



Illustrated Parts Manual

Models 12ELSP & 15ELSP

3120786

August 15, 2004

ANSI



REVISION LOG

June 30,1999 - Original Issue Of Manual

November 1, 1999 - Updated Section 1

May 1, 2000 - Revised Manual (Edited to 0010563 Revision 11)

September 1, 2000 - Revised Maual (Edited to 0010563 Revision15)

March 15, 2001 - Revised Manual (Edited to 0010563 Revision 18)

January 15, 2002 - Revised Manual (Revised Pump and Lift Cylinders)

February 1, 2002 - Revised Manual (Edited to 0010563 Revision 30)

March 31, 2003 - Revised Manual (Edited to 0010563 Revision 35)

June 30, 2003 - Revised Manual (Edited to 0010563 Revision 40)

August 15, 2004 - Revised Manual (Edited to 0010563 Revision 47)

REVISION LOG

TABLE OF CONTENTS

FIGURE NO.	TITLE	PAGE NO.
SECTION 1 - BASE		1-1
1-1	BASE MOUNTED COMPONENTS INSTALLATION	1-2
SECTION 2 - CONTROLS		2-1
2-1	DC POWER PACK INSTALLATION	2-2
2-2	DC MOTOR/PUMP ASSEMBLY	2-6
2-3	BATTERY CHARGER INSTALLATION	2-10
2-4	BATTERY CHARGER ASSEMBLY	2-12
2-5	CABLE & PLATFORM CONTROLS INSTALLATION - 12ELSP	2-14
2-6	CABLE & PLATFORM CONTROLS INSTALLATION - 15ELSP	2-18
SECTION 3 - MAST		3-1
3-1	MAST ASSEMBLY - 12ELSP	3-2
3-2	MAST ASSEMBLY - 15ELSP	3-6
SECTION 4 - PLATFORM		4-1
4-1	STEEL BASE PLATFORM INSTALLATION (PRIOR TO 18610)	4-2
4-2	STEEL BASE PLATFORM INSTALLATION (S/N 18610 TO PRESENT)	4-6
SECTION 5 - CYLINDER		5-1
5-1	LIFT CYLINDER ASSEMBLY (PRIOR TO S/N 18391)	5-2
5-2	LIFT CYLINDER ASSEMBLY (S/N 18391 TO PRESENT)	5-4
SECTION 6 - HYDRAULIC		6-1
6-1	HYDRAULIC DIAGRAM	6-2
SECTION 7 - ELECTRICAL		7-1
7-1	ELECTRICAL DIAGRAM (PRIOR TO S/N 17472)	7-2
7-2	ELECTRICAL DIAGRAM (S/N 17472 TO PRESENT)	7-4
SECTION 8 - DECALS		8-1
8-1	DECAL INSTALLATION	8-2
SECTION 9 - RECOMMENDED SERVICE PARTS STOCK		9-1
SECTION 10 - SPECIAL OPTIONS		10-1
SECTION 11 - PART NUMBER INDEX		11-1

TABLE OF CONTENTS

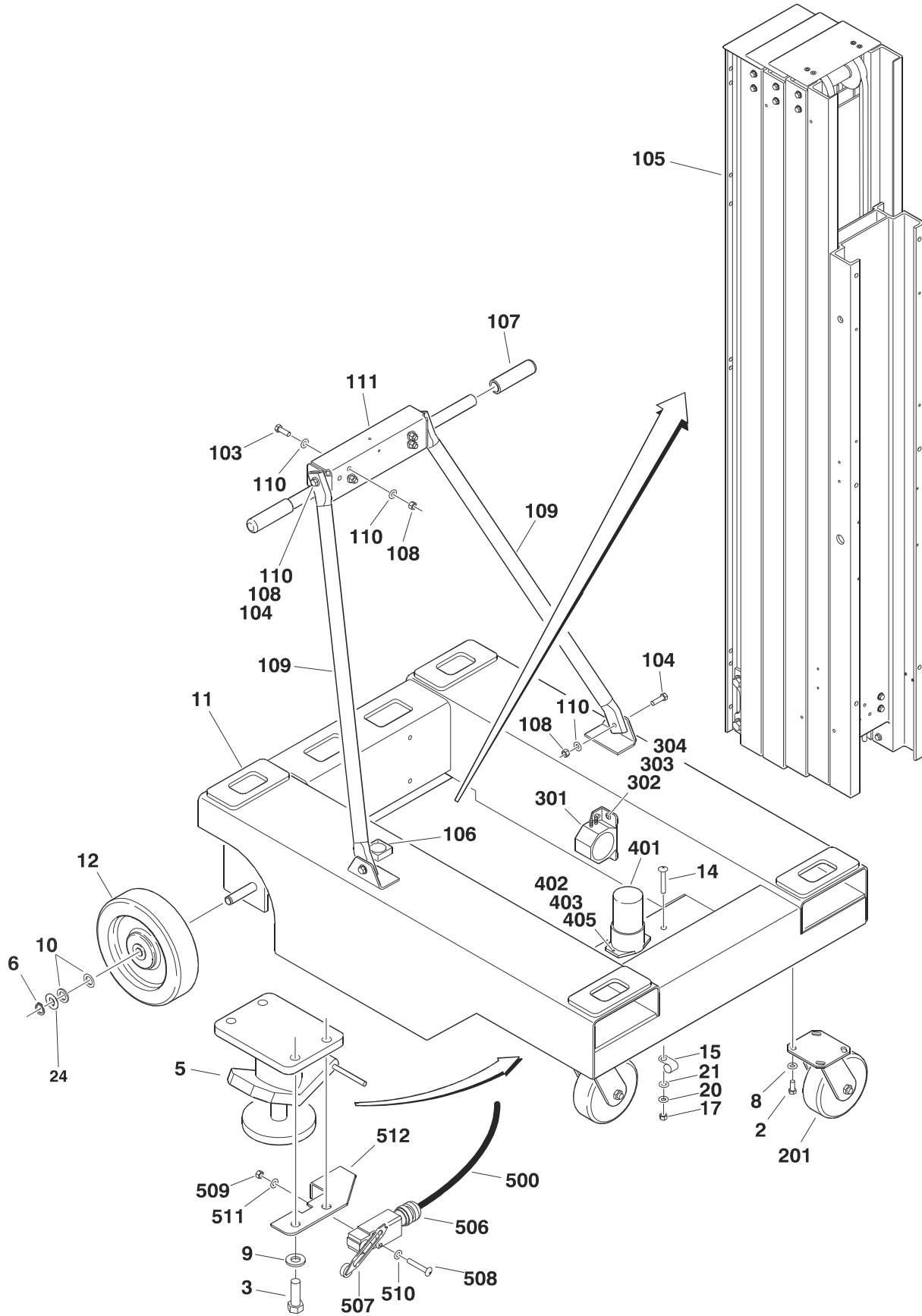
FIGURE NO.	TITLE	PAGE NO.
------------	-------	----------

SECTION 1

BASE

SECTION 1 BASE

FIGURE 1-1. BASE MOUNTED COMPONENTS INSTALLATION



SECTION 1 BASE

FIGURE 1-1. BASE MOUNTED COMPONENTS INSTALLATION

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	BASE ASSEMBLY	
	0259472	Ref.	Prior to S/N 18391	J
	0271922	Ref.	S/N 18391 to Present	C
1	0100019	A/R	Loctite #271 (Not Shown)	
2	0641607	8	Bolt 3/8"-16NC x 7/8"	
3	0641812	8	Bolt 1/2"-13NC x 1 1/2"	
4	Not Used			
5	0920114	2	Stop, Floor	
6	3760348	2	Ring, Retaining	
7	Not Used			
8	4711600	8	Flatwasher 3/8"	
9	4711800	4	Flatwasher 1/2"	
10	4740456	4	Shim	
11		1	Base Options:	
	4846025		Prior to S/N 18391	
	4846534		S/N 18391 to Present	
12		2	Wheel, Rear Options:	
	Use 4860202		Prior to S/N 13574 (Was p/n 4860183) (Gray Wheel)	
	4860202		S/N 13574 to S/N 13653 (Gray Wheel)	
	4860208		S/N 13653 to S/N 20797 (Black Wheel)	
	4860211		S/N 13653 to S/N 20797 (Red Wheel)	
	4860244		S/N 20797 to Present (Gray Wheel)	
			Replacement Wheel Parts:	
	7020209	2	Bearing for 4860202 Wheel (1 Per Wheel)	
	7020237	2	Bearing for 4860208 & 4860211 Wheel(1 Per Wheel)	
	Not Available	2	Bearing for 4860244 Wheel (1 Per Wheel)	
	7020074	4	Retainer for 4860202 Wheel (2 Per Assembly)	
	Not Available	0	Retainer for 4860208, 4860211 & 4860244 Wheel (If Required)	
	7012631	2	Spanner for 4860202 Wheel (1 Per Assembly)	
	Not Available	0	Spanner for 4860208, 4860211 & 4860244 Wheel (If Required)	
13	Not Used			
14	0721005	2	Screw #10-24NC x 5/8"	
15	1320043	2	Clamp, Cable (S/N 14145 to Present Only)	
16	Not Used			
17	3311005	2	Locknut #10-24NC	
18	Not Used			
19	Not Used			
20	4751000	4	Flatwasher #10	
21	4761000	4	Lockwasher #10	
22	4240032	5	Tie, Wire (Not Shown)	
23	4460234	2	Wire, Tie (Not Shown)	
24	4740415	2	Flatwasher	

SECTION 1 BASE

FIGURE 1-1. BASE MOUNTED COMPONENTS INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
			MAST SUPPORT INSTALLATIONS	
	0271924	Ref.	12SP with 4 Section Mast	A
	0259357	Ref.	15SP Prior to S/N 18391	B
	0271923	Ref.	15SP S/N 18391 to Present	A
101	0100001	A/R	Adhesive (Not Shown)	
102	Not Used			
103	0641609	4	Bolt 3/8"-16NC x 1 1/8"	
104	0641610	8	Bolt 3/8"-16NC x 1 1/4"	
105		1	Mast Assembly Options (Not Shown - See Section 3 for Breakdown):	
	0801324		12SP with 4 Section Mast (S/N 18391 to Present)	
	0801195		15SP Prior to S/N 18391	
	0801323		15SP S/N 18391 to Present	
106	2420140	1	Gauge, Level	
107	2560088	2	Handle	
108	3311605	12	Locknut 3/8"-16NC	
109	4567911	2	Brace Tube, Mast	
110	4711600	24	Flatwasher 3/8"	
111	4845715	1	Support, Mast	
201		2	FRONT WHEEL OPTIONS:	
	4860184		Wheel Assembly (Prior to S/N 13653) (Non-Locking Gray Tire & Wheel)	
	4860194		Wheel Assembly (Prior to S/N 13653) (Locking Gray Tire & Wheel)	
	4860209		Wheel Assembly (S/N 13653 to S/N 20797) (Non-Locking Black Tire & Gray Wheel)	
	4860245		Wheel Assembly (S/N 20797 to Present) (Non-Locking Charcoal Gray Tire & Gray Wheel)	
			Replacement Wheel Parts:	
	7020017	2	Swivel Rig for 4860184 & 4860194 (1 Per Assembly)	
	7020240	2	Swivel Rig for 4860209 (1 Per Assembly)	
	Not Available	2	Swivel Rig for 4860245 (1 Per Assembly)	
	7020086	2	Wheel, Replacement for 4860184 & 4860194 (1 Per Assembly)	
	7020243	2	Wheel, Replacement for 4860209 (1 Per Assembly)	
	Not Available	2	Wheel, Replacement for 4860245 (1 Per Assembly)	
	7020084	4	Bearing for 4860184, 4860194 & 4860209 (2 Per Wheel)	
	Not Available	4	Bearing for 4860245 (2 Per Wheel)	
	7012631	2	Bushing, Axle Spanner for 4860184 & 4860194 (1 Per Assembly)	
	7020241	2	Bushing, Axle Spanner for 4860209 (1 Per Assembly)	
	Not Available	2	Bushing, Axle Spanner for 4860245 (1 Per Assembly)	
	7012630	2	Axle Kit for 4860184 & 4860194 (1 Per Assembly)	
	7020242	2	Axle Kit for 4860209 (1 Per Assembly)	
	Not Available	2	Axle Kit for 4860245 (1 Per Assembly)	

SECTION 1 BASE

FIGURE 1-1. BASE MOUNTED COMPONENTS INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	DESCENT ALARM INSTALLATION	
	0256808	Ref.	Prior to S/N 18391 (Optional)	—
	0259472/0271922	Ref.	S/N 18391 to Present (Becomes Standard Equipment)	J/B
301	0140033	1	Alarm	
302	0641406	2	Bolt 1/4"-20NC x 3/4"	
303	4751400	4	Flatwasher 1/4"	
304	3311405	4	Nut 1/4"-20NC	
		Ref.	BEACON ASSEMBLY	
	0259447	Ref.	Prior to S/N 18391 (Optional)	—
	0259472/0271922	Ref.	S/N 18391 to Present (Becomes Standard Equipment)	J/B
401	0721008	2	Screw #10-24NC x 1"	
402	2920146	1	Lamp, Beacon	
	7016319	1	Bulb, Replacement	
	7016372	1	Lens, Replacement	
403	3311005	2	Locknut #10-24NC	
404	Not Used			
405	4751000	4	Flatwasher #10	
		Ref.	ELECTRICAL COMPONENTS (BASE MOUNTED)	
	4933103	Ref.	Prior to S/N 18391	B
	0259472/0271922	Ref.	S/N 18391 to Present	J/B
500	4922416	1	Limit Switch/Beacon Light/Alarm Harness (Includes Items 501-512)	2/C
501 to 505	Not Used			
506	4460662	2	Connector, Strain Relief	
507		2	Switch, Limit Options	
	4360397		Prior to S/N 13465	
	4360456		S/N 13465 to Present	
508	3911024	4	Screw #10-24NC x 3"	
509	3311001	4	Nut #10-24NC	
510	4751000	4	Flatwasher #10	
511	4761000	4	Lockwasher #10	
512	0902523	2	Bracket, Limit Switch	
513 to 517	Not Used			
518	3730099	1	Resistor	

SECTION 1 BASE

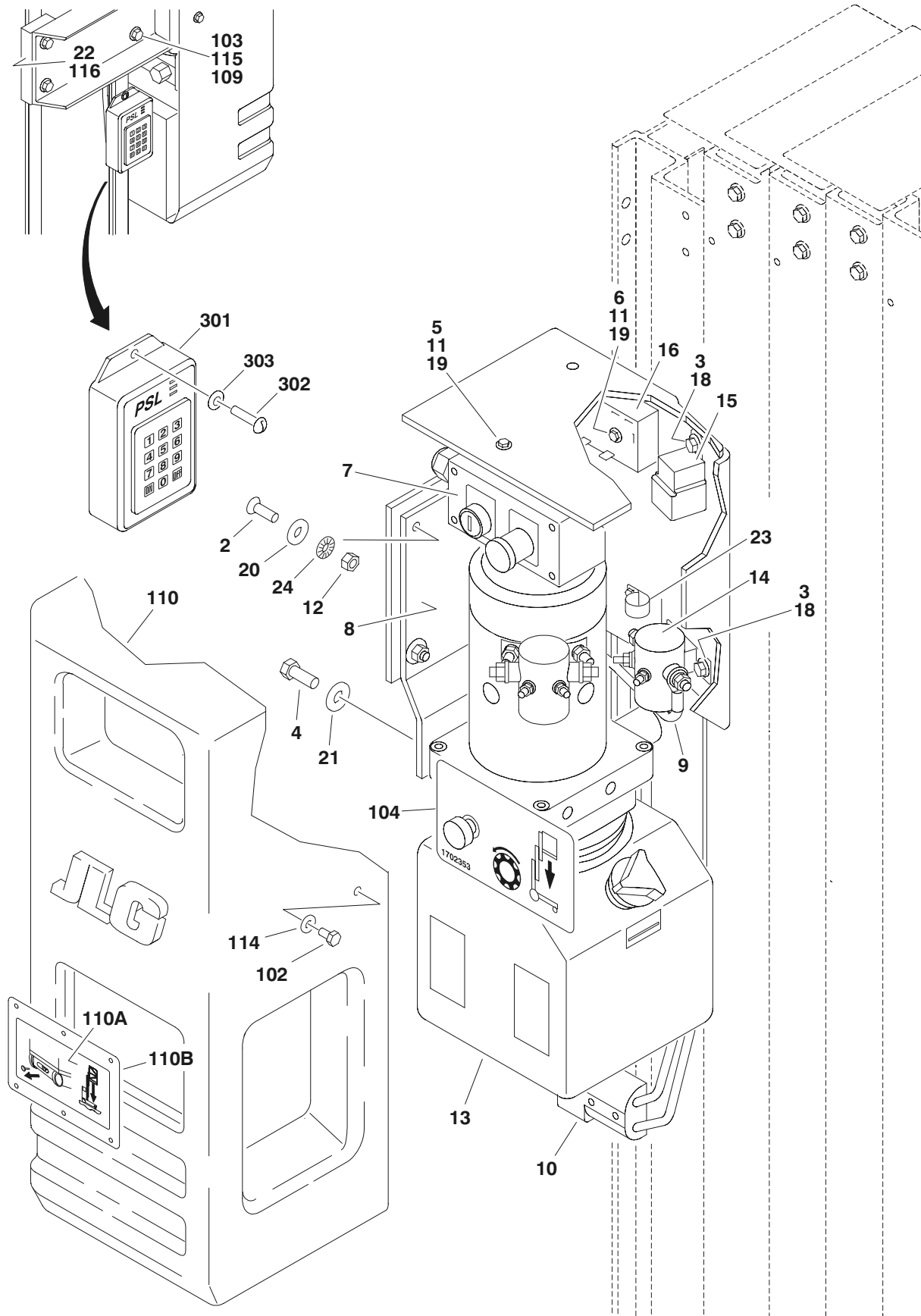
FIGURE 1-1. BASE MOUNTED COMPONENTS INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 2 CONTROLS

SECTION 2 CONTROLS

FIGURE 2-1. DC POWER PACK INSTALLATION



SECTION 2 CONTROLS

FIGURE 2-1. DC POWER PACK INSTALLATION

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	MOTOR/PUMP & GROUND CONTROL INSTALLATIONS	
	0259449	Ref.	Prior to S/N 17472	B
	0271307	Ref.	S/N 17472 to S/N 18391	A
	0271929	Ref.	S/N 18391 to Present	D
1	0100011	A/R	Loctite, #242 (Not Shown)	
2	0630486	4	Screw, Countersunk	
3	0641403	3	Bolt 1/4"-20NC x 3/8"	
4	0791605	2	Screw 3/8"-16NC x 5/8"	
5	0721006	2	Screw	
6	0721014	1	Screw (Prior to S/N 17472 Only)	
7	0861305	1	Ground Control Box Assembly	C
	7020078	1	Switch, Push-Pull (Stop)	
	7020096	1	Legend Plate, "Stop"	
	7020097	1	Legend Plate, "Power/Off/On"	
	4360467	1	Switch, On/Off	
	2860030	1	Key, Replacement	
	4460633	1	Strain Relief	
	7020093	4	Screw M3 x 25mm	
	3910804	3	Screw #8-32 x 1/4"	
	7020094	1	Box	
8	0902054	1	Plate, Mounting	
9	1060518	1	Cable, Battery (Prior to S/N 17472 Only)	
10	1060571	1	Cable Assembly - Battery	
	4460567	1	Connector, Anderson	
11	3311005	3	Locknut #10-24NC	
12	3311505	4	Locknut 5/16"-18NC	
13		1	DC Motor/Pump Assembly Options (See Figure 2-2 for Breakdown):	
	3600291		Prior to S/N13731	
	3600306		S/N13731 to S/N 18391	
	3600343		S/N 18391 to Present	
14	3740013	1	Solenoid (Prior to S/N 17472 Only)	
15		A/R	Relay Options:	
	3740080	2	Prior to S/N 17472	
	3740049	1	S/N 17472 to Present	
16	3740113	1	Relay, Timer (Prior to S/N 17472 Only)	
17	4567605	2	Tube, Butyrate (Not Shown)	
18	4711400	3	Flatwasher 1/4" Narrow (Prior to S/N 20824 Only)	
19	4751000	6	Flatwasher #10	
20	4751500	4	Flatwasher 5/16"	
21	4751600	2	Flatwasher 3/8" (Prior to S/N 20824 Only)	
22	4845714	1	Bracket, Pump Mounting	
23	1320224	1	Clamp, Cable	
24	4791500	1	Starwasher 5/16"	

SECTION 2 CONTROLS

FIGURE 2-1. DC POWER PACK INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
			MOTOR/PUMP COVER INSTALLATIONS	
	0271928	Ref.	12ELSP	C
	0259294	Ref.	15ELSP Prior to S/N13653	A
	0258478	Ref.	15ELSP S/N13653 to S/N13872	B
	0270117	Ref.	15ELSP S/N13872 to S/N 18391	B
	0271927	Ref.	15ELSP S/N 18391 to Present	C
101	Not Used			
102	0641404	4	Bolt 1/4"-20NC x 1/2"	
103	0641614	4	Bolt 3/8"-16NC x 1 3/4"	
104	1702353	1	Decal, Manual Decent (Prior to S/N 18391 Only)	
105 to 108	Not Used			
109	3311605	4	Locknut 3/8"-16NC	
110		1	Shield, Pump Cover Options:	
	4060875		Prior to S/N 18485	
	9981089		S/N 18485 to S/N 19088	
	4061024		S/N 19088 to Present	
110A	1704582		Decal (S/N 18485 to Present Only)	
110B	9984088		Cover (S/N 18485 to Present Only)	
111 to 113	Not Used			
114	4711400	4	Flatwasher 1/4" Narrow	
115	4711600	8	Flatwasher 3/8" Narrow	
116	4070984	2	Shim, Pump Spacer (12 SP S/N 15116 to Present Only and 15SP Prior to S/N13653 Only)	
117	2820035	7.3ft/2.24m	1/4 Expandable Loom (15SP S/N 16317 to Present) (Not Shown)	
118	4240032	1	Tie Wire (S/N 16317 to Present) (Not Shown)	
119	4240033	8	Tie Wire (7 inch) (S/N 16317 to Present) (Not Shown)	
		Ref.	HARNESS INSTALLATION	
	4933103	Ref.	Prior to S/N 17472	2/B
	0271307	Ref.	S/N 17472 to S/N 18391	A
	0271929	Ref.	S/N 18391 to Present	D
		1	Harness, Pump Options:	
	4922412		Prior to S/N 17472	1/A
	4922558		S/N 17472 to S/N 18391	1/A
	4922605		S/N 18391 to S/N 19088	2/B
	4922740		S/N 19088 to Present	2/B
	2400006	1	Fuse	
	4460044	1	Fuseholder	
	3990010	2	Diode - 6 Amp (Prior to S/N 18391 Only)	
	4922420	1	Harness, Jumper (Prior to S/N 18391 Only)	1/A
	3990010	1	Diode - 6 Amp	
		Ref.	HOURLY METER INSTALLATION (OPTIONAL)	A
201	2420172	1	Hourmeter	
	3311001	2	Nut #10-24NC	
	3572158	1	Plate, Mounting	

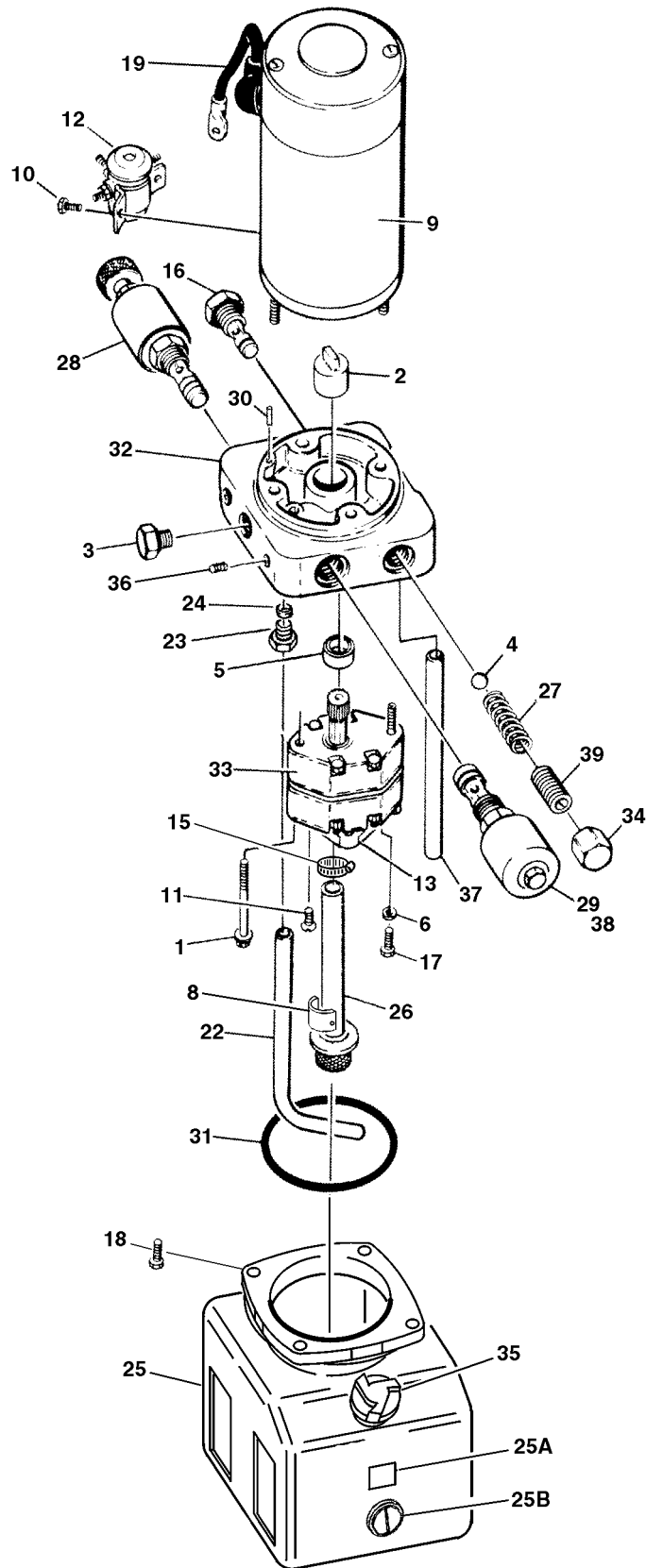
SECTION 2 CONTROLS

FIGURE 2-1. DC POWER PACK INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
	3911010	2	Screw #10-24NC x 5/8"	
	4761000	2	Lockwasher #10	
	4922935	1	Harness, Hourmeter	
	0272181	Ref.	PROGRAMMABLE SECURITY LOCK INSTALLATION (OPTIONAL)	B
301	See Note	1	Lock, Electronic (Note: Purchase p/n 0272181 as pre-wired service replacement)	
302	3911008	2	Screw	
303	4751000	2	Flatwasher #10	

SECTION 2 CONTROLS

FIGURE 2-2. DC MOTOR/PUMP ASSEMBLY



SECTION 2 CONTROLS

FIGURE 2-2. DC MOTOR/PUMP ASSEMBLY

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	DC MOTOR/PUMP ASSEMBLIES	
	3600291	Ref.	Prior to S/N13731	A
	3600306	Ref.	S/N13731 to S/N 18391	C
	3600343	Ref.	S/N 18391 to Present	B
1	7013713	2	Bolt 5/16"-24NF x 2 3/4"	
2	7016735	1	Coupling	
3	7013714	1	Plug	
4	7013715	1	Ball	
5	7013716	1	Seal	
6	7013717	1	Washer	
7	Not Used			
8	7013722	1	Magnet	
9	7013710	1	Motor	
	7013757	1	Brush Kit	
10	7013758	2	Screw 1/4"-20NC x 1/4"	
11	7013728	2	Screw M6 x 1.0 - 12mm	
12	7013760	1	Solenoid	
13	7016770	1	Cover	
14	Not Used			
15	7016771	1	Clamp	
16	7013708	1	Cartridge, Valve - Check	
17	3931516	1	Bolt, Socket Head 5/16"-18NC x 1"	
18	7016721	4	Bolt #12-24NC x 1/2"	
19	7016772	1	Cable	
20	Not Used			
21	7016713	1	Decal - Fill Line	
22	7013795	1	Tube, Return	
23	7013792	1	Nut, Tube Compression	
24	7013793	1	Sleeve, Tube Compression	
25		1	Tank Options:	
	7016775		Prior to S/N 18391	
	7022219		S/N 18391 to Present	
25A	7016776	1	Decal - Caution	
25B	7016759	1	Plug	
26	7016773	1	Plumbing Assembly - Inlet	
27		1	Spring Options:	
	7016762		Prior to S/N13731	
	7013733		S/N13731 to Present	
28		1	Cartridge, Valve - Manual Descent	
	7013764		Prior to S/N 18391	
	Not Required		S/N 18391 to Present	
29		1	Cartridge, Valve - Solenoid Options:	
	7016786		Prior to S/N13731	
	7016751		S/N13731 to Present	
30	7013766	1	Pin	
31	7013743	1	O-Ring	

SECTION 2 CONTROLS

FIGURE 2-2. DC MOTOR/PUMP ASSEMBLY (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
32	7016753 7022220	1	End Head Options: Prior to S/N 18391 S/N 18391 to Present	
33	7016717	1	Pump Assembly	
34	7013750 7013779	1	Cap, Relief Prior to S/N13731 S/N13731 to Present	
35	7016714	1	Breather	
36	7013720	2	Plug (Prior to S/N 18391)	
37	7013726	1	Tube, Return	
38	7016755	1	Valve	
39	7013770	1	Screw, Adjustment	

SECTION 2 CONTROLS

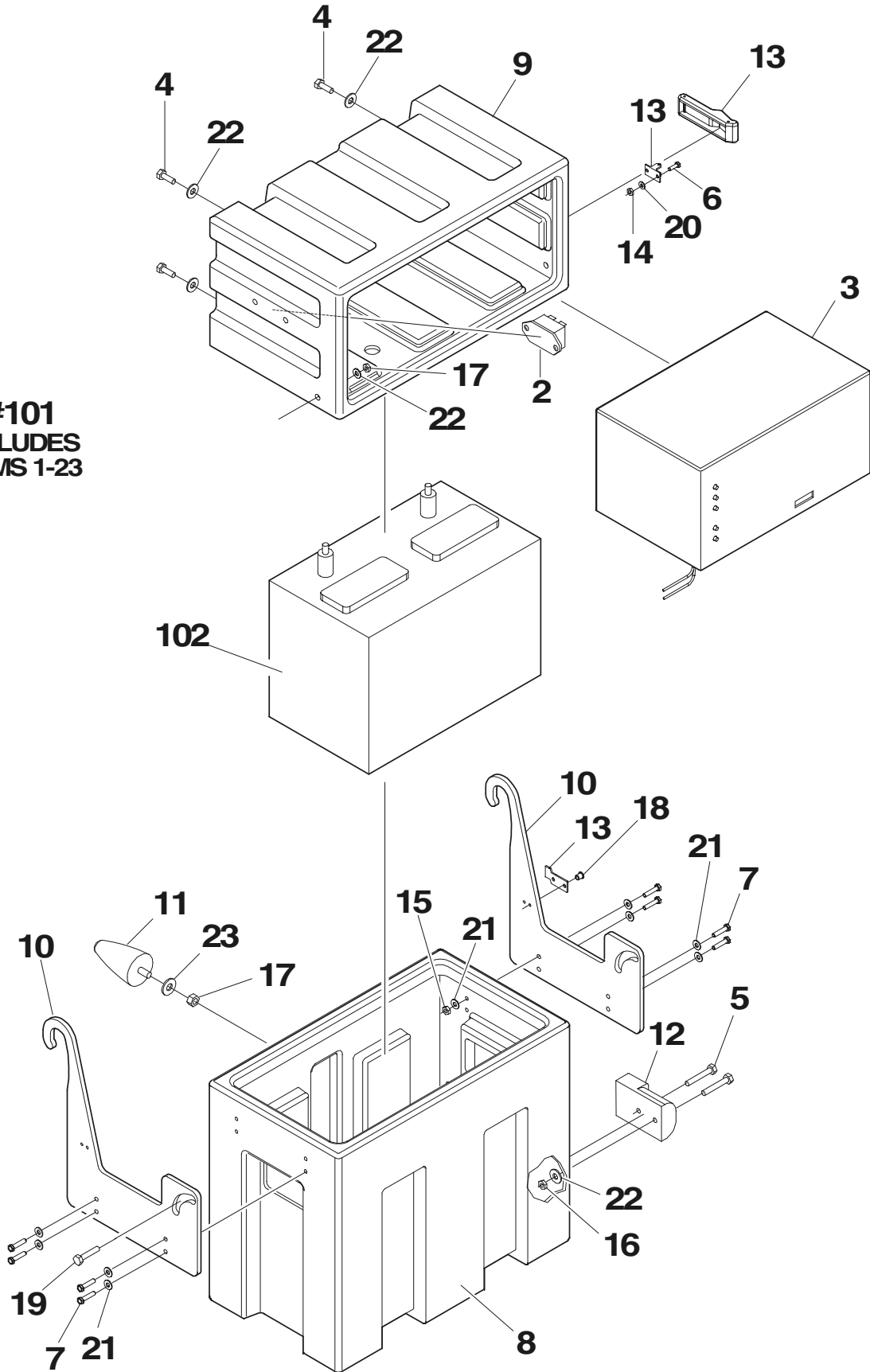
FIGURE 2-2. DC MOTOR/PUMP ASSEMBLY (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 2 CONTROLS

FIGURE 2-3. BATTERY CHARGER INSTALLATION

#101
INCLUDES
ITEMS 1-23



SECTION 2 CONTROLS

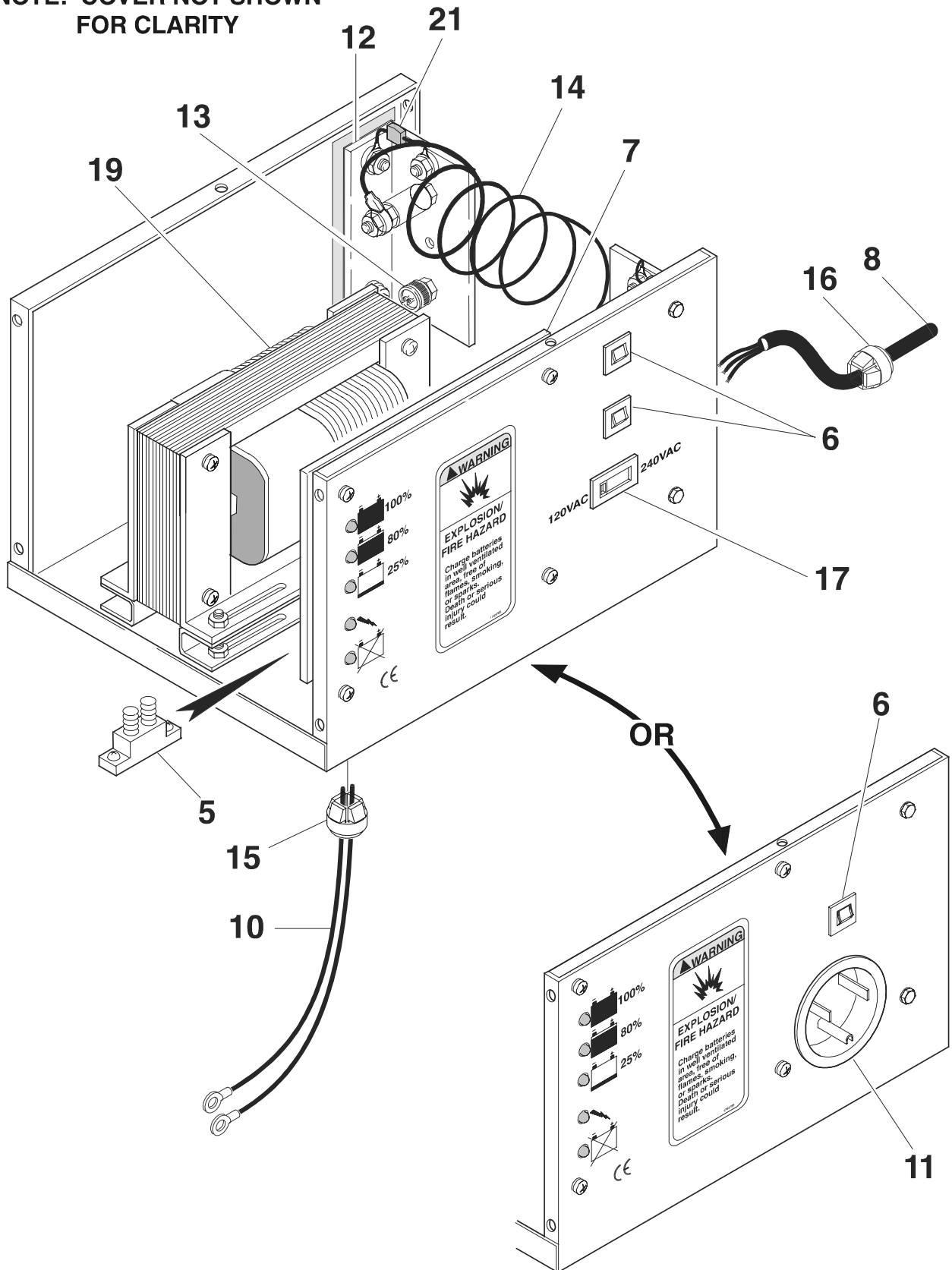
FIGURE 2-3. BATTERY CHARGER INSTALLATION

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	BATTERY BOX AND CHARGER ASSEMBLIES	
	0400223	Ref.	Machines with Charger with Cord (Prior to S/N 13315)	B
	0400225	Ref.	Machines with Charger with Inlet (S/N 13315 to Present)	B
1	0100011	A/R	Loctite, #242 (Not Shown)	
2	0270163	1	Battery Discharge Indicator & Harness (S/N 15284 to Present Only)	
3		1	Charger Assembly Options (See Figure 2-4 for Breakdown):	
	0400176		Standard Charger With Cord (Prior to S/N 13315)	
	0400193		Standard Charger With Inlet (S/N 13315 to Present)	
4	0641406	4	Bolt, 1/4"-20NC x 3/4"	
5	0641412	2	Bolt 1/4"-20NC x 1 1/2"	
6	0720805	2	Screw, #8-24NC x 5/8"	
7	0721008	8	Screw, #10-24NC	
8	0861192	1	Box, Molded Battery	
9	0861193	1	Box, Molded Battery Charger	
10	0902442	2	Bracket, Hanger	
11	0940085	1	Bumper, Stop	
12	1060570	1	Cable Assembly - Battery	
13	2940111	1	Latch, Soft Draw	
14	3310805	2	Locknut #8-32NC	
15	3311005	8	Locknut #10-24NC	
16	3311405	2	Locknut 1/4-20NC	
17	3311505	3	Locknut 5/16-18NC	
18	3820001	2	Rivet	
19	3900190	2	Screw, Shoulder	
20	4750800	2	Flatwasher #8	
21	4751000	16	Flatwasher #10	
22	4751400	A/R	Flatwasher 1/4"	
23	4751500	1	Flatwasher 5/16"	
		Ref.	BATTERY BOX AND CHARGER INSTALLATIONS	
	0258203	Ref.	Machines with Wet Battery & Charger with Cord (Prior to S/N 13315)	E
	0259543	Ref.	Machines with Wet Battery & Charger with Inlet (S/N 13315 to Present)	D
	0270717	Ref.	Machines with Dry Battery & Charger with Inlet	B
101		1	Battery Box and Charger Assy Options (Includes Items 1-23):	
	0400223		Machines with Charger with Cord	
	0400225		Machines with Charger with Inlet	
102		1	Battery Options:	
	0400122		Standard Wet Battery	
	0400144		Standard Dry Battery	

SECTION 2 CONTROLS

FIGURE 2-4. BATTERY CHARGER ASSEMBLY

NOTE: COVER NOT SHOWN FOR CLARITY



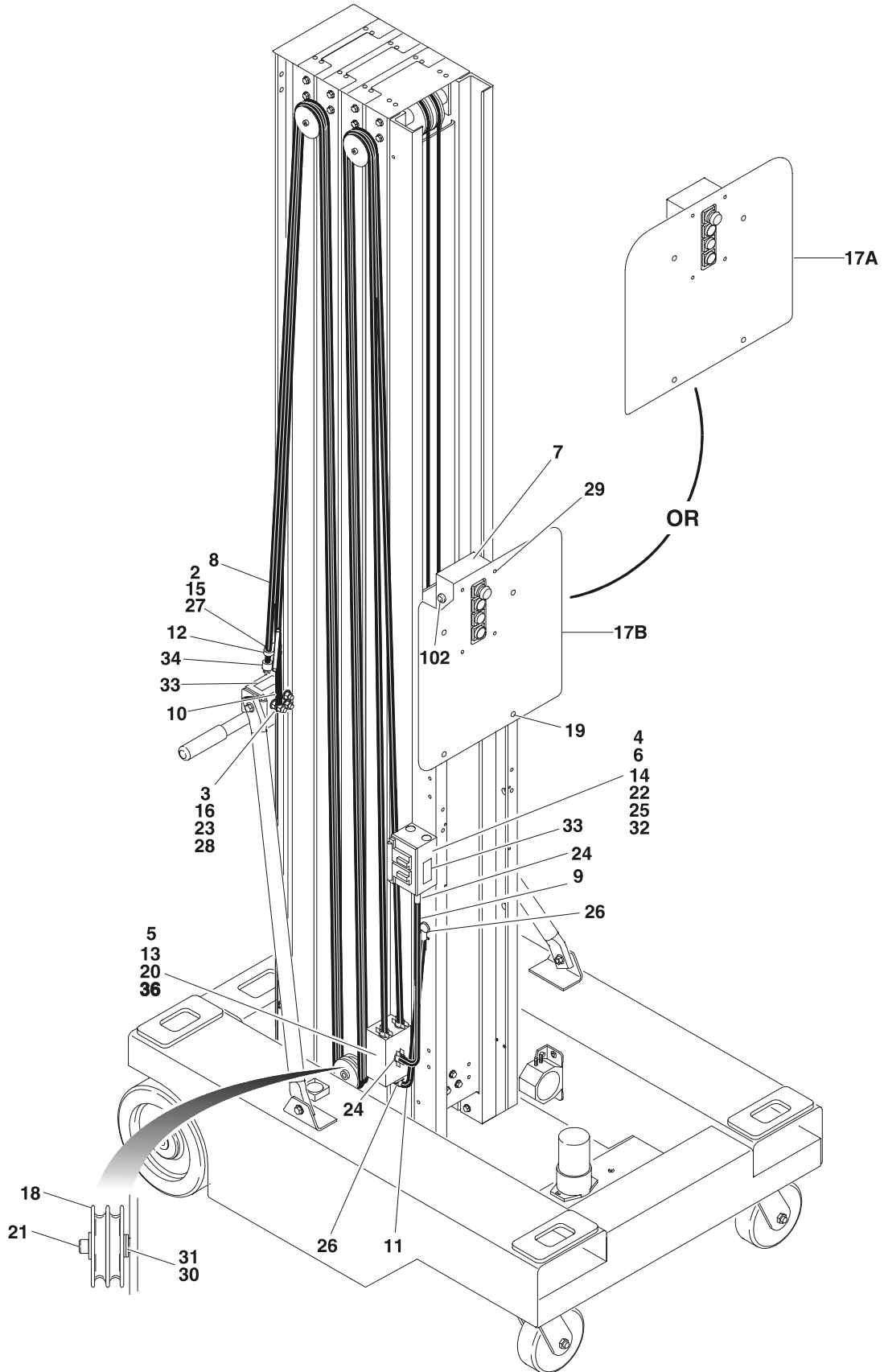
SECTION 2 CONTROLS

FIGURE 2-4. BATTERY CHARGER ASSEMBLY

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
			BATTERY CHARGER ASSEMBLIES	
	0400176	Ref.	Standard Charger with Cord	F
	0400193	Ref.	Standard Charger with Inlet	A
1 to 4	Not Used			
5	7011509	1	Breaker, Circuit - DC 50Amp	
6	7018536	2	Breaker, Circuit	
7		1	Card, Circuit Options:	
	7020626		0400176 Charger	
	7020677		0400193 Charger	
8		A/R	AC Cord Assembly Options:	
	7020627	1	0400176 Charger	
	Not Required	0	0400193 Charger	
9	Not Used			
10	7020629	1	DC Harness	
11	7011513	1	Receptacle, AC (0400193 Charger Only)	
12		2	Rectifier Assembly Options:	
	7020631		0400176 Charger	
	7020678		0400193 Charger	
13		A/R	SCR Rectifier Options:	
	7018555	1	0400176 Charger	
	7020679	2	0400193 Charger	
14		1	Shunt Assembly Options:	
	7020605		0400176 Charger	
	7020674		0400193 Charger	
15	7018556	1	Connector, Strain Relief - DC	
16	7011528	1	Connector, Strain Relief - AC	
17	7018586	1	Switch, Slide (0400176 Charger Only)	
18	Not Used			
19		1	Transformer Options:	
	7020032		0400176 Charger	
	7020680		0400193 Charger	
20	Not Used			
21		A/R	Varistor Options:	
	7020633	1	0400176 Charger	
	7020681	1	0400193 Charger	

SECTION 2 CONTROLS

FIGURE 2-5. CABLE & PLATFORM CONTROLS INSTALLATION - 12ELSP



SECTION 2 CONTROLS

FIGURE 2-5. CABLE & PLATFORM CONTROLS INSTALLATION - 12ELSP

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
			CABLES AND CONTROLS INSTALLATIONS	
	0270490	Ref.	12ELSP Standard Cables (Prior to S/N18610)	D
	0272345	Ref.	12ELSP Standard Cables (S/N18610 to Present)	A
	0270746	Ref.	12ELSP Optional 120V Accessory Outlet	B
1	0100011	A/R	Loctite #242 (Not Shown)	
2	0641410	1	Bolt 1/4"-20NC x 1 1/4"	
3	0641612	1	Bolt 3/8"-16NC x 1 1/2"	
4	0721006	2	Bolt #10-24NC x 3/4"	
5	0860945	1	Box, Junction	
6	0860946	1	Box, Receptacle (With Accessory Outlet Only)	
7	0861207	1	Control Box Assembly	
	7020078	1	Switch, Push-Pull (Red)	
	7020088	2	Switch, Push Button (White)	
	7020089	1	Switch, Push Button (Green)	
	7020091	1	Plug	
	7020092	1	Connector, Strain Relief	
	7020093	4	Screw M3 x 25mm	
8	1060923	86in/2.2m	Cable, Electrical - 12/3 (With Accessory Outlet Only)	
	4460549	1	Plug, Male (120V Only) (Not Shown)	
9	4922653	2ft/61cm	Harness/Cable, Electrical (With Accessory Outlet Only)	
10	1060922	115in/3m	Cable, Electrical - 16/5	
11	4922652	40in/1m	Cable, Electrical - 16/5	
12	1320149	3	Clamp	
13	1670603	1	Cover, Junction Box	
14	3311001	2	Nut #10-24NC	
15	3311405	1	Locknut 1/4"-20NC	
16	3311605	2	Locknut 3/8"-16NC	
17		1	Plate, Decal Mounting Options:	
17A	3570923		Prior to S/N 18610	
17B	2573725		S/N 18610 to Present	
18	3580231	3	Sheave, Control Cable	
19	3820032	4	Rivet	
20	3900191	2	Screw, Pan Head	
21	3900200	1	Screw, Shoulder	
22	4060092	1	Shield, Weatherproof Receptacle Cover (With 120V Accessory Outlet Only)	
23	4160130	1	Spring, Extension	
24	4460023	A/R	Connector, Strain Relief	
25	4460190	1	Receptacle, Electrical (With 120V Accessory Outlet Only)	
26	4460566	2	Connector, Strain Relief - 90°	
27	4711400	2	Flatwasher 1/4" Narrow	
28	4711600	2	Flatwasher 3/8" Narrow	
29	4740426	4	Washer #8	
30	4751000	2	Flatwasher #10	
31	4751500	3	Flatwasher 5/16"	
32	4761000	12	Lockwasher #10 Wide	
33	3252761	2	Decal - Voltage (With Accessory Outlet Only):	
34	4460549	1	Plug, Electrical (With 120V Accessory Outlet Only)	

SECTION 2 CONTROLS

FIGURE 2-5. CABLE & PLATFORM CONTROLS INSTALLATION - 12ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
35	4922420	1	Harness, Jumper (Not Shown - Located inside Item 7)	
36	3520034	2	Plug, Hole	
	0259450	Ref.	AUXILIARY LOWERING INSTALLATION	A
101	Not Used			
102	4360274	1	Switch, Push Button	
103 to 104	Not Used			
105	4460662	1	Connector, Strain Relief	

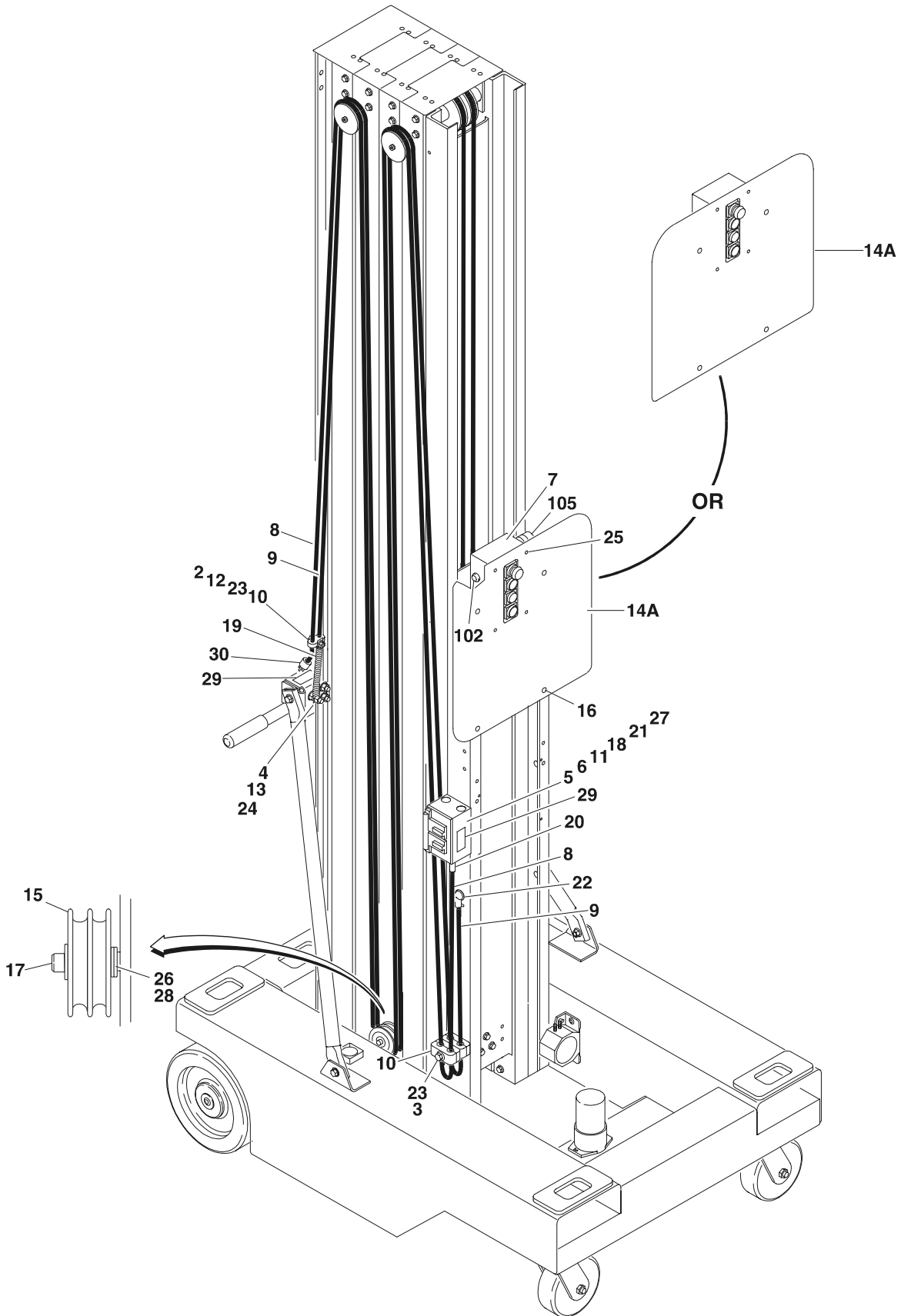
SECTION 2 CONTROLS

FIGURE 2-5. CABLE & PLATFORM CONTROLS INSTALLATION - 12ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 2 CONTROLS

FIGURE 2-6. CABLE & PLATFORM CONTROLS INSTALLATION - 15ELSP



SECTION 2 CONTROLS

FIGURE 2-6. CABLE & PLATFORM CONTROLS INSTALLATION - 15ELSP

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
			CABLES AND CONTROLS INSTALLATIONS	
	0258449	Ref.	All Machines (Prior to S/N 17472)	D
	0258449	Ref.	Standard Cables (S/N 17472 to S/N 18610)	D
	0272346	Ref.	Standard Cables (S/N 18610 to Present)	A
	0270748	Ref.	Machines with Optional 120V Accessory Outlet (S/N 17472 to Present)	B
1	0100011	A/R	Loctite #242 (Not Shown)	
2	0641410	1	Bolt 1/4"-20NC x 1 1/4"	
3	0641416	1	Bolt 1/4"-20NC x 2"	
4	0641612	1	Bolt 3/8"-16NC x 1 1/2"	
5	0721006	2	Bolt #10-24NC x 3/4"	
6	0860946	1	Box, Receptacle (With Accessory Outlet Only)	
7	0861207	1	Control Box Assembly	
	7020078	1	Switch, Push-Pull (Red)	
	7020088	2	Switch, Push Button (White)	
	7020089	1	Switch, Push Button (Green)	
	7020091	1	Plug	
	7020092	1	Connector, Strain Relief	
	7020093	4	Screw M3 x 25mm	
8		A/R	Cable, Electrical - 12/3 Options (With Accessory Outlet Only):	
	1060564	27ft/8.23m	Prior to S/N 17768	
	1060925	22ft/6.6m	S/N 17768 to Present	
	4460549	1	Plug, Male (120V Only) (Not Shown)	
9		A/R	Cable, Electrical - 16/5 Options:	
	1060687	25ft/7.62m	Prior to S/N 17768	
	4922657	26ft/7.7m	S/N 17768 to Present	
10	1320149	3	Clamp	
11	3311001	2	Nut #10-24NC	
12	3311405	1	Locknut 1/4"-20NC	
13	3311605	2	Locknut 3/8"-16NC	
14		1	Plate, Decal Mounting Options:	
14A	3570923		Prior to S/N 18610	
14B	2573725		S/N 18610 to Present	
15	3580231	3	Sheave, Control Cable	
16	3820032	4	Rivet	
17	3900200	3	Screw, Shoulder	
18	4060092	1	Shield, Weatherproof Receptacle Cover (With Accessory Outlet Only)	
19	4160130	1	Spring, Extension	
20	4460023	1	Connector, Strain Relief (With Accessory Outlet Only)	
21	4460190	1	Receptacle, Electrical (With Accessory Outlet Only)	
22	4460566	1	Connector, Strain Relief - 90°	
23	4711400	3	Flatwasher 1/4" Narrow	
24	4711600	2	Flatwasher 3/8" Narrow	
25	4740426	4	Washer #8 (Prior to S/N 17472 Only)	
26	4751500	3	Flatwasher 5/16"	
27	4761000	2	Lockwasher #10	
28	4751000	12	Flatwasher #10 Wide	

SECTION 2 CONTROLS

FIGURE 2-6. CABLE & PLATFORM CONTROLS INSTALLATION - 15ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
29	3252761	2	Decal - Voltage (With Accessory Outlet Only):	
30	4460549	1	Plug, Electrical (With 120V Accessory Outlet Only)	
31	4922420	1	Harness, Jumper (Not Shown - Located inside Item 7) (S/N 17472 to Present Only)	
	0259450	Ref.	AUXILIARY LOWERING INSTALLATION	A
101	Not Used			
102	4360274	1	Switch, Push Button	
103	Not Used			
104	Not Used			
105	4460662	1	Connector, Strain Relief	

SECTION 3 MAST

SECTION 3 MAST

FIGURE 3-1. MAST ASSEMBLY - 12ELSP

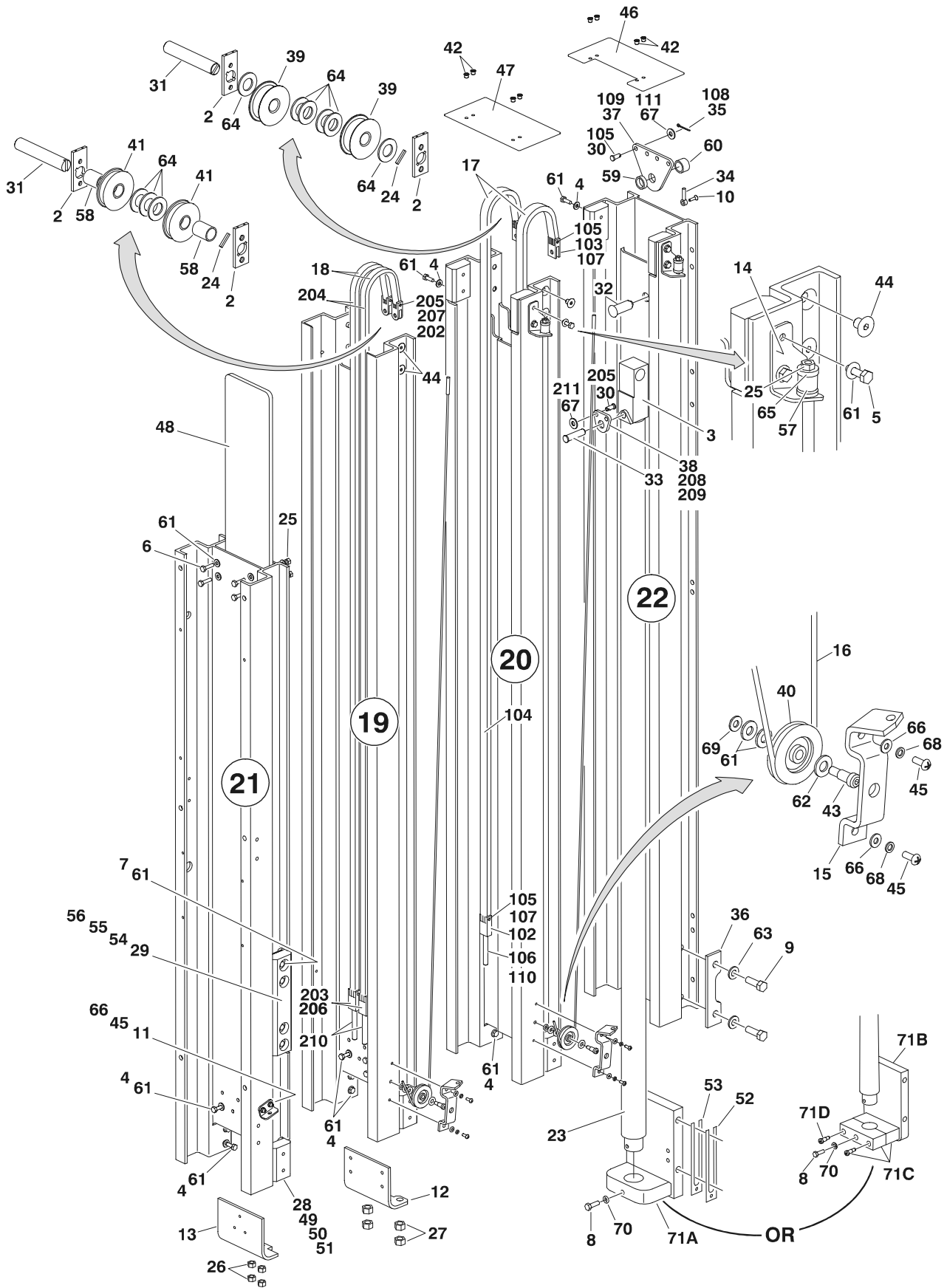


FIGURE 3-1. MAST ASSEMBLY - 12ELSP

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	MAST ASSEMBLY - 12ELSP	
	0801257	Ref.	S/N 15116 to S/N 18391	B
	0801324	Ref.	S/N 18391 to Present	D
1	0100011	A/R	Loctite #242 (Not Shown)	
2	0362735	4	Bar, Sheave Pin Support	
3	0561341	1	Block, Chain Anchor	
4	0641406	23	Bolt 1/4"-20NC x 3/4"	
5	0641407	4	Bolt 1/4"-20NC x 7/8"	
6	0641408	4	Bolt 1/4"-20NC x 1"	
7	0641410	8	Bolt 1/4"-20NC x 1 1/4"	
8	0641508	1	Bolt 5/16"-18NC x 1"	
9	0641812	4	Bolt 1/2"-13NC x 1 1/2"	
10	0741006	1	Bolt #10-24NC x 3/4"	
11	0902047	1	Bracket, Sequence Cable	
12	0902422	1	Bracket, Bottom Chain Attach	
13	0902423	1	Bracket, Bottom Chain Attach	
14	0902431	2	Bracket, Sequence Cable	
15	0902445	2	Bracket, Sequence Cable	
16	1060683	2	Cable, Sequence	
17	1260355	2	Chain Assembly - #544 Chain (See Items 101-111 for Breakdown)	
18	1260356	2	Chain Assembly - #444 Chain (See Items 201-211 for Breakdown)	
19	1271392	1	Channel, Mast #6	
20	1271421	1	Channel, Mast #2	
21	1271446	1	Channel, Mast Header	
22	1271447	1	Channel, Mast #1	
23		1	Cylinder Assembly (See Section 5 for Breakdown)	
	1683808		S/N 15116 to S/N 18391	
	1684142		S/N 18391 to Present	
24	2880310	2	Key	
25	3311401	6	Nut 1/4"-20NC	
26	3311601	4	Nut 3/8"-16NC	
27	3311801	4	Nut 1/2"-13NC	
28	3340845	10	Pad, Slide Guide	
29	3340858	2	Pad, Slide Guide	
30		4	Pin Options:	
	3422338		S/N 15116 to S/N 18391	
	See Item 105		S/N 18391 to Present	
31	3422717	2	Pin	
32	3422750	1	Pin	
33	3422752	1	Pin	
34	3422757	1	Pin, Keeper	
35		2	Pin Cotter Options:	
	3450304		S/N 15116 to S/N 18391	
	See Item 108		S/N 18391 to Present	
36	3570893	2	Plate	

SECTION 3 MAST

FIGURE 3-1. MAST ASSEMBLY - 12ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
37	3571101 See Item 109	1	Plate, Clevis Options: S/N 15116 to S/N 18391 S/N 18391 to Present	
38	3571103 Not Used	1	Plate, Clevis Options: S/N 15116 to S/N 18391 S/N 18391 to Present	
39	3580268 3580286	2	Sheave Assembly Options: S/N 15116 to S/N 16290 S/N 16290 to Present	
	0440225 0440246	2	Bearing Options: (1 Per Assembly) S/N 15116 to S/N 16290 S/N 16290 to Present	
40	3580269	2	Sheave, Sequence Cable	
41	3580274 3580293	2	Chain, Sheave Assembly Options: S/N 15116 to S/N 16290 S/N 16290 to Present	
	0440230 0440246	1	Bearing Options: (1 Per Assembly) S/N 15116 to S/N 17527 S/N 17527 to Present	
42	3820034	2	Rivet	
43	3900187	2	Screw, Shoulder	
44	3900192	8	Screw 3/8"-16NC x 1/2"	
45	3900205	6	Screw #10-24NC x 5/8"	
46	4060960	1	Shield, Mast Cover	
47	4060961	1	Shield, Mast Cover	
48	4060987	1	Shield, Mast	
49	4070860	10	Shim, Slide Pad	
50	4070861	10	Shim, Slide Pad	
51	4070862	20	Shim, Slide Pad	
52	4070970	2	Shim, Cylinder Mount	
53	4070971	4	Shim, Cylinder Mount	
54	4070988	4	Shim, Slide Pad	
55	4070989	2	Shim, Slide Pad	
56	4070990	2	Shim, Slide Pad	
57	4160124	2	Spring	
58	4567491	2	Tube, Spacer	
59	4567750	1	Tube, Spacer	
60	4567751	1	Tube, Spacer	
61	4711400	47	Flatwasher 1/4" Narrow	
62	4711500	2	Flatwasher 5/16" Narrow	
63	4711800	4	Flatwasher 1/2" Narrow	
64	4712600	9	Flatwasher 1" Narrow (S/N 15116 to S/N 16290 Only)	
65	4740414	4	Washer, Cup	
66	4750800	6	Flatwasher #8 Wide	
67	4751500 Not Used	4	Flatwasher S/N 15116 to S/N 18391 S/N 18391 to Present	
68	4761000	6	Lockwasher #10	
69	4761400	2	Lockwasher 1/4"	

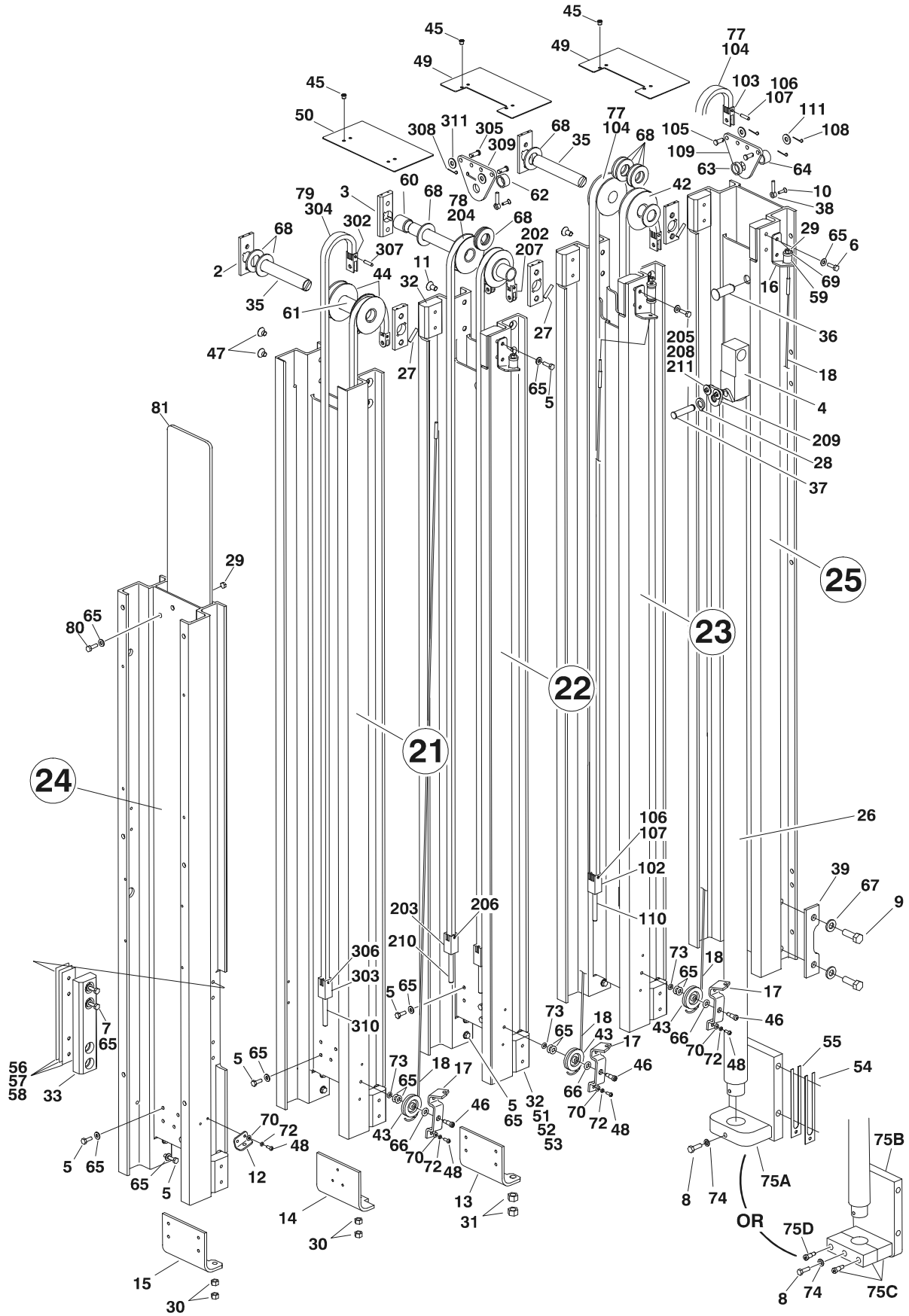
SECTION 3 MAST

FIGURE 3-1. MAST ASSEMBLY - 12ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
70	4761500	1	Lockwasher 5/16"	
71		1	Mount, Cylinder	
71A	4845731		S/N 15116 to S/N 18391	
71A	4846381		S/N 18391 to S/N 19283	
71B	4846514		S/N 19283 to Present	
71C	3572847	1	Clamp, Cylinder (S/N 19283 to Present Only)	
71D	3900163	2	Screw Socket Head 3/8"-16NC x 2" (S/N 19283 to Present Only)	
72	4740007	9	Thrust Washer (S/N 16290 to Present)	
73	3020041	A/R	Lubricant, Krytox (Not Shown) (S/N 19128 to Present)	
	1260355	Ref.	CHAIN ASSEMBLY - #544 CHAIN	B
101	0100062	A/R	Loctite #RC/640 (Not Shown)	
102	0561308	2	Block	
103	0561336	2	Block	
104	Kit	A/R	Chain	
105	3422338	2	Pin, Chain Equalizer	
106	3422720	4	Pin, Chain Block	
107	3450202	8	Cotter Pin	
108	3450304	2	Cotter Pin	
109	3571101	1	Plate, Chain Adjustment	
110	4300129	2	Stud, Chain Assembly	
111	4751500	2	Washer	
	1260343	1	Chain Kit - #544 Chain (Includes Qty 1 of #101-103 & 110, Qty 71in/1.8m of #104, Qty 2 of #106 and Qty 4 of #107)	B
	1260356	Ref.	CHAIN ASSEMBLY - #444 CHAIN	B
201	0100062	A/R	Loctite #RC/640 (Not Shown)	
202	0561149	2	Block	
203	0561408	2	Block	
204	Kit	A/R	Chain	
205	3422338	2	Pin, Chain Equalizer	
206	3422346	2	Pin, Groove	
207	3422355	2	Pin, Groove	
208	3450304	2	Cotter Pin	
209	3571103	1	Plate, Chain Adjustment	
210	4300111	2	Stud, Chain Assembly	
211	4751500	2	Washer	
	1260349	2	Chain Kit (Includes Qty 1 of #201-203, 206 & 210 and Qty 71in/1.8m of #204)	C

SECTION 3 MAST

FIGURE 3-2. MAST ASSEMBLY - 15ELSP



SECTION 3 MAST

FIGURE 3-2. MAST ASSEMBLY - 15ELSP

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	MAST ASSEMBLY OPTIONS:	
	0801195	Ref.	15ELSP (Prior to S/N 18391)	H
	0801323	Ref.	15ELSP (S/N 18391 to Present)	D
1	0100011	A/R	Loctite #242 (Not Shown)	
2	0362735	4	Bar, Sheave Pin Support	
3	0362736	2	Bar, Sheave Pin Support	
4	0561341	1	Block, Chain Anchor	
5	0641406	33	Bolt 1/4"-20NC x 3/4"	
6	0641407	6	Bolt 1/4"-20NC x 7/8"	
7	0641410	8	Bolt 1/4"-20NC x 1 1/4"	
8	0641508	1	Bolt 5/16"-18NC x 1"	
9	0641812	4	Bolt 1/2"-13NC x 1 1/2"	
10	0741006	2	Bolt #10-24NC x 3/4"	
11	0741606	4	Bolt 3/8"-16NC x 3/4"	
12	0902047	1	Bracket, Sequence Cable	
13	0902422	1	Bracket, Bottom Chain Attach	
14	0902423	1	Bracket, Bottom Chain Attach	
15	0902424	1	Bracket, Bottom Chain Attach	
16	0902431	3	Bracket, Sequence Cable	
17	0902445	3	Bracket, Sequence Cable	
18	1060683	3	Cable, Sequence	
19 to 20	Not Used			
21	1271392	1	Channel, Mast #6	
22	1271419	1	Channel, Mast #3	
23	1271421	1	Channel, Mast #2	
24	1271446	1	Channel, Mast Header	
25	1271447	1	Channel, Mast #1	
26		1	Cylinder Assembly Options (See Section 5 for Breakdown)	
	1683808		Prior to S/N 18391	
	1684142		S/N 18391 to Present	
27	2880310	3	Key	
28	3760383	1	Ring, Retaining	
29	3311401	3	Nut 1/4"-20NC	
30	3311601	8	Nut 3/8"-16NC	
31	3311801	4	Nut 1/2"-13NC	
32	3340845	14	Pad, Slide Guide	
33	3340858	2	Pad, Slide Guide	
34	Not Used			
35	3422717	3	Pin	
36	3422750	2	Pin	
37	3422752	1	Pin	
38	3422757	2	Pin, Keeper	
39	3570893	2	Plate	
40 to 41	Not Used			

SECTION 3 MAST

FIGURE 3-2. MAST ASSEMBLY - 15ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
42	3580268	2	Sheave Assembly Options:	
	3580286		Sheave - Prior to S/N 18391	
			Sheave - S/N 18391 to Present	
		1	Bearing Options:	
	0440225		Bearing - Prior to S/N 18391	
	0440246		Bearing - S/N 18391 to Present	
43	3580269	3	Sheave, Sequence Cable	
44		4	Chain, Sheave Assembly Options:	
	3580274		Sheave - Prior to S/N 17527	
	3580293		Sheave - S/N 17527 to Present	
			Bearing Options:	
	0440230		Bearing - Prior to S/N 17527	
	0440246	1	Bearing - S/N 17527 to Present	
45	3820034	12	Rivet	
46	3900187	3	Screw, Shoulder	
47	3900192	8	Screw 3/8"-16NC x 1/2"	
48	3900205	8	Screw #10-24NC x 5/8"	
49	4060960	2	Shield, Mast Cover	
50	4060961	1	Shield, Mast Cover	
51	4070860	14	Shim, Slide Pad	
52	4070861	14	Shim, Slide Pad	
53	4070862	28	Shim, Slide Pad	
54	4070970	2	Shim, Cylinder Mount	
55	4070971	2	Shim, Cylinder Mount	
56	4070988	2	Shim, Slide Pad	
57	4070989	2	Shim, Slide Pad	
58	4070990	2	Shim, Slide Pad	
59	4160124	3	Spring	
60	4567489	2	Tube, Spacer	
61	4567492	1	Tube, Spacer	
62	4567749	1	Tube, Spacer	
63	4567750	1	Tube, Spacer	
64	4567751	1	Tube, Spacer	
65	4711400	A/R	Flatwasher 1/4" Narrow	
66	4711500	3	Flatwasher 5/16" Narrow	
67	4711800	4	Flatwasher 1/2" Narrow	
68	4712600	15	Flatwasher 1" Narrow (Prior to S/N 17527 Only)	
69	4740414	6	Washer, Cup	
70	4750800	8	Flatwasher #8 Wide	
71	Not Used			
72	4761000	8	Lockwasher #10	
73	4761400	3	Lockwasher 1/4"	
74	4761500	1	Lockwasher 5/16"	
75		1	Mount, Cylinder Options:	
75A	4845731		S/N 15116 to S/N 18391	
75A	4846381		S/N 18391 to S/N 19415	
75B	4846514		S/N 19415 to Present	
75C	3572847	1	Clamp, Cylinder (S/N 19415 to Present Only)	
75D	3900163	2	Screw Socket Head 3/8"-16NC x 2" (S/N 19415 to Present Only)	

SECTION 3 MAST

FIGURE 3-2. MAST ASSEMBLY - 15ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
76	Not Used			
77		1	Chain/Clevis Assembly Options (See Items 101-111 for Breakdown):	
	Not Available		Prior to S/N 13391 (#466 Chain)	
	1260355		S/N 13391 to Present (#544 Chain)	
78	1260356	1	Chain/Clevis Assembly (#444) (See Items 201-211 for Breakdown)	
79	1260357	1	Chain/Clevis Assembly (#444) (See Items 301-311 for Breakdown)	
80	0641408	3	Bolt 1/4"-20NC x 1" (S/N 14971 to Present Only)	
81	4060987	1	Shield, Mast	
82	4740007	15	Thrust Washer (S/N 16290 to Present)	
83	3020041	A/R	Lubricant, Krytox (Not Shown) (S/N 19128 to Present)	
	2901673	1	Mast Kit (Includes Items 21 thru 25)	
		Ref.	CHAIN/CLEVIS ASSEMBLY OPTIONS	
	Not Available	Ref.	#466 Chain (Prior to S/N 13391)	
	1260355	Ref.	#544 Chain (S/N 13391 to S/N 15116)	C
101	0100062	A/R	Loctite #RC/640 (Not Shown)	
102		2	Block Options:	
	Use 0561409		#466 Chain (Prior to S/N 13391) (Was p/n 0561150)	
	0561308		#544 Chain (S/N 13391 to S/N 15116)	
103		2	Block Options:	
	0561153		#466 Chain (Prior to S/N 13391)	
	0561336		#544 Chain (S/N 13391 to S/N 15116)	
104	Kit	A/R	Chain	
105	3422338	2	Pin, Clevis	
106		4	Pin Options:	
	3422346		#466 Chain (Prior to S/N 13391)	
	3422720		#544 Chain (S/N 13391 to S/N 15116)	
107	3450202	8	Pin, Cotter	
108	3450304	2	Pin, Cotter	
109	3571101	1	Plate, Clevis	
110		2	Stud Options:	
	4300111		#466 Chain (Prior to S/N 13391)	
	4300129		#544 Chain (S/N 13391 to S/N 15116)	
111	4711500	2	Flatwasher 5/16" Narrow	
		2	Chain Kit Options:	
	1260347		#466 Chain (Prior to S/N 13391) (Includes Qty 1 of #101-103 & 110, Qty 71in/1.8m of #104 and Qty 2 of #106)	D
	1260343		#544 Chain (S/N 13391 to S/N 15116) (Includes Qty 1 of #101-103 & 110, Qty 71in/1.8m of #104, Qty 2 of #106 and Qty 4 of #107)	B

SECTION 3 MAST

FIGURE 3-2. MAST ASSEMBLY - 15ELSP (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
	1260356	Ref.	CHAIN/CLEVIS ASSEMBLY - #444 CHAIN	C
201	0100062	A/R	Loctite #RC/640 (Not Shown)	
202	0561149	2	Block	
203		2	Block Options:	
	0561151		Prior to S/N 14971	
	0561408		S/N 14971 to S/N 15116	
204	Kit	A/R	Chain	
205	3422338	2	Pin, Clevis	
206	3422346	2	Pin, Groove	
207	3450355	2	Pin, Groove	
208	3450304	2	Pin, Cotter	
209	3571103	1	Plate, Clevis	
210	4300111	2	Stud	
211	4711500	2	Flatwasher 5/16" Narrow	

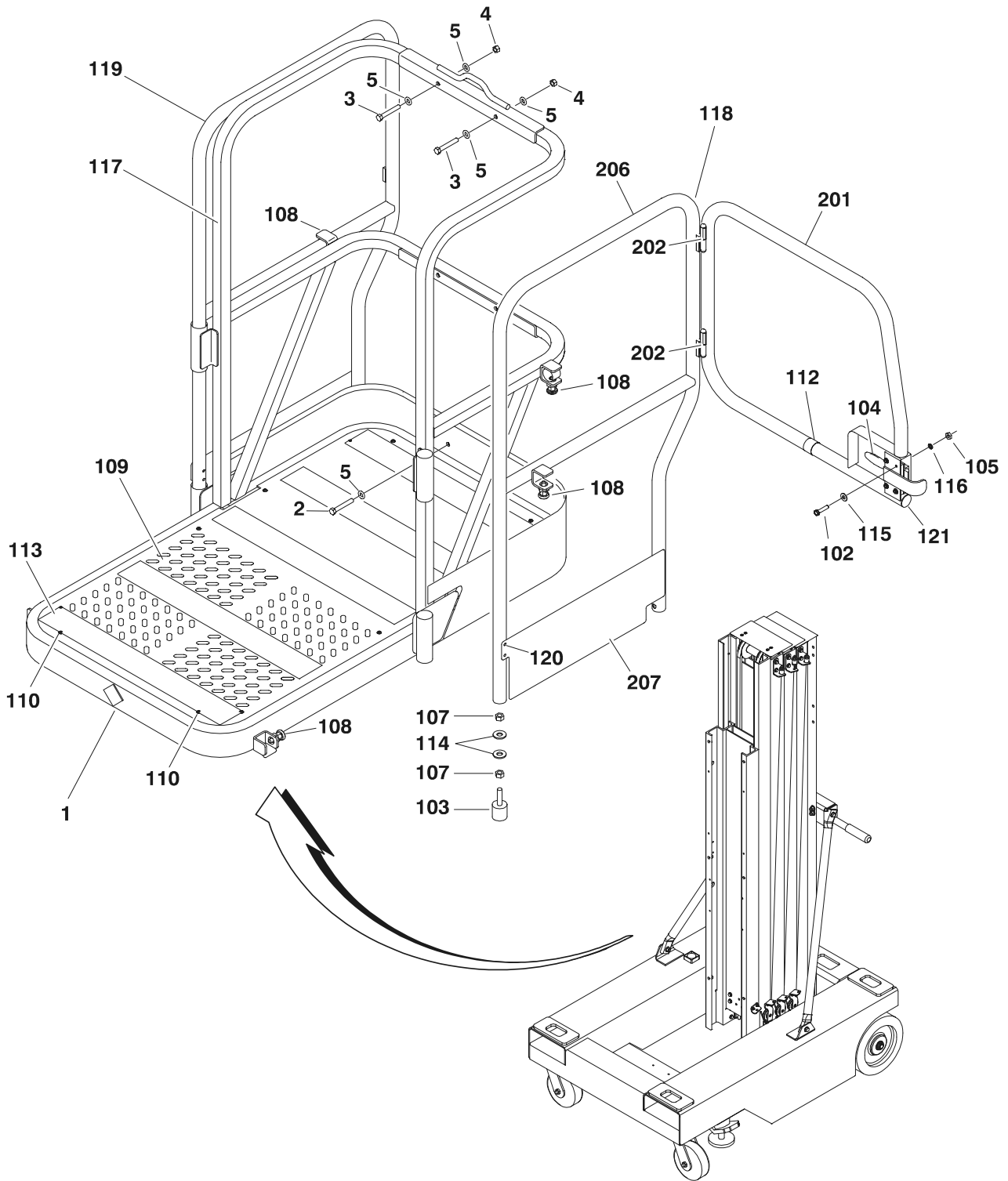
	1260349	2	Chain Kit (Includes Qty 1 of #201-203, 206 & 210 and Qty 71in/ 1.8m of #204)	C
	1260357	Ref.	CHAIN/CLEVIS ASSEMBLY - #444 CHAIN	C
301	0100062	A/R	Loctite #RC/640 (Not Shown)	
302	0561149	2	Block	
303		2	Block Options:	
	0561151		Prior to S/N 14971	
	0561408		S/N 14971 to S/N 15116	
304	Kit	A/R	Chain	
305	3422338	2	Pin, Clevis	
306	3422346	2	Pin, Groove	
307	3450355	2	Pin, Groove	
308	3450304	2	Pin, Cotter	
309	3571101	1	Plate, Clevis	
310	4300111	2	Stud	
311	4711500	2	Flatwasher 5/16" Narrow	

	1260349	2	Chain Kit (Includes Qty 1 of #301-303, 306 & 310 and Qty 71in/ 1.8m of #304)	C

SECTION 4 PLATFORM

SECTION 4 PLATFORM

FIGURE 4-1. STEEL BASE PLATFORM INSTALLATION (PRIOR TO 18610)



SECTION 4 PLATFORM

FIGURE 4-1. STEEL BASE PLATFORM INSTALLATION (PRIOR TO 18610)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	PLATFORM INSTALLATIONS	
	0259376	Ref.	Folding Siderails	A
	0270439	Ref.	Fixed Siderails	A
1		1	Platform Assembly Options:	
	0259350		Folding Siderails (Prior to S/N 18610)	
	0270438		Fixed Siderails (Prior to S/N 18610)	
2	0641616	2	Bolt 3/8"-16NC x 2"	
3	0641620	4	Bolt 3/8"-16NC x 2 1/2"	
4	3311605	6	Locknut 3/8"-16NC	
5	4711600	12	Flatwasher 3/8" Narrow	
		Ref.	PLATFORM ASSEMBLY	
	0259350	Ref.	Folding Siderails (Prior to S/N 18610)	G
	0270438	Ref.	Fixed Siderails (Prior to S/N 18610)	C
101	0100011	A/R	Loctite (Not Shown)	
102	0721008	4	Screw	
103	0940049	2	Stopper, Hood	
104	2940074	1	Latch	
105	3311001	4	Nut #10-24NC	
106	Not Used			
107	3311501	4	Nut 5/16"-18NC	
108		A/R	Hardware Options:	
	3422744	5	Pin, Plunger (Folding Siderails)	
	0630545	2	Bolt 5/8"-18NC (Fixed Siderails)	
109	3571552	1	Plate, Platform Pan	
110	3820032	12	Rivet	
111	Not Used			
112	4280296	8in/51cm	Strip	
113	4420039	10ft/3m	Tape, Non Skid	
114	4751500	4	Flatwasher 5/16"	
115	4751000	4	Flatwasher #10	
116	4761000	4	Lockwasher #10	
117		1	Platform Options:	
	4846030		Prior to S/N 15643	
	4846323		S/N 15643 to S/N 18610	
118		1	Gate & Left Side Handrail Assembly Options (See Items 201-207 for Breakdown)	
	4846034		Prior to S/N 15643	
	4846324		S/N 15643 to S/N 18610	
119		1	Right Side Handrail Options:	
	4846035		Prior to S/N 15643	
	4846325		S/N 15643 to S/N 18610	
120	2080040	4	Fastener, Huck (S/N 13574 to S/N 18610 Only)	
121	3520176	1	Plug (S/N 14145 to S/N 18610 Only)	
122	0962337	2	Bushing (S/N 15489 to S/N 18610 Only)	
123	3422866	2	Pin, Hinge (S/N 15489 to S/N 18610 Only)	
124	3760448	2	Ring, Snap (S/N 15489 to S/N 18610 Only)	

SECTION 4 PLATFORM

FIGURE 4-1. STEEL BASE PLATFORM INSTALLATION (PRIOR TO 18610) (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	GATE & LEFT SIDE HANDRAIL ASSEMBLY	
	4846034	Ref.	Prior to S/N 15643	B
	4846324	Ref.	S/N 15643 to S/N 18610	A
201	1780303	1	Gate	
202		2	Hinge Options:	
	2600189		Prior to S/N 15643	
	2600268		S/N 15643 to S/N 18610	
203 to 205	Not Used			
206		1	Left Side Handrail Options:	
	4846032		Prior to S/N 15643	
	4846326		S/N 15643 to S/N 18610	
207		1	Plate, Kick	
	3571650		Prior to S/N 15643	
	3572584		S/N 15643 to S/N 18610	

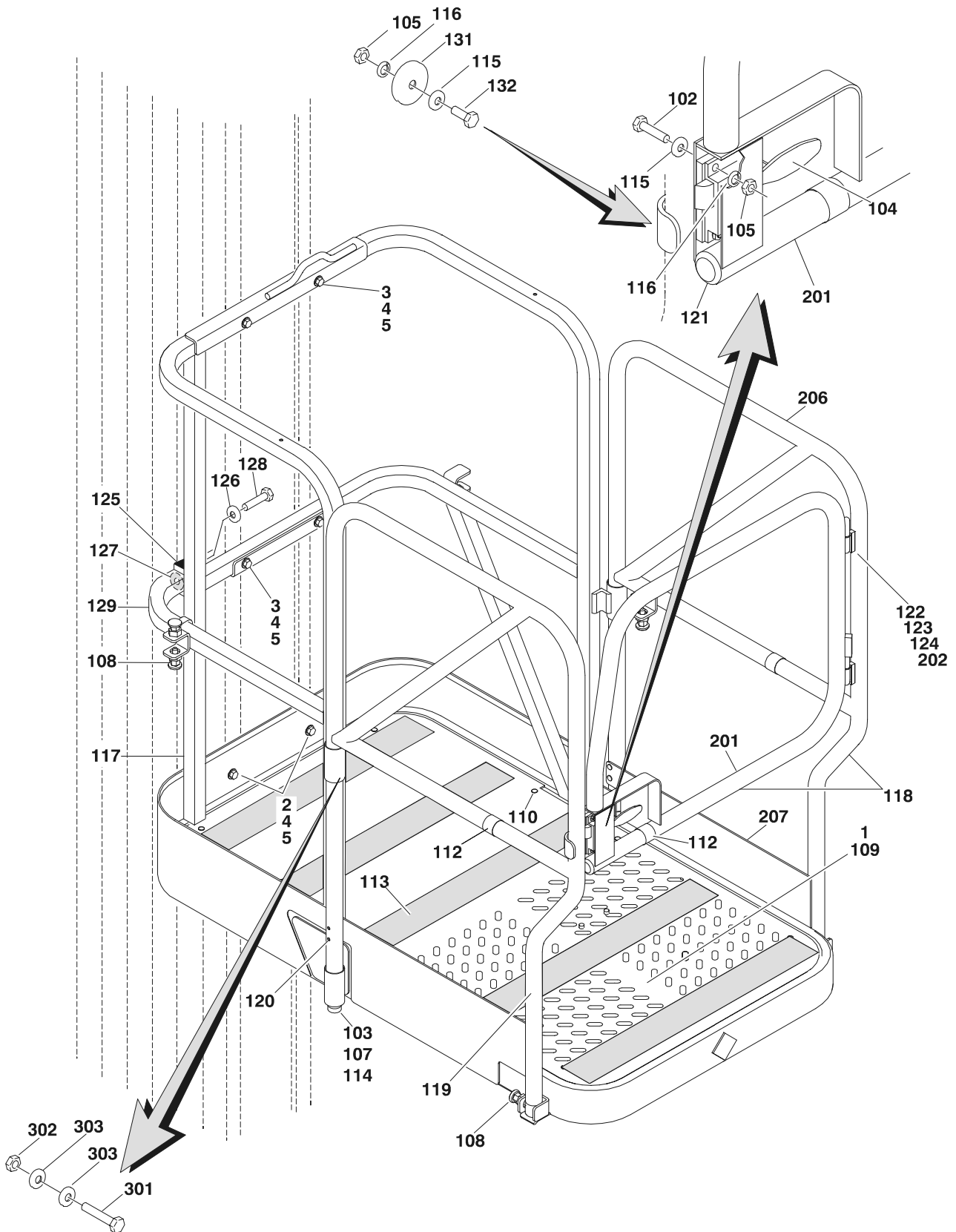
SECTION 4 PLATFORM

FIGURE 4-1. STEEL BASE PLATFORM INSTALLATION (PRIOR TO 18610) (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 4 PLATFORM

FIGURE 4-2. STEEL BASE PLATFORM INSTALLATION (S/N 18610 TO PRESENT)



SECTION 4 PLATFORM

FIGURE 4-2. STEEL BASE PLATFORM INSTALLATION (S/N 18610 TO PRESENT)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	PLATFORM INSTALLATIONS	
	0259376	Ref.	Folding Siderails	B
	0270439	Ref.	Fixed Siderails	B
1		1	Platform Assembly Options (See Items 101-132):	
	0272264		Folding Siderails (S/N 18610 to Present)	
	0272265		Fixed Siderails (S/N 18610 to Present)	
2	0641616	2	Bolt 3/8"-16NC x 2"	
3	0641620	4	Bolt 3/8"-16NC x 2 1/2"	
4	3311605	6	Locknut 3/8"-16NC	
5	4711600	12	Flatwasher 3/8" Narrow	
		Ref.	PLATFORM ASSEMBLY	
	0272264	Ref.	Folding Siderails (S/N 18610 to Present)	E
	0272265	Ref.	Fixed Siderails (S/N 18610 to Present)	F
101	0100011	A/R	Loctite (Not Shown)	
102	Use 0630572	4	Screw (Was p/n 0721008)	
103	0940049	2	Stopper, Hood	
104	2940074	1	Latch	
105	3311001	5	Nut #10-24NC	
106	Not Used			
107	3311501	2	Nut 5/16"-18NC	
108		A/R	Hardware Options:	
	3422744	5	Pin, Plunger (Folding Siderails)	
	0630545	2	Bolt 5/8"-18NC (Fixed Siderails)	
109	3571552	1	Plate, Platform Pan	
110	3820032	12	Rivet	
111	Not Used			
112	4280296	21in/53cm	Strip	
113	4420039	8.5ft/2.6m	Tape, Non Skid	
114	4751500	4	Flatwasher 5/16" (Prior to S/N 22851 Only)	
115	4751000	5	Flatwasher #10	
116	4761000	5	Lockwasher #10	
117	4846521	1	Platform	
118	4846324	1	Gate & Left Side Handrail Assembly (See Items 201-207 for Breakdown)	
119	4846325	1	Right Side Handrail	
120	2080040	4	Fastener, Huck	
121	3520176	1	Plug	
122	0962337	2	Bushing	
123	3422866	2	Pin, Hinge	
124	3760448	2	Ring, Snap	
125	3520072	2	Cap-Plug	
126	4711800	2	Flatwasher 1/2" Narrow	
127	4711600	1	Flatwasher 3/8" Narrow	
128	3900270	1	Bolt, Shoulder 1/2"-13NC x 1 1/2" (
129	4846522	1	Gate Weldment	
130	0100019	A/R	Loctite #271 (Not Shown)	

SECTION 4 PLATFORM

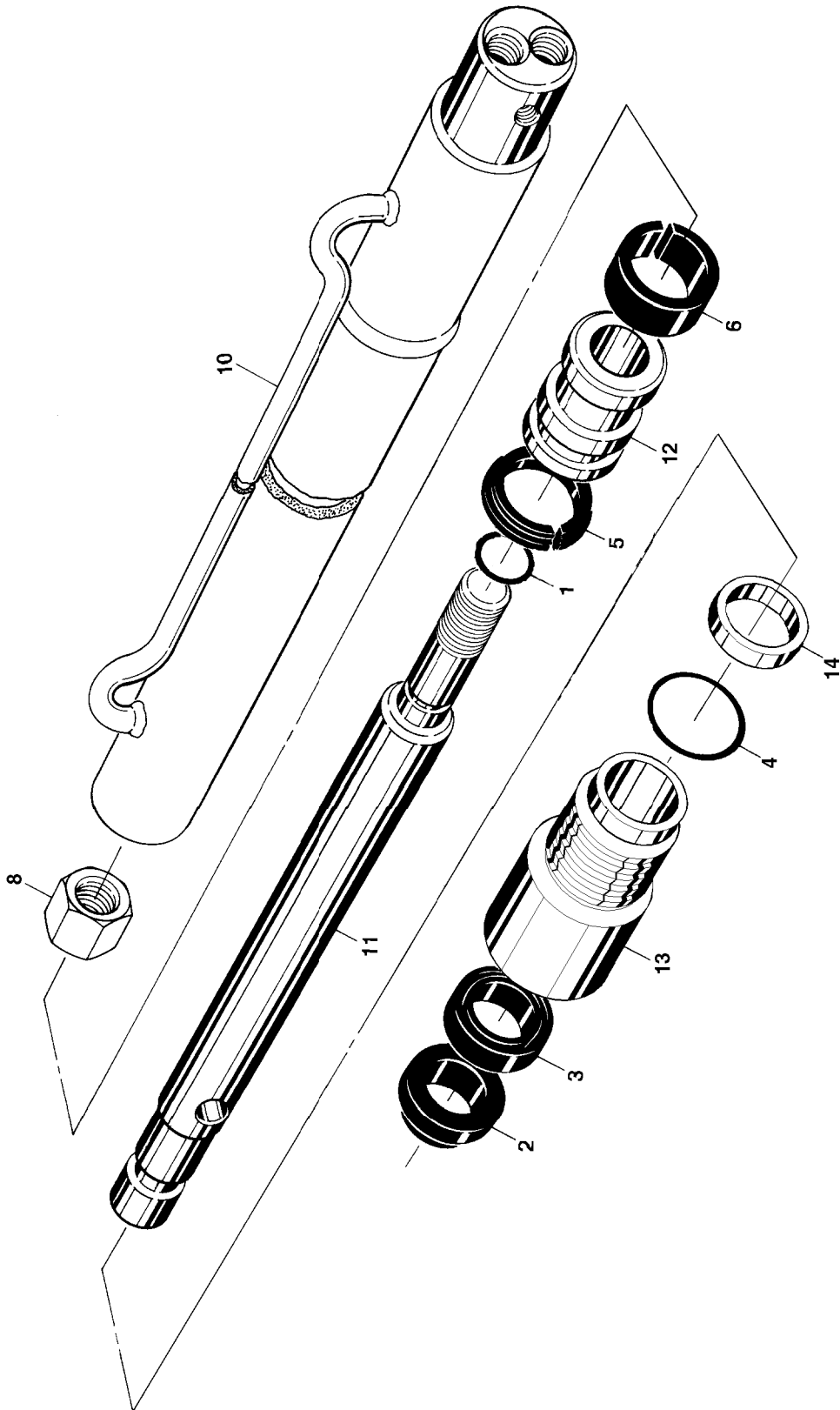
FIGURE 4-2. STEEL BASE PLATFORM INSTALLATION (S/N 18610 TO PRESENT)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
131	3080005	1	Magnet, Gate (S/N 19218 to Present Only)	
132	0721004	1	Screw #10-24NC x 1/2"	
	4846324	Ref.	GATE & LEFT SIDE HANDRAIL ASSEMBLY	A
201	1780303	1	Gate	
202	2600268	2	Hinge	
203 to 205	Not Used			
206	4846326	1	Left Side Handrail	
207	3572584	1	Plate, Kick	
	0272524	Ref.	ENTRY GATE LOCK INSTALLATION	B
301	0641418	1	Bolt 1/4"-20NC x 2 1/4"	
302	3311405	1	Locknut 1/4"-20NC	
303	4751400	2	Flatwasher 1/4"	

SECTION 5 CYLINDER

SECTION 5 CYLINDER

FIGURE 5-1. LIFT CYLINDER ASSEMBLY (PRIOR TO S/N 18391)



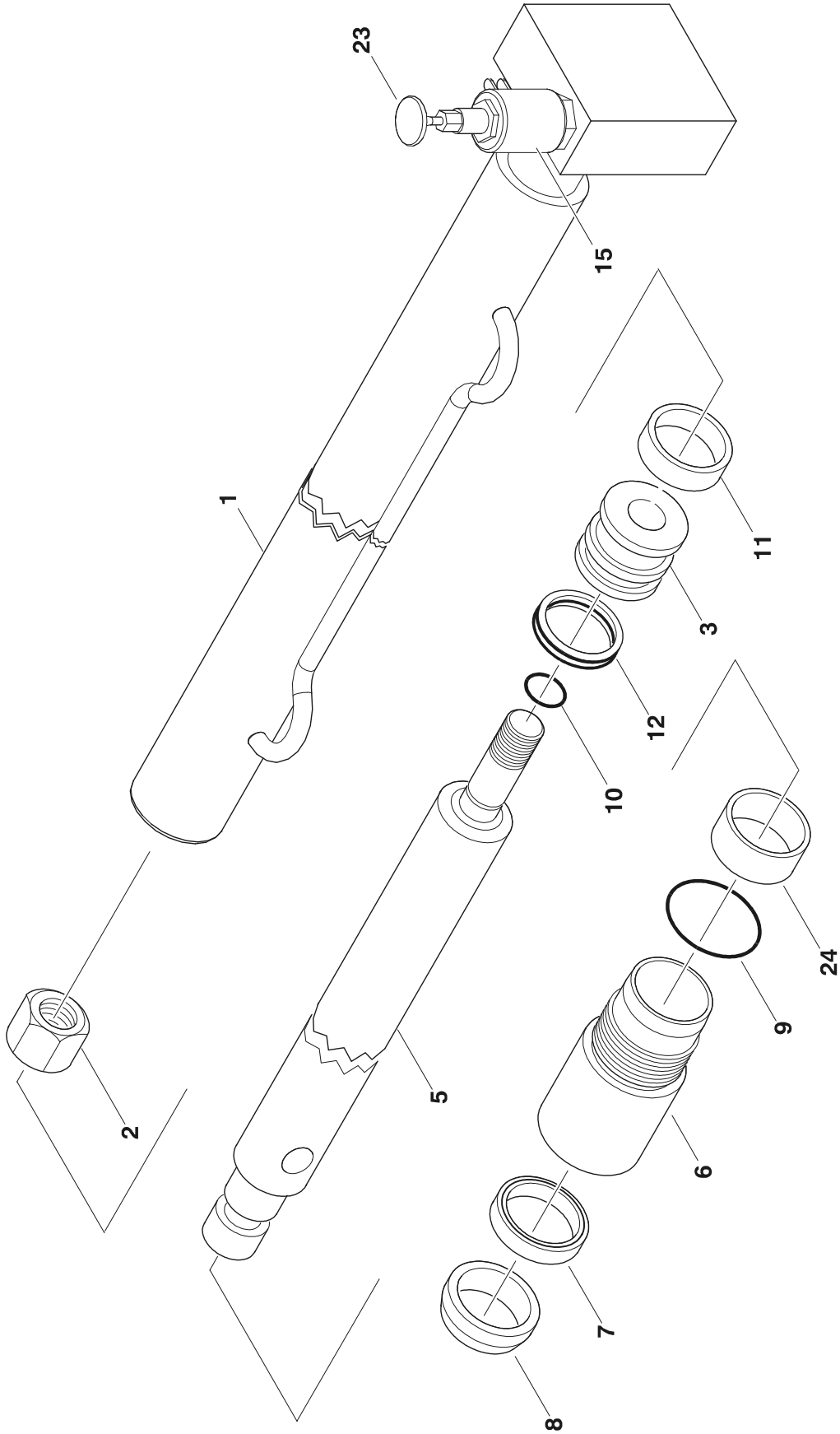
SECTION 5 CYLINDER

FIGURE 5-1. LIFT CYLINDER ASSEMBLY (PRIOR TO S/N 18391)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	LIFT CYLINDER ASSEMBLY	
	1686981	Ref.	12SP with 5 Section Mast	A
	1683808	Ref.	12SP with 4 Section Mast	A
	1683808	Ref.	15SP	A
1	Kit	1	O-Ring	
2	Kit	1	Wiper	
3	Kit	1	Seal	
4	Kit	1	O-Ring	
5	Kit	1	Seal	
6	Kit	1	Ring, Wear	
7	Not Used			
8	7003246	1	Locknut	
9	Not Used			
10	7019839	1	Barrel	
11	7019838	1	Rod	
12	7019835	1	Piston	
13	7019834	1	Head	
14	7019872	1	Spacer Options: 1683808 Cylinder 1683981 Cylinder	
	Not Available		-----	
	7019833	1	Seal Kit (Includes Items 1-6)	

SECTION 5 CYLINDER

FIGURE 5-2. LIFT CYLINDER ASSEMBLY (S/N 18391 TO PRESENT)



SECTION 5 CYLINDER

FIGURE 5-2. LIFT CYLINDER ASSEMBLY (S/N 18391 TO PRESENT)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
	1684142	Ref.	LIFT CYLINDER ASSEMBLY	H
1	Not Available	1	Barrel	
2	7023391	1	Nut	
3	7023392	1	Piston	
4	Not Used	1		
5	7023393	1	Rod	
6	7023394	1	Head	
7	Kit	1	Seal, Rod	
8	Kit	1	Rod Wiper	
9	Kit	1	O-Ring	
10	Kit	1	O-Ring	
11	Kit	1	Ring, Wear	
12	Kit	1	Seal, Piston	
13	Not Used			
14	Not Used			
15	7024354	1	Poppet, Solenoid Valve	
16	7023397	1	Spring (Not Shown)	
17	7023398	1	Control Valve (Not Shown)	
18	Not Used			
19	Not Used			
20	Not Used			
21	Not Used			
22	Not Used			
23	7023399	1	Knob - Red	
24	Not Required	0	Spacer	
	7023395	1	Seal Kit (Includes Items 7-12)	

SECTION 5 CYLINDER

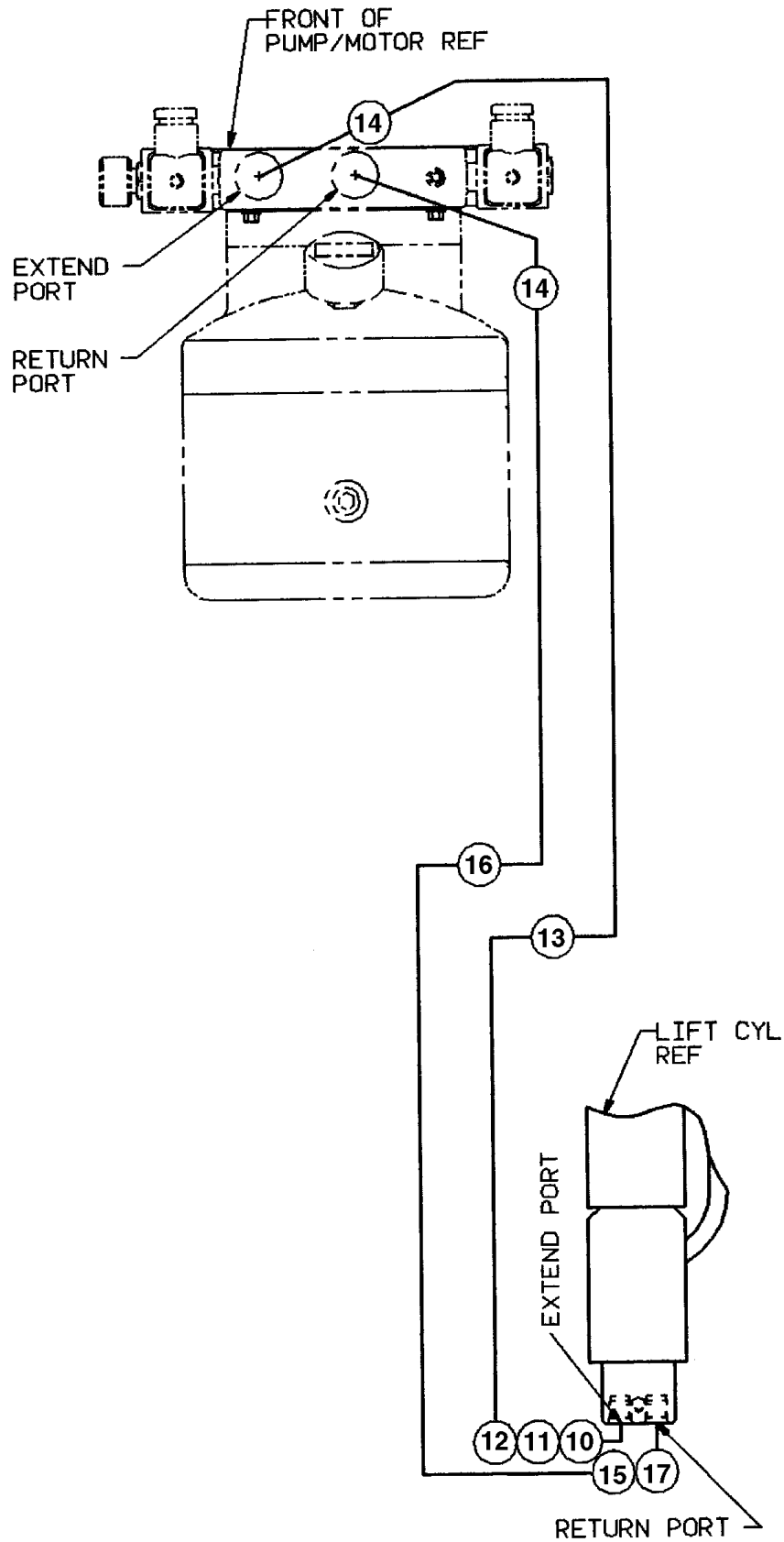
FIGURE 5-2. LIFT CYLINDER ASSEMBLY (S/N 18391 TO PRESENT) (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 6 HYDRAULIC

SECTION 6 HYDRAULIC

FIGURE 6-1. HYDRAULIC DIAGRAM



SECTION 6 HYDRAULIC

FIGURE 6-1. HYDRAULIC DIAGRAM

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	HYDRAULIC DIAGRAMS	
	0270117	Ref.	12SP Prior to S/N 15116	B
	0259294	Ref.	12SP S/N 15116 to S/N 18391	A
	0271928	Ref.	12SP S/N 18391 to Present	A
	0259294	Ref.	15SP Prior to S/N13653	A
	0258478	Ref.	15SP S/N13653 to S/N13872	B
	0270117	Ref.	15SP S/N13872 to S/N 18391	B
	0271927	Ref.	15SP S/N 18391 to Present	A
1	0100020	A/R	Loctite #567 (Not Shown)	
2 to 4	Not Used			
5	2220473	2	Fitting	
6		A/R	Fitting 90° Options:	
	2220773	1	Prior to S/N 18391	
	Not Required	0	S/N 18391 to Present	
7		A/R	Fitting 90° Options:	
	2220507	1	Prior to S/N 18391	
	Not Required	0	S/N 18391 to Present	
8		1	Fitting Options:	
	2220875		Prior to S/N 18391	
	2220603		S/N 18391 to Present	
9 to 10	Not Used			
11		1	Tube Options:	
	4567669		Prior to S/N 18391	
	4568227		S/N 18391 to Present	
12		1	Tube Options:	
	4567670		Prior to S/N 18391	
	4568228		S/N 18391 to Present	
13		A/R	Valve, Flow Options:	
	Use 4640956	1	S/N 13653 to S/N 13872 (Was p/n 4640900)	
	4640956	1	Prior to S/N 13653 & S/N 13872 to S/N 18391	
	Not Required	0	S/N 18391 to Present (See Lift Cylinder Assembly)	
14 to 16	Not Used			
17	2220603	1	Fitting	

SECTION 6 HYDRAULIC

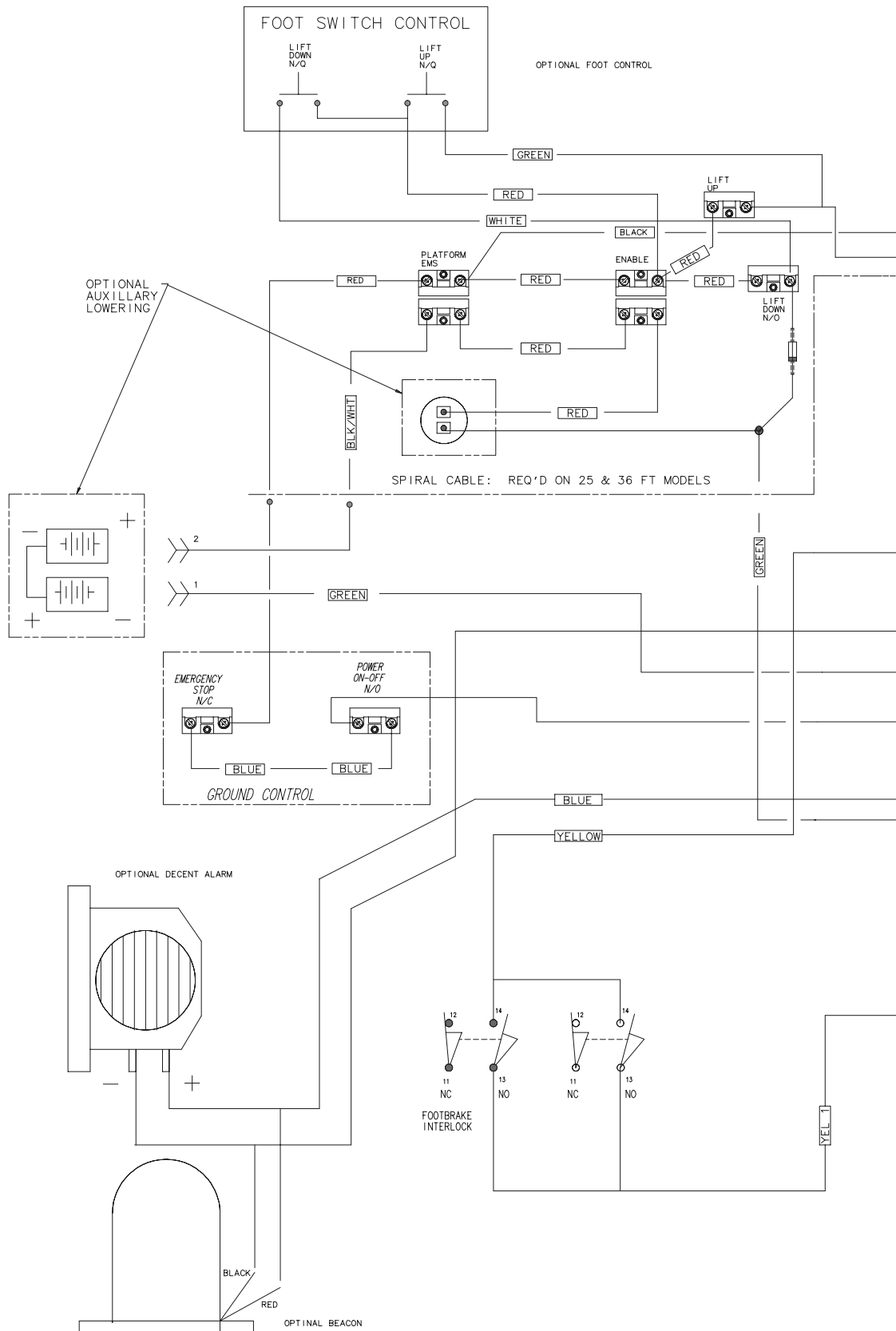
FIGURE 6-1. HYDRAULIC DIAGRAM (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 7 ELECTRICAL

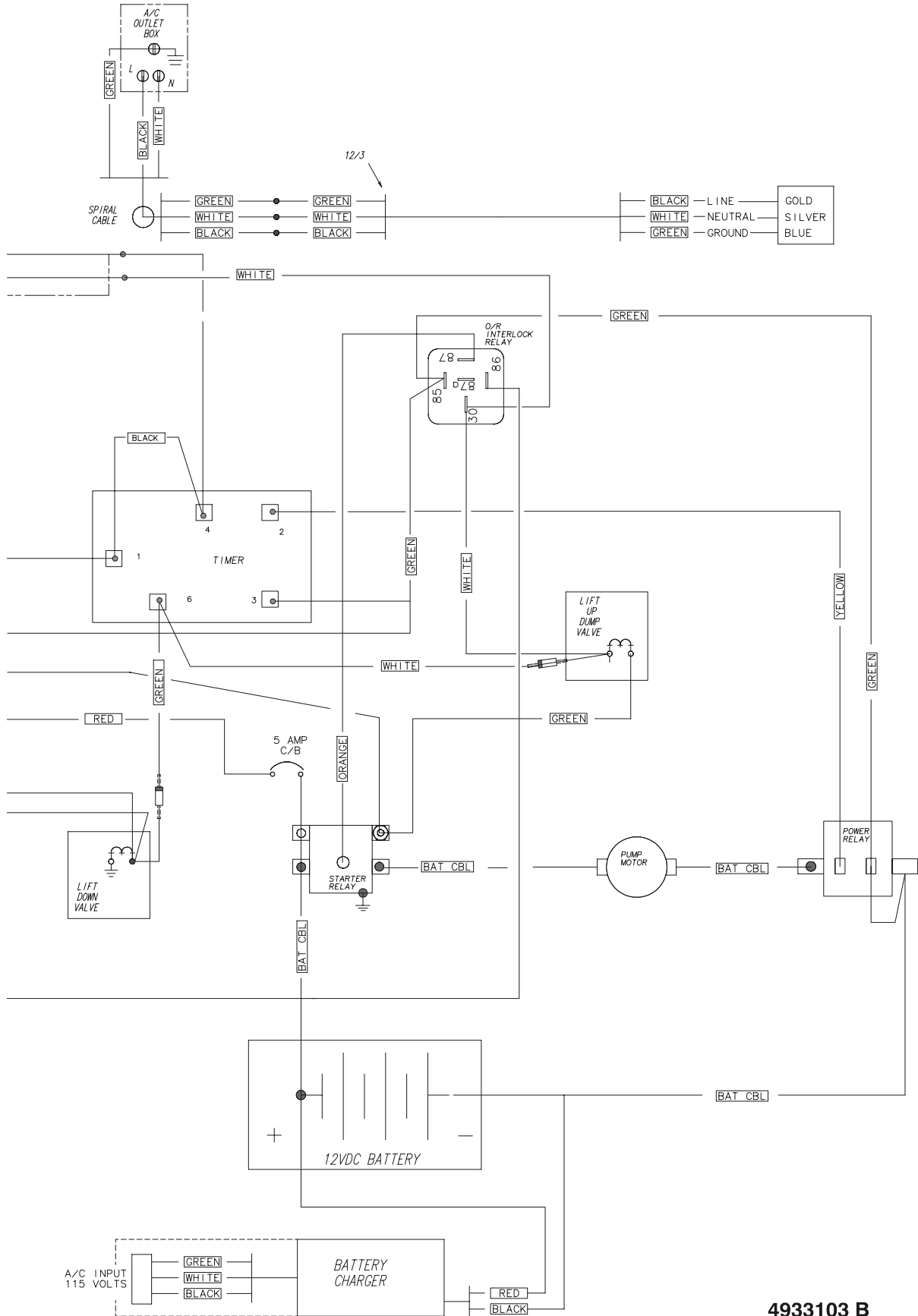
SECTION 7 ELECTRICAL

FIGURE 7-1. ELECTRICAL DIAGRAM (PRIOR TO S/N 17472)



4933103 B

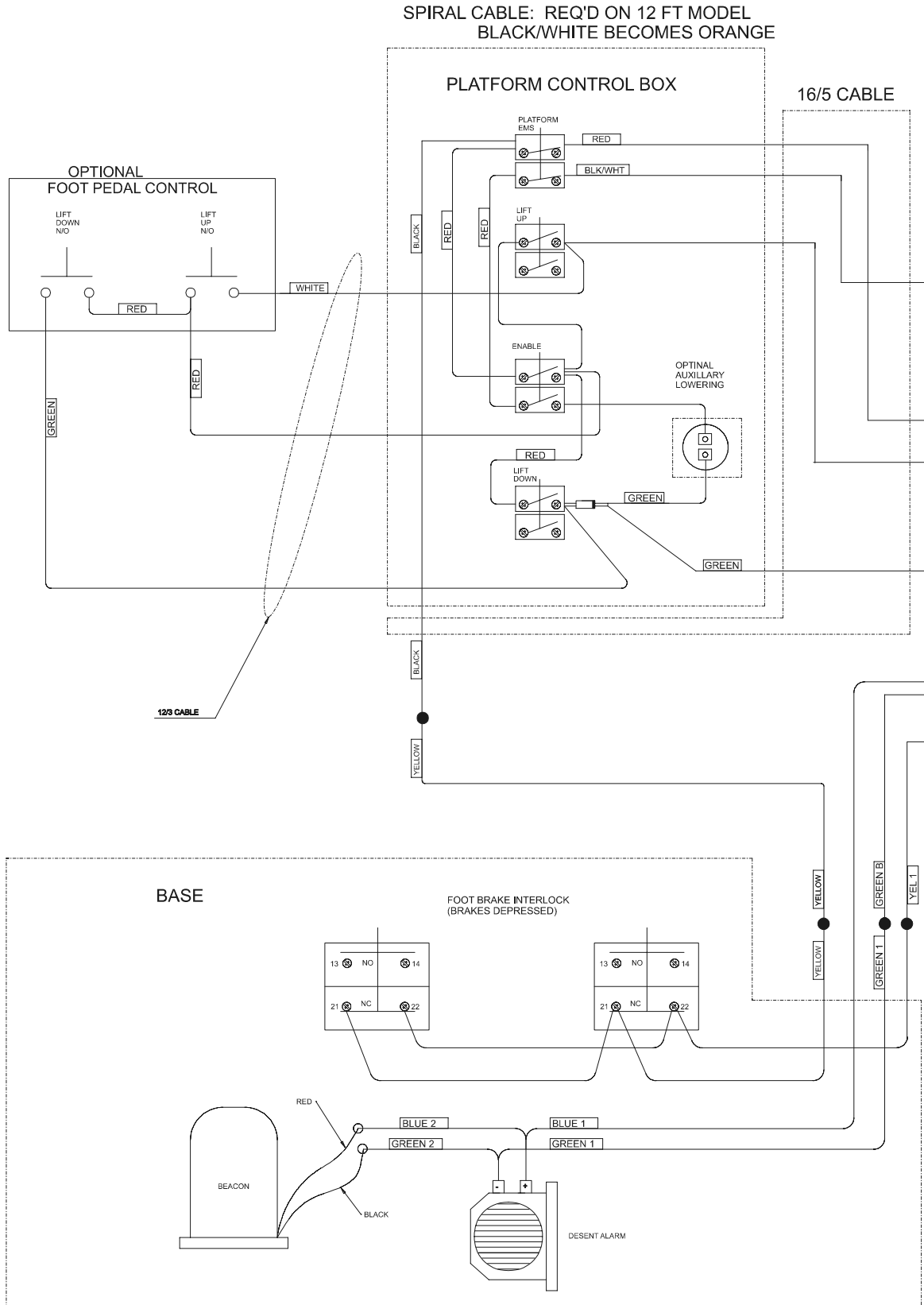
SECTION 7 ELECTRICAL



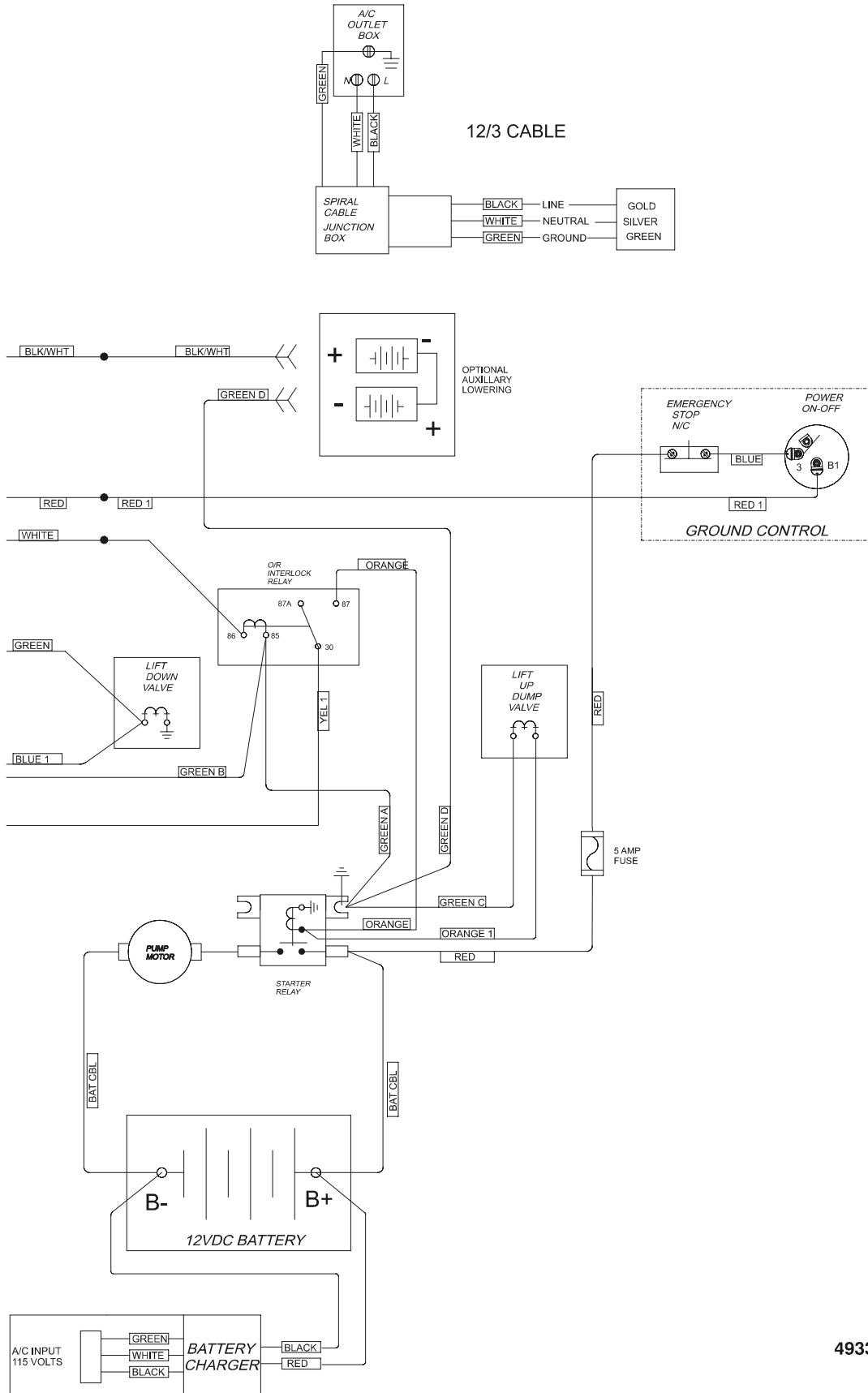
4933103 B

SECTION 7 ELECTRICAL

FIGURE 7-2. ELECTRICAL DIAGRAM (S/N 17472 TO PRESENT)



SECTION 7 ELECTRICAL



4933188 A

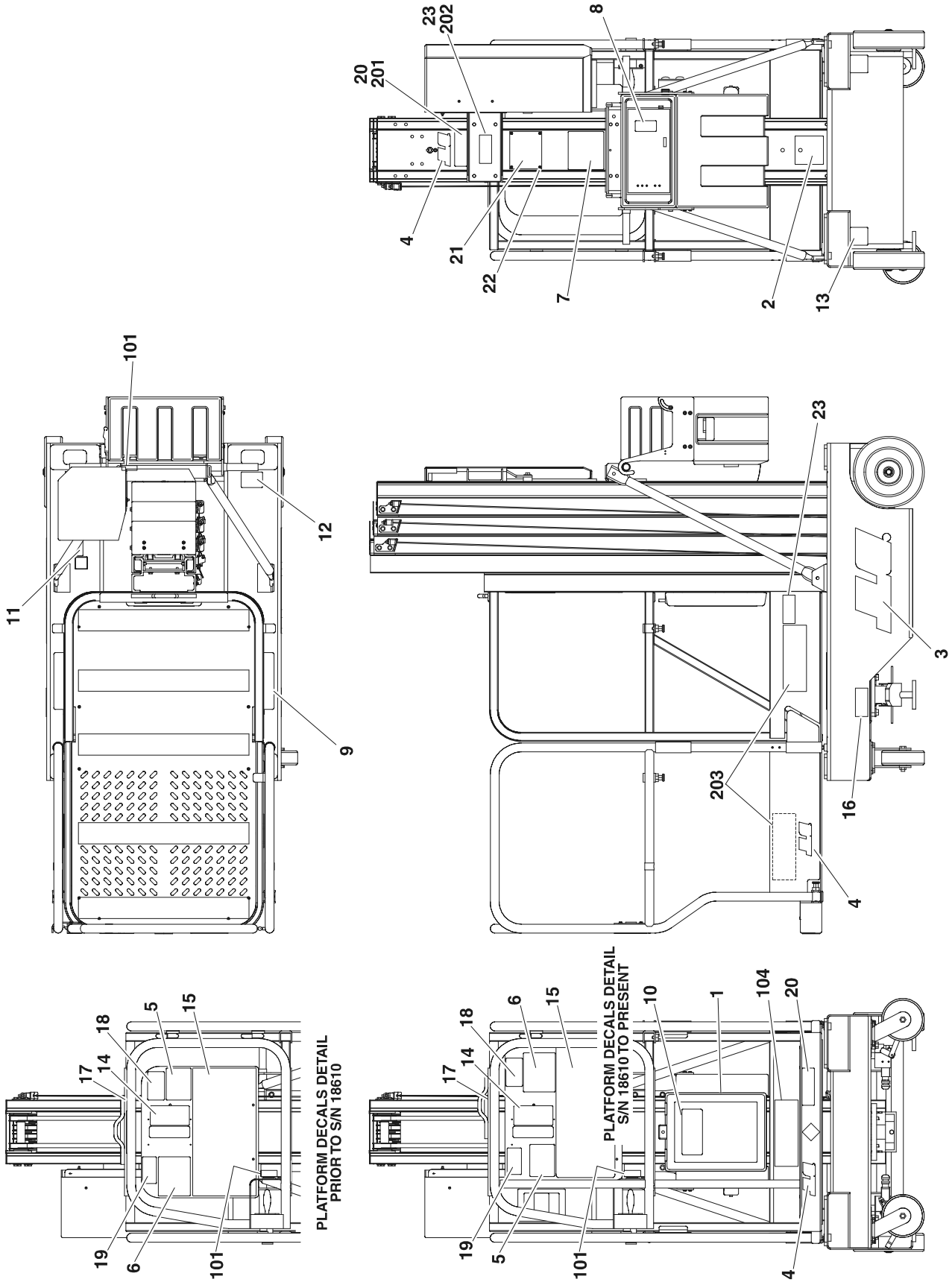
SECTION 7 ELECTRICAL

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 8 DECALS

SECTION 8 DECALS

FIGURE 8-1. DECAL INSTALLATION



SECTION 8 DECALS

FIGURE 8-1. DECAL INSTALLATION

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	DECAL INSTALLATION	
	0270404	Ref.	12ELSP	C
	0259438	Ref.	15ELSP	E
1	0860520	1	Box, Manual Storage	
2	Not Available	1	Decal - Bar Code	
3	1703625	2	Decal - JLG	
4	1703681	4	Decal - JLG	
5	1703779	1	Decal - USA	
6	1703781	1	Decal - Electric Hazard	
7	1703784	1	Decal - Crushing/Tipping Hazard	
8	1703785	1	Decal - Warning/ Fire Hazard	
9	1703786	2	Decal - Crushing Hazard	
10		1	Decal - Manual Options:	
	Use 1701509		Prior to S/N 17847 (Was P/N 1703788)	
	1701509		S/N 17847 to Present	
11	1703789	1	Decal - Level Indicator	
12	1703814	4	Decal - Tie Down	
13	1703817	2	Decal - Forklift	
14	1704212	1	Decal - Function Controls	
15	1704221	1	Decal - Warning	
16	1704424	2	Decal - Foot Stop	
17	1704277	1	Decal - Lanyard Attach	
18	1704365	1	Decal - 500lb Capacity	
19	1704366	1	Decal - Warning (Fall Hazard)	
20	Use Item #201	2	Decal - Model Designation	
21	Not Available	1	Nameplate - Serial Number	
22	3520006	4	Rivet	
23	Use Item #202	3	Decal - JLG Manufacturing (S/N 13574 to Present Only)	
	0258842	Ref.	VOLTAGE DECAL INSTALLATION	A
101	3251243	2	Decal - 120V - 60HZ	
		Ref.	ELSP DECAL INSTALLATION	
	0272425	Ref.	12ELSP	A
	0259615	Ref.	15ELSP	A
201		1	Decal - Model Designation Options:	
	1705401		12ELSP	
	1704392		15ELSP	
202	1704393	2	Decal - JLG Service Support	
203	1704394	4	Decal - Electric Ladder Logo	

SECTION 8 DECALS

FIGURE 8-1. DECAL INSTALLATION (CONTINUED)

ITEM #	PART NUMBER	QTY.	DESCRIPTION	REV.

SECTION 9 RECOMMENDED SERVICE PARTS STOCK

MODELS 12SP/15SP

The following list will service one machine (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.

Part Number	Description	Qty./Machine
STANDARD PARTS		
4360467	Switch, Key (Figure 2-1)	1
2860030	Key, Replacement (Figure 2-1)	1
3740049	Relay, Bosch (Figure 2-1)	1
2400006	Fuse (Figure 2-1)	1
3990010	Diode - 6 Amp (Figure 2-1)	2
7016735	Coupling (Figure 2-2)	1
7013760	Solenoid (Figure 2-2)	1
7016714	Breather (Figure 2-2)	1
7016786	Solenoid (Figure 2-2)	1
7011509	Breaker, Circuit - DC 50 Amp (Figure 2-4)	1
7018536	Breaker, Circuit - 3 Amp (Figure 2-4)	1
7018586	Switch, Slide (Figure 2-4)	1
7020078	Switch, Push - Pull (Red) (Figure 2-5)	1
7020088	Switch, Push-Button (White) (Figure 2-5)	1
7020089	Switch, Push-Button (Green) (Figure 2-5)	1
4360274	Switch, Push-Button (Figure 2-5)	1
2940074	Latch, Platform (Figure 4-2)	1
2940074	Latch, Platform (Steel Platform) (Figure 4-2)	1
2940082	Latch, Platform (Molded Platform) (Figure 4-3)	1

SECTION 9 RECOMMENDED SERVICE PARTS STOCK

MODELS 12SP/15SP

The following list will service one machine (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.

Part Number	Description	Qty./Machine

SECTION 10 SPECIAL OPTIONS

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

FIG&ITEM#	PART NUMBER	QTY.	DESCRIPTION	REV.
		Ref.	MISCELLANEOUS SPECIAL OPTIONS	
		Ref.	Special Tools:	
	7002821	1	Crimper (For Wire to Pin/Socket Connections)	
	7002823	1	Extractor (For Removal of Pin/Sockets Connectors)	
	4460467	1	Extractor 16-18 Gauge (For Wire to Pin/Socket from Deutsch Connectors)	
	4460510	1	Extractor 12-14 Gauge (For Wire to Pin/Socket from Deutsch Connectors)	
	7016654	1	Screwdriver, Magnetic	
	7004275	1	Seal Tool - 1"	
	7004276	1	Seal Tool - 1 1/2"	
	7002826	1	Seal Tool 2"	
	8896941	1	Stripper, Wire	

SECTION 10 SPECIAL OPTIONS

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

FIG&ITEM#	PART NUMBER	QTY.	DESCRIPTION	REV.



Corporate Office
JLG Industries, Inc.
1 JLG Drive
McConnellsburg PA. 17233-9533
USA
Phone: (717) 485-5161
Fax: (717) 485-6417

JLG Worldwide Locations

JLG Industries (Australia)
P.O. Box 5119
11 Bolwarra Road
Port Macquarie
N.S.W. 2444
Australia
Phone: (61) 2 65 811111
Fax: (61) 2 65 810122

JLG Industries (UK)
Unit 12, Southside
Bredbury Park Industrial Estate
Bredbury
Stockport
SK6 2sP
England
Phone: (44) 870 200 7700
Fax: (44) 870 200 7711

JLG Deutschland GmbH
Max Planck Strasse 21
D-27721 Ritterhude/Idpohl
Bei Bremen
Germany
Phone: (49) 421 693 500
Fax: (49) 421 693 5035

JLG Industries (Italia)
Via Po. 22
20010 Pregnana Milanese - MI
Italy
Phone: (39) 02 9359 5210
Fax: (39) 02 9359 5845

JLG Latino Americana Ltda.
Rua Eng. Carlos Stevenson,
80-Suite 71
13092-310 Campinas-SP
Brazil
Phone: (55) 19 3295 0407
Fax: (55) 19 3295 1025

JLG Europe B.V.
Jupiterstraat 234
2132 HJ Foofddorp
The Netherlands
Phone: (31) 23 565 5665
Fax: (31) 23 557 2493

JLG Industries (Norge AS)
Sofeimyrveien 12
N-1412 Sofienyr
Norway
Phone: (47) 6682 2000
Fax: (47) 6682 2001

JLG Polska
Ul. Krolewska
00-060 Warszawa
Poland
Phone: (48) 91 4320 245
Fax: (48) 91 4358 200

JLG Industries (Europe)
Kilmartin Place,
Tannochside Park
Uddingston G71 5PH
Scotland
Phone: (44) 1 698 811005
Fax: (44) 1 698 811055

JLG Industries (Pty) Ltd.
Unit 1, 24 Industrial Complex
Herman Street
Meadowdale
Germiston
South Africa
Phone: (27) 11 453 1334
Fax: (27) 11 453 1342

Plataformas Elevadoras
JLG Iberica, S.L.
Trapadella, 2
P.I. Castellbisbal Sur
08755Castellbisbal
Spain
Phone: (34) 93 77 24700
Fax: (34) 93 77 11762

JLG Industries (Sweden)
Enkopingsvagen 150
Box 704
SE - 175 27 Jarfalla
Sweden
Phone: (46) 8 506 59500
Fax: (46) 8 506 59534
