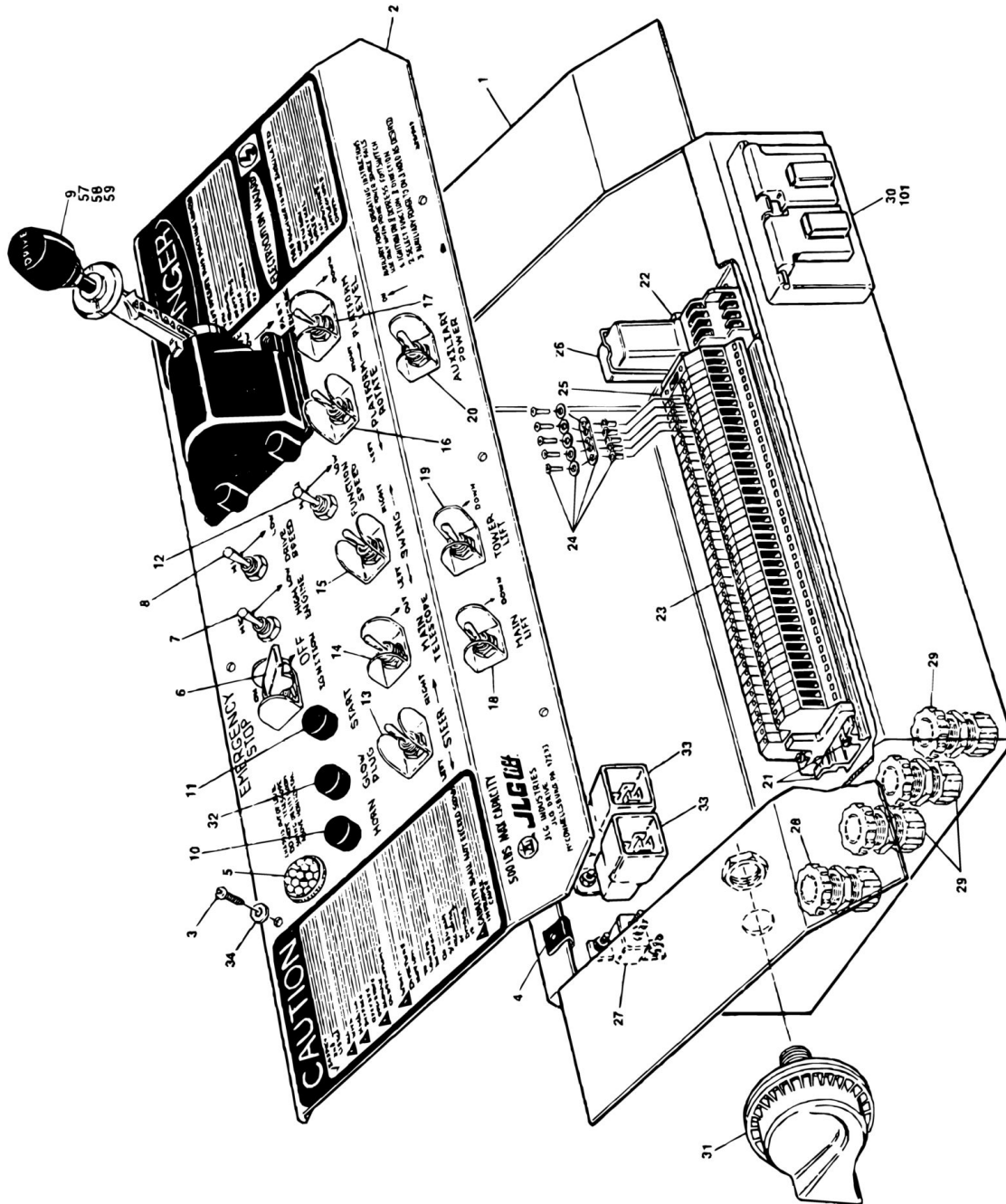
SECTION 4 - PLATFORM

FIGURE 4-3. ROTATOR MOTOR ASSEMBLY

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

SECTION 4 - PLATFORM

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



SECTION 4 - PLATFORM

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	CONSOLE BOX ASSEMBLIES	
	0860622	Ref	CONSOLE BOX ASSEMBLY - 2WS FORD/DEUTZ	L
	0860660	Ref	CONSOLE BOX ASSEMBLY - 2WS KUBOTA	I
	0860714	Ref	CONSOLE BOX ASSEMBLY - 4WS FORD/DEUTZ	F
	0860715	Ref	CONSOLE BOX ASSEMBLY - 4WS KUBOTA	F
1	4842892	1	Box, Console	
2		Ref	Lid Options:	
2	3251909	1	Lid (Prior to May 1994)	
2	3252362	1	Lid (May 1994 to November 1994)	
2	1702399	1	Decal, Lid (November 1994 to Present)	
2	3538389	1	Lid, Plate (November 1994 to Present)	
2	4420008	52 in/1.3m	Tape, Insulation	
3	0751006	6	Screw, Pan Head #10-24NC x 3/4in	
4	3300177	6	Nut, Tinnerman	
5	2920015	1	Lamp (Out of Level)	
6	4360199	1	Switch, Toggle (Ignition/Emergency Stop)	
6	3790012	1	O-Ring	
6	4360141	1	Guard, Switch	
7	4360199	1	Switch, Toggle (High Engine)	
7	3790012	1	O-Ring	
8	4360199	1	Switch, Toggle (Drive Speed)	
8	3790012	1	O-Ring	
9		Ref	Controller Options:	
9	1600116	1	Controller (2WS)	
9	7003783	1	Electrical Assembly	
9	2560041	1	Knob (2WS)	
9	1600135	1	Controller (4WS)	
9	7003797	1	Electrical Assembly	
9	7003789	2	Switch, Roller	
10	4360274	1	Switch, Push Button (Horn)	
10	3790015	1	O-Ring	
11	4360274	1	Switch, Push Button (Start)	
11	3790015	1	O-Ring	
12	4360199	1	Switch, Toggle (Function Speed)	
12	3790012	1	O-Ring	
13	4360202	1	Switch, Toggle (Steer)	
13	4060229	1	Guard, Switch	
13	3790012	1	O-Ring	
14	4360202	1	Switch, Toggle (Main Telescope)	
14	4060229	1	Guard, Switch	
14	3790012	1	O-Ring	
15	4360202	1	Switch, Toggle (Swing)	
15	4060229	1	Guard, Switch	
15	3790012	1	O-Ring	
16	4360202	1	Switch, Toggle (Platform Rotate) (With Rotating Platform Only)	
16	4060229	1	Guard, Switch	
16	3790012	1	O-Ring	
17	4360202	1	Switch, Toggle (Platform Level)	
17	4060229	1	Guard, Switch	
17	3790012	1	O-Ring	

SECTION 4 - PLATFORM

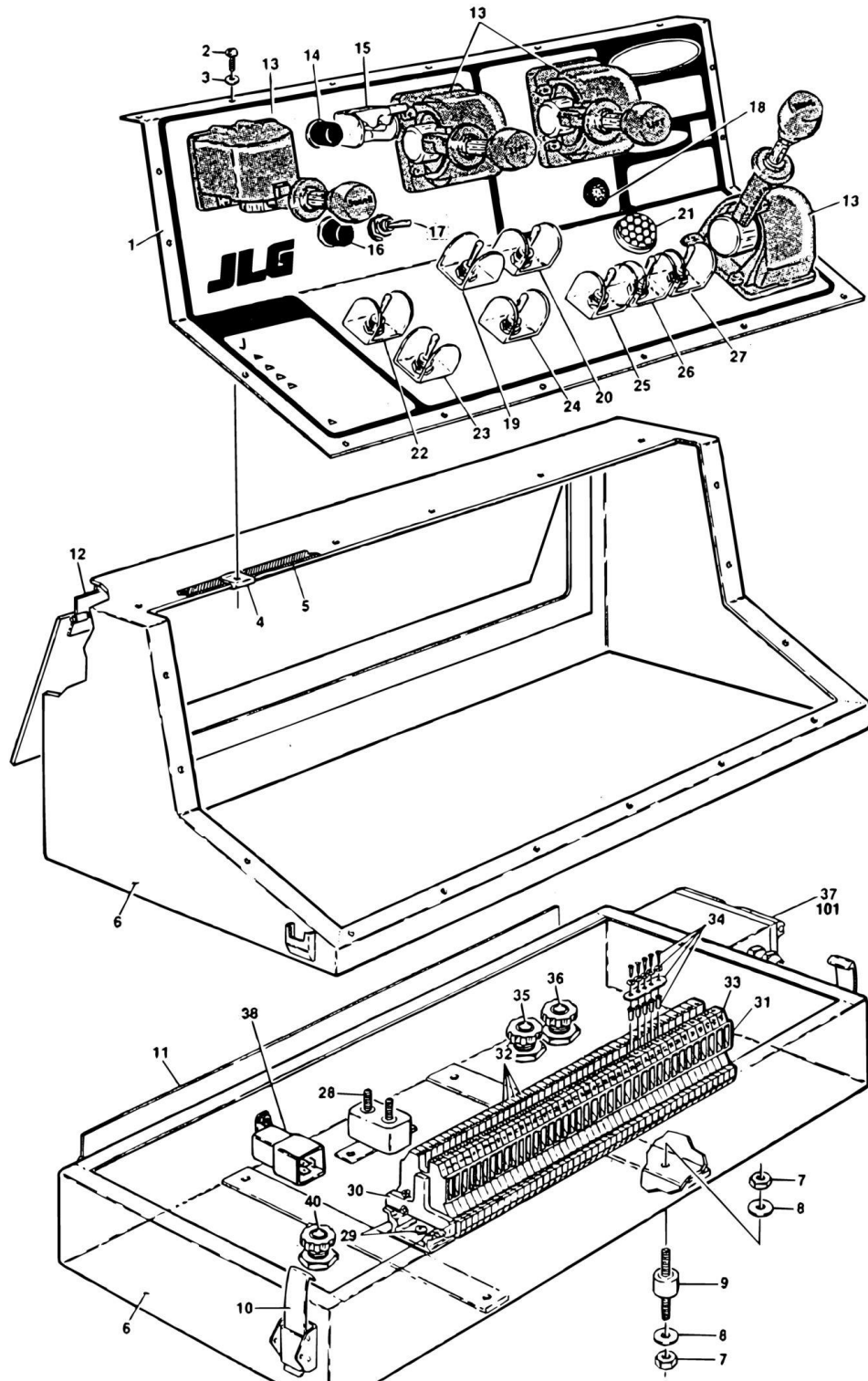
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
18	4360202	1	Switch, Toggle (Main Lift)	
18	4060229	1	Guard, Switch	
18	3790012	1	O-Ring	
19	4360202	1	Switch, Toggle (Tower Lift)	
19	4060229	1	Guard, Switch	
19	3790012	1	O-Ring	
20	4360200	1	Switch, Toggle (Auxiliary Power)	
20	4060229	1	Guard, Switch	
20	3790012	1	O-Ring	
21		Ref	Rail Options:	
21	3640500	1	Rail (2WS)	
21	3640970	1	Rail (4WS)	
21	3910606	2	Screw, Machine #6-32NC x 3/8in	
21	4760600	2	Lockwasher #6	
21	3310601	2	Nut #6-32NC	
22	4460299	2	Stop, Terminal	
23	4460298	Ref	Block, Terminal	
23	4460298	AR	2WS - Qty. 40	
23	4460298	AR	4WS - Qty. 45	
23	4460301	1	Strip, Marking	
24	4460311	1	Bar, Buss - 5 Position	
24	4460305	5	Screw	
24	4460306	5	Washer	
24	4460307	5	Sleeve	
25	4460300	1	Barrier, Terminal	
26	3740058	1	Relay	
26	4120013	1	Socket, Relay	
26	3740063	1	Spring, Relay	
27	4360209	1	Breaker, Circuit - 20 Amp	
27	3311001	1	Nut #10-24NC	
27	4761000	1	Lockwasher #10	
28	4460244	1	Connector	
28	0960238	1	Bushing	
28	3300048	1	Nut, Conduit	
29	4460052	3	Connector	
29	0960239	3	Bushing	
29	3300047	3	Nut, Conduit	
30	0860038	1	Box	
30	4460190	1	Receptacle	
30	4060092	1	Cover	
30	3910608	4	Screw, Machine #6-32NC x 1/2in	
30	4760600	4	Lockwasher #6	
30	4460071	1	Connector	
31	0140001	1	Horn	
32	4360274	1	Switch, Push Button (Glow Plugs) (Kubota)	
32	3520026	1	Plug, Hole (Ford and Deutz)	
33	3740049	2	Relay (4WS Only)	
33	4761000	2	Lockwasher #10	
33	3311001	2	Nut #10-24NC	
34	4740120	6	Washer, Nylon	
57	0720804	4	Screw, Machine #8-32NC x 1/2 (October 1995 to Present)	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
58	4750800	4	Flatwasher #8 (October 1995 to Present)	
59	4760800	4	Lockwasher #8 (October 1995 to Present)	
		Ref	110V POWER CORD INSTALLATIONS	
	0252405	Ref	110V POWER CORD INSTALLATIONS (PRIOR TO OCTOBER 1993)	-
	0254438	Ref	110V POWER CORD INSTALLATIONS (OCTOBER 1993 PRESENT)	3
101		Ref	Cable, Electrical - 12/3 Options:	
101	1060300	32 ft/9.8m	Cable, Electrical (Prior to October 1993)	
101	1060514	70 ft/21.3m	Cable, Electrical (October 1993 to Present) (was p/n 1060268)	
101	4460205	1	Plug	

SECTION 4 - PLATFORM

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



SECTION 4 - PLATFORM

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	CONSOLE BOX ASSEMBLIES	
	0860752	Ref	CONSOLE BOX ASSEMBLY - 2WS DEUTZ	B
	0860753	Ref	CONSOLE BOX ASSEMBLY - 4WS DEUTZ	A
	0860779	Ref	CONSOLE BOX ASSEMBLY - 2WS FORD	A
	0860777	Ref	CONSOLE BOX ASSEMBLY - 4WS FORD	-
	0860655	Ref	CONSOLE BOX ASSEMBLY - 2WS KUBOTA	F
	0860718	Ref	CONSOLE BOX ASSEMBLY - 4WS KUBOTA	-
1	3251894	1	Lid	
2	0751006	18	Screw, Pan Head #10-24NC x 3/4in	
3	4740120	18	Washer, Nylon	
4	3300177	18	Nut, Tinnerman	
5	4420038	37 in/1m	Tape, Insulation	
5	0100001	AR	Adhesive	
6	0860538	1	Box, Control (Includes Items 10-12)	
7	3311505	8	Nut 5/16in-18NC	
8	4751500	8	Flatwasher 5/16in	
9	4320002	4	Stud, Mounting	
10	2940052	2	Latch	
11	2600132	1	Hinge (Top to Bottom)	
12	2600105	1	Hinge (Access Door)	
13	1600126	3	Controller, PQ (Swing and Lifts)	
13	7003782	1	Electrical Assembly	
13	1600116	1	Controller, PQ (Drive)	
13	7003783	1	Electrical Assembly	
13	2560038	2	Knob (Lift)	
13	2560040	1	Knob (Swing)	
13	2560041	1	Knob (Drive)	
14	4360274	1	Switch, Push Button (Horn)	
14	3790015	1	O-Ring	
15	4360199	1	Switch, Toggle (Ignition)	
15	3790012	1	O-Ring	
15	4360141	1	Guard, Switch	
16	4360274	1	Switch, Push Button (Start)	
16	3790015	1	O-Ring	
17	4360199	1	Switch, Toggle (Glow Plug - Kubota/Choke - Ford)	
17	3790012	1	O-Ring	
17	3251872	1	Nameplate - Glow Plug (Kubota Only)	
18	3520026	1	Plug, Hole	
19	4360202	1	Switch, Toggle (Rotate)	
19	4060229	1	Shield	
19	3790012	1	O-Ring	
20	4360202	1	Switch, Toggle (Level)	
20	4060229	1	Shield	
20	3790012	1	O-Ring	
21	2920015	1	Lamp (Chassis Out of Level)	
22	4360200	1	Switch, Toggle (Auxiliary Power)	
22	4060229	1	Shield	
22	3790012	1	O-Ring	
23	4360202	1	Switch, Toggle (Steer)	

SECTION 4 - PLATFORM

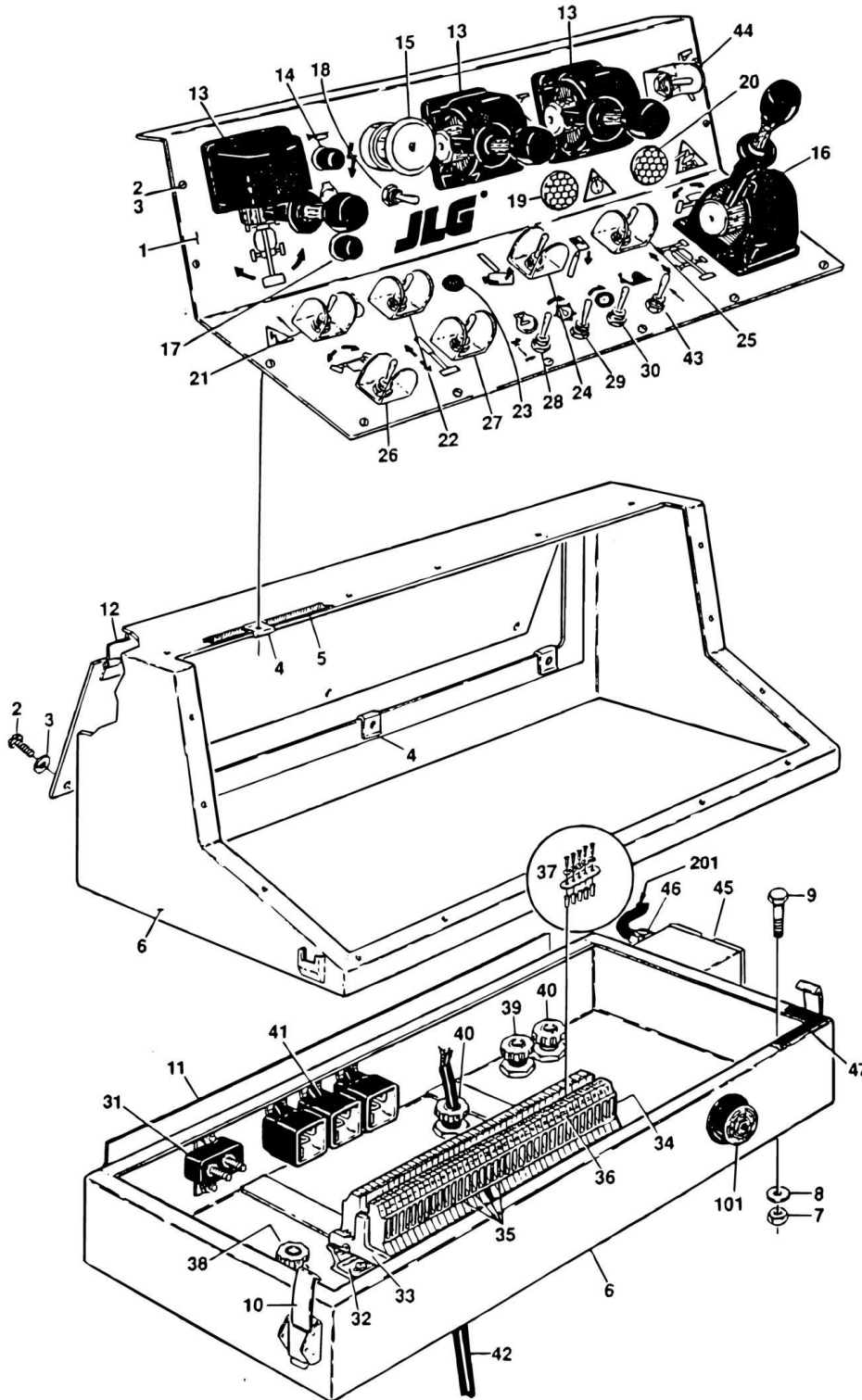
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
23	4060229	1	Shield	
23	3790012	1	O-Ring	
24	4360202	1	Switch, Toggle (Main Tele)	
24	4060229	1	Shield	
24	3790012	1	O-Ring	
25	4360199	1	Switch, Toggle (High Engine)	
25	3790012	1	O-Ring	
26	4360199	1	Switch, Toggle (Pump Volume)	
26	3790012	1	O-Ring	
27	4360199	1	Switch, Toggle (Wheel Motor Speed)	
27	3790012	1	O-Ring	
28	4360209	1	Breaker, Circuit - 20 Amp	
28	3910608	1	Screw #6-32NC x 1/2in	
28	4750600	1	Flatwasher #6	
28	4760600	1	Lockwasher #6	
28	3310601	1	Nut #6-32NC	
29	3640500	1	Rail, Mounting	
29	3910608	2	Screw, Round Head #6-32NC x 1/2in	
29	4750600	2	Flatwasher #6	
29	4760600	2	Lockwasher #6	
29	3310601	2	Nut #6-32NC	
30	4460299	2	Stop, Terminal Strip	
31	4460300	1	Barrier, Terminal End	
32	4460298	45	Block, Terminal	
33	4460301	1	Strip, Marking	
34	4460311	1	Bar, Buss	
34	4460305	3	Screw, Terminal Block	
34	4460306	3	Washer, Terminal Block	
34	4460307	3	Sleeve, Terminal Block	
35	4460244	1	Connector	
35	0960238	1	Bushing, Insulating	
35	3300048	1	Nut, Conduit	
36	4460071	1	Connector	
36	0960238	1	Bushing, Insulating	
36	3300048	1	Nut, Conduit	
37	0860038	1	Box, Receptacle	
37	4460190	1	Receptacle (Not Shown)	
37	3911008	4	Screw, Round Head #10-24NC x 1/2in	
37	4761000	4	Lockwasher #10	
37	4060092	1	Shield, Weatherproof	
37	4460071	1	Connector, Terminal	
38	3740049	1	Relay - SPDT	
38	3311001	1	Nut #10-24NC	
38	4761000	1	Lockwasher #10	
39	1060309	8 ft/2.4m	Cable, Control - 12/4 (To Footswitch) (Not Shown)	
40	4460052	1	Connector, Strain Relief	
40	3300047	1	Locknut, Conduit	
40	0960239	1	Bushing	
		Ref	110V POWER CORD INSTALLATIONS	
	0252405	Ref	110V POWER CORD INSTALLATIONS (PRIOR TO OCTOBER 1993)	-

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0254438	Ref	110V POWER CORD INSTALLATIONS (OCTOBER 1993 PRESENT)	3
101		Ref	Cable, Electrical - 12/3 Options:	
101	1060300	32 ft/9.8m	Cable, Electrical (Prior to October 1993)	
101	1060514	70 ft/21.3m	Cable, Electrical (October 1993 to Present) (was p/n 1060268)	
101	4460205	1	Plug	

SECTION 4 - PLATFORM

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



SECTION 4 - PLATFORM

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	CONSOLE BOX ASSEMBLIES	
	0860839	Ref	CONSOLE BOX ASSEMBLY - 2WS WITH CREEP	5
	0860850	Ref	CONSOLE BOX ASSEMBLY - 2WS WITH THUMB STEER AND CREEP	6
	0860840	Ref	CONSOLE BOX ASSEMBLY - 4WS WITH CREEP	6
1	3252224	1	Lid (February 1993 to May 1994)	
1	3252382	1	Lid (May 1994 to January 1995)	
1	3538392	1	Plate, Lid (January 1995 to Present)	
1	1702402	1	Decal (January 1995 to Present)	
2	0751006	18	Screw, Pan Head #10-24NC x 3/4in	
3	4740120	18	Washer, Nylon	
4	3300177	18	Nut, Tinnerman	
5	4420037	14 ft/2m	Tape, Insulation	
6	0860538	1	Box, Control (Includes Items 10,11 & 12)	
7	3311505	4	Nut 5/16in-18NC	
8	4751500	4	Flatwasher 5/16in	
9	0641508	4	Bolt 5/16in-18NC x 1in	
10	2940052	2	Latch	
11	2600132	1	Hinge (Top to Bottom)	
12	2600105	1	Hinge (Access Door)	
13	1600126	3	Controller, PQ (Swing and Lift) (Machines Without Steer Switch in Drive Controller)	
13	7003782	3	Electrical Assembly	
13	1600141	3	Controller, PQ (Swing and Lift) (Machines With Steer Switch in Drive Controller)	
13	7011907	1	Electrical Assembly	
13	7003751	1	Potentiometer	
13	2560112	AR	Knob	
14	4360274	1	Switch, Push Button (Horn)	
14	3790015	1	O-Ring	
15	4360289	1	Switch, Push-Pull (Emergency Stop)	
15	7012611	1	Mushroom Head	
15	7012612	1	Boot	
15	4360282	1	Block, Contact - 2 P.N.C.	
16	1600116	1	Controller, PQ (Drive) (2WS Without Steer Switch in Drive Controller)	
16	7003783	1	Electrical Assembly	
16	1600140	1	Controller, PQ (Drive) (2WS With Steer Switch in Drive Controller)	
16	7011903	1	Electrical Assembly	
16	7003789	2	Switch, Roller	
16	1600135	1	Controller, PQ (Drive) (4WS Without Steer Switch in Drive Controller)	
16	7003797	1	Electrical Assembly	
16	7003789	2	Switch, Roller	
16	2560112	1	Knob	
17	4360274	1	Switch, Push Button (Start)	
17	3790015	1	O-Ring	
18	3520026	1	Plug, Hole (Standard)	
18	4360199	1	Switch, Toggle (Glow Plug - Optional)	

SECTION 4 - PLATFORM

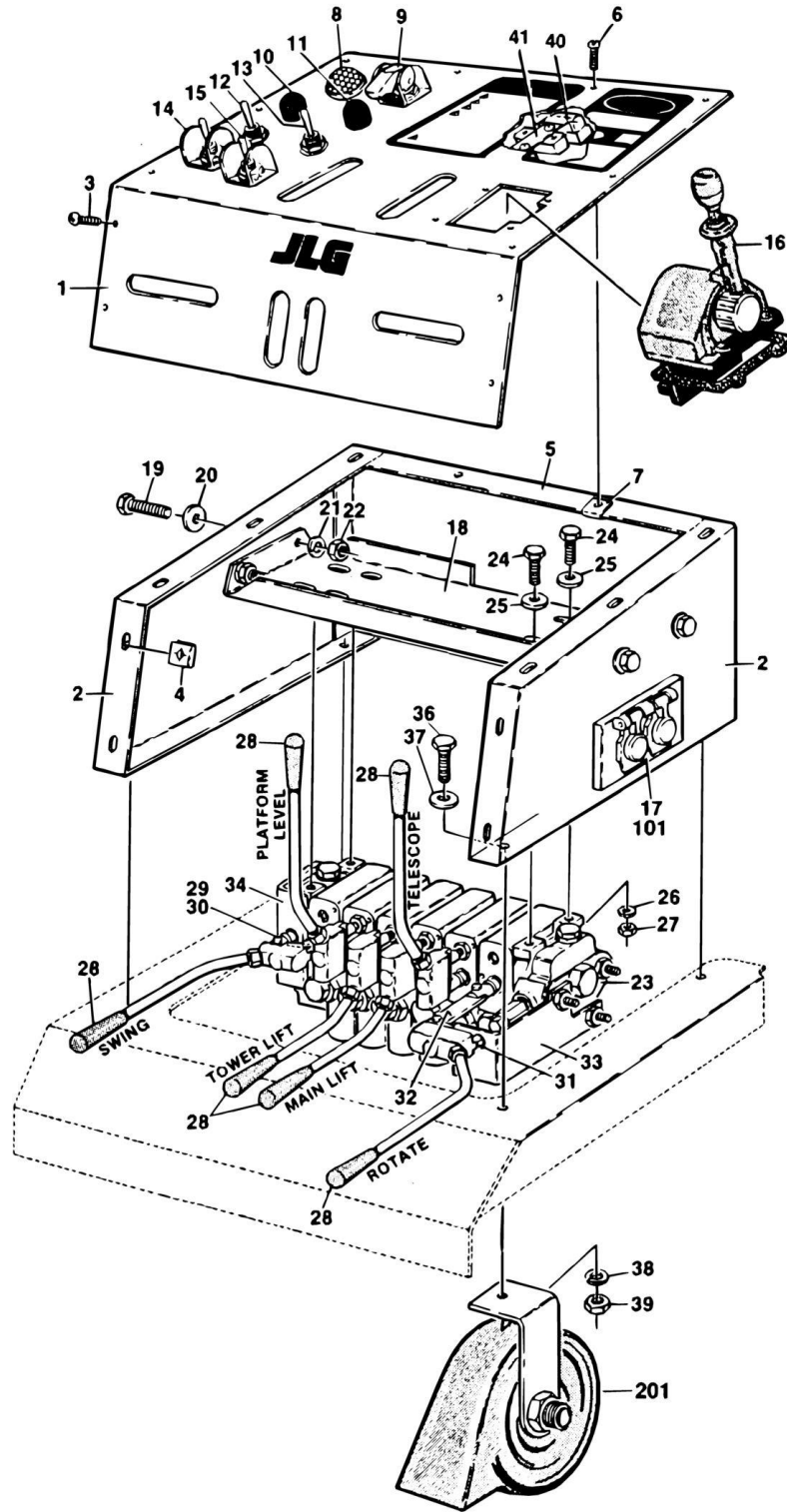
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
18	3790012	1	O-Ring (Glow Plug - Option)	
18	3251872	1	Nameplate (Glow Plug Option)	
19	2920015	1	Lamp (Engine Distress) (Optional)	
20	2920015	1	Lamp (Chassis Out of Level)	
21	4360200	1	Switch, Toggle (Auxiliary Power)	
21	3790012	1	O-Ring	
21	4060229	1	Shield	
22	4360199	1	Switch, Toggle (Lights) (Optional)	
22	3790012	1	O-Ring	
23	3520028	1	Plug, Hole	
24	4360202	1	Switch, Toggle (Rotate) (Optional)	
24	4060229	1	Shield	
24	3790012	1	O-Ring	
25	4360202	1	Switch, Toggle (Level)	
25	4060229	1	Shield	
25	3790012	1	O-Ring	
26	4360202	1	Switch, Toggle (Steer) (Machines Without Steer Switch in Drive Controller Only)	
26	4060229	1	Shield	
26	3790012	1	O-Ring	
27	4360202	1	Switch, Toggle (Main Tele)	
27	4060229	1	Shield	
27	3790012	1	O-Ring	
28	4360199	1	Switch, Toggle (Engine Speed)	
28	3790012	1	O-Ring	
29	4360199	1	Switch, Toggle (Pump Volume)	
29	3790012	1	O-Ring	
30	4360199	1	Switch, Toggle (Wheel Speed)	
30	3790012	1	O-Ring	
31	4360209	1	Breaker, Circuit - 20 Amp	
32	3640500	1	Rail, Mounting	
32	3910608	2	Screw, Round Head #6-32NC x 1/2in	
32	4750600	2	Flatwasher #6	
32	4760600	2	Lockwasher #6	
32	3310601	2	Nut #6-32NC	
33	4460299	2	Stop, Terminal Strip	
34	4460300	1	Barrier, Terminal End	
35	4460298	AR	Block, Terminal	
36	4460301	1	Strip, Marking	
37	4460311	1	Bar, Buss	
37	4460305	3	Screw, Terminal Block	
37	4460306	3	Washer, Terminal Block	
37	4460307	3	Sleeve, Terminal Block	
38	4460052	1	Connector	
38	0960239	1	Bushing, Insulating	
38	3300047	1	Nut, Conduit	
39	4460244	1	Connector	
39	0960238	1	Bushing, Insulating	
39	3300048	1	Nut, Conduit	
40	4460071	2	Connector	
40	0960238	2	Bushing, Insulating	
40	3300048	2	Nut, Conduit	

SECTION 4 - PLATFORM

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

SECTION 4 - PLATFORM

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



SECTION 4 - PLATFORM

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

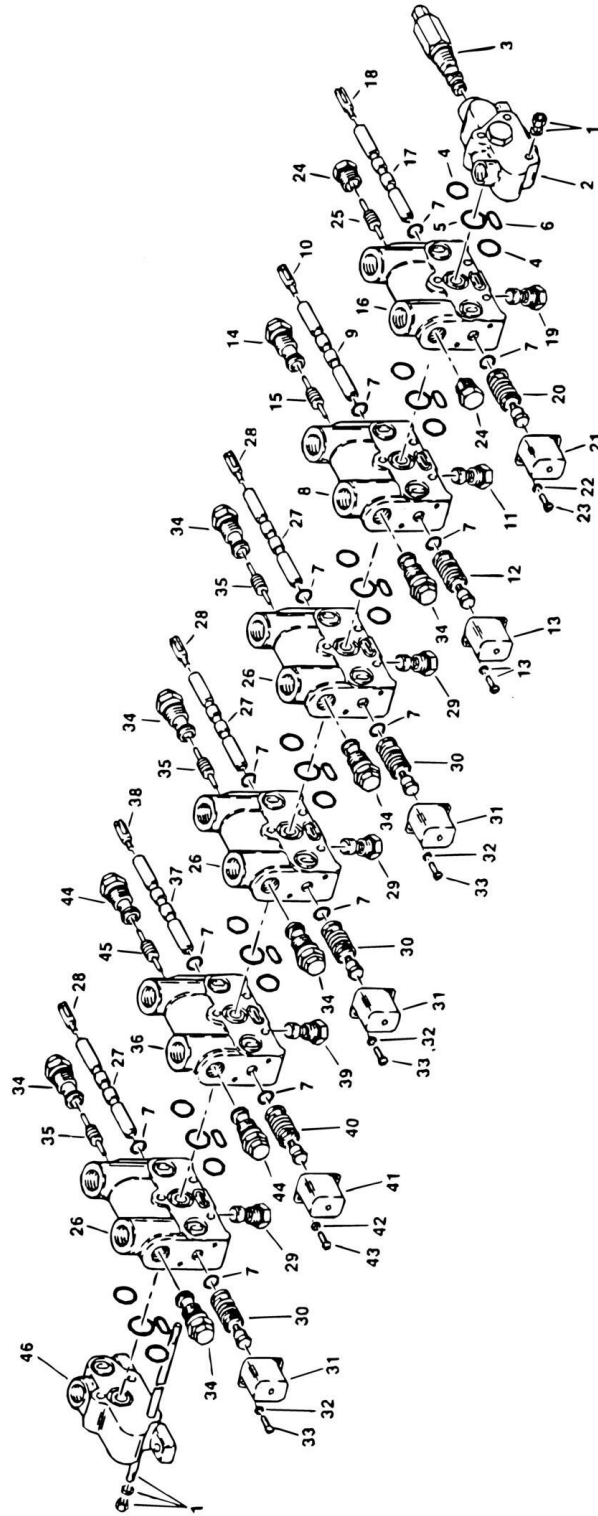
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0250844	Ref	CONTROL BOX ASSEMBLY	F
1	3251987	1	Lid, Control Box (Prior to May 1994)	
1	3252390	1	Lid, Control Box (May 1994 to Present)	
2	3534232	1	Plate, Side (LH)	
2	3534233	1	Plate, Side (RH)	
3	0751006	5	Screw, Machine #10-24NC x 3/4in	
4	3300177	5	Nut, Tinnerman	
4	4420008	AR	Tape, Insulation	
5	1670568	1	Plate, Back	
6	0751006	4	Screw, Machine #10-24NC x 3/4in	
7	3300177	4	Nut, Tinnerman	
7	4420008	AR	Tape, Insulation	
8	2920015	1	Lamp (Out of Level)	
9	4360199	1	Switch, Toggle (Emergency Stop)	
9	4360141	1	Guard, Switch	
9	3790012	1	O-Ring	
10	4360274	1	Switch, Push Button (Horn)	
10	3790015	1	O-Ring	
11	4360274	1	Switch, Push Button (Start)	
11	3790015	1	O-Ring	
12	4360199	1	Switch, Toggle (Drive Speed)	
12	3790012	1	O-Ring	
13	4360199	1	Switch, Toggle (High Engine)	
13	3790012	1	O-Ring	
14	4360200	1	Switch, Toggle (Aux. Power)	
14	4060229	1	Shield, Switch	
14	3790012	1	O-Ring	
15	4360198	1	Switch, Toggle (Steer)	
15	4060229	1	Shield, Switch	
15	3790012	1	O-Ring	
16	1600116	1	Controller - PQ (Drive)	
16	7003783	1	Electrical Assembly	
16	2560041	1	Knob	
17	4060092	1	Cover, Weather Proof	
17	4460190	1	Receptacle	
17	0860038	1	Box, Electrical	
17	3910604	4	Screw, Machine #6-32NC x 1/2in	
17	4760600	4	Lockwasher #6	
17	4460071	1	Connector, Strain Relief	
18	0901393	1	Bracket, Mounting - Valve	
19	0641608	4	Bolt 3/8in-16NC x 1in	
20	4751600	8	Flatwasher 3/8in	
21	4761600	4	Lockwasher 3/8in	
22	3311605	4	Locknut 3/8in-16NC	
23	4640640	1	Valve Assembly (See CONTROL VALVE ASSEMBLY - GRESEN (6-STACK) (HYDRAULIC CONTROLS ONLY) for Breakdown)	
24	0641612	3	Bolt 3/8in-16NC x 1 1/2in	
25	4751600	3	Flatwasher 3/8in	
26	4740341	3	Flatwasher, Special	
27	3311605	3	Locknut 3/8in-16NC	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
28	2980091	6	Lever	
29	3430507	1	Pin, Clevis	
30	3450403	1	Pin, Cotter 1/8in x 3/4in	
31	3531543	1	Plate, Link	
32	3534256	1	Plate, Link	
33	0901690	1	Bracket, Rotate	
34	0901392	1	Bracket, Swing	
36	0641608	1	Bolt 3/8in-16NC x 1in	
37	4751600	1	Flatwasher 3/8in	
38	4761600	1	Lockwasher 3/8in	
39	3311605	1	Locknut 3/8in-16NC	
40	3740049	1	Relay - SPDT	
41	4360209	1	Breaker, Circuit - 20 Amp	
41	3911012	2	Screw #10-24NC x 3/4in	
41	4761000	2	Lockwasher #10	
41	3311001	2	Nut #10-24NC	
		Ref	110V POWER CORD INSTALLATIONS	
	0252405	Ref	110V POWER CORD INSTALLATIONS (PRIOR TO OCTOBER 1993)	-
	0254438	Ref	110V POWER CORD INSTALLATIONS (OCTOBER 1993 PRESENT)	3
101		Ref	Cable, Electrical - 12/3 Options:	
101	1060300	32 ft/9.8m	Cable, Electrical (Prior to October 1993)	
101	1060514	70 ft/21.3m	Cable, Electrical (October 1993 to Present) (was p/n 1060268)	
101	4460205	1	Plug	
	0239762	Ref	HORN INSTALLATION	-
201	0140001	1	Horn	

SECTION 4 - PLATFORM

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



SECTION 4 - PLATFORM

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

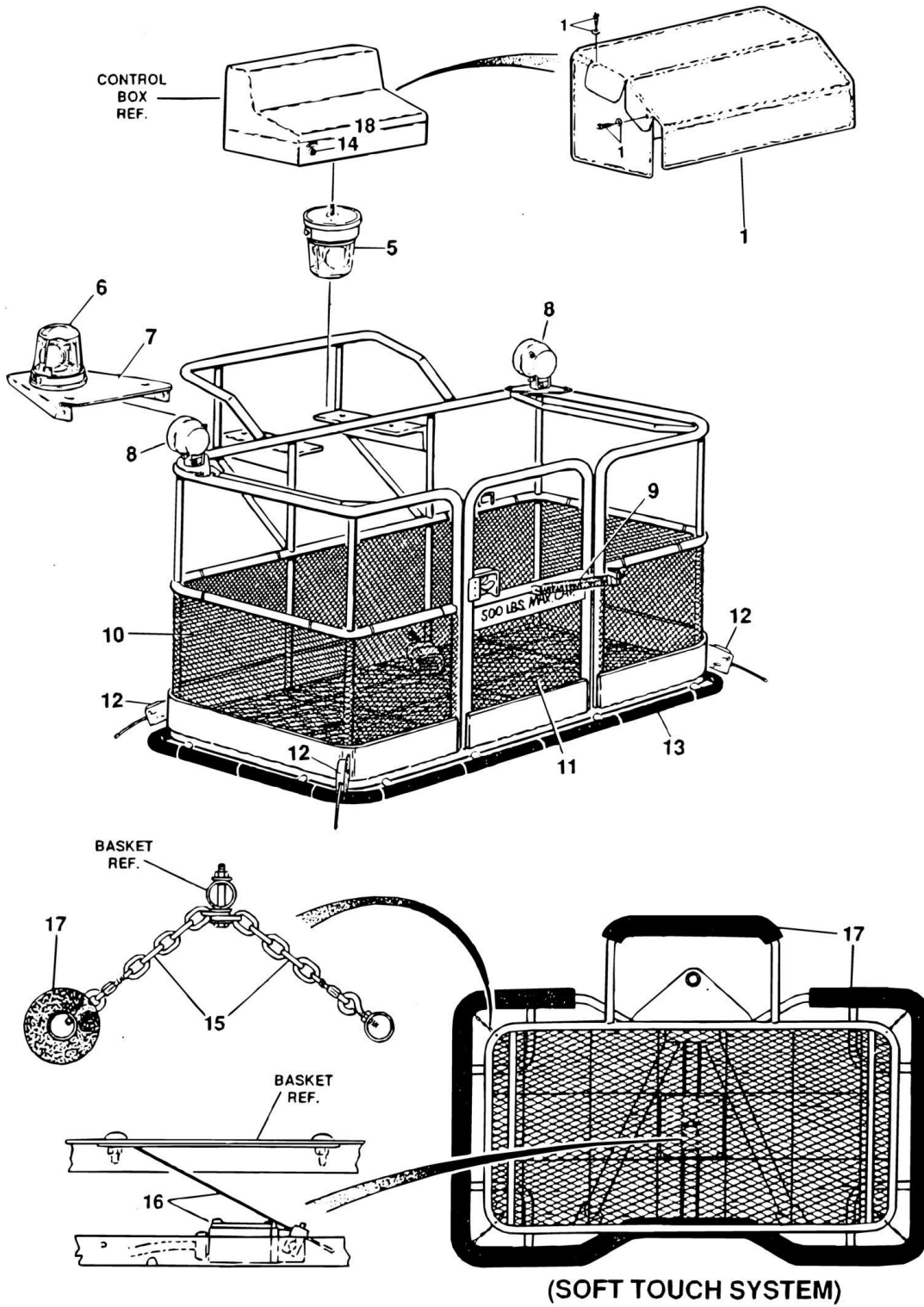
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4640640	Ref	CONTROL VALVE ASSEMBLY - GRESEN (6-STACK)	
1	7002408	1	Tie Rod Kit (Includes 3 tie rods, 6 hex nuts, & 6 washers)	
2	7002409	1	Inlet Section Assembly	
3	7002410	1	Cartridge, Relief Valve	
4	Kit	14	O-Ring	
5	Kit	7	O-Ring	
6	Kit	7	O-Ring	
7	Kit	14	O-Ring	
8	7002430	1	Working Section Assembly - Telescope	
9	7002425	1	Spool	
10	7002415	1	Spool End	
11	7002416	1	Load Check Assembly	
12	7002417	1	Spring Centering Kit	
13	7002418	1	Cover	
13	7002419	2	Lockwasher	
13	7002420	2	Screw	
14	7002426	1	Cartridge, Cylinder Lock Valve	
15	7002424	1	Ram, Pilot	
16	7002421	1	Working Section Assembly - Rotate	
17	7002422	1	Spool	
18	7002415	1	Spool End	
19	7002416	1	Load Check Assembly	
20	7002417	1	Spring Centering Kit	
21	7002418	1	Cover	
22	7002419	2	Lockwasher	
23	7002420	2	Screw	
24	7002423	2	Plug	
25	7002424	1	Ram, Pilot	
26	7011100	3	Working Section Assembly - Lift, Articulate and Swing	
27	4140017	3	Spool	
28	7002415	3	Spool End	
29	7002416	3	Load Check Assembly	
30	7002417	3	Spring Centering Kit	
31	7002418	3	Cover	
32	7002419	6	Lockwasher	
33	7002420	6	Screw	
34	7002426	6	Cartridge, Cylinder Lock Valve	
35	7002424	3	Ram, Pilot	
36	7002427	1	Working Section Assembly - Level	
37	7002422	1	Spool	
38	7002415	1	Spool End	
39	7002416	1	Load Check Assembly	
40	7002417	1	Spring Centering Kit	
41	7002418	1	Cover	
42	7002419	2	Lockwasher	
43	7002420	2	Screw	
44	7002426	2	Cartridge, Cylinder Lock Valve	
45	7002424	1	Ram, Pilot	
46	7002428	1	Outlet Section Assembly	

SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	7002429	7	Seal Kit (Includes two of Item 4, one of Item 5, one of Item 6 & two of Item 7.)	

SECTION 4 - PLATFORM

FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS



SECTION 4 - PLATFORM

FIGURE 4-9. OPTIONAL COMMON PLATFORM MOUNTED COMPONENTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0252054	Ref	CONSOLE BOX COVER INSTALLATION (BLACK)	2
	0251203	Ref	CONSOLE BOX COVER INSTALLATION (YELLOW)	2
	0252848	Ref	CONSOLE BOX COVER INSTALLATION (CLEAR PLEXI-GLASS)	-
1	1670607	1	Cover (Black)	
1	1670526	1	Cover (Yellow)	
1	1670641	1	Cover, Plexi-Glass (Not Shown)	
1	3941406	4	Screw, Self-Tapping 1/4in-20NC	
1	4751400	4	Flatwasher 1/4in	
1	0901842	1	Bracket (Right Side) (Use with Plexi-Glass Cover Only)	
1	0901843	1	Bracket (Left Side) (Use with Plexi-Glass Cover Only)	
		Ref	BEACON LIGHT OPTIONS	
5	0252210	AR	Beacon Mounted Under Console (September 1991 to Present)	3
5	0252211	1	Beacon Mounted Under Console (September 1991 to Present)	3
5	2920009	AR	Beacon (Red)	
5	2920018	AR	Beacon (Amber)	
6	0238864	AR	Beacon Mounted in Front of Console (Prior to September 1991)	-
6	0238865	1	Beacon Mounted in Front of Console (Prior to September 1991)	-
6	2920009	AR	Beacon (Red)	
6	2920018	AR	Beacon (Amber)	
7	0901449		Bracket, Mounting	
		Ref	WORKLIGHT OPTIONS:	
	2900068	Ref	WORKLIGHT (PRIOR TO NOVEMBER 1992)	F
	0253987	Ref	WORKLIGHT (NOVEMBER 1992 TO PRESENT)	C
8	2920013	2	Floodlight	
8	2920111	2	Halogen Light (Uses PN 3536089 Mounting Plate)	
	0250143	Ref	SELF-CLOSING GATE INSTALLATION	A
9	4160028	1	Spring	
9	0900232	1	Bracket (Door Mounted)	
9	0901056	1	Bracket (Platform Mounted)	
9	4220007	1	Stop, Door	
		Ref	MESH TO MIDRAIL INSTALLATIONS	
	0253846	Ref	LOW MOUNT PLATFORM	-
	0254130	Ref	STANDARD PLATFORM	-
10	0480083	2	Mesh (Sides) (Low-Mount Platform)	
10	0480086	2	Mesh (Sides) (Standard Platform)	
11	0480084	1	Mesh (Door)	
		Ref	PLATFORM BUMPERS INSTALLATION	
	0251611	Ref	30IN x 48IN PLATFORM	E
	0254178	Ref	30IN x 60IN FIXED PLATFORM	A
	0251024	Ref	30IN x 60IN ROTATING PLATFORM	C
	0251239	Ref	30IN x 96IN PLATFORM	B
12	4360305	4	Switch, Proximity - U/L Machines	
12	4360215	4	Switch, Proximity - Standard Machines	
12	4460521	4	Connector, Strain Relief	
13	0940038	AR	Padding, Bumper	
14	4360274	1	Switch, Push Button (Override)	
14	3251596	1	Nameplate - Override	
14	3740049	1	Relay (Not Shown)	
		Ref	PLATFORM BUMPERS INSTALLATION - SOFT TOUCH SYSTEM (CHAIN MOUNTED TYPE)	

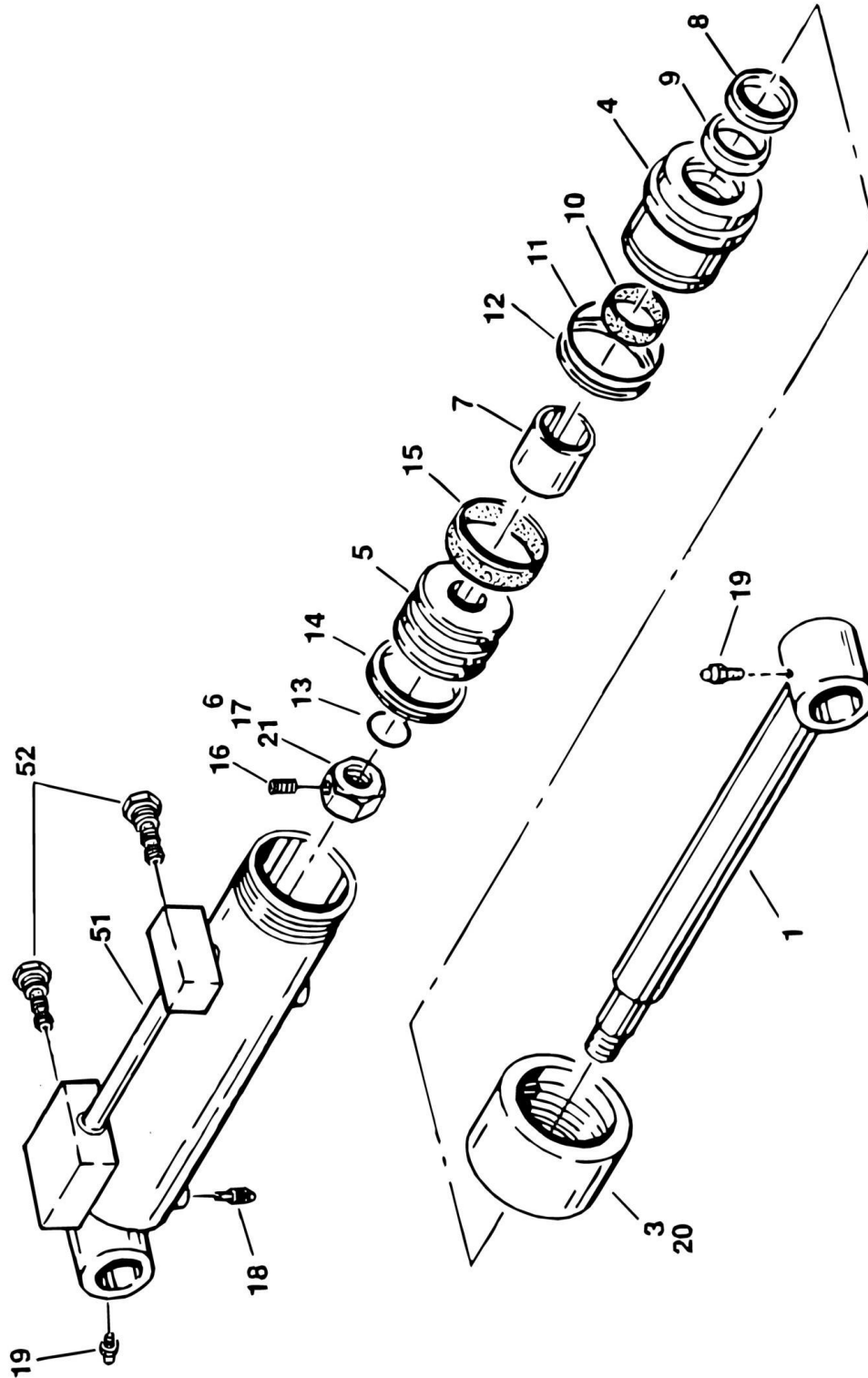
SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0254728	Ref	30INx 96IN PLATFORM	B
	0254948	Ref	30INx 72IN PLATFORM	A
15	0630440	8	Eyebolt	
15	3010088	8	Link, Quick	
15	1260136	AR	Chain	
16	4360057	1	Switch, Limit	
16	0200048	1	Arm, Actuator	
17	0940038	AR	Padding (Bottom Rail)	
17	1670663	1	Padding (Rail Behind Console Box)	
17	1670733	1	Padding (LH Top Rail - 36in x 72in Platform)	
17	1670699	1	Padding (LH Top Tail - 36in x 96in Platform)	
17	1670665	4	Padding (Vertical Rails)	
17	1670666	1	Padding (Gate)	
17	1670734	1	Padding (RH Top Rail - 36in x 72in Platform)	
17	1670700	1	Padding (RH Top Rail - 36in x 96in Platform)	
17	1670735	1	Padding (LH Mid Rail - 36in x 72in Platform)	
17	1670701	1	Padding (LH Mid Rail - 36in x 96in Platform)	
17	1670736	1	Padding (RH Mid Rail - 36in x 72in Platform)	
17	1670702	1	Padding (RH Mid Rail - 36in x 96in Platform)	
17	1670737	1	Padding (Bumper Rail - 36in x 72in Platform)	
17	1670703	1	Padding (Bumper Rail - 36in x 96in Platform)	
18	4360274	1	Switch, Push Button	
18	3252238	1	Decal - Soft Touch System	

SECTION 5 - CYLINDER

SECTION 5 - CYLINDER

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



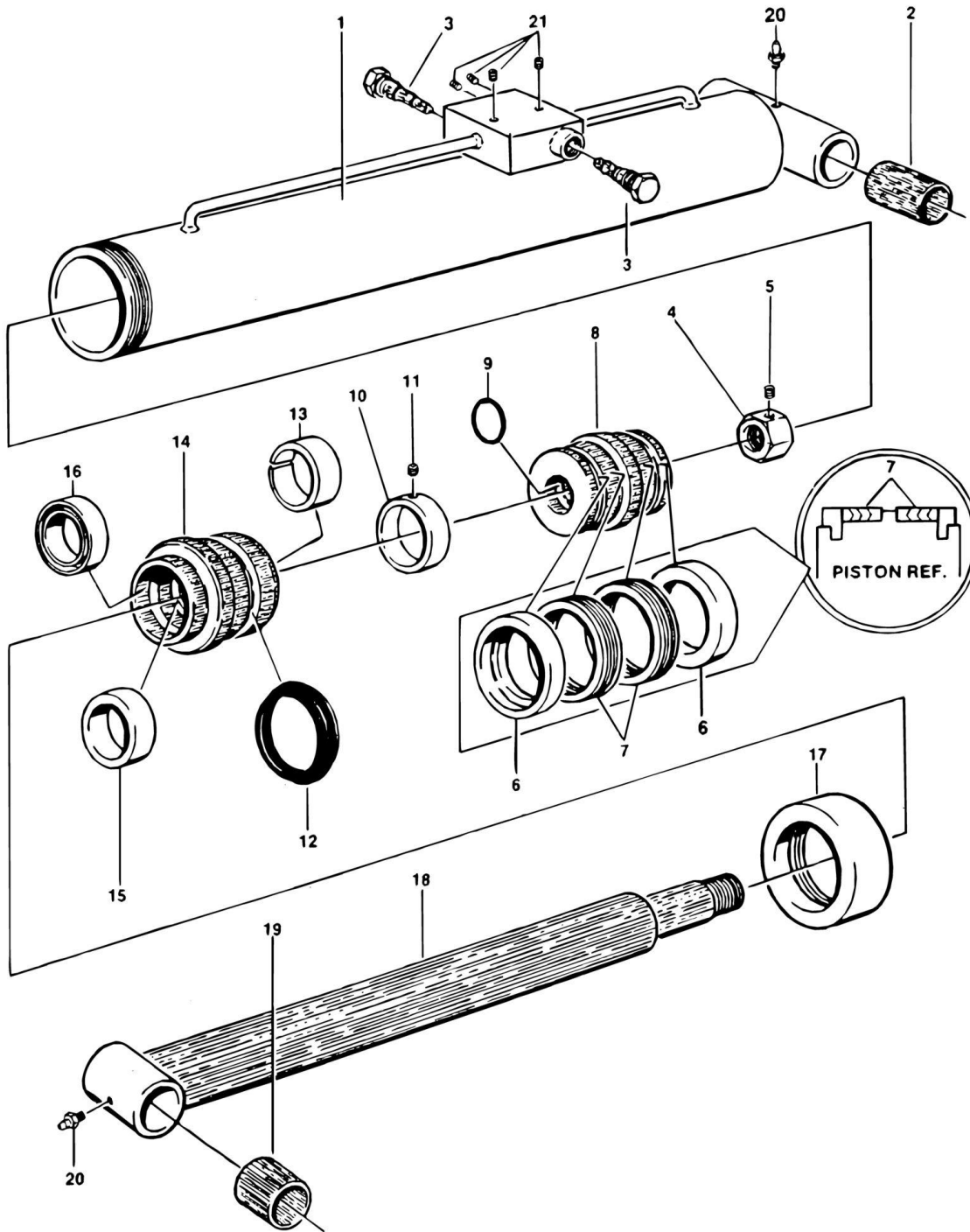
SECTION 5 - CYLINDER

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	AXLE LOCKOUT CYLINDER ASSEMBLIES (STANDARD PARTS)	
1	1681787	1	Rod	
3	1120179	1	Retainer	
4	1680892	1	Head	
5	3480120	1	Piston	
6	3300187	1	Nut (Prior to April 1992)	
6	3300273	1	Nut, Hex (April 1992 to Present)	
7	4563647	1	Tube, Spacer	
8	Kit	1	Seal, Wiper	
9	Kit	1	Seal, Rod	
10	Kit	1	Ring, Wear	
11	Kit	1	O-Ring	
12	Kit	2	Ring, Back-up	
13	Kit	1	O-Ring	
14	Kit	1	Seal, Piston	
15	Kit	1	Ring, Wear	
16	3900141	2	Setscrew 1/4in-20NC x 3/8in (Prior to August 1992)	
16	3900170	1	Setscrew 3/8in-16NC x 3/8in (August 1992 to Present)	
17	0100011	AR	Loctite #242	
18	3900175	2	Setscrew 1/4in-28NF x 3/4in	
18	3960416	2	Seal, Thread	
18	3321401	2	Nut 1/4in-28NF	
		Ref	Note: Replace existing bleeders with these components when ordering parts.	
19	2160002	2	Fitting, Grease	
20	0100035	AR	Compound, Locking	
21	0100038	AR	Primer, Locking	
	2900381	1	Seal Kit (Includes Items 8-15)	
		Ref	AXLE LOCKOUT CYLINDER ASSEMBLY (VARIABLE PARTS)	
	1681785	Ref	AXLE LOCKOUT CYLINDER ASSEMBLY (PRIOR TO SEPTEMBER 1990)	D
	1682406	Ref	AXLE LOCKOUT CYLINDER ASSEMBLY (SEPTEMBER 1990 TO JUNE 1992)	C
	1682757	Ref	AXLE LOCKOUT CYLINDER ASSEMBLY (JUNE 1992 TO PRESENT)	A
51		Ref	Barrel Options:	
51	1681788	1	Barrel (Prior to September 1990)	
51	1682407	1	Barrel (September 1990 to June 1992)	
51	1682758	1	Barrel (June 1992 to Present)	
52		Ref	Valve, Holding Options:	
52	Not Required	2	Valve, Holding (Prior to September 1990)	
52	4640438	2	Valve, Holding (September 1990 to June 1992)	
52	2900770	2	Seal Kit - 4640438 (1 Per Valve)	
52	4640509	2	Valve, Holding (June 1992 to Present)	
52	2900792	2	Seal Kit - 4640509 (1 Per Valve)	

SECTION 5 - CYLINDER

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



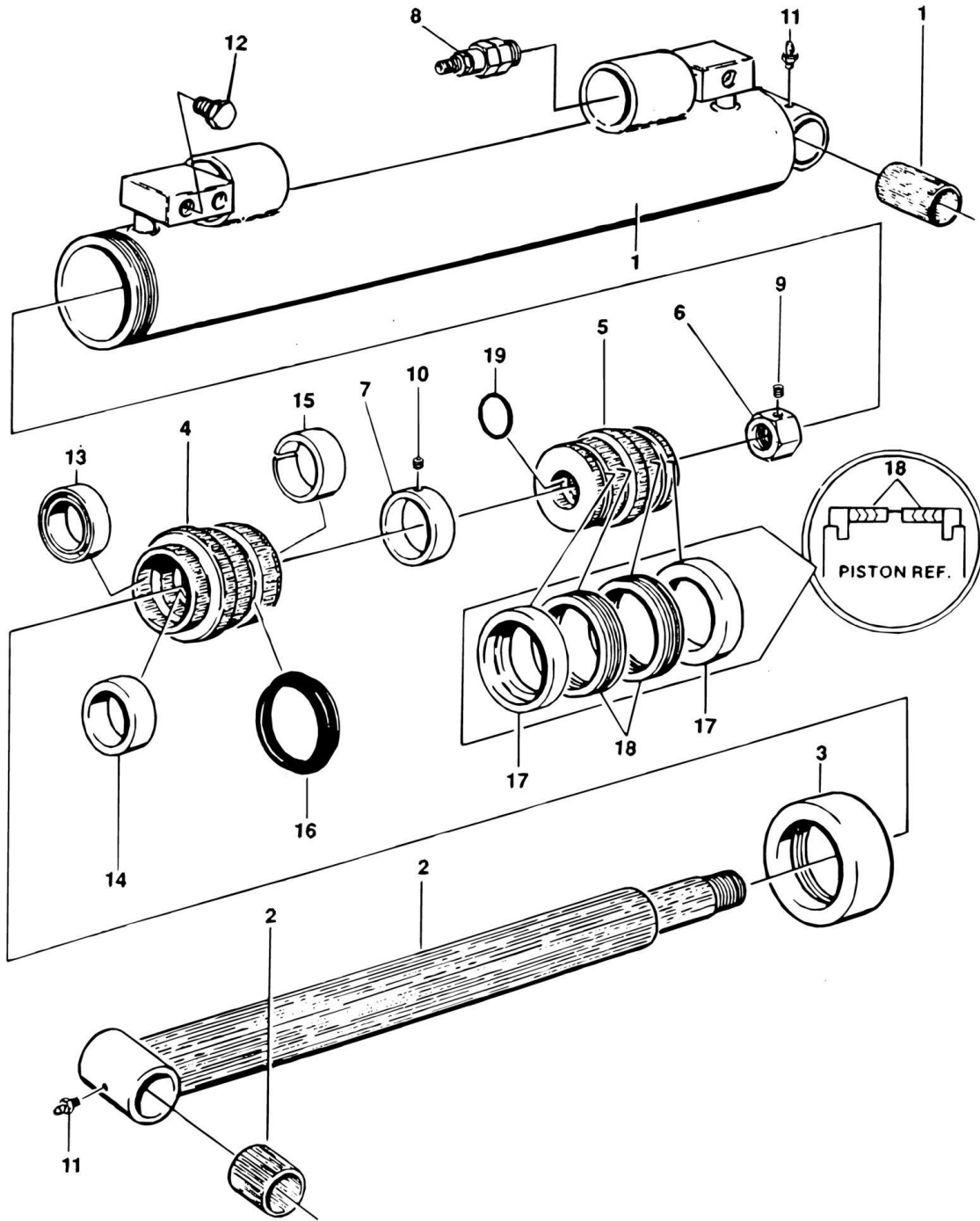
SECTION 5 - CYLINDER

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

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

SECTION 5 - CYLINDER

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



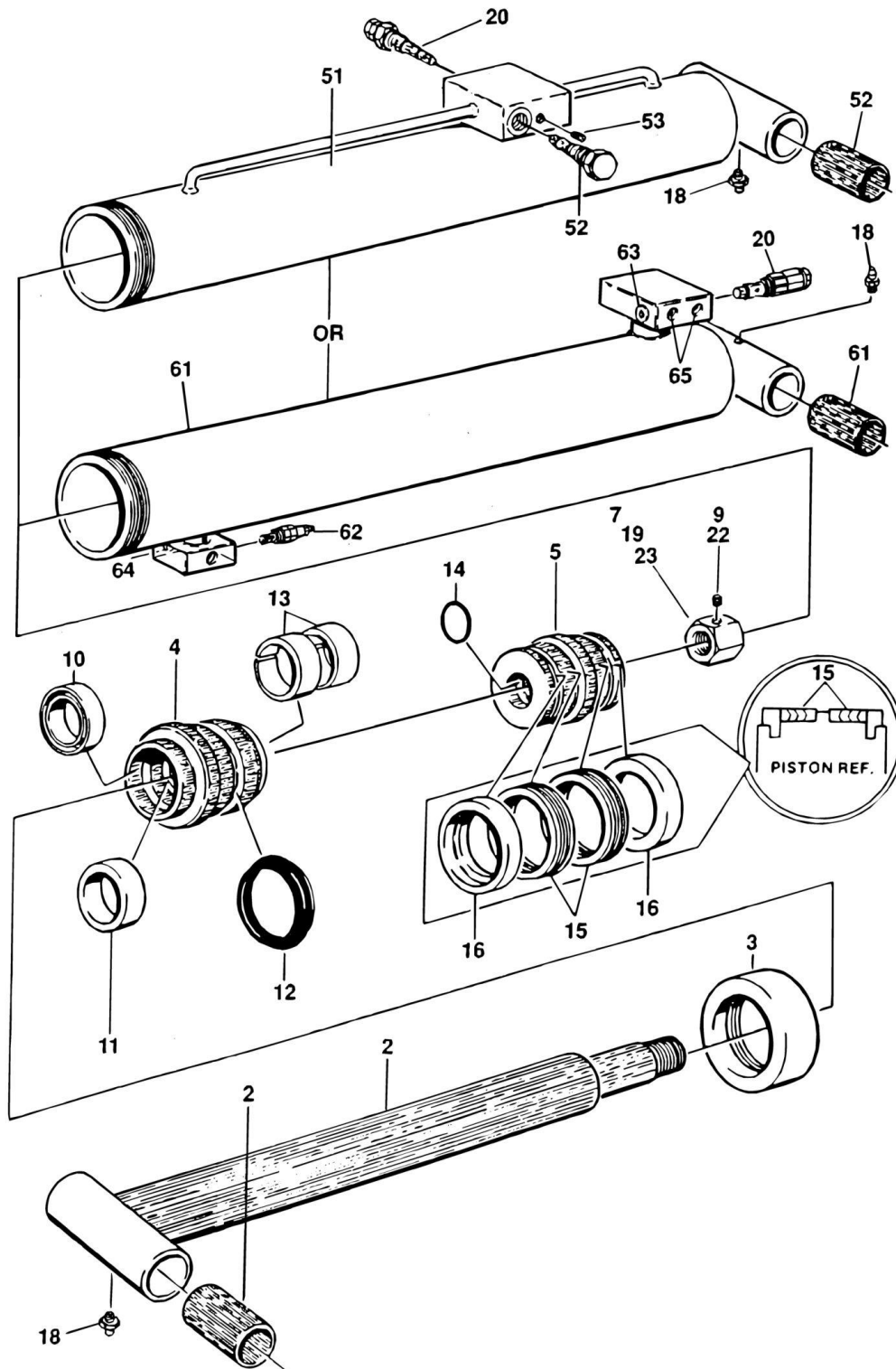
SECTION 5 - CYLINDER

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

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

SECTION 5 - CYLINDER

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



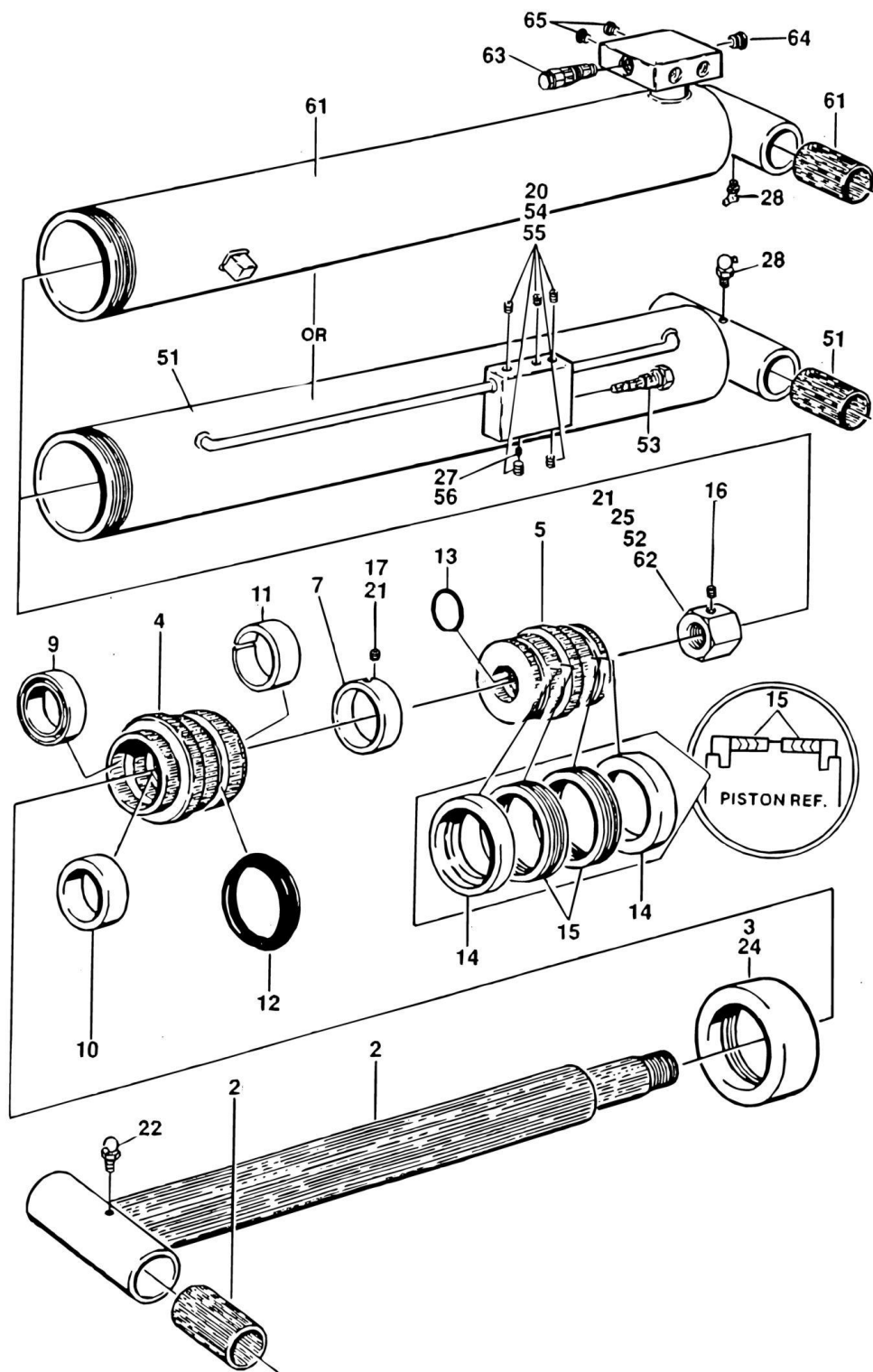
SECTION 5 - CYLINDER

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	LEVEL (UPRIGHT) CYLINDER ASSEMBLY (STANDARD PARTS)	
2	1682091	1	Rod	
2	0960946	2	Bushing, Bronze	
3	1120343	1	Retainer	
4	1681294	1	Head	
5	3480102	1	Piston	
7	3300283	1	Nut, Hex	
9	3900170	1	Setscrew 3/8in-16NC x 3/8in	
10	Kit	1	Wiper, Rod	
11	Kit	1	Seal, Rod	
12	Kit	1	O-Ring	
13	Kit	2	Ring, Wear	
14	Kit	1	O-Ring	
15	Kit	2	Seal, Piston	
16	Kit	2	Ring, Lock	
18	2160002	2	Fitting, Grease	
19	0100011	AR	Loctite #242	
20	4640605	1	Valve, Holding	
20	2900792	1	Seal Kit - 4640605 Valve	
22	0100035	AR	Loctite	
23	0100038	AR	Primer, Locking	
	2900340	1	Seal Kit (Includes Items 10-16)	
	1682255	Ref	LEVEL (UPRIGHT) CYLINDER ASSEMBLY (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)	A
51	1682256	1	Barrel	
51	0961422	2	Bushing, Bronze	
52	4640509	1	Valve, Cartridge	
52	2900792	1	Seal Kit - 4640509 Valve	
53	2200201	1	Plug, Pipe	
		Ref	LEVEL (UPRIGHT) CYLINDER ASSEMBLY OPTIONS (VARIABLE PARTS):	
	1682796	Ref	LEVEL (UPRIGHT) CYLINDER ASSEMBLY (OCTOBER 1992 TO PRESENT) (ORIGINAL EQUIPMENT)	-
	1683524	Ref	LEVEL (UPRIGHT) CYLINDER ASSEMBLY (SERVICE REPLACEMENT)	B
61		Ref	Barrel Options:	
61	1682797	1	Original Equipment	
61	1683523	1	Service Replacement	
61	0961422	2	Bushing, Bronze	
62	4640634	1	Valve, Cartridge	
62	2900770	1	Seal Kit - 4640634 Valve	
63	2220887	1	Plug 5/8in	
64	2220885	1	Plug 3/8in	
65	2220883	2	Plug 1/4in	

SECTION 5 - CYLINDER

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



SECTION 5 - CYLINDER

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

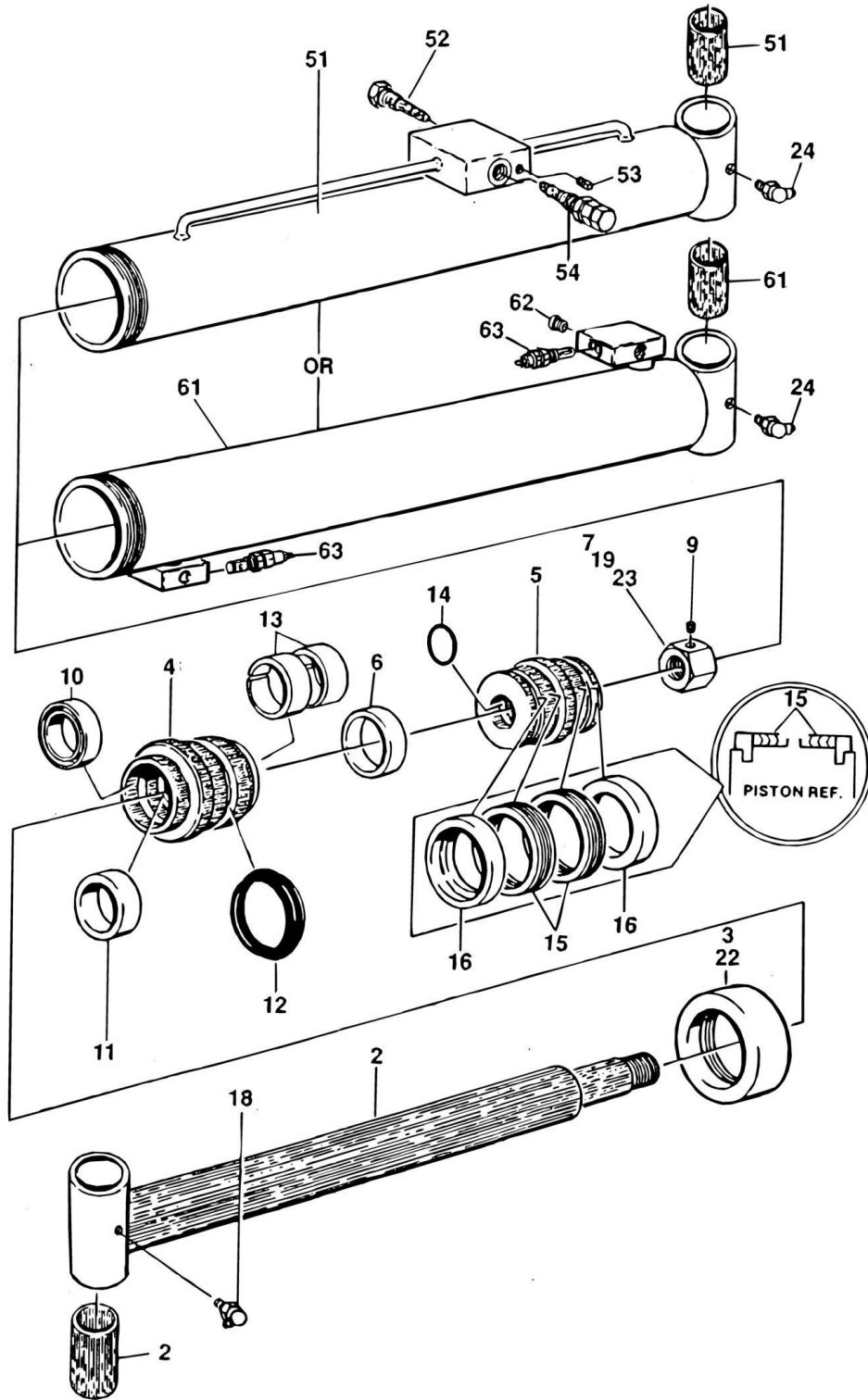
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	LIFT CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)	
2	1681841		Rod	
2	0960946	2	Bushing, Bronze	
3	1120340	1	Cap	
4	1681843	1	Head	
5	3480102	1	Piston	
7	4563769	1	Spacer	
9	Kit	1	Wiper, Rod	
10	Kit	1	Seal, Rod	
11	Kit	1	Ring, Wear	
12	Kit	1	T-Seal	
13	Kit	1	O-Ring	
14	Kit	2	Ring, Lock	
15	Kit	2	Seal	
16	3900170	1	Setscrew 3/8in-16NC x 3/8in (February 1991 to Present)	
16	3951403	1	Setscrew 1/4in-20NC x 3/8in (Prior to February 1991)	
17	3951402	1	Setscrew 1/4in-20NC x 1/4in	
20	0100020	AR	Sealant, Pipe	
21	0100011	AR	Loctite #242	
22	2160001	1	Fitting, Grease - 90	
24	0100035	AR	Loctite	
25	0100038	AR	Primer, Locking	
27	0100034	AR	Loctite	
28	2160003	1	Fitting, Grease - 45	
	2901102	1	Seal Kit (Includes Items 9-15)	
	1682124	Ref	LIFT CYLINDER ASSEMBLY (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)	E
	9983275	Ref	LIFT CYLINDER ASSEMBLY - 8 FT PLATFORMS (PRIOR TO OCTOBER 1992) (VARIABLE PARTS)	A
51	1682125	1	Barrel	
51	0961422	2	Bushing, Bronze	
52	3300190	1	Nut (Prior to February 1991)	
52	3300281	1	Nut (February 1991 to Present)	
52	3300323	1	Nut (Cylinder - p/n 9983275 Only)	
53	4640634	1	Valve, Cartridge	
53	2900770	1	Seal Kit - 4640634 Valve	
54	2200233	4	Plug, Pipe 3/8in	
55	2200221	1	Plug, Pipe 1/4in	
56	2180448	1	Orifice .062	
	1682799	Ref	LIFT CYLINDER ASSEMBLY - 4FT 5 FT AND 6 FT PLATFORMS (OCTOBER 1992 TO PRESENT) (VARIABLE PARTS)	A
	9983596	Ref	LIFT CYLINDER ASSEMBLY - 8 FT PLATFORMS (OCTOBER 1992 TO PRESENT) (VARIABLE PARTS)	A
61	1682800	1	Barrel	
61	0961422	2	Bushing, Bronze	
62	3300281	1	Nut (1682799 Cylinder)	
62	9983276	1	Nut (9983596 Cylinder) (Prior to August 1995)	
62	3300323	1	Nut (9983596 Cylinder) (August 1995 to Present)	
63	4640605	1	Valve, Cartridge	
63	2900792	1	Seal Kit - 4640605 Valve	

SECTION 5 - CYLINDER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
64	2220887	1	Plug 5/8in	
65	2220883	2	Plug 1/4in	

SECTION 5 - CYLINDER

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



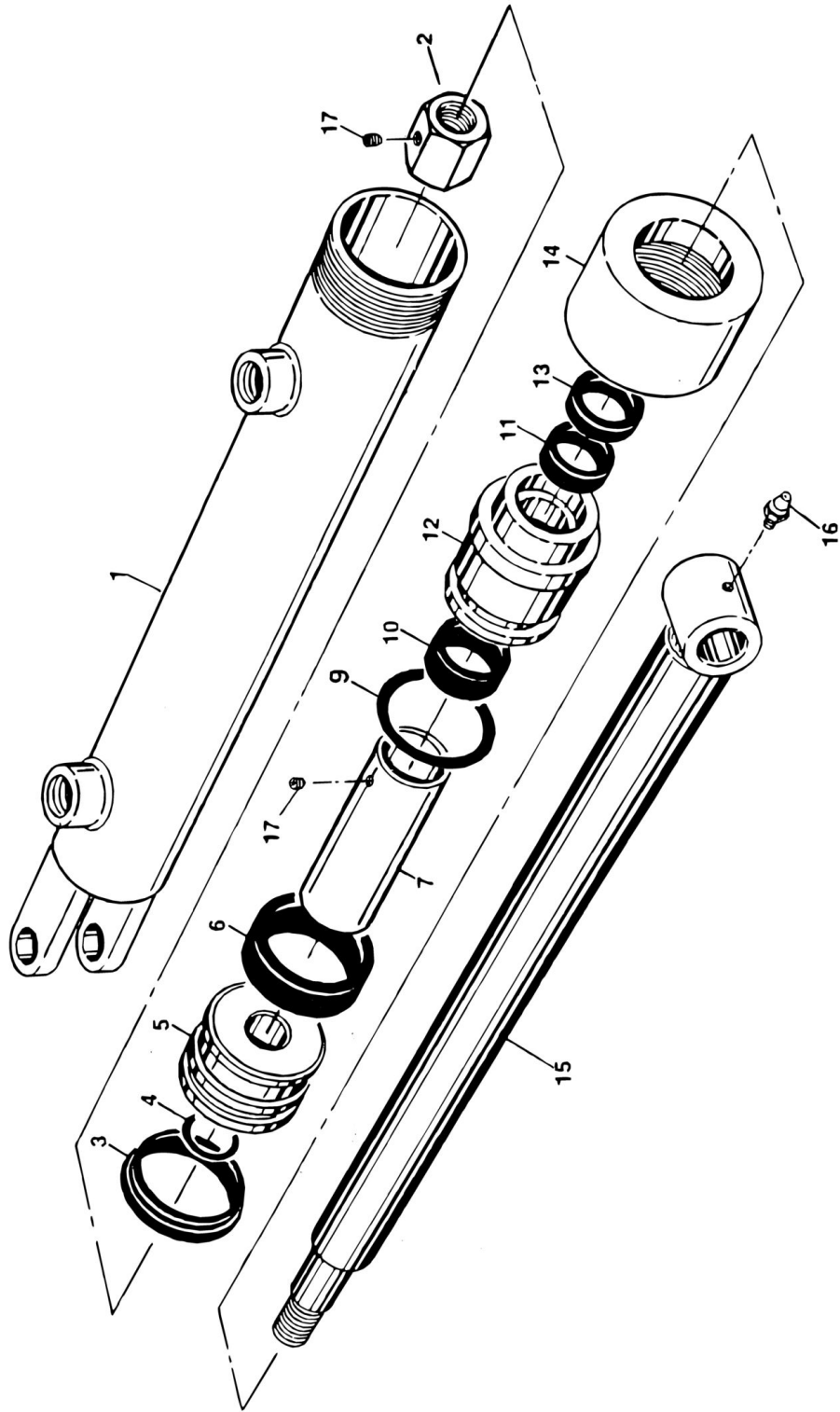
SECTION 5 - CYLINDER

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	LIFT CYLINDER ASSEMBLY - TOWER BOOM (STANDARD PARTS)	
2	1682086	1	Rod	
2	0960946	2	Bushing, Bronze	
3	1120427	1	Retainer	
4	1681294	1	Head	
5	3480102	1	Piston	
6	4563930	1	Spacer	
7	3300190	1	Nut (Prior to August 1991)	
7	3300281	1	Nut, Hex (August 1991 to Present)	
9	3951404	1	Setscrew 1/4in-20NC x 1/4in (Prior to August 1991)	
9	3900170	1	Setscrew 3/8in-16NC x 3/8in (August 1991 to Present)	
10	Kit	1	Wiper, Rod	
11	Kit	1	Seal, Rod	
12	Kit	1	O-Ring	
13	Kit	2	Ring, Wear	
14	Kit	1	O-Ring	
15	Kit	2	Seal, Piston	
16	Kit	2	Ring, Lock	
18	2160001	1	Fitting, Grease - 90	
19	0100011	AR	Loctite #242	
22	0100035	AR	Loctite	
23	0100038	AR	Primer, Locking	
24	2160003	1	Fitting, Grease - 45	
	2900340	1	Seal Kit (Includes Items 10-16)	
	1682085	Ref	LIFT CYLINDER ASSEMBLY - TOWER BOOM USED PRIOR TO OCTOBER 1992 (VARIABLE PARTS)	D
51	1682271	1	Barrel	
51	0960946	2	Bushing, Bronze	
52	4640509	1	Valve, Cartridge	
52	2900792	1	Seal Kit - 4640509 Valve	
53	2200201	2	Plug, Pipe 1/8in NPT	
54	4640605	1	Valve, Cartridge	
54	2900792	1	Seal Kit - 4640605 Valve	
	1682785	Ref	LIFT CYLINDER ASSEMBLY - TOWER BOOM USED OCTOBER 1992 TO PRESENT (VARIABLE PARTS)	
	1683528	Ref	LIFT CYLINDER ASSEMBLY - TOWER BOOM USED SERVICE REPLACEMENT ALTERNATIVE (VARIABLE PARTS)	
61	1682786	1	Barrel (Original Equipment)	
61	1683527	1	Barrel (Service Replacement Alternative)	
61	0960946	2	Bushing, Bronze	
62	2220885	1	Plug	
63	4640634	1	Valve, Cartridge	
63	2900770	1	Seal Kit - 4640634 Valve	

SECTION 5 - CYLINDER

FIGURE 5-7. STEER CYLINDER ASSEMBLIES



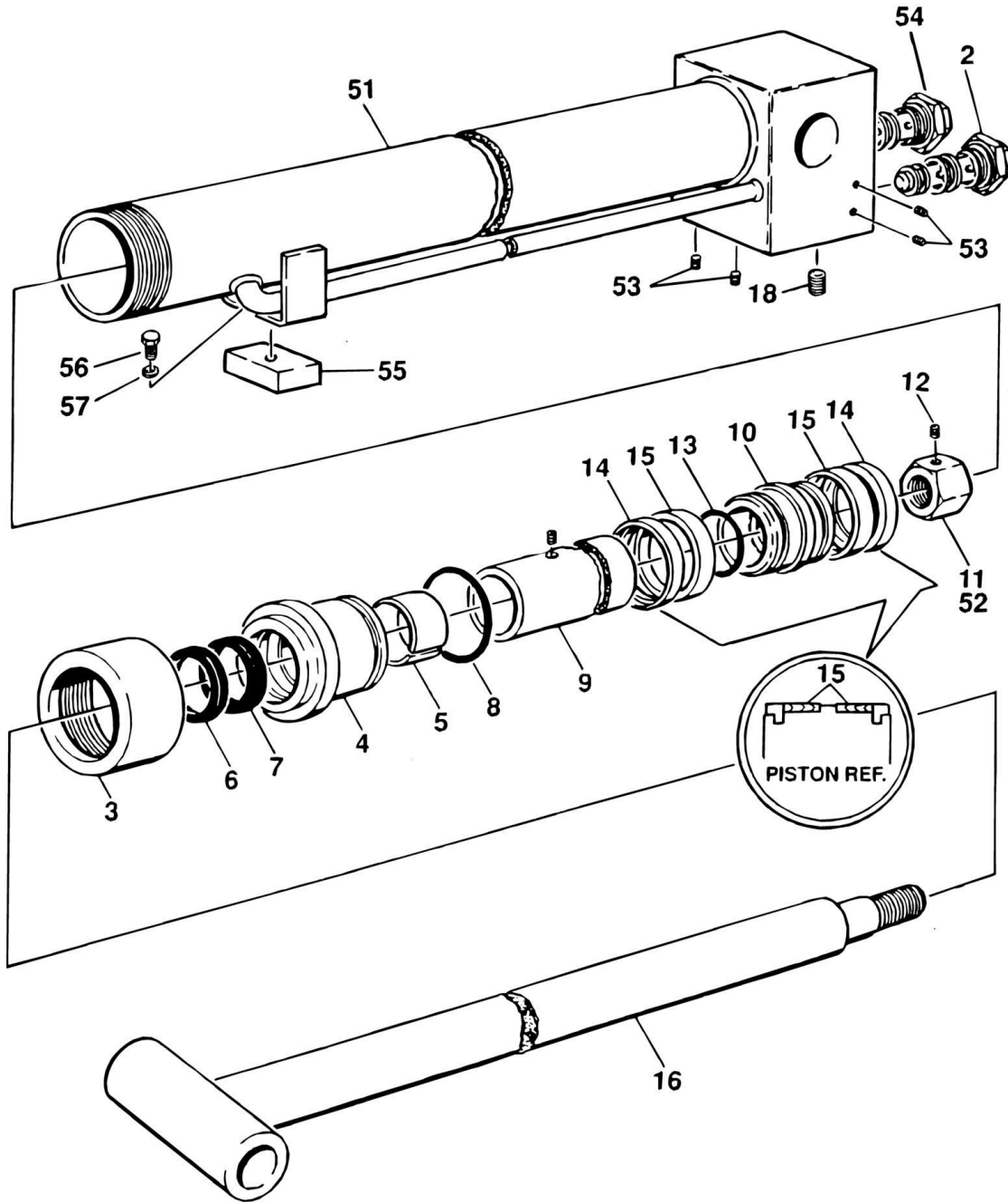
SECTION 5 - CYLINDER

FIGURE 5-7. STEER CYLINDER ASSEMBLIES

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1681562	Ref	STEER CYLINDER ASSEMBLY (2WD FRONT AXLE)	H
	1681555	Ref	STEER CYLINDER ASSEMBLY (4WD FRONT AND ALL REAR AXLES)	D
1	1681433	1	Barrel (1681562 Cylinder)	
1	1681413	1	Barrel (1681555 Cylinder)	
2	3300273	1	Nut, Hex (February 1991 to Present)	
2	3300187	1	Nut, Special (Prior to February 1991)	
2	0100011	AR	Loctite #242	
2	0100038	AR	Primer, Locking	
3	Kit	1	Seal	
4	Kit	1	O-Ring	
5	3480134	1	Piston	
6	Kit	1	Ring, Wear	
7	4562687	1	Spacer (1681562 Cylinder)	
7	4562851	1	Spacer (1681555 Cylinder)	
9	Kit	1	O-Ring	
10	Kit	1	Ring, Wear	
11	Kit	1	Seal, Rod	
12	1681322	1	Head, Cylinder (1681562 Cylinder)	
12	1681344	1	Head, Cylinder (1681555 Cylinder)	
13	Kit	1	Wiper, Rod	
14	1120108	1	Cap	
15	1681435	1	Rod (1681562 Cylinder)	
15	1681411	1	Rod (1681555 Cylinder)	
16	2160002	1	Fitting, Grease - Straight	
16	2160001	1	Fitting, Grease - 90	
16	2160006	1	Fitting, Grease (4WD/4WS Only)	
17	3900141	3	Setscrew 1/4in-20NC x 3/8in (Prior to February 1991)	
17	3900170	1	Setscrew 3/8in-16NC x 3/8in (February 1991 to Present)	
17	0100011	AR	Loctite #242	
	2901148	1	Kit, Seal (Includes Items 3, 4, 6, 9, 10, 11 & 13) (1681562 Cylinder)	
	2901123	1	Kit, Seal (Includes Items 3, 4, 6, 9, 10, 11 & 13) (1681555 Cylinder)	

SECTION 5 - CYLINDER

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



SECTION 5 - CYLINDER

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

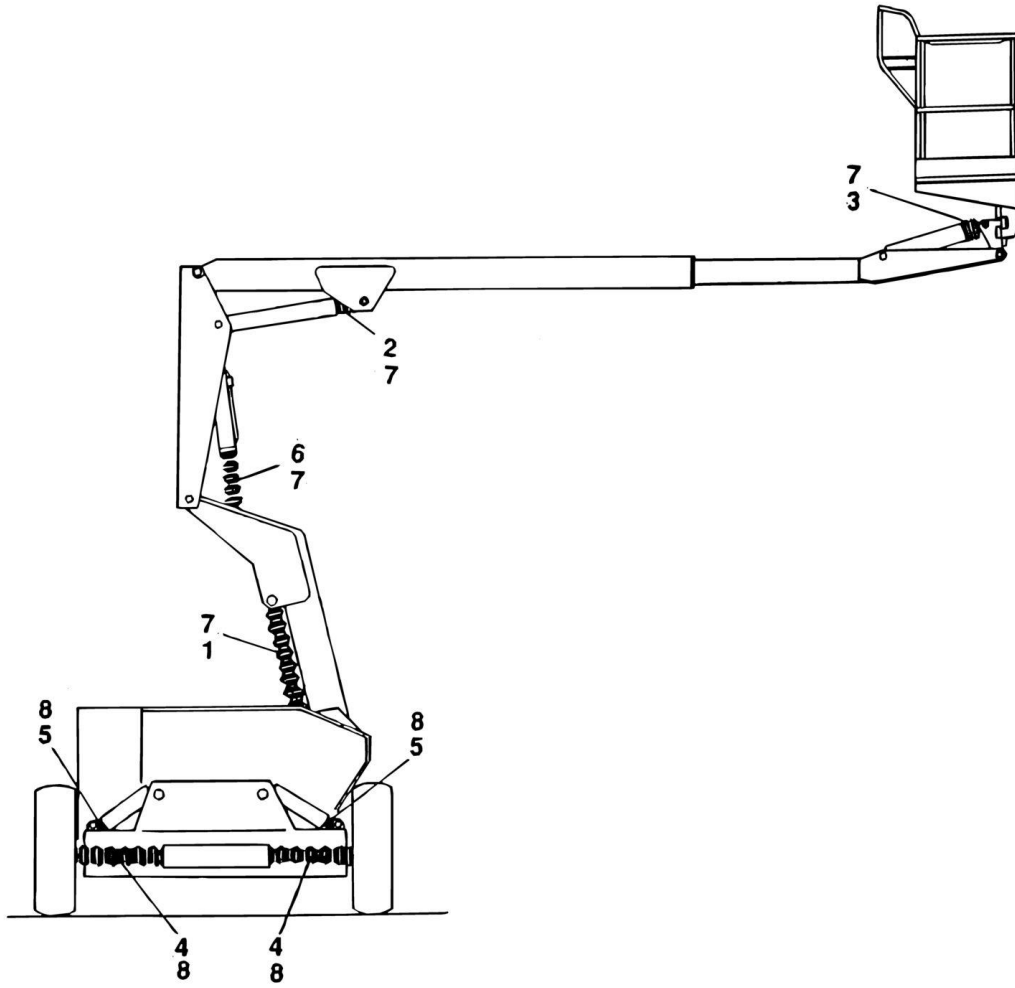
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	TELESCOPE CYLINDER ASSEMBLY - MAIN BOOM (STANDARD PARTS)	
2	4640495	1	Cartridge, Valve (Machines Built Prior to June 1990)	
2	4640634	1	Cartridge, Valve (Machines Built June 1990 to Present)	
2	2900770	1	Seal Kit - 4640495 & 4640634 Valves	
3	1120108	1	End Cap	
3	0100035	AR	Loctite #222	
4	1681283	1	Head	
5	Kit	1	Ring, Wear	
6	Kit	1	Seal, Wiper	
7	Kit	1	Seal, Rod	
8	Kit	1	O-Ring	
9	4563330	1	Spacer, Tube	
9	3951603	2	Setscrew 3/8in-16NC x 3/8in	
9	0100011	AR	Loctite #242	
10	3480092	1	Piston	
11	0100011	AR	Loctite #242	
11	0100038	AR	Primer, Locking	
12	3900170	2	Setscrew 1/4in-20NC x 3/8in	
13	Kit	1	O-Ring	
14	Kit	2	Ring, Guidelock	
15	Kit	2	Seal, Piston	
16	1681883	1	Rod Assembly	
18	2200222	2	Plug 1/4in	
18	0100020	AR	Sealant, Pipe	
	2900396		Seal Kit (Includes Items 5, 6, 7, 8, 13, 14 & 15)	
		Ref	TELESCOPE CYLINDER ASSEMBLIES - MAIN BOOM (VARIABLE PARTS)	
	1681880	Ref	TELESCOPE CYLINDER ASSEMBLIES - MAIN BOOM (PRIOR TO JUNE 1991)	B
	1682492	Ref	TELESCOPE CYLINDER ASSEMBLIES - MAIN BOOM (JUNE 1991 TO PRESENT)	A
51		Ref	Barrel Options:	
51	1681881	1	Barrel (Prior to June 1991)	
51	1682493	1	Barrel (June 1991 to Present)	
52		Ref	Nut, Hex Options:	
52	3300282	1	Nut, Hex (Prior to June 1991)	
52	3300286	1	Nut, Hex (June 1991 to Present)	
53		Ref	Plug Options:	
53	2200201	2	Plug 1/8in (Prior to June 1991)	
53	2180527	4	Plug 1/16in (June 1991 to Present)	
54		Ref	Cartridge, Valve Options:	
54	Not Required	1	Cartridge, Valve (Prior to June 1991)	
54	4640495	1	Cartridge, Valve (June 1991 to Present)	
54	2900770	1	Seal Kit - 4640495 Valve	
55		Ref	Pad, Wear Options:	
55	Not Required	1	Pad, Wear (Prior to June 1991)	
55	3340545	1	Pad, Wear (June 1991 to Present)	
56		Ref	Bolt 3/8in-16NC x 1/2in Options:	
56	Not Required	1	Bolt 3/8in-16NC x 1/2in (Prior to June 1991)	

SECTION 5 - CYLINDER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
56	0641604	1	Bolt 3/8in-16NC x 1/2in (June 1991 to Present)	
57		Ref	Lockwasher 3/8in Options:	
57	Not Required	1	Lockwasher 3/8in (Prior to June 1991)	
57	4761600	1	Lockwasher 3/8in (June 1991 to Present)	

SECTION 5 - CYLINDER

FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL)



SECTION 5 - CYLINDER

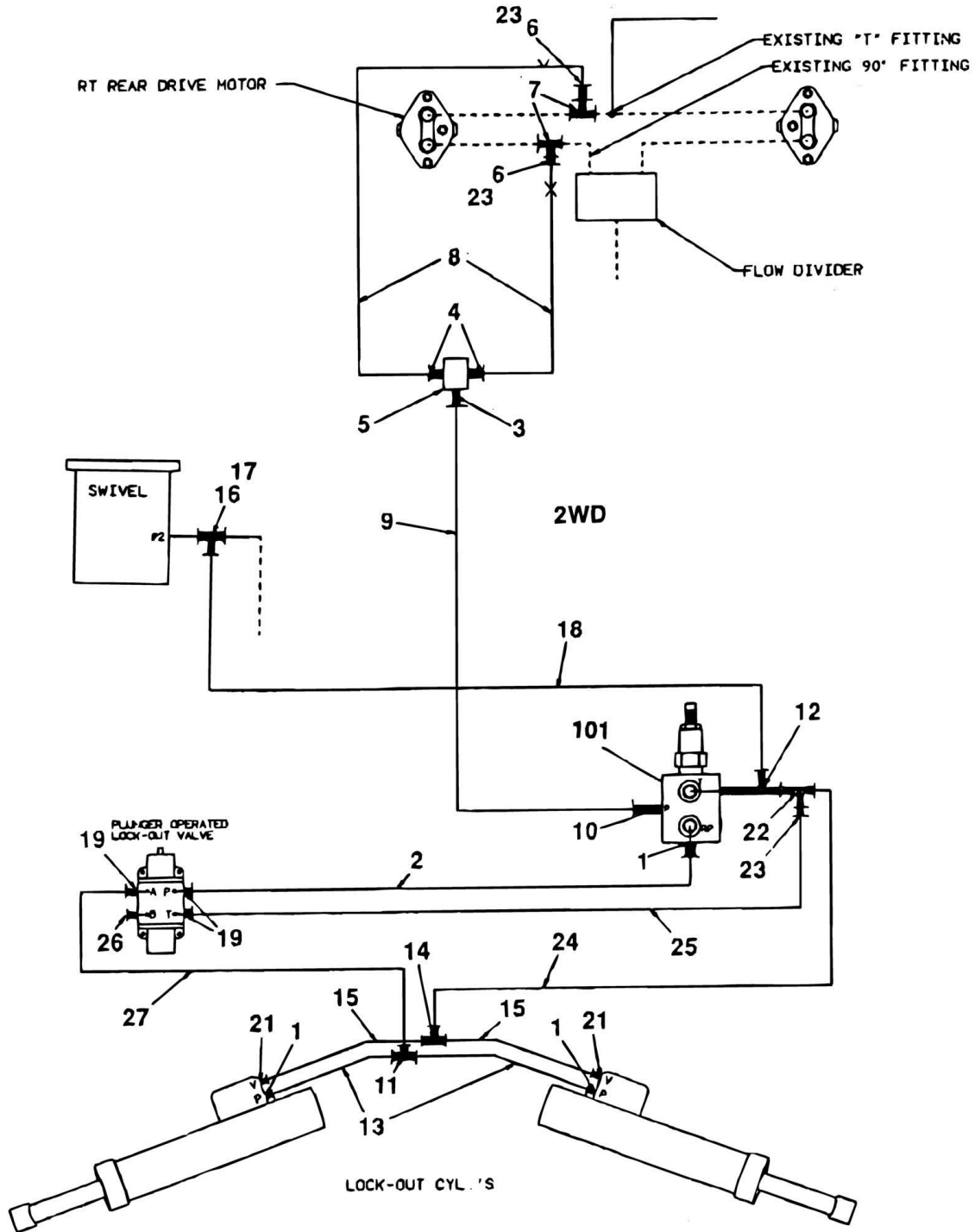
FIGURE 5-9. CLYINDER BELLOWS INSTALLATION (OPTIONAL)

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

SECTION 6 - HYDRAULIC

SECTION 6 - HYDRAULIC

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



2791866 - Rev A

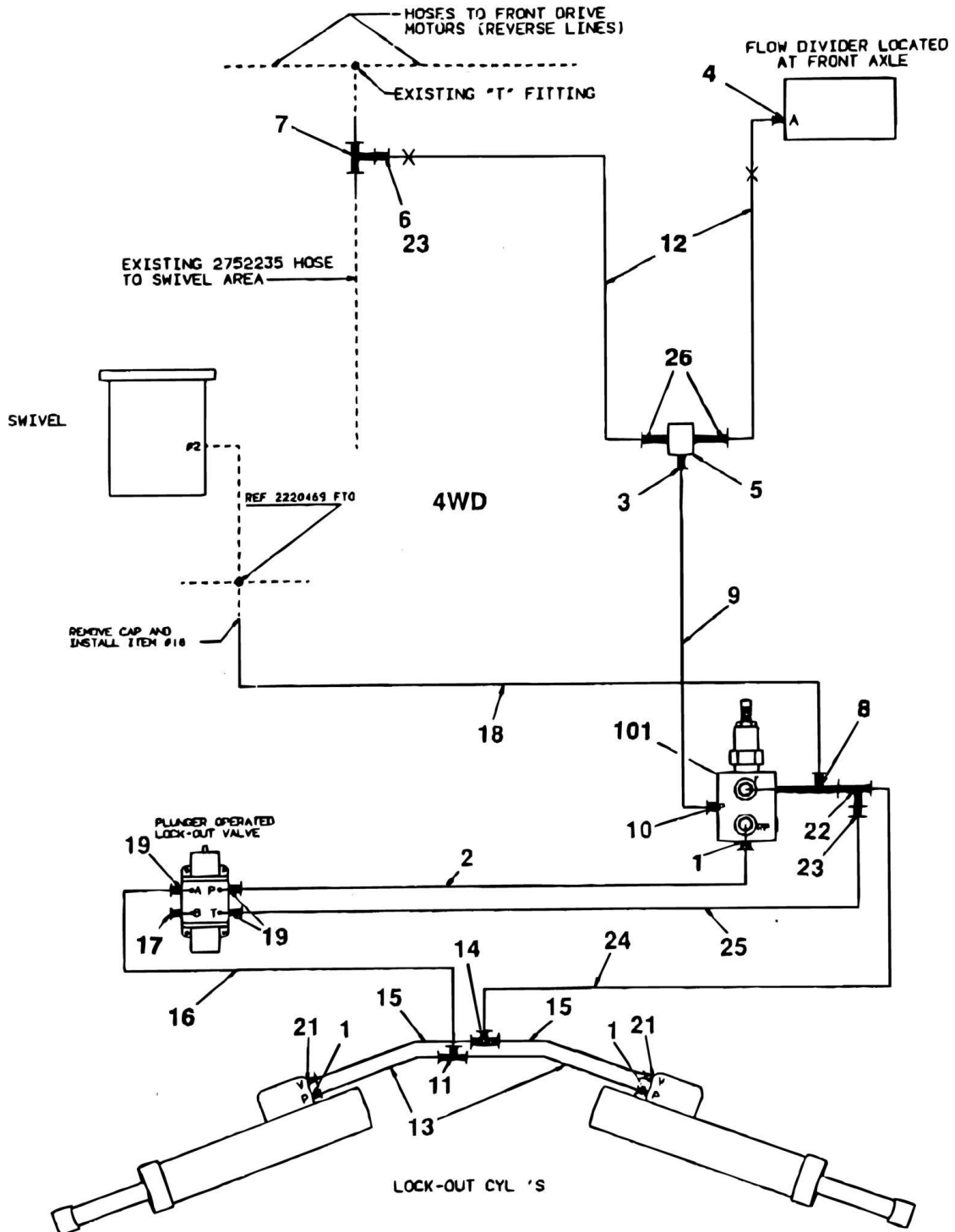
SECTION 6 - HYDRAULIC

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2791866	Ref	HYDRAULIC DIAGRAM - AXLE LOCKOUT (2WD)	A
1	2220582	3	Fitting, Straight	
2	2751397	1	Hose	
3	2220414	1	Fitting, Straight	
4	2220416	2	Fitting, 90	
5	4640013	1	Valve, Shuttle	
6	2220621	2	Fitting, Reducer	
7	2220700	2	Fitting, Tee	
8	2750902	2	Hose	
9	2751906	1	Hose	
10	2220472	1	Fitting, 90	
11	2220504	1	Fitting, Tee	
12	2220606	1	Fitting, Tee	
13	2752433	2	Hose	
14	2220490	1	Fitting, Tee	
15	2750910	2	Hose	
16	2220679	1	Fitting, Tee	
17	2220619	1	Fitting, Reducer	
18	2750779	1	Hose	
19	2220466	3	Fitting, 90	
21	2220371	2	Fitting, Straight	
22	2220635	1	Fitting, Tee	
23	2220609	3	Fitting, Reducer	
24	2750786	1	Hose	
25	2751020	1	Hose	
26	2220235	1	Fitting, Plug	
27	2751013	1	Hose	
	0251599	Ref	PRESSURE REDUCING VALVE INSTALLATION	-
101	4640689	1	Valve, Pressure Reducing	
101	7010530	1	Cartridge	
101	2900698	1	Seal Kit	
101	7010531	1	Plug, Sense Check	
101	3780149	1	O-Ring	
101	4300087	2	Stud (Welded on Part)	
101	4751400	2	Flatwasher 1/4in	
101	4761400	2	Lockwasher 1/4in	
101	3311401	2	Nut 1/4in-20NC	

SECTION 6 - HYDRAULIC

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



2791865 - Rev A

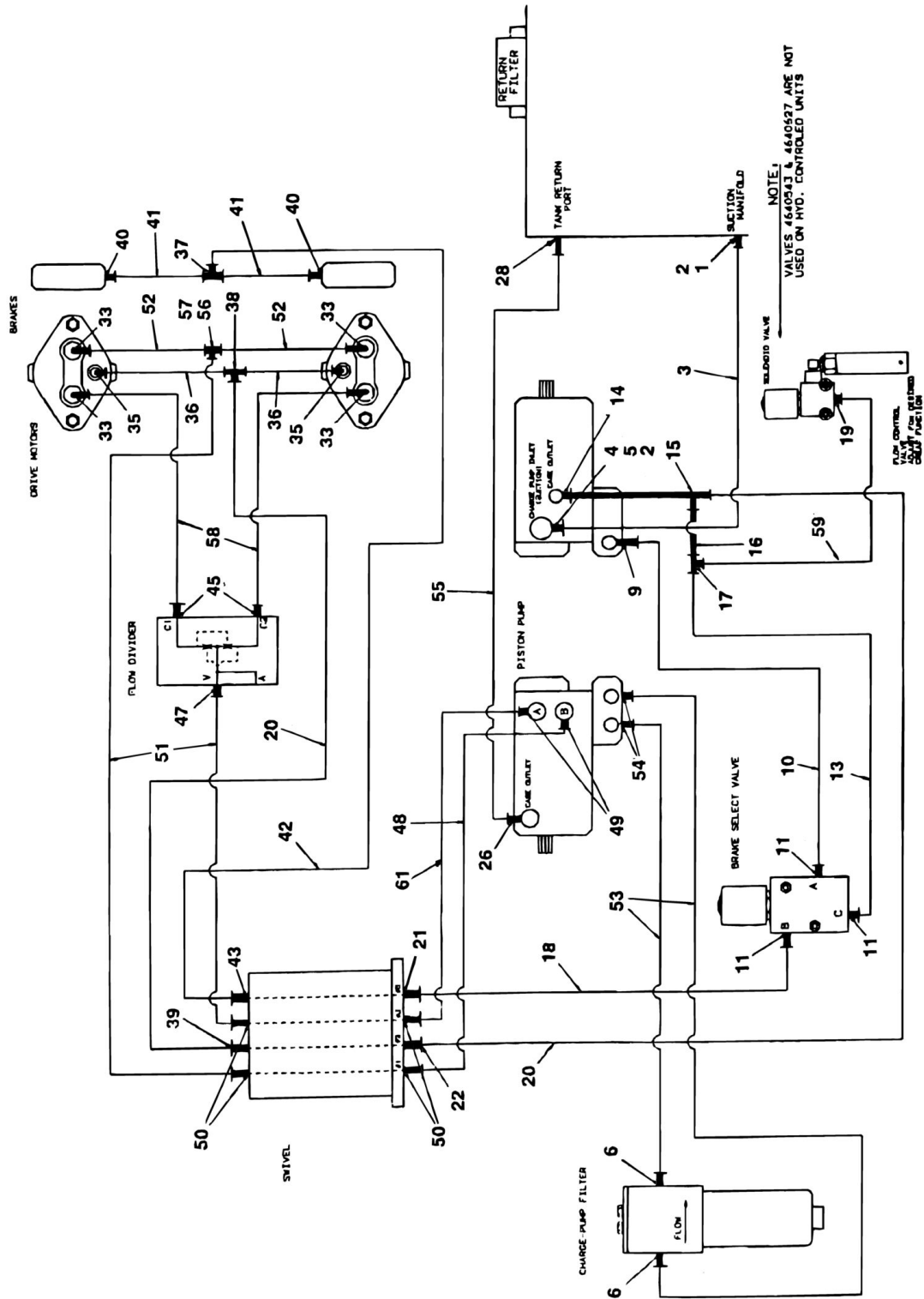
SECTION 6 - HYDRAULIC

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2791865	Ref	HYDRAULIC DIAGRAM - AXLE LOCKOUT (4WD)	A
1	2220582	3	Fitting, Straight	
2	2751397	1	Hose	
3	2220414	1	Fitting, Straight	
4	2220415	1	Fitting, Straight	
5	4640013	1	Valve, Shuttle	
6	2220621	1	Fitting, Reducer	
7	2220700	1	Fitting, Tee	
8	2220606	1	Fitting, Tee	
9	2751015	1	Hose	
10	2220472	1	Fitting, 90	
11	2220504	1	Fitting, Tee	
12	2751018	2	Hose	
13	2752433	2	Hose	
14	2220490	1	Fitting, Tee	
15	2750910	2	Hose	
16	2751013	1	Hose	
17	2220235	1	Hose, Plug	
18	2750779	1	Hose	
19	2220466	3	Fitting, 90	
21	2220371	2	Fitting, Straight	
22	2220635	1	Fitting, Tee	
23	2220609	2	Fitting, Reducer	
24	2750786	1	Hose	
25	2751020	1	Hose	
26	2220416	2	Fitting, 90	
	0251599	Ref	PRESSURE REDUCING VALVE INSTALLATION	-
101	4640689	1	Valve, Pressure Reducing	
101	7010530	1	Cartridge	
101	2900698	1	Seal Kit	
101	7010531	1	Plug, Sense Check	
101	3780149	1	O-Ring	
101	4300087	2	Stud (Welded on Part)	
101	4751400	2	Flatwasher 1/4in	
101	4761400	2	Lockwasher 1/4in	
101	3311401	2	Nut 1/4in-20NC	

SECTION 6 - HYDRAULIC

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



1281327 - Rev E

SECTION 6 - HYDRAULIC

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

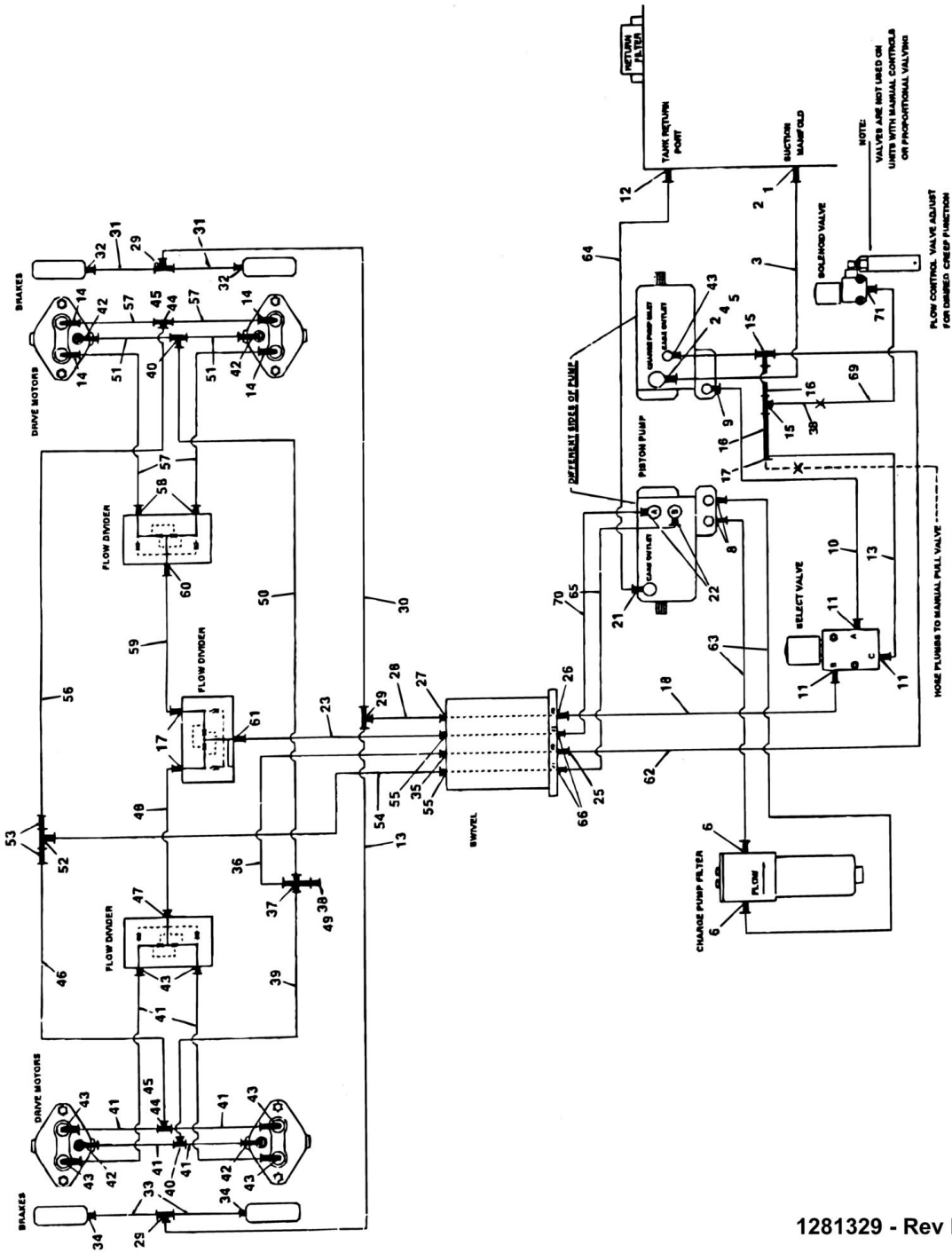
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2791627	Ref	DEUTZ WITH STANDARD BANG-BANG CONTROLS	E
	2791678	Ref	DEUTZ WITH PROPORTIONAL AND HYDRAULIC CONTROLS	B
	2791577	Ref	FORD WITH STANDARD BANG-BANG CONTROLS	G
	2791679	Ref	FORD WITH PROPORTIONAL AND HYDRAULIC CONTROLS	B
1	2210007	1	Fitting, Barbed	
2	1320033	4	Clamp	
3		Ref	Hose Options:	
3	2720335	53 in/1.35m	Deutz Machines	
3	2720281	64 in/1.63m	Ford Machines	
4	2220646	1	Fitting, 90	
5		Ref	Fitting Options:	
5	2210014	1	Deutz Machines	
5	2210003	1	Ford Machines	
6	2220578	2	Fitting	
9	2220472	1	Fitting, 90	
10	2750899	1	Hose	
11	2220417	3	Fitting	
13	2751013	1	Hose	
14	2220375	1	Fitting, Straight	
15	2220385	1	Fitting, Tee	
16	2220618	1	Fitting, Reducer	
17		Ref	Fitting Options:	
17	2220605	1	Fitting, Tee (Standard Bang-Bang Controls)	
17	Not Required	0	Fitting (Proportional and Hydraulic Controls)	
18	2751010	1	Hose	
19		Ref	Fitting Options:	
19	2220372	1	(Standard Bang-Bang Controls)	
19	2220582	1	(Proportional and Hydraulic Controls)	
20	2750977	2	Hose	
21	2220496	1	Fitting, 45	
22	2220355	1	Fitting, 45	
26	2220498	1	Fitting, 45	
28	2220494	1	Fitting, 90	
33	2220451	4	Fitting, Straight	
35	2220600	2	Fitting, Straight	
36	2751517	2	Hose	
37	2220504	1	Fitting, Tee	
38	2220362	1	Fitting, Tee	
39	2220345	1	Fitting, Straight	
40	2220466	2	Fitting, 90	
41	2751014	2	Hose	
42	2751443	1	Hose	
43	2220414	1	Fitting, Straight	
44	0100020	AR	Sealant, Thread (Not Shown)	
45	2220465	2	Fitting, 90	
47	2220377	1	Fitting, Straight	
48	2752319	1	Hose	
49	2220365	2	Fitting, 45	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	2220348	4	Fitting, Straight	
51	2752349	2	Hose	
52	2752238	2	Hose	
53		Ref	Hose Options:	
53	2751614	2	Deutz Machines	
53	2751626	2	Ford Machines	
54	2220408	2	Fitting, Straight	
55	2751635	1	Hose	
56	2220363	1	Fitting, Tee	
57	2220710	2	Fitting, Reducer	
58	2752242	2	Hose	
59		Ref	Hose Options:	
59	2752461	1	Standard Controls	
59	Not Required	0	Proportional and Hydraulic Controls	
61	2752319	1	Hose	
62		Ref	Fitting Options:	
62	2220619	1	Standard Controls	
62	Not Required	0	Proportional and Hydraulic Controls	

SECTION 6 - HYDRAULIC

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



1281329 - Rev E

SECTION 6 - HYDRAULIC

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

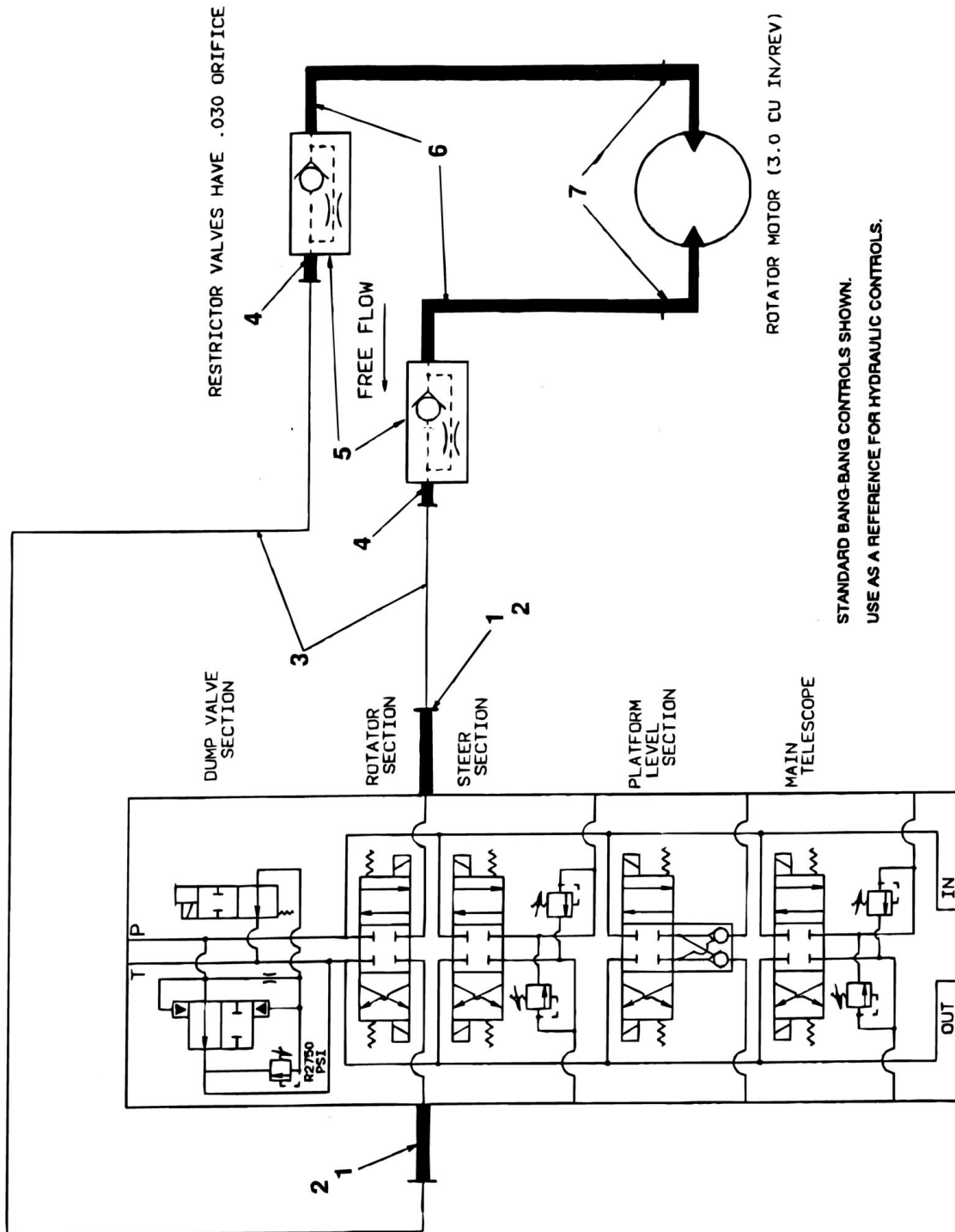
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2791632	Ref	DEUTZ WITH STANDARD BANG-BANG CONTROLS	D
	2791680	Ref	DEUTZ WITH PROPORTIONAL AND HYDRAULIC CONTROLS	A
	2791617	Ref	FORD WITH STANDARD BANG-BANG CONTROLS	F
	2791681	Ref	FORD WITH PROPORTIONAL AND HYDRAULIC CONTROLS	B
1	2210007	1	Fitting, Barbed	
2	1320033	4	Clamp	
3		Ref	Hose Options:	
3	2720335	53 in/1.35m	Deutz Machines	
3	2720281	64 in/1.63m	Ford Machines	
4	2220646	1	Fitting, 90	
5		Ref	Fitting Options:	
5	2210014	1	Deutz Machines	
5	2210003	1	Ford Machines	
6	2220578	2	Fitting	
8	2220408	2	Fitting, Straight	
9	2220472	1	Fitting, 90	
10	2750899	1	Hose	
11	2220417	3	Fitting	
12	2220494	1	Fitting, Tee	
13	2751013	2	Hose	
14	2220451	6	Fitting, Straight	
15	2220385	2	Fitting, Tee	
16	2220618	1	Fitting, Reducer	
17		Ref	Fitting Options:	
17	2220605	1	Fitting, Tee (Standard Bang-Bang Controls)	
17	Not Required	0	Fitting, (Proportional and Hydraulic Controls)	
18	2751010	1	Hose	
21	2220498	1	Fitting, 45	
22	2220365	2	Fitting, 45	
23	2752317	1	Hose	
25	2220355	1	Fitting, 45	
26	2220496	1	Fitting, 45	
27	2220414	1	Fitting, Straight	
28	2750902	1	Hose	
29	2220504	3	Fitting, 3-Way	
30	2751026	1	Hose	
31	2751014	2	Hose	
32	2220466	2	Fitting, 90	
33	2751398	2	Hose	
34	2220415	2	Fitting	
35	2220345	1	Fitting, Straight	
36	2750972	1	Hose	
37	2220469	1	Fitting, 4-Way	
38	2220619	2	Fitting, Reducer	
39	2750774	1	Hose	
40	2220362	2	Fitting, Tee	
41	2750979	6	Hose	
42	2220600	4	Fitting, Straight	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
43	2220375	7	Fitting, Straight	
44	2220481	2	Fitting, Tee	
45	2220622	2	Fitting, Reducer	
46	2752235	1	Hose	
47	2220568	1	Fitting, 45	
48	2752236	1	Hose	
49	2220516	1	Fitting, Cap	
50	2751483	1	Hose	
51	2751517	2	Hose	
52	2220363	1	Fitting, Tee	
53	2220710	2	Fitting, Reducer	
54	2752318	1	Hose	
55	2220627	2	Fitting, 45	
56	2752237	1	Hose	
57	2752242	4	Hose	
58	2220578	2	Fitting, 90	
59	2752239	1	Hose	
60	2220435	1	Fitting, Straight	
61	2220377	1	Fitting, Straight	
62	2750977	1	Hose	
63		Ref	Hose Options:	
63	2751614	2	Deutz Machines	
63	2751626	2	Ford Machines	
64	2751635	1	Hose	
65	2752319	1	Hose	
66	2220348	2	Fitting, Straight	
68	0100020	AR	Sealant, Thread (Not Shown)	
69		Ref	Hose Options:	
69	2752461	1	Standard Controls	
69	Not Required	0	Proportional and Hydraulic Controls	
71	2752319	1	Hose	
72		Ref	Fitting Options:	
72	2220619	1	Standard Controls	
72	Not Required	0	Proportional and Hydraulic Controls	

SECTION 6 - HYDRAULIC

FIGURE 6-5. HYDRAULIC DIAGRAM - ROTATE



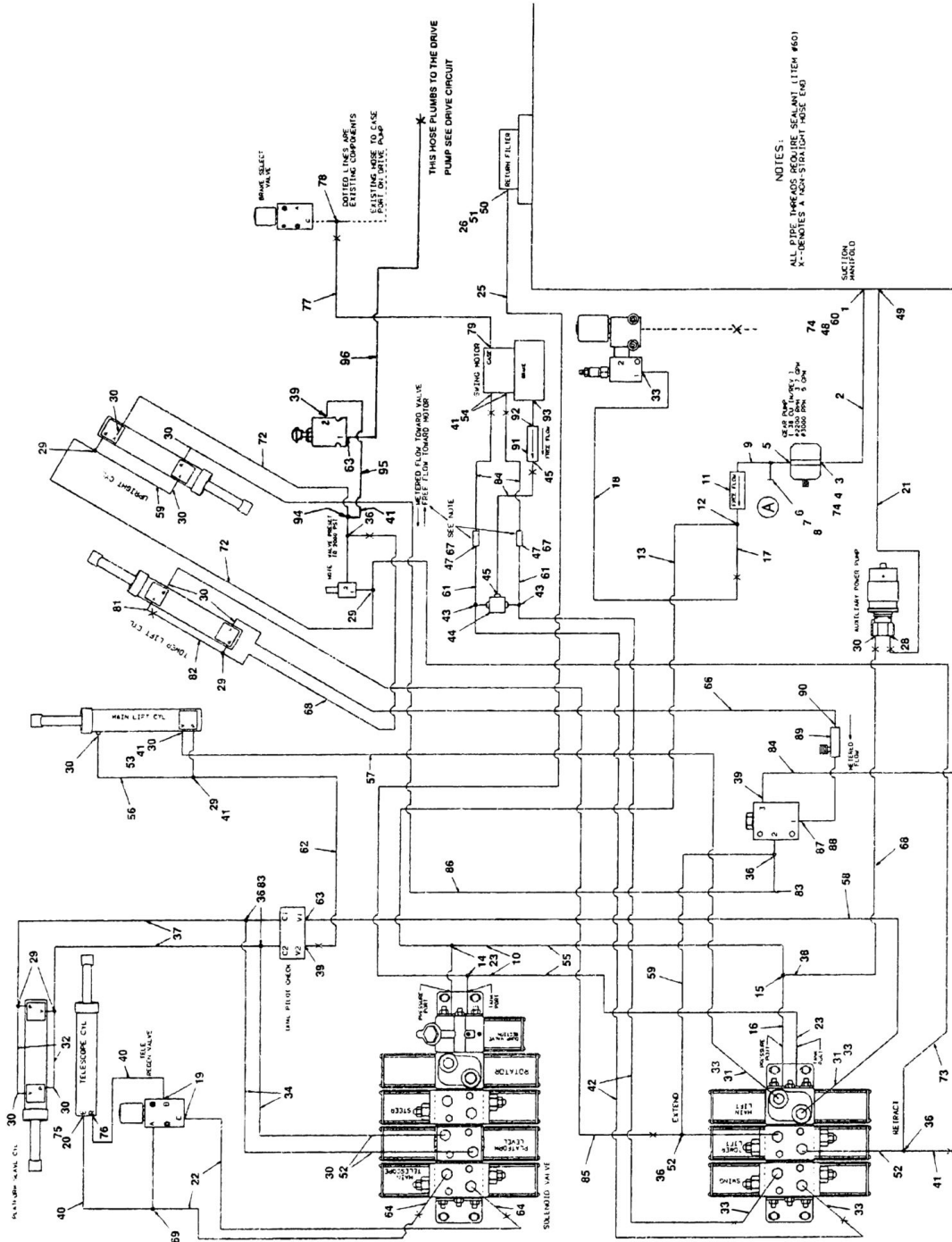
SECTION 6 - HYDRAULIC

FIGURE 6-5. HYDRAULIC DIAGRAM - ROTATE

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

SECTION 6 - HYDRAULIC

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



2792002 - Rev I

SECTION 6 - HYDRAULIC

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

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792002	Ref	HYDRAULIC DIAGRAM - STANDARD (STANDARD BANG-BANG CONTROLS/DEUTZ MACHINES)	1
1	2210006	1	Fitting, Barbed	
2	2720344	56 in/17m	Hose	
3	2210027	1	Fitting, 45	
4	2220408	1	Fitting	
5	2180491	1	Fitting, 90	
6	2220820	1	Fitting, 90	
7	2220429	1	Cap, Dust	
8	2220428	1	Fitting, Quick Disconnect	
9	2220651	1	Fitting	
10	2220683	2	Fitting	
11	4640776	1	Valve, Check	
12	2220602	1	Fitting	
13	2751483	1	Hose	
14	2220383	2	Fitting, Tee	
15	2220385	1	Fitting, Tee	
16	2220600	1	Fitting	
17	2220618	1	Fitting, Reducer	
18	2751017	1	Hose	
19	2220495	2	Fitting, 90	
20	2220064	1	Fitting, 90	
21	2750766	1	Hose	
22	2750913	2	Hose	
23	2220373	3	Fitting	
25	2750973	1	Hose	
26	2220471	1	Fitting, 90	
28	2220726	1	Fitting, 90	
29	2220899	6	Fitting, Tee	
30	2220473	12	Fitting, 90	
31	2220654	2	Fitting, 90	
32	2750918	2	Hose	
33	2220468	5	Fitting	
34	2751123	2	Hose	
36	2220606	6	Fitting, Tee	
37	2751161	2	Hose	
38	2220619	1	Fitting, Reducer	
39	2220472	3	Fitting	
40	2751163	2	Hose	
41	2220609	7	Fitting, Reducer	
42	2750901	2	Hose	
43	2220584	2	Fitting, Tee	
44	4640013	1	Valve, Shuttle	
45	2220414	2	Fitting	
47	2220415	4	Fitting	
48	2220263	1	Fitting, Reducer	
49	2220346	1	Fitting	
50	2220329	1	Fitting, Reducer	
51	2220800	1	Fitting, Straight	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
52	2220591	4	Fitting, Reducer	
53	2220908	1	Fitting, Orifice	
54	2220497	2	Fitting	
55	2750762	2	Hose	
56	2750998	1	Hose	
57	2751418	1	Hose	
58	2751421	1	Hose	
59	2751101	2	Hose	
61	2751394	2	Hose	
62	2751020	1	Hose	
63	2220582	2	Fitting	
64	2220372	2	Fitting	
66	2751852	1	Hose	
67	4640817	2	Valve, Restrictor (.040)	
68	2750991	2	Hose	
69	2220604	1	Fitting, Tee	
72	2751150	2	Hose	
73	2750999	1	Hose	
74	1320030	4	Clamp	
75	2180652	1	Fitting, Modified	
76	2220773	1	Fitting, 90	
77	2751391	1	Hose	
78	2220605	1	Fitting, Tee	
79	2220466	1	Fitting, 90	
80	4640818	1	Valve	
81	2220371	1	Fitting	
82	2750921	1	Hose	
83	2220507	3	Fitting, 90	
84	2751010	4	Hose	
85	2752163	1	Hose	
86	2751007	1	Hose	
87	2220727	1	Fitting	
88	2220261	1	Fitting, Nipple	
89	4640128	1	Valve, Flow Control	
90	2220399	1	Fitting	
91	4640213	1	Valve, Restrictor (.015)	
92	2220261	1	Fitting, Straight	
93	2220110	1	Fitting, 90	
94	2220635	1	Fitting, Tee	
95	2751026	1	Hose	
96	2750892	1	Hose	
	0100020	AR	Sealant, Thread	

SECTION 6 - HYDRAULIC

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

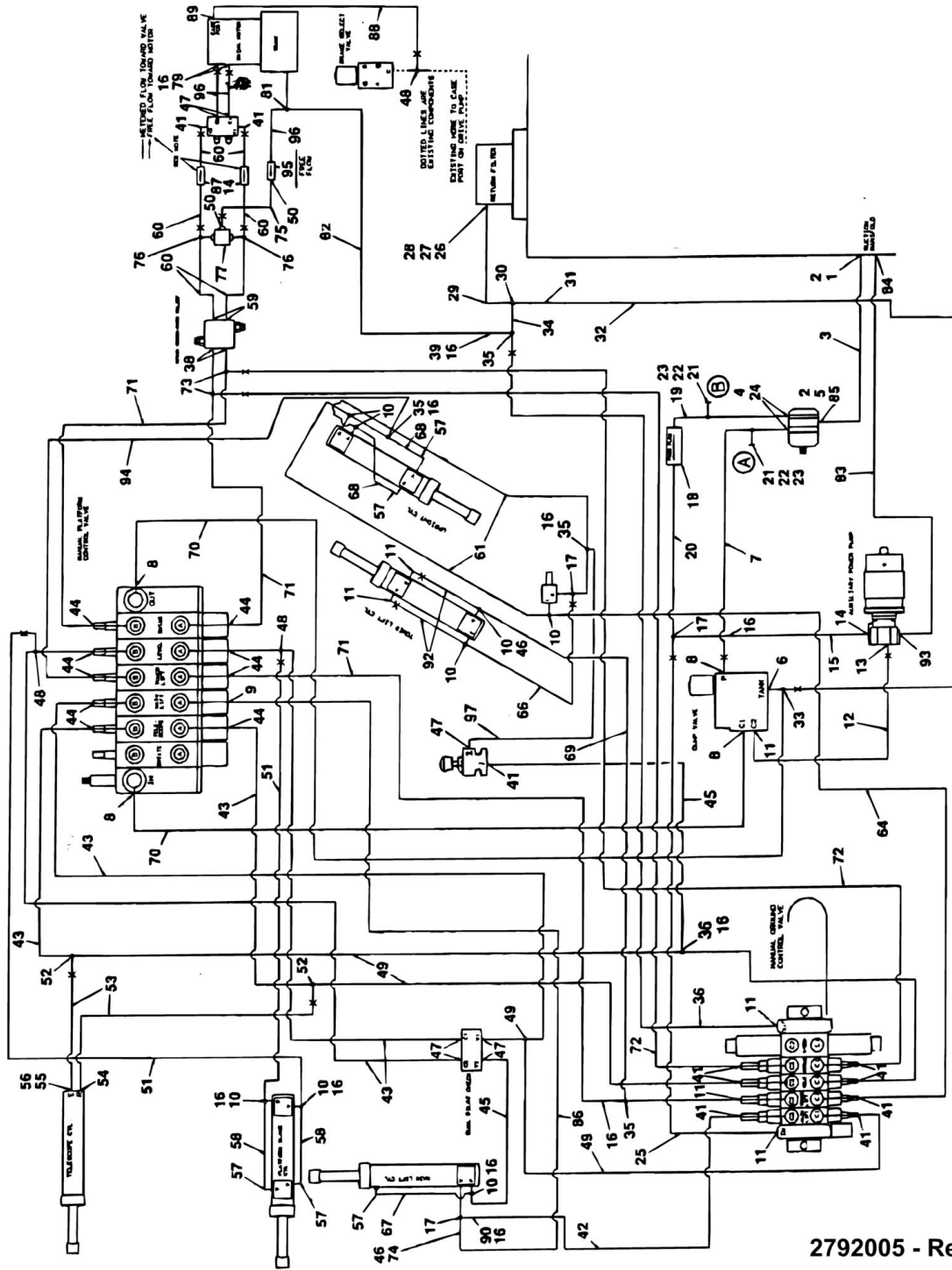
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792001	Ref	HYDRAULIC DIAGRAM - STANDARD	1
1	2210006	1	Fitting, Barbed	
2	2720344	56 in	Hose	
3	2210027	1	Fitting, 45	
4	2220408	1	Fitting	
5	2180491	1	Fitting, 90	
6	2751394	2	Hose	
7	2220429	1	Cap, Dust	
8	2220428	1	Fitting, Quick Disconnect	
9	2220651	1	Fitting	
11	4640776	1	Valve, Check	
12	2220602	1	Fitting	
13	2750773	1	Hose	
14	2220383	2	Fitting, Tee	
15	2220385	1	Fitting, Tee	
16	2220600	2	Fitting	
17	2220619	1	Fitting, Reducer	
18	2750779	1	Hose	
19	2220371	2	Fitting	
20	4640817	2	Valve, Restrictor (.040)	
21	2751010	2	Hose	
22	2750928	2	Hose	
23	2220373	3	Fitting	
24	2180652	1	Fitting	
25	2751003	2	Hose	
26	2220064	1	Fitting	
27	2220635	5	Fitting, Tee	
28	2220495	2	Fitting	
29	2220899	6	Fitting, Tee	
30	2220473	14	Fitting, 90	
31	2220654	2	Fitting, 90	
32	2750918	2	Hose	
33	2220468	5	Fitting	
34	2751123	2	Hose	
36	2220606	3	Fitting, Tee	
37	2751161	2	Hose	
38	2220773	1	Fitting	
39	2220472	3	Fitting	
40	2751163	2	Hose	
41	2220609	4	Fitting, Reducer	
42	2750901	2	Hose	
43	2220584	2	Fitting, Tee	
44	4640013	1	Valve, Shuttle	
45	2220414	2	Fitting	
46	2750899	1	Hose	
47	2220415	4	Fitting	
48	2220263	1	Fitting, Reducer	
49	2220346	1	Fitting	
50	2220329	1	Fitting, Reducer	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
51	2220800	1	Fitting	
52	2220591	4	Fitting, Reducer	
53	2220908	1	Fitting, Restrictor	
54	2220497	2	Fitting	
55	2220609	2	Fitting, Reducer	
56	2750998	1	Hose	
57	2751418	1	Hose	
58	2751421	1	Hose	
59	2751101	1	Hose	
62	2751020	1	Hose	
63	2220582	2	Fitting	
64	2220372	2	Fitting	
66	2751852	1	Hose	
67	2220343	1	Fitting	
68	2750991	1	Hose	
72	2751150	2	Hose	
73	2750999	1	Hose	
74	1320030	4	Clamp	
76	2750777	1	Hose	
78	2220820	1	Fitting, 90	
79	2220657	1	Fitting, 45	
80	2220618	1	Fitting, Reducer	
81	2751017	1	Hose	
82	2751489	1	Hose	
83	2220471	1	Fitting, 90	
84	2751391	1	Hose	
85	2220466	1	Fitting, 90	
86	2220605	1	Fitting, Tee	
88	2750921	1	Hose	
89	2220507	2	Fitting, 90	
90	2751006	1	Hose	
91	2752163	1	Hose	
92	2751007	1	Hose	
93	2220727	1	Fitting	
94	2220261	1	Fitting, Nipple	
95	4640128	1	Valve, Flow Control	
96	2220399	1	Fitting	
97	2751396	1	Hose	
98	4640213	1	Valve, Restrictor	
99	2220261	1	Fitting, Straight	
100	2220110	1	Fitting, 90	
101	2751026	1	Hose	
102	2750892	1	Hose	
	0100020	AR	Sealant, Thread	

SECTION 6 - HYDRAULIC

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



2792005 - Rev H

SECTION 6 - HYDRAULIC

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

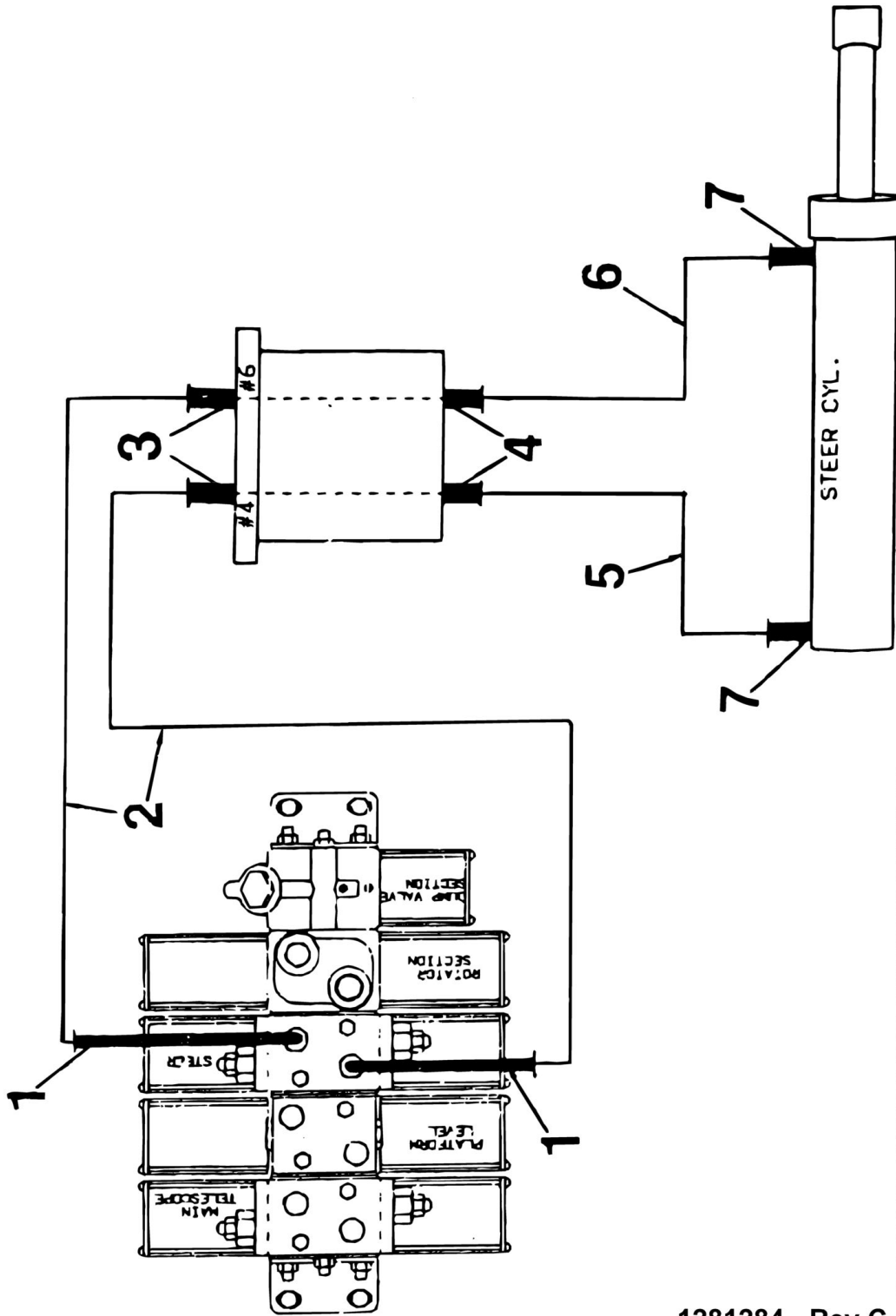
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792005	Ref	HYDRAULIC DIAGRAM - STANDARD (HYDRAULIC CONTROLS)	H
1	2210007	1	Fitting, Barbed	
2	1320033	4	Clamp	
3	2720335	54 in	Hose	
4	2220810	2	Fitting	
5	2210028	1	Fitting, Nipple	
6	2220596	1	Fitting, 90	
7	2750928	1	Hose	
8	2220373	4	Fitting	
9	2220372	1	Fitting	
10	2220899	8	Fitting, Tee	
11	2220371	6	Fitting	
12	2750913	1	Hose	
13	2220603	1	Fitting	
14	2220415	5	Fitting	
15	2751397	1	Hose	
16	2220609	12	Fitting, Reducer	
17	2220606	3	Fitting	
18	4640776	1	Valve, Check	
19	2220651	1	Fitting	
20	2220591	1	Fitting	
21	2220820	2	Fitting, 90	
22	2220428	2	Fitting, Quick Disconnect	
23	2220429	2	Cap, Dust	
24	2180491	2	Fitting, 90	
25	2751102	1	Hose	
26	2220329	1	Fitting, Reducer	
27	2220550	1	Fitting, Reducer	
28	2220451	1	Fitting	
29	2220407	1	Fitting, 90	
30	2220700	1	Fitting, Tee	
31	2220622	1	Fitting, Reducer	
32	2751467	1	Hose	
33	2220385	1	Fitting, Tee	
34	2220621	1	Fitting, Reducer	
35	2220635	5	Fitting, Tee	
36	2750909	1	Hose	
38	2220250	2	Fitting, Reducer	
39	2220909	1	Fitting	
41	2220582	10	Fitting	
42	2751418	1	Hose	
43	2751030	5	Hose	
44	2220468	9	Fitting	
45	2751015	2	Hose	
46	2220907	2	Fitting, Restrictor	
47	2220472	6	Fitting, 90	
48	2220605	4	Fitting, Tee	
49	2751421	3	Hose	
50	2220414	3	Fitting	
51	2751432	2	Hose	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
52	2220504	2	Fitting, Tee	
53	2751435	2	Hose	
54	2220416	1	Fitting, 90	
55	2200064	1	Fitting, 90	
56	2180651	1	Fitting, Modified	
57	2220473	5	Fitting	
58	2750918	2	Hose	
59	2220417	2	Fitting	
60	2750901	2	Hose	
61	2751150	2	Hose	
64	2750999	1	Hose	
66	2750991	1	Hose	
67	2750998	1	Hose	
68	2751101	2	Hose	
69	2751852	1	Hose	
70	2751520	2	Hose	
71	2751457	3	Hose	
72	2751398	2	Hose	
73	2220684	2	Fitting, Tee	
74	2220507	1	Fitting	
75	2751394	3	Hose	
76	2220584	2	Fitting, Tee	
77	4640013	1	Valve, Shuttle	
78	2750902	2	Hose	
79	2220497	2	Fitting	
80	2751017	1	Hose	
81	2220711	1	Fitting, Tee	
82	2750891	1	Hose	
83	2750773	1	Hose	
84	2220346	1	Fitting	
85	2220376	1	Fitting	
86	2752159	1	Hose	
87	4640817	2	Valve, Restrictor (.045)	
88	2751391	1	Hose	
89	2220466	1	Fitting	
90	2220908	1	Fitting, Restrictor (.047)	
91	4640818	1	Valve, Relief	
92	2750921	2	Hose	
93	2220671	1	Fitting	
94	2751921	1	Hose	
95	4640213	1	Valve, Restrictor (.015)	
96	2751017	3	Hose	
97	2751026	1	Hose	
98	2750899	2	Hose	
	0100020	AR	Sealant, Thread	

SECTION 6 - HYDRAULIC

FIGURE 6-9. HYDRAULIC DIAGRAM - STEER



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

1281284 - Rev C

SECTION 6 - HYDRAULIC

FIGURE 6-9. HYDRAULIC DIAGRAM - STEER

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

SECTION 6 - HYDRAULIC

FIGURE 6-10. HYDRAULIC DIAGRAM LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: Diagrams not shown are available from JLG Service/Parts Departments.	
		Ref	Axle Lockout Hydraulic Diagrams:	
	2791624	Ref	All Machines Built Prior to June 1992	
	2791866	Ref	2WD Machines Built June 1992 to Present	
	2791865	Ref	4WD Machines Built June 1992 to Present	
	2792007	Ref	Boeing Modifications Hydraulic Diagram	
	1281328	Ref	Drive Hydraulic Diagram - 2WD/2WS Without Swivel:	
	2791645	Ref	Deutz With Standard Bang-Bang Controls	
	2791677	Ref	Deutz With Proportional and Hydraulic Controls	
	2791646	Ref	Ford With Standard Bang-Bang Controls	
	2791676	Ref	Ford With Proportional and Hydraulic Controls	
	2791914	Ref	Kubota With Standard Bang-Bang Controls	
	2791915	Ref	Kubota With Proportional and Hydraulic Controls	
	1281327	Ref	Drive Hydraulic Diagram - 2WD/2WS With Swivel:	
	2791627	Ref	Deutz With Standard Bang-Bang Controls	
	2791678	Ref	Deutz With Proportional and Hydraulic Controls	
	2791577	Ref	Ford With Standard Bang-Bang Controls	
	2791679	Ref	Ford With Proportional and Hydraulic Controls	
	2791914	Ref	Kubota With Standard Bang-Bang Controls	
	2791915	Ref	Kubota With Proportional and Hydraulic Controls	
	1281547	Ref	Drive Hydraulic Diagram - 2WS/4WS With Swivel:	
	2791803	Ref	Deutz With Standard Bang-Bang Controls	
	2791804	Ref	Deutz With Proportional and Hydraulic Controls	
	2791801	Ref	Ford With Standard Bang-Bang Controls	
	2791802	Ref	Ford With Proportional and Hydraulic Controls	
	2791930	Ref	Kubota With Standard Bang-Bang Controls	
	2791929	Ref	Kubota With Proportional and Hydraulic Controls	
	1281330	Ref	Drive Hydraulic Diagram - 4WD/2WS Without Swivel:	
	2791660	Ref	Deutz With Standard Bang-Bang Controls	
	2791682	Ref	Deutz With Proportional and Hydraulic Controls	
	2791661	Ref	Ford With Standard Bang-Bang Controls	
	2791683	Ref	Ford With Proportional and Hydraulic Controls	
	1281329	Ref	Drive Hydraulic Diagram - 4WD/2WS With Swivel:	
	2791632	Ref	Deutz With Standard Bang-Bang Controls	
	2791680	Ref	Deutz With Proportional Controls	
	2791617	Ref	Ford With Standard Bang-Bang Controls	
	2791681	Ref	Ford With Proportional and Hydraulic Controls	
	2791617	Ref	Kubota With Standard Bang-Bang Controls (Prior to March 1992)	
	2791892	Ref	Kubota With Standard Bang-Bang Controls (March 1992 to July 1993)	
	2792087	Ref	Kubota With Standard Bang-Bang Controls (July 1993 to Present)	
	2791681	Ref	Kubota Proportional and Hydraulic Controls (Prior to March 1992)	
	2791893	Ref	Kubota With Proportional and Hydraulic Controls (March 1992 to July 1993)	
	2792088	Ref	Kubota With Proportional and Hydraulic Controls (July 1993 to Present)	
	1281548	Ref	Drive Hydraulic Diagram - 4WD/4WS With Swivel:	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2791805	Ref	Deutz With Standard Bang-Bang Controls	
	2791807	Ref	Deutz With Proportional and Hydraulic Controls	
	2791806	Ref	Ford With Standard Bang-Bang Controls	
	2791808	Ref	Ford With Proportional and Hydraulic Controls	
	2791916	Ref	Kubota With Standard Bang-Bang Controls	
	2791917	Ref	Kubota With Proportional and Hydraulic Controls	
		Ref	Manual Descent Hydraulic Diagrams:	
	0251299	Ref	Valves and Hosing (Prior to June 1992)	
	0253239	Ref	Valves and Hosing (June 1992 to Present)	
	2791785	Ref	Hydraulic Diagram (Prior to June 1992)	
	2791968	Ref	Hydraulic Diagram (June 1992 to Present)	
	0253393	Ref	Oil Cooler Hydraulic Diagram	
		Ref	Rotate Hydraulic Diagrams:	
	2791578	Ref	Standard Bang-Bang and Proportional Controls	
	2791673		Hydraulic Controls	
		Ref	Standard Hydraulic Diagrams:	
	2791592	Ref	Deutz With Standard Bang-Bang Controls (Prior to June 1992)	
	2791957	Ref	Deutz With Standard Bang-Bang Controls (June 1992 to May 1993)	
	2792002	Ref	Deutz With Standard Bang-Bang Controls (May 1993 to Present)	
	2791857	Ref	Deutz With Proportional Controls (Prior to June 1992)	
	2791960	Ref	Deutz With Proportional Controls (June 1992 to May 1993)	
	2792003	Ref	Deutz With Proportional Controls (May 1993 to Present)	
	2791576	Ref	Ford/Kubota With Standard Bang-Bang Controls (Prior to June 1992)	
	2791958	Ref	Ford/Kubota With Standard Bang-Bang Controls (June 1992 to May 1993)	
	2792001	Ref	Ford/Kubota With Standard Bang-Bang Controls (May 1993 to Present)	
	2791693	Ref	Ford/Kubota Proportional Controls (Prior to June 1992)	
	2791959	Ref	Ford/Kubota Proportional Controls (June 1992 to May 1993)	
	2792004	Ref	Ford/Kubota Proportional Controls (May 1993 to Present)	
	2791664	Ref	Ford/Kubota Proportional Controls (May 1993 to Present)	
	2791956	Ref	Hydraulic Controls (June 1992 to May 1993)	
	2792005	Ref	Hydraulic Controls (May 1993 to Present)	
	1281326	Ref	Steer Hydraulic Diagram Without Swivel (2WS)	
	2791655	Ref	2WD Fixed Axle With Standard Bang-Bang or Proportional Controls	
	2791656	Ref	2WD Oscillating Axle With Standard Bang-Bang or Proportional Controls	
	2791657	Ref	4WD With Standard Bang-Bang or Proportional Controls	
	2791670	Ref	2WD Fixed Axle With Hydraulic Controls	
	2791671	Ref	2WD Oscillating Axle With Hydraulic Controls	
	2791672	Ref	4WD With Hydraulic Controls	
	1281284	Ref	Steer Hydraulic Diagram With Swivel (2WS)	
	2791625	Ref	2WD Fixed Axle With Standard Bang-Bang or Proportional Control	
	2791626	Ref	2WD Oscillating Axle With Standard Bang-Bang or Proportional Control	
	2791633	Ref	4WD With Standard Bang-Bang or Proportional Control	
	2791667	Ref	2WD Fixed Axle With Hydraulic Controls	
	2791668	Ref	2WD Oscillating Axle With Hydraulic Controls	
	2791669	Ref	4WD With Hydraulic Controls	

SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281553	Ref	Steer Hydraulic Diagram (4WS)	
	2791812	Ref	2WD Fixed Axle	
	2791813	Ref	2WD Oscillating Axle	
	2791814	Ref	4WD	
		Ref	Tow Hydraulic Diagrams	
	2791295	Ref	Tow Hydraulic Diagrams (Prior to March 1993)	
	2791764	Ref	Tow Hydraulic Diagrams (March 1993 to Present)	

SECTION 7 - ELECTRICAL

SECTION 7 - ELECTRICAL

FIGURE 7-1. ELECTRICAL DIAGRAM LIST

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

SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0252625	Ref	Engine Distress Electrical Diagram - Ford Machines	5
	2920026	1	Light (At Platform Console)	
	4360182	1	Switch, Oil Pressure	
	4360157	1	Switch, Water Temperature	
	3740049	1	Relay	
	2920029	1	Bulb	
	0252394	Ref	Engine Distress Electrical Diagram - Kubota Machines	-
	2920026	1	Lamp, Indicator (At Platform Console)	
	4360182	1	Switch, Oil Pressure	
	4360157	1	Switch, Water Temperature	
	3740049	1	Relay	
	0251682	Ref	Engine Shutdown Electrical Diagram (Deutz) (1991 to Present)	-
	3990010	1	Diode - 6 Amp	
	3740049	1	Relay, Bosch - SPDT	
	4360065	1	Switch, Pressure - N.C.	
	4931945	Ref	Generator Electrical Diagram (110V) (Deutz and Kubota)	A
	4932046	Ref	Generator Electrical Diagram (110V) (Ford)	5
	4460027	1	Outlet, Electrical - Female Twist Lock	
	3990001	1	Diode - 3.5 Amp (Deutz and Kubota)	
	3990010	2	Diode - 6.5 Amp (Ford)	
	3740049	2	Relay, Bosch - SPDT	
	4360294	1	Breaker, Circuit - 30 Amp Marine Type	
		Ref	Glow Plug Electrical Diagram (Kubota Engines)	
	4921555	1	Harness	
	4931998	Ref	Heaters Electrical Diagram	A
	1060016	20 ft	Cable, Electrical - 16/3 (Heaters to Junction Box)	
	1060515	3 ft	Cable, Electrical - 12/4 (Thermostat to Junction Box) (was p/n 1060012)	
		Ref	Lights Electrical Diagram Options	
	4931942	Ref	Beacon Light On Hood Electrical Diagram (December 1990 to Present)	5
	4931740	Ref	Beacon Light On Hood Electrical Diagram (Prior to December 1990)	A
	1281671	Ref	Beacon Light On Platform Electrical Diagram (September 1991 to Present)	D
	2920018	1	Light, Beacon - Amber	
	2920009	1	Light, Beacon - Red	
	0253816	Ref	Fuel Indicator Light Electrical Diagram	
	4360265	1	Switch, LPG	
	2920026	Ref	Lamp, Indicator	
	3252269	Ref	Nameplate - LP Light	
	4931941	Ref	Headlights and Taillights Electrical Diagram	E
	3740049	1	Relay, Bosch - SPDT (At Ground Control Box)	
	4360199	1	Switch, Toggle (At Platform Console Box)	
	3251019	1	Nametag - Light On	
	1060016	AR	Cable, Electrical - 16/3	
	2920019	2	Taillight/Clearance Light	
	3740002	1	Relay, Power	
	0251619	Ref	Panel Lights Electrical Diagram (Standard Bang-Bang and Proportional Controls)	A
	1281525	Ref	Panel Lights Electrical Diagram (Standard Bang- Bang and Proportional Controls)	D
	0251690	Ref	Panel Lights Electrical Diagram (Hydraulic Controls)	B

SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2920024	3	Light, Panel	
	4931943	Ref	Worklights Electrical Diagram (Prior to November 1992)	
	4360232	1	Breaker, Circuit - 15 Amp	
	2920013	2	Worklight	
	0253987	Ref	Worklights Electrical Diagram (November 1992 to Present)	C
	2920111	2	Worklight, Halogen	
	0253393	Ref	Oil Cooler Electrical Diagram	-
	4921529	1	Harness	
	4360181	1	Switch, Temperature	
	Ref		Platform Electrical Diagrams Options	
	1281356	Ref	Bang-Bang (Standard) Controls:	F
	4932007	Ref	Platform Electrical Diagram - Deutz/Ford 2WS	E
	4932375	Ref	Platform Electrical Diagram - Deutz/Ford 4WS	A
	4932074	Ref	Platform Electrical Diagram - Kubota 2WS	C
	4932376	Ref	Platform Electrical Diagram - Kubota 4WS	A
	1540002	1	Capacitor 1000MFD/25VDC	
	3990010	AR	Diode - 6 Amp	
	1060515	8 ft/2.4m	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	
	Ref		Hydraulic Controls:	
	4932054	Ref	Platform Electrical Diagram	B
	3990010	1	Diode - 6 Amp	
	1540002	1	Capacitor - 1000MFD/25VDC	
	1060515	8 ft/2.4m	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	
	Ref		Proportional Controls:	
	4932441	Ref	Platform Electrical Diagram - Deutz 2WS (Prior to February 1993)	B
	1281712	Ref	Platform Electrical Diagram - Deutz 2WS (Prior to February 1993)	B
	4932442	Ref	Platform Electrical Diagram - Deutz 4WS (Prior to February 1993)	A
	1281712	Ref	Platform Electrical Diagram - Deutz 4WS (Prior to February 1993)	B
	4932486	Ref	Platform Electrical Diagram - Ford 2WS (Prior to February 1993)	A
	1281712	Ref	Platform Electrical Diagram - Ford 2WS (Prior to February 1993)	B
	4932487	Ref	Platform Electrical Diagram - Ford 4WS (Prior to February 1993)	A
	1281712	Ref	Platform Electrical Diagram - Ford 4WS (Prior to February 1993)	B
	4932067	Ref	Platform Electrical Diagram - Kubota 2WS (Prior to February 1993)	B
	1281571	Ref	Platform Electrical Diagram - Kubota 2WS (Prior to February 1993)	B
	4932379	Ref	Platform Electrical Diagram - Kubota 4WS (Prior to February 1993)	-
	1281571	Ref	Platform Electrical Diagram - Kubota 4WS (Prior to February 1993)	B
	9983562	Ref	Platform Electrical Diagram - 2WS With Steer In Controller (February 1993 to Present)	1
	4932600	Ref	Platform Electrical Diagram - 2WS Without Steer In Controller (February 1993 to Present)	A
	1282004	Ref	Platform Electrical Diagram - 2WS Without Steer In Controller (February 1993 to Present)	A

SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4932601	Ref	Platform Electrical Diagram - 4WS Without Steer In Controller (February 1993 to Present)	A
	1282004	Ref	Platform Electrical Diagram - 4WS Without Steer In Controller (February 1993 to Present)	A
	3990010	3	Diode - 6 Amp	
	1540002	1	Capacitor 1000mfd/25V	
	1060515	8 ft/2.4m	Cable, Electrical - 12/4 (To Footswitch) (was p/n 1060309)	
	0255619	Ref	Remote Control Electrical Diagram Options	
		Ref	Remote Control Box Electrical Diagram	
	0238954	Ref	Remote Control Box Electrical Diagram (Prior to July 1995)	
	0253604	Ref	Remote Control Box Electrical Diagram (July 1995 to Present)	
	0251687	Ref	Remote Control Electrical Diagram (Box to Ground Control)	
		Ref	Standard Electrical Diagram Options:	
		Ref	Deutz Machines:	
	4931991	Ref	Standard Bang-Bang Controls	13
	1060016	10 ft/3.0m	Cable, Electrical - 16/3 (To Limit Switches) (was p/n 1060300)	
		Ref	Harness - Engine and Valves Options:	
	4921250	1	Harness - Engine and Valves (Prior to August 1995)	
	4921788	1	Harness - Engine and Valves (August 1995 to Present)	
	3990010	1	Diode - 6 Amp	
	4932440	Ref	Proportional Controls	E
	1060300	10 ft/3.0m	Cable, Electrical - 16/3 (To Limit Switches)	
		Ref	Harness - Engine and Valves Options:	
	4921391	1	Harness - Engine and Valves (Prior to August 1995)	
	4921790	1	Harness - Engine and Valves (August 1995 to Present)	
	3990010	4	Diode - 6 Amp	
	4932076	Ref	Hydraulic Controls	H
	3990010	2	Diode - 6 Amp	
		Ref	Harness - Engine and Valves Options:	
	4921284	1	Harness - Engine and Valves (Prior to August 1995)	
	4921789	1	Harness - Engine and Valves (August 1995 to Present)	
	1060300	10 ft/3.0m	Cable, Electrical - 16/3	
		Ref	Ford Machines:	
	4931962	Ref	Standard Bang-Bang Controls with Bosch Alternator (Prior to September 1994)	F
	4932754	Ref	Standard Bang-Bang Controls with Prestolite Alternator (September 1994 to Present)	A
	4932485	Ref	Proportional Controls with Bosch Alternator (Prior to February 1993)	A
	4932615	Ref	Proportional Controls with Bosch Alternator (February 1993 to September 1994)	B
	4932751	Ref	Proportional Controls with Prestolite Alternator (September 1994 to Present)	A
	1060300	10 ft/3.0m	Cable, Electrical - 16/3 (To Limit Switches)	
	4921251	1	Harness - Engine and Valves	
	3990010	3	Diode - 6 Amp	
	4932055	Ref	Hydraulic Controls with Bosch Alternator (Prior to September 1994)	D
	4932753	Ref	Hydraulic Controls with Prestolite Alternator (September 1994 to Present)	A
	1060300	8 ft/2.4m	Cable, Electrical - 16/3 (To Limit Switches)	
	4921262	1	Harness - Engine and Valves	

SECTION 7 - ELECTRICAL

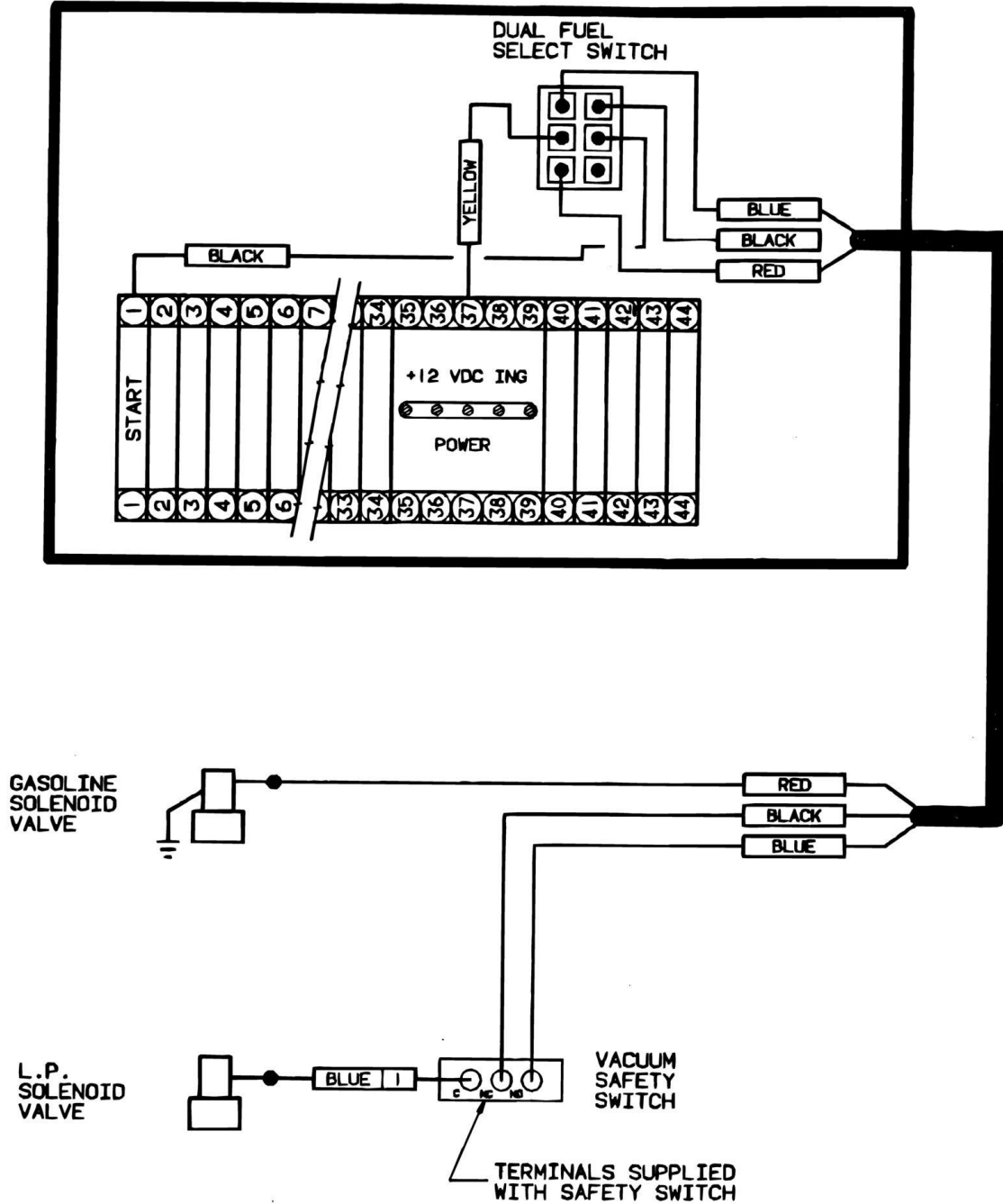
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	3990010	2	Diode - 6 Amp	
		Ref	Kubota Machines:	
	4932072	Ref	Standard Bang-Bang Controls	E
	1060300	10 ft/3.0m	Cable, Electrical - 16/3 (To Limit Switches)	
	4921286	1	Harness - Engine and Valves	
	3990010	2	Diode - 6 Amp	
	4932012	Ref	Proportional Controls	I
	1060300	10 ft/3.0m	Cable, Electrical - 16/3 (To Limit Switches)	
	4921278	1	Harness - Engine and Valves	
	3990010	2	Diode - 6 Amp	
	4932362	Ref	Steer Electrical Diagram (4WS)	-
	1281526	Ref	Steer Electrical Diagram (4WS)	A
	1060042	15 ft/4.6m	Cable, Electrical - 16/5	
	4460260	1	Connector, Strain Relief (At Ground Control Box)	
	0960239	1	Bushing	
	3300047	1	Nut, Conduit	

SECTION 7 - ELECTRICAL

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

DUAL FUEL WIRING

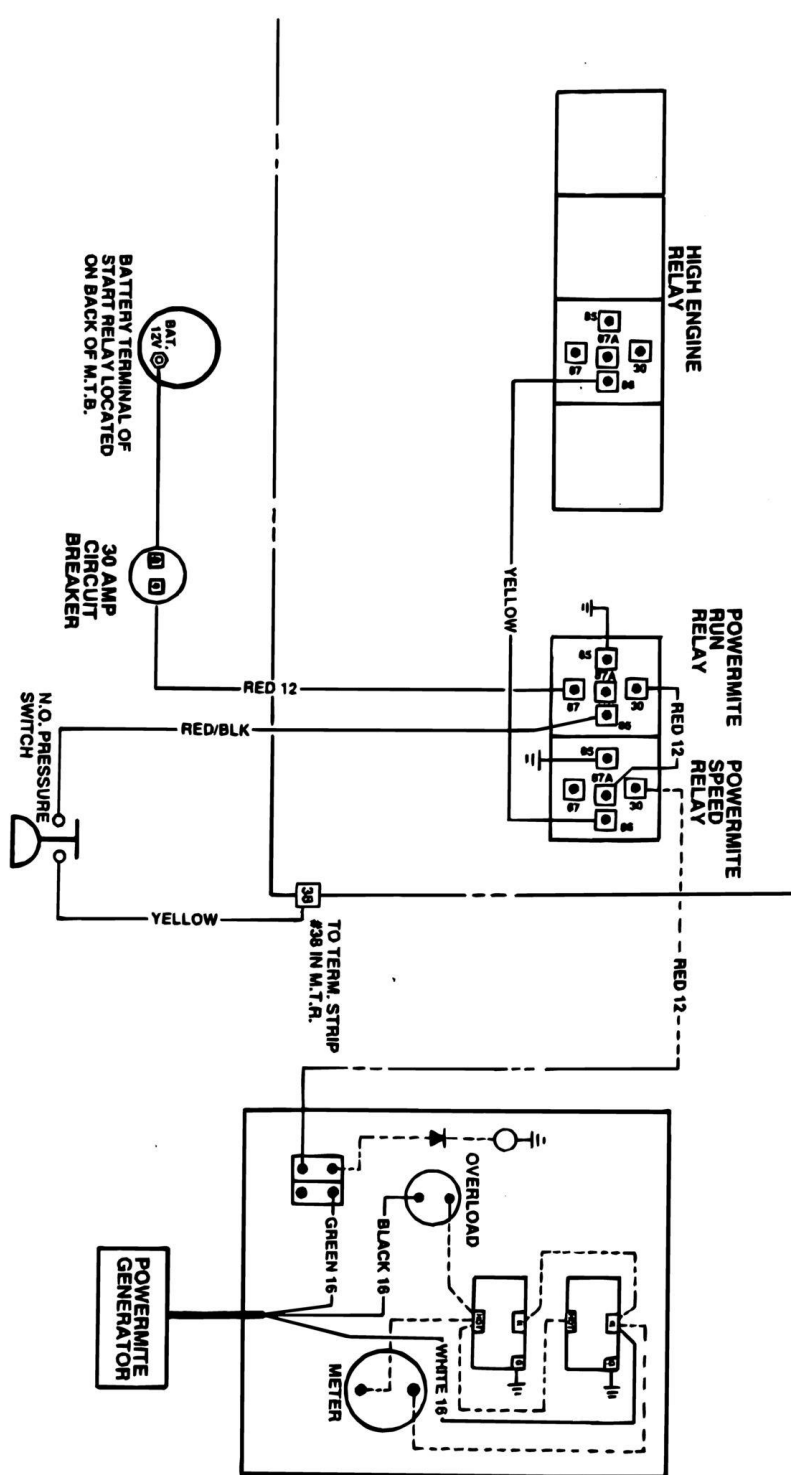
MAIN TERMINAL BOX REF.



4931479 - Rev -

SECTION 7 - ELECTRICAL

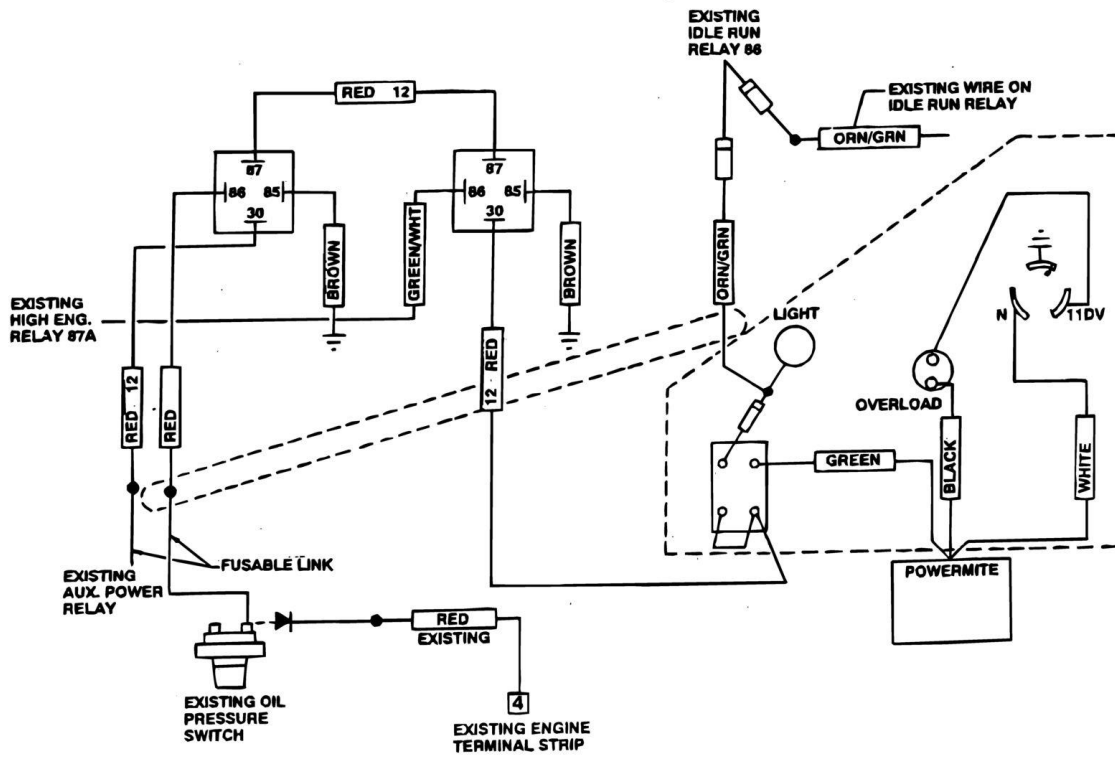
FIGURE 7-3. GENERATOR ELECTRICAL DIAGRAM (110V) (DEUTZ)



4931945 - Rev A

SECTION 7 - ELECTRICAL

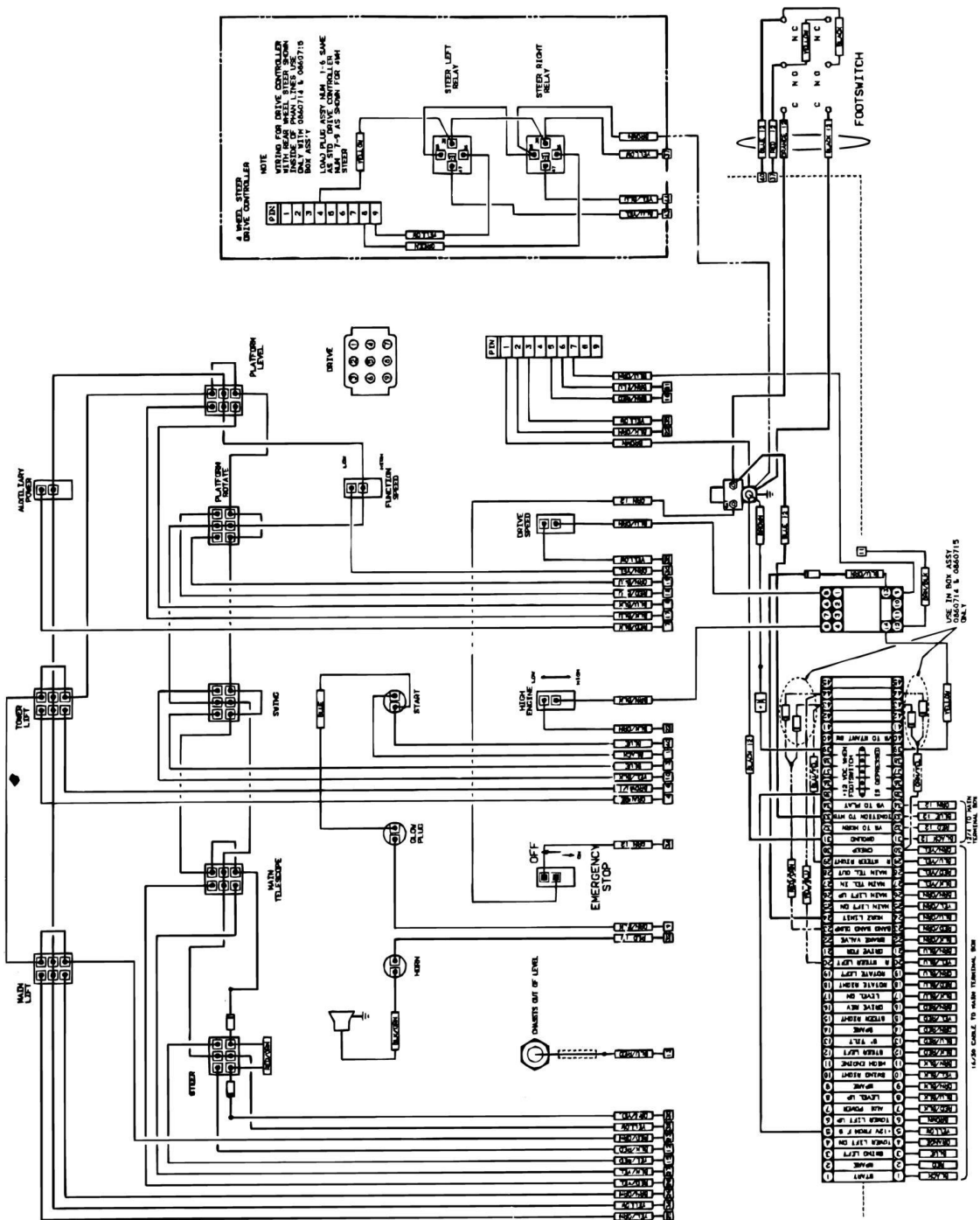
FIGURE 7-4. GENERATOR ELECTRICAL DIAGRAM (110V) (FORD)



4932046 - Rev E

SECTION 7 - ELECTRICAL

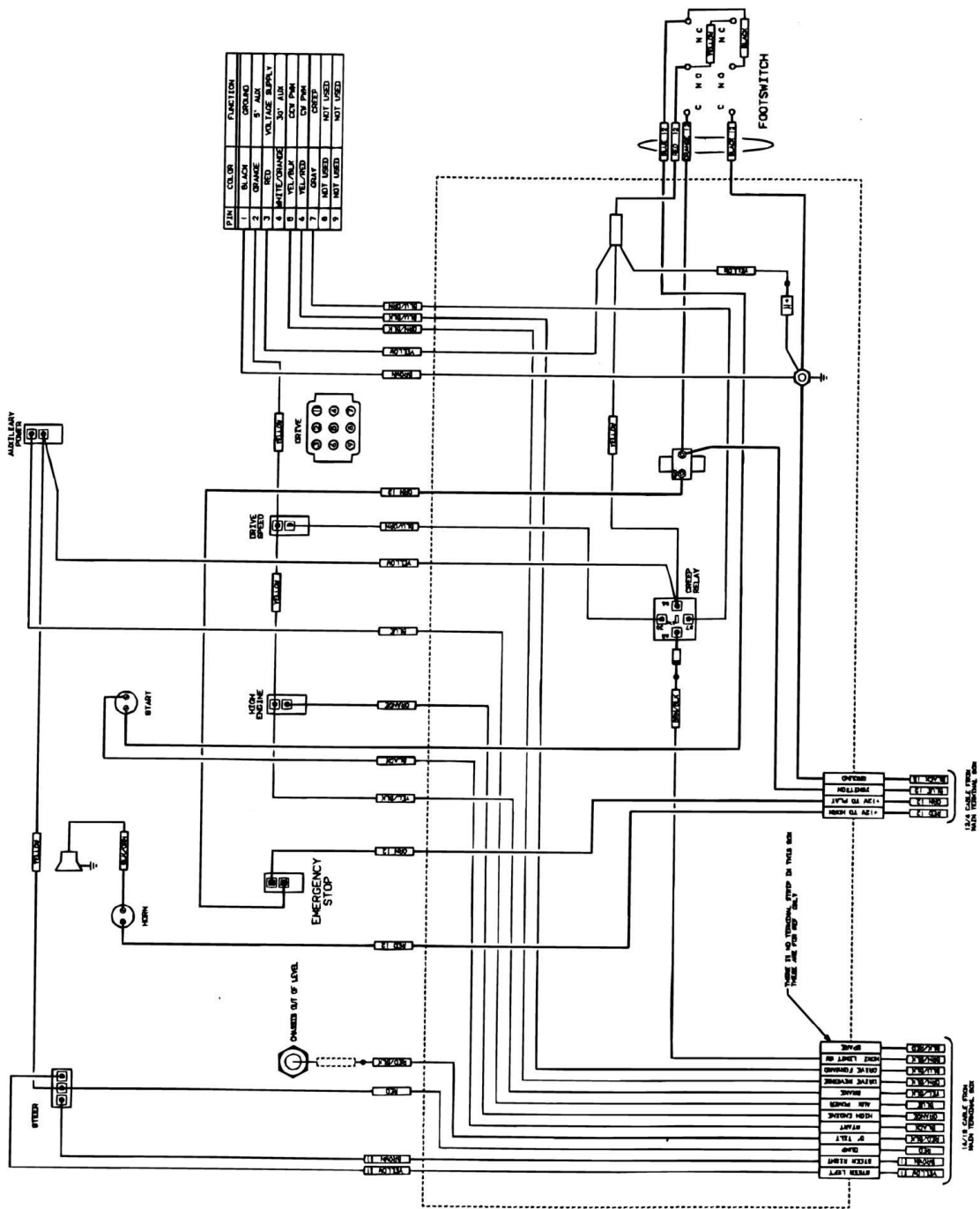
FIGURE 7-5. PLATFORM ELECTRICAL DIAGRAM - BANG-BANG (STANDARD) CONTROLS



1281356 - Rev F

SECTION 7 - ELECTRICAL

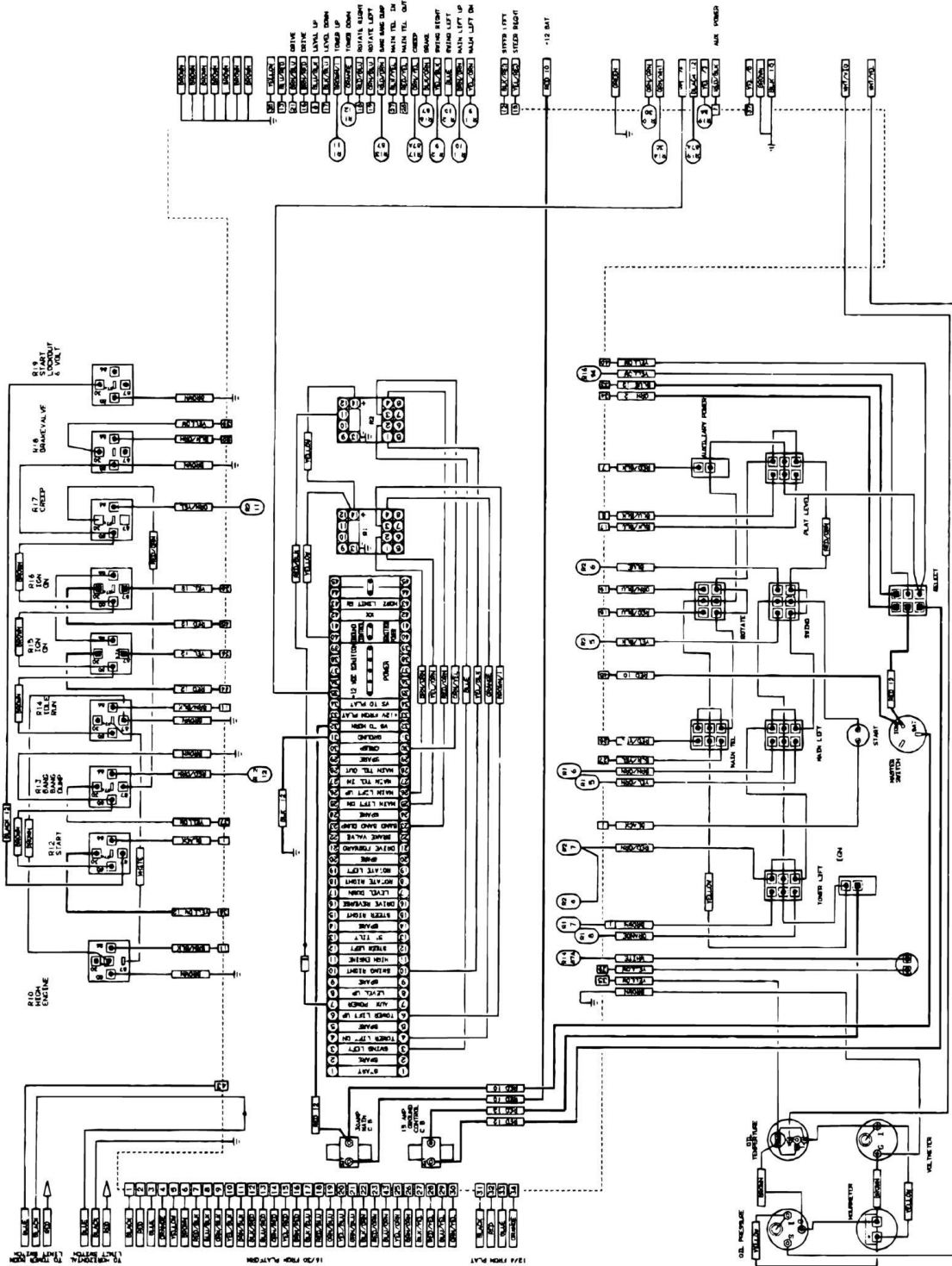
FIGURE 7-6. PLATFORM ELECTRICAL DIAGRAM - HYDRAULIC CONTROLS



4932054 - Rev B

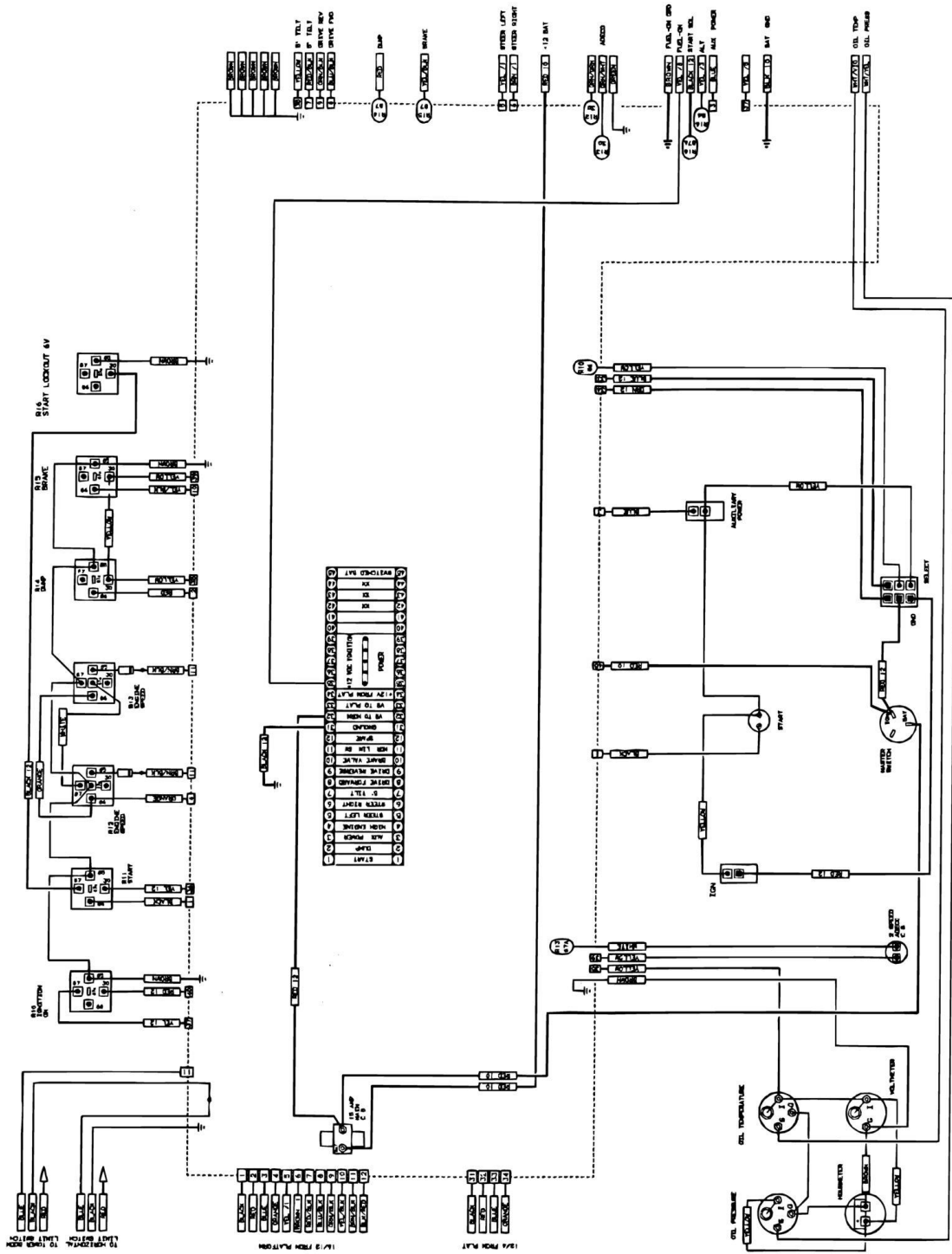
SECTION 7 - ELECTRICAL

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

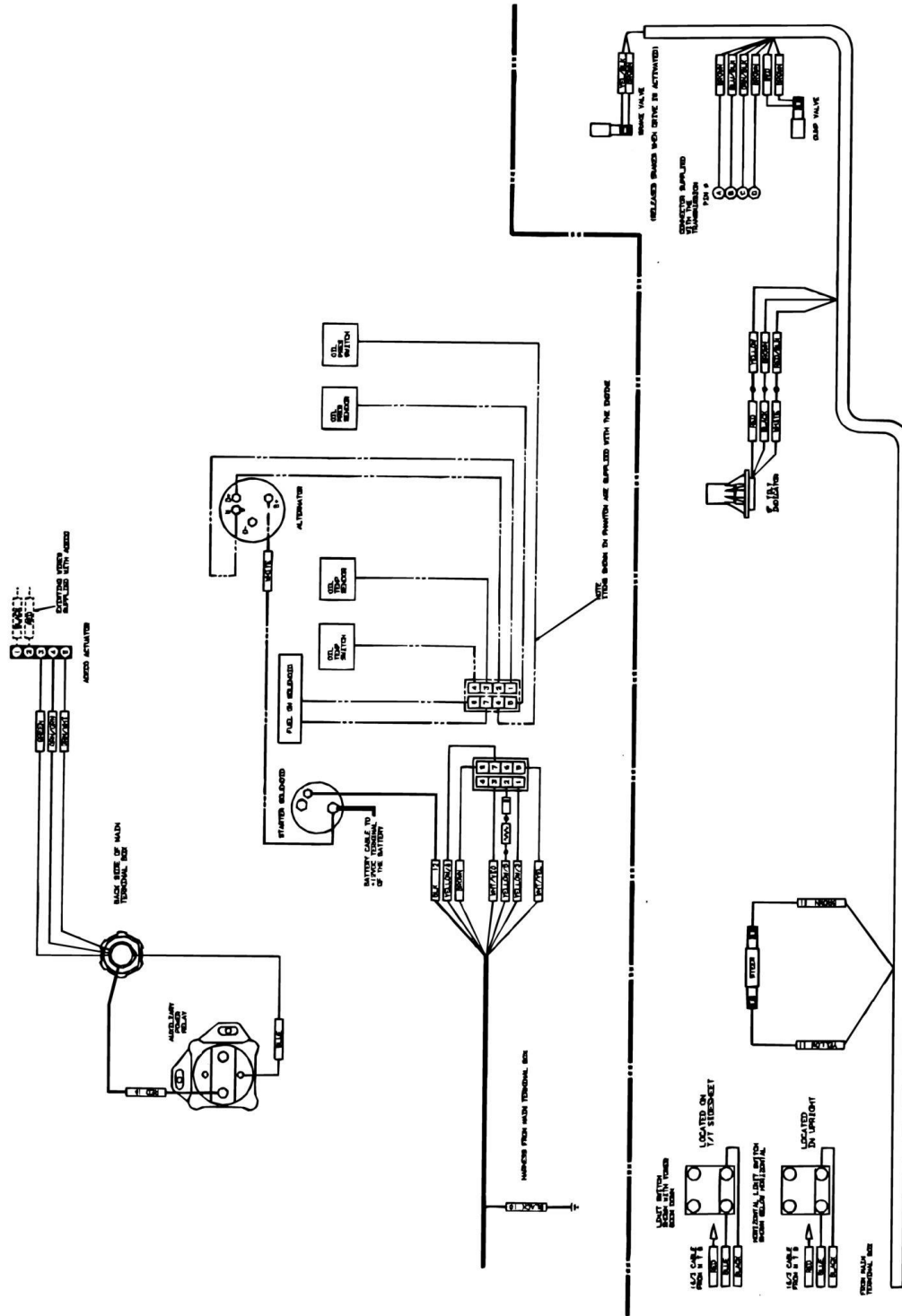


SECTION 7 - ELECTRICAL

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



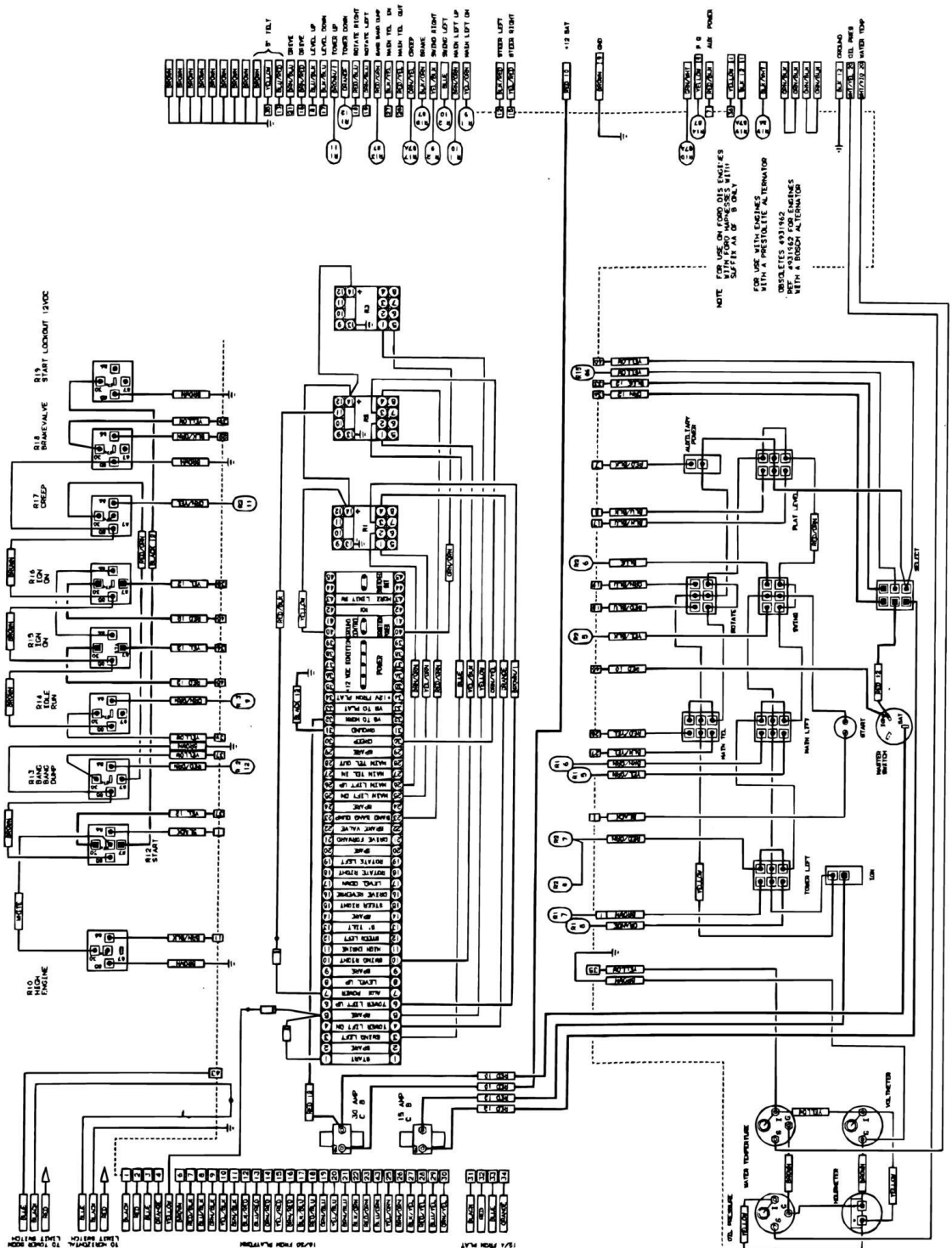
SECTION 7 - ELECTRICAL



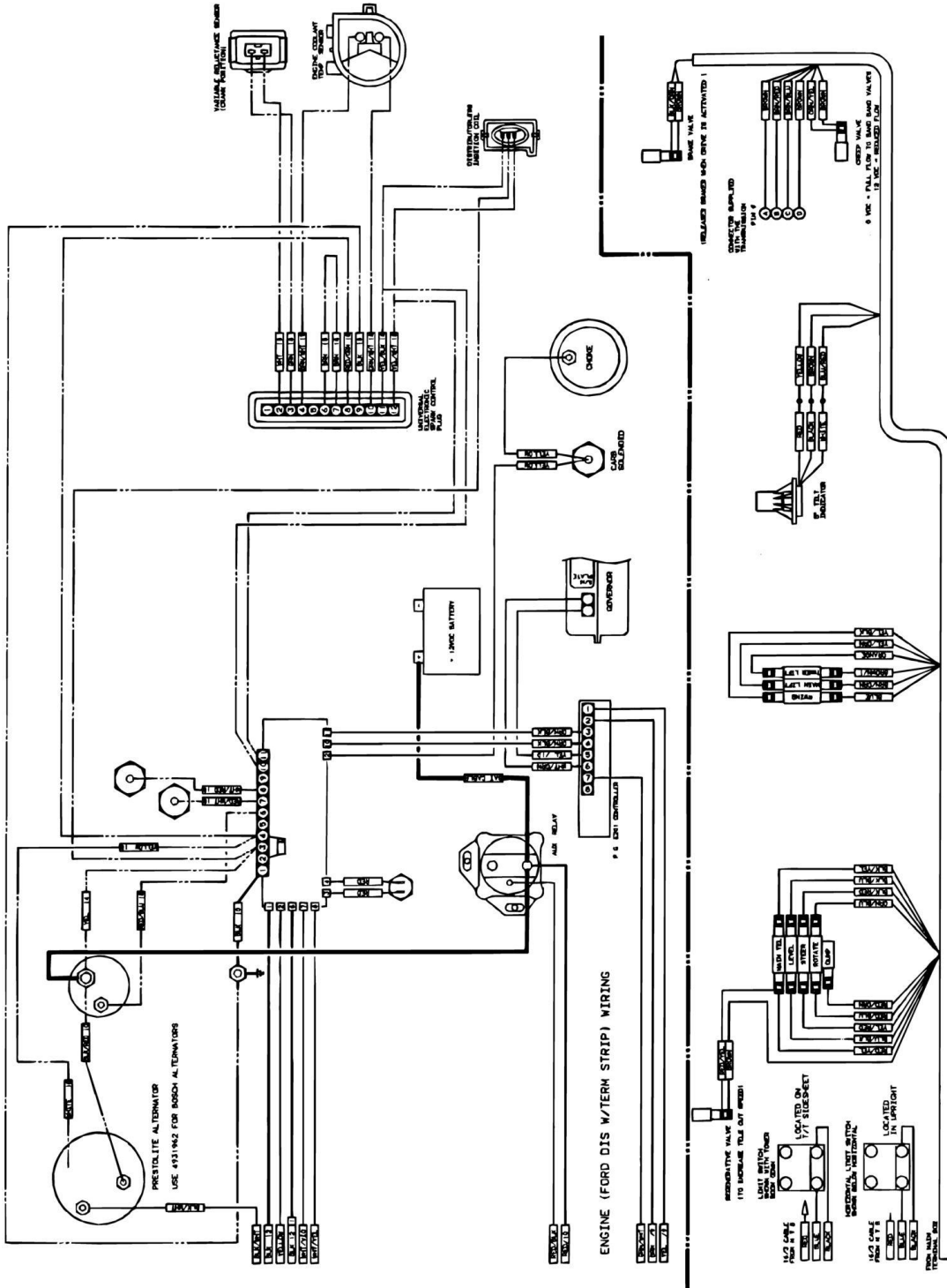
4932076 - Rev H

SECTION 7 - ELECTRICAL

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



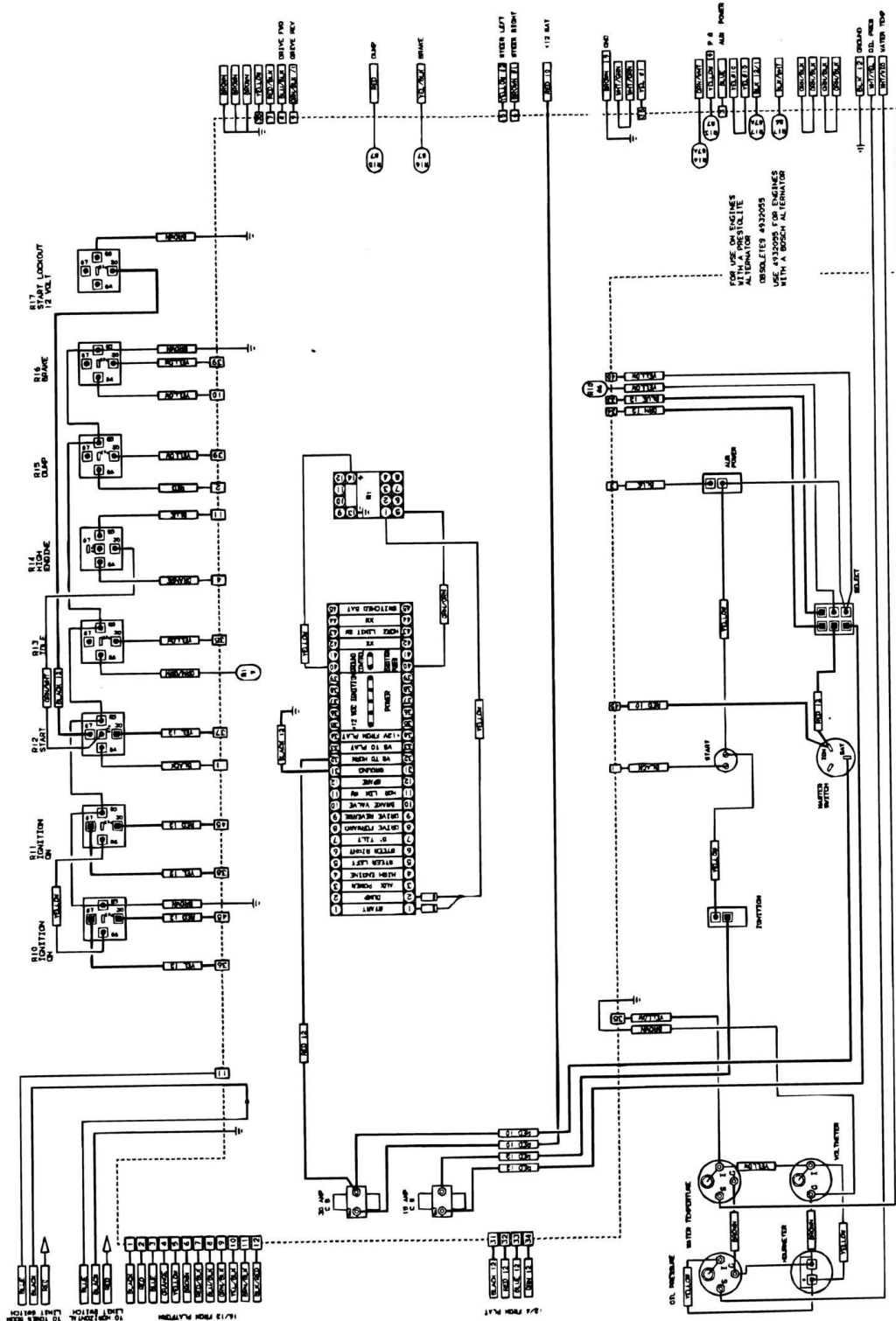
SECTION 7 - ELECTRICAL



4932754 - Rev A

SECTION 7 - ELECTRICAL

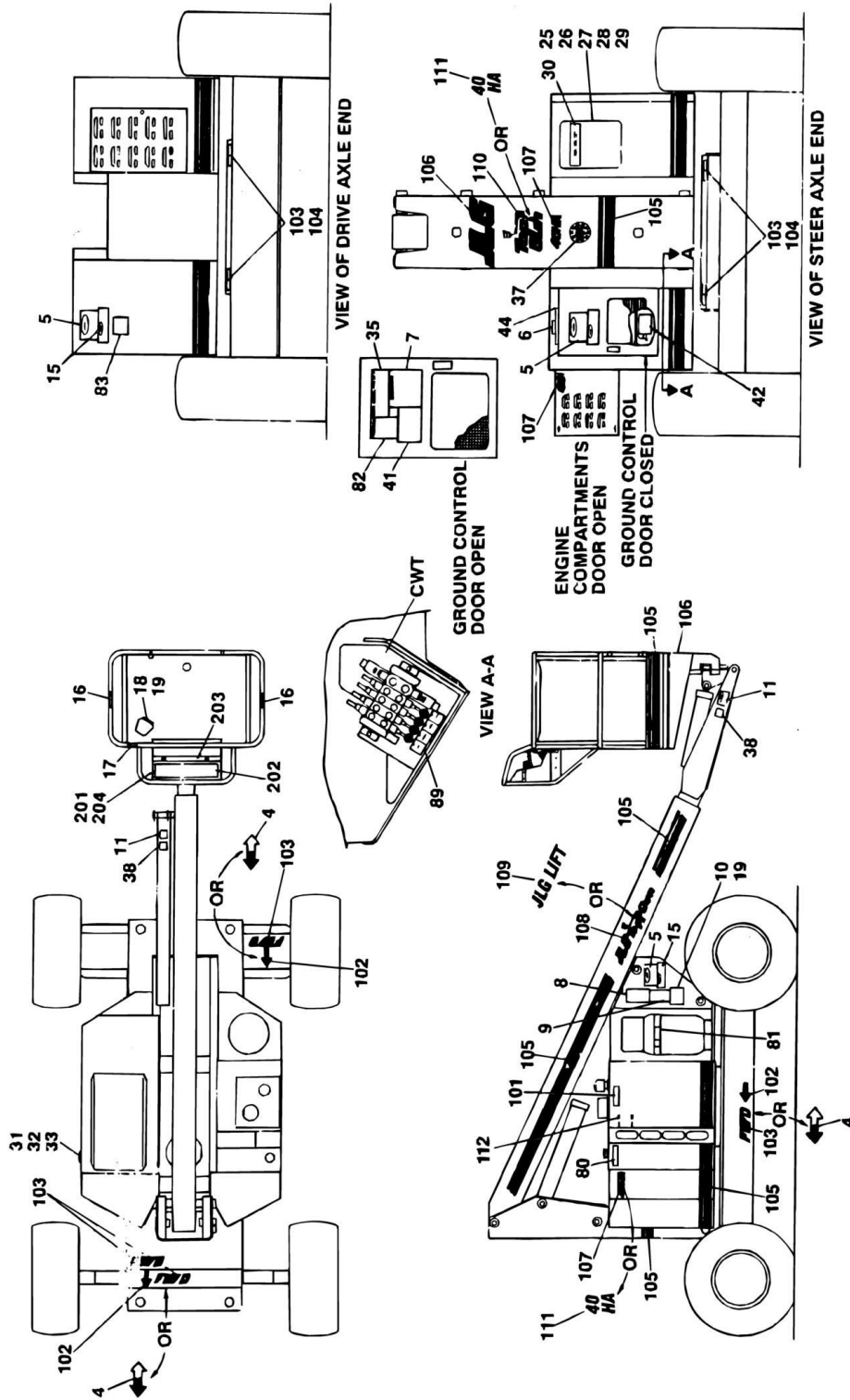
FIGURE 7-10. STANDARD ELECTRICAL DIAGRAM - FORD WITH HYDRAULIC CONTROLS



SECTION 8 - DECALS

SECTION 8 - DECALS

FIGURE 8-1. DECALS INSTALLATION



SECTION 8 - DECALS

FIGURE 8-1. DECALS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DECALS INSTALLATION (STANDARD PARTS)	
	1281358	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS	S
	1282027	Ref	HYDRAULIC CONTROLS	B
4	1701529	4	Decal - Arrow (February 1993 to Present)	
5		Ref	Decal - Crushing Options:	
5	1700585	4	Decal - Crushing (Prior to May 1994)	
5	1702277	4	Decal - Crushing (May 1994 to Present)	
6	1700037	1	Decal - Ground Controls	
7		Ref	Decal - Important Options:	
7	1700643	1	Decal - Important (Prior to May 1994)	
7	1702299	1	Decal - Important (May 1994 to Present)	
8	1700584	1	Decal - Patent	
9		Ref	Decal - Inspection Options:	
9	1700593	1	Decal - Inspection (Prior to May 1994)	
9	1702153	1	Decal - Inspection (May 1994 to Present)	
10	Not Available	1	Nameplate - Serial Number	
11		Ref	Decal - Crushing Options:	
11	1700640	3	Decal - Crushing (Prior to May 1994)	
11	1702284	3	Decal - Crushing (May 1994 to Present)	
15		Ref	Decal - Electrocution Options:	
15	1700580	4	Decal - Electrocution (Prior to May 1994)	
15	1702292	4	Decal - Electrocution (May 1994 to Present)	
16	1700476	2	Decal - No Hands (Prior to May 1994)	
16	1702294	2	Decal - No Hands (May 1994 to Present)	
17		Ref	Decal - Attach Belt Options:	
17	1700477	2	Decal - Attach Belt (Prior to May 1994)	
17	1702276	2	Decal - Attach Belt (May 1994 to September 1995)	
17	1702612	2	Decal - Attach Belt (September 1995 to SN 27520)	
17	1704277	2	Decal - Attach Belt (SN 27521 to Present)	
18	3251766	1	Nameplate - Footswitch (Prior to July 1992)	
19	3820001	AR	Rivet	
25	0860520	1	Box, Manual Storage	
26	4751400	6	Flatwasher 1/4in	
27	3311405	5	Locknut 1/4in-20NC	
28	1060279	1	Lanyard	
29	0641408	1	Bolt 1/4in-20NC x 1in	
30	1700157	1	Decal - Manual	
31	0961127	1	Bushing, Snap	
32	0100010	AR	Adhesive	
33	3251243	1	Nameplate - 120V	
34	1700756	1	Decal - Add/Full	
35	1700582	1	Decal - Ground Control Operation (Prior to May 1994)	
35	1702293	1	Decal - Ground Control Operation (May 1994 to Present)	
37	3251813	1	Nameplate - Made in U.S.A.	
38	1701460	2	Decal - Caution (Prior to May 1994)	
38	1702280	2	Decal - Caution (May 1994 to Present)	
41	1702282	1	Decal - Warning (May 1994 to Present Only)	
42	1702265	1	Decal - Important (May 1994 to Present Only)	
43	Not Available	1	Decal - Bar Code (SN 27521 to Present)	
44	1702688	1	Decal - Max Capacity (500 Lbs) (SN 27521 to Present)	

SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	DECALS INSTALLATION (OPTIONAL PARTS)	
80		Ref	Decal - Fuel Options:	
80	1700428	1	Diesel (Brown)	
80	1702600	1	Diesel (Brown) (Latin American Spec)	
80	1700196	1	Diesel (Black)	
80	1700430	1	Gasoline (Brown)	
80	1702722	1	Gasoline (Brown) (Latin American Spec)	
80	1700194	1	Gasoline (Black)	
81		Ref	Decal - LP Gas Options:	
81	1700429	1	LP Gas (Brown)	
81	1700197	1	LP Gas (Black)	
82	3251028	1	Decal - Dual Fuel (Prior to May 1994)	
82	3252356	1	Decal - Dual Fuel (May 1994 to Present)	
83	1700818	1	Decal - LP Gas Liquid Withdraw System	
84	1700853	1	Decal - Ground Control Selection (Hydraulic Controls Only)	
		Ref	DECAL INSTALLATIONS (VARIABLE PARTS)	
		Ref	DECAL INSTALLATION - BROWN	
	0250026	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS	11
	0251034	Ref	HYDRAULIC CONTROLS (PRIOR TO FEBRUARY 1992)	
	0253756	Ref	HYDRAULIC CONTROLS (DECEMBER 1992 TO PRESENT)	5
		Ref	DECAL INSTALLATION - BLACK	
	0252821	Ref	STANDARD BANG-BANG AND PROPORTIONAL CONTROLS	8
	0253757	Ref	HYDRAULIC CONTROLS	5
101		Ref	Decal - Hydraulic Fluid	
101	1700419	1	Decal - Brown	
101	1700195	1	Decal - Black	
102		Ref	Decal Options: (Prior to February 1993)	
102	1700977	4	Decal - FWD (Brown)	
102	1700978	4	Decal - Arrow (Brown)	
102	1700053	4	Decal - FWD (Black)	
102	1700058	4	Decal - Arrow (Black)	
103		Ref	Decal - Lift Here Options:	
103	1700975	4	Decal - Brown (Prior to SN 27521)	
103	1700232	4	Decal - Black (Prior to SN 27521)	
103	1701500	4	Decal - Brown/Black (SN 27521 to Present)	
104		Ref	Decal - Tie Down Options:	
104	1700976	4	Decal - Brown (Prior to SN 27521)	
104	1700326	4	Decal - Black (Prior to SN 27521)	
104	1702300	4	Decal - Brown/Black (SN 27521 to Present)	
105		Ref	Decal - Stripe Options:	
105	1700431	48	Decal - Brown (Prior to SN 27521)	
		ft/14.6m		
105	1701703	48	Decal - Brown (SN 27521 to Present)	
		ft/14.6m		
105	1701334	48	Decal - Black	
		ft/14.6m		
106		Ref	Decal - JLG	
106	1700981	2	Decal - Brown	
106	1701321	2	Decal - Black	
107		Ref	Decal - 40HA Options:	

SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
107	1701239	AR	Decal - Brown (Qty 2 - Prior to February 1992/Qty 1 - February 1992 to Present Located on Engine Door)	
107	1701725	AR	Decal - Black (Located on Engine Door Only)	
108		Ref	Decal - Top Gun (Prior to February 1992)	
108	1700979	2	Decal - Brown	
109		Ref	Decal - JLG Lift Options:	
109	1701441	2	Decal - Brown (February 1992 to Present)	
109	1701550	2	Decal - Black	
110		Ref	Decal - Top Gun (Prior to February 1992)	
110	1700980	1	Decal - Brown	
111		Ref	Decal - 40HA Options:	
111	1701470	2	Decal - Brown (February 1992 to Present)	
111	1701594	2	Decal - Black	
112		Ref	Decal - Full/Add Options:	
112	1700756	1	Decal - Brown	
112		Ref	Decal - Black	
112	1700755	1	Decal - Black (Prior to May 1994)	
112	1701336	1	Decal - Black (May 1994 to Present)	
	2900763	1	Decal Kit - Brown	
	2910025	1	Decal Kit - Black (Includes Items 202 & 203)	
	0253639	Ref	CAUTION/DANGER NAMEPLATE INSTALLATION (STANDARD BANG-BANG AND PROPORTIONAL CONTROLS BUILT FEBRUARY 1993 TO PRESENT)	A
201	3536671	1	Plate, Mounting	
202	3252144	1	Nameplate (February 1993 to May 1994)	
202	3252369	1	Nameplate (May 1994 to Present)	
203	1702289	1	Decal - Symbols	
204	3820019	4	Rivet	
	2910025	1	Decal Kit (Includes Items 202 & 203)	

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

FIGURE 9-1. MODEL 40HA WITH STANDARD BANG-BANG CONTROLS STANDARD PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	Note: 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.	
		Ref	STANDARD PARTS	
	2120125	4	Element, Pump Charge Filter, (for fleets of 1 to 10)	
	2120125	8	Element, Pump Charge Filter, (for fleets of 10 to 20)	
	2120125	12	Element, Pump Charge Filter, (for fleets of 20 or more)	
	7004368	1	Coil, (for fleets of 1 to 10)	
	7004368	1	Coil, (for fleets of 10 to 20)	
	7004368	1	Coil, (for fleets of 20 or more)	
	7009745	1	Coil, (for fleets of 1 to 10)	
	7009745	1	Coil, (for fleets of 10 to 20)	
	7009745	1	Coil, (for fleets of 20 or more)	
	7000417	1	Coil, (for fleets of 1 to 10)	
	7000417	1	Coil, (for fleets of 10 to 20)	
	7000417	1	Coil, (for fleets of 20 or more)	
	7002450	1	Coil, (for fleets of 1 to 10)	
	7002450	1	Coil, (for fleets of 10 to 20)	
	7002450	1	Coil, (for fleets of 20 or more)	
	7000418	1	Coil, (for fleets of 1 to 10)	
	7000418	1	Coil, (for fleets of 10 to 20)	
	7000418	1	Coil, (for fleets of 20 or more)	
	7007496	1	Coil, (for fleets of 1 to 10)	
	7007496	1	Coil, (for fleets of 10 to 20)	
	7007496	1	Coil, (for fleets of 20 or more)	
	2120107	4	Element, Hydraulic Oil Filter, (for fleets of 1 to 10)	
	2120107	8	Element, Hydraulic Oil Filter, (for fleets of 10 to 20)	
	2120107	12	Element, Hydraulic Oil Filter, (for fleets of 20 or more)	
	1340046	1	Breather, Hydraulic Oil, (for fleets of 1 to 10)	
	1340046	2	Breather, Hydraulic Oil, (for fleets of 10 to 20)	
	1340046	3	Breather, Hydraulic Oil, (for fleets of 20 or more)	
	4360003	1	Switch, Key, (for fleets of 1 to 10)	
	4360003	1	Switch, Key, (for fleets of 10 to 20)	
	4360003	1	Switch, Key, (for fleets of 20 or more)	
	2860002	1	Key, Replacement, (for fleets of 1 to 10)	
	2860002	1	Key, Replacement, (for fleets of 10 to 20)	
	2860002	1	Key, Replacement, (for fleets of 20 or more)	
	4360073	1	Switch, Toggle, (for fleets of 1 to 10)	
	4360073	1	Switch, Toggle, (for fleets of 10 to 20)	
	4360073	1	Switch, Toggle, (for fleets of 20 or more)	
	4360199	1	Switch, Toggle, (for fleets of 1 to 10)	
	4360199	1	Switch, Toggle, (for fleets of 10 to 20)	
	4360199	1	Switch, Toggle, (for fleets of 20 or more)	
	4360202	1	Switch, Toggle, (for fleets of 1 to 10)	
	4360202	1	Switch, Toggle, (for fleets of 10 to 20)	
	4360202	1	Switch, Toggle, (for fleets of 20 or more)	

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4360200	1	Switch, Toggle, (for fleets of 1 to 10)	
	4360200	1	Switch, Toggle, (for fleets of 10 to 20)	
	4360200	1	Switch, Toggle, (for fleets of 20 or more)	
	4360274	1	Switch, Push Button, (for fleets of 1 to 10)	
	4360274	1	Switch, Push Button, (for fleets of 10 to 20)	
	4360274	1	Switch, Push Button, (for fleets of 20 or more)	
	3740049	1	Relay, (for fleets of 1 to 10)	
	3740049	1	Relay, (for fleets of 10 to 20)	
	3740049	1	Relay, (for fleets of 20 or more)	
	4360216	1	Breaker, Circuit, (for fleets of 1 to 10)	
	4360216	1	Breaker, Circuit, (for fleets of 10 to 20)	
	4360216	1	Breaker, Circuit, (for fleets of 20 or more)	
	4360232	1	Breaker, Circuit, (for fleets of 1 to 10)	
	4360232	1	Breaker, Circuit, (for fleets of 10 to 20)	
	4360232	1	Breaker, Circuit, (for fleets of 20 or more)	
	3740058	1	Relay - 4PDT, (for fleets of 1 to 10)	
	3740058	1	Relay - 4PDT, (for fleets of 10 to 20)	
	3740058	1	Relay - 4PDT, (for fleets of 20 or more)	
	3740067	1	Relay, (for fleets of 1 to 10)	
	3740067	1	Relay, (for fleets of 10 to 20)	
	3740067	1	Relay, (for fleets of 20 or more)	
	3740077	1	Relay, (for fleets of 1 to 10)	
	3740077	1	Relay, (for fleets of 10 to 20)	
	3740077	1	Relay, (for fleets of 20 or more)	
	4360171	1	Switch, Level Sensor, (for fleets of 1 to 10)	
	4360171	1	Switch, Level Sensor, (for fleets of 10 to 20)	
	4360171	1	Switch, Level Sensor, (for fleets of 20 or more)	
	4360057	1	Switch, Limit, (for fleets of 1 to 10)	
	4360057	1	Switch, Limit, (for fleets of 10 to 20)	
	4360057	1	Switch, Limit, (for fleets of 20 or more)	
	7006139	2	Powertrack - 1 Ft Section, (for fleets of 1 to 10)	
	7006139	2	Powertrack - 1 Ft Section, (for fleets of 10 to 20)	
	7006139	2	Powertrack - 1 Ft Section, (for fleets of 20 or more)	
	7006152	24	Pin Kit, (for fleets of 1 to 10)	
	7006152	24	Pin Kit, (for fleets of 10 to 20)	
	7006152	24	Pin Kit, (for fleets of 20 or more)	
	2940006	1	Latch, Platform Door, (for fleets of 1 to 10)	
	2940006	1	Latch, Platform Door, (for fleets of 10 to 20)	
	2940006	1	Latch, Platform Door, (for fleets of 20 or more)	
	4360031	1	Foot Switch, (for fleets of 1 to 10)	
	4360031	1	Foot Switch, (for fleets of 10 to 20)	
	4360031	1	Foot Switch, (for fleets of 20 or more)	
	3990010	2	Diode, (for fleets of 1 to 10)	
	3990010	2	Diode, (for fleets of 10 to 20)	
	3990010	2	Diode, (for fleets of 20 or more)	

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

FIGURE 9-2. MODEL 40HA WITH STANDARD BANG-BANG CONTROLS VARIABLE PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	Note: 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.	
		Ref	VARIABLE PARTS	
	7010772	1	Coil (4WS), (for fleets of 1 to 10)	
	7010772	1	Coil (4WS), (for fleets of 10 to 20)	
	7010772	1	Coil (4WS), (for fleets of 20 or more)	
	7004214	1 Dozen	Element, Air Filter (Deutz and Ford), (for fleets of 1 to 10)	
	7004214	1 Dozen	Element, Air Filter (Deutz and Ford), (for fleets of 10 to 20)	
	7004214	1 Dozen	Element, Air Filter (Deutz and Ford), (for fleets of 20 or more)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Deutz), (for fleets of 1 to 10)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Deutz), (for fleets of 10 to 20)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Deutz), (for fleets of 20 or more)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Deutz), (for fleets of 1 to 10)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Deutz), (for fleets of 10 to 20)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Deutz), (for fleets of 20 or more)	
	7012598	4	Element, Fuel Filter (Deutz), (for fleets of 1 to 10)	
	7012598	8	Element, Fuel Filter (Deutz), (for fleets of 10 to 20)	
	7012598	12	Element, Fuel Filter (Deutz), (for fleets of 20 or more)	
	7014502	1 Box	Element, Engine Oil Filter (Deutz), (for fleets of 1 to 10)	
	7014502	1 Box	Element, Engine Oil Filter (Deutz), (for fleets of 10 to 20)	
	7014502	1 Box	Element, Engine Oil Filter (Deutz), (for fleets of 20 or more)	
	7019949	1 Box	Element, Engine Oil Filter (Ford), (for fleets of 1 to 10)	
	7019949	1 Box	Element, Engine Oil Filter (Ford), (for fleets of 10 to 20)	
	7019949	1 Box	Element, Engine Oil Filter (Ford), (for fleets of 20 or more)	
	1660207	1	Coupling - 13 Teeth, Pump/Engine (Ford), (for fleets of 1 to 10)	
	1660207	1	Coupling - 13 Teeth, Pump/Engine (Ford), (for fleets of 10 to 20)	
	1660207	1	Coupling - 13 Teeth, Pump/Engine (Ford), (for fleets of 20 or more)	
	7019684	1	Coupling - 15 Teeth, Pump/Engine (Ford), (for fleets of 1 to 10)	
	7019684	1	Coupling - 15 Teeth, Pump/Engine (Ford), (for fleets of 10 to 20)	
	7019684	1	Coupling - 15 Teeth, Pump/Engine (Ford), (for fleets of 20 or more)	
	7008829	1	PC Board - Adeco (Kubota and Deutz), (for fleets of 1 to 10)	
	7008829	1	PC Board - Adeco (Kubota and Deutz), (for fleets of 10 to 20)	
	7008829	1	PC Board - Adeco (Kubota and Deutz), (for fleets of 20 or more)	
	7008828	1	Cable - Adeco (Kubota and Deutz), (for fleets of 1 to 10)	
	7008828	1	Cable - Adeco (Kubota and Deutz), (for fleets of 10 to 20)	
	7008828	1	Cable - Adeco (Kubota and Deutz), (for fleets of 20 or more)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Kubota), (for fleets of 1 to 10)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Kubota), (for fleets of 10 to 20)	
	1660184	1	Coupling - 13 Teeth, Pump/Engine (Kubota), (for fleets of 20 or more)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Kubota), (for fleets of 1 to 10)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Kubota), (for fleets of 10 to 20)	
	1660234	1	Coupling - 15 Teeth, Pump/Engine (Kubota), (for fleets of 20 or more)	
	4360212	1	Breaker, Circuit (Kubota and Deutz), (for fleets of 1 to 10)	
	4360212	1	Breaker, Circuit (Kubota and Deutz), (for fleets of 10 to 20)	

SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4360212	1	Breaker, Circuit (Kubota and Deutz), (for fleets of 20 or more)	
	4360201	1	Switch, Toggle (Dual Fuel), (for fleets of 1 to 10)	
	4360201	1	Switch, Toggle (Dual Fuel), (for fleets of 10 to 20)	
	4360201	1	Switch, Toggle (Dual Fuel), (for fleets of 20 or more)	
	3740059	1	Relay (Kubota), (for fleets of 1 to 10)	
	3740059	1	Relay (Kubota), (for fleets of 10 to 20)	
	3740059	1	Relay (Kubota), (for fleets of 20 or more)	
	1600117	1	Relay (Kubota), (for fleets of 1 to 10)	
	1600117	1	Relay (Kubota), (for fleets of 10 to 20)	
	1600117	1	Relay (Kubota), (for fleets of 20 or more)	
	1600116	1	PQ Controller (2WS), (for fleets of 1 to 10)	
	1600116	1	PQ Controller (2WS), (for fleets of 10 to 20)	
	1600116	1	PQ Controller (2WS), (for fleets of 20 or more)	
	1600135	1	PQ Controller (4WS), (for fleets of 1 to 10)	
	1600135	1	PQ Controller (4WS), (for fleets of 10 to 20)	
	1600135	1	PQ Controller (4WS), (for fleets of 20 or more)	
	7003783	1	Electrical Assembly - Controller (2WS), (for fleets of 1 to 10)	
	7003783	1	Electrical Assembly - Controller (2WS), (for fleets of 10 to 20)	
	7003783	1	Electrical Assembly - Controller (2WS), (for fleets of 20 or more)	
	7003797	1	Electrical Assembly - Controller (4WS), (for fleets of 1 to 10)	
	7003797	1	Electrical Assembly - Controller (4WS), (for fleets of 10 to 20)	
	7003797	1	Electrical Assembly - Controller (4WS), (for fleets of 20 or more)	
	7003789	1	Switch, Steer, (for fleets of 1 to 10)	
	7003789	1	Switch, Steer, (for fleets of 10 to 20)	
	7003789	1	Switch, Steer, (for fleets of 20 or more)	

SECTION 10 - SPECIAL OPTIONS

SECTION 10 - SPECIAL OPTIONS

FIGURE 10-1. SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	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.	
		Ref	MISCELLANEOUS SPECIAL OPTIONS	
		Ref	Airline Installations	
	0252046	Ref	Airline - 1/2in Single Line	D
	0251053	Ref	Airline - 1/2in Single Line (Boeing Spec)	D
	0255617	Ref	Airline - 1/2in Dual Line	-
	0254446	Ref	Airline - 3/4in Single Line	A
	1281498	Ref	Axle Conversions	-
	0251444	Ref	2WD Oscillating to Fixed	-
	0251445	Ref	4WD Oscillating to Fixed	-
	0253817	Ref	Battery Kit and Disconnect Switch Installations	-
	4360256	1	Switch - Battery Disconnect	
	3252027	1	Nameplate - Disconnect Switch On/Off	
	4360104	2	Switch, Pushbutton	
	4360131	2	Switch, Lense	
	4360132	2	Switch, Operator	
	3252028	1	Nameplate - Battery Disconnect	
	3252029	1	Nameplate - Auxiliary Switch Location	
	1060044	1	Cable - Battery	
	0270723	Ref	Beacon Light Installation - Platform	A
	0253824	Ref	Boeing Spec Installations	B
	0251042	Ref	Bubble Level Installation	-
	2420038	1	Gauge, Level	
	0256789	Ref	Camera Mount Assembly	
		Ref	Decals Installations:	-
	0250733	Ref	Decals Installation - Capacity Nameplates	-
	1700919	3	Decal - 500 Lbs	
	3534137	3	Plate, Mounting	
	0253550	Ref	Decals Installation - CSA	A
	3252221	1	Nameplate	
	0257492	Ref	Decals Installation - Brazil Spec	4
	0257914	Ref	Decals Installation - Brazil Spec (Pictogram)	1
	2900940	Ref	Decal Kit - Brazil Spec (Brown)	
	0255736	Ref	Decals Installation - Latin American Spec	5
	1702669	1	Decal - Important - Latin American Spec	
	1702721	1	Decal - LP Gas (Brown) - Latin American Spec	
	1702722	1	Decal - Fuel Gas (Brown) - Latin American Spec	
	1702600	1	Decal - Fuel Diesel - Latin American Spec	
	0255755	Ref	Nameplate Installation - Latin American Spec	-
	0252822	Ref	Decals Installation - Common (Japanese Spec)	6
	0253262	Ref	Decals Installation - Japanese Spec	2
	0252062	Ref	Decals Installation - Manual Descent	-
	0251830	Ref	Decals Installation - Manual Descent (Japanese Spec)	A
	0256487	Ref	Decal Installation - Warning Prop 65 (Diesel)	
	0256488	Ref	Decal Installation -Warning Prop 65 (Gas)	
	0256956	Ref	Decal Installation -Lanyard Attach (GM K-1 Spec)	

SECTION 10 - SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1281955	Ref	Deutz Engine Installation - With Auxiliary Pump Drive for Hydraulic Tool Circuit	B
	0253464	Ref	Engine Installation (B/M Only)	C
	0253463	Ref	Engine Assembly (B/M Only)	E
	2000119	1	Engine - F2L1011 (Non-Standard)	
	3600202	1	Pump - Barnes (Non-Standard)	
	3600203	1	Pump - Barnes (Non-Standard)	
	1281643	Ref	Deutz Engine Installation With Ucon Hydraulic Fluid	G
	0255202	Ref	Engine Installation (B/M Only)	B
	0255201	Ref	Engine Assembly (B/M Only)	D
	3600241	1	Pump - Commercial (Non-Standard)	
		Ref	ELECTRICAL CONNECTOR KITS	
	1001148902	Ref	Amp Connector Kit	
	1001148903	Ref	Deutsch DT Connector Kit	
	1001148904	Ref	Deutsch HD Connector Kit	
	1001148905	Ref	Packard Connector Kit	
	1001148906	Ref	Various Connector Kit	
		Ref	Engine Manuals:	
	3120044	1	Deutz FL1011	
	3120045	1	Kubota V1200	
	3120077	1	Ford VSG-411	
		Ref	Filter Kits (Deutz Engine Only):	
	1001110983	1	Combined Filter Kit (Hydraulic/Air and Fuel/Engine Oil)	
	1001109671	1	Hydraulic/Air Filter	
	1001110136	1	Fuel/Engine Oil Filter	
		Ref	Fuel Caps:	
	0257365	Ref	Standard	1
	1120314	1	Cap	
	0257366	Ref	Red - Lockable Cap	2
	1120367	1	Cap	
	0258626	Ref	Blue - Lockable Cap	1
	1120512	1	Cap	
	0253816	Ref	Fuel Indicator Light Installation	A
	4360265	1	Switch, LPG	
	2920026	1	Light, Indicator	
	3252269	1	Nameplate, LP Light	
		Ref	Ground Control Box Installation - Brazil Spec	
	0257634	Ref	Deutz with Standard Bang-Bang Controls	1
	0257635	Ref	Deutz with Proportional Controls	1
	0253836	Ref	Lights Installation - Headlights and Spot Lights (Boeing Machines)	3
	2920001	4	Headlight	
	2920013	4	Spotlight (Prior to SN 32554)	
	2920111	4	Spotlight (SN 32554 to Present)	
	0254067	Ref	Lights Installation - Headlights and Taillights (4WS Kubota Machines)	-
	1060016	65 ft/19.8m	Cable, Electrical - 16/3	
		Ref	Lights Installation - Panel	
	0251619	Ref	Standard Bang-Bang and Proportional Controls	A
	0251690	Ref	Hydraulic Controls	B
	2920024	AR	Light, Panel	

SECTION 10 - SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0253239	Ref	Manual Descent Installation	D
	0253393	Ref	Oil Cooler Installation	
	3620003	1	Oil Cooler Assembly	
	2060012	1	Fan	
	4360181	1	Switch, Temperature	
	4640760	1	Valve, Check	
	4060843	1	Shield	
	0256426	Ref	Pipe Rack Installation	
	0251140	Ref	Receptacle Installation - GFI	D
	0860038	1	Box, Switch	
	4460346	1	Receptacle	
	4060700	1	Shield, Cover	
	0254793	Ref	Receptacle Mounting Plate Installation - Argentina Machines	
	3538039	1	Plate, Mounting	
	3251242	1	Nameplate - 240V - 50HZ	
	0251274	Ref	Remote Bearing Lube Installation (Japanese Spec)	-
	0255619	Ref	Remote Control Box Installation	-
	0238954	1	Remote Box Assembly	
	0256829	Ref	Spring Loaded Gate Assembly	A
		Ref	Tank, LP Options:	
	4400281	2	33.5 LB Liquid (Aluminum)	
	4400421	2	33.5 LB Liquid (Steel)	
	4400275	2	43.5 LB Liquid (Aluminum)	
	4400420	2	43.5 LB Liquid (Steel)	
		Ref	Technical Supplements:	
	3120322	1	Spec Data Handbook	
	3120351	1	PQ Controller Supplement	
	3124003	1	Sunstrand Sauer Service Manual	
		Ref	Tools for Service	
	7002828	1	Wire Stripper	
	7002821	1	Wire Crimper (To install wire ends to wires)	
	7002823	1	Pin/Socket Extractor - Universal (To Remove Pins/Sockets from Connectors)	
	7002822	1	Screwdriver, Potentiometer (To Adjust Drive Controllers)	
	7016654	1	Screwdriver, Magnetic	
	7004275	1	Seal Installation Tool - 1in	
	7004276	1	Seal Installation Tool - 1 1/2in	
	7002826	1	Seal Installation Tool - 2in	
	0253823	Ref	Tow Package Installation - Boeing Spec	A
	0257728	Ref	Tube Rack Installation	
	0253879	Ref	Weld Leads Installation	A
	1060097	140 ft/42.7m	Cable, Weld Leads	
	3251963	2	Nameplate - Weld Leads	

PART NUMBER INDEX

SECTION 10 - SPECIAL OPTIONS

0060023.....	130, 155	0239585.....	86	0250929.....	22	0252135.....	191
0080039.....	102, 115	0239762.....	210	0250930.....	22	0252136.....	191
0080046.....	104, 105	0239965.....	173	0250961.....	129	0252210.....	217
0080092.....	113	0250026.....	304	0250973.....	22	0252211.....	217
0080098.....	187, 192	0250040.....	114	0250974.....	23	0252220.....	185
0080099.....	186, 192	0250041.....	116	0250975.....	22	0252223.....	169
0080163.....	105, 106, 118, 131	0250085.....	13, 18	0250979.....	67	0252231.....	169
0080167.....	123	0250093.....	21	0250980.....	67	0252300.....	120, 148
0080168.....	115	0250100.....	22	0250984.....	61	0252301.....	107, 148
0080172.....	101	0250102.....	22	0250985.....	61	0252302.....	148
0080175.....	120	0250109.....	47	0250986.....	156	0252331.....	173
0080177.....	101	0250121.....	65	0251024.....	217	0252332.....	173
0080178.....	103	0250125.....	105	0251031.....	156	0252333.....	13, 18
0080187.....	129	0250131.....	65	0251034.....	304	0252334.....	155
0080188.....	129	0250132.....	59	0251037.....	185	0252394.....	277
0080200.....	120	0250133.....	59	0251038.....	185	0252404.....	185
0100001.....	201	0250136.....	85	0251042.....	314	0252405.....	199, 202, 207, 210
0100003.....	55	0250139.....	85	0251053.....	314	0252578.....	86
0100004.....	85	0250143.....	217	0251056.....	101	0252625.....	120, 277
0100009.....	85	0250144.....	47	0251057.....	103	0252719.....	156
0100010.....	303	0250148.....	21	0251120.....	156	0252722.....	68
0100011.....	12, 17, 21, 51, 109, 114, 151, 169, 178, 221, 223, 225, 227, 229, 233, 235, 237	0250149.....	148	0251140.....	316	0252723.....	68
0100019.....	11, 15, 21, 85, 86, 151, 187, 192	0250154.....	174	0251203.....	217	0252808.....	118
0100020.....	147, 148, 223, 229, 237, 249, 254, 260, 264, 268	0250164.....	159	0251239.....	217	0252821.....	304
0100021.....	86, 187, 192	0250166.....	161	0251252.....	191	0252822.....	314
0100034.....	229	0250170.....	23	0251274.....	316	0252848.....	217
0100035.....	221, 223, 225, 227, 229, 233, 237	0250171.....	22, 23	0251299.....	273	0253077.....	207, 276
0100038.....	221, 223, 225, 227, 229, 233, 235, 237	0250172.....	22	0251310.....	47	0253130.....	22
0100040.....	169	0250229.....	107, 109	0251329.....	11, 16	0253131.....	22
0140001.....	198, 210	0250231.....	147	0251330.....	11, 15	0253132.....	22
0140016.....	276	0250324.....	118, 131	0251417.....	123	0253133.....	22
0140024.....	159	0250334.....	11, 16	0251444.....	314	0253173.....	15
0140026.....	207, 276	0250377.....	101	0251445.....	314	0253174.....	16
0140032.....	159	0250378.....	103	0251521.....	12, 16	0253239.....	273, 316
0181333.....	48	0250382.....	11, 15	0251537.....	107, 276	0253262.....	314
0181565.....	173	0250384.....	55	0251561.....	151	0253393.....	273, 278, 316
0181739.....	159	0250497.....	161	0251599.....	245, 247	0253463.....	315
0200048.....	218	0250588.....	114	0251611.....	217	0253464.....	315
0200333.....	174	0250589.....	116	0251619.....	277, 315	0253550.....	314
0231047.....	151	0250593.....	191	0251639.....	159	0253604.....	279
0231756.....	148	0250597.....	106	0251640.....	159	0253619.....	165
0232302.....	131	0250598.....	118, 131	0251660.....	21	0253639.....	305
0235238.....	185, 186, 191, 192	0250611.....	151	0251661.....	21	0253730.....	185
0236449.....	12, 16	0250668.....	125	0251662.....	18	0253748.....	115
0236768.....	104, 105	0250733.....	314	0251663.....	18	0253749.....	117
0237963.....	188, 193	0250763.....	173	0251668.....	47	0253750.....	115
0238540.....	185, 191	0250772.....	123	0251669.....	47	0253751.....	117
0238568.....	185	0250806.....	120	0251682.....	107, 277	0253752.....	115
0238615.....	151	0250841.....	156	0251687.....	279	0253753.....	117
0238727.....	185	0250842.....	165	0251690.....	277, 315	0253754.....	115
0238864.....	159, 217	0250844.....	209	0251697.....	159	0253755.....	117
0238865.....	159, 217	0250851.....	114	0251709.....	66	0253756.....	304
0238908.....	48	0250852.....	116	0251710.....	66	0253757.....	304
0238954.....	279, 316	0250856.....	165	0251716.....	48, 60	0253767.....	66
0239287.....	22	0250857.....	165	0251717.....	48, 60	0253768.....	66
0239288.....	22	0250858.....	165	0251753.....	55	0253769.....	67
0239417.....	147	0250861.....	181	0251830.....	314	0253770.....	67
		0250862.....	241	0252046.....	314	0253771.....	60
		0250863.....	241	0252054.....	217	0253772.....	60
		0250864.....	241	0252059.....	151	0253773.....	48, 61
		0250865.....	241	0252062.....	314	0253774.....	48, 61
		0250873.....	81	0252098.....	48, 62	0253780.....	156
		0250878.....	159	0252099.....	48, 62	0253816.....	277, 315
		0250902.....	114	0252106.....	102	0253817.....	314
		0250903.....	116	0252107.....	104	0253822.....	147
		0250910.....	156	0252108.....	102	0253823.....	316
		0250911.....	155	0252109.....	105		

SECTION 10 - SPECIAL OPTIONS

0253824.....	314	0257728.....	316	0641407.....	48	0701014.....	113
0253836.....	315	0257914.....	314	0641408....	130, 131, 156,	0701414.....	109
0253846.....	217	0258626.....	315	165, 188, 191, 193, 303		0720804.....	198
0253879.....	316	0270122.....	21	0641410.....	113	0721003.....	12, 17
0253986.....	18	0270215.....	21	0641416.....	59, 65, 81	0721004.....	151
0253987.....	217, 278	0270723.....	314	0641418.....	103, 151	0721005.....	148
0254067.....	315	0320008.....	51	0641420.....	65	0721006.....	125
0254095.....	55	0340002.....	102, 115	0641506....	177, 185, 186	0721008.....	169
0254130.....	217	0360016.....	55, 56	0641507.....	55, 118, 125,	0721014.....	174
0254178.....	217	0361651.....	55	131		0741506.....	191
0254222.....	173	0361675.....	185	0641508....	129, 173, 205	0741606.....	85
0254240.....	107, 276	0361810.....	103, 130	0641510.....	118, 131	0750806.....	153
0254438 ...	199, 203, 207,	0361815.....	109	0641511.....	125	0751006 ...	197, 201, 205,
210		0361951.....	16	0641512.....	101, 151	209	
0254446.....	314	0361952.....	16	0641514.....	59, 65	0800573.....	178
0254486.....	22	0361953.....	15, 16	0641516.....	147	0800618.....	173
0254728.....	218	0361954.....	16	0641518.....	51	0800623.....	173, 178
0254793.....	316	0362531.....	16	0641522....	47, 173, 185,	0800675.....	178
0254858.....	23	0400002.....	116	186, 191		0800676	173, 174, 178
0254859.....	23	0400003.....	116	0641528.....	47, 173	0800714.....	177
0254860.....	22	0400075.....	102, 130	0641604.....	238	0860038 ...	198, 202, 207,
0254948.....	218	0440018.....	12, 17	0641606.....	177	209, 316	
0255010.....	86	0440019.....	12, 17	0641607.....	131, 177	0860520.....	303
0255069.....	11, 15	0440091.....	12, 13, 17	0641608 13, 18, 113, 177,		0860538.....	201, 205
0255070.....	11, 16	0440120.....	186, 192	209, 210		0860576.....	153
0255075.....	15	0440134.....	186, 192	0641609.....	177	0860612.....	153
0255076.....	16	0440135.....	187, 192	0641610 11, 15, 101, 113,		0860613.....	153
0255102.....	107, 109	0440161.....	13, 18	118, 129, 131		0860622.....	197
0255139.....	156	0440183.....	12, 17	0641612.....	147, 209	0860652.....	153
0255140.....	156	0460073.....	241	0641614....	103, 116, 130	0860655.....	201
0255142.....	156	0460075.....	241	0641620.....	47	0860656.....	153
0255201.....	315	0460083.....	241	0641626.....	48	0860660.....	197
0255202.....	315	0460084.....	241	0641634.....	48	0860661.....	153
0255617.....	314	0460092.....	241	0641728.....	113, 129	0860663.....	153
0255619.....	279, 316	0460093.....	241	0641807.....	151	0860714.....	197
0255736.....	314	0460099.....	241	0641810.....	21, 115, 129	0860715.....	197
0255752.....	115	0480057.....	125	0641811.....	191	0860718.....	201
0255753.....	117	0480059.....	109	0641812....	101, 113, 129	0860751.....	153
0255754.....	115	0480083.....	217	0641816.....	186	0860752.....	201
0255755.....	314	0480084.....	217	0641826.....	113	0860753.....	201
0255757.....	117	0480086.....	217	0641830.....	86	0860777.....	201
0255758.....	115	0540084.....	181	0641834.....	86	0860779.....	201
0255759.....	117	0540085.....	181	0641836.....	186, 191	0860780.....	153
0255760.....	115	0540086.....	181	0641844.....	22	0860839.....	205
0255761.....	117	0560467.....	51	0641856.....	103	0860840.....	205
0255805.....	22	0560605.....	12, 13, 17	0641912.....	85	0860843.....	153
0255806.....	22	0560679.....	51	0642014.....	21, 86	0860850.....	205
0255807.....	22	0560714.....	13, 17	0642016.....	21	0860957.....	153
0255808.....	22	0560923.....	177	0642622.....	55	0860958.....	153
0256127.....	107	0610091.....	276	0642628.....	55	0860959.....	153
0256324.....	241	0610104.....	276	0642636.....	55, 56	0900232.....	217
0256325.....	241	0620058.....	151	0652014.....	186, 191	0900479.....	55
0256326.....	241	0620106.....	151	0681510.....	109	0901056.....	217
0256327.....	241	0630137.....	12, 17	0681610....	109, 125, 185,	0901387.....	116
0256426.....	316	0630161.....	129	186		0901392.....	210
0256487.....	314	0630360.....	114	0681818.....	85	0901393.....	209
0256488.....	314	0630370 ...	103, 104, 116,	0681836.....	85	0901449.....	217
0256789.....	314	130		0682020.....	85	0901633.....	109, 125
0256829.....	316	0630394.....	129	0700605.....	102	0901634.....	114, 115
0256848.....	106	0630403.....	115	0700808.....	118	0901635.....	113
0256956.....	314	0630425.....	12, 17	0700810.....	106	0901650.....	125
0257365.....	315	0630440.....	218	0700814.....	105, 113	0901664 ...	114, 123, 129
0257366.....	315	0641404 13, 18, 169, 191		0700819.....	120	0901665.....	129
0257467.....	173	0641405.....	123, 177	0701010....	101, 104, 105,	0901673.....	103
0257492.....	314	0641406 ...	11, 15, 59, 65,	117		0901674.....	131
0257634.....	315	81, 103, 109, 115, 159,		0701012.....	109	0901686.....	130
0257635.....	315	161, 165		0701013.....	105, 106	0901689.....	114, 115

SECTION 10 - SPECIAL OPTIONS

0901690.....	210	1060229.....	178	1320014.....	114	1670612.....	169
0901696.....	129	1060268.....	177	1320016.....	105	1670630.....	191
0901698.....	129	1060273....	102, 116, 130	1320017.....	123	1670641.....	217
0901699.....	131	1060279.....	303	1320019.....	103	1670663.....	218
0901702.....	131	1060300... 174, 199, 203,		1320020.....	115, 129	1670665.....	218
0901705.....	101	207, 210, 279, 280		1320022 ...	102, 116, 123,	1670666.....	218
0901733.....	129	1060309.....	202, 207	131, 147		1670680.....	106
0901756.....	191	1060341.....	276	1320023.....	148	1670699.....	218
0901774.....	125	1060514... 177, 199, 203,		1320026.....	115, 130	1670700.....	218
0901781.....	104, 105	207, 210		1320030.....	260, 264	1670701.....	218
0901842.....	217	1060515... 177, 277, 278,		1320031....	103, 115, 130	1670702.....	218
0901843.....	217	279		1320032.....	116, 123	1670703.....	218
0901924.....	117	1060516.....	178	1320033... 249, 253, 267		1670733.....	218
0902051.....	59, 65, 81	1100041.....	48	1320037.....	118, 241	1670734.....	218
0902090.....	59, 65, 81	1120032.....	12, 17	1320040.....	151	1670735.....	218
0902184.....	114	1120108.....	235, 237	1320041.....	102, 131	1670736.....	218
0902244.....	101	1120161....	103, 104, 115	1320058.....	114	1670737.....	218
0920068.....	85, 95	1120179.....	221	1320059.....	103	1680892.....	221
0920072.....	21, 22, 27	1120218.....	117, 129	1320095.....	123	1681283.....	237
0920084.....	21, 22, 29	1120299.....	185, 191	1320122.....	241	1681294.....	227, 233
0920086.....	85, 97	1120314.....	147, 315	1320126.....	148	1681322.....	235
0920089.....	86	1120336.....	223, 225	1320127.....	148	1681344.....	235
0920095.....	86	1120340.....	229	1320160.....	192	1681411.....	235
0920110.....	21, 22, 29	1120343.....	227	1320176.....	101	1681413.....	235
0920117.....	21, 22, 30	1120367.....	315	1340020.....	103, 115	1681433.....	235
0940038.....	217, 218	1120405.....	104, 105	1340045.....	147	1681435.....	235
0960224.....	151	1120427.....	233	1340046.....	148, 308	1681555.....	13, 17, 235
0960238....	155, 198, 202,	1120512.....	315	1380032 ...	103, 104, 116,	1681562.....	12, 16, 235
206		1180179.....	178	130		1681785....	11, 12, 15, 16,
0960239....	174, 178, 198,	1180256.....	178	1380124.....	13, 18	221	
202, 206, 276, 280		1260017 55, 86, 161, 165,		1380137.....	192	1681787.....	221
0960613.....	223, 225	166, 169		1440154.....	151	1681788.....	221
0960827.....	173	1260136.....	218	1540002 ...	207, 276, 278,	1681841.....	229
0960946.....	227, 229, 233	1281168.....	65	279		1681843.....	229
0961029.....	11, 15, 16	1281170.....	59	1600043.....	148	1681847.....	223, 225
0961127.....	303	1281172.....	161	1600116 ...	197, 201, 205,	1681866....	185, 186, 223
0961247.....	125	1281180.....	153	209, 311		1681867.....	223
0961254.....	223, 225	1281284.....	273	1600117.....	155, 311	1681869.....	223
0961257.....	185, 191	1281296.....	123	1600126.....	201, 205	1681880.....	177, 237
0961259.....	185, 193	1281317.....	155	1600135....	197, 205, 311	1681881.....	237
0961422.....	227, 229	1281318.....	165	1600140.....	205	1681883.....	237
0961450.....	193	1281326.....	273	1600141.....	205	1682085.....	173, 233
0961531.....	151	1281327.....	272	1660009.....	56	1682086.....	233
0961597.....	178	1281328.....	272	1660114.....	55	1682091.....	227
0961664.....	103	1281329.....	272	1660157.....	114	1682124.....	173, 229
0961778.....	12, 17	1281330.....	272	1660160.....	151	1682125.....	229
1001109671.....	315	1281345.....	65	1660169....	105, 118, 131	1682177.....	223, 225
1001110136.....	315	1281347.....	59	1660172.....	131	1682178....	185, 186, 191,
1001110983.....	315	1281356.....	278	1660173.....	131	223	
1001119695.....	178	1281358.....	303	1660184... 106, 118, 131,		1682255.....	173, 227
1001148902.....	315	1281479.....	276	310		1682256.....	227
1001148903.....	315	1281498.....	314	1660185.....	151	1682271.....	233
1001148904.....	315	1281525.....	276, 277	1660207.....	118, 310	1682406....	11, 12, 15, 16,
1001148905.....	315	1281526.....	276, 280	1660213EX.....	151	221	
1001148906.....	315	1281547.....	272	1660234... 105, 106, 118,		1682407.....	221
1060012....	110, 126, 177	1281548.....	272	131, 310		1682492.....	177, 237
1060016....	277, 279, 315	1281553.....	274	1670199.....	148	1682493.....	237
1060019.....	178	1281571.....	278	1670450.....	177	1682757....	11, 12, 15, 16,
1060042.....	276, 280	1281643.....	315	1670451.....	186	221	
1060044.....	314	1281671.....	277	1670468.....	147	1682758.....	221
1060046.....	116	1281701.....	276	1670526.....	217	1682785.....	173, 233
1060093.....	113, 130	1281712.....	278	1670568.....	209	1682786.....	233
1060097.....	316	1281955.....	315	1670576.....	177	1682793....	185, 186, 191,
1060099....	102, 116, 130	1281985.....	276	1670594.....	151	225	
1060149....	103, 113, 130	1282004.....	278, 279	1670607.....	217	1682794.....	225
1060172.....	102, 130	1282027.....	303	1670608.....	105	1682796.....	227
1060221.....	101	1282091.....	276	1670609.....	169	1682797.....	227

SECTION 10 - SPECIAL OPTIONS

1682799.....	173, 229	1702300.....	304	2180711.....	148	2220416 ...	245, 247, 257, 268, 271
1682800.....	229	1702305.....	55	2180730.....	101, 107, 131	2220417 ...	249, 253, 268
1683523.....	227	1702399.....	197	2180749.....	107, 131	2220428 ...	259, 263, 267
1683524.....	173, 227	1702402.....	205	2180763.....	151	2220429 ...	259, 263, 267
1683527.....	233	1702600.....	304, 314	2200064.....	268	2220435.....	254
1683528.....	173, 233	1702612.....	303	2200201....	223, 227, 233, 237	2220451 ...	249, 253, 267
1700037.....	303	1702669.....	314	2200202.....	51, 223	2220465.....	249
1700053.....	304	1702688.....	303	2200213.....	118	2220466 ...	245, 247, 249, 253, 257, 260, 264, 268
1700058.....	304	1702721.....	314	2200221.....	229	2220468 ...	257, 259, 263, 267, 271
1700157.....	303	1702722.....	304, 314	2200222.....	147, 237	2220469.....	253
1700194.....	304	1702738.....	23	2200233.....	229	2220470.....	129
1700195.....	304	1704277.....	303	2200261.....	102, 107	2220471.....	259, 264
1700196.....	304	1760068.....	187, 192	2200268.....	148	2220472 ...	245, 247, 249, 253, 259, 263, 267
1700197.....	304	1780224.....	188, 193	2210003.....	249, 253	2220473 ...	259, 263, 268
1700232.....	304	1780245.....	161	2210006.....	259, 263	2220481.....	254
1700326.....	304	1780250.....	188, 193	2210007....	249, 253, 267	2220490.....	245, 247
1700419.....	304	1780285.....	193	2210014.....	249, 253	2220494.....	249, 253
1700428.....	304	1780286.....	193	2210027.....	259, 263	2220495.....	259, 263
1700429.....	304	1840005 ...	103, 104, 105	2210028.....	267	2220496....	249, 253, 271
1700430.....	304	1840011.....	104, 105	2220003.....	123	2220497 ...	260, 264, 268
1700431.....	304	2000106.....	101, 106	2220063.....	102, 131	2220498.....	249, 253
1700476.....	303	2000109.....	113, 119	2220064.....	259, 263	2220504 ...	245, 247, 249, 253, 268
1700477.....	303	2000113.....	129, 131	2220110.....	260, 264	2220507 ...	260, 264, 268
1700580.....	303	2000117.....	113, 119	2220218.....	257	2220516.....	254
1700582.....	303	2000119.....	315	2220235.....	245, 247	2220550.....	267
1700584.....	303	2000129.....	113, 119	2220250.....	267	2220568.....	254
1700585.....	303	2000130.....	113, 119	2220261....	257, 260, 264	2220578 ...	249, 253, 254
1700593.....	303	2000137.....	101, 106	2220263.....	259, 263	2220582 ...	245, 247, 249, 257, 260, 264, 267, 271
1700640.....	303	2000147.....	113, 119	2220273....	103, 114, 116, 131	2220584 ...	259, 263, 268
1700643.....	303	2060012.....	316	2220290.....	123	2220591 ...	260, 264, 267
1700755.....	305	2060016.....	114	2220296.....	116	2220596.....	267
1700756.....	303, 305	2060019.....	115	2220315.....	123	2220600 ...	249, 253, 259, 263
1700818.....	304	2080026.....	13, 18	2220318.....	107	2220602.....	259, 263
1700853.....	81, 304	2120077.....	123	2220329....	259, 263, 267	2220603.....	267
1700919.....	314	2120103.....	147	2220343.....	264	2220604.....	260
1700975.....	304	2120104.....	148	2220345.....	249, 253	2220605 ...	249, 253, 260, 264, 267
1700976.....	304	2120107.....	147, 308	2220346....	129, 259, 263, 268	2220606 ...	245, 247, 259, 263, 267
1700977.....	304	2120112.....	120	2220348.....	250, 254	2220609 ...	245, 247, 259, 263, 264, 267
1700978.....	304	2120122.....	59, 65, 81	2220355.....	249, 253	2220618 ...	249, 253, 259, 264
1700979.....	305	2120125 ..	59, 65, 81, 308	2220362.....	249, 253	2220619 ...	245, 250, 253, 254, 259, 263
1700980.....	305	2160001 55, 85, 186, 187, 192, 229, 233, 235		2220363.....	250, 254	2220621 ...	245, 247, 267
1700981.....	304	2160002 ...	11, 12, 13, 15, 17, 18, 185, 186, 191, 221, 223, 225, 227, 235	2220364.....	123	2220622.....	254, 267
1701239.....	305	2160003 .	13, 17, 18, 229, 233	2220365.....	249, 253	2220627.....	254
1701321.....	304	2160006 ...	188, 193, 235	2220371....	245, 247, 260, 263, 267	2220635 ...	245, 247, 260, 263, 267
1701321.....	304	2160007.....	177	2220372....	249, 260, 264, 267	2220646.....	249, 253
1701334.....	304	2180029.....	60, 61, 66	2220373....	60, 61, 66, 67, 259, 263, 267	2220648.....	123
1701336.....	305	2180104.....	102, 123	2220375.....	249, 254	2220651 ...	60, 61, 66, 67, 259, 263, 267
1701441.....	305	2180360 ...	107, 114, 120, 123	2220376.....	47, 268	2220654....	257, 259, 263
1701460.....	303	2180387.....	123	2220377.....	249, 254	2220657.....	264
1701470.....	305	2180389.....	123	2220383.....	259, 263	2220671.....	268
1701500.....	304	2180448.....	229	2220385....	249, 253, 259, 263, 267	2220675.....	123
1701529.....	303	2180467.....	147	2220399.....	260, 264	2220679.....	245
1701550.....	305	2180491 ...	259, 263, 267	2220407.....	267	2220683.....	259
1701594.....	305	2180527.....	148, 237	2220408....	250, 253, 259, 263		
1701703.....	304	2180535.....	123	2220414....	245, 247, 249, 253, 259, 263, 267, 271		
1701725.....	305	2180536 ...	103, 123, 131	2220415....	247, 253, 259, 263, 267		
1702153.....	303	2180537.....	107				
1702265.....	303	2180623.....	123				
1702276.....	303	2180643.....	107				
1702277.....	303	2180651.....	268				
1702280.....	303	2180652.....	260, 263				
1702282.....	303	2180658.....	51				
1702284.....	303						
1702289.....	305						
1702292.....	303						
1702293.....	303						
1702294.....	303						
1702299.....	303						

SECTION 10 - SPECIAL OPTIONS

2220684.....268	2620034..... 55	2751101 260, 264, 268	2791646.....272
2220700.....245, 247, 267	2620038..... 55	2751102 267	2791655.....273
2220710.....250, 254	2660080 181	2751123 259, 263	2791656.....273
2220711.....268	2660081 181	2751150 260, 264, 268	2791657.....273
2220726.....259	2660082 181	2751161 259, 263	2791660.....272
2220727 260, 264	2680402 115	2751163 259, 263	2791661.....272
2220773.....260, 263	2720042 116, 123	2751391 ... 260, 264, 268,	2791664.....273
2220800.....259, 264	2720058 ... 102, 116, 123,	271	2791667..... 271, 273
2220805..... 102, 116, 131	131, 173	2751394 ... 260, 263, 268	2791668.....271, 273
2220810.....267	2720084 130	2751396 264	2791669.....271, 273
2220816.....257	2720112 123	2751397 ... 245, 247, 267	2791670.....273
2220820.... 60, 61, 66, 67,	2720170 123	2751398 253, 268	2791671.....273
259, 264, 267	2720271 102, 131	2751418 ... 260, 264, 267	2791672.....273
2220844.....47	2720281 249, 253	2751421 260, 264, 267	2791673.....257, 273
2220883.....227, 230	2720335 ... 249, 253, 267	2751432 267	2791676.....272
2220885.....225, 227, 233	2720341 114	2751435 268	2791677.....272
2220887.....227, 230	2720344 259, 263	2751443 249	2791678.....249, 272
2220895.....257	2720351 103	2751454 257	2791679.....249, 272
2220899....259, 263, 267	2750532 102	2751457 268	2791680.....253, 272
2220907.....267	2750757 129	2751467 267	2791681.....253, 272
2220908.... 260, 264, 268	2750760 271	2751483 254, 259	2791682.....272
2220909.....267	2750762 260	2751489 264	2791683.....272
2360299.....11	2750766 259	2751517 249, 254	2791693.....273
2360300.....11	2750773 263, 268	2751520 268	2791764.....274
2360305.....11	2750774 253	2751614 250, 254	2791785.....273
2360334.....15	2750777 264	2751626 250, 254	2791801.....272
2360380.....15	2750779 ... 245, 247, 263	2751635 250, 254	2791802.....272
2360381.....15	2750786 245, 247	2751852 260, 264, 268	2791803.....272
2360385.....15	2750891 268	2751906 245	2791804.....272
2360386.....11	2750892 ... 260, 264, 271	2751921 268	2791805.....273
2420009.....153	2750894 271	2752159 268	2791806.....273
2420019.....153	2750895 271	2752163 260, 264	2791807.....273
2420024.....131	2750897 271	2752235 254	2791808.....273
2420033..... 114, 131	2750899 ... 249, 253, 263,	2752236 254	2791812.....274
2420035.....153	268	2752237 254	2791813.....274
2420038.....314	2750901 ... 259, 263, 268	2752238 250	2791814.....274
2420091.....153	2750902 ... 245, 253, 268	2752239 254	2791857.....273
2420110.....102	2750909 267	2752242 250, 254	2791865.....247, 272
2420111.....153	2750910 245, 247	2752317 253	2791866.....245, 272
2420118.....114	2750913 259, 267	2752318 254	2791892.....272
2420125.....153	2750918 ... 259, 263, 268	2752319 ... 249, 250, 254	2791893.....272
2420127153	2750921 ... 260, 264, 268	2752349 250	2791914.....272
2420128.....153	2750928 263, 267	2752433 245, 247	2791915.....272
2420129.....153	2750972 253	2752461 250, 254	2791916.....273
2420130.....114	2750973 259	2760064 186, 192	2791917.....273
2420131..... 101, 114	2750977 249, 254	2760091 151	2791929.....272
2420203..... 109, 125	2750979 253	2780055 85, 99	2791930.....272
2440043..... 186, 192	2750991 ... 260, 264, 268	2780091 12, 17	2791956.....273
2440044..... 187, 192	2750998 ... 260, 264, 268	2780157 21, 39	2791957.....273
2440059..... 85	2750999 ... 260, 264, 268	2780167 21, 33	2791958.....273
2460011..... 109, 125	2751003 263	2780169 21, 33	2791959.....273
2500005.....113	2751006 264	2780172 21, 39	2791960.....273
2540016.....159	2751007 260, 264	2780191 21, 43	2791968.....273
2560010..... 188, 193	2751010 ... 249, 253, 260,	2780195 21, 43	2792001.....263, 273
2560038.....201	263	2791295 274	2792002.....259, 273
2560040.....201	2751011 257	2791576 273	2792003.....273
2560041.... 197, 201, 209	2751013 ... 245, 247, 249,	2791577 249, 272	2792004.....273
2560112.....205	253	2791578 257, 273	2792005.....267, 273
2580001..... 120, 131	2751014 249, 253	2791592 273	2792007.....272
2580018..... 148	2751015 247, 267	2791617 253, 272	2792087.....272
2580026..... 120	2751017 ... 259, 264, 268	2791624 272	2792088.....272
2580029..... 131	2751018 247	2791625 271, 273	2820012.....169
2600105.....201, 205	2751020 ... 245, 247, 260,	2791626 271, 273	2820022.....159
2600132.....201, 205	264	2791627 249, 272	2820042..... 104, 105
2600143..... 187, 193	2751026 ... 253, 260, 264,	2791632 253, 272	2820043.....169
2600157.....161	268	2791633 271, 273	2860002..... 153, 308
2600170.....166	2751030 267	2791645 272	2860012.....125

SECTION 10 - SPECIAL OPTIONS

2880404	186, 191	2940050	161, 165	3300029.....	103, 116, 130	3421284	51
2880410	55	2940051	161, 165	3300047	174, 178, 198,	3421490	185, 186, 191
2900034	34, 99	2940052	201, 205	202, 206, 276, 280		3421491	185, 186, 191
2900068	217	2940057	162	3300048.....	155, 198, 202,	3421492	177
2900340	227, 233	2940070	169	206		3421493	177
2900381	221	2940113	169	3300143.....	185, 186	3421494	185, 186, 191
2900396	237	2980091	210	3300151	161, 165, 166,	3421565	86
2900455	195	3010088	218	169		3421627	86
2900649	95	3020021	118	3300175.....	12, 13, 17	3421686	174
2900660	101, 102, 114	3020025	187, 192	3300177	153, 197, 201,	3421687	174
2900662	27, 97	3040464	55	205, 209		3421688	174
2900698	245, 247	3100073	115	3300183.....	85	3421771	177
2900708 ...	59, 62, 65, 67,	3120044	315	3300187.....	221, 235	3421780	174
68, 81		3120045	315	3300190.....	229, 233	3421835	12, 17
2900714	25	3120077	315	3300229.....	13, 17	3421887	13, 18
2900733	195	3120322	316	3300271.....	223	3421968	186, 191
2900740	139, 143	3120351	316	3300273.....	221, 235	3421994	174
2900745	47	3124003	316	3300281.....	229, 233	3422007	174
2900752	136	3160083	186, 192, 195	3300282.....	237	3422008	174
2900754	40, 45	3160156	85, 89	3300283.....	227	3422009	174
2900755	40	3160158	21, 25	3300284.....	223, 225	3422261	12, 17
2900759	78	3160181	85, 91	3300286.....	237	3422401	11, 12, 15, 16
2900760	78	3160183	86, 93	3300323.....	229	3430407	51
2900761	78	3200201	113	3310601	154, 198, 202,	3430507	210
2900763	305	3200202	113	206		3431622	12, 13, 17, 18
2900766	29	3200249	85	3311001.....	47, 116, 125,	3440816	186, 192
2900767	30	3200312	129	148, 151, 154, 155,		3441228	187, 192
2900768	29	3200316	181	169, 198, 202, 207, 210		3450202	101
2900770	81, 221, 225,	3200317	181	3311401	48, 59, 65, 81,	3450403	210
227, 229, 233, 237		3200318	129	102, 109, 113, 115,		3450606	12, 13, 17, 18
2900792 ...	221, 223, 227,	3220061	116	125, 130, 131, 147,		3450810	13, 17
229, 233		3220067	116	148, 153, 156, 159,		3451012	12, 17
2900794	53	3220076	116, 129	161, 169, 193, 245, 247		3480092	237
2900798	91	3220084	117	3311405..59, 65, 81, 120,		3480102	227, 229, 233
2900816	45	3220087	118	159, 161, 165, 166,		3480120	221
2900826	136	3250840	55	169, 177, 185, 186,		3480130	223
2900827	136	3250872	55	188, 303		3480134	235
2900940	314	3251019	277	3311501	47, 59, 65, 81,	3480141	223, 225
2901102	229	3251028	304	101, 103, 114, 116,		3510170	187
2901103	223, 225	3251242	316	129, 147, 169, 173, 186		3510176	187
2901111	107	3251243	148, 303	3311505....	173, 185, 186,	3510177	187
2901123	235	3251476	110, 125	191, 201, 205		3510236	187
2901146	151	3251596	217	3311601 47, 48, 103, 116,		3510237	187
2901148	235	3251766	303	125, 129, 147, 148		3510238	187
2901157	37	3251813	303	3311605....	113, 177, 209,	3510239	192
2901184	123	3251837	148	210		3510240	192
2910025	305	3251872	201, 206	3311705....	113, 116, 129	3510241	192
2910479	116	3251894	201	3311801.21, 86, 114, 151		3510242	192
2915080	85	3251895	153	3311805....	113, 186, 188,	3510247	187
2920001	315	3251909	197	191, 193		3510253	187
2920009 ...	159, 217, 277	3251963	316	3312602.....	12, 17, 55	3510261	192
2920013 ...	217, 278, 315	3251987	209	3312605.....	55, 56	3510307	187
2920015 ...	197, 201, 206,	3252027	314	3313403.....	13, 17	3510323	192
209		3252028	314	3321401	113, 221	3510356	187
2920018	159, 217, 277	3252029	314	3323002....	12, 13, 17, 55	3510386	187
2920019	159, 277	3252144	305	3323403.....	12, 13, 17	3510406	187
2920024	278, 315	3252221	314	3340454.....	186, 191	3510480	192
2920026	276, 277, 315	3252224	205	3340473.....	177	3510481	187
2920029	277	3252238	218	3340545.....	237	3510482	192
2920105	159	3252269	277, 315	3340552.....	177	3510483	187
2920109	159	3252356	304	3420158.....	56	3510656	187
2920111	217, 278, 315	3252362	197	3420290.....	151	3520022	148
2920152	159	3252369	305	3420292.....	55	3520026 ...	153, 154, 155,
2920162	109, 125	3252382	205	3420352.....	56	198, 201, 205	
2940006	188, 193, 309	3252390	209	3421151.....	55	3520028 ...	109, 125, 153,
2940042	166, 169	3291001	117	3421190.....	13, 18	154, 155, 206	
2940048	161, 165, 166	3300012	12, 17, 21	3421243.....	12, 17	3520030	169

SECTION 10 - SPECIAL OPTIONS

3520034.....	155	3740067.....	155, 309	3960418.....	169	4300073.....	147
3520035.....	186, 192	3740074.....	130	3960423.....	119, 120	4300087.....	245, 247
3520054.....	155	3740077.....	155, 309	3980003.....	116	4300092.....	21
3520078.....	106	3760004.....	151	3980007.....	102, 130	4300106.....	13, 18, 159
3520168.....	155	3760053.....	151	3990001.....	277	4300107.....	86
3530244.....	13, 18	3760133.....	177	3990010 ...	276, 277, 278, 279, 280, 309	4320002.....	201
3530403.....	151	3760170.....	86	4031713.....	115	4340569.....	125
3531543.....	210	3780149.....	245, 247	4040215.....	191	4340575.....	55
3532054....	173, 177, 185, 186, 191	3780183 ...	11, 12, 13, 15, 16, 17	4040222.....	191	4340596.....	185, 186
3532649.....	55	3790012 ...	153, 154, 197, 198, 201, 202, 206, 207, 209	4040227.....	191	4360003.....	153, 308
3533291.....	113	3790015 ...	154, 197, 201, 205, 209	4060092 ...	198, 202, 207, 209	4360031....	188, 193, 309
3533445.....	113	3790116.....	51	4060229 ...	197, 198, 201, 202, 206, 207, 209	4360037.....	107, 114
3533788.....	161	3790152.....	101, 114	4060695.....	148	4360056.....	174
3534137.....	314	3790155.....	86	4060700.....	316	4360057....	174, 218, 309
3534232.....	209	3790231.....	51	4060727.....	116	4360065....	107, 276, 277
3534233.....	209	3820001.....	55, 181, 303	4060742.....	131	4360073.....	153, 308
3534256.....	210	3820012.....	161, 165	4060743.....	131	4360089.....	276
3534263.....	81	3820019 ...	161, 165, 166, 305	4060804.....	59, 185, 186	4360104.....	314
3534778.....	47	3840643.....	55	4060806.....	47, 81	4360131.....	314
3535519.....	169	3840822.....	55	4060808.....	47, 59, 173	4360132.....	314
3535607.....	86	3840833.....	51	4060829.....	159	4360141....	153, 197, 201, 209
3536411.....	13, 18	3840833.....	51	4060832.....	169	4360157.....	120, 277
3536671.....	305	3840854.....	51	4060843.....	316	4360171.....	159, 309
3538039.....	316	3840863.....	12, 16	4060849.....	148	4360181.....	278, 316
3538254.....	130	3840863.....	12, 16	4070410.....	48, 147	4360182.....	120, 277
3538389.....	197	3840979.....	123	4070411.....	48, 147	4360188.....	123
3538392.....	205	3841018.....	13, 17	4070412.....	48, 147	4360198.....	209
3580134.....	109, 125	3841048.....	55	4070559.....	177	4360199....	153, 154, 197, 201, 202, 205, 206, 207, 209, 277, 308
3580158.....	109	3841049.....	113	4070585.....	187, 192	4360200....	154, 198, 201, 206, 209, 309
3600050....	103, 104, 117, 130	3860037.....	51	4070586.....	187, 192	4360201....	153, 276, 311
3600071....	104, 105, 117	3900141 ...	221, 223, 225, 235	4070587.....	187, 192	4360202....	154, 197, 198, 201, 202, 206, 207, 308
3600141.....	104, 117	3900170 ...	221, 223, 225, 227, 229, 233, 235, 237	4070670.....	177	4360209....	198, 202, 206, 210
3600143.....	102, 114	3900175.....	221	4070671.....	177	4360212....	153, 310, 311
3600164....	101, 113, 129, 135	3900294.....	207	4070672.....	177	4360215.....	217
3600165.....	101, 114	3910604.....	209	4070676.....	177	4360216.....	154, 309
3600172....	101, 102, 114, 129, 139	3910606.....	154, 198	4070677.....	177	4360223....	154, 278, 309
3600176.....	101, 143	3910608 ...	198, 202, 206	4070678.....	177	4360256.....	314
3600199....	102, 114, 115, 129, 141	3911008.....	116, 202	4070705.....	185	4360265.....	277, 315
3600202....	102, 114, 115, 145, 315	3911012 ...	113, 151, 210	4070706.....	185	4360274....	154, 197, 198, 201, 205, 209, 217, 218, 309
3600203.....	315	3911012 ...	113, 151, 210	4070707.....	186	4360282.....	205
3600208....	104, 117, 118, 130	3911412.....	153, 161	4100025 ...	104, 105, 130	4360289.....	205
3600210.....	105, 118	3931010.....	187, 192	4120013.....	154, 198	4360294.....	277
3600213.....	106	3931016.....	47	4130160.....	12, 17	4360305.....	217
3600241.....	315	3931612.....	187, 192	4130161.....	12, 17	4360542.....	109, 125
3600260....	101, 113, 135	3931620.....	187, 192	4130221.....	13, 17	4400040.....	148
3620003.....	316	3941005.....	113	4130222.....	13, 17	4400164.....	148
3620027.....	114	3941005.....	113	4140017.....	213	4400263.....	147
3640500....	198, 202, 206	3941404.....	159	4160026.....	186, 191	4400264.....	147
3640711.....	154	3941406 ...	105, 161, 165, 166, 169, 217	4160028.....	217	4400265.....	147
3640970.....	198	3951003.....	101	4160078.....	51	4400266.....	147
3720011.....	123	3951402.....	229	4160105.....	169	4400275.....	148, 316
3740002.....	277	3951403.....	229	4220007.....	217	4400281.....	316
3740029.....	155	3951403.....	229	4220137.....	192	4400290.....	147
3740030.....	155	3951404.....	233	4240096.....	114	4400291.....	147
3740049....	154, 155, 198, 202, 207, 210, 217, 276, 277, 309	3951603.....	237	4300031 ...	159, 161, 165, 166, 169, 177, 185, 186	4400327.....	131
3740058....	154, 198, 309	3951820.....	151	4300032.....	102, 131	4400420.....	316
3740059.....	155, 311	3960047.....	51	4300033.....	59, 65, 173	4400421.....	316
3740063.....	154, 198	3960098.....	12, 17	4300034.....	103, 115	4420001.....	102
		3960371.....	147	4300036.....	81	4420008....	197, 207, 209
		3960388.....	120, 123	4300038.....	59, 103, 186		
		3960389.....	102, 131	4300042.....	59, 65, 81		
		3960407.....	101	4300057.....	120		
		3960416.....	221	4300068.....	109, 125		
		3960417.....	169				

SECTION 10 - SPECIAL OPTIONS

4420037 153, 205	4620073 85	4640818...59, 65, 81, 260,	105, 109, 113, 115,
4420038 173, 201	4620074 85	268	123, 125, 130, 131,
4460023 110, 125	4620093 85	4640850....60, 61, 66, 67,	147, 148, 151, 153,
4460027 125, 277	4620094 85	75	156, 159, 161, 165,
4460049 148, 174, 276	4620095 85	4640866.....59, 65, 81	166, 169, 177, 191,
4460051 155	4640013 ... 245, 247, 259,	4640909....60, 61, 66, 67,	245, 247
4460052 ... 177, 198, 202,	263, 268	71	4761500... 47, 51, 55, 59,
206	4640035 81	4640950....61, 62, 67, 68,	65, 81, 101, 103, 109,
4460071 ... 155, 188, 193,	4640049 83	71	114, 118, 125, 129,
198, 202, 206, 207, 209	4640113 23	4643742.....47	131, 147, 151, 169,
4460190 ... 198, 202, 207,	4640122 81	4711400.... 102, 130, 165	173, 185, 191
209	4640123 59, 65, 81	4711600..... 104, 105	476160047, 48, 101, 102,
4460205 ... 199, 203, 207,	4640128 260, 264	4712600.... 11, 12, 13, 15,	109, 113, 116, 118,
210	4640150 59, 65, 81	17, 18, 55	125, 129, 130, 131,
4460244 ... 155, 198, 202,	4640213 260, 264, 268	4740003.....85	147, 148, 173, 177,
206	4640246 ... 59, 61, 65, 67,	4740004.....85, 86	187, 192, 209, 210, 238
4460260 280	71	4740016.....12, 17	476180021, 86, 101, 103,
4460298 ... 154, 198, 202,	4640247 ... 59, 61, 65, 67,	4740048.....85	113, 115, 129, 151,
206	71	4740120.... 153, 198, 201,	186, 191
4460299 ... 154, 198, 202,	4640260 47	205	4762000 21
206	4640261 55	4740158..... 186, 191	4762600 55
4460300 ... 154, 198, 202,	4640360 ... 61, 62, 67, 68,	4740171.....85	4812000 109, 129
206	81	4740185..... 11, 15, 113	4831900... 105, 106, 113,
4460301 ... 154, 198, 202,	4640383 257	4740199..... 186, 192	118, 120
206	4640391 123	4740252.....86	4832000 ... 101, 104, 105,
4460302 101	4640392 23	4740256..... 187, 192	106, 113, 129
4460305 ... 154, 155, 198,	4640438 221	4740273..... 113, 129	4832100 129
202, 206	4640462 60, 62, 66, 71	4740274.....113	4842561 23
4460306 ... 154, 155, 198,	4640479 81	4740322.....147	4842621 11, 12, 15, 16
202, 206	4640485 48, 51	4740338.....147	4842794 11, 15
4460307 ... 155, 198, 202,	4640495 237	4740341.....209	4842892 197
206	4640506 81, 83	4740362..... 188, 193	4842915 185
4460308 154	4640509 ... 221, 223, 227,	4740367.....85	4842978 185
4460311 ... 155, 198, 202,	233	4750600.... 154, 202, 206	4843068 178
206	4640543 ... 59, 60, 61, 65,	4750800..... 199	4843076 177
4460346 316	66, 67	4751000.....47, 116, 125,	4843286 11, 15
4460521 217	4640601 ... 59, 60, 61, 65,	148, 151, 154, 155,	4843330 173
4520024 23	66, 67, 75	169, 207	4843372 103
4520025 23	4640605 227, 229, 233	4751400.... 11, 15, 48, 59,	4843395 161
4520124 23	4640623 60, 61, 66, 67	65, 81, 105, 109, 125,	4843396 161, 165, 166
4520133 22	4640627 60, 66	147, 148, 151, 153,	4843398 161
4520143 23	4640629 47	156, 159, 161, 165,	4843410 109
4520171 23	4640634 ... 225, 227, 229,	166, 169, 177, 185,	4843447 11, 16
4562083 191	233, 237	186, 191, 217, 245,	4843477 11, 15
4562346 55	4640640 209, 213	247, 303	4843497 113
4562516 147, 148	4640643 ... 61, 62, 67, 68,	4751500....47, 55, 59, 65,	4843517 161, 165
4562687 235	77	99, 109, 116, 125, 147,	4843552 116, 117
4562851 235	4640645 ... 59, 60, 61, 65,	185, 201, 205	4843567 161, 165
4563330 237	66, 67, 71	4751600.... 13, 18, 47, 48,	4843585 165
4563647 221	4640646 ... 59, 60, 61, 65,	101, 103, 109, 116,	4843609 178
4563769 229	66, 67, 71	125, 129, 130, 148,	4843621 166
4563771 223, 225	4640668 47	177, 185, 186, 209, 210	4843636 185
4563930 233	4640673 60, 61, 66, 67	4751700.... 113, 115, 129	4843691 130
4564523 116	4640689 245, 247	4751800....21, 113, 115,	4843701 161, 165, 166
4564557 103, 104	4640692 60, 62, 66, 71	129, 148, 186, 191	4843744 165
4564558 103, 104	4640693 48, 53	4751900.....56	4843746 165
4564579 191	4640710 ... 60, 61, 62, 66,	4752000..... 186, 191	4843788 165
4564623 115	67, 68, 71	4760600.... 154, 198, 202,	4843822 151
4564685 130	4640720 ... 60, 61, 62, 66,	206, 209	4843901 178
4564696 130	67, 68, 71	4760800..... 199	4843944 169
4565271 104, 105	4640751 102	4761000.. 12, 17, 47, 113,	4843945 169
4565278 104, 105	4640760 316	116, 148, 151, 154,	4843948 169
4565301 104, 105	4640776 259, 263, 267	155, 169, 174, 198,	4844033 151
4565829 118	4640778 257	202, 207, 210	4844453 173
4566039 115	4640812 ... 11, 12, 13, 15,	4761100..... 125	4844848 11, 15
4620059 85	16, 17	4761400.... 11, 13, 15, 18,	4844849 11, 16
4620060 85	4640817 260, 263, 268	48, 59, 65, 81, 102,	4860115 23

SECTION 10 - SPECIAL OPTIONS

4920092.....	85	7000207.....	99	7000729.....	95	7002408.....	213
4920096.....	13, 18	7000208.....	99	7000732.....	95	7002409.....	213
4920865.....	177	7000209.....	99	7000754.....	105, 118	7002410.....	213
4920986.....	192	7000210.....	99	7000760.....	27, 97	7002415.....	213
4921250.....	279	7000214.....	33, 43, 99	7000782.....	95	7002416.....	213
4921251.....	279	7000215.....	37, 40	7000796.....	27, 29, 95, 97	7002417.....	213
4921262.....	279	7000216.....	34, 44	7000798.....	95	7002418.....	213
4921278.....	280	7000217.....	33, 40, 43, 99	7000877.....	119	7002419.....	213
4921284.....	279	7000220.....	39, 44	7000884.....	119	7002420.....	213
4921286.....	280	7000229.....	33	7000892.....	119	7002421.....	213
4921305.....	276	7000230.....	33	7000893.....	119	7002422.....	213
4921361.....	276	7000232.....	33	7000894.....	119	7002423.....	213
4921391.....	279	7000233.....	99	7000898.....	132	7002424.....	213
4921529.....	278	7000241.....	39, 44	7001438.....	135	7002425.....	213
4921555.....	277	7000242.....	33, 39, 44, 99	7001498.....	136	7002426.....	213
4921788.....	279	7000243.....	34, 39, 44	7001508.....	60, 61, 66	7002427.....	213
4921789.....	279	7000246.....	33, 99	7001909.....	33, 39, 44	7002428.....	213
4921790.....	279	7000247.....	33, 43, 44	7001911.....	33, 39, 44	7002429.....	214
4931740.....	277	7000248.....	33, 39, 43	7001912.....	33, 39, 44	7002430.....	213
4931941.....	277	7000250.....	34, 39, 43, 45	7001913.....	33, 39, 44	7002447.....	72
4931942.....	277	7000251.....	33, 39, 43	7001922.....	43	7002448.....	72
4931943.....	278	7000252.....	33, 39, 43	7001931.....	33, 39, 44	7002449.....	72
4931945.....	277	7000253.....	33, 40, 43, 99	7001985.....	33, 39, 44	7002450.....	72, 308
4931946.....	276	7000255.....	99	7001997.....	33	7002451.....	72
4931947.....	276	7000256.....	99	7001998.....	33	7002821.....	316
4931954.....	276	7000257.....	33, 99	7002025.....	37	7002822.....	316
4931962.....	279	7000258.....	33, 99	7002100.....	195	7002823.....	316
4931991.....	279	7000260.....	34, 39, 45	7002103.....	195	7002826.....	316
4931998.....	277	7000261.....	34, 39, 45	7002104.....	195	7002828.....	316
4932007.....	278	7000262.....	34, 39, 45	7002105.....	195	7003006.....	27, 95, 97
4932012.....	280	7000263.....	33, 34, 39, 44, 45	7002107.....	195	7003007.....	27, 97
4932046.....	277	7000268.....	99	7002110.....	195	7003047.....	27
4932047.....	276	7000269.....	99	7002111.....	195	7003049.....	27, 97
4932054.....	278	7000270.....	99	7002112.....	195	7003050.....	97
4932055.....	279	7000271.....	99	7002116.....	195	7003051.....	27, 97
4932067.....	278	7000271.....	99	7002117.....	195	7003052.....	27, 97
4932072.....	280	70003153.....	178	7002123.....	195	7003054.....	27, 97
4932074.....	278	70003154.....	178	7002125.....	195	7003055.....	27, 97
4932076.....	279	70003160.....	106	7002157.....	93	7003056.....	27, 97
4932362.....	276, 280	70003161.....	106	7002229.....	71	7003057.....	27
4932375.....	278	70003162.....	106	7002274.....	72	7003059.....	27, 97
4932376.....	278	7000413.....	72	7002294.....	71	7003061.....	95
4932379.....	278	7000414.....	72, 75	7002304.....	71	7003062.....	95
4932440.....	279	7000417.....	71, 308	7002305.....	72, 75	7003063.....	95
4932441.....	278	7000418.....	72, 75, 308	7002315.....	72	7003064.....	95
4932442.....	278	7000448.....	72	7002317.....	73, 75	7003065.....	95
4932485.....	279	7000468.....	72, 75	7002320.....	71	7003066.....	95
4932486.....	278	7000470.....	72, 75	7002321.....	71	7003067.....	95
4932487.....	278	7000482.....	103, 104, 117, 130	7002322.....	71	7003069.....	97
4932600.....	278	7000549.....	83	7002323.....	71	7003070.....	27
4932601.....	279	7000550.....	83	7002324.....	72	7003071.....	27
4932615.....	279	7000556.....	83	7002326.....	72	7003087.....	40
4932638.....	276	7000558.....	59, 65, 81	7002327.....	71, 72	7003088.....	40
4932639.....	276	7000585.....	83	7002328.....	71	7003089.....	40
4932676.....	276	7000586.....	83	7002329.....	71	7003092.....	97
4932751.....	279	7000588.....	83	7002333.....	72, 75	7003093.....	97
4932753.....	279	7000589.....	83	7002334.....	71, 72, 75	7003094.....	97
4932754.....	279	7000596.....	83	7002335.....	72, 75	7003095.....	97
70000163.....	119	7000600.....	83	7002336.....	72, 75	7003096.....	97
70000600.....	131	7000625.....	188, 193	7002338.....	71, 72, 75	7003432.....	40
70000617.....	132	7000646.....	119	7002339.....	72, 75	7003433.....	40
70000618.....	132	7000693.....	106	7002340.....	71, 72, 75	7003635.....	62, 67, 68, 81
70000929.....	120	7000699.....	106	7002341.....	72, 75	7003657.....	109, 125
70001111.....	33, 34, 39, 44	7000717.....	27	7002344.....	72, 75	7003723.....	47
70001349.....	33, 34, 44	7000718.....	95	7002345.....	72, 75	7003751.....	205
7000166.....	195	7000728.....	27, 95	7002346.....	71, 72, 75	7003782.....	201, 205
7000206.....	33			7002348.....	72, 75		

SECTION 10 - SPECIAL OPTIONS

7003783 ... 197, 201, 205, 209, 311	7006049 83	7007601 33	7010454 40
7003789 197, 205, 311	7006050 83	7007603 33, 40, 43	7010455 40
7003797 197, 205, 311	7006051 83	7007617 39, 44	7010459 43
7003825 72, 75	7006052 83	7007650 34, 39, 43, 44	7010469 43, 45
7003841 75	7006053 83	7007651 34, 39, 45	7010470 43
7003855 72, 75	7006075 59, 65, 81	7007652 33, 39, 43	7010473 43, 45
7004166 89	7006139 178, 309	7007653 33, 39, 43	7010474 44
7004167 89, 91	7006141 178	7007654 33, 43	7010475 45
7004171 89, 91	7006151 178	7007669 37	7010476 45
7004173 89	7006152 178, 309	7007683 39, 43	7010477 45
7004177 89	7007208 135	7007684 39, 43	7010478 45
7004191 89	7007321 47	7007685 39, 43	7010530 245, 247
7004192 89, 91	7007323 47	7007686 39, 43	7010531 245, 247
7004193 89, 91	7007412 136	7007687 39, 44	7010701 77
7004194 89	7007413 135	7007688 39, 44	7010703 77
7004195 89	7007414 135	7007689 39, 44	7010704 77, 78
7004196 91	7007416 135	7007690 39, 44	7010705 77
7004214 103, 115, 310	7007417 135	7007691 39, 43	7010706 77
7004244 147	7007419 135	7007692 43	7010707 77
7004247 104, 105, 117	7007420 135	7007697 33	7010708 77
7004248 ... 103, 104, 105, 117, 130	7007421 135	7007874 25	7010709 77
7004249 ... 103, 104, 105, 117, 130	7007423 135	7007875 25	7010710 77
7004275 316	7007424 135	7007876 25	7010711 77
7004276 316	7007425 135	7007878 25	7010712 77
7004289 ... 61, 62, 67, 68, 81	7007435 135	7007879 25	7010713 77
7004368 ... 59, 60, 61, 62, 65, 66, 67, 68, 81, 308	7007436 135	7007880 25	7010716 77
7004412 ... 103, 104, 117, 130	7007437 135	7007923 29	7010717 77
7004414 117, 130	7007438 135	7007924 29	7010720 77
7004435 143	7007439 135	7007933 29	7010721 77
7004436 104, 105, 117	7007440 135	7007970 29	7010723 77
7004822 71	7007441 135	7007977 29	7010724 77
7004823 71	7007442 135	7007979 29	7010725 77
7004834 71	7007444 135	7007980 29	7010727 77
7004835 71	7007445 135	7007983 29	7010729 77
7004836 71	7007449 135	7007985 29	7010730 77
7004837 71	7007453 135	7007986 29	7010731 77
7004838 71	7007454 135	7007987 29	7010732 77
7004839 71	7007456 135	7008804 130, 155	7010733 77
7004841 71	7007458 136	7008821 130, 155	7010734 77
7004859 72, 75	7007461 136	7008828 130, 155, 310	7010735 77
7004906 25	7007463 136	7008829 130, 155, 310	7010738 77
7004907 25	7007466 136	7009739 47	7010739 77
7004908 25	7007468 136	7009745 ... 60, 61, 62, 65, 66, 67, 68, 81, 308	7010741 77
7004910 25	7007469 136	7009905 93	7010742 77
7004917 25	7007470 136	7009909 93	7010743 77
7006012 83	7007471 136	7009912 93	7010745 77
7006019 83	7007472 136	7009913 93	7010763 53
7006020 83	7007474 136	7009927 93	7010766 53
7006021 83	7007475 136	7009930 93	7010767 53
7006022 83	7007476 136	7009983 93	7010768 53
7006029 83	7007477 136	7009984 93	7010769 53
7006033 83	7007478 136	7009987 93	7010770 53
7006035 83	7007482 136	7009988 93	7010771 53
7006036 83	7007483 136	7009989 93	7010772 53, 310
7006037 83	7007484 136	7009990 93	7010773 53
7006039 83	7007485 136	7009992 195	7010774 53
7006040 83	7007486 136	7010120 136	7010775 91
7006041 83	7007487 136	7010121 136	7010776 91
7006046 83	7007488 136	7010122 136	7010777 91
7006047 83	7007490 136	7010429 33, 34	7010778 91
7006048 83	7007491 136	7010444 37	7010779 91
	7007492 136	7010446 37	7010784 77
	7007494 136	7010447 37	7010785 77
	7007496 136, 308	7010448 37	7010901 143
	7007497 136	7010452 40	7010902 139, 143
	7007498 136	7010453 40	7010905 139, 143
	7007499 136		7010906 143

SECTION 10 - SPECIAL OPTIONS

7010907.....	139, 143	7011907.....	205	7016331.....	106	7019989.....	119
7010909.....	139, 143	7012513.....	109, 125	7016332.....	106	7019998.....	119
7010910.....	143	7012514.....	109, 125	7016333.....	147	7020023.....	106
7010911.....	139, 143	7012516.....	47	7016602.....	119	7020027.....	107
7010912.....	143	7012518.....	59, 65, 81	7016654.....	316	7020029.....	120
7010913.....	143	7012558.....	109, 125	7016661.....	120	7020108.....	109, 125
7010914.....	139	7012559.....	147	7016701.....	105, 118	7020109.....	109, 125
7010917.....	143	7012570.....	86	7017067.....	33, 43	7020110.....	109, 125
7010918.....	139, 143	7012571.....	86	7017070.....	34, 44	7020111.....	109, 125
7010919.....	139	7012575.....	106	7017080.....	33	7020119.....	120
7010922.....	143	7012576....	104, 105, 117	7017094.....	34, 44	7020121.....	120
7010923....	103, 104, 117, 130	7012577.....	119	7017095.....	34, 44	7020190.....	109, 125
7010925.....	139	7012578.....	119	7017096.....	43	7020191.....	109, 125
7010926.....	139	7012598.....	310	7017516.....	123	7020193.....	109, 125
7010927.....	139	7012599.....	106	7017903.....	132	7020404.....	107
7010928.....	139	7012611.....	205	7017904.....	132	7020406.....	107
7010929.....	139	7012612.....	205	7018602.....	29	7020411.....	107
7010930.....	139	7012626.....	106	7018603.....	29	7020414.....	106, 107
7010937.....	143	7012650.....	86	7018605.....	29	7020415.....	107
7010938.....	143	7012651.....	86	7018606.....	29	7020417.....	106
7010953.....	141	7012653.....	119	7018607.....	29	7020419.....	107
7010954.....	141	7012698.....	106	7018608.....	30	7020424.....	107
7010955.....	141, 145	7012910 ...	61, 62, 67, 68, 81	7018609.....	29	7020425.....	107
7010956.....	141, 145	7012930.....	62, 68, 81	7018612.....	30	7020426.....	107
7010957.....	141, 145	7012959.....	59, 65, 81	7019607.....	106, 107	7020429.....	107
7010958.....	141	7013710 ...	104, 105, 117, 118, 130	7019666.....	119	7020434.....	107
7010959.....	141, 145	7013711 ...	104, 105, 117, 118, 130	7019667.....	119	7020437.....	106
7010960.....	141, 145	7013712 ...	104, 117, 118, 130	7019668.....	119	7020456.....	106
7010961.....	141	7013753 ...	104, 117, 118, 130	7019670.....	119	7020465.....	107
7010962.....	145	7013757.....	105, 118	7019684.....	118, 310	7020477.....	107
7010965.....	145	7013771.....	105, 118	7019917.....	119	7020496.....	106
7010970.....	145	7014100.....	45	7019919.....	120	7021214.....	136
7010978.....	141	7014101.....	45	7019933.....	119	7022180.....	119
7010983.....	145	7014102.....	45	7019934.....	120	7023113.....	132
7010984.....	145	7014103.....	45	7019935.....	119	7023471.....	119
7010985.....	145	7014108.....	45	7019936.....	120	7023668.....	119
7010986.....	145	7014109.....	45	7019937.....	120	7023669.....	119
7010987.....	145	7014110.....	45	7019938.....	120	7023670.....	119
7010988.....	145	7014112.....	45	7019939.....	119	7023676.....	120
7011100.....	213	7014113.....	45	7019941.....	120	7024321.....	119
7011118.....	72	7014502.....	106, 310	7019942.....	120	7024413.....	107
7011182.....	72	7014680.....	119	7019943.....	120	7024574.....	59, 65, 81
7011183.....	72, 75	7014681.....	119	7019944.....	119	7025149.....	120
7011320.....	81	7014682.....	119	7019945.....	120	7025153.....	119
7011321.....	59, 65, 81	7014683.....	106	7019946.....	120	7026199.....	109, 125
7011325....	60, 61, 66, 67	7014687.....	119	7019947.....	120	7026200.....	131
7011712.....	29	7016200.....	132	7019948.....	120	7027607.....	119
7011713.....	29	7016308.....	106	7019949.....	119, 310	7027887.....	109
7011714.....	29	7016309.....	106	7019950.....	120	8320270.....	106
7011715.....	29			7019951.....	120	9983275.....	173, 229
7011716.....	29			7019954.....	119	9983276.....	229
7011717.....	29			7019959.....	120	9983562.....	278
7011903.....	205			7019960.....	120	9983596.....	173, 229
				7019987.....	119		



**Corporate Office
JLG Industries, Inc.
1 JLG Drive
McConnellsburg, PA 17233-9533 USA
☎ (717) 485-5161 (Corporate)
☎ (877) 554-5438 (Customer Support)
📠 (717) 485-6417**

**Visit our website for JLG Worldwide Locations.
www.jlg.com**



OSHKOSH™