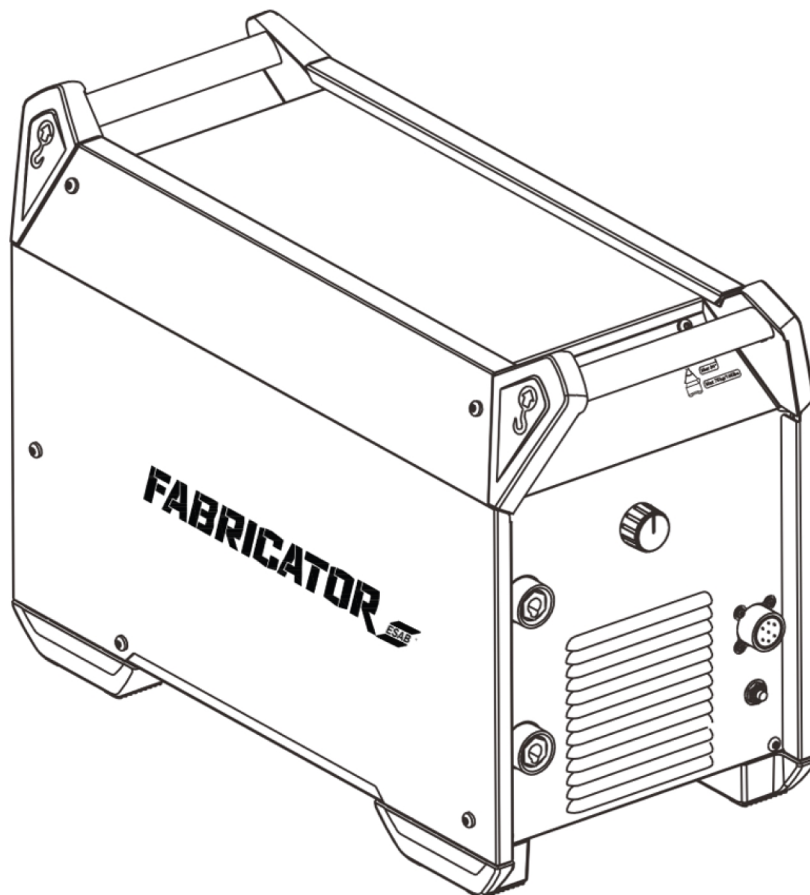


Fabricator EM 400i, Fabricator EM 500i



Spare parts list

Ordering no. Product

0700 020 001 Fabricator EM 400i

0700 020 002 Fabricator EM 500i

Spare parts are to be ordered through the nearest ESAB agency. Kindly indicate type of unit, serial number, denominations and ordering numbers according to the spare parts list.

Maintenance and repair work should be performed by an experienced person, and electrical work only by a trained electrician. Use only recommended spare parts.

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1 SPARE PARTS

C = Component designation in the circuit diagram					
Item	Qty	Ordering no.	Denomination	Notes	C
1	1	0469 950 880	Cable Clamp		
2	1	0321 475 893	Knob		
3	1	0700 020 015	Display board with Front Overlay		1AP1
4	1	0700 020 016	Main Control board		20AP1
5	1	0700 020 017	Input EMC board with Insulation sheet		2AP1
6	3	0700 020 018	Output snubber board		2AP3, 2AP4, 2AP5
7	1	0700 020 019	Fan power supply board		15AP2
8	1	0700 020 073	Output EMC board	Only for EM 400i	2AP2
	1	0700 020 020		Only for EM 500i	2AP2
9	1	0700 020 074	Main power board with IGBT's*	Only for EM 400i	15AP1
	1	0700 020 021		Only for EM 500i	15AP1
10	2	0700 020 076	Transformer	Only for EM 400i	15T1
	2	0700 020 022		Only for EM 500i	15T1
11	1	0700 020 080	Inductor	Only for EM 400i	15L1
	1	0700 020 023		Only for EM 500i	15L1
12	1	0700 020 024	Auxiliary transformer T1	510VA	2T1
13	1	0700 020 025	Auxiliary transformer T2	34VA	2T2
14	3	0700 020 026	Secondary Rectifier diode*	400V/×200A	15PM1, 15PM2, 15PM3
15	1	0700 020 027	Input Rectifier*	1600V/100A	15BR1
16	1	0700 020 028	Secondary current sensor		15CS1
17	4	0465 415 001	Foot		
18	1	0700 020 030	Fan (48VDC/120×120×38mm)	Only for EM 400i	15EV1
	2			Only for EM 500i	15EV1, 15EV2
19	1	0700 020 033	Input circuit breaker with sleeve 63A	Only for EM 500i	FU1
	1	0700 020 088	Input circuit breaker with sleeve 40A	Only for EM 400i	FU1
19a	1	0700 020 090	Sleeve for Input circuit breaker		
20	2	0160 362 881	OKC output terminals		
21	1	0193 586 102	Circuit breaker with cover		FU2
22	2	0700 020 034	Protective cover		
23	1	0700 020 035	Connector 7pin assy with harness		XS1
24	1	0700 020 036	Side panel - Right		

C = Component designation in the circuit diagram					
Item	Qty	Ordering no.	Denomination	Notes	C
25	1	0700 020 037	Side panel - Left		
26	1	0465 331 001	Rubber mat		
27	1	0700 020 039	Top panel with insulation sheet		
28	2	0465 293 001	Handle corner part left		
29	2	0465 293 002	Handle corner part right		
30	1	0700 020 042	Output negative cable		
31	1	0700 020 043	Output positive cable		
32	1	0700 020 044	Output negative bus bar 01		
33	1	0700 020 045	Output positive bus bar 01		
34	2	0700 020 046	NTC thermistor with harness		
35	1	0700 020 047	Output negative bus bar 02		
36	1	0700 020 048	Output positive bus bar 02		
37	6	0700 020 049	Bus bar at diode 01		
38	3	0700 020 050	Bus bar at diode 02		
39	3	0700 020 091	Thermal compound		
40	14		Torx head screw for housing (For top and side panels)	M6*16	
41	8		Philips head screw for display board	M3*8	
42	7		Philips head screw for main control board	M3*8	
43	4		Allen head screw for foot	M6*25	
44	3		Philips head screw for connector	ST4.2*19	
45	9		Philips head screw for input circuit breaker	M4*12	
46	8		Philips head Screw for transformer	M5*12	
47	2		Philips/Hex head screw for inductor	M8*25	
48	14		Philips/Hex head screw for auxiliary transformer T1	M5*12	
49	4		Philips head Screw for fan	M4*45	
50	1	0700 020 092	Circuit breaker mounting metal clamp (For item 19)		
51	9		Counter sunk philips head screw for display panel	M3*8	
52	12		Philips head screw for item 5,7 and 8	M3*8	
53	8		Cross slotted screw for Power board	M5*12	

C = Component designation in the circuit diagram					
Item	Qty	Ordering no.	Denomination	Notes	C
54	9		Philips head screw for Output snubber board	M4*12	
55	6		Cross slotted screw for Secondary Rectifier diode*	M6*16	
56	7		Hexagon head screw for items 11,31,32,33,35 and 36	M10*25	
57	1	0700 020 093	Fixing bracket (for item 12)	Included top and bottom bracket	
58	1	0700 020 094	Cushion		
59	1	0700 020 095	Wire harnesses	001 - 013	
60	1	0700 020 096	Heatsink for secondary diode module		
61	1	0700 020 097	Heatsink for main power board		

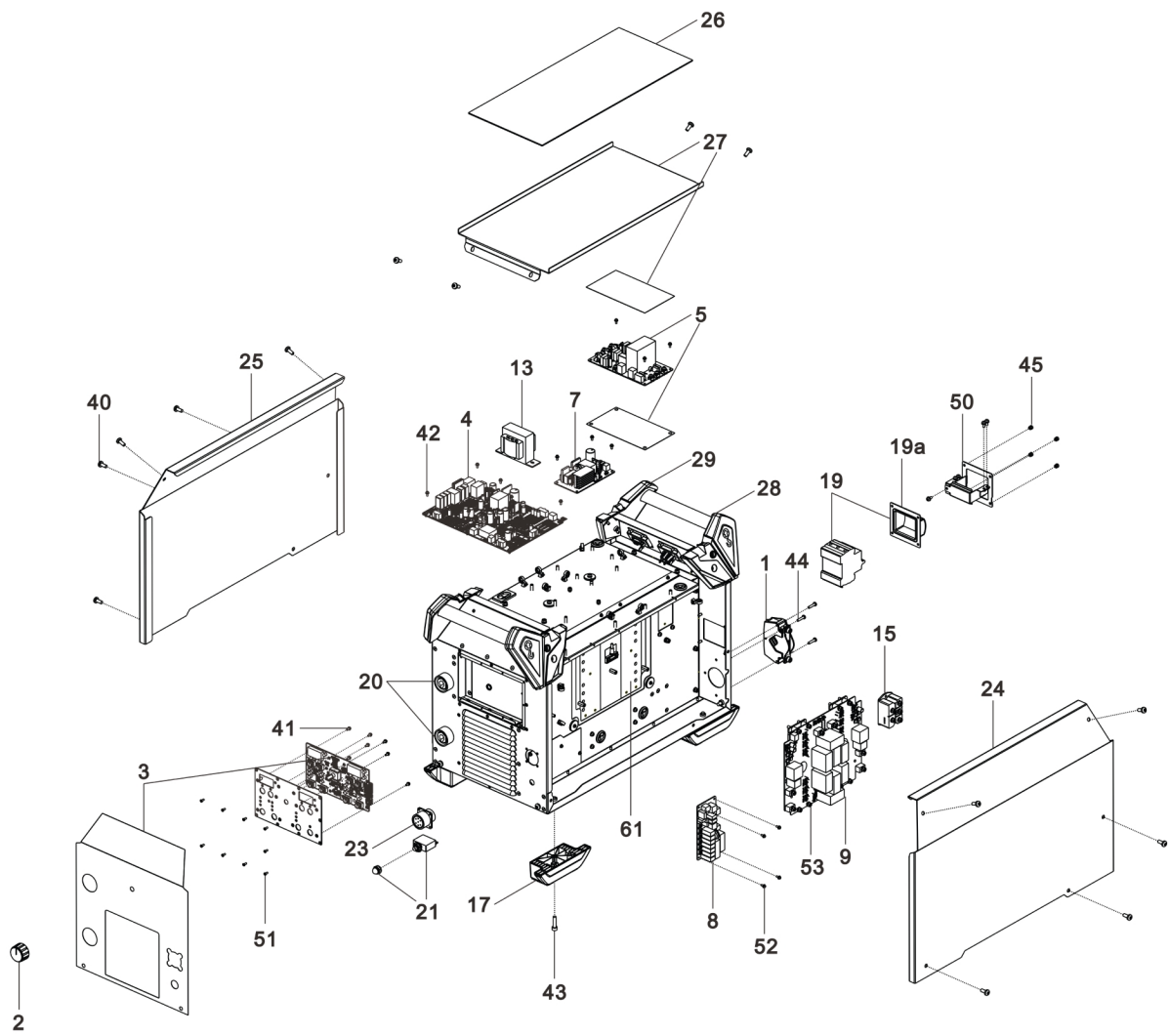
*Refer note

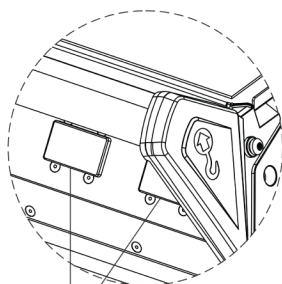
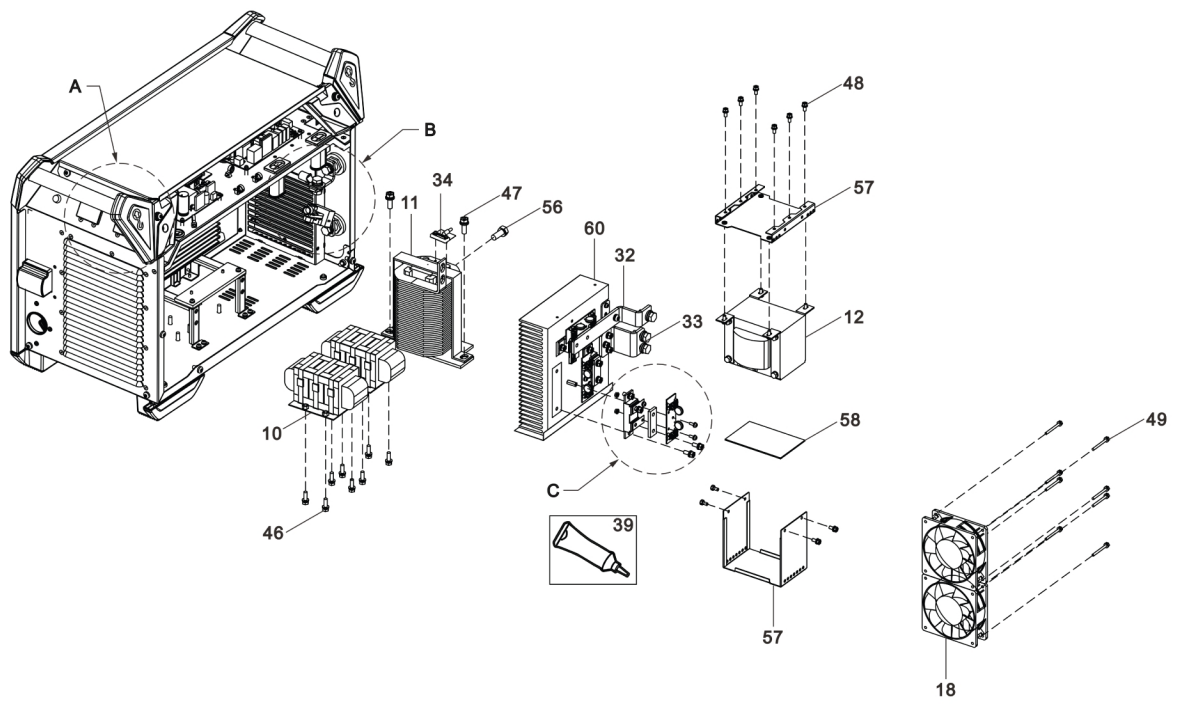
Main power board spare kit contains:

1. Power board assy
2. Thermal compound
3. MSDS safety datasheet for thermal compound
4. Service instructions/procedure
5. Power board should be with Antistatic packaging
6. Hardware's including fasteners

Secondary rectifier and Input rectifier spare kit contains:

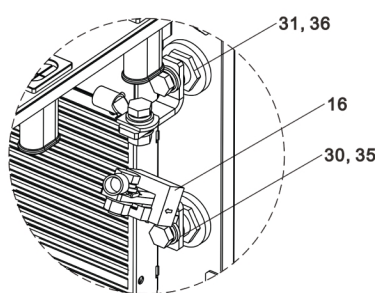
1. Rectifier module
2. Thermal compound
3. MSDS safety datasheet for thermal compound
4. Service instructions/procedure
5. Rectifier component should be with Antistatic packaging
6. Hardware's including fasteners



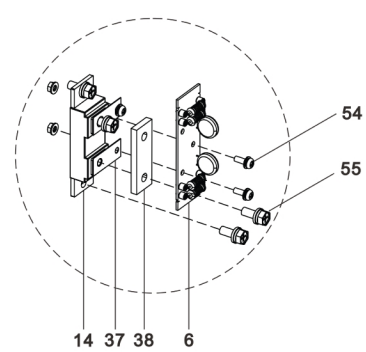


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Detail View A



Detail View B



Detail View C

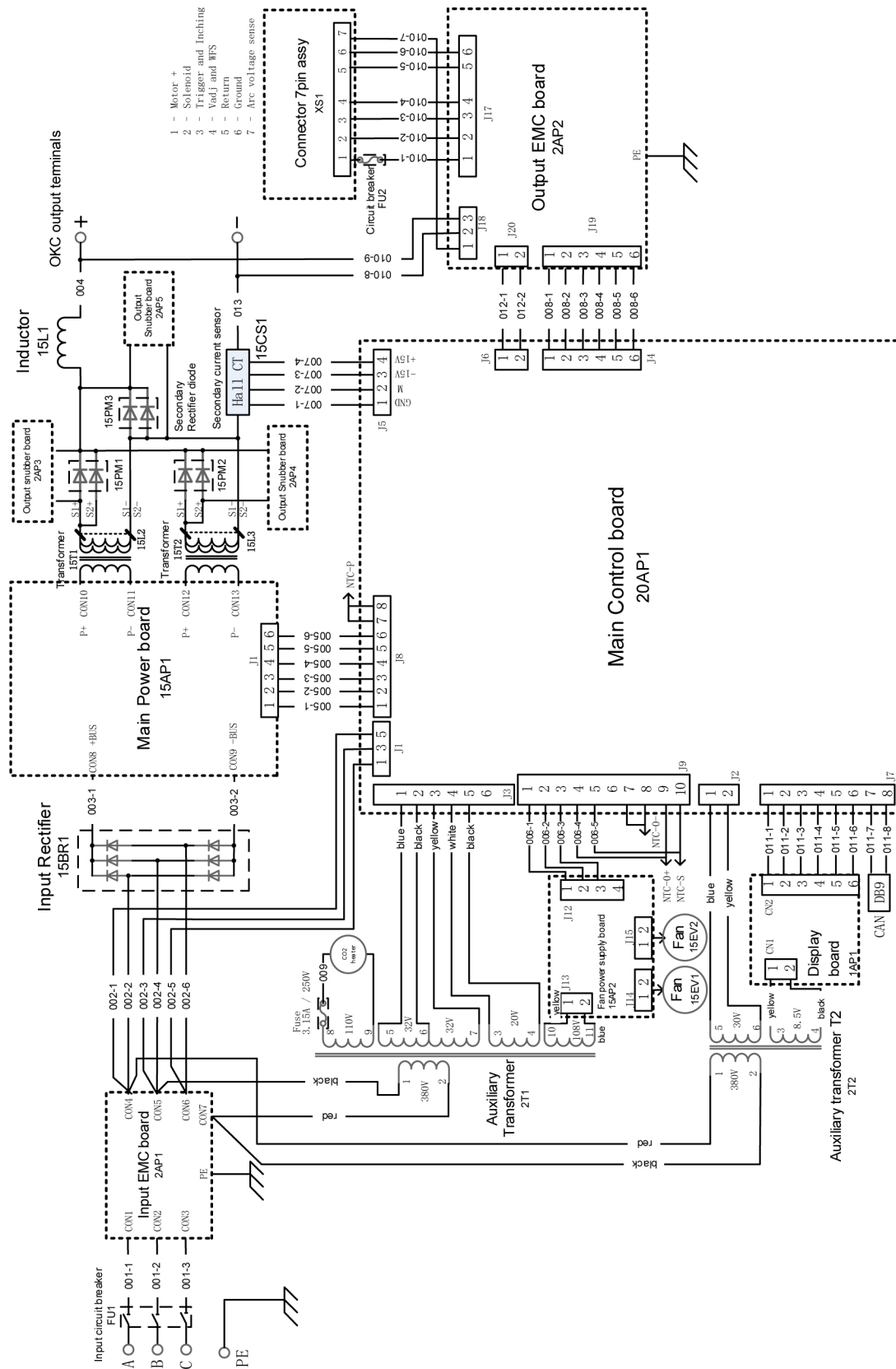
1.1 Wire harness kit

Kit number	Harness no.	QTY	Ordering number	From	To
1	001	1	0700 020 029	Input circuit breaker: (U/V/W)	Input EMC board (2AP1): CON1/CON2/CON3
	002			Input EMC board (2AP1): CON4/CON5/CON6	Main control board (20AP1): J1 Input rectifier (15BR1): 1~/2~/3~
	003			Input rectifier (15BR1): +/-	Main power board (15AP1): CON8(+BUS)/CON9(-BUS)
2	004	1	0700 020 031	Inductor (15L1): L-OUT	OKC output terminals: OUT+
	013			Freewheeling diode positive: DIODE	Output negative bus bar 02: OUT
3	005	1	0700 020 038	Main control board (20AP1): J8	Main power board (15AP1): J1
	011		0700 020 040	Main Control Board (20AP1): J7.7/8	NTC on the output inductor: NTC-L CAN (DB9.3/8)
				Main Control Board (20AP1): J7.1~6	Display board (1AP1): 1~6
	012		Main Control Board (20AP1): J6	Output EMC board(2AP2): J20	
4	006	1	0700 020 041	Fan power supply board (15AP2): J12	Main control board (20AP1): J9
				NTC on secondary heat sink: NTC-S	
				NTC on output positive terminal: NTC-O+	
				NTC on output negative terminal: NTC-O-	
5	007	1	0464 699 880	Secondary current sensor (15CS1)	Main control board (20AP1): J5
	008			Output EMC board (2AP2): J19	Main control board (20AP1): J4
6	009	1	0464 700 880	Fuse for heating valve: S-FUSE	Heating valve: S-HEATER

1 SPARE PARTS

Kit number	Harness no.	QTY	Ordering number	From	To
7	010	1	0464 701 880	Output EMC board(2AP2): J17.2~6	Connector 7pin assembly (XS1.2~6)
				Output EMC board(2AP2): J17.1	FU2, Connector 7PIN assembly (XS1.1)
				Output EMC board(2AP2): J18.1	Connector 7PIN assembly (XS1.7)
				Output EMC board(2AP2): J18.2/3	OKC output terminals: OUT-/OUT+

Refer to the wiring diagram on the next page to understand the above table.





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