



Illustrated Parts Manual

Models
E450AJ

PVC
2001
2007

P/N
31215014

June 1, 2023 - Rev D

ANSI

CE



AS/NZS



An Oshkosh Corporation Company

REVISION LOG

REVISION LOG:

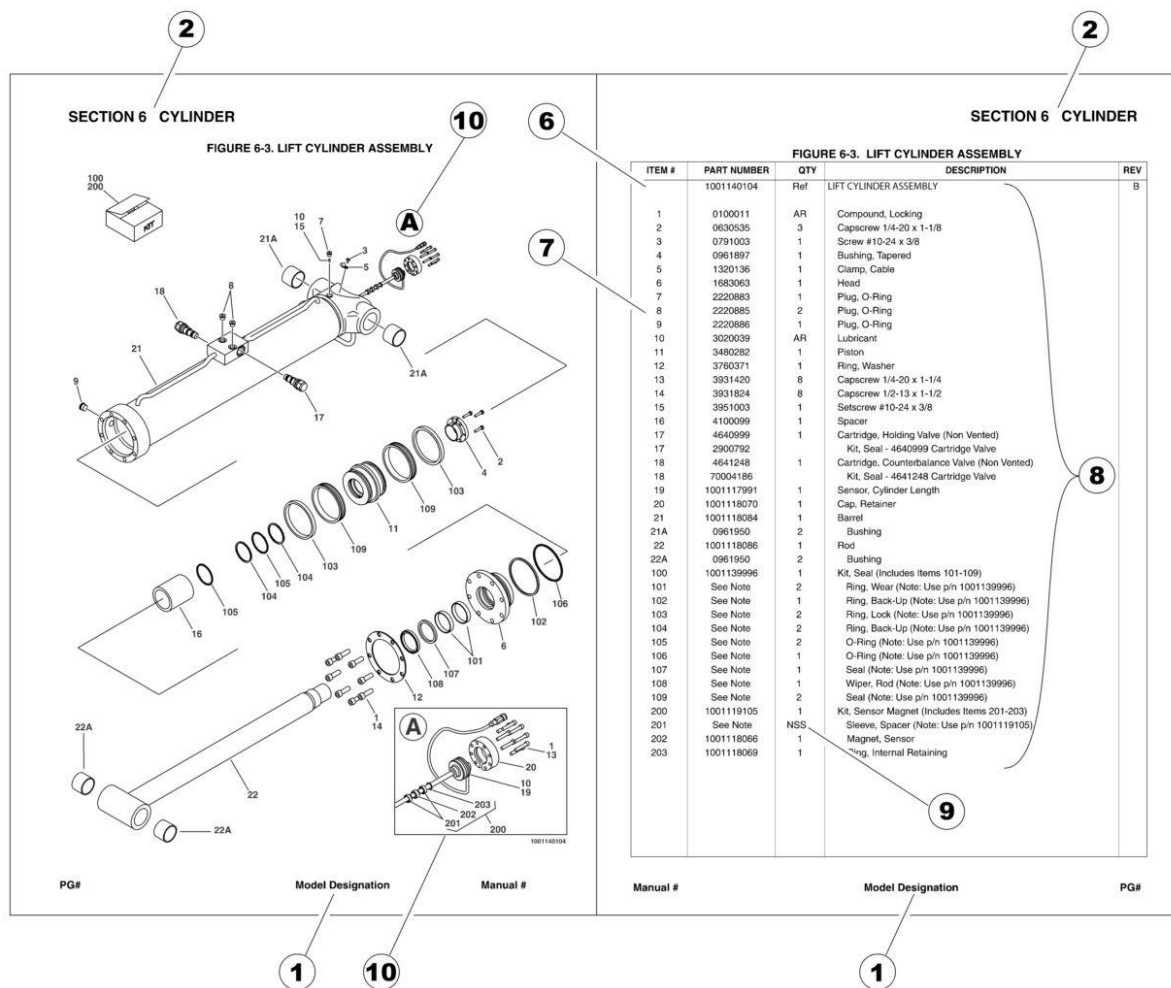
November 1, 2019 - A - Original Issue of Manual (Edited to B/M 1001249345 Revision C)

June 15, 2020 - B - Revised Manual (Edited to B/M 1001249345 Revision E)

January 11, 2021 - C - Revised Manual (Edited to B/M 1001249345 Revision F)

June 1, 2023 - D - Revised Manual (Edited to B/M 1001249345 Revision F)

GENERAL INFORMATION



1) MACHINE IDENTIFICATION

Machines are identified by model and in some cases a combination of models, serial number (SN) or regional standard (i.e ANSI, CE, CSA). Components may also be identified by SN or manufacturer. Common components that may be identified by these characteristics are engines and hydraulic components.

2) PARTS MANUAL ORGANIZATION

Product information in this manual is organized under section titles. Frame, Cylinder, Hydraulic and Electrical are a few examples. Each section is organized by figure and page number. The information within the Figure is then organized by item number, part number, description and corresponding illustration (s).

3) TABLE OF CONTENTS (NOT SHOWN)

A table of contents is found toward the beginning of the manual. Figure number, description and page number are provided for quick reference to the page containing the related information.

4) RECOMMENDED SPARE PARTS (NOT SHOWN)

The Recommended Spare Parts List, located near the end of the manual, reference most frequently used maintenance parts.

5) PART NUMBER INDEX (NOT SHOWN)

A numerical index listing all part numbers and the corresponding page number(s) appears at the back of the manual.

GENERAL INFORMATION

6) NON-SERVICED PARTS

In some instances, it is necessary to display non-serviced parts, assemblies or installations. In the case of assemblies and installations there will be a Ref in the Qty. column. In case of parts that are not available for service within assemblies or components, there will be a NSS (Not Sold Separately) or NLA (No Longer Available) listed in the Qty. column of the manual.

7) PARTS LIST ITEM NUMBERS

Numbers shown in the item# column correspond to numbers used in the associated illustration (s). Item numbers which are missing from the sequence in the parts list are not used on that page.

8) INDENTED PARTS DESCRIPTION

An indented part description is included in the item under which it is indented.

9) ABBREVIATION AND SYMBOLS

AC.....	Alternating Current	L.....	Liter
ADE.....	Advanced Design Electronics	LB(LBS).....	Pounds
AG.....	Agricultural	LCD.....	Liquid Crystal Display
ANSI.....	American National Standards Institute	LED.....	Light Emitting Diodes
AR.....	As Required	LH.....	Left Hand
ASSY.....	Assembly	LRC.....	Low Rated Countries
AUS.....	Australia	LSS.....	Load Sensing System
AUX.....	Auxiliary	M(m).....	Metric/Meter
AWG.....	American Wire Gauge	MM(mm).....	Milimeter
B/M.....	Bill of Material	mA.....	Miliamps
CAC.....	Charge Air Cooler	NLA.....	No Longer Available
CE.....	European Conformity	NPT.....	National Pipe Threads
CCW.....	Counter Clockwise	NSS.....	Not Sold Separately
CM.....	Centimeter	OD.....	Outside Diameter
CW.....	Clockwise	ORB.....	O-Ring Boss
CSA.....	Canadian Standards Association	ORFS.....	O-Ring Face Seal
CYL.....	Cylinder	OZ (oz).....	Ounces
DIA.....	Diameter	PG.....	Page
DC.....	Direct Current	PN.....	Part Number
DEF.....	Diesel Exhaust Fluid	QT(qt.).....	Quarts
EMS.....	Emergency Stop	QTY.....	Quantity
ENG.....	Engine	REF.....	Reference
FT(ft).....	Feet	REV.....	Revision Level
GA(Ga).....	Gauge	RH.....	Right Hand
HRC.....	High Rated Countries	SAE.....	Society of Automotive Engineers
HVAC.....	Heating, Ventilating, and Air Conditioning	SN.....	Serial Number
HYD.....	Hydraulic	SPEC(S).....	Specifications
Hz.....	Hertz	T/T.....	Turntable
ID.....	Inside Diameter	UGM.....	Universal Ground Module
IN.....	inches	V.....	Volts
ISO.....	International Organization for Standards	W.....	Watts
JIC.....	Joint Industry Council	#.....	Number
KG.....	Kilogram		

10) ILLUSTRATION REFERENCE LETTERS

When necessary, illustrations may contain reference letters that are intended to track information (i. e. hoses, harnesses) from one point to another or to track visual enlargement of components to show details that may be located in another area on the illustration.

Note: Due to continuous product improvements, JLG Industries, Inc. reserves the right to make specification changes without prior notification. Contact JLG Industries, Inc. for updated information.

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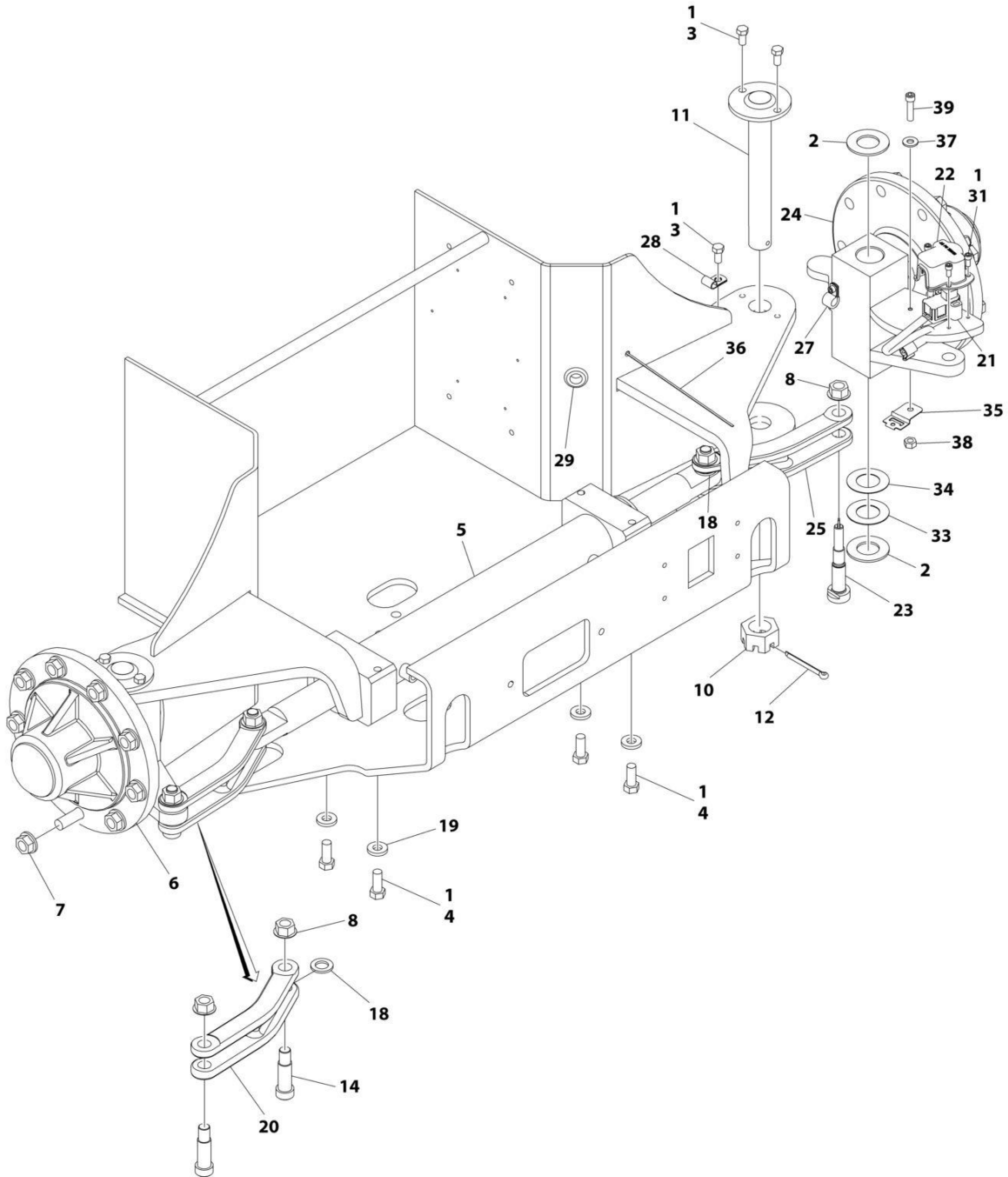
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SECTION 1 - FRAME

SECTION 1 - FRAME

FIGURE 1-1. STEERING INSTALLATION - E450AJ (CHINA BUILT MACHINES)



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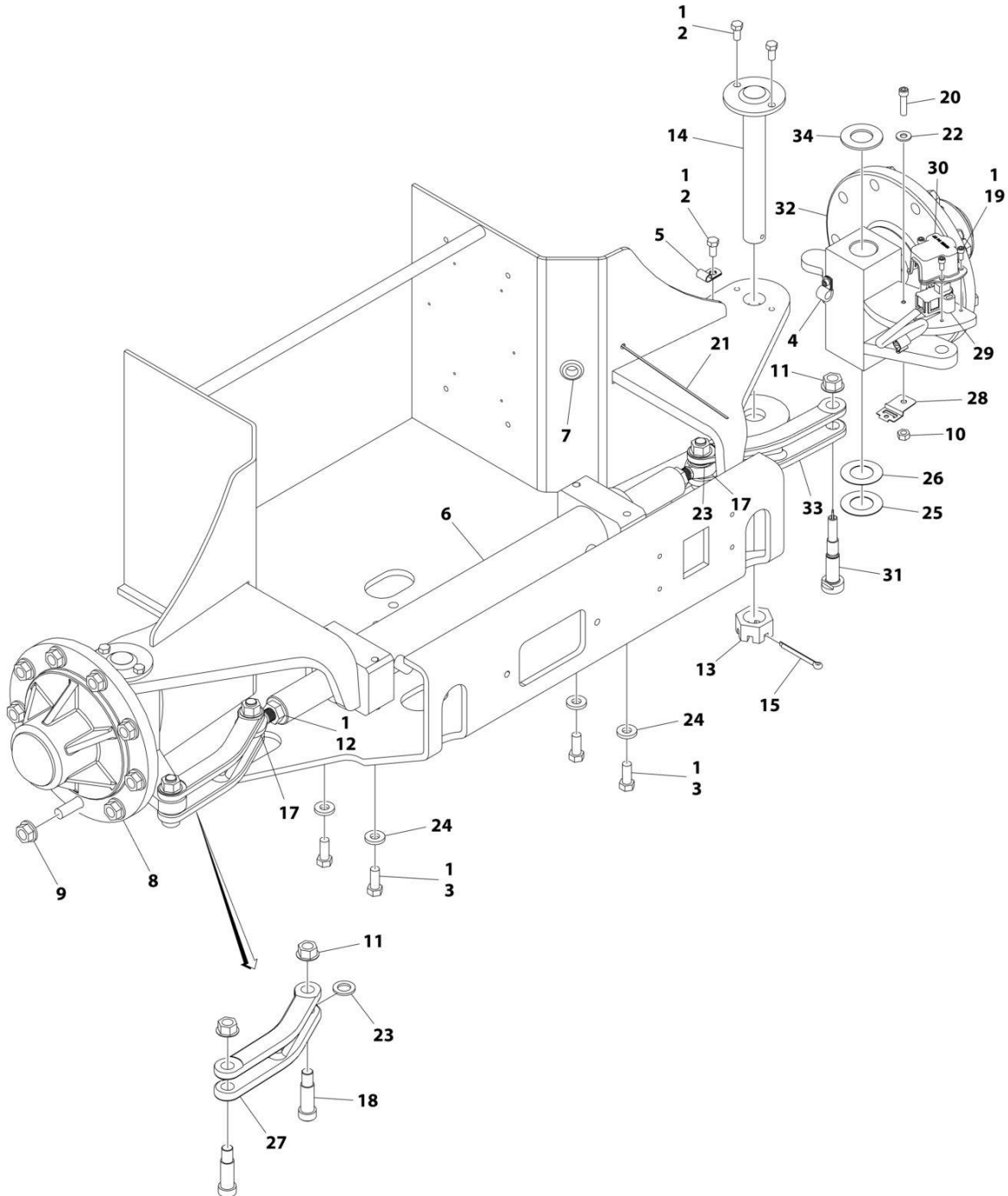
SECTION 1 - FRAME

FIGURE 1-1. STEERING INSTALLATION - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001180923	Ref	STEERING INSTALLATION	G
1	0100011	AR	Compound, Locking	
2	1001193047	AR	Bearing, Thrust	
3	0641606	5	Bolt 3/8 X 3/4	
4	0681810	4	Bolt 1/2 X 1-1/4 Grade 8	
5	1001221480	1	Steer Cylinder Assembly (See Separate Breakdown in CYLINDER Section)	
6	2780241	1	Hub - Spindle Assembly - RH (See Separate Breakdown in this Section)	
7	3300426	18	Nut 5/8	
8	3312008	4	Nut 5/8	
10	3323003	2	Nut 1-1/4	
11	3422692	2	Kingpin	
12	3450810	2	Pin, Cotter	
14	3900109	3	Screw, Shoulder	
18	4740156	2	Washer	
19	4891800	4	Washer 1/2	
20	1001153021	1	Link	
21	1001161117	1	Switch, Angle Sensor	
21	4460536	1	Receptacle, Female - 3 Position	
21	4460464	3	Pin, Male	
22	1001169423	1	Cover	
23	1001180835	1	Pin	
24	1001180839	1	Hub - Spindle Assembly - LH (See Separate Breakdown in this Section)	
25	1001180841	1	Link	
27	1320041	1	Clamp	
28	1320263	1	Clamp, Cable	
29	2540038	1	Grommet	
31	3931408	4	Capscrew 1/4 X 1/2	
33	1001151395	1	Shim 18Ga	
34	1001151428	1	Shim 20Ga	
35	1001153749	1	Clip, Connector	
36	4240175	1	Tie-Strap	
37	4711400	1	Washer 1/4	
38	3311405	1	Nut 1/4	
39	3931416	1	Capscrew 1/4 x 1	

SECTION 1 - FRAME

FIGURE 1-2. STEERING INSTALLATION (USA BUILT MACHINES)



ART_1001232203

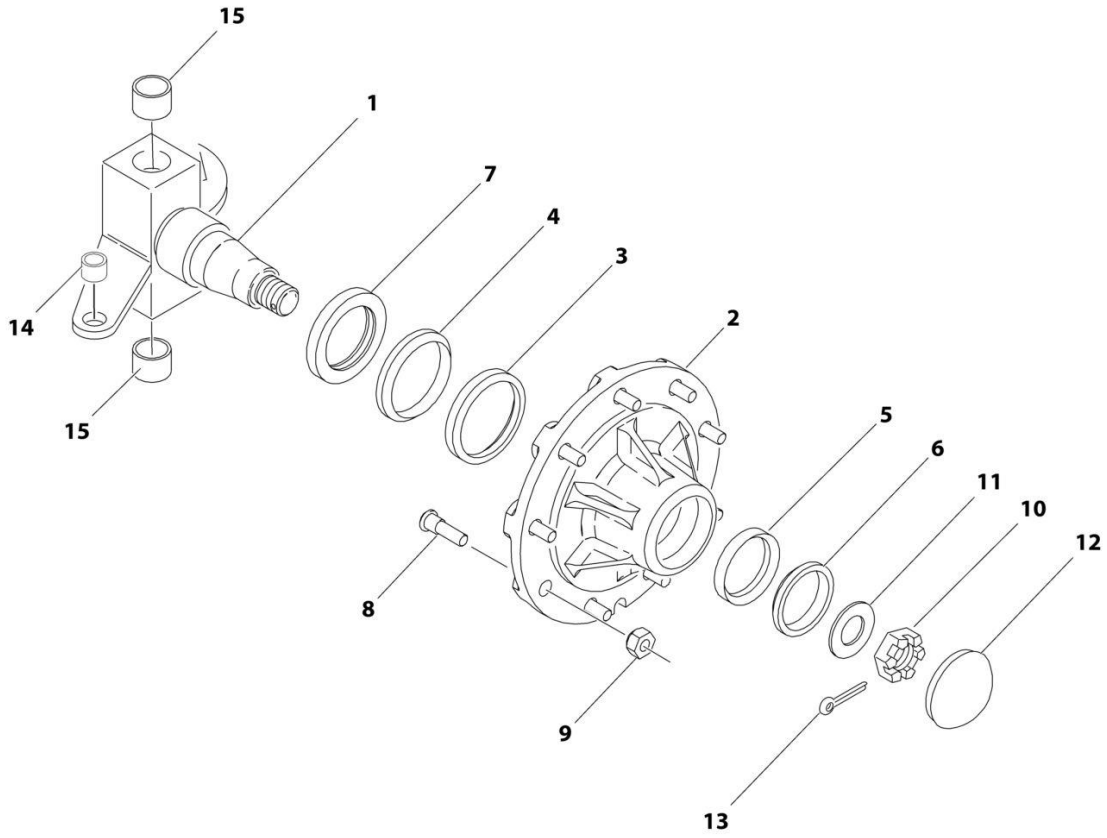
SECTION 1 - FRAME

FIGURE 1-2. STEERING INSTALLATION (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001232203	Ref	STEERING INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0641606	5	Bolt 3/8 X 3/4	
3	0681810	4	Bolt 1/2 X 1-1/4 Grade 8	
4	1320041	1	Clamp	
5	1320263	1	Clamp, Cable	
6	1683591	1	Steer Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	
7	2540038	1	Grommet	
8	2780241	1	Hub - Spindle Assembly - RH (See Separate Breakdown in this Section)	
9	3300426	18	Nut 5/8	
10	3311405	1	Nut 1/4	
11	3312008	4	Nut 5/8	
12	3322202	2	Nut	
13	3323003	2	Nut 1-1/4	
14	3422692	2	Kingpin	
15	3450810	2	Pin, Cotter	
17	3841517	2	End, Tie-Rod	
18	3900109	3	Screw, Shoulder	
19	3931408	4	Capscrew 1/4 X 1/2	
20	3931416	1	Capscrew 1/4 x 1	
21	4240175	1	Tie-Strap	
22	4711400	1	Washer 1/4	
23	4740156	2	Washer	
24	4891800	4	Washer 1/2	
25	1001151395	1	Shim 18Ga	
26	1001151428	1	Shim 20Ga	
27	1001153021	1	Link	
28	1001153749	1	Clip, Connector	
29	1001161117	1	Switch, Angle Sensor	
29	4460536	1	Receptacle, Female - 3 Position	
29	4460464	3	Pin, Male	
30	1001169423	1	Cover	
31	1001180835	1	Pin	
32	1001180839	1	Hub - Spindle Assembly - LH (See Separate Breakdown in this Section)	
33	1001180841	1	Link	
34	1001193047	2	Bearing, Thrust	

SECTION 1 - FRAME

FIGURE 1-3. HUB - SPINDLE ASSEMBLY - RH



ART_2780241

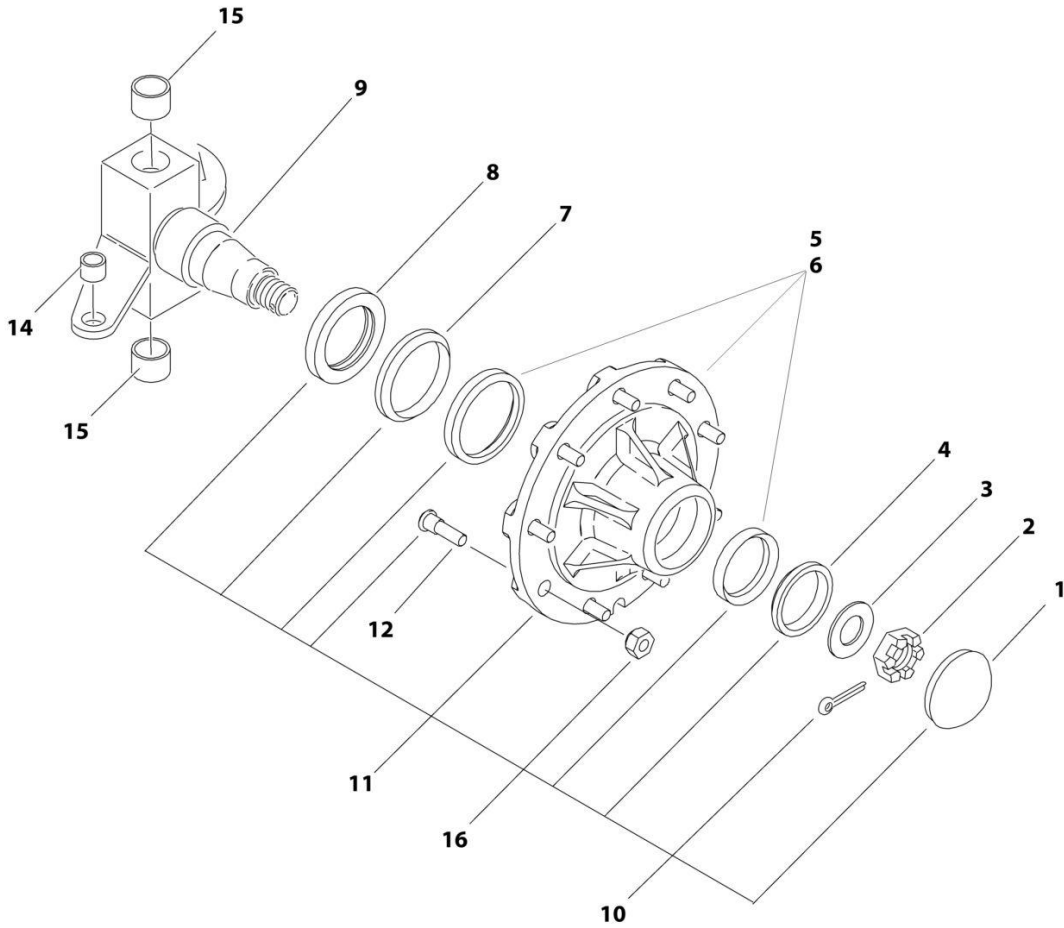
SECTION 1 - FRAME

FIGURE 1-3. HUB - SPINDLE ASSEMBLY - RH

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2780241	Ref	HUB - SPINDLE ASSEMBLY, RH	C
1	4130351	1	Spindle R.H.	
2	7020035	1	Hub	
3	7020036	1	Cup, Bearing - Inner	
4	7020037	1	Cone, Bearing - Inner	
5	7020038	1	Cup, Bearing - Outer	
6	7020039	1	Cone, Bearing - Outer	
7	7020040	1	Seal	
8	7020041	9	Stud, Wheel	
9	7020042	9	Lugnut	
10	7020054	1	Nut, Castle	
11	7020055	1	Washer, Spindle	
12	7020137	1	Dust Cap	
13	7020140	1	Pin, Cotter	
14	0962140	1	Bushing	
15	0961951	2	Bushing	

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FIGURE 1-4. HUB - SPINDLE ASSEMBLY - LH



ART_1001180839

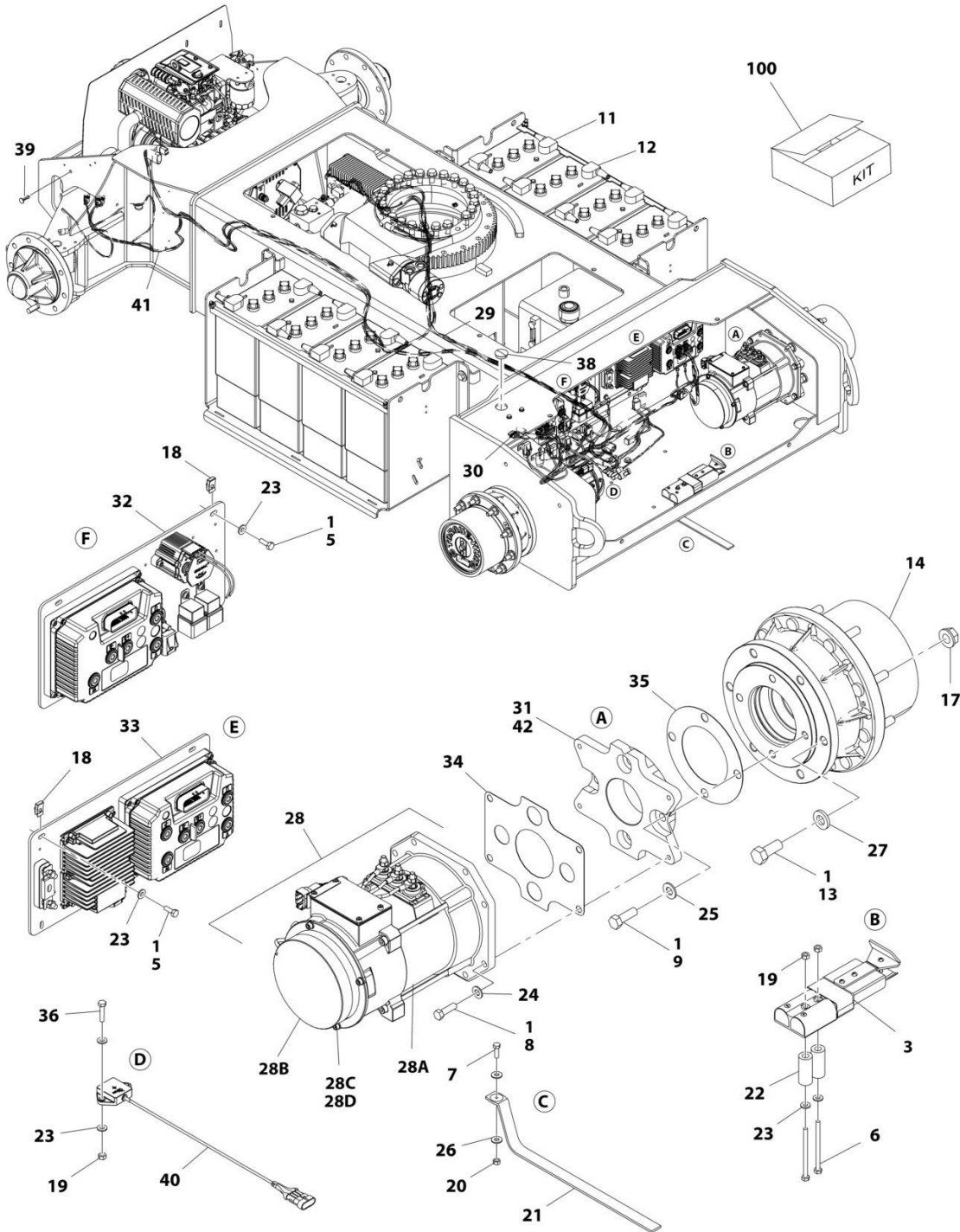
SECTION 1 - FRAME

FIGURE 1-4. HUB - SPINDLE ASSEMBLY - LH

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001180839	Ref	HUB - SPINDLE ASSEMBLY - LH	E
1	7020137	1	Dust Cap	
2	7020054	1	Nut, Castle	
3	7020055	1	Washer, Spindle	
4	7020039	1	Cone, Bearing - Outer	
5	See Note	NLA	Hub (Note: Use Item 11)	
6	See Note	1	Grease, Lithium (Note: Purchase Locally)	
7	7020037	1	Cone, Bearing - Inner	
8	7020040	1	Seal	
9	70005216	1	Spindle	
10	7020140	1	Pin, Cotter	
11	70005215	1	Hub Assembly (Includes Items 1,4,5,7,8 & 12))	
12	0630490	9	Stud, Wheel	
14	0962140	1	Bearing	
15	0961951	2	Bearing	
16	3300426	9	Lugnut (Note: Must be Purchased Separately)	

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FIGURE 1-5. DRIVE INSTALLATION - E450A AND E450AJ (NON-UL SPECS)



ART_1001179134

SECTION 1 - FRAME

FIGURE 1-5. DRIVE INSTALLATION - E450A AND E450AJ (NON-UL SPECS)

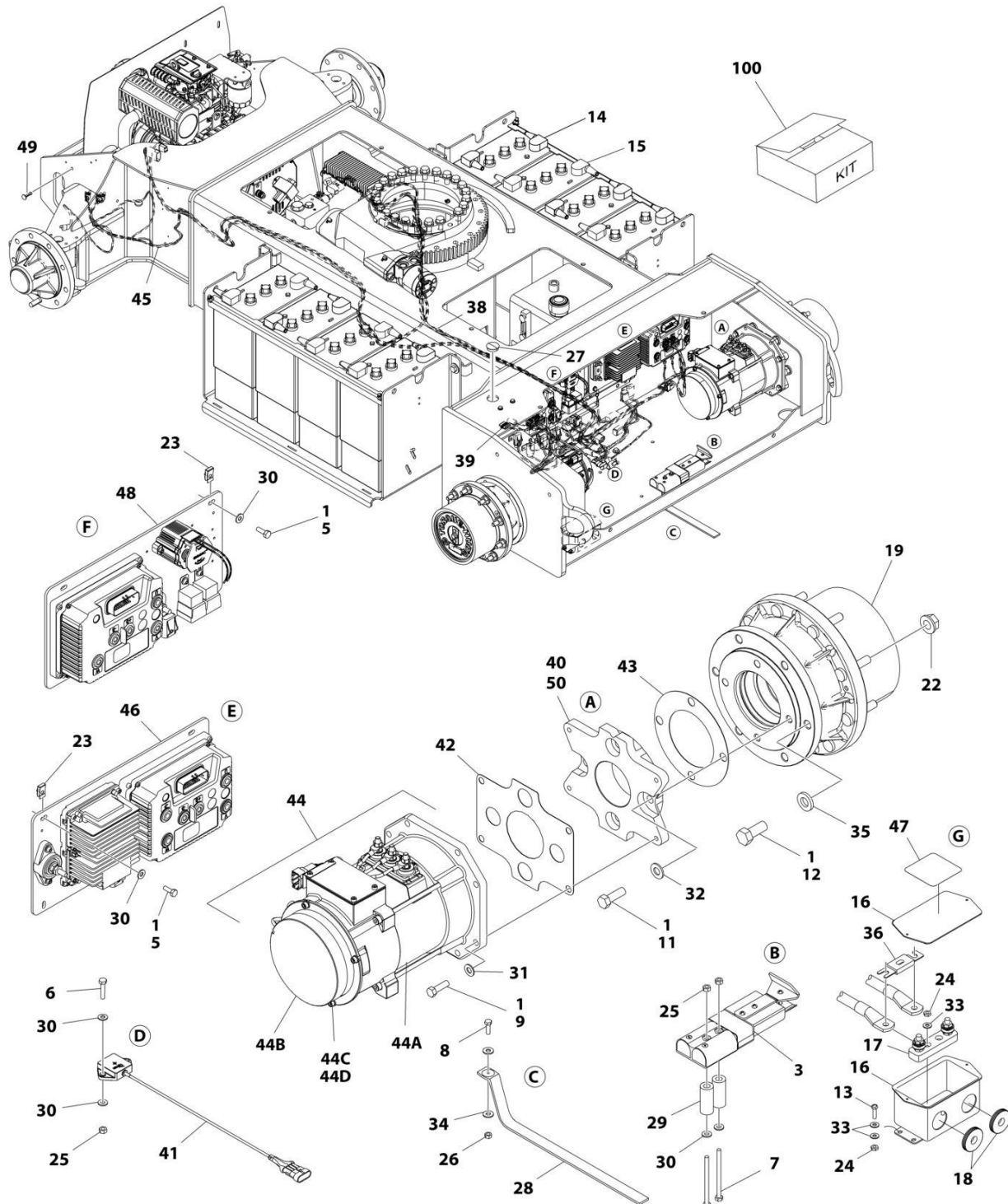
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001179134	Ref	DRIVE INSTALLATION	K
1	0100011	AR	Compound, Locking	
3	0100048	AR	Compound, Silicone	
5	0641406	8	Bolt 1/4 X 3/4	
6	0641430	2	Bolt 1/4 X 3-3/4	
7	0641508	1	Bolt 5/16 X 1	
8	0641610	8	Bolt 3/8 X 1-1/4	
9	0641812	8	Bolt 1/2 X 1-1/2	
11	0840031	8	Boot, Terminal - "d" Shaped	
12	0840032	8	Boot, Terminal - "b" Shaped	
13	0682014	12	Bolt 5/8 X 1-3/4 Grade 8	
14	2780282	2	Drive Hub Assembly (See Separate Breakdown in this Section)	
17	3300426	18	Nut 5/8	
18	3300454	8	Nut 1/4	
19	3311401	4	Nut 1/4	
20	3311505	1	Nut 5/16	
21	4240084	1	Strap, Anti-Static	
22	4568114	2	Tube, Spacer	
23	4711400	14	Washer 1/4	
24	4711600	8	Washer 3/8	
25	4711800	8	Washer 1/2	
26	4751500	2	Washer 5/16	
27	4892000	12	Washer 5/8	
28	1001184854	2	Drive Motor and Brake Assembly	
28A	1001182550	2	Drive Motor Assembly (See Separate Breakdown in this Section)	
28B	1001184852	2	Drive Brake Assembly	
28B	70005415	2	O-Ring Between Brake and Motor (1 Per Assembly) (Not Shown)	
28C	4031707	8	Capscrew M6 x 16	
28D	1001109892	8	Washer M6	
29	1001178405	1	Chassis to Turntable Harness (See Separate Breakdown in ELECTRICAL Section)	
30	1001178629	1	Traction Harness (See Separate Breakdown in ELECTRICAL Section)	
31	1001219722	2	Adapter, Motor	
32	1001179060	1	Electrical Plate Assembly - LH (See Separate Breakdown in this Section)	
33	1001179061	1	Electrical Plate Assembly - RH (See Separate Breakdown in this Section)	
34	1001220271	2	Seal	
35	1001182960	2	Seal	
36	0641408	2	Bolt 1/4-20 x 1	
38	3520035	1	Cap-Plug	
39	4240175	1	Tie-Strap Clamp	
40	1001219601	1	Sensor	
40	See Note	1	Receptacle, Female - 4 Position (Note: Not Available for Purchase)	
40	1001196589	4	Terminal	
41	1001188528	1	Steer/Brake Harness (See Separate Breakdown in ELECTRICAL Section)	
42	0100020	AR	Sealant	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
100	1001190088	1	Battery Cable Kit (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 1-6. DRIVE INSTALLATION - E450A AND E450AJ (UL SPECS)



ART_1001212453

SECTION 1 - FRAME

FIGURE 1-6. DRIVE INSTALLATION - E450A AND E450AJ (UL SPECS)

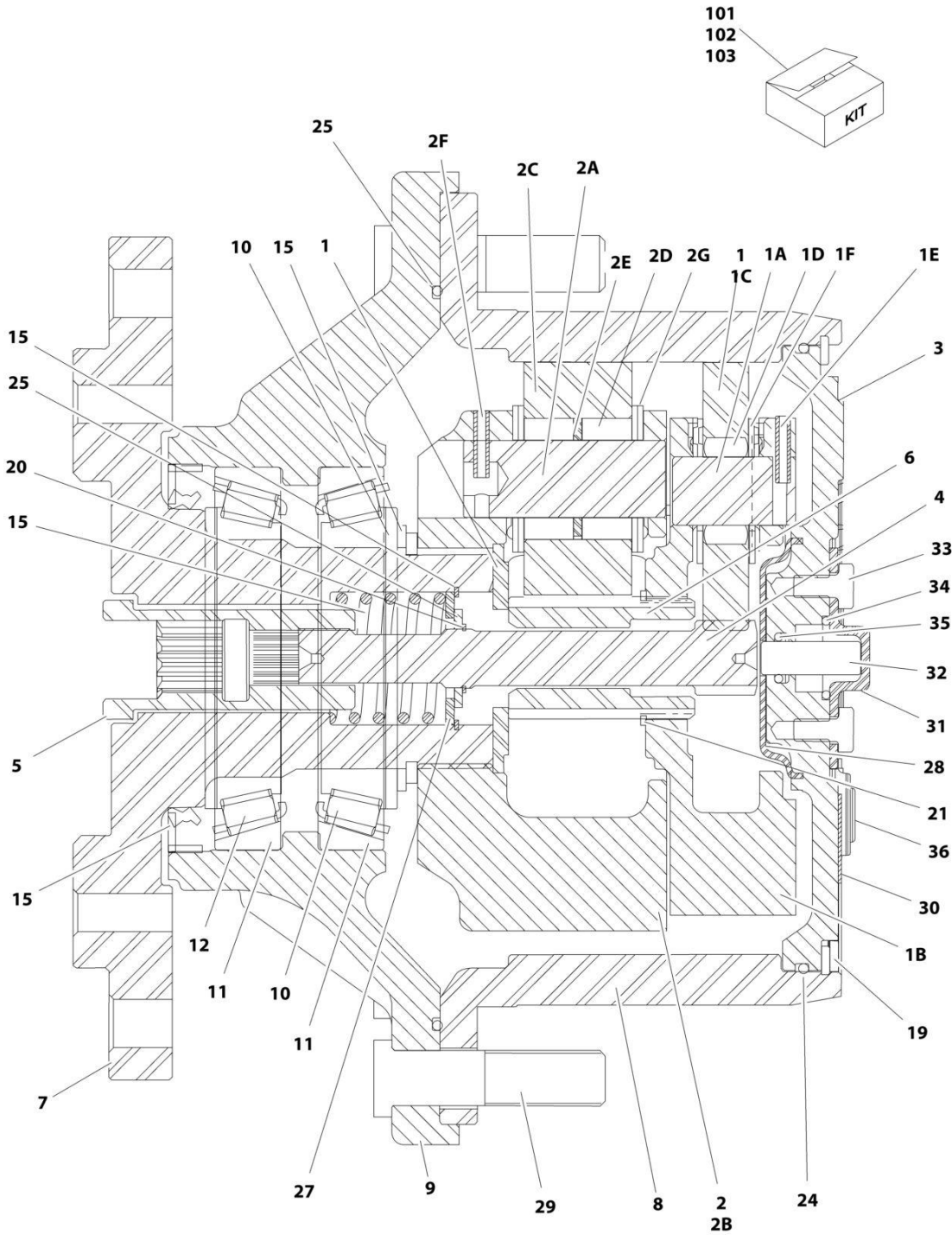
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001212453	Ref	DRIVE INSTALLATION	F
1	0100011	AR	Compound, Locking	
3	0100048	AR	Compound, Silicone	
5	0641406	8	Bolt 1/4 x 3/4	
6	0641408	2	Bolt 1/4 x 1	
7	0641430	2	Bolt 1/4 x 3-3/4	
8	0641508	1	Bolt 5/16 x 1	
9	0641610	8	Bolt 3/8 x 1-1/4	
11	0641812	8	Bolt 1/2 x 1-1/2	
12	0682014	12	Bolt 5/8 x 1-3/4 Grade 8	
13	0721006	4	Bolt #10 x 3/4	
14	0840031	8	Boot, Terminal - "d" Shaped	
15	0840032	8	Boot, Terminal - "b" Shaped	
16	0861375	1	Box	
17	2400044	1	Block, Fuse	
18	2540037	2	Grommet	
19	2780282	2	Drive Hub Assembly (See Separate Breakdown in this Section)	
22	3300426	18	Nut 5/8	
23	3300454	8	Nut 1/4	
24	3311001	6	Nut #10	
25	3311401	4	Nut 1/4	
26	3311505	1	Nut 5/16	
27	3520035	1	Cap-Plug	
28	4240084	1	Strap, Anti-Static	
29	4568114	2	Tube, Spacer	
30	4711400	14	Washer 1/4	
31	4711600	8	Washer 3/8	
32	4711800	8	Washer 1/2	
33	4751000	10	Washer, 10	
34	4751500	2	Washer 5/16	
35	4892000	12	Washer 5/8	
36	1001170365	1	Fuse 400 Amp	
38	1001178405	1	Chassis to Turntable Harness (See Separate Breakdown in ELECTRICAL Section)	
39	1001178629	1	Traction Harness (See Separate Breakdown in ELECTRICAL Section)	
40	1001219722	2	Adapter, Motor	
41	1001219601	1	Sensor	
41	See Note	1	Receptacle, Female - 4 Position (Note: Not Available for Purchase)	
41	1001196589	4	Terminal	
42	1001220271	2	Seal	
43	1001182960	2	Seal	
44	1001184854	2	Drive Motor and Brake Assembly	
44A	1001182550	2	Drive Motor Assembly (See Separate Breakdown in this Section)	
44B	1001184852	2	Drive Brake Assembly	
44B	70005415	2	O-Ring Between Brake and Motor (1 Per Assembly) (Not Shown)	
44C	4031707	8	Capscrew M6 x 16	
44D	1001109892	8	Washer M6	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45	1001188528	1	Steer/Brake Harness (See Separate Breakdown in ELECTRICAL Section)	
46	1001212456	1	Electrical Plate Assembly - RH (See Separate Breakdown in this Section)	
47	1001213626	1	Decal - 400 Amp Fuse	
48	1001214668	1	Electrical Plate Assembly - LH (See Separate Breakdown in this Section)	
49	4240175	1	Tie-Strap Clamp	
50	0100020	AR	Sealant	
100	1001212454	1	Battery Cable Kit (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 1-7. DRIVE HUB ASSEMBLY



ART_2780282

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FIGURE 1-7. DRIVE HUB ASSEMBLY

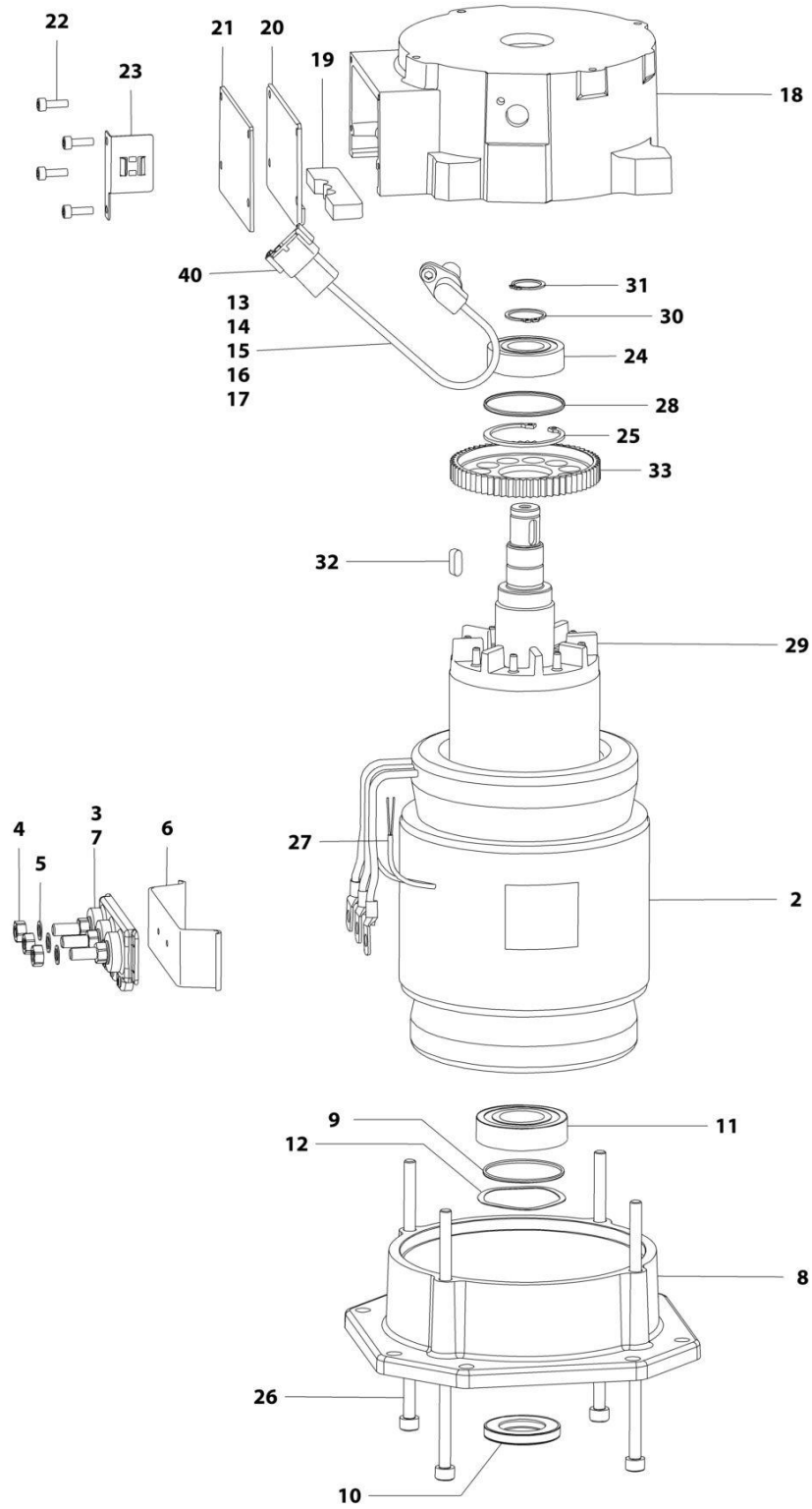
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2780282	Ref	DRIVE HUB ASSEMBLY	D
1	70001366	1	Carrier Sub Assembly	
1A	See Note	NSS	Shaft, Planet (Note: Use Item 1)	
1B	See Note	NSS	Carrier (Note: Use Item 1)	
1C	See Note	NSS	Gear, Planet (Note: Use Item 1)	
1D	See Note	NSS	Bearing, Needle (Note: Use Item 1)	
1E	See Note	NSS	Rollpin (Note: Use Item 1)	
1F	See Note	NSS	Thrustwasher (Note: Use Item 1)	
2	70001367	1	Carrier, Input	
2A	See Note	NSS	Shaft, Planet (Note: Use Item 2)	
2B	See Note	NSS	Carrier (Note: Use Item 2)	
2C	See Note	NSS	Gear, Planet (Note: Use Item 2)	
2D	See Note	NSS	Bearing, Needle (Note: Use Item 2)	
2E	See Note	NSS	Spacer, Thrust (Note: Use Item 2)	
2F	See Note	NSS	Rollpin (Note: Use Item 2)	
2G	See Note	NSS	Thrustwasher (Note: Use Item 2)	
2H	See Note	NSS	Thrustwasher (Note: Use Item 2)	
3	See Note	NSS	Cover (Note: Use Item 103)	
4	70001369	1	Shaft, Input	
5	70001370	1	Coupling	
6	70001371	1	Shaft, Sun Gear	
7	70001372	1	Spindle	
8	70001373	1	Gear, Ring	
9	See Note	NSS	Housing (Note: Not Available - Purchase Complete Assembly)	
10	See Note	NSS	Cone, Bearing (Note: Use Item 101)	
11	See Note	NSS	Cup, Bearing (Note: Use Item 101)	
12	See Note	NSS	Cone, Bearing (Note: Use Item 101)	
13	7017009	1	Thrustwasher	
15	See Note	NSS	Seal, Lip (Note: Use Item 102)	
16	70001374	1	Spring	
17	70001375	1	Ring, Retaining (Internal)	
18	See Note	NSS	Ring, Retaining (Note: Use Item 102)	
19	7024738	1	Ring, Retaining (Note: Use Item 102)	
20	70001376	1	Ring, Retaining (External)	
21	70001377	1	Ring, Retaining (External)	
22	7000281	4	Screw (Not Shown - ID Plate Screws)	
23	7017022	3	Screw (Not Shown - Located on Front of Hub)	
24	See Note	NSS	O-Ring (Note: Use Item 102)	
25	See Note	NSS	O-Ring (Note: Use Item 102)	
26	70001378	1	Spacer, Thrust	
27	70001379	1	Thrustwasher	
28	7024741	1	Spacer, Thrust	
29	7007640	9	Stud, Wheel	
30	See Note	NSS	Flange, Plate (Note: Use Item 103)	
31	See Note	NSS	Cap, Disengage (Note: Use Item 103)	
32	See Note	NSS	Pin, Dowel (Note: Use Item 103)	
33	See Note	NSS	Bolt (Note: Use Item 103)	
34	See Note	NSS	O-Ring (Note: Use Item 103)	
35	See Note	NSS	O-Ring (Note: Use Item 103)	
36	See Note	NSS	O-Ring (Note: Use Item 103)	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
101	7017007	1	Planet Gear Bearing Kit (Includes Items 10-12)	
102	70001380	1	Planet Gear Seal Kit (Includes Items 15, 18, 24 & 25)	
103	70001368	1	Cover/Cap/Disengage Kit (Includes Items 3 & 30-36)	

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FIGURE 1-8. DRIVE MOTOR ASSEMBLY



ART_1001182550

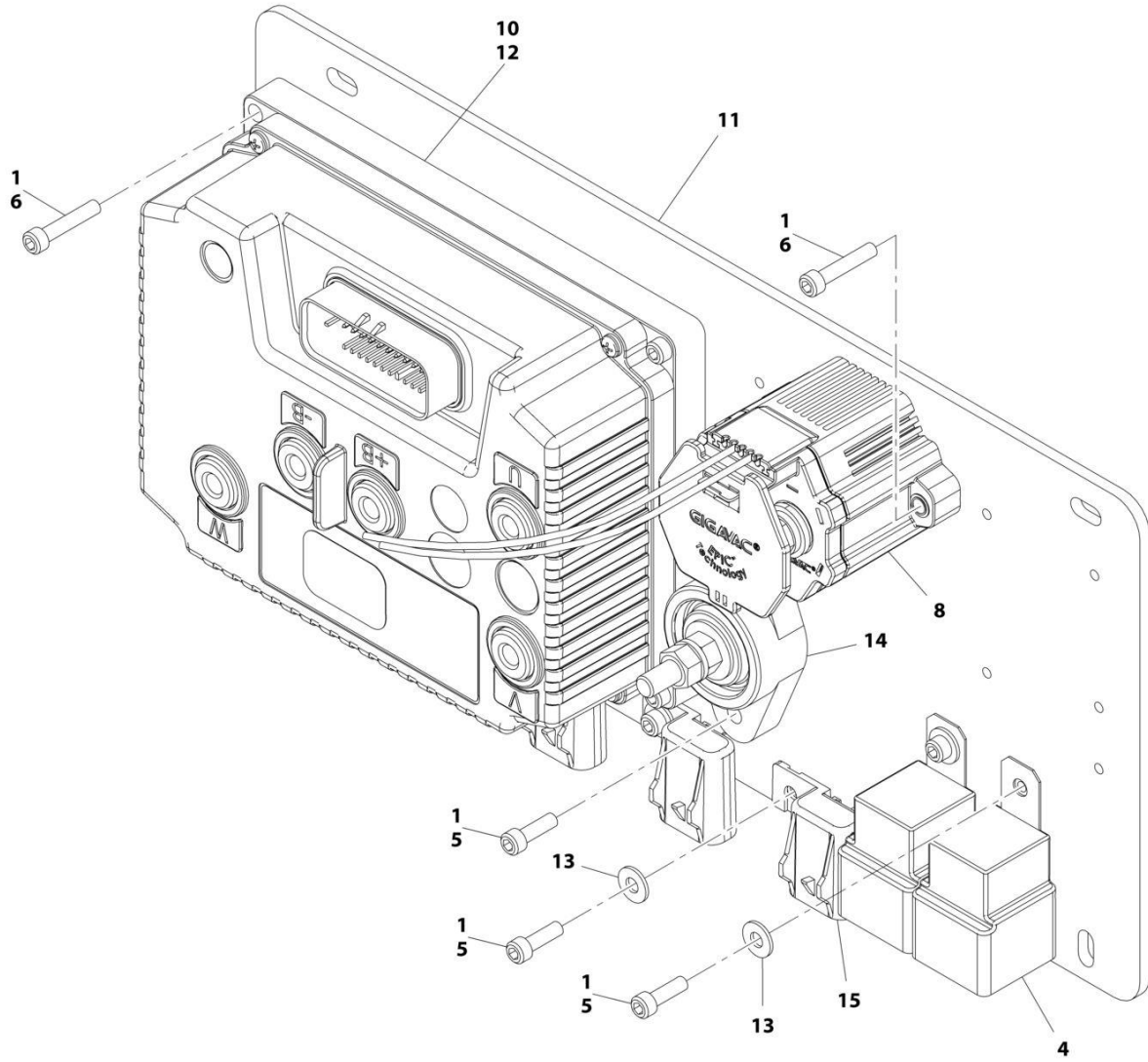
SECTION 1 - FRAME

FIGURE 1-8. DRIVE MOTOR ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001182550	Ref	DRIVE MOTOR ASSEMBLY	F
2	70005385	1	Stator	
3	70005386	1	Board, Terminal	
4	70005387	3	Nut M8	
5	70005388	3	Washer M8	
6	70005389	1	Base, Terminal	
7	70005390	2	Screw M5 x 14	
8	70005391	1	Plate, Drive End	
9	70004811	1	O-Ring	
10	70005392	1	Seal, Shaft	
11	70004809	1	Bearing	
12	70005393	1	Washer, Wavy	
13	70005394	1	Sensor (Includes Items 14-17)	
14	70005395	1	Screw M8 x 16	
15	70005396	1	Wedge	
16	70005397	1	Connector	
17	4460516	4	Pin, Male	
18	70005398	1	Shield, End	
19	70005399	1	Seal	
20	70005400	1	Seal	
21	70005401	1	Cover	
22	70005402	4	Screw M5 x 16	
23	70005403	1	Plate, Retaining	
24	70005404	1	Bearing	
25	70005405	1	Clip, Retainer	
26	70005406	4	Screw M8 x 180	
27	70005407	1	Temperature, Sensor	
28	70005408	1	O-Ring	
29	70005409	1	Rotor	
30	70004820	1	Clip, Retainer	
31	70005410	1	Clip, Retainer	
32	70005411	1	Key	
33	70005412	1	Gear	
40	1001190577	1	Connector - 8 Position	
40	4460516	8	Pin	

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FIGURE 1-9. ELECTRICAL PLATE ASSEMBLY - LH (NON-UL SPECS)



ART_1001179060

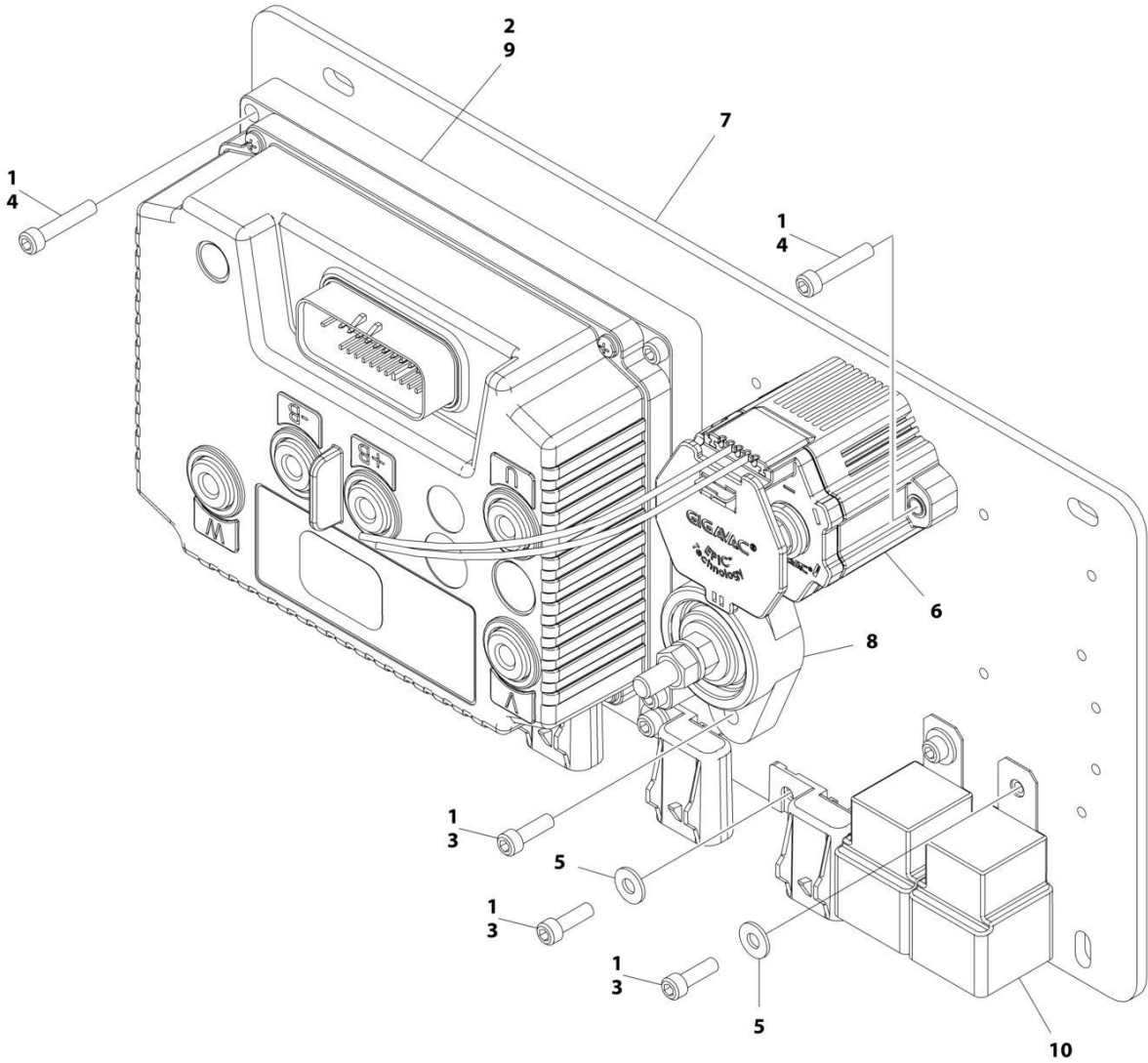
SECTION 1 - FRAME

FIGURE 1-9. ELECTRICAL PLATE ASSEMBLY - LH (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001179060	Ref	ELECTRICAL PLATE ASSEMBLY	G
1	0100035	AR	Compound, Locking	
4	3740080	2	Relay	
5	3931010	8	Capscrew #10 X 5/8	
6	3931016	6	Capscrew #10 X 1	
8	1001170367	1	Relay, Contacter	
8	70004827	1	Receptacle, Female - 2 Position	
10	1001192212	1	Module, Drive	
11	1001179064	1	Plate	
12	0100083	AR	Grease, Heat Transfer	
13	4711000	6	Washer #10	
14	1001186860	1	Stud, Power Distribution	
15	1001217842	4	Fuseholder	

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FIGURE 1-10. ELECTRICAL PLATE ASSEMBLY - LH (UL SPECS)



ART_1001214668

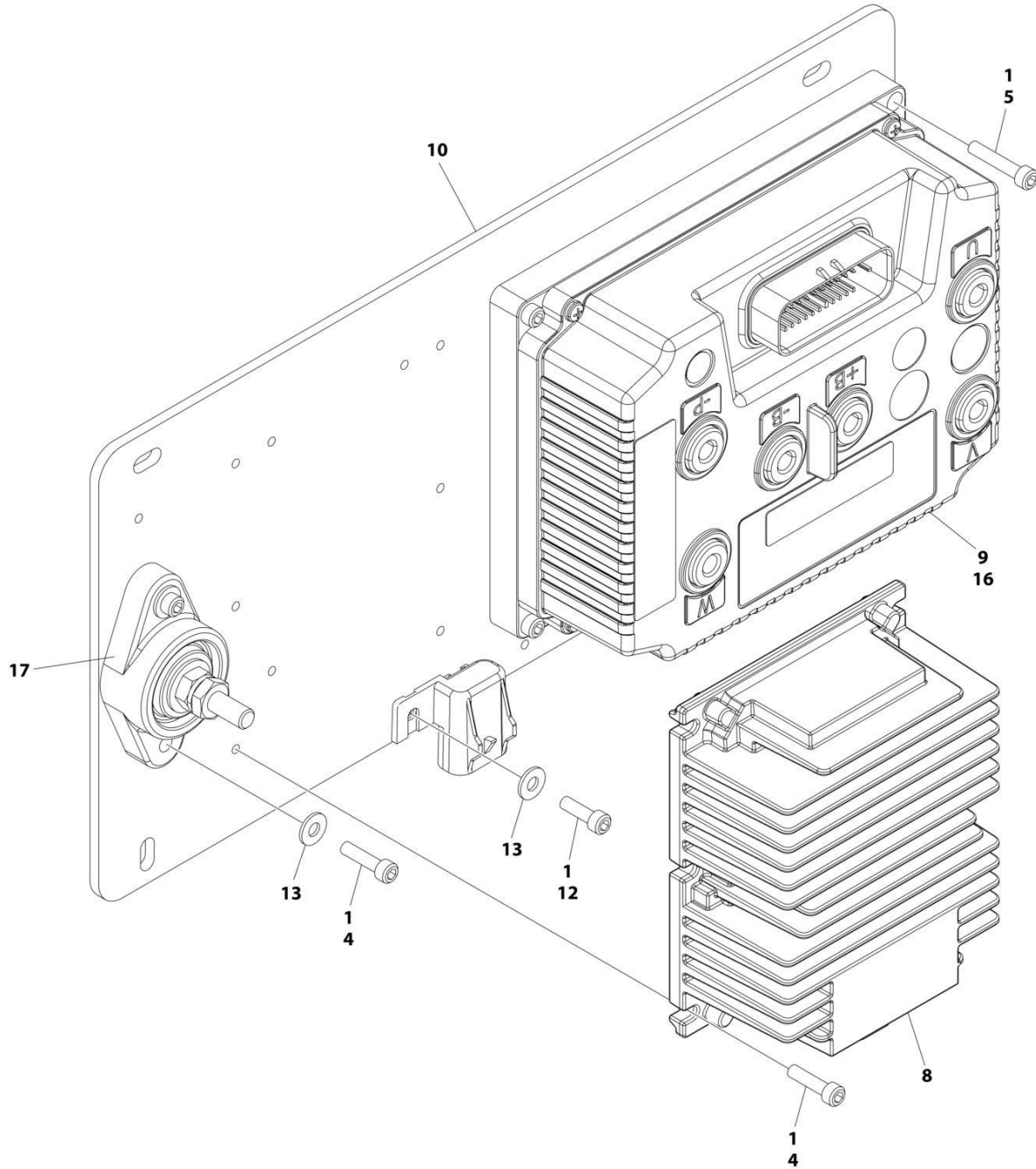
SECTION 1 - FRAME

FIGURE 1-10. ELECTRICAL PLATE ASSEMBLY - LH (UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001214668	Ref	ELECTRICAL PLATE ASSEMBLY - LH	B
1	0100035	AR	Compound, Locking	
2	0100083	AR	Grease, Heat Transfer	
3	3931010	8	Capscrew #10 x 5/8	
4	3931016	6	Capscrew #10 x 1	
5	4711000	6	Washer #10	
6	1001272006	1	Relay, Contactor	
6	1001153612	1	Receptacle, Female - 2 Position	
7	1001179064	1	Plate	
8	1001186860	1	Stud, Power Distribution	
9	1001192212	1	Module, Drive	
10	1001214667	2	Relay	

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FIGURE 1-11. ELECTRICAL PLATE ASSEMBLY - RH (NON-UL SPECS)



ART_1001179061

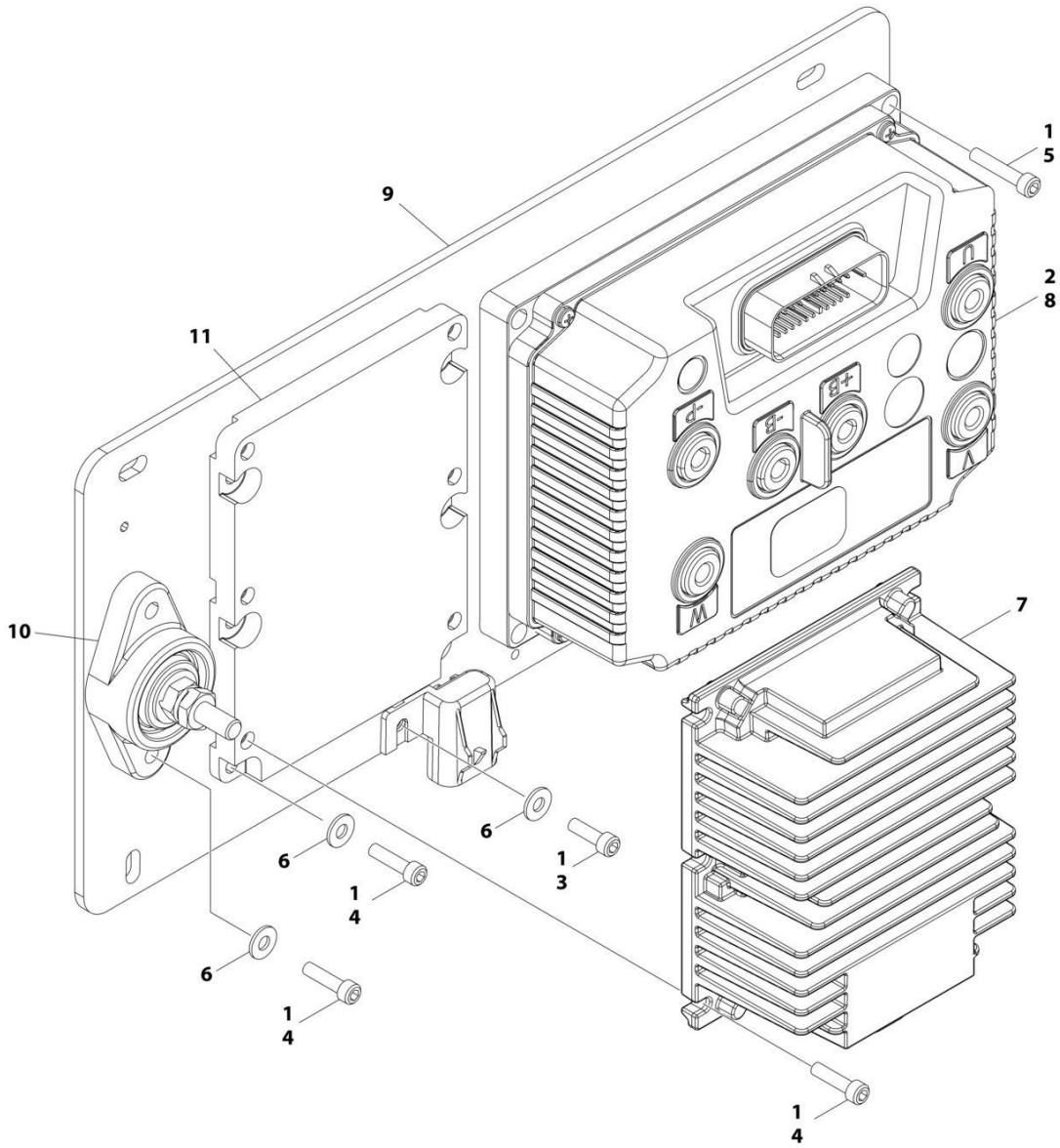
SECTION 1 - FRAME

FIGURE 1-11. ELECTRICAL PLATE ASSEMBLY - RH (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001179061	Ref	ELECTRICAL PLATE ASSEMBLY - RH	F
1	0100035	AR	Compound, Locking	
4	3931012	8	Capscrew #10 X 3/4	
5	3931016	4	Capscrew #10 X 1	
8	1001174447	1	Converter	
9	1001178339	1	Module, Drive	
10	1001179064	1	Plate	
12	3931010	1	Capscrew #10 X 5/8	
13	4711000	3	Washer #10	
16	0100083	AR	Grease, Heat Transfer	
17	1001212359	1	Stud, Power Distribution	

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FIGURE 1-12. ELECTRICAL PLATE ASSEMBLY - RH (UL SPECS)



ART_1001212456

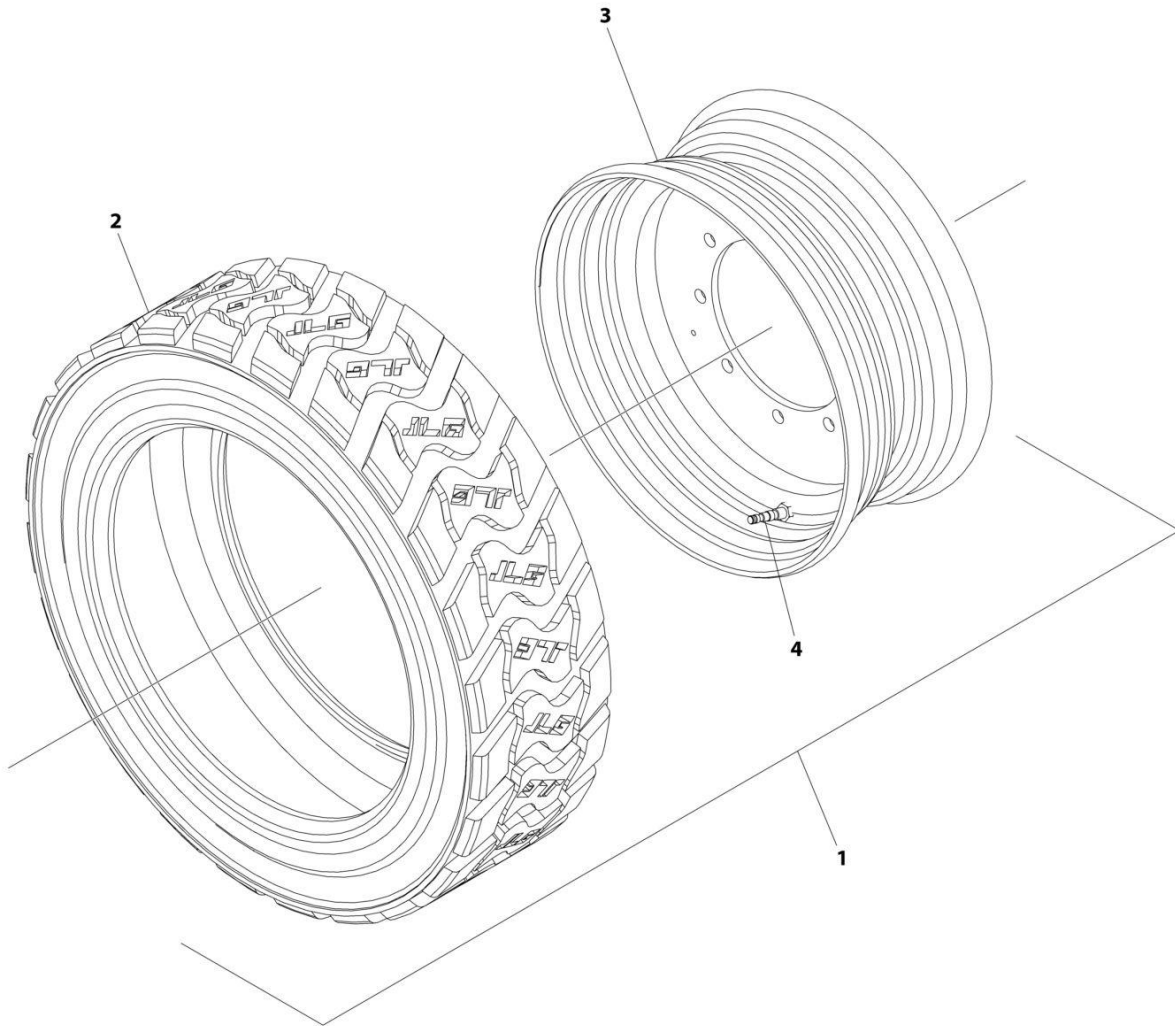
SECTION 1 - FRAME

FIGURE 1-12. ELECTRICAL PLATE ASSEMBLY - RH (UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001212456	Ref	ELECTRICAL PLATE ASSEMBLY - RH	A
1	0100035	AR	Compound, Locking	
2	0100083	AR	Grease, Heat Transfer	
3	3931010	1	Capscrew #10 X 5/8	
4	3931012	14	Capscrew #10 X 3/4	
5	3931016	4	Capscrew #10 X 1	
6	4711000	9	Washer #10	
7	1001174447	1	Converter	
8	1001178339	1	Module, Drive	
9	1001179064	1	Plate	
10	1001212359	1	Stud	
11	1001212450	1	Insulate	

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FIGURE 1-13. TIRE/WHEEL - IN240/55 - 17.5 FOAM FILLED



ART_0258996

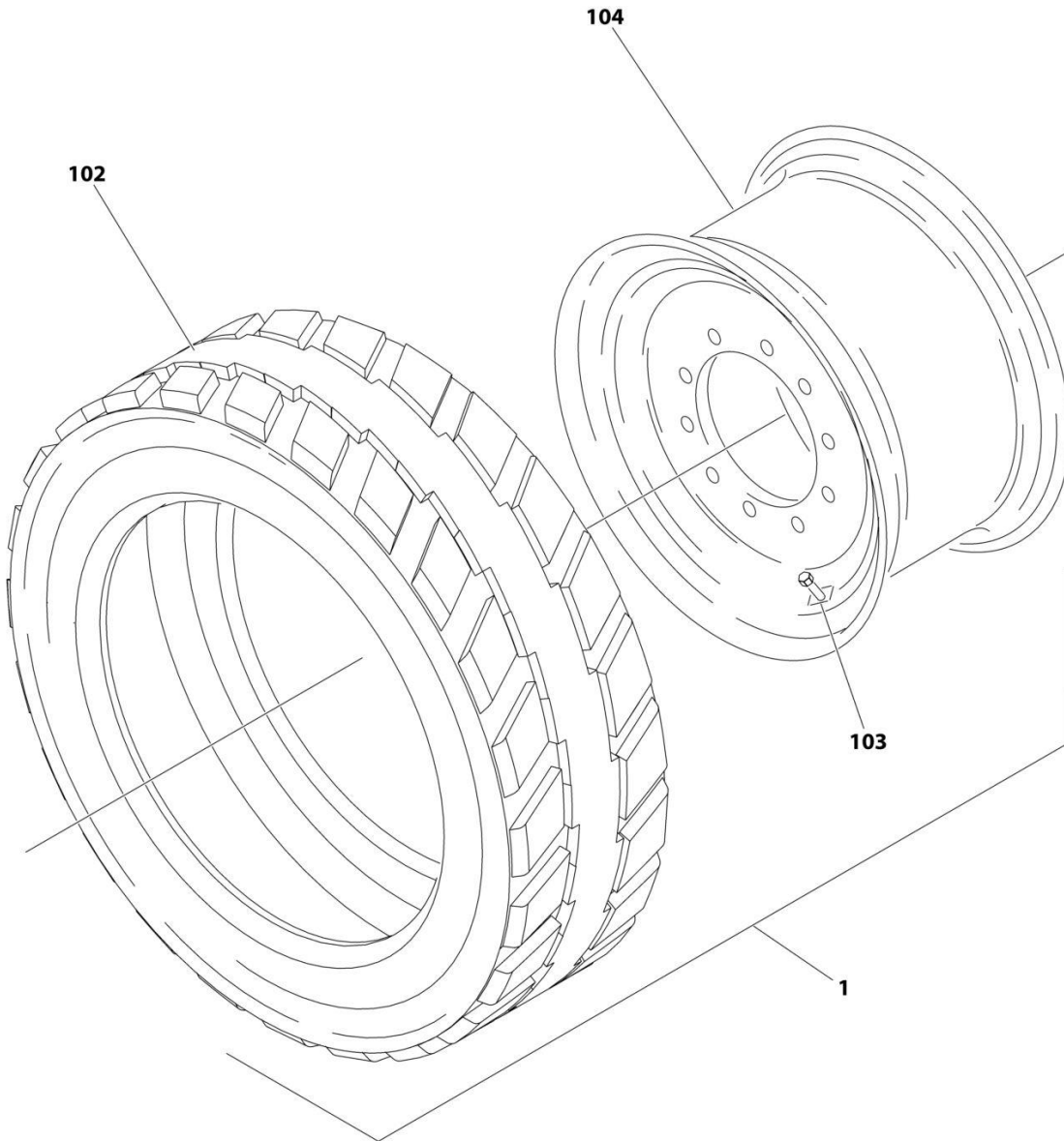
SECTION 1 - FRAME

FIGURE 1-13. TIRE/WHEEL - IN240/55 - 17.5 FOAM FILLED

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	0258996 0258997 See Note	Ref 4 Ref	TIRE AND WHEEL INSTALLATION Tire Assembly Note: Assemblies may require ballast/foam filling to manufacture's specifications prior to installing on a machine. Refer to Operation and Safety or Service and Maintenance Manuals. Purchase Individual tire and/or rim only if able to foam fill tire and wheel assembly, otherwise, purchase complete assembly	1 F
2	4520209	1	Tire, OTR, IN240/55-17.5	
3	4860191	1	Rim, Wheel	
4	4641122	1	Valve, Stem	

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FIGURE 1-14. TIRE/WHEEL - IN240/55-17.5 FOAM FILLED NON MARKING



ART_0273684

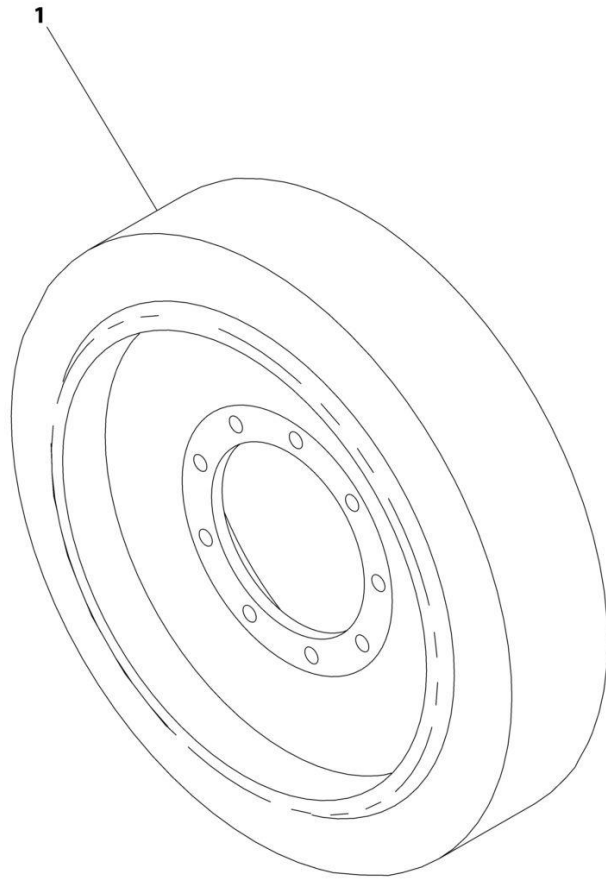
SECTION 1 - FRAME

FIGURE 1-14. TIRE/WHEEL - IN240/55-17.5 FOAM FILLED NON MARKING

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0273684	Ref	TIRE AND WHEEL INSTALLATION	A
		Ref	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. Purchase individual tire and/or rim only if able to foam fill tire and wheel assembly, otherwise, purchase complete assembly.	
1	0273468	4	Tire Assembly	H
102	4520269	1	Tire, OTR, IN240/55-17.5 Foam Filled Non Marking	
103	4641122	1	Valve, Stem	
104	4860191	1	Rim, Wheel	

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FIGURE 1-15. TIRE/WHEEL - 26 X 7 X 20 - SOLID NON MARKING



ART_0270037

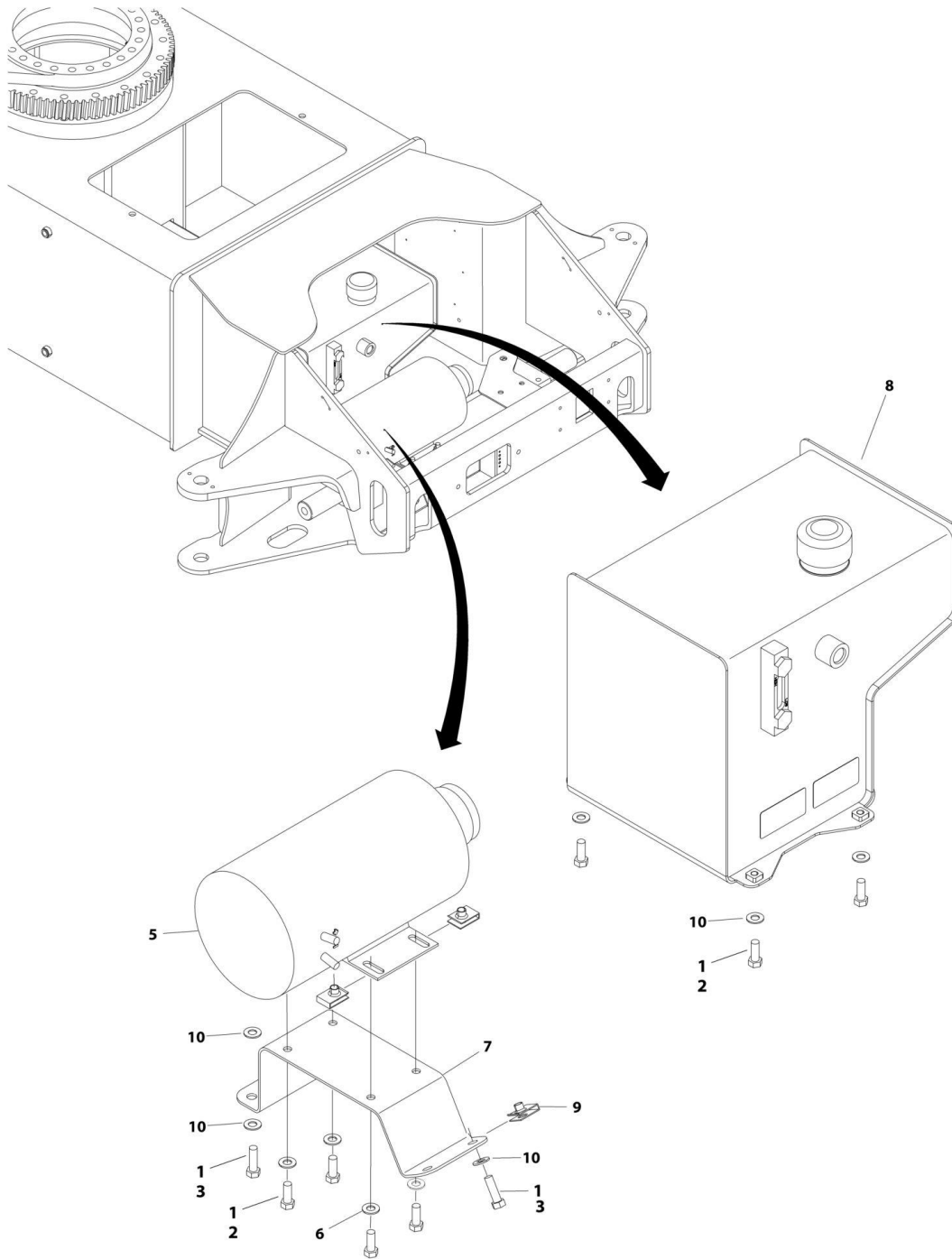
SECTION 1 - FRAME

FIGURE 1-15. TIRE/WHEEL - 26 X 7 X 20 - SOLID NON MARKING

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	0270037 See Note 1001110775	Ref Ref 4	TIRE AND WHEEL INSTALLATION Note: Must replace Tire and Wheel Assemblies in pairs per axle. Tire Assembly	2 B

SECTION 1 - FRAME

FIGURE 1-16. MOTOR/PUMP/TANK INSTALLATION - E450A/E450AJ (NON-UL SPECS)



ART_1001166417

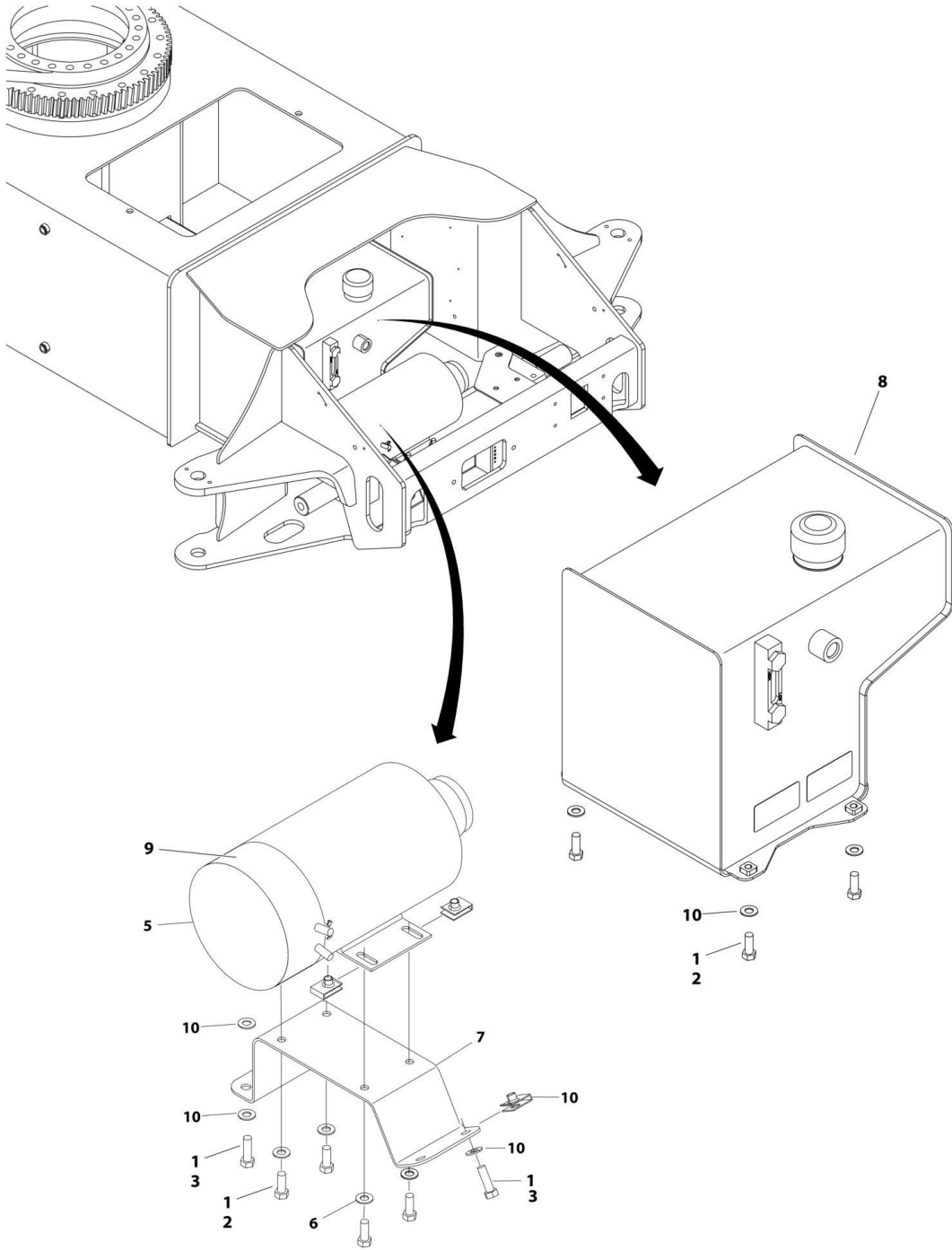
SECTION 1 - FRAME

FIGURE 1-16. MOTOR/PUMP/TANK INSTALLATION - E450A/E450AJ (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166417	Ref	MOTOR/PUMP/TANK INSTALLATION	F
1	0100011	AR	Compound, Locking	
2	0641608	8	Bolt 3/8 x 1	
3	0641610	4	Bolt 3/8 x 1-1/4	
5	3600289	1	Motor/Pump Assembly (See Separate Breakdown in this Section)	
6	4711600	4	Washer 3/8	
7	1001166419	1	Plate, Mounting	
8	1001171213	1	Tank, Hydraulic (See Separate Breakdown in this Section)	
9	88662523	8	Nut, Tinnerman	
10	4891600	8	Washer 3/8 Hardened	

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FIGURE 1-17. MOTOR/PUMP/TANK INSTALLATION - E450A/E450AJ (UL SPECS)



ART_1001167487

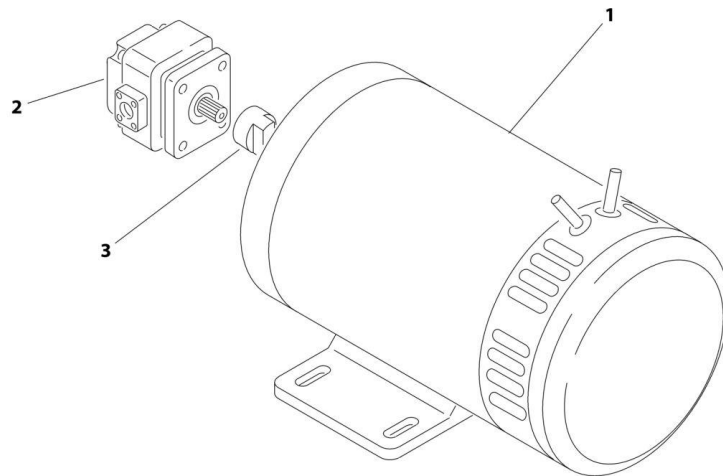
SECTION 1 - FRAME

FIGURE 1-17. MOTOR/PUMP/TANK INSTALLATION - E450A/E450AJ (UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001167487	Ref	MOTOR/PUMP/TANK INSTALLATION	F
1	0100011	AR	Compound, Locking	
2	0641608	8	Bolt 3/8 x 1	
3	0641610	4	Bolt 3/8 x 1-1/4	
5	3600289	1	Motor/Pump Assembly (See Separate Breakdown in this Section)	
6	4751600	4	Washer 3/8	
7	1001166419	1	Plate, Mounting	
8	1001171213	1	Tank Hydraulic (See Separate Breakdown in this Section)	
9	0340048	1	Band, Motor	
10	88662523	8	Nut, Tinnerman	
11	4891600	8	Washer, 3/8 Hardened	

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FIGURE 1-18. MOTOR/PUMP ASSEMBLY



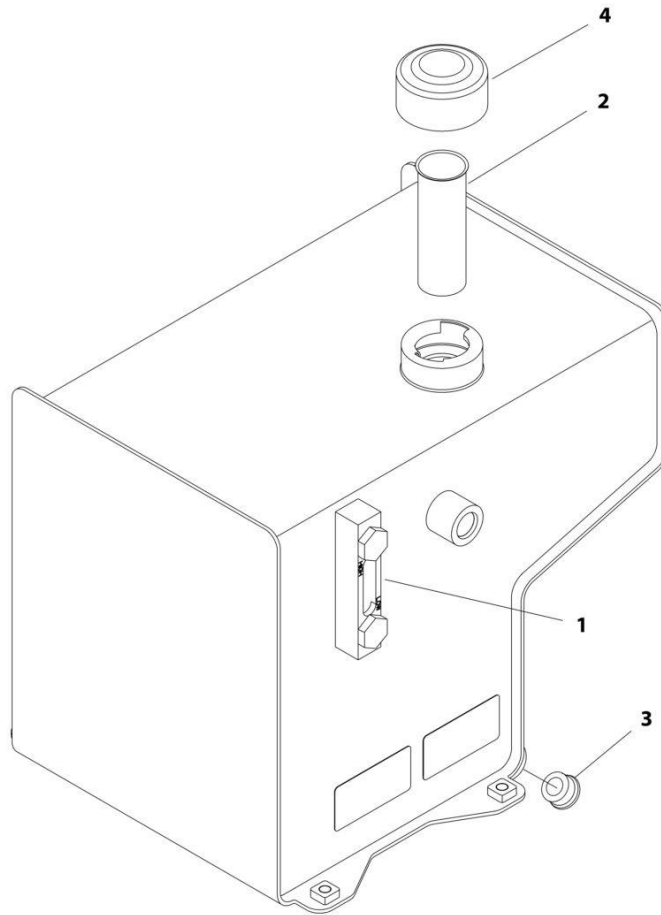
ART_3600289

FIGURE 1-18. MOTOR/PUMP ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	3600289	Ref	MOTOR/PUMP ASSEMBLY	A
1	7021318	1	Motor Assembly	
1	7021361	1	Brush Kit	
1	70003171	1	Spring, Brush	
1	70001961	1	Seal, Oil	
2	7021319	1	Pump Assembly	
2	7021377	1	Seal Kit	
3	70002523	1	Coupling	

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FIGURE 1-19. HYDRAULIC TANK ASSEMBLY - E450A/E450AJ



ART_1001171213

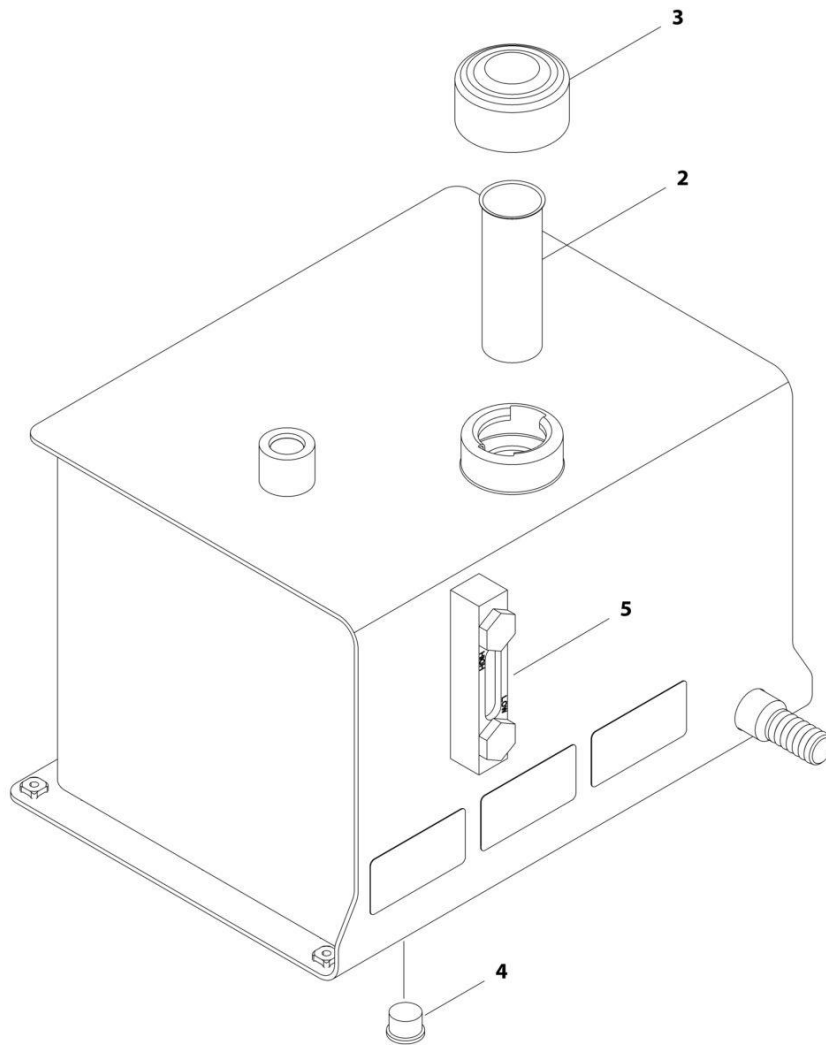
SECTION 1 - FRAME

FIGURE 1-19. HYDRAULIC TANK ASSEMBLY - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001171213	Ref	HYDRAULIC TANK ASSEMBLY	A
1	70005101	1	Gauge, Sight	
2	7024445	1	Strainer	
3	70002112	1	Plug, Drain	
4	7024444	1	Cap, Filler	

SECTION 1 - FRAME

FIGURE 1-20. HYDRAULIC TANK ASSEMBLY - M450AJ



ART_1001171214

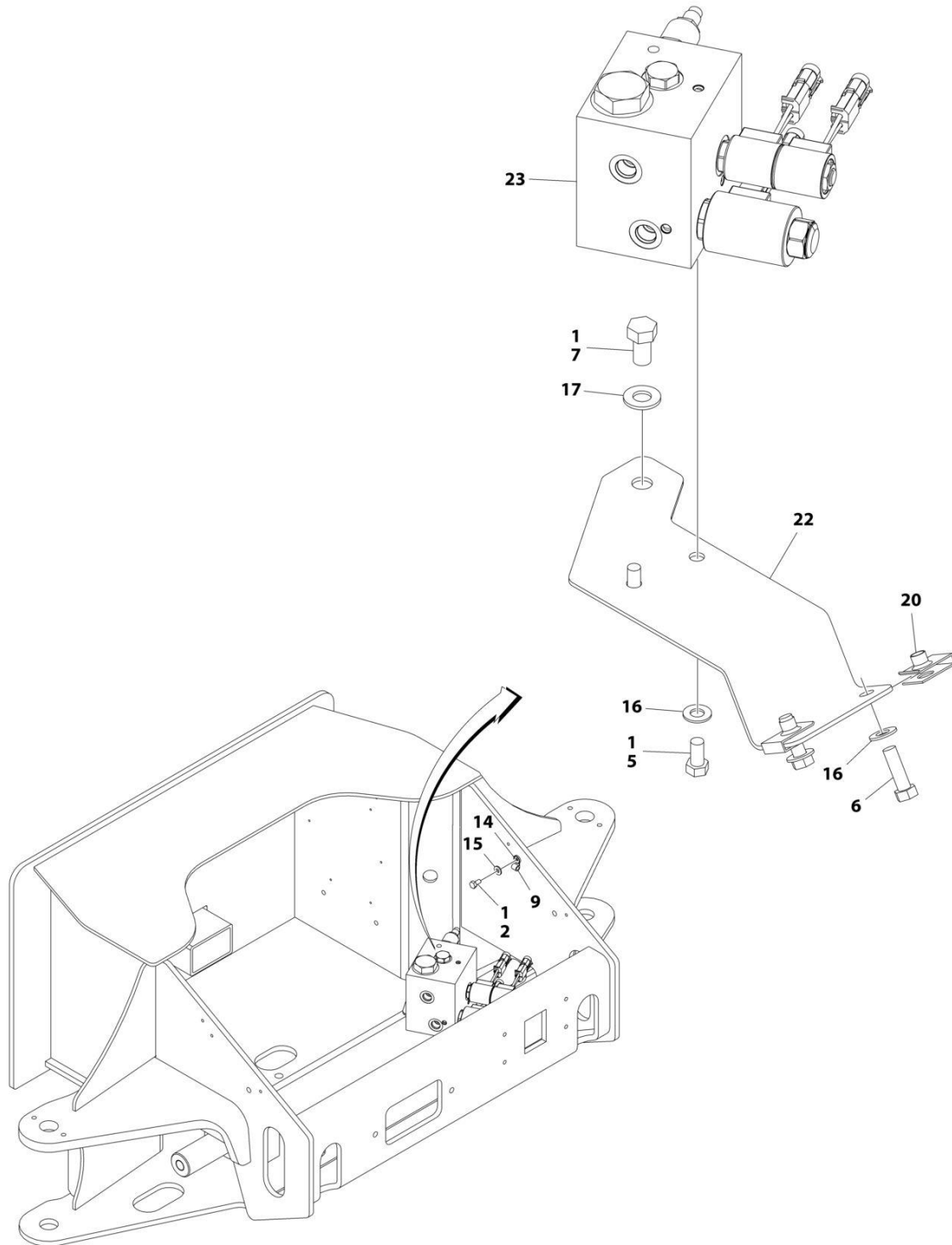
SECTION 1 - FRAME

FIGURE 1-20. HYDRAULIC TANK ASSEMBLY - M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001171214	Ref	HYDRAULIC TANK	B
2	7024445	1	Strainer	
3	7024444	1	Cap, Breather	
4	70002112	1	Plug	
5	70005101	1	Gauge, Sight	

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FIGURE 1-21. VALVE INSTALLATION - FRAME MOUNTED - E450AJ



ART_1001218371_10F2

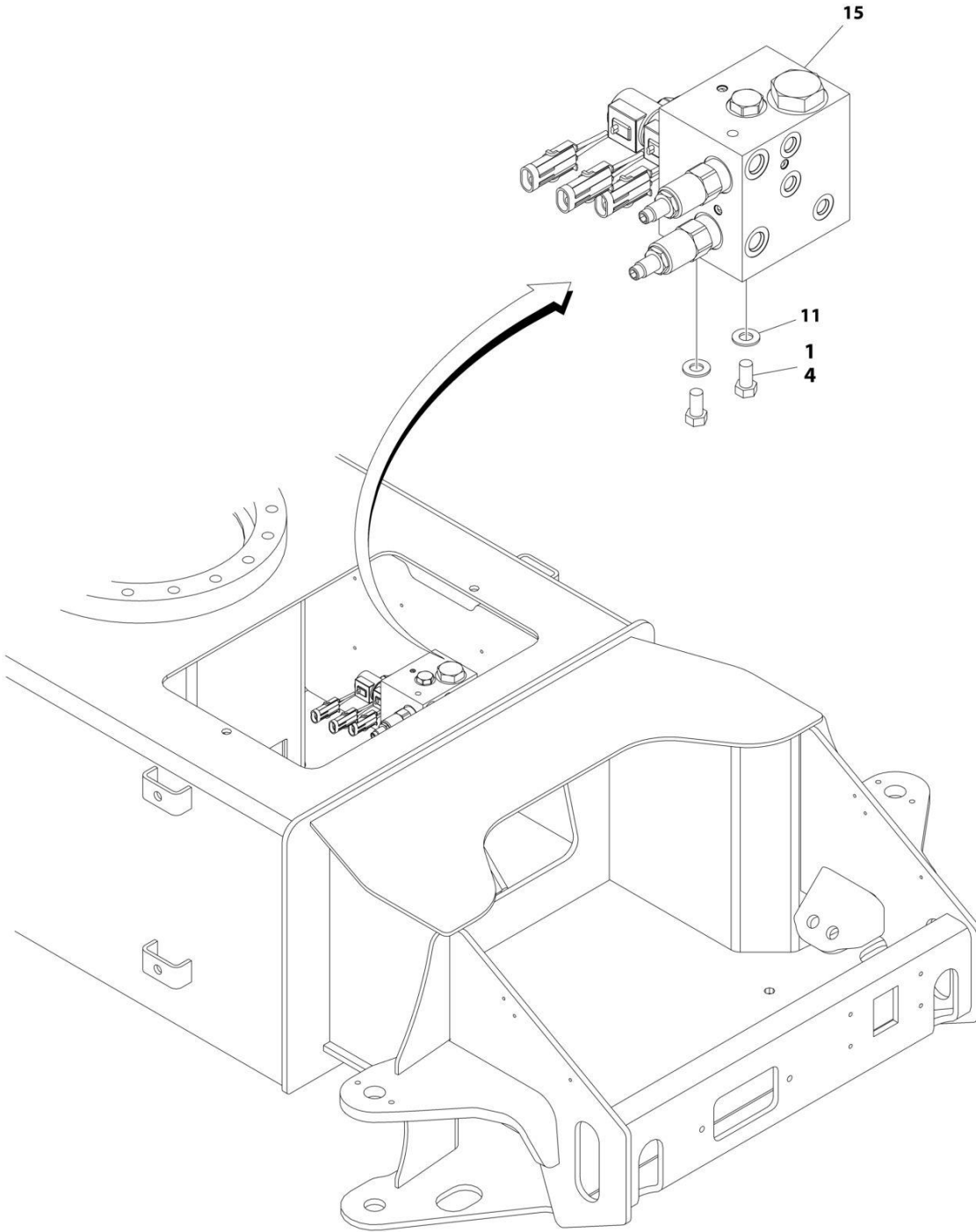
SECTION 1 - FRAME

FIGURE 1-21. VALVE INSTALLATION - FRAME MOUNTED - E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001218371	Ref	VALVE INSTALLATION - FRAME MOUNTED	A
1	0100011	AR	Compound, Locking	
2	0641404	1	Bolt 1/4 x 1/2	
5	0641606	2	Bolt 3/8 x 3/4	
6	0641610	2	Bolt 3/8 x 1-1/4	
7	0641807	1	Bolt 1/2 x 7/8	
9	1320040	1	Clamp	
14	4240032	1	Tie-Strap	
15	4711400	1	Washer 1/4	
16	4711600	4	Washer 3/8	
17	4711800	1	Washer 1/2	
20	88662523	2	Nut, Tinnerman	
22	1001166420	1	Bracket, Mounting	
23	1001177364	1	Steer/Brake Valve Assembly (See Separate Breakdown in this Section)	

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FIGURE 1-22. VALVE INSTALLATION - FRAME MOUNTED - M450AJ



ART_1001218372_10F2

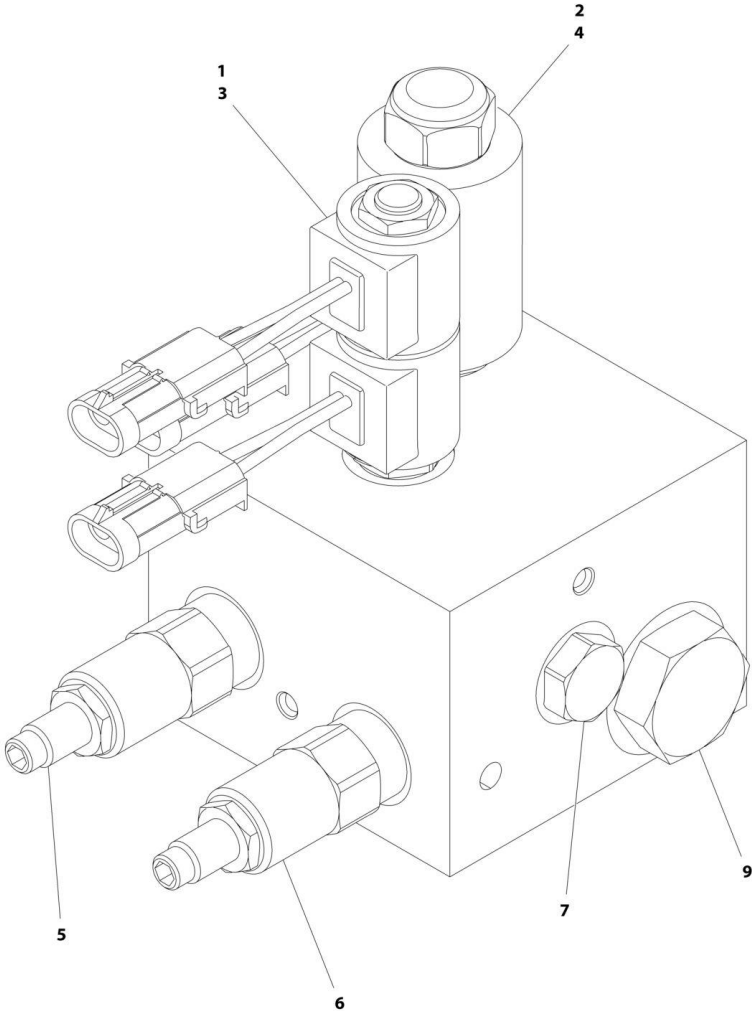
SECTION 1 - FRAME

FIGURE 1-22. VALVE INSTALLATION - FRAME MOUNTED - M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001218372	Ref	VALVE INSTALLATION - FRAME MOUNTED	A
1	0100011	AR	Compound, Locking	
4	0641606	2	Bolt 3/8 x 3/4	
11	4711600	4	Washer 3/8	
15	1001177364	1	Steer/Brake Valve Assembly (See Separate Breakdown in this Section)	

SECTION 1 - FRAME

FIGURE 1-23. BRAKE/STEER VALVE ASSEMBLY



ART_1001177364

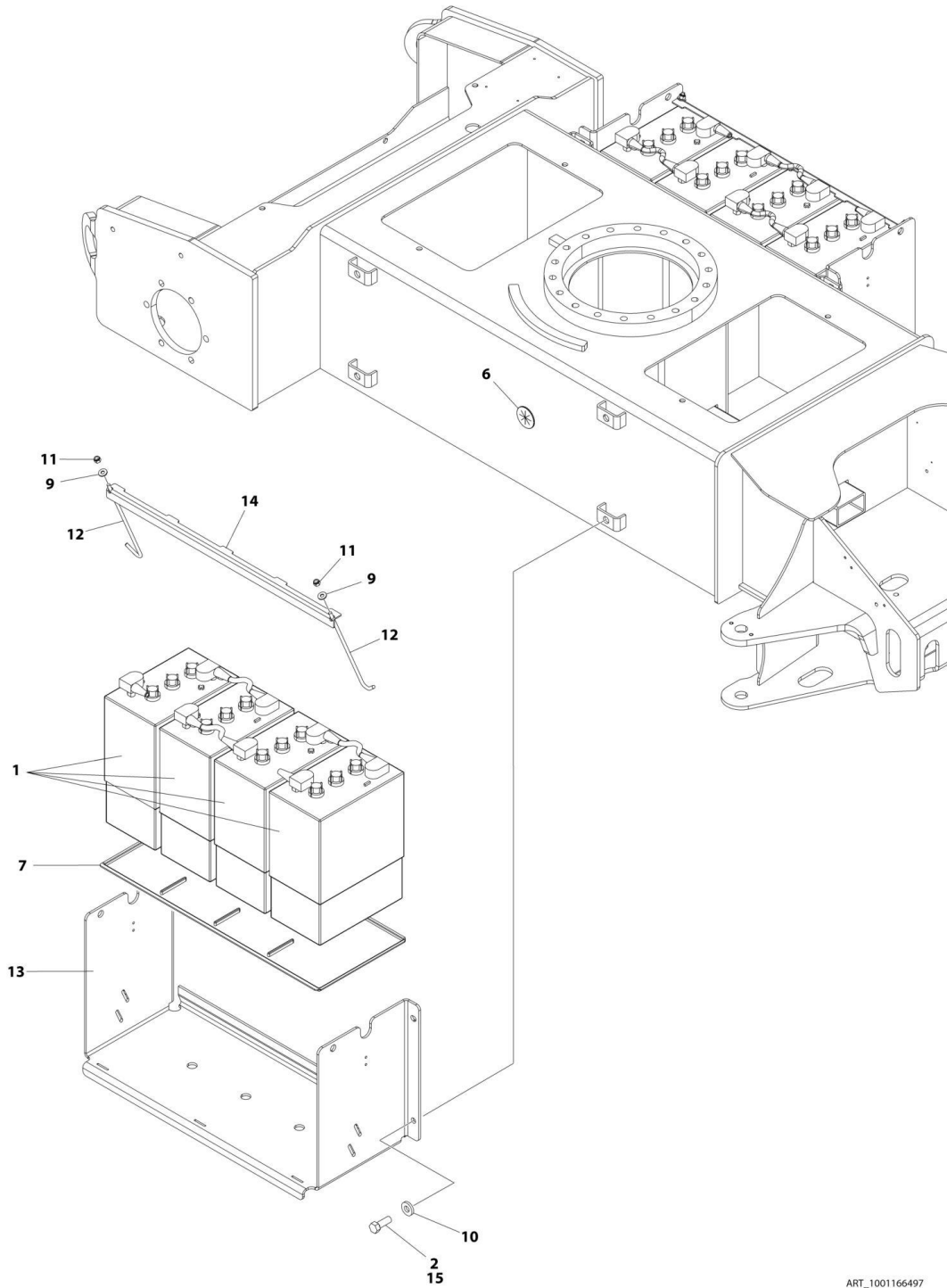
SECTION 1 - FRAME

FIGURE 1-23. BRAKE/STEER VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001177364	Ref	BRAKE/STEER VALVE ASSEMBLY	G
1	7017433	1	Cartridge, without Coil (Steer)	
1	7017402	1	Seal Kit - 7017433 Cartridge	
2	7021611	1	Cartridge, Proportional without Coil (Flow Control)	
2	7012518	1	Seal Kit - 7021611 Cartridge	
3	7021609	2	Coil	
4	7021618	1	Coil	
5	7021659	1	Cartridge, Relief (Main)	
5	7012972	1	Seal Kit - 7021659	
6	7017488	1	Cartridge, Relief (Steer)	
6	7012998	1	Seal Kit - 7017488 Cartridge	
7	10837580	1	Cartridge, Load Shuttle	
7	7010543	1	Seal Kit - 7012941 Cartridge	
9	7021616	1	Cartridge, Filter	

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FIGURE 1-24. BATTERY BOX INSTALLATION - STANDARD (ALL SPECS EXCEPT AUSTRALIAN, CE AND CHINA SPECS)



ART_1001166497

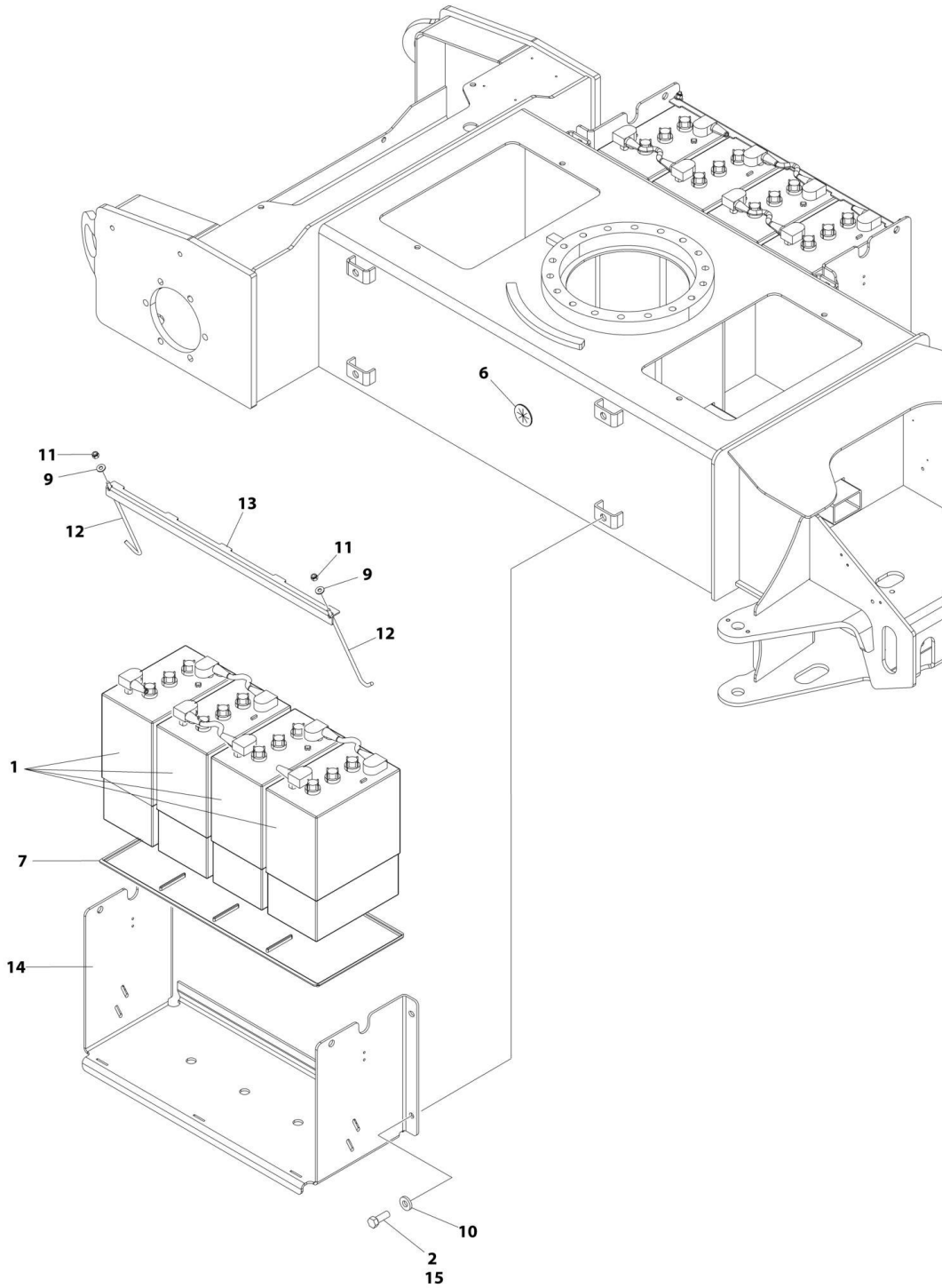
SECTION 1 - FRAME

FIGURE 1-24. BATTERY BOX INSTALLATION - STANDARD (ALL SPECS EXCEPT AUSTRALIAN, CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166497	Ref	BATTERY BOX INSTALLATION	C
1	0400055	8	Battery (Wet)	
1	7016177	8	Battery (Dry)	
2	0641811	8	Bolt 1/2 X 1-3/8	
6	2540045	2	Grommet	
7	3000003	2	Liner, Battery Box	
9	4751500	4	Washer 5/16	
10	4891800	8	Washer 1/2 Hardened	
11	88521205	4	Nut 5/16	
12	1001093382	4	Bolt, J-Bolt	
13	1001166495	2	Tray, Battery	
14	1001166496	2	Battery Hold Down	
15	0100011	AR	Compound, Locking	

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FIGURE 1-25. BATTERY BOX INSTALLATION - STANDARD (AUSTRALIAN, CE AND CHINA SPECS)



ART_1001168670

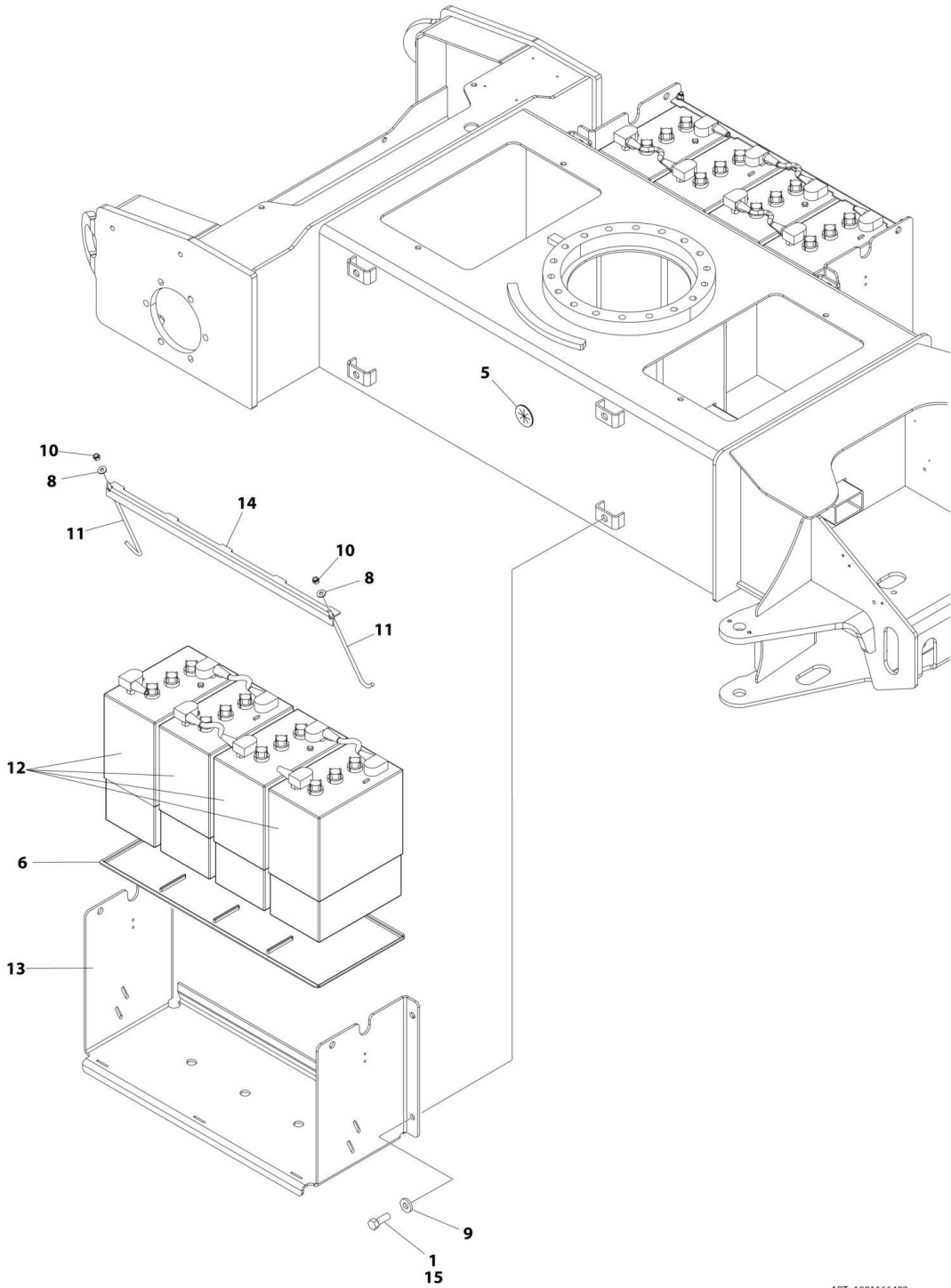
SECTION 1 - FRAME

FIGURE 1-25. BATTERY BOX INSTALLATION - STANDARD (AUSTRALIAN, CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001168670	Ref	BATTERY BOX INSTALLATION	C
1	0400055	8	Battery (Wet)	
1	7016177	8	Battery (Dry)	
2	0641811	8	Bolt 1/2 X 1-3/8	
6	2540045	2	Grommet	
7	3000003	2	Liner, Battery Box	
9	4751500	4	Washer 5/16	
10	4891800	8	Washer 1/2 Hardened	
11	88521205	4	Nut 5/16	
12	1001093382	4	Bolt, J-Bolt	
13	1001166496	2	Battery Hold Down	
14	1001168800	2	Tray, Battery	
15	0100011	AR	Compound, Locking	

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FIGURE 1-26. BATTERY BOX INSTALLATION - AGM BATTERIES (ALL SPECS EXCEPT AUSTRALIAN, CE AND CHINA SPECS)



ART_1001166498

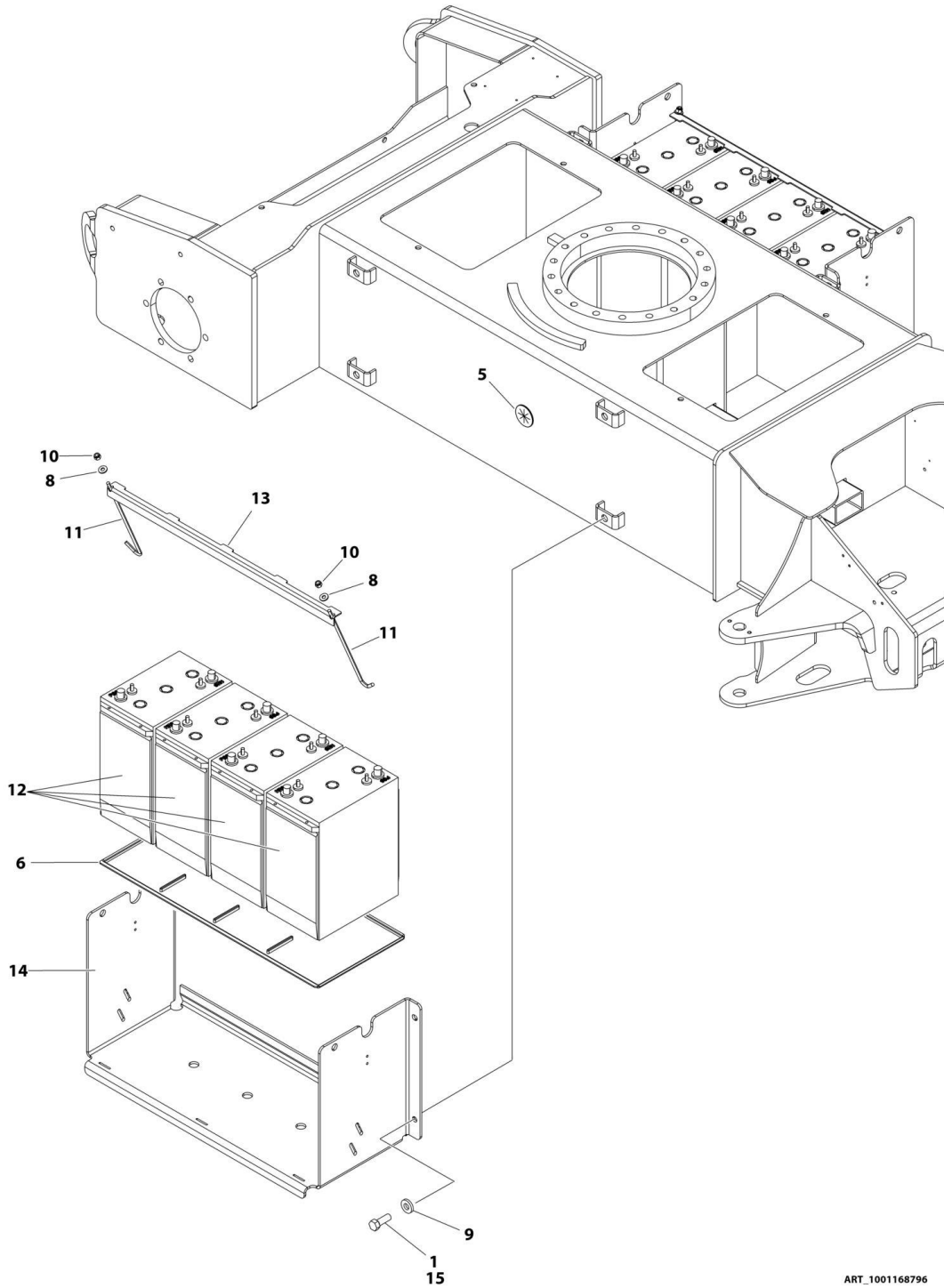
SECTION 1 - FRAME

FIGURE 1-26. BATTERY BOX INSTALLATION - AGM BATTERIES (ALL SPECS EXCEPT AUSTRALIAN, CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166498	Ref	BATTERY BOX INSTALLATION - AGM BATTERIES	C
1	0641811	8	Bolt 1/2 X 1-3/8	
5	2540045	2	Grommet	
6	3000003	2	Liner, Battery Box	
8	4751500	4	Washer 5/16	
9	4891800	8	Washer 1/2 Hardened	
10	88521205	4	Nut 5/16	
11	1001093382	4	Bolt, J-Bolt	
12	1001114782	8	Battery (Wet) (AGM Batteries)	
13	1001166495	2	Tray, Battery	
14	1001166496	2	Battery Hold Down	
15	0100011	AR	Compound, Locking	

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FIGURE 1-27. BATTERY BOX INSTALLATION - AGM BATTERIES (AUSTRALIAN, CE AND CHINA SPECS)



ART_1001168796

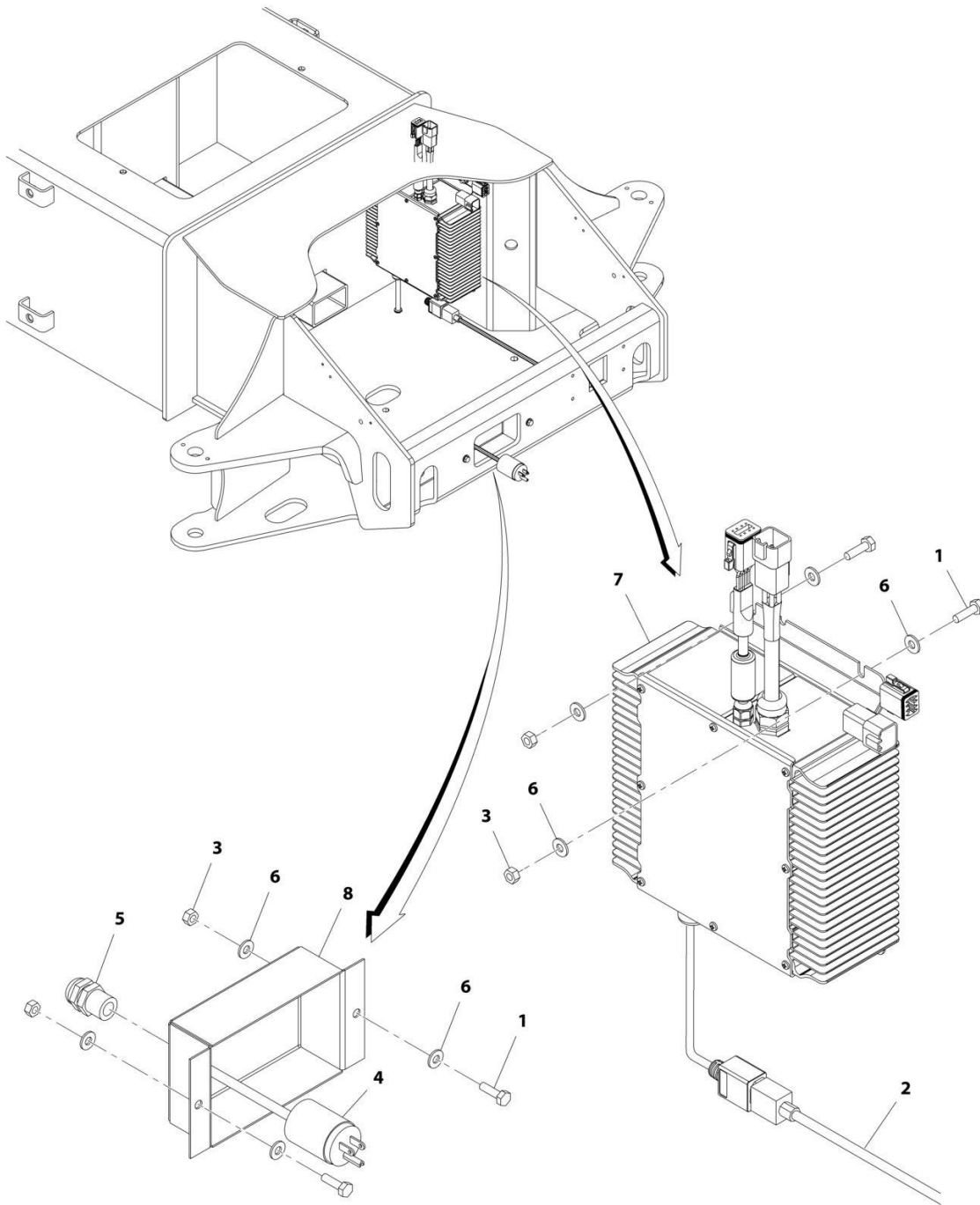
SECTION 1 - FRAME

FIGURE 1-27. BATTERY BOX INSTALLATION - AGM BATTERIES (AUSTRALIAN, CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001168796	Ref	BATTERY BOX INSTALLATION - AGM BATTERIES	C
1	0641811	8	Bolt 1/2 X 1-3/8	
5	2540045	2	Grommet	
6	3000003	2	Liner, Battery Box	
8	4751500	4	Washer 5/16	
9	4751800	8	Washer 1/2	
10	88521205	4	Nut 5/16	
11	1001093382	4	Bolt, J-Bolt	
12	1001114782	8	Battery	
13	1001166496	2	Battery Hold Down	
14	1001168800	2	Tray, Battery	
15	0100011	AR	Compound, Locking	

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FIGURE 1-28. BATTERY CHARGER INSTALLATION - E450A/E450AJ (ANSI, ANSI EXPORT, CSA, JAPANESE AND UL SPECS) (PVC 2001)



ART_1001191204

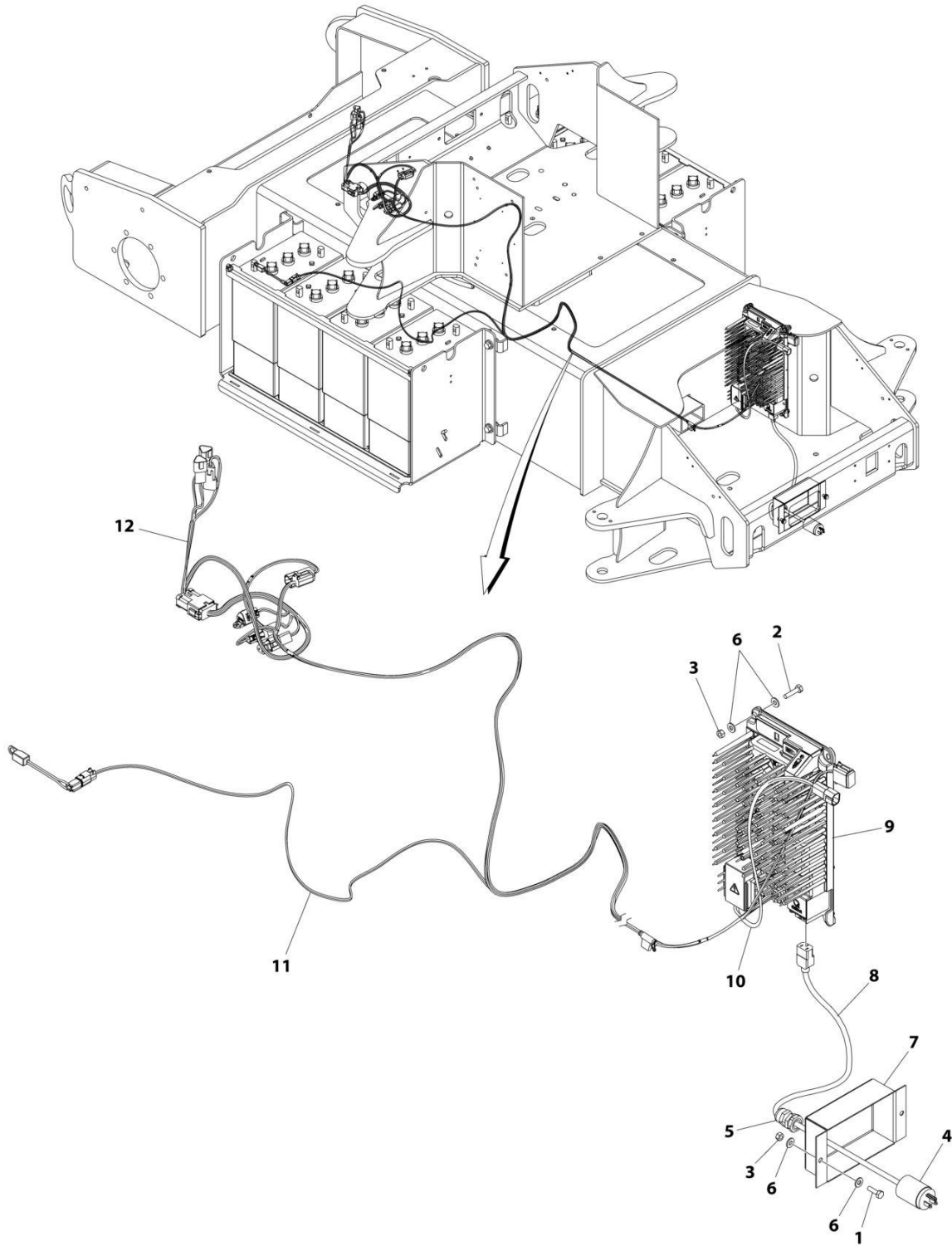
SECTION 1 - FRAME

FIGURE 1-28. BATTERY CHARGER INSTALLATION - E450A/E450AJ (ANSI, ANSI EXPORT, CSA, JAPANESE AND UL SPECS) (PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001191204	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	6	Bolt 1/4 x 7/8	
2	1060689	1	AC Cord	
3	0641405	1	Bolt 1/4 x 5/8	
4	4460138	1	Plug, AC	
5	4460428	1	Connector, Strain Relief	
6	4711400	14	Washer 1/4	
7	1001103105	1	Battery Charger Assembly (See Separate Breakdown in this Section)	
8	1001191212	1	Panel, Cable	

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FIGURE 1-29. BATTERY CHARGER INSTALLATION (ALL SPECS EXCEPT AUSTRALIAN & CE SPECS) (PVC 2007)



ART_1001251471

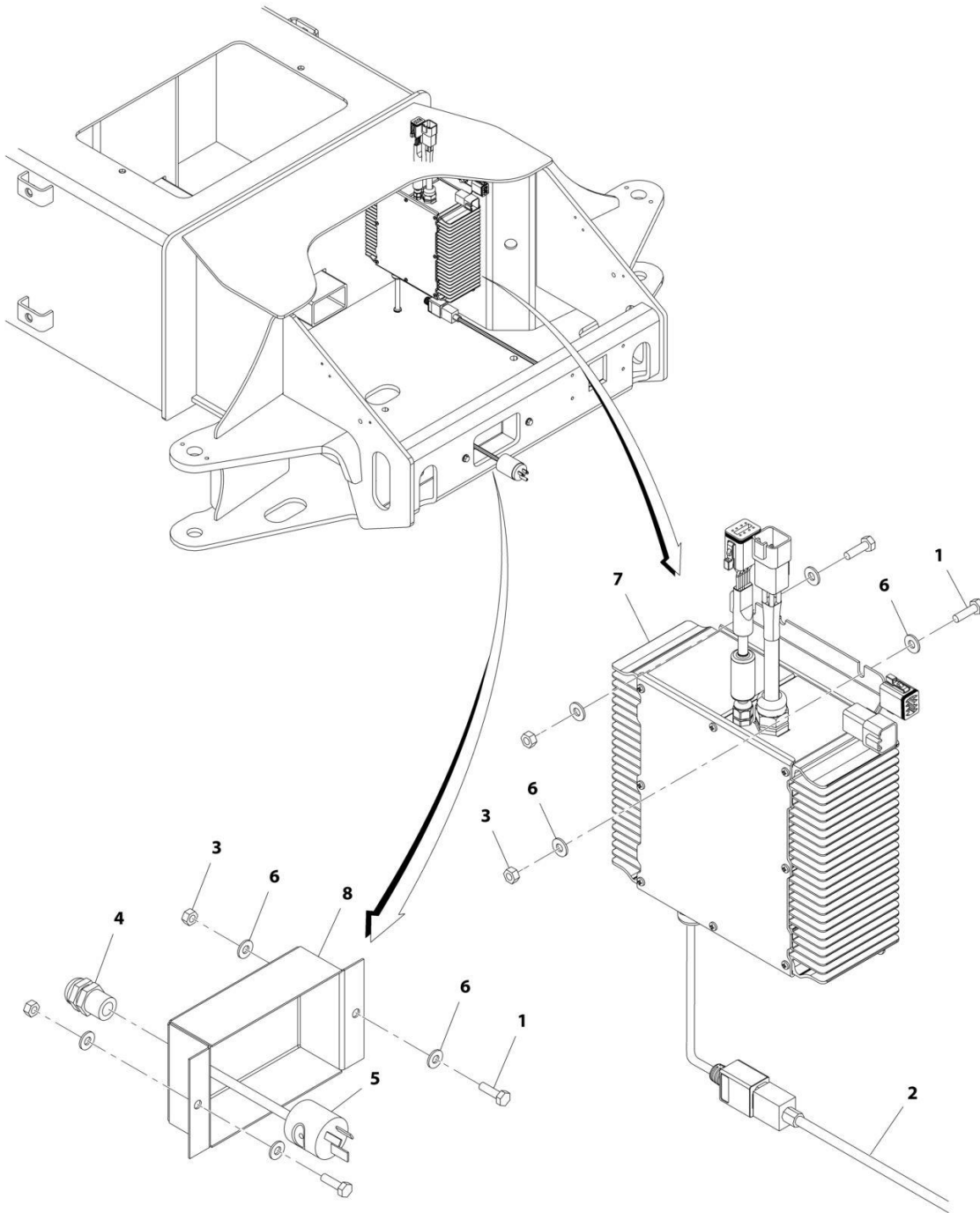
SECTION 1 - FRAME

FIGURE 1-29. BATTERY CHARGER INSTALLATION (ALL SPECS EXCEPT AUSTRALIAN & CE SPECS) (PVC 2007)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251471	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	2	Bolt 1/4 x 7/8	
2	0641409	4	Bolt 1/4 x 1-1/8	
3	3311405	6	Nut 1/4	
4	4460138	1	Plug, AC	
5	4460428	1	Connector, Strain Relief	
6	4711400	12	Washer 1/4	
7	1001191212	1	Panel, Cable	
8	1001207970	1	AC Cord	
9	1001251382	1	Battery Charger Assembly	
10	1001260408	1	Harness, Charger DC Connection (See Separate Breakdown in ELECTRICAL Section)	
11	1001260531	1	Harness, Charger (See Separate Breakdown in ELECTRICAL Section)	
12	1001260532	1	Harness, EBOOM (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 1-30. BATTERY CHARGER INSTALLATION - E450A/E450AJ (AUSTRALIAN SPEC) (PVC 2001)



ART_1001191206

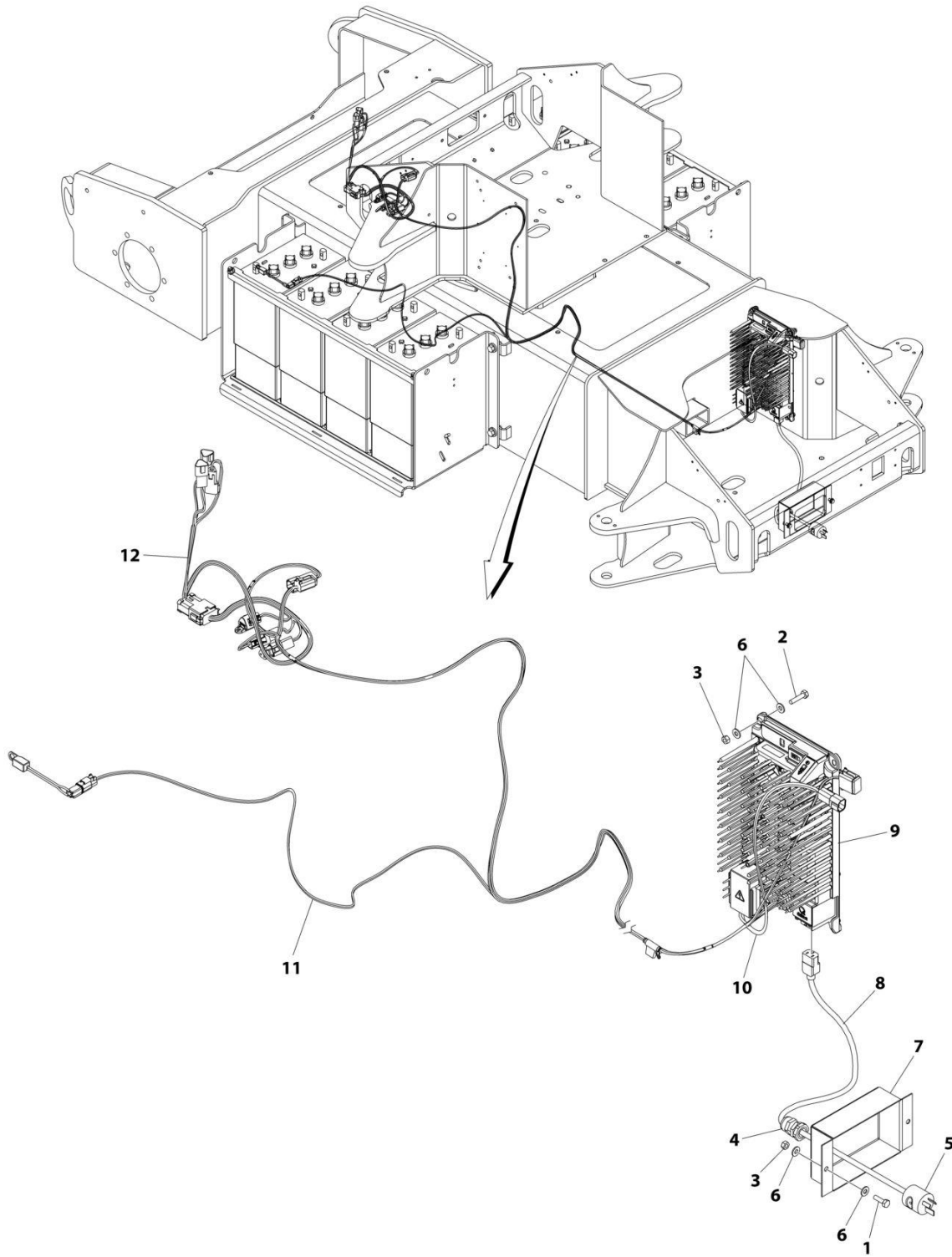
SECTION 1 - FRAME

FIGURE 1-30. BATTERY CHARGER INSTALLATION - E450A/E450AJ (AUSTRALIAN SPEC) (PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001191206	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	6	Bolt 1/4 x 7/8	
2	1060689	1	AC Cord	
3	0641405	1	Bolt 1/4 x 5/8	
4	4460428	1	Connector, Strain Relief	
5	4460805	1	Plug	
6	4711400	14	Washer 1/4	
7	1001103105	1	Battery Charger Assembly (See Separate Breakdown in this Section)	
8	1001191212	1	Panel, Cable	

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FIGURE 1-31. BATTERY CHARGER INSTALLATION - E400AJPN (AUSTRALIAN SPEC) (PVC 2007)



ART_1001251472

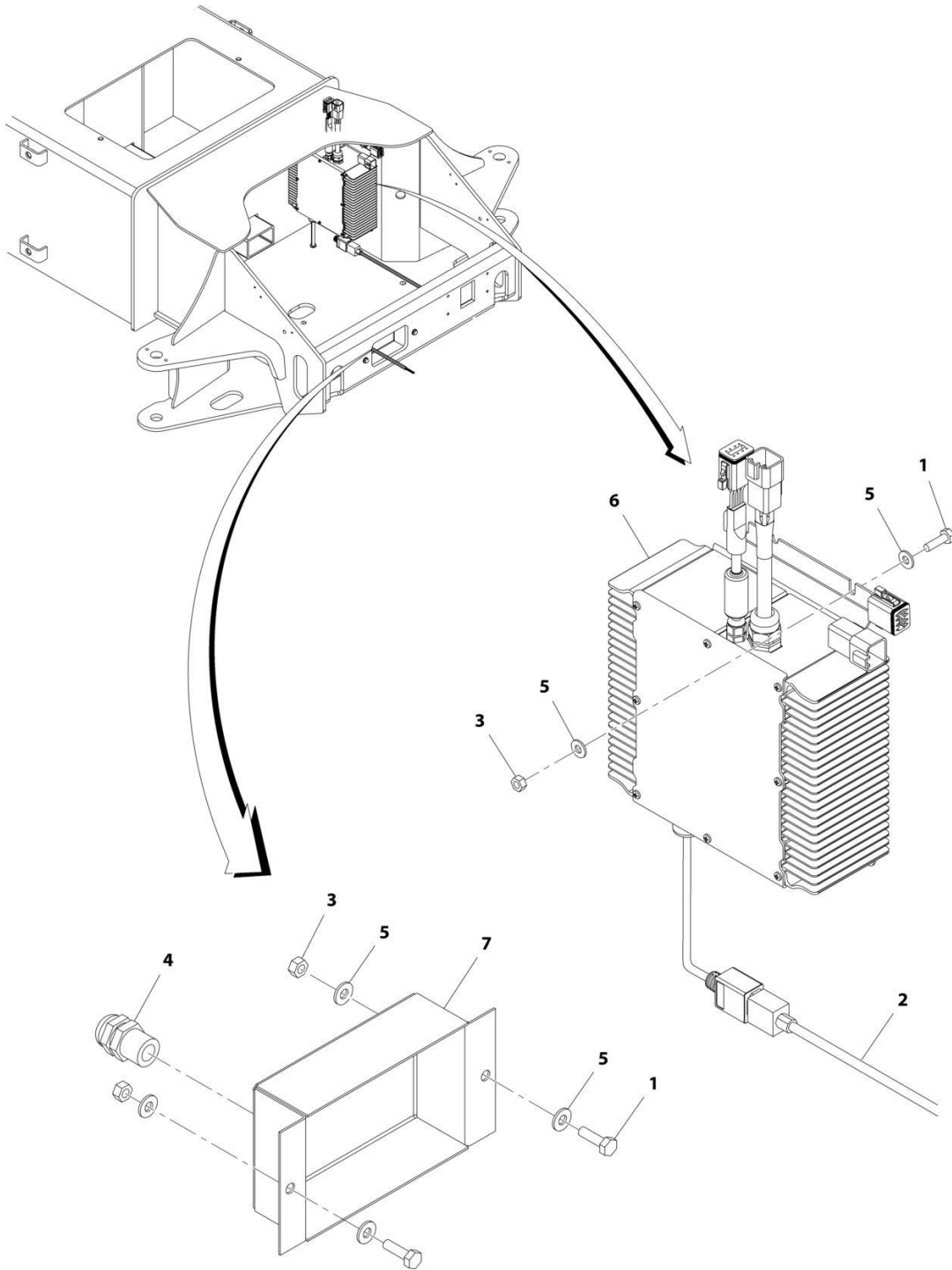
SECTION 1 - FRAME

FIGURE 1-31. BATTERY CHARGER INSTALLATION - E400AJPN (AUSTRALIAN SPEC) (PVC 2007)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251472	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	2	Bolt 1/4 x 7/8	
2	0641409	4	Bolt 1/4 x 1-1/8	
3	3311405	6	Nut 1/4	
4	4460428	1	Connector, Strain Relief	
5	4460805	1	Plug	
6	4711400	12	Washer 1/4	
7	1001191212	1	Panel, Cable	
8	1001207974	1	AC Cord	
9	1001251382	1	Battery Charger Assembly	
10	1001260408	1	Harness, Charger DC Connection (See Separate Breakdown in ELECTRICAL Section)	
11	1001260531	1	Harness, Charger (See Separate Breakdown in ELECTRICAL Section)	
12	1001260532	1	Harness, EBOOM (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 1-32. BATTERY CHARGER INSTALLATION - E450A/E450AJ (ANSI EXPORT AND CE SPECS)
(PVC 2001)



ART_1001191203

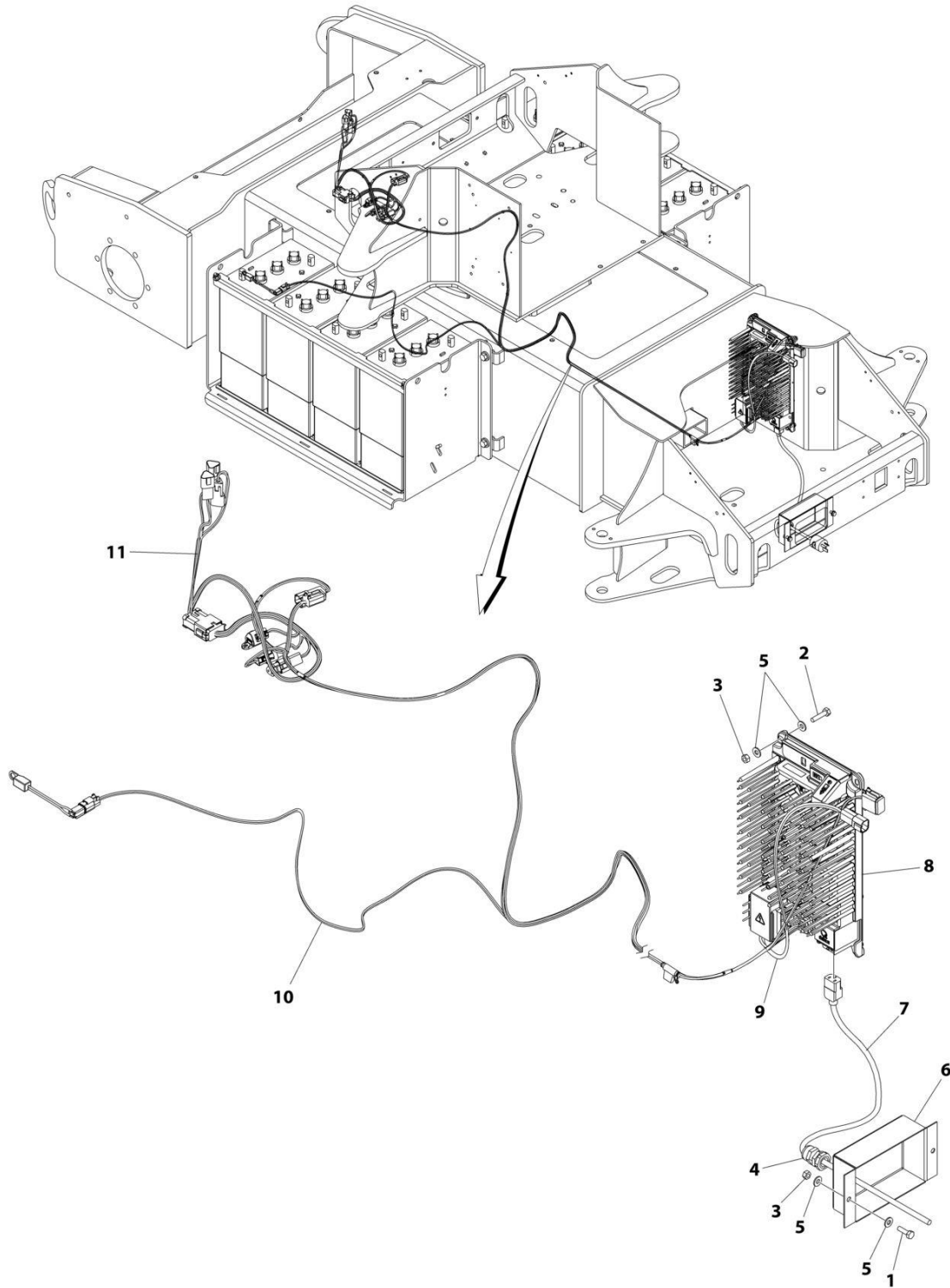
SECTION 1 - FRAME

**FIGURE 1-32. BATTERY CHARGER INSTALLATION - E450A/E450AJ (ANSI EXPORT AND CE SPECS)
(PVC 2001)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001191203	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	6	Bolt 1/4 x 7/8	
2	1060689	1	AC Cord	
3	0641405	1	Bolt 1/4 x 5/8	
4	4460428	1	Connector, Strain Relief	
5	4711400	14	Washer 1/4	
6	1001103105	1	Battery Charger Assembly (See Separate Breakdown in this Section)	
7	1001191212	1	Panel, Cable	

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FIGURE 1-33. BATTERY CHARGER INSTALLATION (ANSI EXPORT, CE AND CHINA SPECS) (PVC 2007)



ART_1001251470

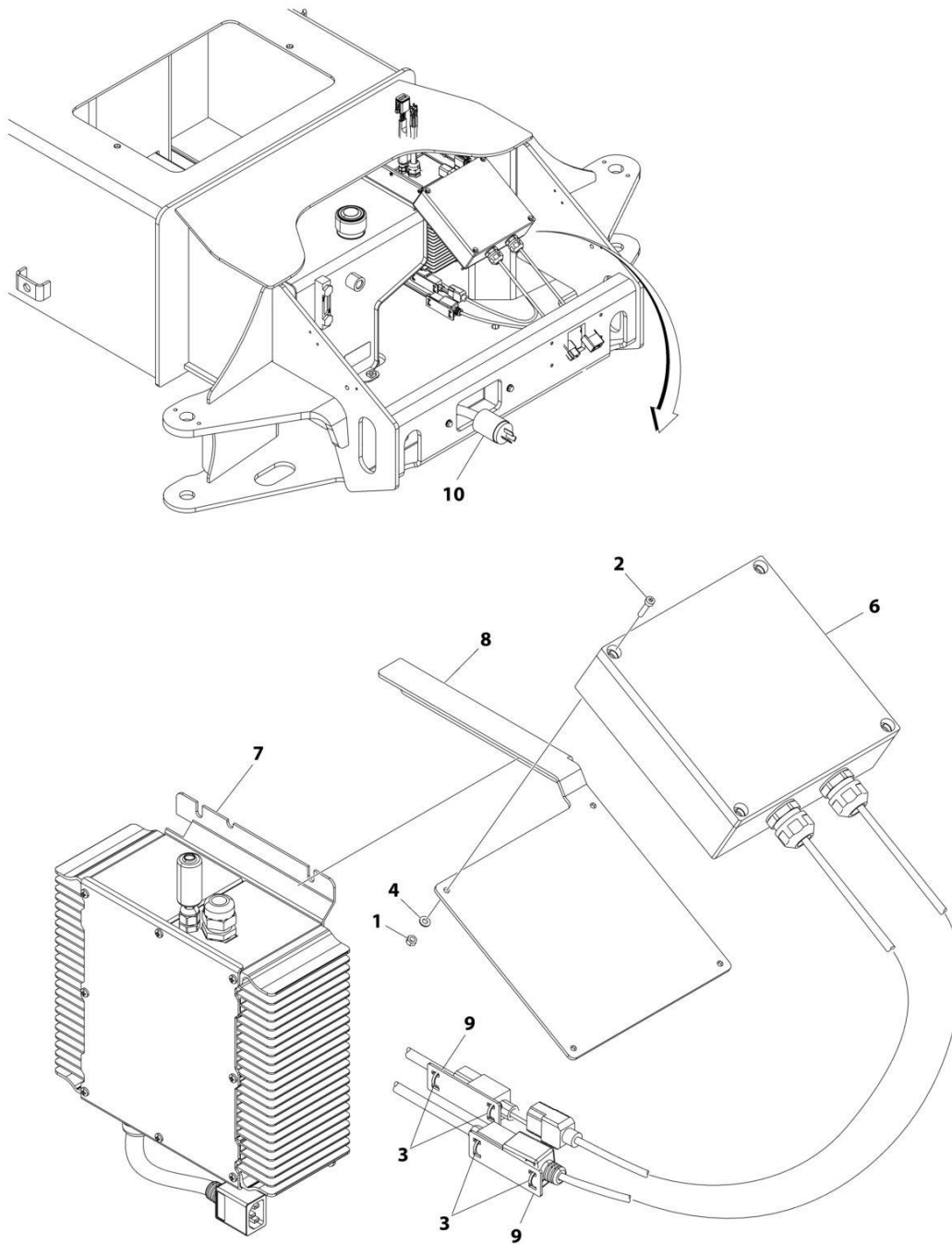
SECTION 1 - FRAME

FIGURE 1-33. BATTERY CHARGER INSTALLATION (ANSI EXPORT, CE AND CHINA SPECS) (PVC 2007)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251470	Ref	BATTERY CHARGER INSTALLATION	B
1	0641407	2	Bolt 1/4 x 7/8	
2	0641409	4	Bolt 1/4 x 1-1/8	
3	3311405	6	Nut 1/4	
4	4460428	1	Connector, Strain Relief	
5	4711400	12	Washer 1/4	
6	1001191212	1	Panel, Cable	
7	1001207974	1	AC Cord	
8	1001251382	1	Battery Charger Assembly	
9	1001260408	1	Harness, Charger DC Connection (See Separate Breakdown in ELECTRICAL Section)	
10	1001260531	1	Harness, Charger (See Separate Breakdown in ELECTRICAL Section)	
11	1001260532	1	Harness, EBOOM (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 1-34. BATTERY CHARGER INSTALLATION - E450AJ (ANSI EXPORT AND CHINA SPECS)



ART_1001215118

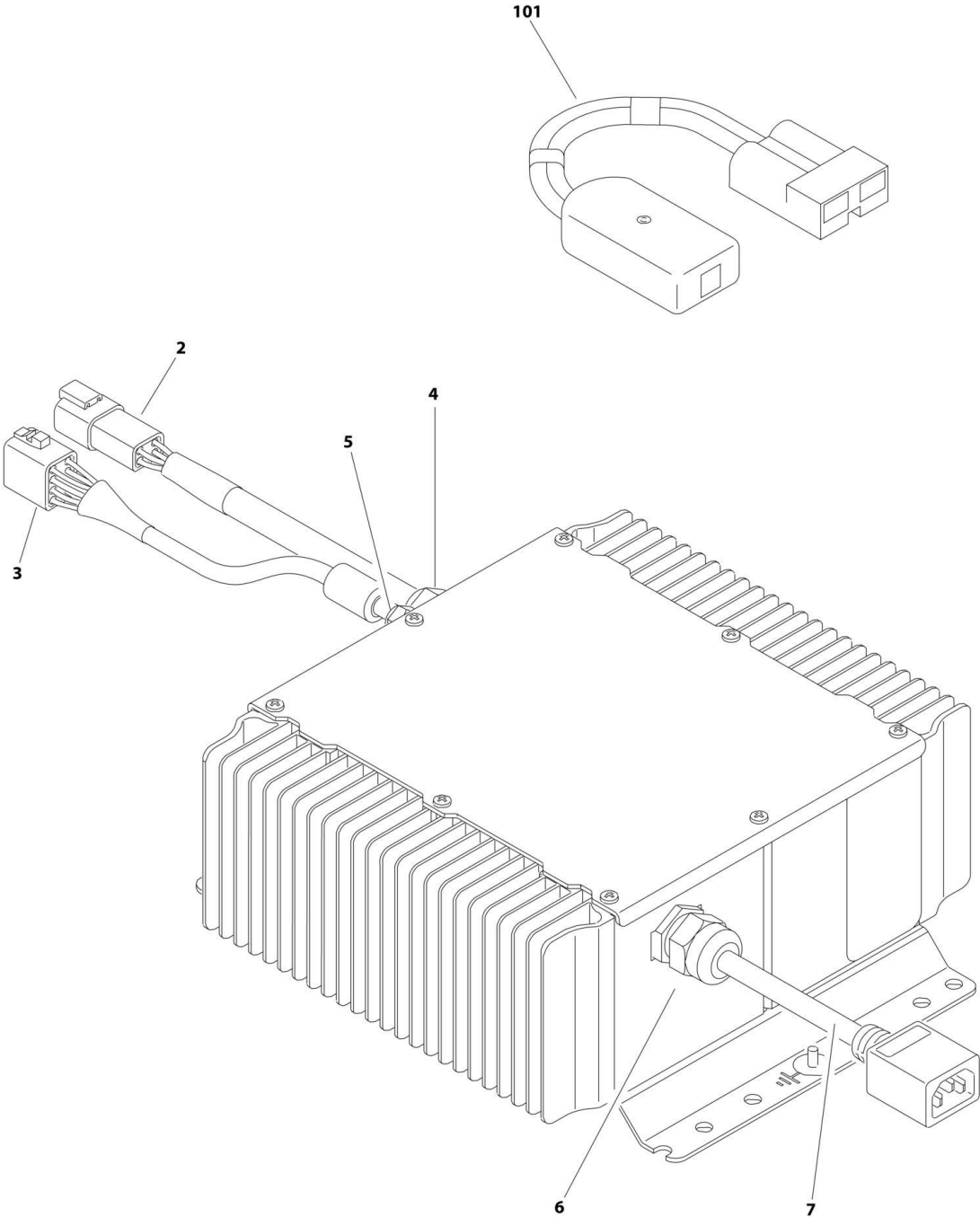
SECTION 1 - FRAME

FIGURE 1-34. BATTERY CHARGER INSTALLATION - E450AJ (ANSI EXPORT AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001215118	Ref	BATTERY CHARGER INSTALLATION	C
1	3290405	4	Nut M4	
2	4031508	4	Bolt M4 x 20	
3	4240017	4	Tie, Strap	
4	4811400	4	Washer M4	
6	1001185306	1	Voltage Guard Installation (See Separate Breakdown in this Section)	
7	1001191203	1	Battery Charger Installation (See Separate Breakdown in this Section)	
8	1001215119	1	Bracket	
9	1001215326	1	Bracket	
10	1001187816	1	Plug	

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FIGURE 1-35. BATTERY CHARGER ASSEMBLY



ART_1001103105

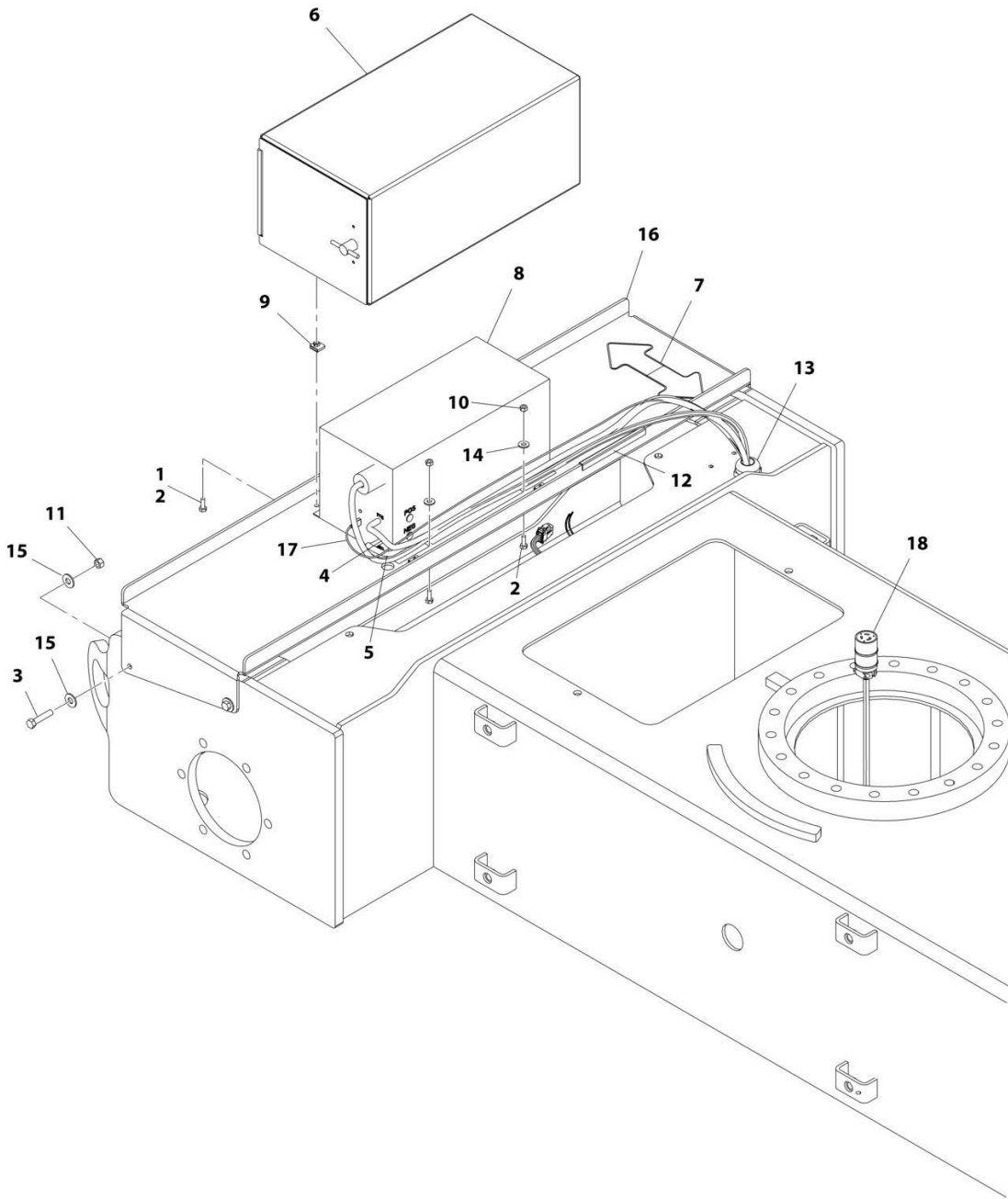
SECTION 1 - FRAME

FIGURE 1-35. BATTERY CHARGER ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001103105	Ref	BATTERY CHARGER ASSEMBLY	D
2	See Note	1	Harness with Connector (Note: Not Available for Purchase)	
2	1001116811	1	Receptacle, Female - 4 Position	
2	4460508	4	Pin, Male	
3	See Note	1	Harness with Connector (Note: Not Available for Purchase)	
3	4460930	1	Plug, Male - 8 Position	
3	4460464	7	Socket, Female	
4	See Note	1	Connector, Strain Relief (Note: Not Available for Purchase)	
5	See Note	1	Connector, Strain Relief (Note: Not Available for Purchase)	
6	See Note	1	Connector, Strain Relief (Note: Not Available for Purchase)	
7	See Note	1	Harness with Connector (Note: Not Available for Purchase)	
101	1600466	NLA	Battery Charger Reprogram Controller (Use p/n 2915230)	

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FIGURE 1-36. INVERTER INSTALLATION - E450A/E450AJ



ART_1001192502

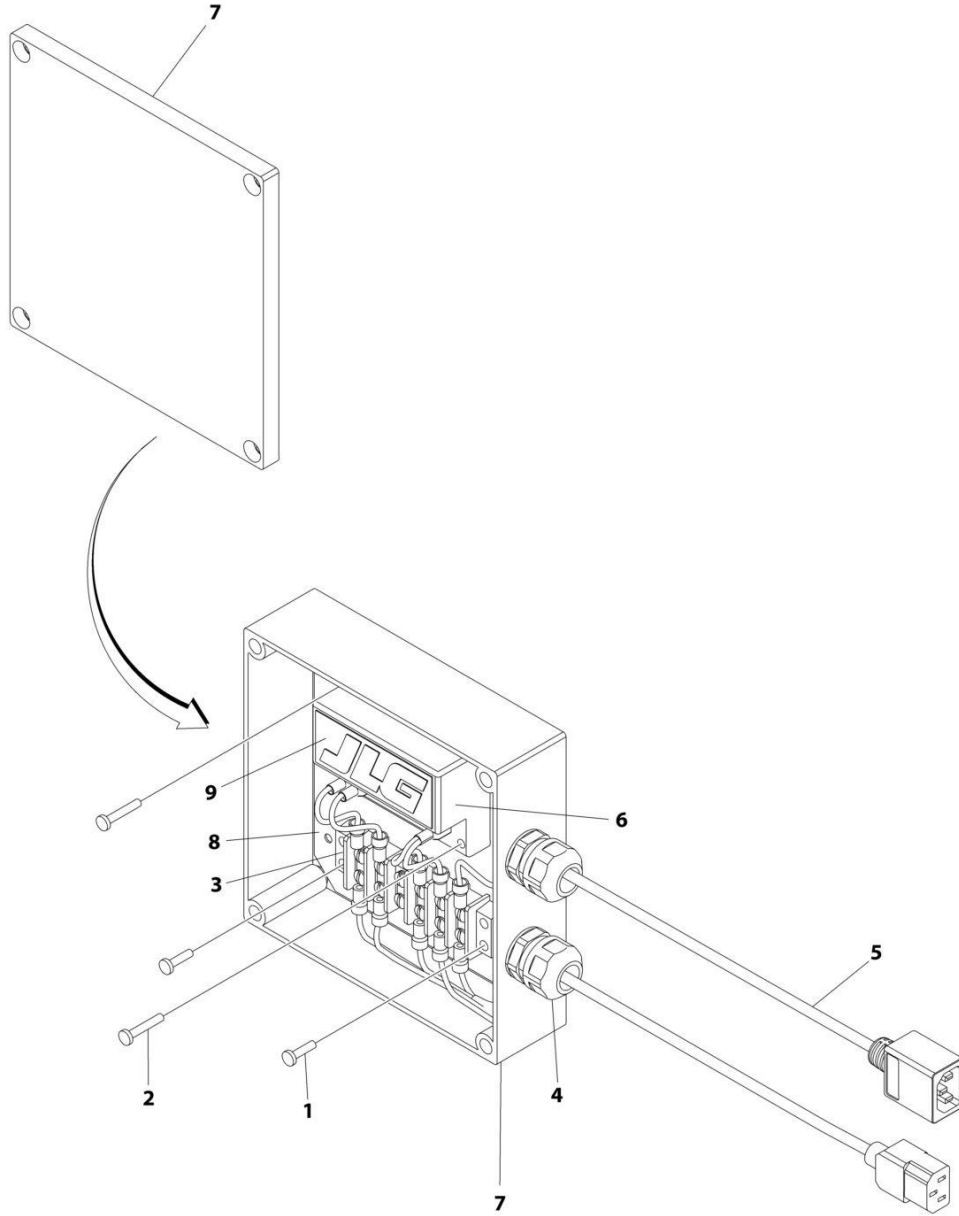
SECTION 1 - FRAME

FIGURE 1-36. INVERTER INSTALLATION - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001192502	Ref	INVERTER INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0641406	8	Bolt 1/4 X 3/4	
3	0641614	4	Bolt 3/8 X 1-3/4	
4	1060801	1	Cable, Battery	
5	1060802	1	Cable, Ground	
6	1670953	1	Cover	
7	1701642	1	Decal - Arrow	
8	2460037	1	Inverter	
9	3300353	4	Nut, Tinnerman	
10	3311405	4	Nut 1/4	
11	3311605	4	Nut 3/8	
12	4060805	6 in /150mm	Shield, Flex Trim	
13	4460426	1	Connector, Strain Relief	
14	4751400	4	Washer, 1/4	
15	4751600	8	Washer, 3/8	
16	1001167014	1	Bracket	
17	1001192293	1	Inverter Ignition Harness (See Separate Breakdown in ELECTRICAL Section)	
18	1001182296	1	Inverter Harness (See Separate Breakdown in ELECTRICAL Section)	

SECTION 1 - FRAME

FIGURE 1-37. VOLTAGE GUARD ASSEMBLY AND INSTALLATION (ANSI EXPORT AND CHINA SPECS)



ART_1001185306

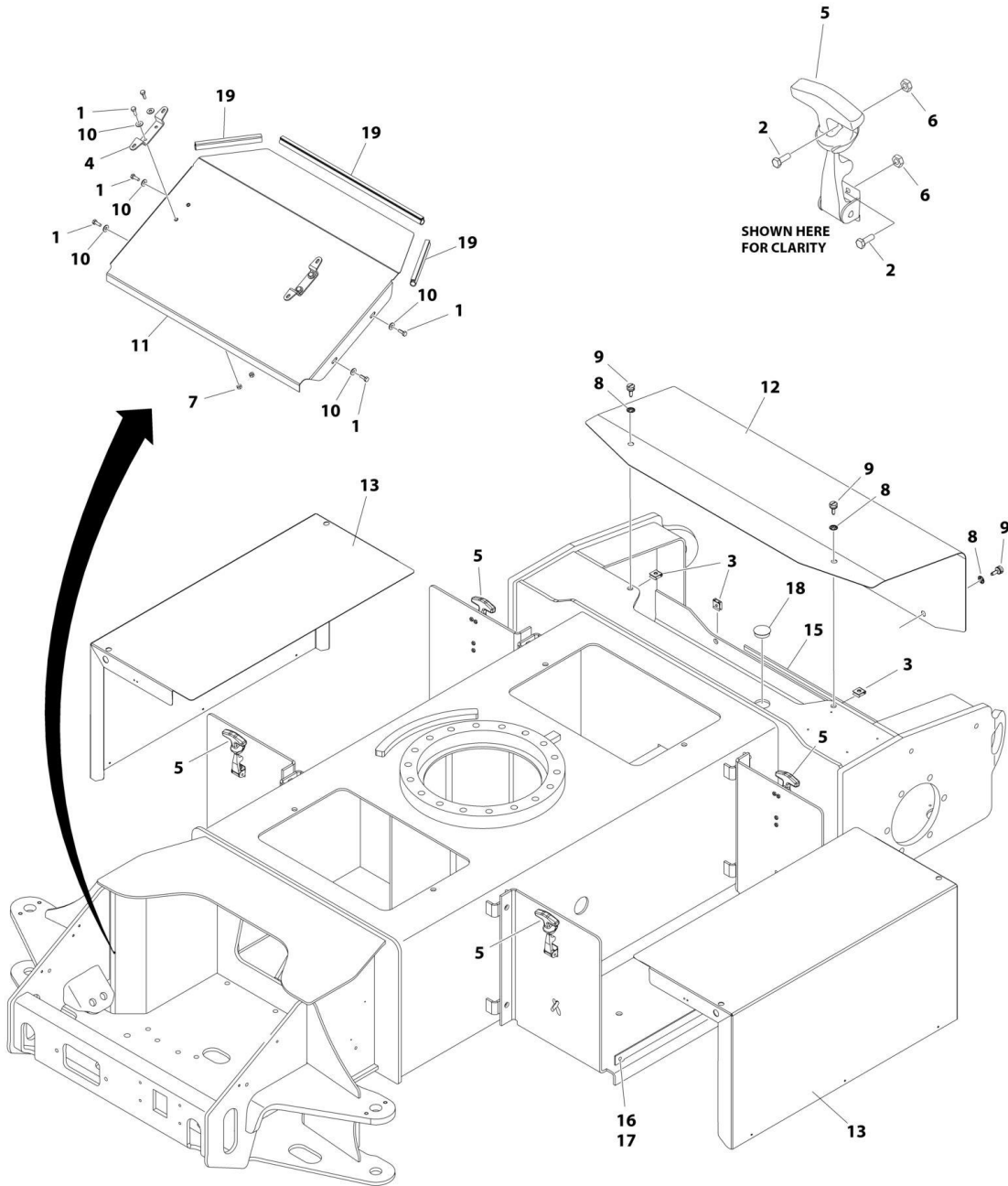
SECTION 1 - FRAME

FIGURE 1-37. VOLTAGE GUARD ASSEMBLY AND INSTALLATION (ANSI EXPORT AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001185306	Ref	VOLTAGE GUARD ASSEMBLY AND INSTALLATION	B
1	4010408	2	Screw M4 x 16	
2	4010412	2	Screw M4 x 24	
3	4460007	1	Buss Bar	
4	4460968	2	Connector, Strain Relief	
5	1001184947	1	Harness, OVP Cable Kit	
6	1001185156	1	Module, Voltage Guard	
7	1001186497	1	Box	
8	1001187101	1	Plate	
9	1001187530	1	Decal - JLG	

SECTION 1 - FRAME

FIGURE 1-38. FRAME COVER INSTALLATION - E450A/E450AJ



ART_1001166327

SECTION 1 - FRAME

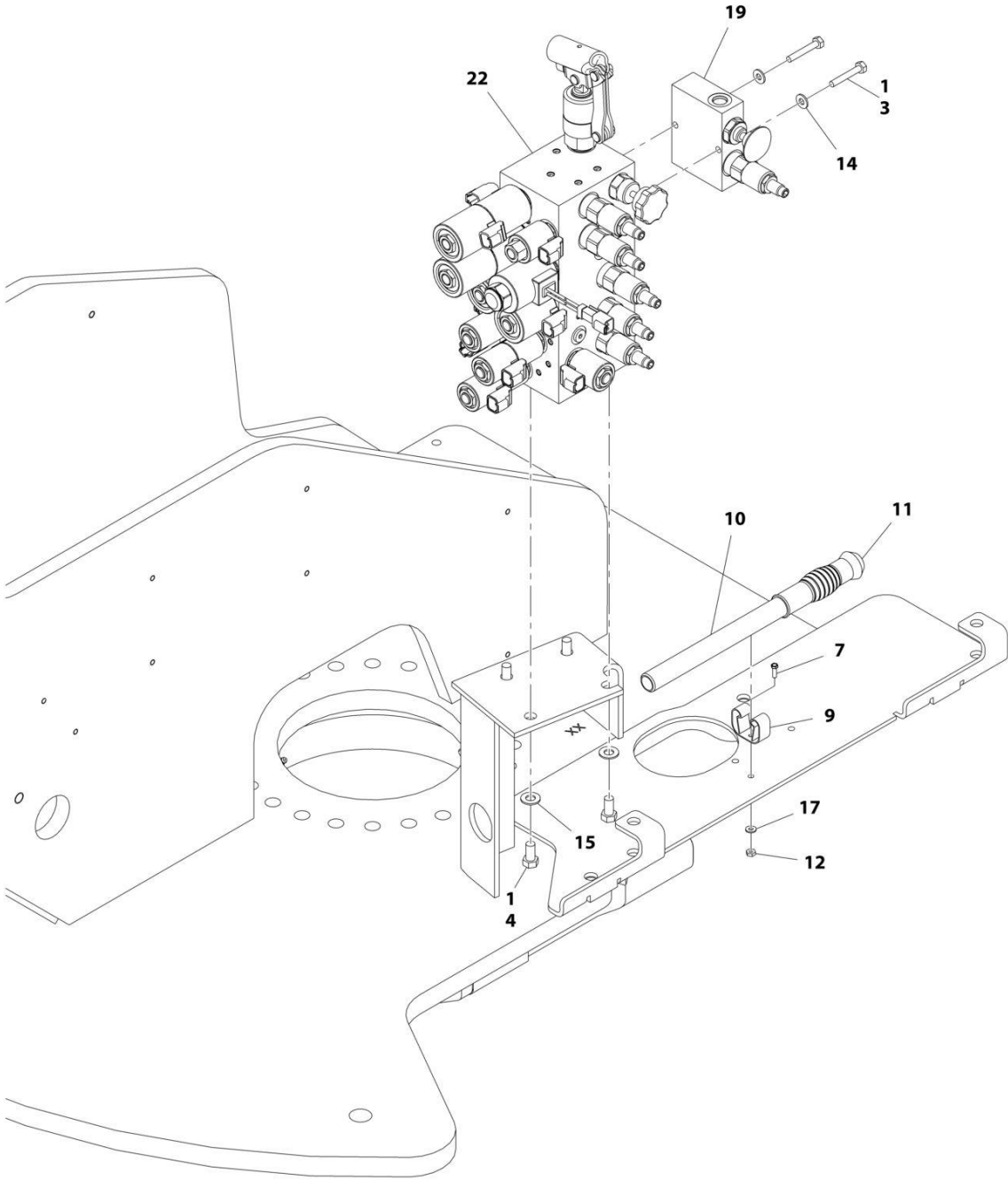
FIGURE 1-38. FRAME COVER INSTALLATION - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166327	Ref	FRAME COVER INSTALLATION	F
1	0641406	8	Bolt 1/4 X 3/4	
2	0721004	16	Bolt #10 X .500	
3	1380138	4	Clip, Receptacle	
4	2700093	2	Hook	
5	2940095	4	Latch	
6	3311005	16	Nut #10	
7	3311405	4	Nut 1/4	
8	3760308	4	Retainer	
9	1001112496	4	Screw, Special	
10	4751400	8	Washer 1/4	
11	1001166321	1	Cover	
12	1001166330	1	Axle Cover	
13	1001166493	2	Battery Cover	
15	3960447	11 ft /3.4m	Seal	
16	3820019	6	Rivet	
17	1001175025	2	Brace, Battery Tray	
18	3520035	1	Plug, Cap	
19	1001110166	3.5 ft /1.1m	Seal	

SECTION 2 - TURNTABLE

SECTION 2 - TURNTABLE

FIGURE 2-1. VALVE INSTALLATION- TURNTABLE MOUNTED - E450A



ART_1001180930_20F2

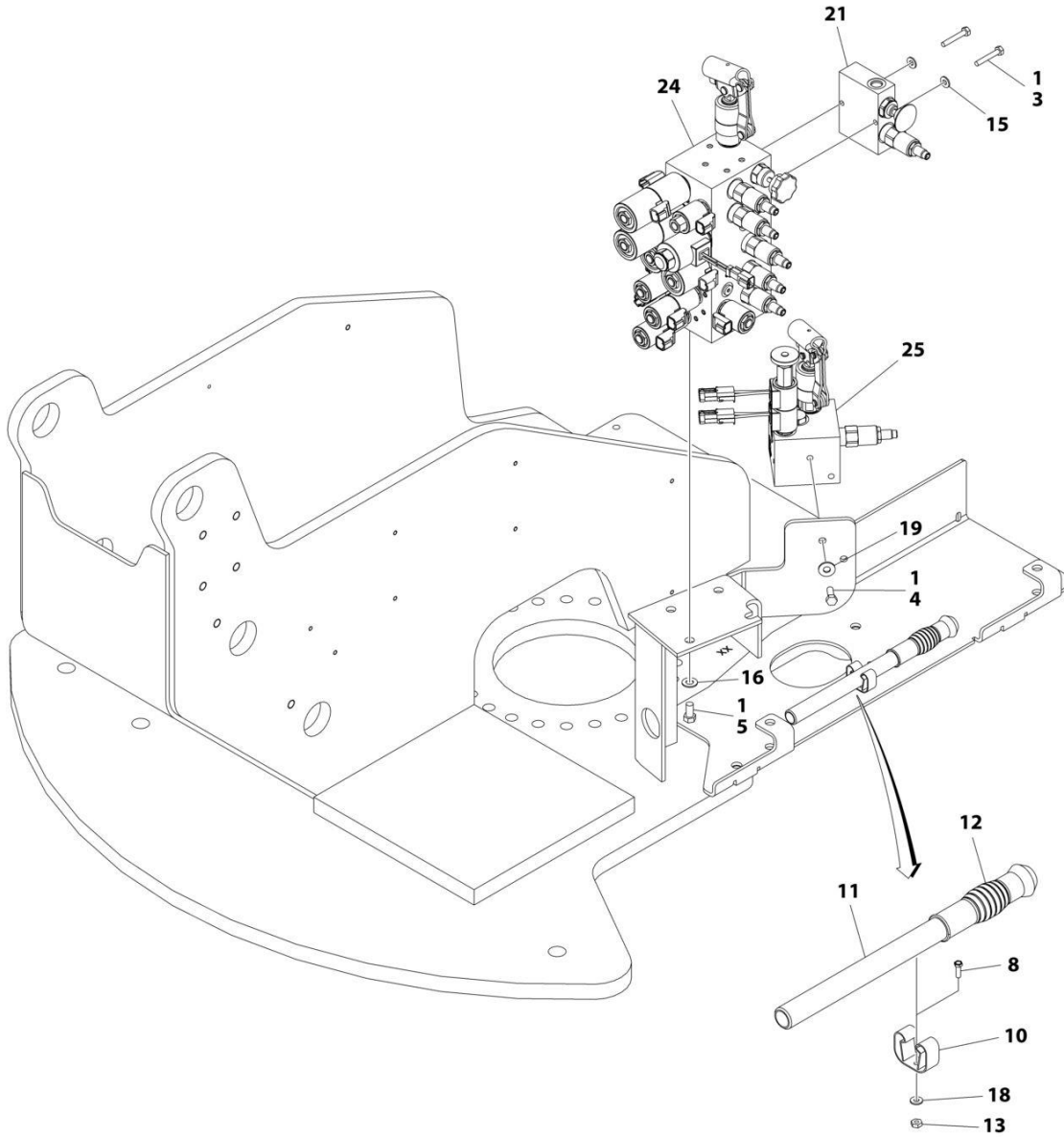
SECTION 2 - TURNTABLE

FIGURE 2-1. VALVE INSTALLATION- TURNTABLE MOUNTED - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001180930	Ref	VALVE INSTALLATION- TURNTABLE MOUNTED	B
1	0100011	AR	Compound, Locking	
3	0641413	2	Bolt 1/4 X 1-5/8	
4	0641606	4	Bolt 3/8 X 3/4	
7	0720804	1	Bolt #8 X .500	
9	1380136	1	Clip, Gripper	
10	2560122	1	Handle	
11	2560123	1	Handle, Grip	
12	3310805	1	Nut #8	
14	4711400	2	Washer 1/4	
15	4711600	4	Washer 3/8	
17	4750800	1	Washer #8	
19	1001097777	1	Releveling Valve Assembly (See Separate Breakdown in this Section)	
22	1001180554	1	Main Control Valve Assembly (See Separate Breakdown in this Section)	

SECTION 2 - TURNTABLE

FIGURE 2-2. VALVE INSTALLATION - TURNTABLE MOUNTED - E450AJ



ART_1001218371_2OF2

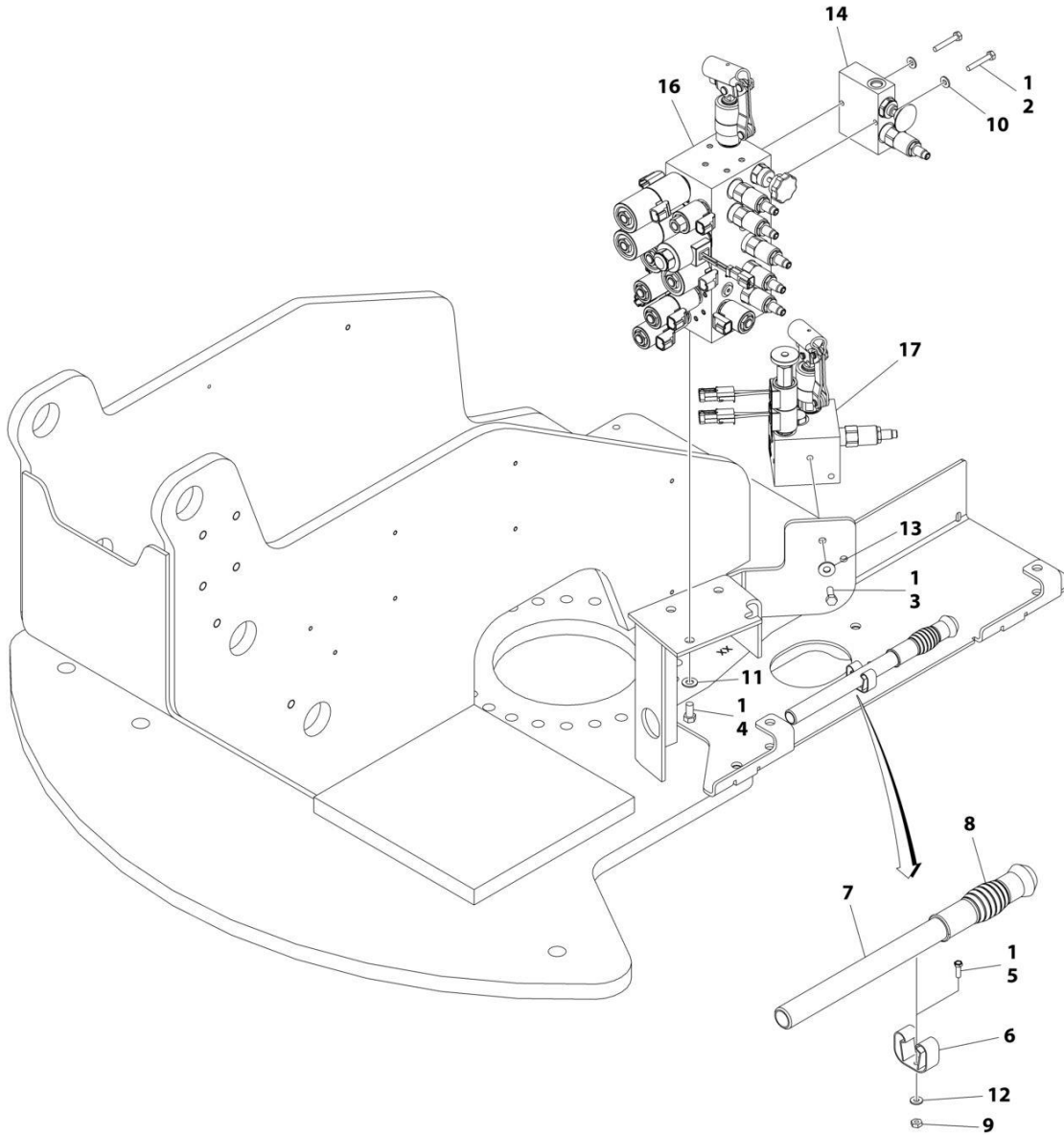
SECTION 2 - TURNTABLE

FIGURE 2-2. VALVE INSTALLATION - TURNTABLE MOUNTED - E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001218371	Ref	VALVE INSTALLATION - TURNTABLE MOUNTED	A
1	0100011	AR	Compound, Locking	
3	0641413	2	Bolt 1/4 x 1-5/8	
4	0641507	2	Bolt 5/16 x 7/8	
5	0641606	4	Bolt 3/8 x 3/4	
8	0720804	1	Bolt #8 x .500	
10	1380136	1	Clip, Gripper	
11	2560122	1	Handle	
12	2560123	1	Handle, Grip	
13	3310805	1	Nut #8	
15	4711400	2	Washer 1/4	
16	4711600	4	Washer 3/8	
18	4750800	1	Washer #8	
19	4751500	2	Washer 5/16	
21	1001097777	1	Releveling Valve Assembly (See Separate Breakdown in this Section)	
24	1001180554	1	Main Control Valve Assembly (See Separate Breakdown in this Section)	
25	1001216920	1	Jib Valve Assembly (See Separate Breakdown in this Section)	

SECTION 2 - TURNTABLE

FIGURE 2-3. VALVE INSTALLATION - TURNTABLE MOUNTED - M450AJ



ART_1001218372_2OF2

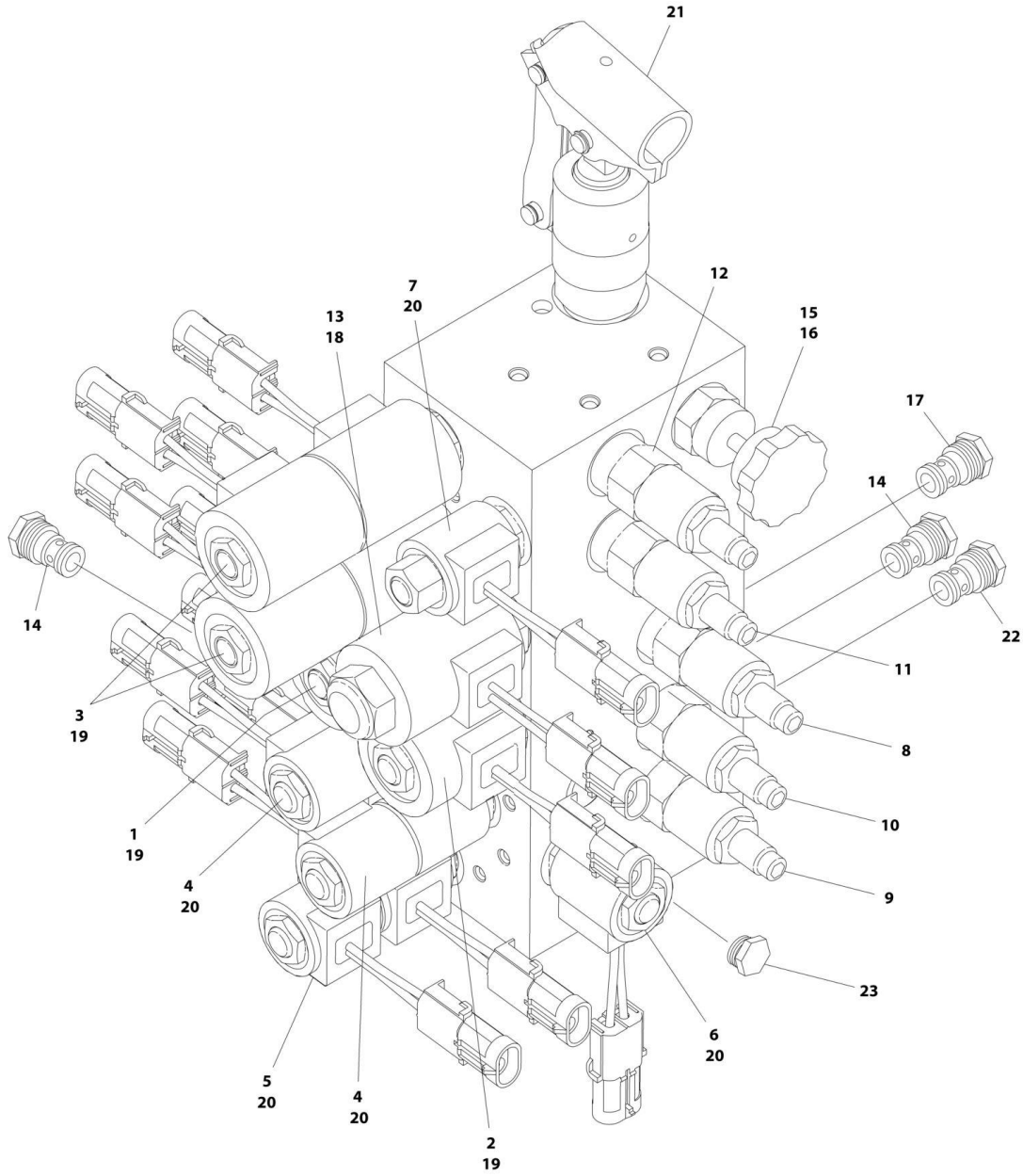
SECTION 2 - TURNTABLE

FIGURE 2-3. VALVE INSTALLATION - TURNTABLE MOUNTED - M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001218372	Ref	VALVE INSTALLATION - TURNTABLE MOUNTED	A
1	0100011	AR	Compound, Locking	
2	0641413	3	Bolt 1/4 x 1-5/8	
3	0641507	2	Bolt 5/16 x 7/8	
4	0641606	4	Bolt 3/8 x 3/4	
5	0720804	1	Bolt #8 x .500	
6	1380136	1	Clip, Gripper	
7	2560122	1	Handle	
8	2560123	1	Handle, Grip	
9	3310805	1	Nut #8	
10	4711400	2	Washer 1/4	
11	4711600	4	Washer 3/8	
12	4750800	1	Washer #8	
13	4751500	2	Washer 5/16	
14	1001097777	1	Releveling Valve Assembly (See Separate Breakdown in this Section)	
16	1001180554	1	Main Control Valve Assembly (See Separate Breakdown in this Section)	
17	1001216920	1	Jib Valve Assembly (See Separate Breakdown in this Section)	

SECTION 2 - TURNTABLE

FIGURE 2-4. MAIN CONTROL VALVE ASSEMBLY



ART_1001180554

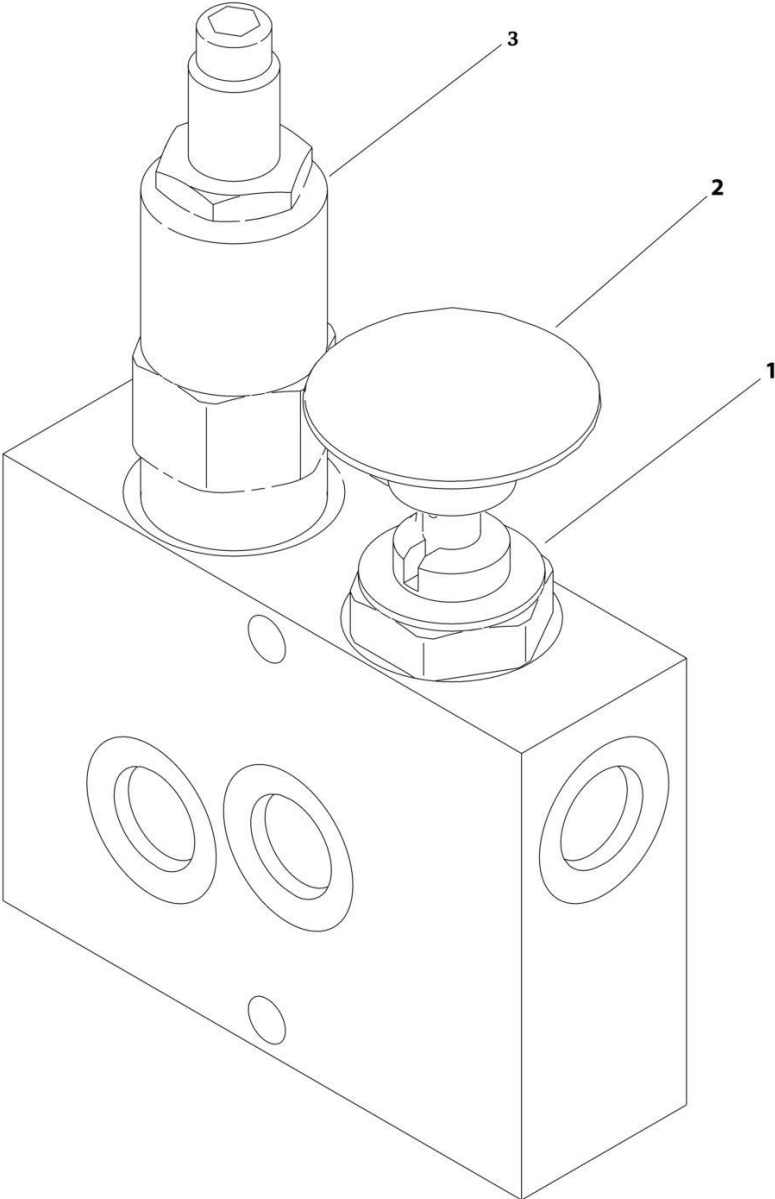
SECTION 2 - TURNTABLE

FIGURE 2-4. MAIN CONTROL VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001180554	Ref	MAIN CONTROL VALVE ASSEMBLY	F
1	7022394	1	Cartridge without Coil (Telescope In)	
1	7012518	1	Seal Kit - 7022394 Cartridge	
2	7012995	1	Cartridge without Coil (Telescope Out)	
2	7012518	1	Seal Kit - 7012995 Cartridge	
3	7021603	2	Cartridge without Coil (Lower and Upper Lift)	
3	7012903	2	Seal Kit - 7021603 Cartridge	
4	7017452	2	Cartridge without Coil (Platform Level)	
4	7017402	2	Seal Kit - 7017452 Cartridge	
5	7017433	1	Cartridge without Coil (Swing)	
5	7017402	1	Seal Kit - 7017433 Cartridge	
6	7021604	1	Cartridge without Coil (Swing Arrest)	
6	7012953	1	Seal Kit - 7021604 Cartridge	
7	7017410	1	Cartridge without Coil (Bypass Unloading)	
7	7012967	1	Seal Kit - 7017410 Cartridge	
8	7017418	1	Cartridge (Telescope)	
8	7012998	1	Seal Kit - 7017418 Cartridge	
9	7017421	1	Cartridge (Platform Level Backward Piston End)	
9	7012998	1	Seal Kit - 7017421 Cartridge	
10	7017418	1	Cartridge (Platform Level Forward Rod End)	
10	7012998	1	Seal Kit - 7017418 Cartridge	
11	70001876	1	Cartridge (Lower Lift Down)	
11	7012998	1	Seal Kit - 70001876 Cartridge	
12	70002806	1	Cartridge (Upper Lift Down)	
12	7012998	1	Seal Kit - 70002806 Cartridge	
13	7021611	1	Cartridge without Coil (Flow Regulator)	
13	7012518	1	Seal Kit - 7021611 Cartridge	
14	7012914	2	Cartridge (Platform Level)	
14	7012918	2	Seal Kit - 7012914 Cartridge	
15	7012947	1	Cartridge (Emergency Descent)	
15	7012518	1	Seal Kit - 7012947 Cartridge	
16	7012961	1	Knob	
17	10837580	1	Cartridge (Telescope)	
17	7010543	1	Seal Kit - 10837580 Cartridge	
18	70005210	1	Coil	
19	7024883	6	Coil	
20	7024885	8	Coil	
21	70004019	1	Pump, Manual	
21	2900756	1	Seal Kit - 70004019 Pump	
21	2560122	1	Handle (Not Shown)	
21	1001114761	1	Handle, Grip (Red) (Not Shown)	
21	2560123	1	Handle, Grip (Black) (Not Shown)	
22	7012975	1	Cartridge (Check)	
22	7012540	1	Seal Kit - 7012975 Cartridge	
23	70000381	1	Plug, Cartridge	
24	70005091	1	Orifice (Swing) (Not Shown)	
25	70004884	1	Orifice (Platform) (Not Shown)	

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FIGURE 2-5. RELEVELING VALVE ASSEMBLY



ART_100109777

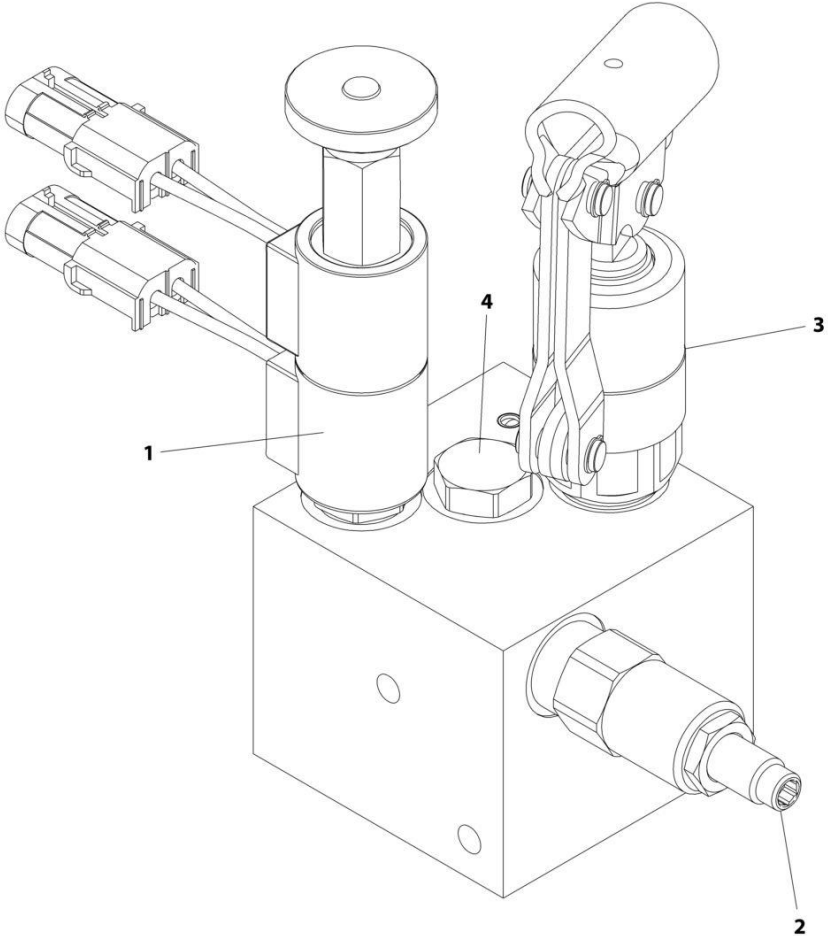
SECTION 2 - TURNTABLE

FIGURE 2-5. RELEVELING VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001097777	Ref	RELEVELING VALVE ASSEMBLY	C
1	7017466	1	Cartridge	
1	7017496	1	Seal Kit - 7017466 Cartridge	
2	7012959	1	Knob	
3	7024891	1	Cartridge	
3	7012953	1	Seal Kit - 7024891 Cartridge	

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FIGURE 2-6. JIB VALVE ASSEMBLY



ART_1001216920

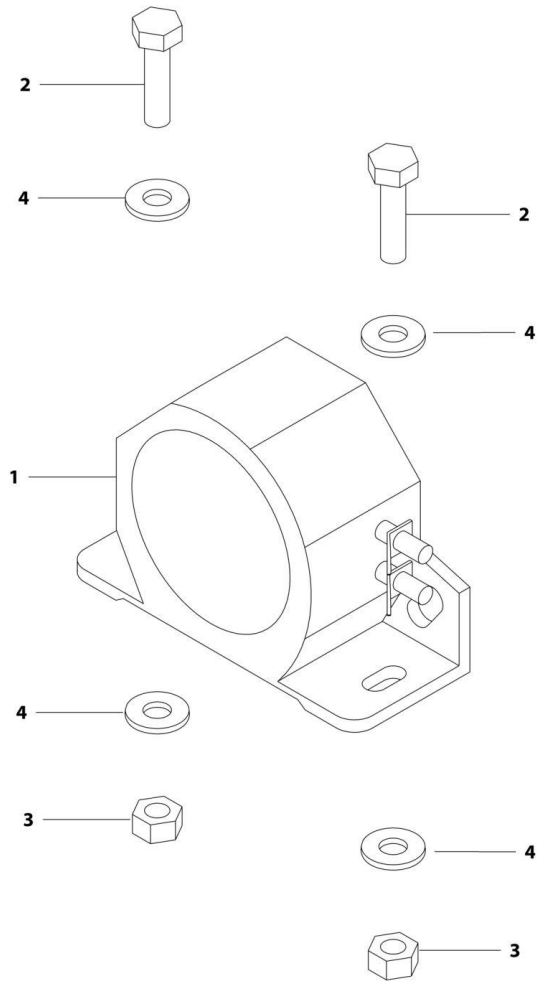
SECTION 2 - TURNTABLE

FIGURE 2-6. JIB VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001216920	Ref	JIB VALVE ASSEMBLY	C
1	70006346	1	Cartridge (Manual Override)	
1	7017402	1	Seal Kit - 70006346 Cartridge	
1	70006348	1	Coil Spacer	
1	7021609	2	Coil	
1	70006347	1	Coil Nut	
2	70006349	1	Cartridge	
2	7021653	1	Seal Kit - 70006349 Cartridge	
3	70005722	1	Cartridge	
3	7017496	1	Seal Kit - 70005722 Cartridge	
3	2560122	1	Handle	
3	1001114761	1	Grip, Handle (Red)	
3	2560123	1	Grip, Handle (Black)	
4	7024887	1	Cartridge	
4	7012998	1	Seal Kit - 7024887 Cartridge	

SECTION 2 - TURNTABLE

FIGURE 2-7. MOTION ALARM INSTALLATION



ART_1001183367

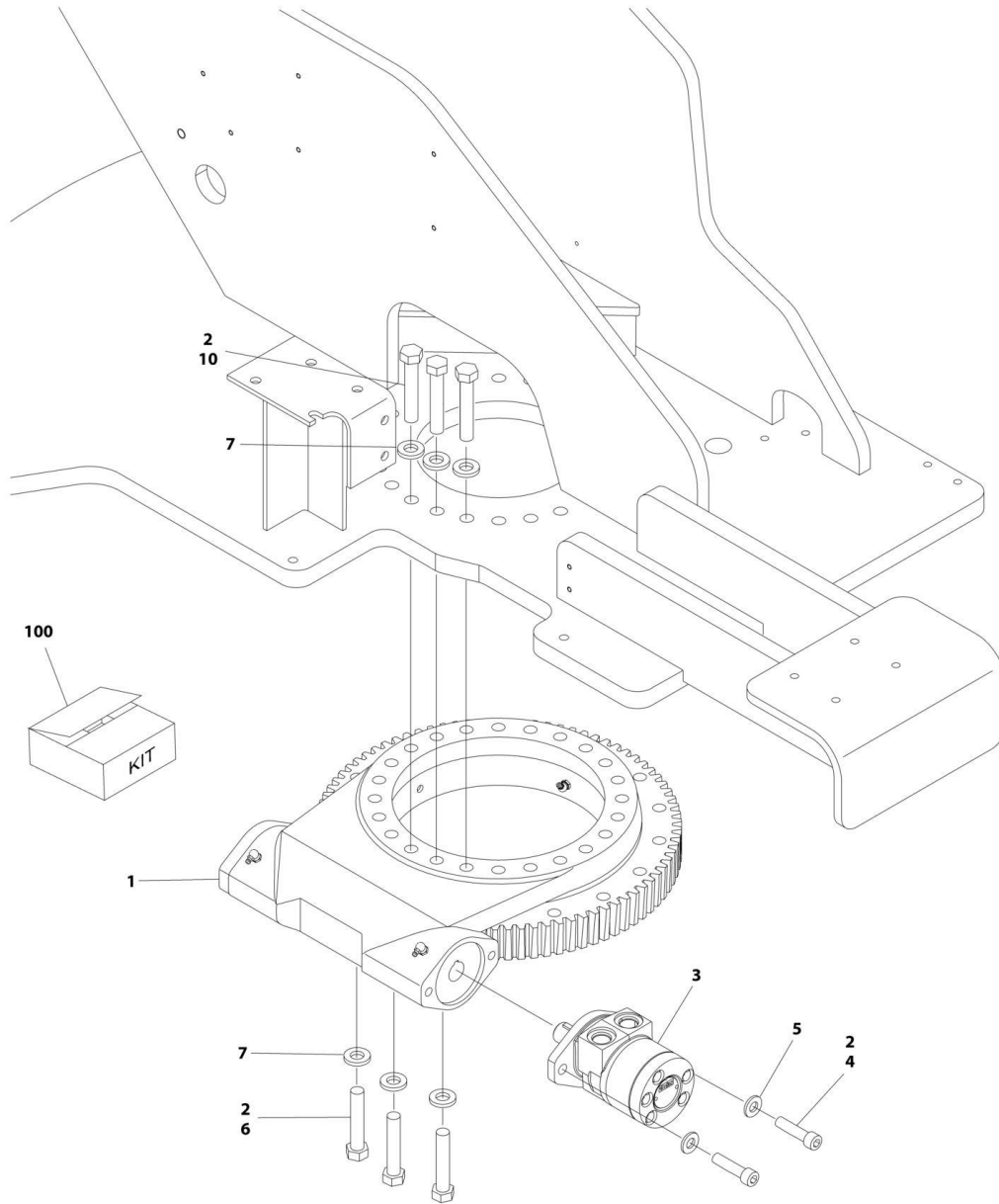
SECTION 2 - TURNTABLE

FIGURE 2-7. MOTION ALARM INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001183367	Ref	MOTION ALARM INSTALLATION	A
1	0140043	1	Alarm, Motion	
2	0641406	2	Bolt 1/4 X 3/4	
3	3311405	2	Nut 1/4-20	
4	4711400	2	Washer 1/4	

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FIGURE 2-8. TURNTABLE BEARING AND SWING DRIVE INSTALLATION



ART_1001166395

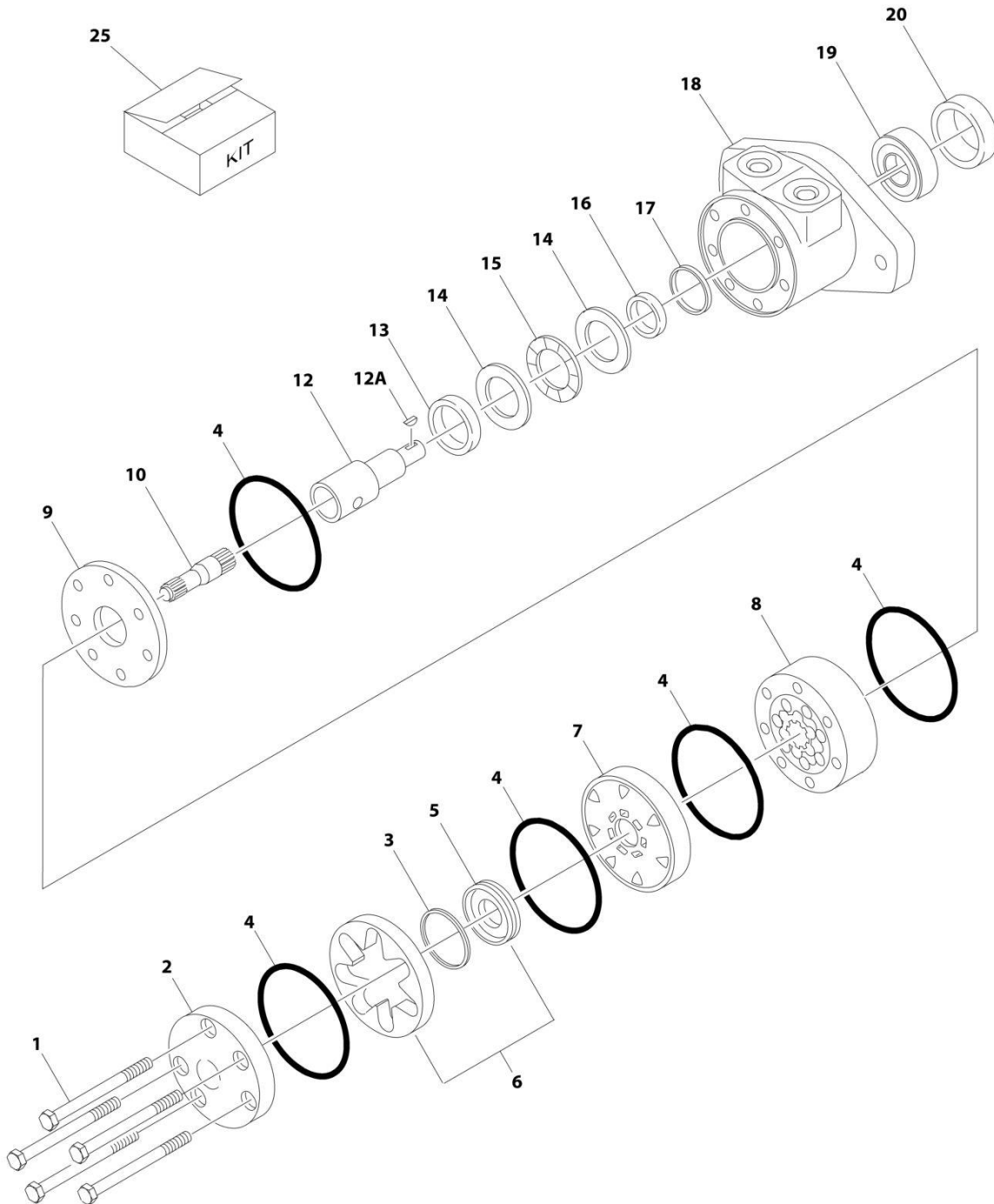
SECTION 2 - TURNTABLE

FIGURE 2-8. TURNTABLE BEARING AND SWING DRIVE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166395	Ref	TURNTABLE BEARING AND SWING DRIVE INSTALLATION	C
1	1001153017	1	Turntable Bearing and Worm Gear Assembly (See Separate Breakdown in this Section)	
2	0100019	AR	Compound, Locking	
3	1001104850	1	Swing Motor Assembly (See Separate Breakdown in this Section)	
4	3931832	2	Bolt 1/2 X 2	
5	4740171	2	Washer	
6	0682026	18	Bolt 5/8 X 3-1/4, Grade 8	
7	4892000	41	Washer 5/8	
10	0682028	23	Bolt 5/8 X 3-1/2, Grade 8	
100	1001160527	1	Turntable Bearing Replacement Kit (Includes Items 1, 4, 5, 6, 7 & 10)	

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FIGURE 2-9. SWING MOTOR ASSEMBLY



ART_1001104850

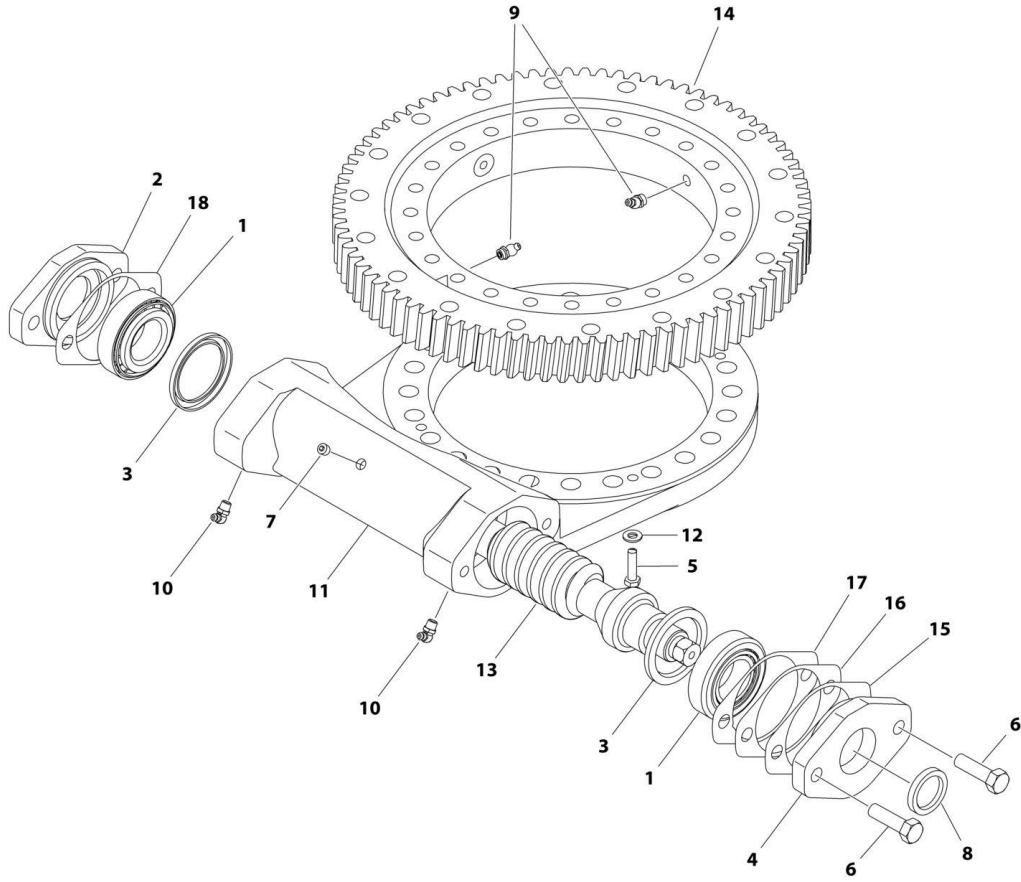
SECTION 2 - TURNTABLE

FIGURE 2-9. SWING MOTOR ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001104850	Ref	SWING MOTOR ASSEMBLY	A
1	See Note	5	Bolt (Note: Not Available for Purchase)	
2	7004035	1	Cover, End	
3	7023318	1	Seal, Commutator	
4	7004036	5	O-Ring	
5	See Note	NSS	Commutator (Note: Use Item 6)	
6	7024453	1	Commutator and Ring Assembly (Includes Item 5)	
7	7024379	1	Manifold	
8	70002206	1	Rotor Set	
9	7024380	1	Plate, Wear	
10	70002207	1	Link, Drive	
12	70000088	1	Shaft, Coupling	
12A	70000089	1	Key	
13	7024381	1	Bushing, Inner	
14	7004043	1	Thrustwasher	
15	7004044	1	Bearing, Thrust	
16	7004049	1	Seal, Inner Shaft	
17	7004045	1	Ring, Back-up	
18	See Note	NSS	Housing (Note: Not Available - Purchase Complete Motor)	
19	7024390	1	Bearing	
20	7004047	1	Seal, Outer Shaft	
25	7024389	1	Seal Kit (Includes Items 3, 4, 16, 17 & 20)	

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FIGURE 2-10. SWING BEARING ASSEMBLY



ART_1001153017

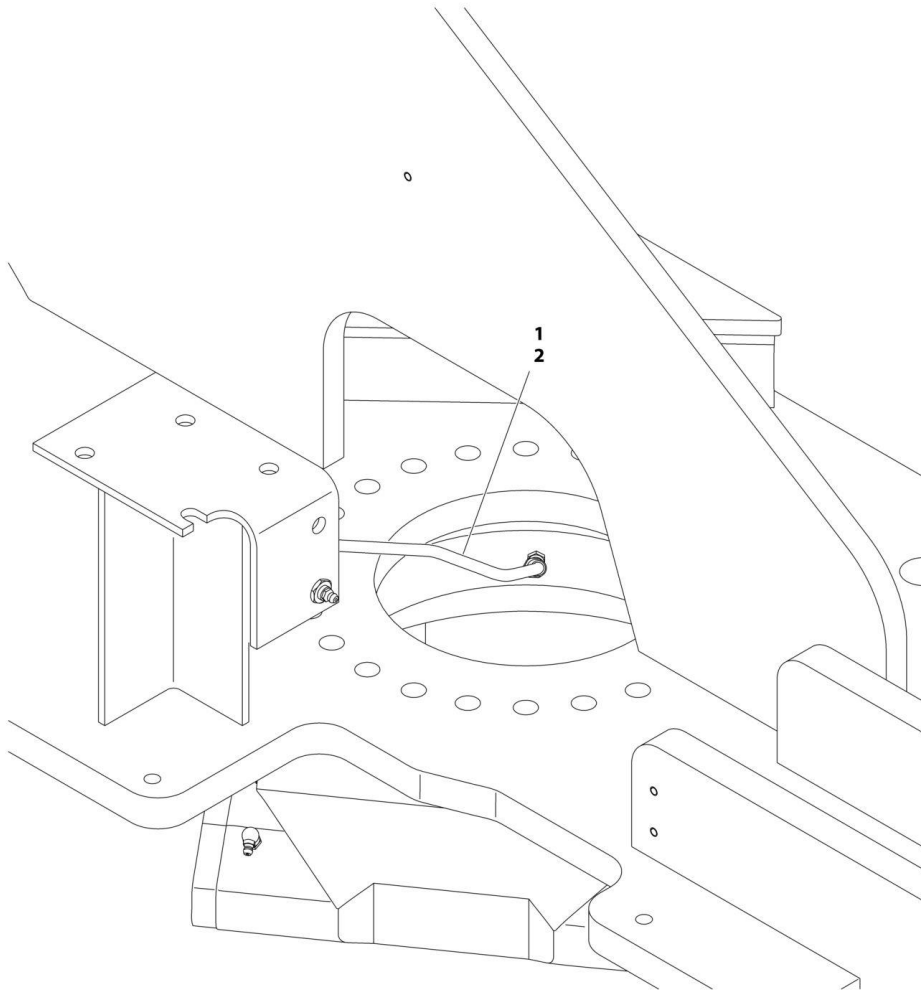
SECTION 2 - TURNTABLE

FIGURE 2-10. SWING BEARING ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001153017	Ref	SWING BEARING ASSEMBLY	B
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 5/16 x 1-1/4	
6	0641812	2	Bolt 1/2 x 1-1/2	
7	70000865	1	Plug	
8	7027360	1	Seal	
9	2160003	2	Fitting, Grease - 45	
10	7027358	2	Fitting, Grease - 90	
11	See Note	NSS	Housing (Note: Not Sold Separate - Use 1001153017)	
12	4891500	1	Washer 5/16	
13	7027363	1	Gear, Worm	
14	70004159	1	Ring Gear	
15	7027352	AR	Gasket (.010 - Brown)	
16	7027351	AR	Gasket (.0075 - Clear)	
17	7027350	AR	Gasket (.005 - Blue)	
18	7027353	1	Gasket (.020 - Yellow)	

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FIGURE 2-11. REMOTE BEARING LUBE INSTALLATION - OPTIONAL



ART_1001166341

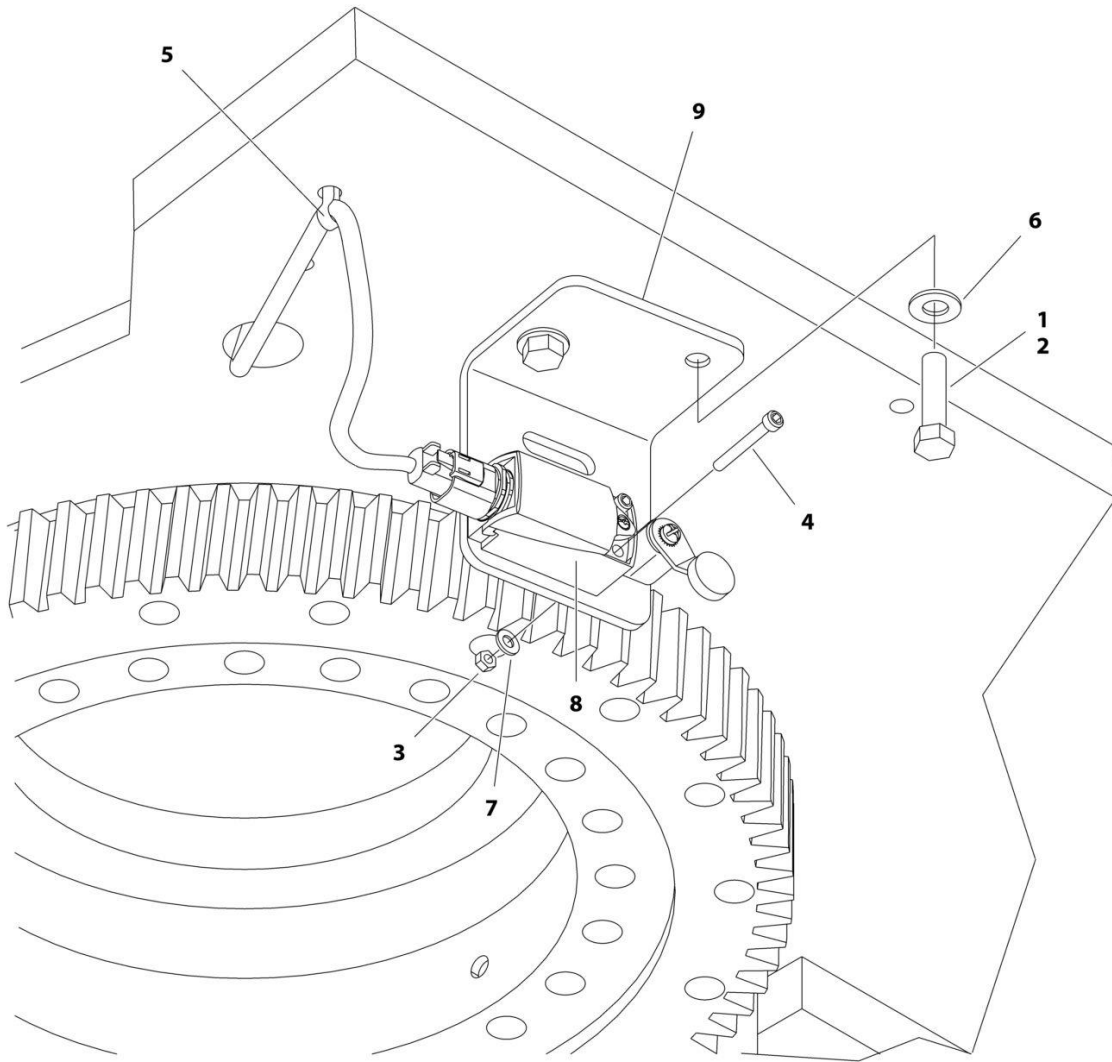
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FIGURE 2-11. REMOTE BEARING LUBE INSTALLATION - OPTIONAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166341	Ref	REMOTE BEARING LUBE INSTALLATION - OPTIONAL	B
1	1001157058	1	Hose, Remote Grease Line	
2	0100011	AR	Compound, Locking	

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FIGURE 2-12. DRIVE ORIENTATION INSTALLATION



ART_1001187790

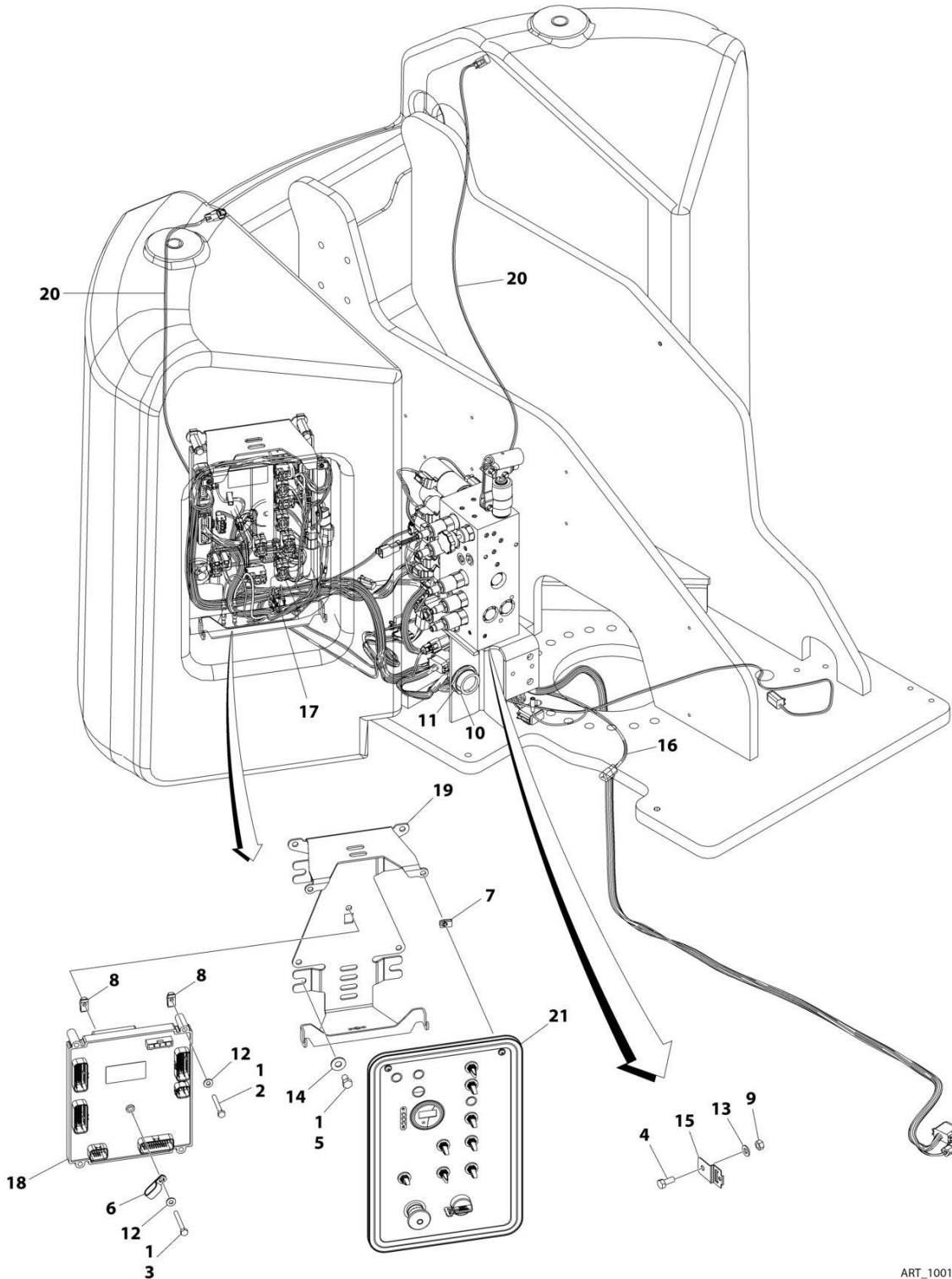
SECTION 2 - TURNTABLE

FIGURE 2-12. DRIVE ORIENTATION INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001187790	Ref	DRIVE ORIENTATION INSTALLATION	B
1	0100011	AR	Compound, Locking	
2	0641608	2	Bolt 3/8 X 1	
3	3310805	2	Nut #8	
4	3930824	2	Bolt #8 X 1-1/2	
5	4240175	1	Tie, Strap	
6	4711600	2	Washer 3/8	
7	4750800	2	Washer #8	
8	1001116232	1	Switch, Limit	
9	1001171298	1	Bracket, Mounting	

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FIGURE 2-13. GROUND CONTROL BOX INSTALLATION - E450AJ/M450AJ (ALL SPECS EXCEPT CE AND CHINA SPECS)



ART_1001249821

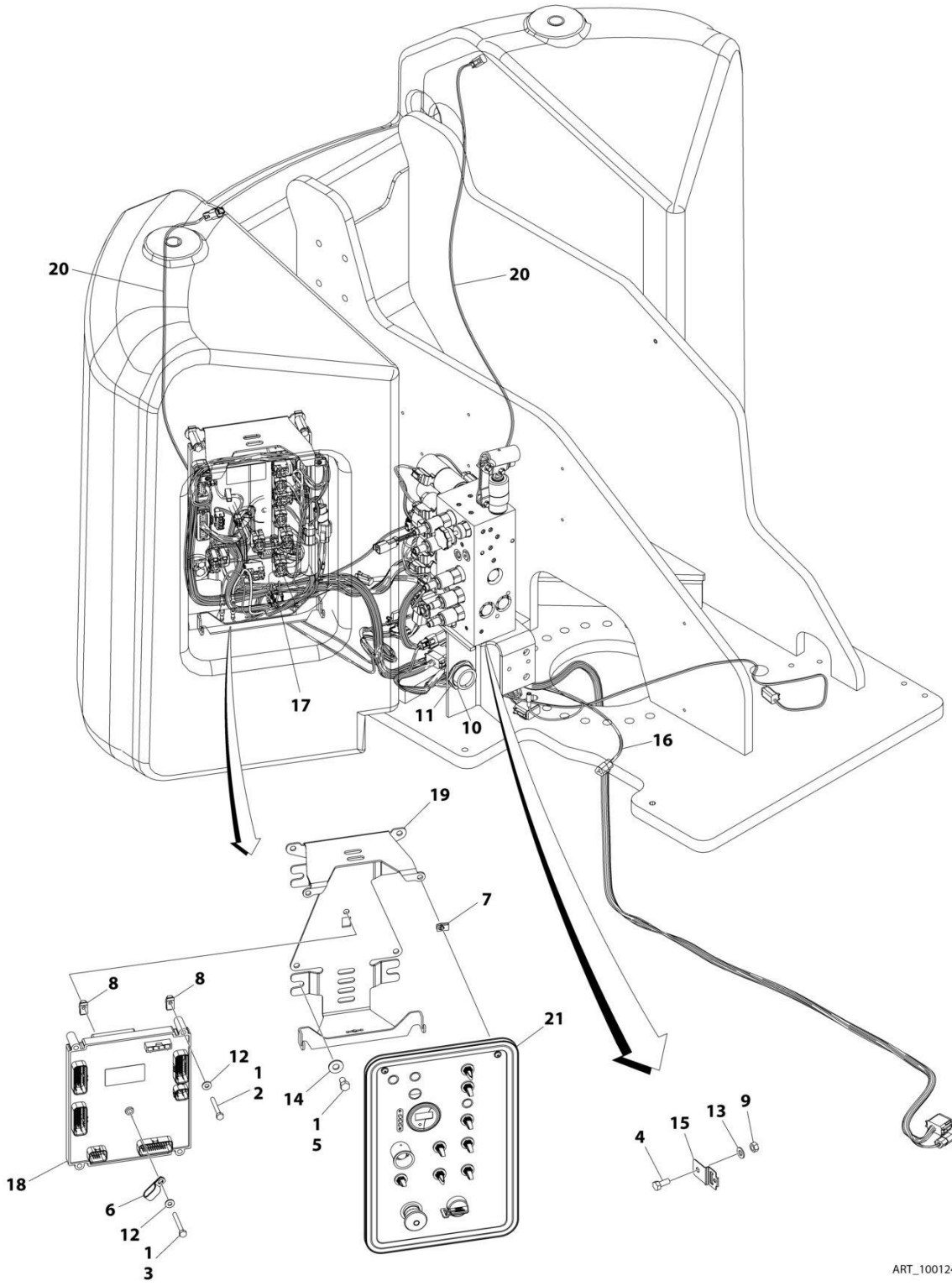
SECTION 2 - TURNTABLE

FIGURE 2-13. GROUND CONTROL BOX INSTALLATION - E450AJ/M450AJ (ALL SPECS EXCEPT CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249821	Ref	GROUND CONTROL BOX INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0641416	4	Bolt, 1/4-20 X 2	
3	0641418	1	Bolt, 1/4-20 X 2-1/4	
4	0641506	1	Bolt, 5/16-18 X 3/4	
5	0641605	4	Bolt, 3/8-16 X 5/8	
6	1321385	1	Clamp	
7	3300365	2	Nut, Special	
8	3300454	5	Nut, 1/4-20	
9	3311505	1	Nut, Lock 5/16-18	
10	4460470	1	Nut, Terminal	
11	4460471	1	Washer, Lock	
12	4711400	5	Washer, 1/4	
13	4711500	1	Washer, 5/16	
14	4751600	4	Washer, 3/8	
15	1001153749	1	Clip	
16	1001178794	1	Harness, Valve (See Separate Breakdown in ELECTRICAL SECTION)	
17	1001179991	1	Harness, Ground Control Panel (See Separate Breakdown in ELECTRICAL SECTION)	
18	1001182700	1	Module, Ground Control (Note: Re-calibration Required when Replaced)	
19	1001188065	1	Bracket	
20	1001245677	1	Harness, Turntable (See Separate Breakdown in ELECTRICAL SECTION)	
21	1001249820	1	Ground Control Box Electrical Assembly (See Separate Breakdown in this Section)	

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FIGURE 2-14. GROUND CONTROL BOX INSTALLATION - E450AJ/M450AJ (CE AND CHINA SPECS)



ART_1001249896

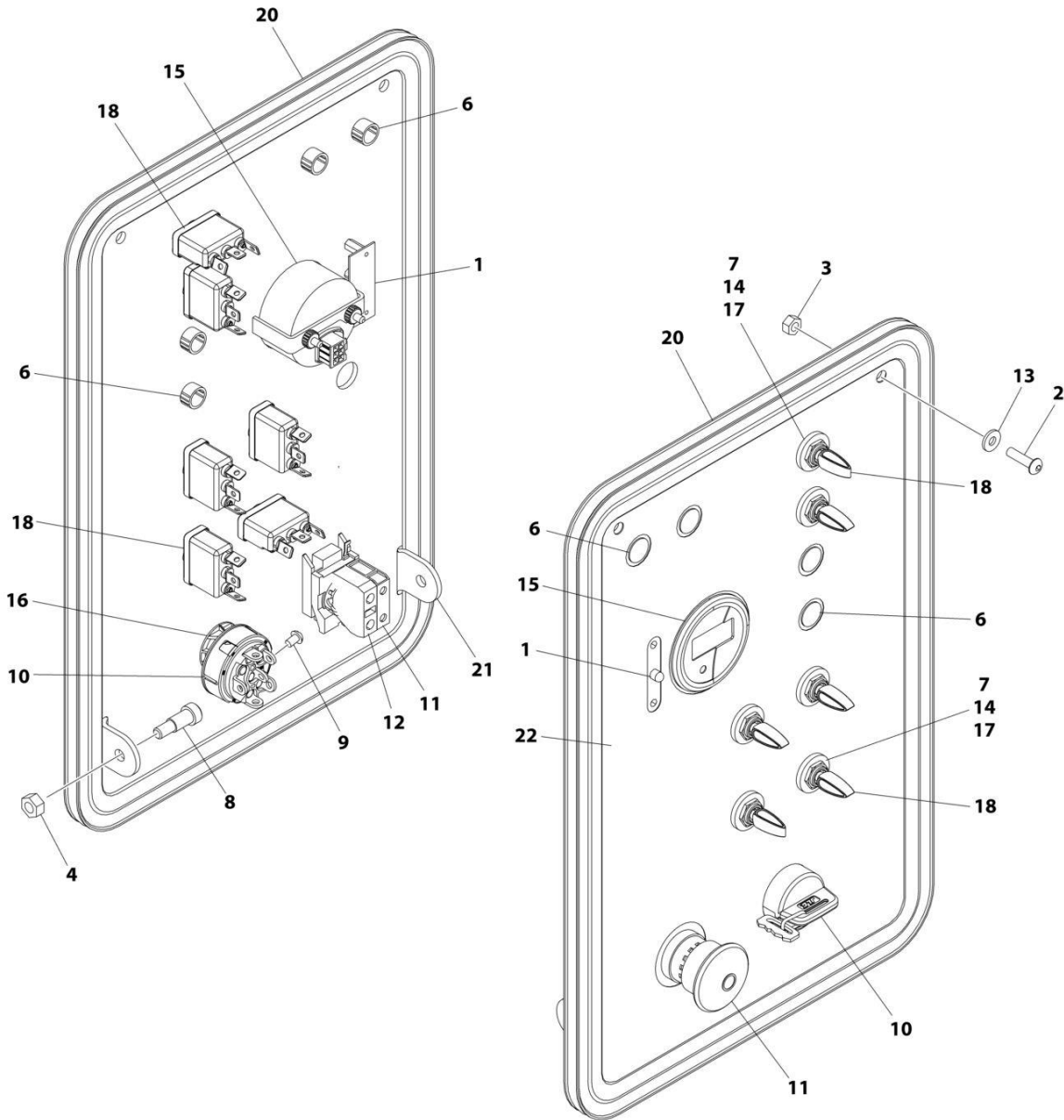
SECTION 2 - TURNTABLE

FIGURE 2-14. GROUND CONTROL BOX INSTALLATION - E450AJ/M450AJ (CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249896	Ref	GROUND CONTROL BOX INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0641416	4	Bolt, 1/4-20 X 2	
3	0641418	1	Bolt, 1/4-20 X 2-1/4	
4	0641506	1	Bolt, 5/16-18 X 3/4	
5	0641605	4	Bolt, 3/8-16 X 5/8	
6	1321385	1	Clamp	
7	3300365	2	Nut, Special	
8	3300454	5	Nut, 1/4-20	
9	3311505	1	Nut, Lock 5/16-18	
10	4460470	1	Nut, Terminal	
11	4460471	1	Washer, Lock	
12	4711400	5	Washer, 1/4	
13	4711500	1	Washer, 5/16	
14	4751600	4	Washer, 3/8	
15	1001153749	1	Clip	
16	1001178794	1	Harness, Valve (See Separate Breakdown in ELECTRICAL SECTION)	
17	1001179991	1	Harness, Ground Control Panel (See Separate Breakdown in ELECTRICAL SECTION)	
18	1001182700	1	Module, Ground Control (Note: Re-calibration Required when Replaced)	
19	1001188065	1	Bracket	
20	1001245677	1	Harness, Turntable (See Separate Breakdown in ELECTRICAL SECTION)	
21	1001249895	1	Ground Control Box Electrical Assembly (See Separate Breakdown in this Section)	

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FIGURE 2-15. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450A (ALL SPECS EXCEPT CE SPECS)



ART_1001249176

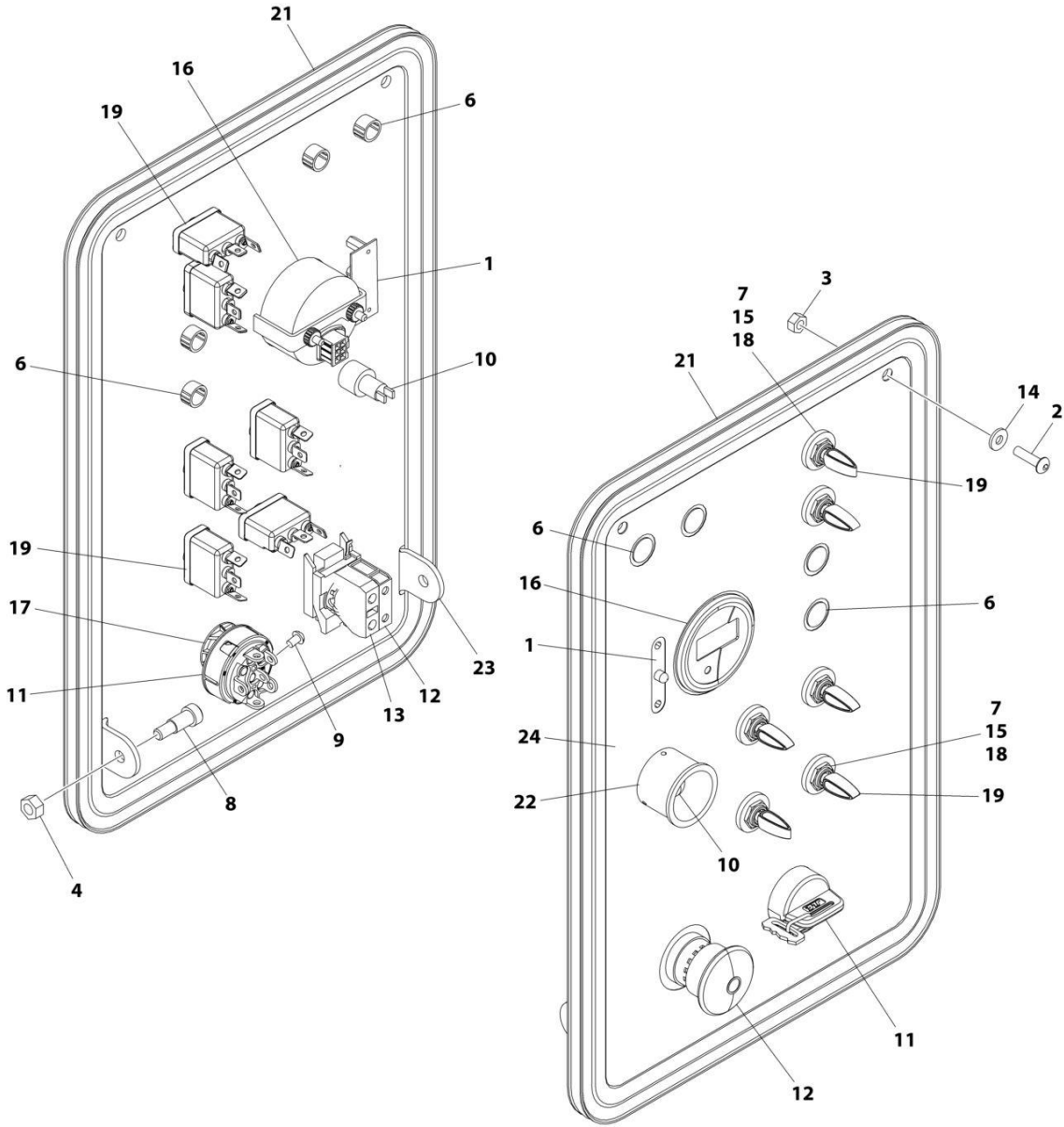
SECTION 2 - TURNTABLE

FIGURE 2-15. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450A (ALL SPECS EXCEPT CE SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249176	Ref	GROUND CONTROL BOX ELECTRICAL ASSEMBLY	C
1	1001259489	1	P/C Board, Battery Charger	
2	0630518	2	Bolt #10 x 3/4	
3	3311011	2	Nut	
4	3311405	2	Nut 1/4	
6	3520028	4	Plug, Hole 1/2	
7	3790012	6	O-Ring	
8	3900187	2	Screw	
9	3910804	6	Screw #8 x 1/4	
10	4360469	1	Keyswitch	
10	2860030	1	Key, Replacement (Set of 2)	
11	4360475	1	Switch, Emergency Stop	
11	7020175	1	Cap, Mushroom Head	
11	7020176	1	Block, Contact	
12	4360476	1	Block, Contact	
13	4740120	2	Washer	
14	4740397	6	Spacer	
15	1001109503	1	Gauge, Indicator	
16	1001151393	1	Shim, .063	
17	1001155044	6	Nut 15/32	
18	1001155045	6	Switch, Toggle	
20	1001166394	4 ft /1.2m	Seal	
21	1001188066	1	Panel, Ground Control	
22	1001221451	1	Decal - Ground Control Lid	

SECTION 2 - TURNTABLE

FIGURE 2-16. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450A (CE SPECS)



ART_1001249182

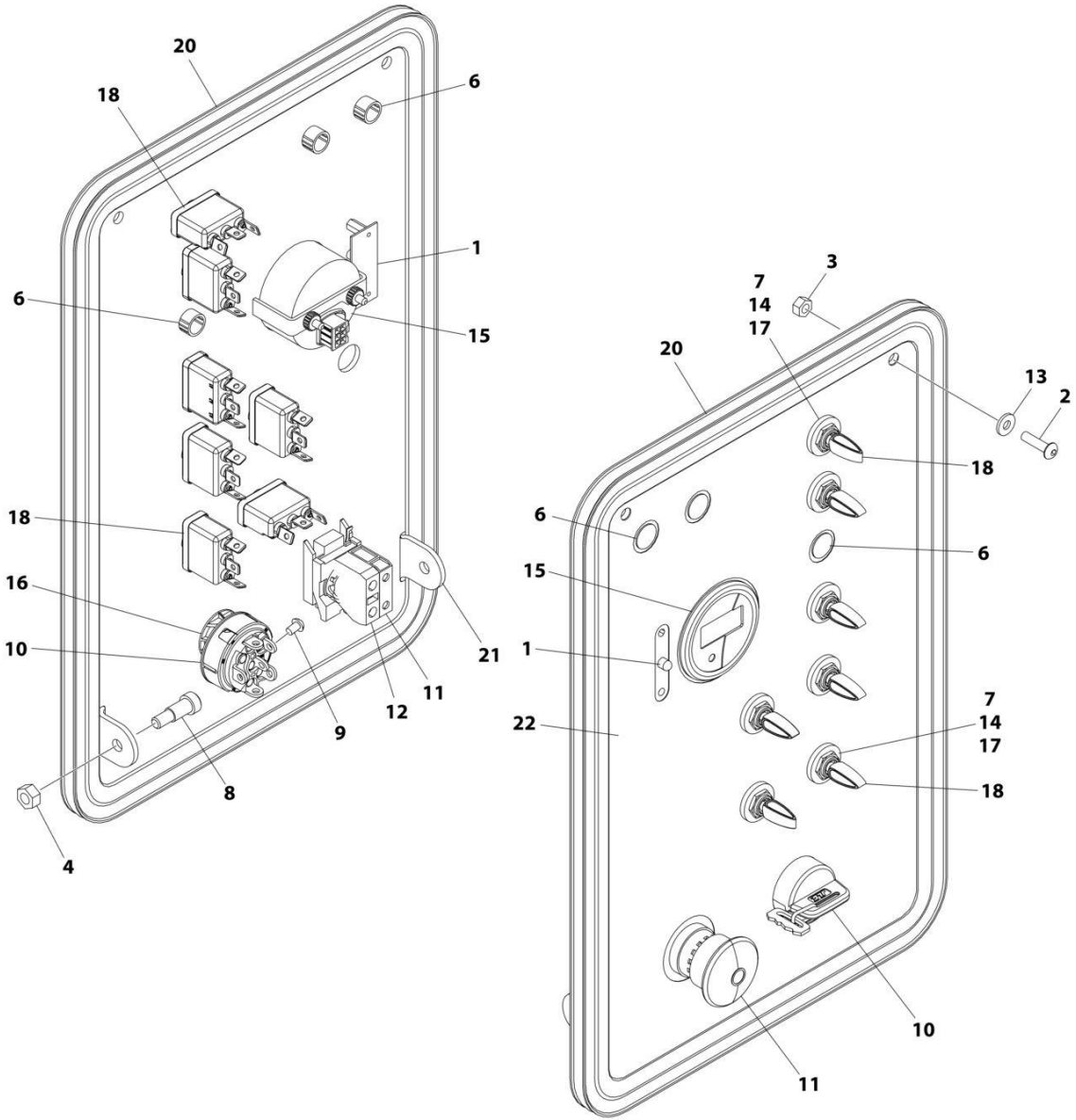
SECTION 2 - TURNTABLE

FIGURE 2-16. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450A (CE SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249182	Ref	GROUND CONTROL BOX ELECTRICAL ASSEMBLY	C
1	1001259489	1	P/C Board, Battery Charger	
2	0630518	2	Bolt #10 x 3/4	
3	3311011	2	Nut	
4	3311405	2	Nut 1/4	
6	3520028	4	Plug, Hole 1/2	
7	3790012	6	O-Ring	
8	3900187	2	Screw	
9	3910804	6	Screw #8 x 1/4	
10	4360387	1	Switch, Push Button	
11	4360469	1	Keyswitch	
11	2860030	1	Key, Replacement (Set of 2)	
12	4360475	1	Switch, Emergency Stop	
12	7020175	1	Cap, Mushroom Head	
12	7020176	1	Block, Contact	
13	4360476	1	Block, Contact	
14	4740120	2	Washer	
15	4740397	6	Spacer	
16	1001109503	1	Gauge, Indicator	
17	1001151393	1	Shim, .063	
18	1001155044	6	Nut 15/32	
19	1001155045	6	Switch, Toggle	
21	1001166394	4 ft /1.2m	Seal	
22	1001176469	1	Shroud	
23	1001188066	1	Panel, Ground Control	
24	1001221452	1	Decal - Ground Control Lid	

SECTION 2 - TURNTABLE

FIGURE 2-17. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450AJ/M450AJ (ALL SPECS EXCEPT CE AND CHINA SPECS)



ART_1001249820

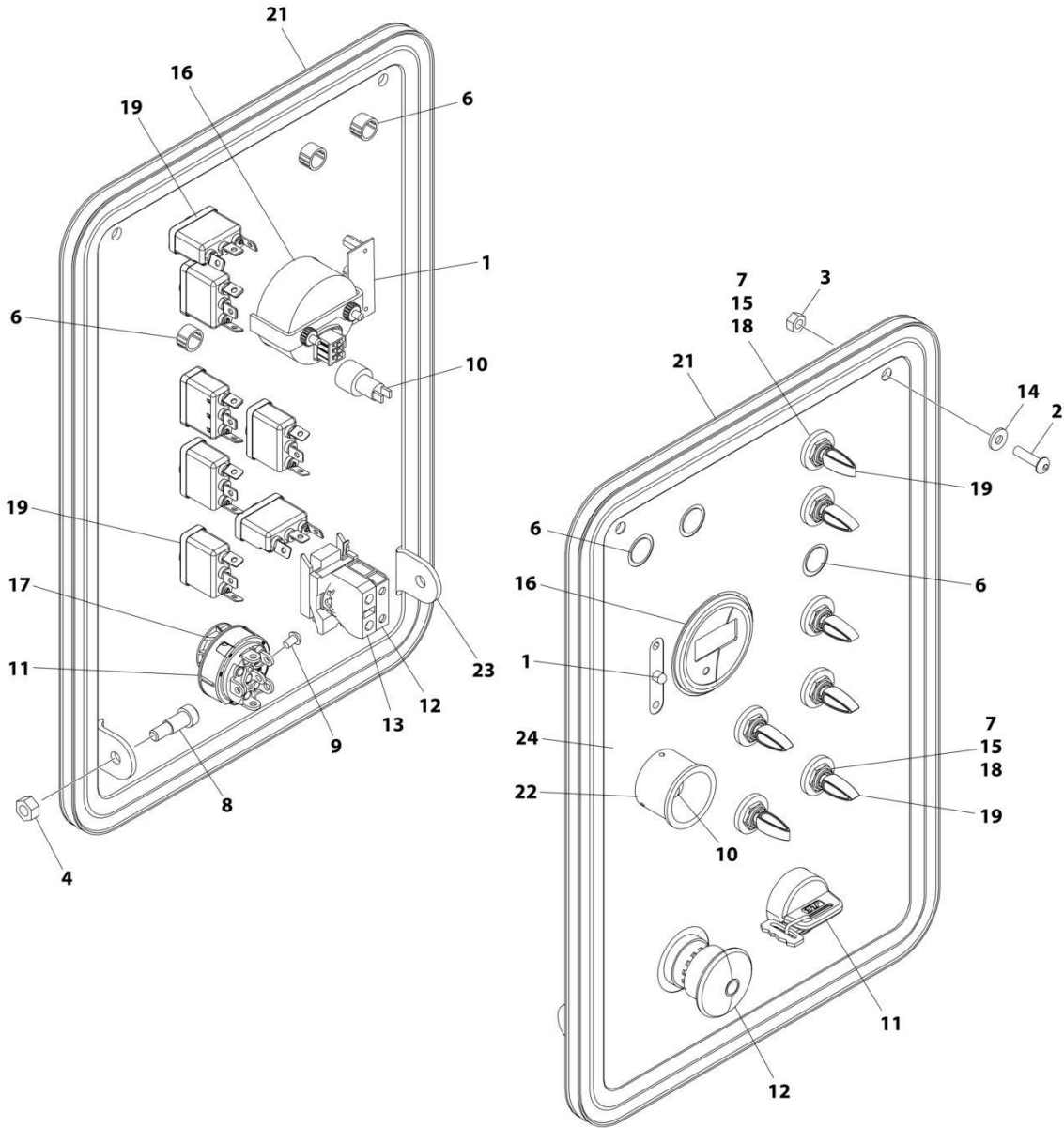
SECTION 2 - TURNTABLE

FIGURE 2-17. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450AJ/M450AJ (ALL SPECS EXCEPT CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249820	Ref	GROUND CONTROL BOX ELECTRICAL ASSEMBLY	C
1	1001259489	1	P/C Board, Battery Charger	
2	0630518	2	Bolt #10 x 3/4	
3	3311011	2	Nut	
4	3311405	2	Nut 1/4	
6	3520028	3	Plug, Hole 1/2	
7	3790012	7	O-Ring	
8	3900187	2	Screw	
9	3910804	6	Screw #8 x 1/4	
10	4360469	1	Keyswitch	
10	2860030	1	Key, Replacement (Set of 2)	
11	4360475	1	Switch, Emergency Stop	
11	7020175	1	Cap, Mushroom Head	
11	7020176	1	Block, Contact	
12	4360476	1	Block, Contact	
13	4740120	2	Washer	
14	4740397	7	Spacer	
15	1001109503	1	Gauge, Indicator	
16	1001151393	1	Shim, .063	
17	1001155044	7	Nut 15/32	
18	1001155045	7	Switch, Toggle	
20	1001166394	4 ft /1.2m	Seal	
21	1001188066	1	Panel, Ground Control	
22	1001221451	1	Decal - Ground Control Lid	

SECTION 2 - TURNTABLE

FIGURE 2-18. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450AJ/M450AJ (CE AND CHINA SPECS)



ART_1001249895

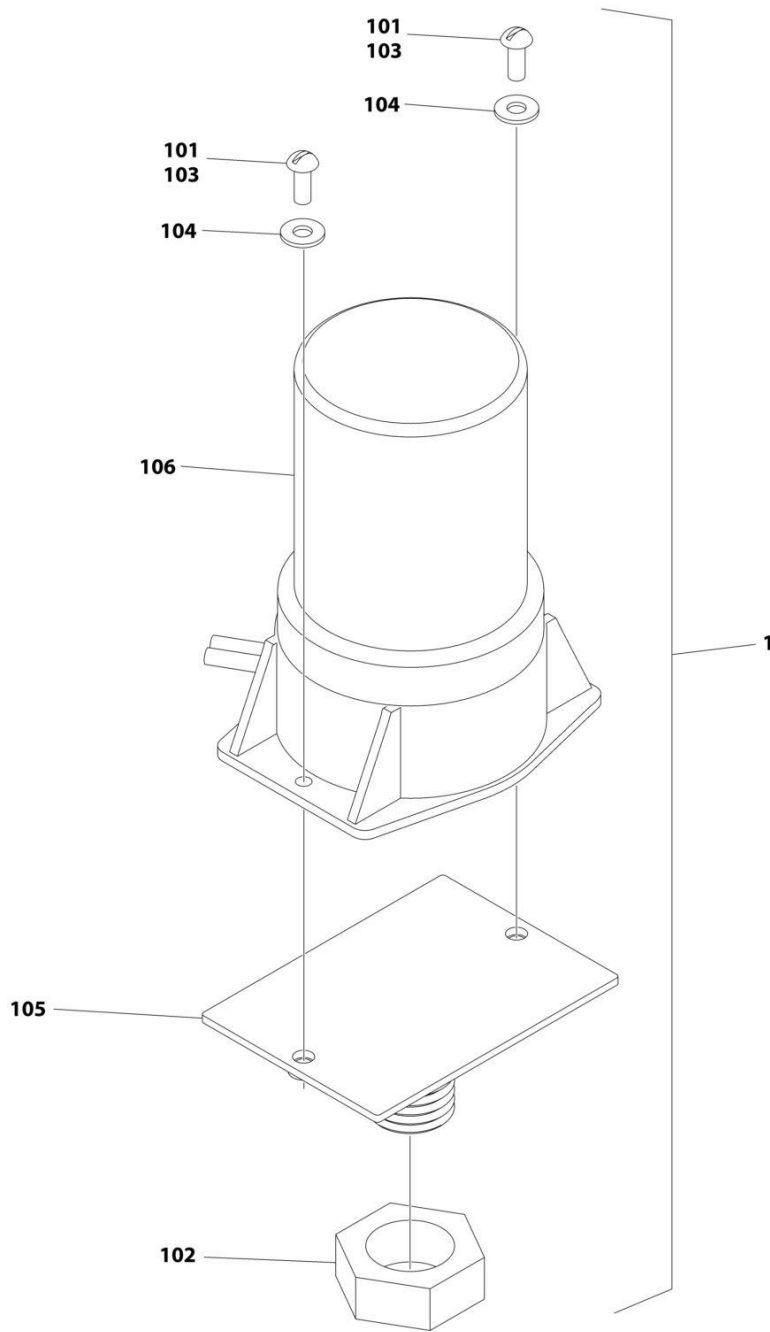
SECTION 2 - TURNTABLE

FIGURE 2-18. GROUND CONTROL BOX ELECTRICAL ASSEMBLY - E450AJ/M450AJ (CE AND CHINA SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249895	Ref	GROUND CONTROL BOX ELECTRICAL ASSEMBLY	C
1	1001259489	1	P/C Board, Battery Charger	
2	0630518	2	Bolt #10 x 3/4	
3	3311011	2	Nut	
4	3311405	2	Nut 1/4	
6	3520028	3	Plug, Hole 1/2	
7	3790012	7	O-Ring	
8	3900187	2	Screw	
9	3910804	6	Screw #8 x 1/4	
10	4360387	1	Switch, Push Button	
11	4360469	1	Keyswitch	
11	2860030	1	Key, Replacement (Set of 2)	
12	4360475	1	Switch, Emergency Stop	
12	7020175	1	Cap, Mushroom Head	
12	7020176	1	Block, Contact	
13	4360476	1	Block, Contact	
14	4740120	2	Washer	
15	4740397	7	Spacer	
16	1001109503	1	Gauge, Indicator	
17	1001151393	1	Shim, .063	
18	1001155044	7	Nut 15/32	
19	1001155045	7	Switch, Toggle	
21	1001166394	4 ft /1.2m	Seal	
22	1001176469	1	Shroud	
23	1001188066	1	Panel, Ground Control	
24	1001221452	1	Decal - Ground Control Lid	

SECTION 2 - TURNTABLE

FIGURE 2-19. STROBE LIGHT INSTALLATION - AMBER



ART_1001191142

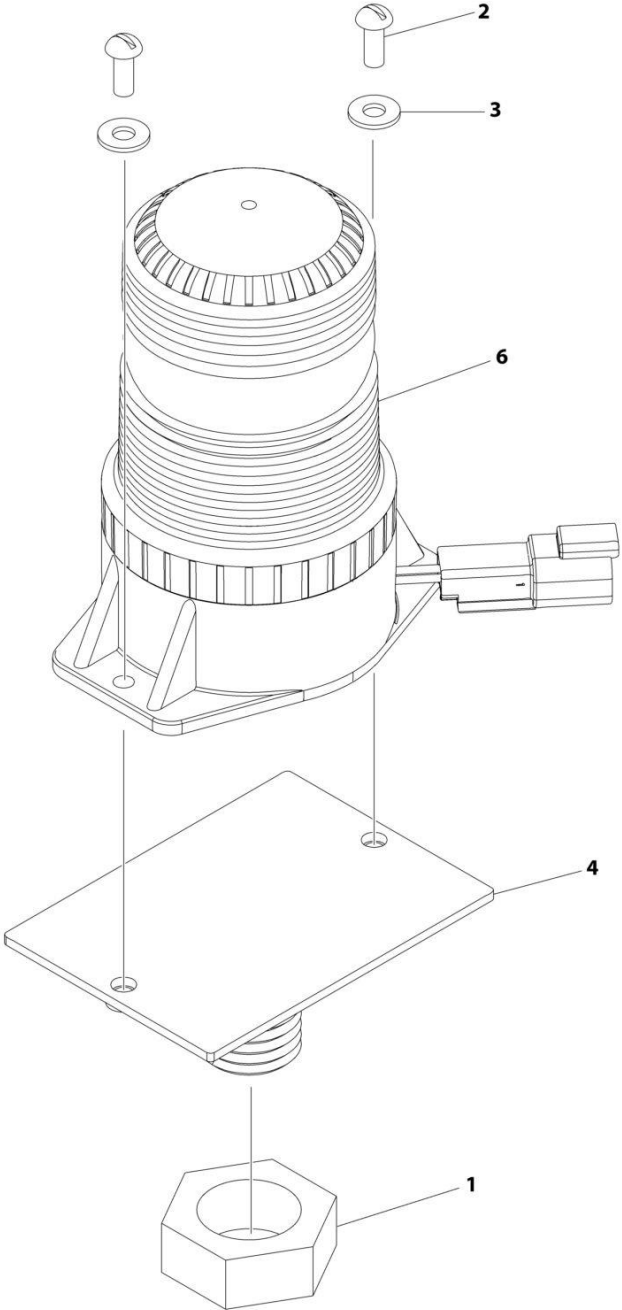
SECTION 2 - TURNTABLE

FIGURE 2-19. STROBE LIGHT INSTALLATION - AMBER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001191142	Ref	STROBE LIGHT INSTALLATION - AMBER	A
1	1001191140	1	Strobe Light Assembly	A
101	0100035	AR	Compound, Locking	
102	3312602	1	Nut, Jam 1	
103	3900085	2	Screw #10 x 1/2	
104	4751000	2	Washer #10	
105	1001149994	1	Plate, Mount	
106	1001191139	1	Strobe Light/Harness Assembly	
106	4460891	1	Connector - 2 Position	
106	4460465	2	Socket, Female	

SECTION 2 - TURNTABLE

FIGURE 2-20. BEACON LIGHT INSTALLATION - BLUE



ART_1001238557

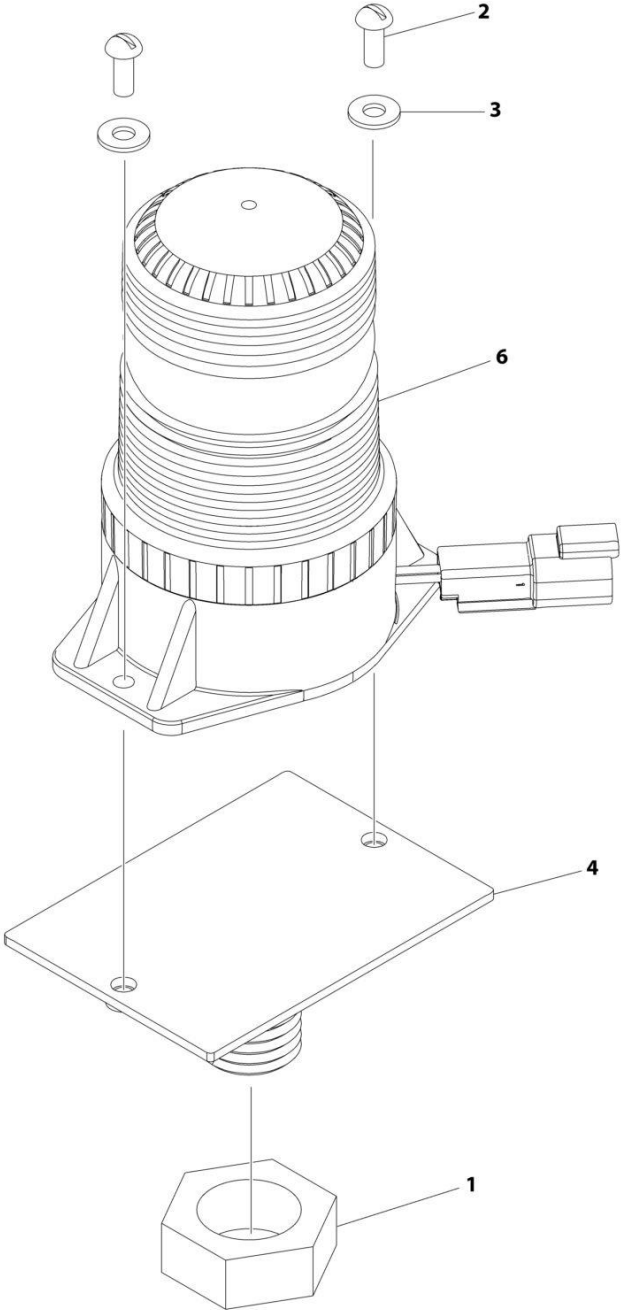
SECTION 2 - TURNTABLE

FIGURE 2-20. BEACON LIGHT INSTALLATION - BLUE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001238557	Ref	BEACON LIGHT INSTALLATION – BLUE	A
	1001217005	Ref	BEACON LIGHT KIT - BLUE	B
1	3312602	1	Nut, Jam 1	
2	3900085	2	Screw #10 x 1/2	
3	4751000	2	Washer #10	
4	1001149994	1	Plate, Mount	
6	1001200910	1	Light, Beacon	
6	4460897	1	Connector - 2 Position	
6	4460943	2	Pin, Male	

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FIGURE 2-21. BEACON LIGHT INSTALLATION - RED



ART_1001238558

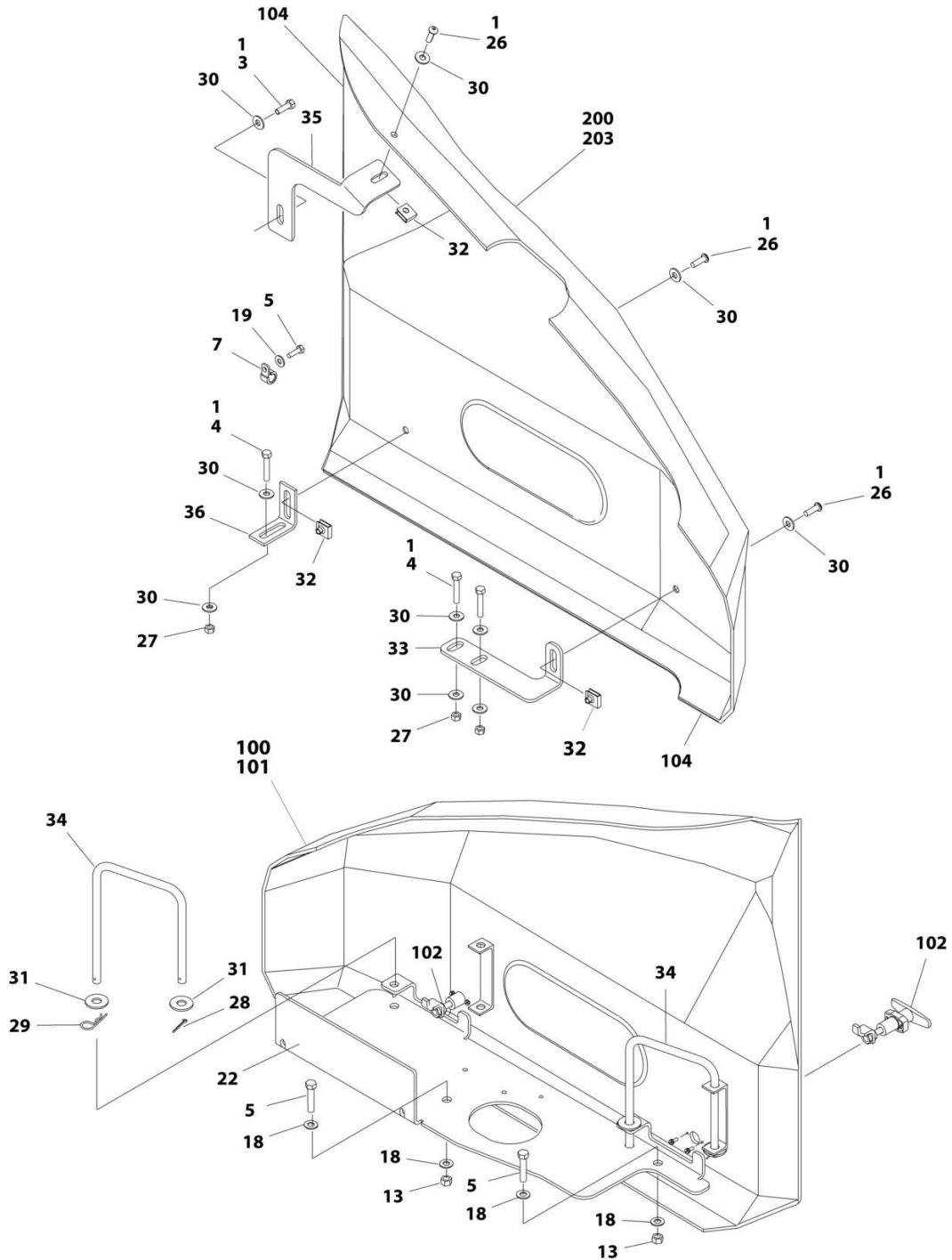
SECTION 2 - TURNTABLE

FIGURE 2-21. BEACON LIGHT INSTALLATION - RED

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001238558	Ref	BEACON LIGHT INSTALLATION – RED	A
1	3312602	1	Nut, Jam 1	
2	3900085	2	Screw #10 x 1/2	
3	4751000	2	Washer #10	
4	1001149994	1	Plate, Mount	
6	1001207004	1	Light, Beacon	
6	4460897	1	Connector - 2 Position	
6	4460943	2	Pin, Male	

SECTION 2 - TURNTABLE

FIGURE 2-22. HOOD INSTALLATION



ART_1001166738

SECTION 2 - TURNTABLE

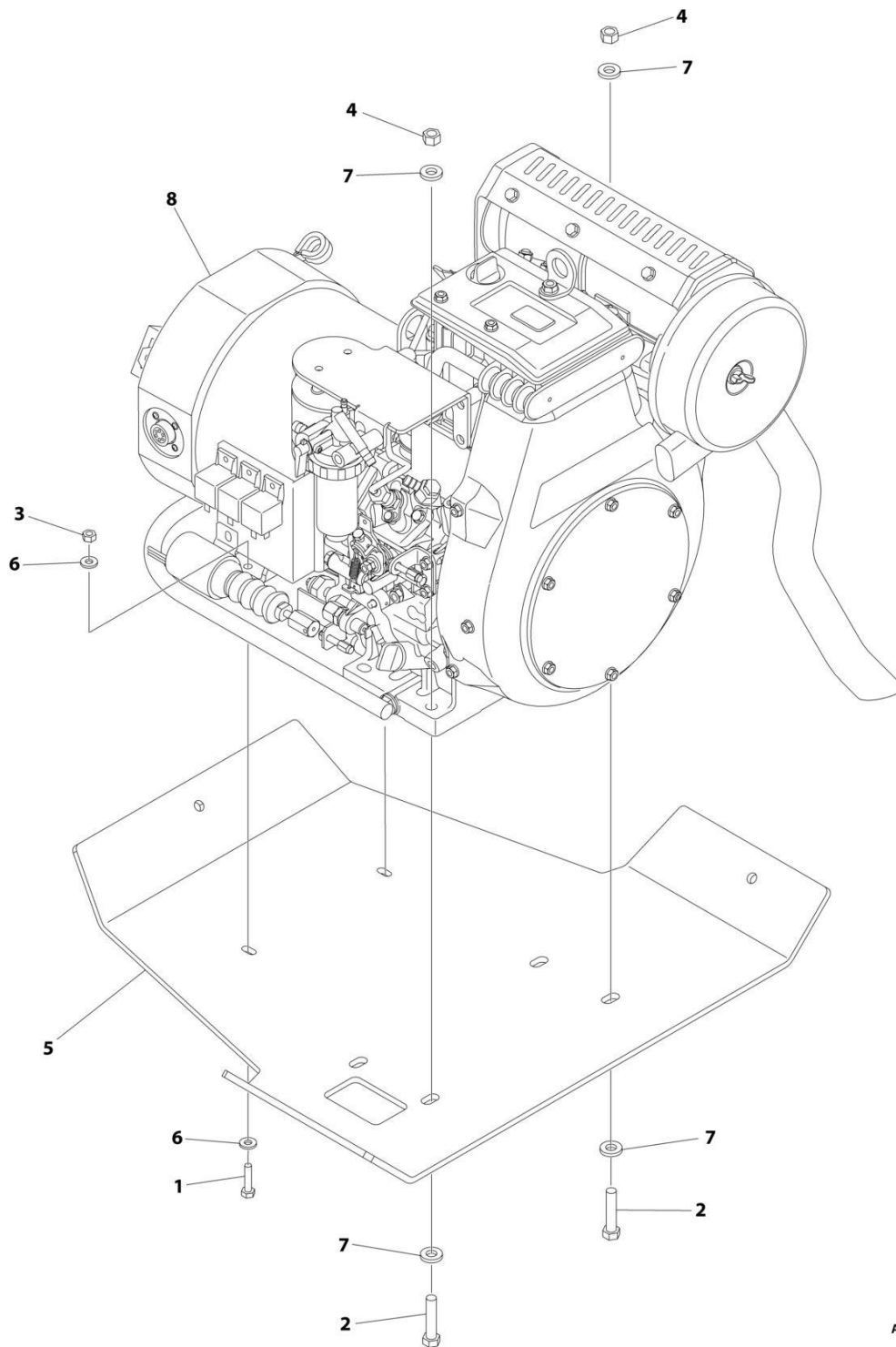
FIGURE 2-22. HOOD INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166738	Ref	HOOD INSTALLATION	E
1	0100011	AR	Compound, Locking	
3	0641508	1	Bolt 5/16 X 1	
4	0641514	3	Bolt 5/16 X 1-3/4	
5	0641613	2	Bolt 3/8 X 1-5/8	
7	1320041	1	Clamp	
13	3311602	2	Nut 3/8	
15	0641407	1	Bolt 1/4 X 7/8	
18	4711600	4	Washer 3/8	
19	4751400	1	Washer 1/4	
22	1001165963	1	Plate, Tray	
26	88261024	3	Screw 5/16 x 1	
27	3311501	3	Nut 5/16	
28	3420156	2	Pin, Cotter	
29	3450304	2	Pin, Cotter	
30	4751500	10	Washer 5/16	
31	4751800	2	Washer 1/2	
32	88662530	3	Nut, Tinnerman	
33	1001165981	1	Mount, Hood - Lower	
34	1001165985	2	Mount, Hood Swing	
35	1001182725	1	Mount, Hood	
36	1001183212	1	Bracket, Hood Mount	
100	1001176417	1	LH Side Hood Kit (Includes Items 101-104)	B
	See Note	Ref	Note: Replacement Decals Must be Ordered Separately - See DECAL SECTION.	
101	See Note	1	Hood, LH (Note: Use Item 100)	
102	2940071	2	Latch	
104	3960453	AR	Seal, Door	
200	1001176441	1	RH Side Hood Kit (Includes Items 203 & 205)	C
	See Note	Ref	Note: Replacement Decals Must be Ordered Separately - See DECAL SECTION.	
203	See Note	1	Hood, RH (Use Item 200)	
205	3960453	AR	Seal, Door	

SECTION 3 - ENGINE

SECTION 3 - ENGINE

FIGURE 3-1. KUBOTA MOTOR/GENERATOR ASSEMBLY - M450AJ



ART_1001248081

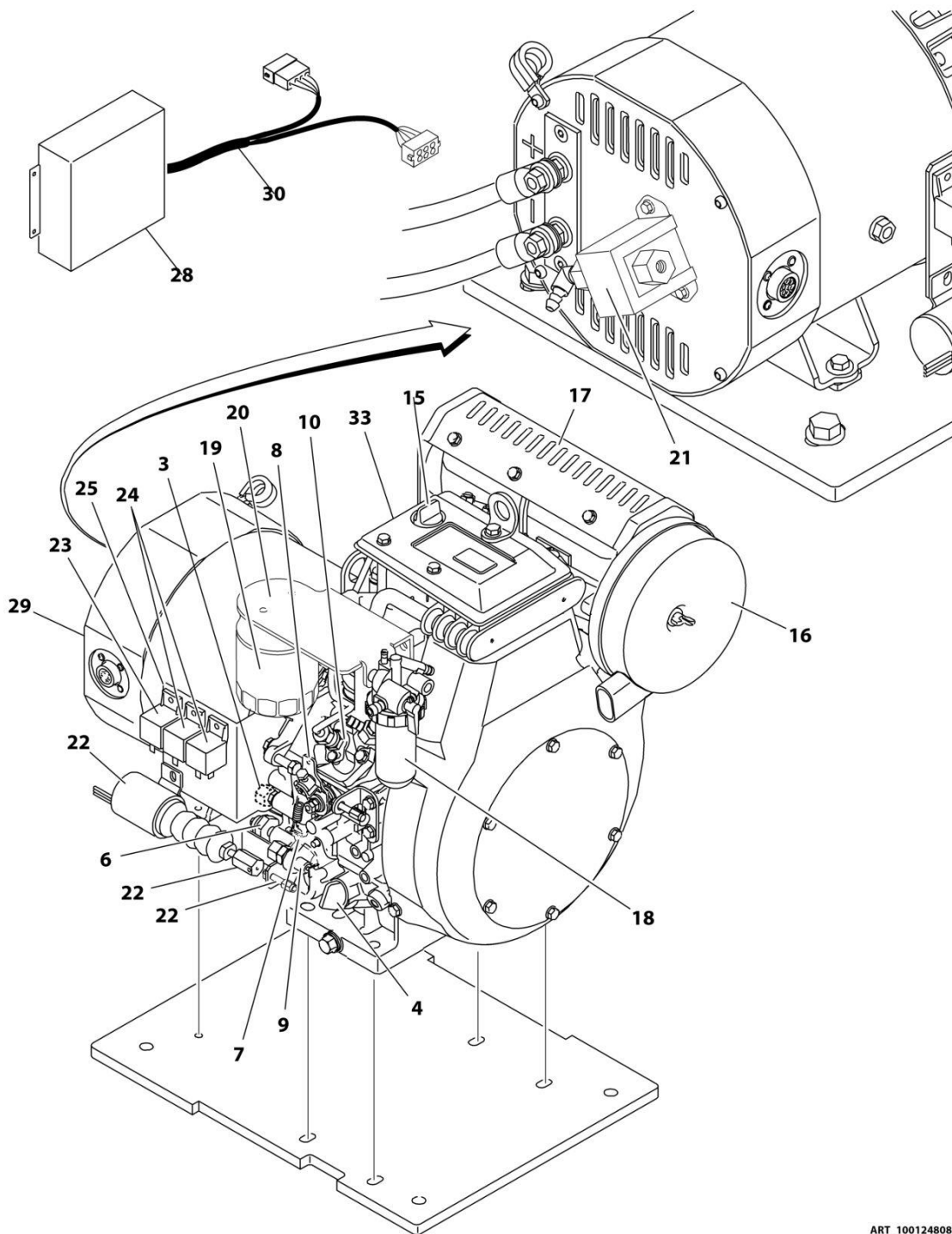
SECTION 3 - ENGINE

FIGURE 3-1. KUBOTA MOTOR/GENERATOR ASSEMBLY - M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248081	Ref	KUBOTA MOTOR/GENERATOR ASSEMBLY	A
1	0641409	2	Bolt 1/4 x 1-1/8	
2	0641614	4	Bolt 3/8 x 1-3/4	
3	3311405	2	Nut 1/4	
4	3311605	4	Nut 3/8	
5	3575952	1	Plate, Base	
6	4891400	4	Washer 1/4 Hardened	
7	4891600	8	Washer 3/8 Hardened	
8	1001248080	1	Kubota Engine/Generator Assembly (See Separate Breakdown in this Section)	

SECTION 3 - ENGINE

FIGURE 3-2. KUBOTA ENGINE COMPONENTS



ART_1001248080

SECTION 3 - ENGINE

FIGURE 3-2. KUBOTA ENGINE COMPONENTS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248080	Ref	KUBOTA MOTOR/GENERATOR COMPONENTS	A
1	70000290	1	Glow Plug (Not Shown)	
1	70000291	1	Harness, Glow Plug (Not Shown)	
2	70000292	1	Screen, Oil Sump (Includes O-Ring) (Not Shown)	
3	70000293	1	Cap, Oil Filler (Includes O-Ring)	
4	70000294	1	Dipstick	
5	70000295	1	Pump, Oil Rotor (Not Shown - Located beside Item 6)	
5	70000296	1	O-Ring Oil Rotor Pump (Not Shown)	
6	70000297	1	Switch, Oil	
7	70000298	1	Lever, Governor	
7	70000299	1	Pin, Governor Lever	
7	70000300	1	Spring, Governor Lever	
8	70000301	1	Spring, Idling	
8	70000304	1	Lever, Spring Control	
8	70000305	1	Spring, Stop (Speed Control Lever)	
9	70000302	1	Valve, Fuel Limit	
9	70000303	1	Gasket, Fuel Limit	
10	70000306	1	Pump, Injection	
10	70000307	1	Kit, Pump Adjustment Shim	
11	70000308	1	Flywheel/Ring Gear Assembly (Not Shown - Located Behind Front Cover)	
11	70000309	1	Ring Gear (Not Shown)	
11	70001121	1	Stator, Engine (Not Shown - Located Behind Flywheel) (Includes Coil & Grommet)	
12	70003557	1	Regulator, Voltage (Not Shown - Located on Opposite Side of Engine)	
13	70000310	1	Starter (Not Shown - Located on Opposite of Engine)	
14	70000311	1	Solenoid, Starter (Not Shown - Located on Opposite Side of Engine)	
15	70002244	1	Cap, Oil Filler (Includes O-Ring)	
16	70000312	1	Air Filter Assembly	
16	70000313	1	Element, Air Cleaner	
16	70000314	1	Gasket, Air Cleaner	
17	70000315	1	Muffler Assembly	
17	70000316	1	Gasket, Muffler	
18	70000317	1	Inline Fuel Check Valve Assembly	
18	70000967	1	Fuel Filter Assembly	
18	70000318	1	Element, Fuel Filter	
19	70000319	1	Element, Oil Filter	
19	70001144	1	Head, Oil Filter Head (Note: Does Not Include Element)	
20	70002544	1	Bracket, Oil Filter Mount	
21	70000320	1	Pump, Fuel	
22	70000321	1	Solenoid, Fuel	
22	70003618	1	Adapter, Solenoid	
22	70003619	1	Screw	
23	70000322	1	Relay	
24	70000323	2	Relay	
25	70002083	1	Bracket, Solenoid/Relay	
26	70000324	1	Sensor, Speed (Not Shown - Located Inside Front Cover)	
26	70004265	1	Bracket, Speed Sensor (Not Show - Located Inside Front Cover)	

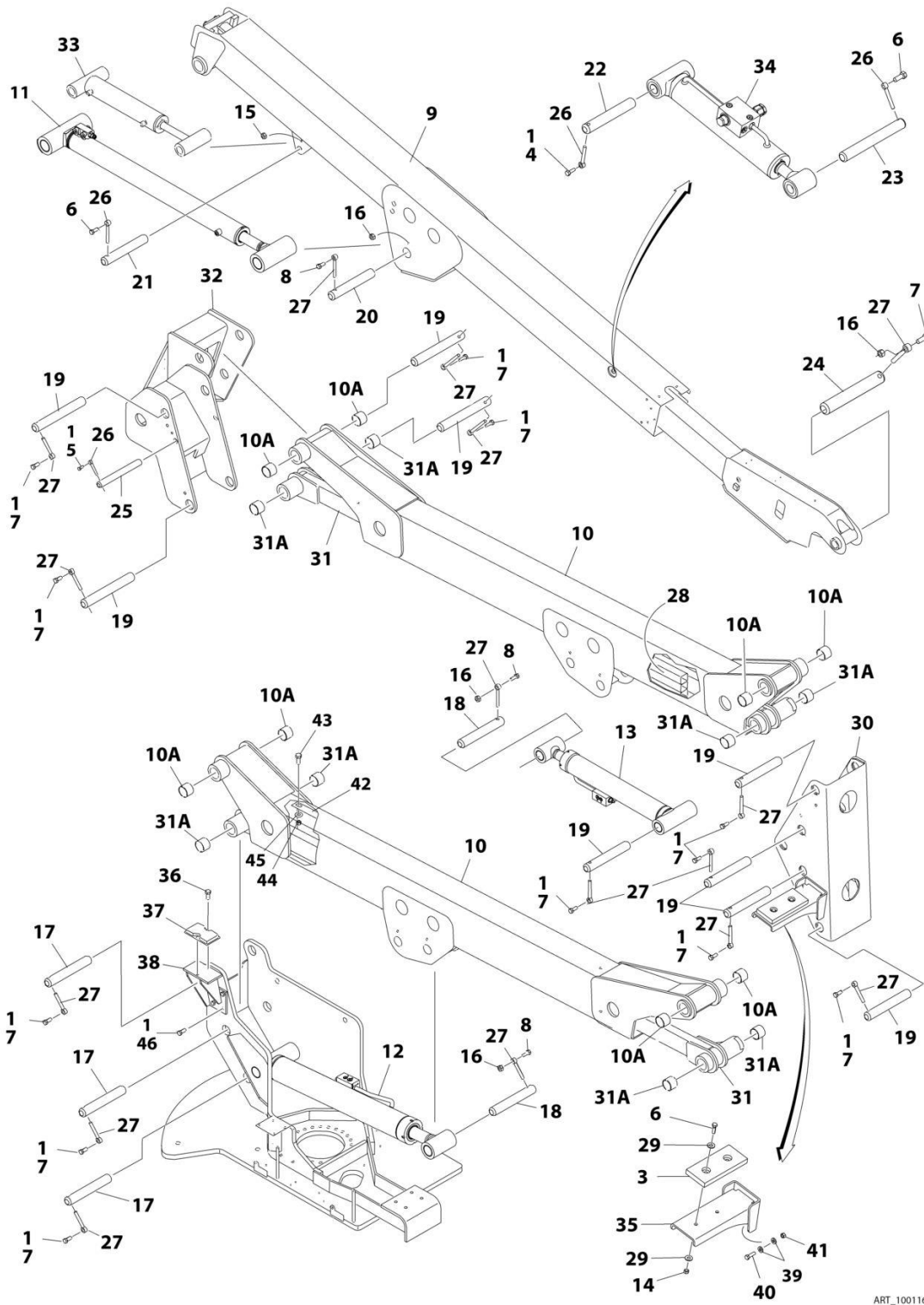
SECTION 3 - ENGINE

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
27	70000325	1	Sensor, Oil Temperature (Not Shown - Located on Opposite Side of Engine Base)	
28	70000326	1	Module, Engine Control	
29	70000327	1	Alternator	
29	70000382	1	Stator, Alternator	
29	70004394	1	Lead, Field Terminal Block Diode	
30	70000328	1	Harness, Generator	
31	70000329	1	Fuse 15Amp (Not Shown)	
32	70000330	1	Fuse 20Amp (Not Shown)	
33	70002543	1	Engine, Kubota (without Generator)	
34	70000289	1	Regulator, Voltage (Not Shown - Located on Opposite Side of Engine)	

SECTION 4 - BOOM

SECTION 4 - BOOM

FIGURE 4-1. BOOM AND CYLINDERS INSTALLATION - E450AJ/M450AJ (USA BUILT MACHINES)



ART_1001168673

SECTION 4 - BOOM

FIGURE 4-1. BOOM AND CYLINDERS INSTALLATION - E450AJ/M450AJ (USA BUILT MACHINES)

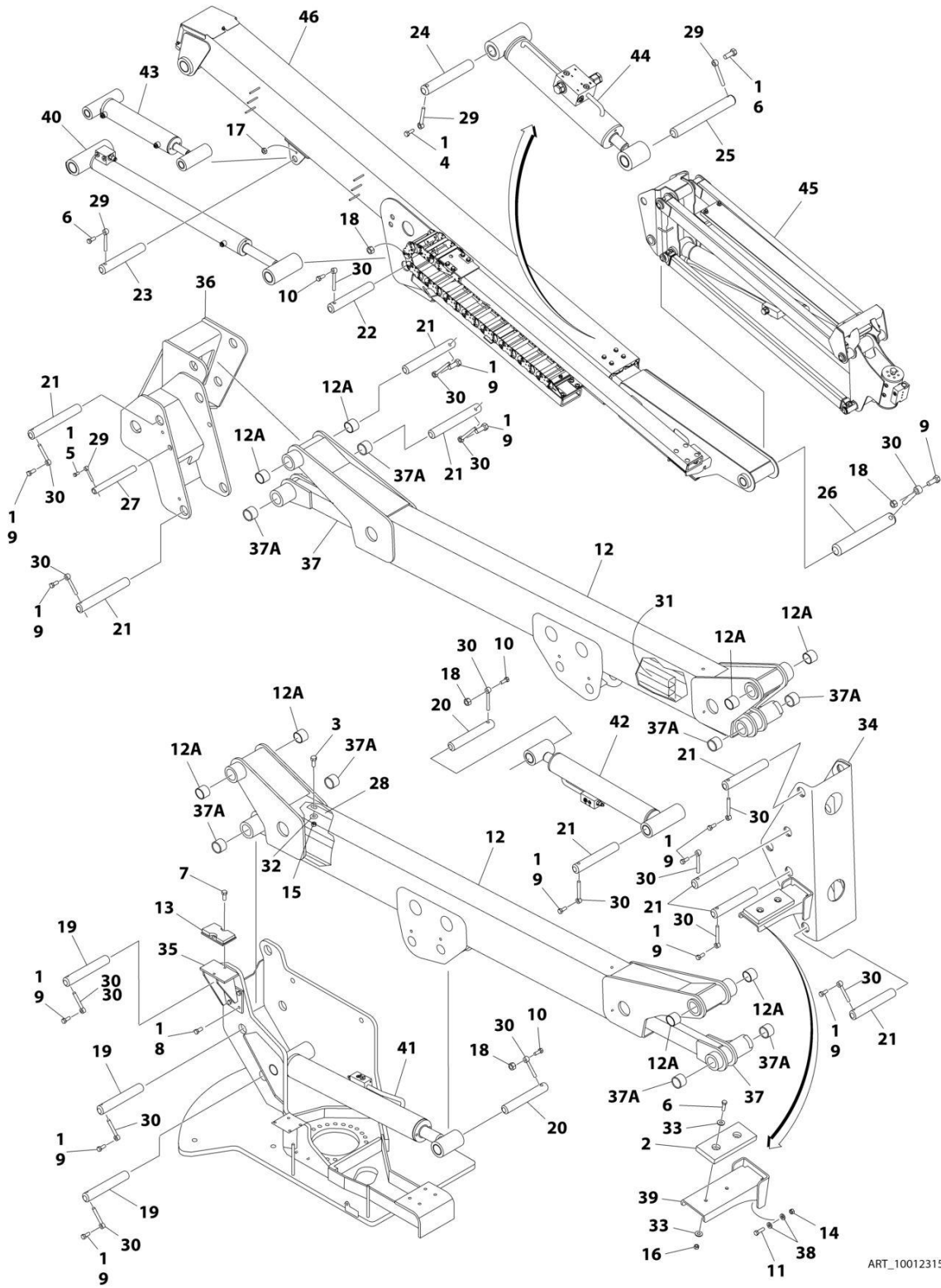
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001168673	Ref	BOOM AND CYLINDERS INSTALLATION	I
1	0100011	AR	Compound, Locking	
3	0561076	1	Block, Boom Rest	
4	0641607	1	Bolt 3/8 x 7/8	
5	0641608	1	Bolt 3/8 x 1	
6	0641610	4	Bolt 3/8 x 1-1/4	
7	0641810	13	Bolt 1/2 x 1-1/4	
8	0641812	3	Bolt 1/2 x 1-1/2	
9	0801197	1	Boom Assembly - Main (See Separate Breakdown in this Section)	
10	0801264	2	Boom Assembly - Tower	
10A	0961950	8	Bushing	
11	1001251016	1	Lift Cylinder Assembly – Upper (See Separate Breakdown in CYLINDER SECTION)	
12	1001228035	1	Lift Cylinder Assembly - Lower (See Separate Breakdown in CYLINDER SECTION)	
13	1001228036	1	Lift Cylinder Assembly - Mid (See Separate Breakdown in CYLINDER SECTION)	
14	3311601	2	Nut 3/8	
15	3311605	1	Nut 3/8	
16	3311805	4	Nut 1/2	
17	3422175	3	Pin	
18	3422176	2	Pin	
19	3422177	9	Pin	
20	3422178	1	Pin	
21	3422582	1	Pin	
22	3422669	1	Pin	
23	3422792	1	Pin	
24	3422793	1	Pin	
25	3422806	1	Pin	
26	3841143	4	Keeper, 3/8	
27	3841203	16	Keeper, 1/2	
28	4566356	1	Tube	
29	4751600	4	Washer 3/8 (Not Shown - Located on Platform Support)	
30	4844427	1	Upright Weldment - Lower	
31	4846307	2	Level Link	
31A	0961950	8	Bushing	
32	4846026	1	Upright Weldment - Upper	
33	1001140278	1	Master Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	
34	1001140279	1	Platform Level Cylinder (See Separate Breakdown in CYLINDER SECTION)	
35	1001177483	1	Support, Boom Rest	
36	0641806	2	Bolt 1/2 x 3/4	
37	0940048	1	Bumper	
38	4844467	1	Boom Rest Weldment	
39	4891600	8	Washer 3/8	
40	0681610	4	Bolt 3/8 x 1-1/4 Grd8	
41	3271605	4	Nut 3/8 Grd8	
42	3537045	1	Plate	
43	0641506	4	Bolt 5/16 x 3/4	
44	3311505	4	Nut 5/16	

SECTION 4 - BOOM

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
45	4751500	4	Washer 5/16	
46	0641808	3	Bolt 1/2 x 1	

SECTION 4 - BOOM

FIGURE 4-2. BOOM AND CYLINDERS INSTALLATION - E450AJ (CHINA BUILT MACHINES)



ART_1001231524

SECTION 4 - BOOM

FIGURE 4-2. BOOM AND CYLINDERS INSTALLATION - E450AJ (CHINA BUILT MACHINES)

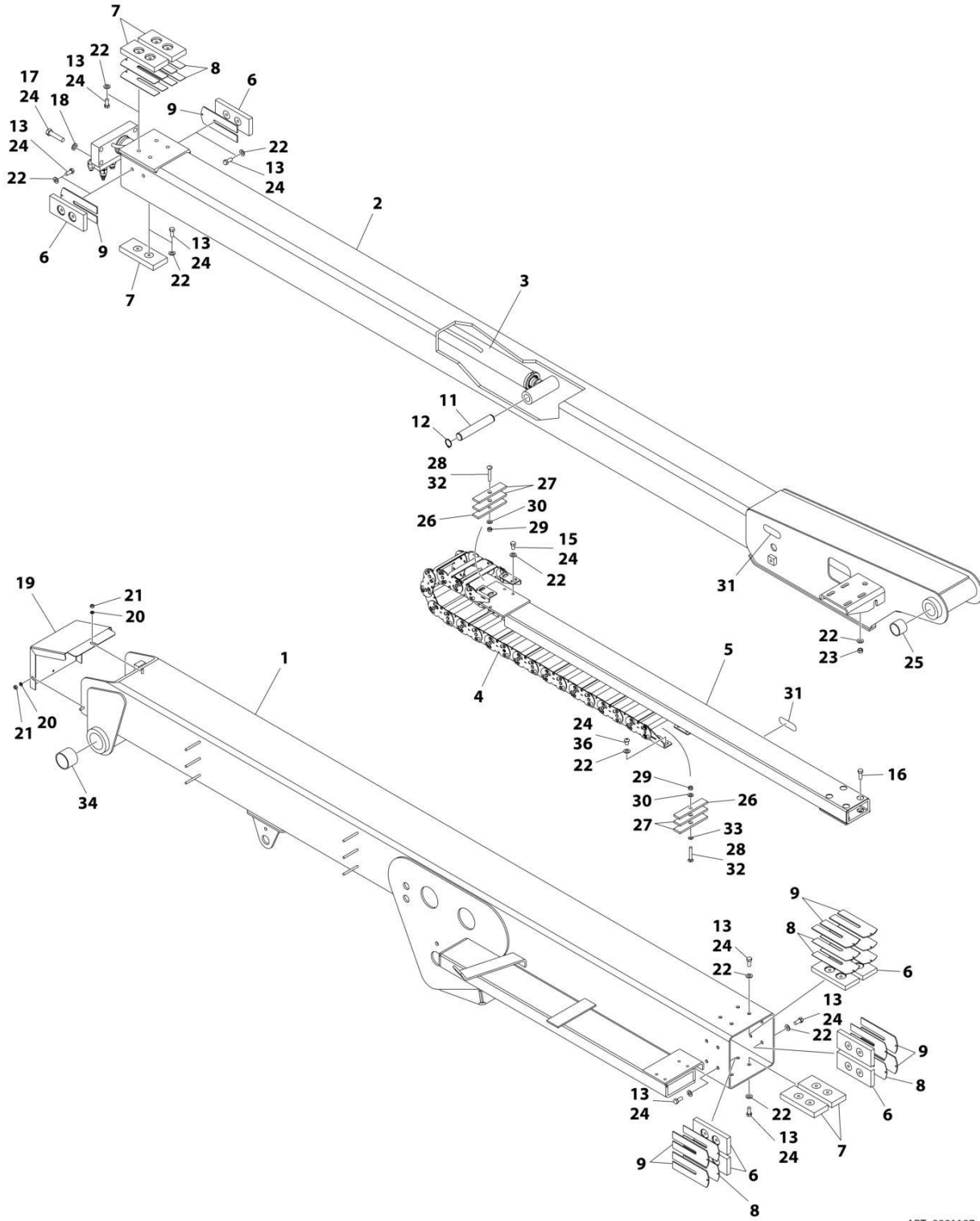
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001231524	Ref	BOOM AND CYLINDERS INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0561076	1	Block, Boom Rest	
3	0641506	4	Bolt 5/16 x 3/4	
4	0641607	1	Bolt 3/8 x 7/8	
5	0641608	1	Bolt 3/8 x 1	
6	0641610	4	Bolt 3/8 x 1-1/4	
7	0641806	2	Bolt 1/2 x 3/4	
8	0641808	3	Bolt 1/2 x 1	
9	0641810	13	Bolt 1/2 x 1-1/4	
10	0641812	3	Bolt 1/2 x 1-1/2	
11	0681610	4	Bolt 3/8 x 1-1/4 Grade 8	
12	0801264	2	Boom Assembly - Tower	
12A	0961950	8	Bushing	
13	0940048	1	Bumper	
14	3271605	4	Nut 3/8 Grade 8	
15	3311505	4	Nut 5/16	
16	3311601	2	Nut 3/8	
17	3311605	1	Nut 3/8	
18	3311805	4	Nut 1/2	
19	3422175	3	Pin	
20	3422176	2	Pin	
21	3422177	9	Pin	
22	3422178	1	Pin	
23	3422582	1	Pin	
24	3422669	1	Pin	
25	3422792	1	Pin	
26	3422793	1	Pin	
27	3422806	1	Pin	
28	3537045	1	Plate	
29	3841143	4	Keeper, 3/8	
30	3841203	16	Keeper, 1/2	
31	4566356	1	Tube	
32	4751500	4	Washer 5/16	
33	4751600	4	Washer 3/8	
34	4844427	1	Upright Weldment - Lower	
35	4844467	1	Boom Rest Weldment	
36	4846026	1	Upright Weldment - Upper	
37	4846307	2	Level Link	
37A	0961950	8	Bushing	
38	4891600	8	Washer 3/8	
39	1001177483	1	Support, Boom Rest	
40	1001230299	1	Lift Cylinder Assembly - Upper (See Separate Breakdown in CYLINDER SECTION)	
41	1001230300	1	Lift Cylinder Assembly - Lower (See Separate Breakdown in CYLINDER SECTION)	
42	1001230301	1	Lift Cylinder Assembly - Mid (See Separate Breakdown in CYLINDER SECTION)	
43	1001230303	1	Master Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
44	1001230304	1	Platform Level Cylinder (See Separate Breakdown in CYLINDER SECTION)	
45	1001231523	1	Jib Assembly (See Separate Breakdown in this Section)	
46	1001231525	1	Main Boom Installation (See Separate Breakdown in this Section)	

SECTION 4 - BOOM

FIGURE 4-3. MAIN BOOM ASSEMBLY - E450A



ART_0801197

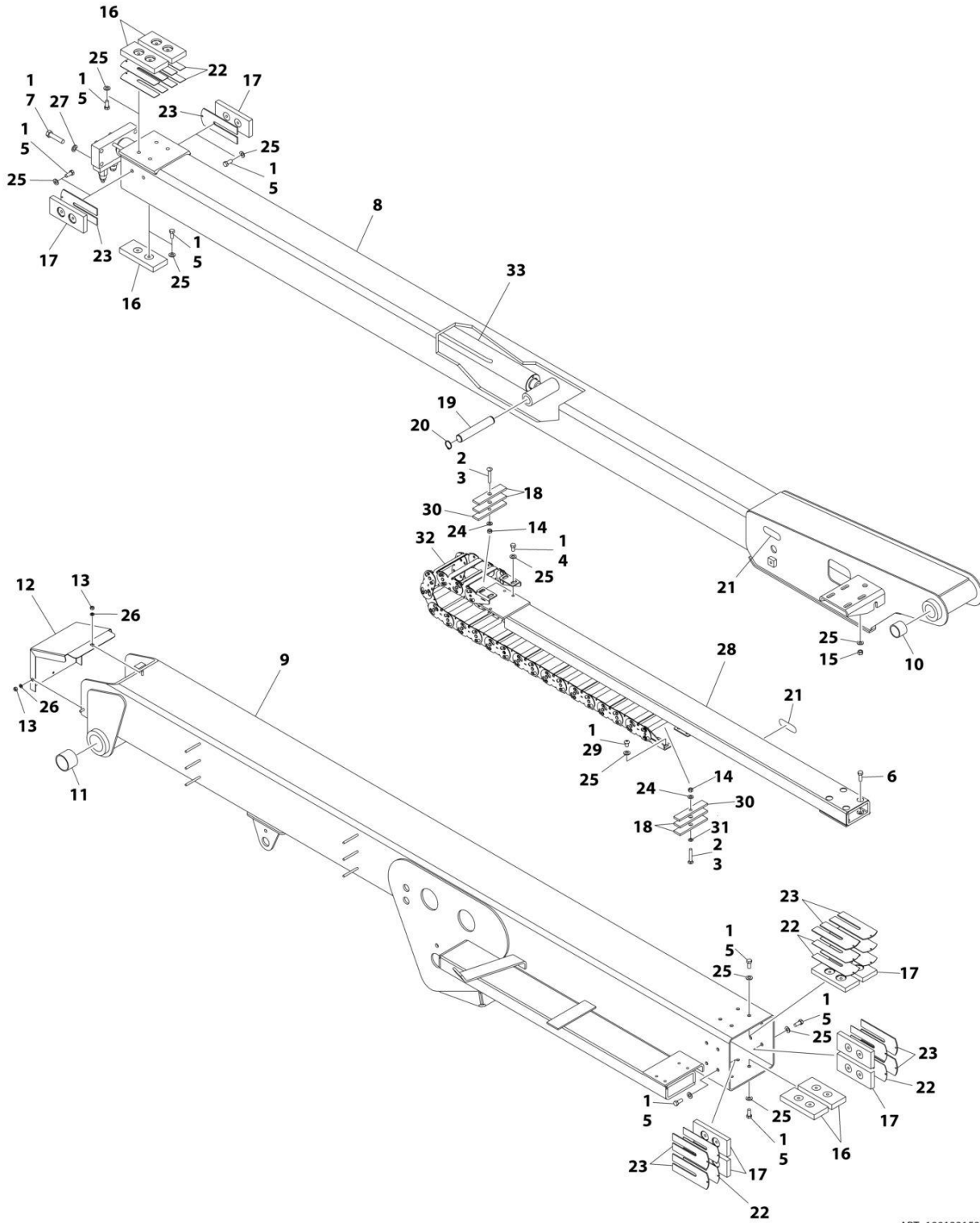
SECTION 4 - BOOM

FIGURE 4-3. MAIN BOOM ASSEMBLY - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0801197	Ref	MAIN BOOM ASSEMBLY	N
1	0801260	1	Base, Weldment	
2	0801192	1	Fly, Weldment	
3	1001251061	1	Telescope Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	
4	1001224890	1	Powertrack Assembly	
4	70006269	1	Repair Section (Includes 10 links, 22 pins, 22 washers, 22 snap rings, 5 rod carriers and 10 self-tapping screws)	
4	70006279	1	Bracket Kit (Includes 2 left and 2 right mounting feet, 4 center pins, 4 center pin snap rings, 8 pins for bracket lockout, 4 washers and 4 snap rings)	
5	4846033	1	Pushtube, Weldment	
6	3340881	8	Pad, Ware	
7	3340837	5	Pad, Ware	
8	4070897	12	Shim, 18 Gauge	
9	4070898	8	Shim, 11 Gauge	
11	3422804	1	Pin	
12	3760115	2	Ring, Snap	
13	0641607	26	Bolt 3/8 x 7/8	
15	0641605	4	Bolt 3/8 x 5/8	
16	0641608	4	Bolt 3/8 x 1	
17	0641818	4	Bolt 1/2 x 2-1/4	
18	4761800	4	Washer 1/2	
19	1670679	1	Cover, Boom	
20	4761400	3	Washer 1/4	
21	3311401	3	Nut 1/4	
22	4711600	38	Washer 3/8	
23	3311605	4	Nut 3/8	
24	0100011	AR	Compound, Locking	
25	0961948	2	Bearing	
26	1001106757	2	Plate, Clamp	
27	3340939	4	Pad, Rubber	
28	0630401	2	Bolt 5/16 x 2	
29	3311505	2	Nut 5/16	
30	4711500	2	Washer 5/16	
31	4060804	16 in /38 cm	Flex-Trim	
32	0100081	AR	Adhesive	
33	1001119228	1	Nut M8	
34	0961950	2	Bushing	
36	88261026	4	Bolt 3/8 x 5/8	

SECTION 4 - BOOM

FIGURE 4-4. MAIN BOOM ASSEMBLY - E450AJ/M450AJ



ART_1001231525

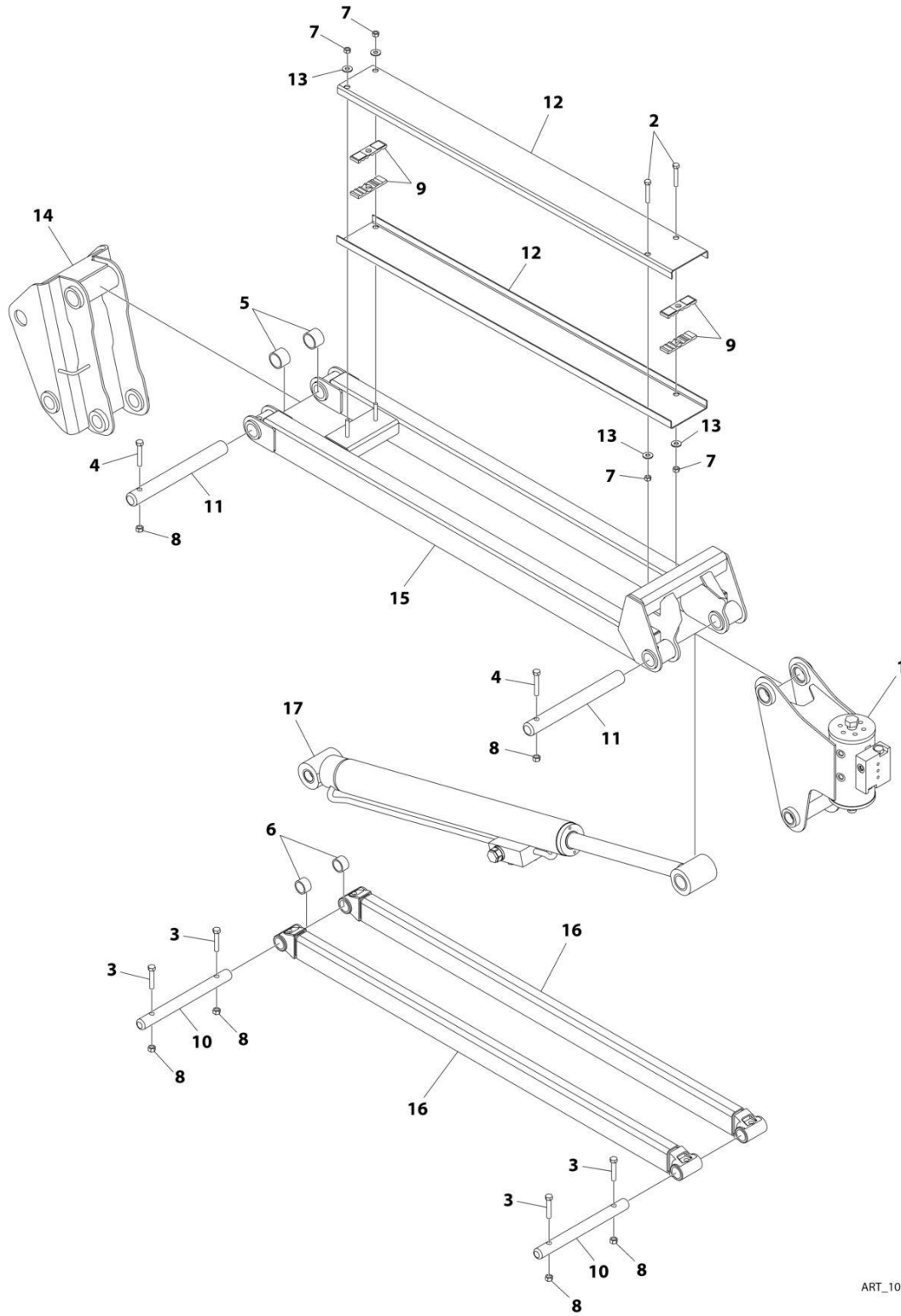
SECTION 4 - BOOM

FIGURE 4-4. MAIN BOOM ASSEMBLY - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001231525	Ref	MAIN BOOM ASSEMBLY	A
1	0100011	AR	Compound, Locking	
2	0100081	AR	Adhesive	
3	0630401	2	Bolt, Carriage, 5/16 x 2	
4	0641605	4	Bolt 3/8 x 5/8	
5	0641607	26	Bolt 3/8 x 7/8	
6	0641608	4	Bolt 3/8 x 1	
7	0641818	4	Bolt 1/2 x 2-1/4	
8	0801192	1	Fly, Weldment	
9	0801260	1	Base, Weldment	
10	0961948	2	Bearing	
11	0961950	2	Bushing	
12	1670679	1	Cover, Boom	
13	3311401	3	Nut 1/4	
14	3311505	2	Nut 5/16	
15	3311605	4	Nut 3/8	
16	3340837	5	Pad, Ware	
17	3340881	8	Pad, Ware	
18	3340939	4	Pad, Rubber	
19	3422804	1	Pin	
20	3760115	2	Ring, Snap	
21	4060804	15 in/ 38cm	Flex-Trim	
22	4070897	12	Shim, 18 Gauge	
23	4070898	8	Shim, 11 Gauge	
24	4711500	2	Washer 5/16	
25	4711600	38	Washer 3/8	
26	4761400	3	Washer 1/4	
27	4761800	4	Washer 1/2	
28	4846033	1	Pushtube, Weldment	
29	88261026	4	Bolt 3/8 x 5/8	
30	1001106757	AR	Plate, Clamp	
31	1001119228	1	Push Nut, M8	
32	1001224890	1	Powertrack Assembly	
32	70006269	1	Repair Section (Includes 10 links, 22 pins, 22 washers, 22 snap rings, 5 rod carriers and 10 self-tapping screws)	
32	70006279	1	Bracket Kit (Includes 2 left and 2 right mounting feet, 4 center pins, 4 center pin snap rings, 8 pins for bracket lockout, 4 washers and 4 snap rings)	
33	1001230302	1	Telescope Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	

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FIGURE 4-5. JIB INSTALLATION



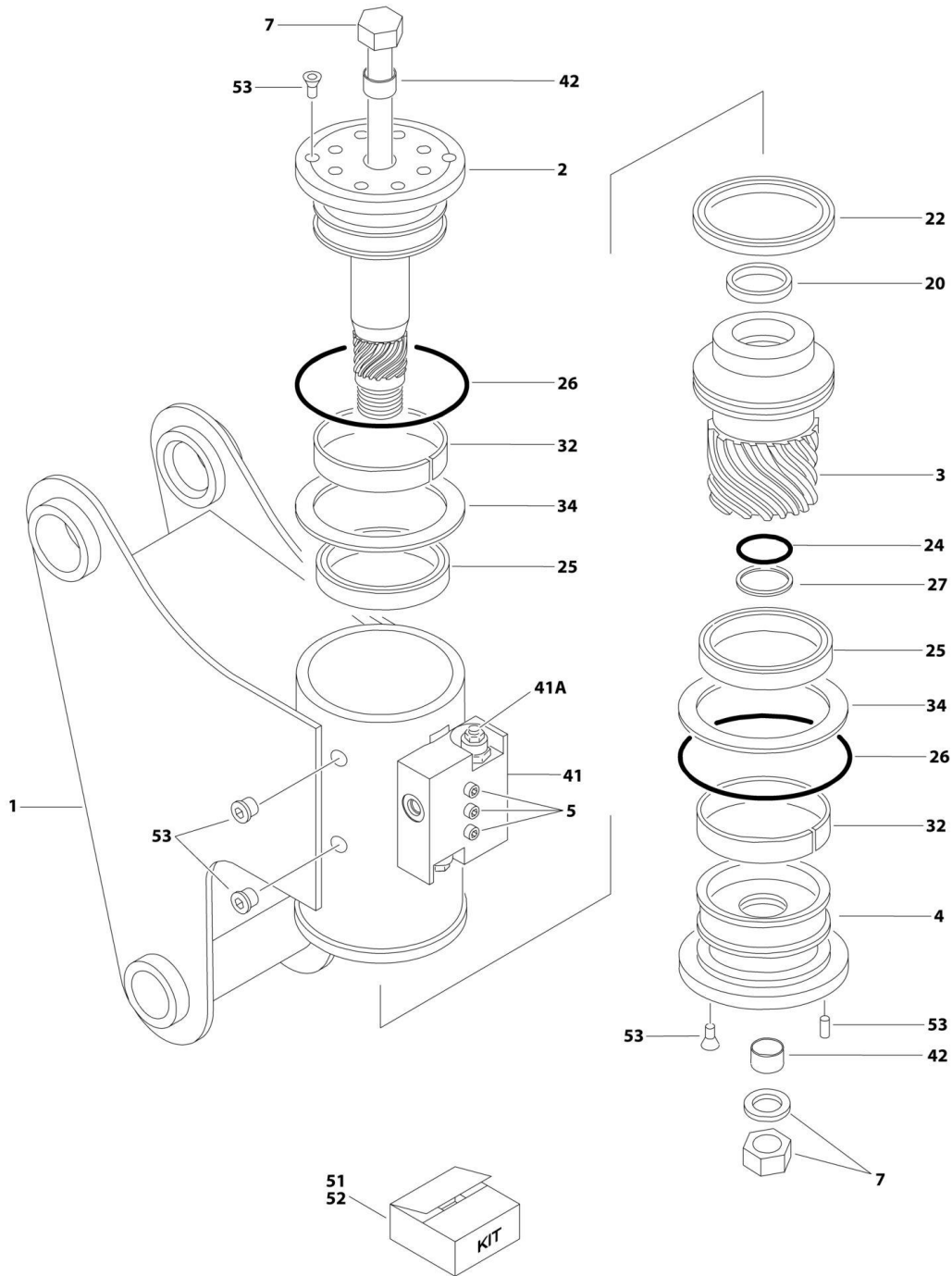
ART_1001231523

FIGURE 4-5. JIB INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001231523	Ref	JIB INSTALLATION	A
1	0060044	1	Rotator Assembly (See Separate Breakdown in this Section)	
2	0641516	2	Bolt 5/16 x 2	
3	0641616	4	Bolt 3/8 x 2	
4	0641618	2	Bolt 3/8 x 2-1/4	
5	0961951	2	Bushing	
6	0962292	2	Bushing	
7	3311501	4	Nut 5/16	
8	3311605	6	Nut 3/8	
9	3340860	4	Pad, Rubber	
10	3422791	2	Pin	
11	3422794	2	Pin	
12	3572551	2	Channel, Hose Carrier	
13	4751500	4	Washer 5/16	
14	4845925	1	Pivot	
15	4846278	1	Link - Upper	
16	1001094670	2	Link - Lower	
17	1001230305	1	Jib Cylinder Assembly (See Separate Breakdown in CYLINDER SECTION)	

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FIGURE 4-6. ROTATOR ASSEMBLY - E450A



ART_0060052

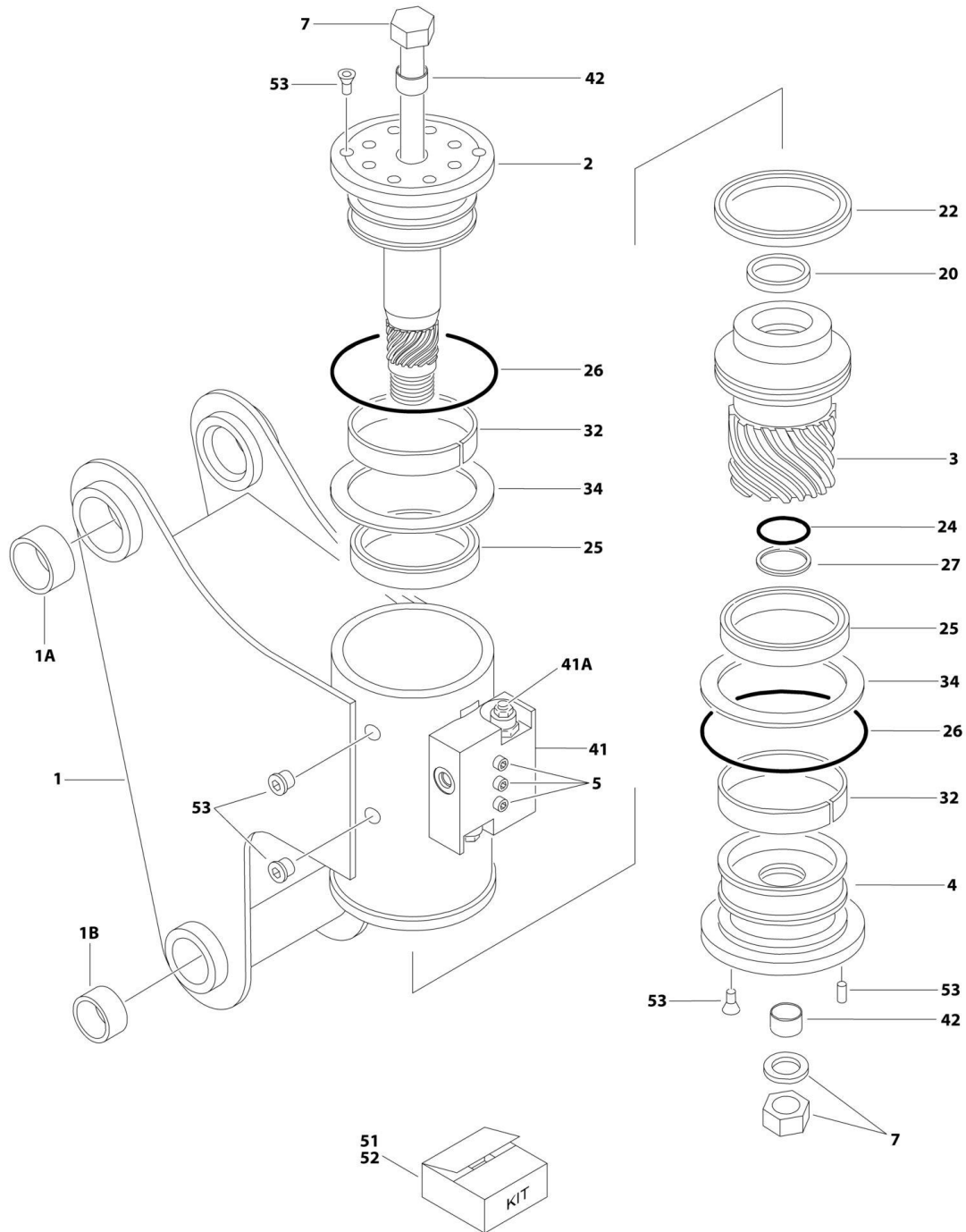
SECTION 4 - BOOM

FIGURE 4-6. ROTATOR ASSEMBLY - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0060052	Ref	ROTATOR ASSEMBLY	F
1	See Note	1	Case/Bracket Weldment (Note: Not Available - Purchase Complete Assembly)	
2	7017120	1	Shaft (Rotator with Helac Control #26409)	
2	7017196	1	Shaft (Rotator with Helac Control #26966)	
3	7017121	1	Piston Sleeve (Rotator with Helac Control #26409)	
3	7027900	1	Piston Sleeve (Rotator with Helac Control #26966)	
4	7017153	1	Cap, End (Rotator with Helac Control #26409)	
4	7027901	1	Cap, End (Rotator with Helac Control #26966)	
5	See Note	3	Capscrew 1/4 x 1-1/2, Grade 8 (Note: Not Available - Purchase Locally)	
7	7017126	1	Tie Rod Assembly	
20	See Note	NSS	Seal, Rod (Note: Use Items 52)	
22	See Note	NSS	Seal, Piston (Note: Use Item 52)	
24	See Note	NSS	Seal, Cap (Note: Use Item 52)	
25	See Note	NSS	Packing, Bearing (Note: Use Item 52)	
26	See Note	NSS	Seal (Note: Use Item 52)	
27	See Note	NSS	Ring, Back-Up Cap (Note: Use Item 52)	
32	See Note	NSS	Bearing, Shaft (Note: Use Item 51)	
34	See Note	2	Washer, Thrust (Note: Use Item 51)	
41	7017172	1	Counterbalance Valve Assembly (Helac p/n 24327, 26553 or 26554 Stamped Beside Mounting Screws)	
41A	7011323	2	Valve, Cartridge (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	See Note	2	Bushing, Shaft (Note: Not Available for Purchase)	
51	7017122	1	Bearing Kit (Includes Items 32-34)	
52	7017127	1	Seal Kit - Standard (Includes Items 20,22,24,25,26 & 27)	
52	70000341	1	Seal Kit - Low Temperature (Includes Items 20,22,24,25,26 & 27)	
53	7017123	1	Hardware Kit	

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FIGURE 4-7. ROTATOR ASSEMBLY - E450AJ/M450AJ



ART_0060044

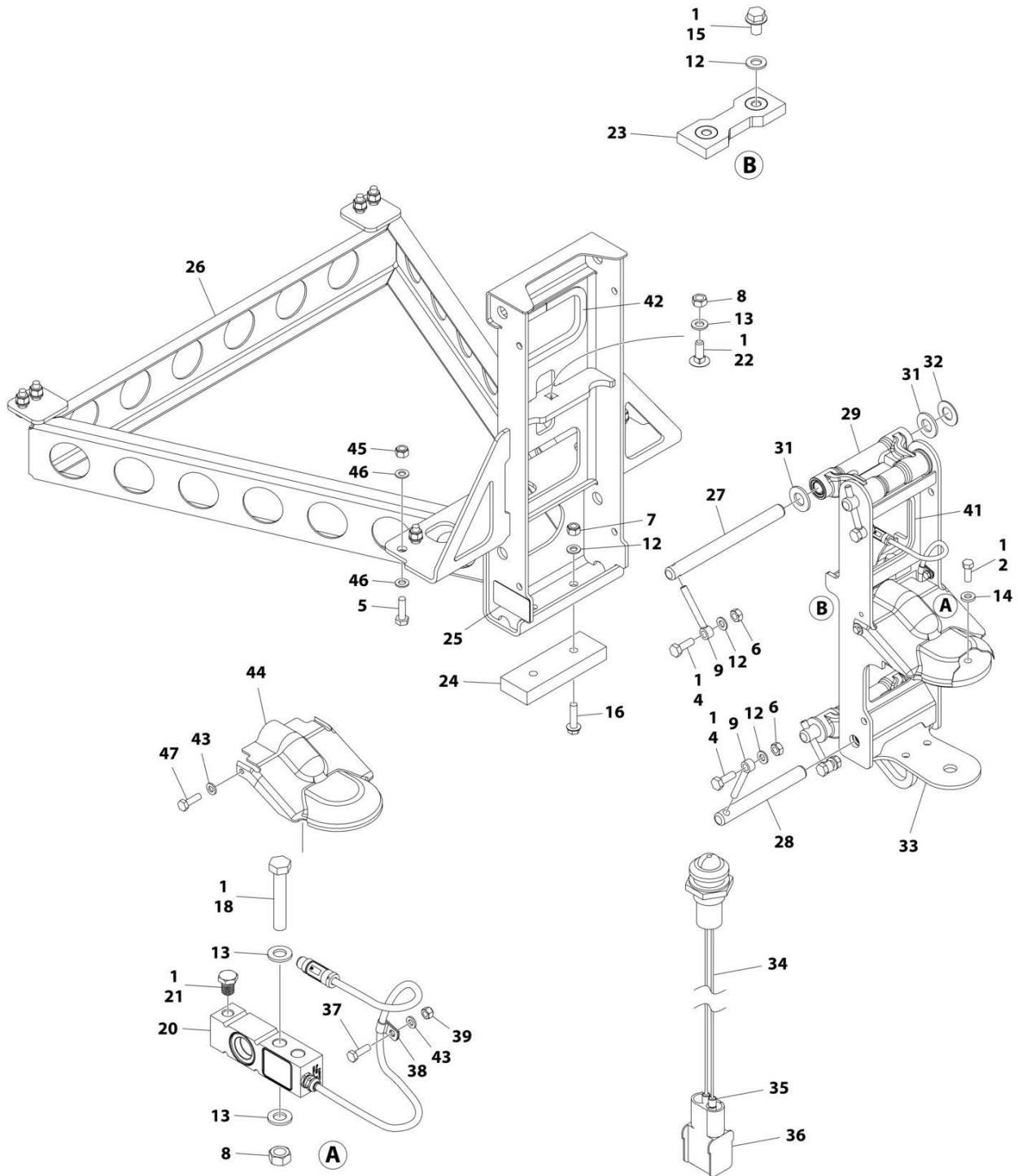
SECTION 4 - BOOM

FIGURE 4-7. ROTATOR ASSEMBLY - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0060044	Ref	ROTATOR ASSEMBLY	D
1	See Note	1	Case/Bracket Weldment (Note: Not Available - Purchase Complete Assembly)	
1A	0962257	2	Bushing	
1B	0961947	2	Bushing	
2	7017120	1	Shaft (Rotator with Helac Control #25928)	
2	7017196	1	Shaft (Rotator with Helac Control #26962)	
3	7017121	1	Piston Sleeve (Rotator with Helac Control #25928)	
3	7027900	1	Piston Sleeve (Rotator with Helac Control #26962)	
4	See Note	1	Cap, End (Rotator with Helac Control #25928) (Note: Use p/n 0060044)	
4	7027901	1	Cap, End (Rotator with Helac Control #26962)	
5	See Note	3	Capscrew 1/4 x 1-1/2, Grade 8 (Note: Not Available - Purchase Locally)	
7	7017126	1	Tie Rod Assembly	
20	See Note	NSS	Seal, Rod (Note: Use Item 52)	
22	See Note	NSS	Seal, Piston (Note: Use Item 52)	
24	See Note	NSS	Seal, Cap (Note: Use Item 52)	
25	See Note	NSS	Packing, Bearing (Note: Use Item 52)	
26	See Note	NSS	Seal (Note: Use Item 52)	
27	See Note	NSS	Ring, Back-Up Cap (Note: Use Item 52)	
32	See Note	NSS	Bearing, Shaft (Note: Use Item 51)	
34	See Note	2	Washer, Thrust (Note: Use Item 51)	
41	7017172	1	Counterbalance Valve Assembly (Helac p/n 24327, 26553 or 26554 Stamped Beside Mounting Screws)	
41A	7011323	2	Valve, Cartridge (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	70004323	1	Bushing, Shaft	
51	7017122	1	Bearing Kit (Includes Items 32-34)	
52	7017127	1	Seal Kit - Standard (Includes Items 20,22,24,25,26 & 27)	
52	70000341	1	Seal Kit - Low Temperature (Includes Items 20,22,24,25,26 & 27)	
53	7017123	1	Hardware Kit	

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FIGURE 4-8. PLATFORM SUPPORT INSTALLATION - E450AJ/M450AJ



ART_1001219016_F

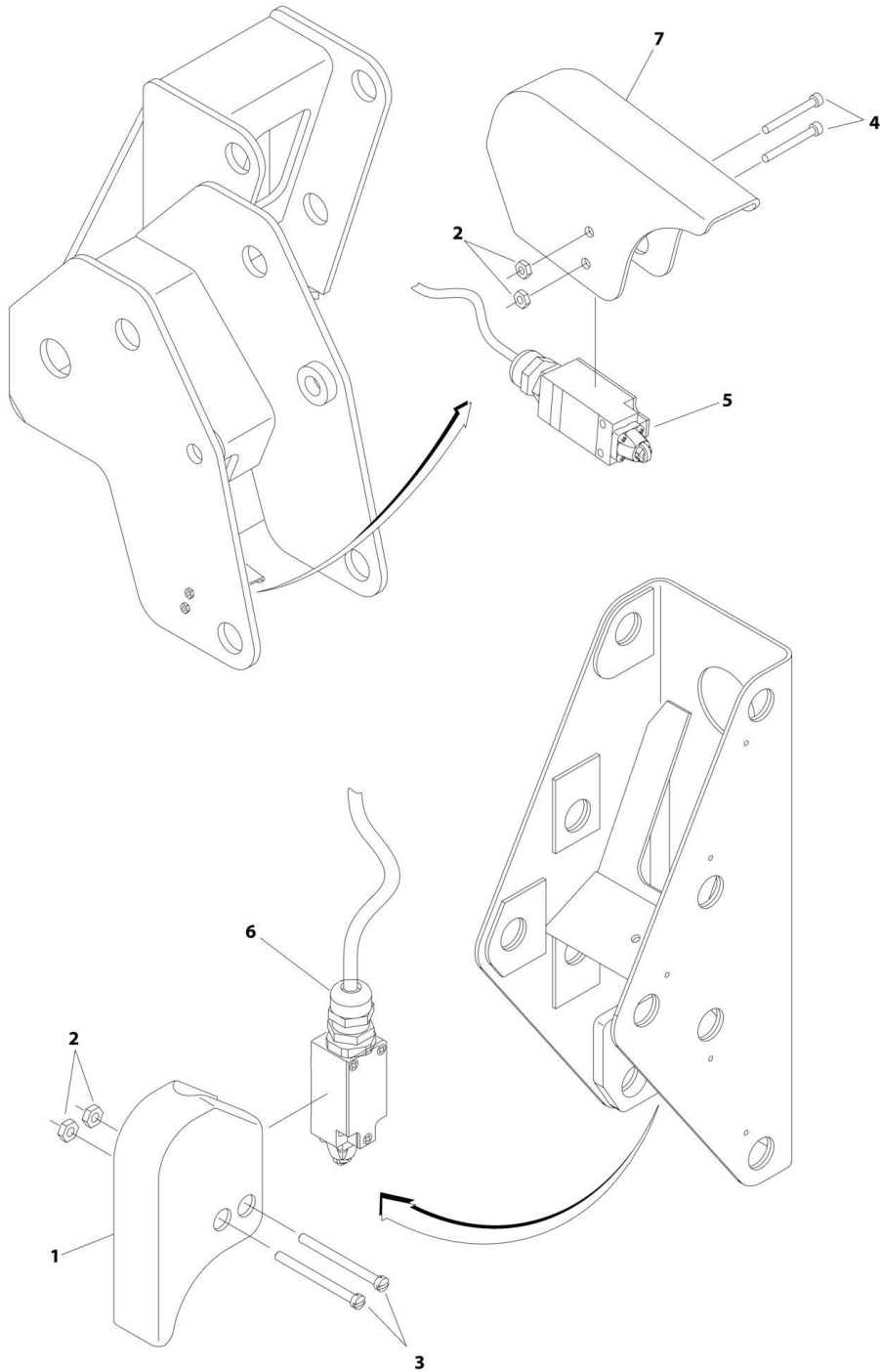
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FIGURE 4-8. PLATFORM SUPPORT INSTALLATION - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001219016	Ref	PLATFORM SUPPORT INSTALLATION	F
1	0100011	AR	Compound, Locking	
2	0681608	6	Bolt 3/8 x 1	
4	0761014	4	Bolt M10 x 30	
5	0761215	8	Bolt M12 x 35	
6	3291001	4	Nut M10	
7	3291005	2	Nut M10	
8	3291201	3	Nut M12	
9	3841143	4	Keeper	
12	4812000	8	Washer M10	
13	4812100	5	Washer M12	
14	4891600	6	Washer 3/8	
15	5251008	2	Bolt M10 x 16	
16	5251016	2	Bolt M10 x 40	
18	1001098828	2	Bolt M12 x 70 Grade 10.9	
20	1001247468	1	Sensor, Load Cell	
21	1001188622	1	Screw M12	
22	1001188844	1	Bolt M12 x 35	
23	1001190985	1	Pad, Wear	
24	1001200491	1	Plate	
25	1001216630	2	Decal - Tie Down/No Lift	
26	1001217228	1	Platform Support	
27	1001217242	2	Pin	
28	1001217243	2	Pin	
29	1001217244	2	Link, LSS Assembly	
29	1001217413	4	Bearing	
29	1001217249	1	Seal	
31	1001217253	8	Bearing	
32	1001217254	4	Bearing	
33	1001217267	1	Support, Rotary	
34	2920151	1	Light	
35	4460226	2	Socket, Female	
36	4460424	1	Connector - 2 Position	
37	0760610	1	Bolt M6 x 20	
38	1320136	1	Clamp	
39	3290605	1	Nut	
41	4060804	1.5 ft/ 0.5m	Flex-Trim	
42	4060805	1.5 ft/ 0.5m	Flex-Trim	
43	4811702	3	Washer M6	
44	1001228627	1	Cover, Platform Support and LSS	
45	3291205	8	Nut M12	
46	5241200	16	Washer M12	
47	0760606	2	Bolt M6 x 12	

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FIGURE 4-9. BOOM LIMIT SWITCHES INSTALLATION



ART_1001187789

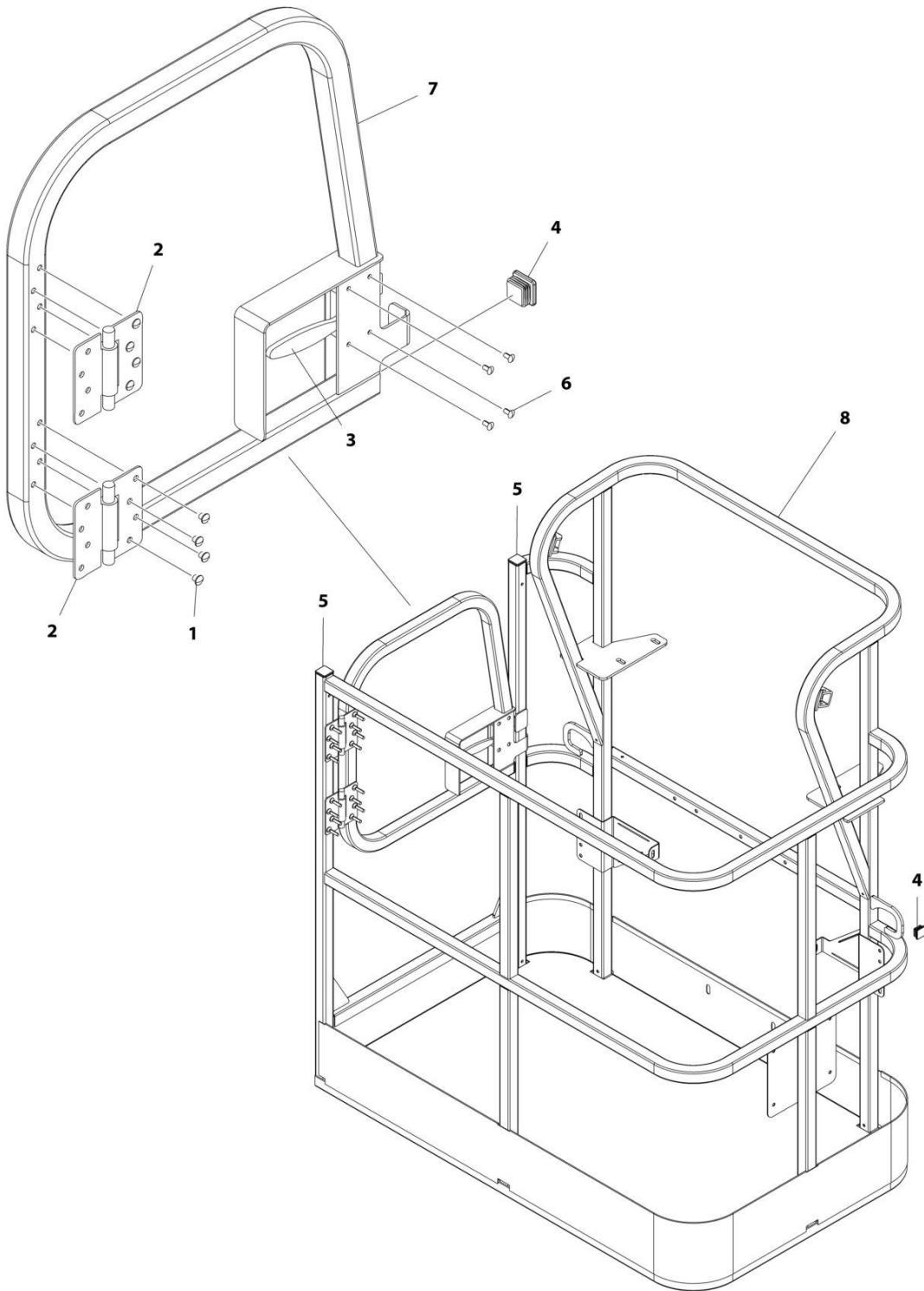
FIGURE 4-9. BOOM LIMIT SWITCHES INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001187789	Ref	BOOM LIMIT SWITCHES INSTALLATION	F
1	1670832	1	Cover, Switch - Lower	
2	3311005	AR	Nut #10	
2	3310805	AR	Nut #8	
3	3900104	AR	Screw #10 x 2-1/4	
3	3930828	AR	Screw #8 x 1-3/4	
4	3931028	2	Screw #10 x 1-3/4	
4	3930836	2	Screw #8 x 2-1/4	
5	1001187777	1	Limit Switch Harness - Upper (Includes Limit Switch) (See Separate Breakdown in ELECTRICAL Section)	
6	1001187776	1	Limit Switch Harness - Lower (Includes Limit Switch) (See Separate Breakdown in ELECTRICAL Section)	
7	1670833	1	Cover	
8	3310805	AR	Nut #8	

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FIGURE 5-1. PLATFORM ASSEMBLY - 4FT/1.22M - SIDE GATE ENTRY



ART_1001186387

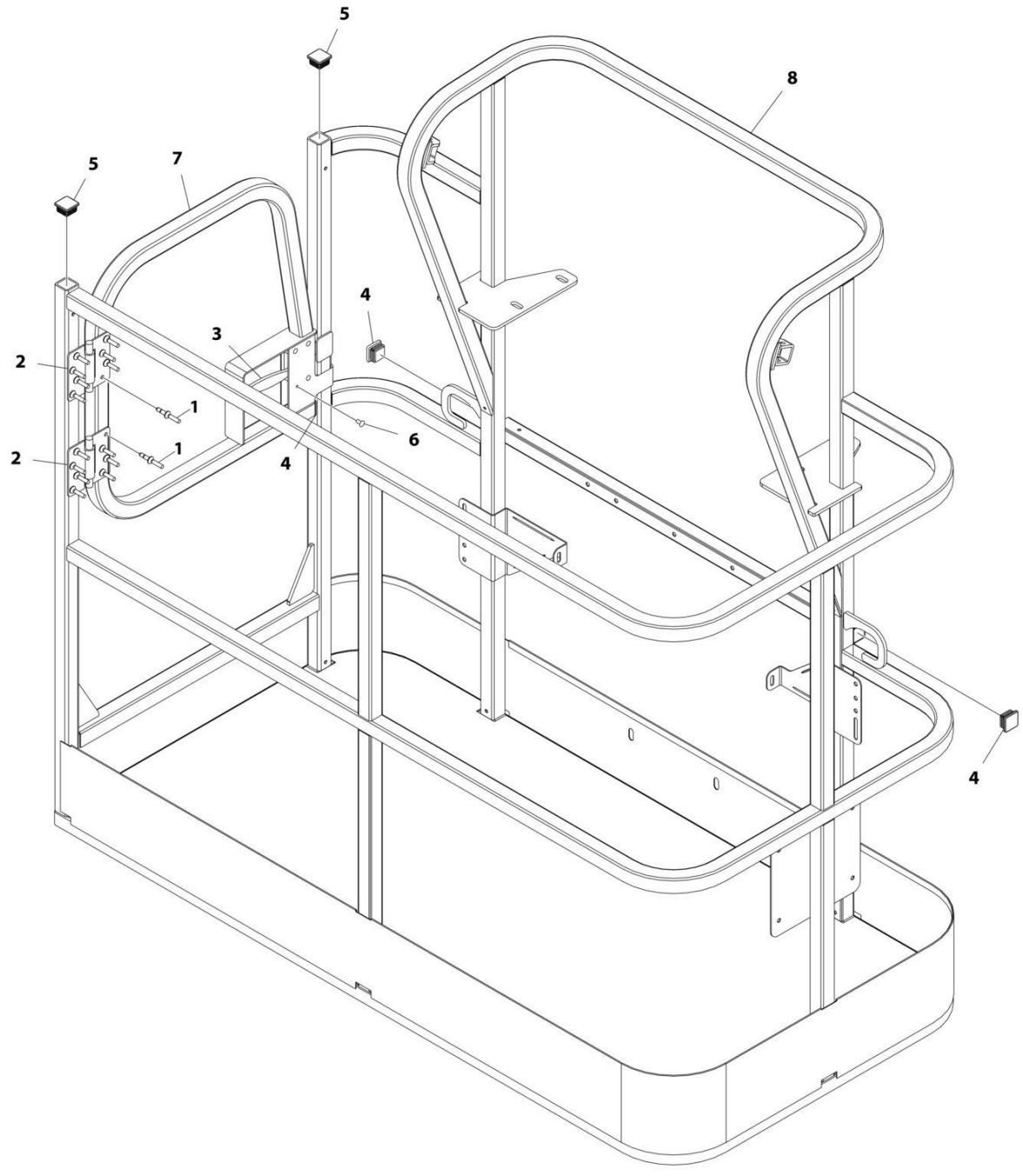
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FIGURE 5-1. PLATFORM ASSEMBLY - 4FT/1.22M - SIDE GATE ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186387	Ref	PLATFORM ASSEMBLY	C
		Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	2080040	16	Fastener, Huck	
2	2600281	2	Hinge, Self-Closing	
3	2940074	1	Latch	
4	3520072	3	Plug	
5	3520198	2	Plug	
6	3820020	4	Rivet	
7	1001144629	1	Gate	
8	See Note	1	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-2. PLATFORM ASSEMBLY - 5FT/1.52M - SIDE GATE ENTRY



ART_1001186386

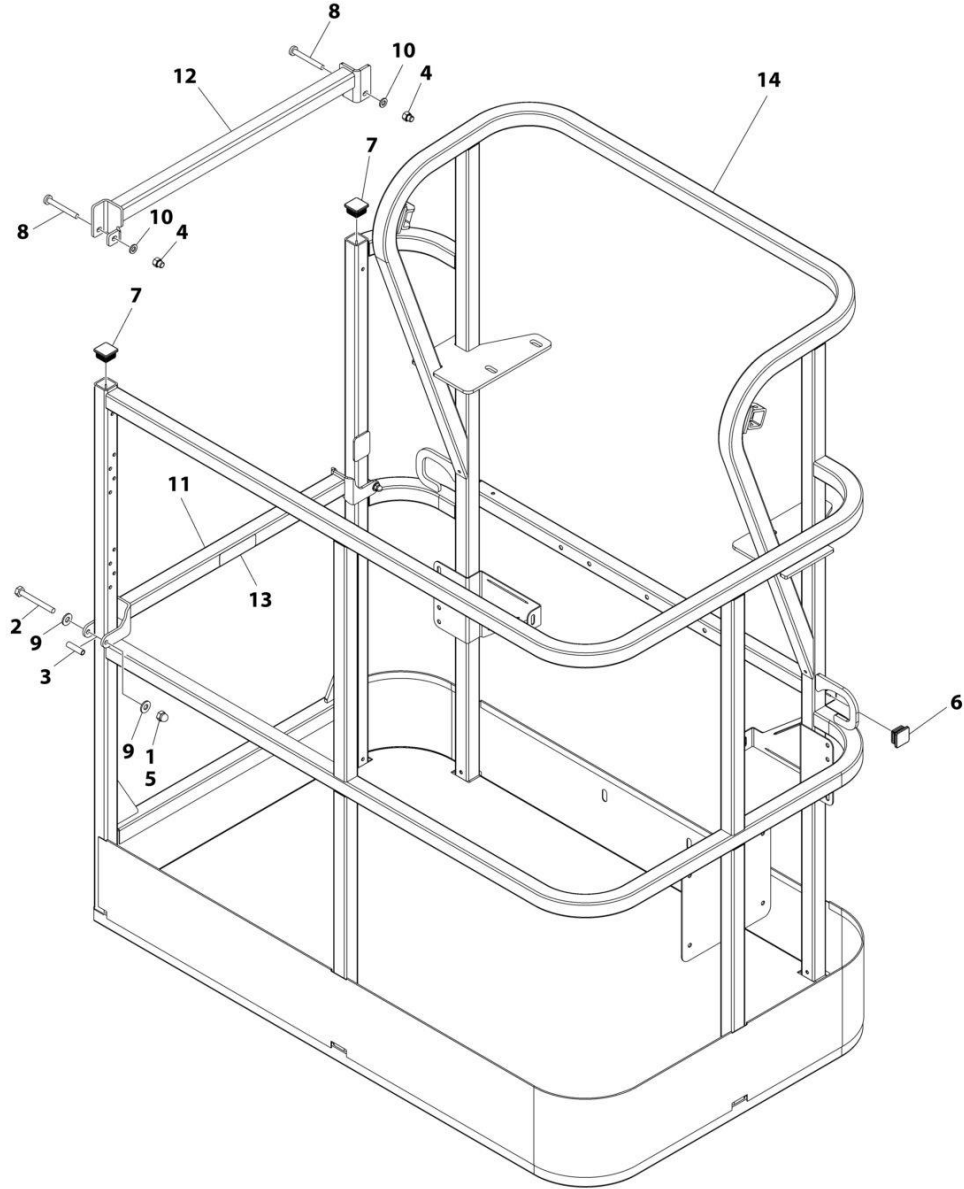
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FIGURE 5-2. PLATFORM ASSEMBLY - 5FT/1.52M - SIDE GATE ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186386	Ref	PLATFORM ASSEMBLY	C
		Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	2080040	16	Fastener, Huck	
2	2600281	2	Hinge, Self-Closing	
3	2940074	1	Latch	
4	3520072	3	Plug	
5	3520198	2	Plug	
6	3820020	4	Rivet	
7	1001144629	1	Gate	
8	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-3. PLATFORM ASSEMBLY - 4FT/1.22M - DROP BAR ENTRY



ART_1001186375

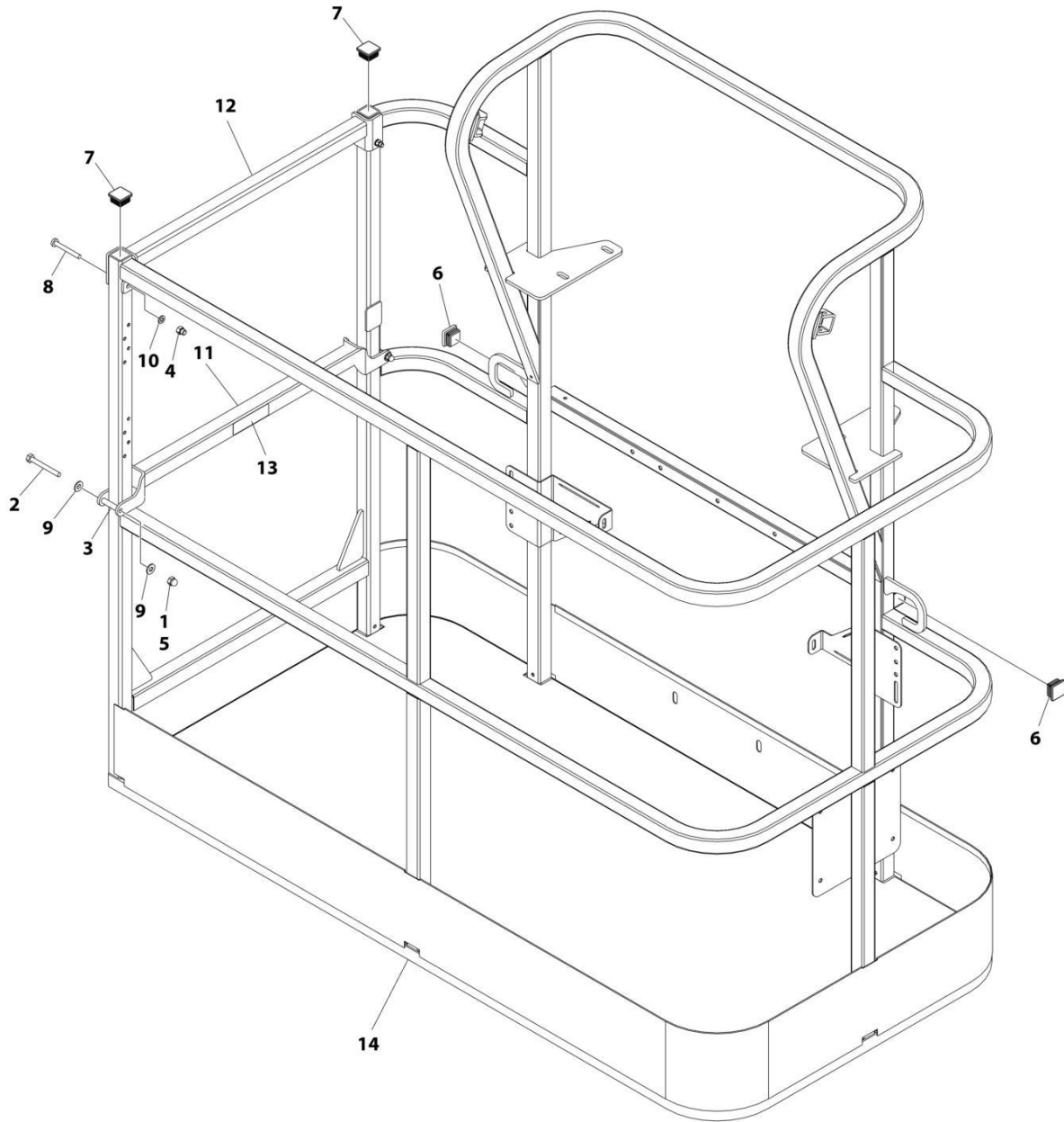
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FIGURE 5-3. PLATFORM ASSEMBLY - 4FT/1.22M - DROP BAR ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186375	Ref	PLATFORM ASSEMBLY	B
		Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	0100011	AR	Compound, Locking	
2	0641418	2	Bolt 1/4 x 2-1/4	
3	0961845	2	Bushing	
4	3290606	2	Nut M6	
5	3300151	2	Nut 1/4	
6	3520072	2	Plug	
7	3520198	2	Plug	
8	4010618	2	Screw M6 x 50	
9	4711400	4	Washer 1/4	
10	4811700	2	Washer M6	
11	1001138494	1	Bar, Drop	
12	1001138514	1	Rail - Top	
13	1001140429	1	Decal - Drop Bar	
14	See Note	1	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-4. PLATFORM ASSEMBLY - 5FT/1.52M - DROP BAR ENTRY



ART_1001186377

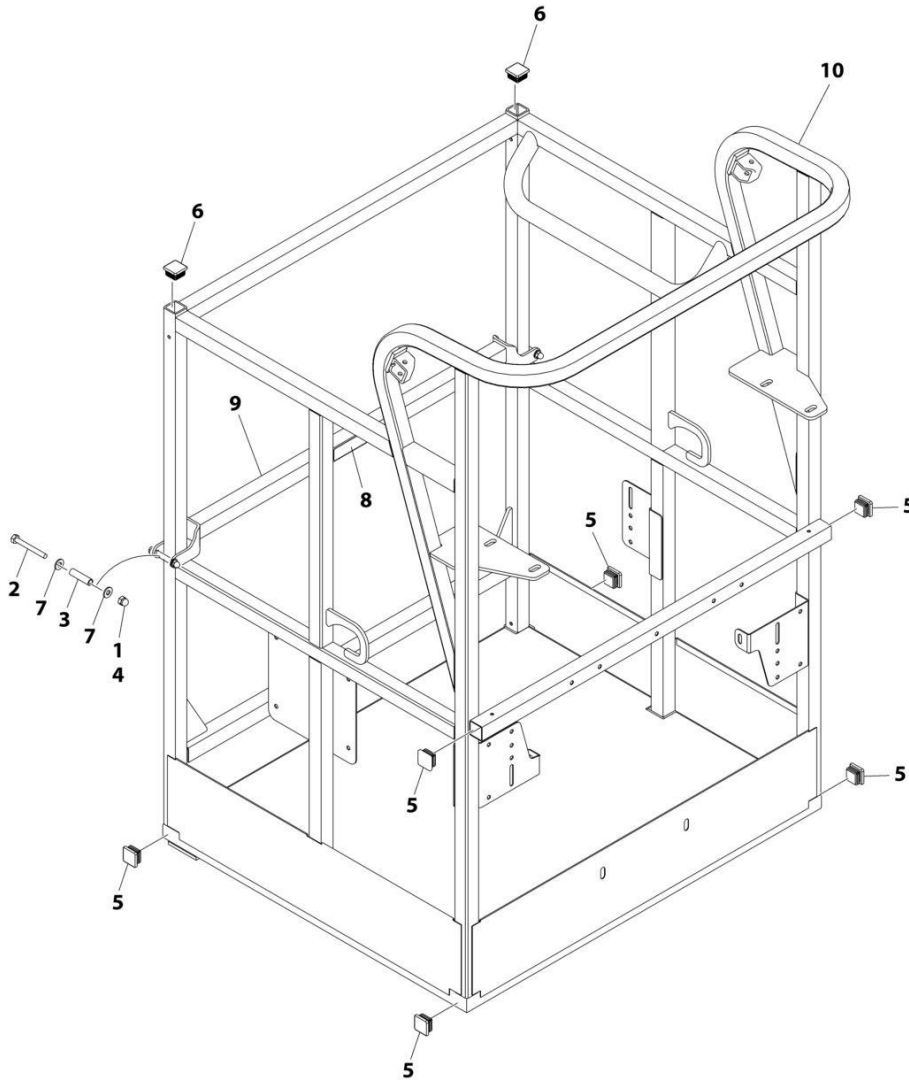
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FIGURE 5-4. PLATFORM ASSEMBLY - 5FT/1.52M - DROP BAR ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186377	Ref	PLATFORM ASSEMBLY	C
		Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	0100011	AR	Compound, Locking	
2	0641420	2	Bolt 1/4 x 2-1/2	
3	0961845	2	Bushing	
4	3290606	2	Nut M6	
5	3300151	2	Nut 1/4	
6	3520072	2	Plug	
7	3520198	2	Plug	
8	4010618	2	Screw M6 x 50	
9	4711400	4	Washer 1/4	
10	4811700	2	Washer M6	
11	1001138494	1	Bar, Drop	
12	1001138514	1	Rail (Top)	
13	1001140429	1	Decal - Drop Bar	
14	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-5. PLATFORM ASSEMBLY - 30IN X 3FT (76CM X .91M) - DROP BAR ENTRY



ART_1001228215

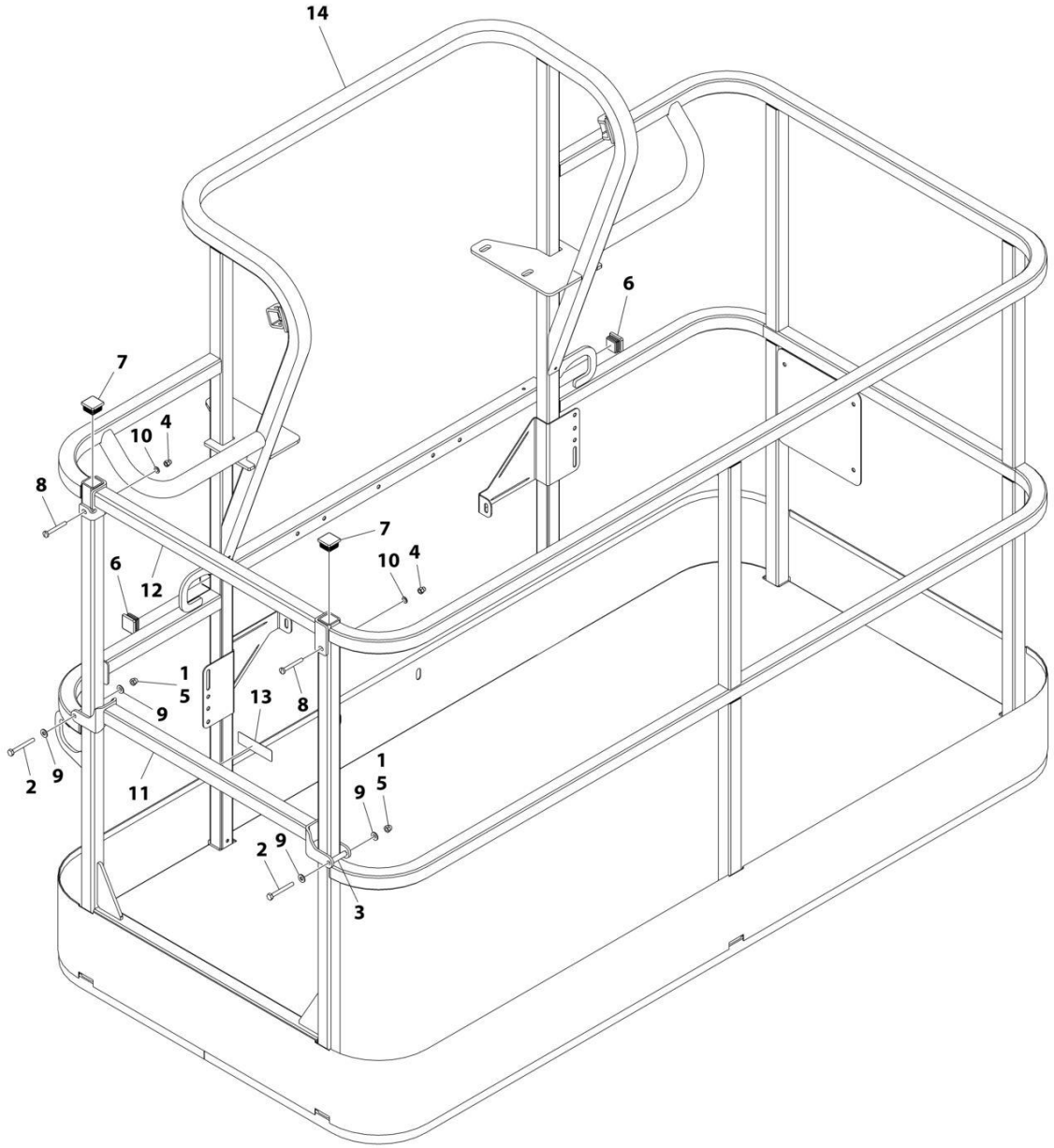
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FIGURE 5-5. PLATFORM ASSEMBLY - 30IN X 3FT (76CM X .91M) - DROP BAR ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228215	Ref	PLATFORM ASSEMBLY	A
	See Note	Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
	See Note	Ref	Note: Replacement Decals Must be Ordered Separately - See DECAL SECTION.	
1	0100011	AR	Compound, Locking	
2	0641418	2	Bolt 1/4 x 2-1/4	
3	0961845	2	Bushing	
4	3300151	2	Nut 1/4	
5	3520072	6	Cap, Plug	
6	3520198	2	Cap, Plug	
7	4711400	4	Washer 1/4	
8	1001140429	1	Decal - Drop Bar	
9	1001226872	1	Bar, Drop	
10	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-6. PLATFORM ASSEMBLY - 6FT/1.83M - DROP BAR ENTRY



ART_1001186378

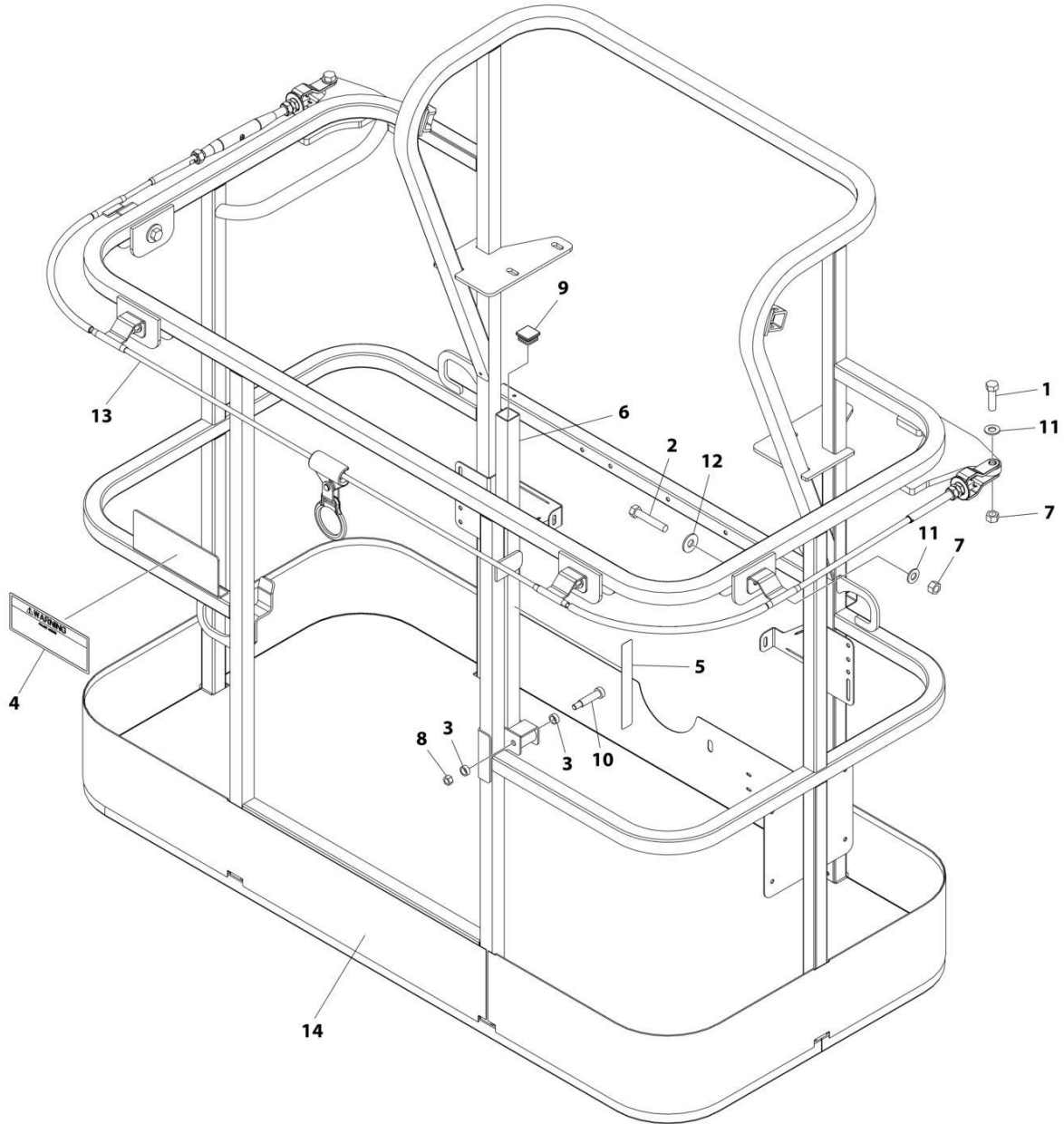
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FIGURE 5-6. PLATFORM ASSEMBLY - 6FT/1.83M - DROP BAR ENTRY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186378	Ref	PLATFORM ASSEMBLY	C
		Ref	Note: Platform and Mesh must be ordered separately for Platforms with Mesh. See SPECIAL OPTIONS SECTION for Mesh Installations.	
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	0100011	AR	Compound, Locking	
2	0641418	2	Bolt 1/4 x 2-1/4	
3	0961845	2	Bushing	
4	3290606	2	Nut M6	
5	3300151	2	Nut 1/4	
6	3520072	2	Plug	
7	3520198	2	Plug	
8	4010618	2	Screw M6 x 50	
9	4711400	4	Washer 1/4	
10	4811700	2	Washer M6	
11	1001138494	1	Bar, Drop	
12	1001138514	1	Rail (Top)	
13	1001140429	1	Decal - Drop Bar	
14	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-7. PLATFORM ASSEMBLY - 5FT/1.52M - FALL ARREST



ART_1001186388

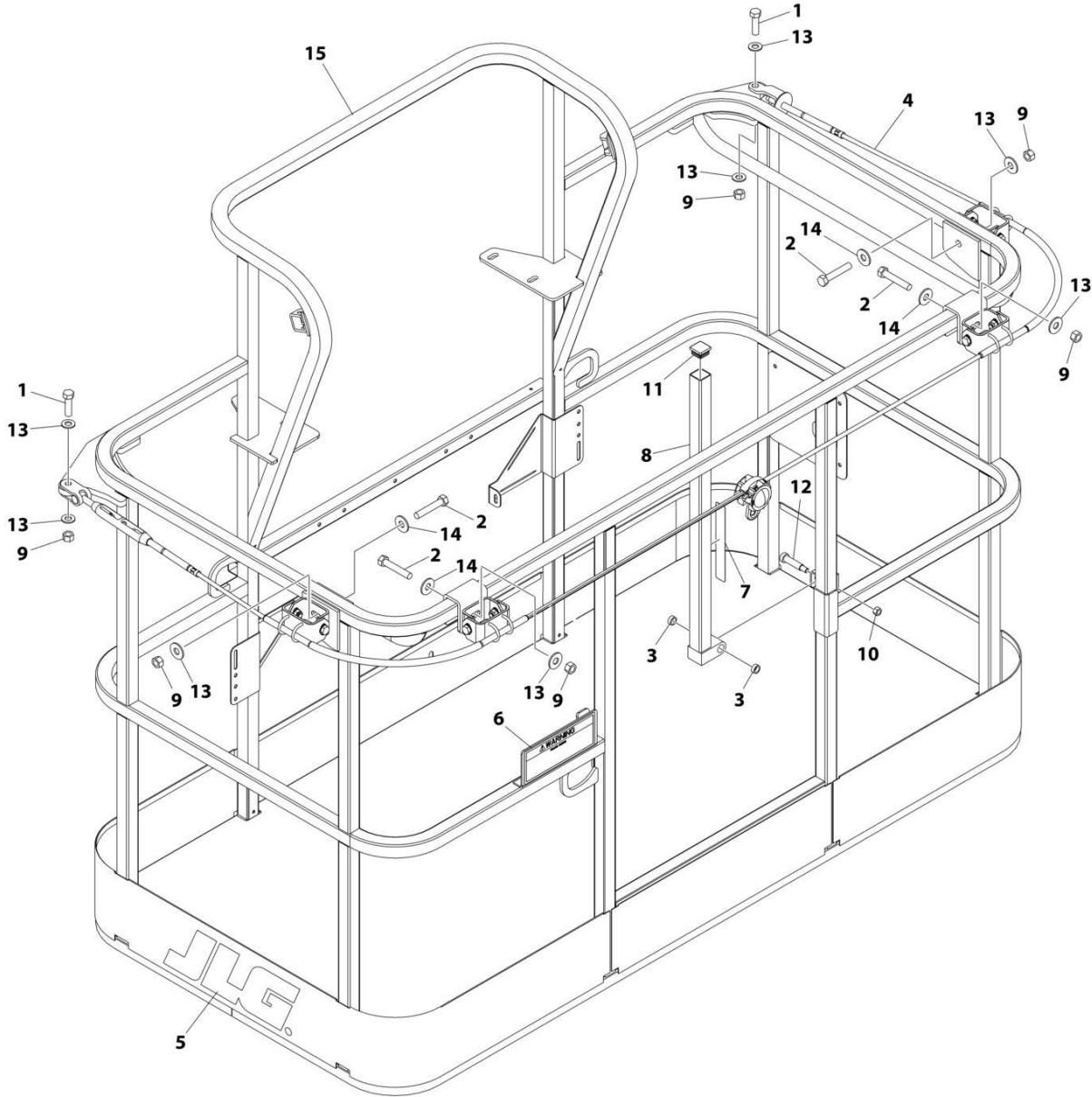
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FIGURE 5-7. PLATFORM ASSEMBLY - 5FT/1.52M - FALL ARREST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186388	Ref	PLATFORM ASSEMBLY	C
	See Note	Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	0681814	2	Bolt 1/2 x 1-3/4 (Grade 8)	
2	0681822	4	Bolt 1/2 x 2-3/4 (Grade 8)	
3	0962270	2	Bearing	
4	1705014	1	Decal - Safety	
5	1706385	1	Decal - Drop Bar	
6	2410014	1	Gate, Weldment	
7	3271805	6	Nut 1/2	
8	3311605	1	Nut 3/8	
9	3520072	1	Cap, Plug	
10	3900054	1	Bolt 1/2 x 1-3/4	
11	4711800	6	Washer 1/2	
12	4751800	4	Washer 1/2	
13	1001203654	1	Lanyard	
14	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

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FIGURE 5-8. PLATFORM ASSEMBLY - 6FT/1.83M - FALL ARREST



ART_1001186333

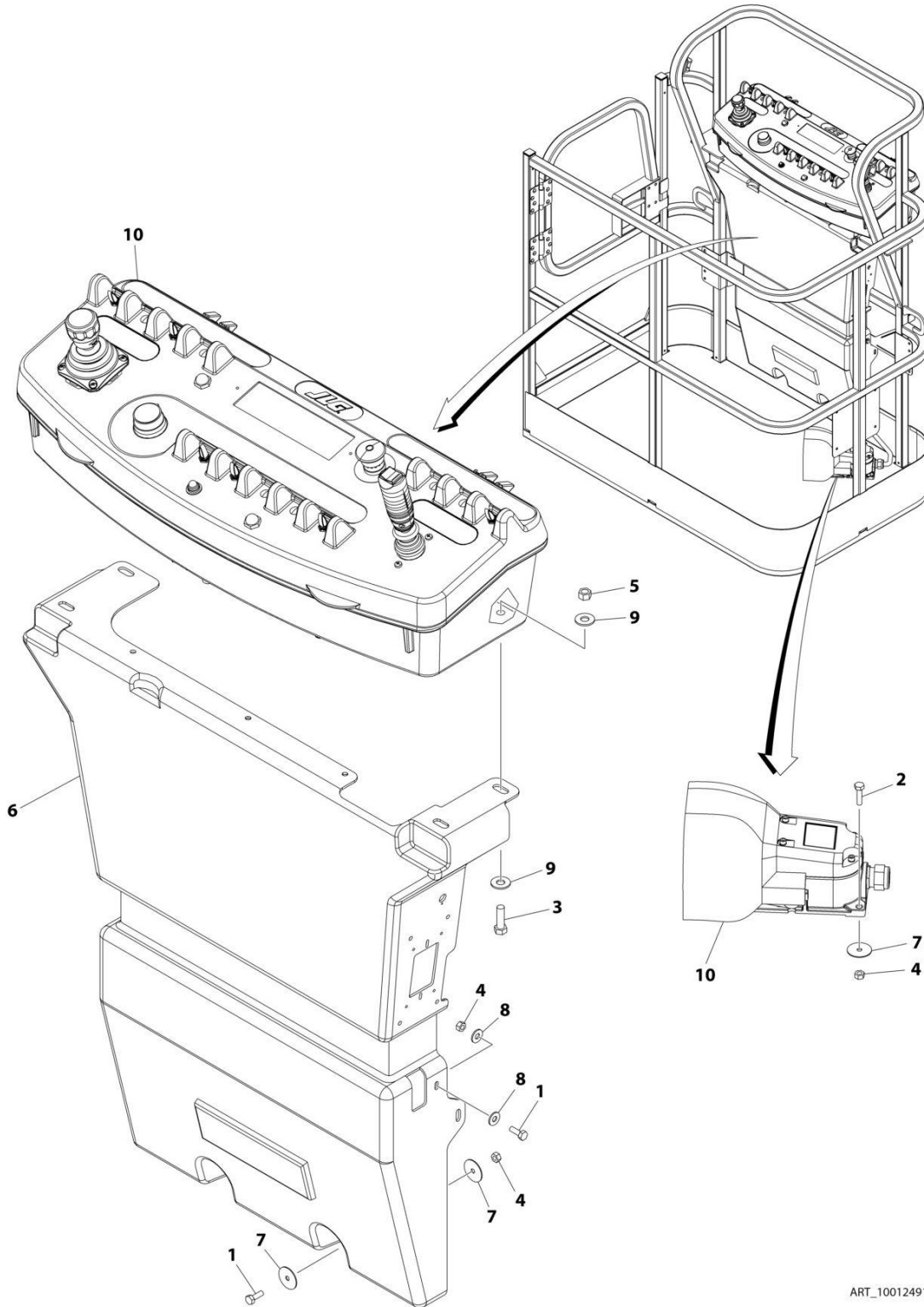
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FIGURE 5-8. PLATFORM ASSEMBLY - 6FT/1.83M - FALL ARREST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001186333	Ref	PLATFORM ASSEMBLY	C
		Ref	Note: Replacement Decals Must be Ordered Separately - See DECALS SECTION.	
1	0681814	2	Bolt 1/2 x 1-3/4 Grade 8	
2	0681822	4	Bolt 1/2 x 2-3/4 Grade 8	
3	0962270	2	Bearing	
4	1001203655	1	Cable	
5	1702773	1	Decal - JLG	
6	1705014	1	Decal - Safety	
7	1706385	1	Decal - Drop Bar	
8	2410014	1	Bar, Drop	
9	3271805	6	Nut 1/2 Grade 8	
10	3311605	1	Nut 3/8	
11	3520072	1	Plug	
12	3900054	1	Bolt 1/2 x 1-3/4	
13	4711800	8	Washer 1/2	
14	4751800	4	Washer 1/2	
15	See Note	NSS	Platform (Note: Not Available - Purchase Platform Assembly)	

SECTION 5 - PLATFORM

FIGURE 5-9. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - WITH 1 CELL LSS AND WITH SKYGUARD (NON-UL SPECS)



ART_1001249159

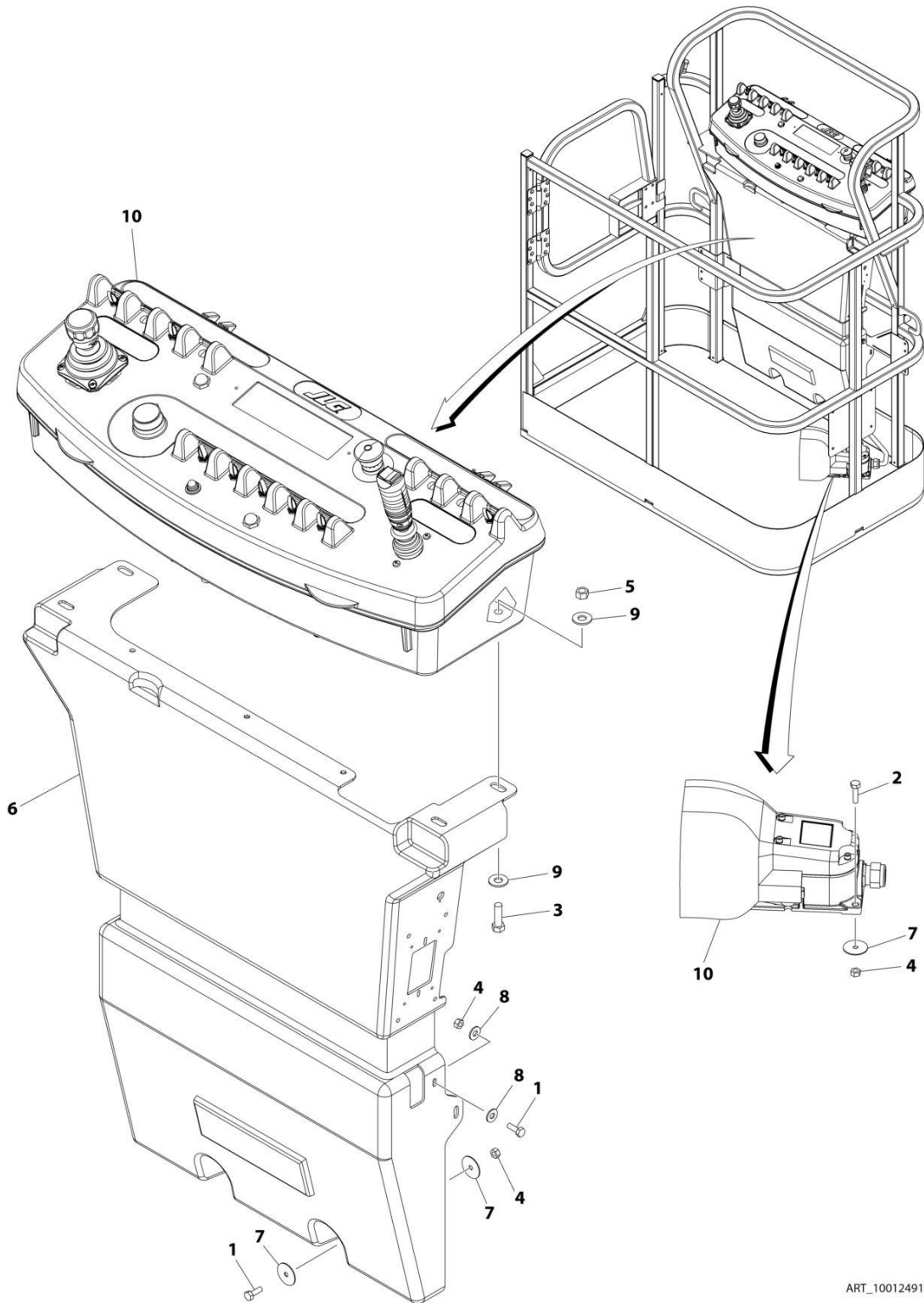
SECTION 5 - PLATFORM

FIGURE 5-9. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - WITH 1 CELL LSS AND WITH SKYGUARD (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249159	Ref	PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION	A
1	0641406	4	Bolt 1/4 x 3/4	
2	0641408	3	Bolt 1/4 x 1	
3	0641610	4	Bolt 3/8 x 1	
4	3311405	7	Nut 1/4	
5	3311605	4	Nut 3/8	
6	3380434	1	Panel, Pedestal	
7	4740362	7	Washer 1/4	
8	4751400	4	Washer 1/4	
9	4751600	8	Washer 3/8	
10	1001249162	1	Platform Console Assembly (See Separate Breakdown in this Section)	

SECTION 5 - PLATFORM

FIGURE 5-10. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - WITH 1 CELL LSS AND WITH SKYGUARD (UL SPECS)



ART_1001249155

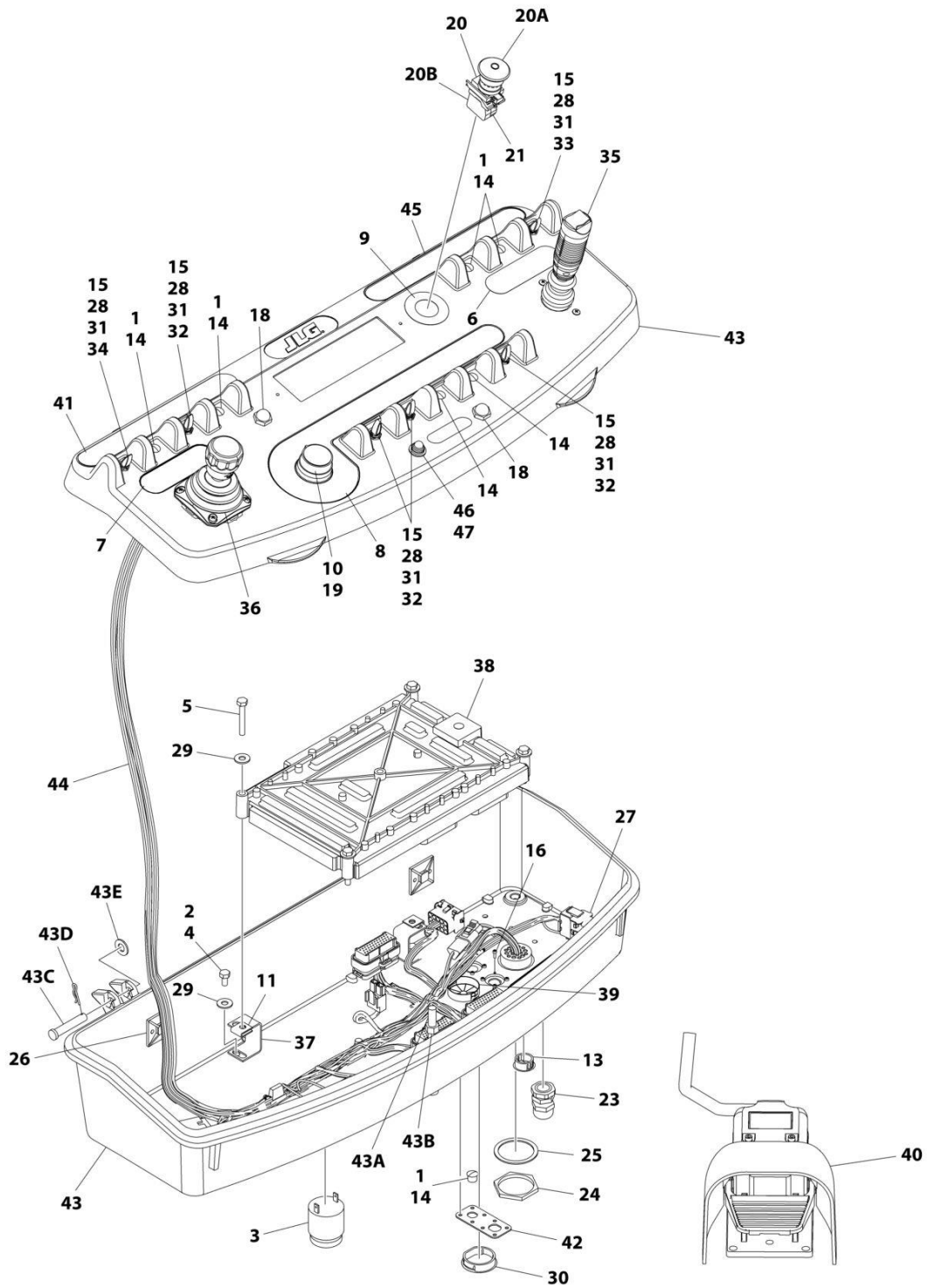
SECTION 5 - PLATFORM

FIGURE 5-10. PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION - WITH 1 CELL LSS AND WITH SKYGUARD (UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249155	Ref	PLATFORM CONSOLE AND FOOTSWITCH INSTALLATION	B
1	0641406	4	Bolt 1/4 X 3/4	
2	0641408	3	Bolt 1/4 X 1	
3	0641610	4	Bolt 3/8 X 1-1/4	
4	3311405	7	Nut 1/4	
5	3311605	4	Nut 3/8	
6	3380434	1	Panel, Pedestal	
7	4740362	7	Washer 1/4	
8	4751400	4	Washer 1/4	
9	4751600	8	Washer 3/8	
10	1001249154	1	Platform Console Assembly (See Separate Breakdown in this Section)	

SECTION 5 - PLATFORM

FIGURE 5-11. PLATFORM CONSOLE ASSEMBLY - WITH 1 CELL LSS AND WITH SKYGUARD (NON-UL SPECS)



ART_1001249162

SECTION 5 - PLATFORM

FIGURE 5-11. PLATFORM CONSOLE ASSEMBLY - WITH 1 CELL LSS AND WITH SKYGUARD (NON-UL SPECS)

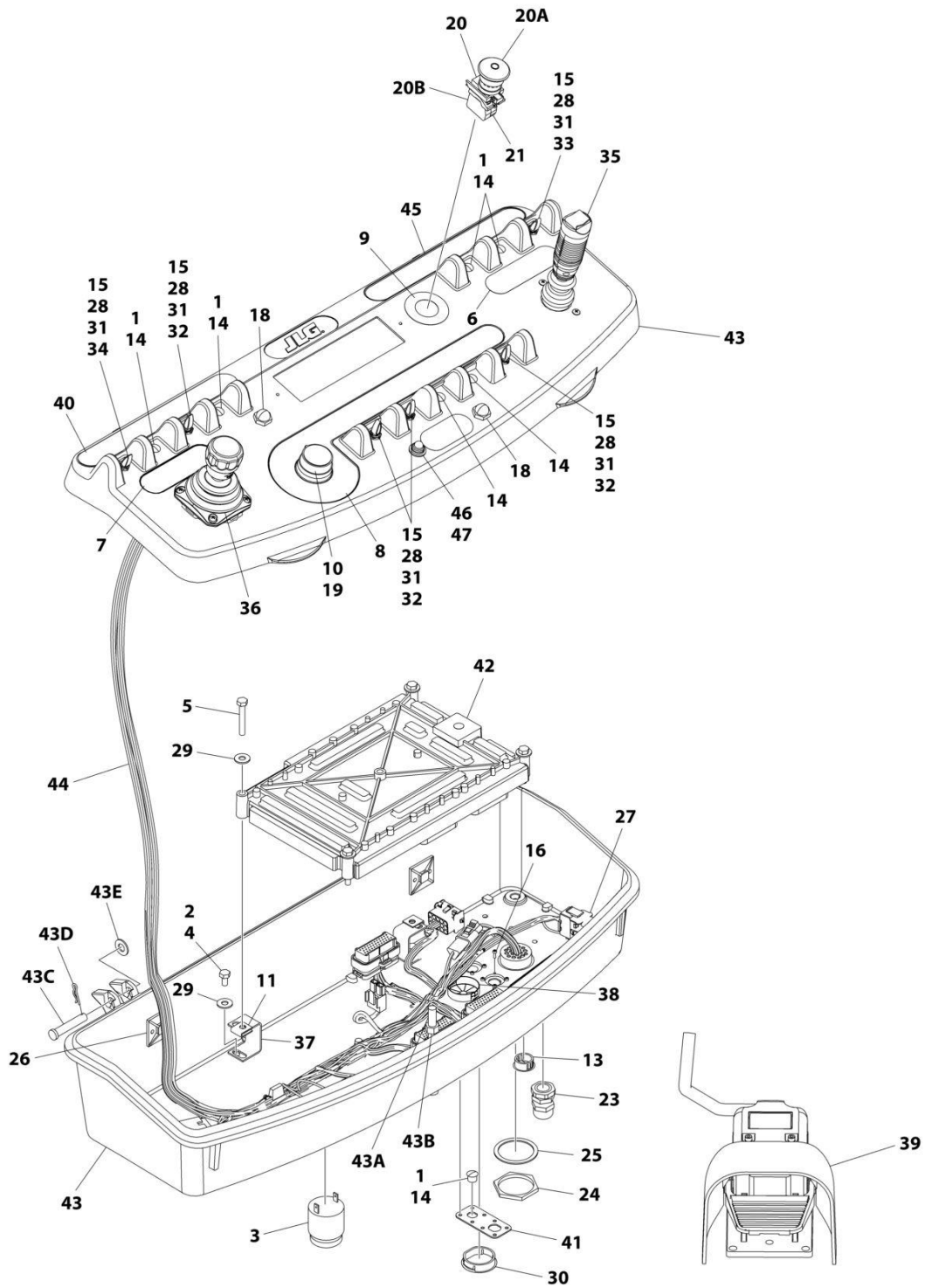
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249162	Ref	PLATFORM CONSOLE ASSEMBLY	B
1	0100009	AR	Sealant	
2	0100035	AR	Compound, Locking	
3	0140011	1	Alarm	
4	0641404	4	Bolt 1/4 x 1/2	
5	0641414	4	Bolt 1/4 x 1-3/4	
6	1702565	1	Decal - Drive and Steer	
7	1702566	1	Decal - Lift and Swing	
8	1702567	1	Decal - Function Speed	
9	1704260	1	Decal - EMS	
10	2560136	1	Handle, Knob	
11	3300353	4	Nut, Tinnerman	
13	3520030	1	Plug, Hole	
14	3520054	7	Plug, Hole	
15	3790012	6	O-Ring	
16	3900349	8	Screw M2.5	
17	4240032	AR	Tie-Strap (Not Shown)	
18	4360387	2	Switch, Push Button	
19	4360407	1	Switch, Potentiometer	
20	4360475	1	Switch, Emergency Stop	
20A	7020175	1	Cap, Mushroom with Sealing Ring	
20B	7020176	1	Block, Contact	
21	4360476	1	Block, Contact	
22	4460234	4	Mount, Tie-Strap (Not Shown)	
23	4460428	1	Connector, Strain Relief	
24	4460470	1	Nut, Terminal	
25	4460471	1	Washer, Lock Terminal	
26	4460488	3	Base, Terminal Mounting	
27	4460708	1	Connector - 15 Position	
28	4740397	6	Spacer	
29	4751400	8	Washer 1/4	
30	1001110434	1	Plug, D-Shaped	
31	1001155044	6	Nut 15/32	
32	1001155045	4	Switch, Toggle	
33	1001159256	1	Switch, Toggle	
34	1001161710	1	Switch, Toggle	
35	1001166538	NLA	Controller Assembly - Drive and Steer (Use p/n 1001212415) (See Separate Breakdown in this Section)	
36	1001166539	NLA	Controller Assembly - Lift and Swing (Use p/n 1001129555) (See Separate Breakdown in this Section)	
37	1001172760	4	Bracket, Module	
38	1001182724	1	Module, PC (Note: Re-calibration Required when Replaced)	
39	1001185281	1	Plug, Bushing	
40	1001189039	1	Footswitch Assembly (See Separate Breakdown in this Section)	
41	1001193987	1	Decal - Horn and Drive Select	
42	1001213882	1	Mount, Connector	
43	1001215228	1	Console Box Assembly	
43A	0630568	1	Capscrew 3/8 x 4-1/2	
43B	3311601	1	Nut 3/8	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
43C	3430616	2	Pin, Clevis	
43D	3470003	2	Pin, Cotter	
43E	4711600	2	Washer 3/8	
44	1001245673	1	Platform Console Box Harness (See Separate Breakdown in ELECTRICAL SECTION)	
45	1001247538	1	Decal - Stop - Generator	
46	2920028	1	Light, Indicator	
47	2920029	1	Lamp, Bulb	

SECTION 5 - PLATFORM

FIGURE 5-12. PLATFORM CONSOLE ASSEMBLY - WITH 1 CELL LSS AND WITH SKYGUARD (UL SPECS)



ART_1001249154

SECTION 5 - PLATFORM

FIGURE 5-12. PLATFORM CONSOLE ASSEMBLY - WITH 1 CELL LSS AND WITH SKYGUARD (UL SPECS)

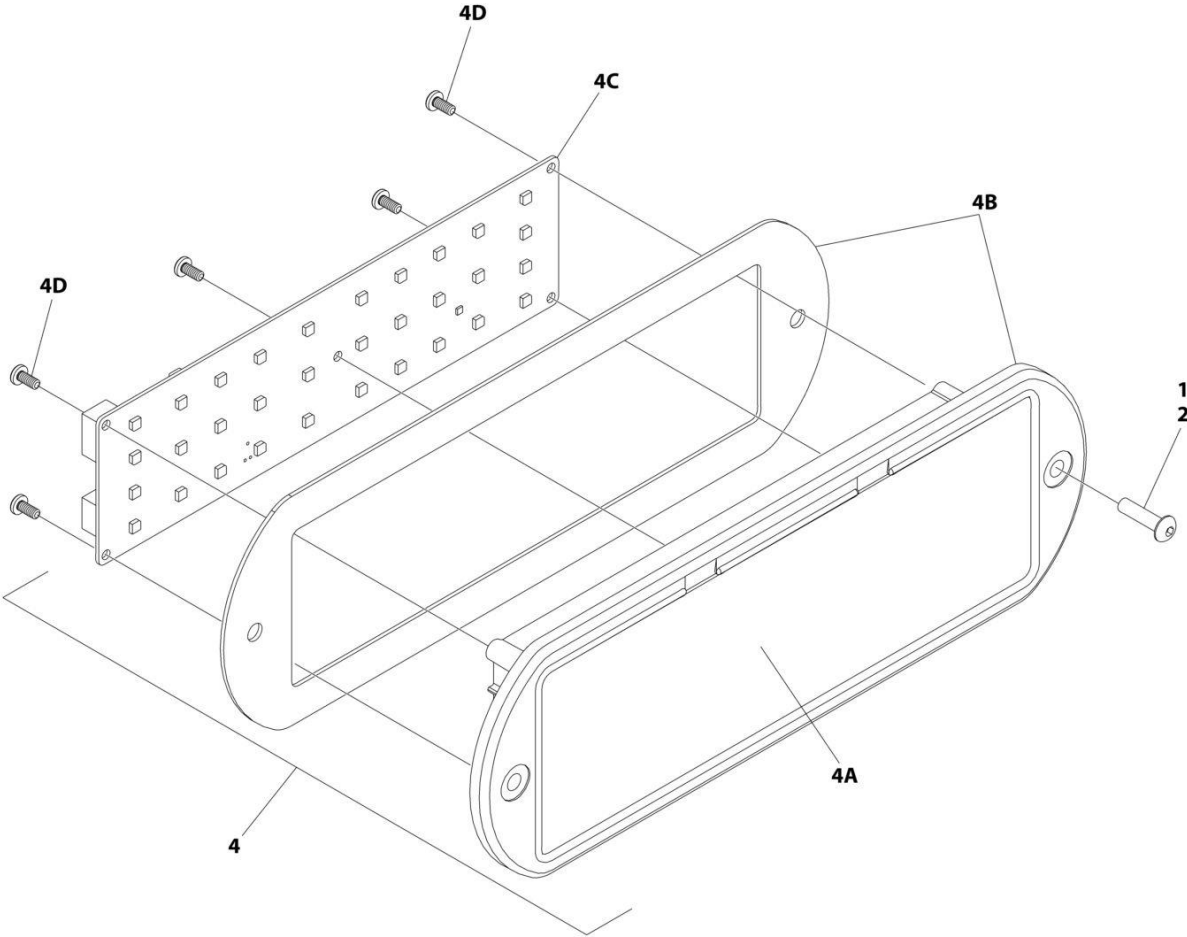
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249154	Ref	PLATFORM CONSOLE ASSEMBLY	B
1	0100009	AR	Sealant	
2	0100035	AR	Compound, Locking	
3	0140011	1	Alarm	
4	0641404	4	Bolt 1/4 x 1/2	
5	0641414	4	Bolt 1/4 x 1-3/4	
6	1702565	1	Decal - Drive and Steer	
7	1702566	1	Decal - Lift and Swing	
8	1702567	1	Decal - Function Speed	
9	1704260	1	Decal - EMS	
10	2560136	1	Handle, Knob	
11	3300353	4	Nut	
13	3520030	1	Plug, Hole	
14	3520054	5	Plug, Hole	
15	3790012	8	O-Ring	
16	3900349	8	Screw M2.5	
17	4240032	AR	Tie-Strap (Not Shown)	
18	4360387	2	Switch, Push Button	
19	4360407	1	Switch, Potentiometer	
20	4360475	1	Switch, Emergency Stop	
20A	7020175	1	Cap, Mushroom with Sealing Ring	
20B	7020176	1	Block, Contact	
21	4360476	1	Block, Contact	
22	4460234	4	Mount, Tie-Strap (Not Shown)	
23	4460428	1	Connector, Strain Relief	
24	4460470	1	Nut	
25	4460471	1	Washer, Lock Terminal	
26	4460488	2	Base, Terminal Mounting	
27	4460708	1	Connector - 15 Position	
28	4740397	8	Spacer	
29	4751400	8	Washer 1/4	
30	1001110434	1	Plug, D-Shaped	
31	1001155044	8	Nut 15/32	
32	1001155045	6	Switch, Toggle	
33	1001159256	1	Switch, Toggle	
34	1001161710	1	Switch, Toggle	
35	1001166538	NLA	Controller Assembly - Drive and Steer (Use p/n 1001212415) (See Separate Breakdown in this Section)	
36	1001166539	NLA	Controller Assembly - Lift and Swing (Use p/n 1001129555) (See Separate Breakdown in this Section)	
37	1001172760	4	Bracket, Module	
38	1001185281	1	Plug, Bushing	
39	1001189039	1	Footswitch Assembly (See Separate Breakdown in this Section)	
40	1001193987	1	Decal - Horn and Drive Select	
41	1001213882	1	Mount, Connector	
42	1001215835	1	Module, PC (Note: Re-calibration Required when Replaced)	
43	1001215228	1	Console Box Assembly	
43A	0630568	1	Capscrew 3/8 x 4-1/2	
43B	3311601	1	Nut 3/8	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
43C	3430616	2	Pin, Clevis	
43D	3470003	2	Pin, Cotter	
43E	4711600	2	Washer 3/8	
44	1001245673	1	Harness, Platform Console Box (With 1 Cell LSS) (See Separate Breakdown in ELECTRICAL SECTION)	
45	1001247538	1	Decal - Stop - Generator	
46	2920028	1	Light, Indicator	
47	2920029	1	Lamp, Bulb	

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FIGURE 5-13. LIGHT PANEL INSTALLATION



ART_1001245179

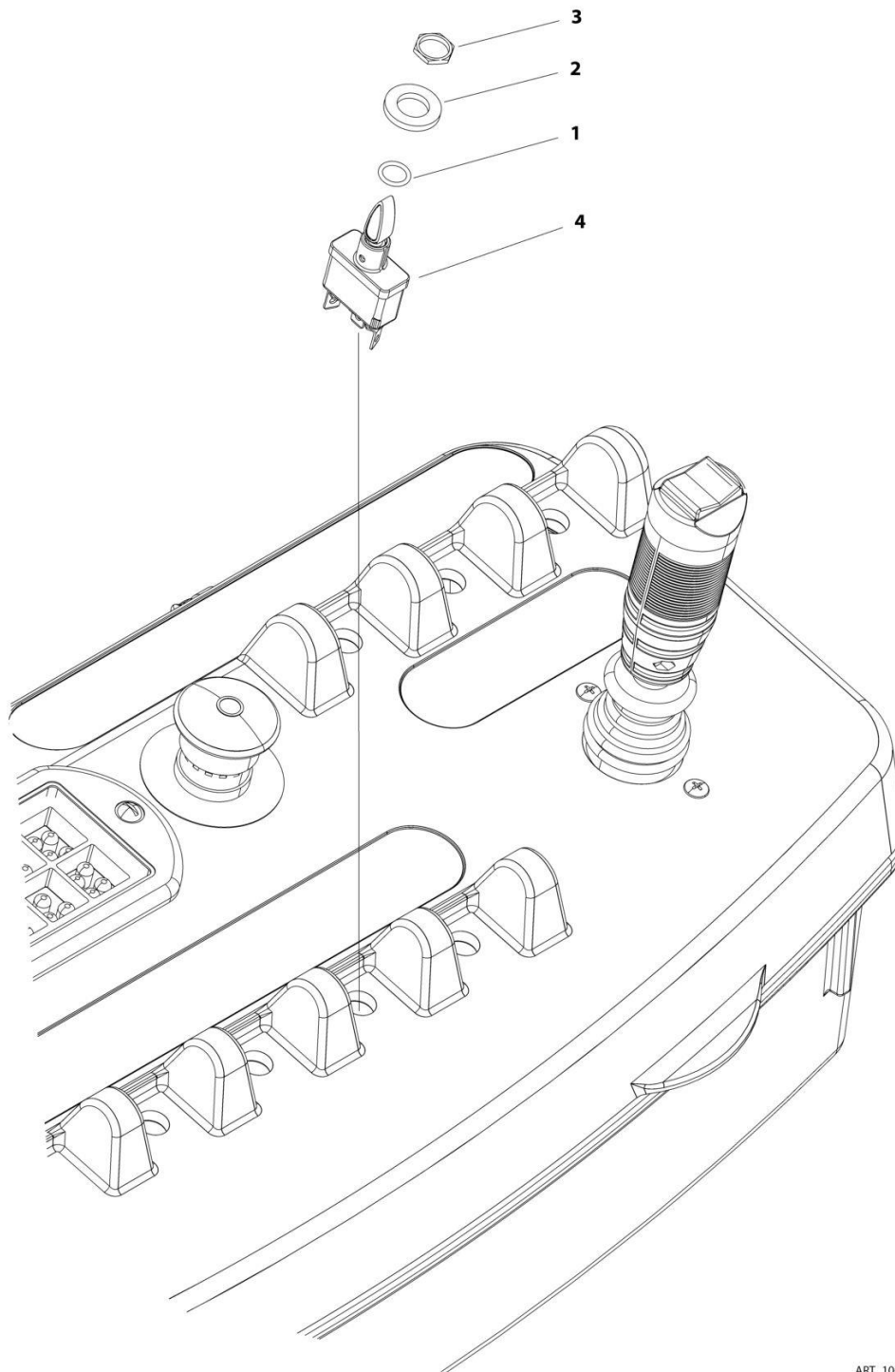
SECTION 5 - PLATFORM

FIGURE 5-13. LIGHT PANEL INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001245179	Ref	LIGHT PANEL INSTALLATION	B
1	0100035	AR	Compound, Locking	
2	3911010	2	Screw #10 x 5/8	
4	1001245210	1	Light Panel Assembly	
4A	1001245164	1	Lens, I-Con	
4B	1001245173	1	Bezel (Includes Gasket)	
4C	1001238732	1	Panel, LED Light	
4D		Ref	Screw	

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FIGURE 5-14. JIB SWITCH INSTALLATION - E450AJ/M450AJ



ART_1001188892

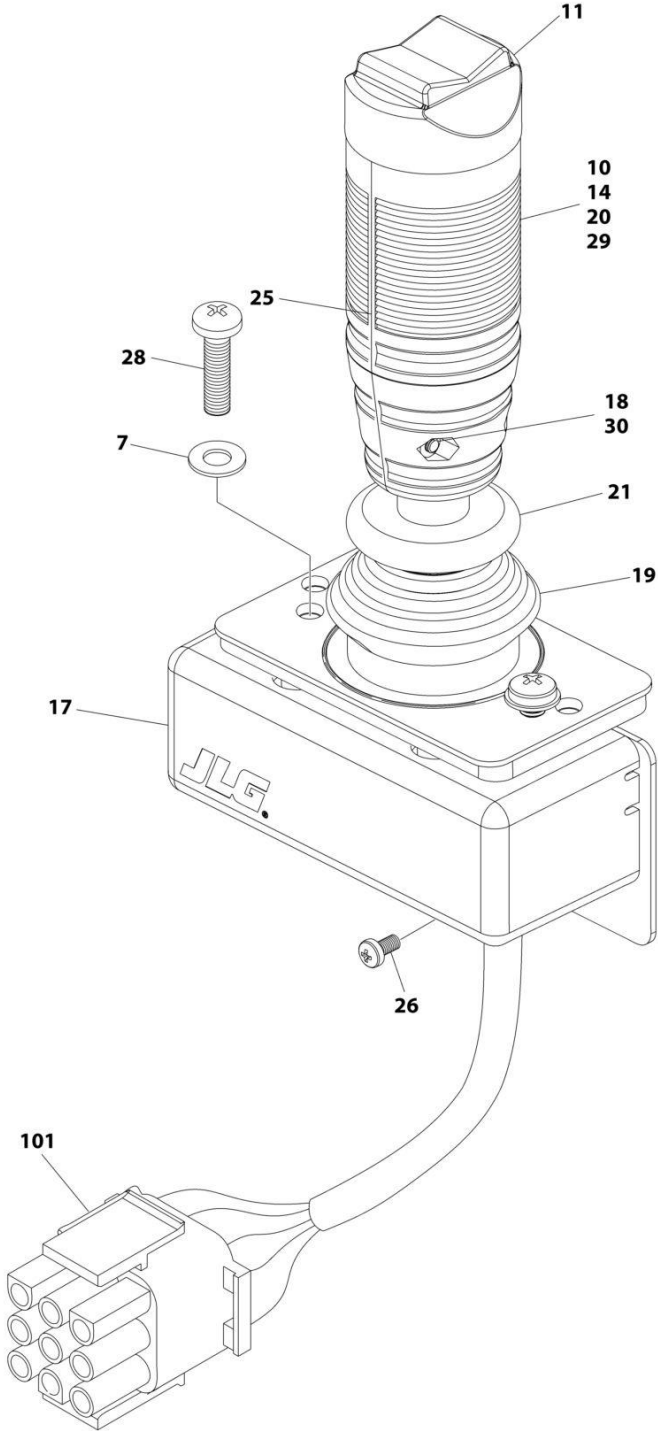
SECTION 5 - PLATFORM

FIGURE 5-14. JIB SWITCH INSTALLATION - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001188892	Ref	JIB SWITCH INSTALLATION	A
1	3790012	1	O-Ring	
2	4740397	1	Spacer	
3	1001155044	1	Nut, Special	
4	1001155045	1	Switch, Toggle	

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FIGURE 5-15. CONTROLLER ASSEMBLY - DRIVE AND STEER



ART_1001166538

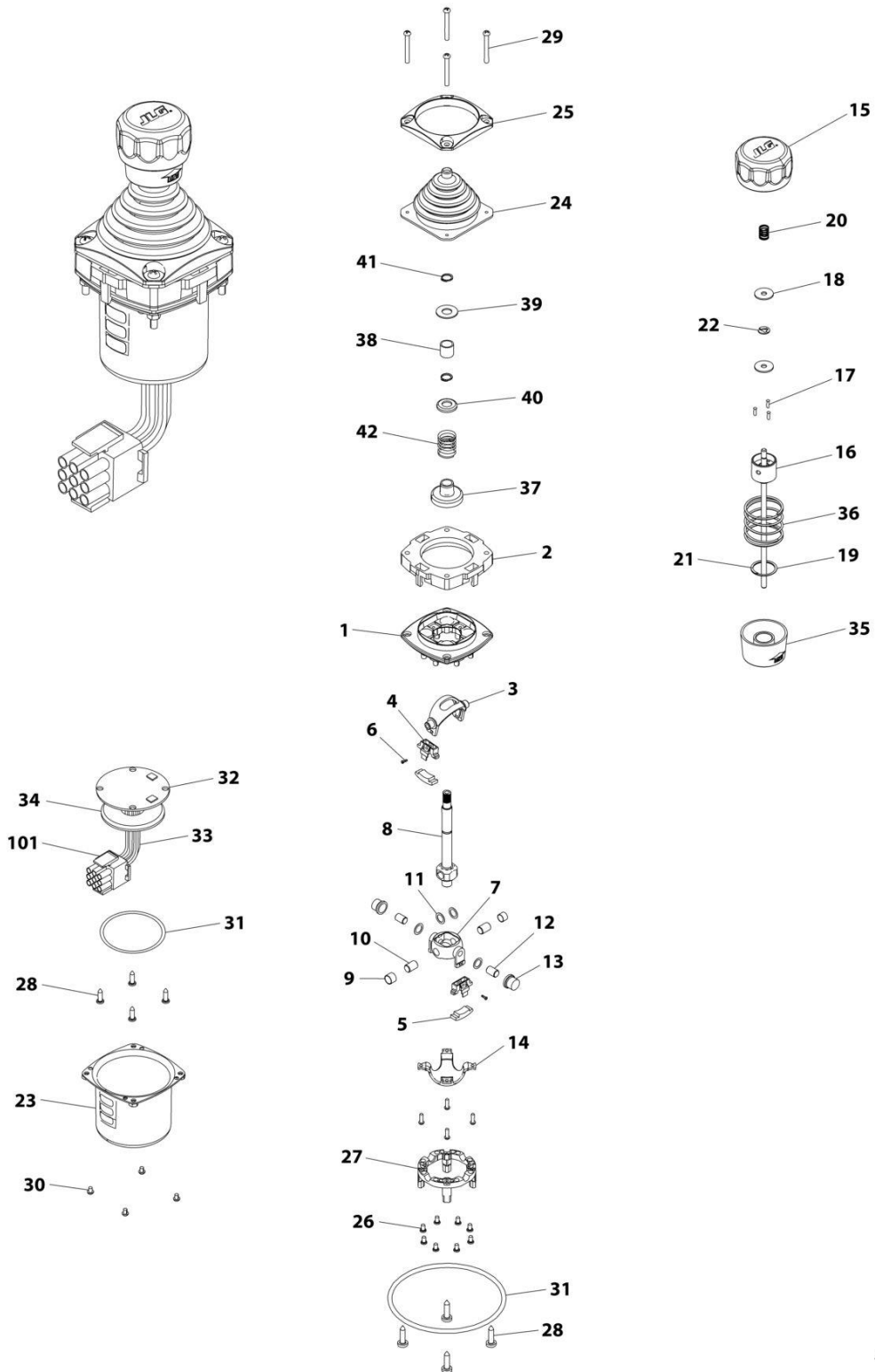
SECTION 5 - PLATFORM

FIGURE 5-15. CONTROLLER ASSEMBLY - DRIVE AND STEER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166538	Ref	CONTROLLER ASSEMBLY - DRIVE AND STEER	G
		Ref	Note: For Replacement, Use p/n 1001212415.	
7	70004738	2	Washer	
10	70004739	1	Roller	
11	70004740	1	Boot, Switch	
14	70004741	2	Half, Handle	
17	70004742	1	Enclosure	
18	70004743	4	Nut	
19	70004744	NLA	Boot, Controller (Use p/n 70005230 Boot/Base Assembly)	
20	70004745	NLA	Tube, Locking (Use p/n 70005230 Boot/Base Assembly)	
21	70004746	NLA	Disc, Locking (Use p/n 70005230 Boot/Base Assembly)	
25	70004747	2	Seal, Rope	
26	70004748	1	Screw M3 x 6	
28	70004749	2	Screw M5 x 20	
29	70004750	1	Pin, Dowel	
30	70004751	4	Screw M3 x 16	
101	4460265	1	Connector - 9 Position	
101	4460226	7	Socket, Female	

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FIGURE 5-16. CONTROLLER ASSEMBLY - LIFT AND SWING



ART_1001166539

SECTION 5 - PLATFORM

FIGURE 5-16. CONTROLLER ASSEMBLY - LIFT AND SWING

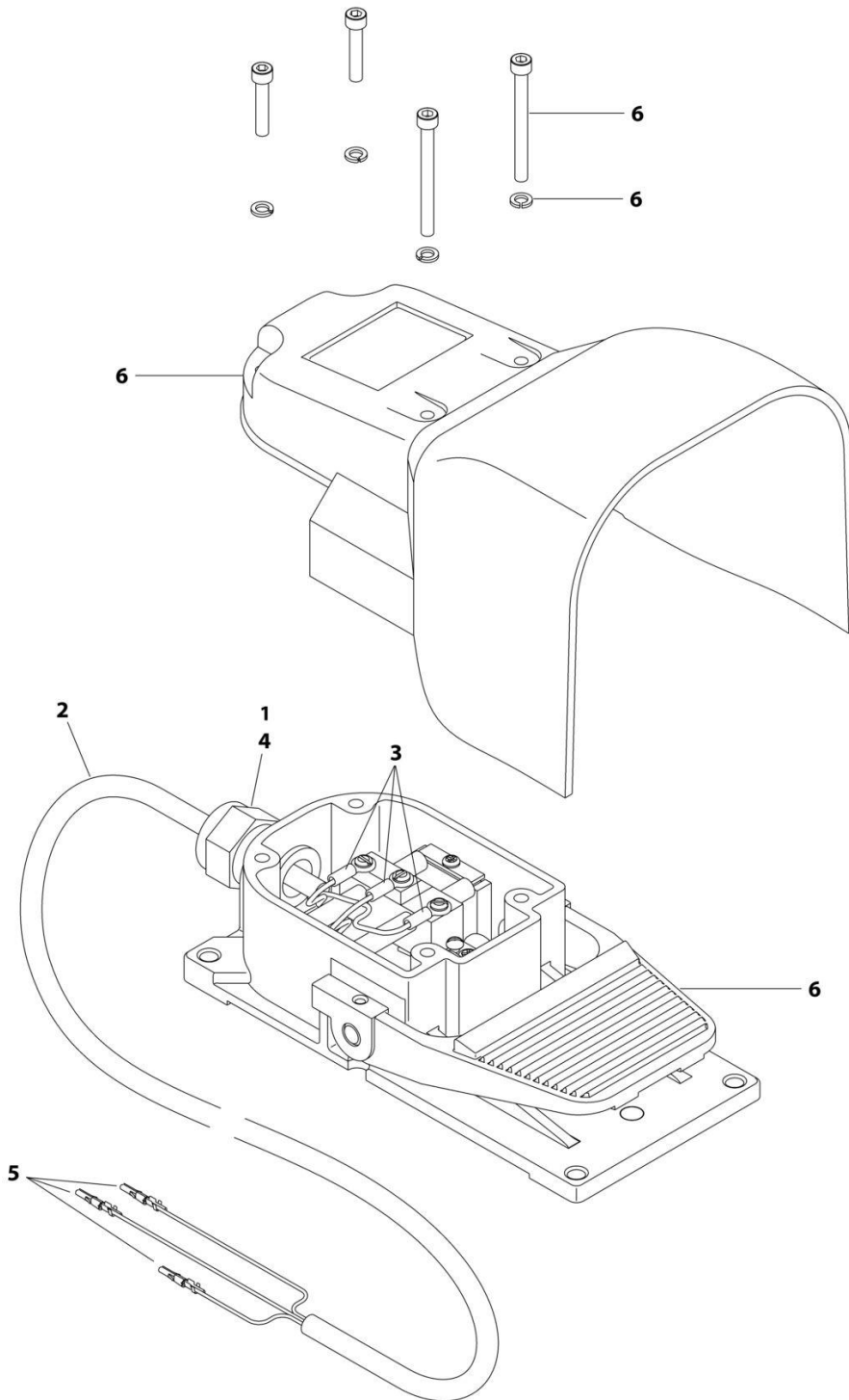
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166539	Ref	CONTROLLER ASSEMBLY	E
		Ref	Note: Original Equipment Controller May Have Been Replaced with Service Replacement Controller. Visually Identify Controller Before Ordering Parts.	
		Ref	Note: For Replacement, Use p/n 1001129555	
1	See Note	NSS	Main Cast Body (Note: Not Available - Purchase Complete Assembly)	
2	70004752	1	Adapter	
3	See Note	NSS	Pivot Arm, Plastic (Note: Not Available - Purchase Complete Assembly)	
4	See Note	NSS	Holder, Magnet (Note: Not Available - Purchase Complete Assembly)	
5	See Note	NSS	Arc, Magnet (Note: Not Available - Purchase Complete Assembly)	
6	See Note	NSS	Screw (Note: Not Available for Purchase)	
7	See Note	NSS	Pivot Arm, Cast (Note: Not Available - Purchase Complete Assembly)	
8	See Note	NSS	Shaft, Main (Note: Not Available - Purchase Complete Assembly)	
9	See Note	NSS	Bearing (Note: Not Available - Purchase Complete Assembly)	
10	See Note	NSS	Pin (Note: Not Available - Purchase Complete Assembly)	
11	See Note	NSS	Shim (Note: Not Available - Purchase Complete Assembly)	
12	See Note	NSS	Pin (Note: Not Available - Purchase Complete Assembly)	
13	See Note	NSS	Bearing (Note: Not Available - Purchase Complete Assembly)	
14	See Note	NSS	Dome, Centering (Note: Not Available - Purchase Complete Assembly)	
15	70004753	1	Cap	
16	70004754	1	Insert, Cap	
17	70004755	3	Pin	
18	70004756	2	Washer	
19	70004757	1	Pin, Centering	
20	70004758	1	Spring	
21	70004759	1	Ring, Retaining	
22	70004760	1	E-Ring	
23	70004761	1	Can, Enclosure	
24	70004762	1	Boot	
25	70004763	1	Bezel	
26	See Note	NSS	Screw (Note: Not Available for Purchase)	
27	See Note	NSS	Base Mounting (Note: Not Available - Purchase Complete Assembly)	
28	See Note	NSS	Screw (Note: Not Available for Purchase)	
29	70004764	4	Screw	
30	70004765	4	Screw	
31	70004766	1	O-Ring	
32	See Note	NSS	Plate (Note: Not Available - Purchase Complete Assembly)	
33	See Note	NSS	Harness (Note: Not Available - Purchase Complete Assembly)	
34	70004767	1	Grommet, Rubber	
35	70004768	1	Housing	
36	70004769	1	Spring	
37	70004770	1	Stopper	
38	70004771	1	Spacer	
39	70004772	1	Washer	
40	70004773	1	Disc	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
41	70004774	2	Ring, Retaining	
42	70004775	1	Spring	
101	4460265	1	Connector - 9 Position	
101	4460226	6	Socket, Female	

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FIGURE 5-17. FOOTSWITCH ASSEMBLY



ART_1001189039

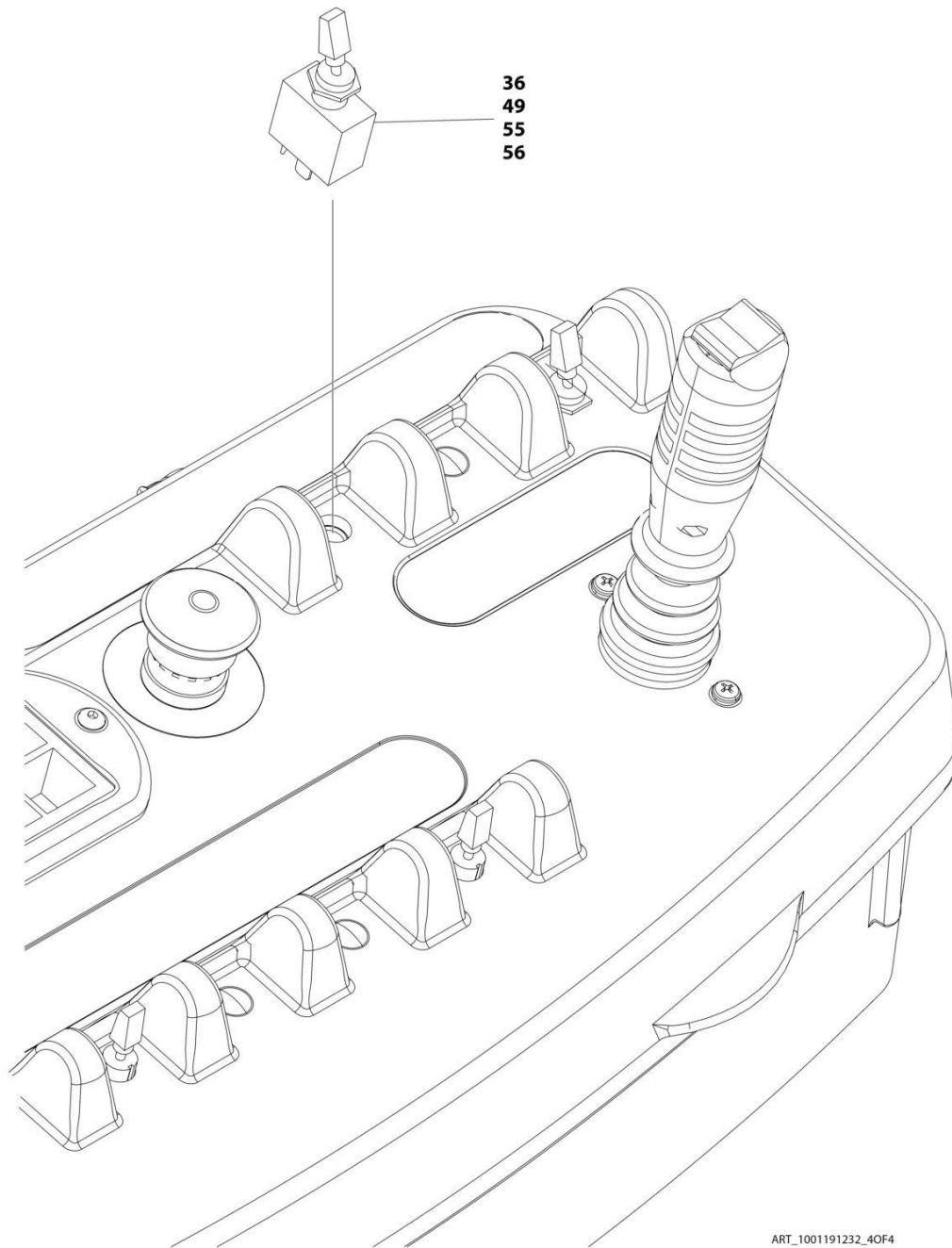
SECTION 5 - PLATFORM

FIGURE 5-17. FOOTSWITCH ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001189039	Ref	FOOTSWITCH ASSEMBLY	A
1	0100020	AR	Sealant	
2	1060330	6 ft /1.8m	Cable, Electrical - 16/3	
3	4460042	3	Terminal	
4	4460071	1	Connector, Strain Relief	
5	4460226	3	Socket, Female	
6	1001117172	1	Footswitch	
6	70002902	1	Switch, 20Amp	
6	70002903	1	Gasket	
6	70002905	1	Cover	
6	70002904	1	Kit, Replacement Bolt	

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FIGURE 5-18. MOTOR CONTROLS INSTALLATION - M450AJ



ART_1001191232_4OF4

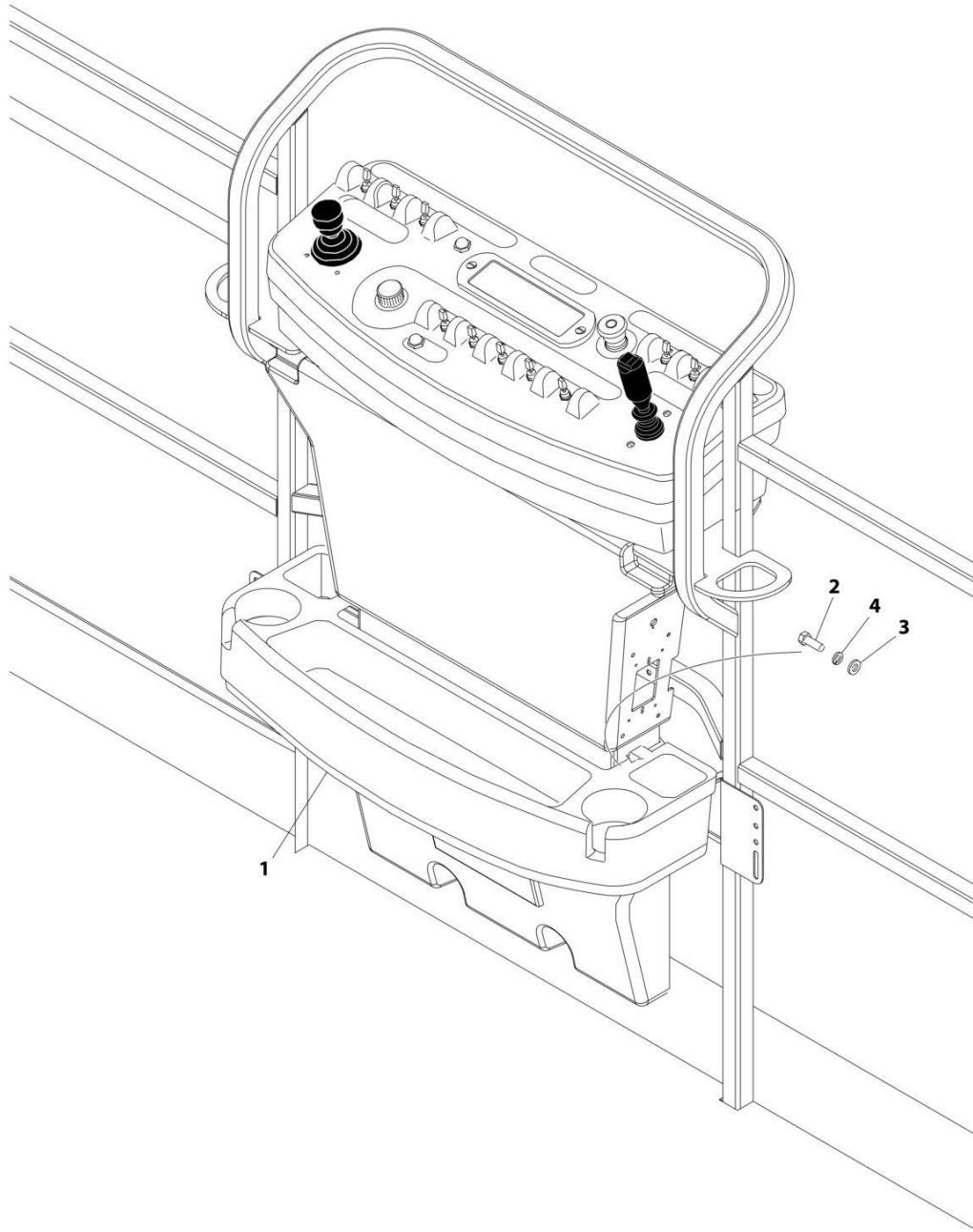
SECTION 5 - PLATFORM

FIGURE 5-18. MOTOR CONTROLS INSTALLATION - M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001191232	Ref	MOTOR CONTROLS INSTALLATION	G
36	3790012	1	O-Ring	
49	4740397	1	Washer, Spacer	
55	1001155044	1	Nut, Special	
56	1001161710	1	Switch, Toggle	

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FIGURE 5-19. TRAY ASSEMBLY



ART_1580012

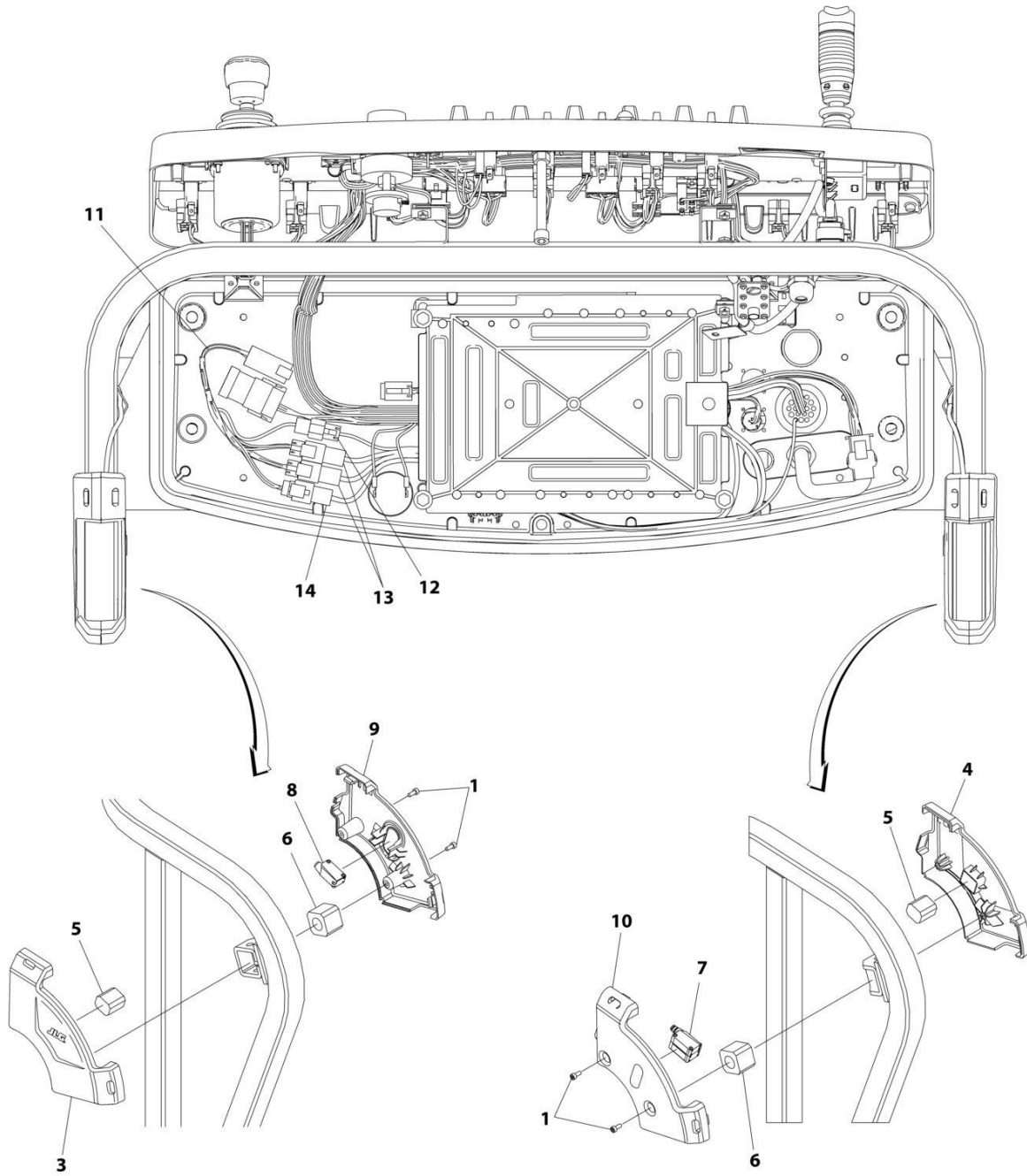
SECTION 5 - PLATFORM

FIGURE 5-19. TRAY ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1580012	Ref	TRAY ASSEMBLY	C
1	See Note	NSS	Tray, Storage (Center) (Note: Purchase p/n 1580012)	
2	0641406	2	Bolt 1/4 x 3/4	
3	4751400	2	Washer 1/4	
4	4761400	2	Washer 1/4	

SECTION 5 - PLATFORM

FIGURE 5-20. SKYEYE INSTALLATION



ART_1001229341

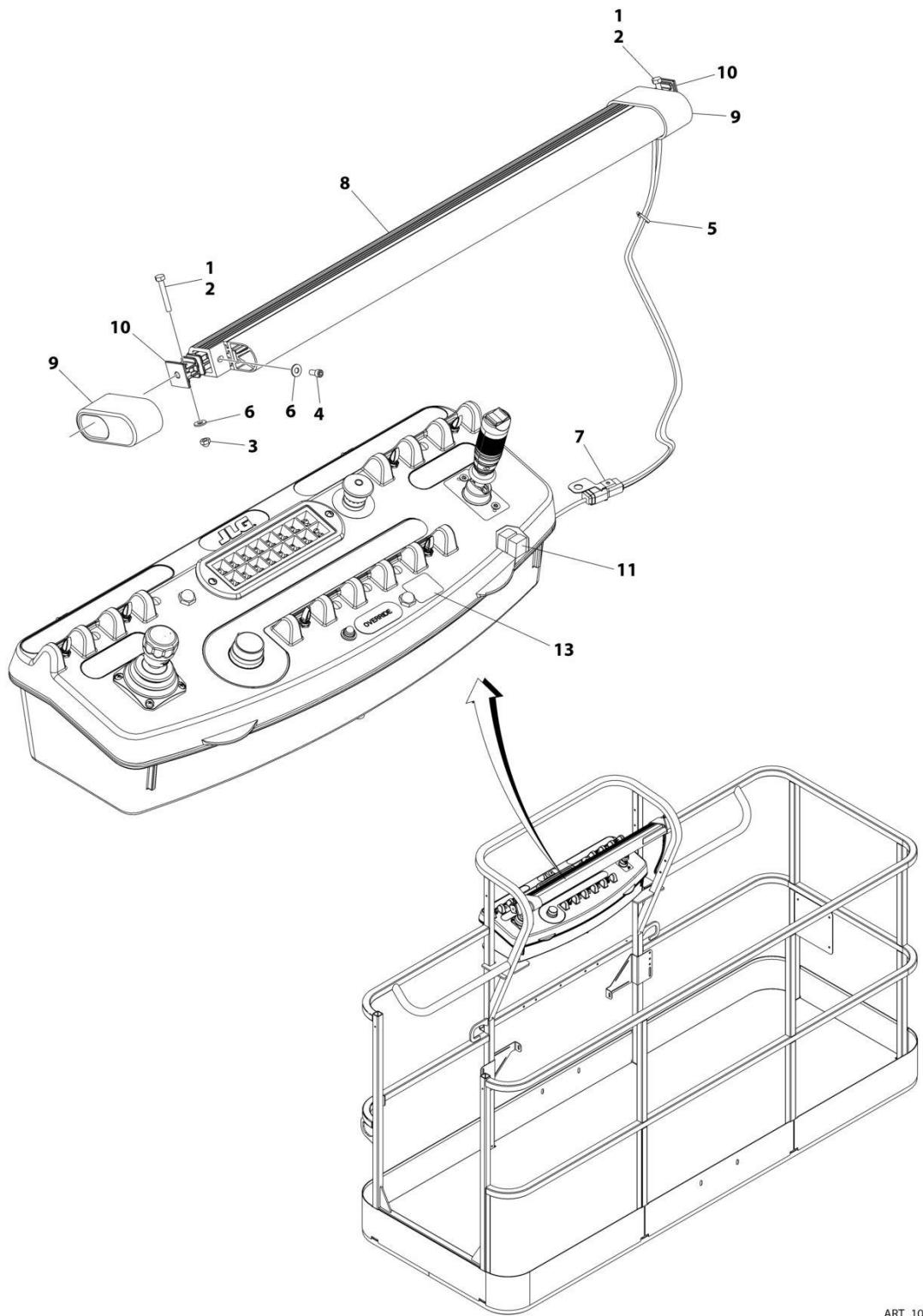
SECTION 5 - PLATFORM

FIGURE 5-20. SKYEYE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001229341	Ref	SKYEYE INSTALLATION	B
1	4031505	4	Bolt M4 x 10	
2	4240033	AR	Tie-Strap (Not Shown)	
3	1001227633	1	Housing, LH Outer	
4	1001227634	1	Housing, RH Outer	
5	1001227985	2	Shim	
6	1001227987	2	Shim	
7	1001228224	2	Sensor, Receiver	
8	1001228225	1	Sensor, Emitter	
9	1001232164	1	Housing, LH Inner	
10	1001232165	1	Housing, RH Inner	
11	1001237865	1	Harness, Skyeeye Intermediate (See Separate Breakdown in ELECTRICAL Section)	
12	1001238319	NLA	Harness, Skyeeye Drain Jumper	
12	1001187674	1	Plug, Male - 2 Position	
12	4460942	1	Terminal	
12	4460466	1	Plug, Terminal	
12	4460508	1	Pin, Male	
13	1001237863	2	Harness, Skyeeye Receiver (See Separate Breakdown in ELECTRICAL Section)	
14	1001237864	1	Harness, Skyeeye Emitter (See Separate Breakdown in ELECTRICAL Section)	

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FIGURE 5-21. SKYGUARD BAR INSTALLATION



ART_1001238495

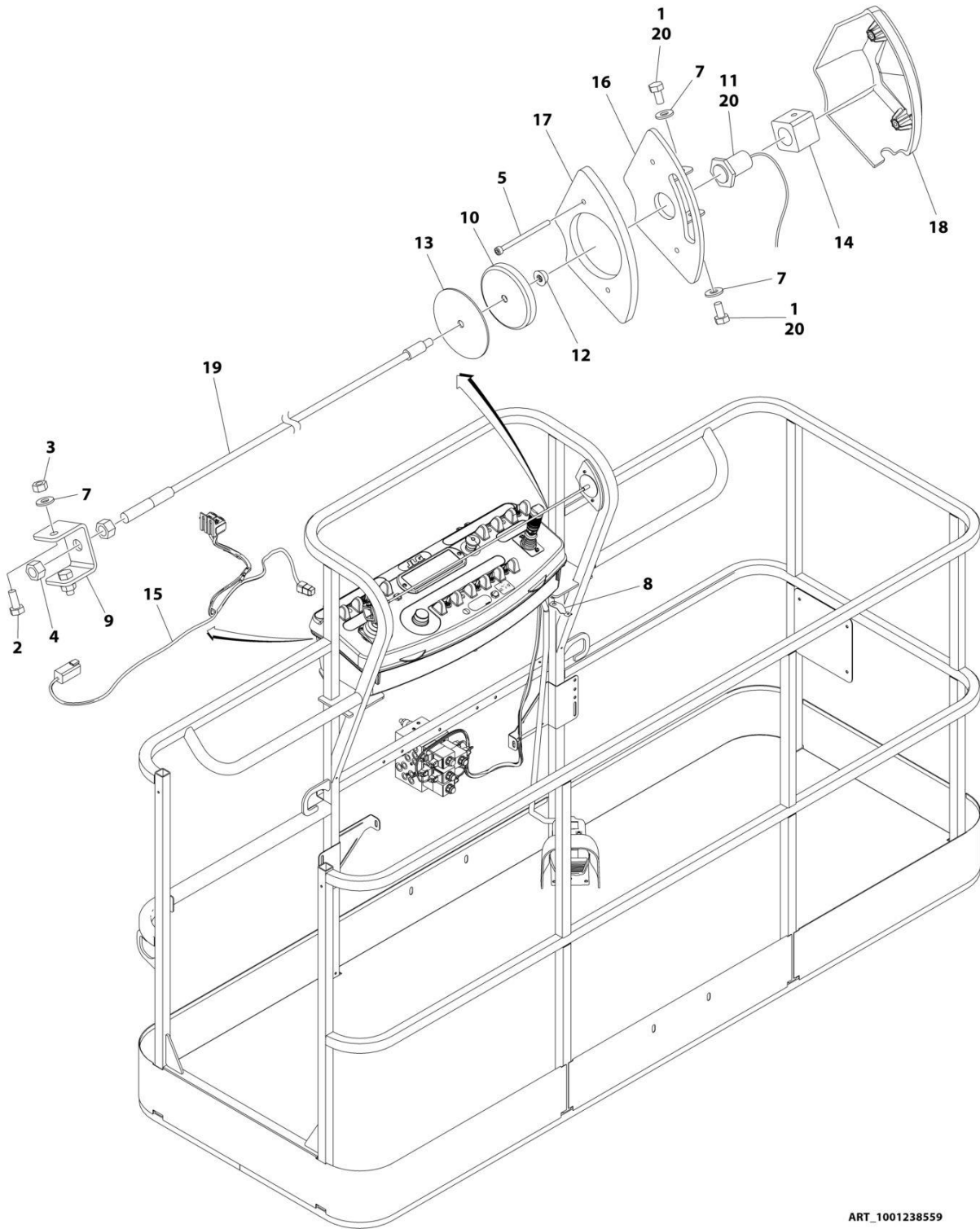
SECTION 5 - PLATFORM

FIGURE 5-21. SKYGUARD BAR INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001238495	Ref	SKYGUARD BAR INSTALLATION	A
1	0100011	AR	Compound, Locking	
2	0641414	2	Bolt 1/4 x 1-3/4	
3	3300430	2	Nut 1/4	
4	3931408	2	Capscrew 1/4 x 1/2	
5	4240033	8	Tie-Strap	
6	4711400	6	Washer 1/4	
7	1001120328	1	Mount	
8	1001137673	1	SkyGuard Switch Assembly	
9	1001186517	2	Cover, Platform Sensor	
10	1001209664	2	Support, Block	
11	1001186431	2	Relay	
12	1001225580	1	Interface Harness Assembly (Not Shown - Located Inside Console Box) (See Separate Breakdown in ELECTRICAL Section)	
13	1001144433	1	Decal - No Weight SkyGuard	

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FIGURE 5-22. SKYLINE INSTALLATION



ART_1001238559

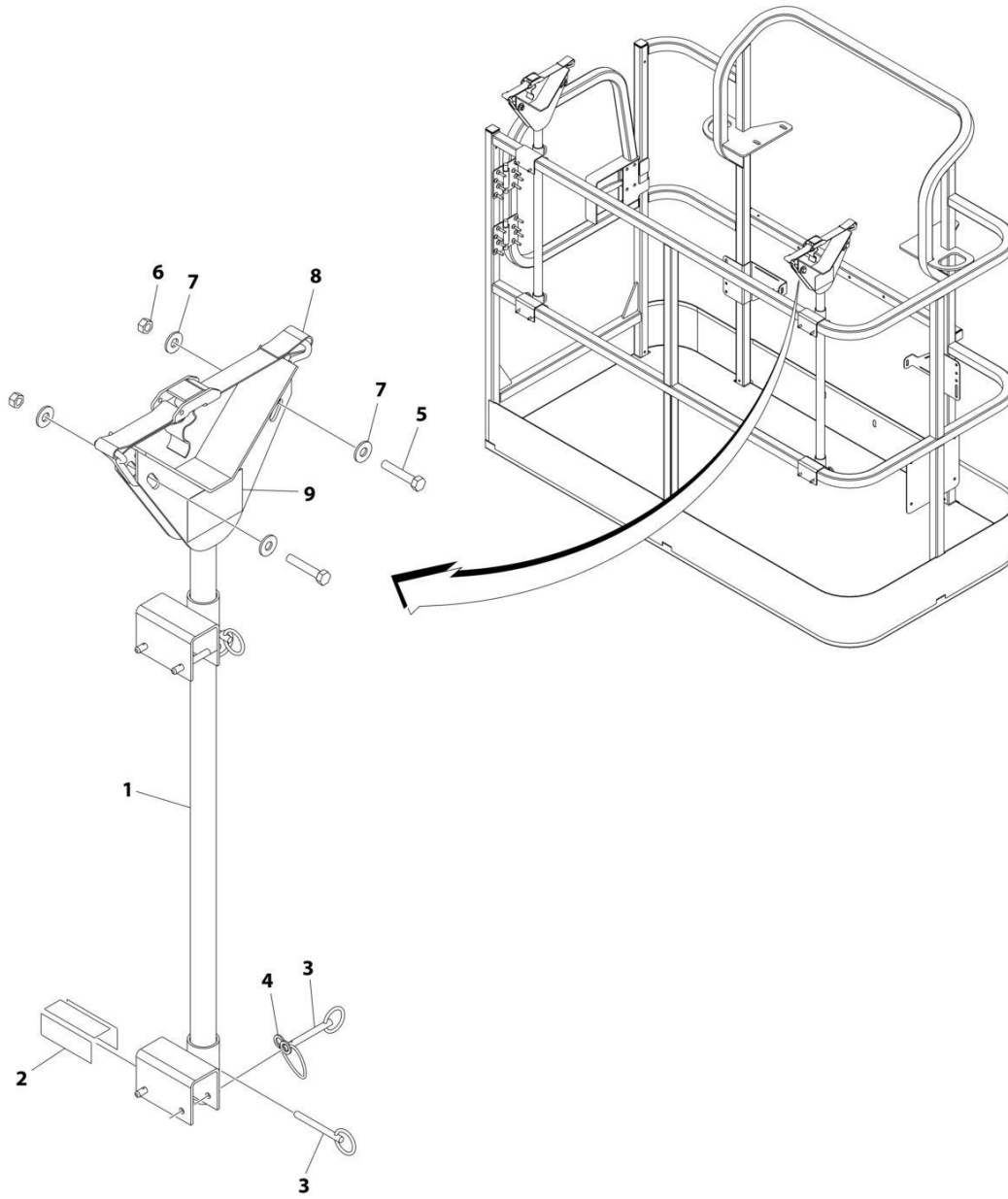
SECTION 5 - PLATFORM

FIGURE 5-22. SKYLINE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001238559	Ref	SKYLINE INSTALLATION	B
1	0641404	2	Bolt 1/4 x 1/2	
2	0641405	2	Bolt 1/4 x 5/8	
3	3311405	2	Nut 1/4	
4	3311601	2	Nut 3/8	
5	4031516	2	Capscrew M4 x 60	
6	4240033	AR	Tie-Strap (Not Shown)	
7	4711400	4	Washer 1/4	
8	1001120328	1	Mount	
9	1001232642	1	Bracket	
10	1001232650	1	Magnet	
11	1001232667	1	Sensor, Proximity	
12	1001235011	1	Nut	
13	1001235013	1	Washer	
14	1001236552	1	Block	
15	1001238418	1	Harness, Skyline (See Separate Breakdown in ELECTRICAL Section)	
16	1001238472	1	Mount	
17	1001238477	1	Housing, LH	
18	1001241965	1	Housing, RH	
19	1001238824	1	Rope	
20	0100011	AR	Compound, Locking	

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FIGURE 5-23. PIPE RACK INSTALLATION



ART_0257728

SECTION 5 - PLATFORM

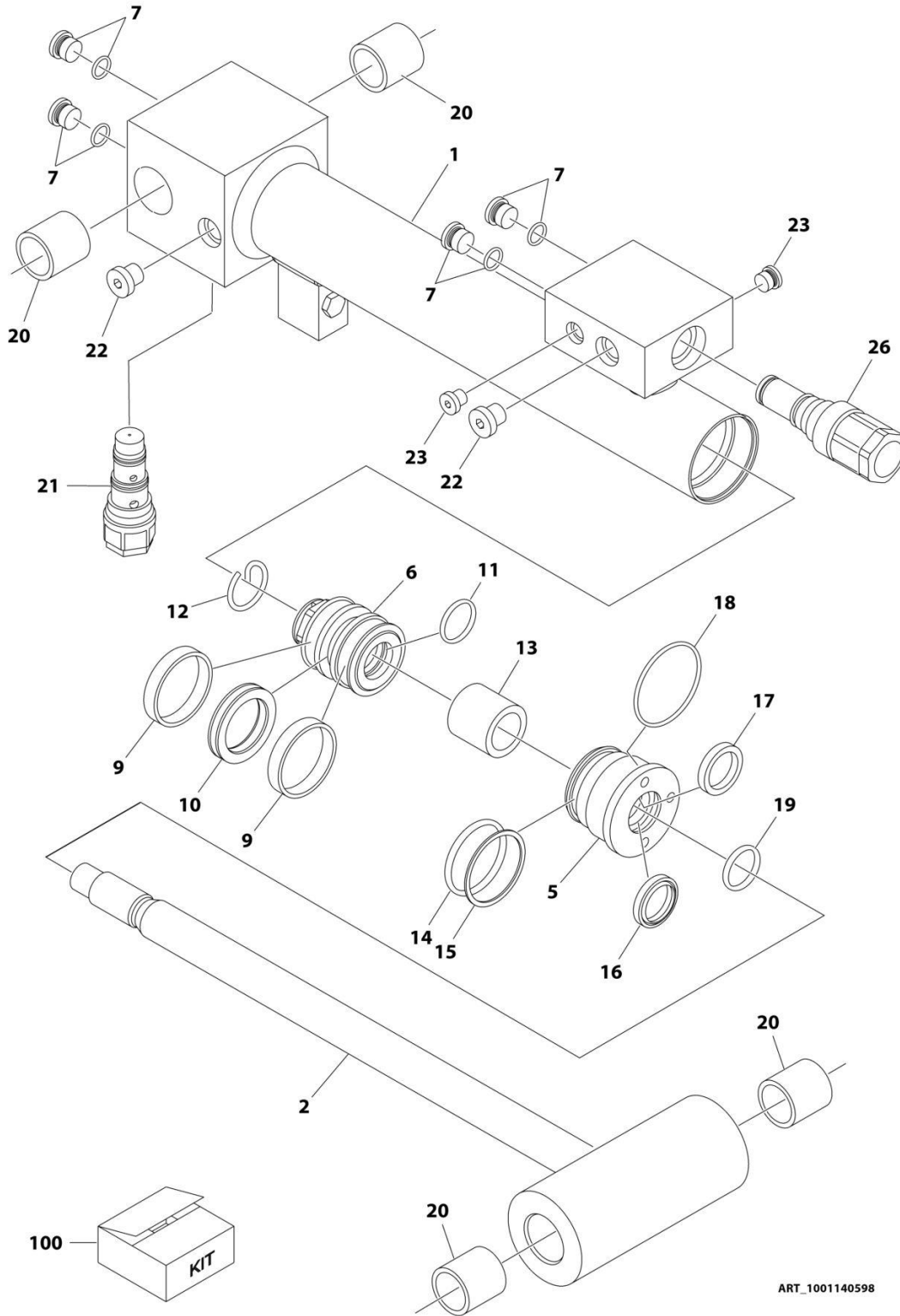
FIGURE 5-23. PIPE RACK INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0257728	Ref	PIPE RACK INSTALLATION	3/E
1	4845582	2	Rack, Pipe	
2	4420062	AR	Tape	
3	3422661	10	Pin	
4	1060379	4	Lanyard	
5	0641514	4	Bolt 5/16 x 1-3/4	
6	3311505	4	Nut 5/16	
7	4751500	8	Washer 5/16	
8	0480100	2	Tie-Down	
11	1001252946	2	Decal - Tube Rack Cap (1)	
12	1001252947	2	Decal - Tube Rack Cap (2)	

SECTION 6 - CYLINDER

SECTION 6 - CYLINDER

FIGURE 6-1. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450A



ART_1001140598

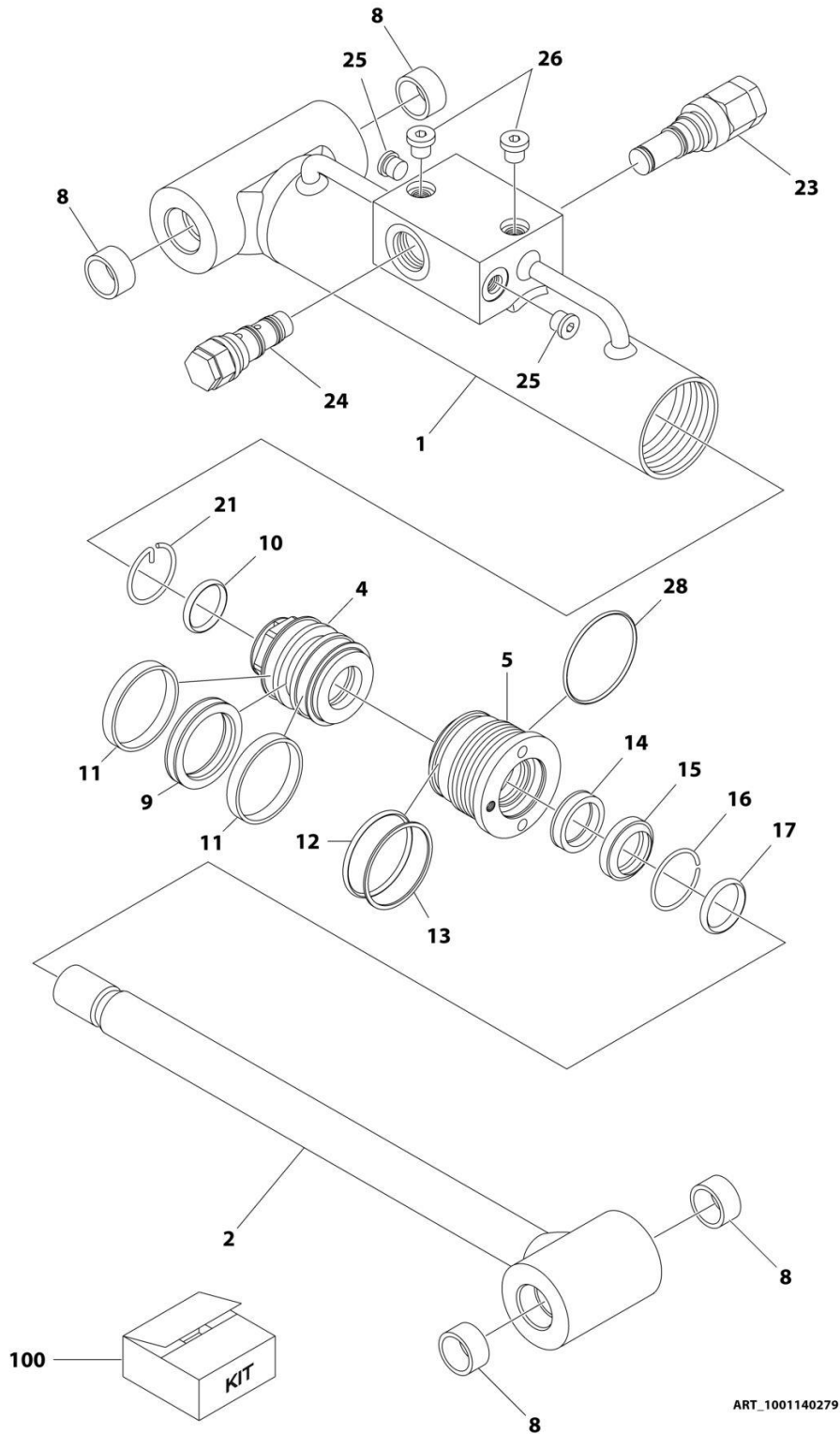
SECTION 6 - CYLINDER

FIGURE 6-1. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001140598	Ref	LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder May Have Been Replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	70004146	1	Barrel	
2	70004147	1	Rod	
5	70000739	1	Head	
6	70004141	1	Piston	
7	See Note	4	Plug (Note: Not Available for Purchase)	
9	See Note	NSS	Ring, Wear (Note: Use p/n 70004131)	
10	See Note	NSS	Seal, Piston (Note: Use p/n 70004131)	
11	70023094	NSS	O-Ring (Note: Use p/n 70004131)	
12	70004142	1	Retainer	
13	70004143	1	Spacer	
14	See Note	NSS	O-Ring (Note: Use p/n 70004131)	
15	See Note	NSS	Ring, Back-Up (Note: Use p/n 70004131)	
16	See Note	NSS	Wiper, Rod (Note: Use p/n 70004131)	
17	See Note	NSS	Seal, Rod (Note: Use p/n 70004131)	
18	See Note	NSS	O-Ring (Note: Use p/n 70004131)	
19	70000740	1	O-Ring	
20	0962356	4	Bushing	
21	4640509	1	Cartridge, Counterbalance Valve	
21	2900792	1	Seal Kit - 4640509 Valve	
22	70024262	2	Plug	
23	See Note	2	Plug (Note: Not Available for Purchase)	
26	4640932	1	Cartridge, Counterbalance Valve	
26	7011112	1	Seal Kit - 4640932 Valve	
100	70004131	1	Seal Kit (Includes Items 9-11 & 14-18)	

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FIGURE 6-2. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450AJ/M450AJ (USA BUILT MACHINES)



ART_1001140279

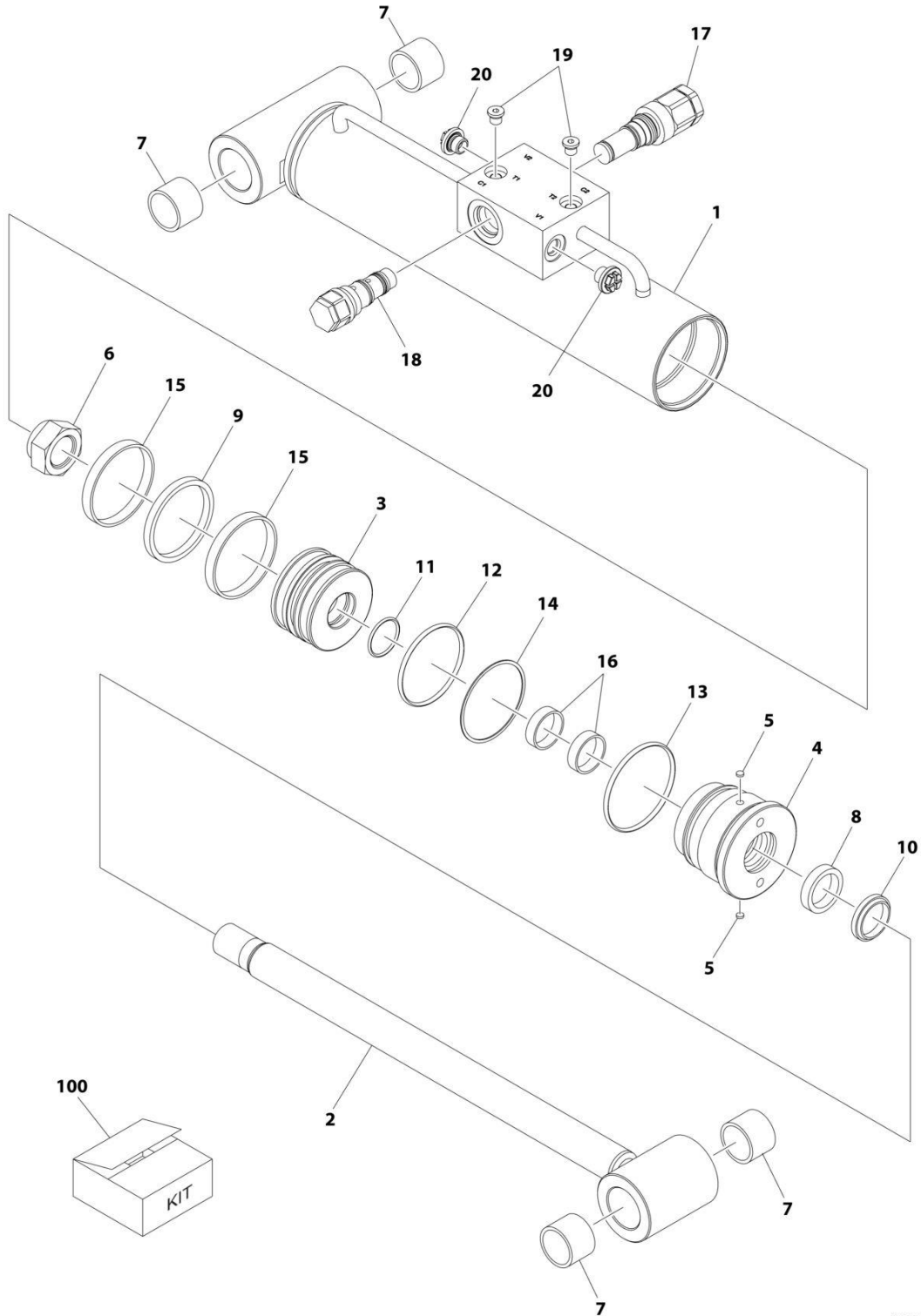
SECTION 6 - CYLINDER

FIGURE 6-2. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450AJ/M450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001140279	Ref	LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	70003846	1	Barrel	
2	70003847	1	Rod	
4	70003819	1	Piston	
5	7026082	1	Head	
8	0961951	4	Bushing	
9	See Note	NSS	Seal, Piston (Note: Use p/n 70003845)	
10	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
11	See Note	NSS	Ring, Wear (Note: Use p/n 70003845)	
12	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
13	See Note	NSS	Ring, Back-Up (Note: Use p/n 70003845)	
14	See Note	NSS	Seal, Rod (Note: Use p/n 70003845)	
15	See Note	NSS	Wiper, Rod (Note: Use p/n 70003845)	
16	70002217	1	Ring, Retaining	
17	7026084	1	O-Ring	
21	70002216	1	Retainer	
23	4640932	1	Cartridge, Counterbalance Valve	
23	7011112	1	Seal Kit - 4640932 Valve	
24	4641086	1	Cartridge, Counterbalance Valve	
24	2900792	1	Seal Kit - 4641086 Valve	
25	7024844	2	Plug	
26	See Note	2	Plug (Note: Not Available for Purchase)	
28	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
100	70003845	1	Seal Kit (Includes Items 9-15 & 28)	

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FIGURE 6-3. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450AJ (CHINA BUILT MACHINES)



ART_1001230304

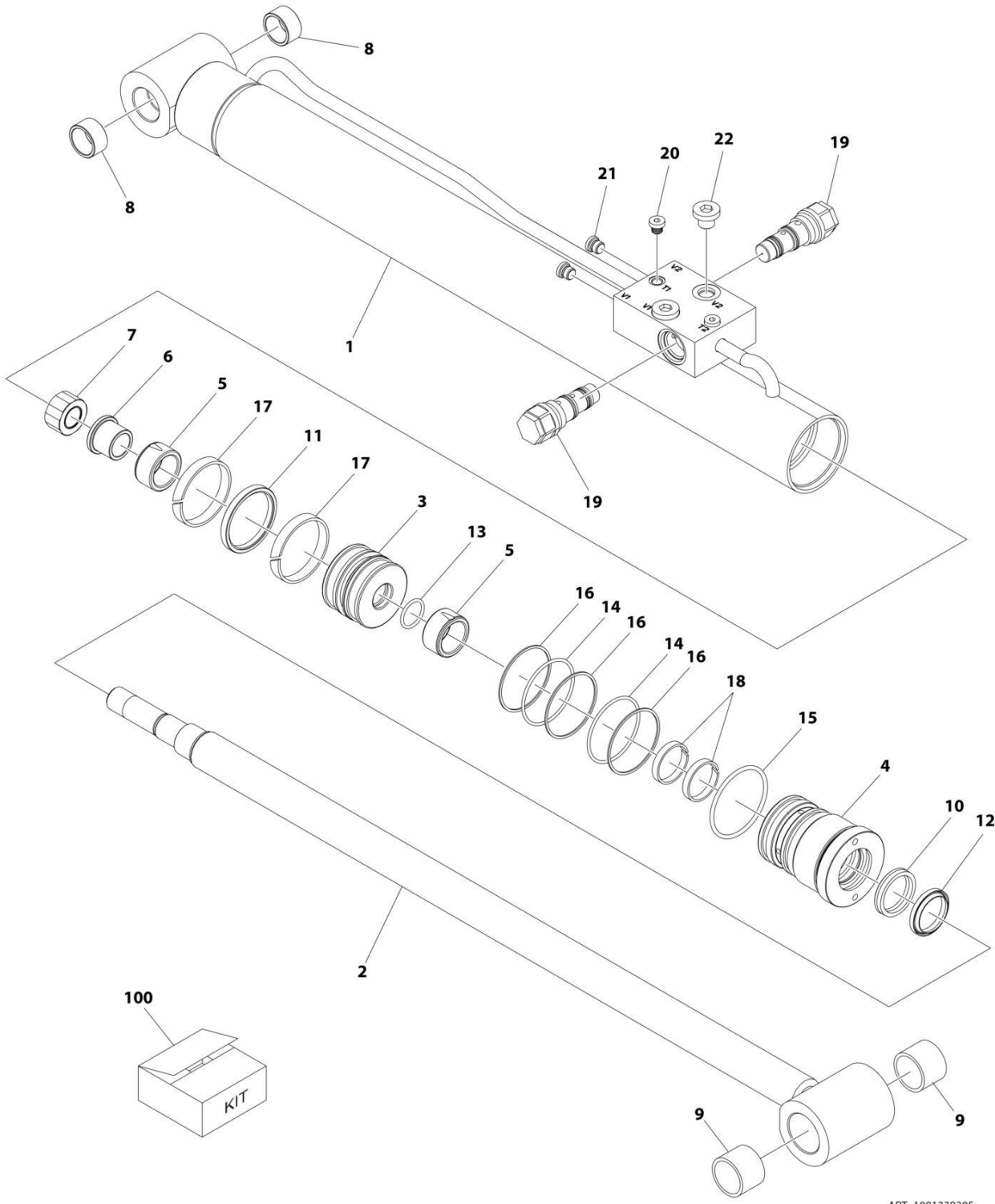
SECTION 6 - CYLINDER

FIGURE 6-3. LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230304	Ref	LEVEL (PLATFORM SLAVE) CYLINDER ASSEMBLY	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006912	1	Rod Assembly	
3	70006909	1	Piston	
4	70006910	1	Gland	
5	70003636	2	Locking Piece (Insert)	
6	70006878	1	Metal Lock Nut	
7	0961951	4	Self-Lubricating Composite Bearing	
8	See Note	NSS	Rod Seal (Note: Use p/n 70006913)	
9	See Note	NSS	Stopt (Note: Use p/n 70006913)	
10	See Note	NSS	Wiper (Note: Use p/n 70006913)	
11	See Note	NSS	O-Ring (Note: Use p/n 70006913)	
12	See Note	NSS	O-Ring (Note: Use p/n 70006913)	
13	See Note	NSS	O-Ring (Note: Use p/n 70006913)	
14	See Note	NSS	Backup (Note: Use p/n 70006913)	
15	See Note	NSS	Tube Wearband (Note: Use p/n 70006913)	
16	See Note	NSS	Rod Wearband (Note: Use p/n 70006913)	
17	4640932	1	Counter Balance Valve	
18	4641086	1	Counter Balance Valve	
19	See Note	NSS	Plug VST	
20	2220885	2	Hex Socket Head Plug	
100	70006913	1	Seal Kit (Includes Items 8-16)	

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FIGURE 6-4. LIFT CYLINDER ASSEMBLY - JIB - E450AJ/M450AJ



ART_1001230305

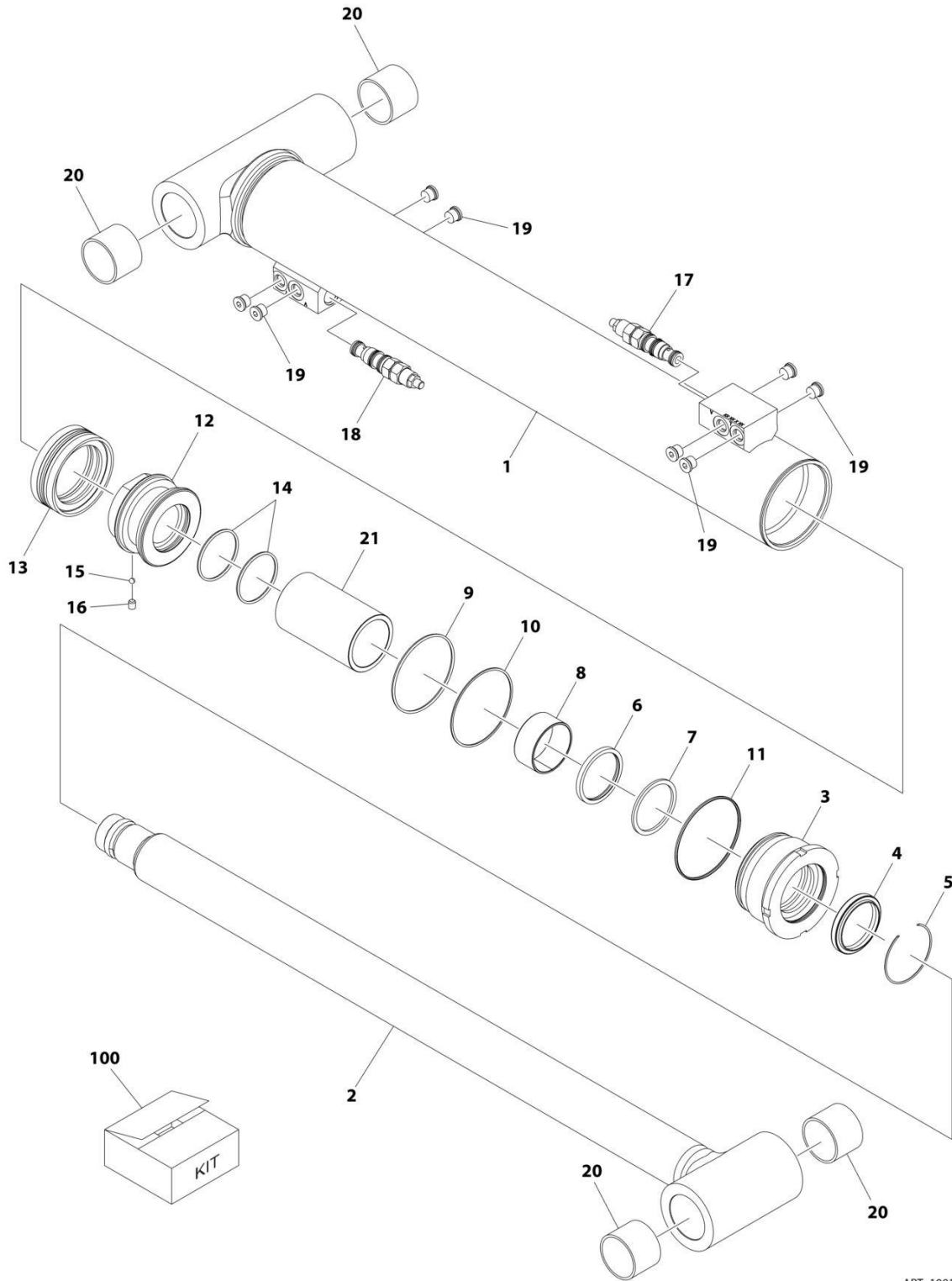
SECTION 6 - CYLINDER

FIGURE 6-4. LIFT CYLINDER ASSEMBLY - JIB - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230305	Ref	LIFT CYLINDER ASSEMBLY - JIB	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006914	1	Rod Assembly	
3	70006915	1	Piston	
4	70006916	1	Gland	
5	70006917	2	Cushion Tube	
6	70006918	1	Location Tube	
7	70006919	1	Hex Nut	
8	0961947	2	Self-lubricating Composite Bearing	
9	0961951	2	Self-lubricating Composite Bearing	
10	See Note	NSS	Rod Seal (Note: Purchase p/n 70006920)	
11	See Note	NSS	Stopt (Note: Purchase p/n 70006920)	
12	See Note	NSS	Wiper (Note: Purchase p/n 70006920)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 70006920)	
14	See Note	NSS	O-Ring (Note: Purchase p/n 70006920)	
15	See Note	NSS	O-Ring (Note: Purchase p/n 70006920)	
16	See Note	NSS	Backup (Note: Purchase p/n 70006920)	
17	See Note	NSS	Tube Wearband (Note: Purchase p/n 70006920)	
18	See Note	NSS	Rod Wearband (Note: Purchase p/n 70006920)	
19	4640509	2	Counter Balance Valve	
20	See Note	NSS	Plug VST	
21	2220883	2	Hex Socket Head Plug	
22	2220885	2	Hex Socket Head Plug	
100	70006920	1	Seal Kit (Includes Items 10-18)	

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FIGURE 6-5. LIFT CYLINDER ASSEMBLY - LOWER - E450A



ART_1001228039

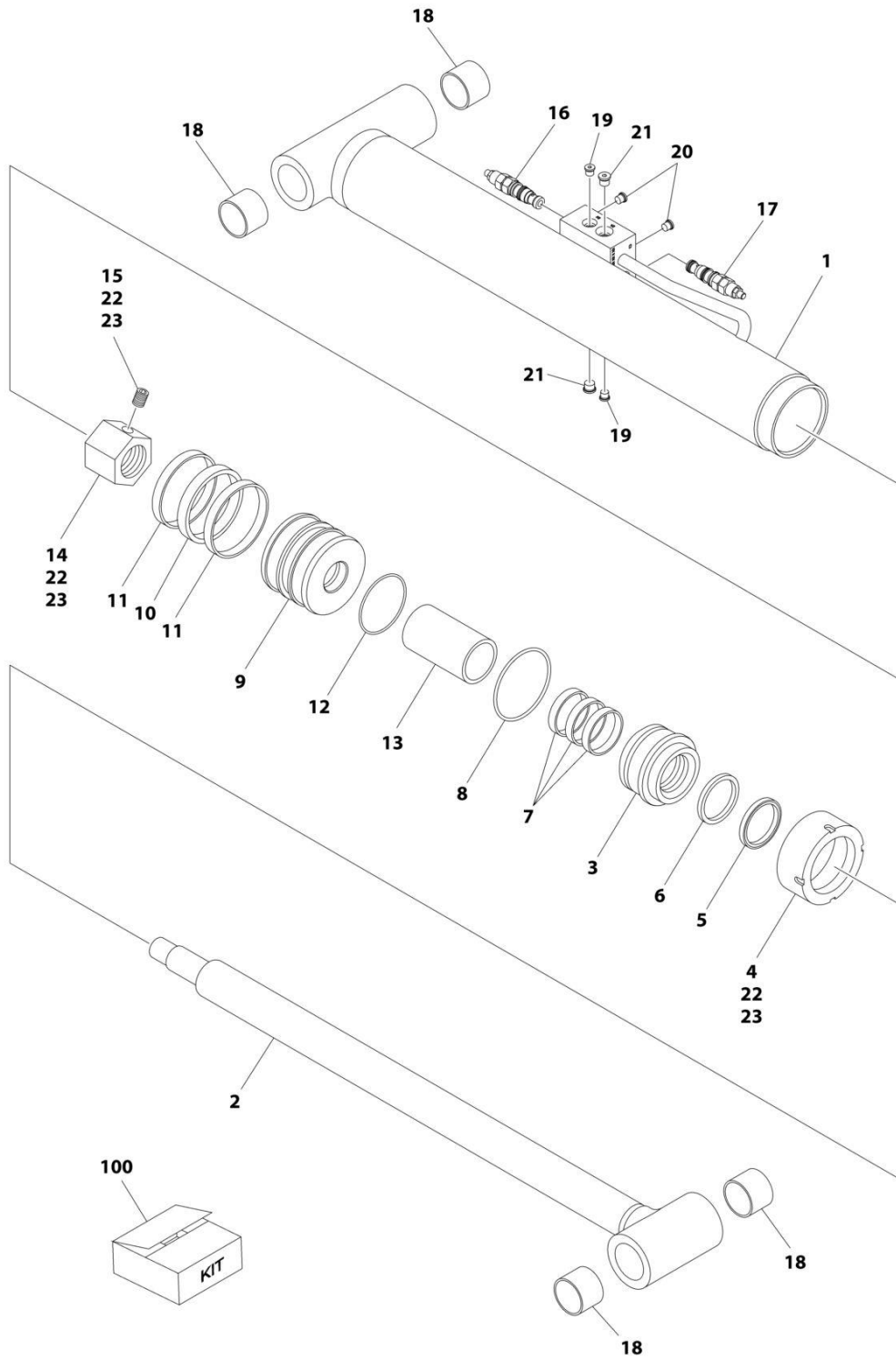
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FIGURE 6-5. LIFT CYLINDER ASSEMBLY - LOWER - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228039	Ref	LIFT CYLINDER ASSEMBLY - LOWER	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006602	1	Rod	
3	70006603	1	Head	
4	70006604	NSS	Wiper (Note: Use Item 100)	
5	70027244	1	Retainer	
6	70006605	NSS	Seal, Rod (Note: Use Item 100)	
7	See Note	NSS	Ring, Back-up (Note: Use Item 100)	
8	70004637	1	Bearing	
9	70006606	NSS	O-Ring (Note: Use Item 100)	
10	See Note	NSS	Ring, Back-up (Note: Use Item 100)	
11	See Note	NSS	O-Ring	
12	70006607	1	Piston	
13	See Note	NSS	Seal (Note: Use Item 100)	
14	See Note	NSS	O-Ring (Note: Use Item 100)	
15	70022564	1	Ball, Steel	
16	70023369	1	Setscrew	
17	4640634	1	Cartridge, Holding Valve	
17	2900770	1	Seal Kit - 4640634 Valve	
18	4641386	1	Cartridge, Holding Valve	
18	7011376	1	Seal Kit - 4641386 Valve	
19	2220885	8	Plug, O-Ring	
20	0961950	4	Bushing	
21	70006608	1	Spacer	
100	70006609	1	Seal Kit (Includes Items 4, 6, 7, 9-11, 13 & 14)	

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FIGURE 6-6. LIFT CYLINDER ASSEMBLY - LOWER - E450AJ/M450AJ (USA BUILT MACHINES)



ART_1001228035

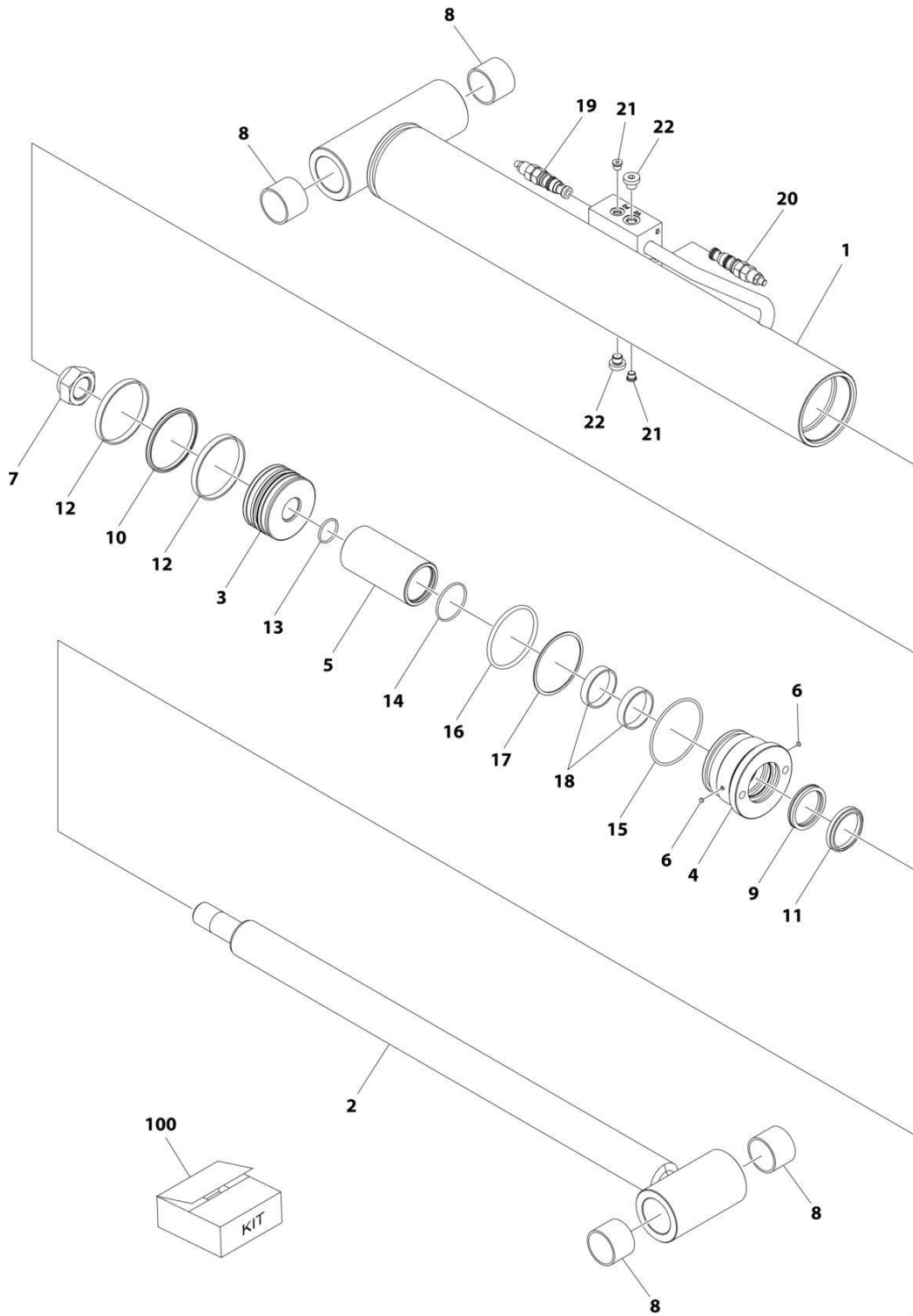
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FIGURE 6-6. LIFT CYLINDER ASSEMBLY - LOWER - E450AJ/M450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228035	Ref	LIFT CYLINDER ASSEMBLY - LOWER	C
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
2	70006535	1	Rod Weldment	
3	70006533	1	Head	
4	70006533	1	Retainer	
5	See Note	NSS	Wiper (Note: Use Item 100)	
6	See Note	NSS	Seal, Rod (Note: Use Item 100)	
7	See Note	NSS	Ring, Wear (Note: Use Item 100)	
8	See Note	NSS	O-Ring (Note: Use Item 100)	
9	70006532	1	Piston	
10	See Note	NSS	Seal (Note: Use Item 100)	
11	See Note	NSS	Ring, Wear (Note: Use Item 100)	
12	See Note	NSS	O-Ring (Note: Use Item 100)	
13	70006531	1	Spacer	
14	3300281	1	Nut	
15	3900170	1	Setscrew	
16	4640634	1	Cartridge, Holding Valve	
16	2900770	1	Seal Kit - 4640634 Valve	
17	4641386	1	Cartridge, Holding Valve	
17	7011376	1	Seal Kit - 4641386 Valve	
18	0961950	4	Bushing	
19	2220883	2	Plug, O-Ring	
20	2220883	2	Plug, O-Ring	
21	2220885	2	Plug, O-Ring	
22	0100011	AR	Compound, Locking	
23	0100038	AR	Primer, Locking	
100	2901806	1	Seal Kit (Includes Items 5-8 & 10-12)	

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FIGURE 6-7. LIFT CYLINDER ASSEMBLY - LOWER - E450AJ (CHINA BUILT MACHINES)



ART_1001230300

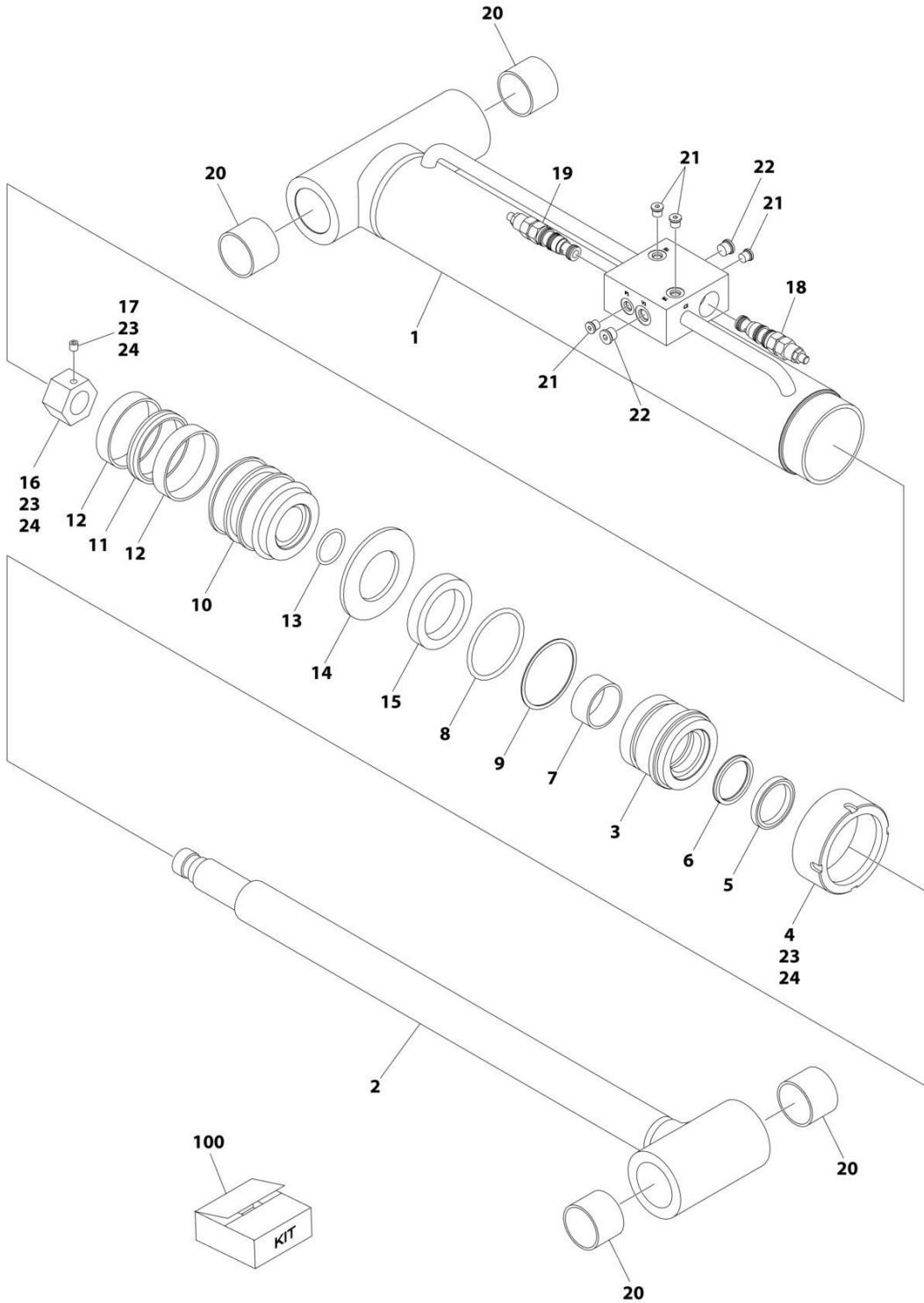
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FIGURE 6-7. LIFT CYLINDER ASSEMBLY - LOWER - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230300	Ref	LIFT CYLINDER ASSEMBLY - LOWER	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006889	1	Rod Assembly	
3	70006890	1	Piston	
4	70006891	1	Head	
5	70006892	1	Tube, Stop	
6	70003636	2	Plate, Locking	
7	70006893	1	Lock Nut	
8	0961950	4	Bearing	
9	See Note	NSS	Seal (Note: Purchase p/n 70006894)	
10	See Note	NSS	Stop (Note: Purchase p/n 70006894)	
11	See Note	NSS	Wiper (Note: Purchase p/n 70006894)	
12	See Note	NSS	Wear band, Tube (Note: Purchase p/n 70006894)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 70006894)	
14	See Note	NSS	O-Ring (Note: Purchase p/n 70006894)	
15	See Note	NSS	O-Ring (Note: Purchase p/n 70006894)	
16	See Note	NSS	O-Ring (Note: Purchase p/n 70006894)	
17	See Note	NSS	Back-up (Note: Purchase p/n 70006894)	
18	See Note	NSS	Wear band, Tube (Note: Purchase p/n 70006894)	
19	4640634	1	Valve, Counter Balance	
19	2900770	1	Seal Kit - 4640634 Valve	
20	4641386	2	Valve, Counter Balance	
20	7011376	1	Seal Kit - 4641386 Valve	
21	2220883	2	Plug	
22	2220885	2	Plug	
100	70006894	1	Seal Kit (Includes Items 9-18)	

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FIGURE 6-8. LIFT CYLINDER ASSEMBLY - MID - E450A/E450AJ/M450AJ (USA BUILT MACHINES)



ART_1001228036

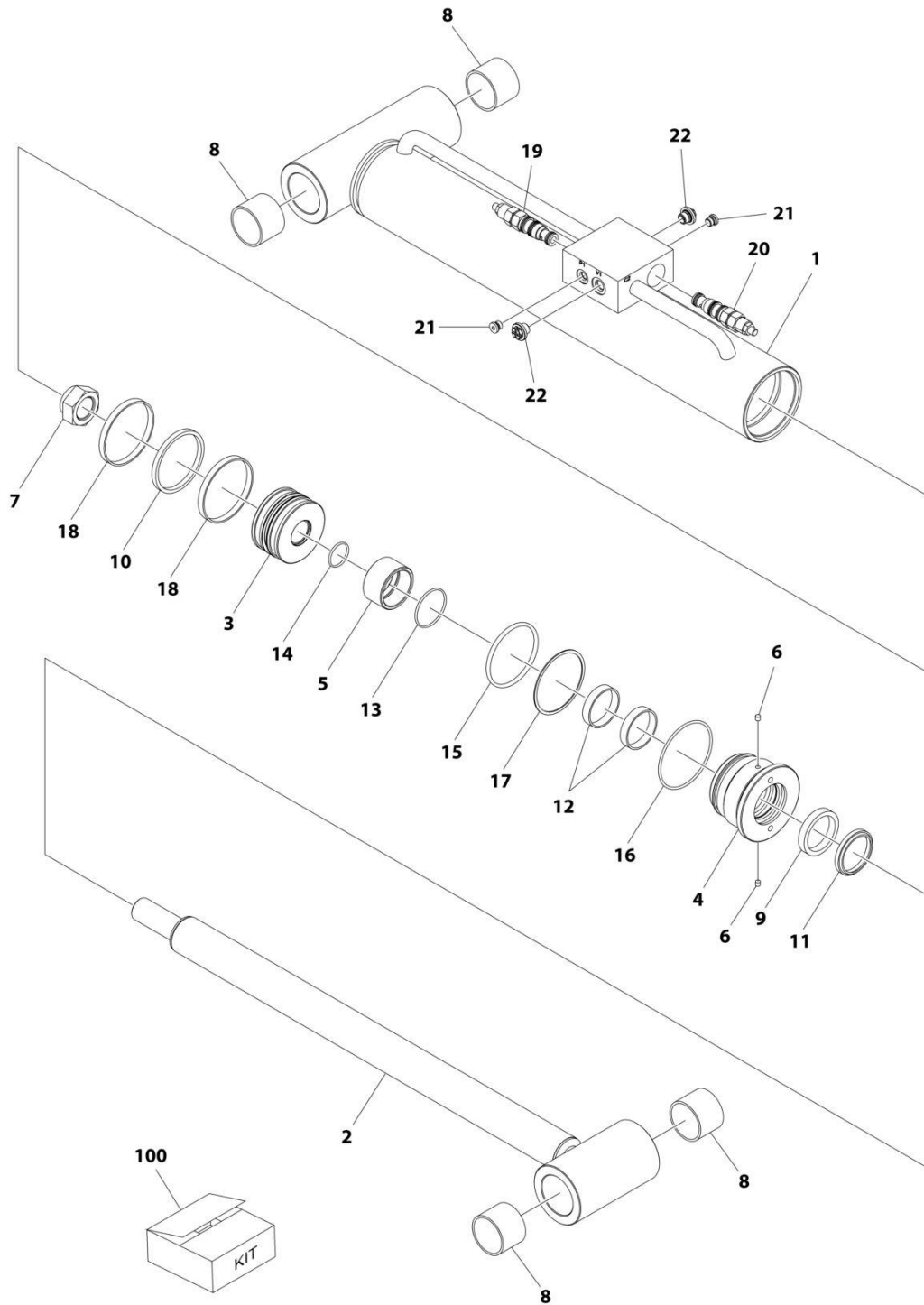
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FIGURE 6-8. LIFT CYLINDER ASSEMBLY - MID - E450A/E450AJ/M450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228036	Ref	LIFT CYLINDER ASSEMBLY - MID	F
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
2	70006543	1	Rod Weldment	
3	70006542	1	Head	
4	70006533	1	Retainer	
5	See Note	NSS	Wiper (Note: Use Item 100)	
6	See Note	NSS	Seal, Rod (Note: Use Item 100)	
7	See Note	NSS	Ring, Wear (Note: Use Item 100)	
8	See Note	NSS	O-Ring (Note: Use Item 100)	
9	See Note	NSS	Ring, Back-up (Note: Use Item 100)	
10	70006532	1	Piston	
11	See Note	NSS	Seal (Note: Use Item 100)	
12	See Note	NSS	Ring, Wear (Note: Use Item 100)	
13	See Note	NSS	O-Ring (Note: Use Item 100)	
14	4740207	1	Washer	
15	70006539	1	Spacer	
16	3300281	1	Nut	
17	3900170	1	Setscrew	
18	4640634	1	Cartridge, Holding Valve	
18	2900770	1	Seal Kit - 4640634 Valve	
19	4641386	1	Cartridge, Holding Valve	
19	7011376	1	Seal Kit - 4641386 Valve	
20	0961950	4	Bushing	
21	2220883	4	Plug, O-Ring	
22	2220885	2	Plug, O-Ring	
23	0100011	AR	Compound, Locking	
24	0100038	AR	Primer, Locking	
100	2901805	1	Seal Kit (Includes Items 5-9 & 11-13)	

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FIGURE 6-9. LIFT CYLINDER ASSEMBLY - MID - E450AJ (CHINA BUILT MACHINES)



ART_1001230301

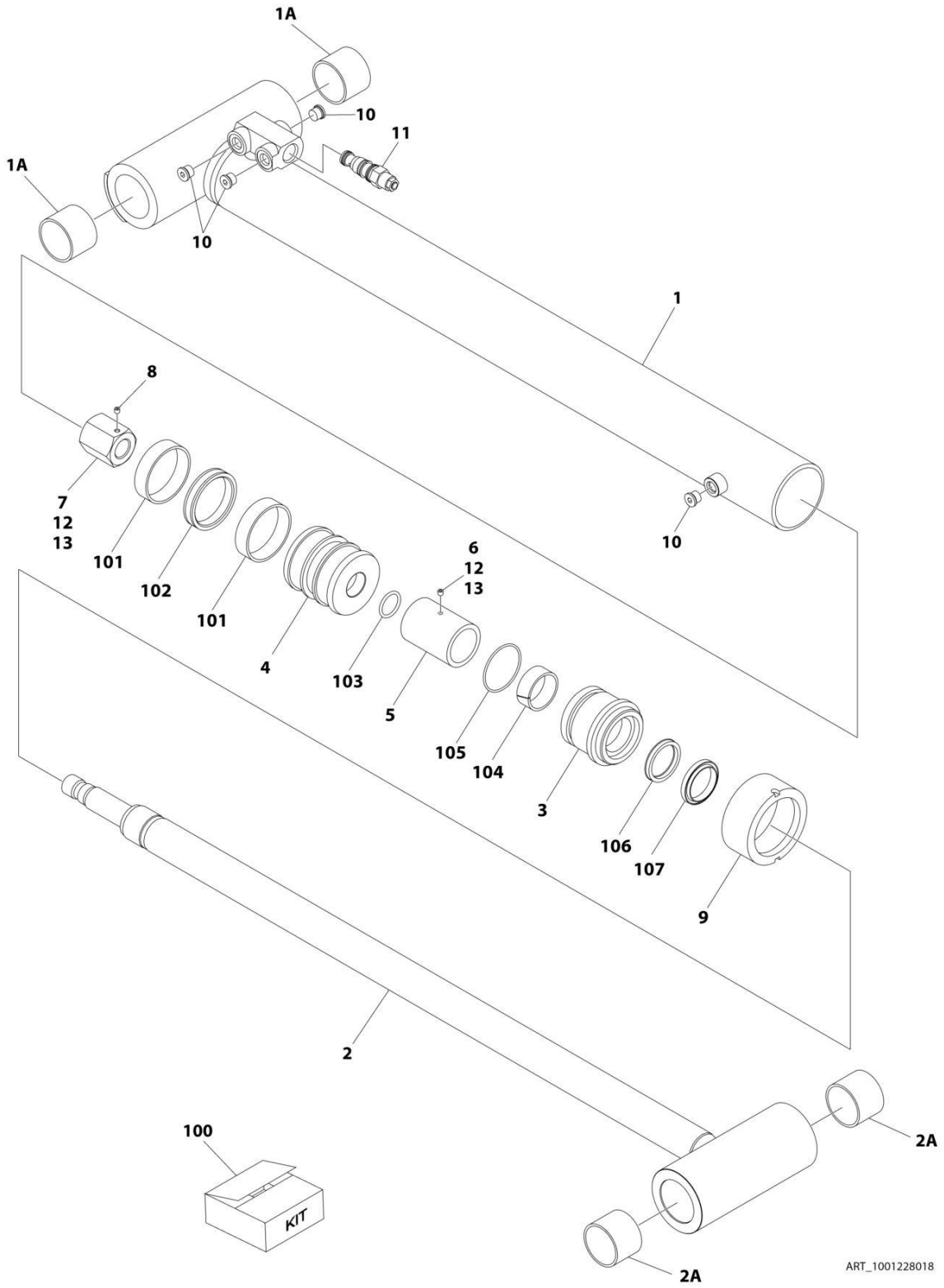
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FIGURE 6-9. LIFT CYLINDER ASSEMBLY - MID - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230301	Ref	LIFT CYLINDER ASSEMBLY - MID	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006895	1	Rod Assembly	
3	70006896	1	Piston	
4	70006897	1	Gland	
5	70006898	1	Stop Tube	
6	70006899	2	Locking Piece (Insert)	
7	70006900	1	Metal Lock Nut	
8	0961950	4	Self-Lubricating Composite Bearing	
9	See Note	NSS	Rod Seal (Note: Purchase p/n 70006901)	
10	See Note	NSS	Stopt (Note: Purchase p/n 70006901)	
11	See Note	NSS	Wiper (Note: Purchase p/n 70006901)	
12	See Note	NSS	Rod Wearband (Note: Purchase p/n 70006901)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 70006901)	
14	See Note	NSS	O-Ring (Note: Purchase p/n 70006901)	
15	See Note	NSS	O-Ring (Note: Purchase p/n 70006901)	
16	See Note	NSS	O-Ring (Note: Purchase p/n 70006901)	
17	See Note	NSS	Backup (Note: Purchase p/n 70006901)	
18	See Note	NSS	Tube Wearband (Note: Purchase p/n 70006901)	
19	4640634	1	Counter Balance Valve	
20	4641386	1	Counter Balance Valve	
21	2220883	2	Hex Socket Head Plug	
22	2220885	2	Hex Socket Head Plug	
100	70006901	1	Seal Kit (Includes Items 9-18)	

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FIGURE 6-10. LIFT CYLINDER ASSEMBLY - UPPER - E450A (PRIOR TO PVC 2001)



ART_1001228018

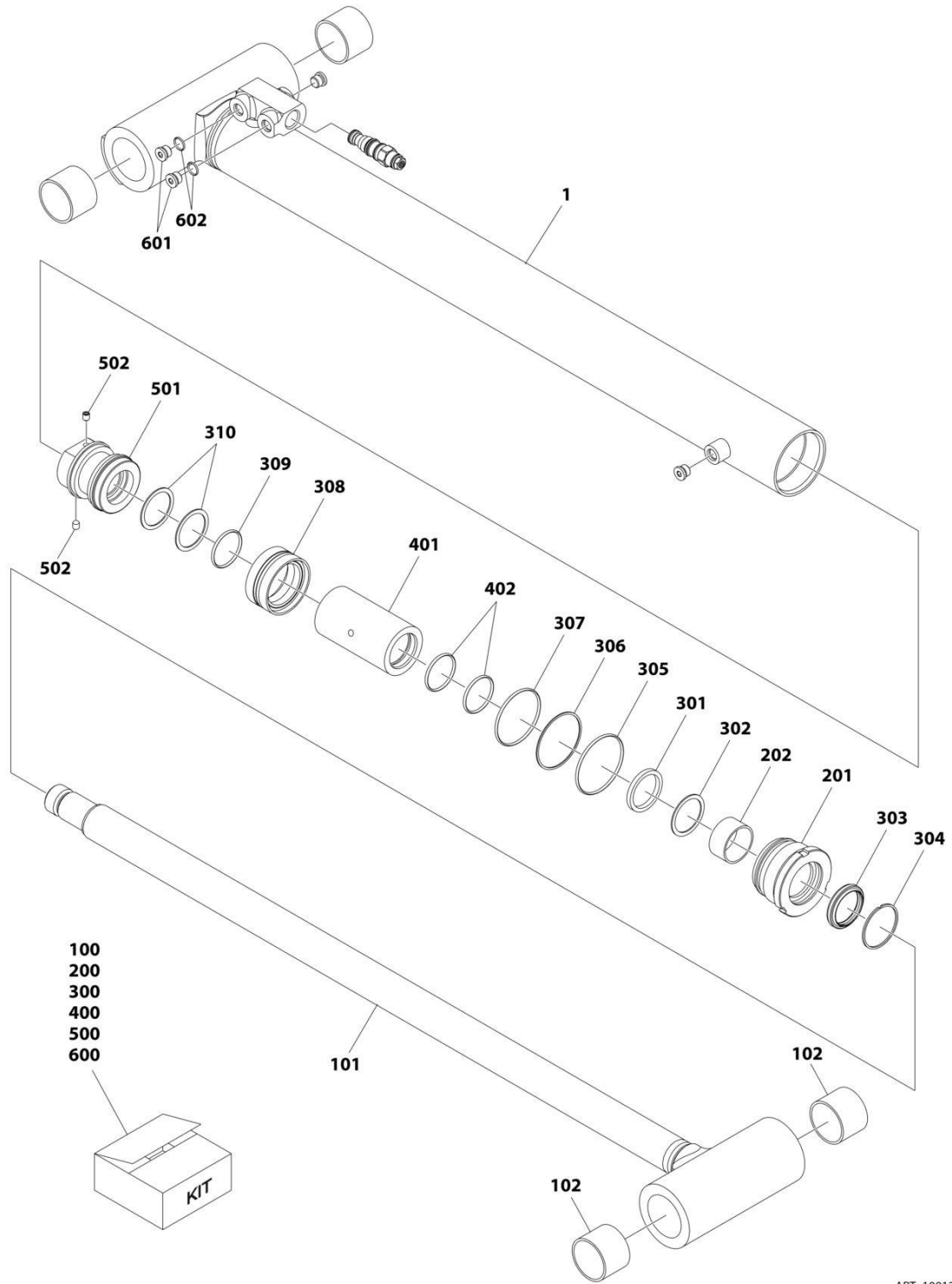
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FIGURE 6-10. LIFT CYLINDER ASSEMBLY - UPPER - E450A (PRIOR TO PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228018	Ref	LIFT CYLINDER ASSEMBLY - UPPER	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
1A	0961950	2	Bushing	
2	70006415	1	Rod Weldment	
2A	0961950	2	Bushing	
3	70006401	1	Head	
4	70006400	1	Piston	
5	70006414	1	Spacer	
6	70006413	1	Setscrew	
7	70006412	1	Nut	
8	70023915	1	Setscrew	
9	70006411	4	Retainer	
10	2220885	1	Plug, O-Ring	
11	4640936	1	Cartridge, Holding Valve	
11	2900770	1	Seal Kit - 4640936 Valve	
12	0100011	AR	Compound, Locking	
13	0100038	AR	Primer, Locking	
100	2901804	1	Seal Kit (Includes Items 101-107)	
101	See Note	NSS	Ring, Wear (Note: Use Item 100)	
102	See Note	NSS	Seal, Piston (Note: Use Item 100)	
103	See Note	NSS	O-Ring (Note: Use Item 100)	
104	See Note	NSS	Ring, Wear (Note: Use Item 100)	
105	See Note	NSS	O-Ring (Note: Use Item 100)	
106	See Note	NSS	Seal, Rod (Note: Use Item 100)	
107	See Note	NSS	Wiper, Rod (Note: Use Item 100)	

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FIGURE 6-11. LIFT CYLINDER ASSEMBLY - UPPER - E450A (PVC 2001)



ART_1001251018

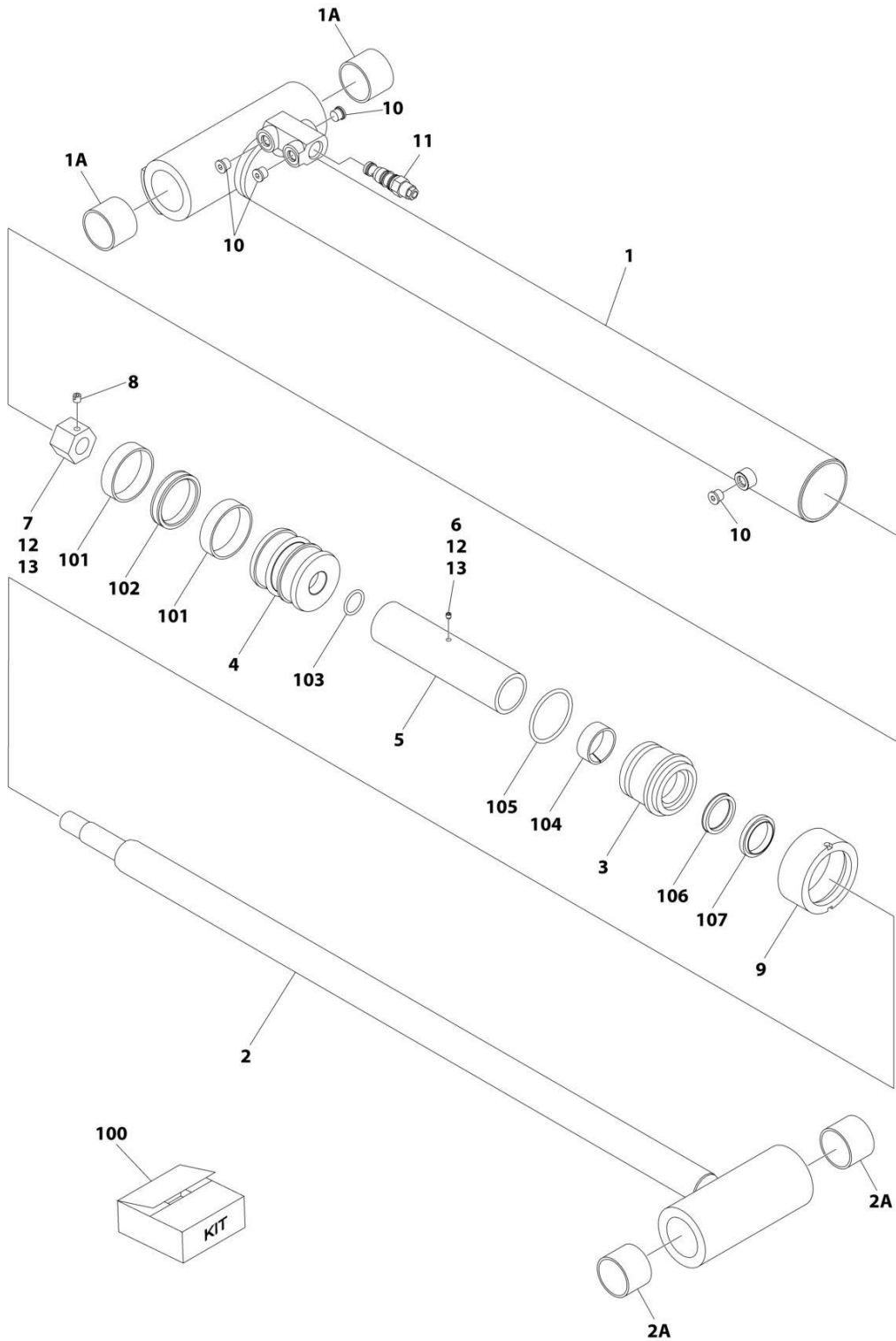
SECTION 6 - CYLINDER

FIGURE 6-11. LIFT CYLINDER ASSEMBLY - UPPER - E450A (PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251018	Ref	LIFT CYLINDER ASSEMBLY - UPPER	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
100	70007367	1	Rod Assembly Kit (Includes Item 101)	
101	See Note	NSS	Rod Assembly (Note: Use p/n 70007367)	
102	See Note	NSS	Bushing (Note: Use p/n 70007367)	
200	70007368	1	Head Kit (Includes Items 201-202)	
201	See Note	NSS	Head (Note: Use p/n 70007368)	
202	See Note	NSS	Bushing (Note: Use p/n 70007368)	
300	70007369	1	Seal Kit (Includes Items 301-310)	
301	See Note	NSS	U-Packing (Note: Use Item 70007369)	
302	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
303	See Note	NSS	Wiper, Rod (Note: Use Item 7007369)	
304	See Note	NSS	Ring, Retaining (Note: Use Item 7007369)	
305	See Note	NSS	O-Ring (Note: Use Item 7007369)	
306	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
307	See Note	NSS	O-Ring (Note: Use Item 7007369)	
308	See Note	NSS	Seal, Compact (Note: Use Item 7007369)	
309	See Note	NSS	O-Ring (Note: Use Item 7007369)	
310	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
400	70007370	1	Spacer Kit (Includes Items 401-402)	
401	See Note	NSS	Spacer (Note: Use p/n 70007370)	
402	See Note	NSS	O-Ring (Note: Use p/n 70007370)	
500	70007371	1	Piston Kit (Includes Items 501-502)	
501	See Note	NSS	Piston (Note: Use Item 7007371)	
502	See Note	NSS	Set Screw (Note: Use Item 7007371)	
600	70007372	1	Plug Kit (Includes Items 601-602)	
601	See Note	NSS	Plug (Note: Use Item 7007372)	
602	See Note	NSS	O-Ring (Note: Use Item 7007372)	

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FIGURE 6-12. LIFT CYLINDER ASSEMBLY - UPPER - E450AJ/M450AJ (USA BUILT MACHINES)
(PRIOR TO PVC 2001)



ART_1001228016

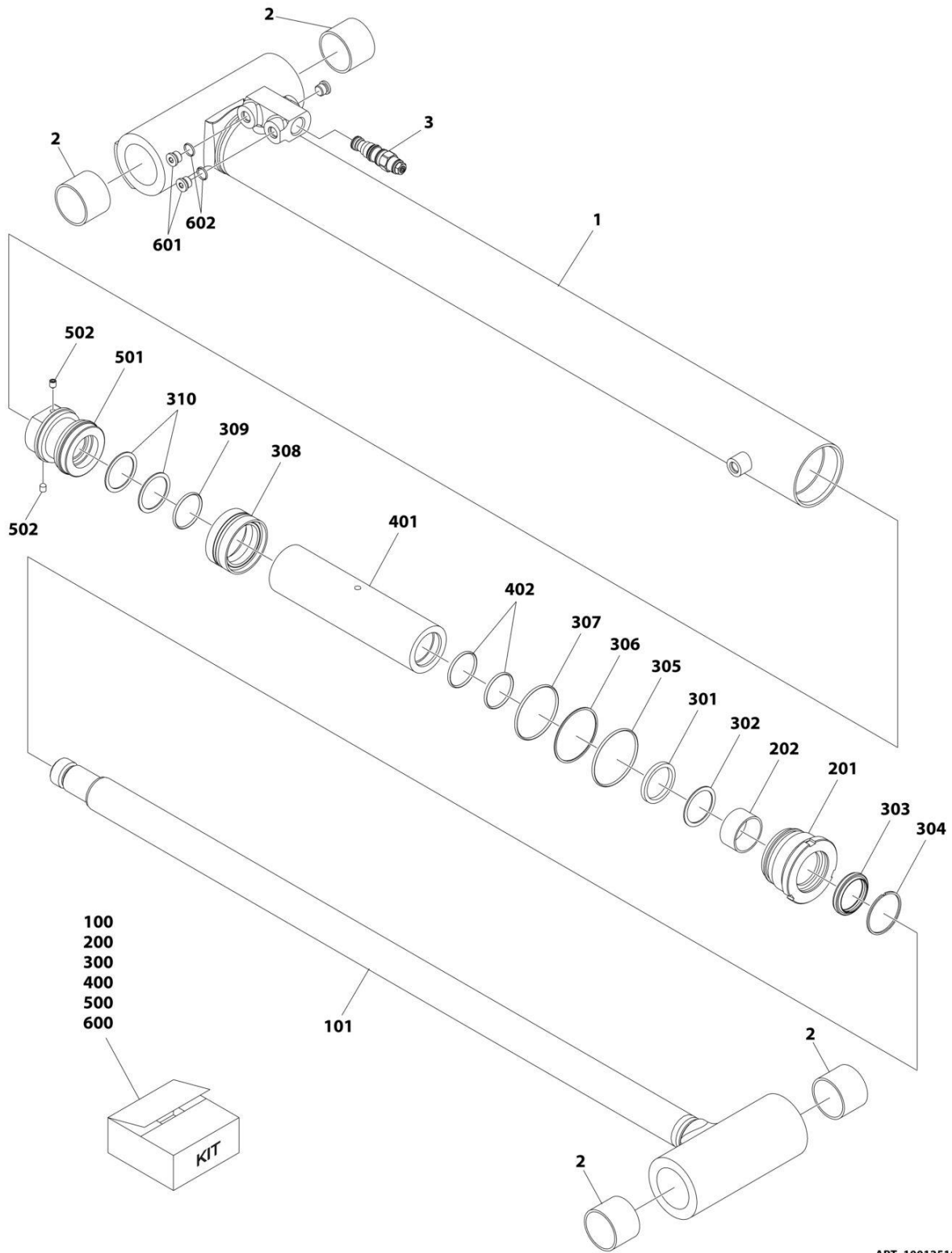
SECTION 6 - CYLINDER

**FIGURE 6-12. LIFT CYLINDER ASSEMBLY - UPPER - E450AJ/M450AJ (USA BUILT MACHINES)
(PRIOR TO PVC 2001)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228016	Ref	LIFT CYLINDER ASSEMBLY - UPPER	C
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
1A	0961950	2	Bushing	
2	70006402	1	Rod Weldment	
2A	0961950	2	Bushing	
3	70006401	1	Head	
4	70006400	1	Piston	
5	70006399	1	Spacer	
6	70006398	1	Setscrew	
7	70006397	1	Nut	
8	70023915	1	Setscrew	
9	70006396	1	Retainer	
10	2220885	4	Plug, O-Ring	
11	4640936	1	Cartridge, Holding Valve	
11	2900770	1	Seal Kit - 4640936 Valve	
12	0100011	AR	Compound, Locking	
13	0100038	AR	Primer, Locking	
100	2901804	1	Seal Kit (Includes Items 101-107)	
101	See Note	NSS	Ring, Wear (Note: Use Item 100)	
102	See Note	NSS	Seal, Piston (Note: Use Item 100)	
103	See Note	NSS	O-Ring (Note: Use Item 100)	
104	See Note	NSS	Ring, Wear (Note: Use Item 100)	
105	See Note	NSS	O-Ring (Note: Use Item 100)	
106	See Note	NSS	Seal, Rod (Note: Use Item 100)	
107	See Note	NSS	Wiper, Rod (Note: Use Item 100)	

SECTION 6 - CYLINDER

FIGURE 6-13. LIFT CYLINDER - UPPER - E400AJPN (PVC 2001)



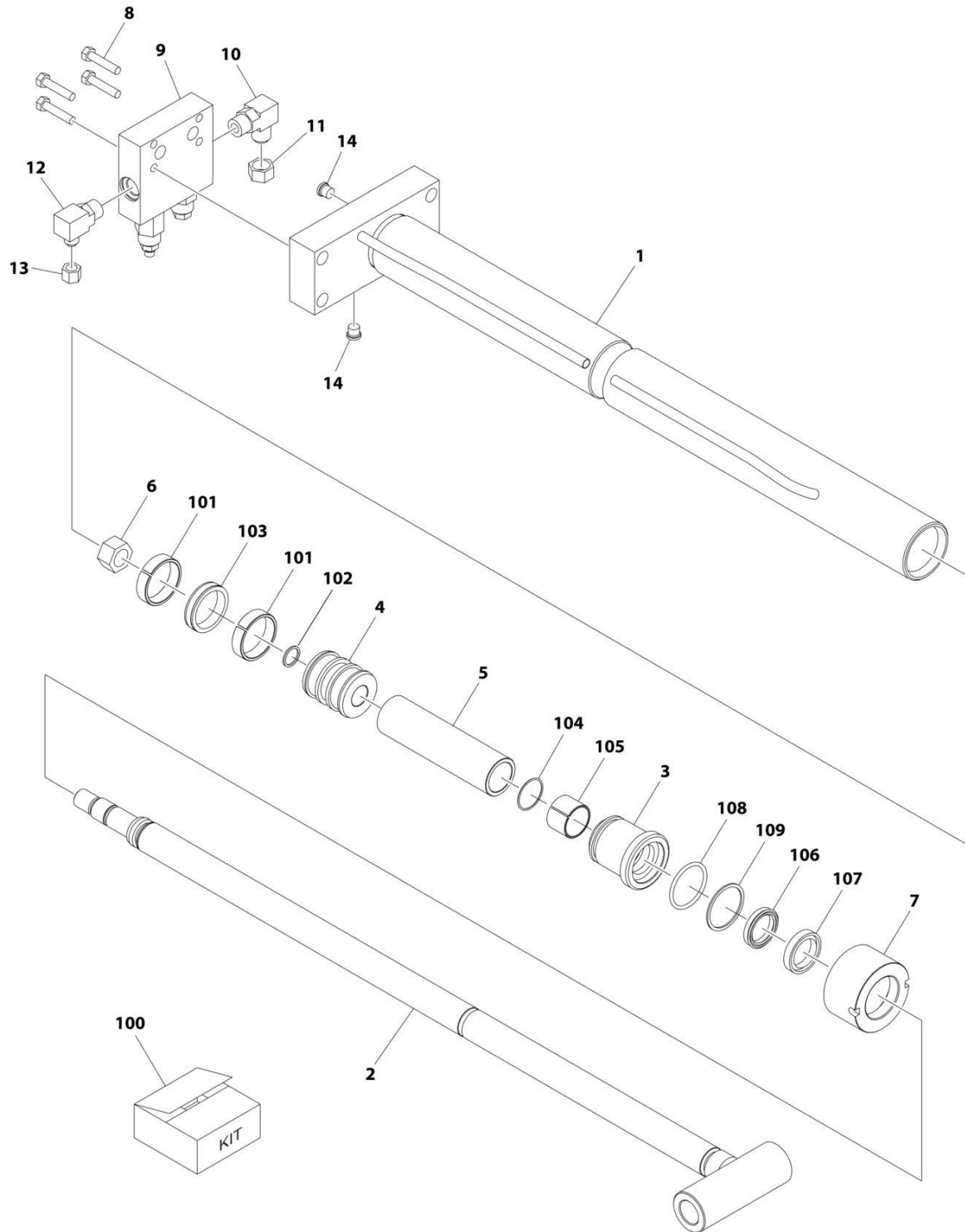
SECTION 6 - CYLINDER

FIGURE 6-13. LIFT CYLINDER - UPPER - E400AJPN (PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251016	Ref	LIFT CYLINDER ASSEMBLY - UPPER	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
2	0961950	4	Bushing	
3	4640936	1	Valve, Counterbalance	
3	2900770	1	Seal Kit - 4640936 Valve	
100	70007373	1	Rod Assembly Kit (Includes Item 101)	
101	See Note	NSS	Rod Assembly (Note: Use p/n 70007373)	
200	70007368	1	Head Kit (Includes Items 201-202)	
201	See Note	NSS	Head (Note: Use p/n 70007368)	
202	See Note	NSS	Bushing (Note: Use p/n 70007368)	
300	70007369	1	Seal Kit (Includes Items 301-310)	
301	See Note	NSS	U-Packing (Note: Use Item 70007369)	
302	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
303	See Note	NSS	Wiper, Rod (Note: Use Item 7007369)	
304	See Note	NSS	Ring, Retaining (Note: Use Item 7007369)	
305	See Note	NSS	O-Ring (Note: Use Item 7007369)	
306	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
307	See Note	NSS	O-Ring (Note: Use Item 7007369)	
308	See Note	NSS	Seal, Compact (Note: Use Item 7007369)	
309	See Note	NSS	O-Ring (Note: Use Item 7007369)	
310	See Note	NSS	Ring, Back-up (Note: Use Item 7007369)	
400	70007374	1	Spacer Kit (Includes Items 401-402)	
401	See Note	NSS	Spacer (Note: Use Item 7007374)	
402	See Note	NSS	O-Ring (Note: Use Item 7007374)	
500	70007371	1	Piston Kit (Includes Items 501-502)	
501	See Note	NSS	Piston (Note: Use Item 7007371)	
502	See Note	NSS	Set Screw (Note: Use Item 7007371)	
600	70007372	1	Plug Kit (Includes Items 601-602)	
601	See Note	NSS	Plug (Note: Use Item 7007372)	
602	See Note	NSS	O-Ring (Note: Use Item 7007372)	

SECTION 6 - CYLINDER

FIGURE 6-14. TELESCOPE CYLINDER ASSEMBLY - E450A (PRIOR TO PVC 2001)



ART_1001228061

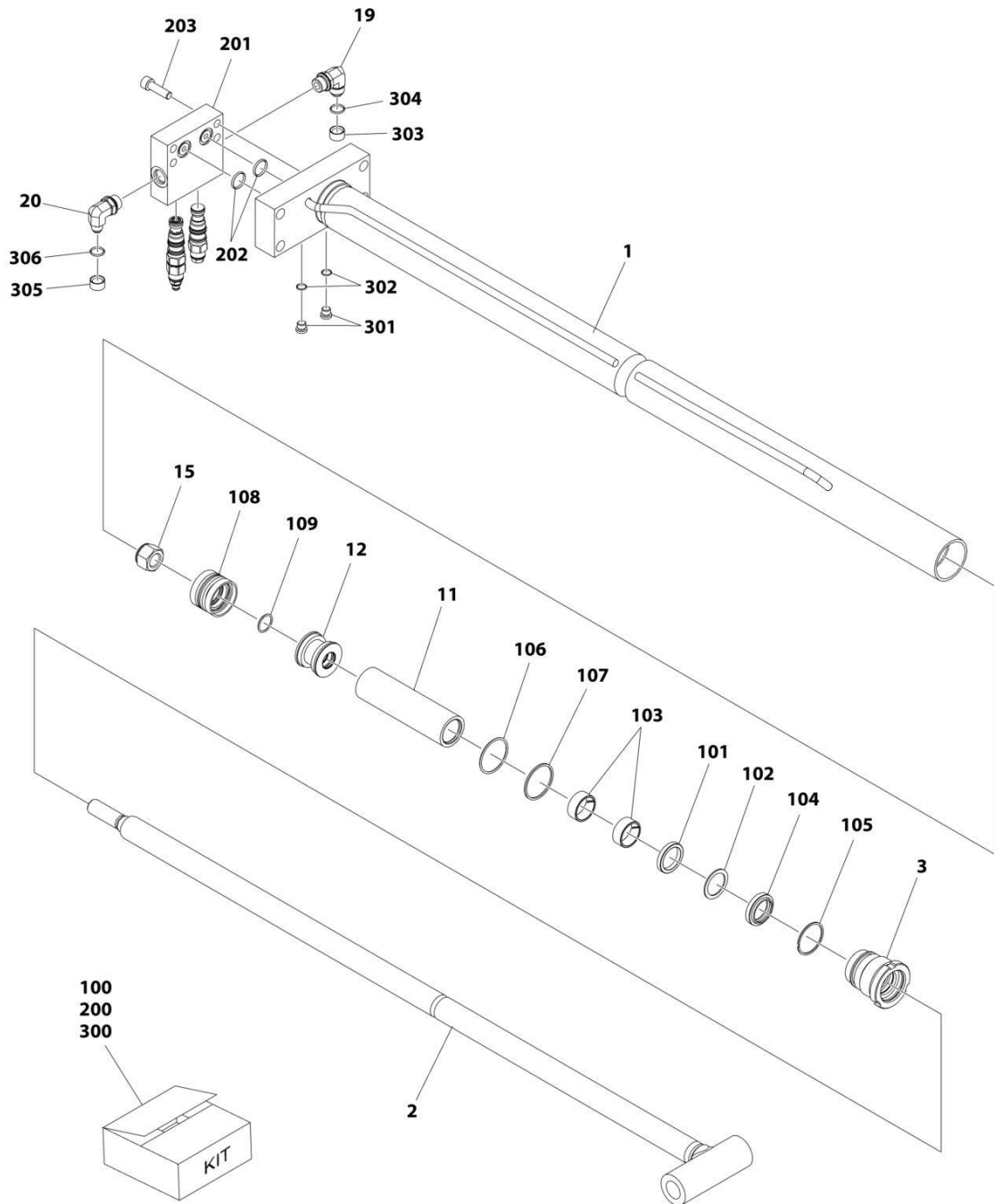
SECTION 6 - CYLINDER

FIGURE 6-14. TELESCOPE CYLINDER ASSEMBLY - E450A (PRIOR TO PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001228061	Ref	TELESCOPE CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006973	1	Rod	
3	70006565	1	Head	
4	70006564	1	Piston	
5	70006972	1	Spacer	
6	70006971	1	Nut, Lock	
7	70006561	1	Cap, End	
8	0641512	4	Bolt, 5/16 X 1-1/2	
9	4640807	1	Counterbalance Valve Assembly (See Separate Breakdown in this Section)	
10	2220596	1	Fitting, 90 JIC/ORB	
11	2220517	1	Fitting, Cap	
12	2220628	1	Fitting, 90 JIC/ORB	
13	2220516	1	Fitting, Cap	
14	2220883	2	Plug	
100	1001152230	1	Seal Kit (Includes Items 101-108)	
101	See Note	NSS	Ring, Wear (Note: Use p/n 1001152230)	
102	See Note	NSS	Seal Cap (Note: Use p/n 1001152230)	
103	See Note	NSS	O-Ring (Note: Use p/n 1001152230)	
104	See Note	NSS	Ring, Wear (Note: Use p/n 1001152230)	
105	See Note	NSS	O-Ring (Note: Use p/n 1001152230)	
106	See Note	NSS	Seal, Rod (Note: Use p/n 1001152230)	
107	See Note	NSS	Wiper, Rod (Note: Use p/n 1001152230)	
108	See Note	NSS	Ring, Back-Up (Note: Use p/n 1001152230)	

SECTION 6 - CYLINDER

FIGURE 6-15. TELESCOPE CYLINDER ASSEMBLY - E400AJPN (PVC 2001)



ART_1001251061

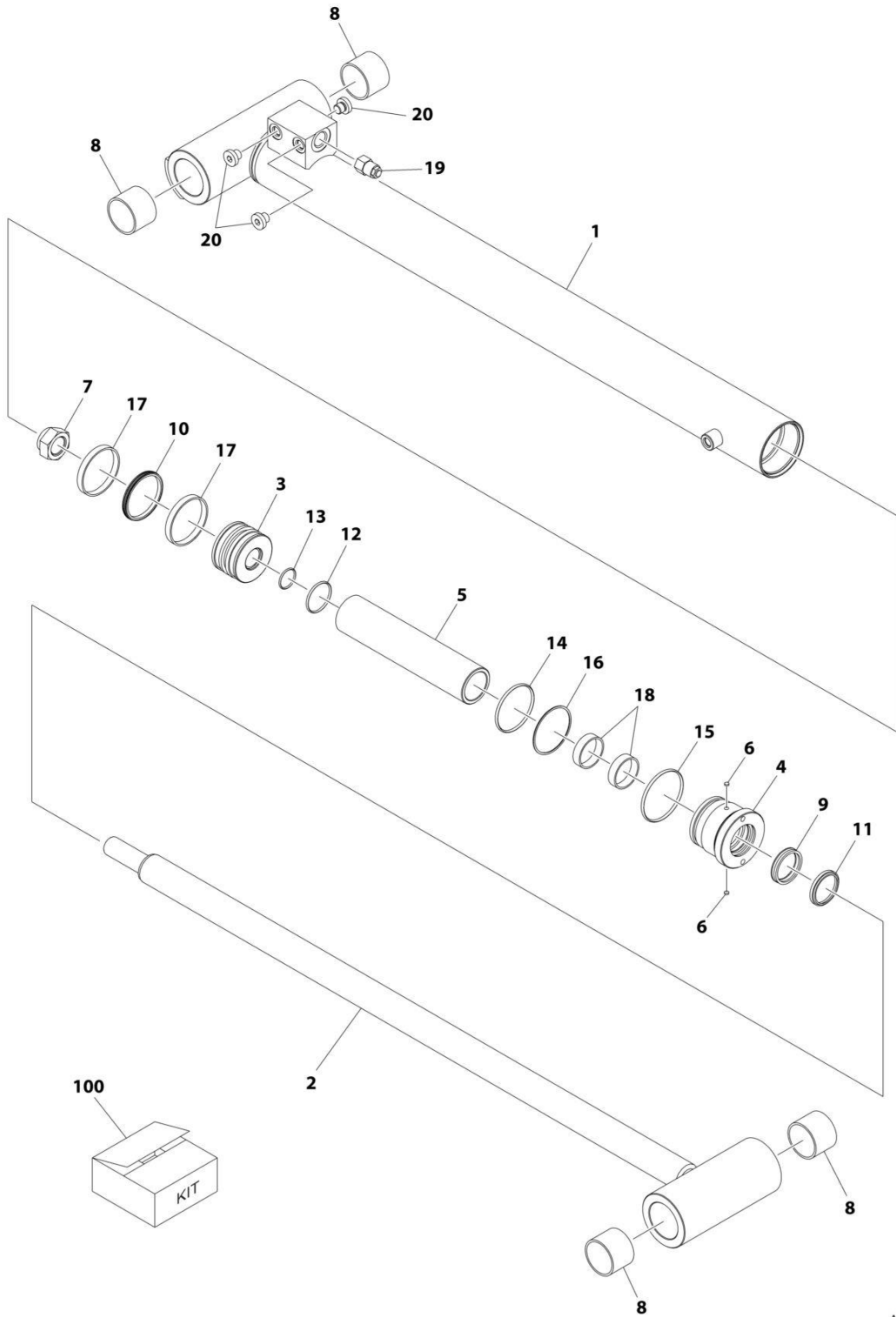
SECTION 6 - CYLINDER

FIGURE 6-15. TELESCOPE CYLINDER ASSEMBLY - E400AJPN (PVC 2001)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001251061	Ref	TELESCOPE CYLINDER ASSEMBLY	C
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel Weldment (Note: Not Available for Purchase)	
2	See Note	NSS	Rod (Note: Not Available for Purchase)	
3	70007357	1	Head	
11	70007375	1	Spacer	
12	70007359	1	Piston	
15	70007360	2	Nut, Nylon	
19	70007361	1	Fitting, 90 JIC/ORB	
20	70007362	1	Fitting, 90 JIC/ORB	
100	70007363	1	Seal Kit (Includes Items 101-107)	
101	See Note	NSS	U-Packing (Note: Use p/n 70007363)	
102	See Note	NSS	Ring, Back-up (Note: Use p/n 70007363)	
103	See Note	NSS	Ring, Wear (Note: Use p/n 70007363)	
104	See Note	NSS	Wiper, Rod (Note: Use p/n 70007363)	
105	See Note	NSS	Ring, Retaining (Note: Use p/n 70007363)	
106	See Note	NSS	O-Ring (Note: Use p/n 70007363)	
107	See Note	NSS	Ring, Back-up (Note: Use p/n 70007363)	
108	See Note	NSS	Seal, Compact (Note: Use p/n 70007363)	
109	See Note	NSS	O-Ring (Note: Use p/n 70007363)	
200	70007364	1	Block Kit (Includes Items 201-203)	
201	See Note	NSS	Block (Note: Use p/n 70007364)	
202	See Note	NSS	O-Ring (Note: Use p/n 70007364)	
203	See Note	NSS	Bolt (Note: Use p/n 70007364)	
300	70007366	1	Plug Kit (Includes Items 401-406)	
301	See Note	NSS	Plug (Note: Use p/n 70007366)	
302	See Note	NSS	O-Ring (Note: Use p/n 70007366)	
303	See Note	NSS	Dust Cap (Note: Use p/n 70007366)	
304	See Note	NSS	O-Ring (Note: Use p/n 70007366)	
305	See Note	NSS	Dust Cap (Note: Use p/n 70007366)	
306	See Note	NSS	O-Ring (Note: Use p/n 70007366)	

SECTION 6 - CYLINDER

FIGURE 6-16. LIFT CYLINDER ASSEMBLY - UPPER - E450AJ (CHINA BUILT MACHINES)



ART_1001230299

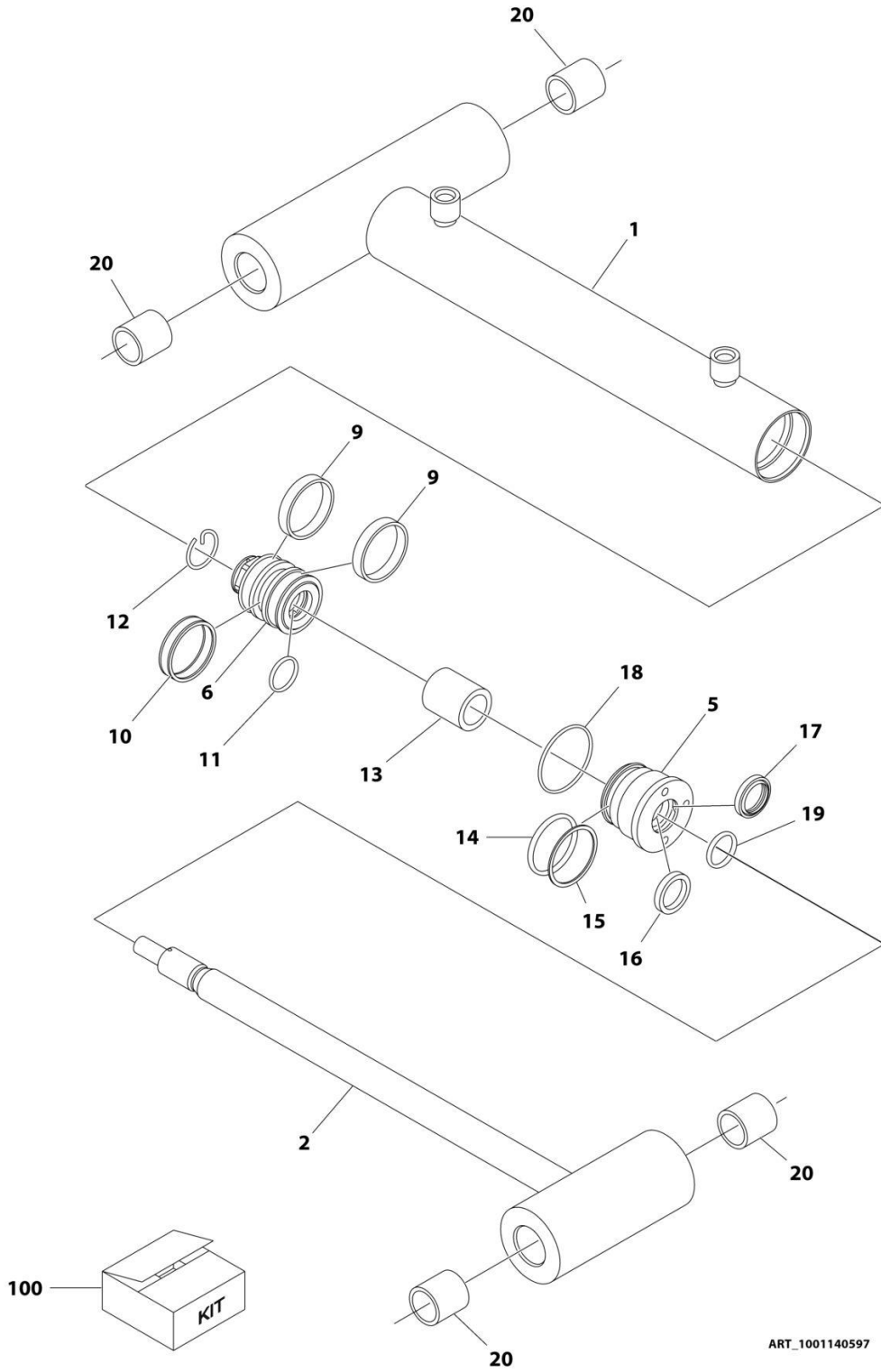
SECTION 6 - CYLINDER

FIGURE 6-16. LIFT CYLINDER ASSEMBLY - UPPER - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230299	Ref	LIFT CYLINDER ASSEMBLY - UPPER	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006874	1	Rod Assembly	
3	70006875	1	Piston	
4	70006876	1	Gland	
5	70006877	1	Stop Tube	
6	70003636	2	Locking Piece	
7	70006878	1	Locknut	
8	0961950	4	Self-Lubricating Composite Bearing	
9	See Note	NSS	Rod Seal (Note: Purchase p/n 70006904)	
10	See Note	NSS	Stopt (Note: Purchase p/n 70006904)	
11	See Note	NSS	Wiper (Note: Purchase p/n 70006904)	
12	See Note	NSS	O-Ring (Note: Purchase p/n 70006904)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 70006904)	
14	See Note	NSS	O-Ring (Note: Purchase p/n 70006904)	
15	See Note	NSS	O-Ring (Note: Purchase p/n 70006904)	
16	See Note	NSS	Backup (Note: Purchase p/n 70006904)	
17	See Note	NSS	Tube Wearband (Note: Purchase p/n 70006904)	
18	See Note	NSS	Rod Wearband (Note: Purchase p/n 70006904)	
19	4640936	1	Counter Balance Valve	
20	2220885	3	Hex Socket Head Plug	
100	70006904	1	Seal Kit (Includes Items 9-19)	

SECTION 6 - CYLINDER

FIGURE 6-17. MASTER CYLINDER ASSEMBLY - E450A



ART_1001140597

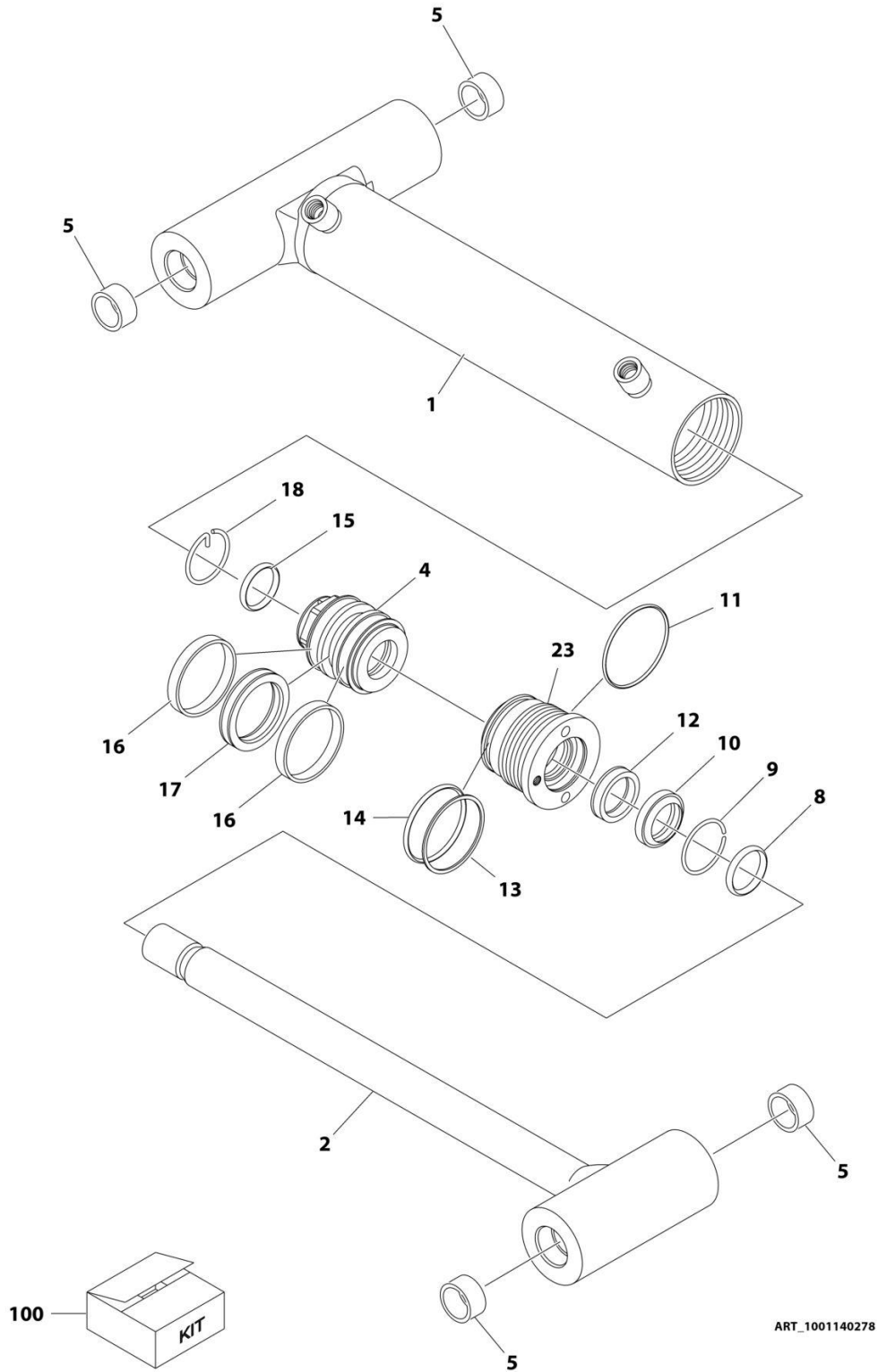
SECTION 6 - CYLINDER

FIGURE 6-17. MASTER CYLINDER ASSEMBLY - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001140597	Ref	MASTER CYLINDER ASSEMBLY	A
		Ref	Note: Original Cylinder May Have Been Replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	70004144	1	Barrel	
2	70004145	1	Rod	
5	70000739	1	Head	
6	70004141	1	Piston	
9	See Note	NSS	Ring, Wear (Note: Use p/n 70004130)	
10	See Note	NSS	Seal, Piston (Note: Use p/n 70004130)	
11	70023094	1	O-Ring	
12	70004142	1	Retainer	
13	70004143	1	Spacer	
14	See Note	NSS	O-Ring (Note: Use p/n 70004130)	
15	See Note	NSS	Ring, Back-Up (Note: Use p/n 70004130)	
16	See Note	NSS	Seal, Rod (Note: Use p/n 70004130)	
17	See Note	NSS	Wiper, Rod (Note: Use p/n 70004130)	
18	See Note	NSS	O-Ring (Note: Use p/n 70004130)	
19	See Note	NSS	O-Ring (Note: Use p/n 70004130)	
20	0962356	4	Bushing	
100	70004130	1	Seal Kit (Includes Items 9-11 & 14-18)	

SECTION 6 - CYLINDER

FIGURE 6-18. MASTER CYLINDER ASSEMBLY - E450AJ/M450AJ (USA BUILT MACHINES)



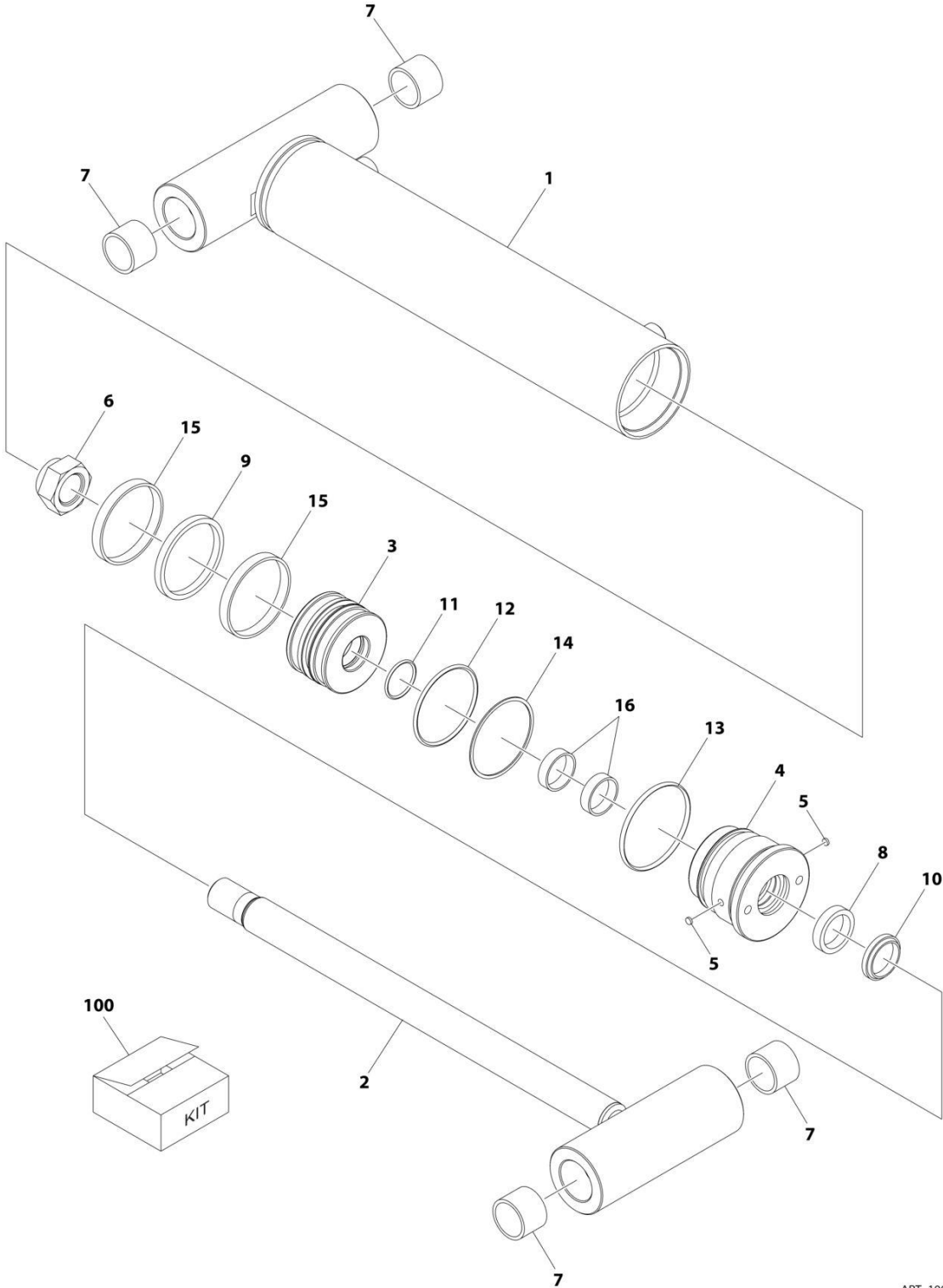
SECTION 6 - CYLINDER

FIGURE 6-18. MASTER CYLINDER ASSEMBLY - E450AJ/M450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001140278	Ref	MASTER CYLINDER ASSEMBLY	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	70003843	1	Barrel	
2	70003844	1	Rod	
4	70003819	1	Piston	
5	0961951	4	Bushing	
8	7026084	1	O-Ring	
9	70002217	1	Ring, Retaining	
10	See Note	NSS	Wiper, Rod (Note: Use p/n 70003845)	
11	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
12	See Note	NSS	Seal, Rod (Note: Use p/n 70003845)	
13	See Note	NSS	Ring, Back-Up (Note: Use p/n 70003845)	
14	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
15	See Note	NSS	O-Ring (Note: Use p/n 70003845)	
16	See Note	NSS	Ring, Wear (Note: Use p/n 70003845)	
17	See Note	NSS	Seal, Piston (Note: Use p/n 70003845)	
18	70002216	1	Retainer	
23	7026082	1	Head	
100	70003845	1	Seal Kit (Includes Items 10-17)	

SECTION 6 - CYLINDER

FIGURE 6-19. MASTER CYLINDER ASSEMBLY - E450AJ (CHINA BUILT MACHINES)



ART_1001230303

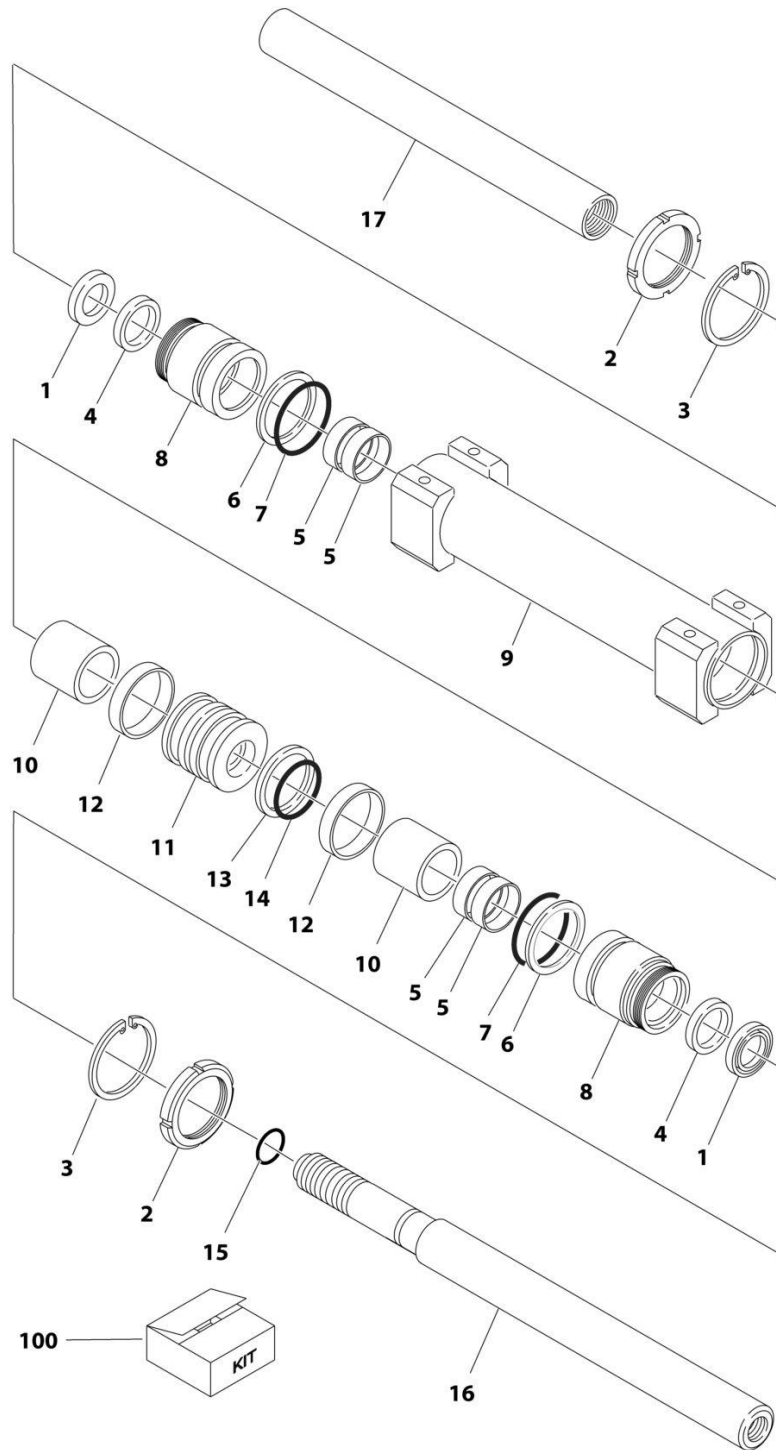
SECTION 6 - CYLINDER

FIGURE 6-19. MASTER CYLINDER ASSEMBLY - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230303	Ref	MASTER CYLINDER ASSEMBLY	A
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006908	1	Rod Assembly	
3	70006909	1	Piston	
4	70006910	1	Gland	
5	70003636	2	Locking Piece (Insert)	
6	70006878	1	Metal Lock Nut	
7	0961951	4	Self-Lubricating Composite Bearing	
8	See Note	NSS	Rod Seal (Note: Purchase p/n 70006911)	
9	See Note	NSS	Stopt (Note: Purchase p/n 70006911)	
10	See Note	NSS	Wiper (Note: Purchase p/n 70006911)	
11	See Note	NSS	O-Ring (Note: Purchase p/n 70006911)	
12	See Note	NSS	O-Ring (Note: Purchase p/n 70006911)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 70006911)	
14	See Note	NSS	Backup (Note: Purchase p/n 70006911)	
15	See Note	NSS	Tube Wearband (Note: Purchase p/n 70006911)	
16	See Note	NSS	Rod Wearband (Note: Purchase p/n 70006911)	
100	70006911	1	Seal Kit (Includes Items 8-16)	

SECTION 6 - CYLINDER

FIGURE 6-20. STEER CYLINDER ASSEMBLY (USA BUILT MACHINES)



ART_1683591

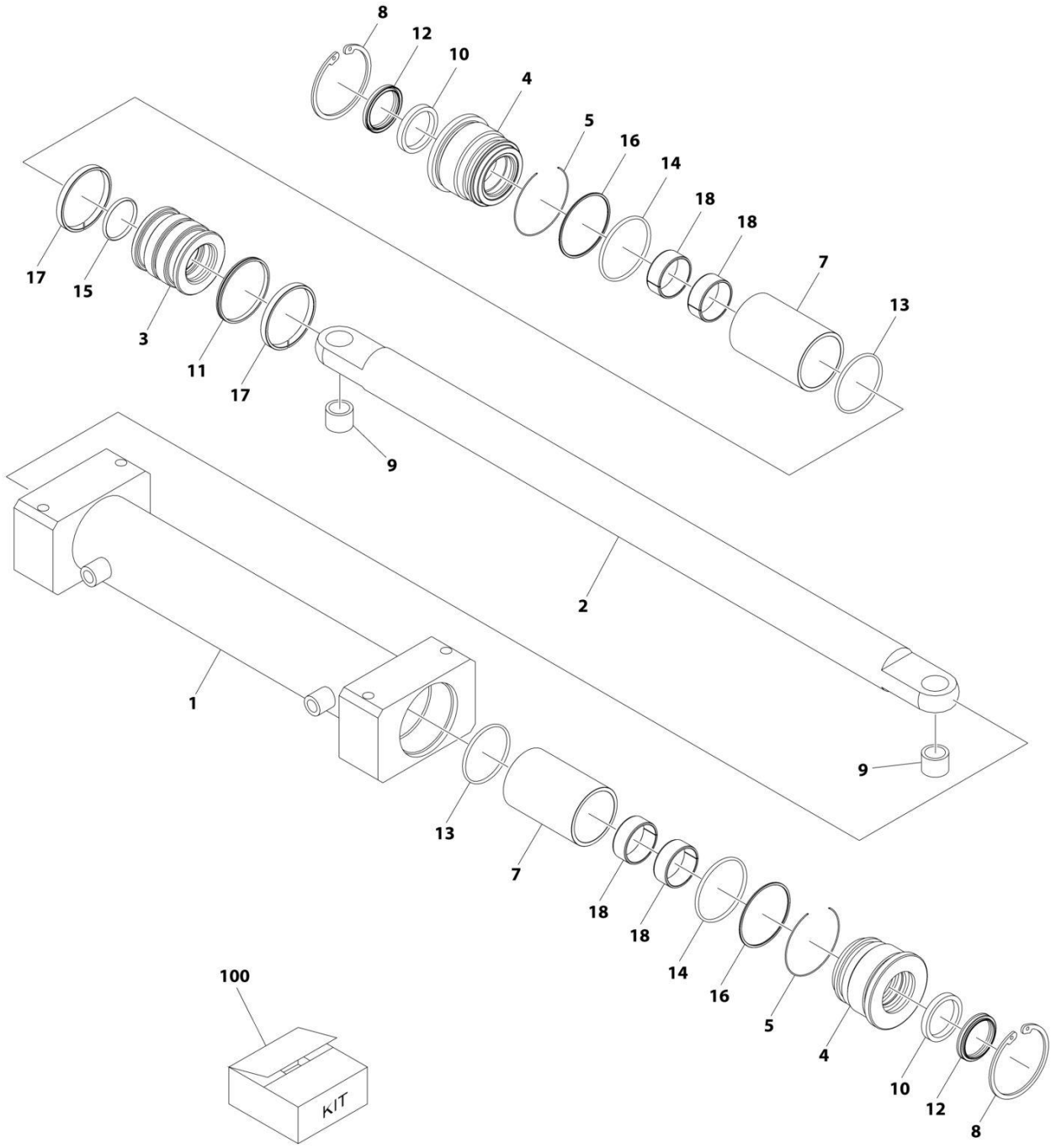
SECTION 6 - CYLINDER

FIGURE 6-20. STEER CYLINDER ASSEMBLY (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1683591	Ref	STEER CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder May Have Been Replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	2	Wiper (Note: Use p/n 7017246)	
2	7001630	2	Nut, Spanner	
3	7017247	2	Ring, Retaining	
4	See Note	2	Seal, Lip (Note: Use p/n 7017246)	
5	See Note	4	Ring, Wear (Note: Use p/n 7017246)	
6	See Note	2	Ring, Back-Up (Note: Use p/n 7017246)	
7	See Note	2	O-Ring (Note: Use p/n 7017246)	
8	7017248	2	Guide	
9	70003341	1	Barrel	
10	7017249	2	Tube	
11	7017250	1	Piston	
12	See Note	2	Ring, Wear (Note: Use p/n 7017246)	
13	See Note	1	Seal (Note: Use p/n 7017246)	
14	See Note	1	O-Ring (Note: Use p/n 7017246)	
15	See Note	1	O-Ring (Note: Use p/n 7017246)	
16	7017251	1	Rod - Male End	
17	7017252	1	Rod - Female End	
100	7017246	1	Seal Kit (Includes Items 1,4-7 & 12-15)	

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FIGURE 6-21. STEER CYLINDER ASSEMBLY (CHINA BUILT MACHINES)



ART_1001221480

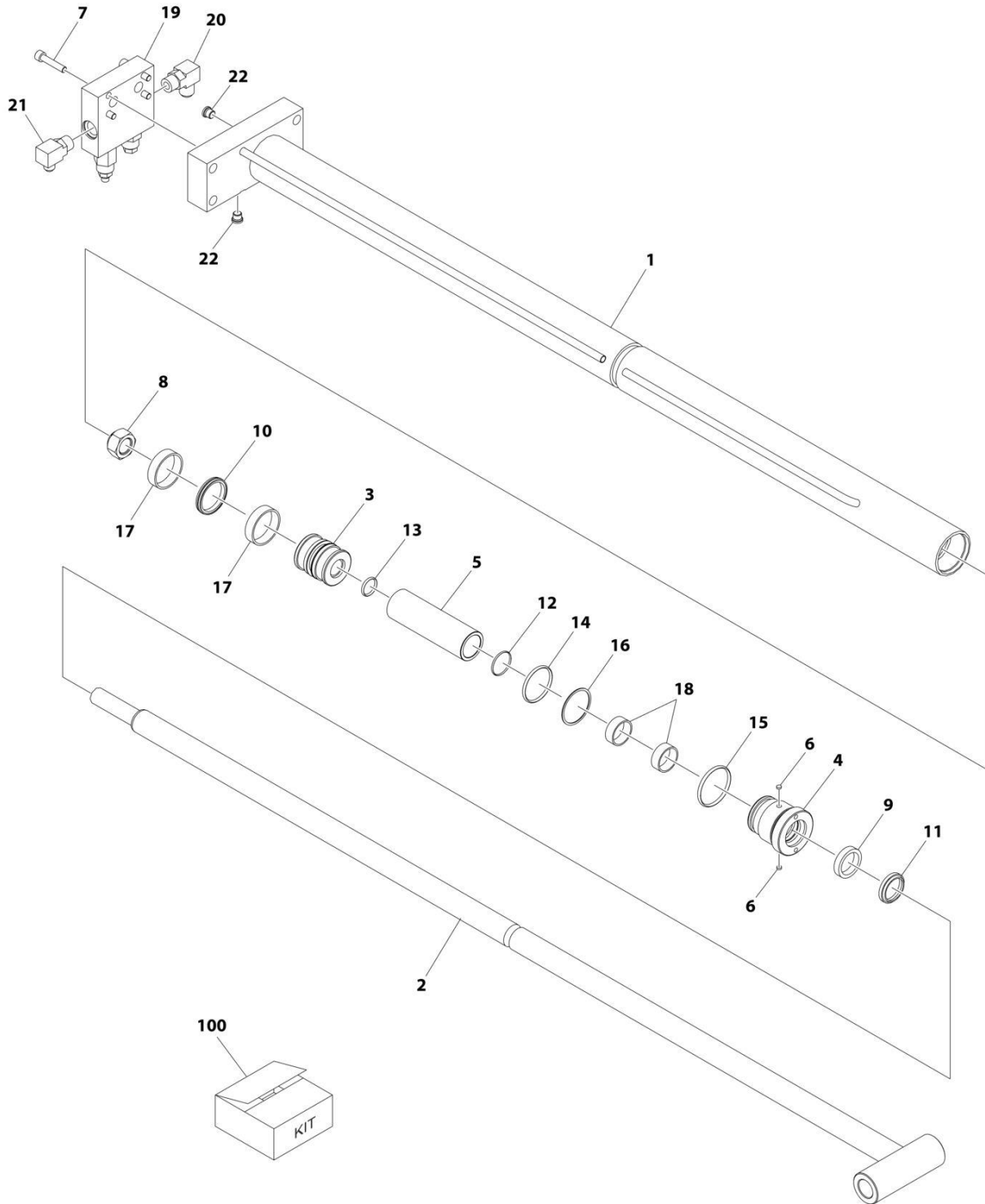
SECTION 6 - CYLINDER

FIGURE 6-21. STEER CYLINDER ASSEMBLY (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001221480	Ref	STEER CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder May Have Been Replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Use P/N 1001221480)	
2	70007109	1	Rod	
3	70007110	1	Piston	
4	70007111	1	Head	
5	70007112	2	Ring, Retaining	
6	70007113	1	Ring, Retaining (Not Shown)	
7	70007114	2	Tube, Stop	
8	70007115	2	Ring, Locking	
9	1001164209	2	Bushing	
10	See Note	NSS	Seal, Rod (Note: Use Item 100)	
11	See Note	NSS	Seal, Piston (Note: Use Item 100)	
12	See Note	NSS	Wiper (Note: Use Item 100)	
13	See Note	NSS	O-Ring (Note: Use Item 100)	
14	See Note	NSS	O-Ring (Note: Use Item 100)	
15	See Note	NSS	Ring, Back-up (Note: Use Item 100)	
16	See Note	NSS	Ring, Back-up (Note: Use Item 100)	
17	See Note	NSS	Ring, Wear (Note: Use Item 100)	
18	See Note	NSS	Ring, Wear (Note: Use Item 100)	
100	70007116	1	Seal Kit - Cylinder (Includes Item 8-16)	

SECTION 6 - CYLINDER

FIGURE 6-22. TELESCOPE CYLINDER ASSEMBLY - E450AJ/M450AJ



ART_1001230302

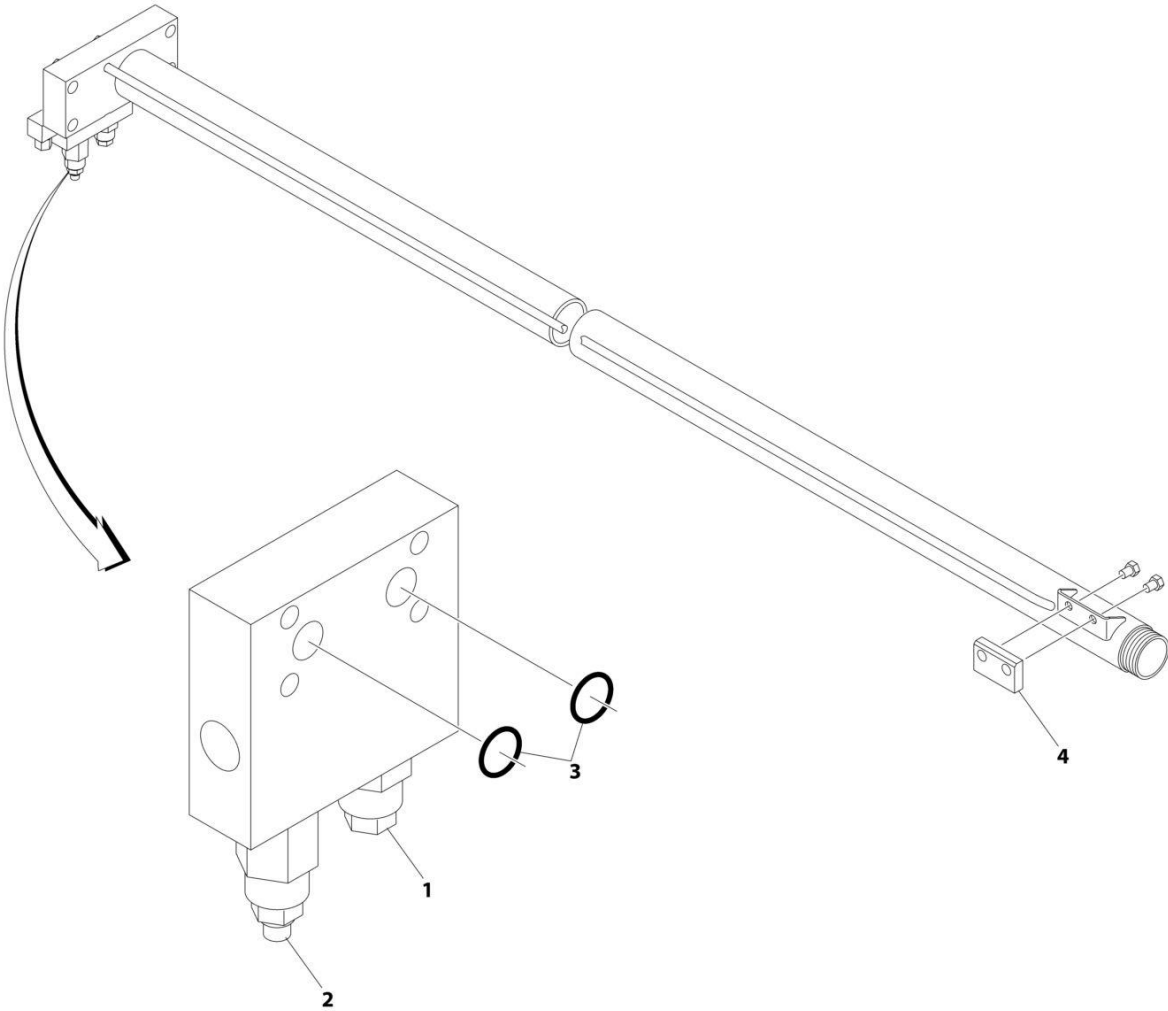
SECTION 6 - CYLINDER

FIGURE 6-22. TELESCOPE CYLINDER ASSEMBLY - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001230302	Ref	TELESCOPE CYLINDER ASSEMBLY	B
		Ref	Note: Original Cylinder may have been replaced with Service Replacement. Identify PN Stamped on Cylinder Before Ordering Parts.	
1	See Note	NSS	Barrel (Note: Not Available for Purchase)	
2	70006902	1	Rod Assembly	
3	70006903	1	Piston	
4	70006905	1	Gland	
5	70006906	1	Stop Tube	
6	70003636	2	Locking Piece (Insert)	
7	0641512	4	Hex Socket Cap Screw	
8	70004213	1	Metal Lock Nut	
9	See Note	NSS	Rod Seal (Note: Purchase p/n 7006907)	
10	See Note	NSS	Stopt (Note: Purchase p/n 7006907)	
11	See Note	NSS	Wiper (Note: Purchase p/n 7006907)	
12	See Note	NSS	O-Ring (Note: Purchase p/n 7006907)	
13	See Note	NSS	O-Ring (Note: Purchase p/n 7006907)	
14	See Note	NSS	O-Ring (Note: Purchase p/n 7006907)	
15	See Note	NSS	O-Ring (Note: Purchase p/n 7006907)	
16	See Note	NSS	Backup (Note: Purchase p/n 7006907)	
17	See Note	NSS	Tube Wearband (Note: Purchase p/n 7006907)	
18	See Note	NSS	Rod Wearband (Note: Purchase p/n 7006907)	
19	4640807	1	Counterbalance Valve Assembly (See Separate Breakdown in this Section)	
20	2220596	1	Transition Joint	
21	2220628	1	Transition Joint	
22	2220883	2	Hex Socket Head Plug	
100	70006907	1	Seal Kit (Includes Items 9-18)	

SECTION 6 - CYLINDER

FIGURE 6-23. COUNTERBALANCE VALVE ASSEMBLY



ART_4640807

SECTION 6 - CYLINDER

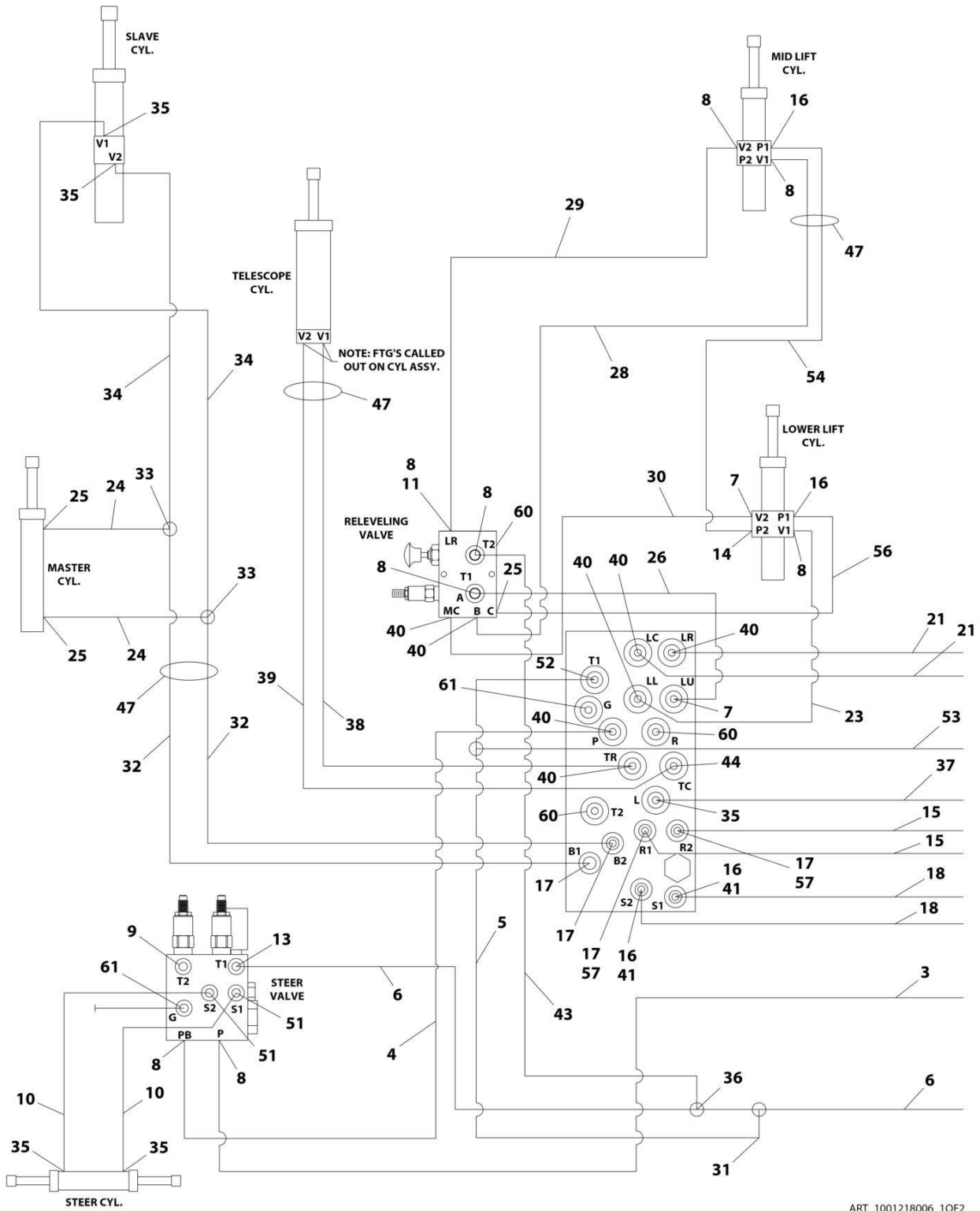
FIGURE 6-23. COUNTERBALANCE VALVE ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4640807	Ref	COUNTERBALANCE VALVE ASSEMBLY	D
1	4640771	1	Cartridge, Counterbalance	
1	2900770	1	Seal Kit - 4640771 Cartridge	
2	4640709	1	Cartridge, Vented Counterbalance	
2	2900770	1	Seal Kit - 4640709 Cartridge	
3	3790113	2	O-Ring (Between Valve and Cylinder Block)	

SECTION 7 - HYDRAULIC

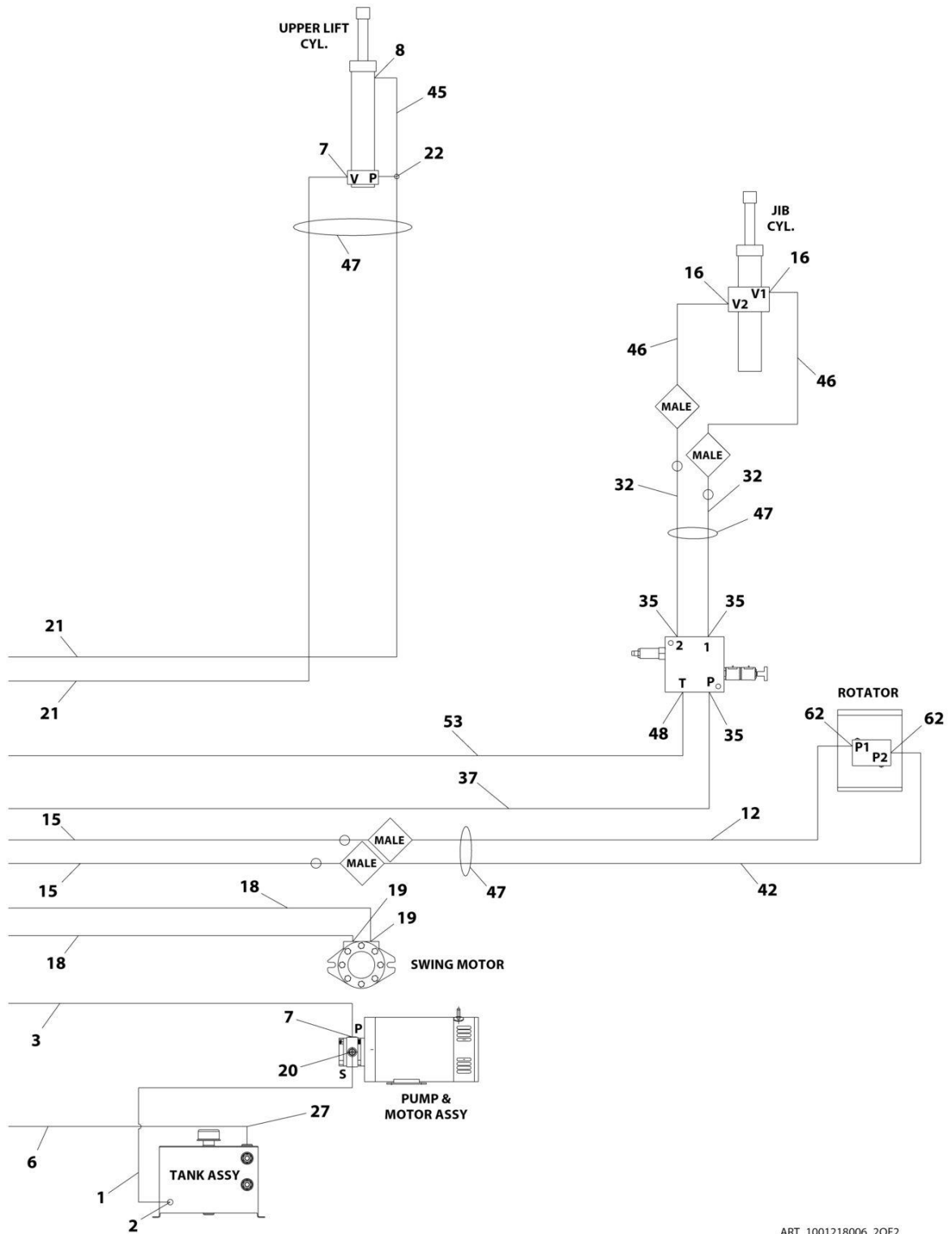
SECTION 7 - HYDRAULIC

FIGURE 7-1. HYDRAULIC DIAGRAM - E450AJ



ART_1001218006_10F2

SECTION 7 - HYDRAULIC



ART_1001218006_2OF2

SECTION 7 - HYDRAULIC

FIGURE 7-1. HYDRAULIC DIAGRAM - E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001218006	Ref	HYDRAULIC DIAGRAM	E
1	2753973	1	Hose	
2	2220498	1	Fitting, 45 JIC/ORB	
3	1001152635	1	Hose	
4	2750915	1	Hose	
5	1001177666	1	Hose	
6	2752467	1	Hose	
7	2220371	4	Fitting, Straight JIC/ORB	
8	2220473	9	Fitting, 90 JIC/ORB	
9	2220885	1	Plug	
10	2752453	2	Hose	
11	2220507	1	Fitting, 90 JIC/JIC	
12	2753638	1	Hose	
13	2220371	1	Fitting, Straight JIC/ORB	
14	2220466	1	Fitting, 90 JIC/ORB	
15	1001185713	2	Hose	
16	2220415	6	Fitting, Straight JIC/ORB	
17	2220502	4	Fitting, 45 JIC/ORB	
18	2752459	2	Hose	
19	2221033	2	Fitting, Straight JIC/ORB	
20	2220593	1	Fitting, Straight JIC/ORB	
21	2753050	2	Hose	
22	2220899	1	Fitting, Tee JIC/ORB/JIC	
23	2752466	1	Hose	
24	2752437	2	Hose	
25	2220472	3	Fitting, 90 JIC/ORB	
26	2750910	1	Hose	
27	2220999	1	Fitting, Tee JIC/ORB/JIC	
28	2753301	1	Hose	
29	2751009	1	Hose	
30	2752611	1	Hose	
31	2220386	1	Fitting, 90 JIC/JIC	
32	2752585	4	Hose	
33	2220504	2	Fitting, Tee JIC/JIC/JIC	
34	2753302	2	Hose	
35	2220582	8	Fitting, Straight JIC/ORB	
36	2221054	1	Fitting, Tee JIC/JIC/JIC	
37	2752442	2	Hose	
38	2750996	1	Hose	
39	2751508	1	Hose	
40	2220501	7	Fitting, 45 JIC/ORB	
41	2220677	1	Fitting, 45 JIC/JIC	
42	1001185826	1	Hose	
43	2750915	1	Hose	
44	2220600	1	Fitting, Straight JIC/ORB	
45	4567946	1	Tube	
46	2753303	2	Hose	
47	4100026	12.2 ft/ 3.7m	Nylon, Sleeve	
48	2220373	1	Fitting, Straight JIC/ORB	

SECTION 7 - HYDRAULIC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
49	1702124	1	Hose, Tag (Not Shown)	
51	2220415	2	Fitting, Straight JIC/ORB	
52	8760554	1	Fitting, Tee ORB/JIC/JIC	
53	2752493	1	Hose	
54	2751414	1	Hose	
56	2752600	1	Hose	
57	2220909	2	Fitting, Restrictor	
60	2220237	3	Plug, ORB	
61	2221086	2	Fitting, Nipple	
62	2220940	2	Fitting, 90 JIC/ORB	

SECTION 7 - HYDRAULIC

FIGURE 7-2. HYDRAULIC DIAGRAM LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: Diagrams are available from JLG Service/Parts Department. See Service and Maintenance Manual for schematics.	
	1001218114	Ref	Hydraulic, Schematic	

SECTION 8 - ELECTRICAL

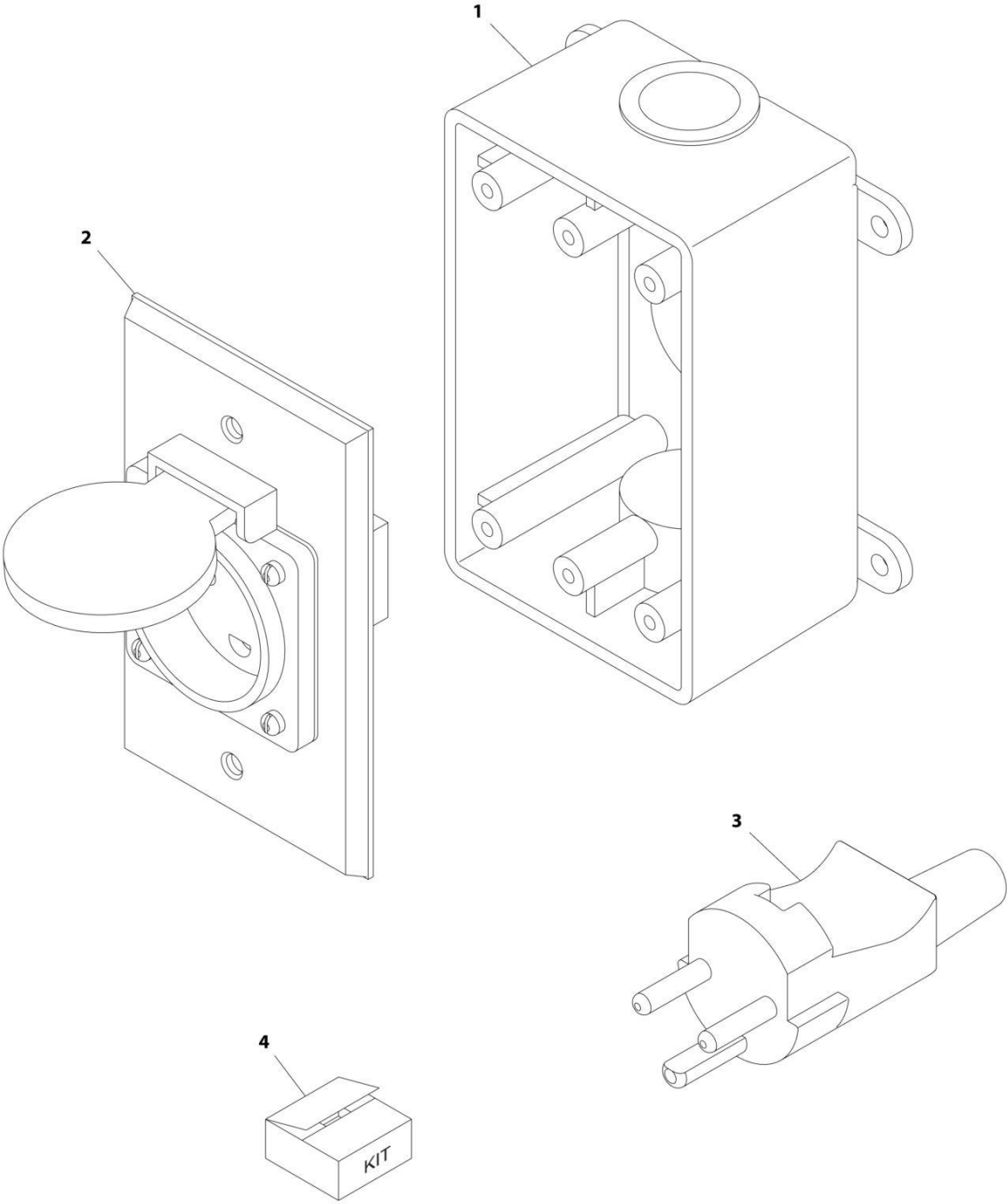
SECTION 8 - ELECTRICAL

FIGURE 8-1. ELECTRICAL DIAGRAM LIST

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: Diagrams are available from JLG Service/Parts Department. See Service and Maintenance Manual for schematics.	
	1001245676	Ref	Electrical Schematic	
	1001193419	Ref	Soft Touch Wiring Diagram	

SECTION 8 - ELECTRICAL

FIGURE 8-2. AC PLUGS AND SOCKETS INSTALLATION - AFSINT 107-2-01 KEYED GROUND - 2 X 4 BOX (CE SPEC)



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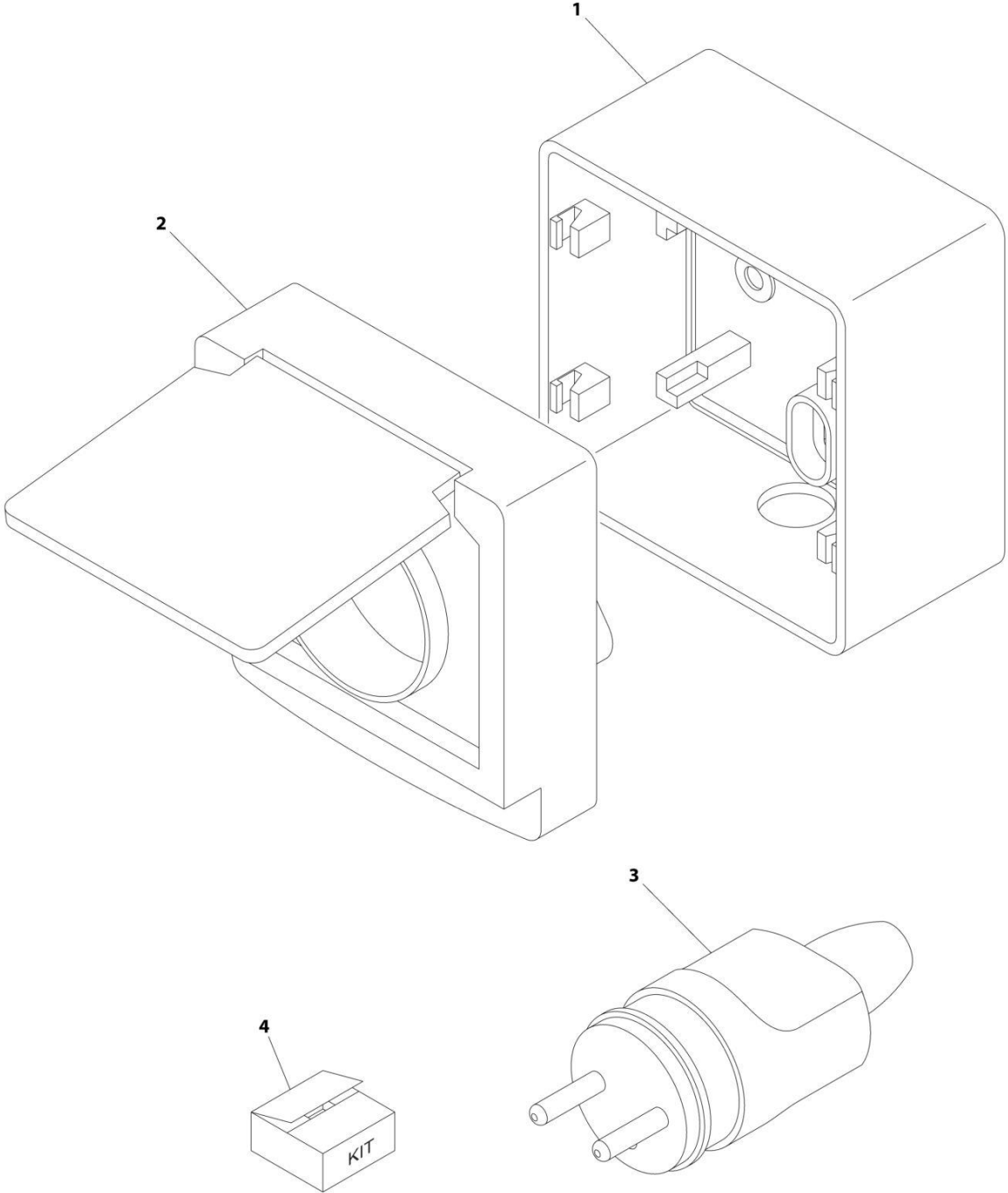
SECTION 8 - ELECTRICAL

FIGURE 8-2. AC PLUGS AND SOCKETS INSTALLATION - AFSINT 107-2-01 KEYED GROUND - 2 X 4 BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275454	Ref	RECEPTACLE BOX KIT - 220V AFSINT 107	B
1	0861731	1	Box, Switch	
2	4461246	1	Receptacle	
3	4461249	1	Plug, Male	
4	1001100346	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461250)	

SECTION 8 - ELECTRICAL

FIGURE 8-3. AC PLUGS AND SOCKETS INSTALLATION - CEE7 POST GROUND (CE SPEC)



ART_0275218

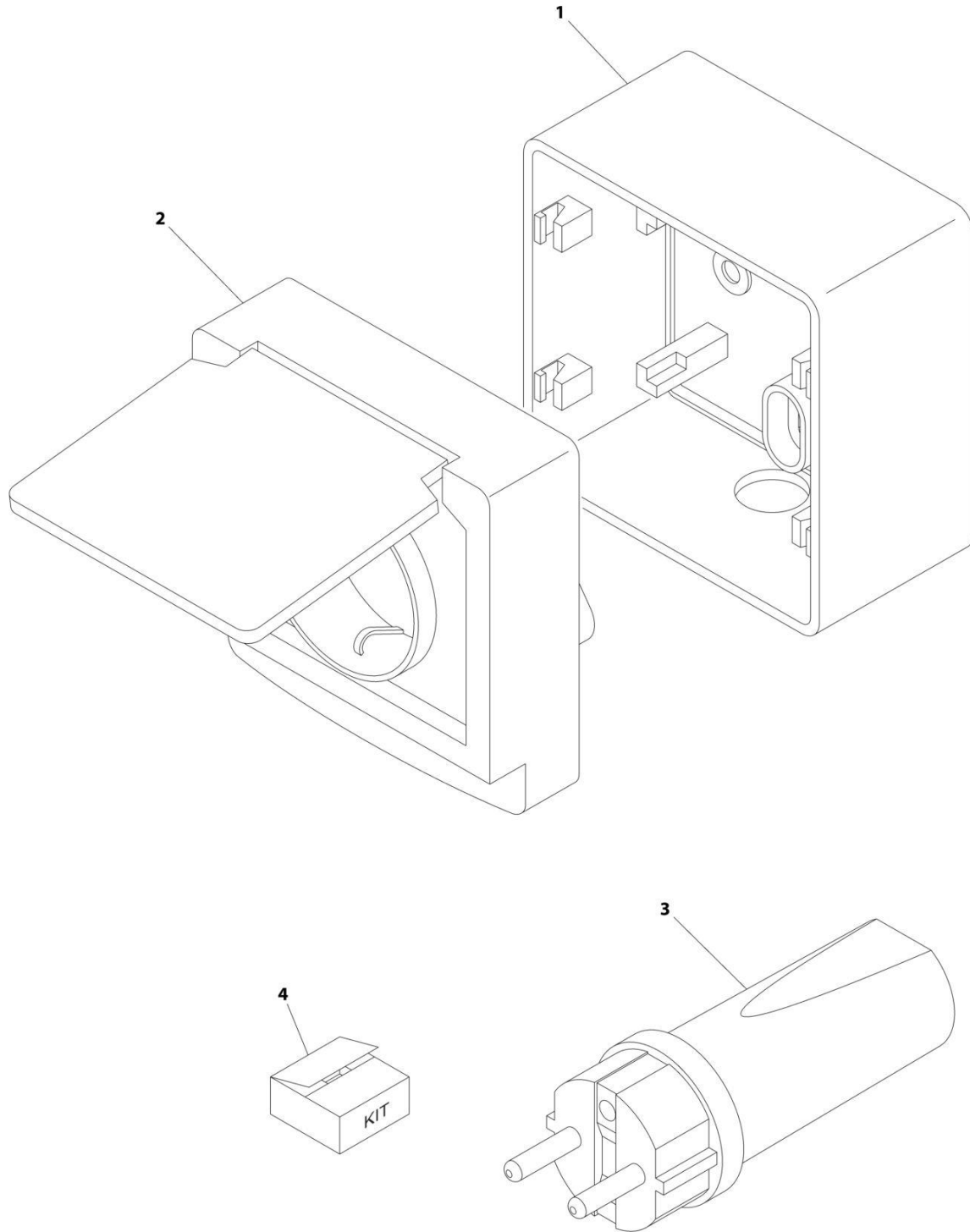
SECTION 8 - ELECTRICAL

FIGURE 8-3. AC PLUGS AND SOCKETS INSTALLATION - CEE7 POST GROUND (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275218	Ref	RECEPTACLE BOX KIT - 220V CEE7 POST GROUND 70X70 BOX	C
1	1001141967	1	Box, Switch	
2	1001141968	1	Receptacle	
3	4461205	1	Plug, Male	
4	1001141971	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461206)	

SECTION 8 - ELECTRICAL

FIGURE 8-4. AC PLUGS AND SOCKETS INSTALLATION - CEE 7 SIDE GROUND (CE SPEC)



ART_0275219

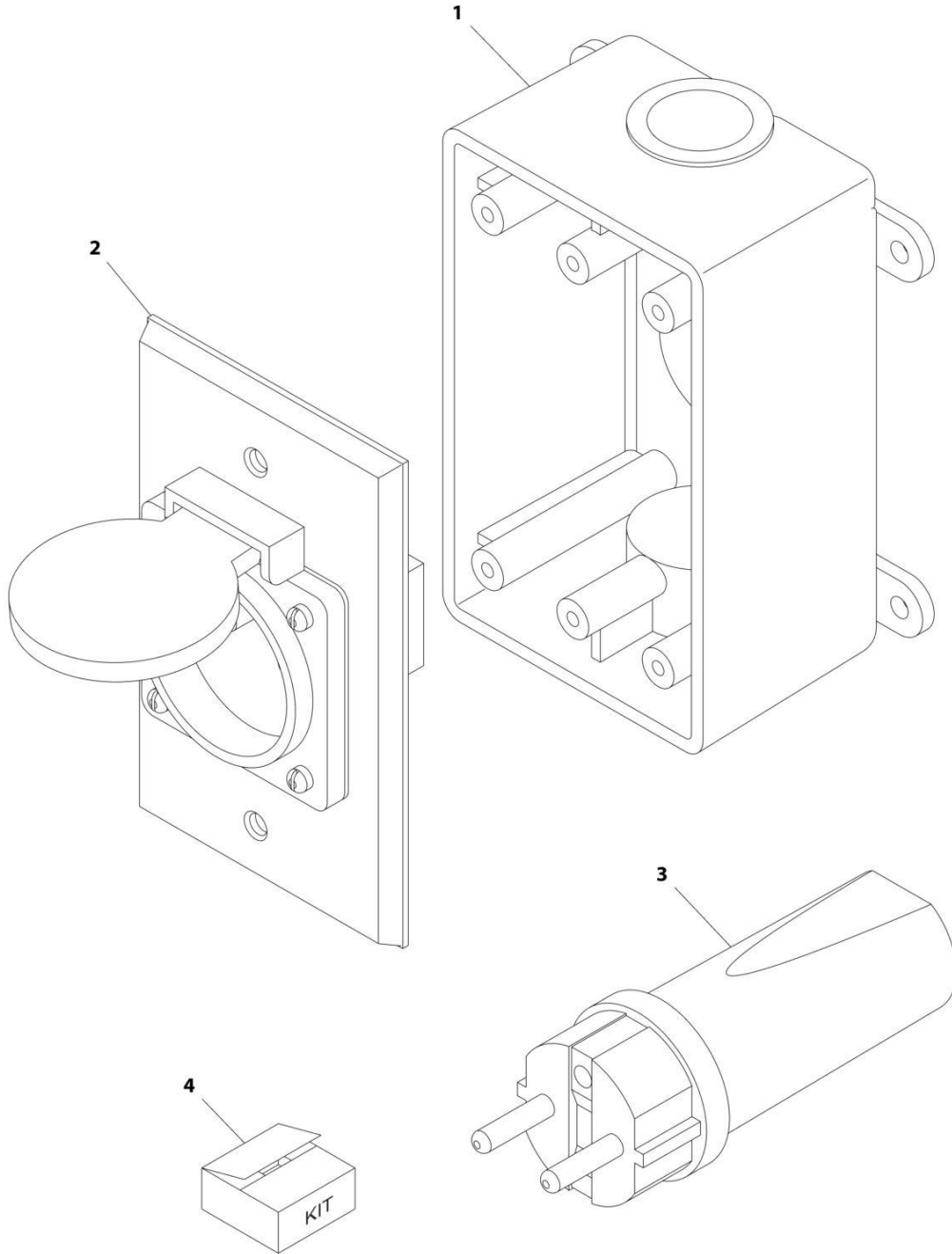
SECTION 8 - ELECTRICAL

FIGURE 8-4. AC PLUGS AND SOCKETS INSTALLATION - CEE 7 SIDE GROUND (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275219	Ref	RECEPTACLE BOX KIT - 220V CEE7 SIDE GROUND 70MM X 70MM BOX	B
1	1001141967	1	Box, Switch	
2	1001141969	1	Receptacle	
3	4461205	1	Plug, Male	
4	1001141970	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461206)	

SECTION 8 - ELECTRICAL

FIGURE 8-5. AC PLUGS AND SOCKETS INSTALLATION - CEE7 POST GROUND - 2 X 4 BOX (CE SPEC)



ART_0275452

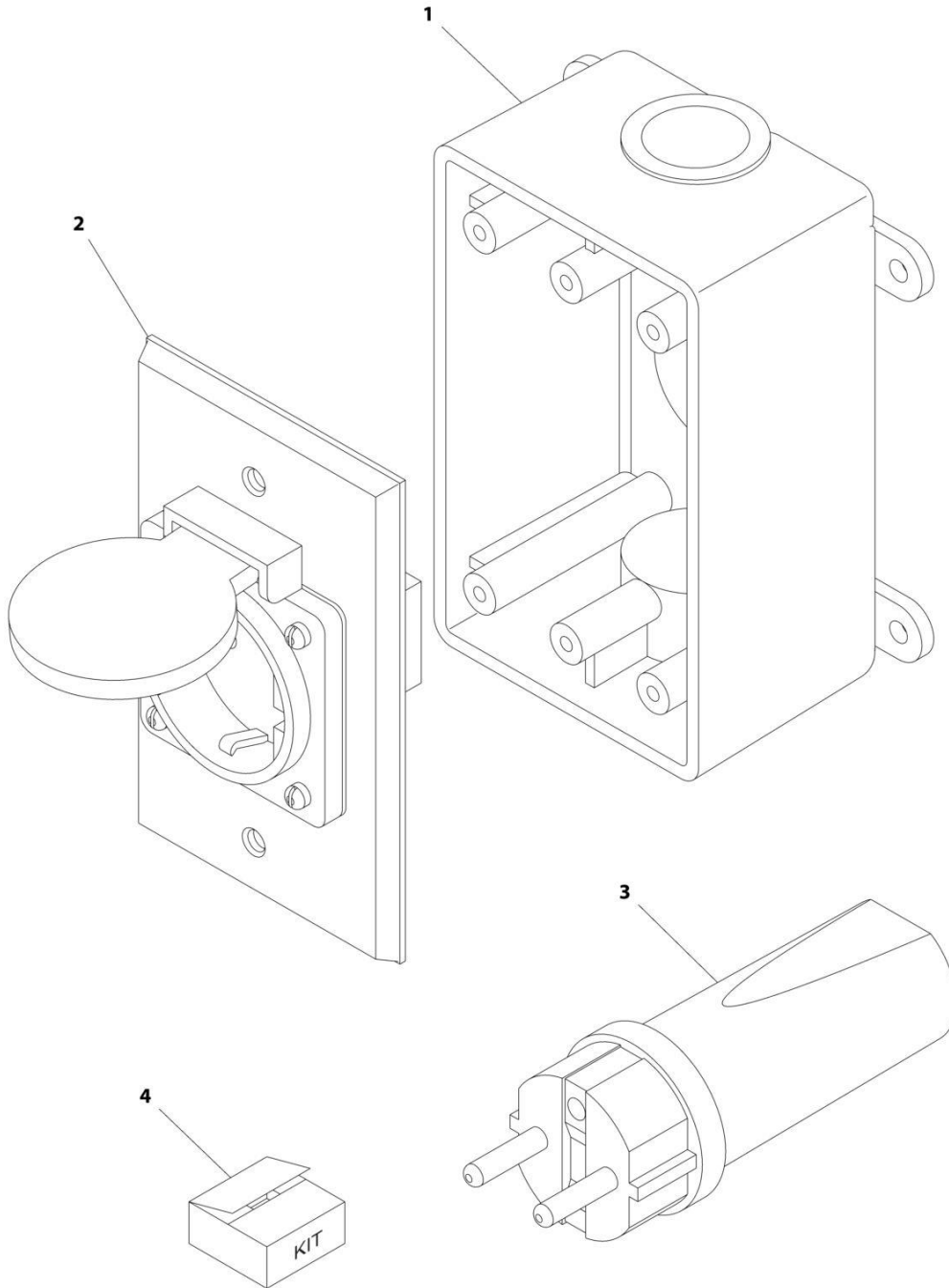
SECTION 8 - ELECTRICAL

FIGURE 8-5. AC PLUGS AND SOCKETS INSTALLATION - CEE7 POST GROUND - 2 X 4 BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275452	Ref	RECEPTACLE BOX KIT - 220V CEE7 POST GROUND	C
1	0861731	1	Box, Switch	
2	4461244	1	Receptacle	
3	4461205	1	Plug, Male	
4	1001100345	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461206)	

SECTION 8 - ELECTRICAL

FIGURE 8-6. AC PLUGS AND SOCKETS INSTALLATION - CEE7 SIDE GROUND - 2 X 4 BOX (CE SPEC)



ART_0275453

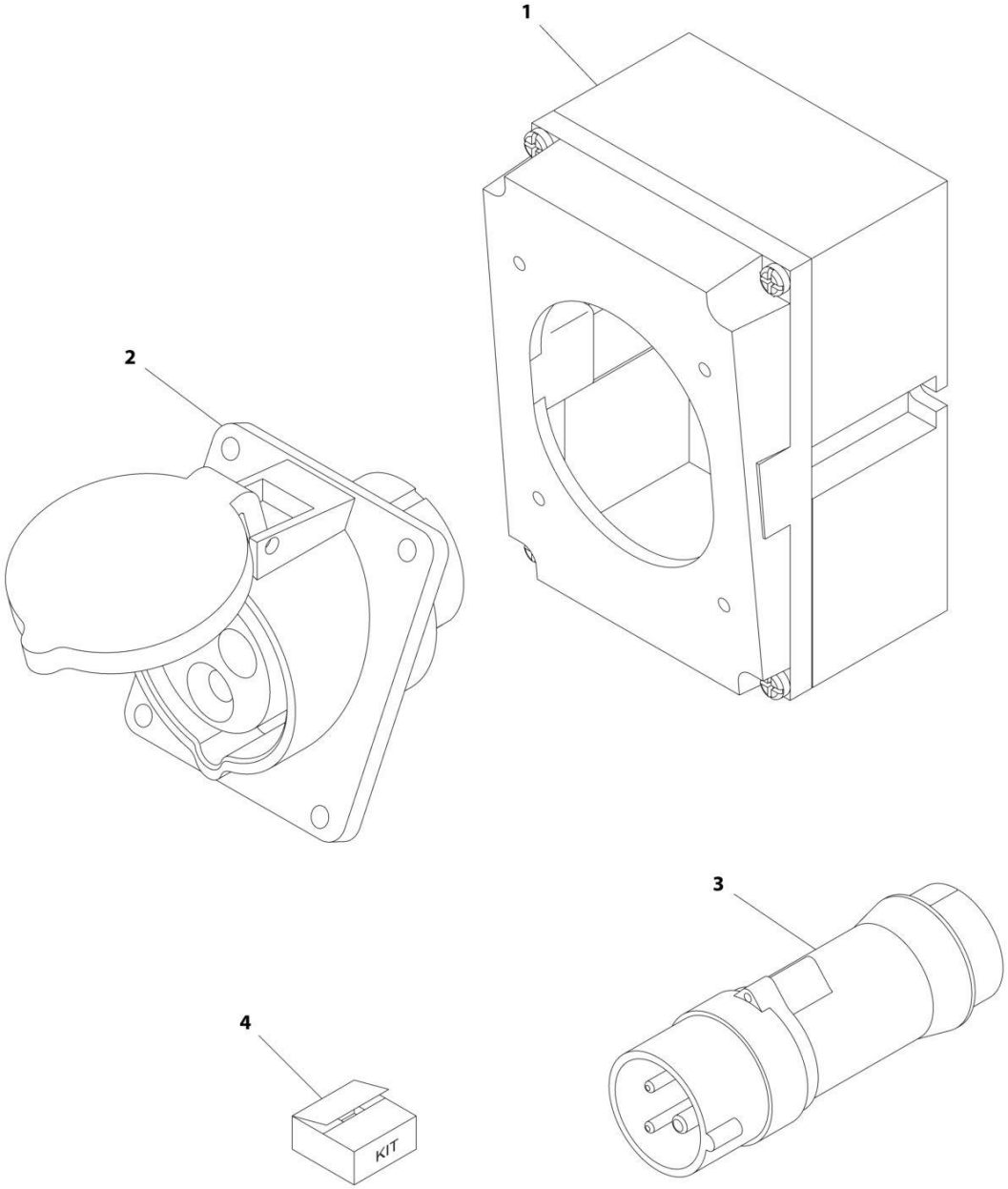
SECTION 8 - ELECTRICAL

FIGURE 8-6. AC PLUGS AND SOCKETS INSTALLATION - CEE7 SIDE GROUND - 2 X 4 BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275453	Ref	RECEPTACLE BOX KIT - 220V CEE7 SIDE GROUND	B
1	0861731	1	Box, Switch	
2	4461245	1	Receptacle	
3	4461205	1	Plug, Male	
4	1001100347	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461206)	

SECTION 8 - ELECTRICAL

FIGURE 8-7. AC PLUGS AND SOCKETS INSTALLATION - IEC 60309 BLUE (CE SPEC)



ART_0275217

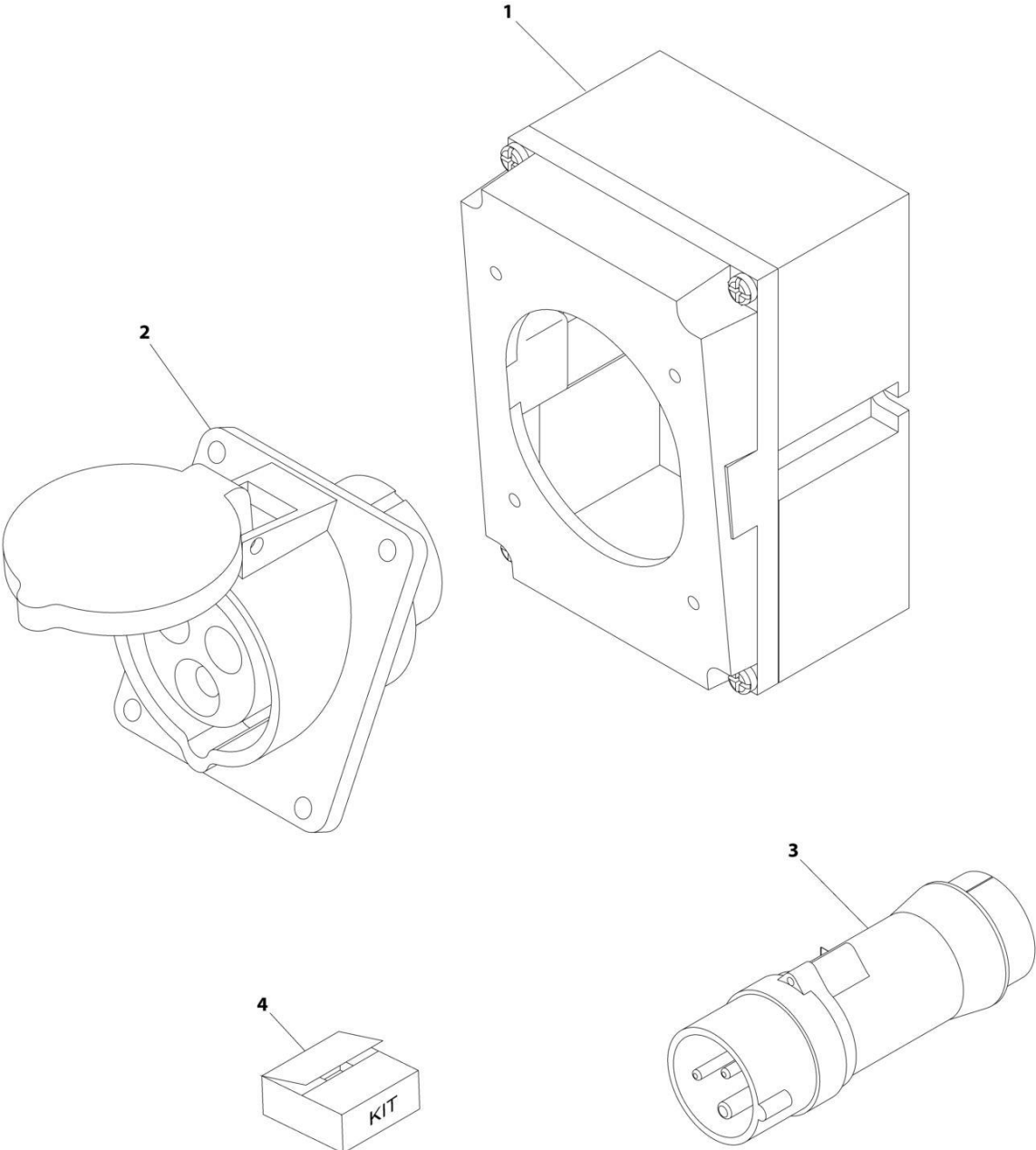
SECTION 8 - ELECTRICAL

FIGURE 8-7. AC PLUGS AND SOCKETS INSTALLATION - IEC 60309 BLUE (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275217	Ref	RECEPTACLE BOX KIT - 220V IEC BLUE	B
1	0861781	1	Box, Switch	
2	4461201	1	Receptacle	
3	4461199	1	Plug, Male	
4	1001100342	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461200)	

SECTION 8 - ELECTRICAL

FIGURE 8-8. AC PLUGS AND SOCKETS INSTALLATION - IEC 60309 YELLOW (CE SPEC)



ART_0275216

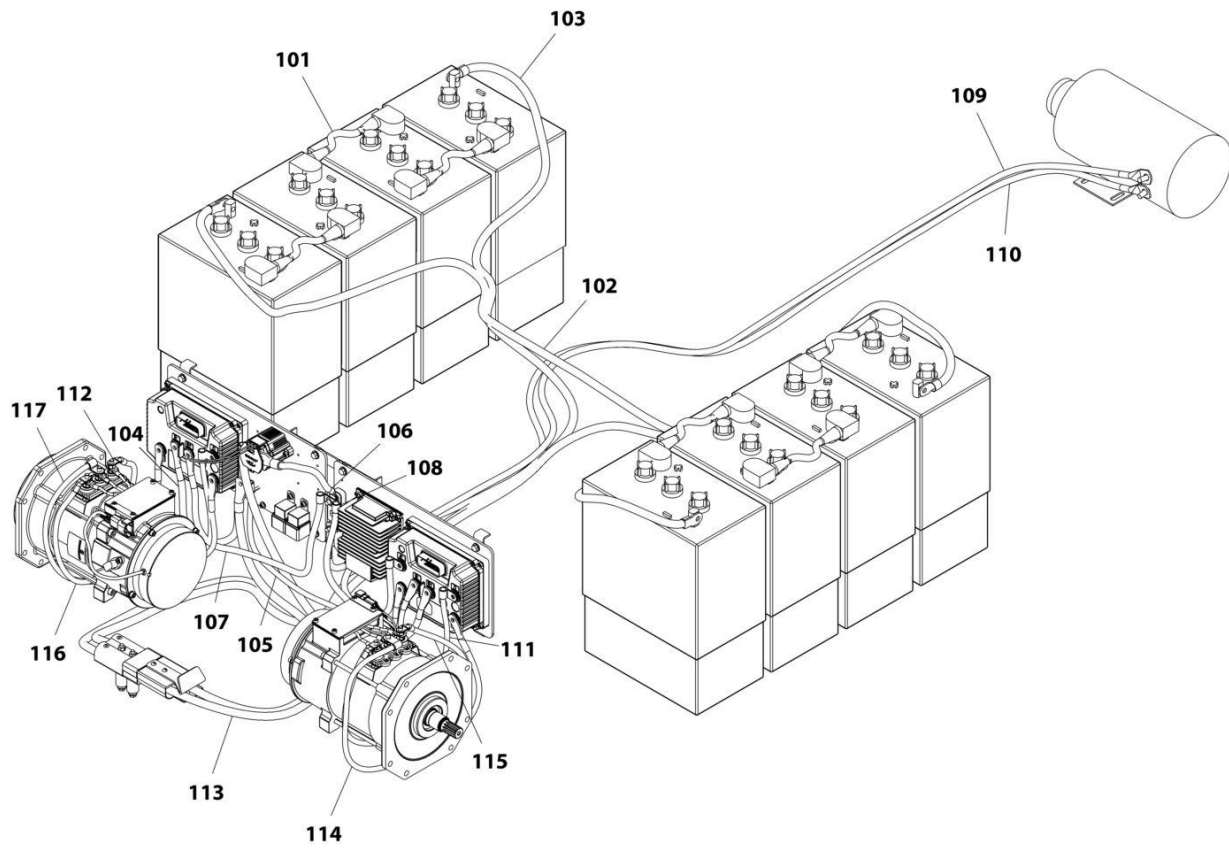
SECTION 8 - ELECTRICAL

FIGURE 8-8. AC PLUGS AND SOCKETS INSTALLATION - IEC 60309 YELLOW (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275216	Ref	RECEPTACLE BOX KIT - 110V IEC YELLOW	B
1	0861781	1	Box, Switch	
2	4461198	1	Receptacle	
3	4461196	1	Plug, Male	
4	1001100341	1	Plug and Socket Kit (Includes Items 1-3 and Female Plug p/n 4461197)	

SECTION 8 - ELECTRICAL

FIGURE 8-9. BATTERY CABLE KIT - E450A AND E450AJ (NON-UL SPECS)



ART_1001190088

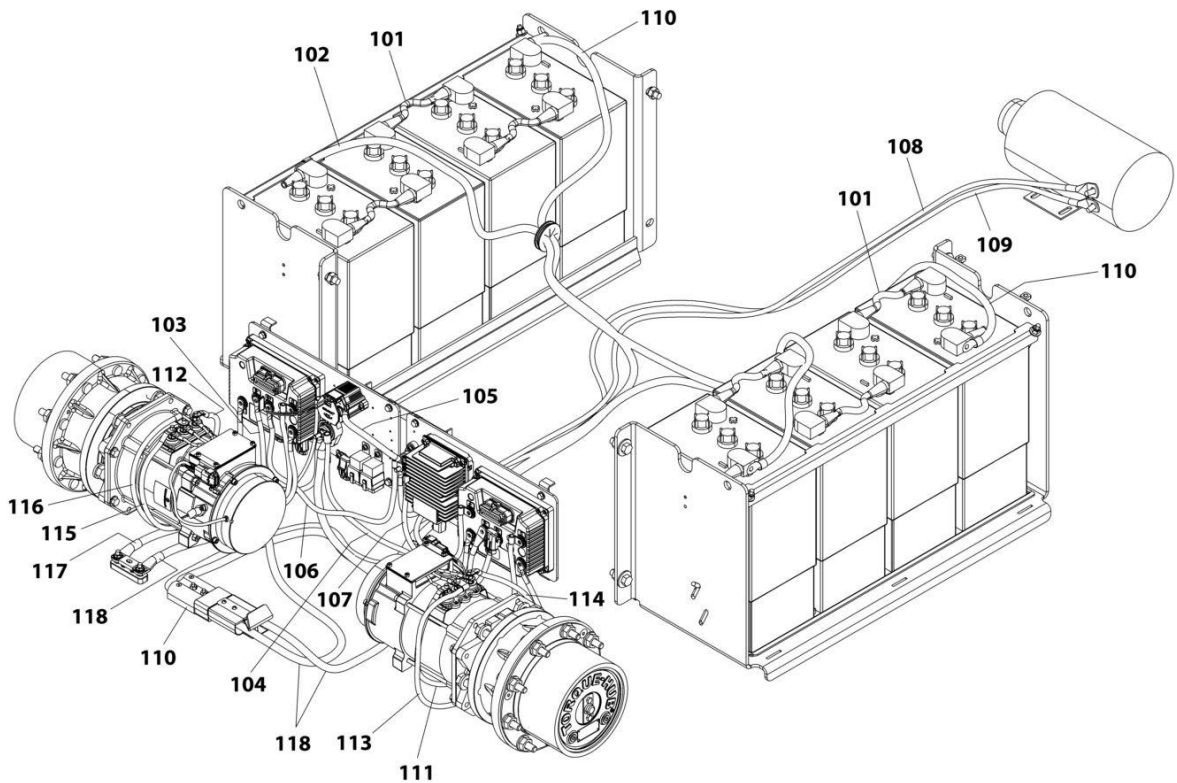
SECTION 8 - ELECTRICAL

FIGURE 8-9. BATTERY CABLE KIT - E450A AND E450AJ (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001190088	Ref	BATTERY CABLE KIT	K
101	1001109833	6	Cable, Battery	
102	1001177245	1	Cable, Interconnect	
103	1001177246	1	Cable, Battery	
104	1001178394	1	Cable, Negative to LH Module	
105	1001178395	1	Cable, Negative to RH Module	
106	1001178396	1	Cable, Positive to Pump Motor Fuse	
107	1001178398	1	Cable, Positive to LH Module	
108	1001178399	1	Cable, Positive to RH Module	
109	1001178400	1	Cable, Pump Motor Positive	
110	1001178401	1	Cable, Pump Motor Negative	
111	1001178402	1	Cable, Motor R U	
112	1001178403	1	Cable, Motor L U	
113	1001178660	1	Cable, Battery	
114	1001189027	1	Cable, Motor R V	
115	1001189030	1	Cable, Motor R W	
116	1001189031	1	Cable, Motor L W	
117	1001189032	1	Cable, Motor L V	

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FIGURE 8-10. BATTERY CABLE KIT - E450A AND E450AJ (UL SPECS)



ART_1001212454

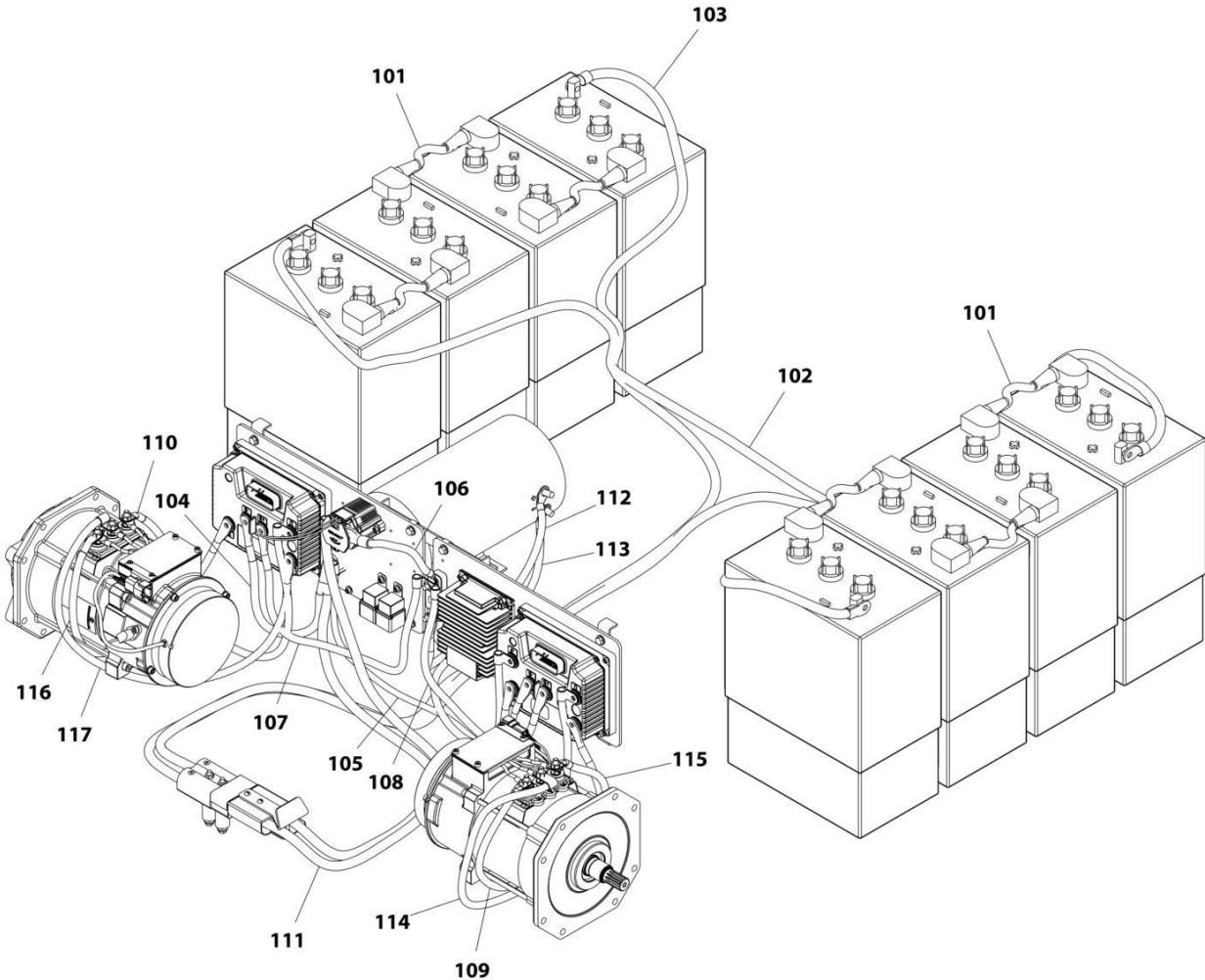
SECTION 8 - ELECTRICAL

FIGURE 8-10. BATTERY CABLE KIT - E450A AND E450AJ (UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001212454	Ref	BATTERY CABLE KIT	F
101	1001109833	6	Cable, Battery	
102	1001177245	1	Cable, Interconnect	
103	1001178394	1	Cable, Negative to LH Module	
104	1001178395	1	Cable, Negative to RH Module	
105	1001178396	1	Cable, Positive to Pump Motor Fuse	
106	1001178398	1	Cable, Positive to LH Module	
107	1001178399	1	Cable, Positive to RH Module	
108	1001178400	1	Cable, Pump Motor Positive	
109	1001178401	1	Cable, Pump Motor Negative	
110	1001177246	1	Cable, Battery	
111	1001178402	1	Cable, Motor R U	
112	1001178403	1	Cable, Motor L U	
113	1001189027	1	Cable, Motor R V	
114	1001189030	1	Cable, Motor R W	
115	1001189031	1	Cable, Motor L W	
116	1001189032	1	Cable, Motor L V	
117	1001212455	1	Cable, Drive Jumper	
118	1001212480	1	Cable, Battery	

SECTION 8 - ELECTRICAL

FIGURE 8-11. BATTERY CABLE KIT - M450AJ (NON-UL SPECS)



ART_1001190020

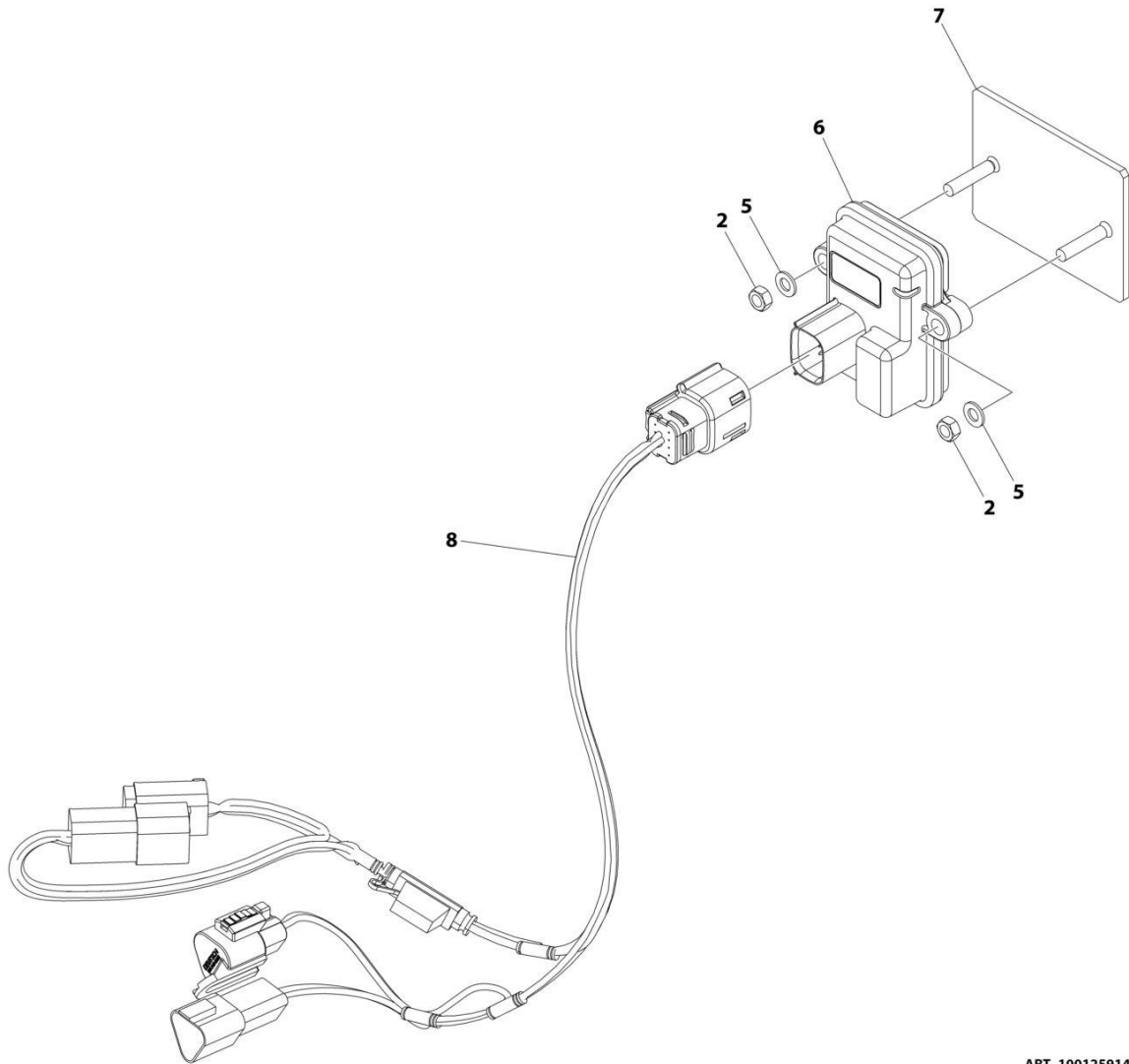
SECTION 8 - ELECTRICAL

FIGURE 8-11. BATTERY CABLE KIT - M450AJ (NON-UL SPECS)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001190020	Ref	BATTERY CABLE KIT	1
101	1060092	1	Cable, Battery	
102	1001177245	1	Cable, Interconnect	
103	1001177246	1	Cable, Battery	
104	1001178394	1	Cable, Negative to LH Module	
105	1001178395	1	Cable, Negative to RH Module	
106	1001178396	1	Cable, Positive to Pump Motor Fuse	
107	1001178398	1	Cable, Positive to LH Module	
108	1001178399	1	Cable, Positive to RH Module	
109	1001178402	1	Cable, Motor R U	
110	1001178403	1	Cable, Motor L U	
111	1001178660	1	Cable, Battery	
112	1001178822	1	Cable, Pump Motor Positive	
113	1001178823	1	Cable, Pump Motor Negative	
114	1001189027	1	Cable, Motor R V	
115	1001189030	1	Cable, Motor R W	
116	1001189031	1	Cable, Motor L W	
117	1001189032	1	Cable, Motor L V	

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FIGURE 8-12. BLUETOOTH MODULE INSTALLATION



ART_1001259149

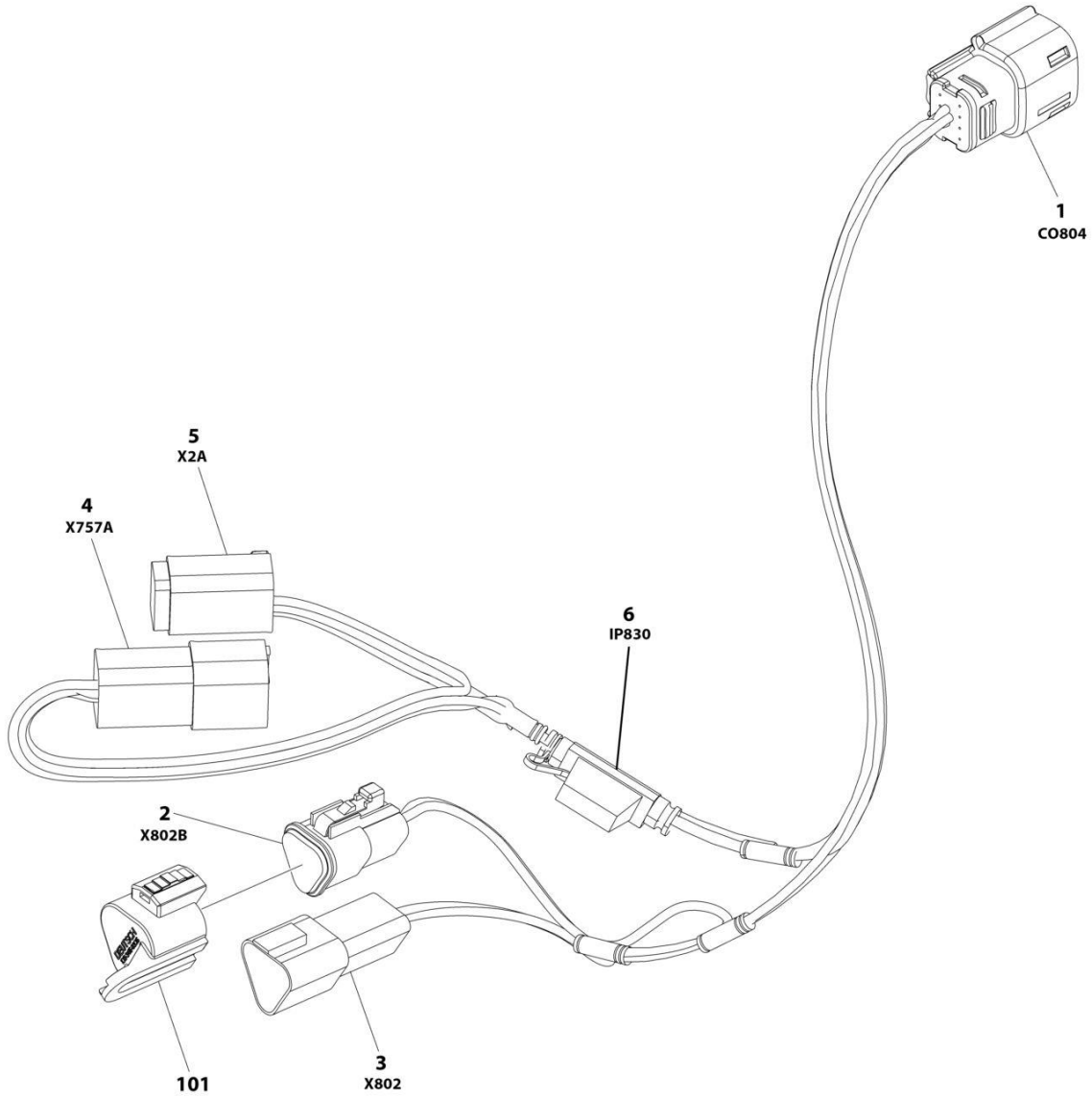
SECTION 8 - ELECTRICAL

FIGURE 8-12. BLUETOOTH MODULE INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001259149	Ref	BLUETOOTH MODULE INSTALLATION	B
2	3290501	2	Nut M5	
5	4811600	2	Washer 5mm	
6	1001245293	1	Module, Bluetooth Control	
7	1001259155	1	Bracket, Module Mounting	
8	1001260414	1	Harness, Bluetooth Module (See Separate Breakdown in this Section)	

SECTION 8 - ELECTRICAL

FIGURE 8-13. BLUETOOTH MODULE HARNESS



ART_1001260414

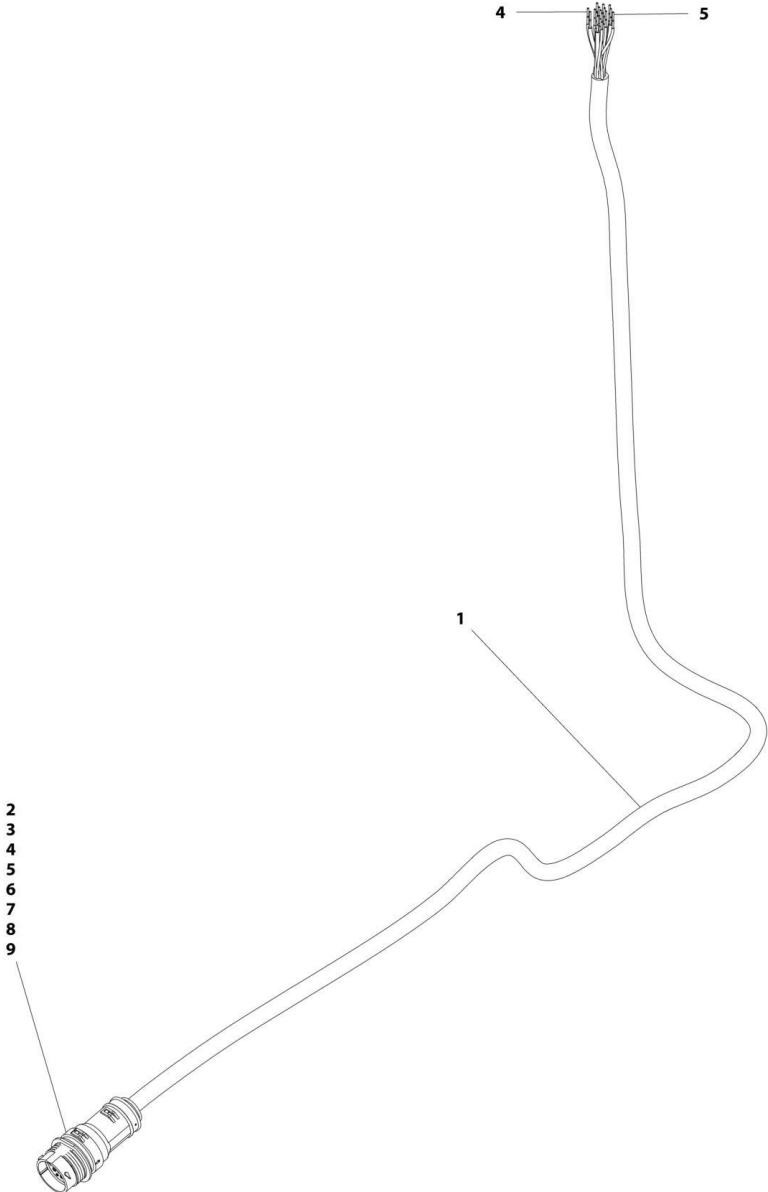
SECTION 8 - ELECTRICAL

FIGURE 8-13. BLUETOOTH MODULE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001260414	Ref	BLUETOOTH MODULE HARNESS	B
1	1001205409	1	Connector	
1	1001162887	4	Terminal	
1	1001163340	4	Plug	
2	1001116812	1	Connector	
2	4460944	2	Socket	
2	4460466	1	Plug	
3	1001144147	1	Connector	
3	4460943	2	Pin	
3	4460466	1	Plug	
4	4460932	1	Connector	
4	4460464	4	Pin	
5	4460884	1	Connector	
5	4460465	4	Socket	
6	2400060	1	Fuse Holder	
6	1001196635	1	Fuse, 3 Amp	
101	1001144296	1	Dust Cap	

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FIGURE 8-14. BOOM CABLE - LOWER - E450A/E450AJ/M450AJ



ART_1001183878

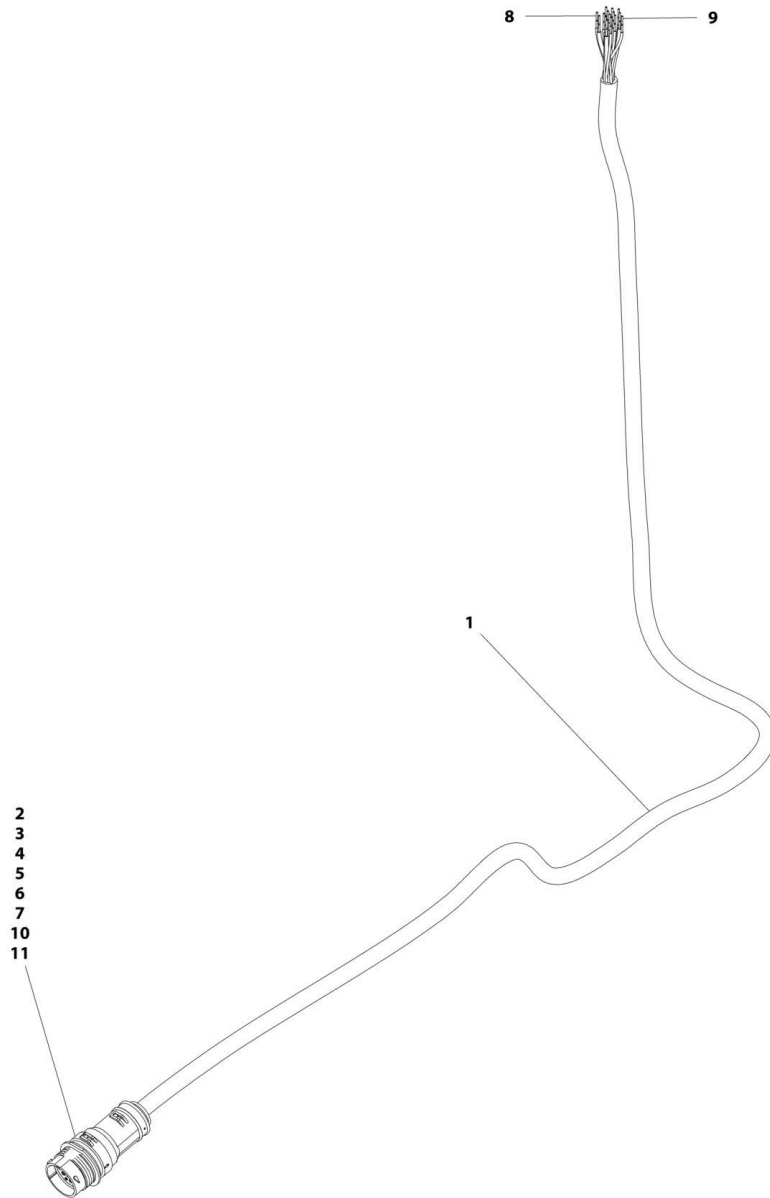
SECTION 8 - ELECTRICAL

FIGURE 8-14. BOOM CABLE - LOWER - E450A/E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	1001183878	Ref	BOOM CABLE - LOWER	E
	1060896	35.5 ft /10.8m	Cable, Electrical	
2	1001188292	1	Connector - 19 Position	
3	1001188291	1	Connector, Backshell	
4	4460465	22	Socket, Female	
5	4460509	8	Socket, Female	
6	4460466	4	Plug, Seal	
7	2820118	6.5 in /16.5cm	Insulator, Tubing	
8	1001188354	1	Grommet	
9	4240033	2	Tie-Strap	

SECTION 8 - ELECTRICAL

FIGURE 8-15. BOOM CABLE - UPPER - E450A



ART_1001183879

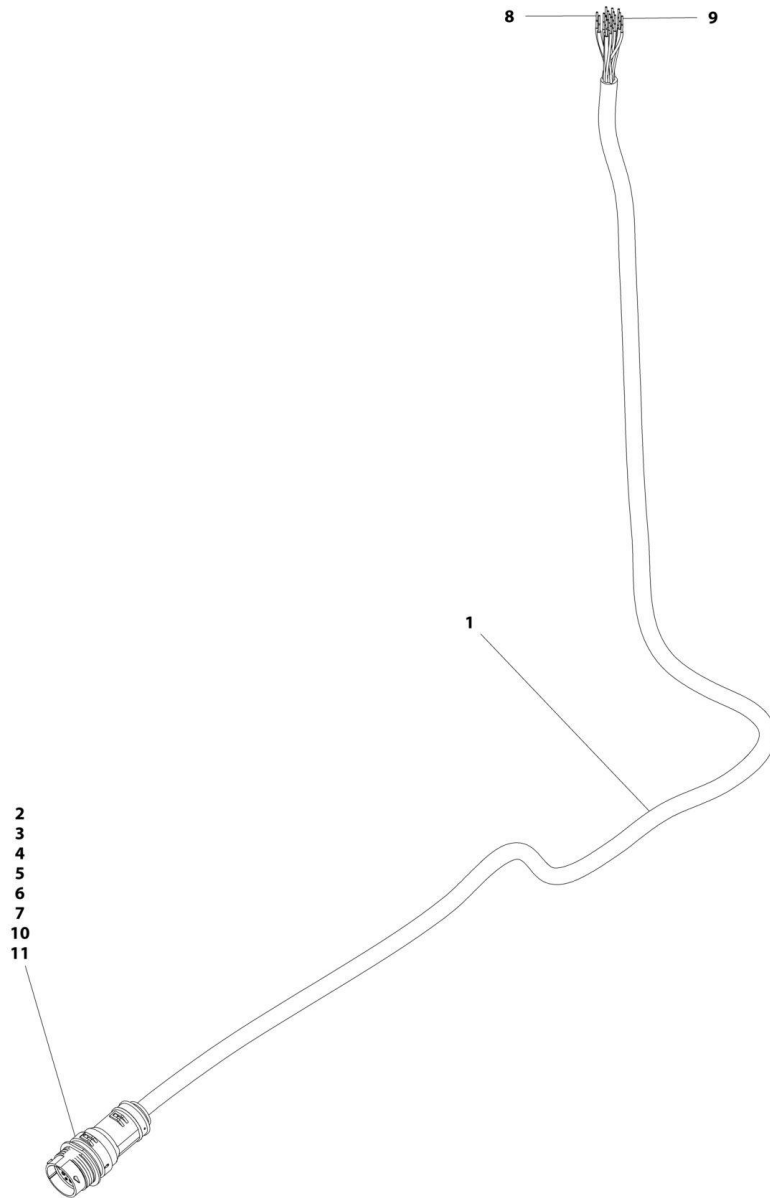
SECTION 8 - ELECTRICAL

FIGURE 8-15. BOOM CABLE - UPPER - E450A

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	1001183876	Ref	BOOM CABLE - UPPER	E
	1060896	26.5 ft /8.1m	Cable, Electrical	
2	1001188293	1	Connector - 19 Position	
3	1001188291	1	Connector, Backshell	
4	4460465	11	Socket, Female	
5	4460509	4	Socket, Female	
6	4460466	4	Plug, Seal	
7	2820118	6.5 in /16.5cm	Insulator, Tubing	
8	4460464	11	Pin, Male	
9	4460508	4	Pin, Male	
10	1001188354	1	Grommet	
11	4240033	2	Tie-Strap	

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FIGURE 8-16. BOOM CABLE - UPPER - E450AJ/M450AJ



ART_1001183879

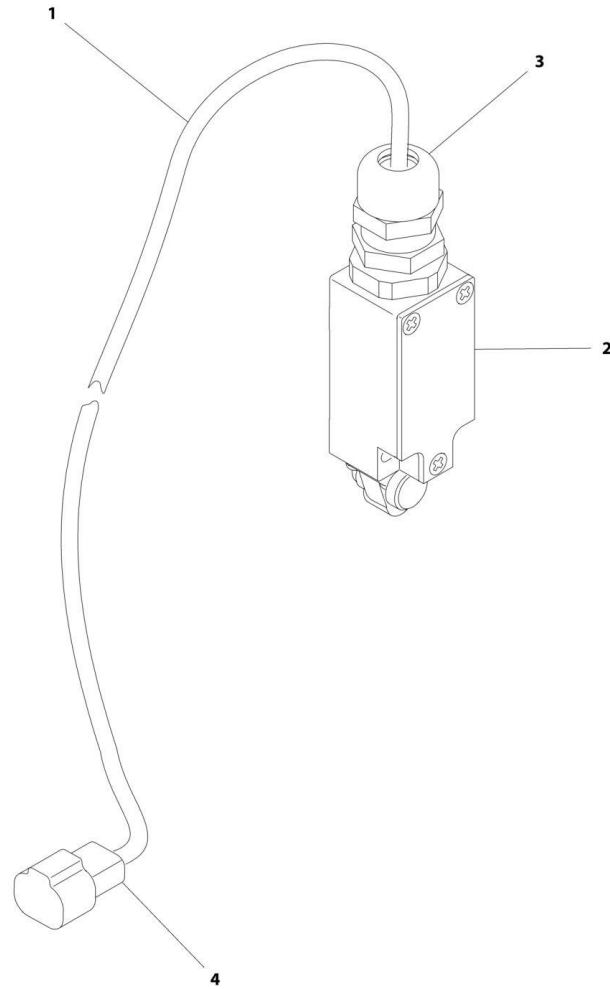
SECTION 8 - ELECTRICAL

FIGURE 8-16. BOOM CABLE - UPPER - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001183879	Ref	BOOM CABLE - UPPER	E
1	1060896	28 ft /8.5m	Cable, Electrical	
2	1001188293	1	Connector - 19 Position	
3	1001188291	1	Connector, Backshell	
4	4460465	11	Socket, Female	
5	4460509	4	Socket, Female	
6	4460466	4	Plug, Seal	
7	2820118	6.5 in /16.5cm	Insulator, Tubing	
8	4460464	11	Pin, Male	
9	4460508	4	Pin, Male	
10	1001188354	1	Grommet	
11	4240033	2	Tie-Strap	

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FIGURE 8-17. BOOM LIMIT SWITCH HARNESS - LOWER



ART_1001187776

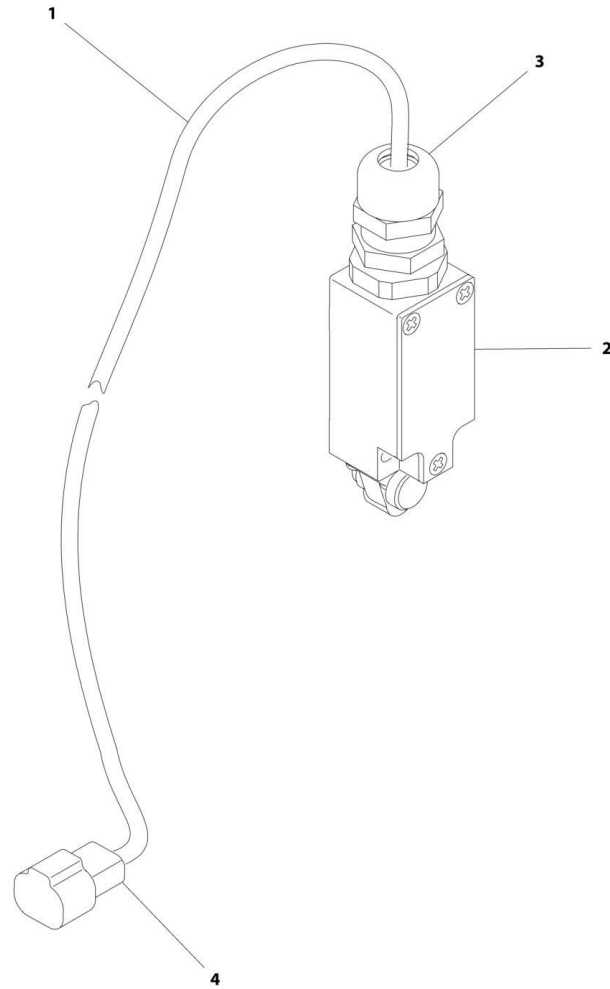
SECTION 8 - ELECTRICAL

FIGURE 8-17. BOOM LIMIT SWITCH HARNESS - LOWER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001187776	Ref	BOOM LIMIT SWITCH HARNESS - LOWER	D
1	1060341	14 ft /4.3m	Cable, Electrical - 16/2	
2	4360548	1	Switch, Limit	
3	4460968	1	Connector, Strain Relief	
4	4460897	1	Connector- 2 Position	
4	4460464	2	Pin, Male	

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FIGURE 8-18. BOOM LIMIT SWITCH HARNESS - UPPER



ART_100118777

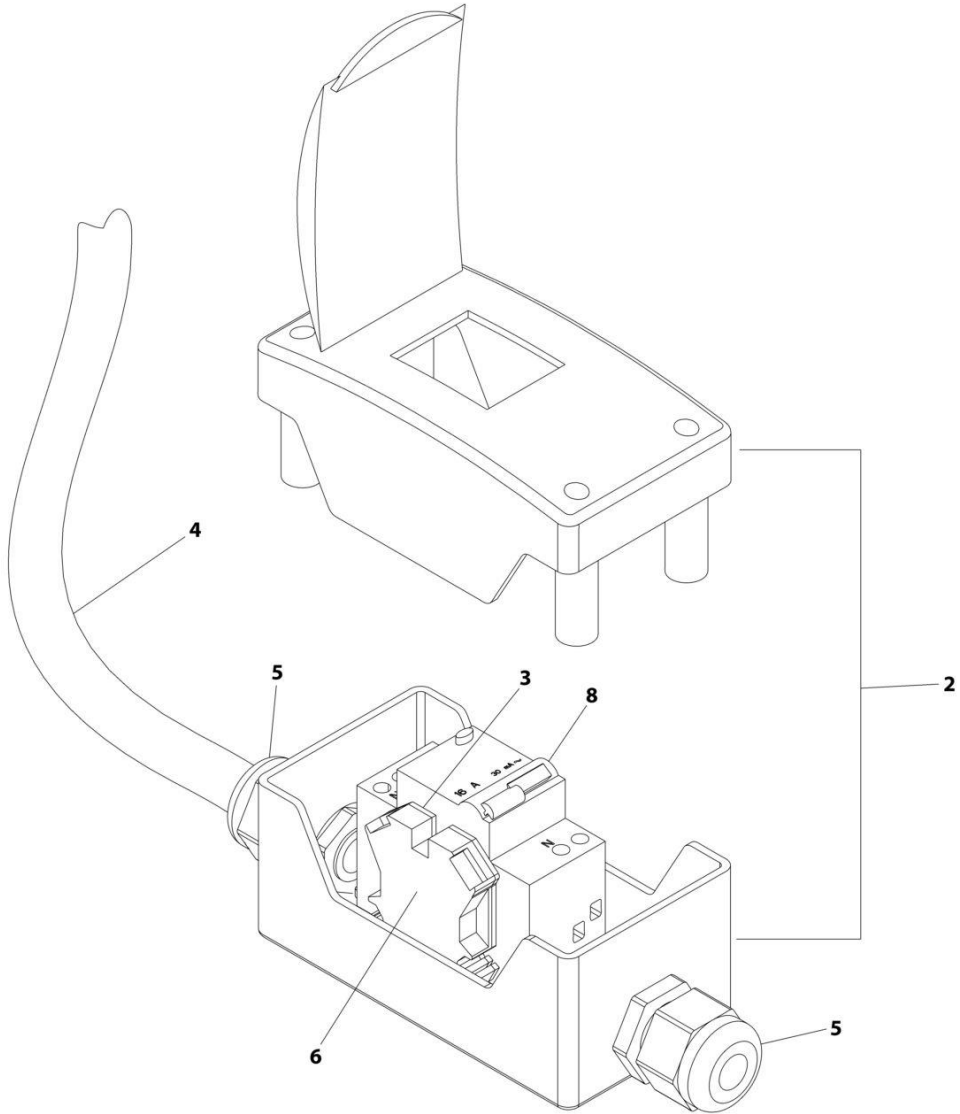
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FIGURE 8-18. BOOM LIMIT SWITCH HARNESS - UPPER

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001187777	Ref	BOOM LIMIT SWITCH HARNESS - UPPER	D
1	1060341	29 ft /8.8m	Cable, Electrical - 16/2	
2	4360548	1	Switch, Limit	
3	4460968	1	Connector, Strain Relief	
4	4460897	1	Connector - 2 Position	
4	4460464	2	Pin, Male	

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FIGURE 8-19. BREAKER BOX KIT WITH ONE BREAKERS - CE SPEC



ART_2902549_F

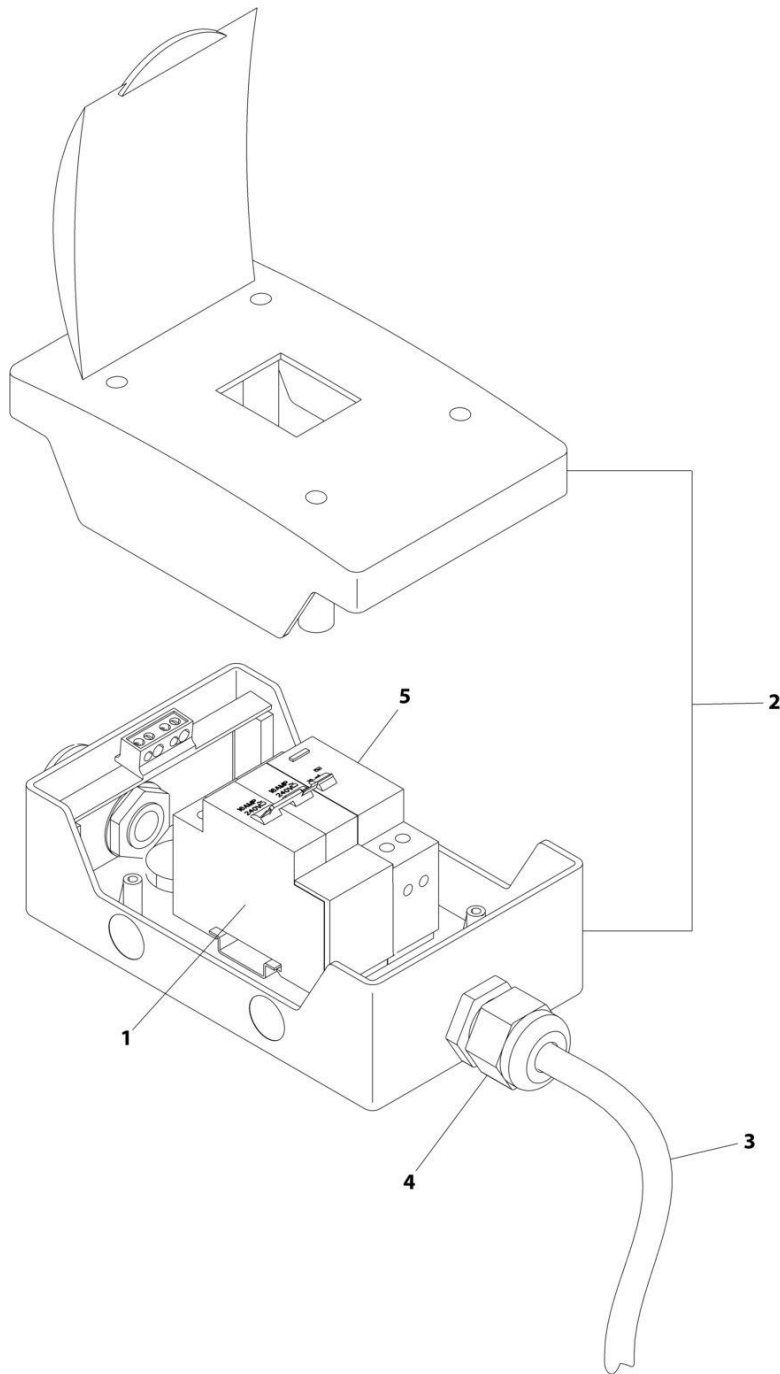
SECTION 8 - ELECTRICAL

FIGURE 8-19. BREAKER BOX KIT WITH ONE BREAKERS - CE SPEC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2902549	Ref	BREAKER BOX KIT	F
2	0861880	1	Box	
3	4460956	1	Barrier, Terminal	
4	1060908	6 ft/1.8m	Cable, 12/3	
5	1001097150	2	Connector, Strain Relief	
6	4460957	1	Block, Terminal	
8	1001181045	1	Breaker, 16Amp	

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FIGURE 8-20. BREAKER BOX KIT WITH TWO BREAKERS - CE SPEC



ART_1001152485_F

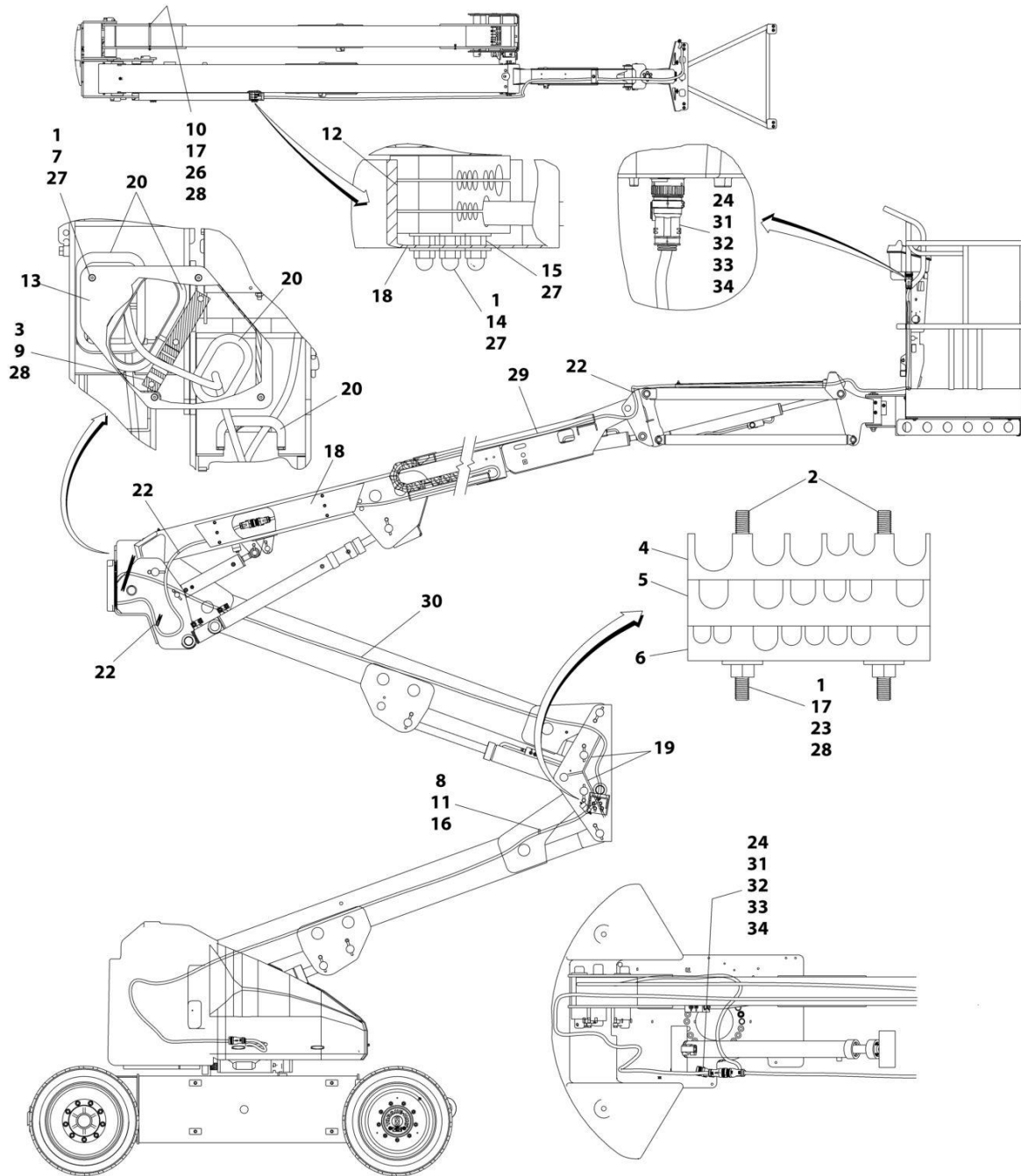
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FIGURE 8-20. BREAKER BOX KIT WITH TWO BREAKERS - CE SPEC

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001152485	Ref	BREAKER BOX KIT WITH TWO BREAKERS	F
1	1001189172	1	Breaker 16Amp Double	
2	1001152483	1	Box	
3	1060908	6 ft/1.8m	Cable, 12/3	
4	1001097150	2	Connector, Strain Relief	
5	1001189171	1	Breaker, 30mA	

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FIGURE 8-21. CABLES AND CLAMPS INSTALLATION - E450AJ/M450AJ



ART_1001183528

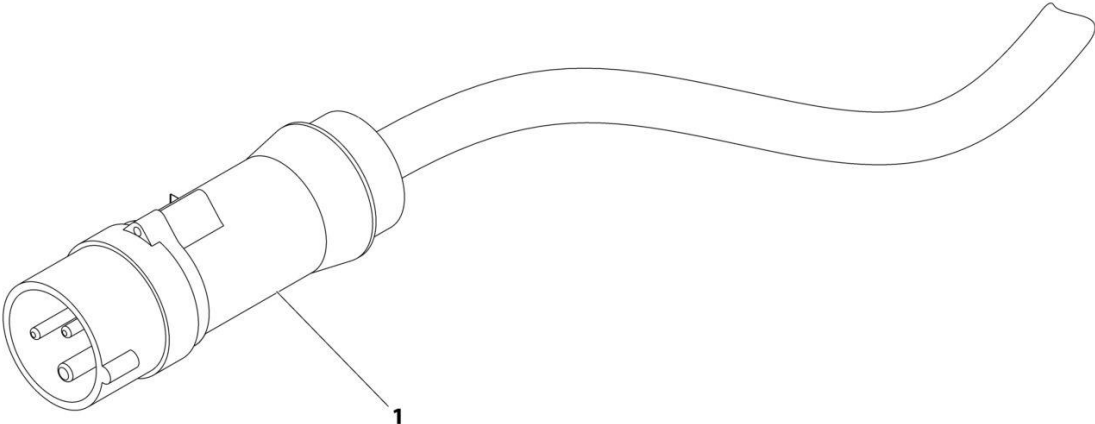
SECTION 8 - ELECTRICAL

FIGURE 8-21. CABLES AND CLAMPS INSTALLATION - E450AJ/M450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001183528	Ref	CABLES AND CLAMPS INSTALLATION	E
1	0100011	AR	Compound, Locking	
2	0100019	AR	Compound, Locking	
3	0561317	1	Block, Hose Clamp	
4	0561384	1	Block, Hose Clamp	
5	0561385	1	Block, Hose Clamp	
6	0561386	1	Block, Hose Clamp	
7	0630467	4	Capscrew, Button 5-16 x 1/2	
8	0641410	1	Bolt 1/4 x 1-1/4	
9	0641514	3	Bolt 5/16 x 1-3/4	
10	0641560	1	Bolt 5/16 x 7-1/2	
11	1320043	1	Clamp, Cable	
12	1320260	2	Block, Hose Clamp	
13	1670697	1	Cover, Hose	
14	3300151	6	Nut 1/4	
15	3311401	6	Nut 1/4	
16	3311405	1	Nut 1/4	
17	3311505	3	Nut 5/16	
18	3571462	1	Shield	
19	4060805	1.5 ft /0.5m	Trim, Flex	
20	4060808	6 ft /1.8m	Trim, Flex	
21	4100067	AR	Sleeve, Hose (Not Shown)	
22	4240099	AR	Tie, Strap	
23	4300140	2	Stud 5/16 x 3-5/8	
24	1001188292	2	Connector - 19 Position	
26	4566243	1	Roller	
27	4751400	16	Washer 1/4	
28	4751500	6	Washer 5/16	
29	1001183879	1	Harness Assembly - Upper Boom (See Separate Breakdown in this Section)	
30	1001183878	1	Harness Assembly - Lower Boom (See Separate Breakdown in this Section)	
31	4240033	AR	Tie-Strap	
32	4460466	8	Terminal	
33	1001188291	2	Connector, Backshell	
34	1001188354	2	Grommet	

SECTION 8 - ELECTRICAL

FIGURE 8-22. CHARGER CORD PLUG INSTALLATION - 110V - IEC 60309 - YELLOW (CE SPEC)



ART_0275666

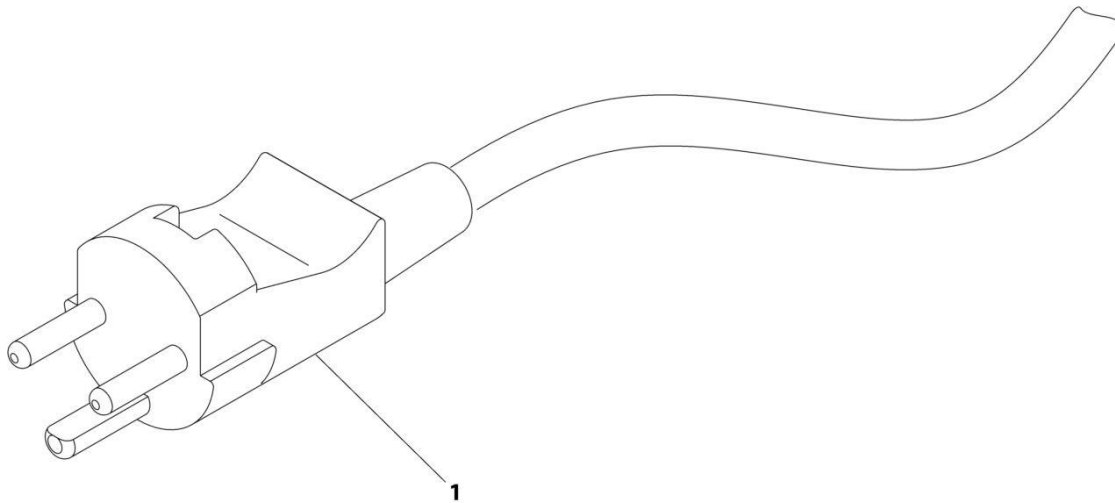
SECTION 8 - ELECTRICAL

FIGURE 8-22. CHARGER CORD PLUG INSTALLATION - 110V - IEC 60309 - YELLOW (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275666	Ref	CHARGER CORD PLUG INSTALLATION - 110V IEC YELLOW	B
1	4461196	1	PLUG Plug	

SECTION 8 - ELECTRICAL

FIGURE 8-23. CHARGER CORD PLUG INSTALLATION - 220V - AFSINT 107 KEYED GROUND (CE SPEC)



ART_0275665

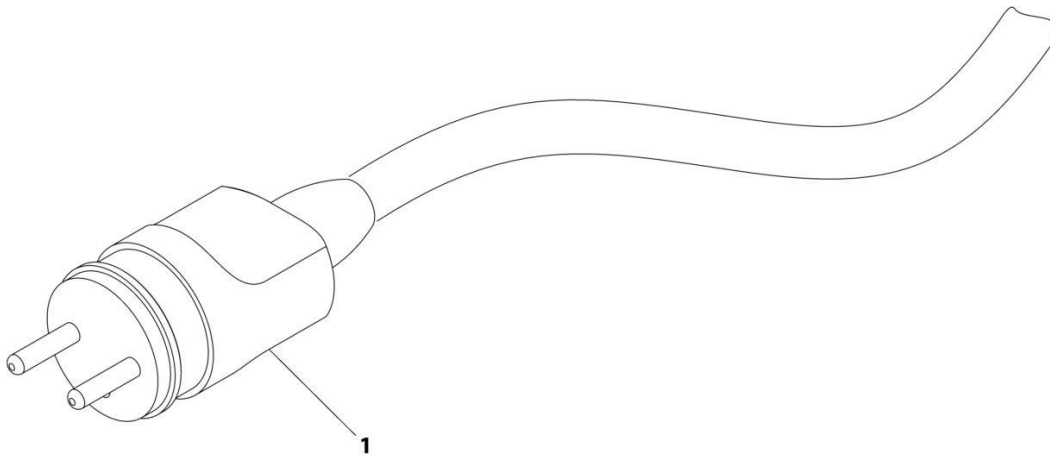
SECTION 8 - ELECTRICAL

FIGURE 8-23. CHARGER CORD PLUG INSTALLATION - 220V - AFSINT 107 KEYED GROUND (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275665	Ref	CHARGER CORD PLUG INSTALLATION - 220V AFSINT 107 KEYED GROUND	B
1	4461249	1	Plug	

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FIGURE 8-24. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 POST GROUND (CE SPEC)



ART_0275663-C

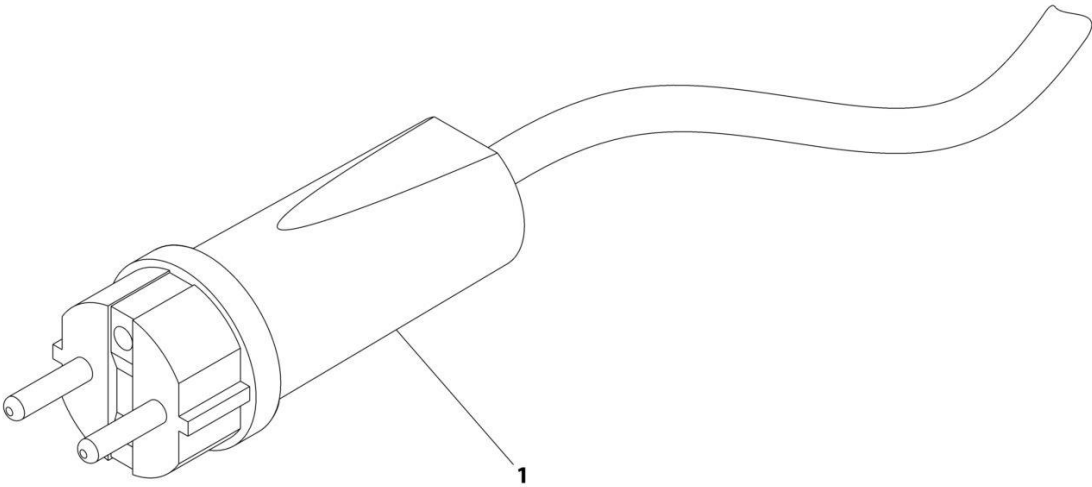
SECTION 8 - ELECTRICAL

FIGURE 8-24. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 POST GROUND (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	0275663 4461205	Ref 1	CHARGER CORD PLUG INSTALLATION - 220V POST GROUND Plug	C

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FIGURE 8-25. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 SIDE GROUND (CE SPEC)



ART_0275664

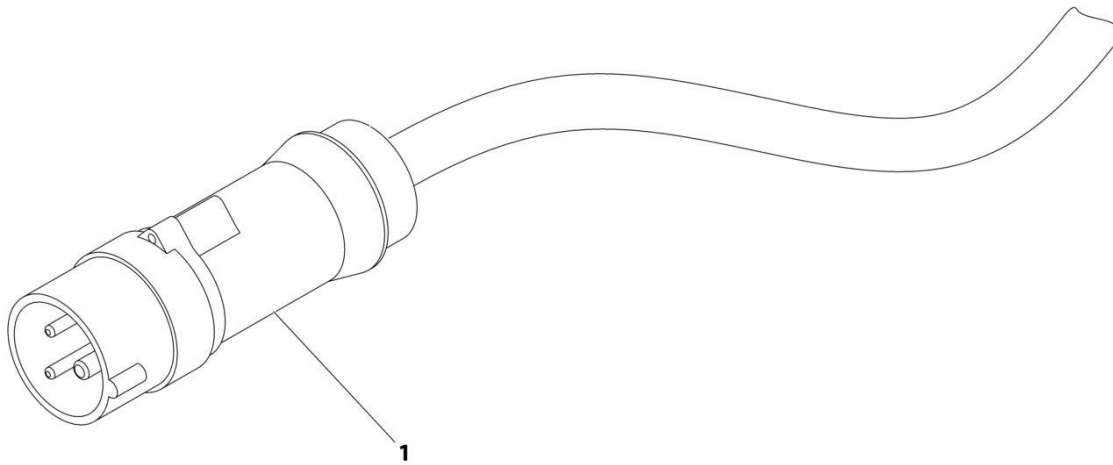
SECTION 8 - ELECTRICAL

FIGURE 8-25. CHARGER CORD PLUG INSTALLATION - 220V - CEE7 SIDE GROUND (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275664	Ref	CHARGER CORD PLUG INSTALLATION - 220V CEE7 SIDE GROUND	A
1	4461205	1	Plug	

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FIGURE 8-26. CHARGER CORD PLUG INSTALLATION - 220V - IEC 60309 - BLUE (CE SPEC)



ART_0275667

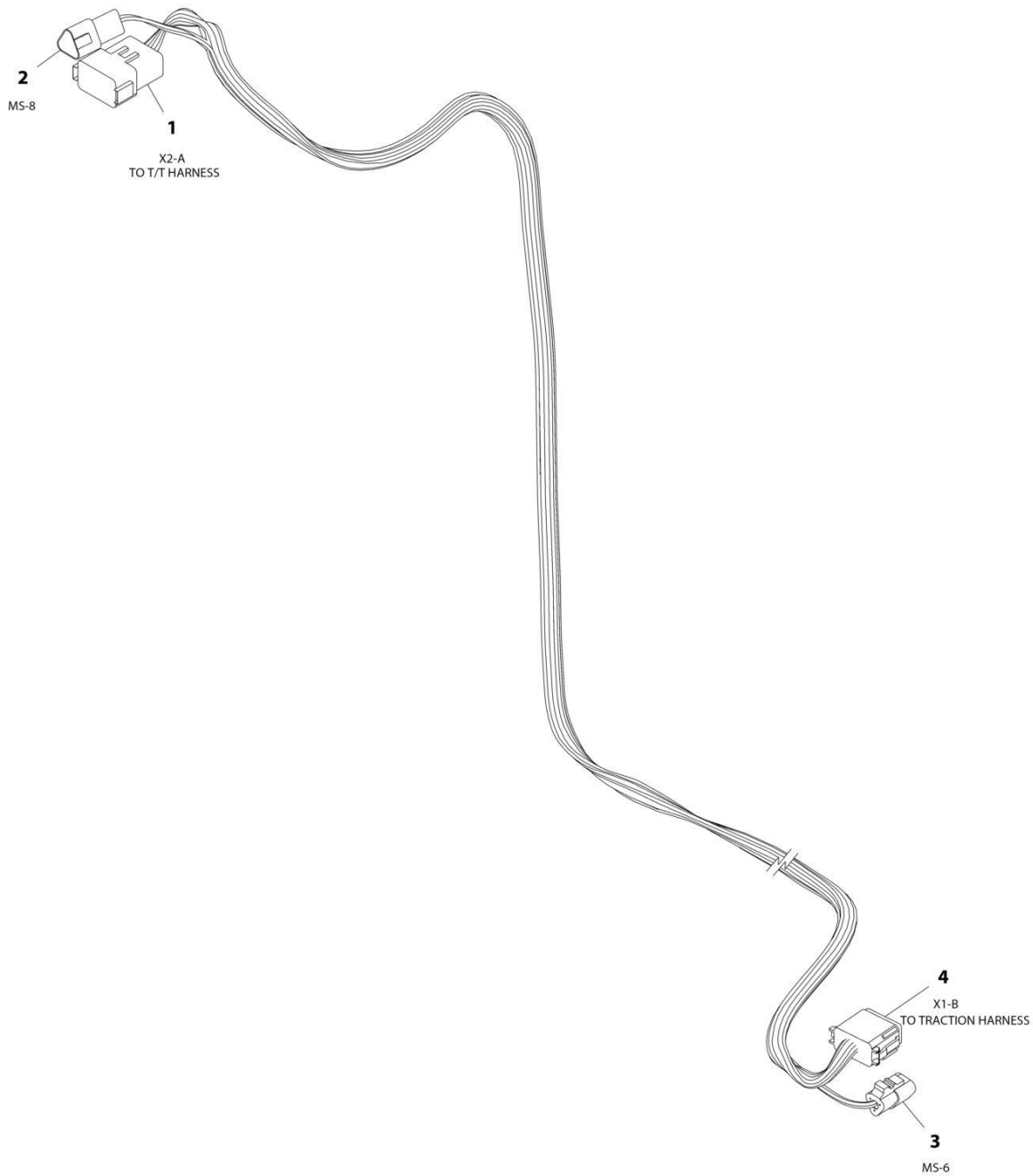
SECTION 8 - ELECTRICAL

FIGURE 8-26. CHARGER CORD PLUG INSTALLATION - 220V - IEC 60309 - BLUE (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	0275667 4461199	Ref 1	CHARGER CORD PLUG INSTALLATION - 220V IEC BLUE PLUG Plug	B

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FIGURE 8-27. CHASSIS TO TURNTABLE HARNESS



ART_1001178405

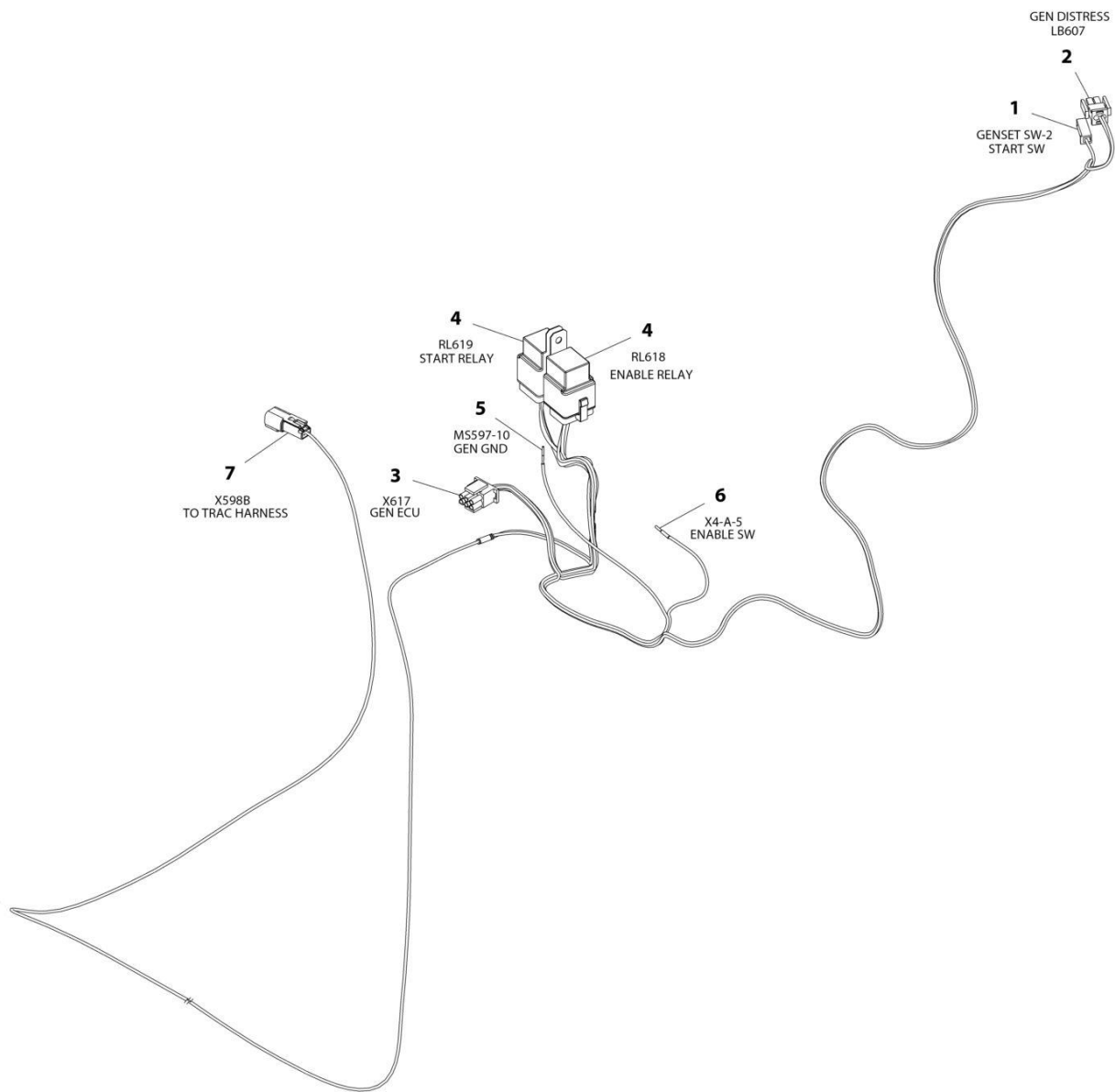
SECTION 8 - ELECTRICAL

FIGURE 8-27. CHASSIS TO TURNTABLE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001178405	Ref	CHASSIS TO TURNTABLE HARNESS	G
1	4460950	1	Connector - 12 Position	
1	1001157891	4	Terminal	
1	4460464	5	Pin, Male	
1	4460941	1	Terminal	
1	4460943	2	Pin, Male	
2	1001144147	1	Receptacle, Female - 3 Position	
2	4460943	3	Pin, Male	
3	4460539	1	Plug, Male - 3 Position	
3	4460944	3	Socket, Female	
4	4460836	1	Connector - 12 Position	
4	1001157890	4	Terminal	
4	4460465	5	Socket, Female	
4	4460942	1	Terminal	
4	4460944	2	Socket, Female	

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FIGURE 8-28. GENERATOR HARNESS



ART_1001192024

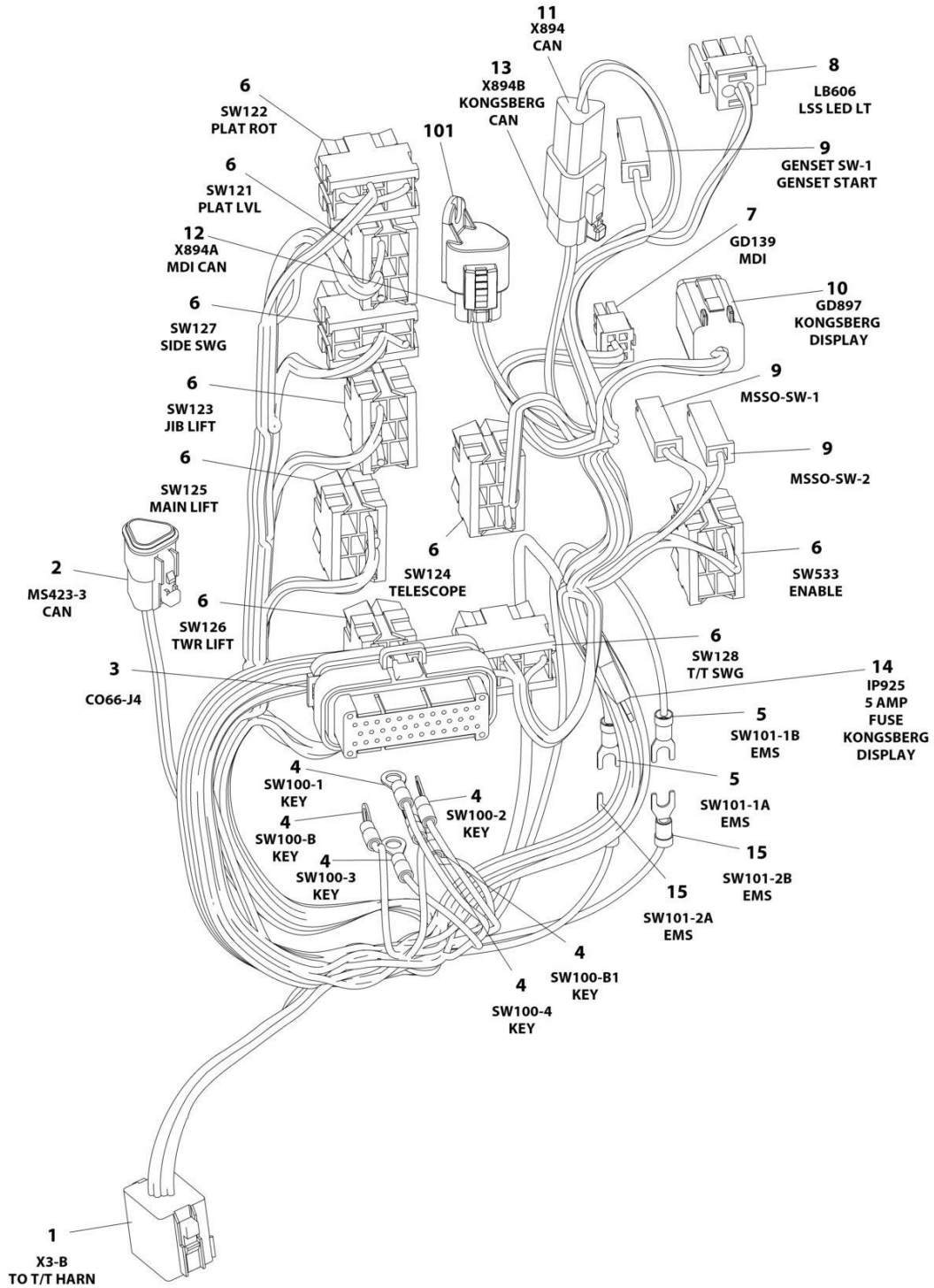
SECTION 8 - ELECTRICAL

FIGURE 8-28. GENERATOR HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001192024	Ref	GENERATOR HARNESS	D
1	4460260	1	Housing, Terminal	
1	4460259	1	Terminal	
2	4460320	1	Plug, Male - 2 Position	
2	4460227	2	Pin, Male	
3	4460225	1	Connector - 6 Position	
3	4460267	5	Pin, Male	
4	3740080	2	Relay	
4	4460374	2	Plug, Relay	
4	1001116733	8	Terminal	
4	1001128128	2	Plug, Terminal	
5	4460465	1	Socket, Female	
6	4460464	1	Pin, Male	
7	4460897	1	Receptacle, Female - 2 Position	
7	4460464	1	Pin, Male	
7	4460466	1	Plug, Terminal	

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FIGURE 8-29. GROUND CONTROL PANEL HARNESS



ART_1001179991

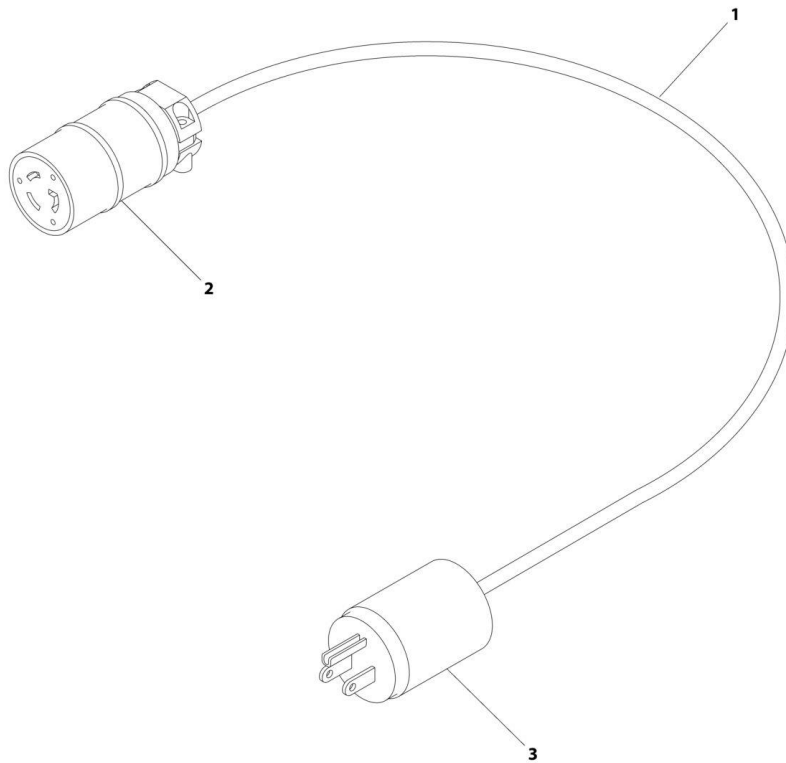
SECTION 8 - ELECTRICAL

FIGURE 8-29. GROUND CONTROL PANEL HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001179991	Ref	GROUND CONTROL PANEL HARNESS	L
1	4460851	1	Connector - 8 Position	
2	1001157890	1	Socket, Female	
4	1001116692	1	Socket, Female	
1	4460465	1	Socket, Female	
1	4460466	1	Plug, Terminal	
2	1001116812	1	Plug, Male - 3 Position	
2	4460944	2	Socket, Female	
2	4460466	1	Plug, Terminal	
3	4460876	1	Connector - 35 Position	
3	4460871	23	Socket, Female	
3	4460905	12	Plug, Terminal	
4	4460313	6	Terminal, Ring	
5	4460806	2	Terminal, Fork	
6	4460418	9	Connector - 6 Position	
6	4460419	18	Terminal	
6	1001159186	17	Terminal	
7	4460868	1	Plug, Male - 6 Position	
7	4460877	4	Terminal	
8	4460320	1	Plug, Male - 2 Position	
8	4460227	2	Pin, Male	
9	4460260	3	Housing, Terminal	
9	4460259	3	Terminal	
10	4460894	1	Connector	
10	4460465	4	Socket, Female	
10	4460466	2	Plug, Terminal	
11	1001144147	1	Connector	
11	4460943	2	Pin, Male	
11	4460466	1	Plug, Terminal	
12	1001116812	1	Connector	
12	4460944	2	Socket, Female	
12	4460466	1	Plug, Terminal	
13	1001116812	1	Connector	
13	4460944	2	Socket, Female	
13	4460466	1	Plug, Terminal	
14	2400060	1	Fuseholder (Includes Cover) (PVC 2201 to Present)	
14	8229242	1	Fuse 5A (PVC 2201 to Present)	
15	4460183	2	Terminal, Fork	
101	1001144296	1	Dust Cap	

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FIGURE 8-30. INVERTER HARNESS



ART_1001182296

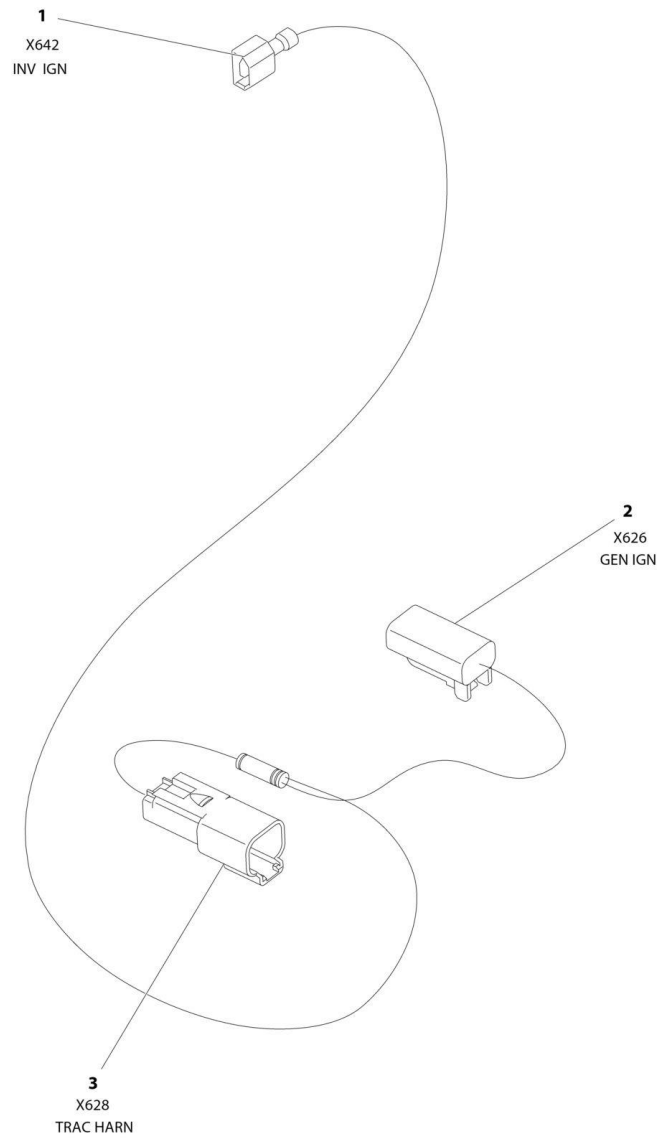
SECTION 8 - ELECTRICAL

FIGURE 8-30. INVERTER HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
1	1001182296 1060494	Ref 115 in /292cm	INVERTER HARNESS Cable, Electrical 12/3	A
2	4460134	1	Connector, Female	
3	4460138	1	Plug, Connector	

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FIGURE 8-31. INVERTER IGNITION HARNESS



ART_1001192293

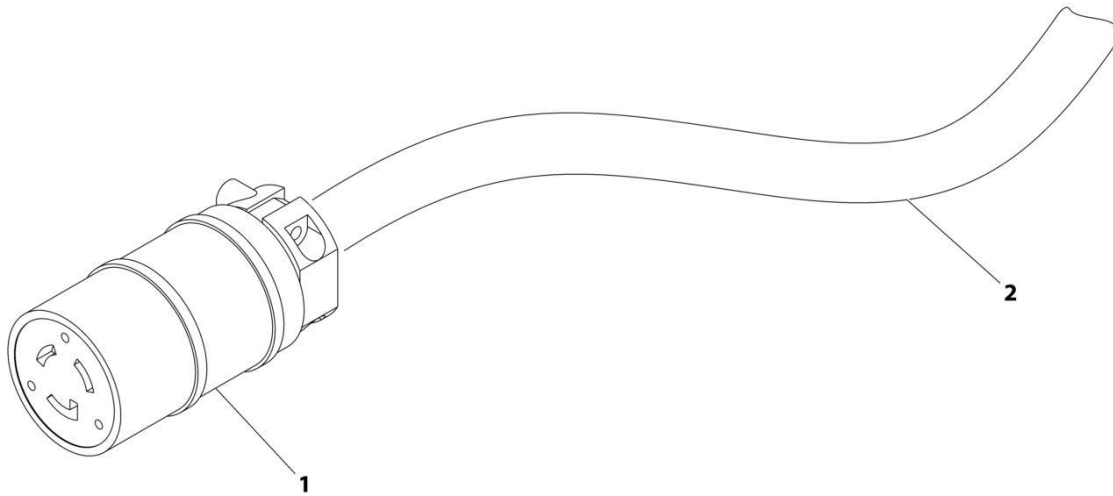
SECTION 8 - ELECTRICAL

FIGURE 8-31. INVERTER IGNITION HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001192293	Ref	INVERTER IGNITION HARNESS	C
1	1001193545	1	Terminal	
2	4460891	1	Plug, Male - 2 Position	
2	4460465	1	Socket, Female	
2	4460466	1	Plug, Terminal	
3	4460897	1	Receptacle, Female - 2 Position	
3	4460464	1	Pin, Male	
3	4460466	1	Plug, Seal	

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FIGURE 8-32. LOWER BOOM 110V HARNESS ASSEMBLY



ART_4922607

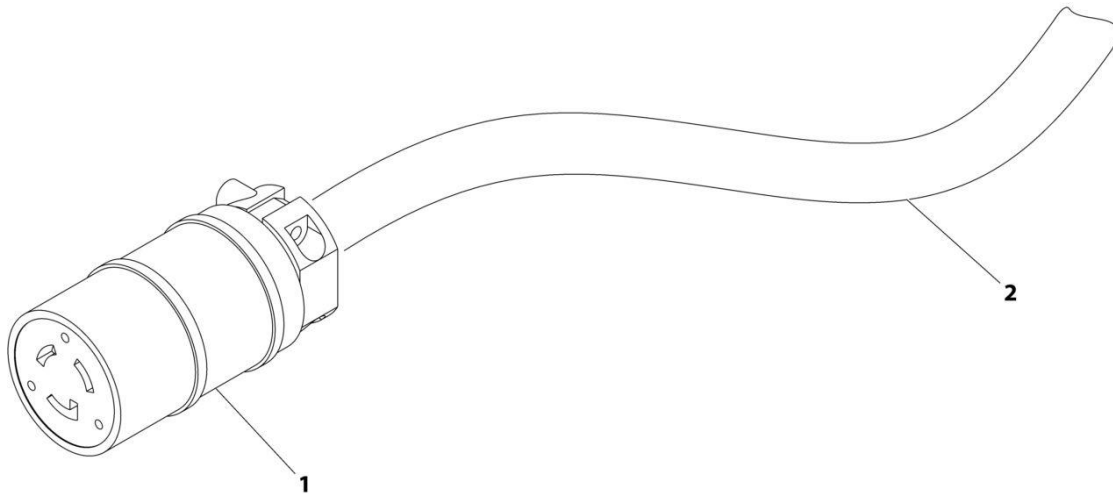
SECTION 8 - ELECTRICAL

FIGURE 8-32. LOWER BOOM 110V HARNESS ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4922607	Ref	LOWER BOOM 110V HARNESS ASSEMBLY	1
1	4460134	1	Connector, Female	
2	1060494	37 ft /11.3m	Electrical Cable, 12/3	

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FIGURE 8-33. LOWER BOOM 220V HARNESS ASSEMBLY



ART_4922609

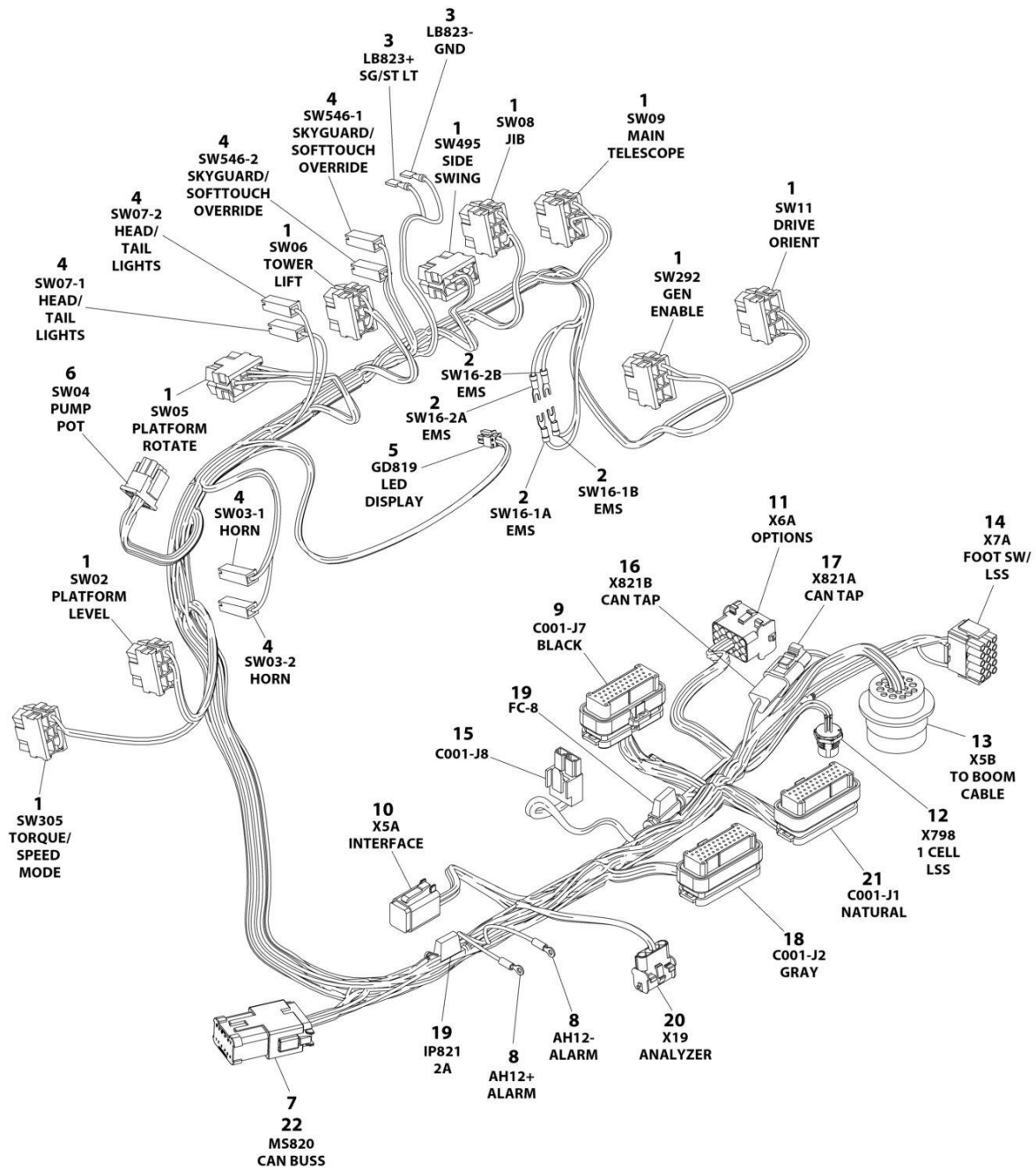
SECTION 8 - ELECTRICAL

FIGURE 8-33. LOWER BOOM 220V HARNESS ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4922609	Ref	LOWER BOOM 220V HARNESS ASSEMBLY - CE SPEC	1
1	4460710	1	Connector, Female	
2	1060461	37 ft /11.3m	Electrical Cable, 12/3	

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FIGURE 8-34. PLATFORM CONSOLE HARNESS - WITH 1 CELL LSS



ART_1001245673

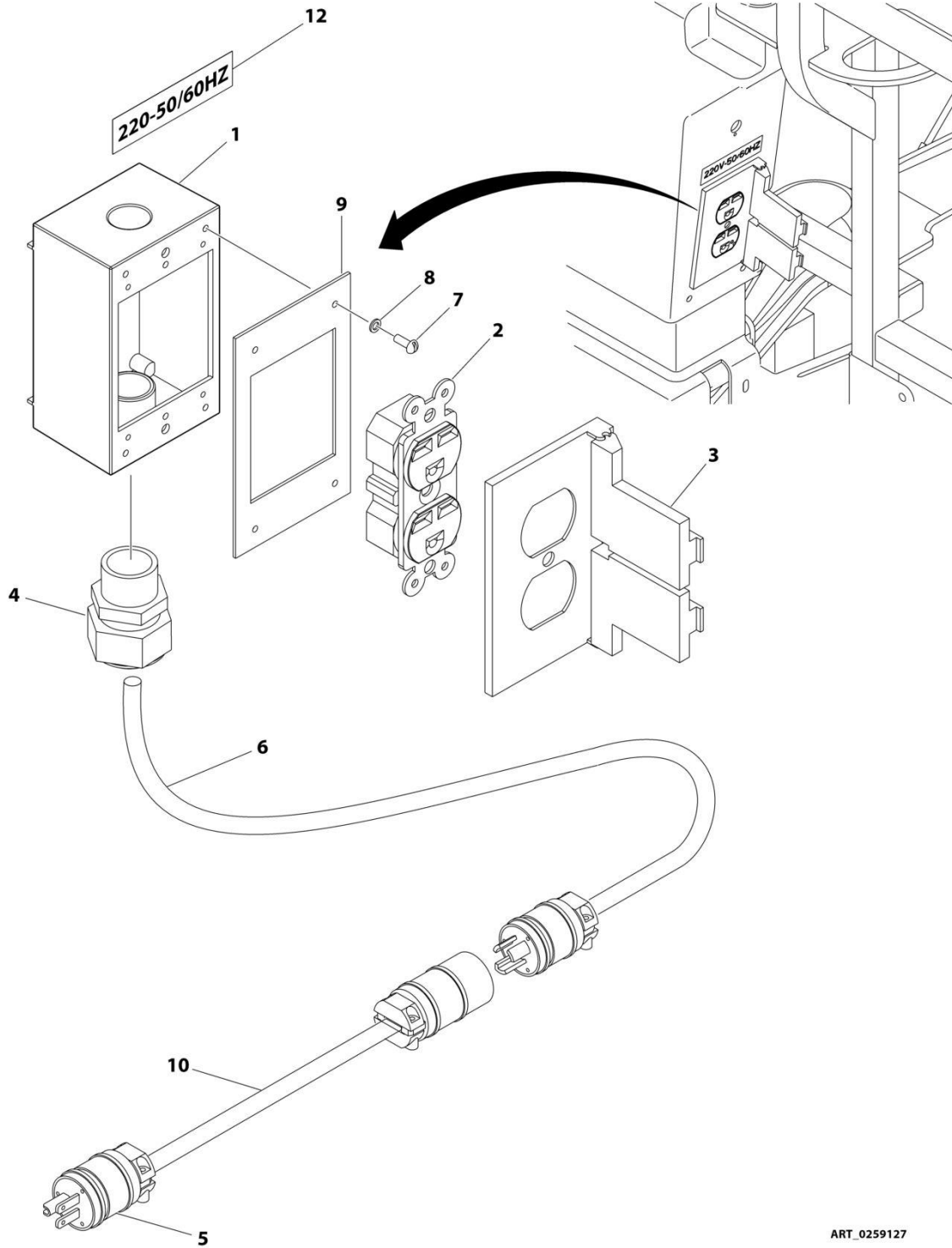
SECTION 8 - ELECTRICAL

FIGURE 8-34. PLATFORM CONSOLE HARNESS - WITH 1 CELL LSS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001245673	Ref	PLATFORM CONSOLE HARNESS	D
1	4460418	9	Connector - 6 Position	
1	4460419	14	Terminal	
1	1001159186	18	Terminal	
2	4460888	4	Terminal, Fork	
3	4460016	2	Terminal	
4	4460260	6	Housing, Terminal	
4	4460259	8	Terminal	
5	1001237667	1	Connector - 6 Position	
5	1001237668	4	Terminal	
6	4460225	1	Connector - 6 Position	
6	4460267	7	Socket, Female	
7	4460933	1	Plug, Male - 12 Position	
7	4460465	10	Socket, Female	
7	4460466	2	Plug, Terminal	
8	1001098122	2	Terminal, Ring	
9	4460873	1	Connector - 35 Position	
9	4460871	21	Socket, Female	
9	4460905	14	Plug, Terminal	
10	4460894	1	Plug, Male - 6 Position	
10	4460465	6	Socket, Female	
11	4460708	1	Connector - 15 Position	
11	4460226	12	Socket, Female	
12	1001213447	1	Connector, Female - 5 Position	
13	4460866	1	Connector - 19 Position	
13	4460466	7	Plug, Terminal	
13	4460464	10	Pin, Male	
13	4460508	2	Pin, Male	
14	4460434	1	Plug, Male - 15 Position	
14	4460227	9	Pin, Male	
15	4460879	1	Plug, Male - 2 Position	
15	4460887	2	Terminal	
16	4460536	1	Receptacle, Female - 3 Position	
16	4460464	2	Pin, Male	
16	4460466	1	Plug, Terminal	
17	4460539	1	Plug, Male - 3 Position	
17	4460465	2	Socket, Female	
17	4460466	1	Plug, Terminal	
18	4460875	1	Connector - 35 Position	
18	4460905	24	Plug, Terminal	
18	4460871	11	Socket, Female	
19	2400060	2	Holder, Fuse	
19	8229242	1	Fuse - 5Amp	
19	See Note	1	Fuse - 2Amp (Note: Purchase Locally)	
20	4460761	1	Receptacle, Female - 4 Position	
20	4460227	4	Pin, Male	
21	4460874	1	Connector - 35 Position	
21	4460871	24	Socket, Female	
21	4460905	11	Plug, Terminal	
22	1001125677	1	Connector, Bussbar	

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FIGURE 8-35. PLUG AND RECEPTACLE INSTALLATION - SUPPLIED LOCALLY



ART_0259127

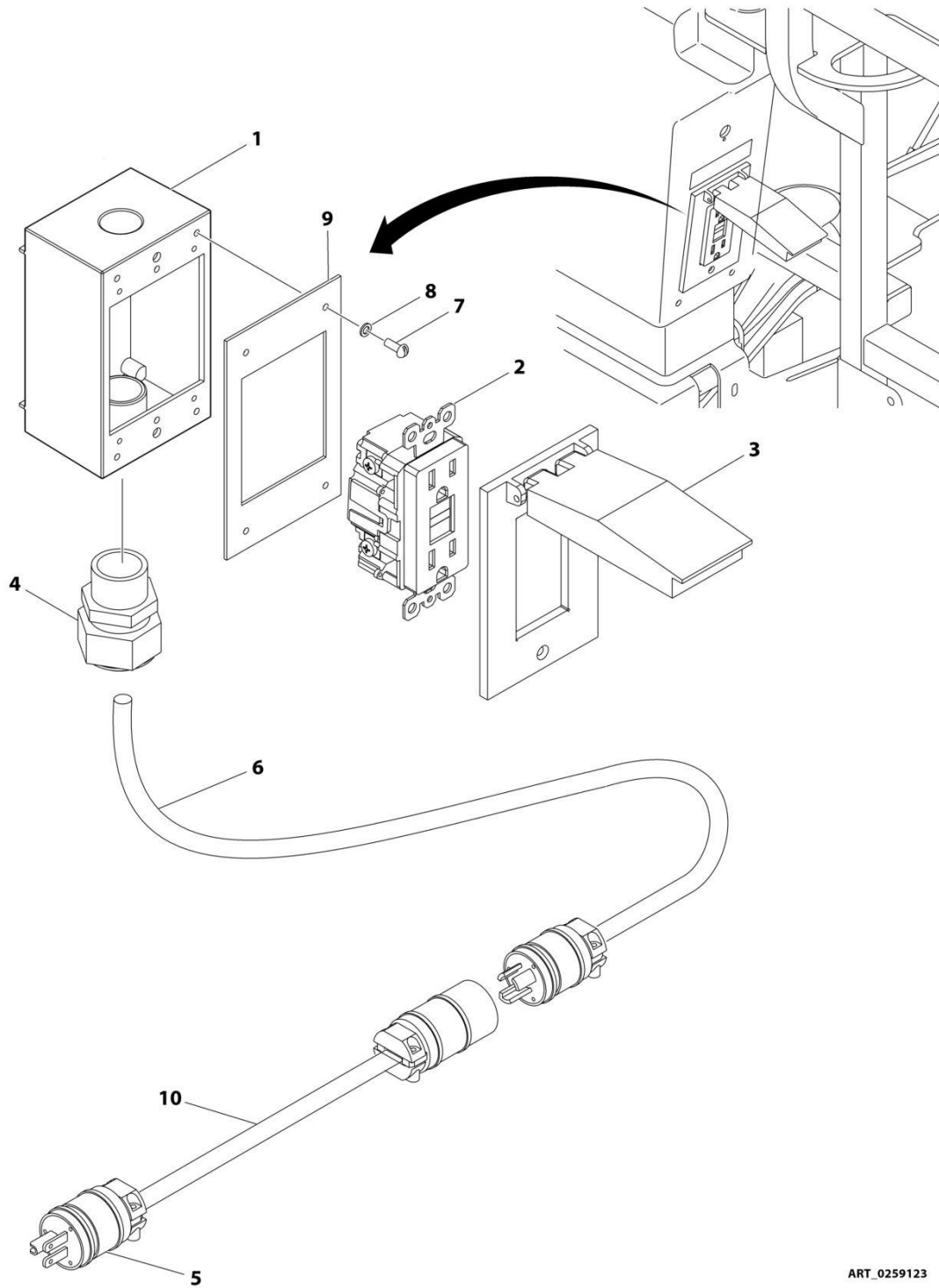
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FIGURE 8-35. PLUG AND RECEPTACLE INSTALLATION - SUPPLIED LOCALLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0259127	Ref	PLUG AND RECEPTACLE INSTALLATION - SUPPLIED LOCALLY	2
1	See Note	1	Box, Switch (Note: Supplied Locally)	
2	See Note	1	Receptacle (Note: Supplied Locally)	
3	See Note	1	Shield, Cover (Note: Supplied Locally)	
4	See Note	1	Connector, Strain Relief (Note: Supplied Locally)	
5	See Note	1	Plug, Male (Note: Supplied Locally)	
6	4922610	1	Upper Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
7	See Note	4	Screw, Self-tapping, #6-32 x 5/8 (Note: Supplied Locally)	
8	See Note	4	Washer, #6 (Note: Supplied Locally)	
9	See Note	1	Gasket (Note: Supplied Locally)	
10	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
12	See Note	1	Decal - 220V-50/60Hz (Note: Supplied Locally)	

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FIGURE 8-36. PLUG AND RECEPTACLE INSTALLATION - 110V



ART_0259123

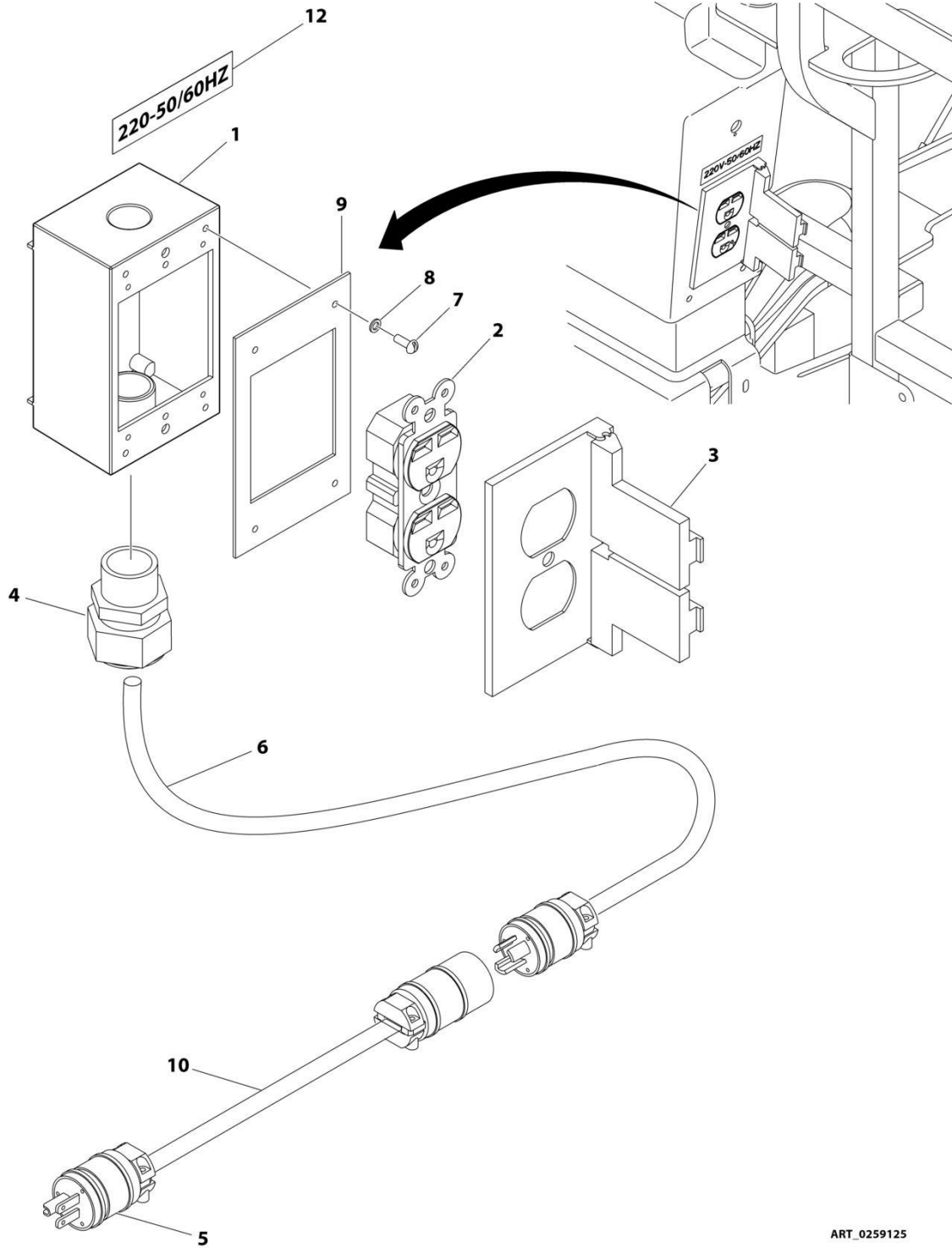
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FIGURE 8-36. PLUG AND RECEPTACLE INSTALLATION - 110V

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0259123	Ref	PLUG AND RECEPTACLE INSTALLATION - 110V - ANSI SPEC	5
1	0860038	1	Box, Switch	
2	4460346	1	Receptacle	
3	1001110873	1	Shield, Cover	
4	4460071	1	Connector, Strain Relief	
5	4460205	1	Plug, Male	
6	4922608	1	Upper Boom 110V Harness Assembly (See Separate Breakdown in this Section)	
7	3910610	4	Screw, Self-tapping, #6 x 5/8	
8	4760600	4	Washer #6	
9	3960422	1	Gasket	
10	4922607	1	Lower Boom 110V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-37. PLUG AND RECEPTACLE INSTALLATION - 220V



ART_0259125

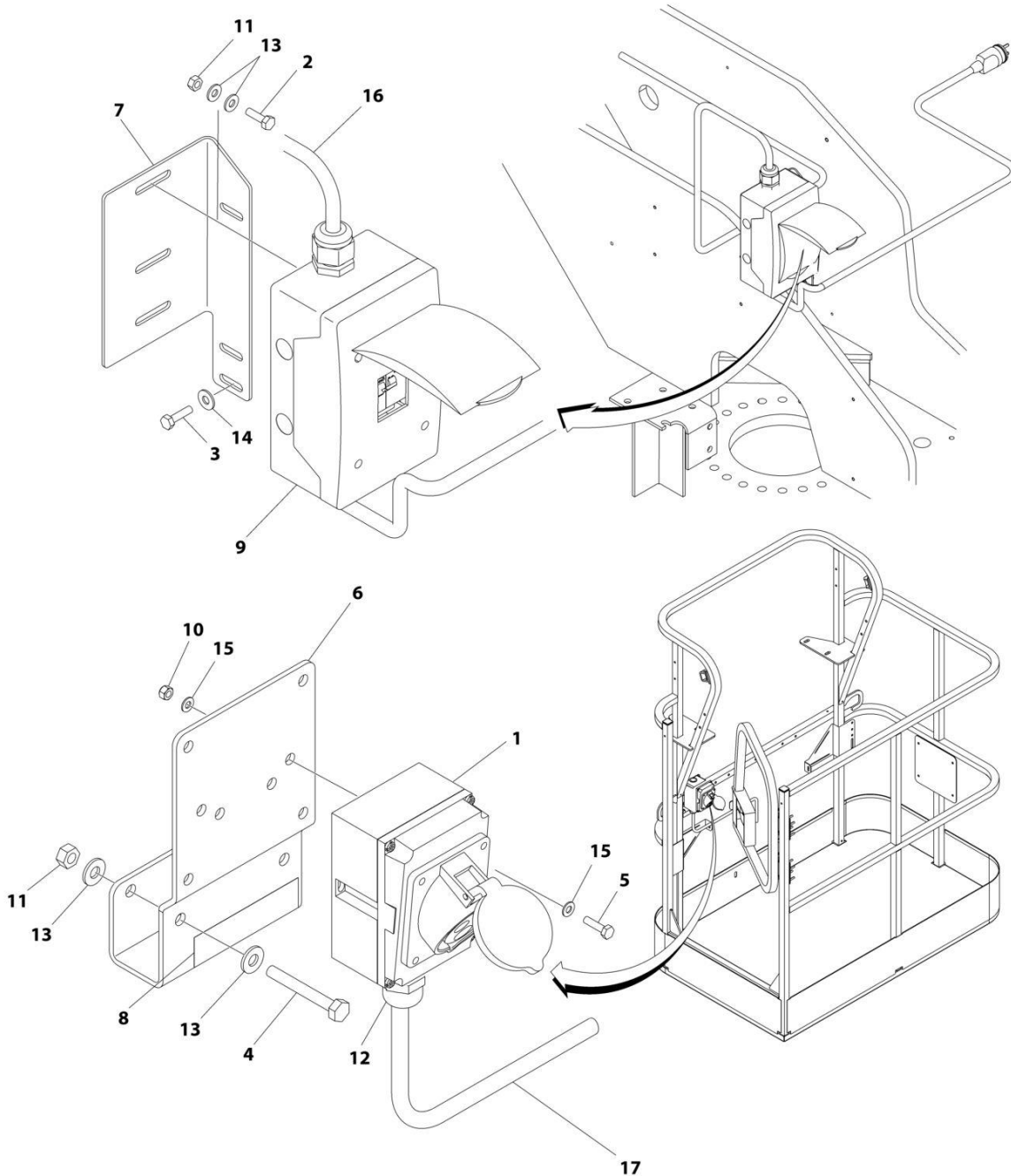
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FIGURE 8-37. PLUG AND RECEPTACLE INSTALLATION - 220V

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0259125	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - ANSI SPEC	4
1	0860038	1	Box, Switch	
2	4460125	1	Receptacle	
3	4060092	1	Shield, Cover	
4	4460071	1	Connector, Strain Relief	
5	4460233	1	Plug, Male	
6	4922608	1	Upper Boom 110V Harness Assembly (See Separate Breakdown in this Section)	
7	3910610	4	Screw, Self-tapping, #6 x 5/8	
8	4760600	4	Washer #6	
9	3960422	1	Gasket	
10	4922607	1	Lower Boom 110V Harness Assembly (See Separate Breakdown in this Section)	
12	3252507	1	Decal - 220V-50/60 Hz	

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FIGURE 8-38. PLUG AND RECEPTACLE 110V INSTALLATION - IEC 60309 - YELLOW (CE SPEC)



ART_1001166263

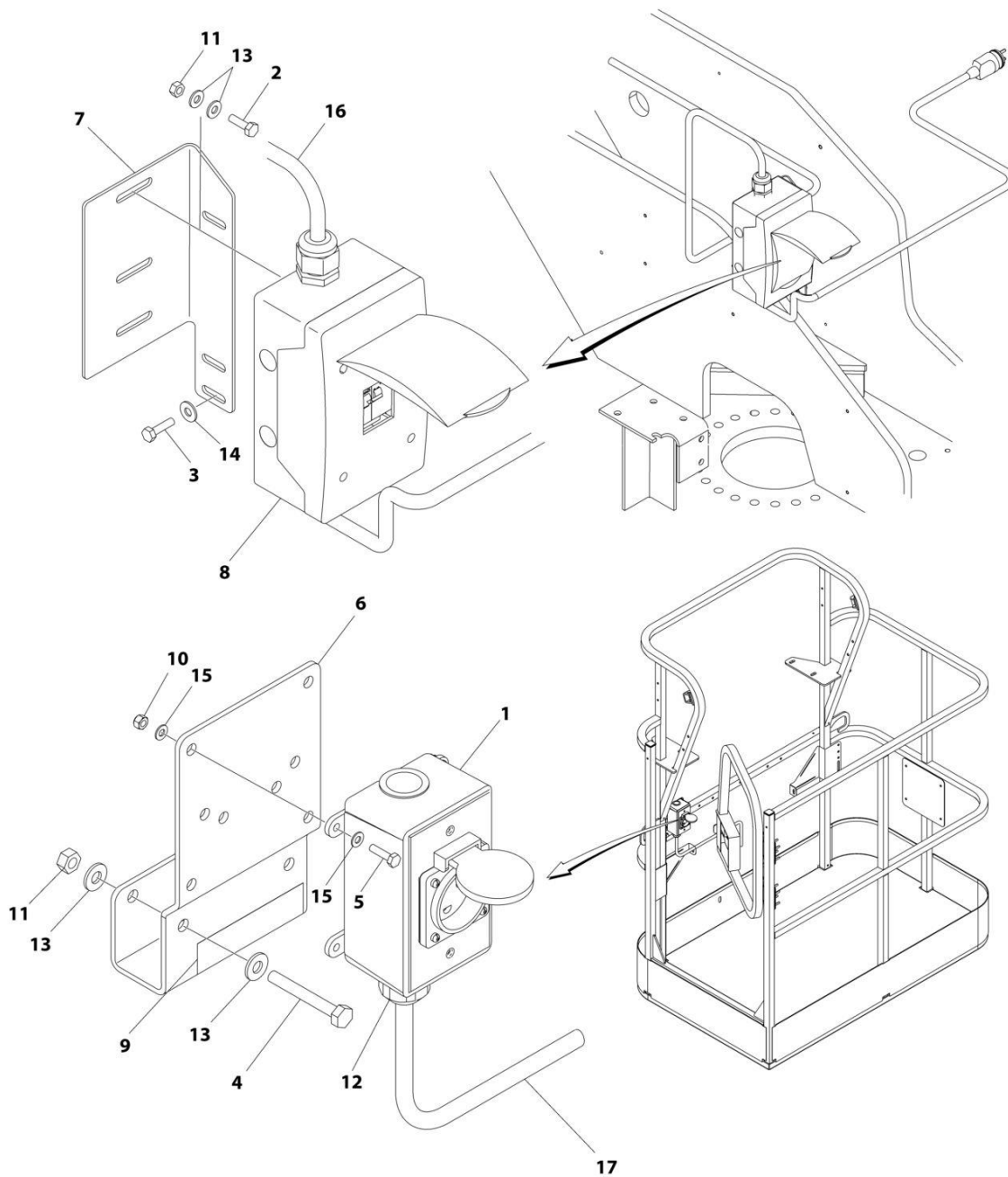
SECTION 8 - ELECTRICAL

FIGURE 8-38. PLUG AND RECEPTACLE 110V INSTALLATION - IEC 60309 - YELLOW (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166263	Ref	PLUG AND RECEPTACLE 110V INSTALLATION - IEC 60309 - YELLOW	C
1	0275216	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	2	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	1705325	2	Decal - 120V - 50 Hz	
9	2902549	1	Breaker Box Kit with Two Breakers (See Separate Breakdown in this Section)	
10	3290405	2	Nut M4	
11	3311405	4	Nut 1/4	
12	4460968	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	4	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-39. PLUG AND RECEPTACLE 220V INSTALLATION - AFSINT 107 KEYED GROUND - 2 X 4 BOX (CE SPEC)



ART_1001166259

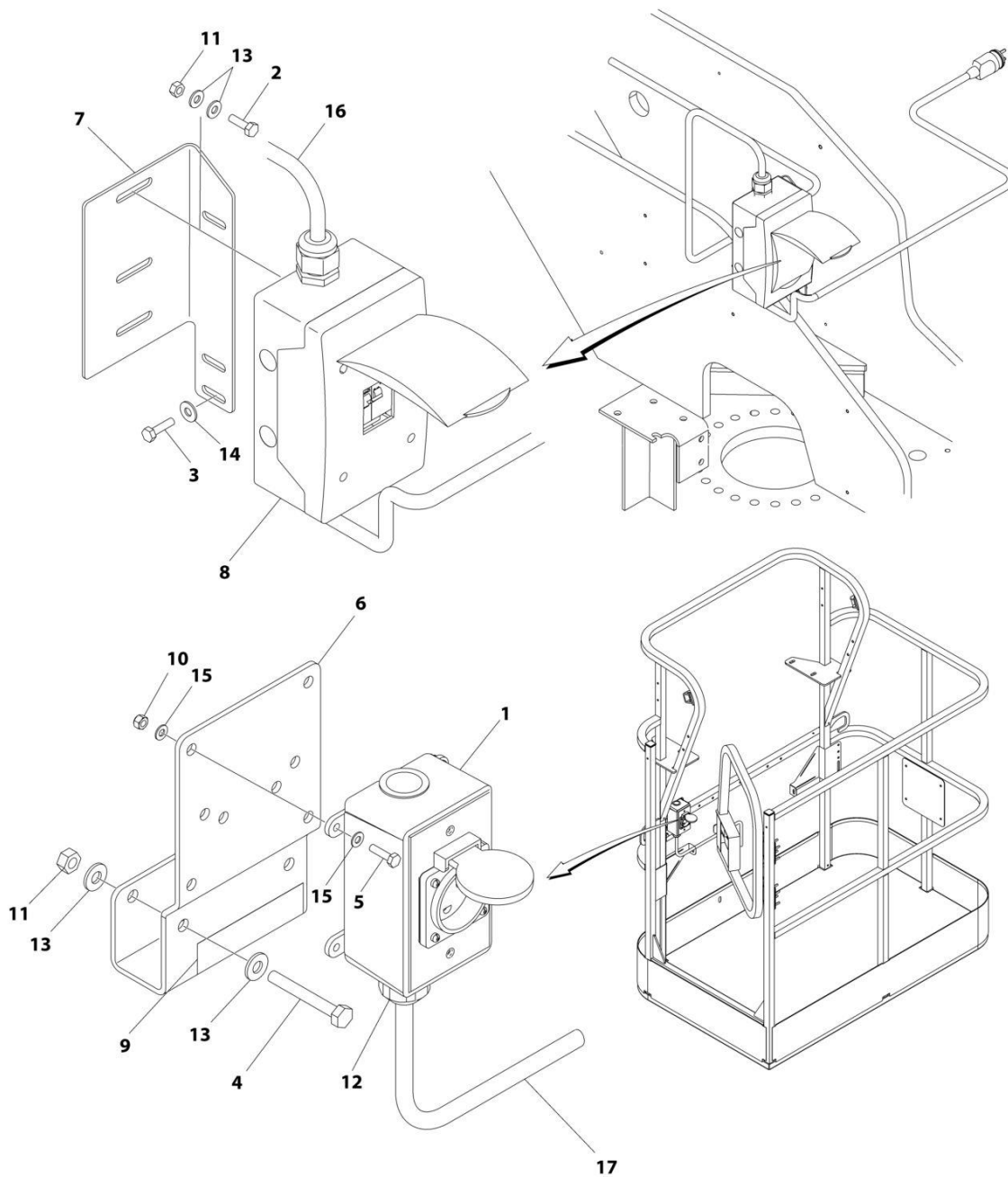
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FIGURE 8-39. PLUG AND RECEPTACLE 220V INSTALLATION - AFSINT 107 KEYED GROUND - 2 X 4 BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166259	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - AFSINT 107 KEYED GROUND - 2 X 4 BOX	C
1	0275454	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	4	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	2902549	1	Breaker Box Kit with Two Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60 Hz	
10	3290405	4	Nut M4	
11	3311405	4	Nut 1/4	
12	4460662	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	8	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-40. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 2 X 4 BOX (CE SPEC)



ART_1001166251

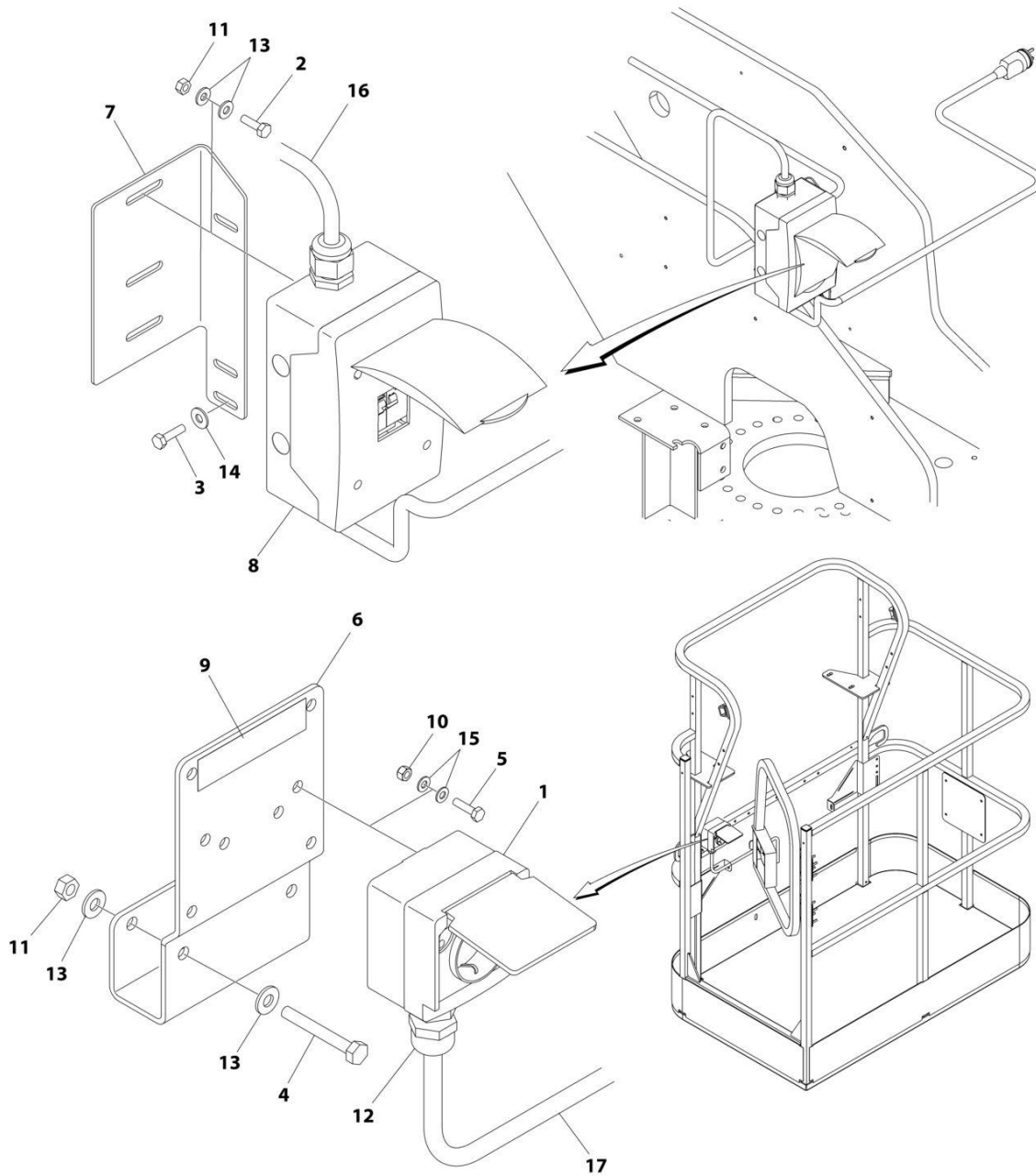
SECTION 8 - ELECTRICAL

**FIGURE 8-40. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 2 X 4 BOX
(CE SPEC)**

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166251	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 2 X 4 BOX	C
1	0275452	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	4	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	2902549	1	Breaker Box Kit with Two Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60Hz	
10	3290405	4	Nut M4	
11	3311405	4	Nut 1/4	
12	4460662	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	8	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-41. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 70MM X 70MM BOX (CE SPEC)



ART_1001166261

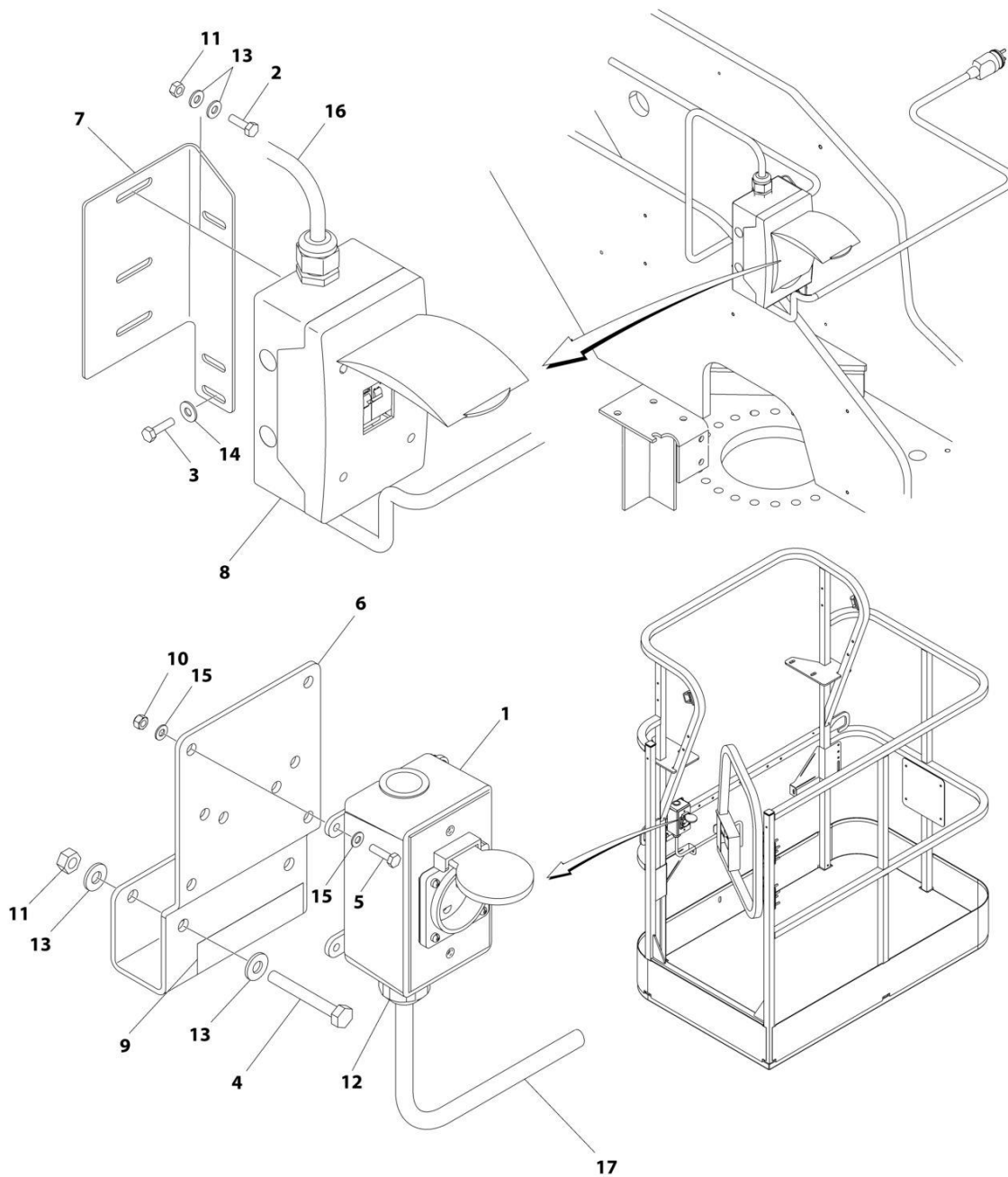
SECTION 8 - ELECTRICAL

FIGURE 8-41. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 70MM X 70MM BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166261	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 POST GROUND - 70MM X 70MM BOX	C
1	0275218	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	2	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	2902549	1	Breaker Box Kit with Two Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60 Hz	
10	3290405	2	Nut M4	
11	3311405	4	Nut 1/4	
12	4460968	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	4	Washer 4mm	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-42. PLUG AND RECEPTACLE 220 INSTALLATION - CEE7 SIDE GROUND - 2 X 4 BOX (CE SPEC)



ART_1001166258

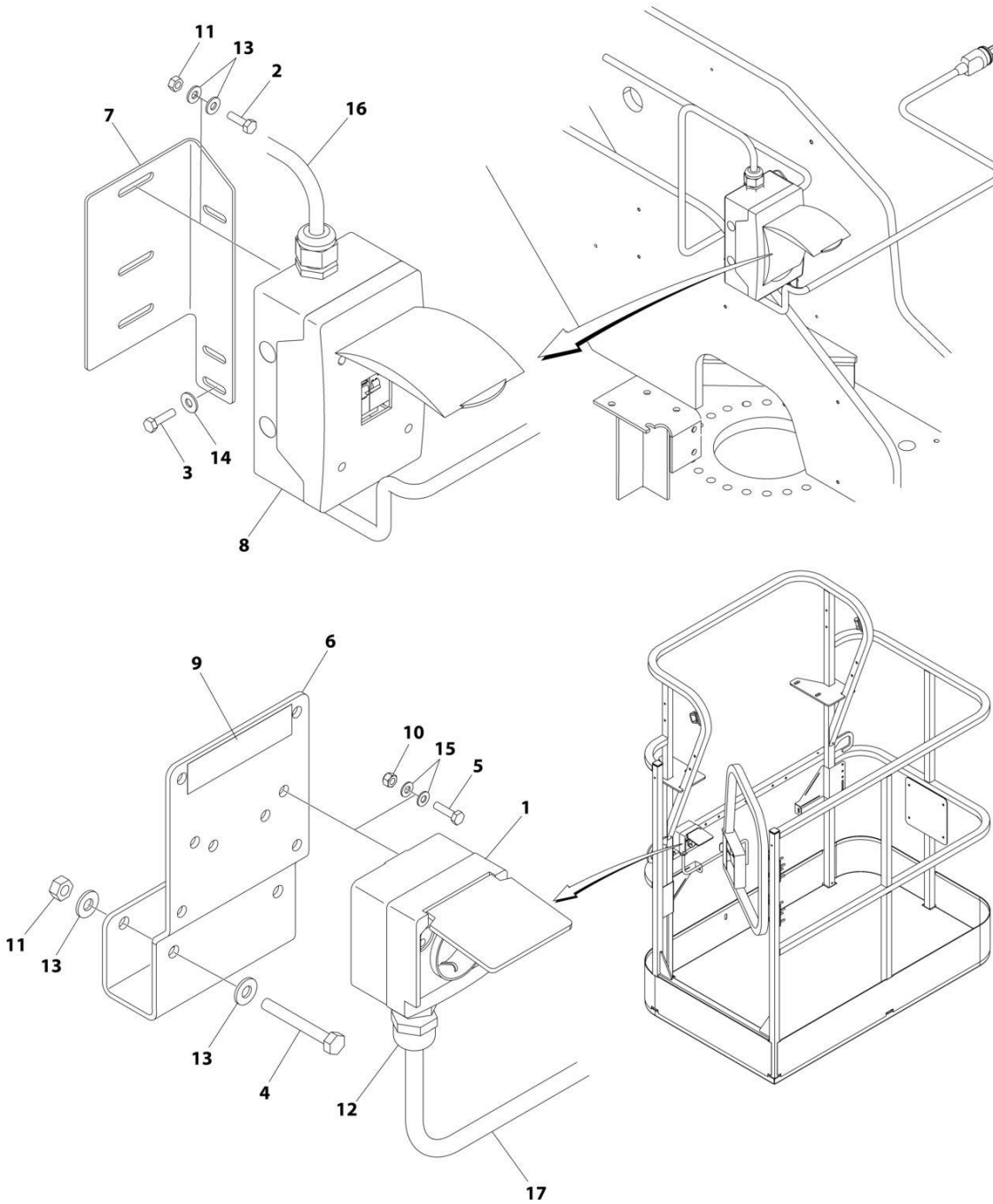
SECTION 8 - ELECTRICAL

FIGURE 8-42. PLUG AND RECEPTACLE 220 INSTALLATION - CEE7 SIDE GROUND - 2 X 4 BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166258	Ref	PLUG AND RECEPTACLE 220 INSTALLATION - CEE7 SIDE GROUND - 2 X 4 BOX	D
1	0275453	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	4	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	1001152485	1	Breaker Box Kit with Three Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60 Hz	
10	3290405	4	Nut M4	
11	3311405	4	Nut 1/4	
12	4460662	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	8	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-43. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 SIDE GROUND - 70MM X 70MM BOX (CE SPEC)



ART_1001166262

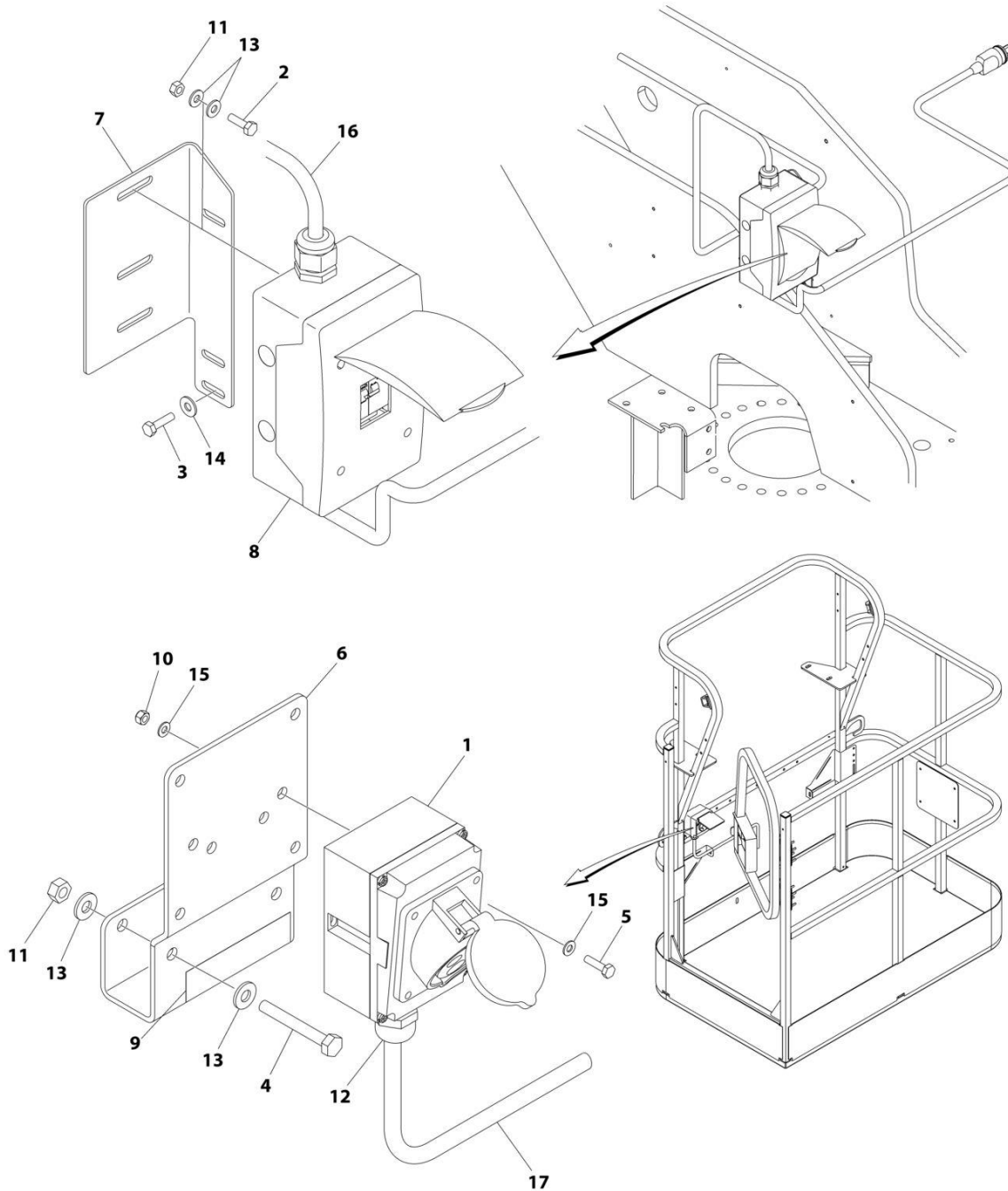
SECTION 8 - ELECTRICAL

FIGURE 8-43. PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 SIDE GROUND - 70MM X 70MM BOX (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166262	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - CEE7 SIDE GROUND - 70MM X 70MM BOX	C
1	0275219	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	2	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	1001152485	1	Breaker Box Kit with Three Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60 Hz	
10	3290405	2	Nut M4	
11	3311405	4	Nut M4	
12	4460968	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	4	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-44. PLUG AND RECEPTACLE 220V INSTALLATION - IEC 60309 - BLUE (CE SPEC)



ART_1001166260

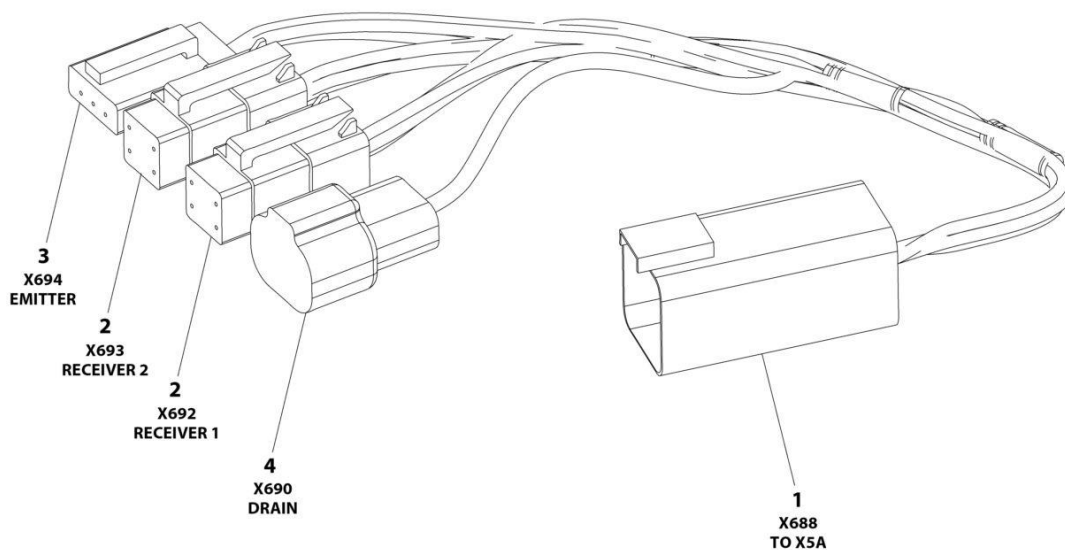
SECTION 8 - ELECTRICAL

FIGURE 8-44. PLUG AND RECEPTACLE 220V INSTALLATION - IEC 60309 - BLUE (CE SPEC)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001166260	Ref	PLUG AND RECEPTACLE 220V INSTALLATION - IEC 60309 - BLUE	C
1	0275217	1	AC Plugs and Sockets Installation (See Separate Breakdown in this Section)	
2	0641407	2	Bolt 1/4 x 7/8	
3	0641408	2	Bolt 1/4 x 1	
4	0641416	2	Bolt 1/4 x 2	
5	0700408	2	Bolt M4 x 16	
6	1001193018	1	Bracket	
7	1001178491	1	Bracket	
8	2902549	1	Breaker Box Kit with One Breakers (See Separate Breakdown in this Section)	
9	3252507	2	Decal - 220V - 50/60 Hz	
10	3290405	2	Nut M4	
11	3311405	4	Nut M4	
12	4460968	1	Connector, Strain Relief	
13	4711400	8	Washer 1/4	
14	4751400	2	Washer 1/4	
15	4811400	4	Washer M4	
16	4922609	1	Lower Boom 220V Harness Assembly (See Separate Breakdown in this Section)	
17	4922610	1	Main Boom 220V Harness Assembly (See Separate Breakdown in this Section)	

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FIGURE 8-45. SKYEYE INTERMEDIATE HARNESS



ART_1001237865

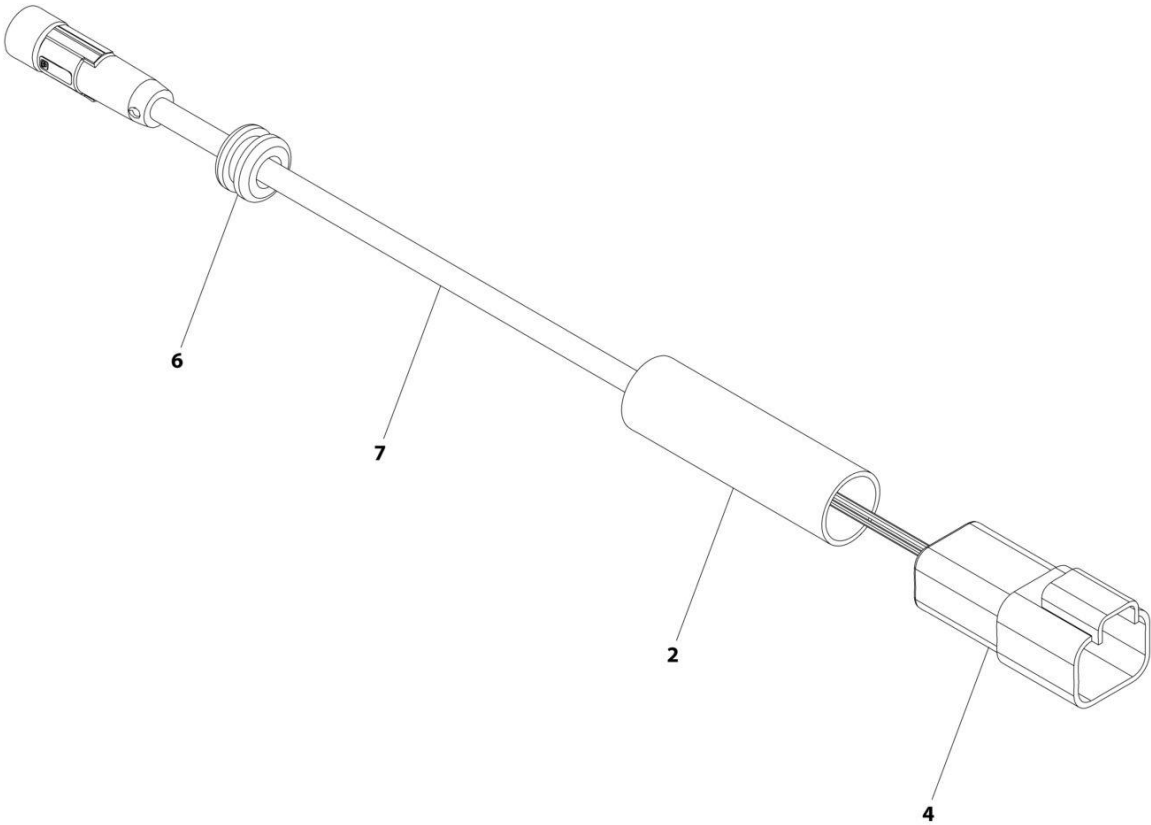
SECTION 8 - ELECTRICAL

FIGURE 8-45. SKYEYE INTERMEDIATE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001237865	Ref	SKYEYE INTERMEDIATE HARNESS	A
1	4460899	1	Connector - 6 Position	
1	4460943	4	Pin, Male	
1	4460466	2	Plug, Terminal	
2	4461077	2	Connector - 4 Position	
2	1001119619	8	Socket, Female	
3	4460911	1	Connector - 3 Position	
3	1001119619	3	Socket, Female	
4	1001187681	1	Connector - 2 Position	
4	4460941	1	Pin, Male	
4	4460466	1	Plug, Terminal	

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FIGURE 8-46. SKYEYE RECEIVER HARNESS



ART_1001237863

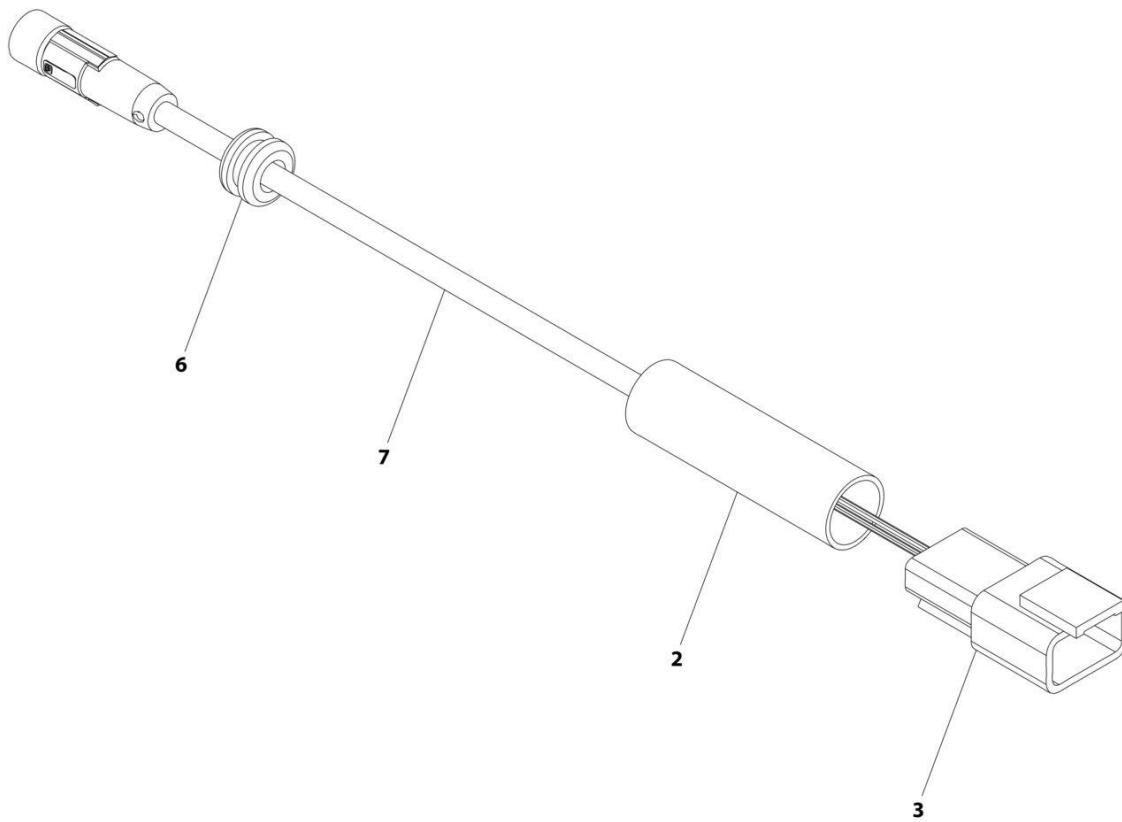
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FIGURE 8-46. SKYEYE RECEIVER HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001237863	Ref	SKYEYE RECEIVER HARNESS	A
2	2820247	AR	Tubing, Heat Shrink	
4	1001097051	1	Connector - 4 Position	
4	1001119620	4	Pin, Male	
6	1001227996	1	Grommet	
7	1001237862	1	Cable, M8 Female Cordset	

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FIGURE 8-47. SKYEYE EMITTER HARNESS



ART_1001237864

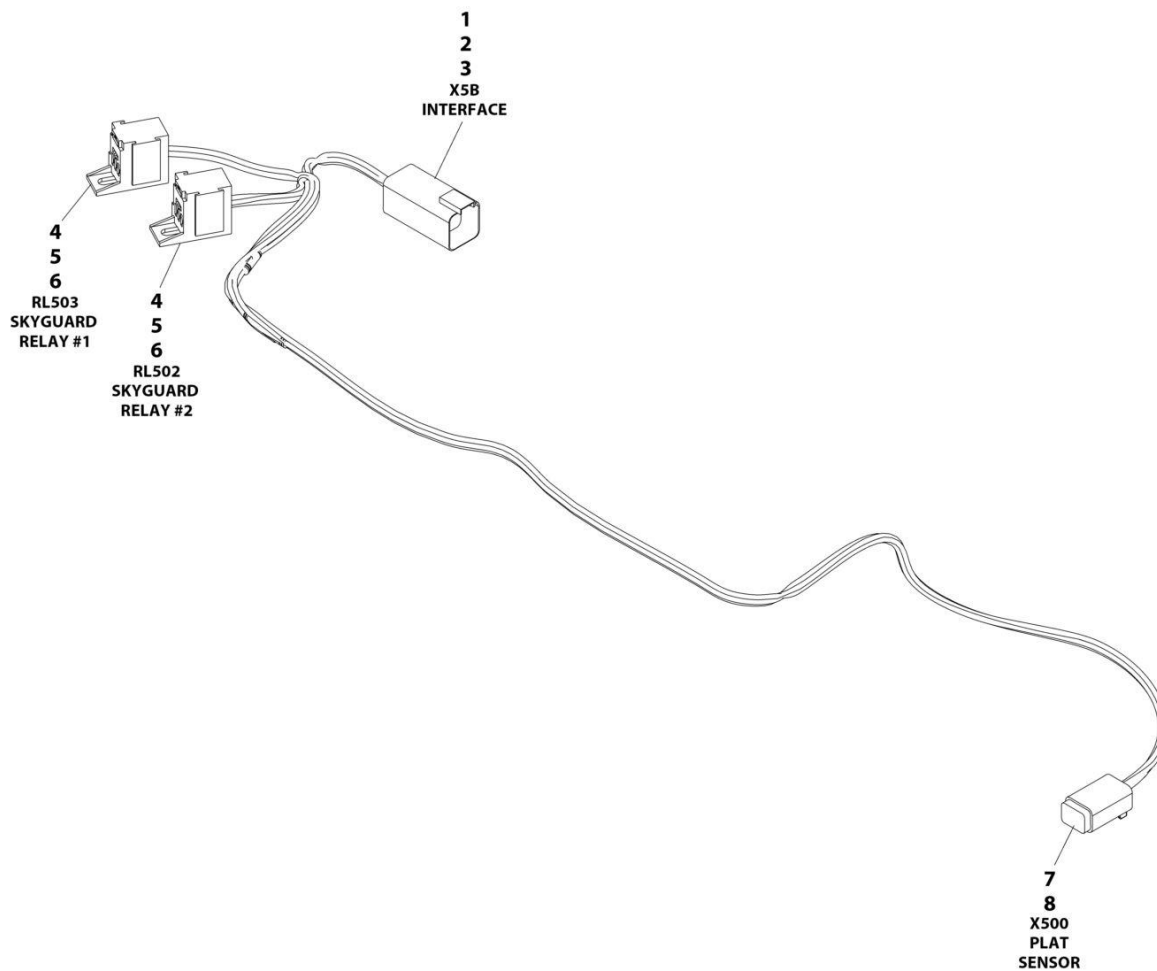
SECTION 8 - ELECTRICAL

FIGURE 8-47. SKYEYE EMITTER HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001237864	Ref	SKYEYE EMITTER HARNESS	A
2	2820247	AR	Tubing, Heat Shrink	
3	4460910	1	Connector - 3 Position	
3	1001119620	3	Pin, Male	
6	1001227996	1	Grommet	
7	1001237862	1	Cable, M8 Female Cordset	

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FIGURE 8-48. SKYGUARD HARNESS - WITH 1 CELL LSS



ART_1001225580

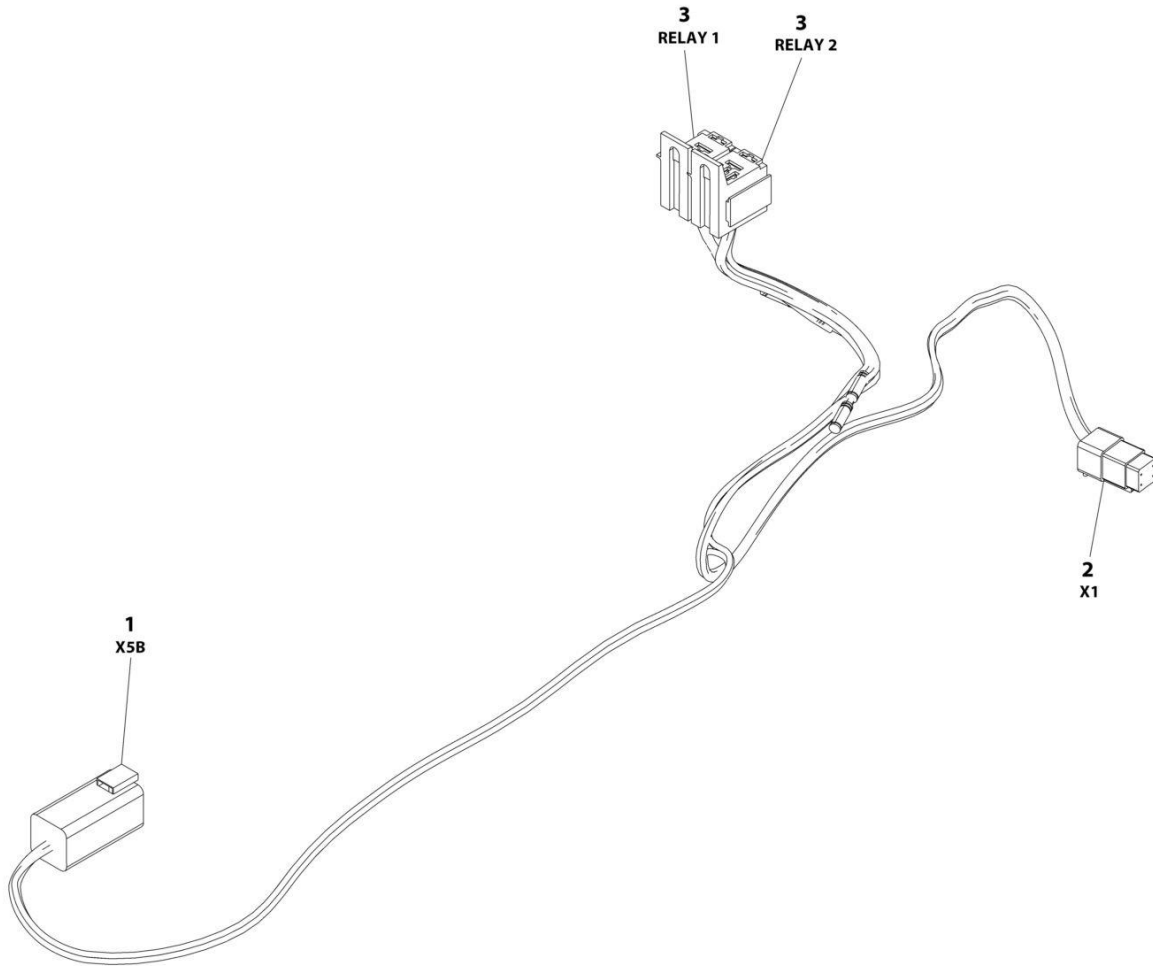
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FIGURE 8-48. SKYGUARD HARNESS - WITH 1 CELL LSS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001225580	Ref	INTERFACE HARNESS - WITH 1 CELL LSS	D
1	4460899	1	Connector	
2	4460464	4	Terminal	
3	4460466	2	Plug	
4	1001186432	2	Connector	
5	1001116720	4	Terminal	
6	1001118388	4	Terminal	
7	4460884	1	Connector	
8	4460465	4	Terminal	

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FIGURE 8-49. SKYLINE HARNESS



ART_1001238418

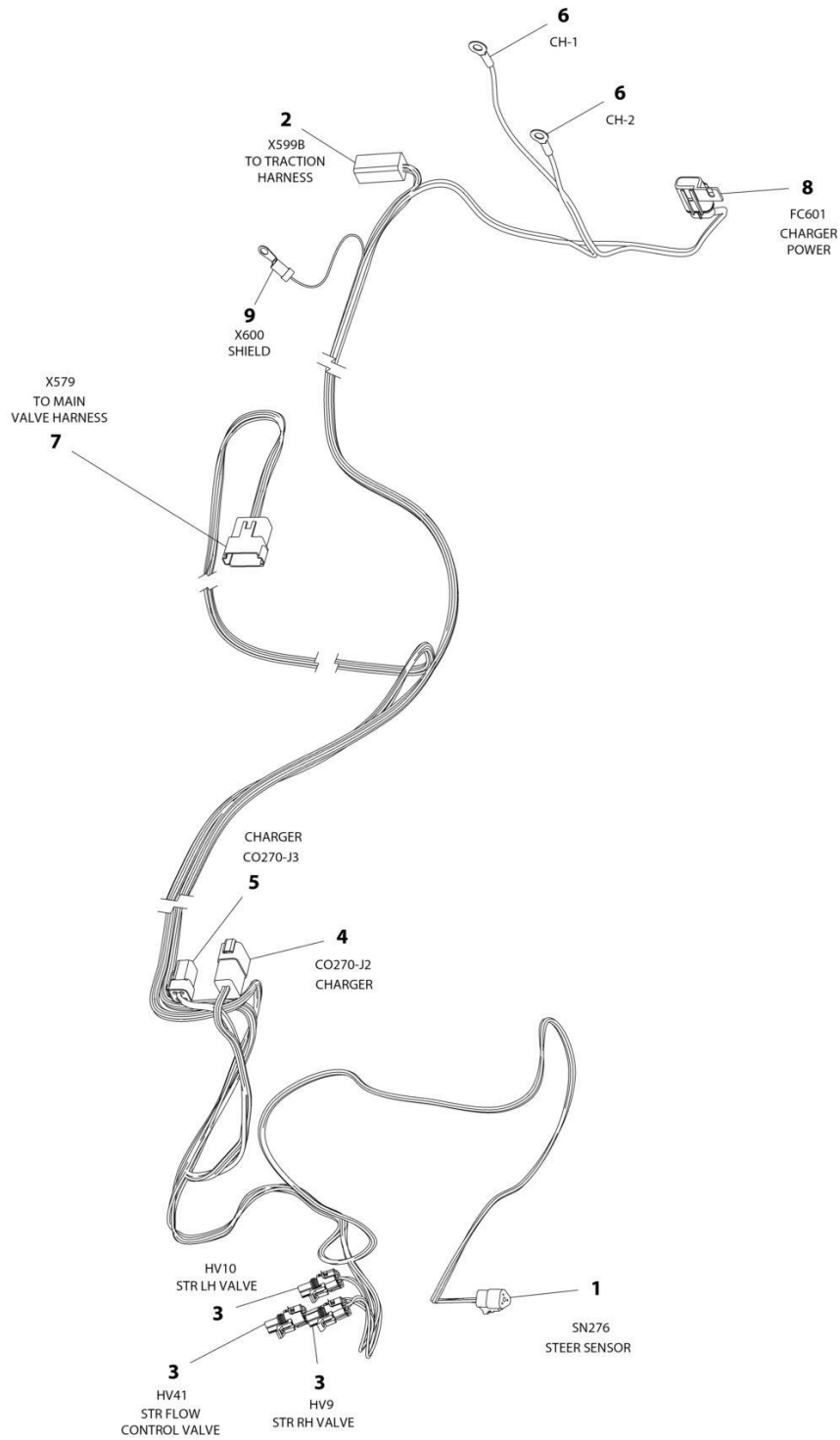
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FIGURE 8-49. SKYLINE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001238418	Ref	SKYLINE HARNESS	B
1	4460899	1	Connector - 6 Position	
1	4460464	4	Pin, Male	
1	4460466	2	Plug, Terminal	
2	4461077	1	Connector - 4 Position	
2	1001126009	4	Socket, Female	
3	1001186432	2	Plug, Relay	
3	1001118388	5	Terminal	
3	1001118384	3	Terminal	
3	3740086	2	Relay	

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FIGURE 8-50. STEER/BRAKE HARNESS



ART_1001188528

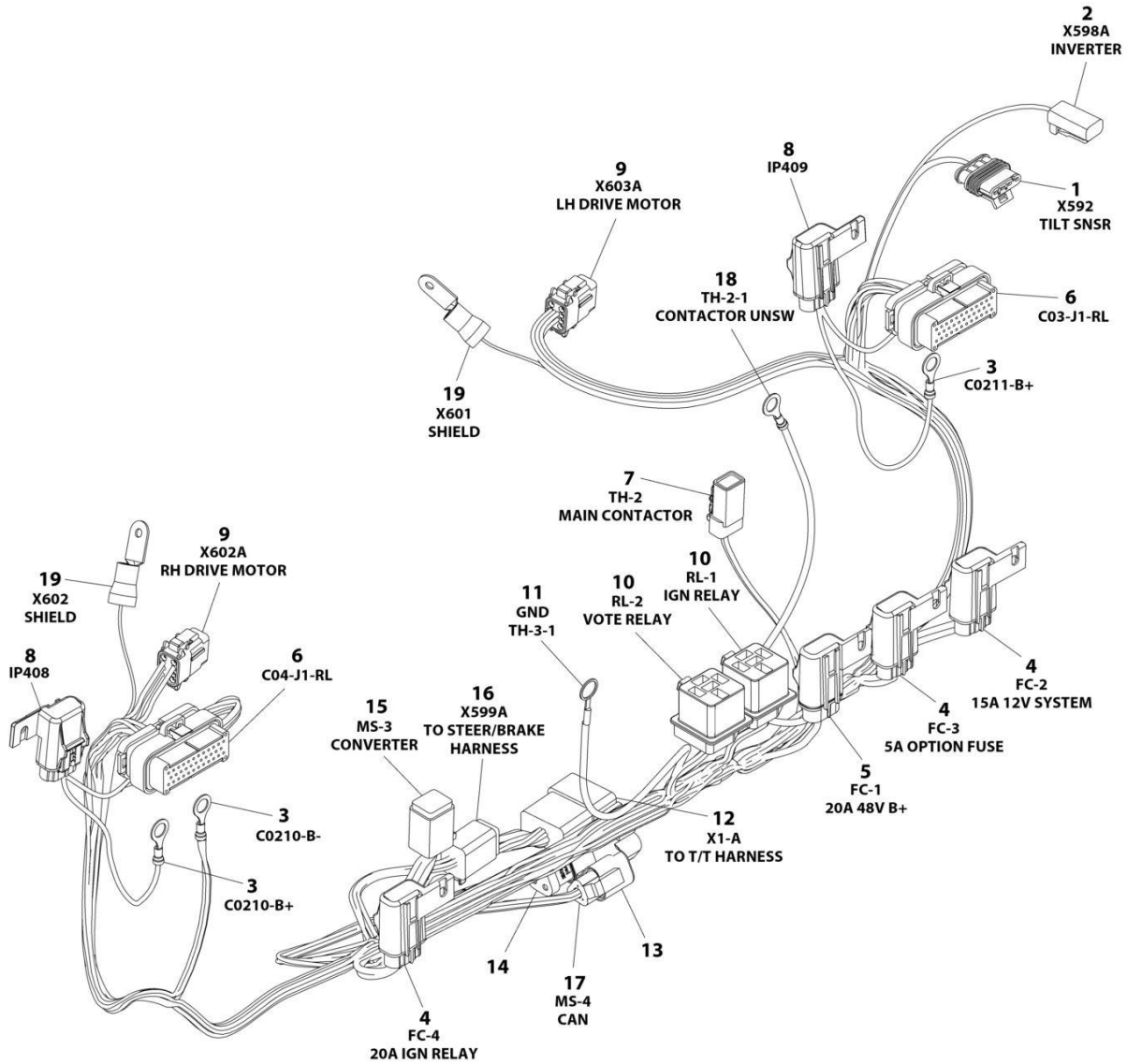
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FIGURE 8-50. STEER/BRAKE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001188528	Ref	STEER/BRAKE HARNESS	1
1	4460539	1	Plug, Male - 4 Position	
1	4460465	3	Socket, Female	
2	4460899	1	Receptacle, Female - 6 Position	
2	4460464	5	Pin, Male	
2	4460466	1	Plug, Terminal	
3	4460742	3	Plug, Male - 2 Position	
3	4460743	6	Socket, Female	
4	4460931	1	Receptacle, Female - 8 Position	
4	4460464	6	Pin, Male	
4	4460466	2	Plug, Terminal	
5	1001116810	1	Plug, Male - 4 Position	
5	4460509	2	Terminal	
5	4460466	2	Plug, Terminal	
6	8220045	2	Ring, Terminal	
7	4460970	1	Receptacle, Female - 12 Position	
7	4460464	9	Pin, Male	
7	4460466	3	Plug, Terminal	
8	1001217844	1	Fuseholder	
8	1001217842	1	Cover	
8	8229236	1	Fuse - 30Amp	
8	1001170762	1	Fuse - 30Amp	
8	1001116734	2	Terminal, Female	
9	4460142	1	Terminal, Ring	

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FIGURE 8-51. TRACTION HARNESS



ART_1001178629

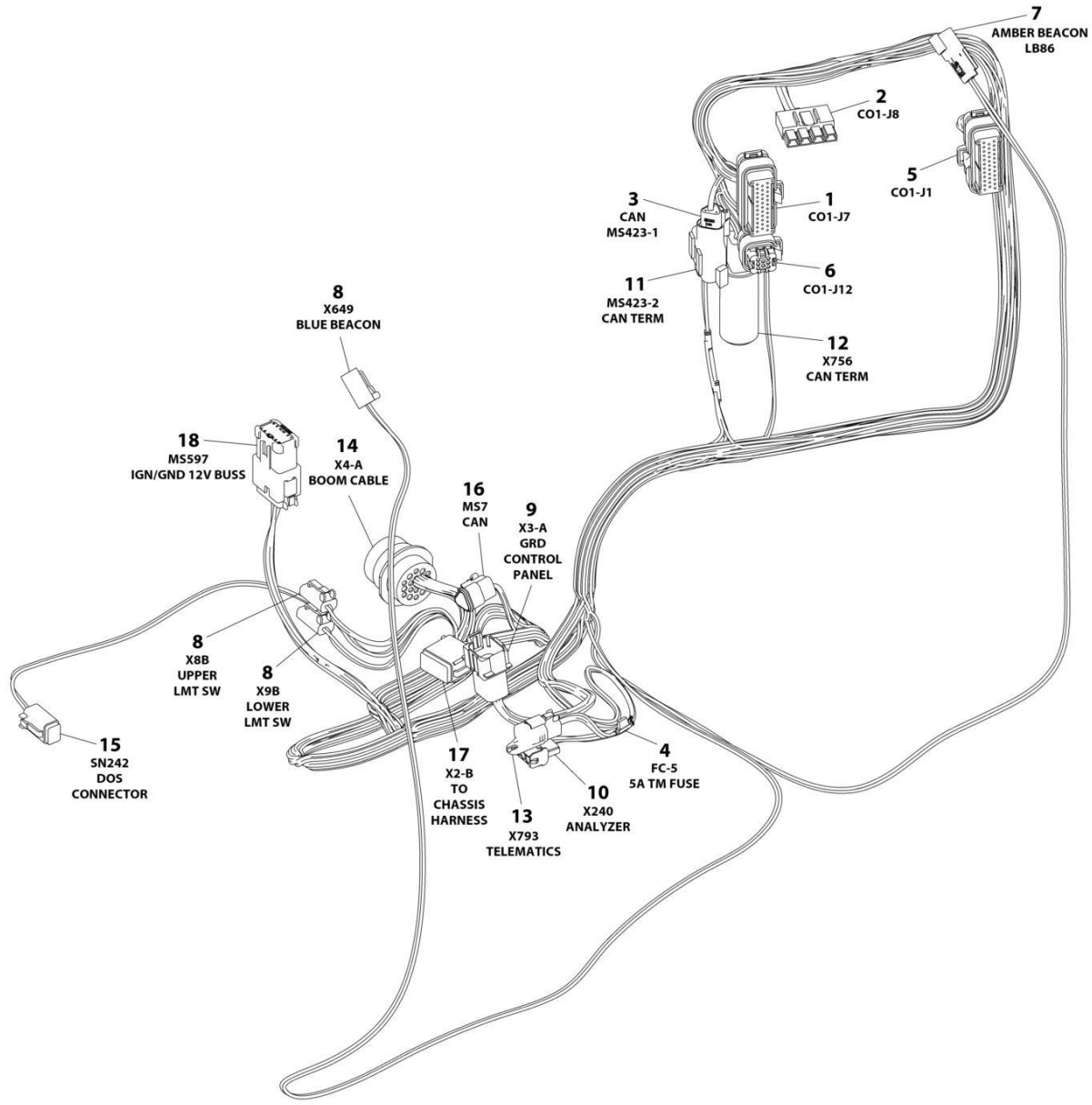
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FIGURE 8-51. TRACTION HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001178629	Ref	TRACTION HARNESS	N
1	1001103012	1	Connector - 4 Position	
1	1001107854	4	Socket, Female	
2	4460891	1	Plug, Male - 2 Position	
2	4460465	1	Socket, Female	
2	4460466	1	Plug, Terminal	
3	4460670	3	Terminal, Ring	
4	1001217844	3	Fuseholder	
4	1001217842	3	Cover	
4	8229261	1	Fuse - 5Amp	
4	8229237	1	Fuse - 15Amp	
4	8229235	1	Fuse - 20Amp	
4	1001170761	1	Fuse - 20Amp	
4	1001116734	6	Terminal, Female	
5	1001217844	1	Fuseholder	
5	1001217842	1	Cover	
5	8229235	1	Fuse - 20Amp	
5	1001116734	2	Terminal, Female	
6	4460873	1	Connector - 35 Position	
6	4460871	11	Terminal, Female	
6	4460905	24	Seal, Terminal	
7	1001126245	1	Connector - 2 Position	
7	1001126008	2	Terminal	
8	1001217843	2	Fuseholder	
8	1001217842	2	Cover	
8	8229234	2	Fuse - 10Amp	
8	1001116733	4	Terminal	
9	1001190577	2	Plug, Male - 8 Position	
9	1001126008	16	Terminal	
10	1001203734	2	Plug, Relay	
10	1001116732	8	Terminal	
11	4460019	1	Terminal, Ring	
12	4460950	1	Connector - 12 Position	
12	1001157891	4	Terminal	
12	1001116693	4	Pin, Male	
12	4460464	2	Pin, Male	
12	4460943	2	Pin, Male	
13	4460945	1	Receptacle, 3 Way	
14	1001116815	1	Resistor, 3 Position	
15	4460894	1	Plug, Male - 6 Position	
15	1001157890	5	Terminal	
15	1001116692	1	Socket, Female	
16	4460894	1	Plug, Male - 6 Position	
16	4460465	4	Socket, Female	
16	4460466	2	Plug, Terminal	
17	1001116812	1	Plug, Male - 3 Position	
17	4460944	3	Socket, Female	
18	4460738	1	Terminal, Ring	
19	1001260275	2	Terminal, Ring	

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FIGURE 8-52. TURNTABLE HARNESS



ART_1001245677

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FIGURE 8-52. TURNTABLE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001245677	Ref	TURNTABLE HARNESS	A
1	4460873	1	Connector - 35 Position	
1	4460871	16	Socket, Female	
1	4460905	19	Plug, Terminal	
2	4460878	1	Connector - 4 Position	
2	4460887	4	Terminal	
3	1001116812	1	Plug, Male -3 Position	
3	4460944	2	Socket, Female	
3	4460466	1	Plug, Terminal	
3	4460945	1	Receptacle, 3 Way	
4	2400060	1	Fuseholder with Cover	
4	8229242	1	Fuse - 5Amp	
5	4460874	1	Connector - 35 Position	
5	4460871	9	Socket, Female	
5	4460905	26	Plug, Terminal	
6	1001113961	1	Plug, Male - 8 Position	
6	4460871	3	Socket, Female	
6	4460905	5	Plug, Terminal	
7	4460897	1	Receptacle, Female - 2 Position	
7	4460464	2	Pin, Male	
8	4460891	3	Plug, Male - 2 Position	
8	4460465	6	Socket, Female	
9	1001116813	1	Receptacle, Female - 8 Position	
9	1001116693	5	Pin, Male	
9	1001157891	2	Terminal	
9	4460466	1	Plug, Terminal	
10	4460761	1	Connector - 4 Position	
10	4460227	4	Pin, Male	
11	4460539	1	Plug, Male - 3 Position	
11	4460944	2	Socket, Female	
11	4460466	1	Plug, Terminal	
12	4460884	1	Plug, Male - 4 Position	
12	4460465	4	Socket, Female	
12	1001186231	1	Connector, Fuse/Diode Can	
13	4460884	1	Plug, Male - 4 Position	
13	4460465	3	Socket, Female	
13	4460942	1	Socket, Female	
13	1001192401	1	Connector, Dust Cap	
14	4460866	1	Connector - 19 Position	
14	4460943	2	Pin, Male	
14	4460508	4	Pin, Male	
14	4460464	7	Pin, Male	
14	4460466	6	Plug, Terminal	
15	4460884	1	Connector - 4 Position	
15	4460465	2	Socket, Female	
15	4460466	2	Plug, Terminal	
16	1001116812	1	Plug, Male -3 Position	
16	4460944	3	Socket, Female	
17	4460836	1	Plug, Male - 12 Position	
17	1001157890	5	Socket, Female	

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ITEM	PART NUMBER	QTY	DESCRIPTION	REV
17	4460944	2	Socket, Female	
17	1001116692	5	Socket, Female	
18	4460933	1	Plug, Male - 12 Position	
18	4460942	4	Socket, Female	
18	4460465	2	Socket, Female	
18	4460466	6	Plug, Terminal	
18	1001125677	1	Buss Bar	

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FIGURE 8-53. UPPER BOOM 110V HARNESS ASSEMBLY



ART_4922608

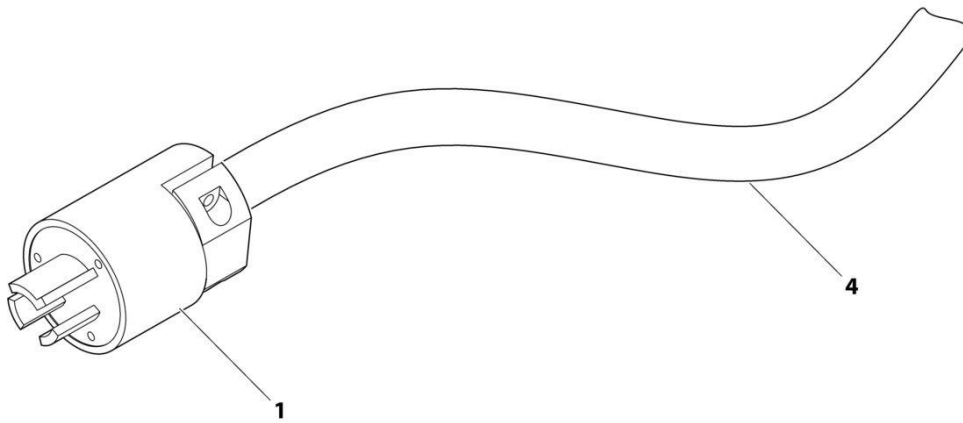
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FIGURE 8-53. UPPER BOOM 110V HARNESS ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4922608	Ref	UPPER BOOM 110V HARNESS ASSEMBLY	2
1	4460205	1	Plug, Male	
4	1060494	27.2 ft /8.3m	Electrical Cable, 12/3	

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FIGURE 8-54. UPPER BOOM 220V HARNESS ASSEMBLY



ART_4922610

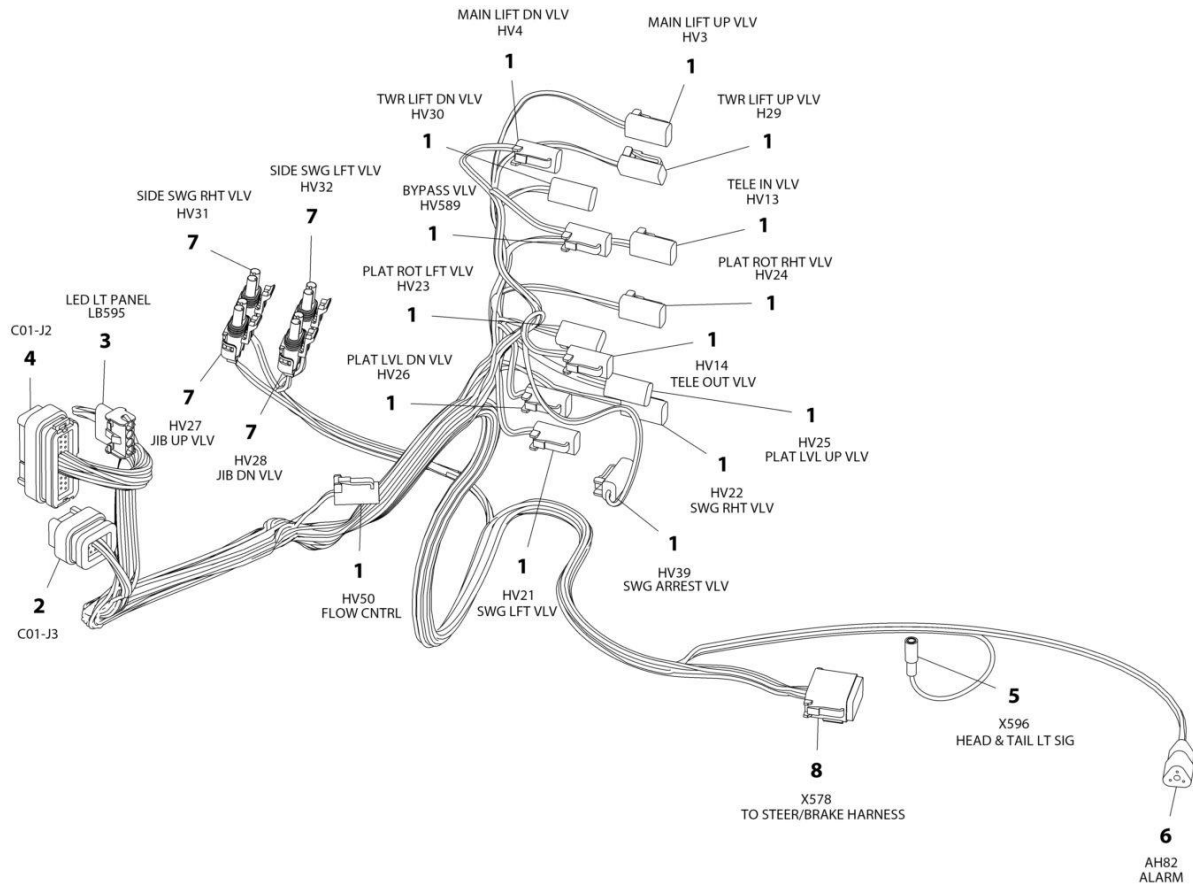
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FIGURE 8-54. UPPER BOOM 220V HARNESS ASSEMBLY

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	4922610	Ref	BOOM 220V HARNESS ASSEMBLY - CE SPEC	1
1	4460709	1	Plug, Male	
4	1060461	28 ft/8.5m	Electrical Cable, 12/3	

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FIGURE 8-55. VALVE HARNESS



ART_1001178794

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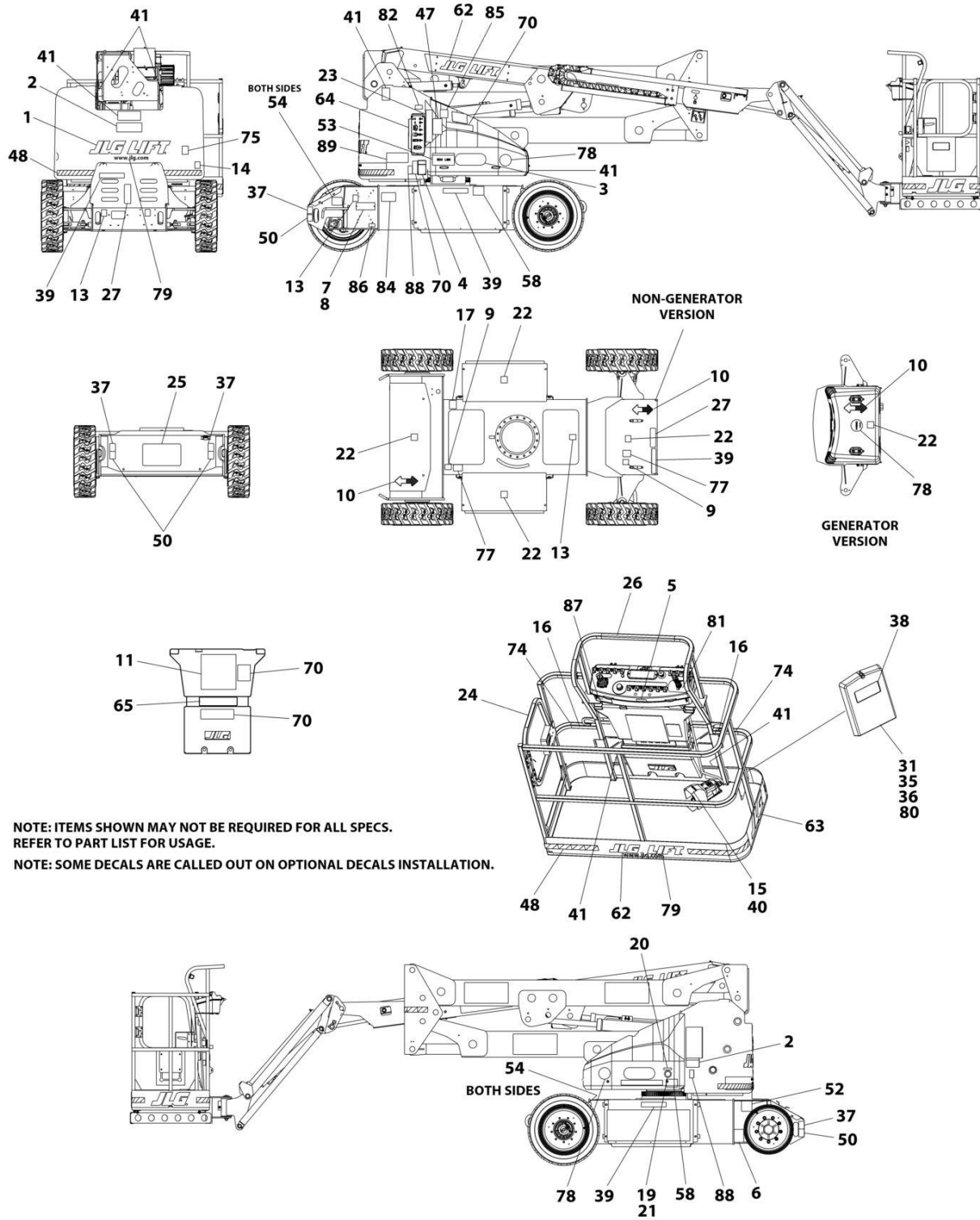
FIGURE 8-55. VALVE HARNESS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001178794	Ref	VALVE HARNESS	1
1	4460891	15	Plug, Male - 2 Position	
1	4460465	30	Socket, Female	
2	4460872	1	Connector - 14 Position	
2	4460871	6	Socket, Female	
2	4460905	8	Plug, Terminal	
3	4460761	1	Connector - 4 Position	
3	4460226	4	Socket, Female	
4	4460875	1	Connector - 35 Position	
4	4460871	30	Socket, Female	
4	4460905	5	Plug, Terminal	
5	8220068	1	Connector - 1 Position	
6	4460539	1	Plug, Male - 3 Position	
6	4460465	3	Socket, Female	
7	4460742	4	Plug, Male - 2 Position	
7	4460743	8	Socket, Female	
7	4460458	8	Seal, Terminal	
8	4460933	1	Plug, Male - 12 Position	
8	1001116692	9	Socket, Female	
8	4460466	3	Plug, Terminal	

SECTION 9 - DECALS

SECTION 9 - DECALS

FIGURE 9-1. DECAL INSTALLATION - ANSI, ANSI EXPORT, CSA AND UL SPECS - ENGLISH - E450A/E450AJ (USA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001249184

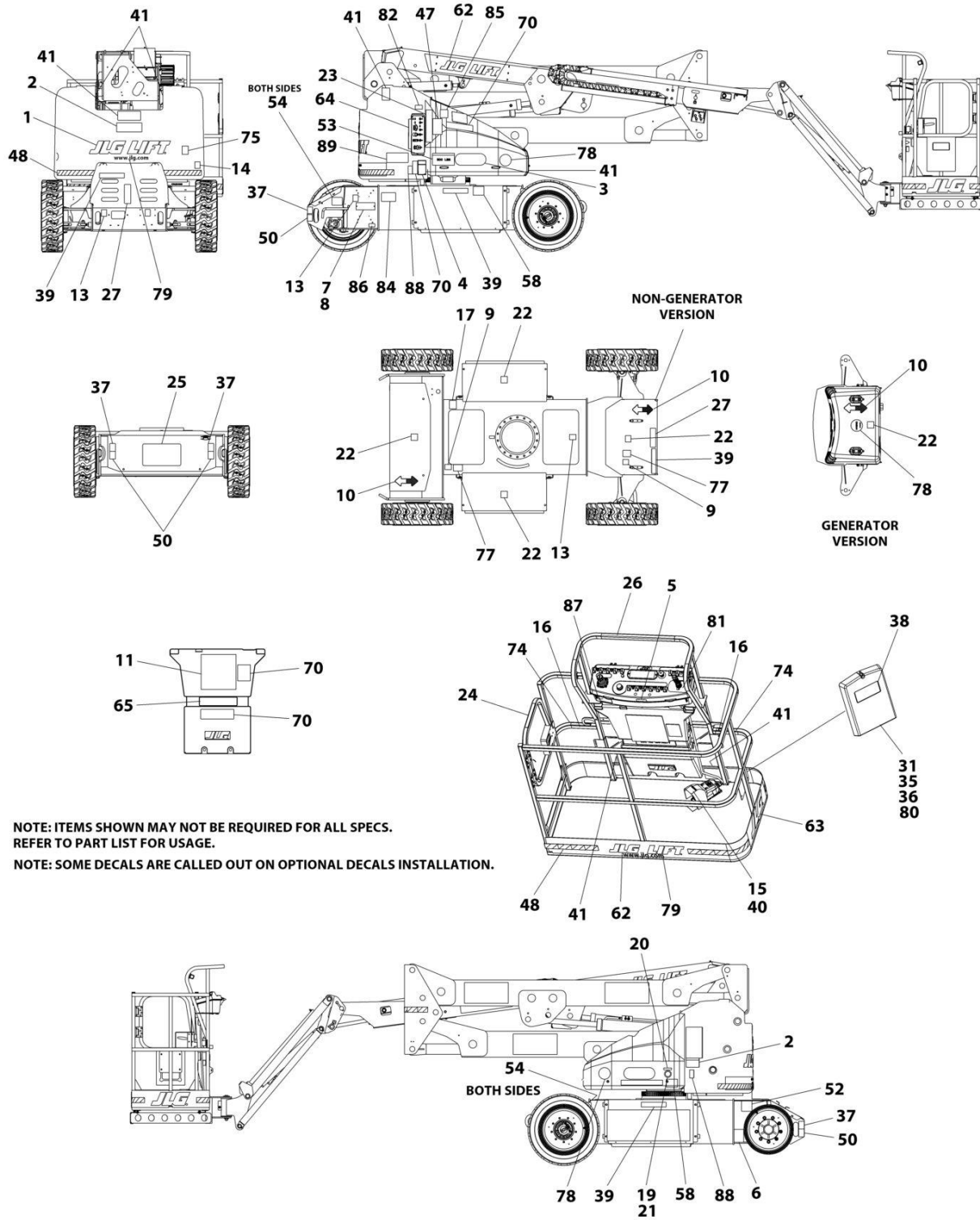
SECTION 9 - DECALS

FIGURE 9-1. DECAL INSTALLATION - ANSI, ANSI EXPORT, CSA AND UL SPECS - ENGLISH - E450A/E450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001249184	Ref	DECAL INSTALLATION	C
2	1703805	2	Decal - Electrocution	
4	1703798	1	Decal - Crushing	
6	1001131269	1	Decal - Patent	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703797	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
20	3251243	1	Nameplate 120V-60Hz	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
24	1702868	2	Decal - No Hands	
25	1001193949	1	Decal - Cable Routing	
27	1704446	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1703813	3	Decal - Danger	
40	3252347	1	Nameplate - Footswitch	
41	1703804	6	Decal - Crushing Hazard	
47	1702265	1	Decal - Boom Sequence	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253921	1	Decal - 500 LBS Max Capacity	
65	1001253920	1	Decal - 500 LBS Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705351	1	Decal - Drive/Steer Instruction	
84	1001223055	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	
86	1001228370	1	Decal - CSA ICES	
87	1001231801	1	Decal - Prop 65 Warning	

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FIGURE 9-2. DECAL INSTALLATION - ANSI EXPORT SPEC - ENGLISH - E450AJ (CHINA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001250508

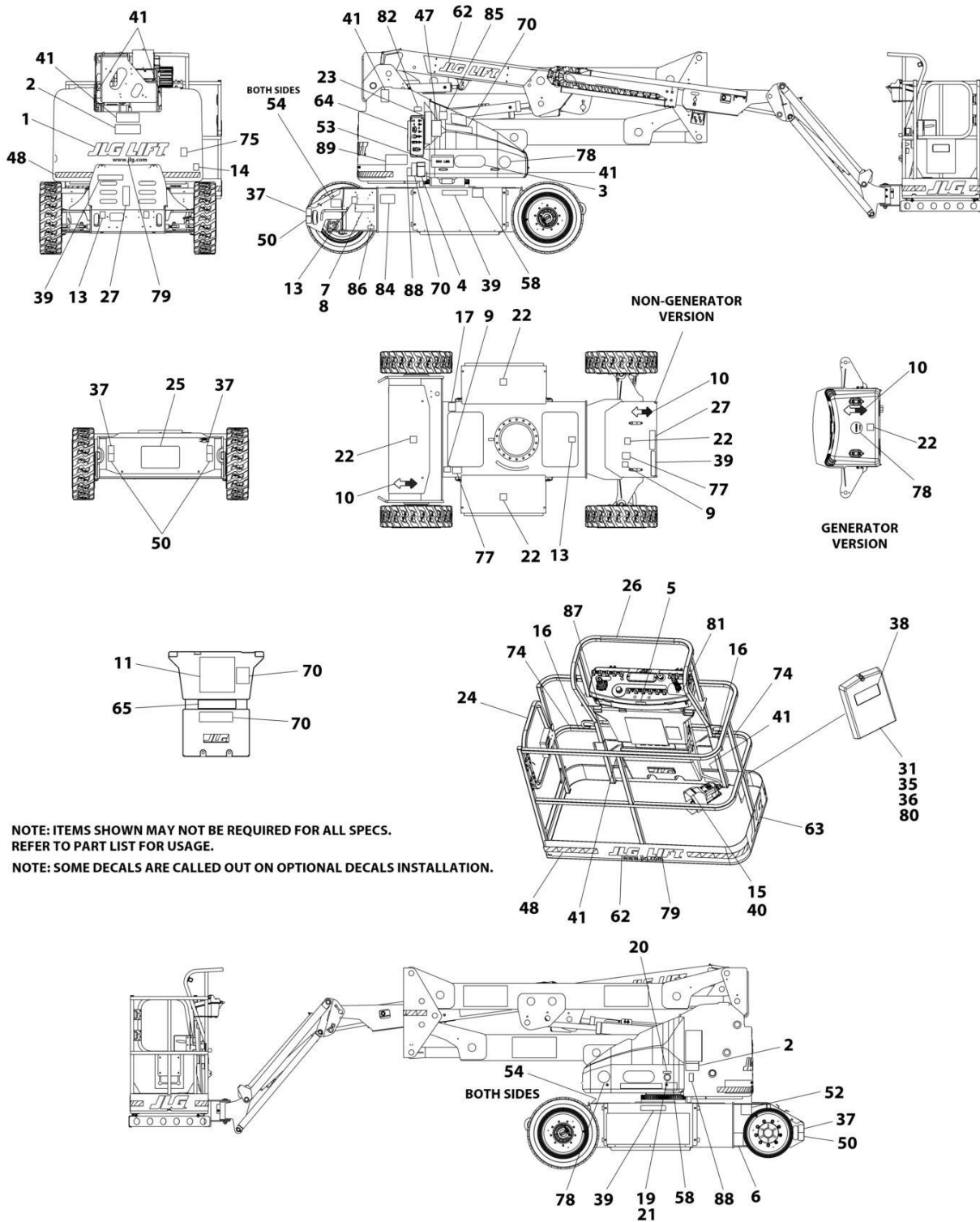
SECTION 9 - DECALS

FIGURE 9-2. DECAL INSTALLATION - ANSI EXPORT SPEC - ENGLISH - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001250508	Ref	DECAL INSTALLATION	C
2	1703805	2	Decal - Electrocution	
4	1703798	1	Decal - Crushing	
6	1001131269	1	Decal - Patent	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703797	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
20	3251243	1	Nameplate 120V-60Hz	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
24	1702868	2	Decal - No Hands	
25	1001193949	1	Decal - Cable Routing	
27	1704446	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1703813	3	Decal - Danger	
40	3252347	1	Nameplate - Footswitch	
41	1703804	6	Decal - Crushing Hazard	
47	1702265	1	Decal	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253921	1	Decal - 500 LBS Max Capacity	
64	1706950	1	Decal - Key Main Terminal Box	
65	1001253920	1	Decal - 500 LBS Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705351	1	Decal - Drive/Steer Instruction	
84	1001223055	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	
86	1001228370	1	Decal - CSA ICES	

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FIGURE 9-3. DECAL INSTALLATION - AUSTRALIAN SPEC - E450AJ



ART_1001178378

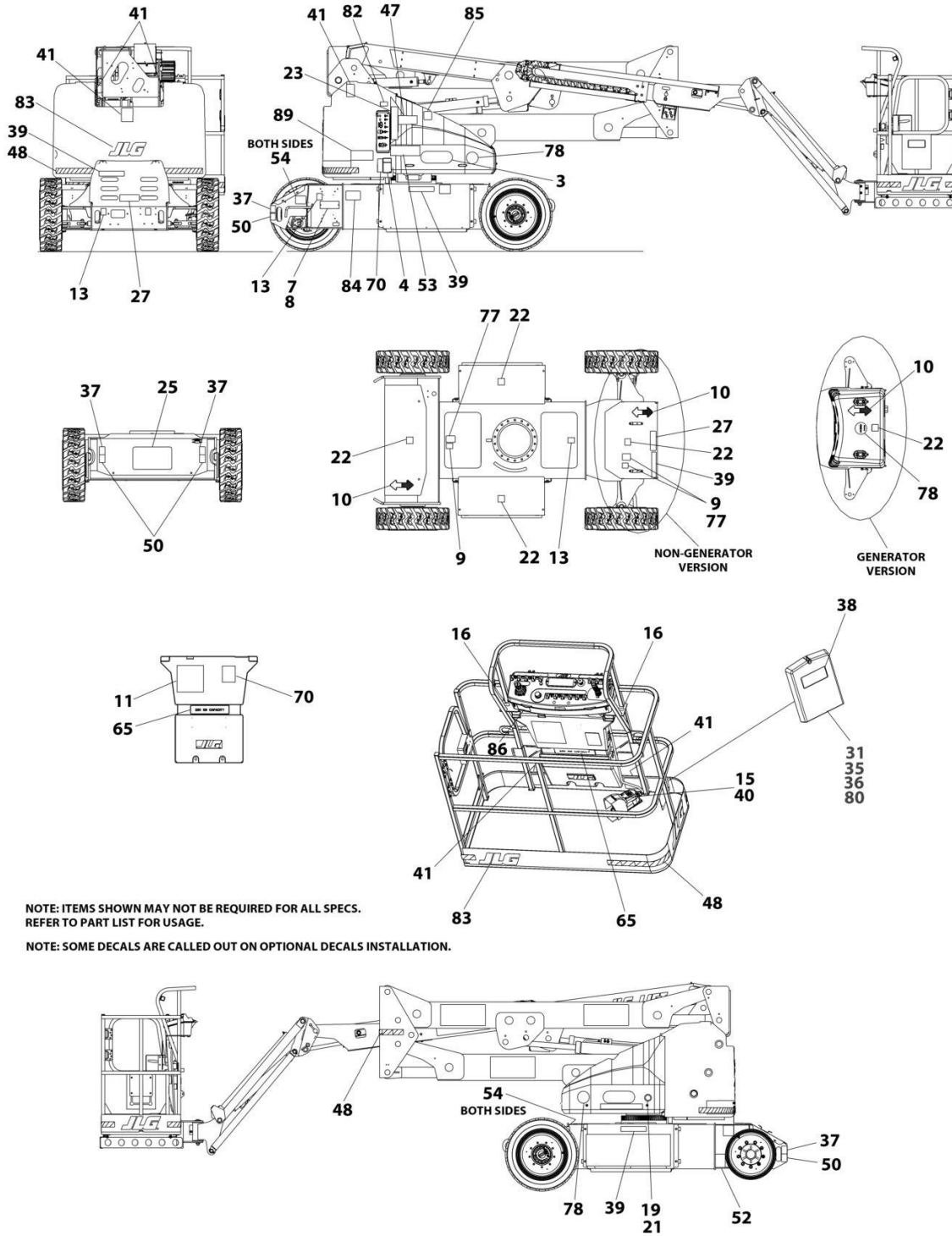
SECTION 9 - DECALS

FIGURE 9-3. DECAL INSTALLATION - AUSTRALIAN SPEC - E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001178378	Ref	DECAL INSTALLATION	I
4	1705822	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1705921	1	Decal - Danger/Caution	
13	1701644	2	Decal - Charger	
15	1705828	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1706378	1	Decal - Charging Instructions	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1703811	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1705670	AR	Decal - Explosion Warning	
41	1701518	6	Decal - Crushing Hazard	
47	1705977	1	Decal - Upright Level Over-Ride	
50	1703814	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1705978	1	Decal - Capacity	
65	1705978	1	Decal - Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-4. DECAL INSTALLATION - CE AND CHINA SPECS - E450AJ



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001190003

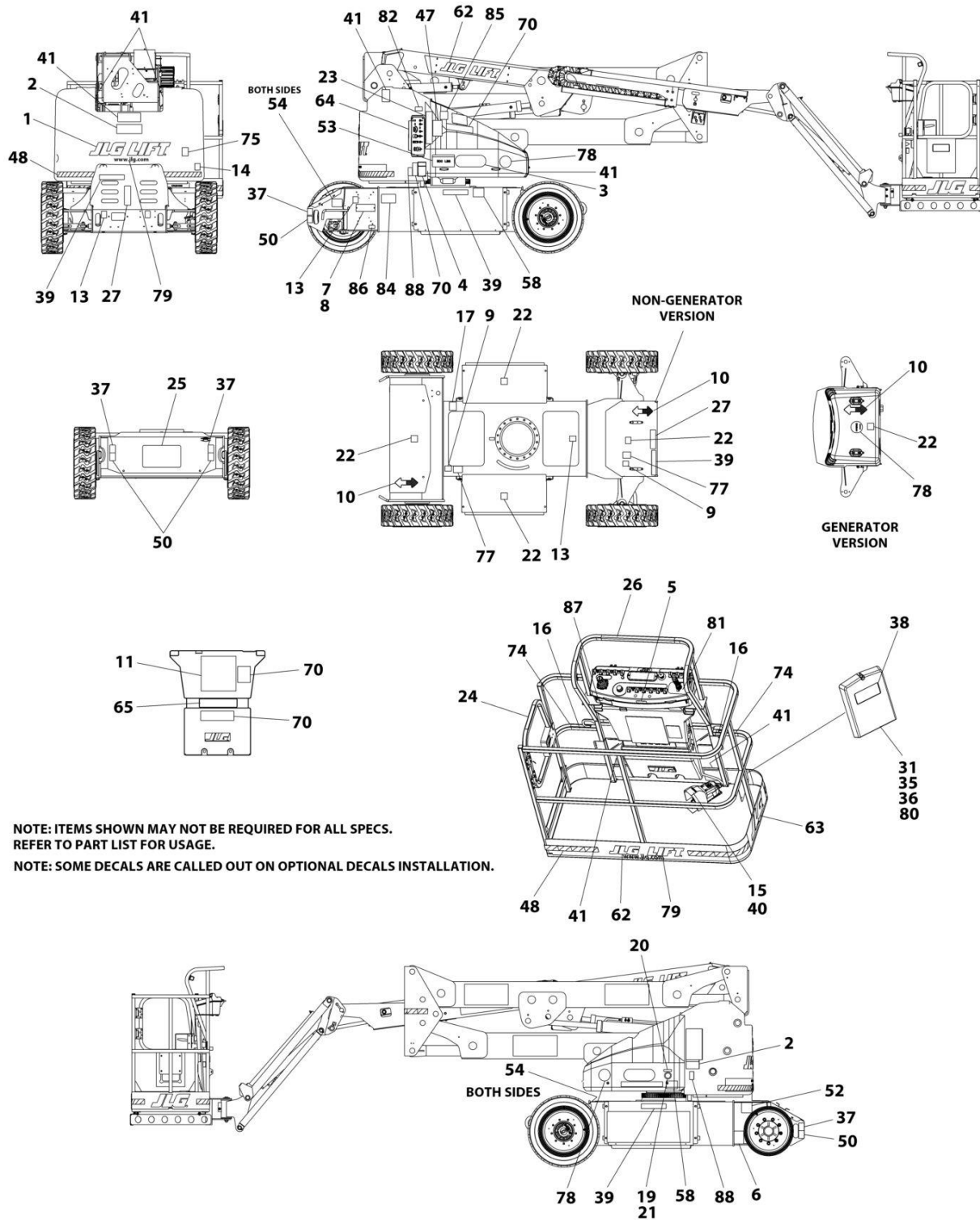
SECTION 9 - DECALS

FIGURE 9-4. DECAL INSTALLATION - CE AND CHINA SPECS - E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001217465	Ref	DECAL INSTALLATION - REFERENCE CHART	F
	1001190003	Ref	DECAL INSTALLATION	H
4	1705822	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1705921	1	Decal - Danger/Caution	
13	1701644	2	Decal - Charger	
15	1705828	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1706378	1	Decal - Charging Instructions	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1703811	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1705670	3	Decal - Explosion Warning	
41	1701518	6	Decal - Crushing Hazard	
47	1705977	1	Decal - Upright Level Over-Ride	
50	1703814	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1705978	1	Decal - Capacity	
65	1705978	1	Decal - Capacity	
77	1704412	1	Decal - Oil Type	
80	0641406	4	Bolt 1/4 x 3/4	
83	1702773	1	Decal - JLG 5in	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-5. DECAL INSTALLATION - CHINESE/ENGLISH - E450A/E450AJ (USA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001178376

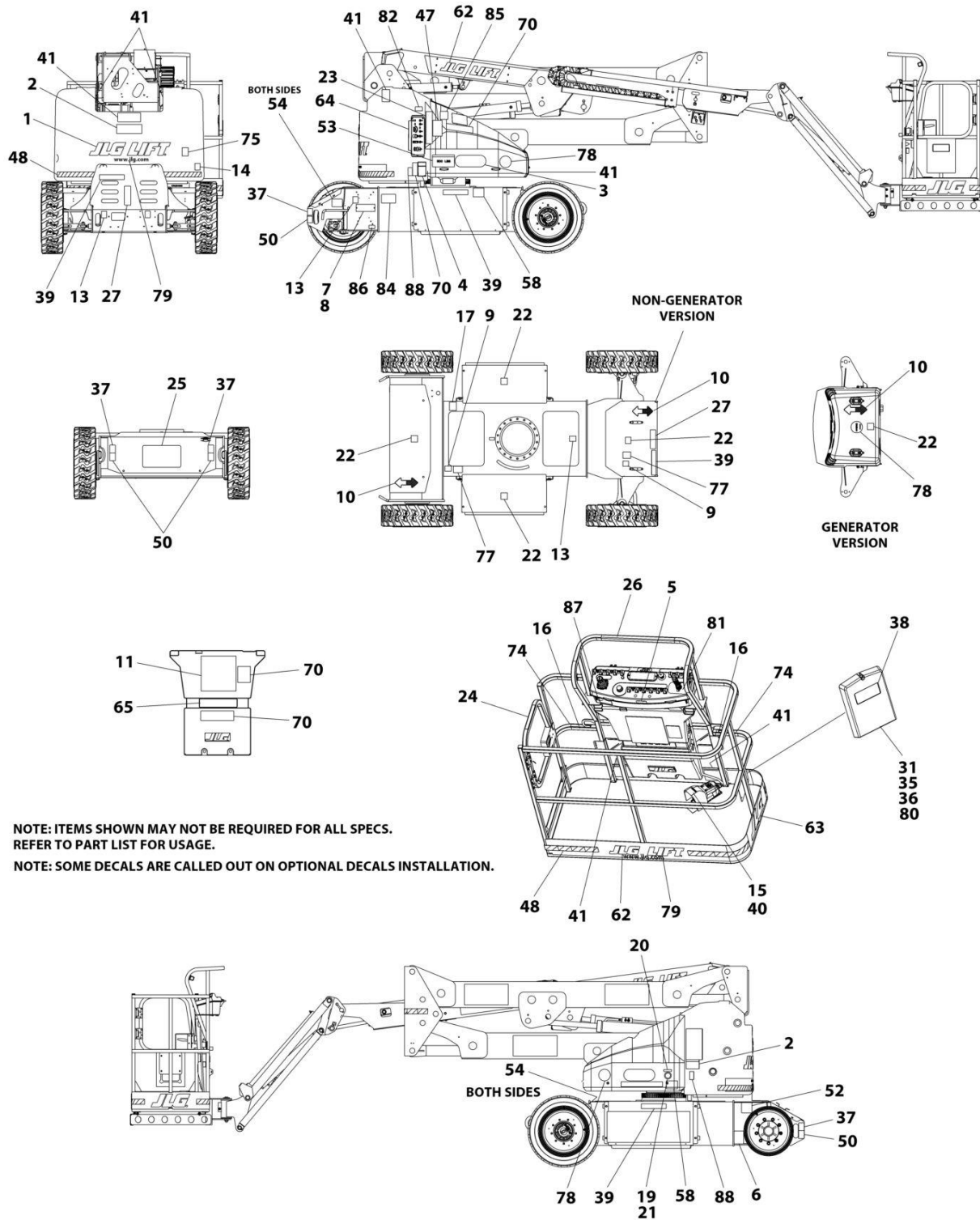
SECTION 9 - DECALS

FIGURE 9-5. DECAL INSTALLATION - CHINESE/ENGLISH - E450A/E450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	B
	1001178376	Ref	DECAL INSTALLATION	G
2	1703937	2	Decal - Electrocution	
4	1703931	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703925	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703982	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704419	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704344	3	Decal - Explosion Warning	
41	1703949	6	Decal - Crushing Hazard	
47	1703988	1	Decal - Upright Level Override	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001121823	1	Decal - 500 LBS. Max Capacity	
65	1001121810	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705430	1	Decal - Drive/Steer Instruction	
84	1001224050	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-6. DECAL INSTALLATION - CHINESE/ENGLISH - E450AJ (CHINA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001214413

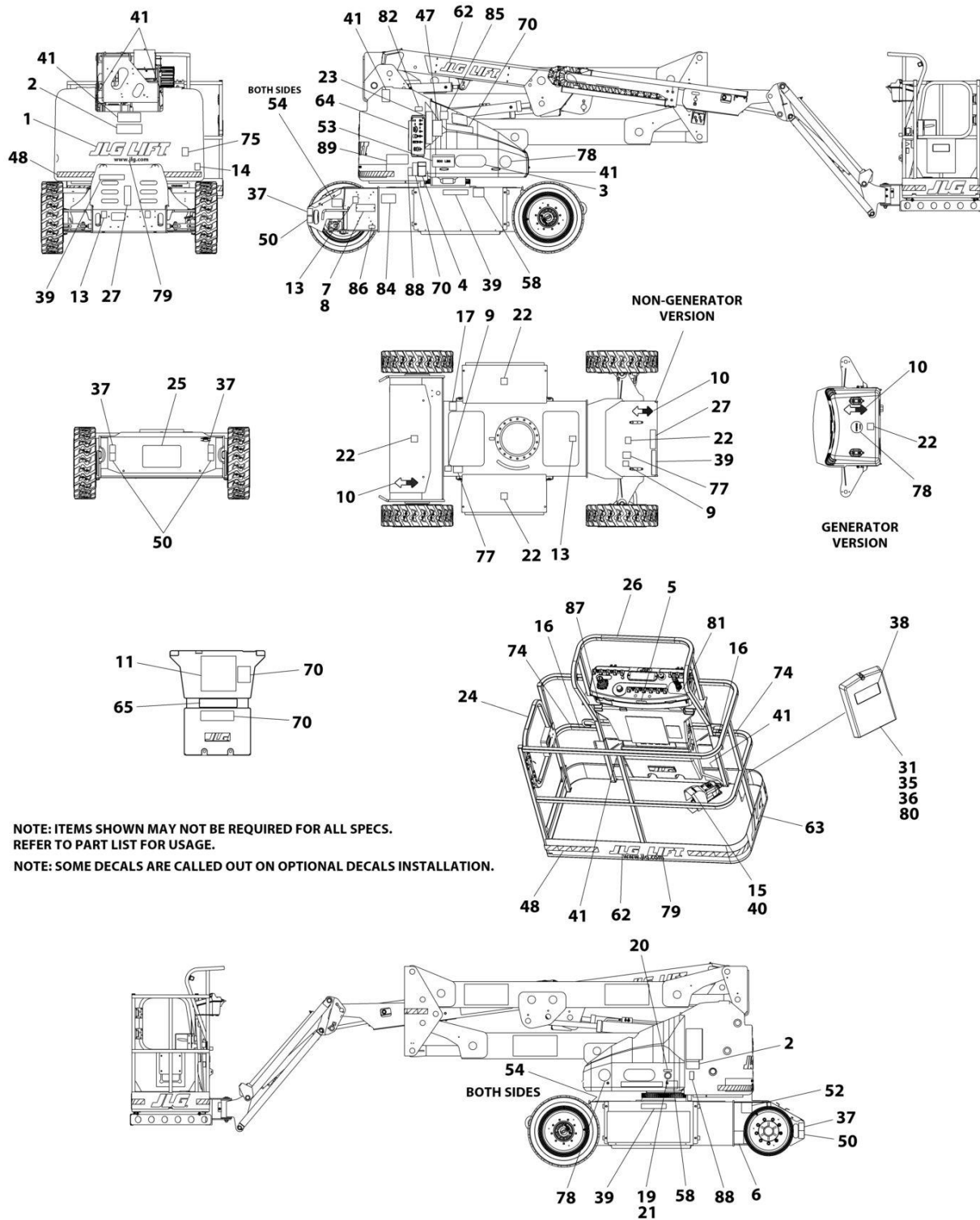
SECTION 9 - DECALS

FIGURE 9-6. DECAL INSTALLATION - CHINESE/ENGLISH - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	B
	1001214413	Ref	DECAL INSTALLATION	D
2	1703937	2	Decal - Electrocution	
4	1703931	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703925	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703982	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704419	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704344	3	Decal - Explosion Warning	
41	1703949	6	Decal - Crushing Hazard	
47	1703988	1	Decal - Upright Level Override	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001121823	1	Decal - 500 LBS. Max Capacity	
65	1001121810	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
78	1001121510	3	Decal - Hybrid	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705430	1	Decal - Drive/Steer Instruction	
84	1001224050	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	
88	1001244298	2	Decal - Wechat QR Code	

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FIGURE 9-7. DECAL INSTALLATION - FRENCH/ENGLISH SPECS - E450A/E450AJ



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001249186

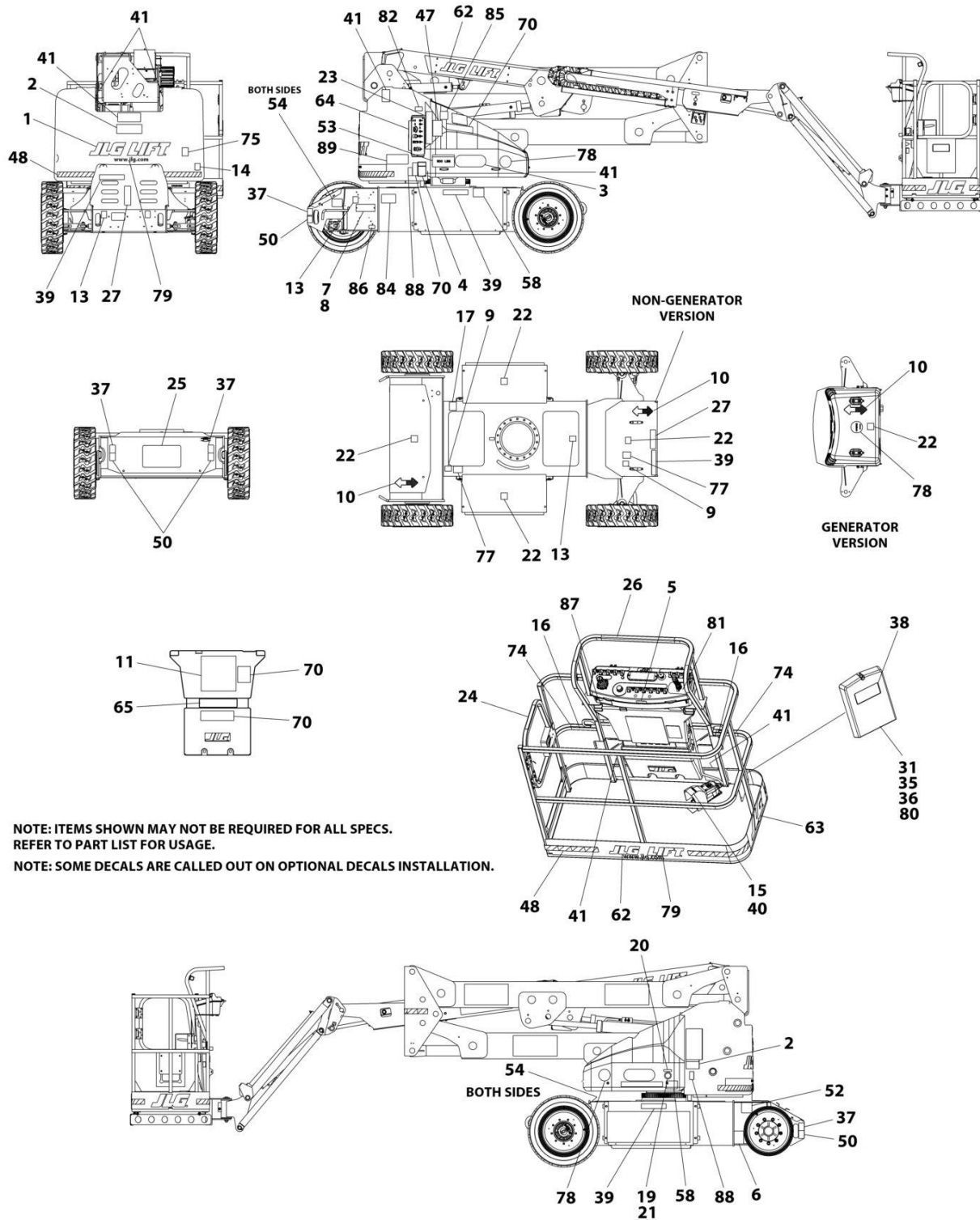
SECTION 9 - DECALS

FIGURE 9-7. DECAL INSTALLATION - FRENCH/ENGLISH SPECS - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001249186	Ref	DECAL INSTALLATION	C
2	1703936	2	Decal - Electrocutation	
4	1703930	1	Decal - Danger/Caution	
6	1700584	1	Decal - Patent	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703924	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703984	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
20	3251243	1	Nameplate - 120V/60HZ	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
24	1704000	2	Decal - No Hands	
25	1001193949	1	Decal - Cable Routing	
27	1704452	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704340	3	Decal - Explosion Warning	
41	1703948	6	Decal - Crushing Hazard	
47	1702265	1	Decal - Boom Sequence	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253923	1	Decal - 500 LBS. Max Capacity	
65	1001253922	1	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705429	1	Decal - Drive/Steer Instruction	
84	1001223971	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	
86	1001228370	1	Decal - CSA ICES	

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FIGURE 9-8. DECAL INSTALLATION - JAPANESE SPEC - E450A/E450AJ (USA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001249187

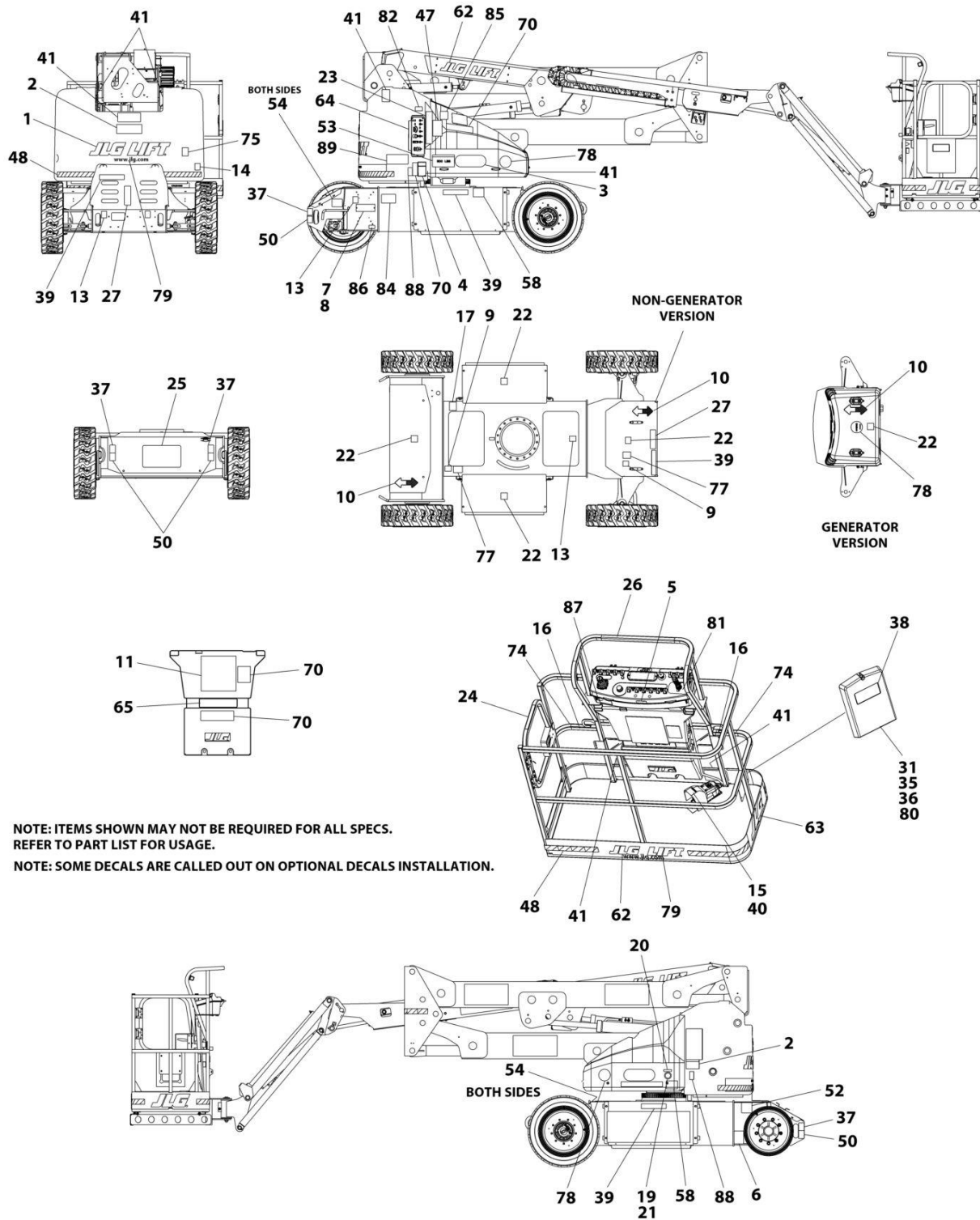
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FIGURE 9-8. DECAL INSTALLATION - JAPANESE SPEC - E450A/E450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001249187	Ref	DECAL INSTALLATION	D
2	1703938	2	Decal - Electrocution	
4	1703932	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703926	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703980	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704417	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704342	3	Decal - Explosion Warning	
41	1703950	6	Decal - Crushing Hazard	
47	1702271	1	Decal	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253933	1	Decal - 500 LBS. Max Capacity	
65	1001253932	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705426	1	Decal - Drive/Steer Instruction	
84	1001224053	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-9. DECAL INSTALLATION - JAPANESE SPEC - E450AJ (CHINA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001250509

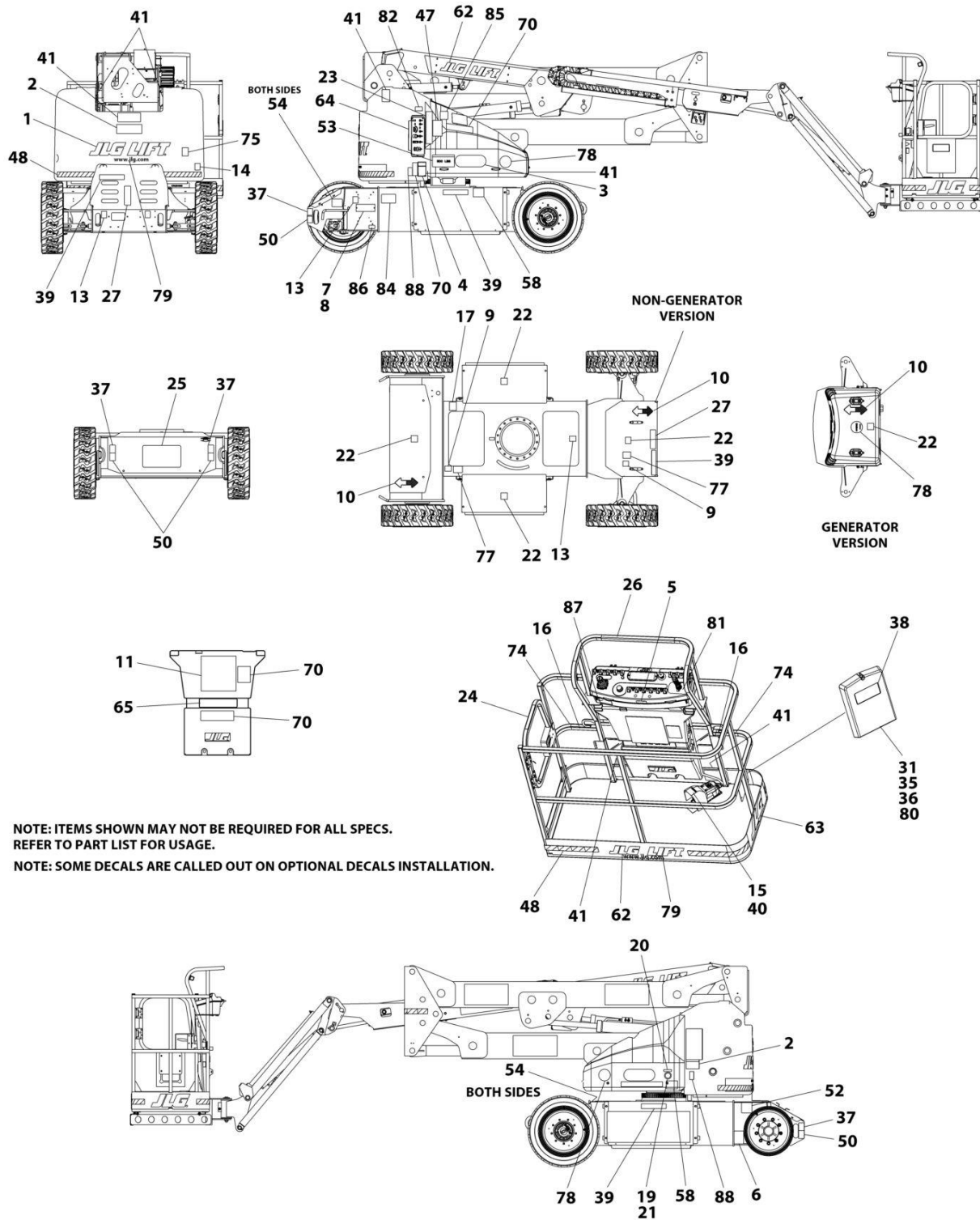
SECTION 9 - DECALS

FIGURE 9-9. DECAL INSTALLATION - JAPANESE SPEC - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001250509	Ref	DECAL INSTALLATION	C
2	1703938	2	Decal - Electrocution	
4	1703932	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703926	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703980	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704417	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704342	3	Decal - Explosion Warning	
41	1703950	6	Decal - Crushing Hazard	
47	1702271	1	Decal	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253933	1	Decal - 500 LBS. Max Capacity	
65	1001253932	1	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705426	1	Decal - Drive/Steer Instruction	
84	1001224053	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-10. DECAL INSTALLATION - KOREAN SPEC - E450A/E450AJ (USA BUILT MACHINES)



ART_1001178374

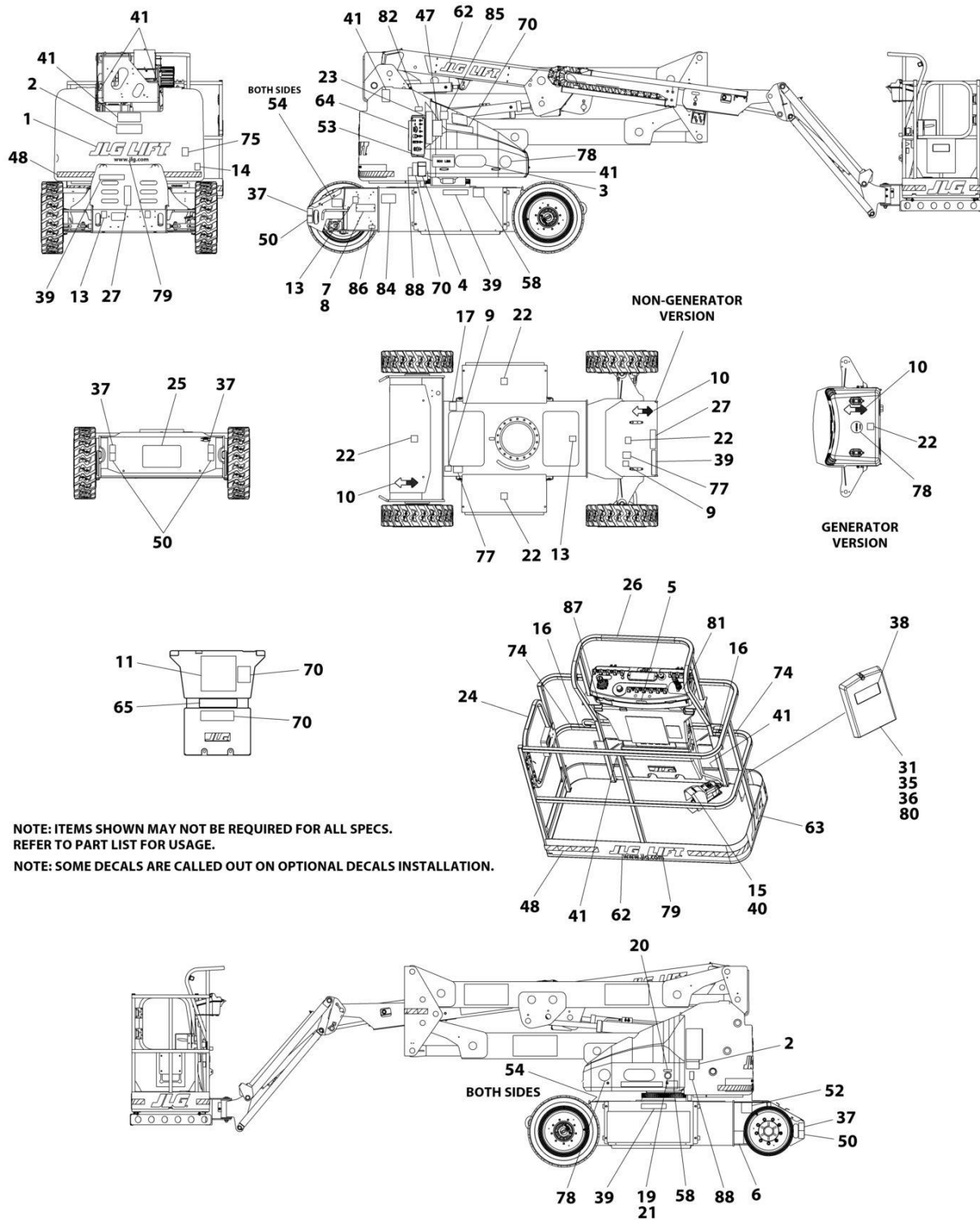
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FIGURE 9-10. DECAL INSTALLATION - KOREAN SPEC - E450A/E450AJ (USA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	B
	1001178374	Ref	DECAL INSTALLATION	G
2	1703939	2	Decal - Electrocution	
4	1703933	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703927	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703981	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704418	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	AR	Washer 1/4	
36	3311405	AR	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704343	3	Decal - Explosion Warning	
41	1703951	6	Decal - Crushing Hazard	
47	1703987	1	Decal - Upright Level Override	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001121921	1	Decal - 500 LBS. Max Capacity	
65	1001121918	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705427	1	Decal - Drive/Steer Instruction	
84	1001224048	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-11. DECAL INSTALLATION - KOREAN SPEC - E450AJ (CHINA BUILT MACHINES)



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.

NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001214412

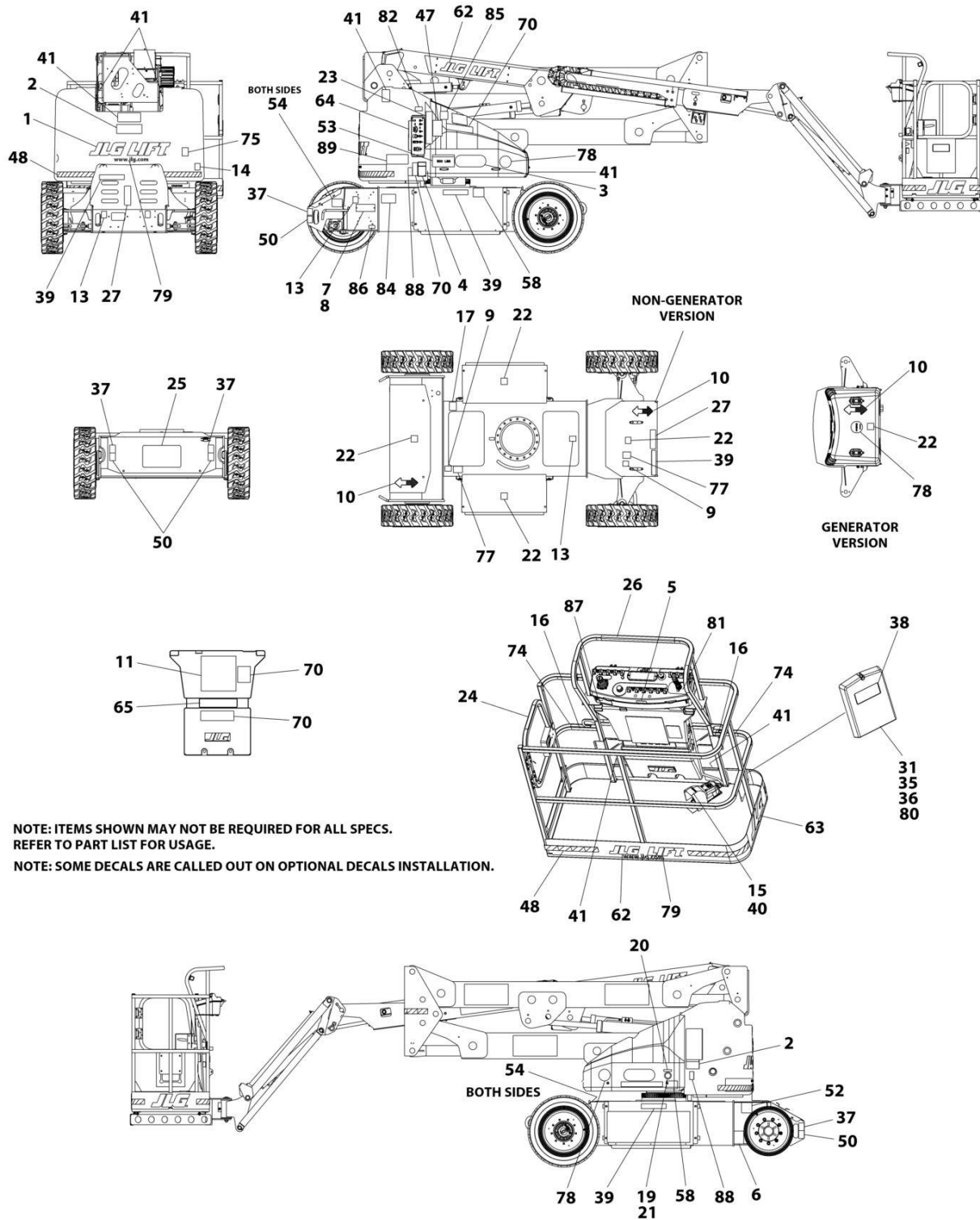
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FIGURE 9-11. DECAL INSTALLATION - KOREAN SPEC - E450AJ (CHINA BUILT MACHINES)

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	B
	1001214412	Ref	DECAL INSTALLATION - KOREAN SPEC - E450AJ (CHINA BUILT MACHINES)	C
2	1703939	2	Decal - Electrocutation	
4	1703933	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703927	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703981	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
25	1001193949	1	Decal - Cable Routing	
27	1704418	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704343	3	Decal - Explosion Warning	
41	1703951	6	Decal - Crushing Hazard	
47	1703987	1	Decal - Upright Level Override	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001121921	1	Decal - 500 LBS. Max Capacity	
65	1001121918	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705427	1	Decal - Drive/Steer Instruction	
84	1001224048	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-12. DECAL INSTALLATION - SPANISH/ENGLISH SPECS - E450A/E450AJ



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

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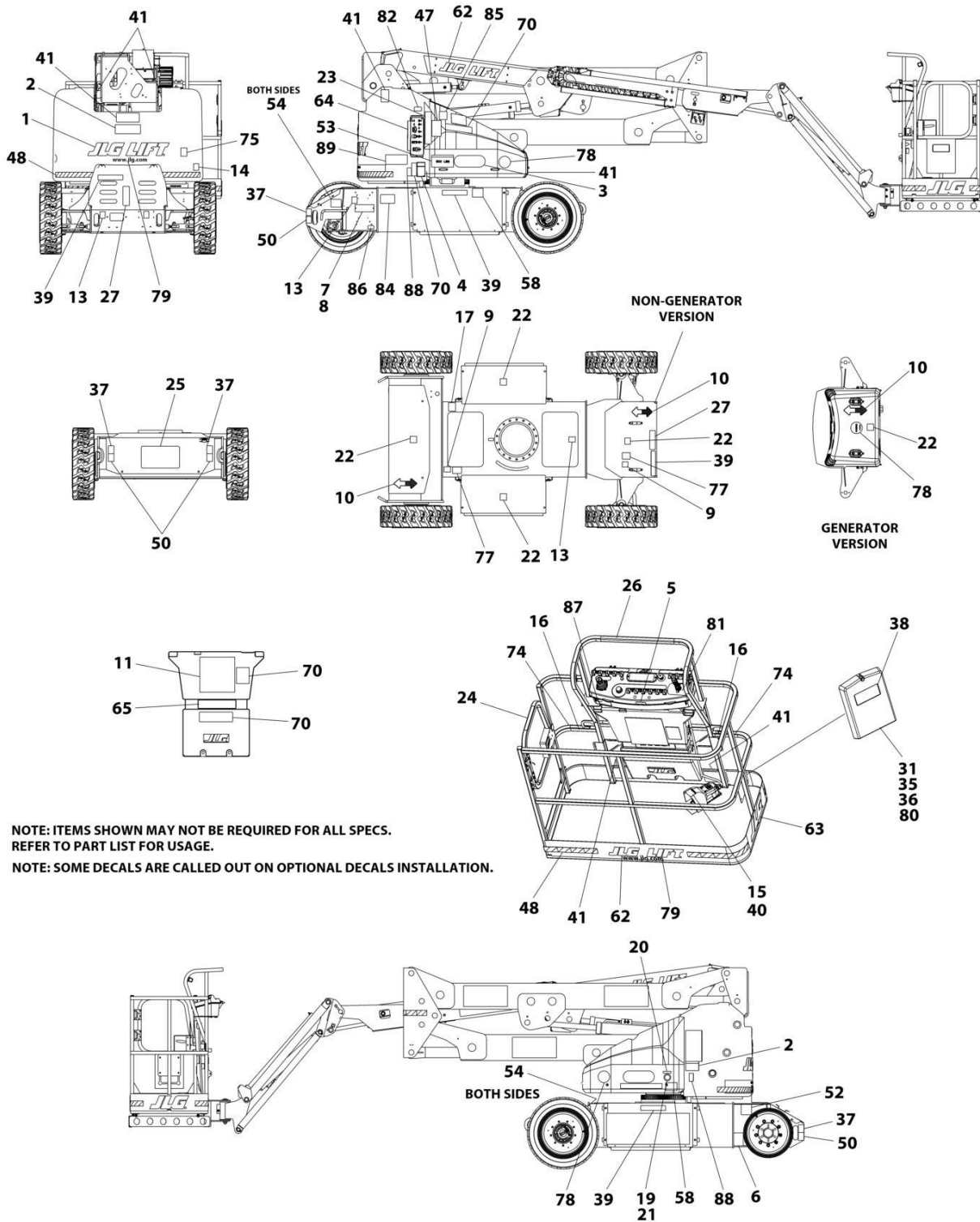
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FIGURE 9-12. DECAL INSTALLATION - SPANISH/ENGLISH SPECS - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001249189	Ref	DECAL INSTALLATION	C
2	1703935	2	Decal - Electrocutation	
4	1703929	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	2	Decal - Arrow	
11	1703923	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703983	1	Decal - Footswitch	
16	1704277	2	Decal - Attach Lanyard	
19	0961127	1	Bushing, Snap	
20	3251243	1	Nameplate - 120V/60HZ	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
24	1704001	2	Decal - No Hands	
25	1001193949	1	Decal - Cable Routing	
27	1704454	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704339	3	Decal - Explosion Warning	
41	1703947	6	Decal - Crushing Hazard	
47	1702265	1	Decal - Boom Sequence	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253931	1	Decal - 500 LBS. Max Capacity	
65	1001253930	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1705910	1	Decal - Drive/Steer Instruction	
84	1001224049	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

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FIGURE 9-13. DECAL INSTALLATION - SPANISH/PORTUGUESE SPECS - E450A/E450AJ



NOTE: ITEMS SHOWN MAY NOT BE REQUIRED FOR ALL SPECS.
REFER TO PART LIST FOR USAGE.
NOTE: SOME DECALS ARE CALLED OUT ON OPTIONAL DECALS INSTALLATION.

ART_1001248655

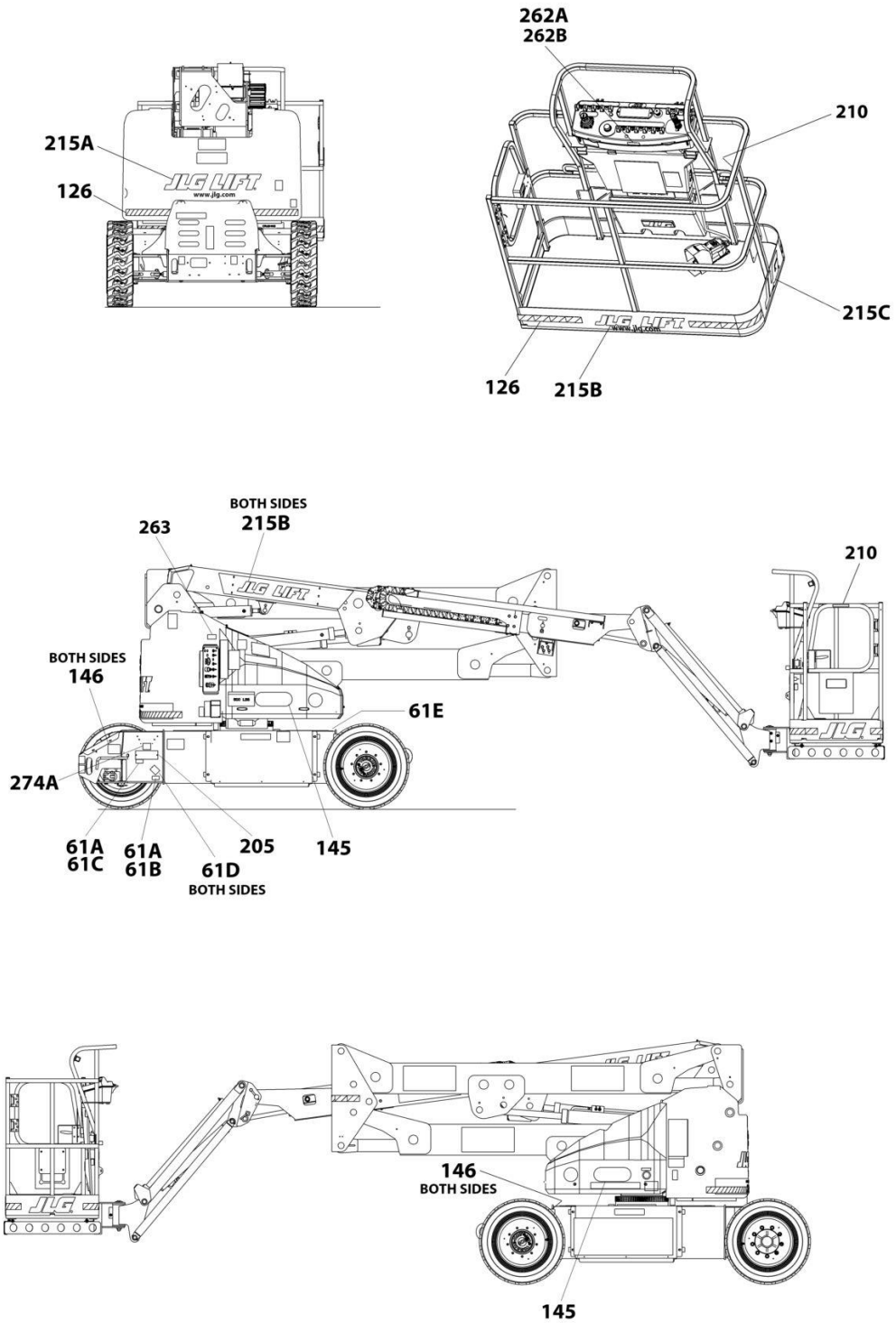
SECTION 9 - DECALS

FIGURE 9-13. DECAL INSTALLATION - SPANISH/PORTUGUESE SPECS - E450A/E450AJ

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	E
	1001248655	Ref	DECAL INSTALLATION	E
2	1703940	2	Decal - Electrocutation	
4	1703934	1	Decal - Danger/Caution	
8	3820001	2	Rivet	
9	1701504	1	Decal - Hydraulic Oil	
10	1701642	1	Decal - Arrow	
11	1703928	1	Decal - Caution/Danger	
13	1701644	2	Decal - Charger	
15	1703985	1	Decal - Footswitch	
16	1704277	2	Decal - Footswitch	
19	0961127	1	Bushing, Snap	
20	3251243	1	Nameplate - 120V/60HZ	
21	0100010	AR	Adhesive	
22	1701691	4	Decal - No Step	
23	1001104864	1	Decal - Manual Descent	
24	1704002	2	Decal - No Hands	
25	1001193949	1	Decal - Cable Routing	
27	1704453	1	Decal - Charger	
31	0860520	1	Box, Manual Storage	
35	4751400	4	Washer 1/4	
36	3311405	4	Nut 1/4	
37	1701500	4	Decal - Lift	
38	1701509	1	Decal - Manual	
39	1704341	3	Decal - Explosion Warning	
41	1703952	6	Decal - Crushing Hazard	
47	1703991	1	Decal - Boom Sequence	
50	1702300	4	Decal - Tie Down	
52	See Note	1	Decal - Bar Code (Note: Not Available for Purchase)	
53	1001253929	1	Decal - 500 LBS. Max Capacity	
65	1001253928	2	Decal - 500 LBS. Max Capacity	
77	1704412	1	Decal - Oil Type	
79	1704885	2	Decal - Website	
80	0641406	4	Bolt 1/4 x 3/4	
81	1001113680	1	Decal - Drive/Steer Instruction	
84	1001224052	1	Decal - Yearly Inspection	
85	1001222801	1	Decal - Manual Jib Pump	

SECTION 9 - DECALS

FIGURE 9-14. DECAL INSTALLATION - OPTIONS



ART_DECAL_OPTIONS

SECTION 9 - DECALS

FIGURE 9-14. DECAL INSTALLATION - OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001248659	Ref	DECAL INSTALLATION - REFERENCE CHART	B
	1001249345	Ref	DECAL INSTALLATION - OPTIONS	B
61	0270433	Ref	Decal Installation - UL Tags	B
61A	3820001	8	Pop Rivet	
61B	3252331	1	Nameplate - Battery Info	
61C	3252780	1	Nameplate - UL Certification Tag	
61D	1702251	2	Nameplate - EE	
61E	1001213625	1	Decal - Replacement Fuse 400 Amp	
126	0259550	Ref	Warning Strip Installation (Not Shown)	2
126	4420051	17.5 ft /5.3m	Tape, Safety	
145	1704789	2	Decal - Model Designation (E450AJ)	
146	1704445	4	Decal - Tire Load (E450AJ/M450AJ)	
205	See Note	1	Nameplate - Serial Number (Note: Not Available for Purchase)	
210	1702868	Ref	Decal - No Hands (English) (ANSI/ANSI Export/Australian and Japanese Spec) (Used with Platform Padding, Soft Touch Platforms or Mesh to Top Rail)	
210	1704000	Ref	Decal - No Hands (English & French) (CSA Spec) (Used with Platform Padding, Soft Touch Platforms or Mesh to Top Rail)	
210	1705968	Ref	Decal - No Hands (English/Simplified Chinese) (ANSI Export Spec) (Used with Soft Touch Platforms)	
210	1001116846	Ref	Decal - No Hands (English and Traditional Chinese) (ANSI Export Spec) (Used with Soft Touch Platforms)	
210	1704001	Ref	Decal - No Hands (English/Spanish (ANSI Export and CE Specs) (Used with Soft Touch Platforms)	
210	1705969	Ref	Decal - No Hands (English/Korean (ANSI Export Specs) (Used with Soft Touch Platforms)	
210	1705967	Ref	Decal - No Hands (English/Portuguese (ANSI Export and CE Specs) (Used with Soft Touch Platforms)	
215	0270273	Ref	Decal Installation - JLG Logo (Not Shown)	C
215A	1702860	1	Decal - JLG Lift	
215B	1702774	3	Decal - JLG Lift	
215C	1702773	1	Decal - JLG	
262A	1001141300	1	Decal - Platform Sensor Override	
262B	1001141302	1	Decal - SkyGuard/Soft Touch Override	
263	1001189882	1	Decal - MSSO Instructions (CE Specs Only)	
274	1001214031	1	Decal Installation - EAC (Russian/CIS Specs)	
274	1001173703	1	Decal - EAC (Russian/CIS Specs)	

SECTION 10 - RECOMMENDED SERVICE PARTS STOCK

SECTION 10 - RECOMMENDED SERVICE PARTS STOCK

SECTION 10 - RECOMMENDED SERVICE PARTS STOCK

FIGURE 10-1. RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	Note: The following list will service one machine (built to current production per date on the front cover) with emergency repair parts which can be installed in the field. Parts from the list should be replaced when inventory is depleted to keep service parts stock supplied. For further information, contact your JLG dealer or the JLG Industries Parts Department.	
		Ref	STANDARD PARTS	
	7021618	1	Coil	
	7021609	1	Coil	
	70005210	1	Coil	
	7024883	1	Coil	
	7024885	1	Coil	
	1001212415	1	Controller (Drive and Steer)	
	1001129555	1	Controller (Lift and Swing)	
	4360476	1	Contact, Switch	
	7021616	4	Filter Cartridge	
	1001196634	1	Fuse, 2 Amp	
	8229242	1	Fuse, 5 Amp	
	8229261	1	Fuse, 5 Amp	
	8229234	1	Fuse, 10 Amp	
	8229237	1	Fuse, 15 Amp	
	8229235	1	Fuse, 20 Amp	
	8229236	1	Fuse, 30 Amp	
	1001170365	1	Fuse, 400 Amp	
	2860030	1	Key Replacement	
	2940074	1	Latch	
	1001155045	1	Switch, Toggle	
	1001159256	1	Switch, Toggle	
	4360475	1	Switch, Emergency	
	4360469	1	Switch, Key (ANSI Spec)	
	4360387	1	Switch, Push Button	
	1001161710	1	Switch, Toggle	
		Ref	VARIABLE PARTS	
	1001181045	1	Breaker 30mA (CE Spec)	
	1001189172	1	Breaker 16Amp (CE Spec)	
	1001189171	1	Breaker 16Amp (CE Spec)	
	70000313	1	Element, Air Cleaner (M450AJ Only)	
	70000318	1	Element, Fuel Filter (M450AJ Only)	
	70000319	1	Element, Oil Filter (M450AJ Only)	
	70000329	1	Fuse 15Amp (M450AJ Only)	
	70000330	1	Fuse 20Amp (M450AJ Only)	
	1001192212	1	Module (Drive - LH)	
	1001178339	1	Module (Drive - RH)	
	1001182700	1	Module (Ground Control)	
	1001182724	1	Module (Platform Control) (NON-UL Listed)	
	1001215835	1	Module (Platform Control) (UL Listed)	
	70000326	1	Module (Engine Control)	
	7019698	1	Power Track - 1 Link	
	70001996	1	Power Track - 2ft. Section	

SECTION 10 - RECOMMENDED SERVICE PARTS STOCK

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	70001998	1	Power Track - Bracket Kit	
	4360548	1	Switch, Limit	
	4360274	1	Switch, Push Button (M450AJ Only)	

SECTION 11 - SPECIAL OPTIONS

SECTION 11 - SPECIAL OPTIONS

FIGURE 11-1. SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	MISCELLANEOUS SPECIAL OPTIONS	
		Ref	Note: This list is to accommodate machines ordered with special equipment. Options may not be applicable to all models. For more specific parts information contact JLG Parts Department.	
	0275650	Ref	Airline Installation - 1/2in (E/M450AJ Models)	
	1001261338	Ref	Bolt-On Fall Arrest - 30in X 4ft (76cm x 1.22m) (All Specs Except CE Specs)	
	1001257275	Ref	Bolt-On Fall Arrest - 30in x 5ft (76cm x 1.52m) (All Specs Except CE Specs)	
		Ref	ClearSky (Telematics) Installations (Dealer Installed)	
	1001243575	Ref	ClearSky (Telematics) Access Control Installation Kit (Dealer Installed) (ANSI, ANSI Export, CE and CSA Specs)	
	1001243183	Ref	ClearSky (Telematics) Added-on Kit (Dealer Installed) (ANSI, ANSI Export and CSA Specs)	
	1001250537	Ref	ClearSky (Telematics) Added-on Kit (Dealer Installed) (ANSI and CSA Specs)	
	1001247426	Ref	ClearSky (Telematics) Added-on Kit (Dealer Installed) (Australian Specs)	
	1001243184	Ref	ClearSky (Telematics) Added-on Kit (Dealer Installed) (CE Specs)	
	1001254285	Ref	ClearSky (Telematics) Added-on Kit (Dealer Installed) (CE Specs)	
	1001230504	Ref	ClearSky Telematics Installation - 3 Wire Connection (Dealer Installed) (ANSI Specs)	
	1001234102	Ref	ClearSky Telematics Installation - 3 Wire Connection (Dealer Installed) (ANSI Export & CE Specs)	
	1001236405	Ref	ClearSky Telematics Installation - Canbus (Dealer Installed) (ANSI Specs)	
	1001237110	Ref	ClearSky Telematics Installation - Canbus (Dealer Installed) (ANSI Export & CE Specs)	
		Ref	ClearSky Telematics (Factory Installed)	
	1001229107	Ref	ClearSky Telematics Installation - 3 Wire Connection (Factory Installed) (ANSI & CSA Specs)	
	1001233237	Ref	ClearSky Telematics Installation - 3 Wire Connection (Factory Installed) (ANSI Export & CE Specs)	
	1001235649	Ref	ClearSky Telematics Installation - Canbus (Factory Installed) (ANSI & CSA Specs)	
	1001246541	Ref	ClearSky Telematics Installation - Canbus (Factory Installed) (Australian Specs)	
	1001236535	Ref	ClearSky Telematics Installation - Canbus (Factory Installed) (ANSI Export & CE Specs)	
	1001246542	Ref	ClearSky Telematics Installation - Canbus (Factory Installed) (China Specs)	
	1001195304	Ref	Console Cover	
		Ref	Cylinder Bellows Installations	
	1001241863	Ref	Cylinder Bellows Installations (E450A)	
	0271251	Ref	Cylinder Bellows Installations (E/M450AJ)	
	0460110	2	Bellows - Platform Level and Master Cylinders (E450A)	
	0460194	2	Bellows - Platform Level and Master Cylinders (E/M450AJ)	
	0460115	1	Bellows - Main Lift Cylinder	
	0460113	1	Bellows - Mid Lift Cylinder	
	0460114	1	Bellows - Tower Lift Cylinder	
	0460196	1	Bellows - Jib Cylinder (E/M450AJ)	

SECTION 11 - SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1320037	6	Clamp	
		Ref	Decal Installations	
	1001229691	Ref	Decal - ClearSky Installation	
	1001108727	Ref	Decal Kit - Platform	
	1001223824	Ref	Decal Kit - Platform Console	
		Ref	Electrical Connector Kits	
	1001148902	Ref	Amp Connector Kit	
	1001148903	Ref	Deutsch DT Connector Kit	
	1001148904	Ref	Deutsch HD Connector Kit	
	1001148905	Ref	Packard Connector Kit	
	1001148906	Ref	Various Connector Kit	
	1001191314	Ref	Headlight and Tail Lights Installation	
		Ref	Hydraulic Fluids	
	2300028	Ref	Hydraulic Fluid - Mobil DTE 10 Excel 15	
	2300027	Ref	Hydraulic Fluid - Mobil EAL 224H - Biodegradable	
	1001251369	Ref	Hood Kit	
	1001151286	Ref	Jib Cylinder with Manual Descent Valve Kit	
	1001259112	Ref	Operator Access Control	
		Ref	Platform Mesh To Mid Rail Add-on Kits	
	1001214478	Ref	30in X 4ft (76cm x 1.22m)	
	1001214515	Ref	30in X 5ft (76cm x 1.52m)	
	1001214560	Ref	30in x 6 ft (76cm x 1.83m)	
		Ref	Platform Mesh To Mid Rail Installations	
	1001140318	Ref	30in X 4ft (76cm x 1.22m)	
	1001140315	Ref	30in X 5ft (76cm x 1.52m)	
		Ref	Platform Mesh Top Rail Add-on Kits	
	1001214552	Ref	30in X 4ft (76cm x 1.22m)	
	1001214559	Ref	30in X 5ft (76cm x 1.52m)	
	1001214560	Ref	30in x 6 ft (76cm x 1.83m)	
		Ref	Platform Mesh Top Rail Installations	
	0273147	Ref	30in X 4ft (76cm x 1.22m)	
		Ref	Platform Padding Installation	
	0273381	Ref	30in X 4ft (76cm x 1.22m)	
	0273382	Ref	30in X 5ft (76cm x 1.52m)	
	0275698	Ref	30in x 6 ft (76cm x 1.83m)	
		Ref	Platform Top Rail Extension Installation	
	1001103617	Ref	30in X 4ft (76cm x 1.22m)	
	1001103558	Ref	30in X 5ft (76cm x 1.52m)	
	1001120466	Ref	Platform Worklights Installation	
	1001209059	Ref	Platform Work Surface Installation	
	1001212202	Ref	Rotator Actuator Protection Kit	
	1001190896	Ref	Service Kits	
	1001237443	Ref	Service Kit, E450A Mid-Level Cylinder	
	1001241547	Ref	SkyEye Housing Kit - LH Side	
	1001241548	Ref	SkyEye Housing Kit - RH Side	
	1001247073	Ref	SkyEye Retrofit Kit	
	1001218499	Ref	SkyGuard Bar Kit	
	1001206996	Ref	SkyGuard Complete Add-on Kit (Blue)	
	1001210033	Ref	SkyGuard Complete Add-on Kit (Red)	
	1001205501	Ref	SkyGuard Beacon Kit (Blue)	
	1001210032	Ref	SkyGuard Beacon Kit (Red)	

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SECTION 11 - SPECIAL OPTIONS

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001249052	Ref	SkyGuard Retrofit Kit	
	1001232643	Ref	SkyLine Kit	
	1001246867	Ref	SkySense (EDS) Add-on Kit - Level 1 (Dealer Installad)	
	1001246860	Ref	SkySense (EDS) Add-on Kit - Level 2 (Dealer Installad)	
	1001250465	Ref	SkySense (EDS) Installation - Level 1 (Factory Installad)	
	1001250466	Ref	SkySense (EDS) Installation - Level 2 (Factory Installad)	
		Ref	Strobe Light Installations (Amber)	
	1001191144	Ref	Strobe Light Installation (Amber) Platform Mounted	
	1001241747	Ref	Strobe Light Installation (Amber) Ground Mounted	
	1001191145	Ref	Strobe Light Installation (Amber) Platform/Ground Mounted	
	1001218502	Ref	Strobe Light Installations (Blue)	
	1001218503	Ref	Strobe Light Installations (Red)	
		Ref	Tools for Service	
	2901443	1	Analyzer Kit	
	1001249695	1	Analyzer and Cable Kit	
	1001249941	1	Analyzer and Cable Kit (Battery Powered)	
	1001137005	1	Cable Service Kit	
	7002828	1	Stripper, Wire	
	7002821	1	Crimper, Wire	
	7002823	1	Pin Extractor - Universal (For Electrical Connectors with Pins and Sockets)	
	4460467	1	Extractor - 16-18 Gauge (For Removal of Pin/Sockets from Deutsch Connectors)	
	4460510	1	Extractor - 12-14 Gauge (For Removal of Pin/Sockets from Deutsch Connectors)	
	7004275	1	Seal Tool 1in (For Cylinders)	
	7004276	1	Seal Tool 1-1/2in (For Cylinders)	
	7016654	1	Screwdriver, Magnetic	
	70004185	1	Torque Multiplier	
	7016655	1	Wire Rope Sheave Gauge	
	1001200914	Ref	Trickle Charger 12Volt	
	1001246695	Ref	Valve and Hose Protection Cover	
	1001241270	Ref	Wear Pad Kit	
	0259302	Ref	Wheel Cover Installation	
	1001235847	Ref	White Noise Alarm Service Kit	
	1001235848	Ref	White Noise Ambient Alarm Service Kit	
	1001231870	Ref	White Noise Ambient Alarm	
	1001231804	Ref	White Noise Alarm	

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0100020.....	21, 26, 211	0630467.....	321	0682014.....	21, 25	1001104864.....	395, 397, 399, 401, 403, 405, 407, 409, 411, 413, 415, 417, 419
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