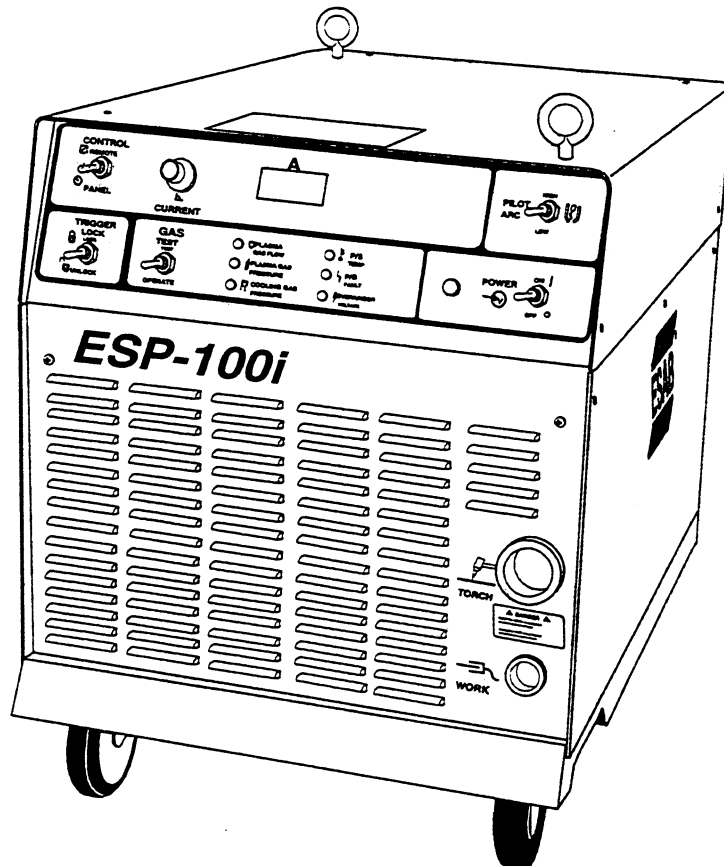




# ESP-100i



Bruksanvisning  
Instruktionsbog  
Instruksjonshåndbok  
Käyttöohjeet  
Instruction Manual  
Bedienungsanleitung

Manuel d'instructions  
Handleiding  
Manual De Instrucciones  
Manuale Di Istruzioni  
Manual De Instruções  
Εγχειρίδιο Οδηγιών

## FÖRSÄKRAN OM ÖVERENSSTÄMMELSE

### SVENSKA

Esab Welding Equipment AB, 695 81 Laxå, Sverige, försäkrar under eget ansvar att plasmaskärutrustning ESP 100i med nummer 35966 är i överensstämmelse med standard EN 50192 enligt villkoren i direktiv 73/23/EEC med tillägg 93/68/EEC.

---

## DECLARATION OF CONFORMITY

### ENGLISH

Esab Welding Equipment AB, 695 81 Laxå, Sweden, gives its unreserved guarantee that plasma cutting equipment ESP 100i having number 35966 complies with standard EN 50192, in accordance with the requirements of directive 73/23/EEC and addendum 93/68/EEC.

---

## KONFORMITÄT SERKLÄRUNG

### DEUTSCH

Esab Welding Equipment AB, 695 81 Laxå Schweden, versichert hiermit auf eigene Verantwortung, daß die plasmaschneidausrüstung ESP 100i mit Nr 35966 mit der norm EN 50192 gemäß den Bedingungen der Richtlinien 73/23/EEC mit der Ergänzung 93/68/EEC in Übereinstimmung steht.

---

## CERTIFICAT DE CONFORMITÉ

### FRANÇAIS

Esab Welding Equipment AB, 695 81 Laxå Suède, certifie sous sa propre responsabilité que des équipements de coupage plasma ESP 100i portant le numéro 35966 répond aux normes de qualité EN 50192 conformément aux directives 73/23/EEC avec annexe 93/68/EEC.

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## DECLARACIÓN DE CONFORMIDAD

### ESPAÑOL

Esab Welding Equipment AB, 695 81 Laxå, Suecia, declara, asumiendo toda responsabilidad, que equipo de corte plasma ESP 100i con el número de 35966 está fabricada de conformidad con la normativa EN 50192 según los requisitos de la directiva 73/23/EEC con el suplemento 93/68/EEC.

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Laxå 96-



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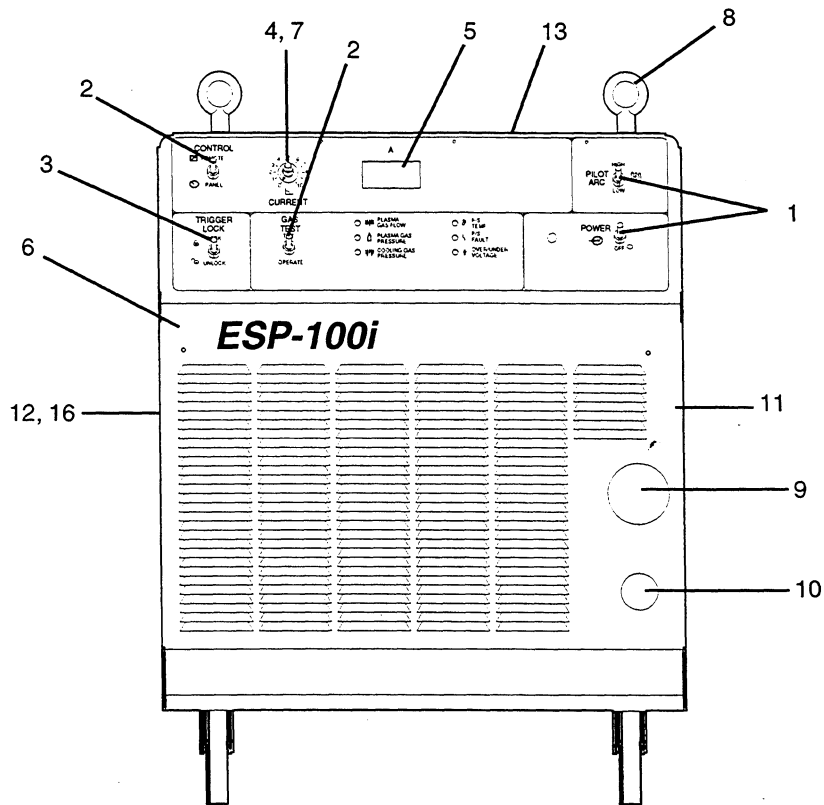
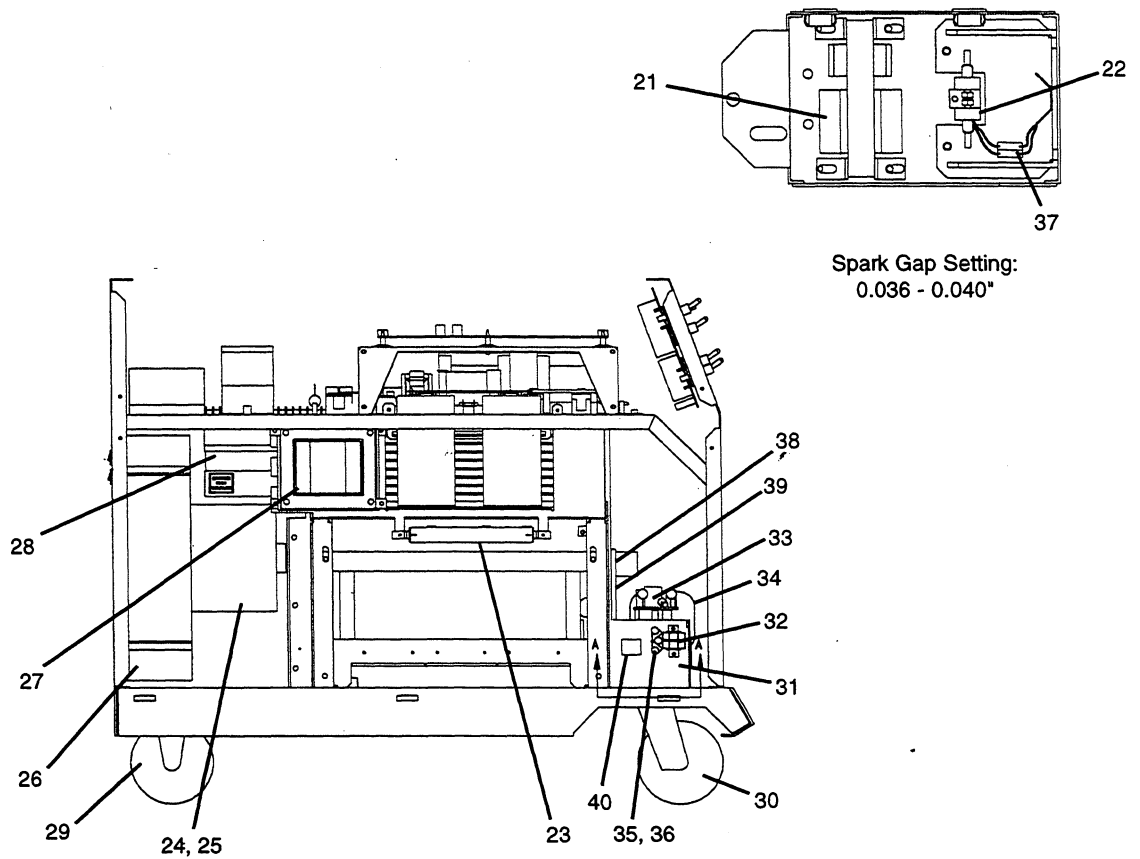


Figure 5-1. ESP-100i Front View

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
1	1	558000784	SWITCH TOGGLE 3 PST (SEAL - 951474)	S1, 55
2	1	558000385	SWITCH TOGGLE DPDT (SEAL - 951474)	S3, S4
3	1	558000698	SWITCH TOGGLE SPST (SEAL - 951474)	S2
4	1	558000373	KNOB	
5	1	558000785	METER, LED	AM1
6	1	558000786	PANEL, FRONT (CONTROL LABEL - 954484)	
7	1	558000372	POTENTIOMETER, 10K 2W	R12
8	2	558000787	BOLT, EYE, 3/8" - 16 X 1"	
9	1	558000788	GROMMET, 1.12"	
10	1	558000745	GROMMET, 1.12"	
11	1	558000897	PANEL, RIGHT SIDE	
12	1	558000898	PANEL, LEFT SIDE	
13	1	558000899	COVER, TOP	



Spark Gap Setting:  
0.036 - 0.040"

Figure 5-2. ESP-100i Left Side View

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
21	1	558000467	XFMR HIGH VOLTAGE	T7
22	1	558000610	SPARK GAP ASSY. includes (2) electrodes - 32931	SG
23	1	558000747	RESISTOR 1.5 KOHMS, 100W	R2
24	1	558000748	BLADE, FAN	
25	1	558000749	MOTOR, FAN	M1
26	1	558000750	SHROUD, FAN	
27	1	558000751	INDUCTOR, P.F.	L1
28	1	558000752	RESISTOR, PILOT ARC, 5 OHN 200W	R10, 11
29	2	558000753	CASTER, FIXED	
30	2	558000754	CASTER, SWIVEL	
31	1	558000900	BOX, HI FREQ.	
32	1	558000600	TERM. STRIP 2 POS.	TB4
33	1	558000498	PC BOARD ASSY. START UP	PCB7
34	1	558000901	HI FREQ REACTOR	T5
35	1	558000665	CAPACITOR 0.01uf 250VAC	C20
36	2	558000602	CAPACITOR 0.01uf 1KV	C21, 22
37	2	558000611	CAPACITOR 2500pf 1KV	C23, 24
38	1	558000756	RECEPTACLE 5 POLE	J2
39	1	558000380	CONNECTOR TWIST LOCK	J1

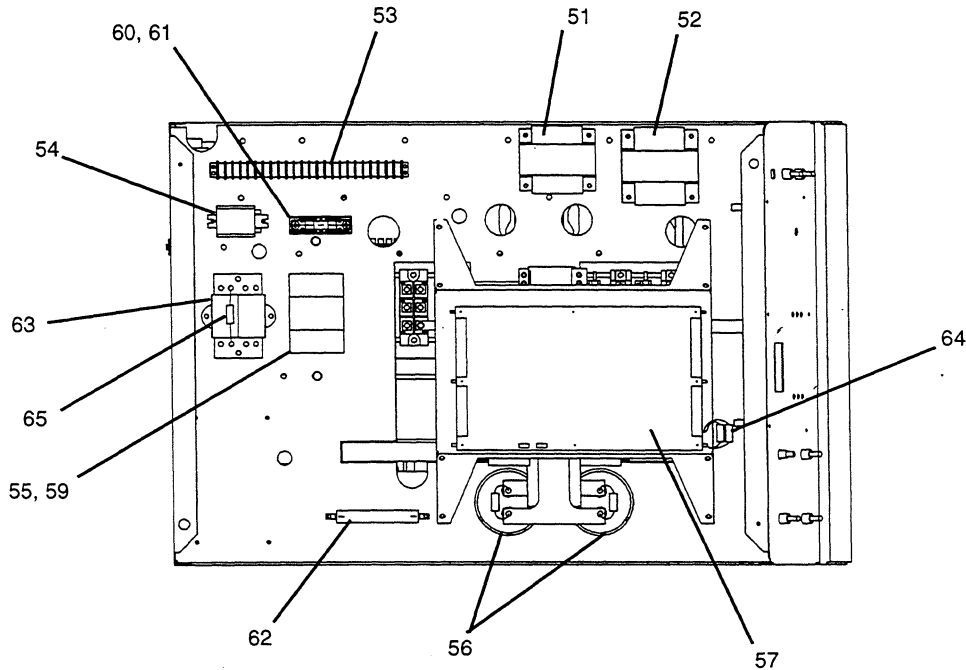


Figure 5-3. ESP-100i Top View with Top Cover Removed

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
51	1	558000391	TRANSFORMER ASSEMBLY, CONTROL	T1
52	1	558000757	TRANSFORMER ASSEMBLY, CONTROL	52
53	1	558000758	TERMINAL STRIP, 24 POSITION	TB3
54	1	558000387	RELAY ENCLOSURE DPDT 120VAC, 20A	K3
55	1	558000759	PILOT ARC CONTACTOR	K2
56	2	558000760	CAPACITOR, 3300 $\mu$ F	C3, 4
57	1	558000761	PC BOARD ASSEMBLY CONTROL	PCB1
58	2	558000642	CAPACITOR, 1 $\mu$ F 630 VDC	C1, 2
59	1	558000762	DIODE, ZENER, 180V	ZD2
60	1	558000902	HOLDER, FUSE	
61	1	558000903	FUSE 1A 250V FAST ACTING	F3
62	1	558000134	RESISTOR 25 OHM 50W	R1
63	2	558000469	CAPACITOR, 20 $\mu$ F, 400 VDC	C18, 19
64	2	558000585	CAPACITOR, .022 $\mu$ F 250 VAC	C16, 17
65	1	558000904	RESISTOR, 2W 10K	R13

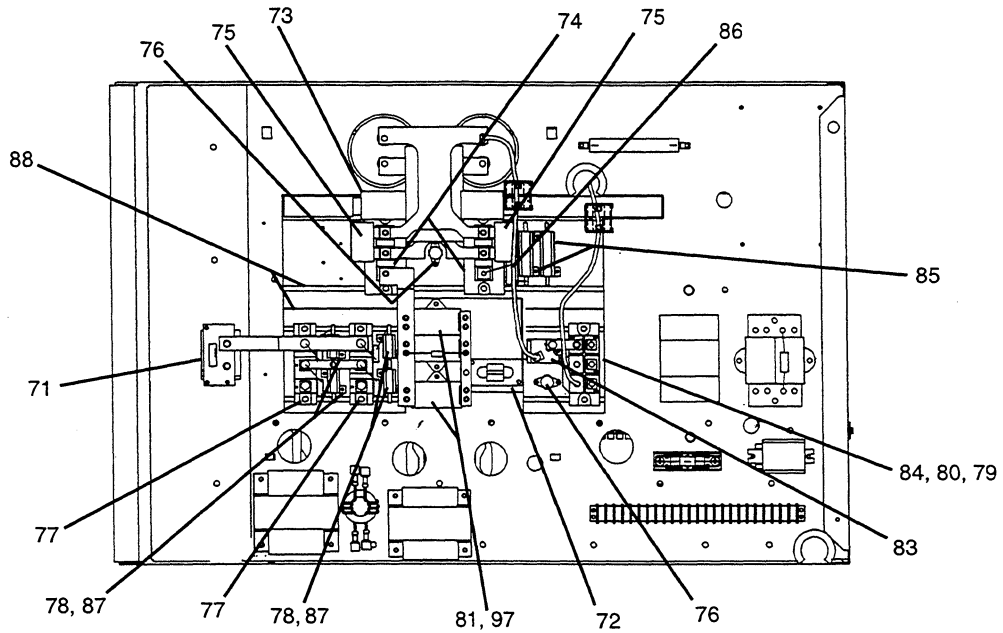


Figure 5-4. ESP-100i Top View (PCB1 Removed)

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
71	1	558000763	SHUNT, FEEDBACK	PCB5
72	1	558000408	TRANSFORMER, CURRENT	T6
73	2	558000639	PC BOARD ASSEMBLY IGBT DRIVER	T6
74	2	558000764	IGBT (PAD - 951190)	Q1, Q2
75	2	558000532	CAPACITOR, 1 $\mu$ F 600VDC	C5, 6
76	2	558000412	SWITCH, THERMAL	TS1, 2
77	2	558000401	MODULE DIODE 100A 600V (PAD - 951518)	D1, D2
78	4	558000404	RESISTOR, 20 OHM 25W (PAD - 951193)	R6, 7, 8, 9
79	3	558000689	VARISTOR, METAL OX. 275V	MOV1, 2, 3
80	1	558000622	CAPACITOR .22 $\mu$ F 1000VDC	C15
81	3	558000469	CAPACITOR 29 $\mu$ F, 400 VDC	C7, 8, 9
82	1	558000765	BUSBAR CAPACITOR	
83	1	558000766	SCR (PAD - 951196)	SCR 1
84	1	558000767	BRIDGE DIODE (PAD - 951192)	BR1
85	2	558000417	RESISTOR 20 OHM, 50W (PAD - 951194)	R4, 5
86	1	558000471	CAPACITOR, 0.033 $\mu$ F, 630 VDC	C10
87	4	558000405	CAPACITOR 0.01 $\mu$ F 630W VDC	C11, 12, 13, 14
88	2	558000915	HEATSINK	
97	1	558000904	RESISTOR 2W 10K	R3

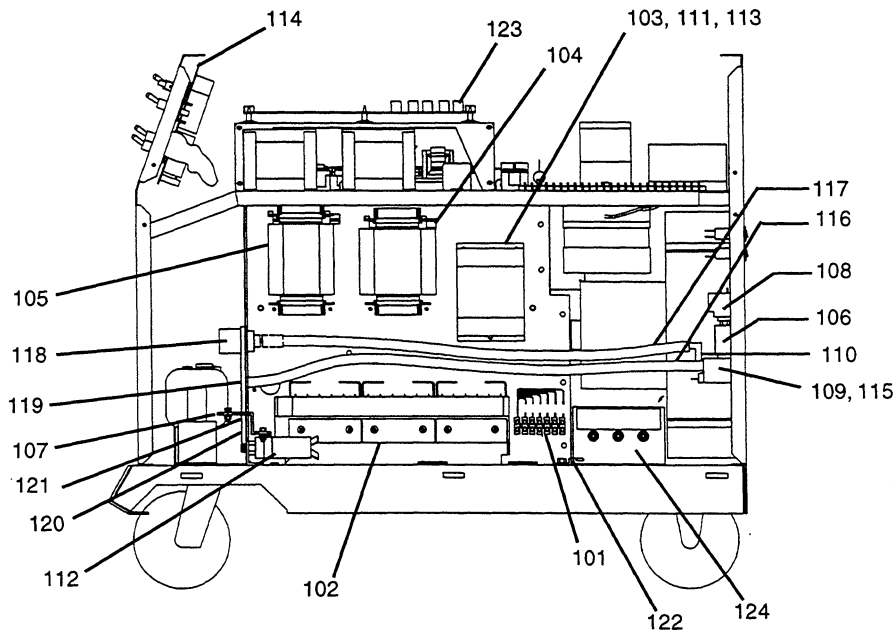


Figure 5-5. ESP-100i Right Side View

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
101	1	558000671	TERMINAL BLOCK, 7 POSITION	TB2
102	1	558000768	TRANSFORMER, AUTO	T4
103	1	558000769	CONTACTOR, MAIN	K1
104	1	558000770	TRANSFORMER ASSEMBLY, MAIN	T3
105	1	558000771	INDUCTOR ASSEMBLY, OUTPUT	L2
106	1	558000772	MANIFOLD	
107	1	558000916	TERMINAL WORK	
108	2	558000773	SWITCH, PRESSURE	PS1, 2
109	2	558000774	VALVE, SOLENOID GAS	GSV1, 2
110	1	558000410	FLOW SWITCH	FS1
111	1	558000762	DIODE, ZENER 180V	ZD1
112	1	558000775	SWITCH PRESSURE	PS3
113	3	558000652	VARISTOR METAL OX., 625V	MOV4, 5, 6
114	1	558000776	ISOLATION AMPLIFER PCB	PCB4
115	1	558000625	DIODE ZENER 62V 5W 7.1A	ZD3
116	1	558000905	HOSE ASSEMBLY, 24"	
117	1	558000906	HOSE ASSEMBLY, 22"	
118	1	558000907	ADAPTOR 1/4NPTM x C/A-W F	
119	1	558000908	ADAPTOR 1/4NPTM x B/I-G F	
120	1	558000909	BOARD OUTPUT TERMINAL	
121	1	558000755	TERMINAL BUSHING	J5
122	1	558000910	GROUND LUG	
124	1	558000911	EMC FILTER	FN1



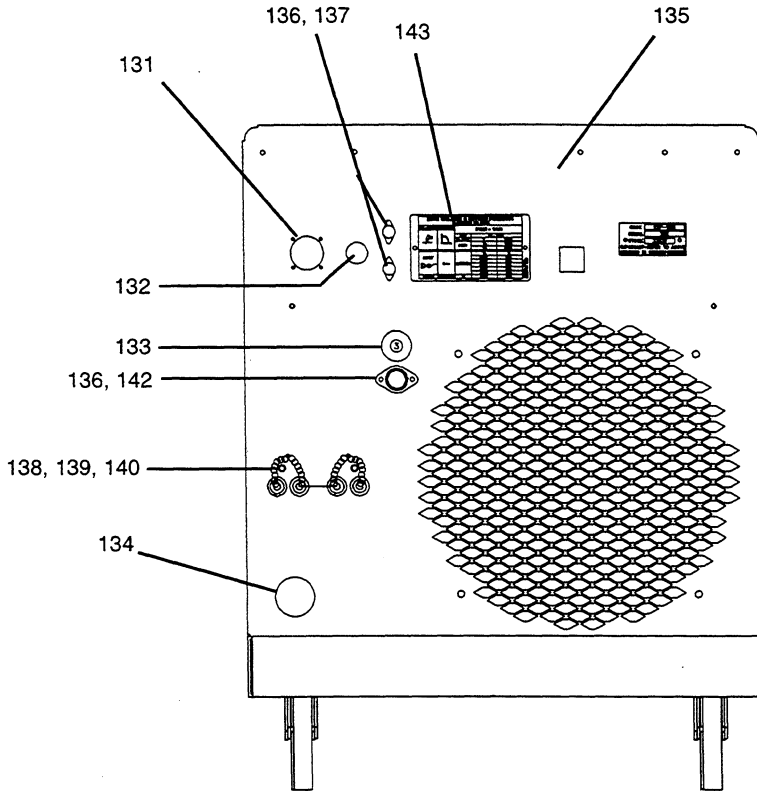


Figure 5-6. ESP-100i Rear View

ITEM NO.	QTY REQ.	PART NO.	DESCRIPTION	CIRCUIT SYMBOL
131	1	558000777	HOUSING, 14-PIN AMPHENOL	J3
132	1	558000089	HOLE PLUG, BLACK	
133	1	558000423	CIRCUIT BREAKER, 3A	CB1
134	1	558000778	STRAIN RELIEF	
135	1	558000779	PANEL, REAR	
136	3	558000516	FUSE HOLDER	
137	2	558000780	FUSE 20A 600V	F1, F2
138	1	558000781	DUST PLUG - R.H.	
139	1	558000782	DUST PLUG - L.H.	
140	2	558000783	PLUG & NUT	
142	1	558000686	FUSE 3A 600VAC FAST ACTING	F4
143	1	558000912	LABEL RATING ESP-100I	

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