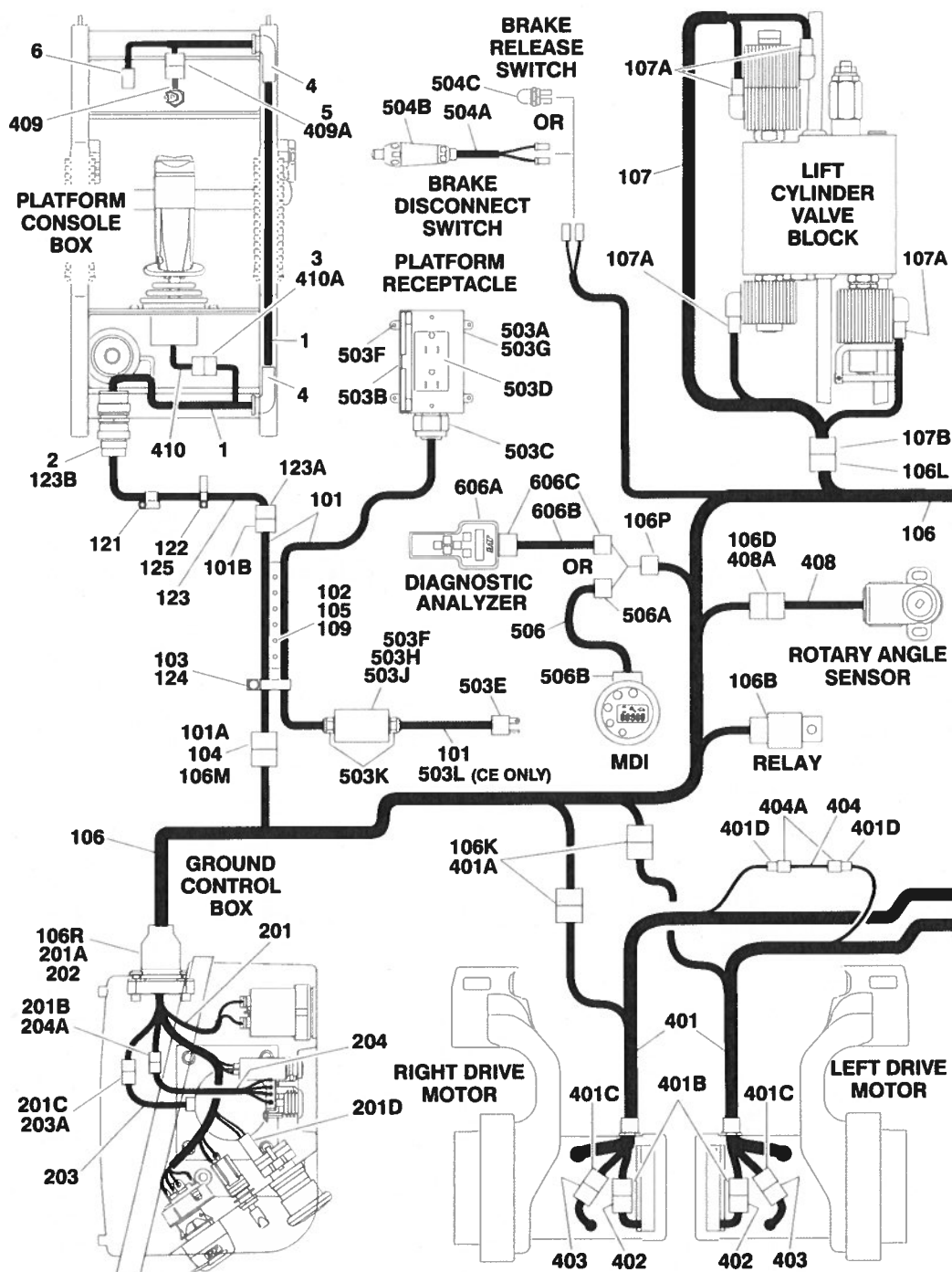


## **SECTION 7 - ELECTRICAL**

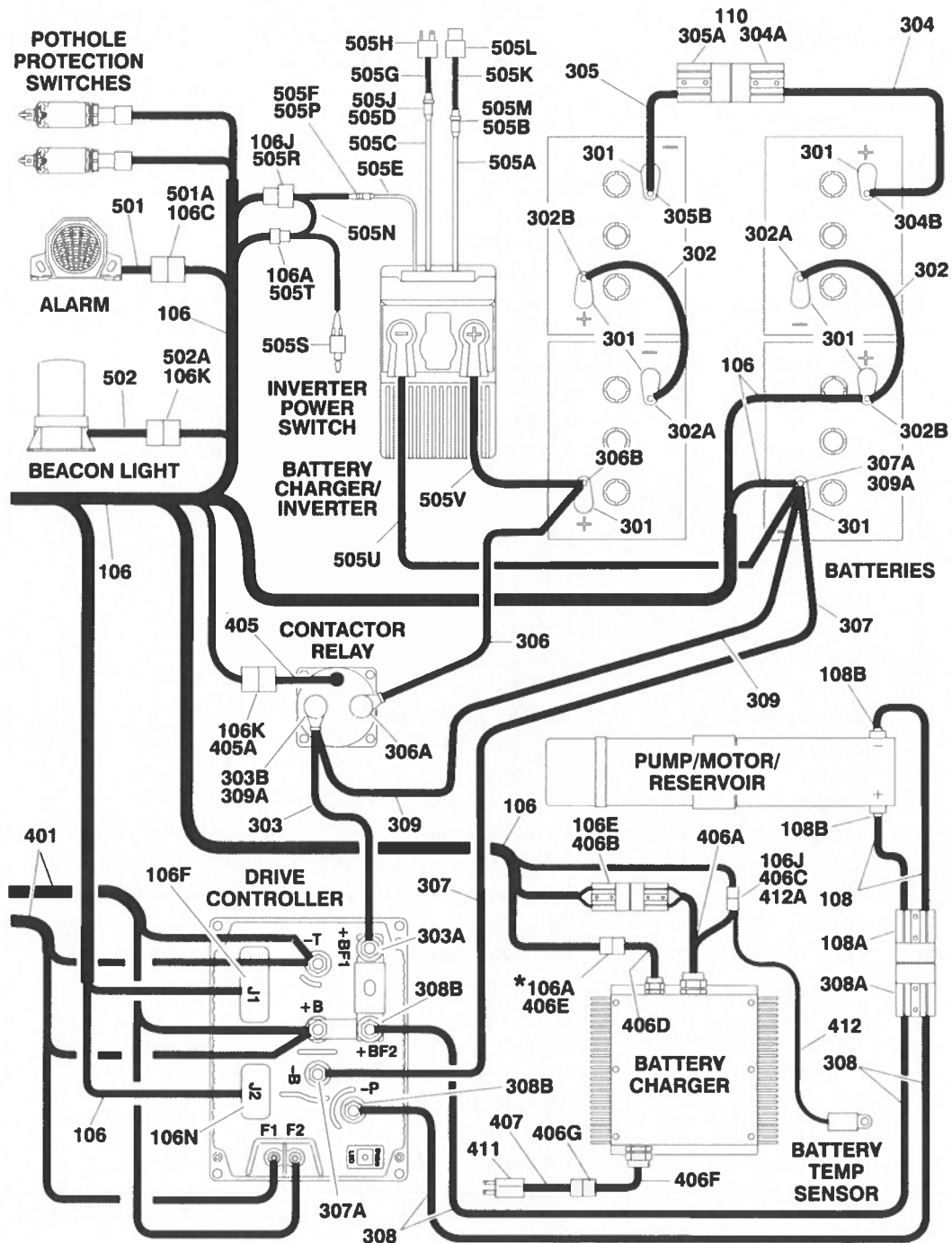
## **SECTION 7 - ELECTRICAL**

## SECTION 7 - ELECTRICAL

FIGURE 7-1. 1930ES ELECTRICAL COMPONENTS INSTALLATION



## SECTION 7 - ELECTRICAL



**\*NOTE: THIS CONNECTION USED ONLY WHEN FOOTSWITCH OR BATTERY CHARGER INTERLOCK OPTIONS ARE REQUIRED.**

## SECTION 7 - ELECTRICAL

FIGURE 7-1. 1930ES ELECTRICAL COMPONENTS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONSOLE BOX COMPONENTS</b>	
1	4922870	1	Platform Box Harness	C
2	4461016	1	Connector - 14 Position	
2	4460464	5	Pin, Male	
2	4460466	9	Plug, Sealing	
2	4460496	1	Lockwasher	
2	4460497	1	Nut, Panel	
3	4460265	1	Plug, Male - 9 Position	
3	4460267	8	Pin, Male	
4	2540042	2	Grommet 90	
5	Not Available	1	Receptacle, Female - 3 Position	
6	4461057	1	Plug, Male - 16 Position	
		Ref	<b>PLATFORM CABLES INSTALLATION</b>	
	1001116630	Ref	<b>ANSI, ANSI Export, Japanese and UL Specs</b>	C
	1001116631	Ref	<b>Australian and CE Specs</b>	C
101		Ref	Platform to Ground Harness Options:	
101	1001094154	1	ANSI, ANSI Export, Japanese and UL Specs	E
101	1001094332	1	Australian and CE Specs:	E
101A	4460930	1	Plug, Male - 8 Position	
101A	4460465	4	Socket, Female	
101A	4460944	3	Socket, Female (Gold)	
101A	4460466	1	Plug, Sealing	
101A	0840061	1	Boot, 8 Position Plug	
101A	2820026	AR	Insulation, Clear Tubing	
101A	2820028	AR	Heat Shrink	
101B	4460930	1	Plug, Male - 8 Position	
101B	4460465	4	Socket, Female	
101B	4460944	3	Socket, Female (Gold)	
101B	4460466	1	Plug, Sealing	
101B	0840061	1	Boot, 8 Position Plug	
101B	2820026	AR	Insulation, Clear Tubing	
101B	2820028	AR	Heat Shrink	
102	1380158	AR	Retainer	
103	1320318	AR	P-Clamp 3/4in	
104	0100048	AR	Grease, Dielectric	
105	4740545	AR	Washer, Special Cable	
106	1001116634	1	Chassis Harness	E
106	1001115126	1	Wiring Diagram - Chassis	A
106A	4460320	1	Plug, Male - 2 Position (Note: Connection to this plug used only when footswitch or battery interlock options are required)	
106A	4460226	2	Socket, Female	
106B	1001097347	1	Relay	
106B	4460374	1	Plug, Relay	
106B	4460375	3	Terminal	
106C	4460539	1	Plug, Male - 3 Position	
106C	4460465	2	Socket, Female	
106D	4460539	1	Plug, Male - 3 Position	
106D	4460465	3	Socket, Female	
106E	4460648	1	Connector, Anderson	
106F	4460873	1	Plug, Male - 35 Position	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
106F	4460871	26	Socket, Female	
106J	4460894	1	Plug, Male - 6 Position	
106J	4460465	4	Socket, Female	
106K	4460897	4	Receptacle, Female - 2 Position	
106K	4460464	8	Pin, Male	
106L	4460899	1	Connector, Female - 6 Position	
106L	4460464	6	Pin, Male	
106M	4460931	1	Receptacle, Female - 8 Position	
106M	4460464	4	Pin, Male	
106M	4460943	3	Pin, Male (Gold)	
106M	0840058	1	Boot	
106N	1001096138	1	Plug, Male - 23 Position	
106N	4460871	13	Socket, Female	
106P	4460761	1	Receptacle, Female - 4 Position	
106P	4460227	4	Pin, Male	
106R	1001115076	1	Plug, Male - 18 Position	
106R	4460465	14	Socket, Female	
106R	4460942	2	Socket, Female	
107	1001115002	1	Lift Cylinder Harness	
107A	4460891	4	Plug, Male - 2 Position	B
107A	4460465	8	Socket, Female	
107B	4460894	1	Plug, Male - 6 Position	
107B	4460465	6	Socket, Female	
107B	0840059	1	Boot	
108	4923647	1	Power to Pump Motor Harness	
108A		Ref	Connector, Anderson Options:	
108A	Not Available	1	Connector, Anderson Red	
108A	Not Available	1	Connector, Anderson Gray	
108B	0840041	2	Boot, Terminal (Red)	
109		Ref	Screw M6 Options:	
109	0760610	AR	Screw M6 x 20mm Length	
109	0760614	AR	Screw M6 x 30mm Length	
109	0760615	AR	Screw M6 x 35mm Length	
110		Ref	Bracket, Battery Connector Options:	
110	0903339	1	Bracket Non-UL Machines	
110	1001110826	1	Bracket UL Machines	
110	0760615	1	Screw M6 x 35mm	
110	3290605	1	Locknut M6	
110	4811702	2	Flatwasher M6	
111	1001116635	Ref	Battery Cable Kit (See Items 301-309 for Breakdown)	
121	1001094175	AR	Clamp, Post	
121	4010616	AR	Screw M6 x 40mm	
121	3290606	AR	Nut, Acorn M6	
122	1001094180	4	Clamp, Rail (USA Built Machines) (SN 0200198014 through 0200226731, SN 0200234120 through 0200239381)	
122	1001094180	4	Clamp, Rail (China Built Machines) (SN B200000100 through B20014593, SN B200018670 through B200020296)	
122	0760606	AR	Screw M6 x 12mm	
122	3290606	AR	Nut, Acorn M6	
123	1001096705	1	Platform to Control Box Coiled Cable Harness	
123A	4460931	1	Receptacle, Female - 8 Position	D
123A	4460464	4	Pin, Male	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
123A	4460943	3	Pin, Male (Gold)	
123A	4460466	1	Plug, Sealing	
123A	0840058	1	Boot, 8 Position Receptacle	
123A	2820026	AR	Insulation, Clear Tubing	
123A	2820028	AR	Heat Shrink	
123B	4460754	1	Connector -14 Position	
123B	4460465	4	Socket, Female	
123B	4460944	3	Socket, Female	
123B	4460466	4	Plug, Sealing	
123B	3730119	1	Resistor	
123B	4460493	1	Cap, Dust	
123B	2820026	AR	Insulation, Clear Tubing	
124	1321716	2	P-Clamp, Double 1in	
124	3900351	AR	Capscrew M10 x 30mm	
124	4812000	AR	Flatwasher M10	
124	3291005	AR	Locknut M10	
125	1001155042	4	Strap, Cable Tie (USA Built Machines) (SN 0200226731 through 0200234119)	
125	1001155042	4	Strap, Cable Tie (China Built Machines) (SN B200014593 through B200018669)	
		Ref	<b>GROUND CONTROL BOX COMPONENTS</b>	
201	1001114935	1	Control Box Harness (SN 0200198014 through 0200238465)	A
201	1001167256	1	Control Box Harness (SN 0200238466 through 0200239381)	D
201	1001114935	1	Control Box Harness (SN B200000100 through B200020296)	A
201A	See Note	NSS	Receptacle, Female - 18 Position (Note: Not Available for Purchase)	
201A	See Note	NSS	Socket, Female (Note: Not Available for Purchase)	
201B	4460961	1	Receptacle, Female - 4 Position	
201B	4460267	4	Pin, Male	
201C	4461077	1	Plug, Male - 4 Position (1001114935 Harness)	
201C	4460884	1	Plug, Male - 4 Position (1001167256 Harness)	
201C	4460928	4	Socket, Female (1001114935 Harness)	
201C	4460944	4	Socket, Female (1001167256 Harness)	
201D	4460418	1	Receptacle, Female - 3 Position	
201D	4460419	3	Terminal	
202	1001114937	1	Mount, Harness Bulkhead	
203	1001114933	1	Harness, Tilt Sensor (Includes Sensor)	A
203A	4461076	1	Receptacle, Female - 4 Position	
203A	4460929	4	Pin, Male	
204	0610161	1	Harness, Charger LED (Includes PC Board	
204A	4460321	1	Plug, Male - 4 Position	
204A	4460268	3	Socket, Female	
	1001116635	Ref	<b>BATTERY CABLE KIT</b>	E
	0275480	Ref	<b>BATTERY CABLE COMPONENTS (UL SPEC ONLY)</b>	E
301	0840060	8	Boot, Terminal (Gray) (Covers only the Battery Terminal Base)	
302	1060998	2	Cable, Battery (Battery Positive to Battery Negative)	E
302A	Not Available	2	Boot, Terminal (Black) (1 Per Cable Assembly)	
302B	Not Available	2	Boot, Terminal (Red) (1 Per Cable Assembly)	
303	1001114992	1	Cable, Battery (Contactor to Drive Module B+)	A
303A	Not Available	1	Boot, Terminal (Black)	
303B	Not Available	1	Boot, Terminal (Red)	
304		Ref	Cable, Battery (LH Battery to Disconnect)	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
304	4923365	1	Single Pole	C
304	4923413	NLA	Two Pole (Use p/n 1001127523)	C-E
304A		Ref	Connector, Anderson Options:	
304A	Not Available	NLA	Connector Single Pole (Use p/n 4923365)	
304A	Not Available	NLA	Connector Two Pole (Use p/n 4923414)	
304B	Not Available	1	Boot, Terminal (Red)	
305		Ref	Cable, Battery (RH Batteries to Disconnect) Options:	
305	4923366	1	Single Pole	B
305	4923414	1	Two Pole	E
305A		Ref	Connector, Anderson Options:	
305A	Not Available	NLA	Connector Single Pole (Use p/n 4923366)	
305A	Not Available	NLA	Connector Two Pole (Use p/n 4923413 & 1001127523)	
305B		Ref	Boot, Terminal Options:	
305B	Not Available	1	Boot, Black	
305B	Not Available	1	Boot, Red	
306	4923367	1	Cable, Battery (RH Battery to Contactor)	B
306A	Not Available	1	Boot, Terminal (Black)	
306B	Not Available	1	Boot, Terminal (Red)	
307 to 307	Not Required	0	Not Required	
308	4923648	2	Cable, Battery (Power to Pump Motor)	B
308A		Ref	Connector, Anderson Options:	
308A	Not Available	1	Connector, Anderson Red	
308A	Not Available	1	Connector, Anderson Gray	
308B	0840041	1	Boot, Terminal (Red)	
309	4923374	1	Cable, Battery (LH Battery to Contactor)	B
309A	Not Available	2	Boot, Terminal (Red)	
		Ref	<b>STANDARD HARNESSES</b>	
401	1001091502	2	Drive Motor/Brake Harness	E
401A	4460891	2	Plug, Male - 2 Position (1 Per Harness)	
401A	4460465	4	Socket, Female (2 Per Harness)	
401B	70001442	2	Plug, Male - 2 Position (1 Per Harness) (To Brake)	
401B	Not Available	4	Socket, Female (2 Per Harness) (To Brake)	
401C	70001443	2	Plug, Male - 2 Position (1 Per Harness) (To Motor)	
401C	70001444	4	Socket, Female (2 Per Harness) (To Motor)	
401D		Ref	Connector Options:	
401D	4461261	1	Plug, Male - 1 Position	
401D	4460509	1	Terminal	
402	Not Available	2	Harness, Brake (Internal Connections - Purchase Complete Brake)	
402	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
402	Not Available	4	Pin, Male (2 Per Harness)	
403	Not Available	2	Harness, Motor (Internal Connections - Purchase Complete Motor)	
403	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
403	Not Available	4	Pin, Male (2 Per Harness)	
404	4923602	2	Harness, Field Wire Connection	B
404A	4461260	2	Receptacle, Female - 1 Position	
404A	4460508	2	Terminal	
405	3740150	1	Contactor Relay Harness (Includes Relay)	
405A	4460891	1	Plug, Male - 2 Position	
405A	4460465	2	Socket, Female	
406		Ref	Battery Charger Components	
406A	Not Available		DC Harness/Cord Set	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
406B	4460648	1	Plug, Anderson	
406C	4460899	1	Connector, Female - 6 Position	
406C	4460464	6	Pin, Male	
406D	Not Available	1	Harness with Connector (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460424	1	Connector, Female - 2 Position (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460227	2	Pin, Male	
406F	Not Available	1	AC Harness/Cord Set	
406G	Not Available	1	Connector, Female	
407		Ref	Cable, AC Power to Charger Options:	
407	1001103257	1	Cable with Factory Supplied Plug (Orange)	
407	1001103258	1	Cable with Locally Supplied Plug (Orange)	
408	4360526	NLA	Rotary Angle Sensor and Harness (Separate Harness Not Available) (Use p/n 1001092354)	
408A	4460536	1	Receptacle, Female - 3 Position	
408A	4460464	3	Pin, Male	
409	4360539	1	Toggle Switch and Harness (No Separate Harness Available)	
409A	Not Available	1	Plug, Male - 3 Position	
410	Not Available	1	Joystick Harness	
410A	4460266	1	Receptacle, Female - 9 Position	
410A	4460226	8	Socket, Female	
411		Ref	Plug Options:	
411	Not Available	NLA	ANSI Spec Plug (Use p/n 1001103257)	
411	Not Available	1	Australian and Japanese Specs (Purchase Locally)	
411		Ref	CE Spec Options:	
411	0275666	Ref	IEC Yellow Receptacle Installation	A
411	4461196	Ref	Receptacle, IEC Yellow	
411	0276667	Ref	IEC Blue Receptacle Installation	A
411	4661199	Ref	Receptacle, IEC Blue	
411	0275665	Ref	AFSINT 107 Keyed Ground Receptacle Installation	A
411	4661249	Ref	Receptacle, AFSINT 107 Keyed Ground	
411	0275663	Ref	CEE7 Post Ground Receptacle Installation	A
411	4661202	Ref	Receptacle, CEE7 Post Ground	
411	0275664	Ref	CEE7 Side Ground Receptacle Installation	A
411	4661205	Ref	Receptacle, CEE7 Side Ground	
412	1001112113	NLA	Battery Temperature Sensor Harness (Includes Sensor and Instructions) (Use p/n 1001127269)	
412A	4460465	2	Socket, Female	
		Ref	<b>OPTIONAL HARNESSSES</b>	
501	0140043	1	Alarm and Harness (Separate Harness Not Available)	
501A	4460536	1	Receptacle, Female - 3 Position	
501A	4460464	3	Pin, Male	
502	2920161	1	Beacon Light and Harness (Separate Harness Not Available)	
502A	4460891	1	Plug, Male - 2 Position (1 Per Harness)	
502A	4460465	2	Socket, Female (2 Per Harness)	
503		Ref	Platform Electrical Outlet Components	
503		Ref	ANSI, ANSI Export, CSA, Japanese and UL Specs Options:	
503	0272839	Ref	110V with Receptacle and Plug	I
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	Australian Specs Options:	



## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	CE Specs Options:	
503	0275487	Ref	110V with IEC Yellow Receptacle and Plug and Circuit Breaker	C
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	F
503	0275487	NLA	220V with IEC Blue Receptacle and Plug and Circuit Breaker (Use p/n 0275488)	C
503	0275486	Ref	220V with AFSINT 107 Keyed Ground Receptacle and Plug and Circuit Breaker	C
503	0275472	Ref	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (2x4 Box) (SN 0200198014 through 0200232930, SN B200000100 through B200018635)	C
503	1001162449	Ref	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (2x4 Box) (SN 0200232931 through 0200239381, SN B200018636 through B200020296)	A
503	0275489	Ref	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (70x70 Box)	D
503	0275485	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Single Box) (SN 0200198014 through 0200232930, SN B200000100 through B200018635)	C
503	1001162447	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Single Box) (SN 0200232931 through 0200239381, SN B200018636 through B200020296)	A
503	1001096628	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Dual Boxes) (Note: Qty shown is for single Receptacle Box. Double Qty listed for Dual Receptacle Boxes)	A
503	0275490	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (70x70 Box)	D
503		Ref	Decal - AC Power (Not Shown)	
503	1703464	1	Decal - AC Power 110V	
503	3252507	1	Decal - AC Power 220V	
503A		Ref	Box, Switch Options:	
503A	0861731	1	Box, Switch 0272839, 0275472, 0275485, 0275486, 1001162447, 1001162449 & 1001096628 Installations	
503A	Not Available	1	Box, Switch 0272843 Installation (Purchase Locally)	
503A	4460315	1	Box, Switch 0272839 Installation (Terminal, Spade) (Not Shown)	
503A	0861781	1	Box, Switch 0275487 & 0275488 Installations	
503A	See Note	1	Box, Switch 0275774/0275775 Installations (Note: Was p/n 0861782 which is no longer available. Use p/n 1001100344 CEE7 Side Ground Service Kit or p/n 1001100343 CEE7 Post Ground Service Kit. Kits includes Box p/n 1001141967 & Items 503B, 503D & 503E)	
503A	1001141967	1	Box, Switch 1001100343, 1001100344, 1001141970 & 1001141971 Service Kits	
503B		Ref	Cover Options:	
503B	1671207	1	Cover 0272839 Installation	
503B	Not Available	1	Cover 0272843 Installation (Purchase Locally)	
503B	4461244	1	Cover 0275472 & 1001162449 Installations (Includes Receptacle)	
503B	4461245	1	Cover 0275485, 1001162447 & 1001096628 Installations (Includes Receptacle)	
503B	4461246	1	Cover 0275486 Installation (Includes Receptacle)	
503B	4461198	1	Cover 0275487 Installation (Includes Receptacle)	
503B	4461201	1	Cover 0275488 Installation (Includes Receptacle)	
503B	4461204	NLA	Cover 0275489 Installation (Includes Receptacle) (Use p/n	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503B	1001141971	NLA	1001100343) Cover 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	4461207	NLA	Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503B	1001141970	NLA	Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503B	1001141968	1	Cover 1001100343 & 1001141971 Service Kits	
503B	1001141969	1	Cover 1001100344 & 1001141970 Service Kits	
503C		Ref	Connector, Strain Relief Options:	
503C	4460662	1	Connector, Strain Relief 0272839, 0275472, 0275485, 0275486, 1001162447, 1001162449 & 1001096628 Installations	
503C	Not Available	1	Connector, Strain Relief 0272843 Installation (Purchase Locally)	
503C	4461257	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (90)	
503C	4461258	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (Adapter)	
503C	4460633	1	Connector, Strain Relief 0275520 & 0275521 Installations	
503C	4460428	1	Connector, Strain Relief 0275522 & 0275523 Installations	
503D		Ref	Receptacle, Electrical Options:	
503D	4460346	1	Receptacle, Electrical 0272839 Installation	
503D	Not Available	1	Receptacle, Electrical 0272843 Installation (Purchase Locally)	
503D	4461244	1	Receptacle, Electrical 0275472 & 1001162449 Installations (Includes Cover)	
503D	4461245	1	Receptacle, Electrical 0275485, 1001162447 & 1001096628 Installations (Includes Receptacle)	
503D	4461246	1	Receptacle, Electrical 0275486 Installation (Includes Cover)	
503D	4461198	1	Receptacle, Electrical 0275487 Installation (Includes Cover)	
503D	4461201	1	Receptacle, Electrical 0275488 Installation (Includes Cover)	
503D	4461204	NLA	Receptacle, Electrical 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503D	1001141971	NLA	Receptacle, Electrical 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503D	4461207	NLA	Receptacle, Electrical 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503D	1001141970	NLA	Receptacle, Electrical 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503D	1001141968	1	Receptacle, Electrical 1001100343 & 1001141971 Service Kits	
503D	1001141969	1	Receptacle, Electrical 1001100344 & 1001141970 Service Kits	
503E		Ref	Plug End Options:	
503E	4460138	1	Plug End 0272839 Installation (Male)	
503E	Not Available	1	Plug End 0272843 Installation (Purchase Locally)	
503E	4461202	1	Plug End 0275472/0275489/1001162449 Installations and 1001100343/1001141971 Service Kits (Male)	
503E	4461203	1	Plug End 0275472/0275489 Installations and 1001100343/1001141971 Service Kits (Female)	
503E	4461205	1	Plug End 0275485/1001096628/1001162447 Installations and 1001100344/1001141970 Service Kits (Male)	
503E	4461206	1	Plug End 0275485/1001096628 Installations and 1001100344/1001141970 Service Kits (Female)	
503E	4461249	1	Plug End 0275486 Installation (Male)	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503E	4461250	1	Plug End 0275486 Installation (Female)	
503E	4461196	1	Plug End 0275487 Installation (Male)	
503E	4461197	1	Plug End 0275487 Installation (Female)	
503E	4461199	1	Plug End 0275488 Installation (Male)	
503E	4461200	1	Plug End 0275488 Installation (Female)	
503E	4461202	1	Plug End 0275489 Installation (Male)	
503E	4461203	1	Plug End 0275489 Installation (Female)	
503E	4461205	1	Plug End 0275490 Installation (Male)	
503E	4461206	1	Plug End 0275490 Installation (Female)	
503F		Ref	Hardware Options:	
503F	4010405	AR	Screw M4 x 10mm	
503F	4010408	AR	Screw M4 x 16mm	
503F	4010608	AR	Screw M6 x 16mm	
503F	4191706	AR	Screw M6 x 12mm	
503F	4191708	AR	Screw M6 x 20mm	
503F	0760619	AR	Screw M6 x 55mm	
503F	3290405	AR	Locknut M4	
503F	3290605	AR	Locknut M6	
503F	3290607	AR	Locknut M6	
503F	4811400	AR	Flatwasher M4	
503F	1001091102	AR	Flatwasher M4 Oversize	
503F	4811700	AR	Flatwasher M6	
503G		Ref	Bracket, Receptacle Box Mounting Options:	E
503G	Not Required	0	Bracket 0272839, 0272843, 0275472, 0275485, 0275486 & 1001096628 Installations	
503G	0903569	1	Bracket 0275487, 0275488, 0275489 & 0275490 Installations	
503G	0903484	1	Bracket 1001096628 Installation (2nd Receptacle Box Only)	
503H	0903566	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec Installations except 0272843 Installation)	
503H	1001096627	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec 1001096628 Installation)	
503H	1001162362	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec 1001162447 & 1001162449 Installations)	
503J	2902541	AR	Circuit Breaker Box Assembly with 2 Breakers (Required Only on CE Spec Installations except 0272843, 1001162447 & 1001162449 Installations)	
503J	1001152485	AR	Circuit Breaker Box Assembly with 3 Breakers (Required Only on CE Spec Installations except 1001162447 & 1001162449 Installations)	
503J	1001109475	NLA	Circuit Breaker - 16 Amp (Breaker Box with 2 Breakers) (Use p/n 1001181045 16A/30mA Combination Breaker)	
503J	1001152479	NLA	Circuit Breaker - 16 Amp Double (Breaker Box with 3 Breakers) (Use p/n 1001189172)	
503J	1001109482	NLA	Circuit Breaker - 30mAmp (Breaker Box with 2 Breakers) (Use p/n 1001181045 16A/30mA Combination Breaker)	
503J	1001152482	NLA	Circuit Breaker - 30mAmp (Breaker Box with 3 Breakers) (Use p/n 1001189171)	
503J	4460957	1	Terminal Block (Breaker Box with 2 Breakers)	
503J	4460956	1	Barrier, Terminal Block (Breaker Box with 2 Breakers)	
503K	1001097150	1	Connector, Strain Relief (Required Only on CE Spec Installations except 0272843 Installation)	
503L	1060908	55 in/1.4m	Cable, Extension (Required Only on CE Spec Installations except 0272843 Installation)	
503M	1060908	55 in/1.4m	Cable, Electrical (Required Only on CE Spec 1001096628	

## SECTION 7 - ELECTRICAL

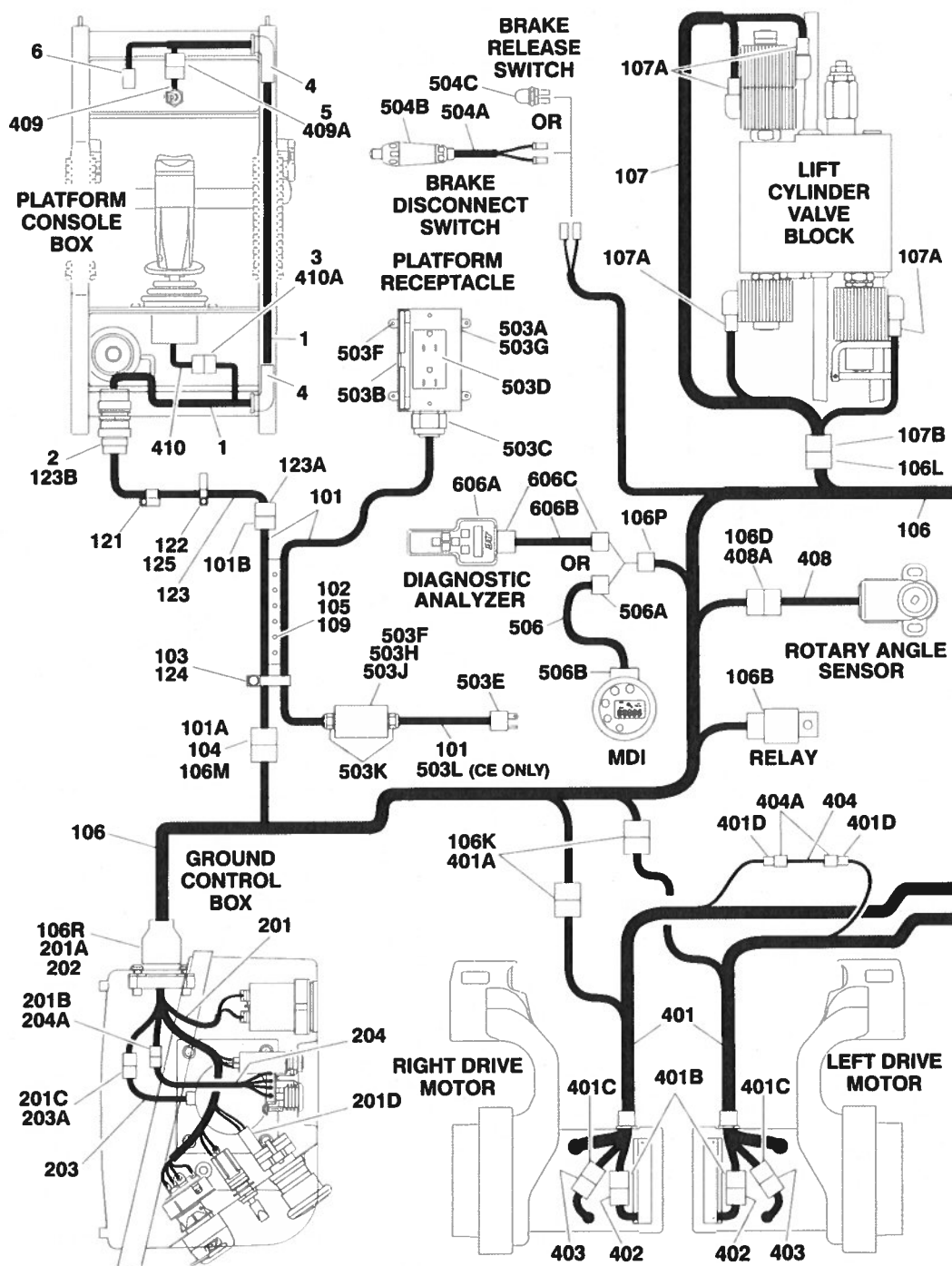
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	2902431	1	Installation) (Not Shown - Connects 2 Receptacle Boxes) Receptacle Box Kit (110V GFI) (Includes Items 503A-503D) (0272839 Installation)	C
	0275216	1	Receptacle, Box and Plug Kit (110V IEC Yellow) (Includes Items 503A, 503B, 503C & Male 503E Plug End) (0275487 Installation)	1-A
	0275217	1	Receptacle, Box and Plug Kit (220V IEC Blue) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275488 Installation)	1-A
	0275452	1	Receptacle Box Kit (220V CEE7 Post Ground with 2x4 Box) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275472 & 1001162449 Installations)	1-A
	0275218	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation) (Use p/n 1001100343)	B-A
	1001141971	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation) (Use p/n 1001100343)	B-A
	0275453	1	Receptacle Box Kit (220V CEE7 Side Ground with 2x4 Box) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275485, 1001096628 & 1001162447 Installations)	1-A
	0275219	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation) (Use p/n 1001100344)	B-A
	1001141970	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation) (Use p/n 1001100344)	B-A
	0275454	1	Receptacle, Box and Plug Kit (220V AFSINT 107 Keyed Ground) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275486 Installation)	1-A
504		Ref	Brake Disconnect/Release Switch Components	
504A	4922944	1	Brake Disconnect Harness and Switch	E
504A	1060680	15 ft/2.7m	Cable, Electrical 18/2	
504A	4240003	1	Strap, Cinch (Not Shown)	
504B	4360613	1	Switch, Limit	
504C	4360387	1	Brake Release Switch	
505		Ref	Battery Charger/Inverter Components (ANSI and CSA Option Only):	
505A	Not Available	1	AC Output Harness (Internal Part of Inverter)	
505B	Not Available	1	Receptacle, Female - 4 Position (Conxall T9014)	
505C	Not Available	1	AC Input Harness (Internal Part of Inverter)	
505D	Not Available	1	Receptacle, Female - 4 Position (Conxall T9016)	
505E	Not Available	1	Remote Control Harness (Internal Part of Inverter)	
505F	Not Available	1	Plug, Male - 8 Position (Conxall 7281-8PG-300)	
505G	4923389	NLA	AC Input Harness (Use p/n 1001091479)	A-D
505H	4460138	1	Plug, Male	
505J	Not Available	1	Plug, Male - 4 Position (Conxall T9017)	
505K	4923390	1	AC Output Harness	D
505L	4460779	1	Receptacle, Female	
505M	Not Available	1	Plug, Male - 4 Position (Conxall T9015)	
505N	4923391	1	Data Interface Harness	E
505P	Not Available	1	Plug, Male - 8 Position (Conxall 6280-8SG-318)	
505R	4460899	1	Receptacle, Female - 6 Position	
505R	4460464	4	Pin, Male	
505R	4460466	2	Plug, Seal	
505R	3990010	1	Diode 6A/600V	

## SECTION 7 - ELECTRICAL

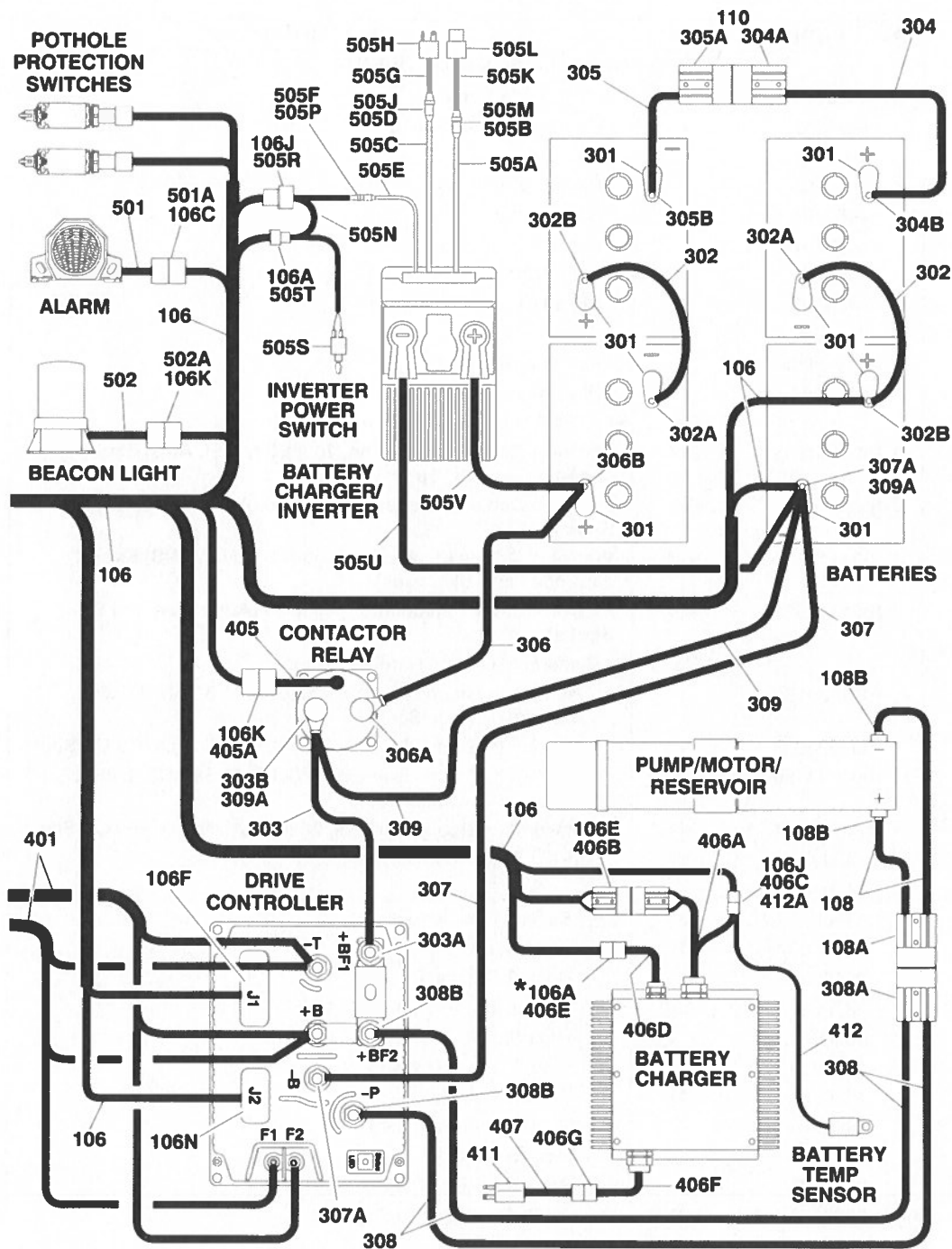
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
505S	4360336	1	Switch, Toggle	A A B
505T	4460424	2	Receptacle, Female - 2 Position	
505T	4460267	2	Pin, Male	
505U	4923392	1	Cable, Battery + to Inverter +	
505V	4923393	1	Cable, Battery - to Inverter -	
506	1001093556	1	MDI Harness	
506A	4460321	1	Plug, Male	
506A	4460226	4	Socket, Female	
506B	4460868	1	Plug, Male - 6 Position	
506B	4460877	4	Terminal	
506B	1001094105	1	Boot	
		Ref	<b>TOOLS FOR SERVICE</b>	
601	7002821	1	Crimper, Wire (Not Shown)	
602	7002823	1	Extractor, Pin - Universal (Not Shown)	
603	4460467	AR	Extractor, Pin #16 Gauge (Not Shown)	
604	4460510	AR	Extractor, Pin #12 Gauge (Not Shown)	
605	7002828	1	Stripper, Wire (Not Shown)	
606	2901443	1	Analyzer Kit (Not Shown)	
606A	1600244	1	Analyzer	
606B	1060633	1	Cable, Analyzer	
606C	4460321	2	Plug, Male - 4 Position	
606C	4460226	8	Socket, Female	
607	1001137005	1	Software Cables Kit (Not Shown)	

## SECTION 7 - ELECTRICAL

FIGURE 7-2. 2030ES/2630ES ELECTRICAL COMPONENTS INSTALLATION



## SECTION 7 - ELECTRICAL



**\*NOTE: THIS CONNECTION USED ONLY WHEN FOOTSWITCH OR BATTERY CHARGER INTERLOCK OPTIONS ARE REQUIRED.**

## SECTION 7 - ELECTRICAL

FIGURE 7-2. 2030ES/2630ES ELECTRICAL COMPONENTS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONSOLE BOX COMPONENTS</b>	
1	4922870	1	Platform Box Harness	C
2	4461016	1	Connector - 14 Position	
2	4460464	6	Pin, Male	
2	4460466	8	Plug, Sealing	
2	4460496	1	Lockwasher	
2	4460497	1	Nut, Panel	
3	4460265	1	Plug, Male - 9 Position	
3	4460267	8	Pin, Male	
4	2540042	2	Grommet 90	
5	Not Available	1	Receptacle, Female - 3 Position	
6	4461057	1	Plug, Male - 16 Position	
		Ref	<b>PLATFORM CABLES INSTALLATION</b>	
	1001114883	Ref	<b>Platform Cables Installation, 2030ES (ANSI, ANSI Export, Japanese and UL Specs)</b>	D
	1001114920	Ref	<b>Platform Cables Installation, 2030ES (Australian and CE Specs)</b>	C
	1001114884	Ref	<b>Platform Cables Installation, 2630ES (ANSI, ANSI Export, Japanese and UL Specs)</b>	D
	1001114921	Ref	<b>Platform Cables Installation, 2630ES (Australian and CE Specs)</b>	C
101		Ref	Platform to Ground Harness Options:	
101	1001094155	1	Platform to Ground Harness, 2030ES ANSI, ANSI Export, Japanese and UL Specs	F
101	1001094333	1	Platform to Ground Harness, 2030ES Australian and CE Specs	D
101	1001094156	1	Platform to Ground Harness, 2630ES ANSI, ANSI Export, Japanese and UL Specs	F
101	1001094334	1	Platform to Ground Harness, 2630ES Australian and CE Specs	D
101A	4460930	1	Plug, Male - 8 Position	
101A	4460465	4	Socket, Female	
101A	4460944	3	Socket, Female (Gold)	
101A	4460466	1	Plug, Sealing	
101A	0840061	1	Boot, 8 Position Plug	
101A	2820026	AR	Insulation, Clear Tubing	
101A	2820028	AR	Heat Shrink	
101B	4460930	1	Plug, Male - 8 Position	
101B	4460465	4	Socket, Female	
101B	4460944	3	Socket, Female (Gold)	
101B	4460466	1	Plug, Sealing	
101B	0840061	1	Boot, 8 Position Plug	
101B	2820026	AR	Insulation, Clear Tubing	
101B	2820028	AR	Heat Shrink	
102	1380158	AR	Retainer	
103	Not Required	0	Not Required	
104	0100048	AR	Grease, Dielectric	
105	4740545	AR	Washer, Special Cable	
106	1001114934	1	Chassis Harness	F
106	1001115126	1	Wiring Diagram - Chassis	A
106A	4460320	1	Plug, Male - 2 Position (Note: Connection to this plug used only when footswitch or battery interlock options are required)	
106A	4460226	2	Socket, Female	



## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
106B	1001097347	1	Relay	
106B	4460374	1	Plug, Relay	
106B	4460375	3	Terminal	
106C	4460539	1	Plug, Male - 3 Position	
106C	4460465	2	Socket, Female	
106D	4460539	1	Plug, Male - 3 Position	
106D	4460465	3	Socket, Female	
106E	4460648	1	Connector, Anderson	
106F	4460873	1	Plug, Male - 35 Position	
106F	4460871	26	Socket, Female	
106J	4460894	1	Plug, Male - 6 Position	
106J	4460465	4	Socket, Female	
106K	4460897	4	Receptacle, Female - 2 Position	
106K	4460464	8	Pin, Male	
106L	4460899	1	Connector, Female - 6 Position	
106L	4460464	6	Pin, Male	
106M	4460931	1	Receptacle, Female - 8 Position	
106M	4460464	4	Pin, Male	
106M	4460943	3	Pin, Male (Gold)	
106M	0840058	1	Boot	
106N	1001096138	1	Plug, Male - 23 Position	
106N	4460871	13	Socket, Female	
106P	4460761	1	Receptacle, Female - 4 Position	
106P	4460227	4	Pin, Male	
106R	1001115076	1	Plug, Male - 18 Position	
106R	4460465	14	Socket, Female	
106R	4460942	2	Socket, Female	
107	1001115002	1	Lift Cylinder Harness	B
107A	4460891	4	Plug, Male - 2 Position	
107A	4460465	8	Socket, Female	
107B	4460894	1	Plug, Male - 6 Position	
107B	4460465	6	Socket, Female	
107B	0840059	1	Boot	C
108	1001096794	1	Power to Pump Motor Harness	
108A		Ref	Connector, Anderson Options:	
108A	Not Available	1	Connector, Anderson Red	
108A	Not Available	1	Connector, Anderson Gray	
108B	0840041	2	Boot, Terminal (Red)	
109		Ref	Screw M6 Options:	
109	0760610	AR	Screw 20mm Length	
109	0760614	AR	Screw 30mm Length	
110	4031713	1	Capscrew M6 x 45mm	
110	3290605	1	Locknut M6	
111		Ref	Battery Cable Kit Options (See Item 301- 309 for Breakdown):	
111	1001096799	1	Battery Cable Kit USA Built Machines	
111	1001115022	1	Battery Cable Kit China Built Machines	
121	1001094175	AR	Clamp, Post	
121	4010616	AR	Screw M6 x 40mm	
121	3290606	AR	Nut, Acorn M6	
122	1001094180	5	Clamp, Rail (USA Built Machines) (SN 0200198014 through 0200226731, SN 0200234120 through 0200239381)	
122	1001094180	5	Clamp, Rail (China Built Machines) (SN B200000100 through	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
			<b>B200014593, SN B200018670 through B200020296)</b>	
122	0760606	AR	Screw M6 x 12mm	
122	3290606	AR	Nut, Acorn M6	
123	1001096706	1	Platform to Control Box Coiled Cable Harness	C
123A	4460931	1	Receptacle, Female - 8 Position	
123A	4460464	4	Pin, Male	
123A	4460943	3	Pin, Male (Gold)	
123A	4460466	1	Plug, Sealing	
123A	0840058	1	Boot, 8 Position Receptacle	
123A	2820026	AR	Insulation, Clear Tubing	
123A	2820028	AR	Heat Shrink	
123B	4460754	1	Connector -14 Position	
123B	4460465	4	Socket, Female	
123B	4460944	3	Socket, Female	
123B	4460466	4	Plug, Sealing	
123B	3730119	1	Resistor	
123B	4460493	1	Cap, Dust	
123B	2820026	AR	Insulation, Clear Tubing	
124	1321716	2	P-Clamp, Double 1in	
124	0760610	AR	Capscrew M6 x 20mm	
124	4751400	AR	Flatwasher 1/4in Wide	
124	3290605	AR	Locknut M6	
124	3290601	AR	Nut M6	
125	1001155042	5	Strap, Cable Tie (USA Built Machines) (SN 0200226731 through 0200234119)	
125	1001155042	5	Strap, Cable Tie (China Built Machines) (SN B200014593 through B200018669)	
		Ref	<b>GROUND CONTROL BOX COMPONENTS</b>	
201	1001114935	1	Control Box Harness (SN 0200198014 through 0200238465)	A
201	1001167256	1	Control Box Harness (SN 0200238466 through 0200239381)	C
201	1001114935	1	Control Box Harness (SN B200000100 through B200020296)	A
201A	See Note	NSS	Receptacle, Female - 18 Position (Note: Not Available for Purchase)	
201A	See Note	NSS	Socket, Female (Note: Not Available for Purchase)	
201B	4460961	1	Receptacle, Female - 4 Position	
201B	4460267	4	Pin, Male	
201C	4461077	1	Plug, Male - 4 Position (1001114935 Harness)	
201C	4460884	1	Plug, Male - 4 Position (1001167256 Harness)	
201C	4460928	4	Socket, Female (1001114935 Harness)	
201C	4460944	4	Socket, Female (1001167256 Harness)	
201D	4460418	1	Receptacle, Female - 3 Position	
201D	4460419	3	Terminal	
202	1001114937	1	Mount, Harness Bulkhead	
203	1001114933	1	Harness, Tilt Sensor (Includes Sensor)	A
203A	4461076	1	Receptacle, Female - 4 Position	
203A	4460929	4	Pin, Male	
204	0610161	1	Harness, Charger LED (Includes PC Board	
204A	4460321	1	Plug, Male - 4 Position	
204A	4460268	3	Socket, Female	
		Ref	<b>BATTERY CABLE KITS</b>	
	1001096799	Ref	<b>USA Built Machines</b>	C
	1001115022	Ref	<b>China Built Machines</b>	L

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
301	0840060	8	Boot, Terminal (Gray) (Covers only the Battery Terminal Base)	E
302	1060998	2	Cable, Battery (Battery Positive to Battery Negative)	
302A	Not Available	2	Boot, Terminal (Black) (1 Per Cable Assembly)	
302B	Not Available	2	Boot, Terminal (Red) (1 Per Cable Assembly)	A
303	1001114992	1	Cable, Battery (Contactor to Module B+)	
303A	Not Available	1	Boot, Terminal (Black)	
303B	Not Available	1	Boot, Terminal (Red)	C-E
304	4923413	NLA	Cable, Battery (LH Battery to Disconnect) (Use p/n 1001127523)	
304A	4460618	1	Connector, Anderson	
304A	2560205	1	Handle, Connector	E
304B	Not Available	1	Boot, Terminal (Red)	
305	4923414	1	Cable, Battery (RH Batteries to Disconnect)	
305A	4460618	1	Connector, Anderson	A
305B	Not Available	1	Boot, Terminal (Black)	
306	1001115471	1	Cable, Battery (RH Battery to Contactor)	
306A	Not Available	1	Boot, Terminal (Black)	A
306B	Not Available	1	Boot, Terminal (Red)	
307	1001115472	1	Cable, Battery (LH Battery to Connector B-)	
307A	Not Available	1	Boot, Terminal (Black)	C
308	1001096795	2	Cable, Battery (Power to Pump Motor)	
308A		Ref	Connector, Anderson Options:	
308A	Not Available	1	Connector, Anderson Red	
308A	Not Available	1	Connector, Anderson Gray	
308B	0840041	1	Boot, Terminal (Red)	
309 AND 309	Not Required	0	Not Required	
		Ref	<b>STANDARD HARNESSSES</b>	
401		Ref	Drive Motor/Brake Harness Options:	
401	1001091843	NLA	Cable (USA Built Machines) (Use p/n 1001134012) (SN <b>0200198014 through 0200207813</b> )	A-G
401	1001091843	NLA	Cable (China Built Machines) (Use p/n 1001134012) (SN <b>B200000100 through B200000241</b> )	A-G
401	1001132439	2	Cable (USA Built Machines) (SN <b>0200207814 to Present</b> )	A
401	1001132439	2	Cable (China Built Machines) (SN <b>B200000242 to Present</b> )	A
401A	4460891	2	Plug, Male - 2 Position (1 Per Harness)	
401A	4460465	4	Socket, Female (2 Per Harness)	
401B	70001442	2	Plug, Male - 2 Position (1 Per Harness) (To Brake)	
401B	Not Available	4	Socket, Female (2 Per Harness) (To Brake)	
401C	70001443	2	Plug, Male - 2 Position (1 Per Harness) (To Motor)	
401C	70001444	4	Socket, Female (2 Per Harness) (To Motor)	
401D	4461261	1	Plug, Male - 1 Position	
401D	4460509	1	Terminal	
402	Not Available	2	Harness, Brake (Internal Connections - Purchase Complete Brake)	
402	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
402	Not Available	4	Pin, Male (2 Per Harness)	
403	Not Available	2	Harness, Motor (Internal Connections - Purchase Complete Motor)	
403	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
403	Not Available	4	Pin, Male (2 Per Harness)	
404	4923602	2	Harness, Field Wire Connection	
404A	4461260	2	Receptacle, Female - 1 Position	B
404A	4460508	2	Terminal	
405	3740150	1	Contactor Relay Harness (Includes Relay)	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
405A	4460891	1	Plug, Male - 2 Position	
405A	4460465	2	Socket, Female	
406		Ref	Battery Charger Components	
406A	Not Available		DC Harness/Cord Set	
406B	4460648	1	Plug, Anderson	
406C	4460899	1	Connector, Female - 6 Position	
406C	4460464	6	Pin, Male	
406D	Not Available	1	Harness with Connector (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460424	1	Connector, Female - 2 Position (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460227	2	Pin, Male	
406F	Not Available	1	AC Harness/Cord Set	
406G	Not Available	1	Connector, Female	
407		Ref	Cable, AC Power to Charger Options:	
407	1001103257	1	Cable with Factory Supplied Plug	
407	1001103258	1	Cable with Locally Supplied Plug	
408	4360526	NLA	Rotary Angle Sensor and Harness (Separate Harness Not Available) (Use p/n 1001092354)	
408A	4460536	1	Receptacle, Female - 3 Position	
408A	4460464	3	Pin, Male	
409	4360539	1	Toggle Switch and Harness (No Separate Harness Available)	
409A	Not Available	1	Plug, Male - 3 Position	
410	Not Available	1	Joystick Harness	
410A	4460266	1	Receptacle, Female - 9 Position	
410A	4460226	8	Socket, Female	
411		Ref	Plug Options:	
411	Not Available	NLA	ANSI Spec Plug (Use p/n 1001103257)	
411	Not Available	1	Australian and Japanese Specs (Purchase Locally)	
411		Ref	CE Spec Options:	
411	0275666	Ref	IEC Yellow Receptacle Installation	A
411	4461196	Ref	Receptacle, IEC Yellow	
411	0276667	Ref	IEC Blue Receptacle Installation	A
411	4661199	Ref	Receptacle, IEC Blue	
411	0275665	Ref	AFSINT 107 Keyed Ground Receptacle Installation	A
411	4661249	Ref	Receptacle, AFSINT 107 Keyed Ground	
411	0275663	Ref	CEE7 Post Ground Receptacle Installation	A
411	4661202	Ref	Receptacle, CEE7 Post Ground	
411	0275664	Ref	CEE7 Side Ground Receptacle Installation	A
411	4661205	Ref	Receptacle, CEE7 Side Ground	
412	1001112113	NLA	Battery Temperature Sensor Harness (Includes Sensor and Instructions) (Use p/n 1001127269)	
412A	4460465	2	Socket, Female	
		Ref	<b>OPTIONAL HARNESSES</b>	
501	0140043	1	Alarm and Harness (Separate Harness Not Available)	
501A	4460536	1	Receptacle, Female - 3 Position	
501A	4460464	3	Pin, Male	
502	2920161	1	Beacon Light and Harness (Separate Harness Not Available)	
502A	4460891	1	Plug, Male - 2 Position (1 Per Harness)	
502A	4460465	2	Socket, Female (2 Per Harness)	
503		Ref	Platform Electrical Outlet Components	
503		Ref	ANSI, ANSI Export, CSA, Japanese and UL Specs Options:	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503	0272839	Ref	110V with Receptacle and Plug	I
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	Australian Specs Options:	
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	CE Specs Options:	
503	0275513	NLA	110V with IEC Yellow Receptacle and Plug and Circuit Breaker (Use p/n 0275487)	C
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	F
503	0275514	NLA	220V with IEC Blue Receptacle and Plug and Circuit Breaker (Use p/n 0275488)	C
503	0275512	NLA	220V with AFSINT 107 Keyed Ground Receptacle and Plug and Circuit Breaker (Use p/n 0275486)	C
503	0275510	NLA	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (2x4 Box) (Use p/n 0275472)	C
503	0275515	NLA	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (70x70 Box) (Use p/n 0275489)	D
503	0275511	NLA	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Single Box) (Use p/n 0275485)	C
503	1001096628	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Dual Boxes)	A
		Ref	<b>Note: Qty shown is for single Receptacle Box. Double Qty listed for Dual Receptacle Boxes.</b>	
503	0275516	NLA	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (70x70 Box) (Use p/n 0275490)	D
503		Ref	Decal - AC Power (Not Shown)	
503	1703464	1	Decal - AC Power 110V	
503	3252507	1	Decal - AC Power 220V	
503A		Ref	Box, Switch Options:	
503A	0861731	1	Box, Switch 0272839, 0275472, 0275485, 0275486 & 1001096628 Installations	
503A	Not Available	1	Box, Switch 0272843 Installation (Purchase Locally)	
503A	4460315	1	Box, Switch 0272839 Installation (Terminal, Spade) (Not Shown)	
503A	0861781	1	Box, Switch 0275487 & 0275488 Installations	
503A	See Note	1	Box, Switch 0275774/0275775 Installations (Note: Was p/n 0861782 which is no longer available. Use p/n 1001100344 CEE7 Side Ground Service Kit or p/n 1001100343 CEE7 Post Ground Service Kit. Kits includes Box p/n 1001141967 & Items 503B, 503D & 503E)	
503A	1001141967	1	Box, Switch 1001100344, 1001100344, 1001141970 & 1001141971 Service Kits	
503B		Ref	Cover Options:	
503B	1671207	1	Cover 0272839 Installation	
503B	Not Available	1	Cover 0272843 Installation (Purchase Locally)	
503B	4461244	1	Cover 0275472 Installation (Includes Receptacle)	
503B	4461245	1	Cover 0275485 & 1001096628 Installations (Includes Receptacle)	
503B	4461246	1	Cover 0275486 Installation (Includes Receptacle)	
503B	4461198	1	Cover 0275487 Installation (Includes Receptacle)	
503B	4461201	1	Cover 0275488 Installation (Includes Receptacle)	
503B	4461204	NLA	Cover 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	1001141971	NLA	Cover 0275489 Installation (Includes Receptacle) (Use p/n	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503B	4461207	NLA	1001100343) Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	1001141970	NLA	Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	1001141968	1	Cover 1001100343 & 1001141971 Service Kit	
503B	1001141969	1	Cover 1001100344 & 1001141970 Service Kit	
503C		Ref	Connector, Strain Relief Options:	
503C	4460662	1	Connector, Strain Relief 0272839, 0275472, 0275485, 0275486 & 1001096628 Installations	
503C	Not Available	1	Connector, Strain Relief 0272843 Installation (Purchase Locally)	
503C	4461257	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (90)	
503C	4461258	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (Adapter)	
503C	4460633	1	Connector, Strain Relief 0275520 & 0275521 Installations	
503C	4460428	1	Connector, Strain Relief 0275522 & 0275523 Installations	
503D		Ref	Receptacle, Electrical Options:	
503D	4460346	1	Receptacle, Electrical 0272839 Installation	
503D	Not Available	1	Receptacle, Electrical 0272843 Installation (Purchase Locally)	
503D	4461244	1	Receptacle, Electrical 0275472 Installation (Includes Cover)	
503D	4461245	1	Receptacle, Electrical 0275485 & 1001096628 Installations (Includes Receptacle)	
503D	4461246	1	Receptacle, Electrical 0275486 Installation (Includes Cover)	
503D	4461198	1	Receptacle, Electrical 0275487 Installation (Includes Cover)	
503D	4461201	1	Receptacle, Electrical 0275488 Installation (Includes Cover)	
503D	4461204	NLA	Receptacle, Electrical 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503D	4461207	NLA	Receptacle, Electrical 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503D	1001141968	1	Receptacle, Electrical 1001100343 & 1001141971 Service Kit	
503D	1001141969	1	Receptacle, Electrical 1001100344 & 1001141970 Service Kit	
503E		Ref	Plug End Options:	
503E	4460138	1	Plug End 0272839 Installation (Male)	
503E	Not Available	1	Plug End 0272843 Installation (Purchase Locally)	
503E	4461202	1	Plug End 0275472/0275489 Installations and 1001100343/1001141971 Service Kits (Male)	
503E	4461203	1	Plug End 0275472/0275489 Installations and 1001100343/1001141971 Service Kits (Female)	
503E	4461205	1	Plug End 0275485/1001096628 Installations and 1001100344/1001141970 Service Kits (Male)	
503E	4461206	1	Plug End 0275485 & 1001096628 Installations and 1001100344/1001141970 Service Kits (Female)	
503E	4461249	1	Plug End 0275486 Installation (Male)	
503E	4461250	1	Plug End 0275486 Installation (Female)	
503E	4461196	1	Plug End 0275487 Installation (Male)	
503E	4461197	1	Plug End 0275487 Installation (Female)	
503E	4461199	1	Plug End 0275488 Installation (Male)	
503E	4461200	1	Plug End 0275488 Installation (Female)	
503E	4461202	1	Plug End 0275489 Installation (Male)	
503E	4461203	1	Plug End 0275489 Installation (Female)	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503E	4461205	1	Plug End 0275490 Installation (Male)	
503E	4461206	1	Plug End 0275490 Installation (Female)	
503F		Ref	Hardware Options:	
503F	4010405	AR	Screw M4 x 10mm	
503F	4010408	AR	Screw M4 x 16mm	
503F	4010612	AR	Screw M6 x 16mm	
503F	4191706	AR	Screw M6 x 12mm	
503F	4191708	AR	Screw M6 x 20mm	
503F	0760619	AR	Screw M6 x 55mm	
503F	3290405	AR	Locknut M4	
503F	3290605	AR	Locknut M6	
503F	3290607	AR	Locknut M6	
503F	4811400	AR	Flatwasher M4	
503F	1001091102	AR	Flatwasher M4 Oversize	
503F	4811700	AR	Flatwasher M6	
503G		Ref	Bracket, Receptacle Box Mounting Options:	
503G	Not Required	0	Bracket 0272839, 0272843, 0275472, 0275485, 0275486 & 1001096628 Installations	
503G	0903569	1	Bracket 0275487, 0275488, 0275489 & 0275490 Installations	
503G	0903484	1	Bracket 1001096628 Installation (2nd Receptacle Box Only)	
503H	0903566	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec Installations except 0272843 Installation)	
503H	01001096627	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec 1001096628 Installation)	
503J	2902541	AR	Circuit Breaker Box Assembly (Required Only on CE Spec Installations except 0272843 Installation):	G
503J		Ref	Circuit Breaker Options:	
503J	1001109475	NLA	Circuit Breaker - 16A (Use p/n 1001181045)	
503J	1001109482	NLA	Circuit Breaker - 30mA (Use p/n 1001181045)	
503J	4460957	1	Terminal Block	
503J	4460956	1	Barrier, Terminal Block	
503K	1001097150	1	Connector, Strain Relief (Required Only on CE Spec Installations except 0272843 Installation)	
503L	1060908	55 in/1.4m	Cable, Extension (Required Only on CE Spec Installations except 0272843 Installation)	
503M	1060908	55 in/1.4m	Cable, Electrical (Required Only on CE Spec 1001096628 Installation) (Not Shown - Connects 2 Receptacle Boxes)	
	2902431	1	Receptacle Box Kit (110V GFI) (Includes Items 503A-503D) (0272839 Installation)	C
	0275216	1	Receptacle, Box and Plug Kit (110V IEC Yellow) (Includes Items 503A, 503B, 503C & Male 503E Plug End) (0275487 Installation)	1
	0275217	1	Receptacle, Box and Plug Kit (220V IEC Blue) (Includes Items 503A, 503B, 503D and Male 503E Plug End) (0275488 Installation)	1
	0275452	1	Receptacle Box Kit (220V CEE7 Post Ground with 2x4 Box) (Includes Items 503A, 503B, 503D and Male 503E Plug End) (0275472 Installation)	1
	0275218	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation) (Use p/n 1001100343)	B-A
	1001141971	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation) (Use p/n 1001100343)	B-A

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	0275453	1	Receptacle Box Kit (220V CEE7 Side Ground with 2x4 Box) (Includes Items 503A, 503B, 503D and Male 503E Plug End) (0275485 & 1001096628 Installations)	1
	0275219	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation) (Use p/n 1001100344)	B-A
	1001141970	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation) (Use p/n 1001100344)	B-A
	0275454	1	Receptacle, Box and Plug Kit (220V AFSINT 107 Keyed Ground) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275486 Installation)	1
504		Ref	Brake Disconnect/Release Switch Components	
504A	4922944	1	Brake Disconnect Harness and Switch	E
504A	1060680	15 ft/2.7m	Cable, Electrical 18/2	
504A	4240003	1	Strap, Cinch (Not Shown)	
504B	4360613	1	Switch, Limit	
504C	4360387	1	Brake Release Switch	
505		Ref	Battery Charger/Inverter Components (ANSI and CSA Option Only):	
505A	Not Available	1	AC Output Harness (Internal Part of Inverter)	
505B	Not Available	1	Receptacle, Female - 4 Position (Conxall T9014)	
505C	Not Available	1	AC Input Harness (Internal Part of Inverter)	
505D	Not Available	1	Receptacle, Female - 4 Position (Conxall T9016)	
505E	Not Available	1	Remote Control Harness (Internal Part of Inverter)	
505F	Not Available	1	Plug, Male - 8 Position (Conxall 7281-8PG-300)	
505G	4923389	NLA	AC Input Harness (Use p/n 1001091479)	A-D
505H	4460138	1	Plug, Male	
505J	Not Available	1	Plug, Male - 4 Position (Conxall T9017)	
505K	4923390	1	AC Output Harness	D
505L	4460779	1	Receptacle, Female	
505M	Not Available	1	Plug, Male - 4 Position (Conxall T9015)	
505N	4923391	1	Data Interface Harness	E
505P	Not Available	1	Plug, Male - 8 Position (Conxall 6280-8SG-318)	
505R	4460899	1	Receptacle, Female - 6 Position	
505R	4460464	4	Pin, Male	
505R	4460466	2	Plug, Seal	
505R	3990010	1	Diode 6A/600V	
505S	4360336	1	Switch, Toggle	
505T	4460424	2	Receptacle, Female - 2 Position	
505T	4460267	2	Pin, Male	
505U	4923392	1	Cable, Battery + to Inverter +	A
505V	4923393	1	Cable, Battery - to Inverter -	A
506	1001093556	1	MDI Harness	B
506A	4460321	1	Plug, Male	
506A	4460226	4	Socket, Female	
506B	4460868	1	Plug, Male - 6 Position	
506B	4460877	4	Terminal	
506B	1001094105	1	Boot	
		Ref	<b>TOOLS FOR SERVICE</b>	
601	7002821	1	Crimper, Wire (Not Shown)	
602	7002823	1	Extractor, Pin - Universal (Not Shown)	
603	4460467	AR	Extractor, Pin #16 Gauge (Not Shown)	

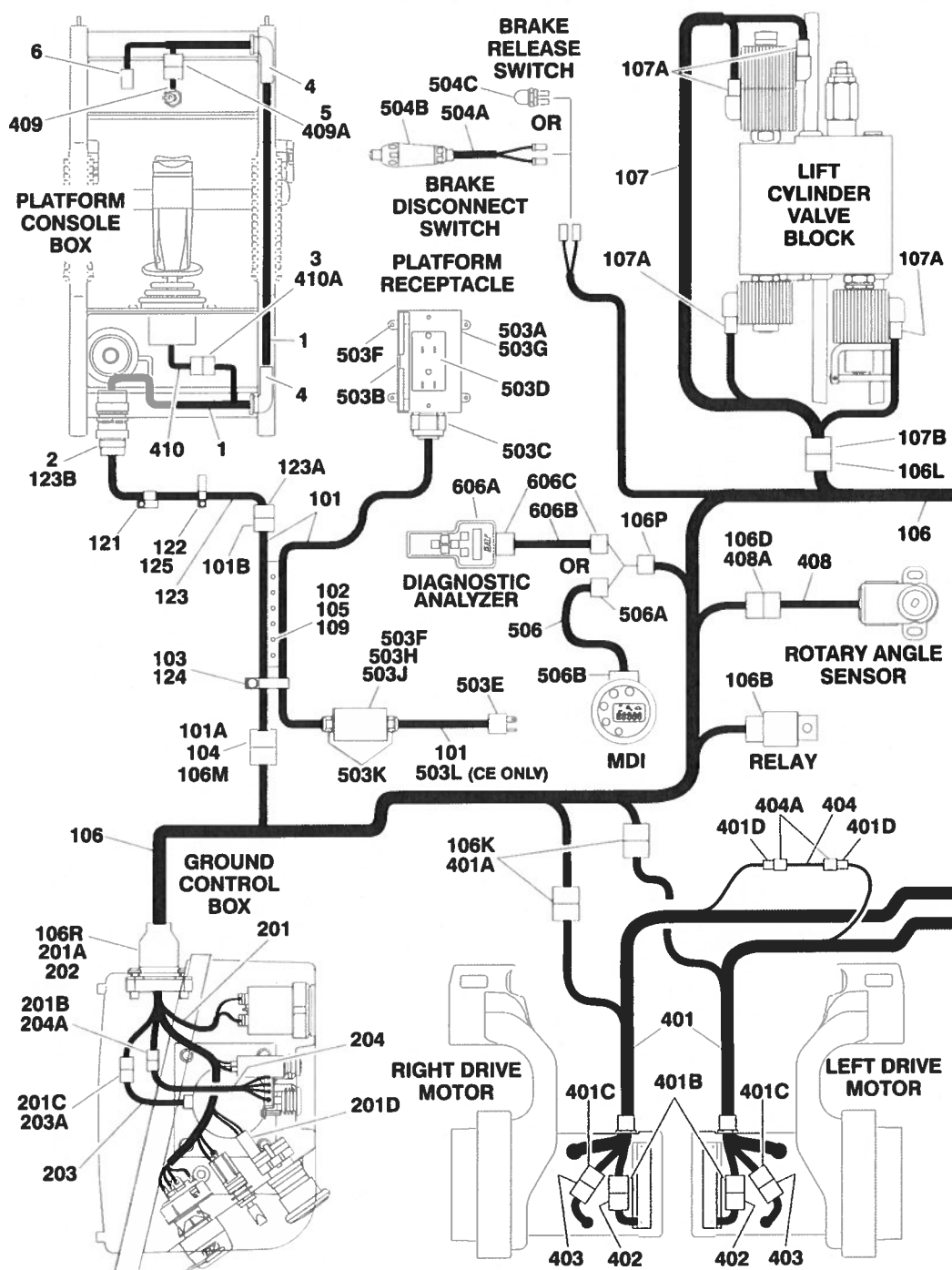


## SECTION 7 - ELECTRICAL

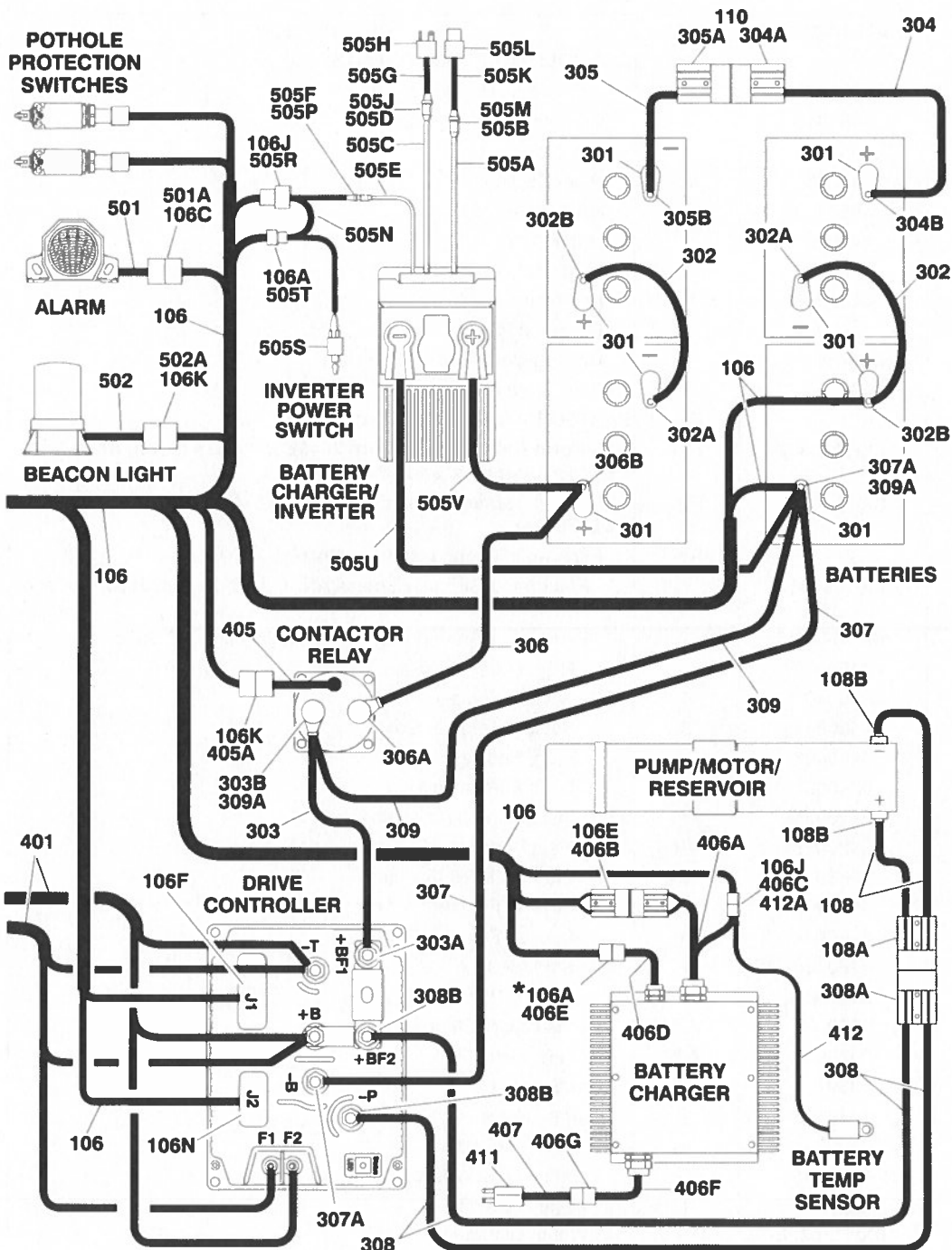
ITEM	PART NUMBER	QTY	DESCRIPTION	REV
604	4460510	AR	Extractor, Pin #12 Gauge (Not Shown)	
605	7002828	1	Stripper, Wire (Not Shown)	
606	2901443	1	Analyzer Kit (Not Shown)	
606A	1600244	1	Analyzer	
606B	1060633	1	Cable, Analyzer	
606C	4460321	2	Plug, Male - 4 Position	
606C	4460226	8	Socket, Female	
607	1001137005	1	Software Cables Kit (Not Shown)	

## SECTION 7 - ELECTRICAL

FIGURE 7-3. 2646ES/3246ES ELECTRICAL COMPONENTS INSTALLATION



## SECTION 7 - ELECTRICAL



**\*NOTE: THIS CONNECTION USED ONLY WHEN FOOTSWITCH OR BATTERY CHARGER INTERLOCK OPTIONS ARE REQUIRED.**

## SECTION 7 - ELECTRICAL

FIGURE 7-3. 2646ES/3246ES ELECTRICAL COMPONENTS INSTALLATION

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
		Ref	<b>CONSOLE BOX COMPONENTS</b>	
1	4922870	1	Platform Box Harness	C
2	4461016	1	Connector - 14 Position	
2	4460464	6	Pin, Male	
2	4460466	8	Plug, Sealing	
2	4460496	1	Lockwasher	
2	4460497	1	Nut, Panel	
3	4460265	1	Plug, Male - 9 Position	
3	4460267	8	Pin, Male	
4	2540042	2	Grommet 90	
5	Not Available	1	Receptacle, Female - 3 Position	
6	4461057	1	Plug, Male - 16 Position	
		Ref	<b>PLATFORM CABLES INSTALLATION</b>	
	1001116632	Ref	<b>Platform Cables Installation 2646ES/3246ES (ANSI, ANSI Export, Japanese and UL Specs)</b>	D
	1001116633	Ref	<b>Platform Cables Installation 2646ES/3246ES (Australian and CE Specs)</b>	C
101		Ref	Platform to Ground Harness Options:	
101	1001094157	1	Platform to Ground Harness ANSI, ANSI Export, Japanese and UL Specs	E
101	1001094335	1	Platform to Ground Harness Australian and CE Specs	D
101A	4460930	1	Plug, Male - 8 Position	
101A	4460465	4	Socket, Female	
101A	4460944	3	Socket, Female (Gold)	
101A	4460466	1	Plug, Sealing	
101A	0840061	1	Boot, 8 Position Plug	
101A	2820026	AR	Insulation, Clear Tubing	
101A	2820028	AR	Heat Shrink	
101B	4460930	1	Plug, Male - 8 Position	
101B	4460465	4	Socket, Female	
101B	4460944	3	Socket, Female (Gold)	
101B	4460466	1	Plug, Sealing	
101B	0840061	1	Boot, 8 Position Plug	
101B	2820026	AR	Insulation, Clear Tubing	
101B	2820028	AR	Heat Shrink	
102	1380158	21	Retainer	
103	1320318	1	Clamp, Hose	
104	0100048	AR	Grease, Dielectric	
105	4740545	8	Washer, Special Cable	
106	1001116636	1	Chassis Harness	E
106	1001115126	1	Wiring Diagram - Chassis	A
106	3990013	2	Diode 1 Amp/400V (Not Shown)	
106A	4460320	1	Plug, Male - 2 Position (Note: Connection to this plug used only when footswitch or battery interlock options are required)	
106A	4460226	2	Socket, Female	
106B	1001097347	1	Relay	
106B	4460374	1	Plug, Relay	
106B	4460375	3	Terminal	
106C	4460539	1	Plug, Male - 3 Position	
106C	4460465	2	Socket, Female	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
106D	4460539	1	Plug, Male - 3 Position	
106D	4460465	3	Socket, Female	
106E	4460648	1	Connector, Anderson	
106F	4460873	1	Plug, Male - 35 Position	
106F	4460871	26	Socket, Female	
106J	4460894	1	Plug, Male - 6 Position	
106J	4460465	4	Socket, Female	
106K	4460897	4	Receptacle, Female - 2 Position	
106K	4460464	8	Pin, Male	
106L	4460899	1	Connector, Female - 6 Position	
106L	4460464	6	Pin, Male	
106M	4460931	1	Receptacle, Female - 8 Position	
106M	4460464	4	Pin, Male	
106M	4460943	3	Pin, Male (Gold)	
106M	0840058	1	Boot	
106N	1001096138	1	Plug, Male - 23 Position	
106N	4460871	13	Socket, Female	
106P	4460761	1	Receptacle, Female - 4 Position	
106P	4460227	4	Pin, Male	
106R	1001115076	1	Plug, Male - 18 Position	
106R	4460465	14	Socket, Female	
106R	4460942	2	Socket, Female	
107	1001115002	1	Lift Cylinder Harness Options:	
107A	4460891	4	Plug, Male - 2 Position	
107A	4460465	8	Socket, Female	
107B	4460894	1	Plug, Male - 6 Position	
107B	4460465	6	Socket, Female	
107B	0840059	1	Boot	
108	1001093693	1	Power to Pump Motor Harness	
108A		Ref	Connector, Anderson Options:	
108A	Not Available	1	Connector, Anderson Red	
108A	Not Available	1	Connector, Anderson Gray	
108B	0840041	2	Boot, Terminal (Red)	
109		Ref	Screw M6 Options:	
109	0760610	AR	Screw 20mm Length	
109	0760614	AR	Screw 30mm Length	
110	4031713	1	Capscrew M6 x 45mm	
110	3290605	1	Locknut M6	
111	1001116637	1	Battery Cable Kit (See Items 301-309 for Breakdown)	
121	1001094175	AR	Clamp, Post	
121	4010616	AR	Screw M6 x 40mm	
121	3290606	AR	Nut, Acorn M6	
122	1001094180	4	Clamp, Rail (USA Built Machines) (SN 0200198014 through 0200226731, SN 0200234120 through 0200239381)	
122	1001094180	4	Clamp, Rail (China Built Machines) (SN B200000100 through B200014593, SN B200018670 through B200020296)	
122	0760606	AR	Screw M6 x 12mm	
122	3290606	AR	Nut, Acorn M6	
123	1001096707	1	Platform to Control Box Coiled Cable Harness	
123A	4460931	1	Receptacle, Female - 8 Position	
123A	4460464	4	Pin, Male	
123A	4460943	3	Pin, Male (Gold)	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
123A	4460466	1	Plug, Sealing	
123A	0840058	1	Boot, 8 Position Receptacle	
123A	2820026	AR	Insulation, Clear Tubing	
123A	2820028	AR	Heat Shrink	
123B	4460754	1	Connector -14 Position	
123B	4460465	4	Socket, Female	
123B	4460944	3	Socket, Female	
123B	4460466	4	Plug, Sealing	
123B	3730119	1	Resistor	
123B	4460493	1	Cap, Dust	
123B	2820026	AR	Insulation, Clear Tubing	
124	1321716	2	P-Clamp, Double 1in	
124	0700814	AR	Capscrew M6 x 20mm	
124	4751400	AR	Flatwasher 1/4in Wide	
124	3290605	AR	Locknut M6	
124	3290601	AR	Nut M6	
125	1001155042	4	Strap, Cable Tie (USA Built Machines) (SN 0200226731 through 0200234119)	
125	1001155042	4	Strap, Cable Tie (China Built Machines) (SN B200014593 through B200018669)	
		Ref	<b>GROUND CONTROL BOX COMPONENTS</b>	
201	1001114935	1	Control Box Harness (SN 0200198014 through 0200238465)	A
201	1001167256	1	Control Box Harness (SN 0200238466 through 0200239381)	C
201	1001114935	1	Control Box Harness (SN B200000100 through B200020296)	A
201A	See Note	NSS	Receptacle, Female - 18 Position (Note: Not Available for Purchase)	
201A	See Note	NSS	Socket, Female (Note: Not Available for Purchase)	
201B	4460961	1	Receptacle, Female - 4 Position	
201B	4460267	4	Pin, Male	
201C	4461077	1	Plug, Male - 4 Position (1001114935 Harness)	
201C	4460884	1	Plug, Male - 4 Position (1001167256 Harness)	
201C	4460928	4	Socket, Female (1001114935 Harness)	
201C	4460944	4	Socket, Female (1001167256 Harness)	
201D	4460418	1	Receptacle, Female - 3 Position	
201D	4460419	3	Terminal	
202	1001114937	1	Mount, Harness Bulkhead	
203	1001114933	1	Harness, Tilt Sensor (Includes Sensor)	A
203A	4461076	1	Receptacle, Female - 4 Position	
203A	4460929	4	Pin, Male	
204	0610161	1	Harness, Charger LED (Includes PC Board	
204A	4460321	1	Plug, Male - 4 Position	
204A	4460268	3	Socket, Female	
	1001116637	Ref	<b>BATTERY CABLE KITS</b>	C
301	0840060	8	Boot, Terminal (Gray) (Covers only the Battery Terminal Base)	
302	1060998	2	Cable, Battery (Battery Positive to Battery Negative)	E
302A	Not Available	2	Boot, Terminal (Black) (1 Per Cable Assembly)	
302B	Not Available	2	Boot, Terminal (Red) (1 Per Cable Assembly)	
303	1001114992	1	Cable, Battery (Contactor to Drive Module B+)	A
303A	Not Available	1	Boot, Terminal (Black)	
303B	Not Available	1	Boot, Terminal (Red)	
304	4923401	1	Cable, Battery (LH Battery to Disconnect)	C
304A	4460618	1	Connector, Anderson	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
304A	2560205	1	Handle, Connector	
304B	Not Available	1	Boot, Terminal (Red)	
305	4923402	1	Cable, Battery (RH Batteries to Disconnect)	B
305A	4460618	1	Connector, Anderson	
305B	Not Available	1	Boot, Terminal (Black)	
306	4923406	1	Cable, Battery (RH Battery to Contactor)	B
306A	Not Available	1	Boot, Terminal (Black)	
306B	Not Available	1	Boot, Terminal (Red)	
307	4923409	1	Cable, Battery (LH Battery to Connector B-)	B
307A	Not Available	1	Boot, Terminal (Black)	
308	1001096796	2	Cable, Battery (Power to Pump Motor)	B
308A		Ref	Connector, Anderson Options:	
308A	Not Available	1	Connector, Anderson Red	
308A	Not Available	1	Connector, Anderson Gray	
308B	0840041	1	Boot, Terminal (Red)	
309	Not Required	0	Cable, Battery (LH Battery to Contactor)	
309A	Not Required	0	Boot, Terminal (Red)	
		Ref	<b>STANDARD HARNESSES</b>	
401		Ref	Drive Motor/Brake Harness Options:	
401	1001091843	NLA	Cable USA Built Machines (Use p/n 1001134012) (SN 0200198014 through 0200207813)	A-G
401	1001091843	NLA	Cable China Built Machines (Use p/n 1001134012) (SN B200000100 through B200000241)	A-G
401	1001132439	2	Cable USA Built Machines (SN 0200207814 through 0200239381)	A
401	1001132439	1	Cable China Built Machines (SN B200000242 through B200020296)	A
401A	4460891	2	Plug, Male - 2 Position (1 Per Harness)	
401A	4460465	4	Socket, Female (2 Per Harness)	
401B	70001442	2	Plug, Male - 2 Position (1 Per Harness) (To Brake)	
401B	Not Available	4	Socket, Female (2 Per Harness) (To Brake)	
401C	70001443	2	Plug, Male - 2 Position (1 Per Harness) (To Motor)	
401C	70001444	4	Socket, Female (2 Per Harness) (To Motor)	
401D	4461261	1	Plug, Male - 1 Position	
401D	4460509	1	Terminal	
402	Not Available	2	Harness, Brake (Internal Connections - Purchase Complete Brake)	
402	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
402	Not Available	4	Pin, Male (2 Per Harness)	
403	Not Available	2	Harness, Motor (Internal Connections - Purchase Complete Motor)	
403	Not Available	2	Receptacle, Female - 2 Position (1 Per Harness)	
403	Not Available	4	Pin, Male (2 Per Harness)	
404	4923602	2	Harness, Field Wire Connection	B
404A	4461260	2	Receptacle, Female - 1 Position	
404A	4460508	2	Terminal	
405	3740150	1	Contactor Relay Harness (Includes Relay)	
405A	4460891	1	Plug, Male - 2 Position	
405A	4460465	2	Socket, Female	
406		Ref	Battery Charger Components	
406A	Not Available		DC Harness/Cord Set	
406B	4460648	1	Plug, Anderson	
406C	4460899	1	Connector, Female - 6 Position	
406C	4460464	6	Pin, Male	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
406D	Not Available	1	Harness with Connector (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460424	1	Connector, Female - 2 Position (Note: Connection to this plug used only when battery interlock options are required)	
406E	4460227	2	Pin, Male	
406F	Not Available	1	AC Harness/Cord Set	
406G	Not Available	1	Connector, Female	
407		Ref	Cable, AC Power to Charger Options:	
407	1001103257	1	Cable with Factory Supplied Plug	
407	1001103258	1	Cable with Locally Supplied Plug	
408	4360526	NLA	Rotary Angle Sensor and Harness (Separate Harness Not Available) (Use p/n 1001092354)	
408A	4460536	1	Receptacle, Female - 3 Position	
408A	4460464	3	Pin, Male	
409	4360539	1	Toggle Switch and Harness (No Separate Harness Available)	
409A	Not Available	1	Plug, Male - 3 Position	
410	Not Available	1	Joystick Harness	
410A	4460266	1	Receptacle, Female - 9 Position	
410A	4460226	8	Socket, Female	
411		Ref	Plug Options:	
411	Not Available	NLA	ANSI Spec Plug (Use p/n 1001103257)	
411	Not Available	1	Australian and Japanese Specs (Purchase Locally)	
411		Ref	CE Spec Options:	
411	0275666	Ref	IEC Yellow Receptacle Installation	A
411	4461196	Ref	Receptacle, IEC Yellow	
411	0276667	Ref	IEC Blue Receptacle Installation	A
411	4661199	Ref	Receptacle, IEC Blue	
411	0275665	Ref	AFSINT 107 Keyed Ground Receptacle Installation	A
411	4661249	Ref	Receptacle, AFSINT 107 Keyed Ground	
411	0275663	Ref	CEE7 Post Ground Receptacle Installation	A
411	4661202	Ref	Receptacle, CEE7 Post Ground	
411	0275664	Ref	CEE7 Side Ground Receptacle Installation	A
411	4661205	Ref	Receptacle, CEE7 Side Ground	
412	1001112113	NLA	Battery Temperature Sensor Harness (Includes Sensor and Instructions) (Use p/n 1001127269)	
412A	4460465	2	Socket, Female	
		Ref	<b>OPTIONAL HARNESSSES</b>	
501	0140043	1	Alarm and Harness (Separate Harness Not Available)	
501A	4460536	1	Receptacle, Female - 3 Position	
501A	4460464	3	Pin, Male	
502	2920161	1	Beacon Light and Harness (Separate Harness Not Available)	
502A	4460891	1	Plug, Male - 2 Position (1 Per Harness)	
502A	4460465	2	Socket, Female (2 Per Harness)	
503		Ref	Platform Electrical Outlet Components	
503		Ref	ANSI, ANSI Export, CSA, Japanese and UL Specs Options:	
503	0272839	Ref	110V with Receptacle and Plug	I
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	Australian Specs Options:	
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components)	G
503		Ref	CE Specs Options:	
503	0275520	NLA	110V with IEC Yellow Receptacle and Plug and Circuit Breaker	C



## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
			(Use p/n 0275487)	
503	0272843	Ref	220V without Receptacle and Plug (Locally Supplied Components) (All Models)	G
503	0275521	NLA	220V with IEC Blue Receptacle and Plug and Circuit Breaker (Use p/n 0275488)	C
503	0275519	NLA	220V with AFSINT 107 Keyed Ground Receptacle and Plug and Circuit Breaker (Use p/n 0275486)	C
503	0275517	NLA	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (2x4 Box) (Use p/n 0275472)	C
503	0275522	NLA	220V with CEE7 Post Ground Receptacle and Plug and Circuit Breaker (70x70 Box) (Use p/n 0275489)	D
503	0275518	NLA	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Single Box) (Use p/n 0275485)	C
503	1001096628	Ref	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (2x4 Dual Boxes) (Note: Qty shown is for single Receptacle Box. Double Qty listed for Dual Receptacle Boxes)	A
503	0275523	NLA	220V with CEE7 Side Ground Receptacle and Plug and Circuit Breaker (70x70 Box) (Use p/n 0275490)	D
503		Ref	Decal - AC Power (Not Shown)	
503	1703464	1	Decal - AC Power 110V	
503	3252507	1	Decal - AC Power 220V	
503A		Ref	Box, Switch Options:	
503A	0861731	1	Box, Switch 0272839, 0275472, 0275485, 0275486 & 1001096628 Installations	
503A	Not Available	1	Box, Switch 0272843 Installation (Purchase Locally)	
503A	4460315	1	Box, Switch 0272839 Installation (Terminal, Spade) (Not Shown)	
503A	0861781	1	Box, Switch 0275487 & 0275488 Installations	
503A	See Note	1	Box, Switch 0275774/0275775 Installations (Note: Was p/n 0861782 which is no longer available. Use p/n 1001100344 CEE7 Side Ground Service Kit or p/n 1001100343 CEE7 Post Ground Service Kit. Kits includes Box p/n 1001141967 & Items 503B, 503D & 503E)	
503A	1001141967	1	Box, Switch 1001100343, 1001100344, 1001141970 & 1001141971 Service Kits	
503B		Ref	Cover Options:	
503B	1671207	1	Cover 0272839 Installation	
503B	Not Available	1	Cover 0272843 Installation (Purchase Locally)	
503B	4461244	1	Cover 0275472 Installation (Includes Receptacle)	
503B	4461245	1	Cover 0275485 & 1001096628 Installations (Includes Receptacle)	
503B	4461246	1	Cover 0275486 Installation (Includes Receptacle)	
503B	4461198	1	Cover 0275487 Installation (Includes Receptacle)	
503B	4461201	1	Cover 0275488 Installation (Includes Receptacle)	
503B	4461204	NLA	Cover 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	1001141971	NLA	Cover 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503B	4461207	NLA	Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503B	1001141970	NLA	Cover 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503B	1001141968	1	Cover 1001100343 & 1001141971 Service Kits	
503B	1001141969	1	Cover 1001100343 & 1001141970 Service Kits	
503C		Ref	Connector, Strain Relief Options:	
503C	4460662	1	Connector, Strain Relief 0272839, 0275472, 0275485,	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503C	Not Available	1	0275486 & 1001096628 Installations	
503C	4461257	1	Connector, Strain Relief 0272843 Installation (Purchase Locally)	
503C	4461258	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (90)	
503C	4460633	1	Connector, Strain Relief 0275487, 0275488, 0275489 & 0275490 Installations (Adapter)	
503C	4460428	1	Connector, Strain Relief 0275520 & 0275521 Installations	
503D		Ref	Connector, Strain Relief 0275522 & 0275523 Installations	
503D	4460346	1	Receptacle, Electrical Options:	
503D	Not Available	1	Receptacle, Electrical 0272839 Installation	
503D	4461244	1	Receptacle, Electrical 0272843 Installation (Purchase Locally)	
503D	4461245	1	Receptacle, Electrical 0275472 Installation (Includes Cover)	
503D	4461246	1	Receptacle, Electrical 0275485 & 1001096628 Installations (Includes Receptacle)	
503D	4461198	1	Receptacle, Electrical 0275486 Installation (Includes Cover)	
503D	4461201	1	Receptacle, Electrical 0275487 Installation (includes Cover)	
503D	4461204	NLA	Receptacle, Electrical 0275488 Installation (Includes Cover)	
503D	1001141971	NLA	Receptacle, Electrical 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503D	4461207	NLA	Receptacle, Electrical 0275489 Installation (Includes Receptacle) (Use p/n 1001100343)	
503D	1001141970	NLA	Receptacle, Electrical 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503D	1001141968	1	Receptacle, Electrical 0275490 Installation (Includes Receptacle) (Use p/n 1001100344)	
503D	1001141969	1	Receptacle, Electrical 1001100343 & 1001141971 Service Kits	
503D		1	Receptacle, Electrical 1001100343 & 1001141970 Service Kits	
503E		Ref	Plug End Options:	
503E	4460138	1	Plug End 0272839 Installation (Male)	
503E	Not Available	1	Plug End 0272843 Installation (Purchase Locally)	
503E	4461202	1	Plug End 0275472/0275489 Installations and 1001100343/1001141971 Service Kits (Male)	
503E	4461203	1	Plug End 0275472/0275489 Installations and 1001100343/1001141971 Service Kits (Female)	
503E	4461205	1	Plug End 0275485/1001096628 Installations and 1001100344/1001141970 Service Kits (Male)	
503E	4461206	1	Plug End 0275485/1001096628 Installations and 1001100344/1001141970 Service Kits (Female)	
503E	4461249	1	Plug End 0275486 Installation (Male)	
503E	4461250	1	Plug End 0275486 Installation (Female)	
503E	4461196	1	Plug End 0275487 Installation (Male)	
503E	4461197	1	Plug End 0275487 Installation (Female)	
503E	4461199	1	Plug End 0275488 Installation (Male)	
503E	4461200	1	Plug End 0275488 Installation (Female)	
503E	4461202	1	Plug End 0275489 Installation (Male)	
503E	4461203	1	Plug End 0275489 Installation (Female)	
503E	4461205	1	Plug End 0275490 Installation (Male)	
503E	4461206	1	Plug End 0275490 Installation (Female)	
503F		Ref	Hardware Options:	
503F	4010405	AR	Screw M4 x 10mm	
503F	4010408	AR	Screw M4 x 16mm	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
503F	4010612	AR	Screw M6 x 16mm	
503F	4191706	AR	Screw M6 x 12mm	
503F	4191708	AR	Screw M6 x 20mm	
503F	0760619	AR	Screw M6 x 55mm	
503F	3290405	AR	Locknut M4	
503F	3290605	AR	Locknut M6	
503F	3290607	AR	Locknut M6	
503F	4811400	AR	Flatwasher M4	
503F	1001091102	AR	Flatwasher M4 Oversize	
503F	4811700	AR	Flatwasher M6	
503G		Ref	Bracket, Receptacle Box Mounting Options:	
503G	Not Required	0	Bracket, Receptacle Box Mounting 0272839, 0272843, 0275472, 0275485, 0275486 & 1001096628 Installations	
503G	0903569	1	Bracket, Receptacle Box Mounting 0275487, 0275488, 0275489 & 0275490 Installations	
503G	0903484	1	Bracket, Receptacle Box Mounting 1001096628 Installation (2nd Receptacle Box Only)	
503H	0903566	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec Installations except 0272843 Installation)	
503H	1001096627	1	Bracket, Circuit Breaker Mounting (Required Only on CE Spec 1001096628 Installation)	
503J	2902541	AR	Circuit Breaker Box Assembly (Required Only on CE Spec Installations except 0272843 Installation):	G
503J		Ref	Circuit Breaker Options:	
503J	1001109475	NLA	Circuit Breaker - 16A (Use p/n 1001181045)	
503J	1001109482	NLA	Circuit Breaker - 30mA (Use p/n 1001181045)	
503J	4460957	1	Terminal Block	
503J	4460956	1	Barrier, Terminal Block	
503K	1001097150	1	Connector, Strain Relief (Required Only on CE Spec Installations except 0272843 Installation)	
503L	1060908	55 in/1.4m	Cable, Extension (Required Only on CE Spec Installations except 0272843 Installation)	
503M	1060908	55 in/1.4m	Cable, Electrical (Required Only on CE Spec 1001096628 Installation) (Not Shown - Connects 2 Receptacle Boxes)	
	2902431	1	Receptacle Box Kit (110V GFI) (Includes Items 503A-503D) (0272839 Installation)	C
	0275216	1	Receptacle, Box and Plug Kit (110V IEC Yellow) (Includes Items 503A, 503B, 503C & Male 503E Plug End) (0275487 Installation)	1
	0275217	1	Receptacle, Box and Plug Kit (220V IEC Blue) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275488 Installation)	1
	0275452	1	Receptacle Box Kit (220V CEE7 Post Ground with 2x4 Box) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275472 Installation)	1
	0275218	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation) (Use p/n 1001141971)	B-A
	1001141971	NLA	Receptacle, Box and Plug Kit (220V CEE7 Post Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275489 Installation)	B-A
	0275453	1	Receptacle Box Kit (220V CEE7 Side Ground with 2x4 Box) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275485 & 1001096628 Installation)	1
	0275219	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation) (Use p/n 1001141970)	B-A

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
	1001141970	NLA	Receptacle, Box and Plug Kit (220V CEE7 Side Ground with 70x70 Box) (Includes Items 503A, 503B, 503D & 503E) (0275490 Installation)	B-A
	0275454	1	Receptacle, Box and Plug Kit (220V AFSINT 107 Keyed Ground) (Includes Items 503A, 503B, 503D & Male 503E Plug End) (0275486 Installation)	1
504		Ref	Brake Disconnect/Release Switch Components	
504A	4922944	1	Brake Disconnect Harness and Switch	E
504A	1060680	15 ft/2.7m	Cable, Electrical 18/2	
504A	4240003	1	Strap, Cinch (Not Shown)	
504B	4360613	1	Switch, Limit	
504C	4360387	1	Brake Release Switch	
505		Ref	Battery Charger/Inverter Components (ANSI and CSA Option Only):	
505A	Not Available	1	AC Output Harness (Internal Part of Inverter)	
505B	Not Available	1	Receptacle, Female - 4 Position (Conxall T9014)	
505C	Not Available	1	AC Input Harness (Internal Part of Inverter)	
505D	Not Available	1	Receptacle, Female - 4 Position (Conxall T9016)	
505E	Not Available	1	Remote Control Harness (Internal Part of Inverter)	
505F	Not Available	1	Plug, Male - 8 Position (Conxall 7281-8PG-300)	
505G	4923389	NLA	AC Input Harness (Use p/n 1001091479)	A-D
505H	4460138	1	Plug, Male	
505J	Not Available	1	Plug, Male - 4 Position (Conxall T9017)	
505K	4923390	1	AC Output Harness	D
505L	4460779	1	Receptacle, Female	
505M	Not Available	1	Plug, Male - 4 Position (Conxall T9015)	
505N	4923391	1	Data Interface Harness	E
505P	Not Available	1	Plug, Male - 8 Position (Conxall 6280-8SG-318)	
505R	4460899	1	Receptacle, Female - 6 Position	
505R	4460464	4	Pin, Male	
505R	4460466	2	Plug, Seal	
505R	3990010	1	Diode 6A/600V	
505S	4360336	1	Switch, Toggle	
505T	4460424	2	Receptacle, Female - 2 Position	
505T	4460267	2	Pin, Male	
505U	4923392	1	Cable, Battery + to Inverter +	A
505V	4923393	1	Cable, Battery - to Inverter -	A
506	1001093556	1	MDI Harness	B
506A	4460321	1	Plug, Male	
506A	4460226	4	Socket, Female	
506B	4460868	1	Plug, Male - 6 Position	
506B	4460877	4	Terminal	
506B	1001094105	1	Boot	
		Ref	<b>Tools for Service</b>	
601	7002821	1	Crimper, Wire (Not Shown)	
602	7002823	1	Extractor, Pin - Universal (Not Shown)	
603	4460467	AR	Extractor, Pin #16 Gauge (Not Shown)	
604	4460510	AR	Extractor, Pin #12 Gauge (Not Shown)	
605	7002828	1	Stripper, Wire (Not Shown)	
606	2901443	1	Analyzer Kit (Not Shown)	
606A	1600244	1	Analyzer	
606B	1060633	1	Cable, Analyzer	

## SECTION 7 - ELECTRICAL

ITEM	PART NUMBER	QTY	DESCRIPTION	REV
606C	4460321	2	Plug, Male - 4 Position	
606C	4460226	8	Socket, Female	
607	1001137005	1	Software Cables Kit (Not Shown)	

