



# Illustrated Parts Manual

**Models**  
**E45A/AJ**  
**E40AJP**  
**E40AJPnarrow**  
**M45A/AJ**  
**M40AJP**  
**M40AJPnarrow**

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# TABLE OF CONTENTS

SECTION 1 - FRAME.....	7
FIGURE 1-1. STEER INSTALLATION.....	8
FIGURE 1-2. TIRE AND WHEEL DRIVE INSTALLATION .....	12
FIGURE 1-3. DRIVE HUB ASSEMBLY .....	16
FIGURE 1-4. HYDRAULIC COMPONENTS INSTALLATION .....	18
FIGURE 1-5. BRAKE/STEER VALVE ASSEMBLY .....	20
FIGURE 1-6. BATTERIES AND CHARGER INSTALLATIONS.....	22
FIGURE 1-7. BATTERY CHARGER ASSEMBLY (Prior to SN 49542).....	26
FIGURE 1-8. BATTERY CHARGER ASSEMBLY (SN 49542 to Present).....	28
FIGURE 1-9. ELECTRICAL COMPONENTS INSTALLATION (FRAME MOUNTED).....	32
FIGURE 1-10. MOTOR/GENERATOR INSTALLATION (M45 AND M40 ONLY).....	36
FIGURE 1-11. FRAME COVERS INSTALLATION.....	40
SECTION 2 - TURNTABLE.....	43
FIGURE 2-1. VALVES AND HORN INSTALLATIONS .....	44
FIGURE 2-2. MAIN CONTROL VALVE ASSEMBLY.....	46
FIGURE 2-3. TURNTABLE AND SWING DRIVE INSTALLATION.....	50
FIGURE 2-4. SWING MOTOR ASSEMBLY .....	52
FIGURE 2-5. SWING BEARING ASSEMBLY .....	54
FIGURE 2-6. TANK AND MOTOR/GENERATOR COMPONENTS INSTALLATION (M45 AND M40 ONLY) .....	56
FIGURE 2-7. GROUND CONTROL BOX ASSEMBLY.....	58
FIGURE 2-8. HOODS AND BEACON LIGHT INSTALLATIONS.....	62
SECTION 3 - BOOM.....	65
FIGURE 3-1. BOOMS INSTALLATION (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP) .....	66
FIGURE 3-2. MAIN BOOM ASSEMBLY (E45A AND M45A).....	70
FIGURE 3-3. MAIN BOOM ASSEMBLY (E45AJ AND M45AJ) .....	72
FIGURE 3-4. MAIN BOOM ASSEMBLY (E40AJP AND M40AJP) .....	74
FIGURE 3-5. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (Prior to SN 49945).....	76
FIGURE 3-6. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (SN 49945 to Present).....	78
FIGURE 3-7. SUPPORT/ROTATOR AND JIB ASSEMBLIES (AJ AND AJP) .....	80
FIGURE 3-8. ROTATOR ASSEMBLY (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP) .....	84
FIGURE 3-9. CABLES/CLAMPS AND LIMIT SWITCHES INSTALLATIONS (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP).....	88
SECTION 4 - PLATFORM.....	91
FIGURE 4-1. PLATFORM COMPONENTS INSTALLATION .....	92
FIGURE 4-2. PLATFORM PADDING INSTALLATION.....	96
FIGURE 4-3. PLATFORM CONSOLE ASSEMBLY.....	98
FIGURE 4-4. CONTROLLER ASSEMBLY (SWING AND LIFT).....	102
FIGURE 4-5. CONTROLLER ASSEMBLY (DRIVE AND STEER).....	104
SECTION 5 - CYLINDER.....	107
FIGURE 5-1. JIB CYLINDER ASSEMBLY (AJ AND AJP).....	108
FIGURE 5-2. PLATFORM LEVEL CYLINDER ASSEMBLY (E45A AND M45A) .....	110
FIGURE 5-3. PLATFORM LEVEL CYLINDER ASSEMBLY (AJ AND AJP) .....	112
FIGURE 5-4. LIFT CYLINDER ASSEMBLY - LOWER.....	114

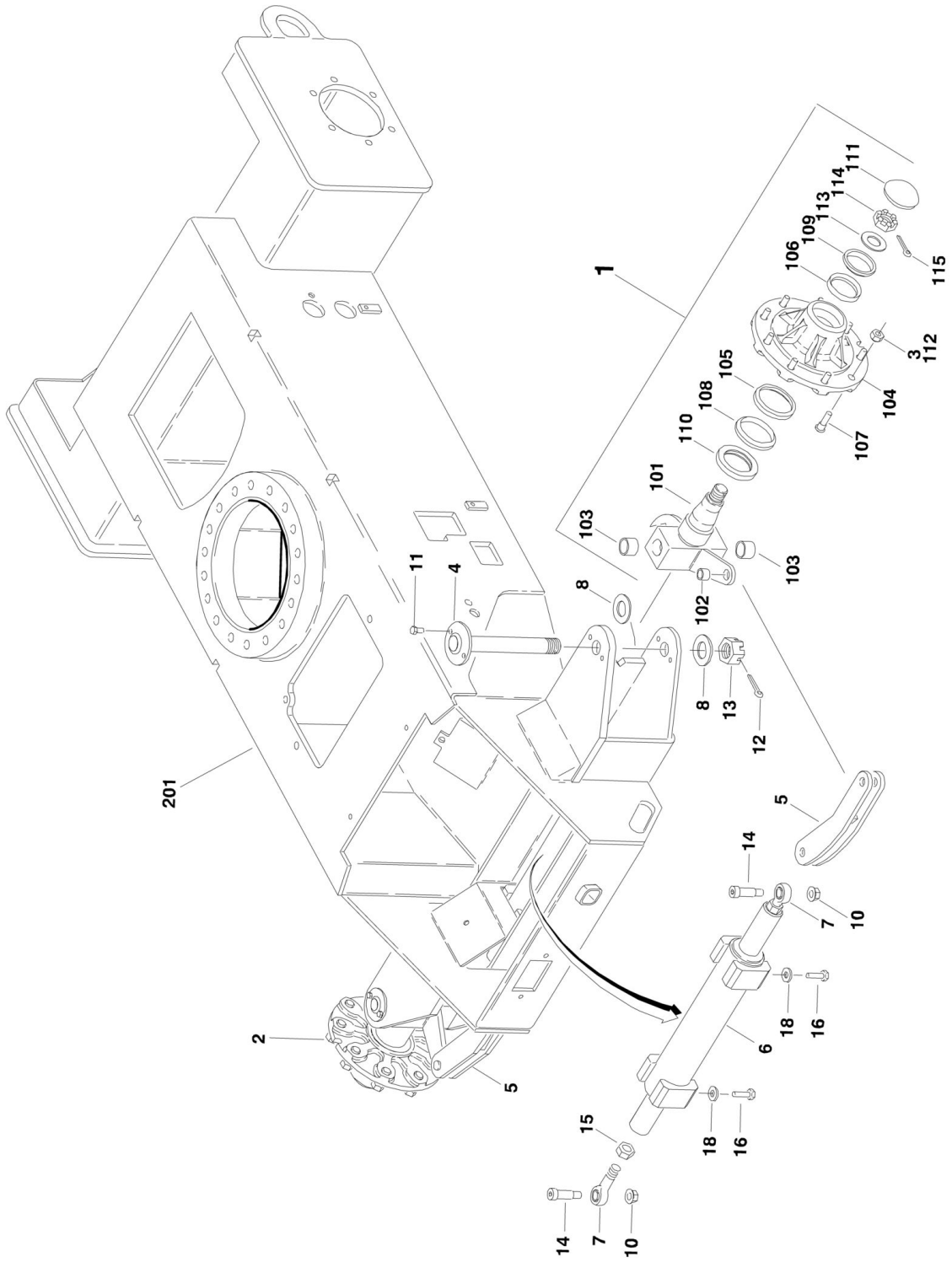
# TABLE OF CONTENTS

FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MID .....	116
FIGURE 5-6. LIFT CYLINDER ASSEMBLY - UPPER .....	118
FIGURE 5-7. MASTER CYLINDER ASSEMBLY (A MODELS) .....	120
FIGURE 5-8. MASTER CYLINDER ASSEMBLY (AJ AND AJP MODELS).....	122
FIGURE 5-9. ROTATOR CYLINDER ASSEMBLY (E45 AND M45 ONLY) (Prior to SN 49945) .....	124
FIGURE 5-10. STEER CYLINDER ASSEMBLY .....	126
FIGURE 5-11. TELESCOPE CYLINDER ASSEMBLY (E45 AND M45).....	128
FIGURE 5-12. TELESCOPE CYLINDER ASSEMBLY (E40 AND M40).....	130
SECTION 6 - HYDRAULIC .....	133
FIGURE 6-1. STANDARD HYDRAULIC DIAGRAM (E45A AND M45A).....	134
FIGURE 6-2. STANDARD HYDRAULIC DIAGRAM (E45AJ AND M45AJ) .....	138
FIGURE 6-3. STANDARD HYDRAULIC DIAGRAM (E40AJP AND M40AJP) .....	142
FIGURE 6-4. HYDRAULIC DIAGRAM LIST.....	146
SECTION 7 - ELECTRICAL.....	147
FIGURE 7-1. ELECTRICAL DIAGRAM LIST .....	148
FIGURE 7-2. ELECTRICAL SCHEMATIC (E45 AND M45 MODELS) .....	150
FIGURE 7-3. ELECTRICAL SCHEMATIC (E40 AND M40 MODELS) .....	156
FIGURE 7-4. HARNESS COMPONENTS INSTALLATION .....	162
SECTION 8 - DECALS .....	171
FIGURE 8-1. DECALS INSTALLATION - STANDARD .....	172
FIGURE 8-2. DECALS INSTALLATION - COUNTRY SPEC .....	176
SECTION 9 - RECOMMENDED SERVICE PARTS STOCK.....	181
FIGURE 9-1. MODELS E45/M45/E40 AND M40 STANDARD PARTS.....	182
FIGURE 9-2. MODELS E45/M45/E40 AND M40 VARIABLE PARTS.....	184
SECTION 10 - SPECIAL OPTIONS .....	187
FIGURE 10-1. SPECIAL OPTIONS .....	188
PART NUMBER INDEX.....	191

**SECTION 1 - FRAME**

# SECTION 1 - FRAME

## FIGURE 1-1. STEER INSTALLATION



# SECTION 1 - FRAME

## FIGURE 1-1. STEER INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>STEER INSTALLATION OPTIONS:</b>	
	0257817	Ref	<b>Steer Installation E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP</b>	4-B
	0270010	Ref	<b>Steer Installation E40AJPnarrow &amp; M40AJPnarrow</b>	1-A
1		Ref	Hub/Spindle Assembly Options: (Left Side) (See Items 101-115 for Breakdown)	
1	2780242	1	Hub/Spindle Assembly (Left Side) E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP	
1	2780250	1	Hub/Spindle Assembly (Left Side) E40AJPnarrow & M40AJPnarrow	
2		Ref	Hub/Spindle Assembly Options: (Right Side) (See Items 101-115 for Breakdown)	
2	2780241	1	Hub/Spindle Assembly (Right Side) E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP	
2	2780251	1	Hub/Spindle Assembly (Right Side) E40AJPnarrow & M40AJPnarrow	
3	3300426	18	Lugnut 5/8in-18NF	
4	3422692	2	Kingpin	
5		Ref	Steering Link Options:	
5	3010119	2	Steering Link E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP	
5	3010121	2	Steering Link E40AJPnarrow & M40AJPnarrow	
6	1683591	1	Steer Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
7	3841367	2	End, Rod	
8	0440162	2	Washer, Thrust	
10	3312008	4	Nut, Serrated 5/8in-11NC	
11	0641606	4	Bolt 3/8in-16NC x 3/4in	
12	3450810	2	Pin, Cotter 1/4in x 2 1/2in	
13	3323003	2	Nut, Castle 1 1/4in-12NF	
14	3900109	4	Screw, Socket Head Shoulder 3/4in-16NF x 1 3/4in	
15	3322202	2	Nut, Jam 3/4in-16NF	
16	0681810	4	Bolt 1/2in-13NC x 1 1/4in (Grade 8)	
17	0100011	AR	Loctite #242 (Not Shown)	
18	4891800	4	Washer, Hardened 1/2in	
		Ref	<b>HUB/SPINDLE ASSEMBLY OPTIONS:</b>	
	2780242	Ref	<b>Hub/Spindle Assembly E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP (Left Side)</b>	B
	2780250	Ref	<b>Hub/Spindle Assembly E40AJPnarrow &amp; M40AJPnarrow (Left Side)</b>	B
	2780241	Ref	<b>Hub/Spindle Assembly E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP (Right Side)</b>	B
	2780251	Ref	<b>Hub/Spindle Assembly E40AJPnarrow &amp; M40AJPnarrow (Right Side)</b>	B
101		Ref	Spindle Options:	
101	4130350	AR	Spindle E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP (Left Side)	
101	7023216	AR	Spindle E40AJPnarrow & M40AJPnarrow (Left Side)	
101	4130351	AR	Spindle E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP (Right Side)	
101	7023217	AR	Spindle E40AJPnarrow & M40AJPnarrow (Right Side)	
102	0962140	2	Bushing (1 per Assembly)	
103	0961951	4	Bushing (2 per Assembly)	
104	7020035	2	Hub Assy (1 per Assembly)	

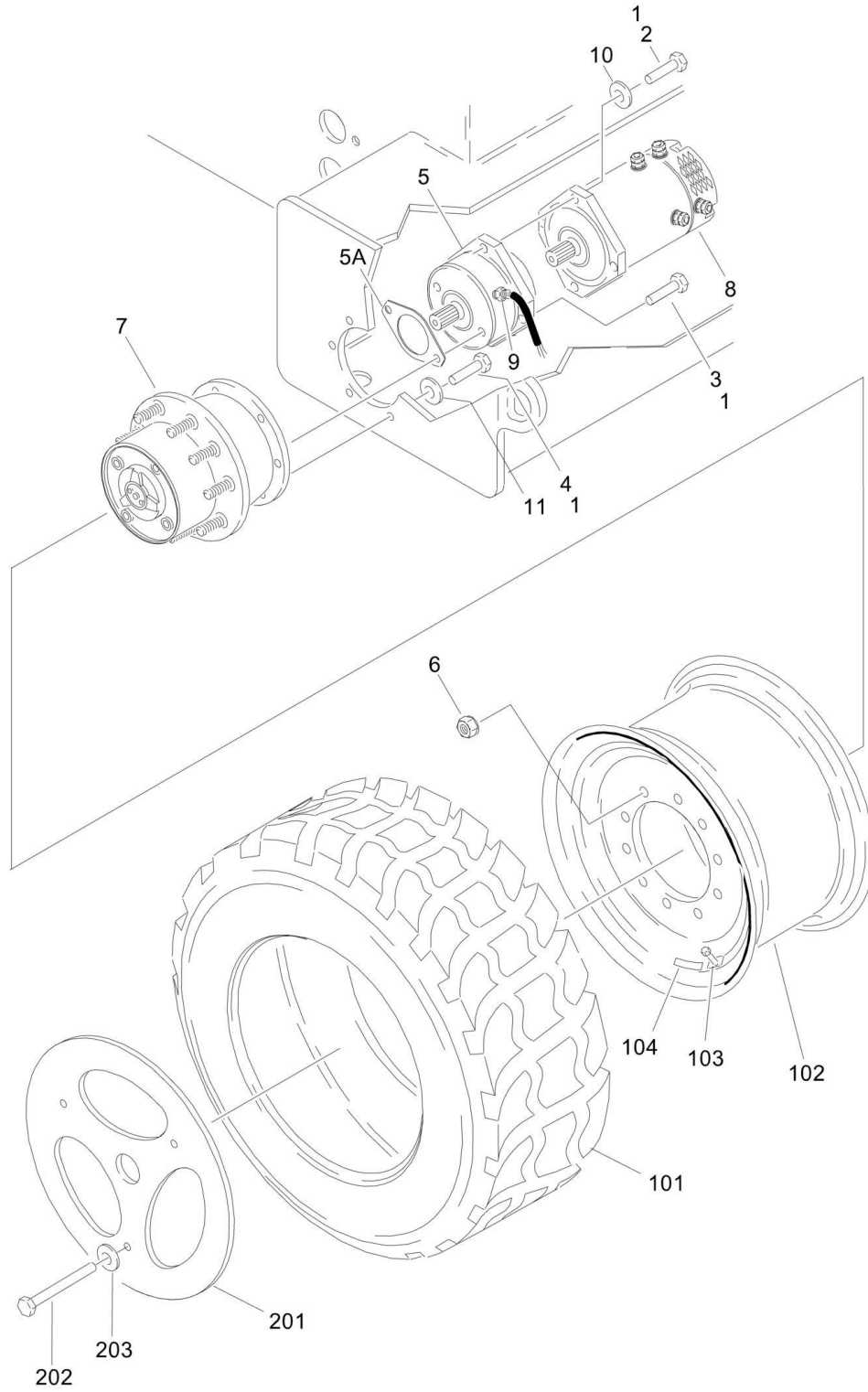
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
105	7020036	2	Cup, Bearing - Inner (1 per Assembly)	
106	7020038	2	Cup, Bearing - Outer (1 per Assembly)	
107	7020041	18	Stud (9 per Assembly)	
108	7020037	2	Cone, Bearing - Inner (1 per Assembly)	
109	7020039	2	Cone, Bearing - Outer (1 per Assembly)	
110	7020040	2	Seal, Lip (1 per Assembly)	
111	7020137	2	Dust Cap (1 per Assembly)	
112	3300426	18	Lugnut 5/8in-18NF (9 per Assembly)	
113	7020055	2	Washer, Tanged (1 per Assembly)	
114	7020054	2	Nut, Castle (1 per Assembly)	
115	7020140	2	Pin, Cotter (1 per Assembly)	
201		Ref	<b>FRAME WELDMENTS</b>	
201	2360505	1	Frame Weldments E45A, M45A, E40AJP & M40AJP	
201	2360510	1	Frame Weldments E45AJ & M45AJ	
201	2360531	1	Frame Weldments E40AJP <sub>narrow</sub> & M40AJP <sub>narrow</sub>	



# SECTION 1 - FRAME

## FIGURE 1-2. TIRE AND WHEEL DRIVE INSTALLATION





# SECTION 1 - FRAME

## FIGURE 1-2. TIRE AND WHEEL DRIVE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>WHEEL DRIVE INSTALLATION OPTIONS:</b>	
	0259069	Ref	<b>Wheel Drive Installation E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP</b>	6-G
	0270103	Ref	<b>Wheel Drive Installation E40AJPnarrow &amp; M40AJPnarrow</b>	4
1	0100019	AR	Loctite #271	
2	0641609	8	Bolt 3/8in-16NC x 1 1/8in	
3	0641826	4	Bolt 1/2in-13NC x3 1/4in	
4	0682010	12	Bolt 5/8in-11NC x 1 1/4in (Grade 8)	
5	0920113	2	Drive Brake Assembly	
5	7011757	2	Repair Kit - Complete for 0920113 Brake (1 per Assembly)	
5	2900768	2	Bearing Kit for 0920113 Brake (1 per Assembly)	
5	7007900	2	Seal, Oil for 0920113 Brake (1 per Assembly)	
5	7007977	2	Ring, Retaining for 0920113 Brake (1 per Assembly)	
5	7011716	2	Ring, Retaining for 0920113 Brake (1 per Assembly)	
5A	7000731	2	Gasket (1 Per Assembly)	
6	3300426	18	Lugnut	
7	2780236	2	Drive Hub Assembly (See DRIVE HUB ASSEMBLY for Breakdown)	
8	3160239	2	Drive Motor Assembly	
8	7020138	NLA	Brush (Note: Use p/n 7020297)	
8	7020150	1	Holder Assembly	
9	3990105	2	Sensor, Speed	
10	4711600	8	Flatwasher 3/8in Narrow	
11	4892000	12	Washer, Hardened 5/8in	
		Ref	<b>TIRE AND WHEEL INSTALLATIONS</b>	
	0258995	Ref	<b>IN240/55-17.5 Pneumatic</b>	1
	0270416	Ref	<b>IN240/55-17.5 Pneumatic (Non-Marking)</b>	1
	0258996	Ref	<b>IN240/55-17.5 Foam-Filled</b>	1
	0270418	Ref	<b>IN240/55-17.5 Foam-Filled (Non-Marking)</b>	1
	0259679	Ref	<b>LT215/8R16 Pneumatic</b>	1
	0270037	Ref	<b>26in x 7in x 20in Solid (Non-Marking)</b>	A
	0270028	Ref	<b>Solid (Non-Marking) (M40AJPnarrow &amp; E40AJPnarrow Only)</b>	1-B
		Ref	Tire Assembly Options:	
		Ref	<b>Note: Assemblies may require ballast/foam filling to manufacturer's specifications prior to installing on a machine. Refer to Operation and Safety or Service and Maintenance Manuals.</b>	
		Ref	<b>Purchase individual tire and/or rim only if able to foam fill tire and wheel assembly, otherwise, purchase complete assembly.</b>	
		Ref	Tire Assembly E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP:	
	0258688	4	OTR IN240/55-17.5 Pneumatic	1-A
	0270415	4	OTR IN240/55-17.5 Pneumatic (Non-Marking)	1-A
	0258997	4	OTR IN240/55-17.5 Foam-Filled	1-A
	0270417	4	OTR IN240/55-17.5 Foam-Filled (Non-Marking)	1-A
	0258037	4	Goodyear LT215/8R16 Pneumatic	1-A
	4520232	4	Monarch 26in x 7in x 20in Solid (Non-Marking) (Sold as Assembly Only)	A
		Ref	Tire Assembly E40AJPnarrow & M40AJPnarrow:	

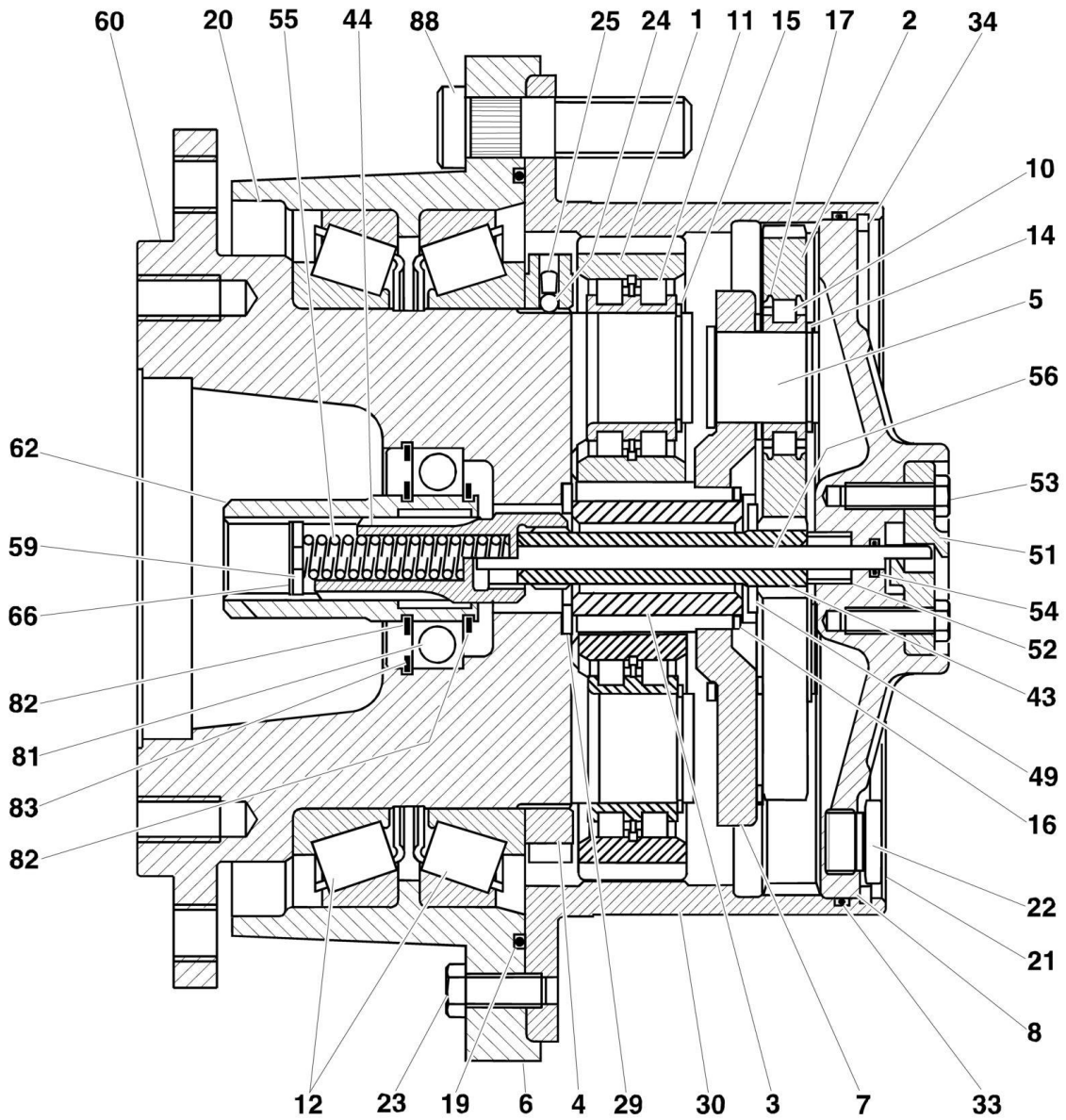
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4520231	2	Trelleborg 22in x 6in x 17.75in (M40AJPnarrow & E40AJPnarrow Front Tire) (Solid) Non-Marking (Sold as Assembly Only)	B
	4520208	2	Trelleborg 25in x 7in x 12in (M40AJPnarrow & E40AJPnarrow Rear Tire) (Solid) Non-Marking (Sold as Assembly Only)	E
101		Ref	Tire Options:	
101	4520209	1	IN240/55-17.5	
101	4520247	1	IN240/55-17.5 Non-Marking	
101	4520206	1	LT215/8R16	
102		Ref	Rim, Wheel Options:	
102	4860191	1	Use with IN240/55-17.5 Tires	
102	4860181	1	Use with LT215/8R16 Tires	
102	Not Available		Other Tire/Wheel Assemblies (Purchase Complete Assembly)	
103	4640392	1	Valve, Air	
104		Ref	Decal - Tire Air Pressure Options:	
104	1702740	1	90PSI	
104	1702701	1	95PSI	
	0259302	Ref	<b>WHEEL COVER INSTALLATION (IN240/55-17.5 TIRES ONLY)</b>	1-A
201	1670887	4	Cover, Wheel	
202	0641542	12	Bolt 5/16in-18NC x 5 1/4in	
203	4711500	12	Flatwasher 5/16in Narrow	
204	0100011	AR	Loctite #242 (Not Shown)	



# SECTION 1 - FRAME

## FIGURE 1-3. DRIVE HUB ASSEMBLY



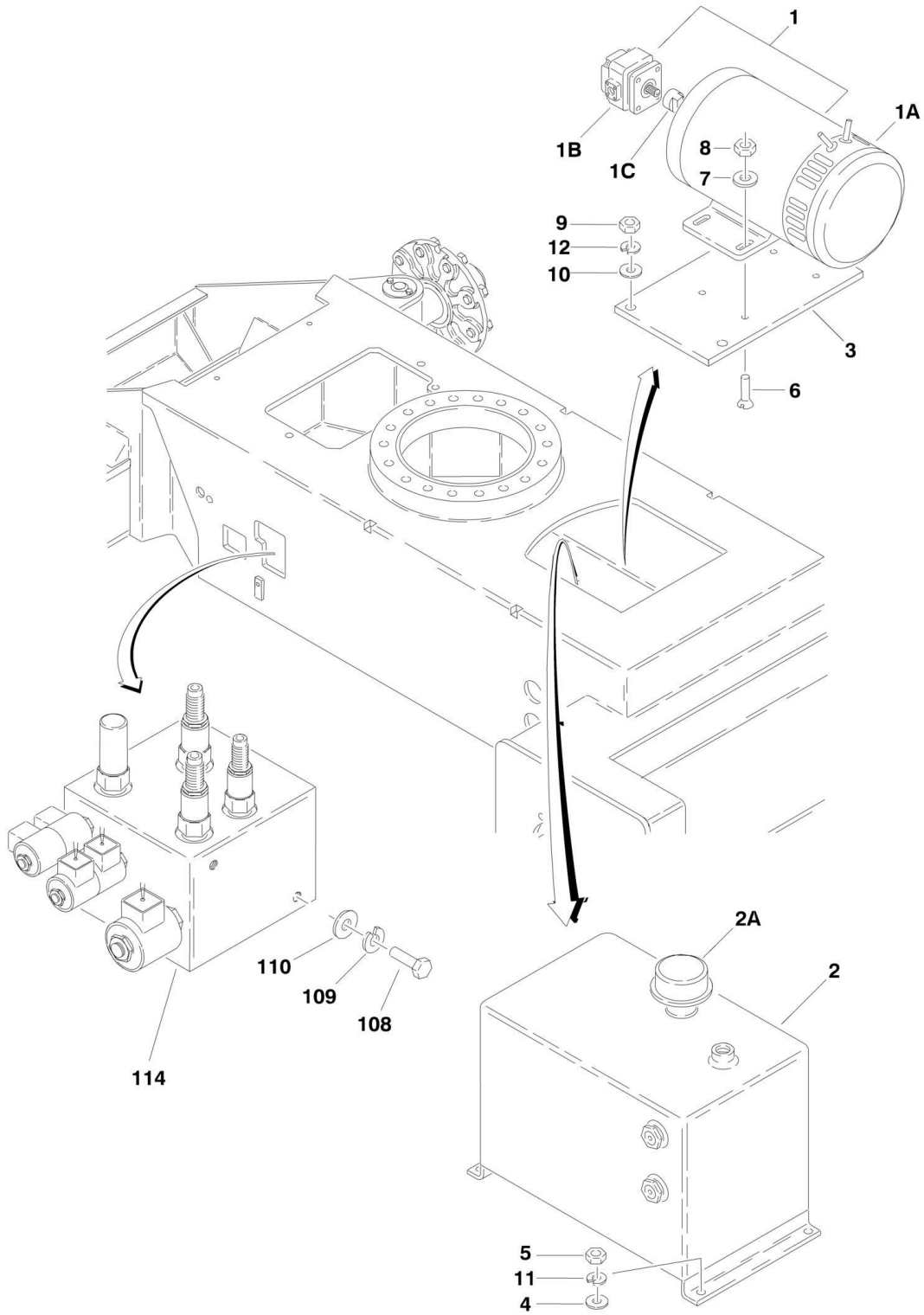
# SECTION 1 - FRAME

## FIGURE 1-3. DRIVE HUB ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2780236	Ref	<b>DRIVE HUB ASSEMBLY</b>	C
1	7021323	4	Gear, Planet	
2	7021324	3	Gear, Planet	
3	7021325	1	Gear, Sun	
4	Kits 2 AND 5	1	Nut, Shaft	
5	7021326	3	Bolt, Planet	
6	7021327	1	Ring, Support	
7	7021328	1	Carrier, Planet	
8	Kit 1	1	Cover	
10	Kit 2	3	Bearing, Roller	
11	Kit 2	4	Bearing, Roller	
12	Kit 2	2	Bearing, Roller	
14	Kit 2	3	Ring, Retaining	
15	Kit 2	4	Ring, Retaining	
16	7021341	1	Ring, Retaining	
17	Kit 2	3	Disk, Support	
19	Kit 3	1	O-Ring	
20	Kit 3	1	Seal, Ring	
21	Kits 3 AND 5	3	Plug	
22	Kit 3	3	Seal, Ring	
23	7021342	3	Bolt	
24	Kit 2	2	Ball	
25	Kits 2 AND 5	2	Expander	
29	Kit 2	1	Washer, Housing	
30	7021335	1	Gear, Ring	
33	Kits 1 AND 3	1	O-Ring	
34	Kit 1	1	Ring, Retaining	
43	7021336	1	Shaft, Sun Gear	
44	7021337	1	Shaft, Input	
49	Kit 2	1	Washer, Thrust	
51	Kit 1	1	Cover	
52	Kit 1	1	Disk	
53	Kit 1	2	Bolt	
54	Kits 1, 3 AND 4	1	O-Ring	
55	Kit 4	1	Spring, Pressure	
56	Kit 4	1	Rod, Shaft	
59	Kit 4	1	Disk, Rotor	
60	7021339	1	Spindle	
62	7021340	1	Coupler	
66	Kit 4	1	Ring, Retaining	
81	Kit 2	1	Bearing, Ball	
82	Kit 2	2	Ring, Retaining	
83	Kit 2	1	Ring, Retaining	
88	7021344	9	Stud, Wheel	
	7021329	1	Kit 1 - Cover Kit (Includes Items 8, 33, 34, 51, 52, 53 & 54)	
	7021330	1	Kit 2 - Bearing Kit (Includes Items 4, 10, 11, 12, 14, 15, 17, 24, 25, 29, 49, 81, 82 & 83)	
	7021333	1	Kit 3 - Seal Kit (Includes Items 19-22, 33 & 54)	
	7021338	1	Kit 4 - Mechanical Disconnect Kit (Includes Items 54-56, 59 & 66)	
	2910601	1	Kit 5 - Shaft Nut Kit (Includes Items 4, 21 & 25)	

# SECTION 1 - FRAME

## FIGURE 1-4. HYDRAULIC COMPONENTS INSTALLATION



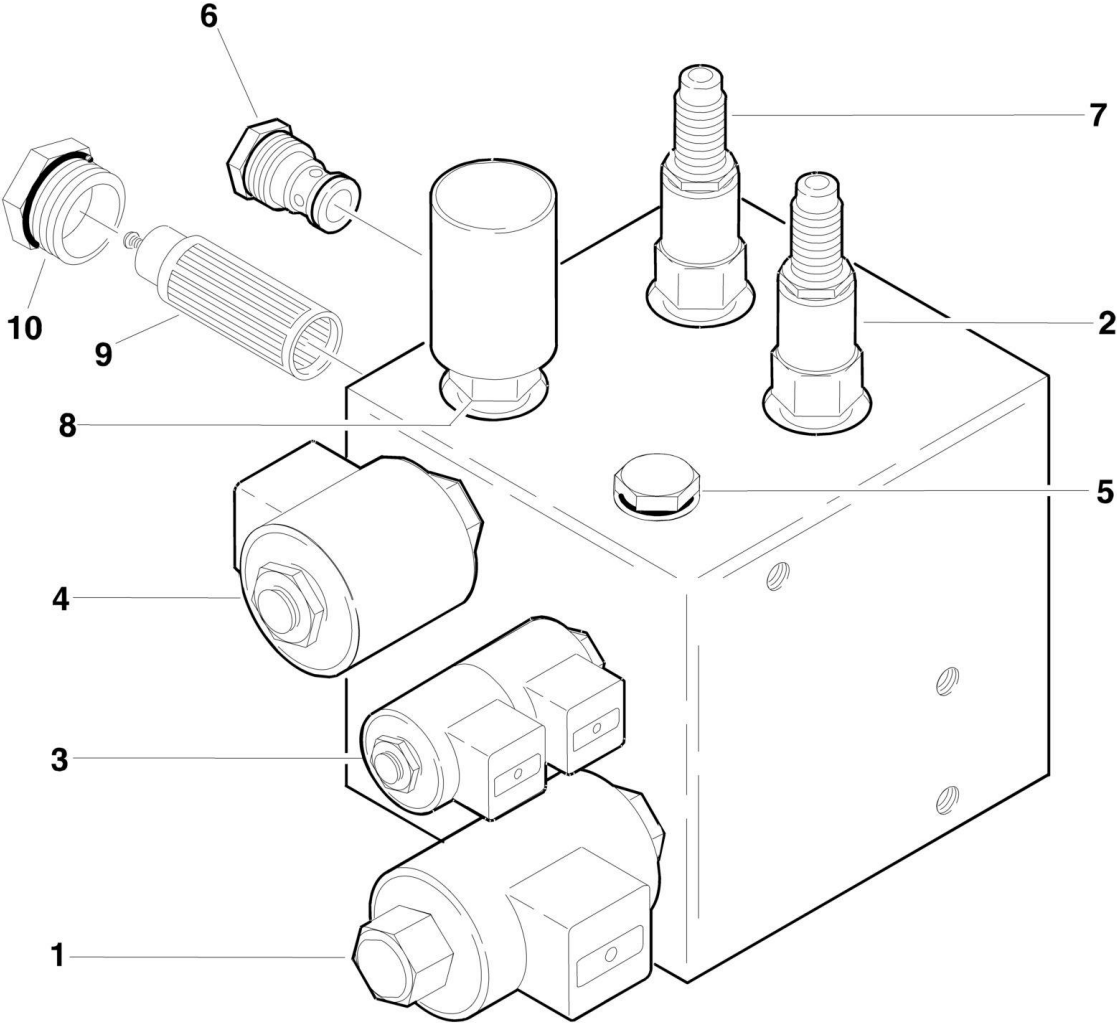
# SECTION 1 - FRAME

## FIGURE 1-4. HYDRAULIC COMPONENTS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0257816	Ref	<b>HYDRAULIC MOTOR/PUMP/TANK INSTALLATION</b>	4-C
1	3600289	1	Motor/Pump Assembly	
1A	7021318	1	Motor Assembly	
1A	7021368	1	Brush Kit	
1B	7021319	1	Pump Assembly	
1B	Not Available	1	Seal Kit	
1C	7021367	1	Coupling	
2	4400416	1	Hydraulic Tank Assembly	
2A	7021320	1	Cap	
3	3571160	1	Plate, Mounting	
4	4711400	4	Flatwasher 1/4in Narrow	
5	3311405	4	Locknut 1/4in-20NC	
6	0741506	4	Screw, Flathead Countersink 5/16in-18NC x 3/4in	
7	4751500	4	Flatwasher 5/16in	
8	3311505	4	Locknut 5/16in-18NC	
9	3311605	2	Locknut 3/8in-16NC	
10	4751600	2	Flatwasher 3/8in	
11	4761400	4	Lockwasher 1/4in	
12	4761600	2	Lockwasher 3/8in	
		Ref	<b>VALVES INSTALLATIONS</b>	
	0258034	Ref	<b>Valves Installations E45A &amp; M45A</b>	4-C
	0259399	Ref	<b>Valves Installations E45AJ &amp; M45AJ</b>	3-B
	0259951	Ref	<b>Valves Installations E40AJP, M40AJP, E40AJPnarrow &amp; M40AJPnarrow</b>	3-A
108	0641608	2	Bolt 3/8in-16NC x 1in	
109	4711600	2	Flatwasher 3/8in	
110	4761600	2	Lockwasher 3/8in	
114		Ref	Brake/Steer Control Valve Assembly Options:	
114	4641149	1	Brake/Steer Control Valve Assembly (was p/n 4641071) <b>(Prior to SN 47551)</b>	
114	4641149	1	Brake/Steer Control Valve Assembly (was p/n 464113) <b>(SN 47551 through 50959)</b>	
114	4641149	1	Brake/Steer Control Valve Assembly (See BRAKE/STEER VALVE ASSEMBLY for Breakdown) <b>(SN 50960 to Present)</b>	
120		Ref	Harness Assembly - Brake/Steer Control Valve Options: (Not Shown -See ELECTRICAL SECTION for Breakdown)	
120	4922069	1	Harness Assembly - Brake/Steer Control Valve <b>(Prior to SN 47551)</b>	
120	4922328	1	Harness Assembly - Brake/Steer Control Valve <b>(SN 47551 to Present)</b>	

**SECTION 1 - FRAME**

**FIGURE 1-5. BRAKE/STEER VALVE ASSEMBLY**





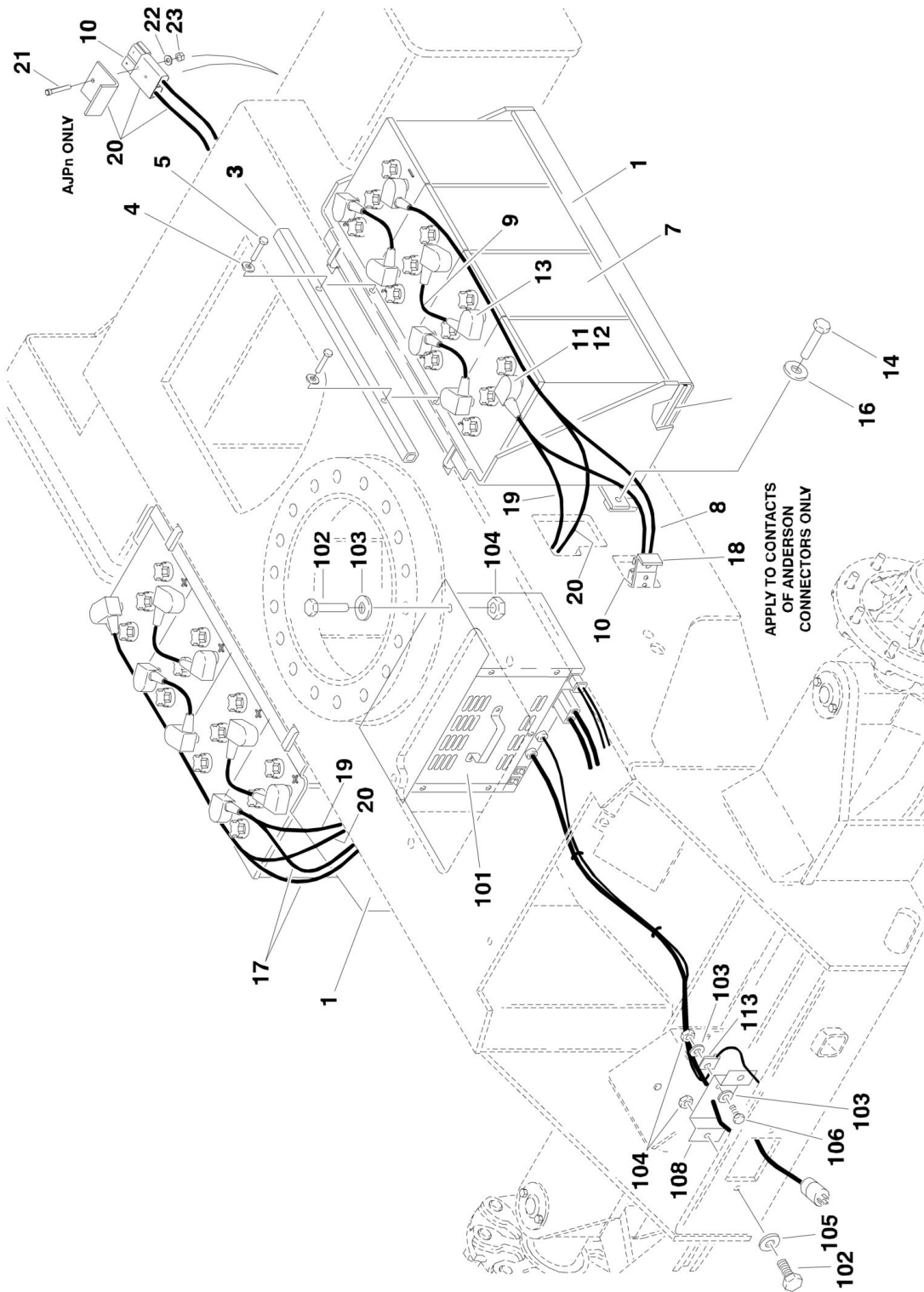
# SECTION 1 - FRAME

## FIGURE 1-5. BRAKE/STEER VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4641149	Ref	<b>BRAKE/STEER VALVE ASSEMBLIES</b>	A
1	7017450	1	Cartridge, Proportional without Coil (Flow Control)	
1	7012518	1	Seal Kit- 7017450 Cartridge	
1	7021618	1	Coil	
2	7021659	1	Cartridge, Relief (Main)	
2	7012972	1	Seal Kit - 7021659 Cartridge	
3	7017433	1	Cartridge (Steer)	
3	7017402	1	Seal Kit - 7017433 Cartridge	
3	7021609	2	Coil	
4	7012941	1	Cartridge without Coil (Brake Release)	
4	7010543	1	Seal Kit - 7017455 Cartridge	
4	7021609	1	Coil	
5	7017412	1	Cartridge, Check	
5	7012967	1	Seal Kit - 7017412 Cartridge	
6	7010542	1	Cartridge, Shuttle	
6	7010543	1	Seal Kit - 7010542 Cartridge	
7	7017428	1	Cartridge, Relief (Steer)	
7	7012998	1	Seal Kit - 7012912 Cartridge	
8	7022532	1	Switch, Pressure	
9	7021616	1	Cartridge, Filter	
10	7024832	1	Plug	

# SECTION 1 - FRAME

## FIGURE 1-6. BATTERIES AND CHARGER INSTALLATIONS



# SECTION 1 - FRAME

## FIGURE 1-6. BATTERIES AND CHARGER INSTALLATIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>BATTERIES INSTALLATION</b>	
	0258689	Ref	<b>Batteries Installation E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP</b>	2/C
	0259763	Ref	<b>Batteries Installation E40AJPnarrow &amp; M40AJPnarrow</b>	B
1		Ref	Battery Box Weldment Options:	
1	4845846	2	All Models Except AJPnarrow	
1	4846106	1	AJPnarrow (Left Side)	
1	4846107	1	AJPnarrow (Right Side)	
3		Ref	Battery Hold Down Options:	
3	4567679	2	All Models Except AJPnarrow	
3	0182010	2	AJPnarrow	
4	4711500	4	Flatwasher 5/16in Narrow	
5	0641514	4	Bolt 5/16in-18NC x 1 3/4in	
6	3000003	2	Liner, Battery Box	
7		Ref	Battery Options:	
7	0400055	6	Wet	
7	7016177	6	Dry	
8		Ref	Cable, Battery (Left)	
8	1060760	1	All Models Except AJPnarrow	
8	Not Required	0	AJPnarrow	
9	1060092	6	Cable, Battery	
10	0100048	AR	Adhesive, Silicone	
11	0100051	AR	Grease, Terminal	
12	0840031	8	Boot, Terminal ("d" shape)	
13	0840032	8	Boot, Terminal ("b" shape)	
14	0641808	4	Bolt 1/2in-13NC x 1in	
16	4711800	8	Flatwasher 1/2in Narrow	
17		Ref	Cable, Battery (Right)	
17	1060761	1	All Models Except AJPnarrow	
17	Not Required	0	AJPnarrow	
18	1320172	2	Clamp, Cable	
19		Ref	Cable, Battery (Battery to Battery)	
19	Not Required	0	All Models Except AJPnarrow	
19	1060811	1	AJPnarrow	
20		Ref	Cable, Battery (Battery to Clamp)	
20	Not Required	0	All Models Except AJPnarrow	
20	1060809	1	AJPnarrow	
21	3311405	2	Locknut 1/4in-20NC	
22	3931430	2	Capscrew, Socket Head 1/4in-20NC x 1 7/8in	
23	4711400	2	Flatwasher 1/4in Narrow	
		Ref	<b>BATTERY CHARGER INSTALLATIONS</b>	
	0257815	Ref	<b>ANSI Spec (105V/132V - 60Hz) (Prior to SN 49542)</b>	2
	0259825	Ref	<b>ANSI Spec (105V/132V - 60Hz) (SN 49542 to Present)</b>	2
	0259258		<b>ANSI Export Spec (110V/220V - 50Hz) (Prior to SN 49542)</b>	
	0259826	Ref	<b>ANSI Export Spec (110V/220V - 50Hz) (SN 49542 to Present)</b>	2
	0259693	Ref	<b>ANSI Export Spec (250V - 50Hz)</b>	1
	0259692	Ref	<b>Japanese Spec (100V - 60Hz)</b>	1
101		Ref	Battery Charger Assembly Options (See BATTERY CHARGER ASSEMBLY for Breakdown):	
101	0400185	1	ANSI Spec (105V/132V - 60Hz) (Prior to SN 49542)	

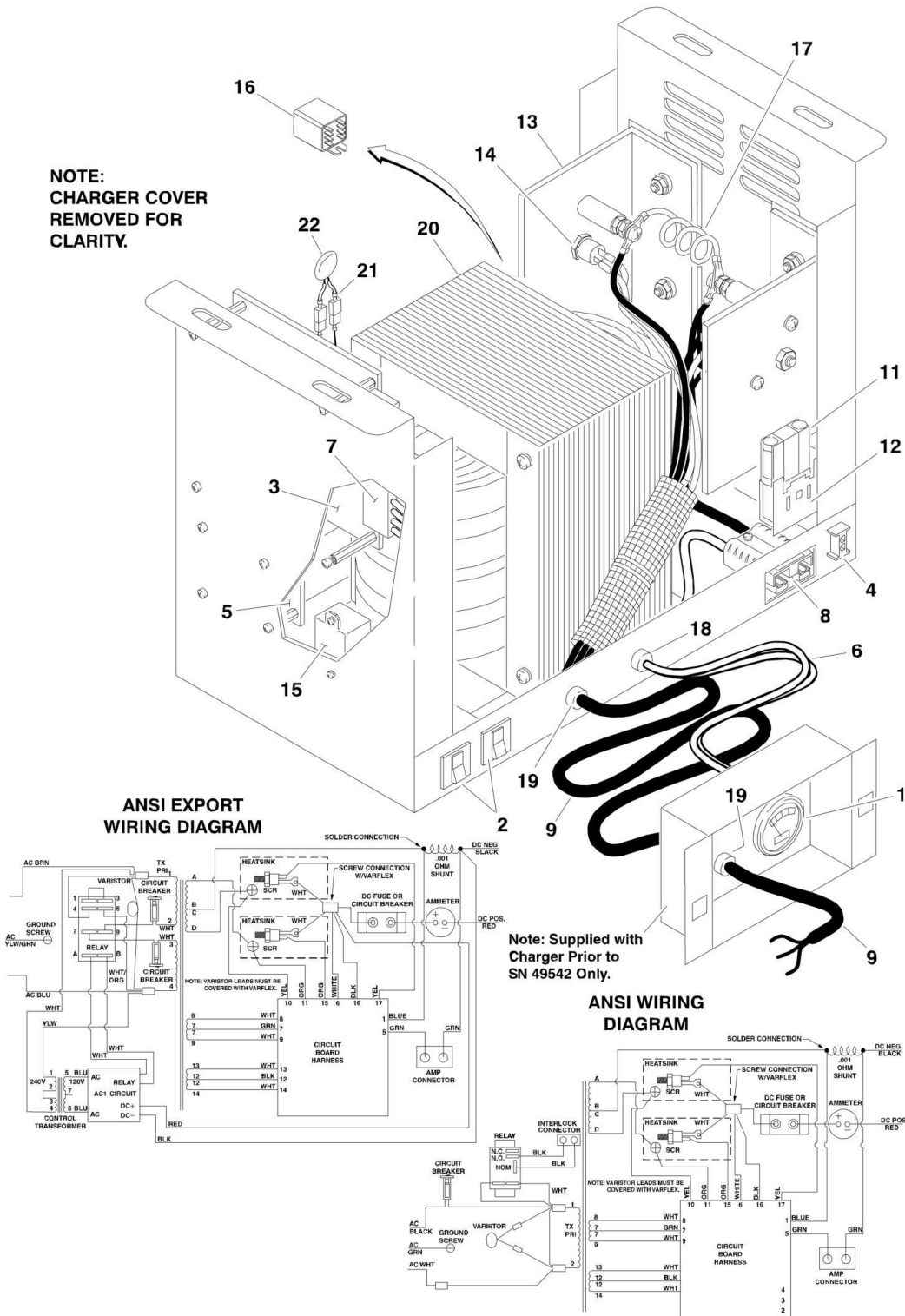
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
101	0400196	1	ANSI Spec (105V/132V - Auto Seeking Hz) <b>(SN 49542 to Present)</b>	
101	0400192	1	ANSI Export Spec (110V/220V - 50Hz) <b>(Prior to SN 49542)</b>	
101	0400197	1	ANSI Export Spec (110V/220V - Auto Seeking Volts and Hz) <b>(SN 49542 to Present)</b>	
101	0400195	1	ANSI Export Spec (250V - Auto Seeking Hz)	
101	0400194	1	Japanese Spec (100V - 60Hz)	
102	0641408	4	Bolt 1/4in-20NC x 1in	
103	4711400	6	Flatwasher 1/4in Narrow	
104	3311405	5	Locknut 1/4in-20NC	
105	4711400	2	Washer 1/4in (Narrow)	
106	0641404	1	Bolt 1/4in-20NC x 1/2in	
108		Ref	Plate, Panel Options:	
108	See Note	1	Plate, Panel (Note: Panel and Ammeter Supplied with Charger) <b>(Prior to SN 49542)</b>	
108	3571834	1	Plate, Panel (Uses LED Lights) <b>(SN 49542 to Present)</b>	
113	1320136	1	Clamp, Insulated	



# SECTION 1 - FRAME

## FIGURE 1-7. BATTERY CHARGER ASSEMBLY (Prior to SN 49542)



# SECTION 1 - FRAME

**FIGURE 1-7. BATTERY CHARGER ASSEMBLY (Prior to SN 49542)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>Note: Refer to battery charger serial number nameplate for build date. Example: BA515 (Spec) 9631 (Date Code). First and second digits in the date code indicate year. Third and fourth digits indicate the week of manufacture.</b>	
		Ref	<b>BATTERY CHARGER ASSEMBLIES</b>	
	0400185	Ref	<b>ANSI Spec (105/132V - 60Hz)</b>	A
1	7011573	1	Ammeter	
2	7020642	1	Breaker, Circuit	
3	7020655	1	PC Board	
4	7011621	1	Connector, Enable Switch	
5	Not Required	0	Not Required	
6	7020657	1	DC Cord Assembly	
7	7020658	1	Harness	
8	7011590	1	Plug, DC	
9	7020656	1	Cord, AC	
11	7018570	1	Fuse, DC - 80 Amp	
12	7020647	1	Holder, Fuse - AC	
13	7020649	2	Rectifier Assembly	
14	7020650	2	Rectifier, SCR	
15	7018506	1	Relay (White)	
16	Not Required	0	Not Required	
17	7020651	1	Shunt Assembly	
18	7011528	1	Relief, Strain	
19	7020659	2	Relief, Strain	
20	7020660	1	Transformer, Main	
21	7020661	1	Varistor Assembly	
22	7011596	2	Varistor	
	0400192	Ref	<b>ANSI Export Spec (110/220V - 50 Hz)</b>	A
1	7011573	1	Ammeter	
2	7018597	2	Breaker, Circuit	
3	7020607	1	PC Board	
4	7011621	1	Connector, Enable Switch	
5	7020640	1	Controller PC Board	
6	7020667	1	DC Cord Assembly	
7	7020668	1	Harness	
8	7011590	1	Plug, DC	
9	7020669	1	Cord, AC	
11	7018570	1	Fuse, DC - 80 Amp	
12	7018571	1	Holder, Fuse - AC	
13	7020649	2	Rectifier Assembly	
14	7020650	2	Rectifier, SCR	
15	7018506	1	Relay (White)	
16	7020654	1	Relay (Clear Cover)	
17	7020651	1	Shunt Assembly	
18	7011528	1	Relief, Strain	
19	7020659	2	Relief, Strain	
20	7020670	1	Transformer, Main	
21	7020633	1	Varistor Assembly	
22	7011596	2	Varistor	





# SECTION 1 - FRAME

**FIGURE 1-8. BATTERY CHARGER ASSEMBLY (SN 49542 to Present)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>Note: Refer to battery charger serial number nameplate for build date. Example: BA515 (Spec) 9631 (Date Code). First and second digits in the date code indicate year. Third and fourth digits indicate the week of manufacture.</b>	
		Ref	<b>BATTERY CHARGER ASSEMBLIES</b>	
	0400196	Ref	<b>ANSI Spec (105/132V - Auto Seeking Hz)</b>	A
	0400197	Ref	<b>ANSI Export Spec (110/220V - Auto Seeking Volts and Hz)</b>	A
	0400195	Ref	<b>ANSI Export Spec (250V - Auto Seeking Hz)</b>	A
	0400194	Ref	<b>Japanese Spec (100V - Auto Seeking Hz)</b>	A
2		Ref	Breaker, Circuit Options:	
2	7020642	1	Charger p/n 0400196	
2	7020653	2	Charger p/n 0400197	
2	7018525	1	Charger p/n 0400195	
2	7020642	1	Charger p/n 0400194	
3	7011621	1	Connector, Enable Switch	
4		Ref	Circuit, Control Options:	
4	7020643	1	Charger p/n 0400196	
4	7022902	1	Charger p/n 0400197	
4	7020685	1	Charger p/n 0400195	
4	7020696	1	Charger p/n 0400194	
5	7020644	1	DC Cord Assembly	
6	7020690	1	Fuse Assembly	
7	7020691	1	Fuse, DC - 50Amp	
8	7020697	1	Harness	
9	7020693	1	Harness	
10	7018571	1	Holder, Fuse	
11	7020648	1	Plug, AC Inlet	
12	7020649	2	Rectifier Assembly	
13	7020650	1	Rectifier, SCR 40-Amp	
14		Ref	Relay (Black) Options:	
14	7018506	1	Charger p/n 0400196	
14	7018564	1	Charger p/n 0400197	
14	7018563	1	Charger p/n 0400195	
14	7018506	1	Charger p/n 0400194	
15	7020651	1	Shunt Assembly	
16		Ref	Transformer, Main Options:	
16	7022900	1	Charger p/n 0400196	
16	7022905	1	Charger p/n 0400197	
16	7020699	1	Charger p/n 0400195	
16	7020698	1	Charger p/n 0400194	
17		Ref	Varistor Assembly Options:	
17	7020603	1	Charger p/n 0400196	
17	7018537	1	Charger p/n 0400197	
17	7018537	1	Charger p/n 0400195	
17	7018537	1	Charger p/n 0400194	
18		Ref	Varistor Options:	
18	7011596	1	Charger p/n 0400196	
18	7020663	1	Charger p/n 0400197	
18	7020663	2	Charger p/n 0400195	
18	7020663	1	Charger p/n 0400194	

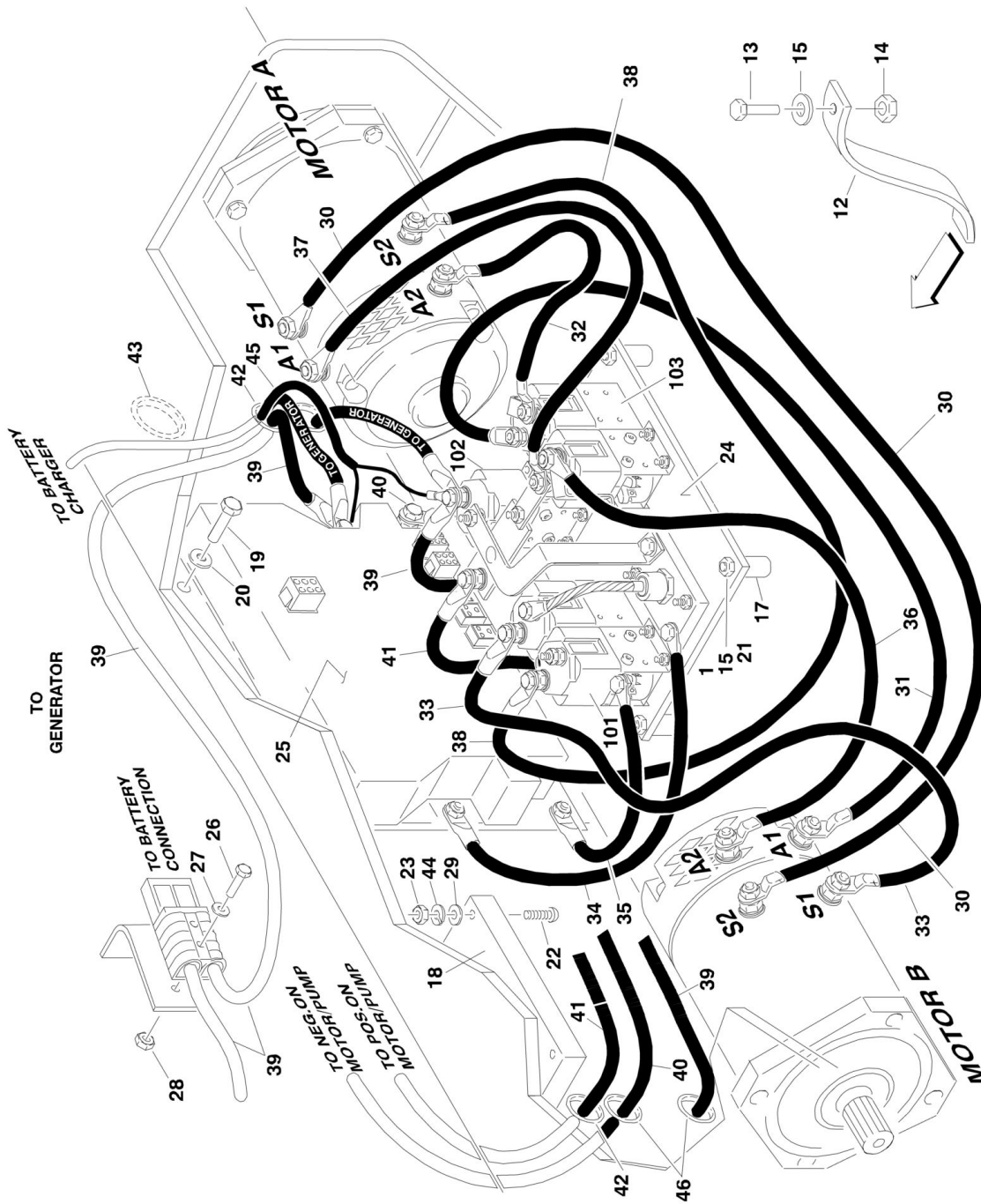
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
19		Ref	Capacitor Assembly Options:	
19	Not Required	0	Charger p/n 0400196	
19	7018577	2	Charger p/n 0400197	
19	7018577	1	Charger p/n 0400195	
19	Not Required	0	Charger p/n 0400194	
20		Ref	Control, AC1-48V Options:	
20	Not Required	0	Charger p/n 0400196	
20	7022903	1	Charger p/n 0400197	
20	Not Required	0	Charger p/n 0400195	
20	Not Required	0	Charger p/n 0400194	
21		Ref	Relay, 24VDC-30A (Clear) Options:	
21	Not Required	0	Charger p/n 0400196	
21	7020654	1	Charger p/n 0400197	
21	Not Required	0	Charger p/n 0400195	
21	Not Required	0	Charger p/n 0400194	



# SECTION 1 - FRAME

FIGURE 1-9. ELECTRICAL COMPONENTS INSTALLATION (FRAME MOUNTED)



## SECTION 1 - FRAME

**FIGURE 1-9. ELECTRICAL COMPONENTS INSTALLATION (FRAME MOUNTED)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONTACTOR INSTALLATION OPTIONS:</b>	
	0259069	Ref	<b>Contactor Installation E45A, M45A, E45AJ, M45AJ, E40AJP &amp; M40AJP</b>	6-G
	0270103	Ref	<b>Contactor Installation E40AJPnarrow &amp; M40AJPnarrow</b>	4-B
1	0100019	AR	Loctite #242 (Not Shown)	
12	4240084	1	Strap, Static	
13	0641508	1	Bolt 5/16in-18NC x 1in	
14	3311505	1	Locknut 5/16in-15NC	
15	4751500	10	Flatwasher 5/16in	
17	4300135	4	Stud, Stand-Off	
18	1600293	1	Module (Positrac/Tilt) (Note: Calibration required when replaced)	
19	0641406	6	Bolt 1/4in-20NC x 3/4in	
20	4761400	6	Lockwasher 1/4in	
21	3311501	8	Locknut 5/16in-18NC	
22	3910636	4	Screw #6-32NC x 2 1/4in	
23	3310601	4	Nut #10-24NC	
24	1600294	1	Contactor Plate Assembly (See Items 101-103 for Breakdown)	
25	1600292	1	Module, Power	
26	3931430	AR	Capscrew, Socket Head 1/4in-20NC x 2in	
27	4711400	AR	Flatwasher 1/4in	
28	3311405	AR	Locknut 1/4in-20NC	
29	4750600	4	Flatwasher #6	
30	1060717	1	Cable, Electrical (Motor B S1 to Motor A S2)	
31	1060718	1	Cable, Electrical (Motor B A1 to Contactor Plate MB1)	
32	1060719	1	Cable, Electrical (Motor A A2 to Contactor Plate MA2)	
33	1060720	1	Cable, Electrical (Motor B A2 to Contactor Plate SB1)	
34	1060721	1	Cable, Electrical (Power Module A to Contactor Plate)	
35	1060722	1	Cable, Electrical (Power Module B+ to Contactor Plate)	
36	1060723	1	Cable, Electrical (Motor B S2 to Contactor Plate MB2)	
37	1060724	1	Cable, Electrical (Motor A A1 to Contactor Plate MA1)	
38	1060725	1	Cable, Electrical (Motor A S1 to Contactor Plate SA1)	
39		Ref	Cable, Electrical Options: (Contactor Plate to Batteries)	
39	1060726	1	Cable, Electrical E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP	
39	1060810	1	E40AJPnarrow & M40AJPnarrow	
40	1060727	1	Cable, Electrical (Module to Hydraulic Pump Motor -)	
41	1060728	1	Cable, Electrical (Contactor Plate to Hydraulic Pump Motor +)	
42	2540019	4	Grommet	
43	2540021	1	Grommet	
44	4760600	4	Lockwasher #6	
45	4922103	1	Cable, Electrical (Contactor/Module to Charger)	
45	4460444	1	Connector, DC	
46	2540020	3	Grommet	
47		Ref	Clamp, Cable Options (Not Shown - Located on Item 39):	
47	Not Required	0	Clamp, Cable E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP	
47	1320172	1	Clamp, Cable E40AJPnarrow & M40AJPnarrow	
	1600294	Ref	<b>CONTACTOR PLATE ASSEMBLY</b>	B
	7022003	1	Harness, Contactor (See ELECTRICAL SECTION for Breakdown)	
	7022004	1	Harness, Posi-Track Contactor (See ELECTRICAL SECTION for Breakdown)	

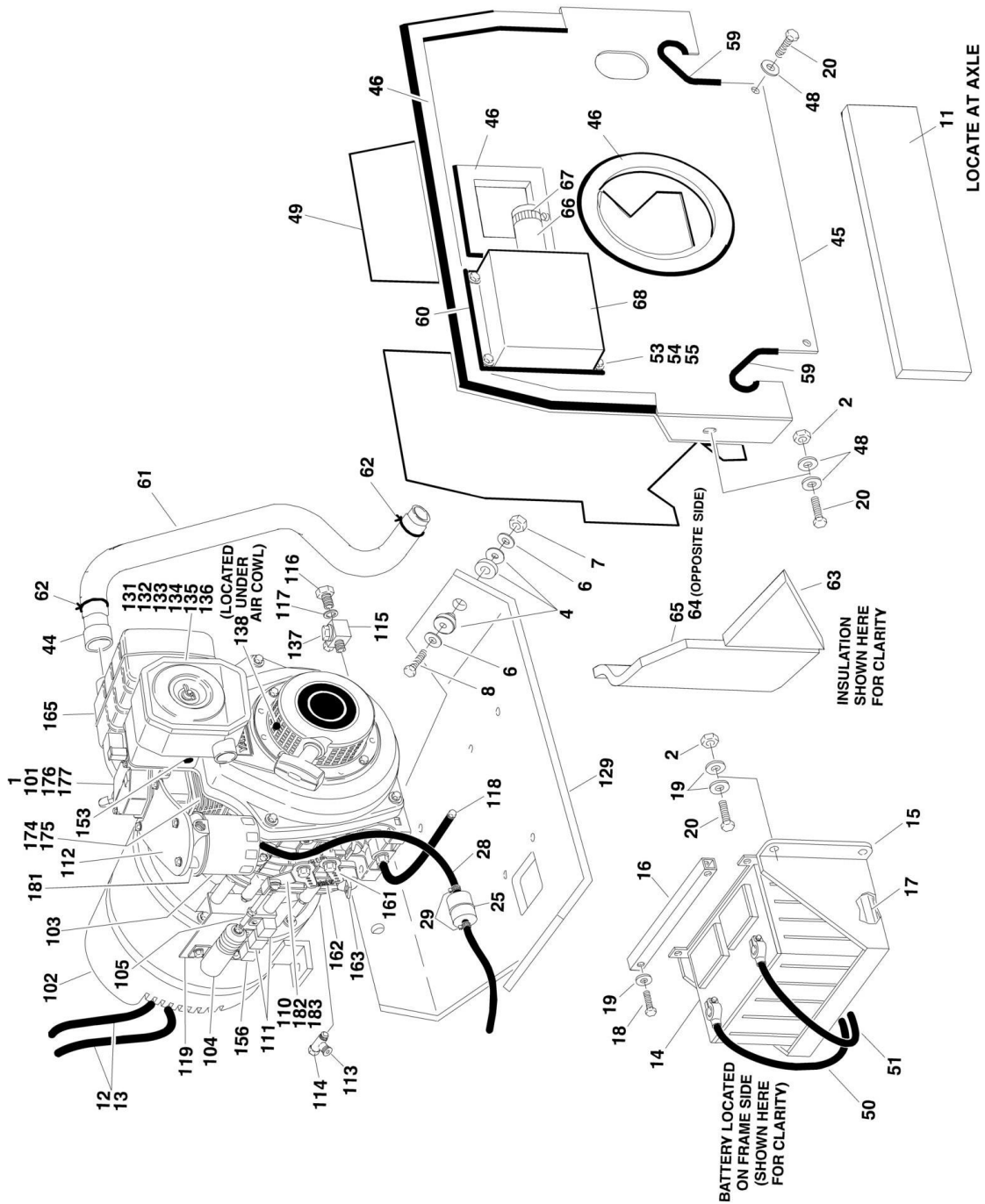
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	7022005	1	Harness, Shunt (See ELECTRICAL SECTION for Breakdown)	
101	7022002	1	Contactora	
102	7022001	1	Contactora	
103	7022000	1	Contactora	



# SECTION 1 - FRAME

FIGURE 1-10. MOTOR/GENERATOR INSTALLATION (M45 AND M40 ONLY)





## SECTION 1 - FRAME

**FIGURE 1-10. MOTOR/GENERATOR INSTALLATION (M45 AND M40 ONLY)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>MOTOR/GENERATOR INSTALLATION (YANMAR DIESEL)</b>	
	0257824	Ref	<b>Motor/Generator Installation M45A, M45AJ &amp; M40AJP</b>	11
	0270344	Ref	<b>Motor/Generator Installation M40AJPnarrow</b>	1-A
1	0257858	1	Motor/Generator Assembly (See Items 101 to 183 for Breakdown)	
2	3311505	8	Locknut 5/16in-18NC	
4	3200404	3	Mount, Insolation	
6	4751600	6	Flatwasher 3/8in	
7	3311605	3	Locknut 3/8in-16NC	
8	0641618	3	Bolt 3/8in-16NC x 2 1/4in	
11	2820117	1	Foam, Sound (Steer Axle) <b>(SN 46103 to Present)</b>	
12	1060755	1	Cable, Battery (Includes Terminal Boot) (+ Generator)	
13	1060754	1	Cable, Battery (Includes Terminal Boot) (- Generator)	
14		Ref	Battery Options:	
14	0400201	1	Battery (Was p/n 0400186) <b>(Prior to SN 53986)</b>	
14	0400201	1	Battery <b>(SN 53986 to Present)</b>	
15		Ref	Starter Battery Tray Options:	
15	4845642	1	Starter Battery Tray M45A, M40AJP & M45AJ	
15	Not Required	0	Starter Battery Tray M40AJPnarrow (Welded-In Part of Battery Tray)	
16		Ref	Battery Hold Down Options:	
16	4220179	1	Battery Hold Down (Was p/n 4567693) <b>(Prior to SN 53986)</b>	
16	4220179	1	Battery Hold Down <b>(SN 53986 to Present)</b>	
17		Ref	Battery Seat Options:	
17	3980035	1	Battery Seat (Was p/n 3000012) <b>(Prior to SN 53986)</b>	
17	3980035	1	Battery Seat <b>(SN 53986 to Present)</b>	
18	0641518	2	Bolt 5/16in-18NC x 1 5/8in	
19	4711500	6	Flatwasher 5/16in Narrow	
20	0641505	8	Bolt 5/16in-18NC x 5/8in	
25	2120042	1	Filter, In-Line Fuel	
28	2720339	12 ft/3.7m	Hose	
29	1320022	7	Clamp, Hose	
33	4240033	8	Strap, Tie	
44	4567845	1	Tube, Exhaust	
45	3571401	1	Plate	
46	3960389	5 ft/1.5m	Seal	
47	0100011	AR	Loctite #242 (Not Shown)	
48	4751500	6	Flatwasher 5/16in	
49	2820107	1	Insulation	
50	1060731	1	Cable, Battery (Includes Terminal Boot) (- Battery to Ground)	
51	1060730	1	Cable, Battery (Includes Terminal Boot) (+ Battery to Starter)	
53	0461406	4	Bolt 1/4in-20NC x 3/4in	
54	4711400	8	Flatwasher 1/4in Narrow	
55	3311405	4	Locknut 1/4in-20NC	
59	4060803	16 in/4.9m	Flex-Trim	
60	3960417	28 in/71cm	Seal	
61	4100025	26 in/66cm	Sleeve, Fiberglass	
62	4920385	7 in/18cm	Wire, Safety	

## SECTION 1 - FRAME

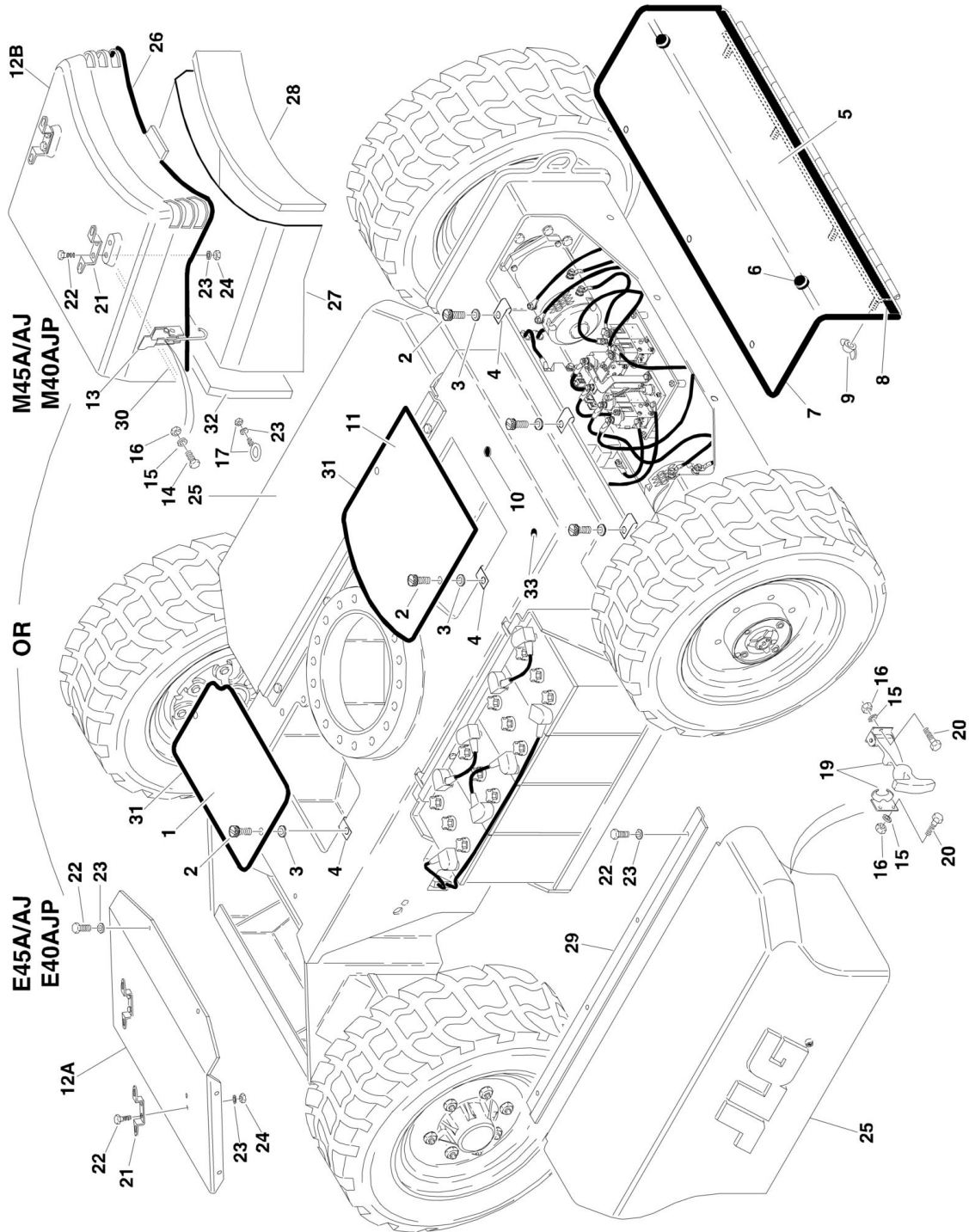
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
63	2820112	2	Insulation	
64	2820116	1	Insulation (Right Side)	
65	2820116	1	Insulation (Left Side)	
66	2720455	1	Hose	
67	1320012	2	Clamp	
68	0259481	1	Plenum Box Assembly	
69	3960418	3 ft/.9m	Seal	
70	4922319	1	Harness, Generator (Not Shown - See ELECTRICAL SECTION for Breakdown)	
71	4460267	1	Socket, Female (Not Shown - See ELECTRICAL SECTION for Call-Out)	
	0257858	Ref	<b>MOTOR/GENERATOR ASSEMBLY</b>	E
101	7018126	1	Motor, Yanmar	
102	7023485	1	Alternator (was p/n 7020203)	
103	Not Available	1	Filter, Oil with Element	
103	7020215	1	Element, Oil	
104	7020167	1	Solenoid, Throttle	
105	7020166	1	Swivel, In-line	
110	7018125	1	Handle, Regulator	
111	70000323	2	Relay, Bosch (was p/n 7020207)	
112	3571412	1	Plate, Mounting, Oil Filter	
113	7018127	1	Switch, Pressure	
114	7020164	1	Fitting, Adapter	
115	7020163	1	Adapter, Oil Drain	
116	7020162	1	Bolt, Banjo	
117	Not Serviced	1	Washer, Rubber	
118	7020204	1	Drain Line Assembly	
119	7020161	1	Bracket	
129	3570581	1	Baseplate	
131	7020160	1	Flange, Air Intake	
132	7020159	1	Flange, Air Intake	
133	7020165	1	Heater, Air	
134	7018123	2	Gasket, Air Cleaner	
135	7018122	2	Gasket, Air Adapter	
136	7018124	1	Cover, Air Filter	
137	7020158	1	Probe, Temperature	
138	7020157	1	Bracket, Magnetic Pick-Up	
153	70000324	1	Sensor, Hall Effect Zero Speed (was p/n 7020206)	
156	70000322	1	Relay, Sealed 14VDC/40Amp (was p/n 7023274)	
161	7018125	1	Lever (was p/n 7020197)	
162	7020198	1	Spring	
163	7020199	1	Dipstick	
164	7020200	1	Regulator, Voltage (Not Shown - Located Below Starter)	
165	7020201	1	Muffler	
166	7020202	1	Starter (Not Shown - Located Below Muffler)	
166	7018137	1	Stopper Set, Pinion	
166	7018138	1	Pinion Assy	
167	7020217	1	Element, Air Cleaner (Washable)	
168	7018142	1	Pump, Fuel (Not Shown)	
169	7018134	1	Flywheel w/Gear (Not Shown)	
170	7018135	1	Valve, Assembly Fuel Injection (Not Shown)	
171	7018136	1	Pipe, Fuel Injection (Not Shown)	

## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
172	7018139	1	Rectifier (Not Shown)	
173	7018140	1	Gasket Set (Not Shown)	
174	7018128	1	Gasket, Cylinder Head	
175	7018129	1	O-Ring, Cylinder Head	
176	7018132	1	Gasket, Valve Cover	
177	7018133	2	Bolt M6 x 55mm	
178	7020156	1	Printed Circuit Board (Not Shown)	
179	7023349	1	Fuse 15Amp (Not Shown)	
180	7023350	1	Fuse 20Amp (Not Shown)	
181	70001144	1	Filter, Head (was p/n 7023489)	
182	7026669	1	Spring, Governor	
183	7026670	1	Spring, Return	

# SECTION 1 - FRAME

## FIGURE 1-11. FRAME COVERS INSTALLATION



# SECTION 1 - FRAME

## FIGURE 1-11. FRAME COVERS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>FRAME COVERS INSTALLATIONS</b>	
	0258974	Ref	<b>Frame Covers Installations E45A &amp; E45AJ</b>	4
	0258035	Ref	<b>Frame Covers Installations M45A &amp; M45AJ</b>	7
	0270101	Ref	<b>Frame Covers Installations E40AJP</b>	2
	0270100	Ref	<b>Frame Covers Installations M40AJP</b>	1
	0270101	Ref	<b>Frame Covers Installations E40AJPnarrow</b>	3
	0270100	Ref	<b>Frame Covers Installations M40AJPnarrow</b>	2
1	3570572	1	Cover, Charger	
2	3900174	7	Screw, Special	
3	3760308	7	Retainer	
4	1380138	1	Cup, Receptacle	
5		Ref	Axle Cover Options:	
5	4844603	1	Axle Cover E45A, E45AJ, E40AJP, M45A, M45AJ & M40AJP	
5	4846223	1	Axle Cover M40AJPnarrow & E40AJPnarrow	
6	0940036	2	Bumper	
7	3960447	93 in/2.4m	Seal	
8	3960433	39 in/1m	Seal	
9	3300371	4	Wingnut	
10	3520026	2	Plug, Hole	
11	3570573	1	Cover, Pump	
12		Ref	Cover Options:	
12A	3571094	1	Cover E45A, E45AJ, E40AJP & E40AJPnarrow	
12B	1670880	1	Cover M45A, M45AJ, M40AJP & M40AJPnarrow	
13		Ref	Latch Options:	
13	Not Required	0	Latch E45A, E45AJ, E40AJP & E40AJPnarrow	
13	2940115	2	Latch M45A, M45AJ, M40AJP & M40AJPnarrow	
14	0721006	AR	Screw, Machine #10-24NC x 3/4in	
15		Ref	Flatwasher Options:	
15	4750800	8	Flatwasher E45A, E45AJ	
15	4751000	12	Flatwasher M45A, M45AJ, M40AJP, E40AJP, M40AJPnarrow & E40AJPnarrow	
16	3311005	12	Locknut #10-24NC	
17	0630440	AR	Eyebolt	
18	0100011	AR	Loctite #242 (Not Shown)	
19	2940095	4	Latch	
20	0721004	16	Screw, Machine #10-24NC x 1/2in	
21	2700093	2	Hook	
22	0641406	AR	Bolt 1/4in-20NC x 3/4in	
23	4751400	AR	Flatwasher 1/4in	
24	3311405	4	Locknut 1/4in-20NC	
25		Ref	Battery Cover Options:	
25	1670879	2	Battery Cover E45A, E45AJ, M45A & M45AJ	
25	1670951	2	Battery Cover M40AJP, E40AJP, M40AJPnarrow & E40AJPnarrow	
26		Ref	Flex-Trim Options:	
26	Not Required	0	Flex-Trim E45A, E45AJ, E40AJP & E40AJPnarrow	
26	4060804	6 ft/1.8m	Flex-Trim M45A, M45AJ, M40AJP & M40AJPnarrow	
27		Ref	Flex-Trim Options:	
27	Not Required	0	Flex-Trim E45A, E45AJ, E40AJP & E40AJPnarrow	
27	2820105	1	Flex-Trim M45A, M45AJ, M40AJP & M40AJPnarrow	

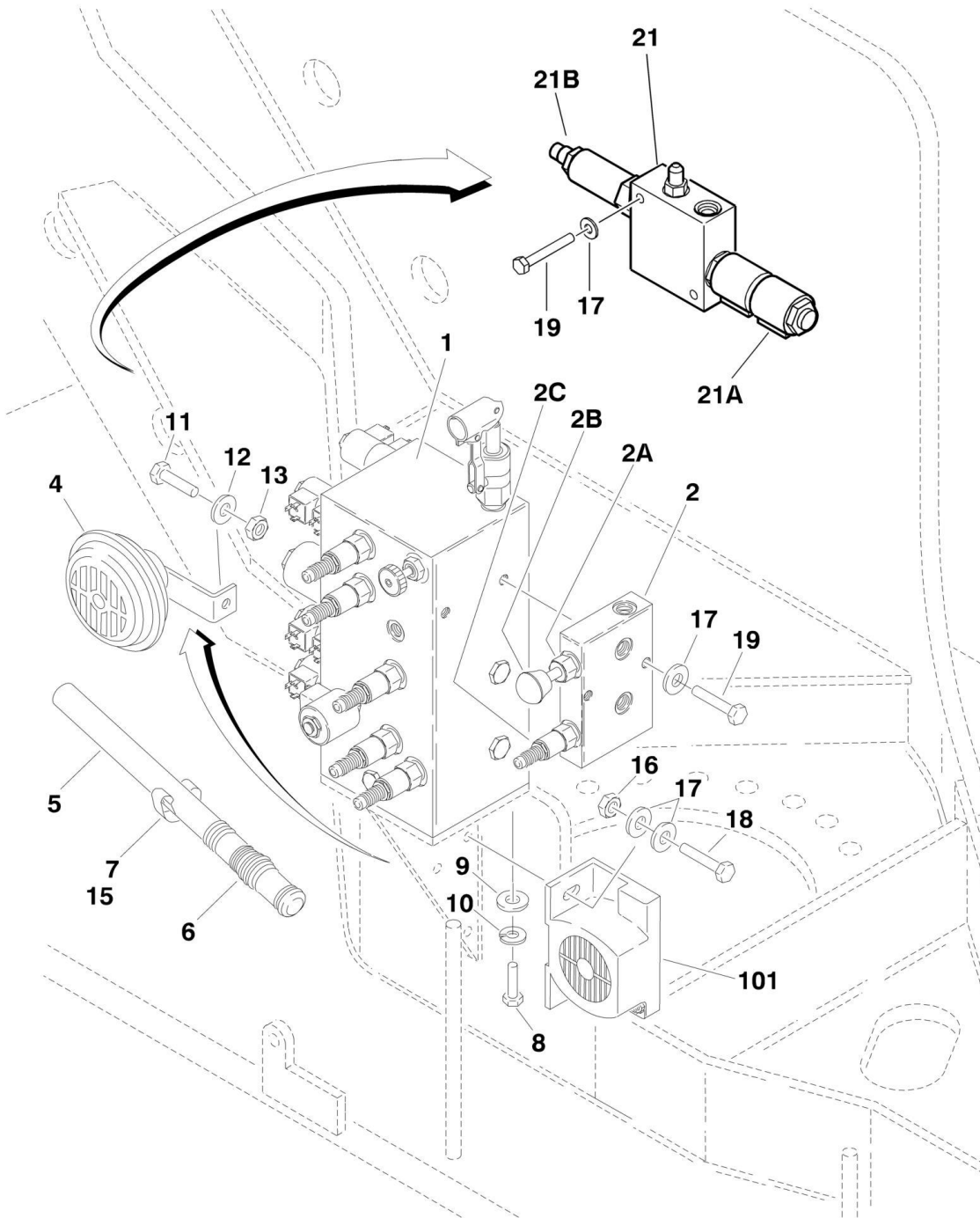
## SECTION 1 - FRAME

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
28		Ref	Flex-Trim Options:	
28	Not Required	0	Flex-Trim E45A, E45AJ, E40AJP & E40AJPnarrow	
28	2820106	1	Flex-Trim M45A, M45AJ, M40AJP & M40AJPnarrow	
29		Ref	Strip, Mounting Options:	
29	0902543	2	Strip, Mounting E45A, E45AJ, M45A & M45AJ	
29	0902681	2	Strip, Mounting E40AJP & E40AJPnarrow, M40AJP & M40AJPnarrow	
30		Ref	Seal Options:	
30	Not Required	0	Seal E45A, E45AJ, E40AJP & E40AJPnarrow	
30	3960389	2.5 ft/7.6m	Seal M45A, M45AJ, M40AJP & M40AJPnarrow	
31		Ref	Seal Options:	
31	Not Required	0	Seal E45A, E45AJ, E40AJP & E40AJPnarrow	
31	3960417	10 ft/3m	Seal M45A, M45AJ, M40AJP & M40AJPnarrow	
32		Ref	Insulation Options:	
32	Not Required	0	Insulation E45A, E45AJ, E40AJP & E40AJPnarrow	
32	2820110	1	Insulation M45A, M45AJ, M40AJP & M40AJPnarrow	
33	3520082	1	Plug	

**SECTION 2 - TURNTABLE**

# SECTION 2 - TURNTABLE

## FIGURE 2-1. VALVES AND HORN INSTALLATIONS





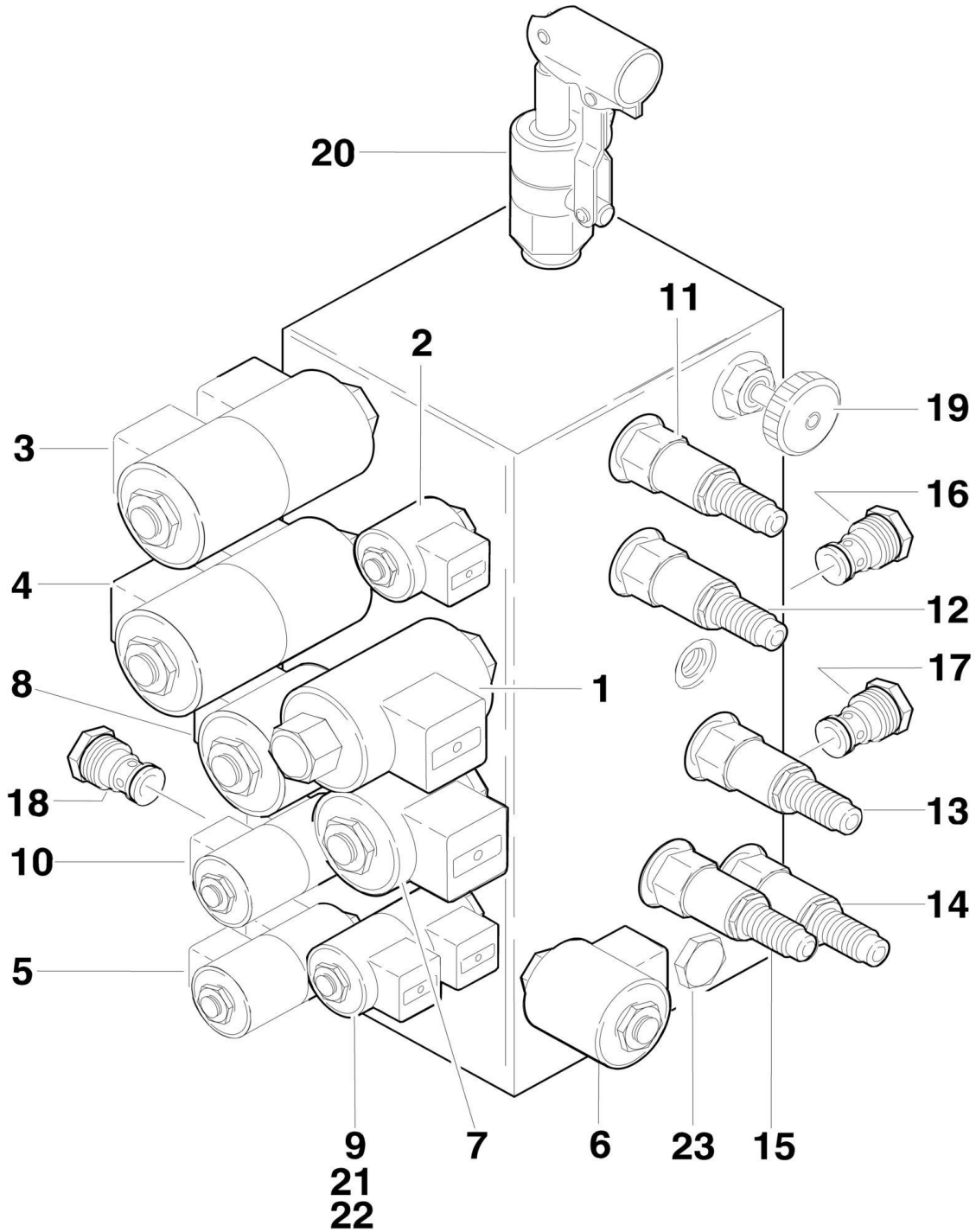
**SECTION 2 - TURNTABLE**

**FIGURE 2-1. VALVES AND HORN INSTALLATIONS**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>VALVE AND HORN INSTALLATIONS</b>	
	0258034	Ref	<b>Valve and Horn Installations E45A &amp; M45A</b>	4-C
	0259399	Ref	<b>Valve and Horn Installations E45AJ &amp; M45AJ</b>	3-B
	0259951	Ref	<b>Valve and Horn Installations E40AJP, M40AJP, E40AJPnarrow &amp; M40AJPnarrow</b>	3-A
1	4641070	1	Main Control Valve Assembly (See MAIN CONTROL VALVE ASSEMBLY for Breakdown)	
2	4641029	1	Releveling Valve Assembly	
2A	7017466	1	Cartridge	
2A	2900708	1	Seal Kit - Cartridge	
2B	7012959	1	Knob	
2C	7012981	1	Cartridge	
2C	7012998	1	Seal Kit - Cartridge	
4	0140028	1	Horn	
5	2560122	1	Handle	
6	2560123	1	Grip, Handle	
7	1380136	1	Clip	
8	0641608	4	Bolt 3/8in-16NC x 1in	
9	4711400	2	Flatwasher 3/8in Narrow	
10	4761400	4	Lockwasher 3/8in	
11	0641508	1	Bolt 5/16in-18NC x 1in	
12	4711500	2	Flatwasher 5/16in Narrow	
13	3311505	1	Locknut 5/16in-18NC	
15	4300106	1	Stud	
16	3311405	AR	Locknut 1/4in-20NC	
17	4711400	AR	Flatwasher 1/4in Narrow	
18	0641408	AR	Bolt 1/4in-20NC x 1in	
19	0641413	AR	Bolt 1/4in-20NC x 1 5/8in	
21		Ref	Jib Valve Assembly Options:	
21	Not Required	0	Jib Valve Assembly E45A & M45A	
21	4641102	1	Jib Valve Assembly E45AJ & M45AJ	
21	4641119	1	Jib Valve Assembly E40AJP, M40AJP, E40AJPnarrow & M40AJPnarrow	
21A	7017452	1	Cartridge without Coils	
21A	7017402	1	Seal Kit - 701452 Cartridge	
21A	7021609	2	Coil	
21B		Ref	Cartridge Options:	
21B	7017460	1	Cartridge E45AJ & M45AJ	
21B	7017460	1	Cartridge E40AJP, M40AJP, E40AJPnarrow & M40AJPnarrow (was p/n 7021623)	
21B	7017461	1	Seal Kit - 7017460 & 7021623 Cartridges	
22	0100011	AR	Loctite #242 (Not Shown)	
		Ref	<b>ALARM INSTALLATIONS</b>	
	0259064	Ref	<b>Motion Alarm</b>	1
101	0140031	1	Alarm, Motion (Remove ground strap before installation)	
101	3311405	2	Locknut 1/4in-20NC	
101	4711400	4	Flatwasher 1/4in Narrow	
101	0641408	2	Bolt 1/4in-20NC	
101	4460685	2	Terminal, Stud Mounted Tab	

# SECTION 2 - TURNTABLE

## FIGURE 2-2. MAIN CONTROL VALVE ASSEMBLY



**SECTION 2 - TURNTABLE**

**FIGURE 2-2. MAIN CONTROL VALVE ASSEMBLY**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4641070	Ref	<b>MAIN CONTROL VALVE ASSEMBLY</b>	G
1	7021611	1	Cartridge without Coil (Flow Regulator)	
1	7012518	1	Seal Kit - 7021611 Cartridge	
1	7021618	1	Coil	
2	7017410	1	Cartridge without Coil (Bypass Unloading)	
2	7012967	1	Seal Kit - 7017410 Cartridge	
2	7021609	2	Coil	
3	7021603	1	Cartridge without Coil (Lower Lift)	
3	7012903	1	Seal Kit - 7021603 Cartridge	
3	7021610	2	Coil	
4	7021603	1	Cartridge without Coil (Upper Lift)	
4	7012903	1	Seal Kit - 7021603 Cartridge	
4	7021610	2	Coil	
5	7017433	1	Cartridge without Coil (Swing)	
5	7017402	1	Seal Kit - 7017433 Cartridge	
5	7021609	1	Coil	
6	7021604	1	Cartridge without Coil (Swing Restrictor)	
6	7012953	1	Seal Kit - 7021604 Cartridge	
6	7021609	1	Coil	
7	7017479	1	Cartridge without Coil (Telescope Out)	
7	7012518	1	Seal Kit - 7017479 Cartridge	
7	7021610	1	Coil	
8	7017479	1	Cartridge without Coil (Telescope In)	
8	7012518	1	Seal Kit - 7017479 Cartridge	
8	7021610	1	Coil	
9	7017452	1	Cartridge without Coil (Platform Level)	
9	7017402	1	Seal Kit - 7017452 Cartridge	
9	7021609	2	Coil	
10	7017452	1	Cartridge without Coil (Rotator)	
10	7017402	1	Seal Kit - 7017452 Cartridge	
10	7021609	2	Coil	
11	7017423	1	Cartridge, (Lower Lift Down)	
11	7012998	1	Seal Kit - 7017423 Cartridge	
12	7021606	1	Cartridge, (Upper Lift Down)	
12	7012998	1	Seal Kit - 7021606 Cartridge	
13	7021607	1	Cartridge (Telescope)	
13	7012998	1	Seal Kit - 7021607 Cartridge	
14	7017421	1	Cartridge (Platform Level Backward Piston End)	
14	7012998	1	Seal Kit - 7017421 Cartridge	
15	7017422	1	Cartridge (Platform Level Forward Rod End)	
15	7012998	1	Seal Kit - 7017422 Cartridge	
16	10837580	1	Cartridge (Telescope)	
16	7010543	1	Seal Kit - 10837580 Cartridge	
17	7012914	1	Cartridge (Platform Level Piston Side)	
17	7012918	1	Seal Kit - 7012914 Cartridge	
18	7012914	1	Cartridge (Platform Level Rod Side)	
18	7012918	1	Seal Kit - 7012914 Cartridge	
19	7012947	1	Cartridge, (Emergency Descent)	
19	7012518	1	Seal Kit - 7012947 Cartridge	
19	7012949	1	Knob	

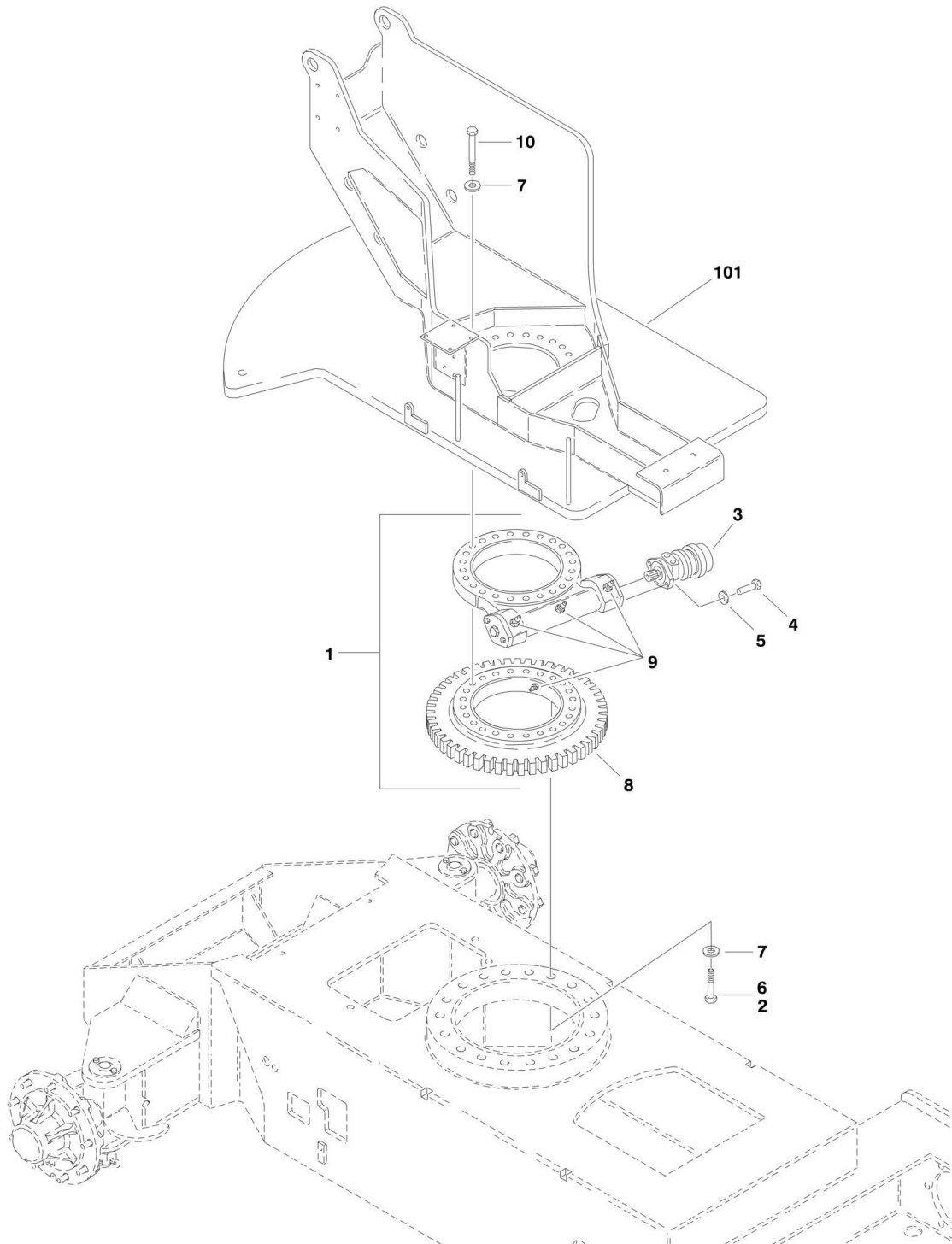
## SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
20	7012694	NLA	Pump, Manual (Note: Use p/n 70004019)	
20	7017496	1	Seal Kit - 7012694 Cartridge (was p/n 2900708)	
21	Not Available	1	Plug, Orifice (.031in)	
22	Not Available	1	Disc, Orifice (.028in)	
23	70000381	1	Cartridge, Plug	



# SECTION 2 - TURNTABLE

## FIGURE 2-3. TURNTABLE AND SWING DRIVE INSTALLATION



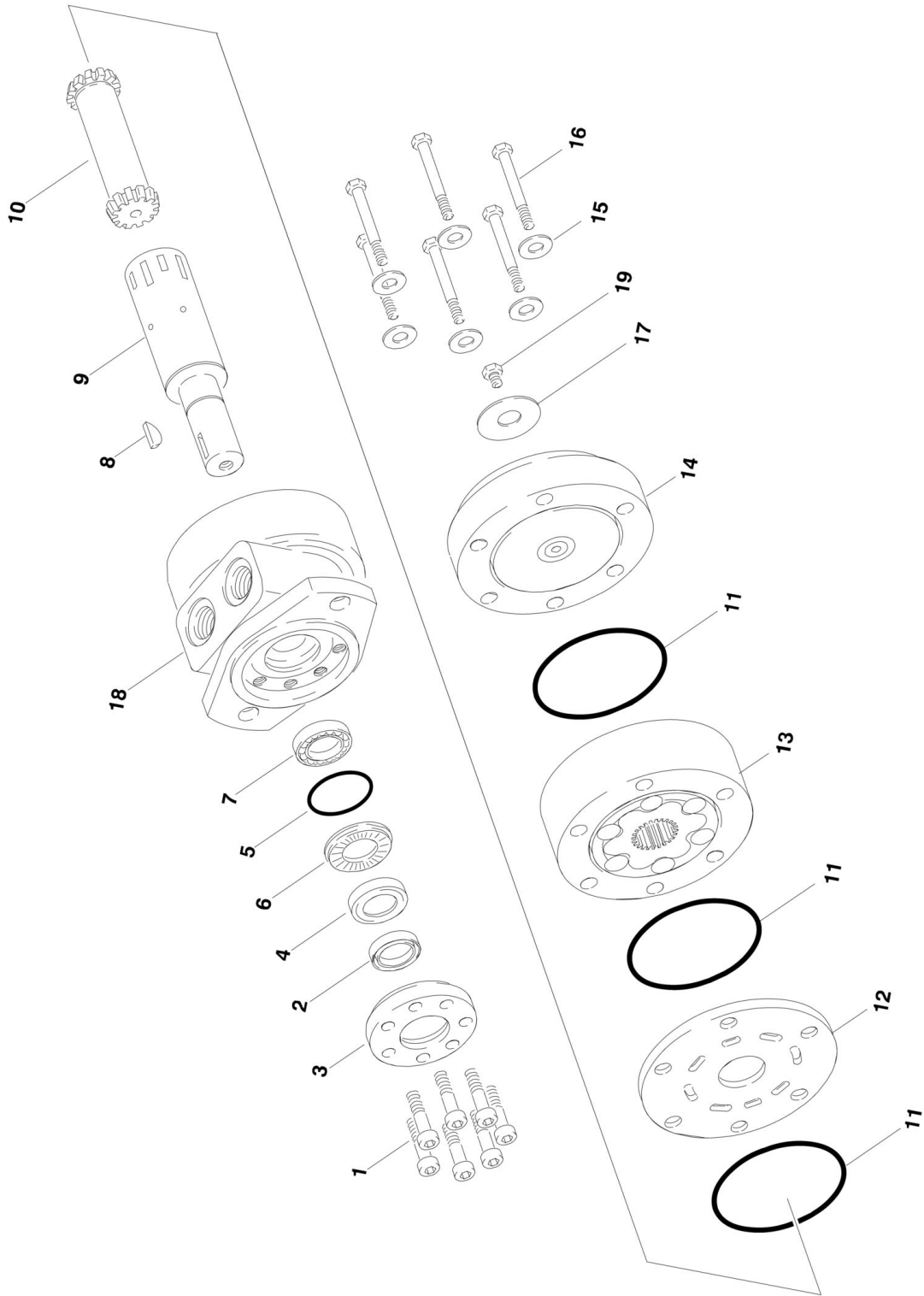
# SECTION 2 - TURNTABLE

**FIGURE 2-3. TURNTABLE AND SWING DRIVE INSTALLATION**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0258653	Ref	<b>TURNTABLE BEARING AND SWING INSTALLATION</b>	1-A
1	0440203	1	Turntable Bearing and Rotation Box Assembly (See SWING BEARING ASSEMBLY for Breakdown)	
2	0100019	AR	Loctite	
3	3160233	1	Swing Motor Assembly (See SWING MOTOR ASSEMBLY for Breakdown)	
4	0681814	2	Bolt 1/2in-13NC x 1 3/4in (Grade 8)	
5	4740171	2	Washer, Hardened	
6	0682026	18	Bolt 5/8in-11NC x 3 1/4in (Grade 8)	
7	4740393	42	Washer, Hardened	
8	3020036	AR	Lube	
9	3020029	AR	Grease, Bearing	
10	0682028	24	Bolt 5/8in-11NC x 3 1/2in (Grade 8)	
101		Ref	<b>TURNTABLE WELDMENTS</b>	
101	4620118	1	Turntable Weldments E45A & M45A	
101	4620124	1	Turntable Weldments E45AJ, M45AJ, E40AJP, E40AJPnarrow, M40AJP & M40AJPnarrow	

# SECTION 2 - TURNTABLE

## FIGURE 2-4. SWING MOTOR ASSEMBLY





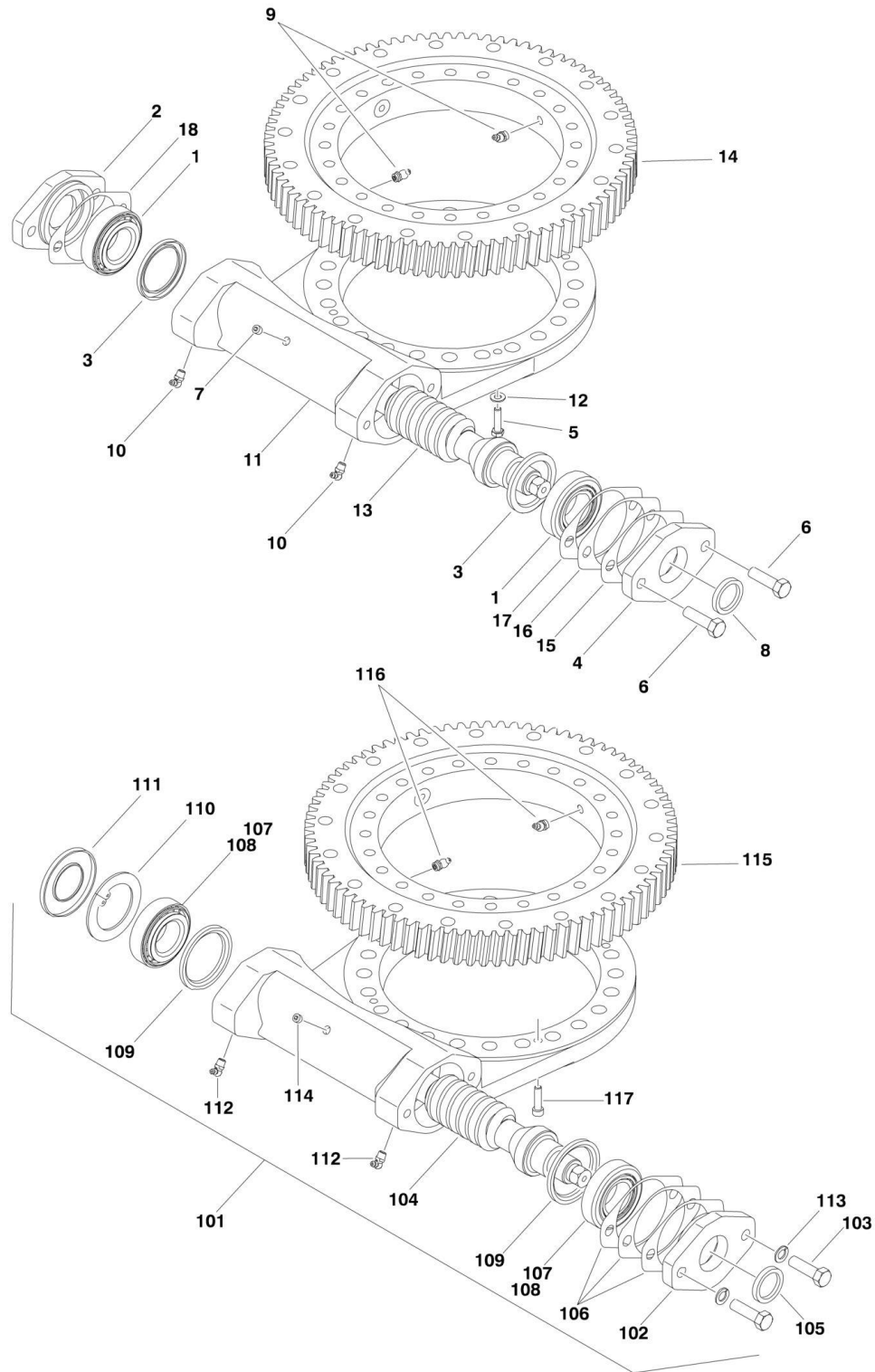
**SECTION 2 - TURNTABLE**

**FIGURE 2-4. SWING MOTOR ASSEMBLY**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	3160233	Ref	<b>SWING MOTOR ASSEMBLY</b>	
1	Not Serviced	6	Screw, Metric M6 x 20mm	
2	Not Serviced	1	Ring, Dust	
3	Not Serviced	1	Flange, Spigot	
4	Kit	1	Seal, Shaft	
5	Kit	1	O-Ring	
6	7020128	1	Race, Bearing	
7	7020129	1	Bearing, Needle	
8	7020126	1	Key, Woodruff	
9	Not Available	1	Shaft, Output	
10	7020130	1	Shaft	
11	Kit	3	O-Ring	
12	Not Serviced	1	Plate, Distributor	
13	7020131	1	Gear Set	
14	Not Serviced	1	Cover, End	
15	Not Serviced	6	Washer	
16	Not Serviced	6	Screw, Metric M8 x 35mm	
17	Not Serviced	1	Nameplate	
18	Not Serviced		Housing	
19	Not Serviced		Plug, Drain 7/16in-20NF	
	7020127	1	Seal Kit (Includes Items 4, 5 & 11)	

# SECTION 2 - TURNTABLE

## FIGURE 2-5. SWING BEARING ASSEMBLY



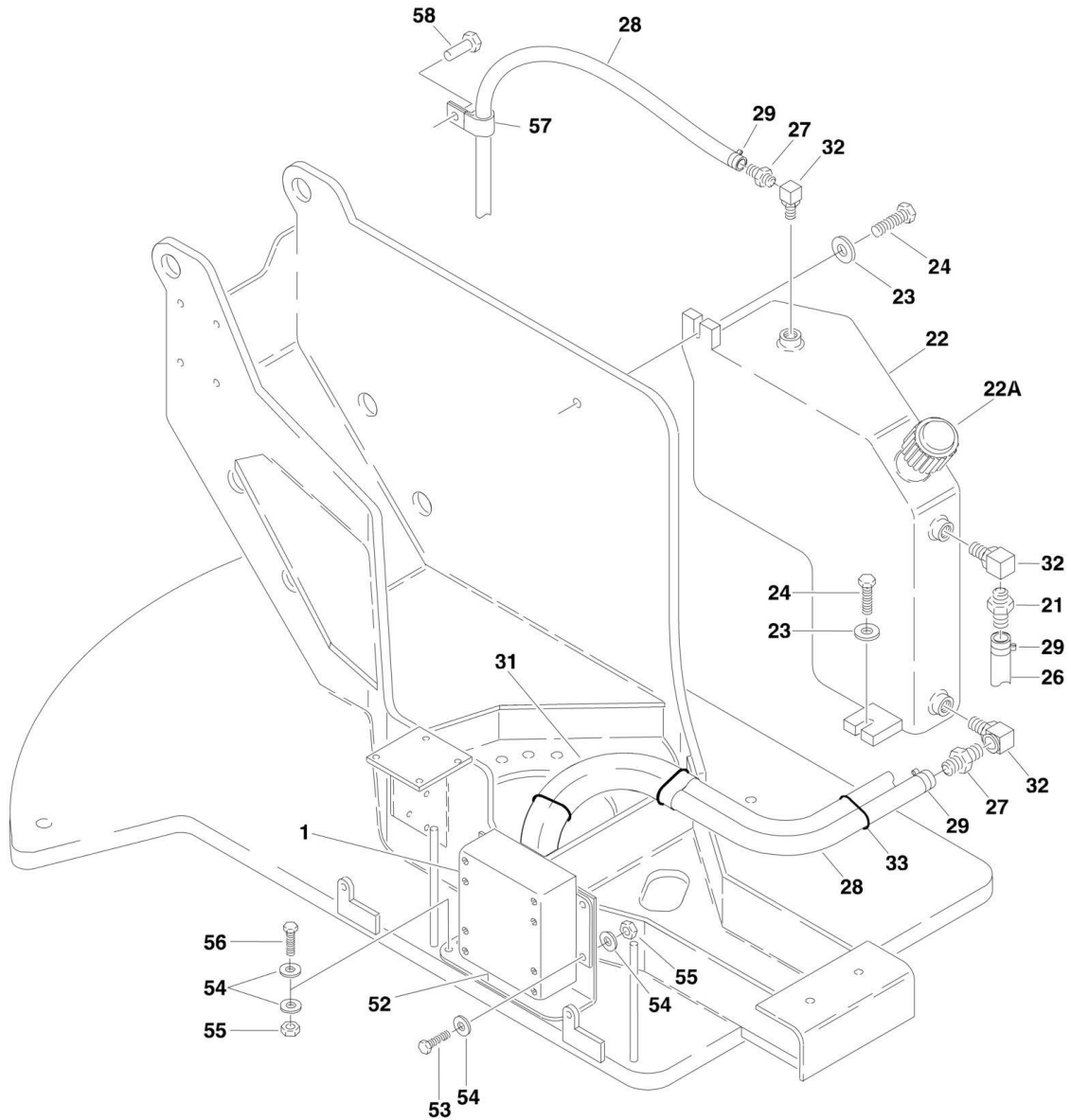
## SECTION 2 - TURNTABLE

### FIGURE 2-5. SWING BEARING ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>Note: Visually identify the brand before ordering replacement parts.</b>	
	0440339	Ref	<b>SWING BEARING ASSEMBLY (PERFECTION GEAR) (SERVICE REPLACEMENT)</b>	C
1	7026042	2	Bearing, Cup	
1	7026043	2	Bearing, Cone	
2	7027356	1	Adapter, Motor	
3	7027361	2	Seal	
4	7027354	1	Cap, End	
5	0641510	2	Bolt 5/16in-18NC x 1 1/4in	
6	0641812	2	Bolt 1/2in-13NC x 1 1/2in	
7	70000865	1	Plug	
8	7027360	1	Seal	
9	7027359	2	Straight Fitting, Grease	
9	2160003	2	Fitting, Grease - 45	
10	7027358	2	90 Fitting, Grease	
11	Not Available	1	Housing	
12	4891500	2	Flatwasher 5/16in (Hardened)	
13	7027363	1	Gear, Worm	
14	70000868	1	Ring, Bearing	
15	7027352	AR	Gasket (.010 - Brown)	
16	7027351	AR	Gasket (.0075 - Clear)	
17	7027350	AR	Gasket (.005 - Blue)	
18	7027353	1	Gasket (.020 - Yellow)	
	0440203	Ref	<b>SWING BEARING ASSEMBLY (KAYDON) (ORIGINAL EQUIPMENT)</b>	G
101	7012597	1	Swing Rotation Box Assembly	
102	7023484	1	Cap, End	
103	Not Available	2	Bolt 1/2in-13NC x 1 1/2in Grade 8	
104	Not Available	1	Gear, Worm	
105	7012654	1	Seal, Outer - Capped End (1.75 O.D.)	
106	7016682	1	Shims Kit (Includes Qty 3 each of .005, .0075 & .010 Shims)	
107	70001677	2	Cup, Bearing	
108	90206369	2	Cone, Bearing	
109	7016676	1	Seal, Outer - Capped End (2.063 O.D.)	
110	Not Available	1	Ring, Retaining	
111	7012655	1	Seal, Outer - Motor End	
112	2160001	2	Fitting, Grease - 90	
113	Not Available	2	Lockwasher 1/2in	
114		Ref	Component Options:	
114	Not Available		Plug, Pipe	
114	2160001	1	Fitting, Grease - 45	
115	7012596	1	Bearing, Turntable	
116	2160003	2	Fitting, Grease - 45	
117	Not Available	4	Capscrew, Socket Head 5/16in-18NC	
117	Not Available	4	Washer 5/16in (Not Shown)	

## SECTION 2 - TURNTABLE

FIGURE 2-6. TANK AND MOTOR/GENERATOR COMPONENTS INSTALLATION (M45 AND M40 ONLY)



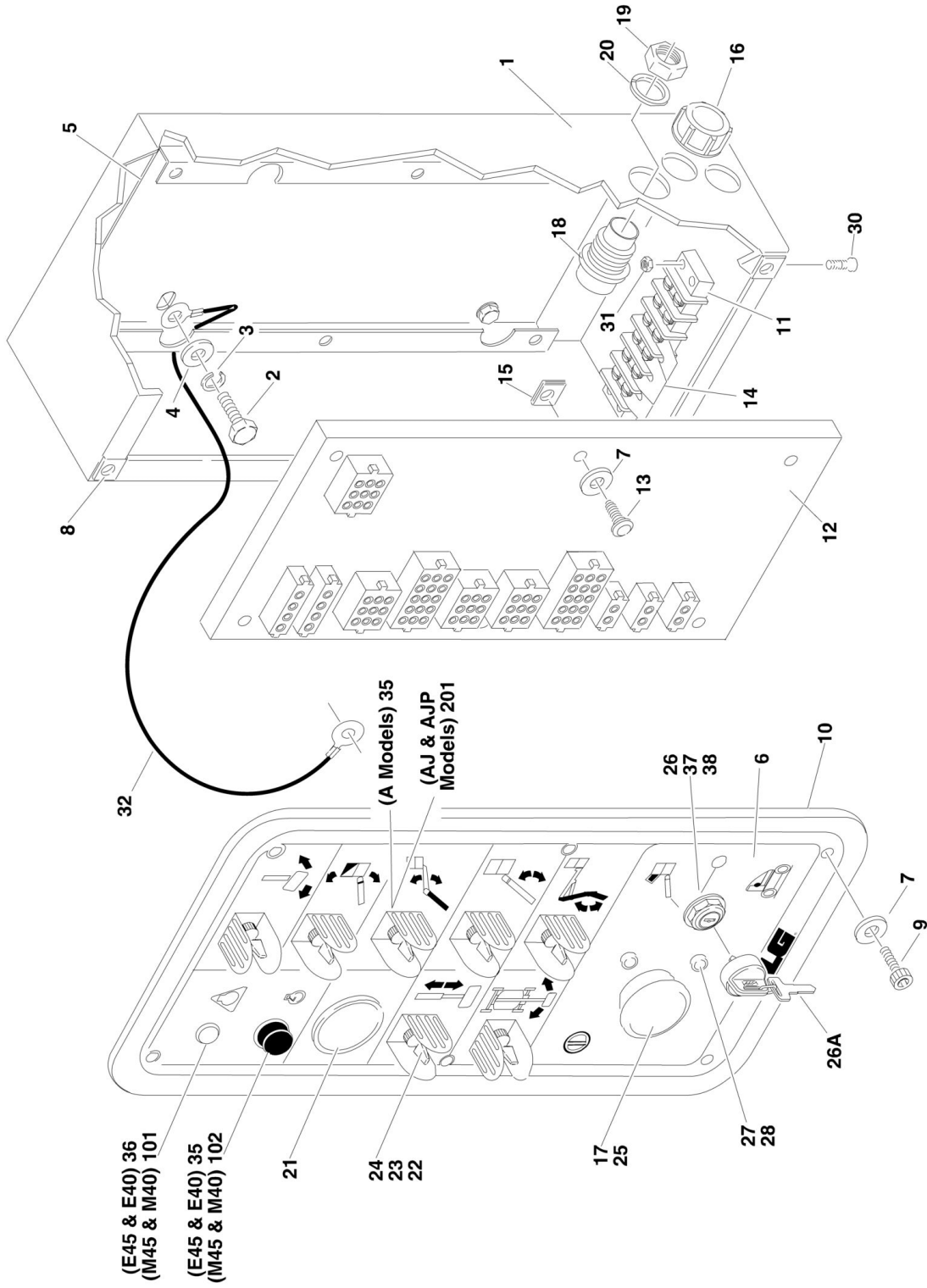
## SECTION 2 - TURNTABLE

**FIGURE 2-6. TANK AND MOTOR/GENERATOR COMPONENTS INSTALLATION (M45 AND M40 ONLY)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>TANK AND MOTOR/GENERATOR COMPONENTS INSTALLATION (TURNTABLE MOUNTED) (M45 AND M40 ONLY)</b>	
	0257824	Ref	<b>Tank and Motor/Generator Components Installation (Turntable Mounted) M45A, M40AJP &amp; M45AJ</b>	11
	0270344	Ref	<b>Tank and Motor/Generator Components Installation (Turntable Mounted) M40AJPnarrow</b>	1
1	7020156	1	Module, Control	
2	7020155	1	Harness, Wiring (Not Shown - See ELECTRICAL SECTION for Breakdown)	
21	2180536	1	Fitting, Barbed	
22	4400417	1	Tank, Gas	
22A	7016314	1	Cap (Standard)	
22A	1120487	1	Lockable Cap (Blue) (Optional)	
23	4751600	2	Flatwasher 3/8in	
24	0641616	2	Bolt 3/8in-16NC x 2in	
26	2720271	10 ft/3m	Hose	
27	2220315	2	Fitting, Barbed	
28	2720339	12 ft/3.7m	Hose	
29	1320022	7	Clamp, Hose	
30	0100020	AR	Sealant (Not Shown)	
31	4100026	3 ft/1m	Sleeve, Hose	
32	2220459	3	Fitting 90	
33	4240033	10	Strap, Tie	
52	3571157	1	Plate	
53	0641406	4	Bolt 1/4in-20NC x 3/4in	
54	4711400	16	Flatwasher 1/4in Narrow	
55	3311405	8	Locknut 1/4in-20NC	
56	0641412	4	Bolt 1/4in-20NC x 1 1/2in	
57	1320041	1	Clamp	
58	0641408	1	Bolt 1/4in-20NC x 1in	

# SECTION 2 - TURNTABLE

## FIGURE 2-7. GROUND CONTROL BOX ASSEMBLY



**SECTION 2 - TURNTABLE**

**FIGURE 2-7. GROUND CONTROL BOX ASSEMBLY**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>GROUND CONTROL BOX ASSEMBLY</b>	
	0861177	Ref	<b>Ground Control Box Assembly E45 &amp; M45 Models</b>	2-B
	0861351	Ref	<b>Ground Control Box Assembly E40 &amp; M40 Models</b>	2-B
1	0861152	1	Box Weldment	
2	0641605	4	Bolt 3/8in-16NC x 5/8in	
3	4761600	4	Lockwasher 3/8in	
4	4751600	4	Flatwasher 3/8in	
5	0902406	1	Bracket, Module Mounting	
6		Ref	Nameplate Options:	
6	3252632	1	Nameplate E45 & M45	
6	3252669	1	Nameplate E40 & M40	
7	4740120	12	Washer, Nylon	
8	3300365	6	Nut, Retainer	
9	0630464	6	Screw	
10	3960438	50	Seal	
		in/1.26m		
11	4460007	1	Strip, Terminal - 6 Position	
11	3990106	1	Limiter, Inrush	
12		Ref	Module Options:	
12	0610129	1	Module E45 & M45	
12	0610139	1	Module E40 & M40	
13	0750808	6	Screw #8 x 1in	
14	4460264	3	Buss, Terminal	
15	3300188	6	Nut, Tinnerman	
16	4460425	1	Connector, Strain Relief	
17	4360476	1	Block, Contact	
18	4460495	1	Connector, Receptacle	
19	4460497	1	Nut, Conduit	
20	4460496	1	Lockwasher	
21	2420106	1	Gauge, Hourmeter/Battery Capacity	
22	4740397	6	Spacer	
23	4360328	6	Switch, Toggle	
24	4060906	6	Guard, Switch	
25	4360475	1	Switch, Emergency Stop	
25	7020175	1	Mushroom Head	
25	7020176	1	Block, Contact	
26	4360469	1	Keyswitch	
26A	2860030	AR	Key, Replacement	
27	4360070	2	Breaker, Circuit - 15Amp	
28	3300396	2	Nut, Special	
30	3911012	2	Screw #10-24NC x 3/4in	
31	3311005	2	Locknut #10-24NC	
32	1060584	1	Cable, Lanyard	
33	3311011	1	Nut, Push #10	
35	3520028	2	Plug, Hole 1/2in	
36	3520054	1	Plug, Hole 7/16in	
37	4070987	5	Shim, Nylon	
38	3910804	6	Screw #8-32NC x 1/4in	
		Ref	<b>MOTOR CONTROLS INSTALLATION (M45 &amp; M40 ONLY)</b>	
	0257824	Ref	<b>Motor Controls Installation M45 Models</b>	11

## SECTION 2 - TURNTABLE

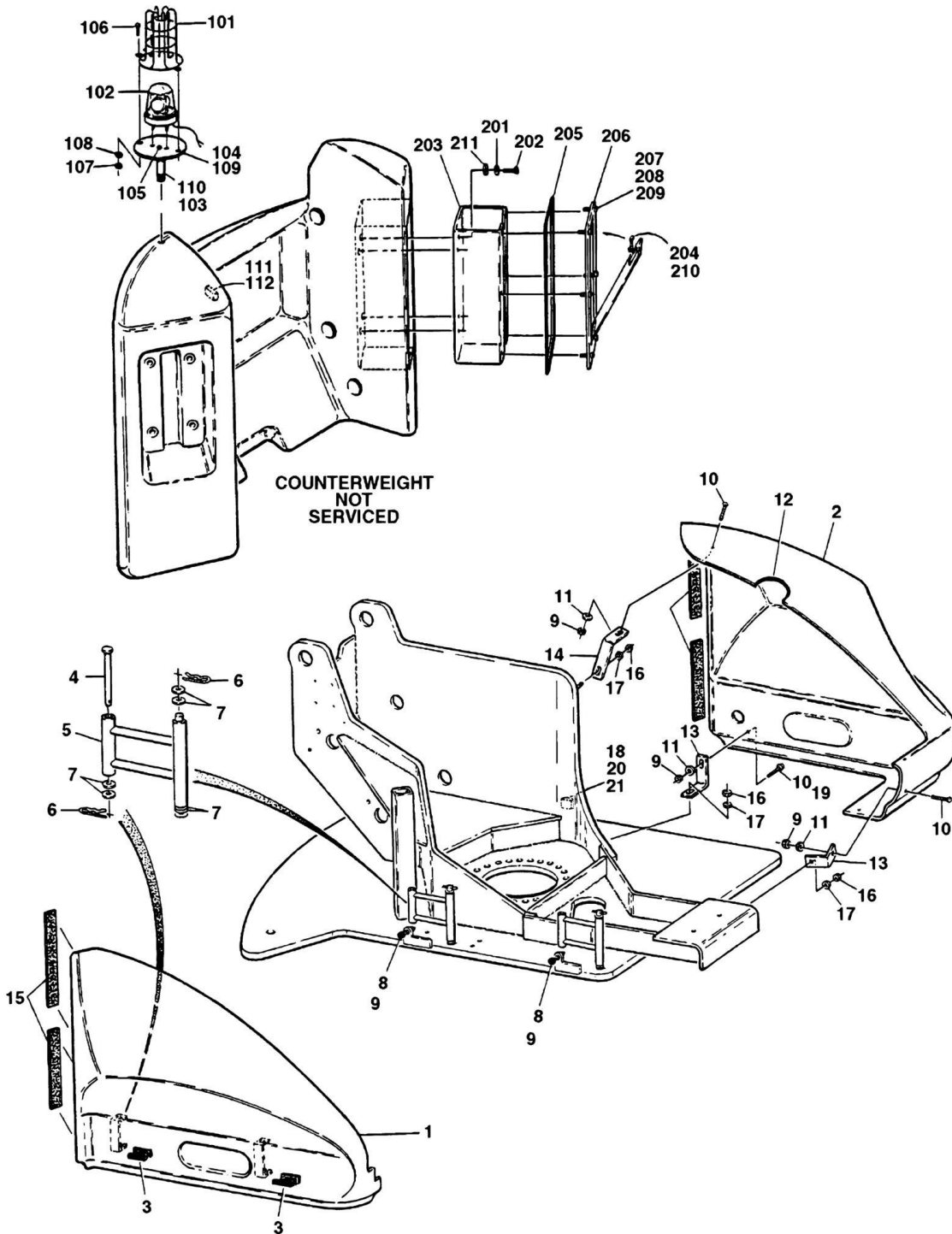
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0270344	Ref	<b>Motor Controls Installation M40 Models</b>	1
101	2920151	1	Led (Red)	
101	4460248	2	Terminal, Button Splice	
102	4360274	1	Switch, Push Button	
102	4460259	2	Terminal, Posi-Lock	
102	4460260	2	Terminal, Housing	
	4933101	Ref	<b>JIB SWITCH INSTALLATION (AJ &amp; AJP MODELS ONLY)</b>	1-A
201	4360328	1	Switch, Toggle	
201	3790012	1	O-Ring	
201	4060906	1	Shield, Switch	





# SECTION 2 - TURNTABLE

## FIGURE 2-8. HOODS AND BEACON LIGHT INSTALLATIONS



**SECTION 2 - TURNTABLE**

**FIGURE 2-8. HOODS AND BEACON LIGHT INSTALLATIONS**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>HOODS INSTALLATION</b>	
	0258953	Ref	<b>Hoods Installation M45 &amp; M40 Models</b>	2-B
	0253709	Ref	<b>Hoods Installation E45 &amp; E40 Models</b>	7-G
		Ref	<b>Note: Replacement Decals Must Be Ordered Separately- See DECALS SECTION.</b>	
1		Ref	Hood, LH Options:	
1	2680473	1	Hood, LH (Was p/n 2680410) <b>(Prior to SN 48133)</b>	
1	2680473	1	Hood, LH <b>(SN 48133 to Present)</b>	
2		Ref	Hood Options:	
2	2680474	1	Hood M45 & M40 Models (Was p/n 2680453) <b>(Prior to SN 48133)</b>	
2	2680474	1	Hood M45 & M40 Models <b>(SN 48133 to Present)</b>	
2	2680475	1	Hood E45 & E40 Models (Was p/n 2680411) <b>(Prior to SN 48133)</b>	
2	2680475	1	Hood E45 & E40 Models <b>(SN 48133 to Present)</b>	
3	2940071	2	Latch	
4	3430840	2	Pin, Clevis	
5	0253687	2	Hinge, Swing	
6	3420156	4	Pin, Hair Cotter	
7	4751800	AR	Flatwasher 1/2in	
8	0940049	2	Bumper Only <b>(Prior to SN 48133)</b>	
9	3311501	AR	Nut 5/16in-18NC	
10	0630468	3	Bolt 5/16in-18NC x 1in	
11	4751500	5	Flatwasher 5/16in	
12	4060803	AR	Shield, Flex Trim	
13	0901923	2	Bracket, Hood Mounting	
14	0901921	1	Bracket, Hood Mounting	
15	3960453	5 ft/1.5m	Seal, Door	
16	3311601	AR	Nut 3/8in-16NC	
17	4751600	AR	Flatwasher 3/8in	
18	1320043	1	Clamp, Insulated Cable 3/8in	
19	0641510	AR	Bolt 5/16in-18NC x 1 1/4in	
20	4751400	1	Flatwasher 1/4in	
21	3311401	1	Nut 1/4in-20NC	
22	0100011	AR	Loctite #242 (Not Shown)	
	0259305	Ref	<b>STROBE LIGHT INSTALLATION (OPTIONAL)</b>	1
101	4060865	1	Guard, Light	
102	2920146	1	Light, Strobe (Amber)	
102	7016319	1	Bulb, Light	
102	7016372	1	Amber Lens	
103	0630491	1	Bolt, Special	
104	3537903	1	Plate, Mounting	
105	0741606	1	Screw, Flathead 3/8in-16NC x 3/4in	
106	0721008	2	Bolt #10-24NC x 1in	
107	3311005	2	Locknut #10-24NC	
108	4751000	4	Flatwasher #10	
109	4220162	1	Spacer	
110	0100011	AR	Loctite #242	
111	4240032	1	Tie-Strap	
112	4460234	1	Clamp	

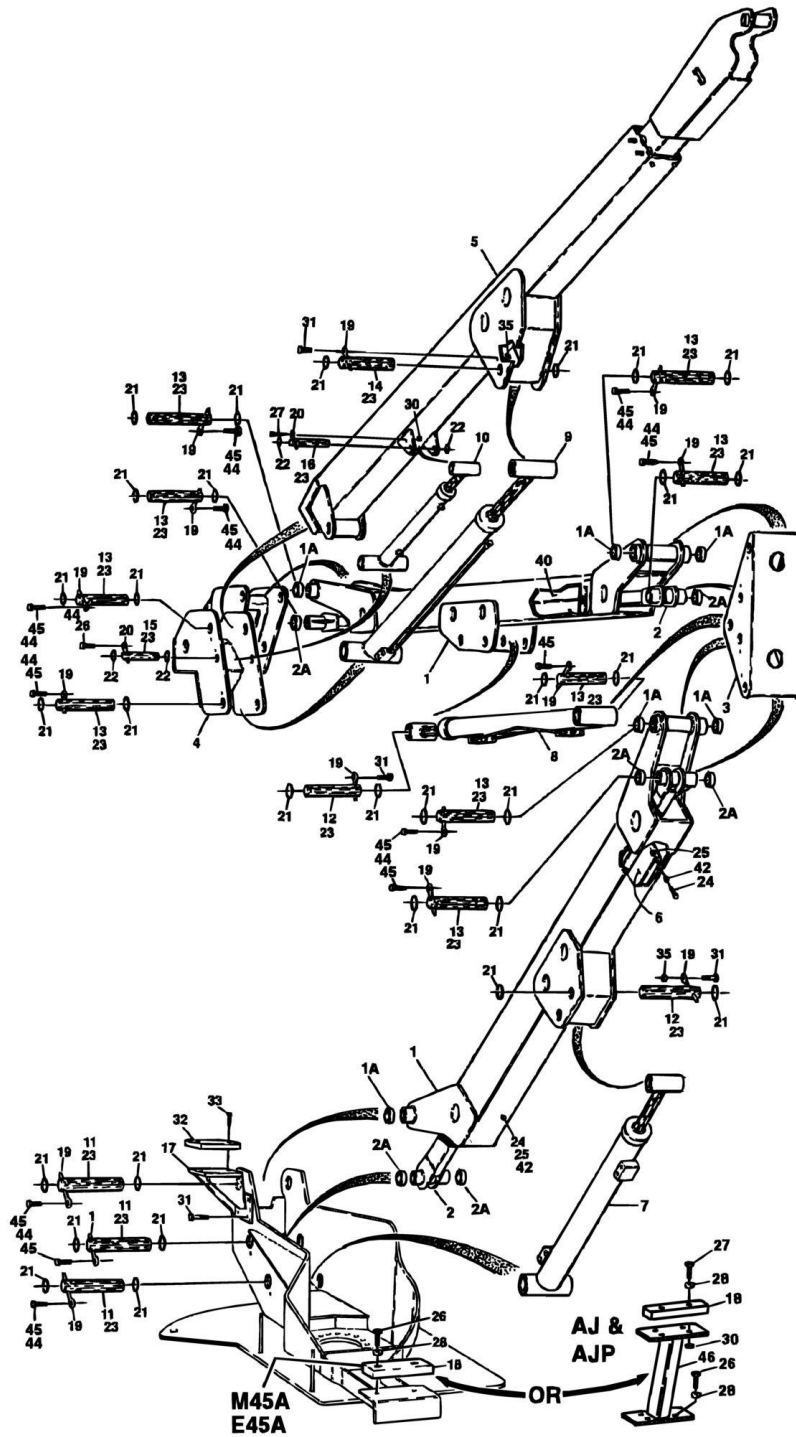
## SECTION 2 - TURNTABLE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
113	2820036	16 in/41cm	Loom (Not Shown)	B
	0253984	Ref	<b>STORAGE COMPARTMENT INSTALLATION ONLY (Prior to SN 48133)</b>	
201	4761600	4	Lockwasher 3/8in	
202	0641605	4	Bolt 3/8in-6NC x 5/8in	
203	3536691	1	Box, Storage	
204	2940042	1	Latch	
205	3960438	50 in/1.3m	Seal	
206	4844404	1	Door Front Weldment	
207	4740120	6	Washer, Nylon	
208	0630464	6	Screw, Button Head #10-24NC x 1/2in	
209	3300365	6	Retainer, Nut #10-24NC	
210	0100011	AR	Loctite #242	
211	4751600	4	Flatwasher 3/8in	

**SECTION 3 - BOOM**

# SECTION 3 - BOOM

FIGURE 3-1. BOOMS INSTALLATION (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)



## SECTION 3 - BOOM

**FIGURE 3-1. BOOMS INSTALLATION (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>BOOMS INSTALLATIONS</b>	
	0258691	Ref	<b>Booms Installations E45A &amp; M45A</b>	2
	0259366	Ref	<b>Booms Installations E45AJ &amp; M45AJ</b>	3/C
	0259939	Ref	<b>Booms Installations E40AJP &amp; M40AJP</b>	2-B
1		Ref	Boom Assembly - Tower Options:	
1	0800852	2	Boom Assembly -Tower E45 & M45	
1	0801227	2	Boom Assembly -Tower E40 & M40	
1A		Ref	Teflon Bushing Options: (4 per Assembly)	
1A	0961726	AR	Teflon Bushing E45 & M45	
1A	0961950	AR	Teflon Bushing E40 & M40	
2		Ref	Level Link Options:	
2	4844541	2	Level Link E45 & M45	
2	4846209	2	Level Link E40 & M40	
2A		Ref	Teflon Bushing Options: (4 per Assembly)	
2A	0961726	AR	Teflon Bushing E45 & M45	
2A	0961950	AR	Teflon Bushing E40 & M40	
3	4844427	1	Upright Weldment (Lower)	
4		Ref	Upright Weldment (Upper) Options:	
4	4844304	1	Upright Weldment (Upper) E45A & M45A	
4	4846026	1	Upright Weldment (Upper) E45AJ, M45AJ, E40AJP & M40AJP	
5		Ref	Boom Assembly - Main Options:	
5	0801169	1	Boom Assembly - Main E45A & M45A (See MAIN BOOM ASSEMBLY (E45A & M45A) for Breakdown)	
5	0801197	1	Boom Assembly - Main E45AJ & M45AJ (See MAIN BOOM ASSEMBLY (E45AJ & M45AJ) for Breakdown)	
5	0801225	1	Boom Assembly - Main E40AJP & M40AJP (See MAIN BOOM ASSEMBLY (E40AJP & M40AJP) for Breakdown)	
6		Ref	Hose Guard Plate Options:	
6	3537045	1	Hose Guard Plate E45 & M45	
6	3536491	1	Hose Guard Plate E40 & M40	
7		Ref	Lift Cylinder Assembly - Lower Options (See CYLINDER SECTION for Breakdown):	
7	1683711	1	Lift Cylinder Assembly - Lower E45A & M45A	
7	1683826	1	Lift Cylinder Assembly - Lower E45AJ & M45AJ	
7	1683939	1	Lift Cylinder Assembly - Lower E40AJP & M40AJP	
8		Ref	Lift Cylinder Assembly - Mid Options (See CYLINDER SECTION for Breakdown):	
8	1683713	1	Lift Cylinder Assembly - Mid E45A & M45A	
8	1683825	1	Lift Cylinder Assembly - Mid E45AJ & M45AJ	
8	1683942	1	Lift Cylinder Assembly - Mid E40AJP & M40AJP	
9		Ref	Lift Cylinder Assembly - Upper Options (See CYLINDER SECTION for Breakdown):	
9	1683708	1	Lift Cylinder Assembly - Upper E45A & M45A	
9	1683813	1	Lift Cylinder Assembly - Upper E45AJ & M45AJ	
9	1683945	1	Lift Cylinder Assembly - Upper E40AJP & M40AJP	
10		Ref	Master Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
10	1683325	1	Master Cylinder Assembly E45A & M45A	
10	1683773	1	Master Cylinder Assembly E45AJ & M45AJ	
10	1683923	1	Master Cylinder Assembly E40AJP & M40AJP	
11		Ref	Pin Options:	

## SECTION 3 - BOOM

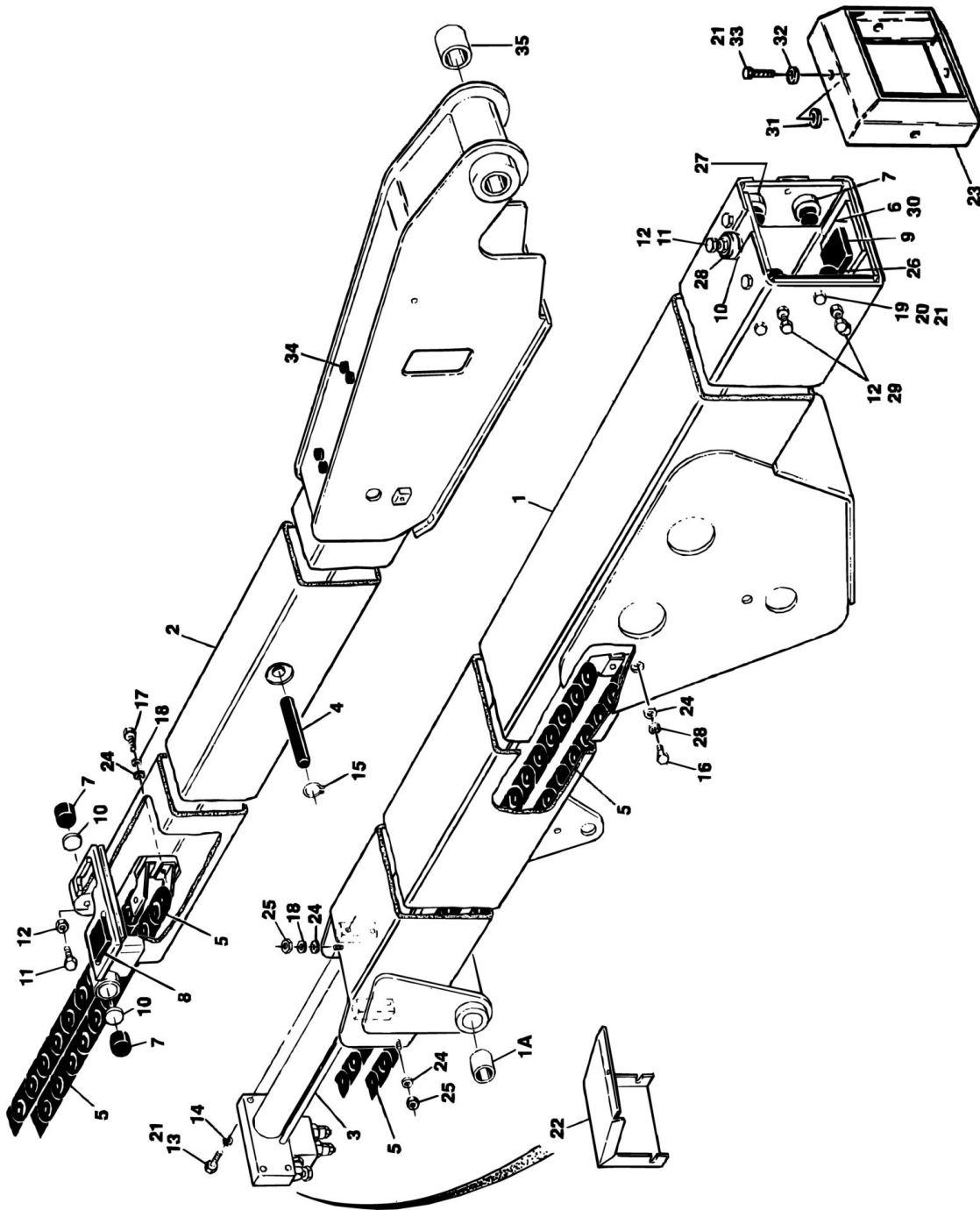
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
11	3422175	3	Pin E45 & M45	
11	3422481	3	Pin E40 & M40	
12		Ref	Pin Options:	
12	3422176	2	Pin E45 & M45	
12	3422845	2	Pin E40 & M40	
13		Ref	Pin Options:	
13	3422177	9	Pin E45 & M45	
13	3422480	9	Pin E40 & M40	
14		Ref	Pin Options:	
14	3422178	1	Pin E45 & M45	
14	3422844	1	Pin E40 & M40	
15		Ref	Pin Options:	
15	3422179	1	Pin E45A & M45A	
15	3422806	1	Pin E45AJ, M45AJ, E40AJP & M40AJP	
16		Ref	Pin Options:	
16	3422180	1	Pin E45A & M45A	
16	3422582	1	Pin E45AJ, M45AJ, E40AJP & M40AJP	
17	4844467	1	Boom Rest Weldment	
18	0561076	1	Block, Boom Rest	
19	3841203	AR	Keeper, Pin - 1/2in	
20	3841143	AR	Keeper, Pin - 3/8in	
21	3780184	30	O-Ring - 2in (E45, M45, E45AJ & M45AJ Only)	
22	3780181	4	O-Ring - 1in (E45 & M45 Only)	
23	3020022	AR	Grease	
24	0641506	4	Bolt 5/16in-18NC x 3/4in	
25	3311505	4	Locknut 5/16in-18NC	
26	0641608	5	Bolt 3/8in-16NC x 1in	
27	0641610	4	Bolt 3/8in-16NC x 1 1/4in	
28	4751600	8	Flatwasher 5/16in	
30	3311605	3	Locknut 3/8in-16NC	
31	0641812	6	Bolt 1/2in-13NC x 1 1/2in	
32	0940048	1	Bumper	
33	0641806	2	Bolt 1/2in-13NC x 3/4in	
34	3422669	1	Pin	
35	3311805	3	Locknut 1/2in-13NC	
40		Ref	Tube	
40	4566356	1	Tube E45 & M45	
40	4566427	1	Tube E40 & M40	
42	4751500	4	Flatwasher 5/16in	
44	0100011	AR	LOCTITE #242	
45	0641810	12	Bolt 1/2in-13NC x 1 1/4in	
46	4846091	1	Rest, Boom Only <b>(SN 46063 to Present)</b>	





# SECTION 3 - BOOM

## FIGURE 3-2. MAIN BOOM ASSEMBLY (E45A AND M45A)



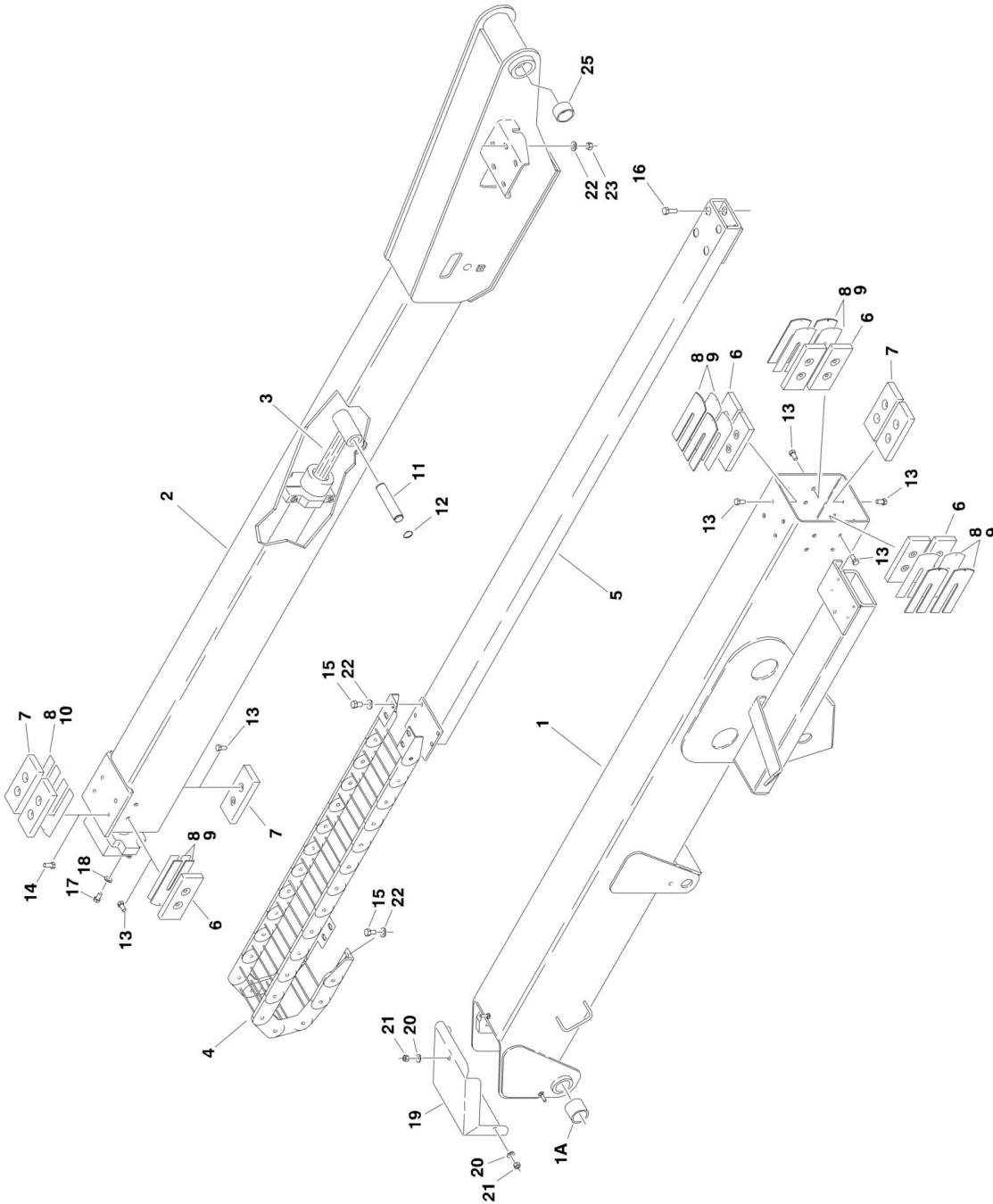
## SECTION 3 - BOOM

**FIGURE 3-2. MAIN BOOM ASSEMBLY (E45A AND M45A)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0801169	Ref	<b>MAIN BOOM ASSEMBLY (E45A AND M45A)</b>	1-A
1	0800854	1	Base Weldment	
1A	0961726	2	Bearing	
2	0801154	1	Fly Weldment	
3	1683704	1	Telescope Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
4	3422185	1	Pin	
5	1180302	1	Powertrack Assembly	
6	4844579	1	Holder, Wear Pad	
7	3340663	8	Pad, Wear (Base Front Top and Sides/Fly Rear Sides and Bottom)	
8	3340820	2	Pad, Wear (Fly Rear Top)	
9	3340682	1	Pad, Wear (Base Front Bottom)	
10	1760160	8	Disc	
11	0630487	6	Bolt, Special	
12	3311602	8	Nut, Jam 3/8in-16NC	
13	0641818	4	Bolt 1/2in-13NC x 2 1/4in	
14	4761800	4	Lockwasher 1/2in	
15	3760115	2	Ring, Snap	
16	0641405	2	Bolt 1/4in-20NC x 5/8in	
17	0641404	2	Bolt 1/4in-20NC x 1/2in	
18	4761400	7	Lockwasher 1/4in	
19	0641606	7	Bolt 3/8in-16NC x 3/4in	
20	4761600	7	Lockwasher 3/8in	
21	0100011	AR	LOCTITE #242	
22	1670678	1	Cover, Boom	
23	1670698	1	Cover, Boom	
24	4751400	7	Flatwasher 1/4in	
25	3311401	3	Nut 1/4in-20NC	
26	1220038	1	Holder, Wear Pad (Base Front Left Sides)	
27	1220039	1	Holder, Wear Pad (Base Front Right Side)	
28	1220040	1	Holder, Wear Pad (Base Front Top)	
29	0630399	2	Bolt, Special	
30	0100009	AR	Silicone	
31	4740413	5	Washer, Spacer	
32	4751600	5	Flatwasher 3/8in	
33	0641608	5	Bolt 3/8in-16NC x 1in	
34	3520034	4	Plug, Hole	
35	0961951	2	Bearing, Garmax	

# SECTION 3 - BOOM

## FIGURE 3-3. MAIN BOOM ASSEMBLY (E45AJ AND M45AJ)



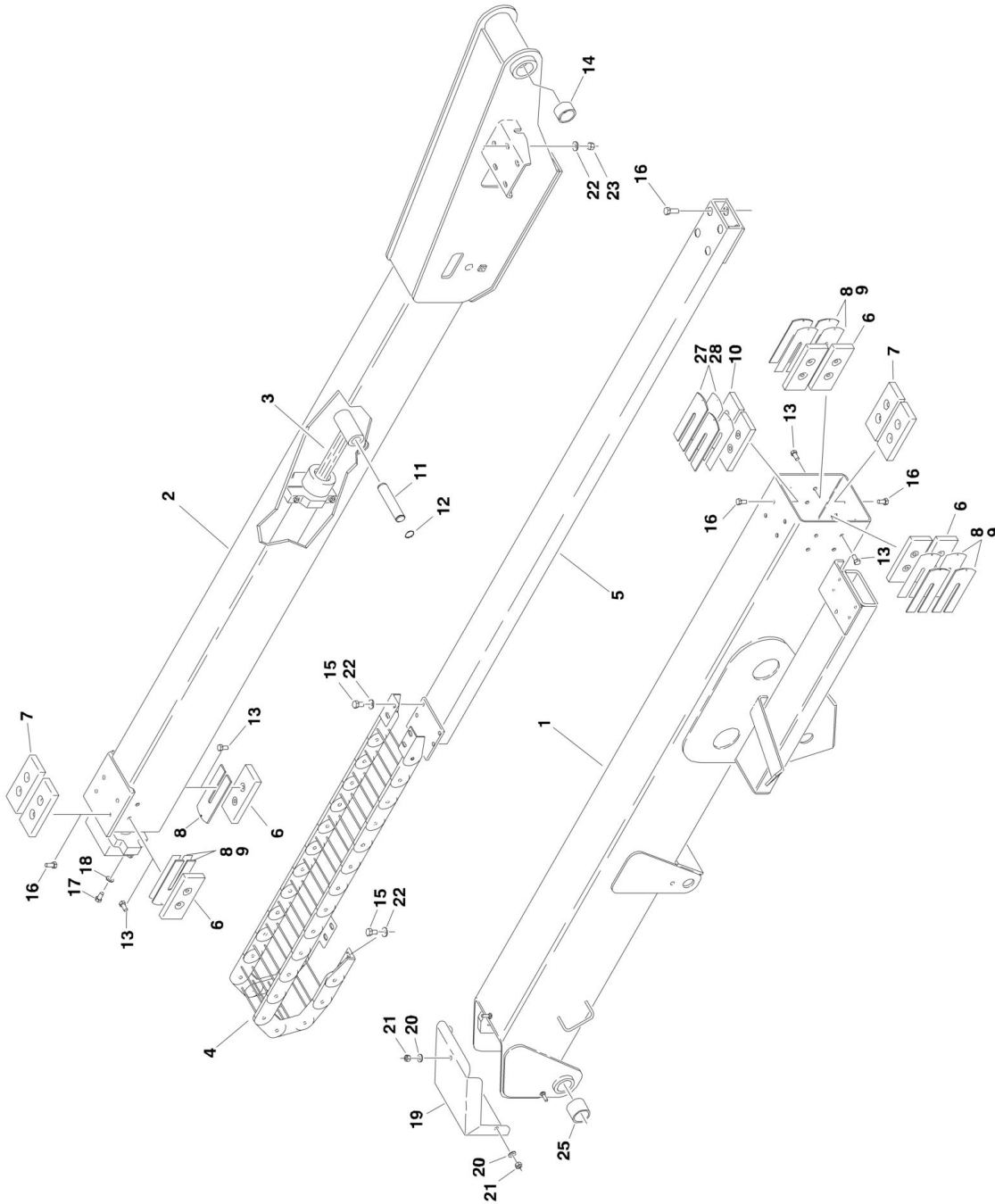
## SECTION 3 - BOOM

**FIGURE 3-3. MAIN BOOM ASSEMBLY (E45AJ AND M45AJ)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0801197	Ref	<b>MAIN BOOM ASSEMBLY (E45AJ AND M45AJ)</b>	2-B
1	0801198	1	Base Weldment	
1A	0961726	2	Bearing	
2	0801192	1	Fly Weldment	
3	1683798	1	Telescope Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
4	1180352	1	Powertrack Assembly	
4	7006139	AR	1ft Repair Section	
4	7006151	AR	Feet, Mounting	
4	7006152	AR	Pin Kit (Includes 1 Link Pin, 4 Different Size Washers and 1 Retaining Ring)	
5	4846033	1	Pushtube Weldment	
6	3340756	8	Pad, Wear (Base Front Top and Sides/Fly Rear Sides)	
7	3340837	5	Pad, Wear (Base Bottom/Fly Rear Top and Bottom)	
8	4070897	10	Shim 18 Gauge	
9	4070898	8	Shim 16 Gauge	
10	4070982	2	Shim 11 Gauge	
11	3422804	1	Pin	
12	3760115	2	Ring, Snap	
13	0641606	22	Bolt 3/8in-16NC x 3/4in	
14	0641607	4	Bolt 3/8in-16NC x 7/8in	
15	0641605	8	Bolt 3/8in-16NC x 5/8in	
16	0641608	24	Bolt 3/8in-16NC x 1in	
17	0641818	4	Bolt 1/2in-13NC x 2 1/4in	
18	4761800	4	Lockwasher 1/2in	
19	1670678	1	Cover, Boom	
20	4761600	3	Lockwasher 3/8in	
21	3311401	3	Nut 1/4in-20NC	
22	4711600	12	Flatwasher 3/8in	
23	3311605	4	Locknut 3/8in-16NC	
24	0100011	AR	Loctite #242 (Not Shown)	
25	0961948	4	Bearing, Garmax	

# SECTION 3 - BOOM

## FIGURE 3-4. MAIN BOOM ASSEMBLY (E40AJP AND M40AJP)



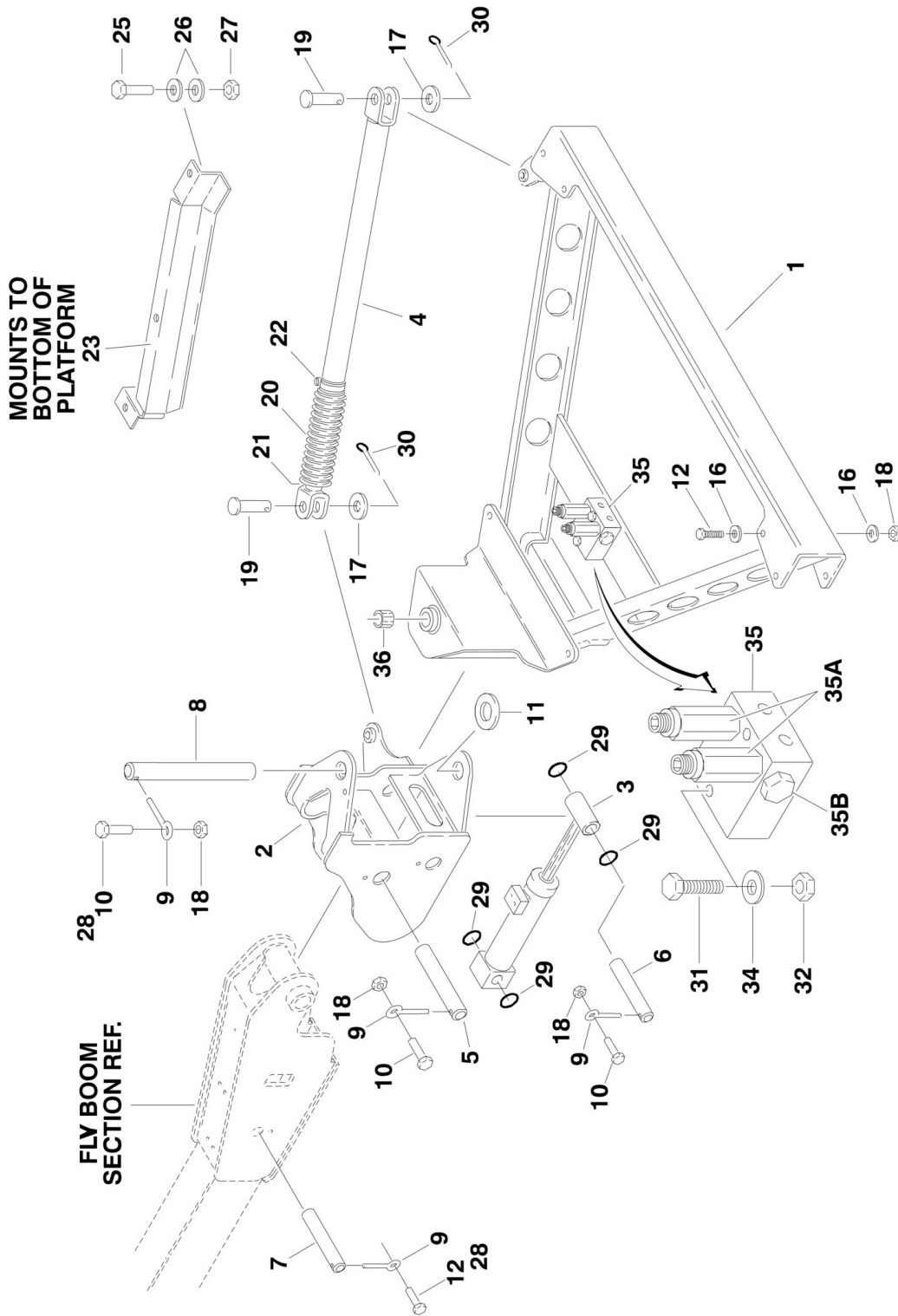
## SECTION 3 - BOOM

**FIGURE 3-4. MAIN BOOM ASSEMBLY (E40AJP AND M40AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0801225	Ref	<b>MAIN BOOM ASSEMBLY (E40AJP AND M40AJP)</b>	2-B
1	0801224	1	Base Weldment	
2	0801226	1	Weldment, Fly Boom	
3	1683911	1	Cylinder, Telescope (See CYLINDER SECTION for Breakdown)	
4	1180353	1	Carrier, Power Track	
4	7006139	AR	1ft Repair Section	
4	7006151	AR	Feet, Mounting	
4	7006152	AR	Pin Kit (Includes 1 Link Pin, 4 Different Size Washers and 1 Retaining Ring)	
5	4846180	1	Weldment, Push Tube	
6	3340878	10	Pad, Wear	
7	3340884	4	Pad, Wear	
8	4070864	12	Shim 18 Gauge	
9	4070863	8	Shim 11 Gauge	
10	3340886	2	Pad, Wear	
11	3422804	1	Pin	
12	3760115	2	Ring, Retaining	
13	0641606	30	Bolt 3/8in-16NC x 3/4in	
14	0961948	2	Bearing	
15	0641605	8	Bolt 3/8in-16NC x 5/8in	
16	0641608	22	Bolt 3/8in-16NC x 1in	
17	0641818	4	Bolt 1/2in-13NC x 2 1/4in	
18	4761800	4	Lockwasher 1/2in	
19	1670959	1	Cover	
20	4761400	3	Lockwasher 1/4in	
21	3311401	3	Nut 1/4in-20NC	
22	4711600	12	Flatwasher 3/8in	
23	3311605	4	Locknut 3/8in-16NC	
24	0100011	AR	Loctite #242 (Not Shown)	
25	0961950	2	Bearing	
26	3520082	2	Plug (Not Shown)	
27	4070997	2	Shim 16 Gauge	
28	4070998	2	Shim 18 Gauge	

# SECTION 3 - BOOM

FIGURE 3-5. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (Prior to SN 49945)





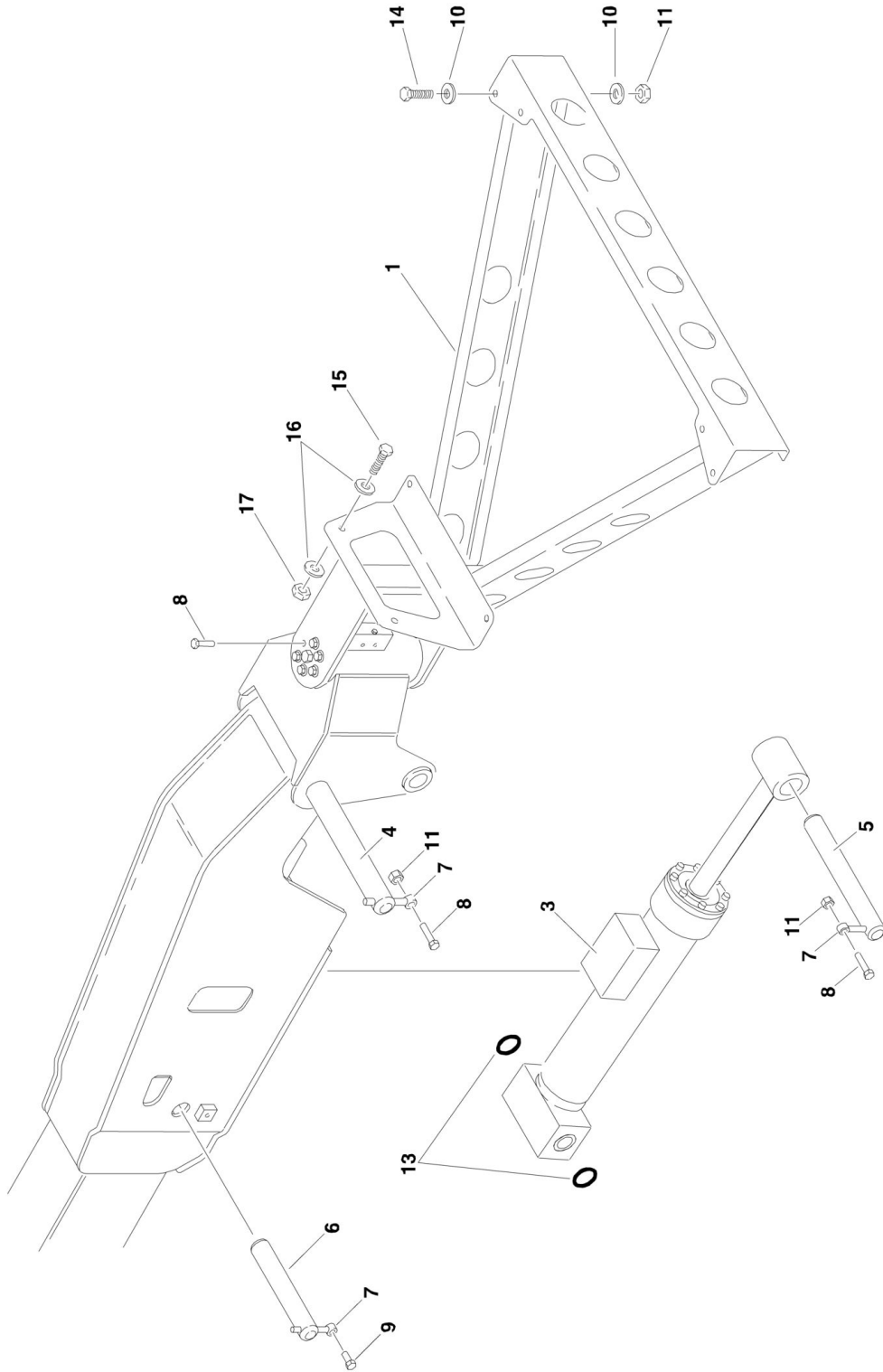
## SECTION 3 - BOOM

**FIGURE 3-5. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (Prior to SN 49945)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0258383	Ref	<b>PLATFORM ROTATOR AND SUPPORT INSTALLATION (E45A AND M45A)</b>	6-C
1	4845770	1	Support Weldment	
2	4845769	1	Pivot Weldment	
3	1683285	1	Platform Level Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
4	1682930	1	Platform Rotator Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
5	3422709	1	Pin, Pivot	
6	3422180	1	Pin, Pivot	
7	3422181	1	Pin, Pivot	
8	3422748	1	Pin, Pivot	
9	3841143	4	Pin, Keeper	
10	0641608	3	Bolt 3/8in-16NC x 1 1/4in	
11	4740007	1	Washer, Thrust	
12	0641607	7	Bolt 3/8in-16NC x 7/8in	
16	4751600	6	Flatwasher 3/8in	
17	4751800	2	Flatwasher 1/2in	
18	3311605	9	Locknut 3/8in-16NC	
19	3430816	2	Pin, Clevis 1/2in x 2in	
20	0460106	1	Bellows	
21	1320014	1	Clamp, Hose	
22	1320031	1	Clamp, Hose	
23	4060855	1	Shield	
25	0641516	2	Bolt 5/16in-18NC x 2in	
26	4751500	4	Flatwasher 5/16in	
27	3311505	2	Locknut 5/16in-18NC	
28	0100011	AR	LOCTITE #242	
29	3780181	4	O-Ring	
30	3450405	2	Pin, Cotter	
31	0641422	2	Bolt 1/4in-20NC x 2 3/4in	
32	3311405	2	Locknut 1/4in-20NC	
34	4751400	2	Flatwasher 1/4in	
35	4641080	1	Valve Assembly - Counterbalance	
35	7017498	1	Piston, Pilot	
35A	7012981	2	Cartridge, Relief	
35A	7012953	2	Seal Kit - 7012981 Cartridge (1 per Assembly)	
35B	7012955	2	Cartridge, Check	
35B	7012967	2	Seal Kit - 7012955 Cartridge (1 per Assembly)	
36	0961947	2	Bushing (Platform Pivot)	

# SECTION 3 - BOOM

FIGURE 3-6. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (SN 49945 to Present)



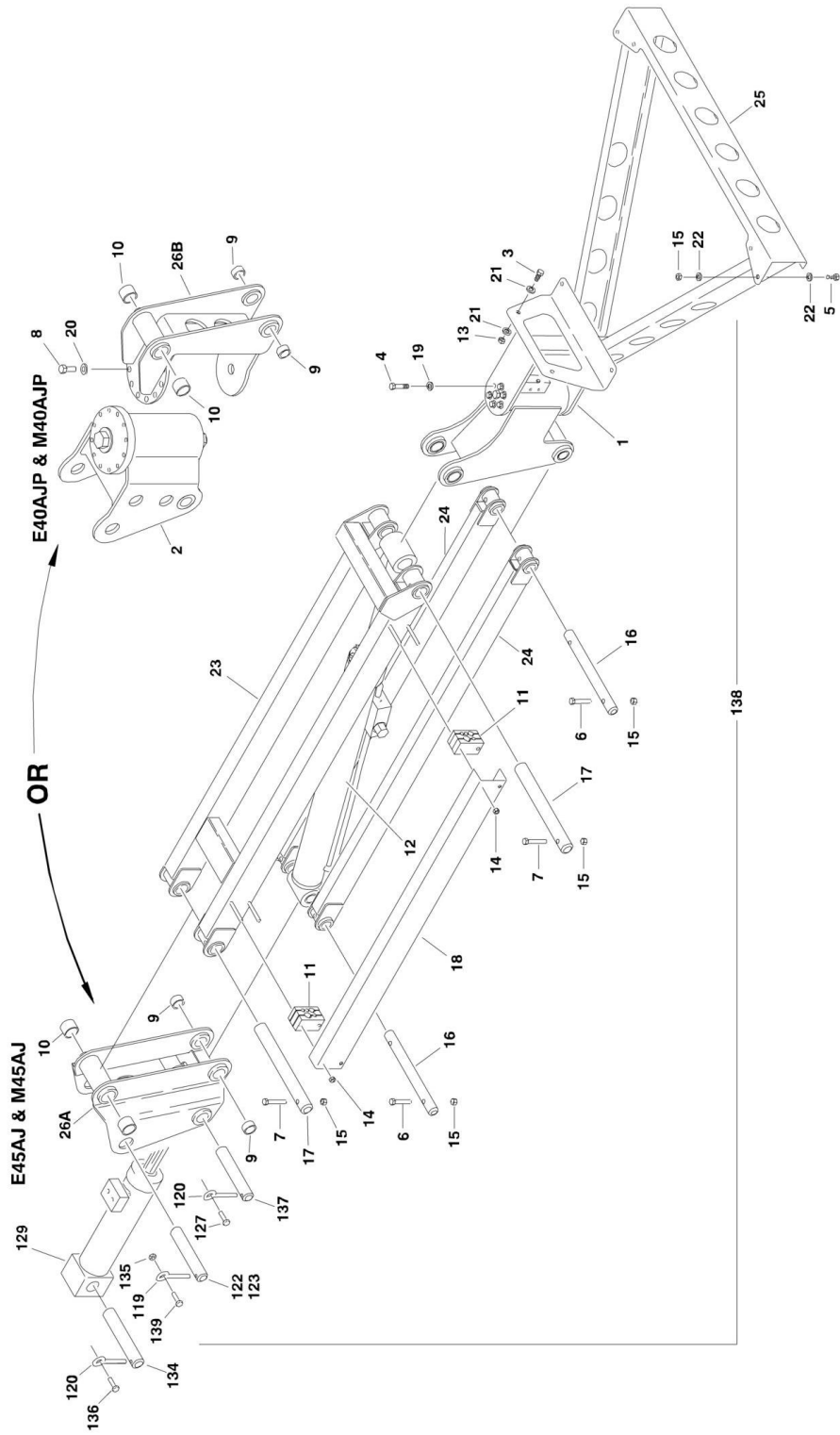
## SECTION 3 - BOOM

**FIGURE 3-6. SUPPORT AND ROTATOR ASSEMBLY (E45A AND M45A) (SN 49945 to Present)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0259754	Ref	<b>PLATFORM ROTATOR AND SUPPORT INSTALLATION (E45A AND M45A)</b>	1
1	4846050	1	Weldment, Support	
2	0060052	1	Rotator, Helac (See ROTATOR ASSEMBLY for Breakdown)	
3	1683285	1	Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
4	3422709	1	Shaft, Pin	
5	3422180	1	Shaft, Pin	
6	3422181	1	Shaft, Pin	
7	3841143	3	Keeper	
8	0641608	8	Bolt 3/8in-16NC x 1in	
9	0641607	1	Bolt 3/8in-16NC x 7/8in	
10	4751600	12	Flatwasher 3/8in	
11	3311605	8	Locknut 3/8in-16NC	
12	0100011	AR	Loctite #242 (Not Shown)	
13	3780181	4	O-Ring (1in)	
14	0641610	6	Bolt 3/8in-16NC x 1 1/4in	
15	0641407	2	Bolt 1/4in-20NC x 7/8in	
16	4740362	4	Washer, Fender	
17	3311405	2	Nut 1/4in-20NC	

# SECTION 3 - BOOM

## FIGURE 3-7. SUPPORT/ROTATOR AND JIB ASSEMBLIES (AJ AND AJP)



## SECTION 3 - BOOM

**FIGURE 3-7. SUPPORT/ROTATOR AND JIB ASSEMBLIES (AJ AND AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>JIB ASSEMBLIES (AJ AND AJP)</b>	
	0259440	Ref	<b>Jib Assemblies E45AJ &amp; M45AJ</b>	C
	0259441	Ref	<b>Jib Assemblies E40AJP &amp; M40AJP</b>	C
1	0060044	1	Rotator Assembly (See ROTATOR ASSEMBLY for Breakdown)	
2		Ref	Rotator Assembly Options (See ROTATOR ASSEMBLY for Breakdown):	
2	Not Required	0	Rotator Assembly E45AJ & M45AJ	
2	0060046	AR	Rotator Assembly E40AJP & M40AJP	
3	0641407	2	Bolt 1/4in-20NC x 7/8in	
4	0641608	6	Bolt 3/8in-16NC x 1in	
5	0641610	6	Bolt 3/8in-16NC x 1 1/4in	
6	0641616	4	Bolt 3/8in-16NC x 2in	
7	0641618	2	Bolt 3/8in-16NC x 2 1/4in	
8	0641810	AR	Bolt 1/2in-13NC x 1 1/4in	
9	0961947	2	Bushing, Garmax	
10	0961951	2	Bushing, Garmax	
11	1320259	2	Clamp, Block	
12	1683779	1	Jib Cylinder Assembly (See CYLINDER SECTION for Breakdown)	
13	3311405	2	Locknut 1/4in-20NC	
14	3311501	8	Nut 5/16in-18NC	
15	3311605	12	Locknut 3/8in-16NC	
16	3422791	2	Pin	
17	3422794	2	Pin	
18	3571406	1	Plate, Jib Cover	
19	4711600	AR	Flatwasher 3/8in Narrow	
20	4711800	AR	Flatwasher 1/2in Narrow	
21	4740362	4	Flatwasher 1/4in	
22	4751600	12	Flatwasher 3/8in	
23	4845926	1	Link (Upper)	
24	4845927	2	Link (Lower)	
25	4846050	1	Support Weldment	
26		Ref	Pivot Options:	
26A	4845925	1	Pivot E45AJ & M45AJ	
26B	4846073	1	Pivot E40AJP & M40AJP	
27	0100011	AR	Loctite #242 (Not Shown)	
		Ref	<b>SUPPORT AND ROTATOR ASSEMBLY</b>	
	0259366	Ref	<b>Support and Rotator Assembly E45AJ &amp; M45AJ</b>	3
	0259939	Ref	<b>Support and Rotator Assembly E40AJP &amp; M40AJP</b>	2
119	3841203	1	Keeper, Pin	
120	3841143	2	Keeper, Pin	
122		Ref	Pin Options:	
122	3422793	1	Pin E45AJ & M45AJ	
122	3422814	1	Pin E40AJP & M40AJP	
123	3020022	AR	Grease	
127	0641610	1	Bolt 3/8in-16NC x 1 1/4in	
129		Ref	Platform Level Cylinder Assembly Options (See CYLINDER SECTION for Breakdown):	
129	1683760	1	Platform Level Cylinder Assembly E45AJ & M45AJ	
129	1683924	1	Platform Level Cylinder Assembly E40AJP & M40AJP	

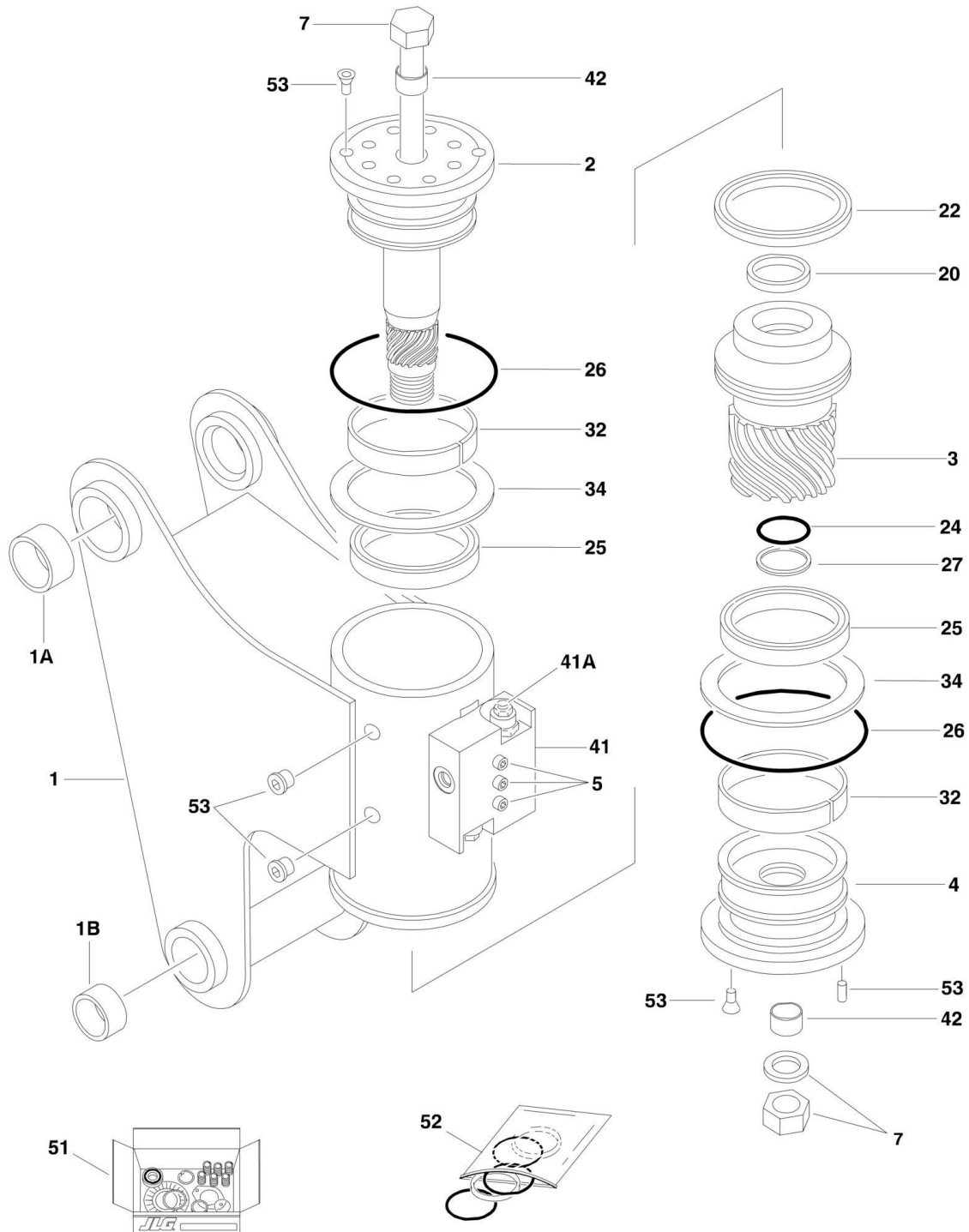
## SECTION 3 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
134	3422669	1	Pin	
135	3311805	1	Locknut 1/2in-13NC	
136	0641607	1	Bolt 3/8in-16NC x 7/8in	
137	3422792	1	Pin	
138		Ref	Jib Assembly Options (Includes Items 1-27):	
138	0259440	1	Jib Assembly E45AJ & M45AJ	
138	0259441	1	Jib Assembly E40AJP & M40AJP	
139	0641810	1	Bolt 1/2in-13NC x 1 1/4in	
144	0100011	AR	Loctite #242 (Not Shown)	



# SECTION 3 - BOOM

## FIGURE 3-8. ROTATOR ASSEMBLY (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)





**SECTION 3 - BOOM**

**FIGURE 3-8. ROTATOR ASSEMBLY (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>ROTATOR ASSEMBLIES</b>	
	0060044	Ref	<b>Rotator Assemblies E45AJ &amp; M45AJ</b>	D
	0060052	Ref	<b>Rotator Assemblies E45A &amp; M45A Only (SN 49945 to Present)</b>	F
	0060046	Ref	<b>Rotator Assemblies E40AJP &amp; M40AJP</b>	C
		Ref	<b>Note: There are 2 different versions each of Rotators p/n 0060044 &amp; 0060052. No s/n break exists. Order parts by the Helac Control #.</b>	
1	Not Serviced	1	Case/Bracket Weldment (Purchase Complete Assembly)	
1A	0962257	2	Bushing, Garmax (0060044 Rotator Only)	
1B	0961947	2	Bushing, Garmax (0060044 Rotator Only)	
2		Ref	Shaft Options:	
2	7017120	1	0060052 Rotators with Helac Control #26409	
2	7017196	1	0060052 Rotators with Helac Control #26966	
2	7017120	1	0060044 Rotators with Helac Control #25928	
2	7017196	1	0060044 Rotators with Helac Control #26962	
2	7017130	1	0060046 Rotator	
3		Ref	Piston Sleeve Options:	
3	7017121	1	0060052 Rotators with Helac Control #26409	
3	7027900	1	0060052 Rotators with Helac Control #26966	
3	7017121	1	0060044 Rotators with Helac Control #25928	
3	7027900	1	0060044 Rotators with Helac Control #26962	
3	7017131	1	0060046 Rotator	
4		Ref	Cap, End Options:	
4	7017153	1	0060052 Rotators with Helac Control #26409	
4	7027901	1	0060052 Rotators with Helac Control #26966	
4	Not Available		0060044 Rotators with Helac Control #25928	
4	7027901	1	0060044 Rotators with Helac Control #26962	
4	Not Available		0060046 Rotator	
5	Not Available	3	Capscrew 1/4in-20NC (Grade 8)	
7		Ref	Bolt and Nut Assembly Options:	
7	7017126	1	0060044 & 0060052 Rotators	
7	7017135	1	0060046 Rotator	
20	See Note	1	Seal, Rod (Note: Use Items 100A-102B)	
22	See Note	1	Seal, Piston (Note: Use Items 100A-102B)	
24	See Note	1	Seal, Cap (Note: Use Items 100A-102B)	
25	See Note	2	Packing, Bearing (Note: Use Items 100A-102B)	
26	See Note	2	Seal (Note: Use Items 100A-102B)	
27	See Note	1	Ring, Back-Up Cap (Note: Use Items 100A-102B)	
32	Item 51	2	Bearing, Shaft	
34	Item 51	2	Washer, Thrust	
41		Ref	Counterbalance Valve Assembly Options:	
41	7017172	1	Helac p/n 24327 Stamped beside Mounting Screws (Was p/n 7017125)	
41	7017172	1	Helac p/n 26553 or 26554 Stamped beside Mounting Screws	
41A		Ref	Valve, Cartridge Options:	
41A	7011323	2	Valve, Cartridge for Helac p/n 24327 Valve	
41A	2900770	2	Seal Kit - 7011323 Cartridge (1 Per Assembly)	
41A	7017192	2	Valve, Cartridge Helac p/n 26553 or 26554 (No Seal Kit Available)	
42	Not Available	2	Bushing, Shaft	

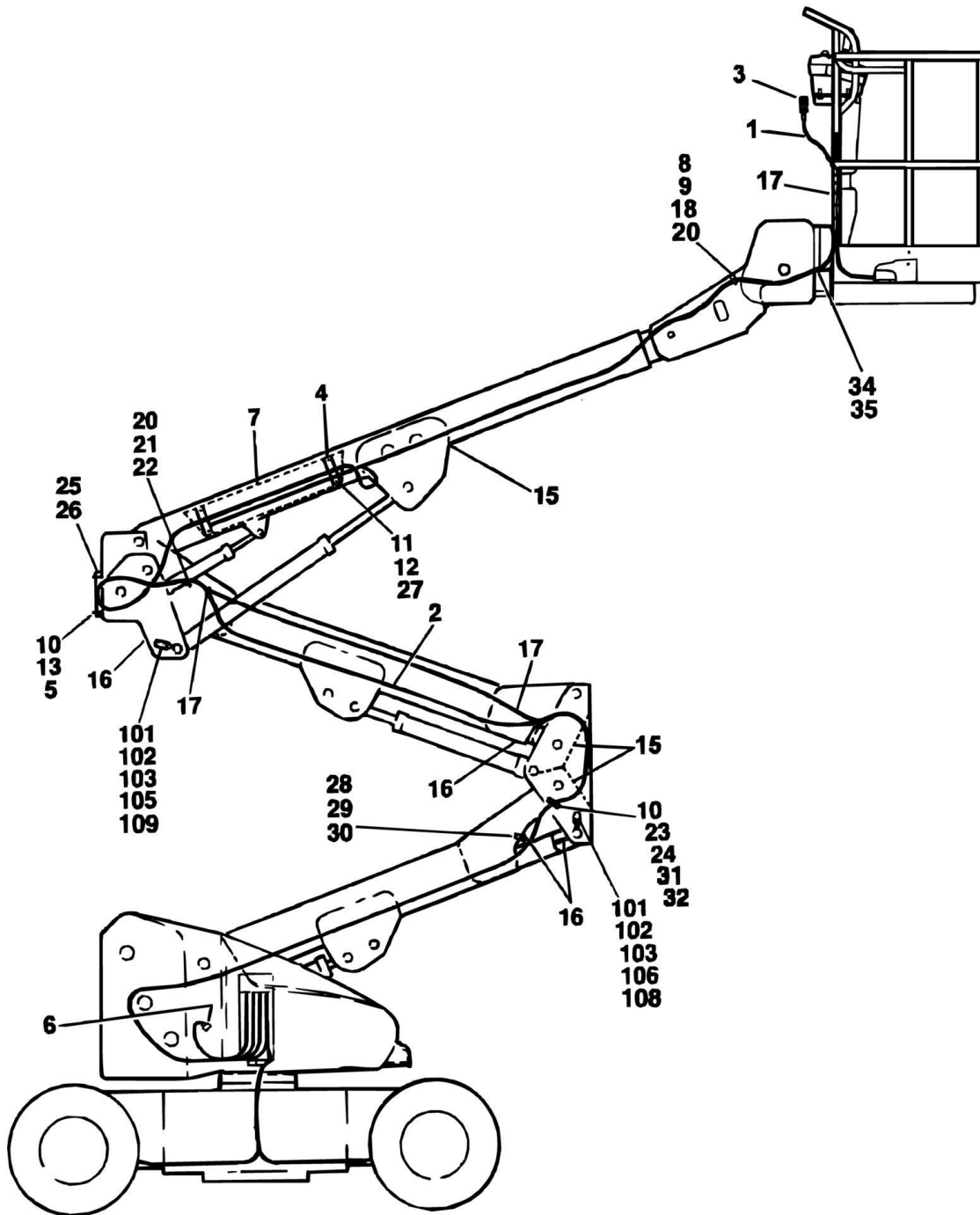
## SECTION 3 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
51		Ref	Bearing Kit Options (Includes Items 32 - 34):	
51	7017122	1	0060044 & 0060052 Rotators	
51	7017134	1	0060046 Rotator	
52		Ref	Seal Kit Options (Includes Items 20, 22, 24, 25, 26 & 27):	
52		Ref	0060044 & 0060052 Rotators Options:	
52	7017127	1	Standard	
52	70000341	1	Low Temperature	
52		Ref	0060046 Rotator Options:	
52	7017165	1	Standard (was p/n 7017133)	
52	Not Available		Low Temperature	
53		Ref	Hardware Kit Options:	
53	7017123	1	0060044 & 0060052 Rotators	
53	7017132	1	0060046 Rotator	



# SECTION 3 - BOOM

FIGURE 3-9. CABLES/CLAMPS AND LIMIT SWITCHES INSTALLATIONS (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)



## SECTION 3 - BOOM

**FIGURE 3-9. CABLES/CLAMPS AND LIMIT SWITCHES INSTALLATIONS (E45A, M45A, E45AJ, M45AJ, E40AJP & M40AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CABLES AND CLAMPS INSTALLATION</b>	
	0257735	Ref	<b>Cables and Clamps Installation E45A &amp; M45A</b>	6-F
	0259367	Ref	<b>Cables and Clamps Installation E45AJ &amp; M45AJ</b>	1-B
	0259970	Ref	<b>Cables and Clamps Installation E40AJP &amp; M40AJP</b>	2-A
1		Ref	Harness Assembly - Upper Boom Options: (See ELECTRICAL SECTION for Breakdown)	
1	4922178	1	Harness Assembly - Upper Boom E45 & M45	
1	4922364	1	Harness Assembly - Upper Boom E40 & M40	
2		Ref	Harness Assembly - Lower Boom Options: (See ELECTRICAL SECTION for Breakdown)	
2	4922179	1	Harness Assembly - Lower Boom E45 & M45	
2	4922363	1	Harness Assembly - Lower Boom E40 & M40	
3	4460754	1	Connector	
4	1320260	2	Block, Hose Clamp	
5	0561317	1	Block, Hose Clamp	
6	4460753	1	Connector	
7		Ref	Shield Options:	
7	3536999	1	Shield E45A & M45A	
7	3571462	1	Shield E45AJ, M45AJ, E40AJP & M40AJP	
8		Ref	Cover, Clamp Options:	
8	1320195	1	Cover, Clamp E45A & M45A	
8	Not Required	0	Cover, Clamp E45AJ & M45AJ	
9		Ref	Clamp Options:	
9	1320199	1	Clamp E45A & M45A	
9	Not Required	0	Clamp E45AJ & M45AJ	
10	4751500	5	Flatwasher 5/16in	
11	4751400	12	Flatwasher 1/4in	
12	3311401	6	Nut 1/4in-20NC	
13	0641514	3	Bolt 5/16in-18NC x 1 3/4in	
14	0100011	AR	Loctite #242 (Not Shown)	
15	4060805	3.6 ft/1.1m	Trim	
16	4060808	8 ft/2.4m	Trim 1/2in	
17	4240099	26	Tie-Strap	
18	0641520	AR	Bolt 5/16in-18NC x 2 1/2in	
20	3311505	2	Locknut 5/16in-18NC	
21	4566243	1	Roller	
22	0641560	1	Bolt 5/16in-18NC x 7 1/2in	
23	4300140	2	Stud, Weld 5/16in-18NC x 3 5/8in	
24		Ref	Hose Clamp Block Options:	
24	0561359	1	Hose Clamp Block E45A & M45A <b>(Prior to SN 56080)</b>	
24	0561384	1	Hose Clamp Block E45A & M45A <b>(SN 56080 to Present)</b>	
24	0561359	1	Hose Clamp Block E45AJ & M45AJ	
24	0561384	1	Hose Clamp Block E40 & M40	
25	1670697	1	Cover, Hose	
26	0630467	4	Capscrew, Button 5/16in-18NC x 1/2in	
27	3300151	6	Nut, Acorn 1/4in - 20NC	
28	1320040	1	Clamp, Cable	
29	0641410	1	Bolt 1/4in-20NC x 1 1/4in	

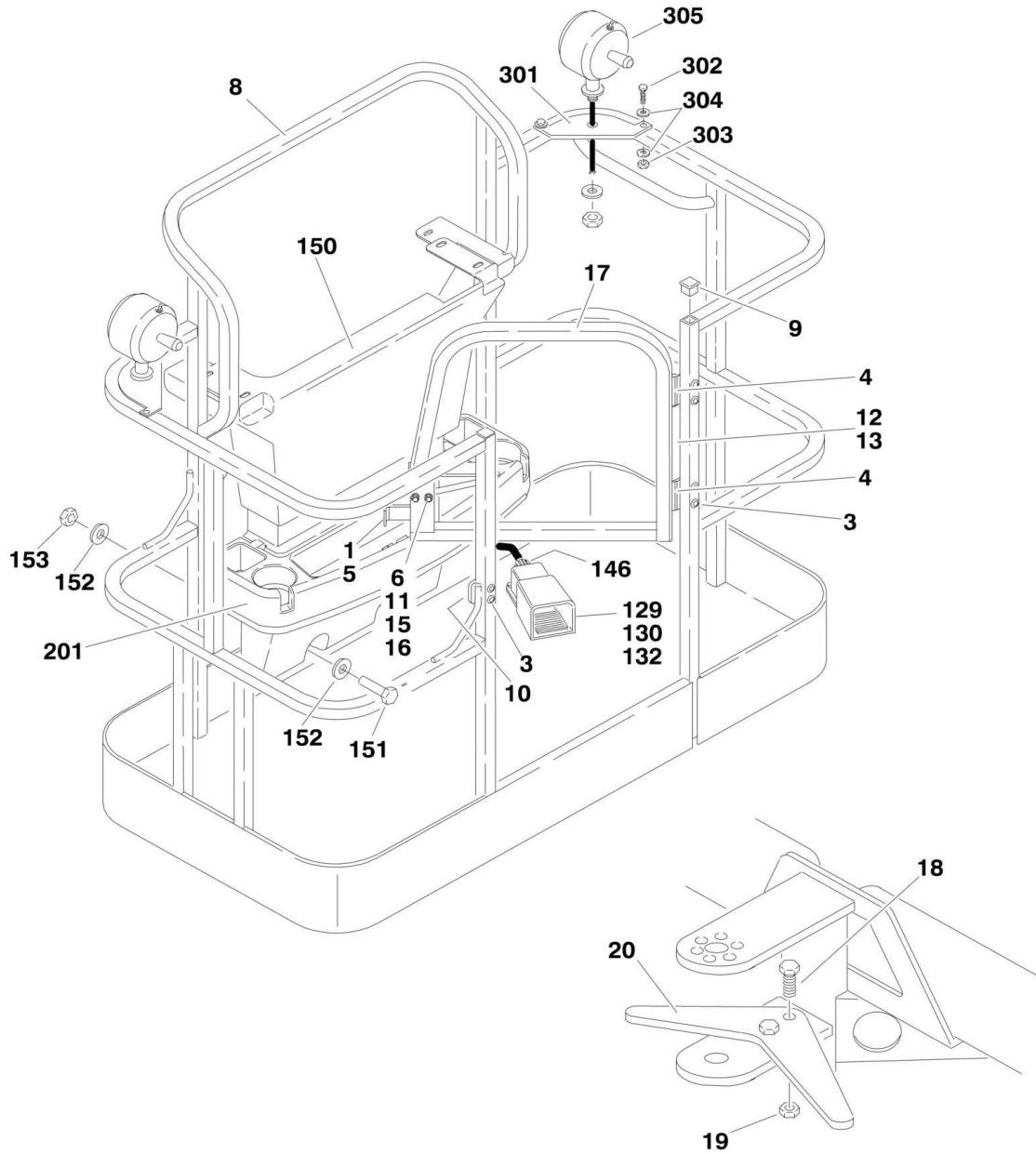
## SECTION 3 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
30	3311405	1	Locknut 1/4in-20NC	
31		Ref	Hose Clamp Block Options:	
31	0561360	1	Hose Clamp Block E45 & M45	
31	0561385	1	Hose Clamp Block E40 & M40	
32		Ref	Hose Clamp Block Options:	
32	0561361	1	Hose Clamp Block E45 & M45	
32	0561386	1	Hose Clamp Block E40 & M40	
33	0100019	AR	Loctite #271 (Not Shown)	
34		Ref	Clamp Options:	
34	1320095	1	Clamp E45A,M45A,E45AJ & M45AJ <b>(SN 45407 through 49944)</b>	
34	Not Required	0	Clamp E45A & M45A <b>(SN 49945 to Present)</b>	
34	1320095	1	Clamp E45AJ & M45AJ <b>(SN 49945 to Present)</b>	
34	Not Required	0	Clamp E40AJP & M40AJP	
35		Ref	Sleeve Options:	
35	Not Required	0	Sleeve E45A,M45A,E45AJ & M45AJ <b>(Prior to SN 49945)</b>	
35	4100065	1	Sleeve E45A & M45A <b>(SN 49945 to Present)</b>	
35	Not Required	0	Sleeve E45AJ & M45AJ <b>(SN 49945 to Present)</b>	
35	Not Required	0	Sleeve E40AJP & M40AJP	
		Ref	<b>LIMIT SWITCHES INSTALLATION</b>	
	0254875	Ref	<b>Limit Switches Installation E45 &amp; M45</b>	4
	0253704	Ref	<b>Limit Switches Installation E40 &amp; M40</b>	5
101	4360321	2	Switch, Limit	
102	4460428	2	Connector, Strain Relief	
103	3311005	4	Locknut #10-24NC	
105	3900246	2	Screw, Filister Head #10-24NC x 1 3/4in	
106	3900104	2	Screw, Filister Head #10-24NC x 2 1/4in	
107	1060341	AR	Cable, Electrical - 16/2	
108	1670832	1	Cover, Switch Lower Only <b>(SN 33795 to Present)</b>	
109	1670833	1	Cover, Switch Upper Only <b>(SN 33795 to Present)</b>	

**SECTION 4 - PLATFORM**

# SECTION 4 - PLATFORM

## FIGURE 4-1. PLATFORM COMPONENTS INSTALLATION





## SECTION 4 - PLATFORM

**FIGURE 4-1. PLATFORM COMPONENTS INSTALLATION**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>PLATFORM INSTALLATIONS WITH SWING GATE</b>	
	3510694	Ref	4ft/1.22m Width without Mesh	C
	3510725	Ref	4ft/1.22m Width with Mesh to Top Rail/Self Closing Gate	A
	3510693	Ref	5ft/1.52m Width without Mesh (Without Stop)	C
	0270407	Ref	5ft/1.52m Width without Mesh (With Stop)	A
	3510735	Ref	5ft/1.52m Width with Mesh to Top Rail/Self Closing Gate (Without Stop)	A
	0270409	Ref	5ft/1.52m Width with Mesh to Top Rail/Self Closing Gate (With Stop)	A
		Ref	<b>Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.</b>	
1	0100074	AR	Silicone, RTV	
3	2080040	13	Fastener, Huck	
4		Ref	Hinge Options:	
4	2600216	2	Standard Gates	
4	2600219	2	Self Closing Gates	
5	2940074	1	Latch	
6	3311001	4	Nut #10-24NC	
8		Ref	Platform Weldment Options (Purchase Complete Platform):	
8	3510694	1	4ft/1.22m Width without Mesh	
8	3510725	1	4ft/1.22m Width with Mesh to Top Rail/Self Closing Gate	
8	3510693	1	5ft/1.52m Width without Mesh (Without Stop)	
8	0270407	1	5ft/1.52m Width without Mesh (With Stop)	
8	3510735	1	5ft/1.52m Width with Mesh to Top Rail/Self Closing Gate (Without Stop)	
8	0270409	1	5ft/1.52m Width with Mesh to Top Rail/Self Closing Gate (With Stop)	
9	3520072	3	Cap-Plug	
10	3539685	1	Plate, Latch	
11	3911008	4	Screw #10-24NC x 1in	
12	4060803	AR	Trimlock	
13	4220165	1	Stop, Gate	
15	4751000	4	Flatwasher #10	
16	4761000	4	Lockwasher #10	
17		Ref	Gate Weldment Options:	
17	4845327	1	Without Mesh	
17	4845951	1	With Mesh to Top Rail	
18	0641609	AR	Bolt 3/8in-16NC x 1 1/8in	
19	3311605	AR	Locknut 3/8in-16NC	
20		Ref	Stop Options:	
20	Not Required	0	3510694, 3510725, 3510693 & 3510735 Platforms	
20	4846276	1	0270407 & 0270409 Platforms	
		Ref	<b>PEDESTAL PANEL AND FOOTSWITCH INSTALLATION</b>	
	0861176	Ref	<b>Pedestal Panel and Footswitch Installation E45 &amp; M45</b>	7-F
	0861314	Ref	<b>Pedestal Panel and Footswitch Installation E40 &amp; M40</b>	2-B
129	4360031	1	Footswitch	
129	7000625	2	Block, Contact	
129	3252347	1	Nameplate (Note: See DECALS SECTION for OtherLanguages)	
130	0641408	3	Bolt 1/4in-20NC x 1in	
131	3311401	3	Nut 1/4in-20NC	

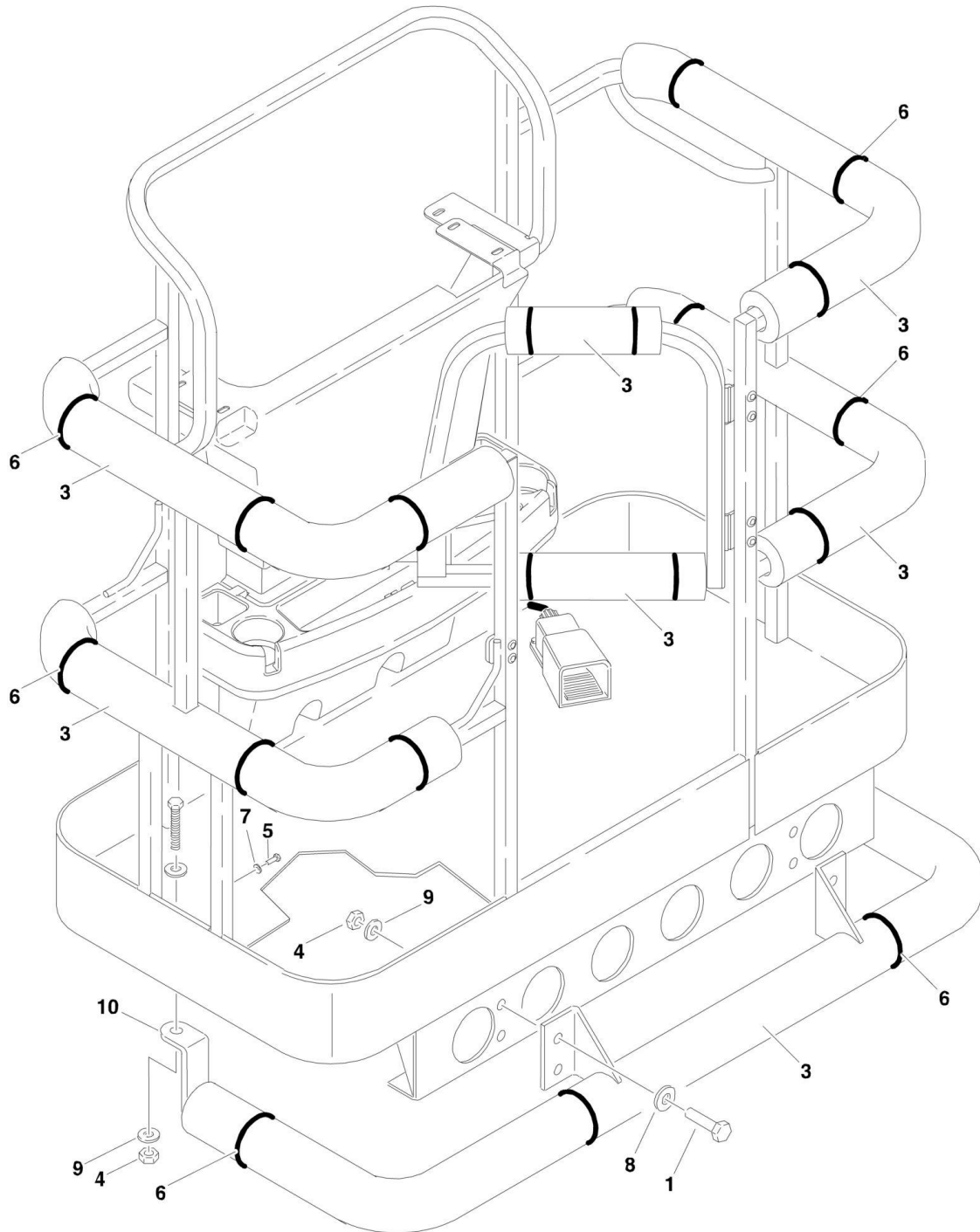
## SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
132	4751400	3	Flatwasher 1/4in	
146	4460071	1	Connector, Strain Relief	
150	3380434	1	Panel, Pedestal	
151	0641407	2	Bolt 1/4in-20NC x 7/8in	
152	4740362	4	Washer, Fender	
153	3311405	2	Locknut 1/4in-20NC	
		Ref	<b>TRAY INSTALLATIONS (OPTIONAL)</b>	
201	1580012	1	Tray, Storage (Center)	
202	1580013	1	Tray, Storage (Rail Mounted - Not Shown)	
	0259338	Ref	<b>WORKLIGHTS INSTALLATION (OPTIONAL)</b>	1-A
301	3536089	2	Plate, Mounting	
302	0641414	4	Bolt 1/4in-20NC x 1 3/4in	
303	3311405	4	Locknut 1/4in-20NC	
304	4711400	8	Flatwasher 1/4in Narrow	
305	2920095	2	Worklight	
305	7016356	2	Bulb, Replacement (1 Per Assembly)	
306	4240099	10	Tie-Strap (Not Shown)	
307	2820035	9	Loom, Vinyl (Not Shown)	
309	4460428	1	Connector, Strain Relief (Not Shown - Located at Console Box)	



# SECTION 4 - PLATFORM

## FIGURE 4-2. PLATFORM PADDING INSTALLATION



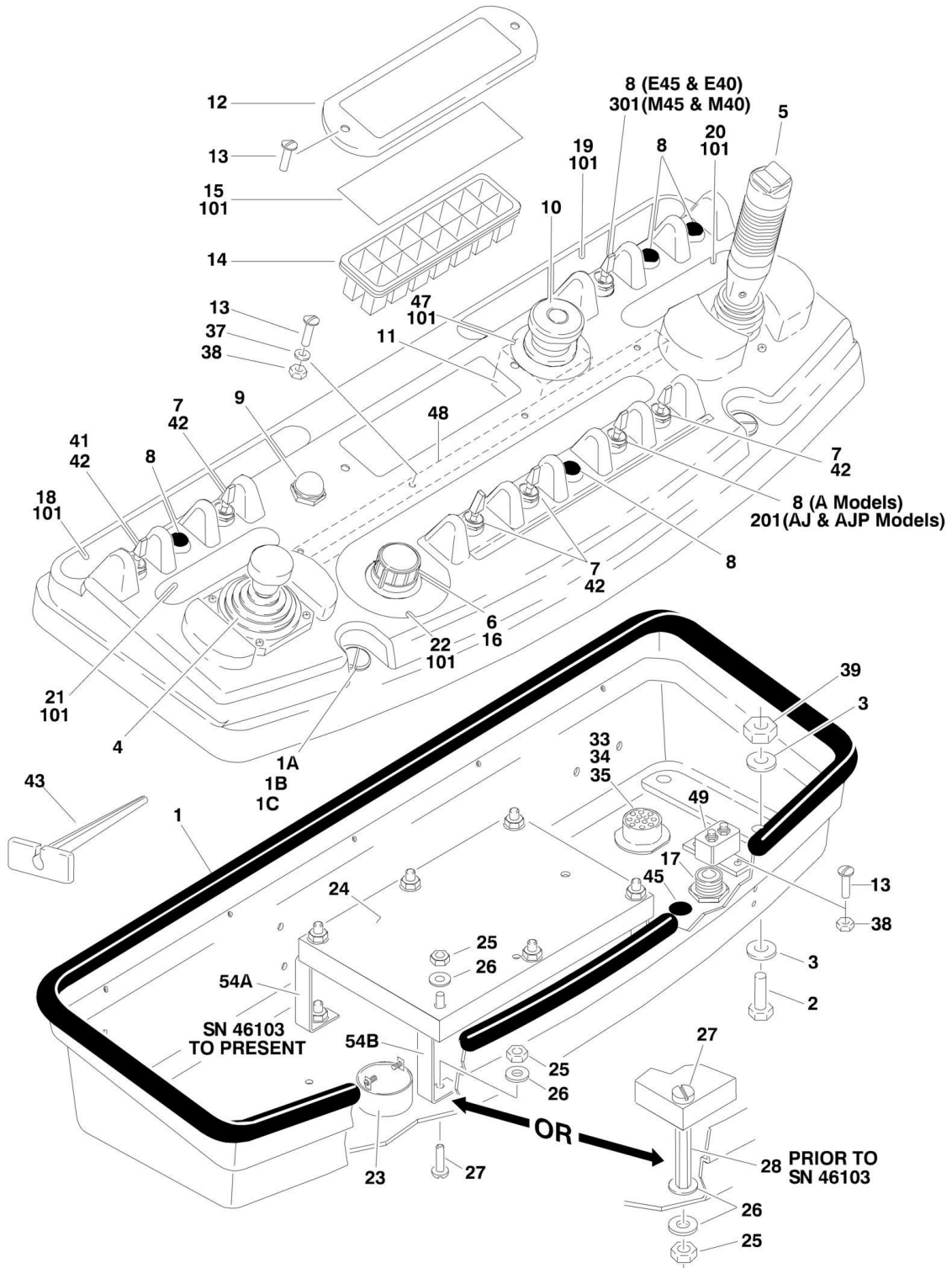
## SECTION 4 - PLATFORM

**FIGURE 4-2. PLATFORM PADDING INSTALLATION**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0270338	Ref	<b>PLATFORM PADDING INSTALLATION</b>	A
1	0641508	4	Bolt 5/16in-18NC x 1in	
2	0641516	2	Bolt 5/16in-18NC x 2in	
3	0940038	24 ft/7.3m	Padding	
4	3311501	6	Nut 5/16in-18NC	
5	3941405	2	Screw, Self Tapping 1/4in-20NC x 5/8in	
6	4240099	AR	Tie, Wire	
7	4711400	2	Flatwasher 1/4in	
8	4751500	6	Flatwasher 5/16in (Wide)	
9	4761500	6	Lockwasher 5/16in	
10	4844917	1	Rail, Bumper	

# SECTION 4 - PLATFORM

## FIGURE 4-3. PLATFORM CONSOLE ASSEMBLY



## SECTION 4 - PLATFORM

**FIGURE 4-3. PLATFORM CONSOLE ASSEMBLY**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONSOLE BOX ASSEMBLIES</b>	
	0861176	Ref	<b>Console Box Assemblies E45 &amp; M45</b>	7-F
	0861314	Ref	<b>Console Box Assemblies E40 &amp; M40</b>	2-B
1	0861215	1	Box, Console	
1A	7020099	2	Screw	
1B	3760308	2	Retainer	
1C	7020100	2	Clip, Receptacle	
2	0641610	4	Bolt 3/8in-16NC x 1 1/4in	
3	4751600	8	Flatwasher 3/8in	
4	1001118419	1	Controller Assembly (Lift and Swing) (See CONTROLLER ASSEMBLY (SWING AND LIFT) for Breakdown) (was p/n 1600274)	
5	1001118418	1	Controller Assembly (Drive and Steer) (See CONTROLLER ASSEMBLY (DRIVE AND STEER) for Breakdown) (was p/n 1600273)	
6	4360462	1	Switch, Potentiometer	
7	4360328	AR	Switch, Toggle	
8	3520028	6	Plug, Hole	
9	4360387	1	Switch, Push Button	
10	4360475	1	Switch, Emergency Stop	
10	7020175	1	Cap, Mushroom with Sealing Ring	
10	7020176	1	Block, Contact	
11	4360476	1	Block, Contact	
12	1670829	1	Bezel	
13	0630464	8	Screw, Button Head #10-24NC x 1/2in	
14	2760105	1	Housing, Display Light	
15	1704239	1	Display - Light Panel	
16	2560136	1	Knob, Speed Control	
17	4460428	1	Connector, Strain Relief	
18	1704240	1	Decal - Horn	
19	1704192	1	Decal - Stop	
20	1702565	1	Decal - Drive and Steer	
21	1702566	1	Decal - Lift and Swing	
22		Ref	Decal - Function Speed Options:	
22	1702567	1	Decal - Function Speed E45 & M45	
22	1704422	1	Decal - Function Speed E40 & M40	
23		Ref	Alarm Options:	
23	0140011	1	Alarm (Was p/n 0140019) <b>(Prior to SN 46840)</b>	
23	0140011	1	Alarm <b>(SN 46840 to Present)</b>	
24	0610128	1	Module, Platform	
25	3310601	AR	Nut #6-32NC	
26	4750600	AR	Flatwasher #6	
27	3910612	AR	Screw #8-32NC x 3/4in	
28	4300132	6	Stud, Stand-Off <b>(Prior to SN 46103)</b>	
33	4460752	1	Receptacle	
34	4460497	1	Nut, Receptacle	
35	4460496	1	Lockwasher, Receptacle	
36	4240032	2	Tie-Strap	
37	4740120	4	Washer, Nylon	
38	3311005	6	Locknut #10-24NC	

## SECTION 4 - PLATFORM

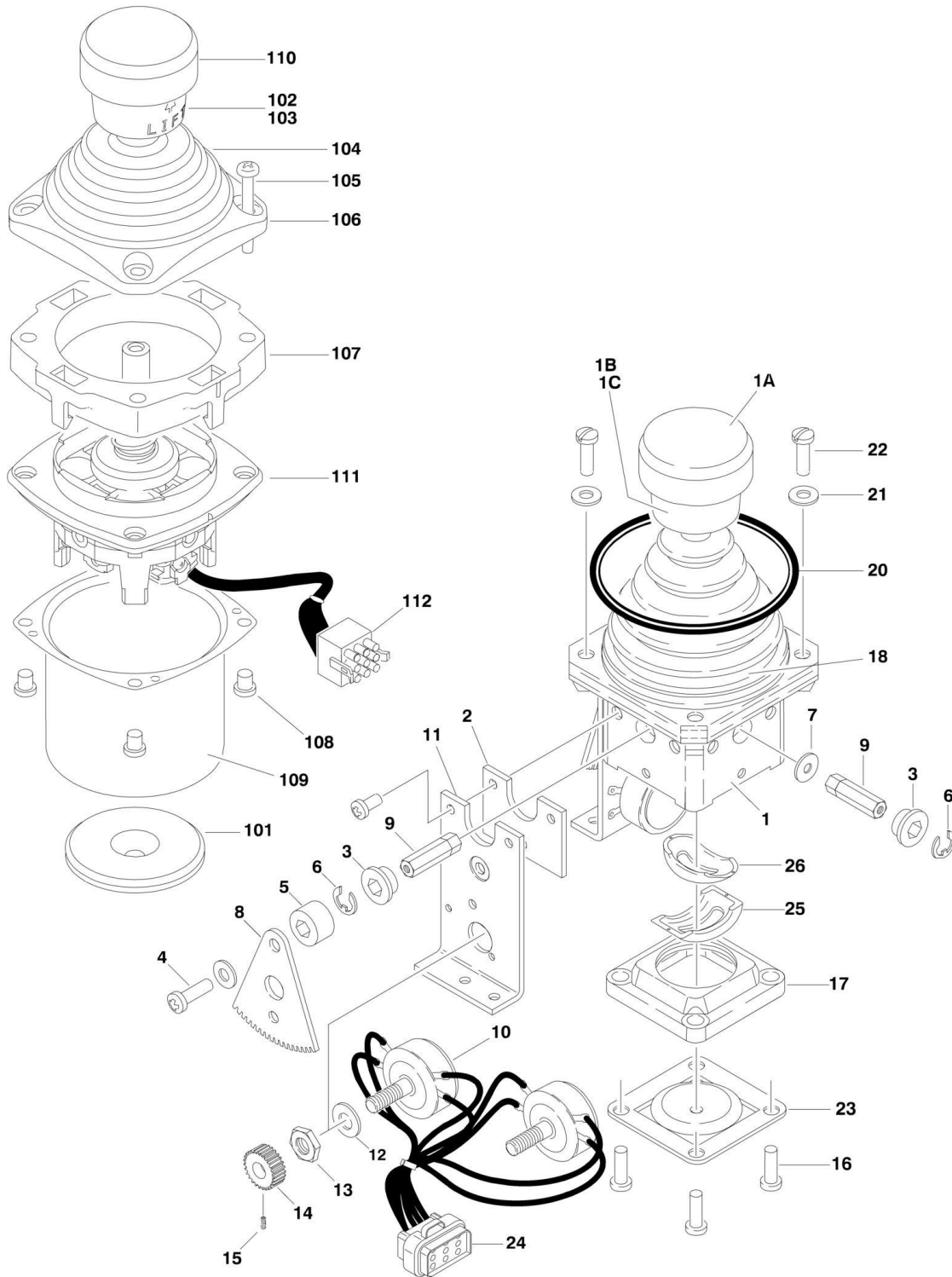
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
39	3311605	4	Locknut 3/8in-16NC	
41	4360330	1	Switch, Toggle - SPST	
42	3790012	AR	O-Ring	
43	4460467	1	Tool, Extraction	
44	0100035	AR	Loctite #222 (Not Shown)	
45	3520030	2	Hole, Plug	
47	1704260	1	Decal - Emergency Stop Switch	
48	3571222	1	Angle, Relay Mounting	
49	4360448	1	Breaker, Circuit - 10Amp	
54		Ref	Bracket Options:	
54A	0902575	1	Bracket - Rear (SN 46103 through 46881)	
54A	0902588	1	Bracket - Rear (SN 46882 to Present)	
54B	0902575	1	Bracket - Front	
59	0100009	AR	Adhesive, Silicone (Not Shown)	
101	2910866	1	Decal Kit Options (Includes Items 15, 18-22 & 47):	
	0259102	Ref	<b>JIB CONSOLE SWITCH (AJ &amp; AJP ONLY)</b>	2-B
201	4360328	1	Switch, Toggle	
201	3790012	1	O-Ring	
201	4922294	1	Harness, Jib Function (See ELECTRICAL SECTION for Breakdown)	
201	4240032	6	Tie-Strap	
	0257824	Ref	<b>MOTOR CONTROLS INSTALLATION (M45 &amp; M40 ONLY)</b>	4
301	4360336	1	Switch, Toggle	
301	3790012	1	O-Ring	
301	4922222	1	Harness (See ELECTRICAL SECTION for Breakdown)	
301	4922223	1	Harness (See ELECTRICAL SECTION for Breakdown)	





# SECTION 4 - PLATFORM

## FIGURE 4-4. CONTROLLER ASSEMBLY (SWING AND LIFT)



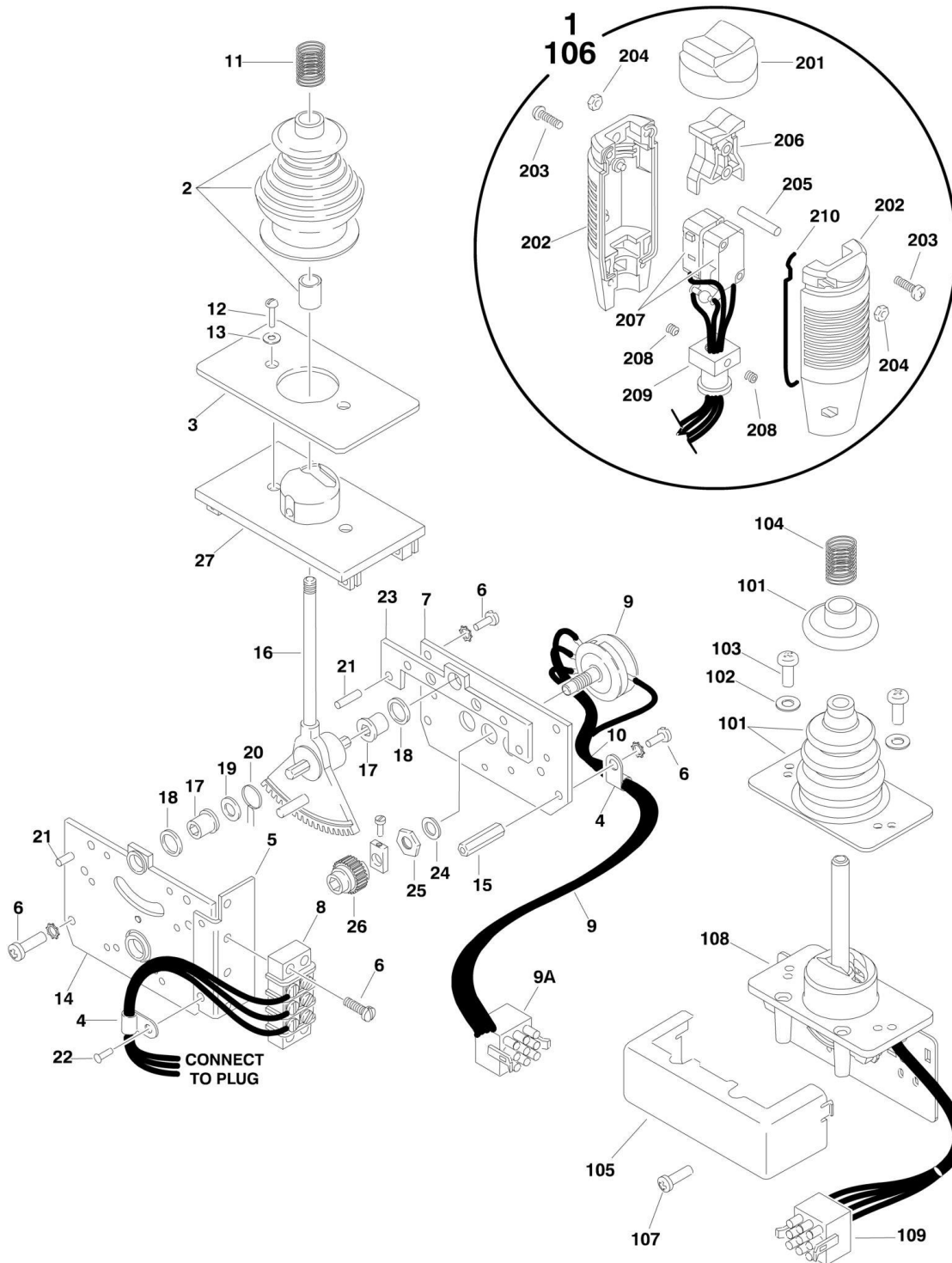
## SECTION 4 - PLATFORM

### FIGURE 4-4. CONTROLLER ASSEMBLY (SWING AND LIFT)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONTROLLER ASSEMBLY</b>	
	1600274	Ref	<b>Controller Assembly (Original Equipment)</b>	F
1	7019141	1	Mechanical Assembly (Includes Base, Handle Stem and Items 18, 1A, 1B & 1C)	
1A	7019197	1	Handle Cap and Rod	
1B	7003928	1	Spring	
1C	7022808	1	Cap, Lift	
2	7019142	2	Plate	
3	7019111	4	Bearing, Gear	
4	7019143	2	Screw	
5	7019144	2	Spacer	
6	7019145	4	E-Clip	
7	7019174	2	Spacer, Cam	
8	7003977	2	Gear, Drive	
9	7019147	4	Shaft	
10	7019195	2	Potentiometer Assembly	
10	7003974	1	Potentiometer	
11	7019142	2	Plate	
12	7003992	2	Washer	
13	7003993	2	Nut	
14	7003976	2	Gear, Slave	
15	7019149	2	Setscrew	
16	7003952	4	Screw	
17	7019150	1	Gate	
18	7022813	1	Boot (was p/n 7003955)	
19	7022813	1	Plate, Plastic (was p/n 7003954)	
20	7003956	1	O-Ring	
21	7003953	4	Washer	
22	7019137	4	Screw	
23	7019170	1	Center, Detent	
24	4460265	1	Connector - 9 Position	
24	4460226	8	Socket, Female	
25	7019122	1	Gimble, Outer	
26	7019123	1	Gimble, Inner	
	1001118419	Ref	<b>Controller Assembly (Service Replacement)</b>	
101	70002730	1	Gasket	
102	7003928	1	Spring	
103	7022808	1	Cap, Lift	
104	70002731	1	Boot	
105	70002732	4	Screw	
106	7022815	1	Bezel	
107	70002733	1	Adapter	
108	70002734	4	Screw	
109	70002735	1	Can, Enclosure	
110	70002906	1	CAP	
111	Not Available	1	Mechanical Assembly	
112	4460265	1	Connector - 9 Position	
112	4460226	8	Socket, Female	

# SECTION 4 - PLATFORM

## FIGURE 4-5. CONTROLLER ASSEMBLY (DRIVE AND STEER)



## SECTION 4 - PLATFORM

**FIGURE 4-5. CONTROLLER ASSEMBLY (DRIVE AND STEER)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONTROLLER ASSEMBLY</b>	
	1600273	Ref	<b>Controller Assembly (Original Equipment)</b>	G
1	7022812	1	Handle Assembly (See Items 201-210 for Breakdown)	
2	7019161	1	Boot and Sleeve	
3	7003933	1	Gasket	
4	7019154	2	Clamp, Wire	
5	7019159	1	Bracket, Mounting	
6	7003994	10	Screw	
7	7019157	1	Plate, Pot Mounting	
8	7003986	1	Strip, Terminal - 3 Position	
9	7019191	1	Electric Assembly	
9	7003974	1	Potentiometer	
9A	4460265	1	Connector - 9 Position	
9A	4460226	7	Socket, Female	
10	7019151	AR	Tie-Strap	
11	7019162	1	Spring	
12	7003969	NLA	Screw (Note: Use p/n 7003940)	
13	7003941	2	Washer	
14	7019158	1	Plate, Mounting (Left Side)	
15	7019115	2	Stand-Off	
16	Not Serviced	1	Shaft 8mm	
17	7019111	2	Bearing	
18	7019110	2	Spacer, Head Gear	
19	7019112	1	Washer	
20	7003946	1	Spring, Return	
21	7019103	4	Pin	
22	Not Serviced	1	Rivet	
23	7019168	1	Plate, Mounting (Right Side)	
24	7003992	1	Washer	
25	7003993	1	Nut	
26	7003935	1	Gear, Slave	
27	7019160	1	Base	
	1001118418	Ref	<b>Controller Assembly (Service Replacement)</b>	B
101	70002724	1	Boot and Control Lock Assembly	
102	7003941	2	Washer	
103	70002725	2	Screw	
104	7019162	1	Spring	
105	70002726	1	Enclosure	
106	70002736	1	Handle Assembly (See Items 201-210 for Breakdown)	
107	70002728	1	Screw	
108	Not Available	1	Mechanical Assembly	
109	4460265	1	Connector - 9 Position	
109	4460226	7	Socket, Female	
		Ref	<b>HANDLE ASSEMBLIES</b>	
	7022812	Ref	<b>Controller Assembly p/n 1600273</b>	
	70002736	Ref	<b>Controller Assembly p/n 1001118418</b>	
201	7003972	1	Boot, Switch	
202	7003973	2	Half, Handle	
203	7003980	4	Screw	
204	7019167	4	Nut	

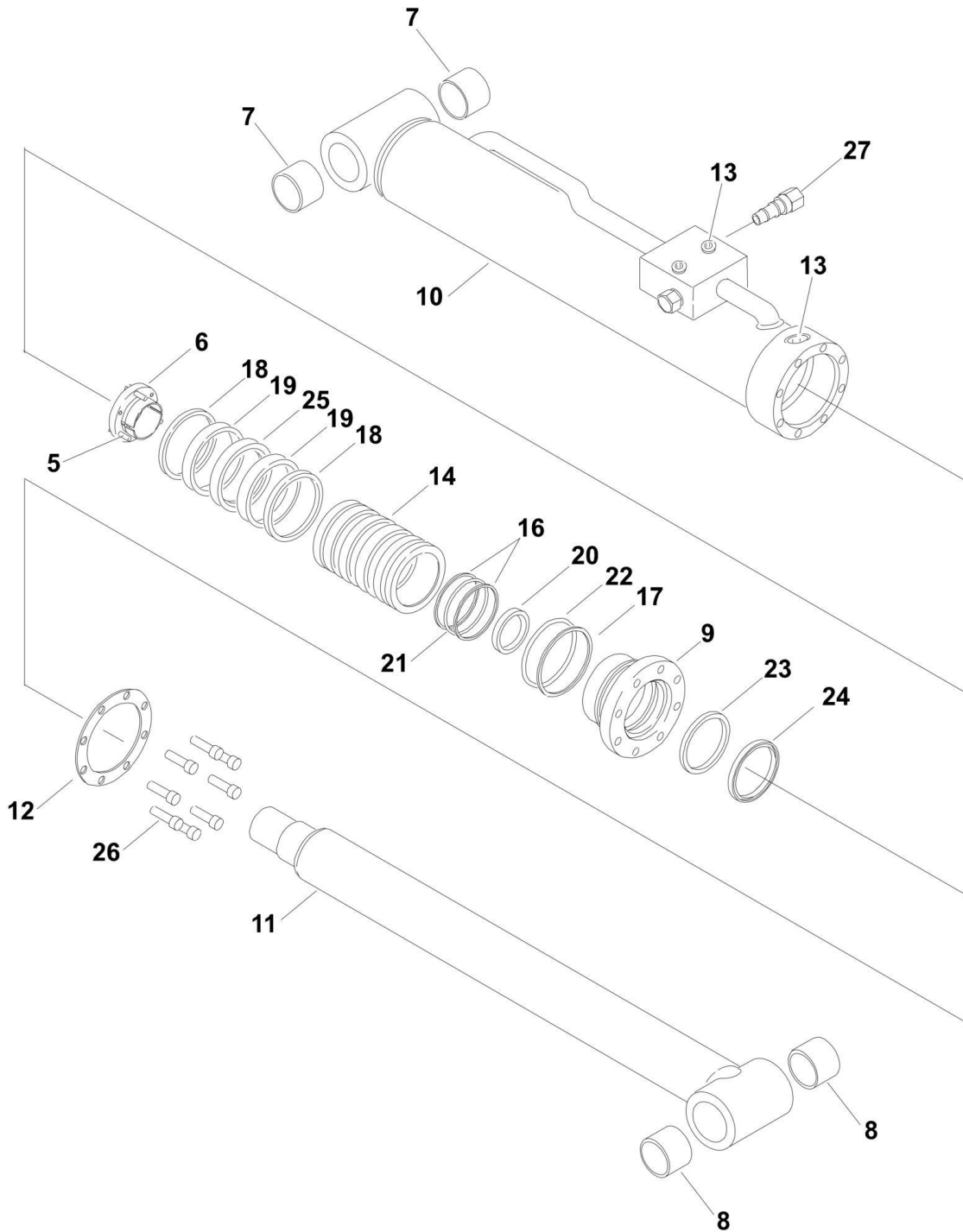
## SECTION 4 - PLATFORM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
205	7019164	1	Axle	
206	7019165	1	Rocker	
207		Ref	Wiring Assembly Options:	
207	7019196	1	Controller Assembly p/n 1600273	
207	7019166	2	Switch, Micro	
207	70002737	1	Controller Assembly p/n 1001118418	
207	7003982	2	Switch, Micro	
208	7003983	2	Setscrew	
209	7019194	1	Coupling	
210	7003989	2	Gasket	

**SECTION 5 - CYLINDER**

# SECTION 5 - CYLINDER

## FIGURE 5-1. JIB CYLINDER ASSEMBLY (AJ AND AJP)





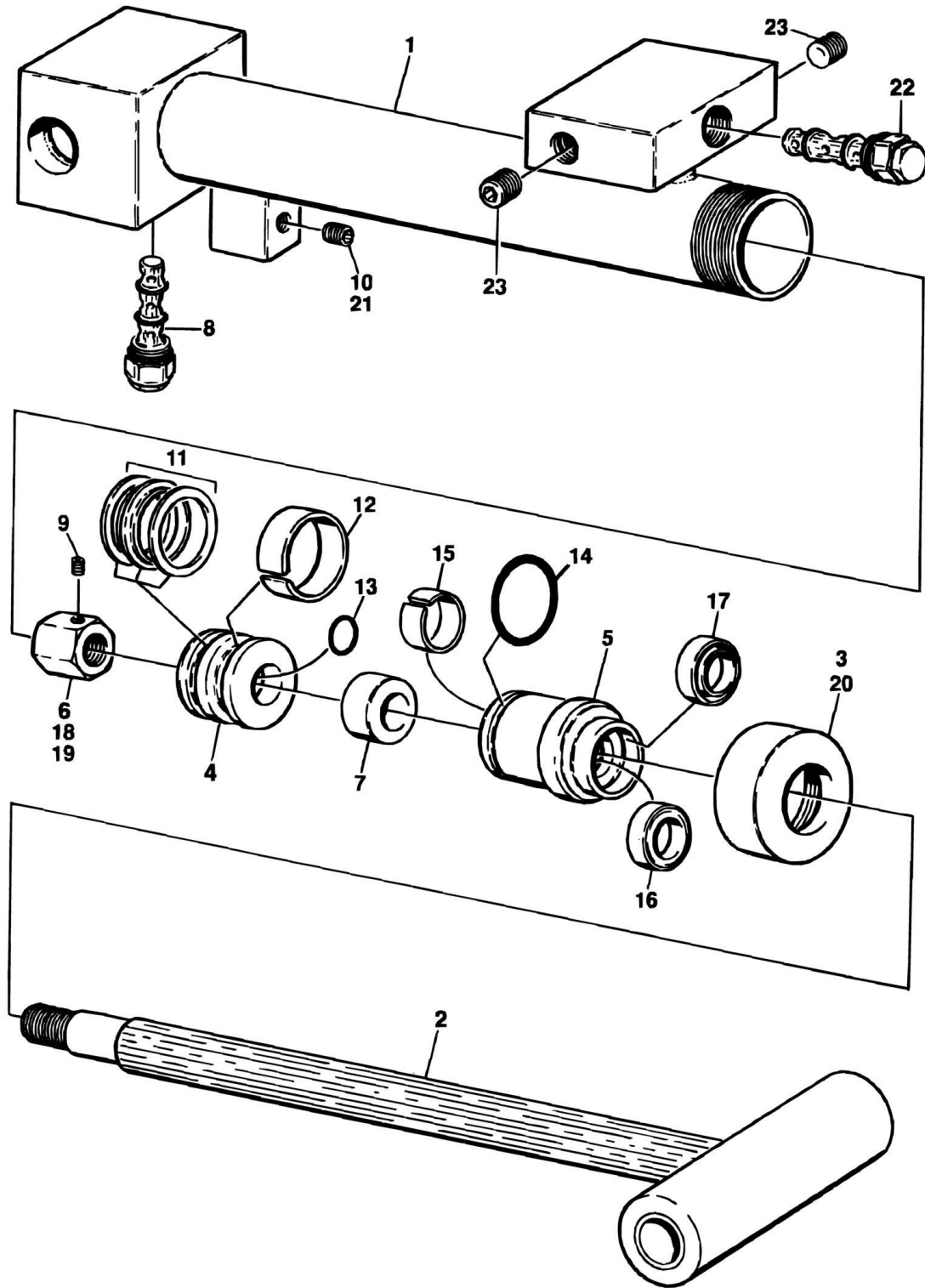
## SECTION 5 - CYLINDER

**FIGURE 5-1. JIB CYLINDER ASSEMBLY (AJ AND AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683779	Ref	<b>JIB CYLINDER ASSEMBLY (AJ AND AJP)</b>	B
1	0100011	AR	Loctite #242 (Not Shown)	
2	0100035	AR	Loctite #222 (Not Shown)	
3	0100038	AR	Primer #7471 (Not Shown)	
4	0100063	AR	Loctite RC 609 (Not Shown)	
5	3931016	3	Bolt #10-24NC x 1in	
6	0961893	1	Bushing, Tapered	
7	0961947	2	Bearing, Garmax	
8	0961951	2	Bushing, Garmax	
9	1683051	1	Head, Cylinder	
10	1683780	1	Barrel	
11	1683783	1	Rod	
12	3760367	1	Ring, Washer	
13	2220885	3	O-Ring Plug	
14	3480249	1	Piston, Head	
16	Kit	2	Back-Up	
17	Kit	1	Back-Up	
18	Kit	2	Ring, Seal	
19	Kit	2	Ring, Wear	
20	Kit	1	Ring, Wear	
21	Kit	1	O-Ring	
22	Kit	1	O-Ring	
23	Kit	1	Seal	
24	Kit	1	Wiper	
25	Kit	1	Seal	
26	3931516	8	Bolt 5/16in-18NC x 1in	
27	4640509	2	Cartridge, Valve	
27	2900792	2	Seal Kit- 4640509 Valve (1 Per Cartridge)	
	2901810	1	Seal Kit (Includes Items 16-25)	

# SECTION 5 - CYLINDER

FIGURE 5-2. PLATFORM LEVEL CYLINDER ASSEMBLY (E45A AND M45A)



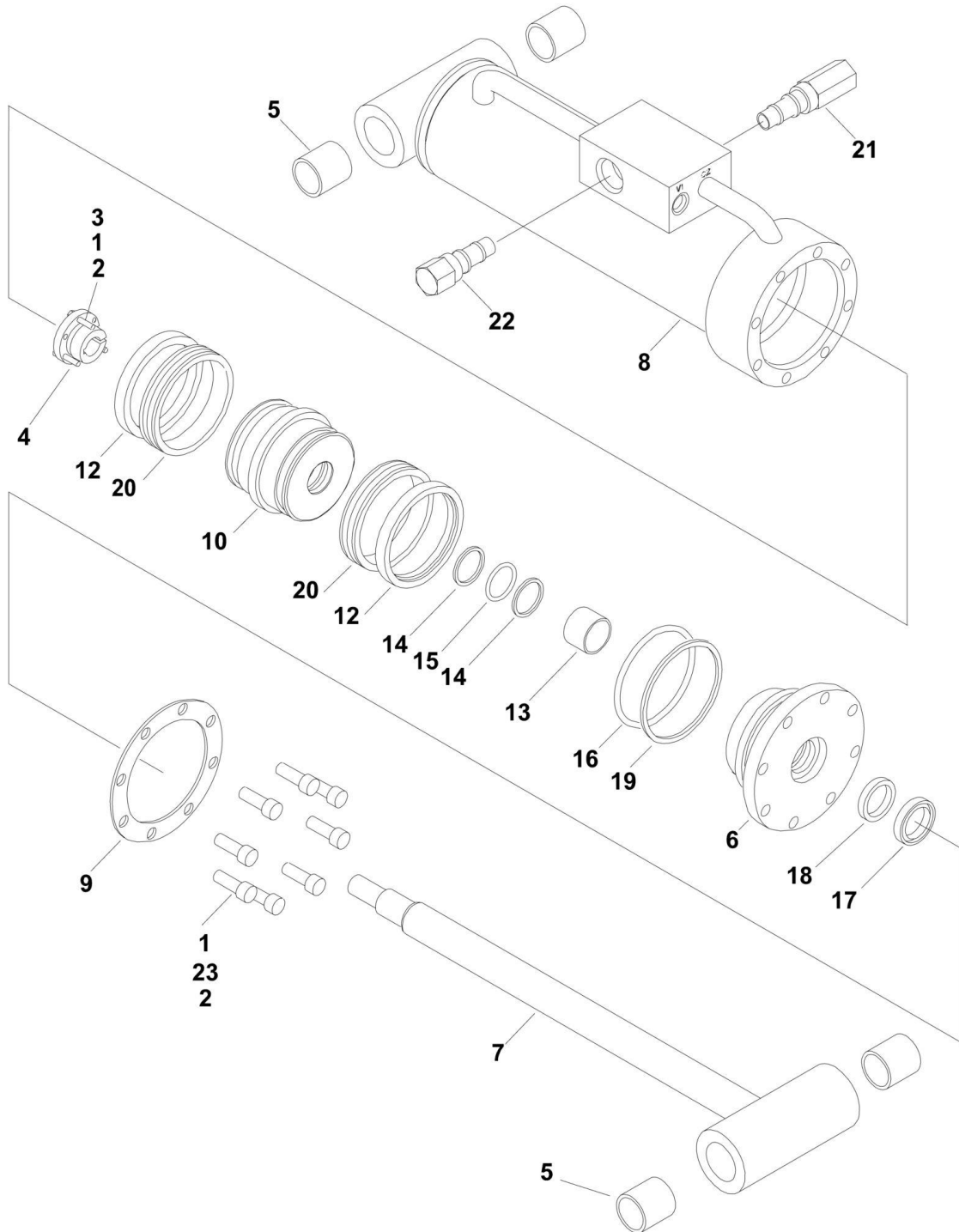
## SECTION 5 - CYLINDER

**FIGURE 5-2. PLATFORM LEVEL CYLINDER ASSEMBLY (E45A AND M45A)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683285	Ref	<b>PLATFORM LEVEL CYLINDER ASSEMBLY (E45A AND M45A)</b>	A
1	1682878	1	Barrel Weldment	
1	0961608	2	Bushing, Teflon	
2	1683286	1	Rod Weldment	
2	0961608	2	Bushing, Teflon	
3	1120110	1	Retainer	
4	3480217	1	Piston	
5	1682154	1	Head	
6	3300308	1	Nut, Hex Options:	
7	4566023	1	Spacer, Tube	
8	4640509	1	Valve, Holding	
9	3900170	1	Setscrew 3/8in-16NC x 3/8in	
10	2200222	1	Plug, Pipe	
11	Kit	1	T-Seal	
12	Kit	1	Ring, Wear	
13	Kit	1	O-Ring	
14	Kit	1	O-Ring	
15	Kit	1	Ring, Wear	
16	Kit	1	Seal, Rod	
17	Kit	1	Wiper, Rod	
18	0100038	AR	Primer, Locking	
19	0100011	AR	LOCTITE #242	
20	0100035	AR	Loctite #222	
21	0100020	AR	Sealant, Pipe	
22	4640932	1	Cartridge, Holding Valve	
22	7011112	1	Seal Kit - 4640932 Valve	
23	2220883	2	Plug, Socket Hex	
	2901147	1	Seal Kit - 1683285 Cylinder (Includes Items 11-17)	

# SECTION 5 - CYLINDER

## FIGURE 5-3. PLATFORM LEVEL CYLINDER ASSEMBLY (AJ AND AJP)



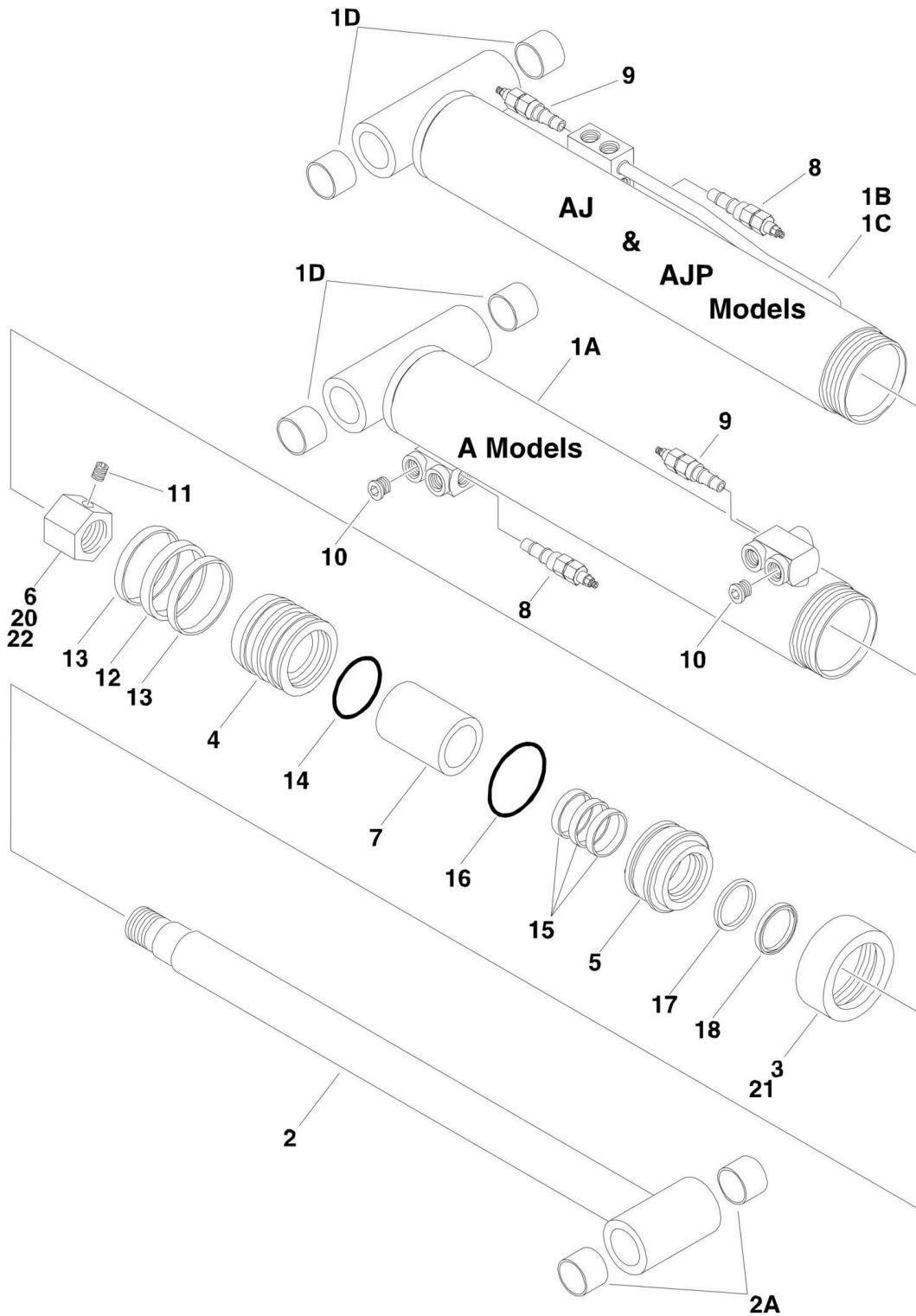
## SECTION 5 - CYLINDER

**FIGURE 5-3. PLATFORM LEVEL CYLINDER ASSEMBLY (AJ AND AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>PLATFORM LEVEL CYLINDER ASSEMBLY (AJ AND AJP)</b>	
	1683760	Ref	<b>Platform Level Cylinder Assembly E45AJ &amp; M45AJ</b>	B
	1683924	Ref	<b>Platform Level Cylinder Assembly E40AJP &amp; M40AJP</b>	B
1	0100011	AR	Loctite #242	
2	0100038	AR	Primer, Locking #7471	
3	3931016	3	Bolt, Socket Head #10-24NC x 1in	
4		Ref	Tapered Bushing Options:	
4	0961900	1	Tapered Bushing E45AJ & M45AJ	
4	0962185	1	Tapered Bushing E40AJP & M40AJP	
5	0961951	4	Bushing, Garmax	
6		Ref	Head Options:	
6	1683052	1	Head E45AJ & M45AJ	
6	1683925	1	Head E40AJP & M40AJP	
7	1683759	1	Rod	
8	1683761	1	Barrel	
9	3760368	1	Washer, Ring	
10		Ref	Piston Options:	
10	3480247	1	Piston E45AJ & M45AJ	
10	3480259	1	Piston E40AJP & M40AJP	
12	Kit	2	Ring, Lock	
13	Kit	1	Ring, Wear	
14	Kit	2	Ring, Back-up	
15	Kit	1	O-Ring	
16	Kit	1	O-Ring	
17	Kit	1	Wiper	
18	Kit	1	Seal	
19	Kit	1	Ring, Back-up	
20	Kit	2	Seal	
21	4640932	1	Cartridge, Valve (Counterbalance Vented)	
21	7011112	1	Seal Kit-4640932 Valve	
22	4641086	1	Cartridge, Valve (Counterbalance Non vented)	
22	2900792	1	Seal Kit-4641086 Valve	
23	3931516	8	Bolt, Socket Head 5/16in-18NC x 1in	
		Ref	Seal Kit Options: (Includes Items 12-20)	
	2901776	1	Seal Kit E45AJ & M45AJ	
	2901898	1	Seal Kit E40AJP & M40AJP	

# SECTION 5 - CYLINDER

## FIGURE 5-4. LIFT CYLINDER ASSEMBLY - LOWER



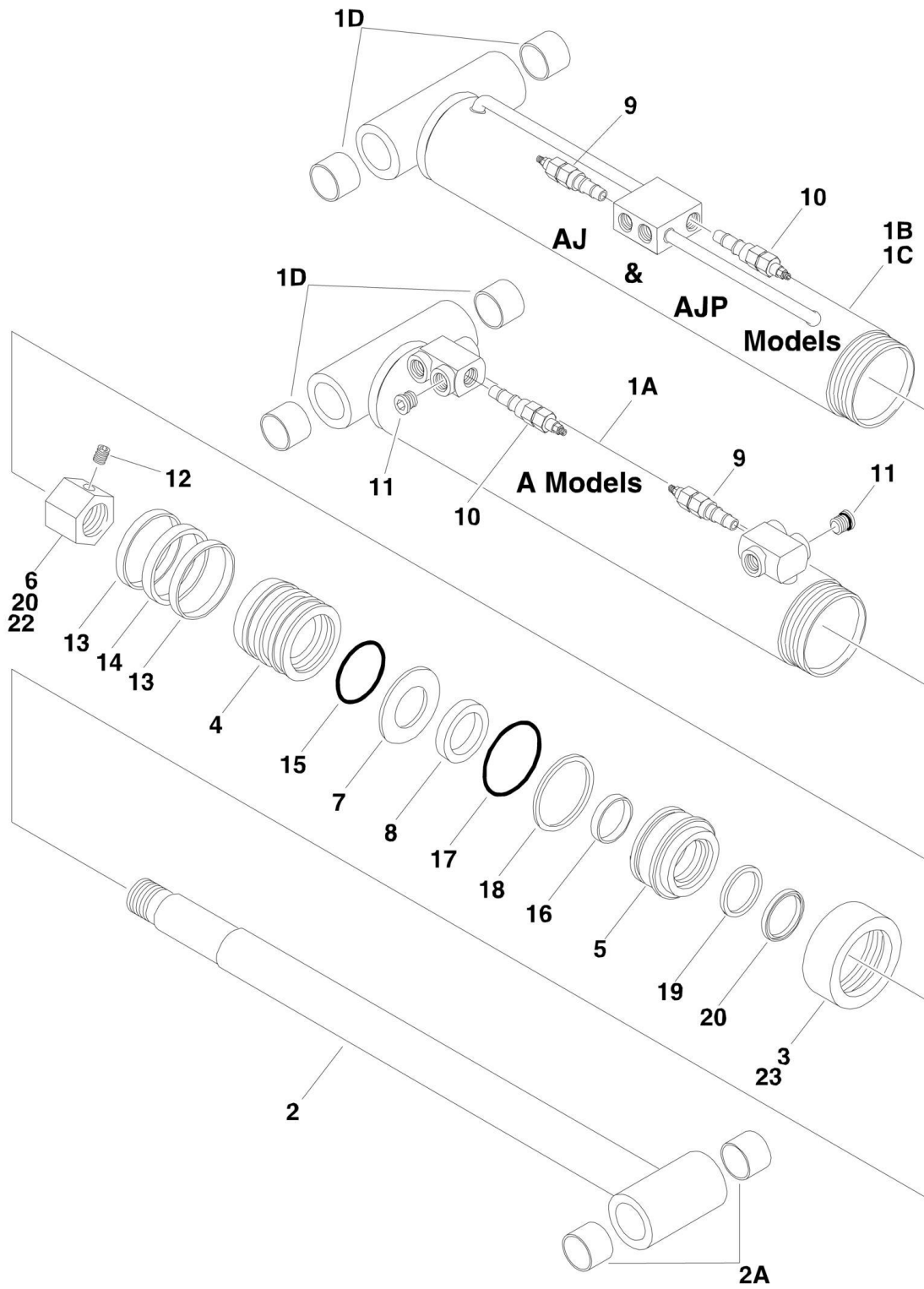
## SECTION 5 - CYLINDER

**FIGURE 5-4. LIFT CYLINDER ASSEMBLY - LOWER**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>LOWER LIFT CYLINDER ASSEMBLIES</b>	
	1683711	Ref	<b>Lower Lift Cylinder Assemblies E45A &amp; M45A</b>	1-A
	1683826	Ref	<b>Lower Lift Cylinder Assemblies E45AJ &amp; M45AJ</b>	1-A
	1683939	Ref	<b>Lower Lift Cylinder Assemblies E40AJP &amp; M40AJP</b>	1-A
1		Ref	Barrel Weldment Options:	
1A	1683515	1	Barrel E45A & M45A	
1B	1683827	1	Barrel E45AJ & M45AJ	
1C	1683940	1	Barrel E40AJP & M40AJP	
1D		Ref	Bushing Options:	
1D	0961726	2	Bushing E45 & M45	
1D	0961950	2	Bushing E40 & M40	
2		Ref	Rod Weldment Options:	
2	1683016	1	Rod E45 & M45	
2	1683941	1	Rod E40 & M40	
2A		Ref	Bushing Options:	
2A	0961726	2	Bushing E45 & M45	
2A	0961950	2	Bushing E40 & M40	
3	1120094	1	Retainer	
4	3480241	1	Piston	
5	1683710	1	Head	
6	3300281	1	Nut, Hex	
7	4566432		Spacer	
8	4640816	1	Cartridge, Holding Valve	
8	2900770	1	Seal Kit - 4640816 Valve	
9	4640634	1	Cartridge, Holding Valve	
9	2900770	1	Seal Kit - 4640634 Valve	
10		Ref	Plug Options:	
10	2220885	2	Plug E45A & M45A	
10	Not Required	0	Plug AJ & AJP	
11	3900170	1	Setscrew	
12	Kit	1	Seal, Piston	
13	Kit	2	Ring, Wear	
14	Kit	1	O-Ring	
15	Kit	3	Ring, Wear	
16	Kit	1	O-Ring	
17	Kit	1	Seal, Rod	
18	Kit	1	Wiper, Rod	
20	0100011	AR	Loctite #242	
21	0100035	AR	Loctite	
22	0100038	AR	Primer, Locking	
	2901806	1	Seal Kit - Lower Lift Cylinder (Includes Items 12-18)	

# SECTION 5 - CYLINDER

## FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MID





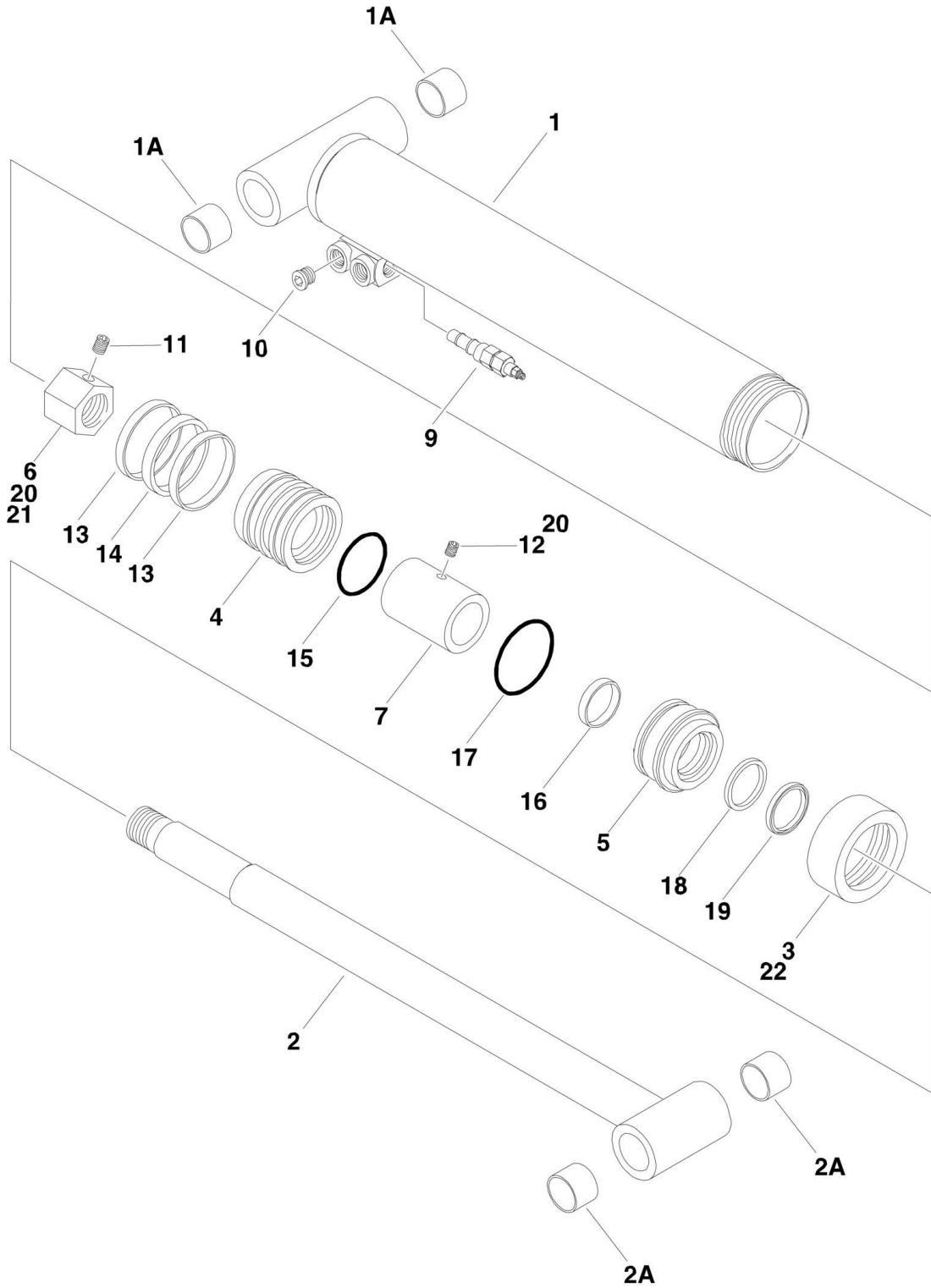
## SECTION 5 - CYLINDER

### FIGURE 5-5. LIFT CYLINDER ASSEMBLY - MID

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>MID LIFT CYLINDER ASSEMBLY</b>	
	1683713	Ref	<b>Mid Lift Cylinder Assembly E45A &amp; M45A</b>	1-A
	1683825	Ref	<b>Mid Lift Cylinder Assembly E45AJ &amp; M45AJ</b>	1-A
	1683942	Ref	<b>Mid Lift Cylinder Assembly E40AJP &amp; M40AJP</b>	1-A
1		Ref	Barrel Weldment Options:	
1A	1683516	1	Barrel E45A & M45A	
1B	1683829	1	Barrel E45AJ & M45AJ	
1C	1683943	1	Barrel E40AJP & M40AJP	
1D		Ref	Bushing Options:	
1D	0961726	2	Bushing E45 & M45	
1D	0961950	2	Bushing E40 & M40	
2		Ref	Rod Weldment Options:	
2	1683021	1	Rod E45 & M45	
2	1683944	1	Rod E40 & M40	
2A		Ref	Bushing Options:	
2A	0961726	2	Bushing E45 & M45	
2A	0961950	2	Bushing E40 & M40	
3	1120305	1	Cap, End	
4	3480242	1	Piston	
5	1683712	1	Head	
6	3300281	1	Nut, Hex	
7	4740207	1	Washer	
8	4566435	1	Spacer	
9	4640634	1	Cartridge, Holding Valve	
9	2900770	1	Seal Kit - 4640634 Valve	
10	4640816	1	Cartridge, Holding Valve	
10	2900770	1	Seal Kit - 4640816 Valve	
11		Ref	Plug Options:	
11	2220885	2	Plug E45A & M45A	
11	Not Required	0	Plug AJ & AJP	
12	3900170	1	Setscrew	
13	Kit	2	Ring, Wear	
14	Kit	1	Seal, Piston	
15	Kit	1	O-Ring	
16	Kit	1	Ring, Wear	
17	Kit	1	O-Ring	
18	Kit	1	Ring, Back-up	
19	Kit	1	Seal, Rod	
20	Kit	1	Wiper, Rod	
21	0100011	AR	Loctite #242	
22	0100035	AR	Loctite	
23	0100038	AR	Primer, Locking	
	2901805	1	Seal Kit - Mid Lift Cylinder (Includes Items 13-20)	

# SECTION 5 - CYLINDER

## FIGURE 5-6. LIFT CYLINDER ASSEMBLY - UPPER



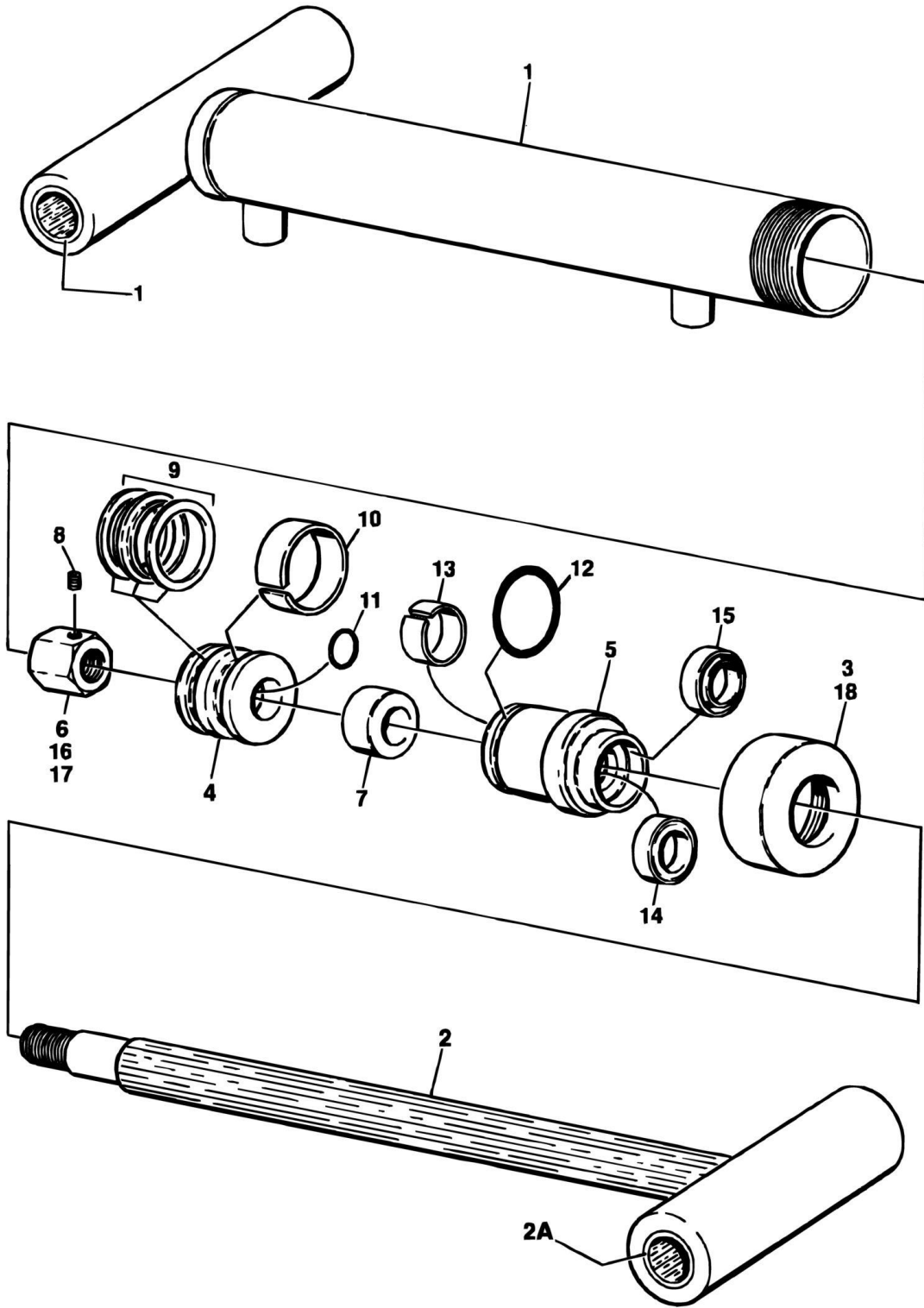
## SECTION 5 - CYLINDER

### FIGURE 5-6. LIFT CYLINDER ASSEMBLY - UPPER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>UPPER LIFT CYLINDER ASSEMBLIES</b>	
	1683708	Ref	<b>Upper Lift Cylinder Assemblies E45A &amp; M45A</b>	2-B
	1683813	Ref	<b>Upper Lift Cylinder Assemblies E45AJ &amp; M45AJ</b>	1-A
	1683945	Ref	<b>Upper Lift Cylinder Assemblies E40AJP &amp; M40AJP</b>	1-A
1		Ref	Barrel Weldment Options:	
1	1683514	1	Barrel Weldment E45A & M45A	
1	1683815	1	Barrel Weldment E45AJ & M45AJ	
1	1683946	1	Barrel Weldment E40AJP & M40AJP	
1A		Ref	Bushing Options:	
1A	0961726	2	Bushing E45 & M45	
1A	0961950	2	Bushing E40 & M40	
2		Ref	Rod Weldment Options:	
2	1683505	1	Rod Weldment E45A & M45A	
2	1683817	1	Rod Weldment E45AJ & M45AJ	
2	1683947	1	Rod Weldment E40AJP & M40AJP	
2A		Ref	Bushing Options:	
2A	0961726	2	Bushing E45 & M45	
2A	0961950	2	Bushing E40 & M40	
3	1120108	1	Cap, End	
4	3480240	1	Piston	
5	1683709	1	Head	
6		Ref	Nut, Hex Options:	
6	3300315	1	Nut, Hex E45A & M45A (Was p/n 3300279) <b>(Prior to SN 45523)</b>	
6	3300315	1	Nut, Hex E45A & M45A <b>(SN 45523 to Present)</b>	
6	3300279	1	Nut, Hex AJ & AJP	
7		Ref	Spacer, Tube Options:	
7	4567177	1	Spacer, Tube E45A & M45A	
7	4567908	1	Spacer, Tube AJ & AJP	
9	4640936	1	Cartridge, Valve	
9	2900770	1	Seal Kit - 4640936 Valve	
10	2220885	1	Plug, O-Ring	
11	3900170	1	Setscrew	
12		Ref	Setscrew Options:	
12	3951402	1	Setscrew E45A & M45A	
12	3900142	1	Setscrew AJ & AJP	
13	Kit	2	Ring, Wear	
14	Kit	1	Seal	
15	Kit	1	O-Ring	
16	Kit	1	Ring, Wear	
17	Kit	1	O-Ring	
18	Kit	1	Seal	
19	Kit	1	Wiper	
20	0100011	AR	Loctite #242	
21	0100038	AR	Primer, Locking	
22	0100035	AR	Loctite	
	2901804	1	Seal Kit - Upper Lift Cylinder (Includes Items 13-19)	

# SECTION 5 - CYLINDER

FIGURE 5-7. MASTER CYLINDER ASSEMBLY (A MODELS)



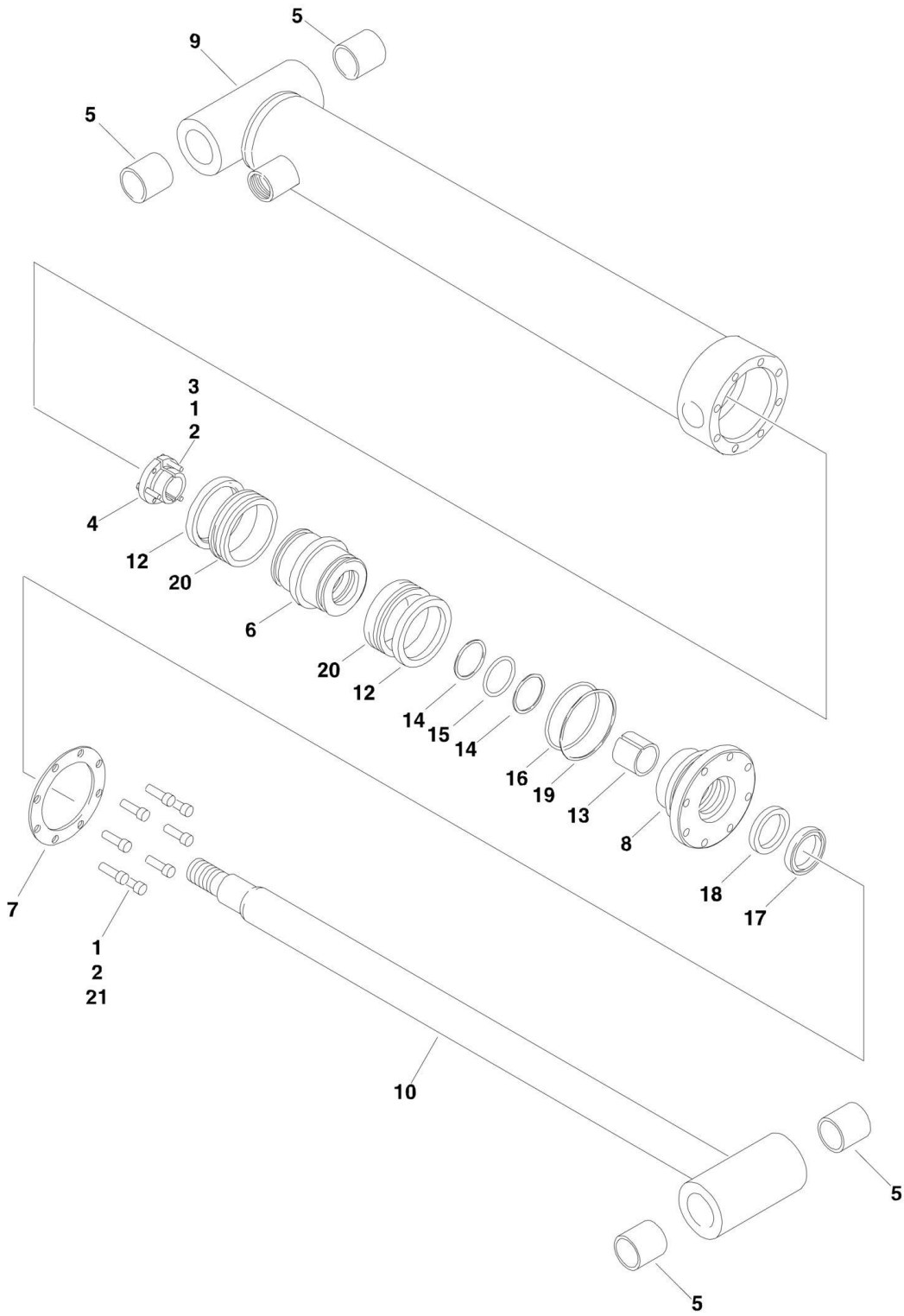
## SECTION 5 - CYLINDER

**FIGURE 5-7. MASTER CYLINDER ASSEMBLY (A MODELS)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683325	Ref	<b>MASTER CYLINDER ASSEMBLY (A MODELS)</b>	1/A
1	1682879	1	Barrel Weldment	
1	0961608	2	Bushing, Teflon	
2	1683286	1	Rod Weldment	
2A	0961608	2	Bushing, Teflon	
3	1120110	1	Retainer	
4	3480217	1	Piston	
5	1682154	1	Head	
6	3300308	1	Nut, Hex	
7	4566023	1	Spacer, Tube	
8	3900170	1	Setscrew 3/8in-16NC x 3/8in	
9	Kit	1	T-Seal	
10	Kit	1	Ring, Wear	
11	Kit	1	O-Ring	
12	Kit	1	O-Ring	
13	Kit	1	Ring, Wear	
14	Kit	1	Seal, Rod	
15	Kit	1	Wiper, Rod	
16	0100038	AR	Primer, Locking	
17	0100011	AR	Loctite #242	
18	0100035	AR	Loctite #222	
	2901147	1	Seal Kit (Includes Items 9-15)	

# SECTION 5 - CYLINDER

## FIGURE 5-8. MASTER CYLINDER ASSEMBLY (AJ AND AJP MODELS)



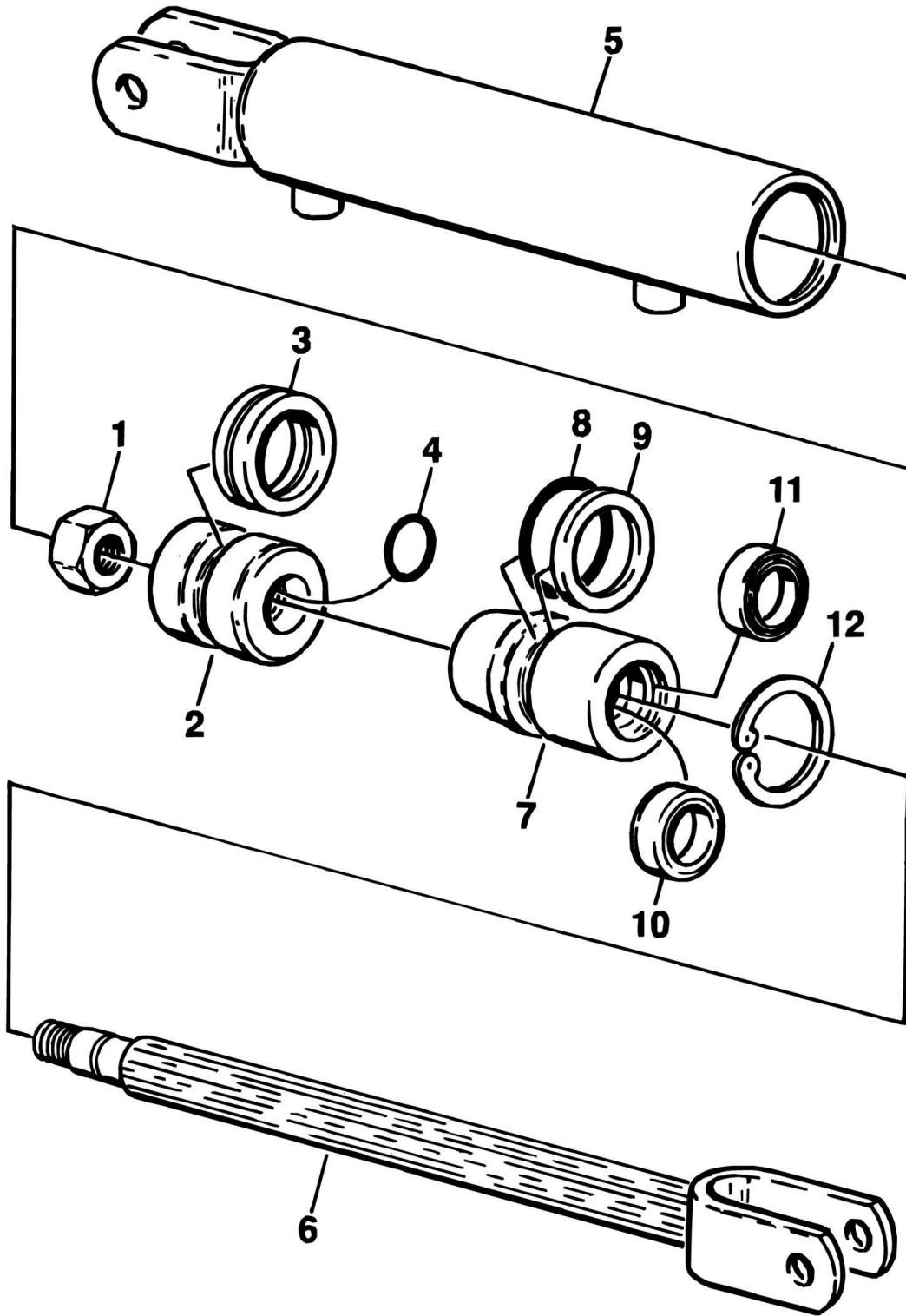
## SECTION 5 - CYLINDER

**FIGURE 5-8. MASTER CYLINDER ASSEMBLY (AJ AND AJP MODELS)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>MASTER CYLINDER ASSEMBLIES (AJ AND AJP MODELS)</b>	
	1683773	Ref	<b>Master Cylinder Assemblies E45AJ &amp; M45AJ</b>	B
	1683923	Ref	<b>Master Cylinder Assemblies E40AJP &amp; M40AJP</b>	B
1	0100011	AR	Loctite #242	
2	0100038	AR	Primer, Locking	
3	3931016	3	Bolt Socket Head #10-24NC x 1in	
4		Ref	Tapered Bushing Options:	
4	0961900	1	Tapered Bushing E45 & M45	
4	0962185	1	Tapered Bushing E40 & M40	
5	0961951	4	Bushing, Garmax	
6		Ref	Piston Options:	
6	3480247	1	Piston E45 & M45	
6	3480259	1	Piston E40 & M40	
7	3760368	1	Washer, Ring	
8		Ref	Head Options:	
8	1683052	1	Head E45 & M45	
8	1683925	1	Head E40 & M40	
9	1683756	1	Barrel	
10	1683772		Rod	
12	Kit	2	Ring, Lock	
13	Kit	1	Ring, Wear	
14	Kit	2	Ring, Back-up	
15	Kit	1	O-Ring	
16	Kit	1	O-Ring	
17	Kit	1	Wiper	
18	Kit	1	Seal	
19	Kit	1	Ring, Back-up	
20	Kit	2	Seal	
21	3931516	8	Bolt Socket Head 5/16in-18NC x 1in	
		Ref	Seal Kit Options: (Includes Items 12-20)	
	2901776	1	Seal Kit E45 & M45	
	2901898	1	Seal Kit E40 & M40	

# SECTION 5 - CYLINDER

FIGURE 5-9. ROTATOR CYLINDER ASSEMBLY (E45 AND M45 ONLY) (Prior to SN 49945)





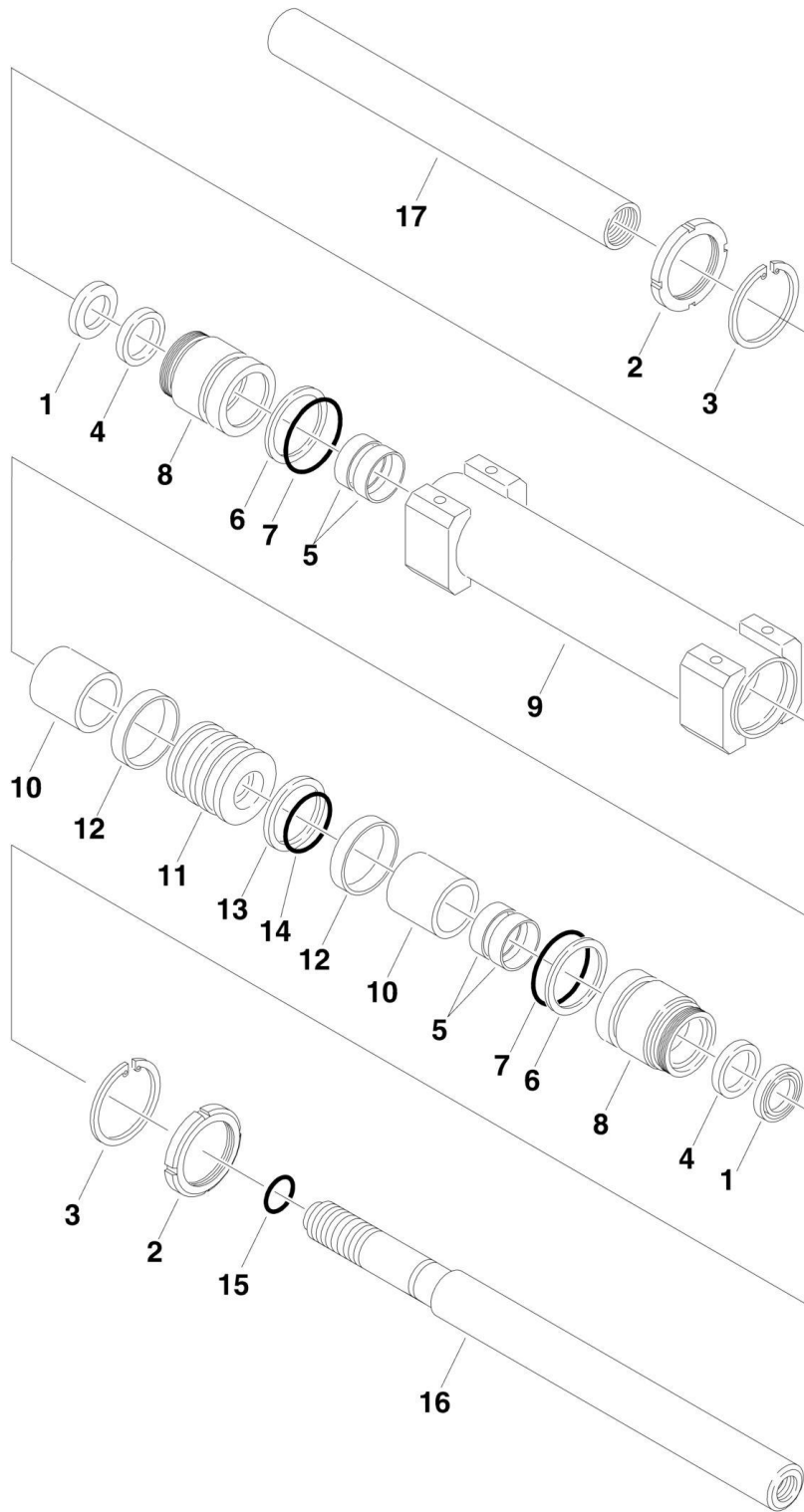
## SECTION 5 - CYLINDER

**FIGURE 5-9. ROTATOR CYLINDER ASSEMBLY (E45 AND M45 ONLY) (Prior to SN 49945)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1682930	Ref	<b>PLATFORM ROTATOR CYLINDER ASSEMBLY (E45 AND M45 ONLY)</b>	A
1	7001609	1	Nut, Hex	
2	7001610	1	Piston	
3	Kit	1	Seal	
4	Kit	1	O-Ring	
5	7001611	1	Barrel Weldment	
6	7001612	1	Rod	
7	7001613	1	Head	
8	Kit	1	O-Ring	
9	Kit	1	Ring, Back-up	
10	Kit	1	Seal	
11	Kit	1	Wiper	
12	7001614	1	Ring, Retainer	
	7001608	1	Seal Kit - 1682930 Cylinder (Includes Items 3,4 & 8-11)	

# SECTION 5 - CYLINDER

## FIGURE 5-10. STEER CYLINDER ASSEMBLY



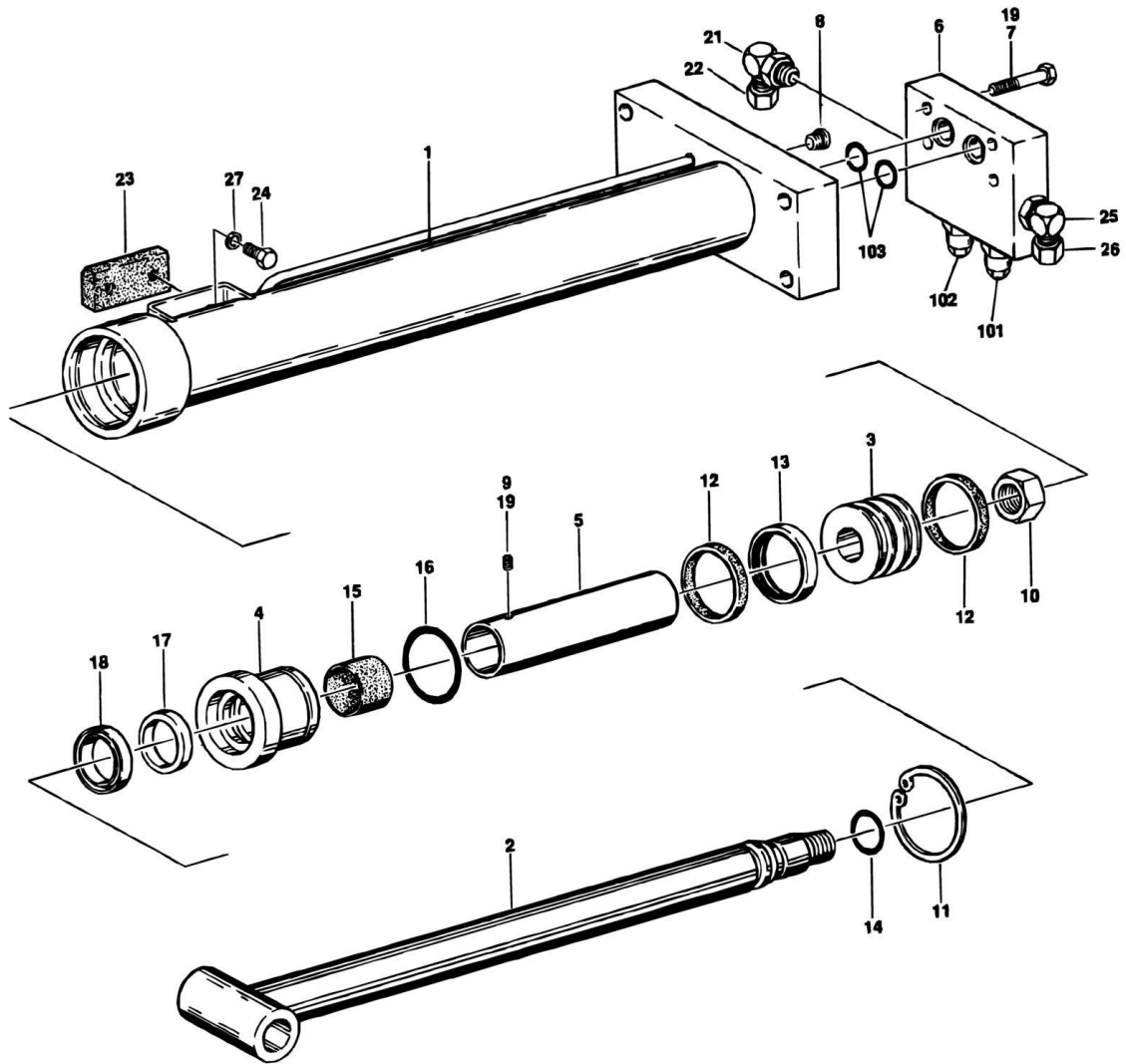
## SECTION 5 - CYLINDER

**FIGURE 5-10. STEER CYLINDER ASSEMBLY**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683591	Ref	<b>STEER CYLINDER ASSEMBLY</b>	B
1	Kit	2	Wiper	
2	7001630	2	Nut, Spanner	
3	7017247	2	Ring, Retaining	
4	Kit	2	Seal, Lip	
5	Kit	4	Ring, Wear	
6	Kit	2	Ring, Back-up	
7	Kit	2	O-Ring	
8	7017248	2	Guide	
9	70003341	1	Barrel Weldment	
10	7017249	2	Tube	
11	7017250	1	Piston	
12	Kit	2	Ring, Wear	
13	Kit	1	Seal	
14	Kit	1	O-Ring	
15	Kit	1	O-Ring	
16	7017251	1	Rod (Male End)	
17	7017252	1	Rod (Female End)	
	7017246	1	Seal Kit (Includes Items 1, 4-7 & 12-15)	

# SECTION 5 - CYLINDER

FIGURE 5-11. TELESCOPE CYLINDER ASSEMBLY (E45 AND M45)



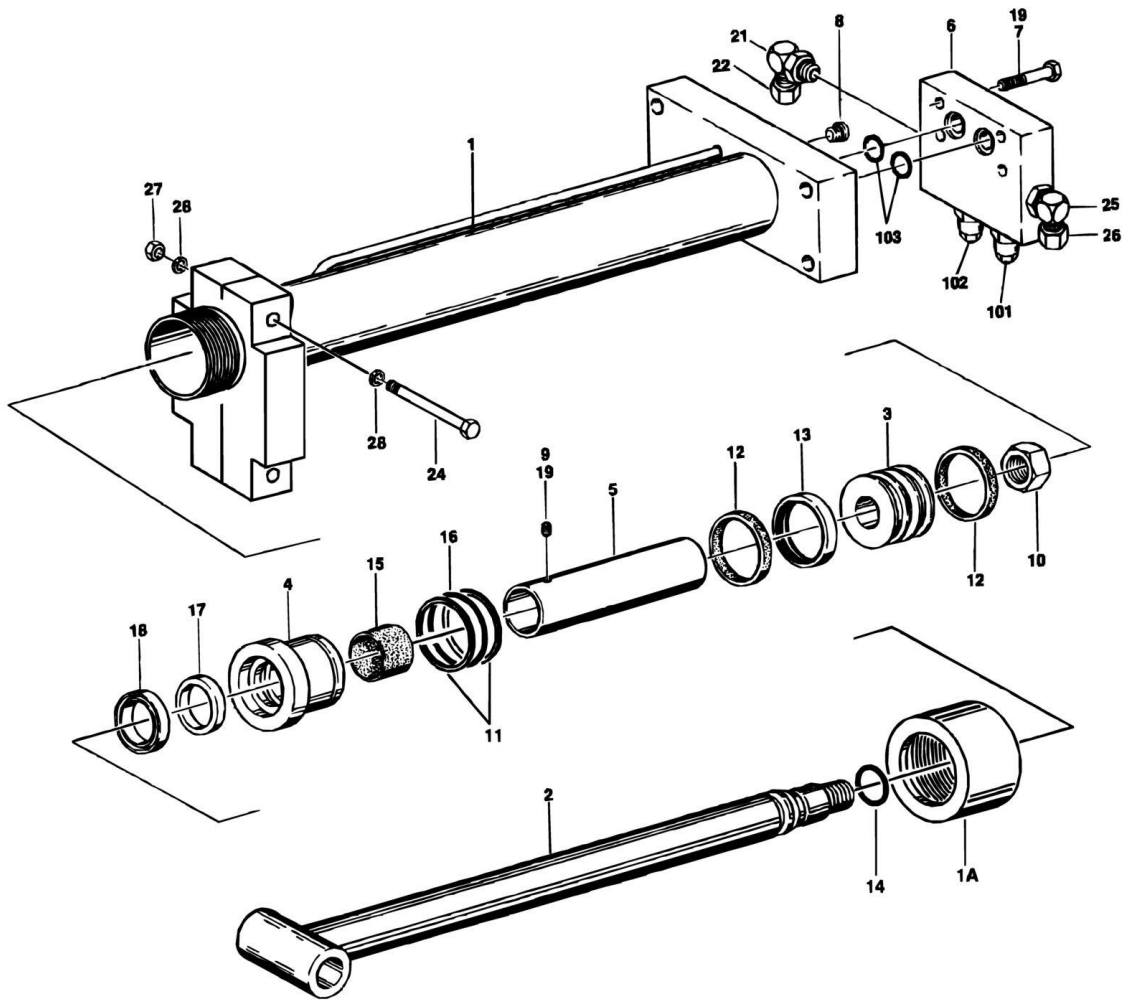
## SECTION 5 - CYLINDER

**FIGURE 5-11. TELESCOPE CYLINDER ASSEMBLY (E45 AND M45)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>TELESCOPE CYLINDER ASSEMBLY (E45 AND M45)</b>	
	1683704	Ref	<b>Telescope Cylinder Assembly E45A &amp; M45A</b>	3-C
	1683798	Ref	<b>Telescope Cylinder Assembly E45AJ &amp; M45AJ</b>	3-B
1		Ref	Barrel Weldment Options:	
1	1682948	1	Barrel Weldment E45A & M45A	
1	1683800	1	Barrel Weldment E45AJ & M45AJ	
2		Ref	Rod Weldment Options:	
2	1683706	1	Rod Weldment E45A & M45A	
2	1683802	1	Rod Weldment E45AJ & M45AJ	
3	3480239	1	Piston	
4	1683705	1	Head	
5		Ref	Spacer, Tube Options:	
5	4567704	1	Spacer, Tube E45A & M45A	
5	4566027	1	Spacer, Tube E45AJ & M45AJ	
6	4640807	1	Counterbalance Valve Assembly (See Items 101-103 for Breakdown)	
7	0641512	4	Bolt 5/16in-18NC x 1 1/2in	
8	2220883	2	Plug, O-Ring	
9	3951402	1	Setscrew 1/4in-20NC x 1/4in	
10	3322205	1	Locknut	
11	3760318	1	Ring, Retaining	
12	Kit	2	Ring, Wear	
13	Kit	1	Seal, Cap	
14	Kit	1	O-Ring	
15	Kit	1	Ring, Wear	
16	Kit	1	O-Ring	
17	Kit	1	Seal, Rod	
18	Kit	1	Wiper	
19	0100011	AR	LOCTITE #242	
21	2220628	1	Fitting, 90	
22	2220516	1	Fitting, Cap	
23	3340679	1	Wear Pad Assembly	
24	0641604	2	Bolt 3/8in-16NC x 1/2in	
25	2220596	1	Fitting, 90	
26	2220517	1	Fitting, Cap	
27	4761600	2	Lockwasher 3/8in	
	2901807	1	Seal Kit (Includes Items 12-18)	
	4640807	Ref	<b>COUNTERBALANCE VALVE ASSEMBLY</b>	
101	4640771	1	Cartridge, Counterbalance	
102	4640709	1	Cartridge, Vented Counterbalance	
103	3790113	2	O-Ring (Between Valve and Cylinder Block)	
	2900770		Seal Kit (1 Per Cartridge)	

# SECTION 5 - CYLINDER

## FIGURE 5-12. TELESCOPE CYLINDER ASSEMBLY (E40 AND M40)



## SECTION 5 - CYLINDER

**FIGURE 5-12. TELESCOPE CYLINDER ASSEMBLY (E40 AND M40)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683911	Ref	<b>TELESCOPE CYLINDER ASSEMBLY (E40 AND M40)</b>	2-B
1	1683912	1	Barrel Weldment	
1A	1120110	1	Cap, End	
2	1683980	1	Rod Weldment	
3	3480239	1	Piston	
4	1683863	1	Head	
5	4567963	1	Spacer, Tube	
6	4640807	1	Counterbalance Valve Assembly (See Items 101-103 for Breakdown)	
7	0641512	4	Bolt 5/16in-18NC x 1 1/2in	
8	2220883	2	Plug, O-Ring	
9	3951402	1	Setscrew 1/4in-20NC x 1/4in	
10	3322205	1	Locknut	
11	3760318	1	Ring, Retaining	
12	Kit	2	Ring, Wear	
13	Kit	1	Seal, Cap	
14	Kit	1	O-Ring	
15	Kit	1	Ring, Wear	
16	Kit	1	O-Ring	
17	Kit	1	Seal, Rod	
18	Kit	1	Wiper	
19	0100011	AR	LOCTITE #242	
21	2220628	1	Fitting, 90	
22	2220516	1	Fitting, Cap	
23	3340882	1	Wear Pad Assembly	
24	0641424	2	Bolt 1/4in-20NC x 3in	
25	2220596	1	Fitting, 90	
26	2220517	1	Fitting, Cap	
27	3311405	4	Flatwasher 1/4in	
	2901903	1	Seal Kit (Includes Items 12-18)	
	4640807	Ref	<b>COUNTERBALANCE VALVE ASSEMBLY</b>	
101	4640771	1	Cartridge, Counterbalance	
102	4640709	1	Cartridge, Vented Counterbalance	
103	3790113	2	O-Ring (Between Valve and Cylinder Block)	
	2900770		Seal Kit (1 Per Cartridge)	





**SECTION 6 - HYDRAULIC**



## SECTION 6 - HYDRAULIC

**FIGURE 6-1. STANDARD HYDRAULIC DIAGRAM (E45A AND M45A)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792334	Ref	<b>STANDARD HYDRAULIC DIAGRAM (E45A AND M45A)</b>	6-F
1	2752675	1	Hose	
2	1320033	1	Clamp	
3	2752487	1	Hose	
4	2752488	1	Hose	
5	2751498	1	Hose	
6	2752476	1	Hose	
7	2220371	3	Fitting, Straight	
8	2752600	1	Hose	
9	2220473	9	Fitting, 90	
10	2220885	5	Plug	
11	2752595	2	Hose	
12	2752446	1	Hose	
13	2220507	1	Fitting, 90	
14	2753326	2	Hose	
15	2220998	2	Fitting, Straight	
16	2220466	2	Fitting, 90	
17	2752795	2	Hose	
19	2220502	4	Fitting, 45	
20	2752459	2	Hose	
21	2221033	2	Fitting, Straight	
22	2220593	1	Fitting, Straight	
23	2220873	1	Fitting, Straight	
24	2220428	2	Fitting, Quick Coupling	
25	2220429	2	Dust Cap	
26	2753050	2	Hose	
27	2220899	3	Fitting, Tee	
28	2752620	1	Hose	
29	2752580	2	Hose	
30	2220472	8	Fitting, 90	
31	2752910	1	Hose	
32	2220999	1	Fitting, Tee	
33	2751127	1	Hose	
34	2751126	1	Hose	
35	2752475	1	Hose	
36	2220386	1	Fitting, 90	
37	2752585	2	Hose	
38	2220504	2	Fitting, Tee	
39	2752572	2	Hose	
40	2220727	2	Fitting, Straight	
41	2220684	2	Fitting, Tee	
42	2752435	1	Hose	
43	2752573	1	Hose	
44	2750996	1	Hose	
45	2751508	1	Hose	
46	2220501	7	Fitting, 45	
47	2220502	2	Fitting, 45	
50	2752581	1	Hose	
51	4566188	1	Tube	
52	4566623	1	Tube	

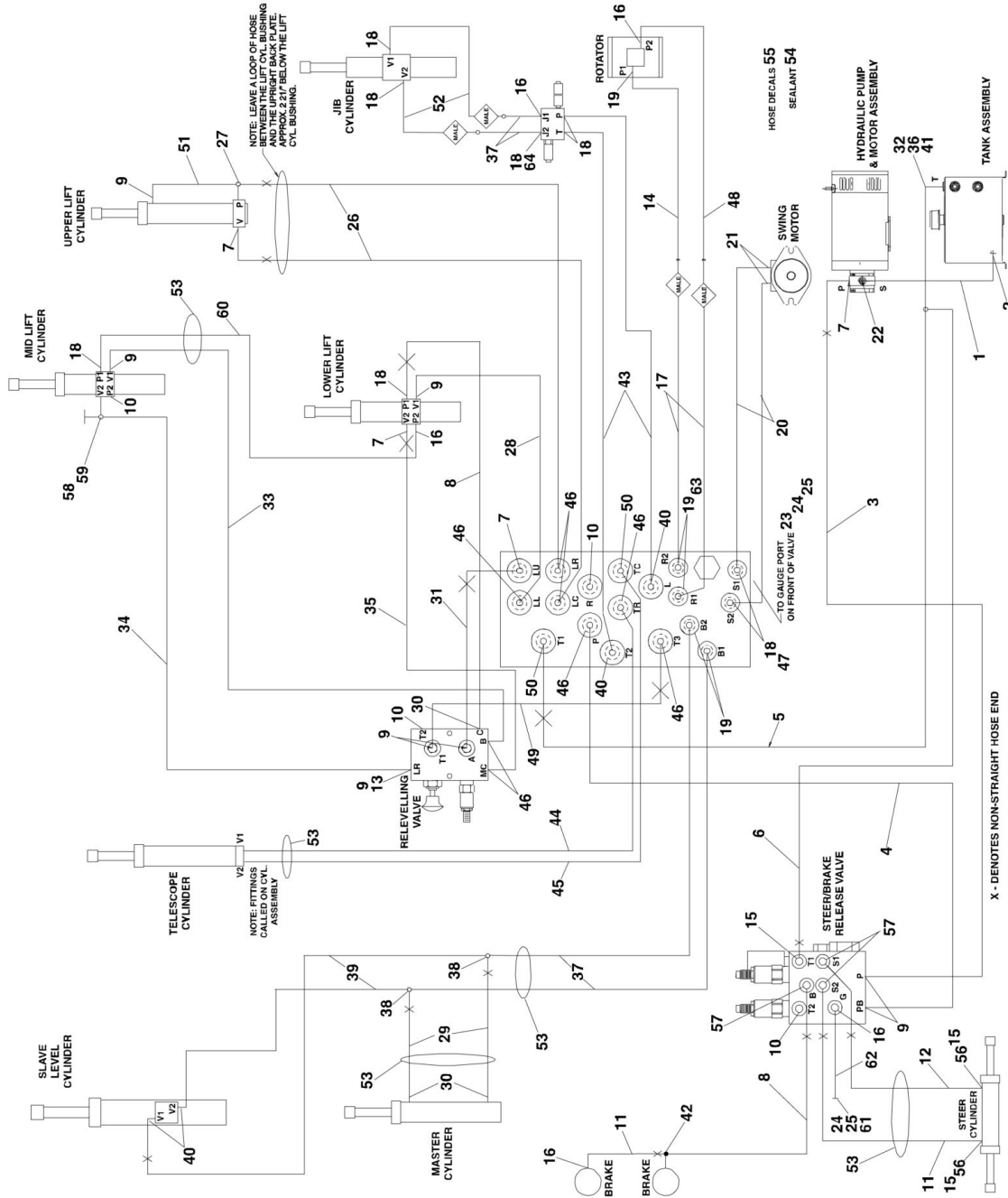
## SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
53	4100026	5	Nylon, Sleeve	
54	2752983	1	Hose	
55	1702124	1	Hose, Tags	
56	2220609	1	Fitting, Reducer	
57	2220923	3	Fitting, Adapter	
58	2220934	1	Fitting, Tee	
59	4640861	1	Bleeder, Kit	
60	2752440	1	Hose	
61	2220605	1	Fitting, Tee	
62	2752463	1	Hose	
63	0100020	AR	Sealant	
64	2220600	2	Fitting, Straight	
65	2220619	1	Fitting, Reducer	
66	2220711	1	Fitting, Tee	
67	2220414	1	Fitting, Straight	
68	2790900	1	Hose	
69	2220909	2	Fitting, Restrictor	



# SECTION 6 - HYDRAULIC

## FIGURE 6-2. STANDARD HYDRAULIC DIAGRAM (E45AJ AND M45AJ)



## SECTION 6 - HYDRAULIC

**FIGURE 6-2. STANDARD HYDRAULIC DIAGRAM (E45AJ AND M45AJ)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792395	Ref	<b>STANDARD HYDRAULIC DIAGRAM (E45AJ AND M45AJ)</b>	6-E
1	2752675	1	Hose	
2	1320017	1	Clamp	
3	2752487	1	Hose	
4	2752488	1	Hose	
5	2751498	1	Hose	
6	2752476	1	Hose	
7	2220371	4	Fitting, Straight	
8	2752600	2	Hose	
9	2220473	7	Fitting, 90	
10	2220885	6	Plug	
11	2752595	2	Hose	
12	2752446	1	Hose	
13	2220507	1	Fitting, 90	
14	2753304	1	Hose	
15	2220998	3	Fitting, Straight	
16	2220466	5	Fitting, 90	
17	2752795	2	Hose	
18	2220415	9	Fitting, Straight	
19	2220502	5	Fitting, 45	
20	2752459	2	Hose	
21	2221033	2	Fitting, Straight	
22	2220593	1	Fitting, Straight	
23	2220873	1	Fitting, Straight	
24	2220428	2	Fitting, Quick Coupling	
25	2220429	2	Dust Cap	
26	2753050	2	Hose	
27	2220899	1	Fitting, Tee	
28	2752466	1	Hose	
29	2752437	2	Hose	
30	2220472	3	Fitting, 90	
31	2750910	1	Hose	
32	2220999	1	Fitting, Tee	
33	2753301	1	Hose	
34	2751009	1	Hose	
35	2752611	1	Hose	
36	2220386	1	Fitting, 90	
37	2752585	4	Hose	
38	2220605	2	Fitting, Tee	
39	2753302	2	Hose	
40	2220582	4	Fitting, Straight	
41	2220619	1	Fitting, Reducer	
42	2220711	1	Fitting, Tee	
43	2752430	2	Hose	
44	2750996	1	Hose	
45	2751508	1	Hose	
46	2220501	8	Fitting, 45	
47	2220677	2	Fitting, 45	
48	2753305	1	Hose	
49	2752463	1	Hose	

## SECTION 6 - HYDRAULIC

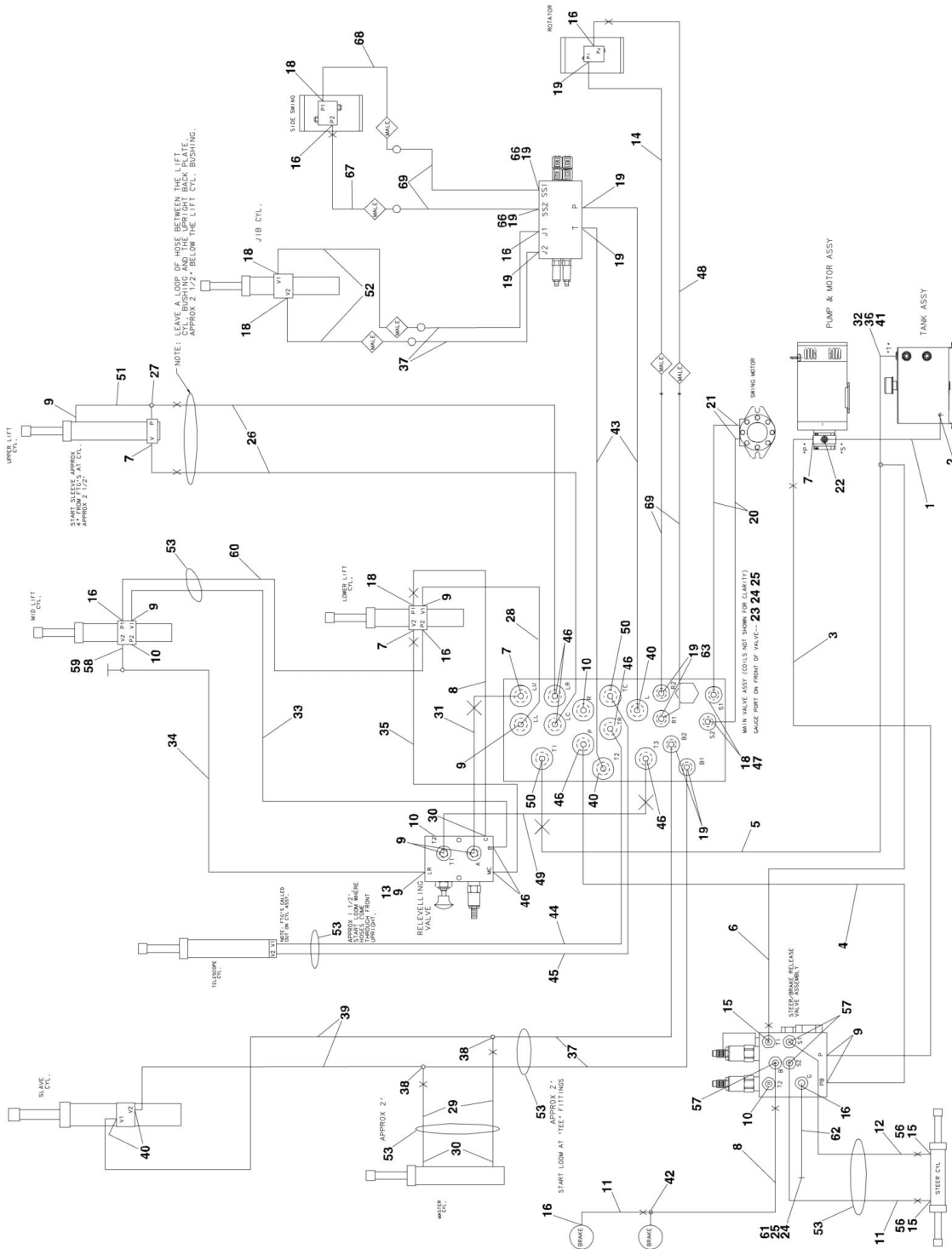
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
50	2220600	2	Fitting, Straight	
51	4567946	1	Tube	
52	2753303	2	Hose	
53	4100026	4	Nylon, Sleeve	
54	0100020	AR	Sealant (Not Shown)	
55	1702124	1	Hose, Tags (Not Shown)	
56	2220609	2	Fitting, Reducer	
57	2220923	3	Fitting, Adapter	
58	2220934	1	Fitting, Tee	
59	4640861	1	Bleeder, Kit	
60	2751414	1	Hose	
61	2220414	1	Fitting, Straight	
62	2750900	1	Hose	
63	2220909	2	Orifice (.015)	
64	2220654	1	Fitting, Straight	





# SECTION 6 - HYDRAULIC

## FIGURE 6-3. STANDARD HYDRAULIC DIAGRAM (E40AJP AND M40AJP)



## SECTION 6 - HYDRAULIC

**FIGURE 6-3. STANDARD HYDRAULIC DIAGRAM (E40AJP AND M40AJP)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2792413	Ref	<b>STANDARD HYDRAULIC DIAGRAM (E40AJP AND M40AJP)</b>	2-B
1	2752675	1	Hose	
2	1320033	1	Clamp	
3	2752487	1	Hose	
4	2752488	1	Hose	
5	2751498	1	Hose	
6	2752476	1	Hose	
7	2220371	4	Fitting, Straight	
8	2752600	2	Hose	
9	2220473	8	Fitting, 90	
10	2220885	6	Plug	
11	2752595	2	Hose	
12	2752446	1	Hose	
13	2220507	1	Fitting, 90	
14	2753337	1	Hose	
15	2220998	3	Fitting, Straight	
16	2220466	6	Fitting, 90	
18	2220415	5	Fitting, Straight	
19	2220502	10	Fitting, 45	
20	2752459	2	Hose	
21	2221033	2	Fitting, Straight	
22	2220593	1	Fitting, Straight	
23	2220873	1	Fitting, Straight	
24	2220428	2	Fitting, Quick Coupling	
25	2220429	2	Dust Cap	
26	2752619	2	Hose	
27	2220899	1	Fitting, Tee	
28	2752466	1	Hose	
29	2752437	2	Hose	
30	2220472	3	Fitting, 90	
31	2750910	1	Hose	
32	2220999	1	Fitting, Tee	
33	2753335	1	Hose	
34	2753334	1	Hose	
35	2752611	1	Hose	
36	2220386	1	Fitting, 90	
37	2752571	4	Hose	
38	2220605	2	Fitting, Tee	
39	2753333	2	Hose	
40	2220582	4	Fitting, Straight	
41	2220619	1	Fitting, Reducer	
42	2220711	1	Fitting, Tee	
43	2752430	2	Hose	
44	2753474	1	Hose	
45	2753475	1	Hose	
46	2220501	7	Fitting, 45	
47	2220677	2	Fitting, 45	
48	2753336	1	Hose	
49	2752463	1	Hose	
50	2220600	2	Fitting, Straight	

## SECTION 6 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
51	4567946	1	Tube	
52	2753329	2	Hose	
53	4100026	4	Nylon, Sleeve	
54	0100020	AR	Sealant (Not Shown)	
55	1702124	1	Hose, Tags (Not Shown)	
56	2220609	2	Fitting, Reducer	
57	2220923	3	Fitting, Adapter	
58	2220934	1	Fitting, Tee	
59	4640861	1	Bleeder, Kit	
60	2751890	1	Hose	
61	2220414	1	Fitting, Straight	
62	2750900	1	Hose	
63	2220909	2	Orifice (.015)	
66	2221039	2	Orifice (.022)	
67	2753330	1	Hose	
68	2753331	1	Hose	
69	2753332	4	Hose	



## SECTION 6 - HYDRAULIC

FIGURE 6-4. HYDRAULIC DIAGRAM LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>Note: Information on diagrams not shown is available from JLG Service/Parts Departments.</b>	
		Ref	<b>Standard Hydraulic Diagrams</b>	
	2792334	Ref	<b>Standard Hydraulic Diagrams E45A &amp; M45A</b>	
	2792395	Ref	<b>Standard Hydraulic Diagrams E45AJ &amp; M45AJ</b>	
	2792413	Ref	<b>Standard Hydraulic Diagrams E40AJP &amp; M40AJP</b>	
	2792337	Ref	<b>Standard Hydraulic Schematic</b>	

**SECTION 7 - ELECTRICAL**

## SECTION 7 - ELECTRICAL

FIGURE 7-1. ELECTRICAL DIAGRAM LIST

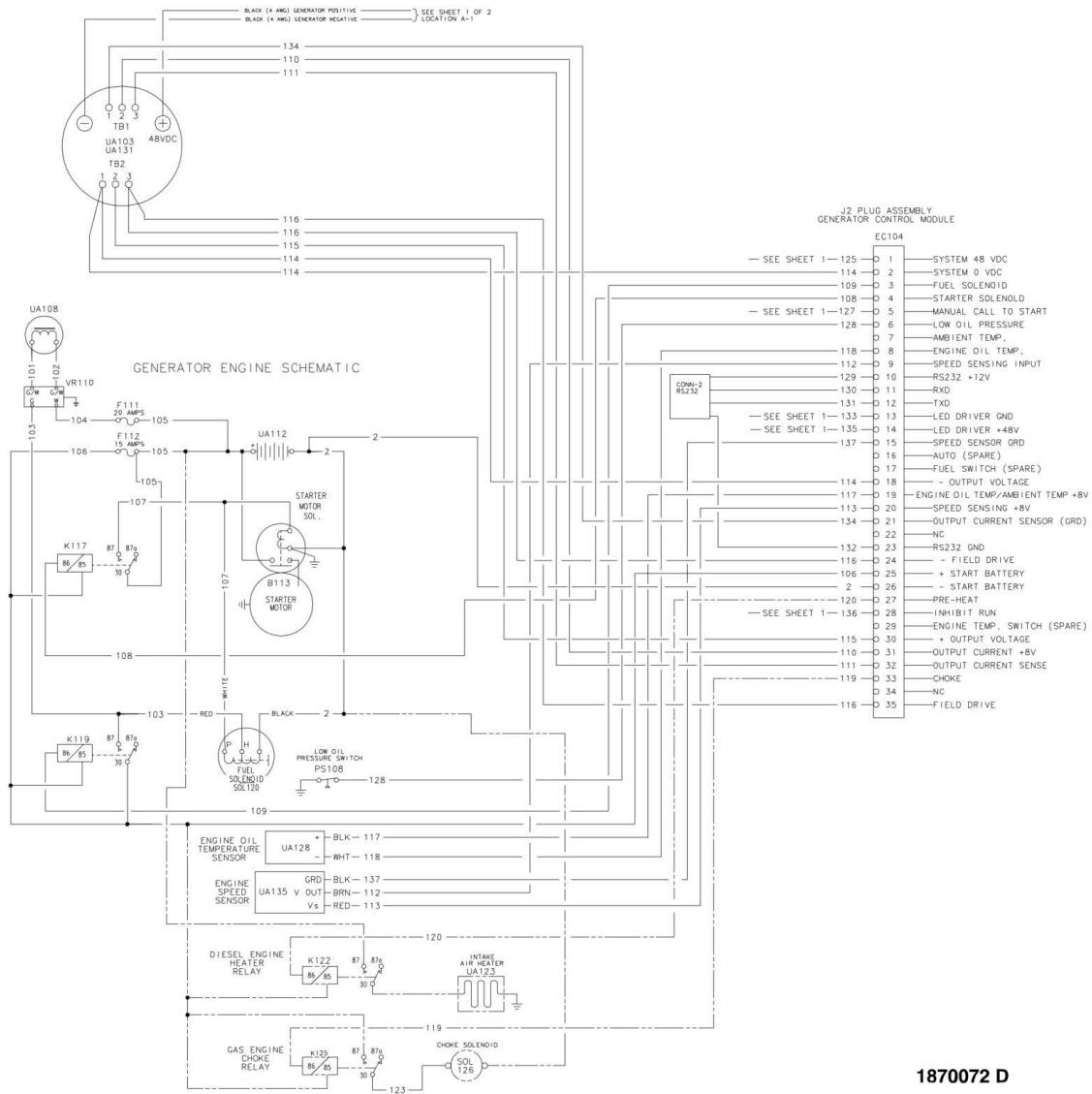
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>Note: Diagrams not shown are available from the JLG Service Department.</b>	
		Ref	<b>LIGHTS ELECTRICAL DIAGRAMS</b>	
		Ref	<b>Headlights and Taillights</b>	1-A
	4933102			
	4360336	1	Switch, Toggle (Located on Platform Console Box)	
	3740087	1	Relay (Located in Ground Control Box)	
	4120027	1	Socket, Relay (Located in Ground Control Box)	
	3740063	1	Spring (Located in Ground Control Box)	
	4360448	1	Breaker, Circuit 10 Amp (Located in Ground Control Box)	
	0259305	Ref	<b>Strobe Light</b>	1
	1283055	Ref	<b>Strobe Light</b>	B
	4933101	Ref	<b>JIB FUNCTION ELECTRICAL DIAGRAM (E45AJ &amp; M45AJ Only)</b>	1-A
	0259064	Ref	<b>MOTION ALARM ELECTRICAL DIAGRAM</b>	1
	1283055	Ref	<b>MOTION ALARM ELECTRICAL DIAGRAM</b>	B
		Ref	<b>PLATFORM ELECTRICAL DIAGRAM</b>	
	4933060	Ref	Platform Electrical Diagram E45 & M45	3-D
	4933105	Ref	Platform Electrical Diagram E40 & M40	1-A
		Ref	<b>STANDARD ELECTRICAL DIAGRAMS</b>	
	4933059	Ref	Standard Electrical Diagrams E45 & M45	3-G
	4933128	Ref	Standard Electrical Diagrams E40 & M40	2-A
		Ref	<b>STANDARD ELECTRICAL SCHEMATIC</b>	
	1870072	Ref	Standard Electrical Schematic E45 & M45	D
	1870126	Ref	Standard Electrical Schematic E40 & M40	A





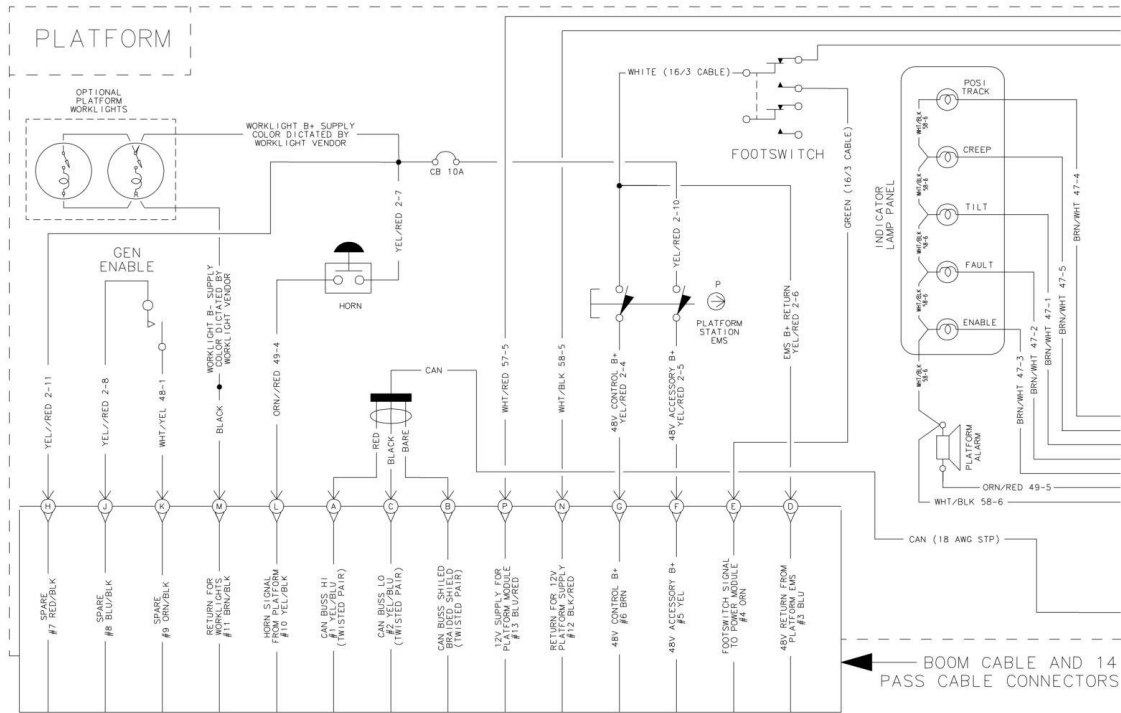
# SECTION 7 - ELECTRICAL

## FIGURE 7-2. ELECTRICAL SCHEMATIC (E45 AND M45 MODELS)

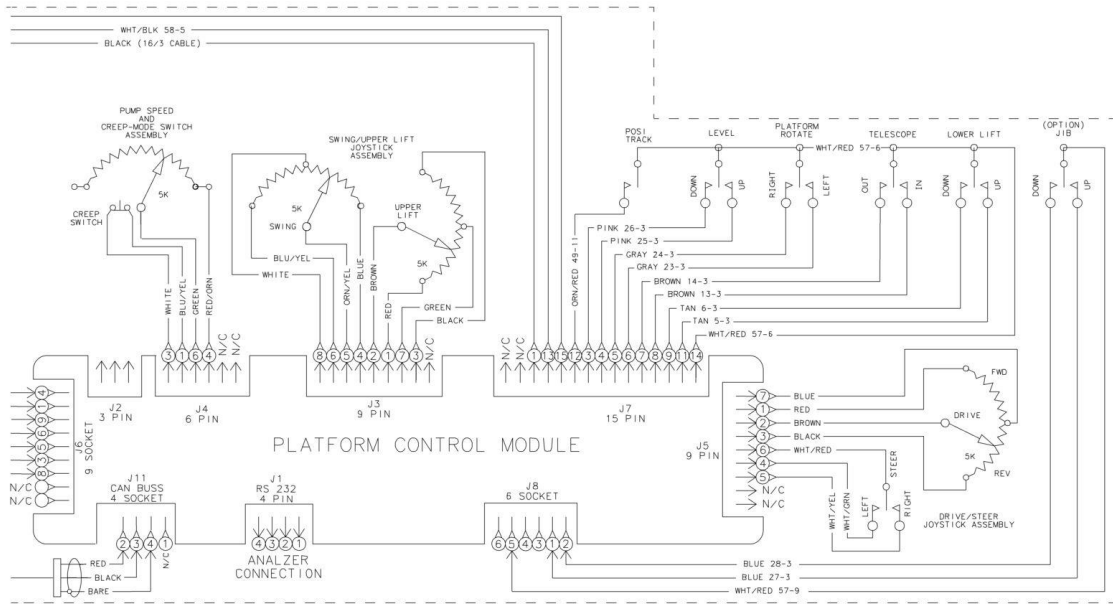


1870072 D

# SECTION 7 - ELECTRICAL

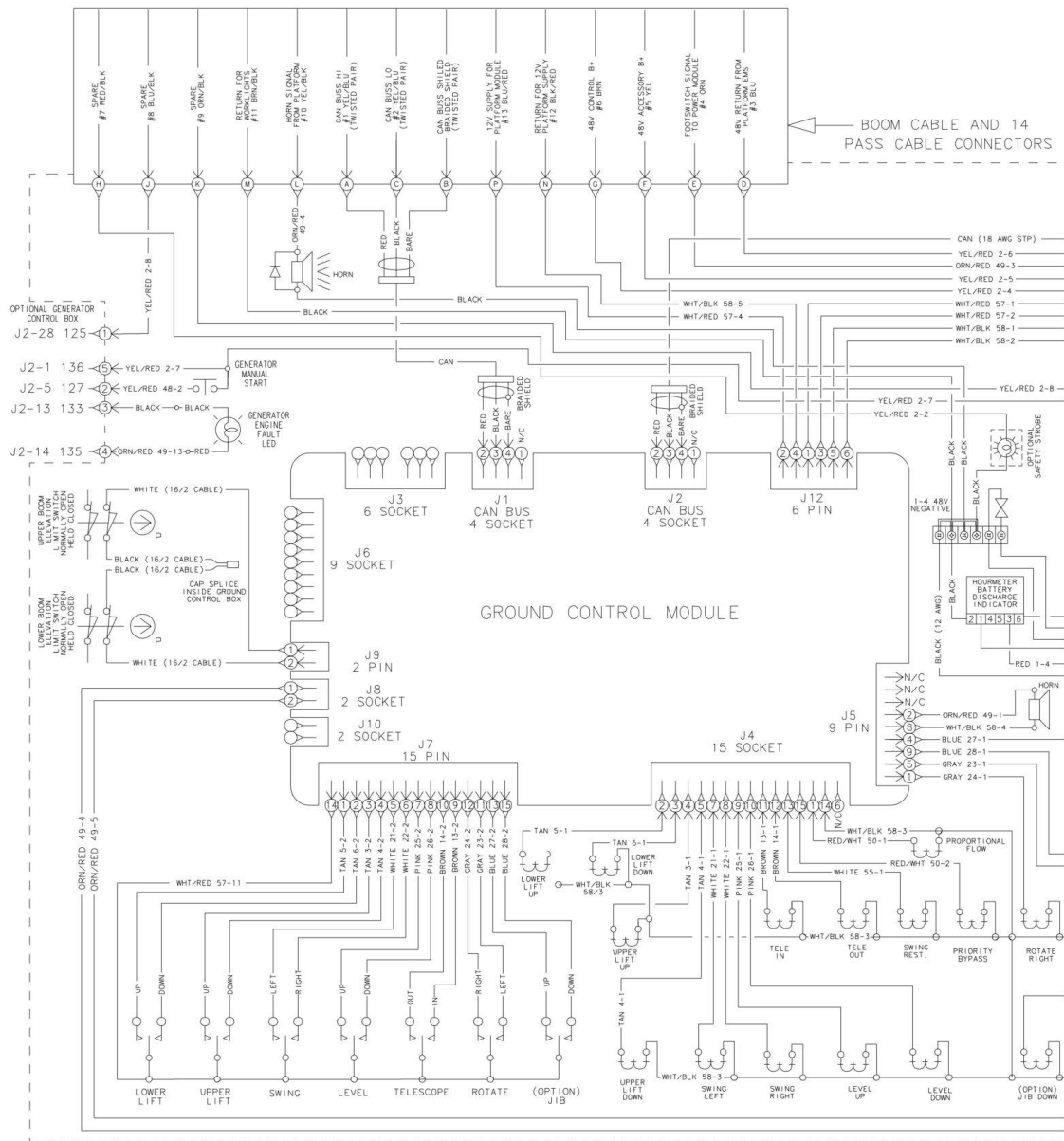


# SECTION 7 - ELECTRICAL

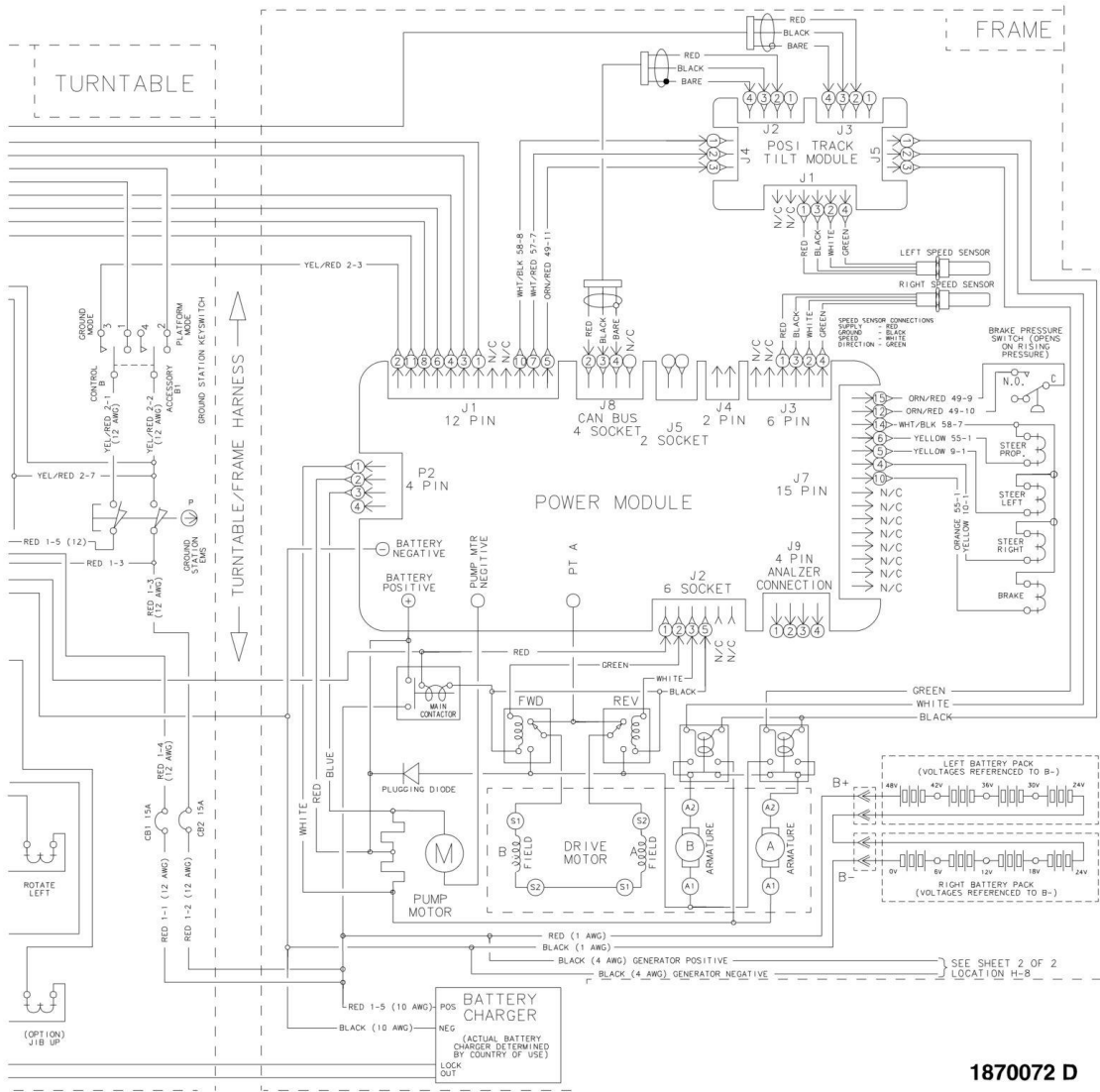


1870072 D

# SECTION 7 - ELECTRICAL



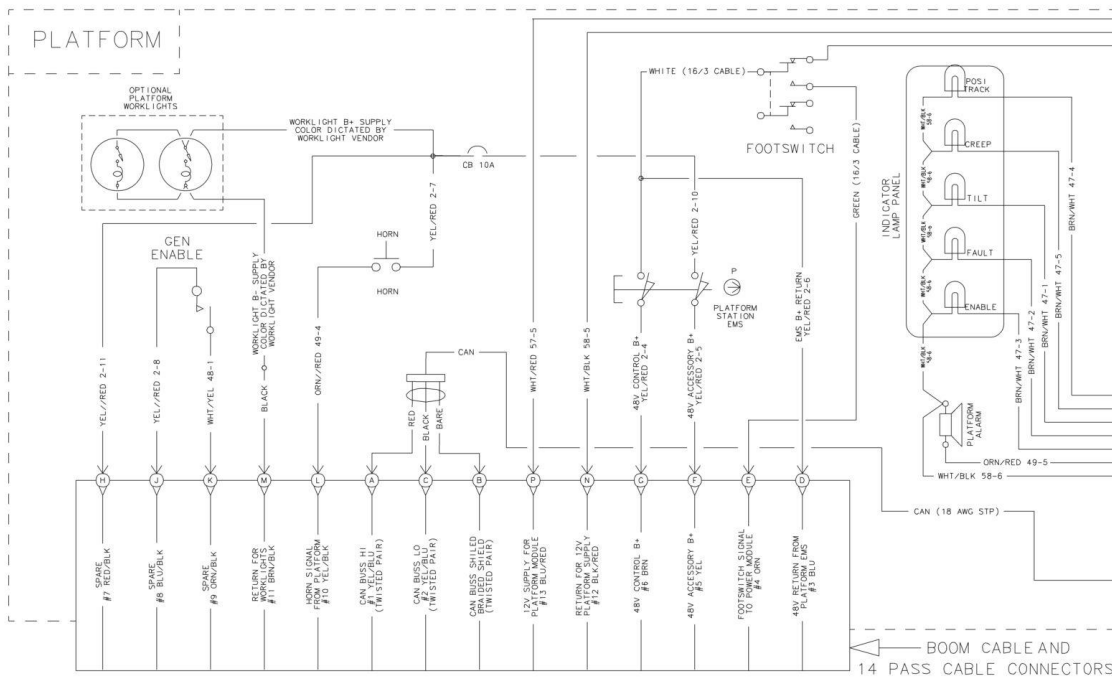
# SECTION 7 - ELECTRICAL





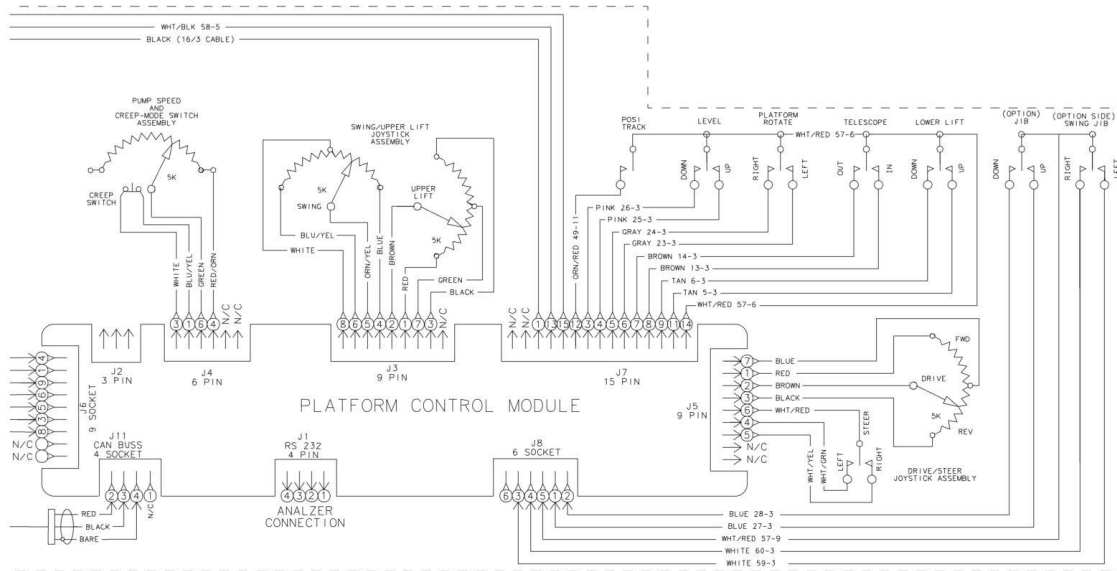
# SECTION 7 - ELECTRICAL

## FIGURE 7-3. ELECTRICAL SCHEMATIC (E40 AND M40 MODELS)



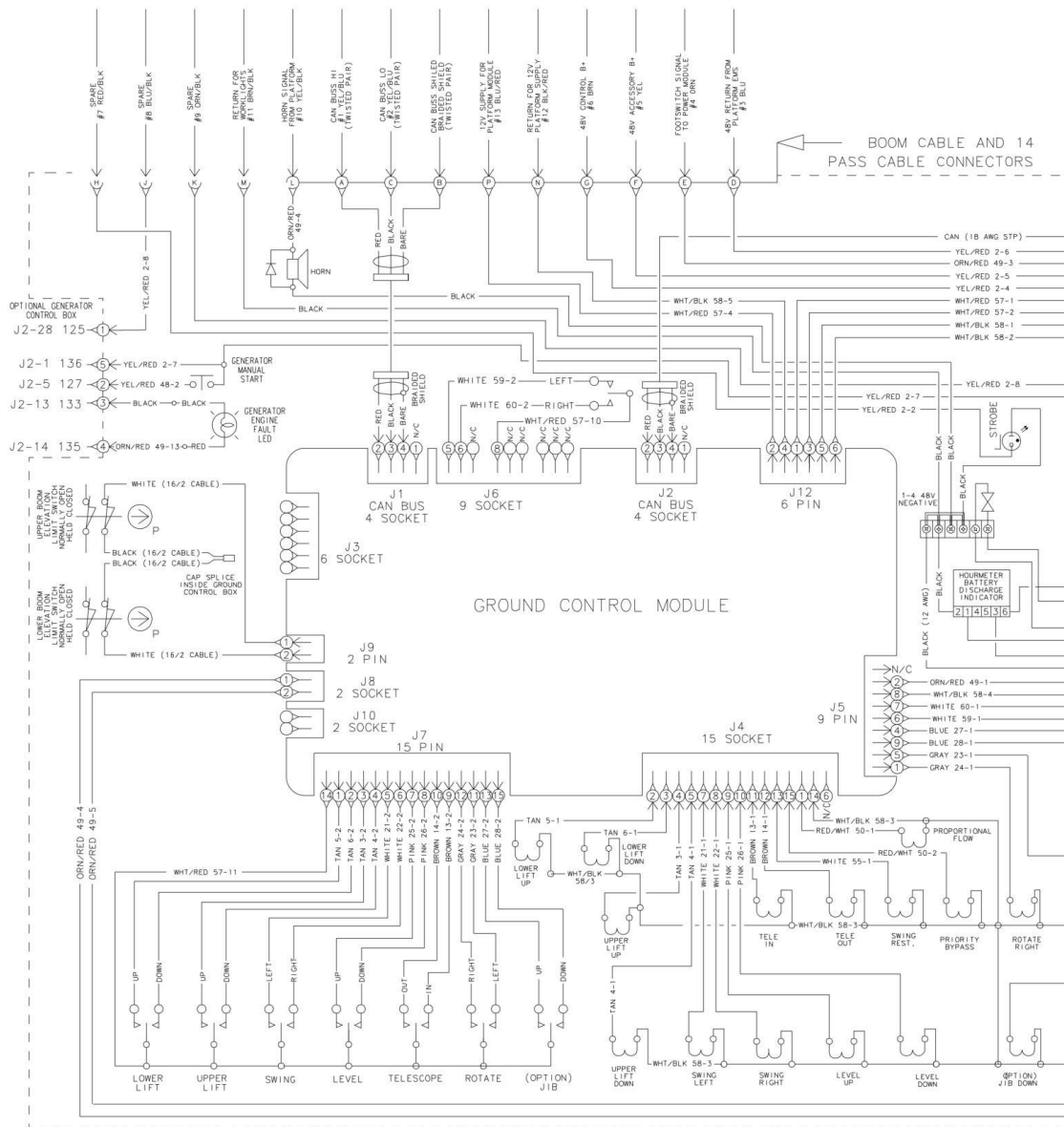


# SECTION 7 - ELECTRICAL

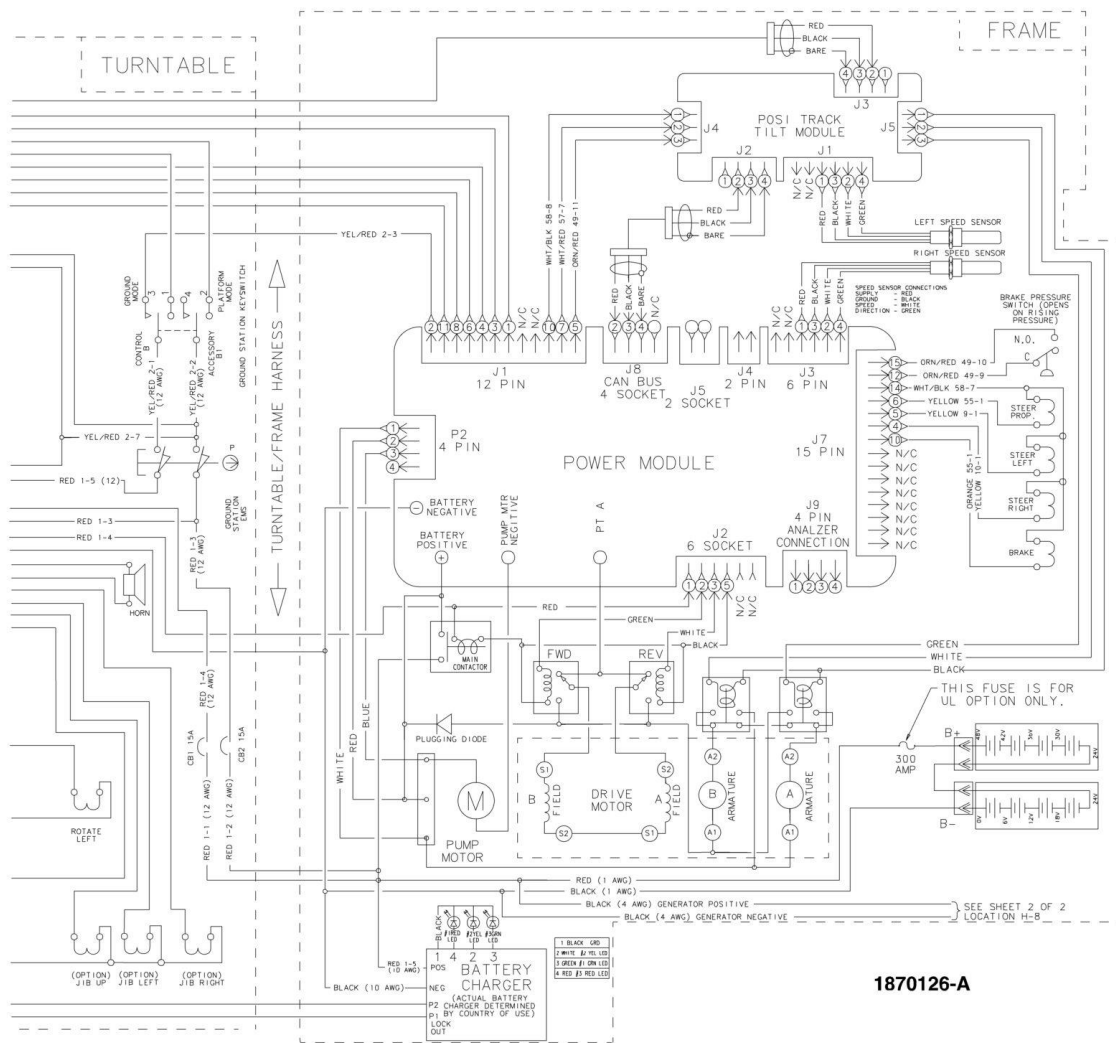


1870126-A

# SECTION 7 - ELECTRICAL

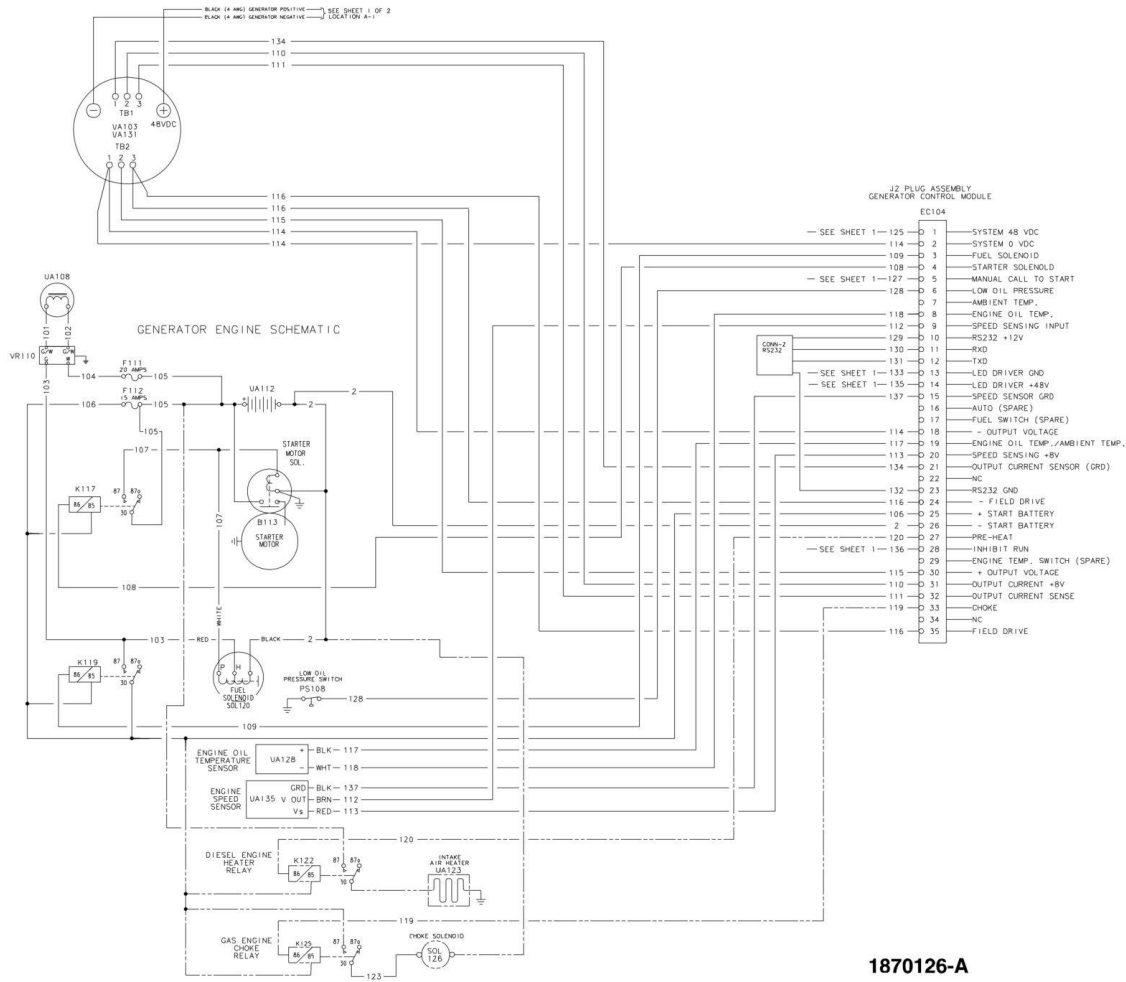


# SECTION 7 - ELECTRICAL



1870126-A

# SECTION 7 - ELECTRICAL

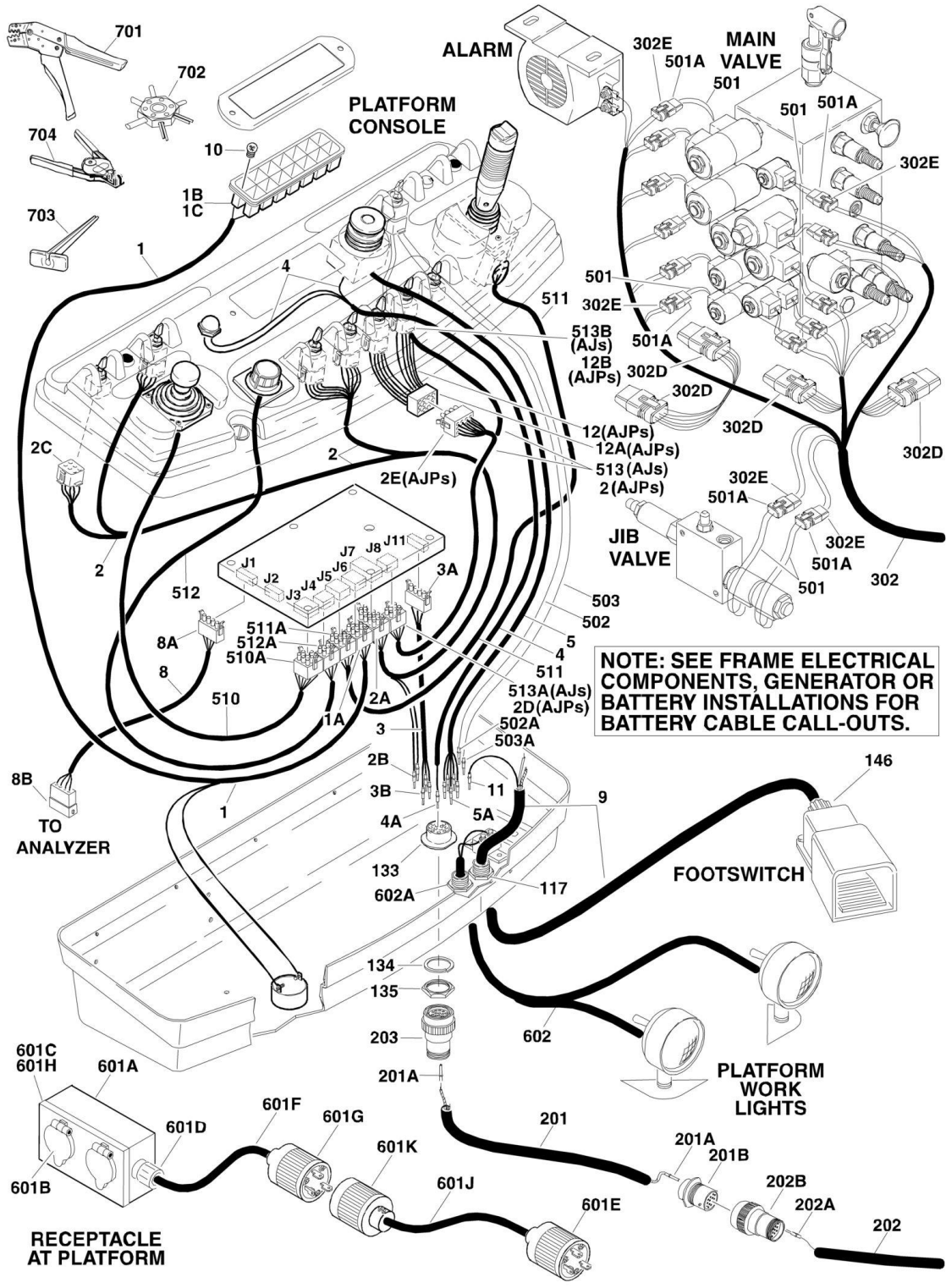


1870126-A

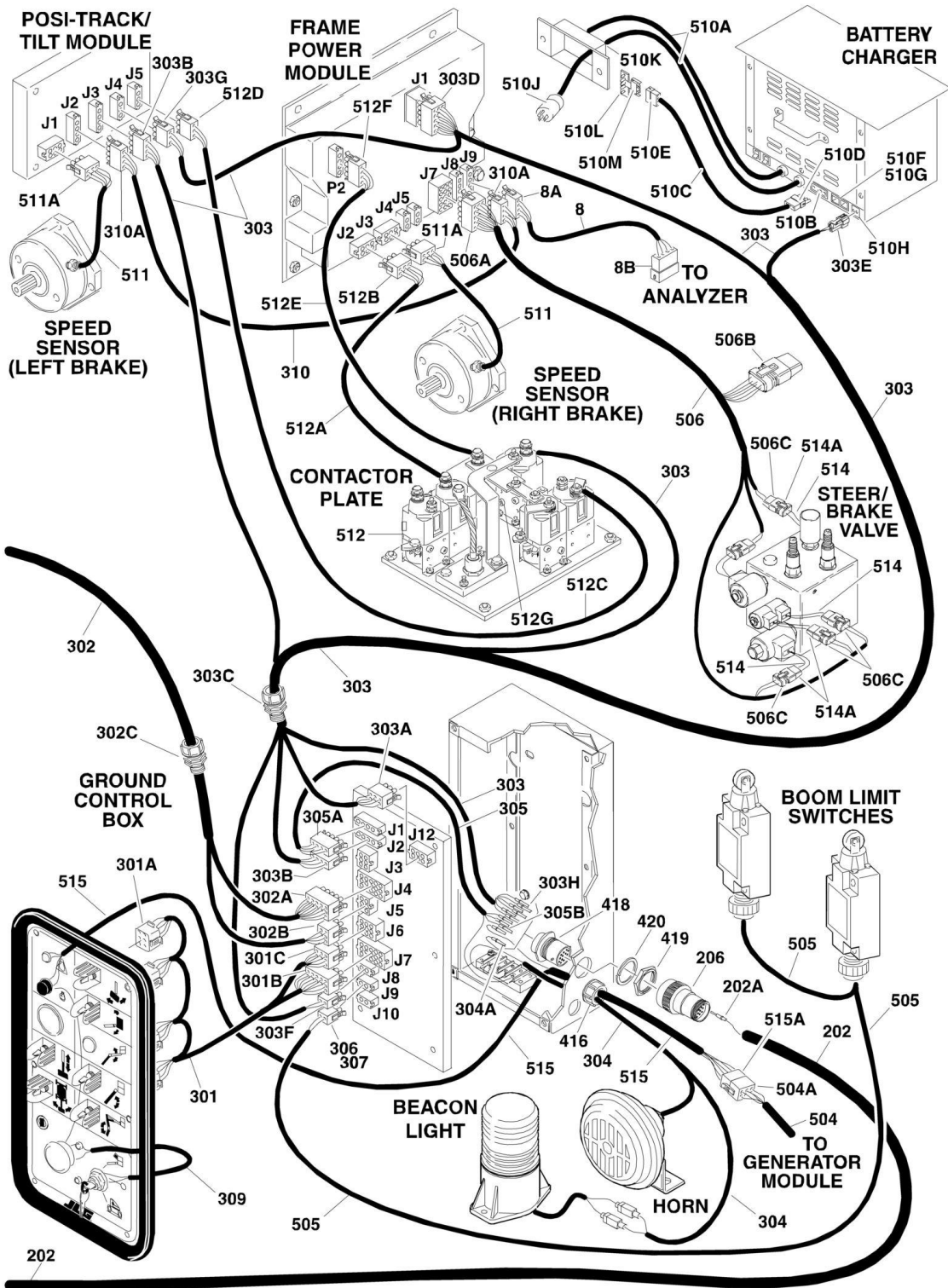


# SECTION 7 - ELECTRICAL

## FIGURE 7-4. HARNESS COMPONENTS INSTALLATION



# SECTION 7 - ELECTRICAL



# SECTION 7 - ELECTRICAL

## FIGURE 7-4. HARNESS COMPONENTS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>HARNESS COMPONENTS INSTALLATION</b>	
		Ref	<b>PLATFORM BOX ELECTRICAL DIAGRAM</b>	
	4933060	Ref	<b>A and AJ Models</b>	3-D
	4933105	Ref	<b>AJP Models</b>	1-A
1	4922074	1	Harness, Indicator Lamp	4-F
1A	4460265	1	Connector - 9 Position	
1A	4460227	5	Pin, Male	
1B	4120035	5	Socket, Lamp	
1C	4460634	6	Socket (Single Wire)	
1C	4460635	4	Socket (Two Wire)	
2		Ref	Harness, Function Switch	
2	4922060	1	A and AJ Models	2-C
2	49223003	1	AJP Models	5-D
2A	4460434	1	Connector - 15 Position	
2A	4460226	12	Pin, Male	
2B	4460464	2	Pin, Male	
2C	4460418	4	Connector, Female	
2C	4460419	12	Terminal	
2D	4460225	1	Connector - 6 Position (AJP Models Only)	
2D	4460227	5	Socket, Female	
2E	4460343	1	Connector - 12 Position (AJP Models Only)	
2E	4460227	10	Socket, Female	
3	4922071	1	Harness, Can Bus	2-B
3A	4460321	1	Connector - 4 Position	
3A	4460227	2	Pin, Male	
3A	4460267	1	Pin, Male	
3B	4460464	3	Pin, Male	
4	4922118	1	Harness, Box Horn	2-B
4A	4460464	1	Pin, Male	
5	4922157	1	Harness, Miscellaneous	3-C
5A	4460464	5	Pin, Male	
8	4922160	1	Harness, Analyzer	2-B
8A	4460321	1	Connector - 4 Position	
8A	4460226	4	Socket, Female	
8B	4460761	1	Connector, Female - 4 Position	
8B	4460227	4	Pin, Male	
9	1060330	7 ft/2.2m	Cable, Electrical - 16/3	
10	2920129	3	Bulb, Light	
11	4460464	3	Pin, Male	
12	4922307	1	Jib Harness (AJP Models Only)	3-C
12A	4460367	1	Connector, Female - 12 Position	
12A	4460226	10	Socket, Female	
12B	4460260	6	Connector, Female	
12B	4460259	6	Terminal	
		Ref	<b>PLATFORM BOX ASSEMBLY COMPONENTS</b>	
117	4460428	1	Connector, Strain Relief	
133	4460752	1	Connector, 14 Position	
134	4460497	1	Nut, Conduit	
135	4460496	1	Lockwasher, Conduit	
146	4460071	2	Connector, Strain Relief	



## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>BOOM CABLES INSTALLATION</b>	
	0257735	Ref	<b>Boom Cables Installation E45A &amp; M45A</b>	4-D
	0259367	Ref	<b>Boom Cables Installation E45AJ &amp; M45AJ</b>	1-B
	0259970	Ref	<b>Boom Cables Installation E40AJP &amp; M40AJP</b>	2-A
201		Ref	Main Boom Harness Assembly Options:	3
201	4922178	1	Main Boom Harness Assembly E45 & M45 Models	
201	1060677	26.5 ft/8.1m	Cable, Electrical (E45 & M45 Models Only)	
201	4922364	1	Main Boom Harness Assembly E40 & M40 Models	
201	1060780	25.25 ft/7.7m	Cable, Electrical - 18/6 (E40 & M40 Models)	
201	1060781	25.25 ft/7.7m	Cable, Electrical - 18/5 (E40 & M40 Models)	
201A	4460465	28	Socket, Female	
201B	4460754	1	Connector, Male	
202		Ref	Tower Boom Harness Assembly Options:	2
202	4922179	1	Tower Boom Harness Assembly E45 & M45 Models	
202	4922363	1	Tower Boom Harness Assembly E40 & M40 Models	
202	1060677	1	Cable, Electrical Options: - 10/4-18/16	
202		Ref	Cable, Electrical E45 & M45 Models	
202		Ref	Cable, Electrical E40 & M40 Models	
202A	4460464	28	Pin, Male	
202B	4460495	1	Connector, Female	
203	4460754	1	Connector	
206	4460753	1	Connector	
		Ref	<b>GROUND CONTROL BOX DIAGRAM</b>	
	4933059	Ref	<b>Ground Control Box Diagram E45 &amp; M45</b>	3-G
	4933128	Ref	<b>Ground Control Box Diagram E40 &amp; M40</b>	1-A
301		Ref	Function Switch Harness Assembly Options:	
301	4922058	1	Function Switch Harness Assembly E45 & M45	4-D
301	4922366	1	Function Switch Harness Assembly E40 & M40	1-A
301A	4460418	7	Connector - 6 Position	
301A	4460419	21	Terminal, Female	
301B	4460434	1	Connector - 15 Position	
301B	4460226	15	Socket, Female	
301C	4460265	1	Connector - 9 Position (E40 & M40 Only)	
301C	4460227	3	Pin, Male	
302		Ref	Harness Assembly - Valve	
302	4922057	1	Harness Assembly - Valve E45 & M45	4-C
302	4922367	1	Harness Assembly - Valve E40 & M40	2-B
302A	4460434	1	Connector - 15 Position	
302A	4460227	14	Pin, Male	
302B	4460265	1	Connector - 9 Position	
302B	4460226	4	Socket, Female	
302C	4460425	1	Connector, Strain Relief	
302D		Ref	Components Options:	
302D		Ref	Components E45 & M45 (Shown)	
302D	4460744	6	Connector, 6 Position	
302D	4460746	24	Socket, Female	
302D	4460745	4	Lock, Secondary	
302D	4460749	4	Cap, Shell	
302D	4460750	4	Bar, Buss - 6 Position	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
302D	4460458	24	Seal	
302D	4460751	4	Clip, Mounting	
302D		Ref	Components E40 & M40 (Not Shown)	
302D	4460836	2	Connector, 12 Position	
302D	4460837	2	Housing, Terminal - 12 Position	
302D	4460465	22	Pin, Terminal	
302E	4460742	17	Connector - 2 Position	
302E	4460743	34	Terminal, Female	
302E	4460458	34	Seal	
303	4922104	1	Harness Assembly - Turntable/Frame (Includes Item 304 Also)	7-F
303A	4460225	1	Connector - 6 Position	
303A	4460268	6	Socket, Female	
303B	4460321	2	Connector - 4 Position	
303B	4460227	2	Pin, Male	
303B	4460267	8	Pin, Male	
303C	4460425	1	Connector, Strain Relief	
303D	4460343	1	Connector, 12 Position	
303D	4460268	12	Socket, Female	
303E	4460320	1	Connector, 2 Position	
303E	4460268	2	Socket, Female	
303F	4460320	1	Connector, 2 Position	
303F	4460267	2	Pin, Male	
303G	4460326	1	Connector, 3 Position	
303G	4460267	3	Pin, Male	
303H	4460465	6	Socket, Female	
304	4922073	1	Harness Assembly - Horn/Beacon (M45 & E45 Only)	4-D
304	3990001	1	Diode (Not Shown)	
304A	4460465	1	Socket, Female	
305	4922117	1	Harness Assembly - Ground Control Can	3-B
305A	4460321	1	Connector - 4 Position	
305A	4460227	2	Pin, Male	
305A	4460267	1	Pin, Male	
305B	4460465	1	Socket, Female	
306	4460320	1	Connector, 2 Position	
307	4460268	2	Socket, Female	
309	4922267	1	Harness Assembly - Power Supply	3-C
310	4922263	1	Harness Assembly - Posi-Track Module Can	2-A
310A	4460321	2	Connector - 4 Position	
310A	4460227	4	Pin, Male	
310A	4460267	2	Pin, Male	
311	3990106	1	Limiters, Inrush (Not Shown)	
		Ref	<b>GROUND CONTROL BOX ASSY COMPONENTS</b>	
416	4460425	1	Connector, Strain Relief	
418	4460495	1	Connector, Male - 14 Position	
419	4460497	1	Nut, Conduit	
420	4460496	1	Lockwasher	
		Ref	<b>STANDARD HARNESS COMPONENTS</b>	
501	Not Available	17	Solenoid Harness	
501A	Not Serviced	17	Connector, Female - 2 Position (Purchase Complete Solenoid)	
501A	Not Serviced	34	Terminal, Male (Purchase Complete Solenoid)	
502	4922222	1	Generator Enable Harness (Yellow/Red) (M45 & M40 Only)	B

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
502A	4460464	1	Pin, Male	
503	4922223	1	Generator Enable Harness (White/Yellow) (M45A & M40 Only)	A
503A	4460464	1	Pin, Male	
504	7023486	1	Generator Harness (M45 & M40 Only) (was p/n 7020155)	
504A	7023486	1	Connector, Female - 6 Position (was p/n 7023337)	
504A	7023486	1	Socket, Female (was p/n 7023338)	
504A	4460268	5	Socket, Female	
505	Not Available	1	Boom Limit Switches Harness	
505	1060341	58	Cable, Electrical - 16/2	
		ft/17.7m		
506		Ref	Harness Assembly - Valve Options:	
506	4922069	1	Harness Assembly - Valve ( <b>Prior to SN 47551</b> )	2-B
506	4922328	1	Harness Assembly - Valve ( <b>SN 47551 to Present</b> )	1-A
506A	4460434	1	Connector - 15 Position	
506A	4460226	7	Socket, Female	
506B	4460749	1	Cap, Shell	
506B	4460750	1	Bar, Buss - 6 Position	
506B	4460744	1	Connector, 6 Position	
506B	4460745	1	Lock, Secondary	
506B	4460746	5	Socket, Female	
506B	4460458	6	Seal	
506B	4460748	1	Plug, Cavity	
506B	4460751	1	Clip, Mounting	
506C	4460742	5	Connector - 2 Position	
506C	4460743	10	Terminal, Female	
506C	4460458	10	Seal	
507	Not Available	1	Controller Harness Assembly (Lift and Swing)	
507A	4460265	1	Connector - 9 Position	
507A	4460226	8	Socket, Female	
508	Not Available	1	Controller Harness/Circuit Board Assembly (Drive and Steer)	
508A	4460265	1	Connector - 9 Position	
508A	4460226	7	Socket, Female	
509	Not Available	1	Controller Harness Assembly (Speed)	
509A	4460225	1	Connector - 6 Position	
509A	4460226	4	Socket, Female	
510		Ref	Battery Charger Components Options:	
510A		Ref	AC Cord Options:	
510A	7020656	1	AC Cord (To Receptacle and Ammeter) ( <b>Prior to SN 49739</b> )	
510A	1060776	1	AC Cord (To Receptacle and Ammeter) ( <b>SN 49739 through 49541</b> )	
510A	1060777	1	AC Cord (To Receptacle Only) ( <b>SN 49542 to Present</b> )	
510B	7020693	1	LED Internal Harness Only ( <b>SN 49542 to Present</b> )	
510B	4460761	1	Connector, Female - 4 Position	
510B	4460227	4	Male Pin	
510C	1060778	1	LED Remote Harness Only ( <b>SN 49542 to Present</b> )	
510D	4460321	1	Connector - 4 Position	
510D	4460226	4	Socket, Female	
510E	4460761	1	Connector, Female - 4 Position	
510E	4460226	4	Socket, Female	
510F		Ref	DC Cord Options:	
510F	7020657	1	DC Cord ( <b>Prior to SN 49542</b> )	
510F	7020644	1	DC Cord ( <b>SN 49542 to Present</b> )	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
510G	7011590	1	Connector, DC	
510H	7011621	1	Connector, Enable Switch	
510J		Ref	Plug, Connector (Not Supplied with Charger)	
510J	4460138	1	ANSI Spec	
510J	Supply Locally	1	Ansi Export Spec	
510J	4460138	1	Japanese Spec	
510K	4460428	1	Connector, Strain Relief (Not Supplied with Charger)	
510L	0610131	1	LED Assembly (Not Supplied with Charger)	
510M	4460321	1	Connector - 4 Position	
510M	4460227	4	Male Pin	
511	Not Available	2	Speed Sensor Harness	
511A	4460225	1	Connector - 6 Position	
511A	4460226	4	Socket, Female	
512	1600294	1	Contactora Plate Assembly	
512A	7022003	1	Contactora Harness	
512B	4460225	1	Connector - 6 Position	
512B	4460226	6	Socket, Female	
512C	7022004	1	Posi-Track Harness	
512D	4460326	1	Connector - 3 Position	
512D	4460227	3	Pin, Male	
512E	7022005	1	Shunt Harness	
512F	4460321	1	Connector - 4 Position	
512F	4460227	4	Pin, Male	
512G	7022012	1	Cable, Power	
513	4922294	1	Jib Harness (AJ Models Only)	1-A
513A	4460225	1	Connector - 6 Position	
513A	4460227	3	Pin, Male	
513B	4460418	1	Connector, Female	
513B	4460419	3	Terminal	
514	Not Available	5	Solenoid Harnesses - Steer/Brake Valve	
514A	Not Serviced	5	Connector, Female - 2 Position (Purchase Complete Solenoid/Valve Cartridge)	
514A	Not Serviced	10	Terminal, Male (Purchase Complete Solenoid/Valve Cartridge)	
515	4922319	1	Harness, Generator to Ground Control Box	1-A
515A	4460225	1	Connector - 6 Position	
515A	4460807	1	Seal, Terminal	
515A	4460808	1	Seal, Terminal	
515A	4460809	1	Pin, Terminal	
515A	4460267	5	Pin, Terminal	
		Ref	<b>OPTIONAL HARNESS COMPONENTS</b>	
601		Ref	AC to Platform Receptacle Components Options:	
601	0259123	Ref	110V Receptacle (M45 & E45 ANSI)	1
601	0270013	Ref	110V Receptacle (M40 & E40 ANSI)	1
601	0259125	Ref	220V Receptacle (M45 & E45 ANSI)	1
601	0270012	Ref	220V Receptacle (M40 & E40 ANSI)	1
601	0253717	Ref	220V Receptacle (M40 & E40 ANSI Export)	1
601	0259127	Ref	220V Receptacle (M45 & E45 ANSI Export)	1
601A	0860038	1	Box, Switch	
601B		Ref	Receptacle Options:	
601B	4460346	1	110V GFI (ANSI)	
601B	4460125	1	220V GFI (ANSI)	
601B	Supply Locally	1	220V GFI (ANSI Export)	

## SECTION 7 - ELECTRICAL

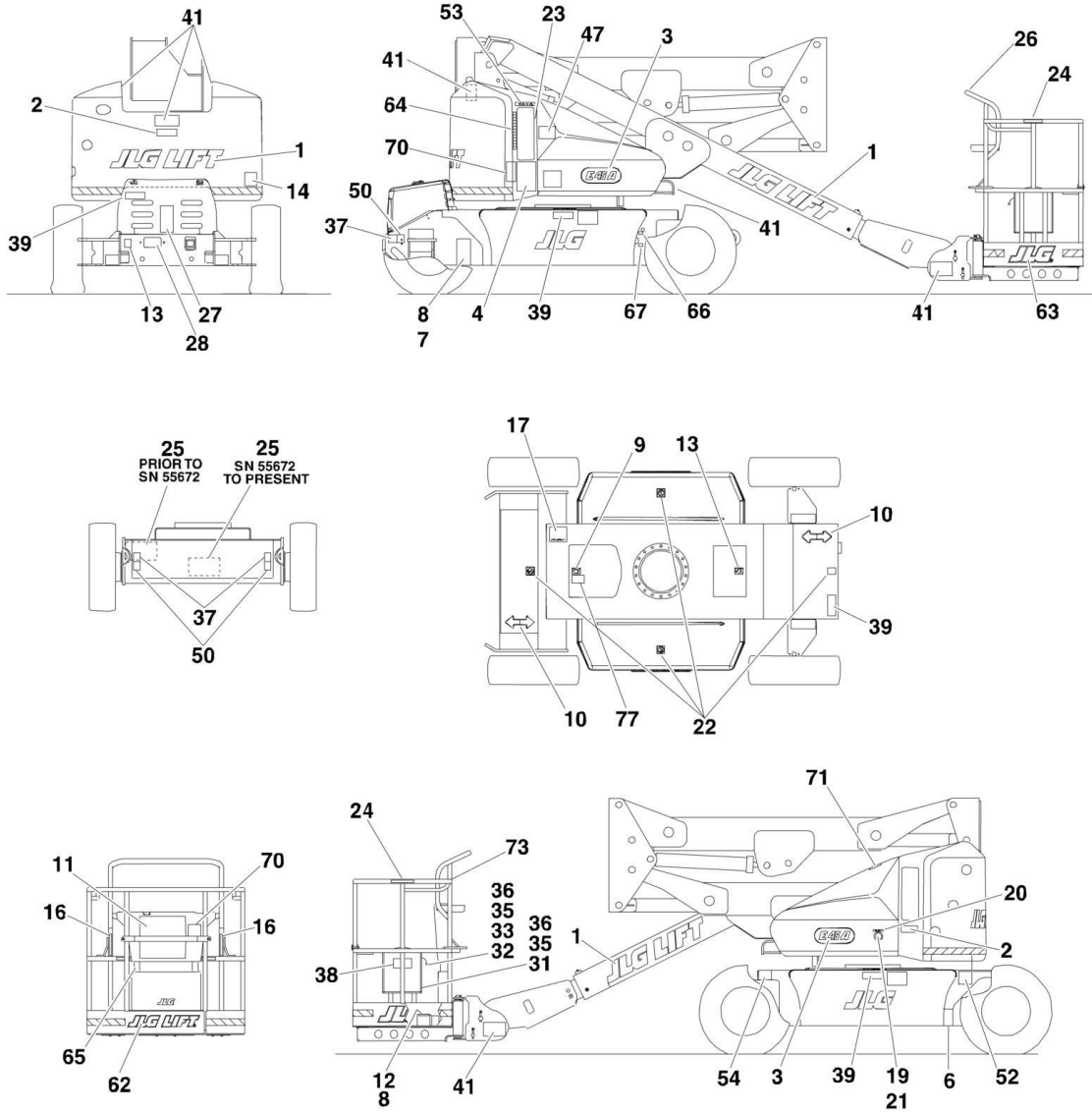
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
601C		Ref	Shield, Cover Options:	
601C	4060700	1	110V GFI (ANSI)	
601C	4060092	1	220V GFI (ANSI)	
601C	Supply Locally	1	220V GFI (ANSI Export)	
601D		Ref	Connector, Strain Relief Options:	
601D	4460071	1	110V GFI (ANSI)	
601D	4460071	1	220V GFI (ANSI)	
601D	Supply Locally	1	220V GFI (ANSI Export)	
601E		Ref	Plug, Male Options :	
601E	4460205	1	110V GFI (ANSI)	
601E	4460233	1	220V GFI (ANSI)	
601E	Supply Locally	1	220V GFI (ANSI Export)	
601F		Ref	Harness (Main Boom) Options:	
601F	4921593	1	Harness (M45 & E45 ANSI)	1-A
601F	4921569	1	Harness (M40 & E40 ANSI)	1-A
601F	4921595	1	Harness (M45 & E45 ANSI Export)	1-A
601F	4921571	1	Harness (M40 & E40 ANSI Export)	1-A
601F		Ref	Electrical Cable Options:	
601F	1060494	32 ft/9.75m	Electrical Cable M45 & E45 ANSI (12/3)	
601F	1060494	30 ft/9.14m	Electrical Cable M40 & E40 ANSI (12/3)	
601F	1060461	32 ft/9.75m	Electrical Cable M45 & E45 ANSI Export (12/3)	
601F	1060461	30 ft/9.14m	Electrical Cable M40 & E40 ANSI Export (12/3)	
601G	4460205	1	Plug, Male	
601J		Ref	Harness (Tower Boom) Options:	
601J	4921592	1	Harness (M45 & E45 ANSI)	1-A
601J	4921568	1	Harness (M40 & E40 ANSI)	1-A
601J	4921594	1	Harness (M45 & E45 ANSI Export)	1-A
601J	4921570	1	Harness (M40 & E40 ANSI Export)	1-A
601J		Ref	Electrical Cable Options:	
601J	1060494	42 ft/12.8m	Electrical Cable M45 & E45 ANSI (12/3)	
601J	1060494	38 ft/11.6m	Electrical Cable M40 & E40 ANSI (12/3)	
601J	1060461	42 ft/12.8m	Electrical Cable M45 & E45 ANSI Export (12/3)	
601J	1060461	38 ft/11.6m	Electrical Cable M40 & E40 ANSI Export (12/3)	
601K	4460134	1	Connector, Female	
602	2920095	2	Platform Worklights Harness (Includes Light and Wire Only)	
602A	4460428	1	Connector, Strain Relief	
		Ref	<b>TOOLS</b>	
701	7002821	1	Crimper (For Wire to Pin/Socket Connections)	
702	7002823	1	Extractor (For Removal of Pin/Socket from Connectors)	
703	4460467	1	Extractor, Pin (Blue 16-18 Gauge) (For Removal of Pin/Socket from Connectors)	
703	4460510	1	Extractor, Pin (Yellow 12-14 Gauge) (For Removal of Pin/Socket from Connectors)	
704	7002828	1	Stripper, Wire	
705	2901443	1	Analyzer, Machine (Not Shown)	



**SECTION 8 - DECALS**

# SECTION 8 - DECALS

## FIGURE 8-1. DECALS INSTALLATION - STANDARD





## SECTION 8 - DECALS

### FIGURE 8-1. DECALS INSTALLATION - STANDARD

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>STANDARD DECAL INSTALLATIONS</b>	
	0259301	Ref	<b>Standard Decal Installations E45 &amp; E40</b>	10
	0258973	Ref	<b>Standard Decal Installations M45 &amp; M40</b>	9
	0270274	Ref	<b>Standard Decal Installations A &amp; AJ Model Lift Decals</b>	2
	0270273	Ref	<b>Standard Decal Installations AJP Model Lift Decals</b>	2
1		Ref	Decal - JLG Lift Options:	
1	1701892	3	Decal - JLG Lift ( <b>Prior to SN 51296</b> )	
1	1702860	2	Decal - JLG Lift ( <b>SN 51296 to Present</b> )	
2	1703805	2	Decal - Electrocutation	
3		Ref	Decal - JLG Options:	
3	1704257	2	Decal - JLG E45A	
3	1704385	2	Decal - JLG E45AJ	
3	1704256	2	Decal - JLG M45A	
3	1704384	2	Decal - JLG M45AJ	
3	1704791	2	Decal - JLG E40AJP	
3	1704792	2	Decal - JLG E40AJPnarrow	
3	1704793	2	Decal - JLG M40AJP	
3	1704794	2	Decal - JLG M40AJPnarrow	
4	1703798	1	Decal - Crushing	
6	1700584	1	Decal - Patent	
7	Not Available	1	Nameplate - Serial Number	
8	3820001	AR	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703797	1	Decal - Caution/Danger	
12	3252347	1	Nameplate - Footswitch	
13	1701644	2	Decal - Charger	
14	3251813	1	Decal - USA	
16	1704277	3	Decal - Attach Lanyard	
17	1702153	1	Decal - Inspection	
19	0961127	1	Bushing, Snap	
20		Ref	Nameplate Options:	
20	3251243	1	120V/60HZ	
20	3252507	1	220V/50-60HZ	
21	0100010	AR	Loctite (Not Shown)	
22	1701691	4	Decal - No Step	
23	1704262	1	Decal - Manual Descent	
24	1702868	2	Decal - No Hands	
25	1704254	1	Decal - Cable Routing	
26	1704253	1	Decal - Key Platform	
27		Ref	Decal - Charger Options:	
27	1704241	1	Decal - Charger ( <b>Prior to SN 49542</b> )	
27	1704446	1	Decal - Charger ( <b>SN 49542 to Present</b> )	
28	1704431		Decal - Battery Charger Led Indicator Only ( <b>SN 49542 to Present</b> )	1
31	0860520	1	Box, Manual Storage	
32	1060279	1	Lanyard	
33	0641408	1	Bolt 1/4in-20NC x 1in	
35	4711400	6	Flatwasher	
36	3311405	5	Locknut 1/4in-20NC	

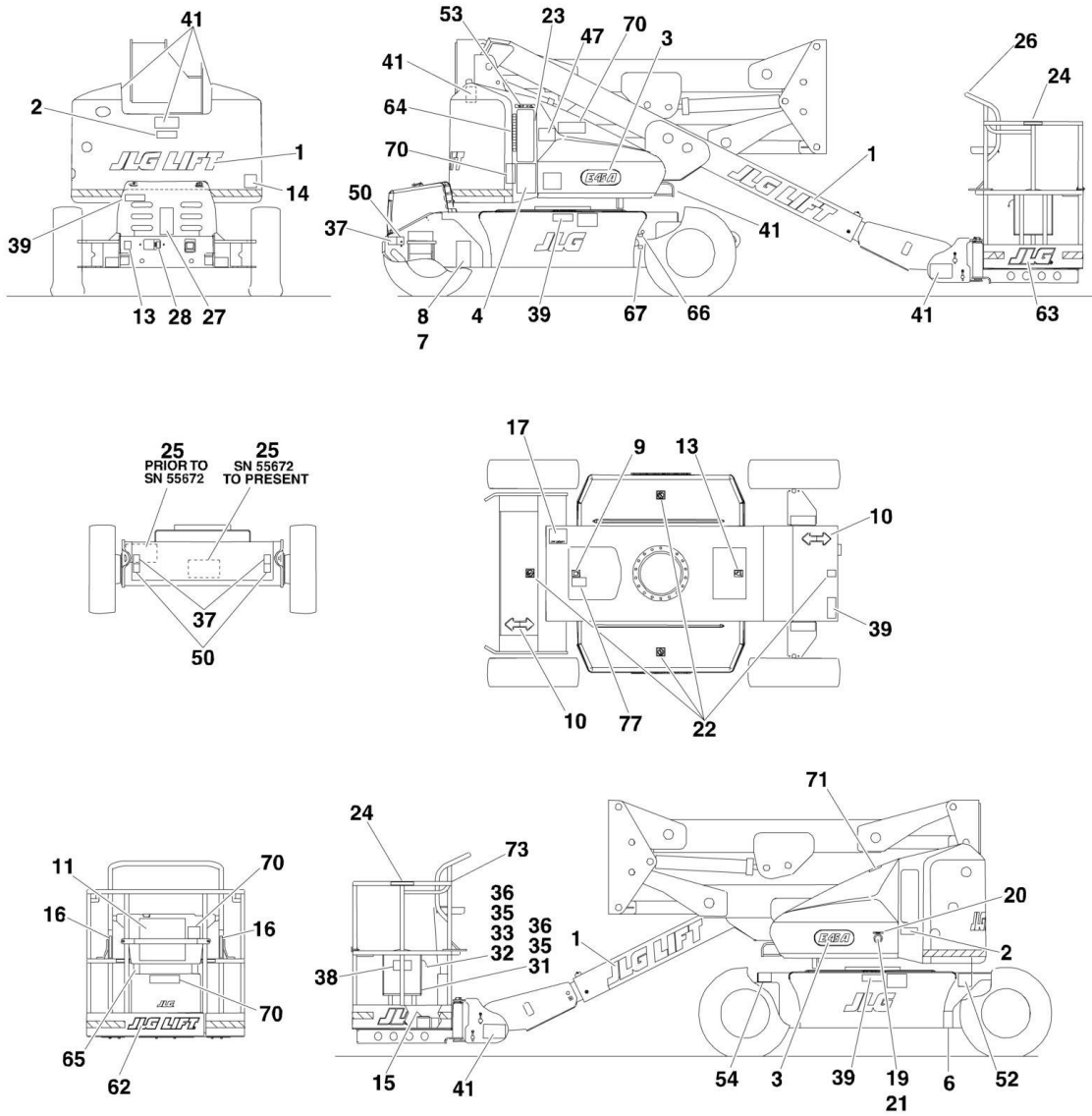
## SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39		Ref	Decal - Danger Options:	
39	1702279	1	Decal - Danger <b>(Prior to SN 47974)</b>	
39	1703813	1	Decal - Danger <b>(SN 47974 to Present)</b>	
41	1703804	6	Decal - Crushing Hazard	
47	1702265	1	Decal	
50	1702300	4	Decal - Tie Down	
52	Not Available	1	Decal - Bar Code	
53	1702688	1	Decal - 500 LBS. Max Capacity	
54		Ref	Decal - Tire Load Options:	
54	1703488	4	Decal - Tire Load E45A	
54	1704445	4	Decal - Tire Load E45AJ	
54	1703488	4	Decal - Tire Load M45A	
54	1704445	4	Decal - Tire Load M45AJ	
54	1704727	4	Decal - Tire Load E40AJP	
54	1704752	4	Decal - Tire Load E40AJPnarrow	
54	1704727	4	Decal - Tire Load M40AJP	
54	1704752	4	Decal - Tire Load M40AJPnarrow	
62	1702774	AR	Decal - JLG Lift	
63		Ref	Decal Options:	
63	1702773	2	Decal A & AJ Models (JLG)	
63	1704200	2	Decal AJP Models (Jib Plus)	
64	1704252	1	Decal - Key, Main Terminal Box	
65	1701645	1	Decal - 500 LBS. Max Capacity	
66	1701502	1	Decal - Hydraulic Oil Level High	
67	1701503	1	Decal - Hydraulic Oil Level Low	
70		Ref	Decal - Generator Danger Options:	
70	Not Required	0	Decal - Generator Danger E45 & E40	
70	1704286	2	Decal - Generator Danger M45 & M40	
71		Ref	Decal - Fuel Options	
71	Not Required	0	Decal - Fuel E45 & E40	
71	1701505	1	Decal - Fuel M45 & M40	
73		Ref	Decal - Fuel Warning Options:	
73	Not Required	0	Decal - Fuel Warning E45 & E40	
73	1702962	1	Decal - Fuel Warning M45 & M40	
77	1704412	1	Decal - Oil Type <b>(SN 46643 to Present)</b>	



# SECTION 8 - DECALS

## FIGURE 8-2. DECALS INSTALLATION - COUNTRY SPEC



## SECTION 8 - DECALS

### FIGURE 8-2. DECALS INSTALLATION - COUNTRY SPEC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>COUNTRY SPEC DECAL INSTALLATIONS</b>	
	0270274	Ref	<b>Country Spec Decal Installations A &amp; AJ Model Lift Decals</b>	2
	0270273	Ref	<b>Country Spec Decal Installations AJP Model Lift Decals</b>	2
		Ref	<b>Country Spec Decal Installations E45 &amp; E40</b>	
	0259495	Ref	<b>Canadian French/English Dual Language</b>	5
	0259540	Ref	<b>Chinese/English Dual Language</b>	3
	0259536	Ref	<b>Japanese Language</b>	3
	0259538	Ref	<b>Korean Language</b>	3
	0259497	Ref	<b>Spanish/English Dual Language</b>	6
	0259499	Ref	<b>Spanish/Portuguese Dual Language</b>	6
		Ref	<b>Country Spec Decal Installations M45 &amp; M40</b>	
	0259494	Ref	<b>Canadian French/English Dual Language</b>	5
	0259539	Ref	<b>Chinese/English Dual Language</b>	3
	0259535	Ref	<b>Japanese Language</b>	3
	0259537	Ref	<b>Korean Language</b>	3
	0259496	Ref	<b>Spanish/English Dual Language</b>	6
	0259498	Ref	<b>Spanish/Portuguese Dual Language</b>	6
1		Ref	Decal - JLG Lift Options:	
1	1701892	3	Decal - JLG Lift ( <b>Prior to SN 51296</b> )	
1	1702860	2	Decal - JLG Lift ( <b>SN 51296 to Present</b> )	
2		Ref	Decal - Electrocuttion Options:	
2	1703936	2	Canadian French/English Dual Language	
2	1703937	2	Chinese/English Dual Language	
2	1703938	2	Japanese Language	
2	1703939	2	Korean Language	
2	1703935	2	Spanish/English Dual Language	
2	1703940	2	Spanish/Portuguese Dual Language	
3		Ref	Decal - JLG Options:	
3	1704257	2	Decal - JLG E45A	
3	1704385	2	Decal - JLG E45AJ	
3	1704256	2	Decal - JLG M45A	
3	1704384	2	Decal - JLG M45AJ	
3	1704791	2	Decal - JLG E40AJP	
3	1704792	2	Decal - JLG E40AJPnarrow	
3	1704793	2	Decal - JLG M40AJP	
3	1704794	2	Decal - JLG M40AJPnarrow	
4		Ref	Decal - Danger/Caution Options:	
4	1703930	1	Canadian French/English Dual Language	
4	1703931	1	Chinese/English Dual Language	
4	1703932	1	Japanese Language	
4	1703933	1	Korean Language	
4	1703929	1	Spanish/English Dual Language	
4	1703934	1	Spanish/Portuguese Dual Language	
6	1700584	1	Decal - Patent	
7	Not Available	1	Nameplate - Serial Number	
8	3820001	AR	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11		Ref	Decal - Caution/Danger Options:	
11	1703924	1	Canadian French/English Dual Language	

## SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
11	1703925	1	Chinese/English Dual Language	
11	1703926	1	Japanese Language	
11	1703927	1	Korean Language	
11	1703923	1	Spanish/English Dual Language	
11	1703928	1	Spanish/Portuguese Dual Language	
13	1701644	2	Decal - Charger	
14		Ref	Decal - USA Options:	
14	3251813	1	Canadian French/English Dual Language	
14	Not Required	0	Chinese/English Dual Language	
14	Not Required	0	Japanese Language	
14	Not Required	0	Korean Language	
14	3251813	1	Spanish/English Dual Language	
14	3251813	1	Spanish/Portuguese Dual Language	
15		Ref	Decal - Footswitch Options:	
15	1703984	1	Canadian French/English Dual Language	
15	1703982	1	Chinese/English Dual Language	
15	1703980	1	Japanese Language	
15	1703981	1	Korean Language	
15	1703983	1	Spanish/English Dual Language	
15	1703985	1	Spanish/Portuguese Dual Language	
16	1704277	3	Decal - Attach Lanyard	
17		Ref	Decal - Inspection Options:	
17	1704006	1	Canadian French/English Dual Language	
17	Not Required	0	Chinese/English Dual Language	
17	Not Required	0	Japanese Language	
17	Not Required	0	Korean Language	
17	1704007	1	Spanish/English Dual Language	
17	1704008	1	Spanish/Portuguese Dual Language	
19	0961127	1	Bushing, Snap	
20		Ref	Nameplate Options:	
20	3251243	1	120V/60HZ	
20	3252507	1	220V/50-60HZ	
21	0100010	AR	Loctite, (Not Shown)	
22	1701691	4	Decal - No Step	
23	1704262	1	Decal - Manual Descent	
24		Ref	Decal - No Hands Options:	
24	1704000	2	Canadian French/English Dual Language	
24	Not Required	0	Chinese/English Dual Language	
24	Not Required	0	Japanese Language	
24	Not Required	0	Korean Language	
24	1704001	2	Spanish/English Dual Language	
24	1704002	2	Spanish/Portuguese Dual Language	
25	1704254	1	Decal - Cable Routing	
26		Ref	Decal - Key Platform Options:	
26	1704253	1	Canadian French/English Dual Language	
26	Not Required	0	Chinese/English Dual Language	
26		Ref	Japanese Language Options:	
26	1704253	1	Japanese Language E45 & E40	
26	Not Required	0	Japanese Language M45 & M40	
26	Not Required	0	Korean Language	
26	1704253	1	Spanish/English Dual Language	

## SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
26	1704253	1	Spanish/Portuguese Dual Language	
27		Ref	Decal - Charger Options:	
27	1704452	1	Canadian French/English Dual Language	
27	1704419	1	Chinese/English Dual Language	
27	1704417	1	Japanese Language	
27	1704418	1	Korean Language	
27	1704454	1	Spanish/English Dual Language	
27	1704453	1	Spanish/Portuguese Dual Language	
28	1704431	1	Decal - Battery Charger LED Indicator	
31	0860520	1	Box, Manual Storage	
32	1060279	1	Lanyard	
33	0641408	1	Bolt 1/4in-20NC x 1in	
35	4751400	6	Flatwasher 1/4in	
36	3311405	5	Locknut 1/4in-20NC	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39		Ref	Decal - Explosion Warning Options:	
39	1704340	3	Canadian French/English Dual Language	
39	1704344	3	Chinese/English Dual Language	
39	1704342	3	Japanese Language	
39	1704343	3	Korean Language	
39	1704339	3	Spanish/English Dual Language	
39	1704341	3	Spanish/Portuguese Dual Language	
41		Ref	Decal - Crushing Hazard Options:	
41	1703948	6	Canadian French/English Dual Language	
41	1703950	6	Japanese Language	
41	1703951	6	Korean Language	
41	1703947	6	Spanish/English Dual Language	
41	1703952	6	Spanish/Portuguese Dual Language	
47		Ref	Decal Options:	
47	1702265	1	Canadian French/English Dual Language	
47	1703988	1	Chinese/English Dual Language	
47	1702271	1	Japanese Language	
47	1703987	1	Korean Language	
47	1702265	1	Spanish/English Dual Language	
47	1703991	1	Spanish/Portuguese Dual Language	
50	1702300	4	Decal - Tie Down	
52	Not Available	1	Decal - Bar Code	
53		Ref	Decal - 500 LBS. Max Capacity Options:	
53	1702688	1	Canadian French/English Dual Language	
53	Not Required	0	Japanese Language	
53	Not Required	0	Korean Language	
53	1702688	1	Spanish/English Dual Language	
53	1702688	1	Spanish/Portuguese Dual Language	
54		Ref	Decal - Tire Load Options:	
54	1703488	4	Decal - Tire Load E45A	
54	1704445	4	Decal - Tire Load E45AJ	
54	1703488	4	Decal - Tire Load M45A	
54	1704445	4	Decal - Tire Load M45AJ	
54	1704727	4	Decal - Tire Load E40AJP	
54	1704752	4	Decal - Tire Load E40AJPnarrow	

## SECTION 8 - DECALS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
54	1704747	4	Decal - Tire Load M40AJP	
54	1704752	4	Decal - Tire Load M40AJPnarrow	
62	1702774	AR	Decal - JLG Lift	
63		Ref	Decal Options:	
63	1702773	2	Decal A & AJ Models (JLG)	
63	1704200	2	Decal AJP Models (Jib Plus)	
64		Ref	Decal - Key, Main Terminal Box Options:	
64	1704252	1	Canadian French/English Dual Language	
64	Not Required	0	Chinese/English Dual Language	
64	Not Required	0	Japanese Language	
64	Not Required	0	Korean Language	
64	1704252	1	Spanish/English Dual Language	
64	1704252	1	Spanish/Portuguese Dual Language	
65	1703996	1	Decal - 500 LBS. Max Capacity	
66	1701502	1	Decal - Hydraulic Oil Level High	
67	1701503	1	Decal - Hydraulic Oil Level Low	
70		Ref	Decal - Generator Danger Options:	
70	Not Required	0	Decal - Generator Danger E45 & E40 All Specs	
70	1704368	2	Decal - Generator Danger M45 & M40 - Canadian French/English Dual Language	
70	1704372	2	Decal - Generator Danger M45 & M40 - Chinese/English Dual Language	
70	1704369	2	Decal - Generator Danger M45 & M40 - Japanese Language	
70	1704370	2	Decal - Generator Danger M45 & M40 - Korean Language	
70	1704371	AR	Decal - Generator Danger M45 & M40 - Spanish/English Dual Language	
70	1704373	2	Decal - Generator Danger M45 & M40 - Spanish/Portuguese Dual Language	
71		Ref	Decal - Fuel Options:	
71	Not Required	0	Decal - Fuel E45 & E40	
71	1701505	1	Decal - Fuel M45 & M40	
73		Ref	Decal - Fuel Warning Options:	
73	Not Required	0	Decal - Fuel Warning E45 & E40	
73	1702962	1	Decal - Fuel Warning M45 & M40	
77	1704412	1	Decal - Oil Type (SN 46643 to Present)	



## **SECTION 9 - RECOMMENDED SERVICE PARTS STOCK**

## **SECTION 9 - RECOMMENDED SERVICE PARTS STOCK**

# SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

FIGURE 9-1. MODELS E45/M45/E40 AND M40 STANDARD PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	<b>Note: The following list 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.</b>	
		Ref	<b>STANDARD PARTS</b>	
	3990105	1	Sensor, Speed, (for fleets of 1-10)	
	3990105	1	Sensor, Speed, (for fleets of 10-20)	
	3990105	1	Sensor, Speed, (for fleets of 20 of more)	
	7021367	1	Coupling, Pump, (for fleets of 1-10)	
	7021367	1	Coupling, Pump, (for fleets of 10-20)	
	7021367	1	Coupling, Pump, (for fleets of 20 of more)	
	7021320	1	Cap, Breather, (for fleets of 1-10)	
	7021320	1	Cap, Breather, (for fleets of 10-20)	
	7021320	1	Cap, Breather, (for fleets of 20 of more)	
	7021618	1	Coil, (for fleets of 1-10)	
	7021618	1	Coil, (for fleets of 10-20)	
	7021618	1	Coil, (for fleets of 20 of more)	
	7021616	1	Filter Cartridge, (for fleets of 1-10)	
	7021616	1	Filter Cartridge, (for fleets of 10-20)	
	7021616	1	Filter Cartridge, (for fleets of 20 of more)	
	7021609	1	Coil, (for fleets of 1-10)	
	7021609	1	Coil, (for fleets of 10-20)	
	7021609	1	Coil, (for fleets of 20 of more)	
	7020691	1	Fuse, DC-50Amp, (for fleets of 1-10)	
	7020691	1	Fuse, DC-50Amp, (for fleets of 10-20)	
	7020691	1	Fuse, DC-50Amp, (for fleets of 20 of more)	
	1600293	1	Module, Posi-Track/Tilt, (for fleets of 1-10)	
	1600293	1	Module, Posi-Track/Tilt, (for fleets of 10-20)	
	1600293	1	Module, Posi-Track/Tilt, (for fleets of 20 of more)	
	1600292	1	Module, Power, (for fleets of 1-10)	
	1600292	1	Module, Power, (for fleets of 10-20)	
	1600292	1	Module, Power, (for fleets of 20 of more)	
	7022002	1	Contact, (for fleets of 1-10)	
	7022002	1	Contact, (for fleets of 10-20)	
	7022002	1	Contact, (for fleets of 20 of more)	
	7022001	1	Contact, (for fleets of 1-10)	
	7022001	1	Contact, (for fleets of 10-20)	
	7022001	1	Contact, (for fleets of 20 of more)	
	7022000	1	Contact, (for fleets of 1-10)	
	7022000	1	Contact, (for fleets of 10-20)	
	7022000	1	Contact, (for fleets of 20 of more)	
	7021610	1	Coil, (for fleets of 1-10)	
	7021610	1	Coil, (for fleets of 10-20)	
	7021610	1	Coil, (for fleets of 20 of more)	
	4360476	1	Contact, Switch Block, (for fleets of 1-10)	
	4360476	1	Contact, Switch Block, (for fleets of 10-20)	
	4360476	1	Contact, Switch Block, (for fleets of 20 of more)	

## SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4360328	1	Switch, Toggle, (for fleets of 1-10)	
	4360328	1	Switch, Toggle, (for fleets of 10-20)	
	4360328	1	Switch, Toggle, (for fleets of 20 of more)	
	4360475	1	Switch, Mushroom, (for fleets of 1-10)	
	4360475	1	Switch, Mushroom, (for fleets of 10-20)	
	4360475	1	Switch, Mushroom, (for fleets of 20 of more)	
	4360469	1	Switch, Key, (for fleets of 1-10)	
	4360469	1	Switch, Key, (for fleets of 10-20)	
	4360469	1	Switch, Key, (for fleets of 20 of more)	
	2860030	1	Key, Replacement, (for fleets of 1-10)	
	2860030	1	Key, Replacement, (for fleets of 10-20)	
	2860030	1	Key, Replacement, (for fleets of 20 of more)	
	4360070	1	Breaker, Circuit, (for fleets of 1-10)	
	4360070	1	Breaker, Circuit, (for fleets of 10-20)	
	4360070	1	Breaker, Circuit, (for fleets of 20 of more)	
	4360321	1	Switch, Limit, (for fleets of 1-10)	
	4360321	1	Switch, Limit, (for fleets of 10-20)	
	4360321	1	Switch, Limit, (for fleets of 20 of more)	
	2940074	1	Latch, (for fleets of 1-10)	
	2940074	1	Latch, (for fleets of 10-20)	
	2940074	1	Latch, (for fleets of 20 of more)	
	4360031	1	Footswitch, (for fleets of 1-10)	
	4360031	1	Footswitch, (for fleets of 10-20)	
	4360031	1	Footswitch, (for fleets of 20 of more)	
	100118419	1	Controller (Lift and Swing), (for fleets of 1-10)	
	100118419	1	Controller (Lift and Swing), (for fleets of 10-20)	
	100118419	1	Controller (Lift and Swing), (for fleets of 20 of more)	
	100118418	1	Controller (Drive and Steer), (for fleets of 1-10)	
	100118418	1	Controller (Drive and Steer), (for fleets of 10-20)	
	100118418	1	Controller (Drive and Steer), (for fleets of 20 of more)	
	4360462	1	Controller, Speed, (for fleets of 1-10)	
	4360462	1	Controller, Speed, (for fleets of 10-20)	
	4360462	1	Controller, Speed, (for fleets of 20 of more)	
	4360387	1	Switch, Push Button, (for fleets of 1-10)	
	4360387	1	Switch, Push Button, (for fleets of 10-20)	
	4360387	1	Switch, Push Button, (for fleets of 20 of more)	
	0610128	1	Module, Platform Console, (for fleets of 1-10)	
	0610128	1	Module, Platform Console, (for fleets of 10-20)	
	0610128	1	Module, Platform Console, (for fleets of 20 of more)	
	4360330	1	Switch, Toggle, (for fleets of 1-10)	
	4360330	1	Switch, Toggle, (for fleets of 10-20)	
	4360330	1	Switch, Toggle, (for fleets of 20 of more)	
	4360448	1	Breaker, Circuit, (for fleets of 1-10)	
	4360448	1	Breaker, Circuit, (for fleets of 10-20)	
	4360448	1	Breaker, Circuit, (for fleets of 20 of more)	
	7003982	1	Switch, Steer (Drive and Steer), (for fleets of 1-10)	
	7003982	1	Switch, Steer (Drive and Steer), (for fleets of 10-20)	
	7003982	1	Switch, Steer (Drive and Steer), (for fleets of 20 of more)	
	3990001	2	Diode, (for fleets of 1 to 10)	
	3990001	2	Diode, (for fleets of 10 to 20)	
	3990001	2	Diode, (for fleets of 20 of more)	

## SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

FIGURE 9-2. MODELS E45/M45/E40 AND M40 VARIABLE PARTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	<b>Note: The following list 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.</b>	
		Ref	<b>VARIABLE PARTS</b>	
	7020642	1	Breaker, Circuit (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 1 to 10)	
	7020642	1	Breaker, Circuit (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 10 to 20)	
	7020642	1	Breaker, Circuit (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 20 of more)	
	7020653	1	Breaker, Circuit (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 1 to 10)	
	7020653	1	Breaker, Circuit (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 10 to 20)	
	7020653	1	Breaker, Circuit (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 20 of more)	
	7018525	1	Breaker, Circuit (ANSI Export Spec 250V-50Hz Charger), (for fleets of 1 to 10)	
	7018525	1	Breaker, Circuit (ANSI Export Spec 250V-50Hz Charger), (for fleets of 10 to 20)	
	7018525	1	Breaker, Circuit (ANSI Export Spec 250V-50Hz Charger), (for fleets of 20 of more)	
	7018563	1	Relay (ANSI Export Spec 250V-50Hz Charger), (for fleets of 1 to 10)	
	7018563	1	Relay (ANSI Export Spec 250V-50Hz Charger), (for fleets of 10 to 20)	
	7018563	1	Relay (ANSI Export Spec 250V-50Hz Charger), (for fleets of 20 of more)	
	7018506	1	Relay (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 1 to 10)	
	7018506	1	Relay (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 10 to 20)	
	7018506	1	Relay (ANSI Spec 105/132V-60Hz and Japanese Spec 100V - 60Hz Chargers), (for fleets of 20 of more)	
	7018564	1	Relay (Black) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 1 to 10)	
	7018564	1	Relay (Black) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 10 to 20)	
	7018564	1	Relay (Black) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 20 of more)	
	7020654	1	Relay (Clear) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 1 to 10)	
	7020654	1	Relay (Clear) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 10 to 20)	
	7020654	1	Relay (Clear) (ANSI Export Spec 110/220V-50Hz Charger), (for fleets of 20 of more)	
	2120042	1	Filter, Fuel (M45 & M40 Only), (for fleets of 1 to 10)	
	2120042	1	Filter, Fuel (M45 & M40 Only), (for fleets of 10 to 20)	
	2120042	1	Filter, Fuel (M45 & M40 Only), (for fleets of 20 of more)	
	7020215	1	Filter, Oil (M45 & M40 Only), (for fleets of 1 to 10)	
	7020215	1	Filter, Oil (M45 & M40 Only), (for fleets of 10 to 20)	
	7020215	1	Filter, Oil (M45 & M40 Only), (for fleets of 20 of more)	

## SECTION 9 - RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	7020167	1	Solenoid, Throttle (M45 & M40 Only), (for fleets of 1 to 10)	
	7020167	1	Solenoid, Throttle (M45 & M40 Only), (for fleets of 10 to 20)	
	7020167	1	Solenoid, Throttle (M45 & M40 Only), (for fleets of 20 of more)	
	70000323	1	Relay, Bosch (M45 & M40 Only), (for fleets of 1 to 10)	
	70000323	1	Relay, Bosch (M45 & M40 Only), (for fleets of 10 to 20)	
	70000323	1	Relay, Bosch (M45 & M40 Only), (for fleets of 20 of more)	
	7020200	1	Regulator, Voltage (M45 & M40 Only), (for fleets of 1 to 10)	
	7020200	1	Regulator, Voltage (M45 & M40 Only), (for fleets of 10 to 20)	
	7020200	1	Regulator, Voltage (M45 & M40 Only), (for fleets of 20 of more)	
	7020217	1	Element, Air Cleaner (M45 & M40 Only), (for fleets of 1 to 10)	
	7020217	1	Element, Air Cleaner (M45 & M40 Only), (for fleets of 10 to 20)	
	7020217	1	Element, Air Cleaner (M45 & M40 Only), (for fleets of 20 of more)	
	7016314	1	Cap, Fuel Tank (M45 & M40 Only), (for fleets of 1 to 10)	
	7016314	1	Cap, Fuel Tank (M45 & M40 Only), (for fleets of 10 to 20)	
	7016314	1	Cap, Fuel Tank (M45 & M40 Only), (for fleets of 20 of more)	
	7020156	1	Module, Control (M45 & M40 Only), (for fleets of 1 to 10)	
	7020156	1	Module, Control (M45 & M40 Only), (for fleets of 10 to 20)	
	7020156	1	Module, Control (M45 & M40 Only), (for fleets of 20 of more)	
	4360274	1	Switch, Push Button (M45 & M40 Only), (for fleets of 1 to 10)	
	4360274	1	Switch, Push Button (M45 & M40 Only), (for fleets of 10 to 20)	
	4360274	1	Switch, Push Button (M45 & M40 Only), (for fleets of 20 of more)	
	0610129	1	Module, Ground Control (M45 & E45), (for fleets of 1 to 10)	
	0610129	1	Module, Ground Control (M45 & E45), (for fleets of 10 to 20)	
	0610129	1	Module, Ground Control (M45 & E45), (for fleets of 20 of more)	
	0610139	1	Module, Ground Control (M40 & E40), (for fleets of 1 to 10)	
	0610139	1	Module, Ground Control (M40 & E40), (for fleets of 10 to 20)	
	0610139	1	Module, Ground Control (M40 & E40), (for fleets of 20 of more)	
	4360336	1	Switch, Toggle (M45 & M40 Only), (for fleets of 1 to 10)	
	4360336	1	Switch, Toggle (M45 & M40 Only), (for fleets of 10 to 20)	
	4360336	1	Switch, Toggle (M45 & M40 Only), (for fleets of 20 of more)	



**SECTION 10 - SPECIAL OPTIONS**

## SECTION 10 - SPECIAL OPTIONS

FIGURE 10-1. SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	Note	Ref	<b>Note: This list is to accomodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.</b>	
		Ref	<b>MISCELLANEOUS SPECIAL OPTIONS</b>	
		Ref	<b>Airline Installations - 1/2in</b>	
	0255015	Ref	<b>Airline Installations - 1/2in E45A &amp; M45A (Prior to SN 48133)</b>	
	0259877	Ref	<b>Airline Installations - 1/2in E45A &amp; M45A (SN 48133 to Present)</b>	
	Not Available	Ref	<b>Airline Installations - 1/2in AJ &amp; AJP</b>	
	0270723	Ref	<b>Beacon Installation Mounted Under Platform</b>	
	0256789	Ref	<b>Camera Mounting Installation</b>	
	0258703	Ref	<b>Console Cover</b>	
		Ref	<b>Cylinder Bellows Installations</b>	
	0259397	Ref	<b>Cylinder Bellows Installations E45A &amp; M45A</b>	
	Not Available	Ref	<b>Cylinder Bellows Installations E45AJ &amp; M45AJ</b>	
	0460110	2	Bellows - Platform Level and Master Cylinders	
	0460115	1	Bellows - Main Lift Cylinder	
	0460113	1	Bellows - Mid Lift Cylinder	
	0460114	1	Bellows - Tower Lift Cylinder	
	Not Available	1	Bellows - Jib Cylinder	
	1320037	6	Clamp	
		Ref	<b>Decal Installations Options:</b>	
	1702788	1	Decal - Biodegradable Hydraulic Fluid (All except German Spec)	
	1703479	1	Decal - Biodegradable Hydraulic Fluid (German Spec Only)	
	3252221	1	Decal - CSA (CSA Spec)	
	0257195	Ref	Decal Installation- Government Warranty	
	1703175	1	Decal - Lanyard Attach (GM K-1 Spec)	
	0256487	1	Decal - Prop 65 Warning Installation (Diesel Machines) (California Spec)	
	0256488	1	Decal - Prop 65 Warning Installation (Gas Machines) (California Spec)	
	1282975	Ref	Decal Location Chart (Sunbelt Machines)	
	0259550	Ref	Warning Stripes Installation	
	1283014	Ref	Warning Stripes Installation	
	0270954	Ref	Decal - United Rentals	
		Ref	<b>Decal Kits</b>	
	2910866	Ref	Decal Kit - Platform	
		Ref	<b>ELECTRICAL CONNECTOR KITS</b>	
	1001148902	Ref	<b>Amp Connector Kit</b>	
	1001148903	Ref	<b>Deutsch DT Connector Kit</b>	
	1001148904	Ref	<b>Deutsch HD Connector Kit</b>	
	1001148905	Ref	<b>Packard Connector Kit</b>	
	1001148906	Ref	<b>Various Connector Kit</b>	
		Ref	<b>Filter Kits (Yanmar Engine)</b>	
	1001111011	1	Combined Filter Kit (Hydraulic/Air and Fuel/Engine Oil Filter)	
	1001109715	1	Hydraulic/Air Filter Kit	
	1001110134	1	Fuel/Engine Oil Filter Kit	
	4060959	Ref	<b>Footswitch Shield (Note: Move Decal to Shield)</b>	
		Ref	<b>Headlight and Taillights Installation</b>	



## SECTION 10 - SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0259398	Ref	<b>Headlight and Taillights Installation E45A &amp; M45A</b>	
	Not Available	Ref	<b>Headlight and Taillights Installation E45AJ &amp; M45AJ</b>	
	2920150	2	Headlight	
	7016356	2	Lamp, Seal Beam (1 Per Headlight)	
	2920118	2	Taillight	
	7016623	2	Bulb - Brake (1 Per Taillight)	
	7016624	Ref	Bulb - Tail (1 Per Taillight)	
	0270408	Ref	<b>Platform Installation - 30inx60in (Lift Gate) (E40AJP &amp; M40AJP Only) (Japanese Spec)</b>	
		Ref	<b>Tools for Service</b>	
	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)	
	4460467	1	Extractor - 16-18 Gauge (For Removal of Pins/Sockets for Deutsch Connectors)	
	4460510	1	Extractor - 12-14 Gauge (For Removal of Pins/Sockets for Deutsch 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	
	2901443	1	Analyzer, Machine	
	0257728	Ref	<b>Tube Rack Installation</b>	
		Ref	<b>UL Machine Installations (Including 54202 )</b>	
	0270433	Ref	<b>Decals Installation</b>	
	0270377	Ref	<b>Drive Installation</b>	
	0270414	Ref	<b>Frame Shields Installation</b>	
	0270376	Ref	<b>Pump Installation</b>	
	0270732	Ref	<b>Tightening Enclosure Installation</b>	



**PART NUMBER INDEX**

## SECTION 10 - SPECIAL OPTIONS

0060044.....81, 85	0259305.....63, 148	0400201.....37	0641826.....13
0060046.....81, 85	0259338.....94	0440162.....9	0681810.....9
0060052.....79, 85	0259366.....67, 81	0440203.....51, 55	0681814.....51
0100009.....71, 100	0259367.....89, 165	0440339.....55	0682010.....13
0100010.....173, 178	0259397.....188	0460106.....77	0682026.....51
01000119, 14, 37, 41, 45, 63, 64, 68, 71, 73, 75, 77, 79, 81, 82, 89, 109, 111, 113, 115, 117, 119, 121, 123, 129, 131	0259398.....189	0460110.....188	0682028.....51
0100019.....13, 33, 51, 90	0259399.....19, 45	0460113.....188	0721004.....41
0100020.....57, 111, 136, 140, 144	0259440.....81, 82	0460114.....188	0721006.....41
0100035.....100, 109, 111, 115, 117, 119, 121	0259441.....81, 82	0460115.....188	0721008.....63
0100038.....109, 111, 113, 115, 117, 119, 121, 123	0259481.....38	0461406.....37	0741506.....19
0100048.....23	0259494.....177	0561076.....68	0741606.....63
0100051.....23	0259495.....177	0561317.....89	0750808.....59
0100063.....109	0259496.....177	0561359.....89	0800852.....67
0100074.....93	0259497.....177	0561360.....90	0800854.....71
0140011.....99	0259498.....177	0561361.....90	0801154.....71
0140028.....45	0259499.....177	0561384.....89	0801169.....67, 71
0140031.....45	0259535.....177	0561385.....90	0801192.....73
0182010.....23	0259536.....177	0561386.....90	0801197.....67, 73
0253687.....63	0259537.....177	0610128.....99, 183	0801198.....73
0253704.....90	0259538.....177	0610129.....59, 185	0801224.....75
0253709.....63	0259539.....177	0610131.....168	0801225.....67, 75
0253717.....168	0259540.....177	0610139.....59, 185	0801226.....75
0253984.....64	0259550.....188	0630399.....71	0801227.....67
0254875.....90	0259679.....13	0630440.....41	0840031.....23
0255015.....188	0259692.....23	0630464.....59, 64, 99	0840032.....23
0256487.....188	0259693.....23	0630467.....89	0860038.....168
0256488.....188	0259754.....79	0630468.....63	0860520.....173, 179
0256789.....188	0259763.....23	0630487.....71	0861152.....59
0257195.....188	0259825.....23	0630491.....63	0861176.....93, 99
0257728.....189	0259826.....23	0641404.....24, 71	0861177.....59
0257735.....89, 165	0259877.....188	0641405.....71	0861215.....99
0257815.....23	0259939.....67, 81	0641406.....33, 41, 57	0861314.....93, 99
0257816.....19	0259951.....19, 45	0641407.....79, 81, 94	0861351.....59
0257817.....9	0259970.....89, 165	0641408...24, 45, 57, 93, 173, 179	0901921.....63
0257824...37, 57, 59, 100	0270010.....9	0641410.....89	0901923.....63
0257858.....37, 38	0270012.....168	0641411.....89	0902406.....59
0258034.....19, 45	0270013.....168	0641412.....57	0902543.....42
0258035.....41	0270028.....13	0641413.....45	0902575.....100
0258037.....13	0270037.....13	0641414.....94	0902588.....100
0258383.....77	0270100.....41	0641422.....77	0902681.....42
0258653.....51	0270101.....41	0641424.....131	0920113.....13
0258688.....13	0270103.....13, 33	0641505.....37	0940036.....41
0258689.....23	0270273.....173, 177	0641506.....68	0940038.....97
0258691.....67	0270274.....173, 177	0641508.....33, 45, 97	0940048.....68
0258703.....188	0270338.....97	0641510.....55, 63	0940049.....63
0258953.....63	0270344.....37, 57, 60	0641512.....129, 131	0961127.....173, 178
0258973.....173	0270376.....189	0641514.....23, 89	0961608.....111, 121
0258974.....41	0270377.....189	0641516.....77, 97	0961726...67, 71, 73, 115, 117, 119
0258995.....13	0270407.....93	0641518.....37	0961893.....109
0258996.....13	0270408.....189	0641520.....89	0961900.....113, 123
0258997.....13	0270409.....93	0641542.....14	0961947...77, 81, 85, 109
0259064.....45, 148	0270414.....189	0641560.....89	0961948.....73, 75
0259069.....13, 33	0270415.....13	0641604.....129	096195067, 75, 115, 117, 119
0259102.....100	0270416.....13	0641605...59, 64, 73, 75	0961951...9, 71, 81, 109, 113, 123
0259123.....168	0270417.....13	0641606...9, 71, 73, 75	0962140.....9
0259125.....168	0270418.....13	0641607...73, 77, 79, 82	0962185.....113, 123
0259127.....168	0270433.....189	0641608...19, 45, 68, 71, 73, 75, 77, 79, 81	0962257.....85
0259258.....23	0270723.....188	0641609.....13, 93	1001109715.....188
0259301.....173	0270732.....189	0641610...68, 79, 81, 99	1001110134.....188
0259302.....14	0270954.....188	0641616.....57, 81	1001111011.....188
	0400055.....23	0641618.....37, 81	1001118418...99, 105, 183
	0400185.....23, 27	0641806.....68	1001118419...99, 103, 183
	0400192.....24, 27	0641808.....23	1001148902.....188
	0400194.....24, 29	0641810.....68, 81, 82	1001148903.....188
	0400195.....24, 29	0641812.....55, 68	
	0400196.....24, 29	0641818.....71, 73, 75	
	0400197.....24, 29		

## SECTION 10 - SPECIAL OPTIONS

1001148904 .....	188	1320259 .....	81	1683863.....	131	1703936.....	177
1001148905 .....	188	1320260 .....	89	1683911.....	75, 131	1703937.....	177
1001148906 .....	188	1380136 .....	45	1683912.....	131	1703938.....	177
1060092 .....	23	1380138 .....	41	1683923.....	67, 123	1703939.....	177
1060279 .....	173, 179	1580012 .....	94	1683924.....	81, 113	1703940.....	177
1060330 .....	164	1580013 .....	94	1683925.....	113, 123	1703947.....	179
1060341 .....	90, 167	1600273 .....	105	1683939.....	67, 115	1703948.....	179
1060461 .....	169	1600274 .....	103	1683940.....	115	1703950.....	179
1060494 .....	169	1600292 .....	33, 182	1683941.....	115	1703951.....	179
1060584 .....	59	1600293 .....	33, 182	1683942.....	67, 117	1703952.....	179
1060677 .....	165	1600294 .....	33, 168	1683943.....	117	1703980.....	178
1060717 .....	33	1670678 .....	71, 73	1683944.....	117	1703981.....	178
1060718 .....	33	1670697 .....	89	1683945.....	67, 119	1703982.....	178
1060719 .....	33	1670698 .....	71	1683946.....	119	1703983.....	178
1060720 .....	33	1670829 .....	99	1683947.....	119	1703984.....	178
1060721 .....	33	1670832 .....	90	1683980.....	131	1703985.....	178
1060722 .....	33	1670833 .....	90	1700584.....	173, 177	1703987.....	179
1060723 .....	33	1670879 .....	41	1701500.....	174, 179	1703988.....	179
1060724 .....	33	1670880 .....	41	1701502.....	174, 180	1703991.....	179
1060725 .....	33	1670887 .....	14	1701503.....	174, 180	1703996.....	180
1060726 .....	33	1670951 .....	41	1701504.....	173, 177	1704000.....	178
1060727 .....	33	1670959 .....	75	1701505.....	174, 180	1704001.....	178
1060728 .....	33	1682154 .....	111, 121	1701509.....	174, 179	1704002.....	178
1060730 .....	37	1682878 .....	111	1701642.....	173, 177	1704006.....	178
1060731 .....	37	1682879 .....	121	1701644.....	173, 178	1704007.....	178
1060754 .....	37	1682930 .....	77, 125	1701645.....	174	1704008.....	178
1060755 .....	37	1682948 .....	129	1701691.....	173, 178	1704192.....	99
1060760 .....	23	1683016 .....	115	1701892.....	173, 177	1704200.....	174, 180
1060761 .....	23	1683021 .....	117	1702124.....	136, 140, 144	1704239.....	99
1060776 .....	167	1683051 .....	109	1702153.....	173	1704240.....	99
1060777 .....	167	1683052 .....	113, 123	1702265.....	174, 179	1704241.....	173
1060778 .....	167	1683285 .....	77, 79, 111	1702271.....	179	1704252.....	174, 180
1060780 .....	165	1683286 .....	111, 121	1702279.....	174	1704253.....	173, 178, 179
1060781 .....	165	1683325 .....	67, 121	1702300.....	174, 179	1704254.....	173, 178
1060809 .....	23	1683505 .....	119	1702565.....	99	1704256.....	173, 177
1060810 .....	33	1683514 .....	119	1702566.....	99	1704257.....	173, 177
1060811 .....	23	1683515 .....	115	1702567.....	99	1704260.....	100
10837580 .....	47	1683516 .....	117	1702688.....	174, 179	1704262.....	173, 178
1120094 .....	115	1683591 .....	9, 127	1702701.....	14	1704277.....	173, 178
1120108 .....	119	1683704 .....	71, 129	1702740.....	14	1704286.....	174
1120110 .....	111, 121, 131	1683705 .....	129	1702773.....	174, 180	1704339.....	179
1120305 .....	117	1683706 .....	129	1702774.....	174, 180	1704340.....	179
1120487 .....	57	1683708 .....	67, 119	1702788.....	188	1704341.....	179
1180302 .....	71	1683709 .....	119	1702860.....	173, 177	1704342.....	179
1180352 .....	73	1683710 .....	115	1702868.....	173	1704343.....	179
1180353 .....	75	1683711 .....	67, 115	1702962.....	174, 180	1704344.....	179
1220038 .....	71	1683712 .....	117	1703175.....	188	1704368.....	180
1220039 .....	71	1683713 .....	67, 117	1703479.....	188	1704369.....	180
1220040 .....	71	1683756 .....	123	1703488.....	174, 179	1704370.....	180
1282975 .....	188	1683759 .....	113	1703797.....	173	1704371.....	180
1283014 .....	188	1683760 .....	81, 113	1703798.....	173	1704372.....	180
1283055 .....	148	1683761 .....	113	1703804.....	174	1704373.....	180
1320012 .....	38	1683772 .....	123	1703805.....	173	1704384.....	173, 177
1320014 .....	77	1683773 .....	67, 123	1703813.....	174	1704385.....	173, 177
1320017 .....	139	1683779 .....	81, 109	1703923.....	178	1704412.....	174, 180
1320022 .....	37, 57	1683780 .....	109	1703924.....	177	1704417.....	179
1320031 .....	77	1683783 .....	109	1703925.....	178	1704418.....	179
1320033 .....	135, 143	1683798 .....	73, 129	1703926.....	178	1704419.....	179
1320037 .....	188	1683800 .....	129	1703927.....	178	1704422.....	99
1320040 .....	89	1683802 .....	129	1703928.....	178	1704431.....	173, 179
1320041 .....	57	1683813 .....	67, 119	1703929.....	177	1704445.....	174, 179
1320043 .....	63	1683815 .....	119	1703930.....	177	1704446.....	173
1320095 .....	90	1683817 .....	119	1703931.....	177	1704452.....	179
1320136 .....	24	1683825 .....	67, 117	1703932.....	177	1704453.....	179
1320172 .....	23, 33	1683826 .....	67, 115	1703933.....	177	1704454.....	179
1320195 .....	89	1683827 .....	115	1703934.....	177	1704727.....	174, 179
1320199 .....	89	1683829 .....	117	1703935.....	177	1704747.....	180

## SECTION 10 - SPECIAL OPTIONS

1704752.....	174, 179, 180	2600219.....	93	2780250.....	9	3300365.....	59, 64
1704791.....	173, 177	2680473.....	63	2780251.....	9	3300371.....	41
1704792.....	173, 177	2680474.....	63	2790900.....	136	3300396.....	59
1704793.....	173, 177	2680475.....	63	2792334.....	135, 146	3300426.....	9, 10, 13
1704794.....	173, 177	2700093.....	41	2792337.....	146	3310601.....	33, 99
1760160.....	71	2720271.....	57	2792395.....	139, 146	3311001.....	93
1870072.....	148	2720339.....	37, 57	2792413.....	143, 146	3311005.....	41, 59, 63, 90, 99
1870126.....	148	2720455.....	38	2820035.....	94	3311011.....	59
2080040.....	93	2750900.....	140, 144	2820036.....	64	3311401.....	63, 71, 73, 75, 89, 93
2120042.....	37, 184	2750910.....	139, 143	2820105.....	41	3311405.....	19, 23, 24, 33, 37, 41, 45, 57, 77, 79, 81, 90, 94, 131, 173, 179
2160001.....	55	2750996.....	135, 139	2820106.....	42	3311501.....	33, 63, 81, 97
2160003.....	55	2751009.....	139	2820107.....	37	3311505.....	19, 33, 37, 45, 68, 77, 89
2180536.....	57	2751126.....	135	2820110.....	42	3311601.....	63
2200222.....	111	2751127.....	135	2820112.....	38	3311602.....	71
2220315.....	57	2751414.....	140	2820116.....	38	3311605.....	19, 37, 68, 73, 75, 77, 79, 81, 93, 100
2220371.....	135, 139, 143	2751498.....	135, 139, 143	2820117.....	37	3311805.....	68, 82
2220386.....	135, 139, 143	2751508.....	135, 139	2860030.....	59, 183	3312008.....	9
2220414.....	136, 140, 144	2751890.....	144	2900708.....	45	3322202.....	9
2220415.....	139, 143	2752430.....	139, 143	2900768.....	13	3322205.....	129, 131
2220428.....	135, 139, 143	2752435.....	135	2900770.....	85, 115, 117, 119, 129, 131	3323003.....	9
2220429.....	135, 139, 143	2752437.....	139, 143	2900792.....	109, 113	3340663.....	71
2220459.....	57	2752440.....	136	2901147.....	111, 121	3340679.....	129
2220466.....	135, 139, 143	2752446.....	135, 139, 143	2901443.....	169, 189	3340682.....	71
2220472.....	135, 139, 143	2752459.....	135, 139, 143	2901776.....	113, 123	3340756.....	73
2220473.....	135, 139, 143	2752463.....	136, 139, 143	2901804.....	119	3340820.....	71
2220501.....	135, 139, 143	2752466.....	139, 143	2901805.....	117	3340837.....	73
2220502.....	135, 139, 143	2752475.....	135	2901806.....	115	3340878.....	75
2220504.....	135	2752476.....	135, 139, 143	2901807.....	129	3340882.....	131
2220507.....	135, 139, 143	2752487.....	135, 139, 143	2901810.....	109	3340884.....	75
2220516.....	129, 131	2752488.....	135, 139, 143	2901898.....	113, 123	3340886.....	75
2220517.....	129, 131	2752571.....	143	2901903.....	131	3380434.....	94
2220582.....	139, 143	2752572.....	135	2910601.....	17	3420156.....	63
2220593.....	135, 139, 143	2752573.....	135	2910866.....	100, 188	3422175.....	68
2220596.....	129, 131	2752580.....	135	2920095.....	94, 169	3422176.....	68
2220600.....	136, 140, 143	2752581.....	135	2920118.....	189	3422177.....	68
2220605.....	136, 139, 143	2752585.....	135, 139	2920129.....	164	3422178.....	68
2220609.....	136, 140, 144	2752595.....	135, 139, 143	2920146.....	63	3422179.....	68
2220619.....	136, 139, 143	2752600.....	135, 139, 143	2920150.....	189	3422180.....	68, 77, 79
2220628.....	129, 131	2752611.....	139, 143	2920151.....	60	3422181.....	77, 79
2220654.....	140	2752619.....	143	2940042.....	64	3422185.....	71
2220677.....	139, 143	2752620.....	135	2940071.....	63	3422480.....	68
2220684.....	135	2752675.....	135, 139, 143	2940074.....	93, 183	3422481.....	68
2220711.....	136, 139, 143	2752795.....	135, 139	2940095.....	41	3422582.....	68
2220727.....	135	2752910.....	135	2940115.....	41	3422669.....	68, 82
2220873.....	135, 139, 143	2752983.....	136	3000003.....	23	3422692.....	9
2220883.....	111, 129, 131	2753050.....	135, 139	3010119.....	9	3422709.....	77, 79
2220885.....	109, 115, 117, 119, 135, 139, 143	2753301.....	139	3010121.....	9	3422748.....	77
2220899.....	135, 139, 143	2753302.....	139	3020022.....	68, 81	3422791.....	81
2220909.....	136, 140, 144	2753303.....	140	3020029.....	51	3422792.....	82
2220923.....	136, 140, 144	2753304.....	139	3020036.....	51	3422793.....	81
2220934.....	136, 140, 144	2753305.....	139	3160233.....	51, 53	3422794.....	81
2220998.....	135, 139, 143	2753326.....	135	3160239.....	13	3422804.....	73, 75
2220999.....	135, 139, 143	2753329.....	144	3200404.....	37	3422806.....	68
2221033.....	135, 139, 143	2753330.....	144	3251243.....	173, 178	3422814.....	81
2221039.....	144	2753331.....	144	3251813.....	173, 178	3422844.....	68
2360505.....	10	2753332.....	144	3252221.....	188	3422845.....	68
2360510.....	10	2753333.....	143	3252347.....	93, 173	3430816.....	77
2360531.....	10	2753334.....	143	3252507.....	173, 178	3430840.....	63
2420106.....	59	2753335.....	143	3252632.....	59	3450405.....	77
2540019.....	33	2753336.....	143	3252669.....	59	3450810.....	9
2540020.....	33	2753337.....	143	3300151.....	89		
2540021.....	33	2753474.....	143	3300188.....	59		
2560122.....	45	2753475.....	143	3300279.....	119		
2560123.....	45	2760105.....	99	3300281.....	115, 117		
2560136.....	99	2780236.....	13, 17	3300308.....	111, 121		
2600216.....	93	2780241.....	9	3300315.....	119		
		2780242.....	9				

## SECTION 10 - SPECIAL OPTIONS

3480217	111, 121	3931430	23, 33	4400417	57	4520206	14
3480239	129, 131	3931516	109, 113, 123	4460007	59	4520208	14
3480240	119	3941405	97	4460071	94, 164, 169	4520209	14
3480241	115	3951402	119, 129, 131	4460125	168	4520231	14
3480242	117	3960389	37, 42	4460134	169	4520232	13
3480247	113, 123	3960417	37, 42	4460138	168	4520247	14
3480249	109	3960418	38	4460205	169	4566023	111, 121
3480259	113, 123	3960433	41	4460225	164, 166, 167, 168	4566027	129
3510693	93	3960438	59, 64	4460226	103, 105, 164, 165, 167, 168	4566188	135
3510694	93	3960447	41	4460227	164, 165, 166, 167, 168	4566243	89
3510725	93	3960453	63	4460233	169	4566356	68
3510735	93	3980035	37	4460234	63	4566427	68
3520026	41	3990001	166, 183	4460248	60	4566432	115
3520028	59, 99	3990105	13, 182	4460259	60, 164	4566435	117
3520030	100	3990106	59, 166	4460260	60, 164	4566623	135
3520034	71	4060092	169	4460264	59	4567177	119
3520054	59	4060700	169	4460265	103, 105, 164, 165, 167	4567679	23
3520072	93	4060803	37, 63, 93	4460267	38, 164, 166, 168	4567704	129
3520082	42, 75	4060804	41	4460268	166, 167	4567845	37
3536089	94	4060805	89	4460320	166	4567908	119
3536491	67	4060808	89	4460321	164, 166, 167, 168	4567946	140, 144
3536691	64	4060855	77	4460326	166, 168	4567963	131
3536999	89	4060865	63	4460343	164, 166	4620118	51
3537045	67	4060906	59, 60	4460346	168	4620124	51
3537903	63	4060959	188	4460367	164	4640392	14
3539685	93	4070863	75	4460418	164, 165, 168	4640509	109, 111
3570572	41	4070864	75	4460419	164, 165, 168	4640634	115, 117
3570573	41	4070897	73	4460425	59, 165, 166	4640709	129, 131
3570581	38	4070898	73	4460428	90, 94, 99, 164, 168, 169	4640771	129, 131
3571094	41	4070982	73	4460434	164, 165, 167	4640807	129, 131
3571157	57	4070987	59	4460444	33	4640816	115, 117
3571160	19	4070997	75	4460458	166, 167	4640861	136, 140, 144
3571222	100	4070998	75	4460464	164, 165, 167	4640932	111, 113
3571401	37	4100025	37	4460465	165, 166	4640936	119
3571406	81	4100026	57, 136, 140, 144	4460467	100, 169, 189	4641029	45
3571412	38	4100065	90	4460495	59, 165, 166	4641070	45, 47
3571462	89	4120027	148	4460496	59, 99, 164, 166	4641080	77
3571834	24	4120035	164	4460497	59, 99, 164, 166	4641086	113
3600289	19	4130350	9	4460510	169, 189	4641102	45
3740063	148	4130351	9	4460634	164	4641119	45
3740087	148	4220162	63	4460635	164	4641149	19, 21
3760115	71, 73, 75	4220165	93	4460685	45	4711400	19, 23, 24, 33, 37, 45, 57, 94, 97, 173
3760308	41, 99	4220179	37	4460742	166, 167	4711500	14, 23, 37, 45
3760318	129, 131	4240032	63, 99, 100	4460743	166, 167	4711600	13, 19, 73, 75, 81
3760367	109	4240033	37, 57	4460744	165, 167	4711800	23, 81
3760368	113, 123	4240084	33	4460745	165, 167	4740007	77
3780181	68, 77, 79	4240099	89, 94, 97	4460746	165, 167	4740120	59, 64, 99
3780184	68	4300106	45	4460748	167	4740171	51
3790012	60, 100	4300132	99	4460749	165, 167	4740207	117
3790113	129, 131	4300135	33	4460750	165, 167	4740362	79, 81, 94
3820001	173, 177	4300140	89	4460751	166, 167	4740393	51
3841143	68, 77, 79, 81	4360031	93, 183	4460752	99, 164	4740397	59
3841203	68, 81	4360070	59, 183	4460753	89, 165	4740413	71
3841367	9	4360274	60, 185	4460754	89, 165	4750600	33, 99
3900104	90	4360321	90, 183	4460761	164, 167	4750800	41
3900109	9	4360328	59, 60, 99, 100, 183	4460807	168	4751000	41, 63, 93
3900142	119	4360330	100, 183	4460808	168	4751400	41, 63, 71, 77, 89, 94, 179
3900170	111, 115, 117, 119, 121	4360336	100, 148, 185	4460809	168	4751500	19, 33, 37, 63, 68, 77, 89, 97
3900174	41	4360387	99, 183	4460836	166	4751600	19, 37, 57, 59, 63, 64, 68, 71, 77, 79, 81, 99
3900246	90	4360448	100, 148, 183	4460837	166	4751800	63, 77
3910612	99	4360462	99, 183			4760600	33
3910636	33	4360469	59, 183				
3910804	59	4360475	59, 99, 183				
3911008	93	4360476	59, 99, 182				
3911012	59	4400416	19				
3931016	109, 113, 123						

## SECTION 10 - SPECIAL OPTIONS

4761000.....	93	4922267.....	166	7003977.....	103	7017153.....	85
4761400.....	19, 33, 45, 71, 75	4922294.....	100, 168	7003980.....	105	7017165.....	86
4761500.....	97	49223003.....	164	7003982.....	106, 183	7017172.....	85
4761600.....	19, 59, 64, 71, 73, 129	4922307.....	164	7003983.....	106	7017192.....	85
4761800.....	71, 73, 75	4922319.....	38, 168	7003986.....	105	7017196.....	85
4844304.....	67	4922328.....	19, 167	7003989.....	106	7017246.....	127
4844404.....	64	4922363.....	89, 165	7003992.....	103, 105	7017247.....	127
4844427.....	67	4922364.....	89, 165	7003993.....	103, 105	7017248.....	127
4844467.....	68	4922366.....	165	7003994.....	105	7017249.....	127
4844541.....	67	4922367.....	165	7004275.....	189	7017250.....	127
4844579.....	71	4933059.....	148, 165	7004276.....	189	7017251.....	127
4844603.....	41	4933060.....	148, 164	7006139.....	73, 75	7017252.....	127
4844917.....	97	4933101.....	60, 148	7006151.....	73, 75	7017402.....	21, 45, 47
4845327.....	93	4933102.....	148	7006152.....	73, 75	7017410.....	47
4845642.....	37	4933105.....	148, 164	7007900.....	13	7017412.....	21
4845769.....	77	4933128.....	148, 165	7007977.....	13	7017421.....	47
4845770.....	77	70000322.....	38	7010542.....	21	7017422.....	47
4845846.....	23	70000323.....	38, 185	7010543.....	21, 47	7017423.....	47
4845925.....	81	70000324.....	38	7011112.....	111, 113	7017428.....	21
4845926.....	81	70000341.....	86	7011323.....	85	7017428.....	21
4845927.....	81	70000381.....	48	7011528.....	27	7017433.....	21, 47
4845951.....	93	70000865.....	55	7011573.....	27	7017450.....	21
4846026.....	67	70000868.....	55	7011590.....	27, 168	7017452.....	45, 47
4846033.....	73	70001144.....	39	7011596.....	27, 29	7017460.....	45
4846050.....	79, 81	70001677.....	55	7011621.....	27, 29, 168	7017461.....	45
4846073.....	81	70002724.....	105	7011716.....	13	7017466.....	45
4846091.....	68	70002725.....	105	7011757.....	13	7017479.....	47
4846106.....	23	70002726.....	105	7012518.....	21, 47	7017496.....	48
4846107.....	23	70002728.....	105	7012596.....	55	7017498.....	77
4846180.....	75	70002730.....	103	7012597.....	55	7018122.....	38
4846209.....	67	70002731.....	103	7012654.....	55	7018123.....	38
4846223.....	41	70002732.....	103	7012655.....	55	7018124.....	38
4846276.....	93	70002733.....	103	7012694.....	48	7018125.....	38
4860181.....	14	70002734.....	103	7012903.....	47	7018126.....	38
4860191.....	14	70002735.....	103	7012903.....	47	7018127.....	38
4891500.....	55	70002736.....	105	7012914.....	47	7018128.....	39
4891800.....	9	70002737.....	106	7012918.....	47	7018129.....	39
4892000.....	13	70002906.....	103	7012941.....	21	7018132.....	39
4920385.....	37	70003341.....	127	7012947.....	47	7018133.....	39
4921568.....	169	7000625.....	93	7012949.....	47	7018134.....	38
4921569.....	169	7000731.....	13	7012953.....	47, 77	7018135.....	38
4921570.....	169	7001608.....	125	7012955.....	77	7018136.....	38
4921571.....	169	7001609.....	125	7012959.....	45	7018137.....	38
4921592.....	169	7001610.....	125	7012967.....	21, 47, 77	7018138.....	38
4921593.....	169	7001611.....	125	7012972.....	21	7018139.....	39
4921594.....	169	7001612.....	125	7012981.....	45, 77	7018140.....	39
4921595.....	169	7001613.....	125	7012998.....	21, 45, 47	7018142.....	38
4922057.....	165	7001614.....	125	7016177.....	23	7018142.....	38
4922058.....	165	7001614.....	125	7016314.....	57, 185	7018506.....	27, 29, 184
4922060.....	164	7001630.....	127	7016319.....	63	7018525.....	29, 184
4922069.....	19, 167	7002821.....	169, 189	7016356.....	94, 189	7018537.....	29
4922071.....	164	7002822.....	189	7016372.....	63	7018563.....	29, 184
4922073.....	166	7002823.....	169, 189	7016623.....	189	7018564.....	29, 184
4922074.....	164	7002826.....	189	7016624.....	189	7018570.....	27
4922103.....	33	7002828.....	169, 189	7016654.....	189	7018571.....	27, 29
4922104.....	166	7003928.....	103	7016676.....	55	7018577.....	30
4922117.....	166	7003933.....	105	7016682.....	55	7018597.....	27
4922118.....	164	7003935.....	105	7017120.....	85	7019103.....	105
4922157.....	164	7003941.....	105	7017121.....	85	7019110.....	105
4922160.....	164	7003946.....	105	7017122.....	86	7019111.....	103, 105
4922178.....	89, 165	7003952.....	103	7017123.....	86	7019112.....	105
4922179.....	89, 165	7003953.....	103	7017126.....	85	7019115.....	105
4922222.....	100, 166	7003956.....	103	7017127.....	86	7019122.....	103
4922223.....	100, 167	7003969.....	105	7017130.....	85	7019123.....	103
4922263.....	166	7003972.....	105	7017131.....	85	7019137.....	103
		7003973.....	105	7017132.....	86	7019141.....	103
		7003974.....	103, 105	7017133.....	86	7019142.....	103
		7003976.....	103	7017134.....	86	7019143.....	103
				7017135.....	85	7019144.....	103



## SECTION 10 - SPECIAL OPTIONS

7019145 .....	103	7020155 .....	57	7020667 .....	27	7022000 .....	34, 182
7019147 .....	103	7020156 .....	39, 57, 185	7020668 .....	27	7022001 .....	34, 182
7019149 .....	103	7020157 .....	38	7020669 .....	27	7022002 .....	34, 182
7019150 .....	103	7020158 .....	38	7020670 .....	27	7022003 .....	33, 168
7019151 .....	105	7020159 .....	38	7020685 .....	29	7022004 .....	33, 168
7019154 .....	105	7020160 .....	38	7020690 .....	29	7022005 .....	34, 168
7019157 .....	105	7020161 .....	38	7020691 .....	29, 182	7022012 .....	168
7019158 .....	105	7020162 .....	38	7020693 .....	29, 167	7022532 .....	21
7019159 .....	105	7020163 .....	38	7020696 .....	29	7022808 .....	103
7019160 .....	105	7020164 .....	38	7020697 .....	29	7022812 .....	105
7019161 .....	105	7020165 .....	38	7020698 .....	29	7022813 .....	103
7019162 .....	105	7020166 .....	38	7020699 .....	29	7022815 .....	103
7019164 .....	106	7020167 .....	38, 185	7021318 .....	19	7022900 .....	29
7019165 .....	106	7020175 .....	59, 99	7021319 .....	19	7022902 .....	29
7019166 .....	106	7020176 .....	59, 99	7021320 .....	19, 182	7022903 .....	30
7019167 .....	105	7020198 .....	38	7021323 .....	17	7022905 .....	29
7019168 .....	105	7020199 .....	38	7021324 .....	17	7023216 .....	9
7019170 .....	103	7020200 .....	38, 185	7021325 .....	17	7023217 .....	9
7019174 .....	103	7020201 .....	38	7021326 .....	17	7023349 .....	39
7019191 .....	105	7020202 .....	38	7021327 .....	17	7023350 .....	39
7019194 .....	106	7020204 .....	38	7021328 .....	17	7023484 .....	55
7019195 .....	103	7020215 .....	38, 184	7021329 .....	17	7023485 .....	38
7019196 .....	106	7020217 .....	38, 185	7021330 .....	17	7023486 .....	167
7019197 .....	103	7020603 .....	29	7021333 .....	17	7024832 .....	21
7020035 .....	9	7020607 .....	27	7021335 .....	17	7026042 .....	55
7020036 .....	10	7020633 .....	27	7021336 .....	17	7026043 .....	55
7020037 .....	10	7020640 .....	27	7021337 .....	17	7026669 .....	39
7020038 .....	10	7020642 .....	27, 29, 184	7021338 .....	17	7026670 .....	39
7020039 .....	10	7020643 .....	29	7021339 .....	17	7027350 .....	55
7020040 .....	10	7020644 .....	29, 167	7021340 .....	17	7027351 .....	55
7020041 .....	10	7020647 .....	27	7021341 .....	17	7027352 .....	55
7020054 .....	10	7020648 .....	29	7021342 .....	17	7027353 .....	55
7020055 .....	10	7020649 .....	27, 29	7021344 .....	17	7027354 .....	55
7020099 .....	99	7020650 .....	27, 29	7021367 .....	19, 182	7027356 .....	55
7020100 .....	99	7020651 .....	27, 29	7021368 .....	19	7027358 .....	55
7020126 .....	53	7020653 .....	29, 184	7021603 .....	47	7027359 .....	55
7020127 .....	53	7020654 .....	27, 30, 184	7021604 .....	47	7027360 .....	55
7020128 .....	53	7020655 .....	27	7021606 .....	47	7027361 .....	55
7020129 .....	53	7020656 .....	27, 167	7021607 .....	47	7027363 .....	55
7020130 .....	53	7020657 .....	27, 167	7021609 .....	21, 45, 47, 182	7027900 .....	85
7020131 .....	53	7020658 .....	27	7021610 .....	47, 182	7027901 .....	85
7020137 .....	10	7020659 .....	27	7021611 .....	47	90206369 .....	55
7020138 .....	13	7020660 .....	27	7021616 .....	21, 182		
7020140 .....	10	7020661 .....	27	7021618 .....	21, 47, 182		
7020150 .....	13	7020663 .....	29	7021659 .....	21		



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