

SPEEDTEC

405S, 405SP, 505S & 505SP

Spare Parts	1
Figure A: Machine Assembly	2
Figure B: Machine Assembly	3
Figure C: Machine Assembly	4
Miscellaneous Items (not shown in figure A, B, C)	4
Electrical Schematic	5
Connection Diagram	6
WEEE	7



LINCOLN[®]
ELECTRIC

Lincoln Electric Bester Sp. z o.o.
ul. Jana III Sobieskiego 19A, 58-263 Bielawa, Poland
www.lincolnelectric.eu

Spare Parts

SP50276/SP50277/SP50278/SP50279 REV02
12/05

ASSEMBLY PAGE NAME			Machine Assembly	Machine Assembly	Machine Assembly	Miscellaneous Items		
CODE NO.:	K NO.:	FIGURE NO.:	A	B	C	-		
50276	K14116-1	SPEEDTEC 505S	1	1	1	1		
50277	K14116-2	SPEEDTEC 505SP	2	2	2	2		
50278	K14117-1	SPEEDTEC 405S	3	3	3	3		
50279	K14117-2	SPEEDTEC 405SP	4	4	4	4		

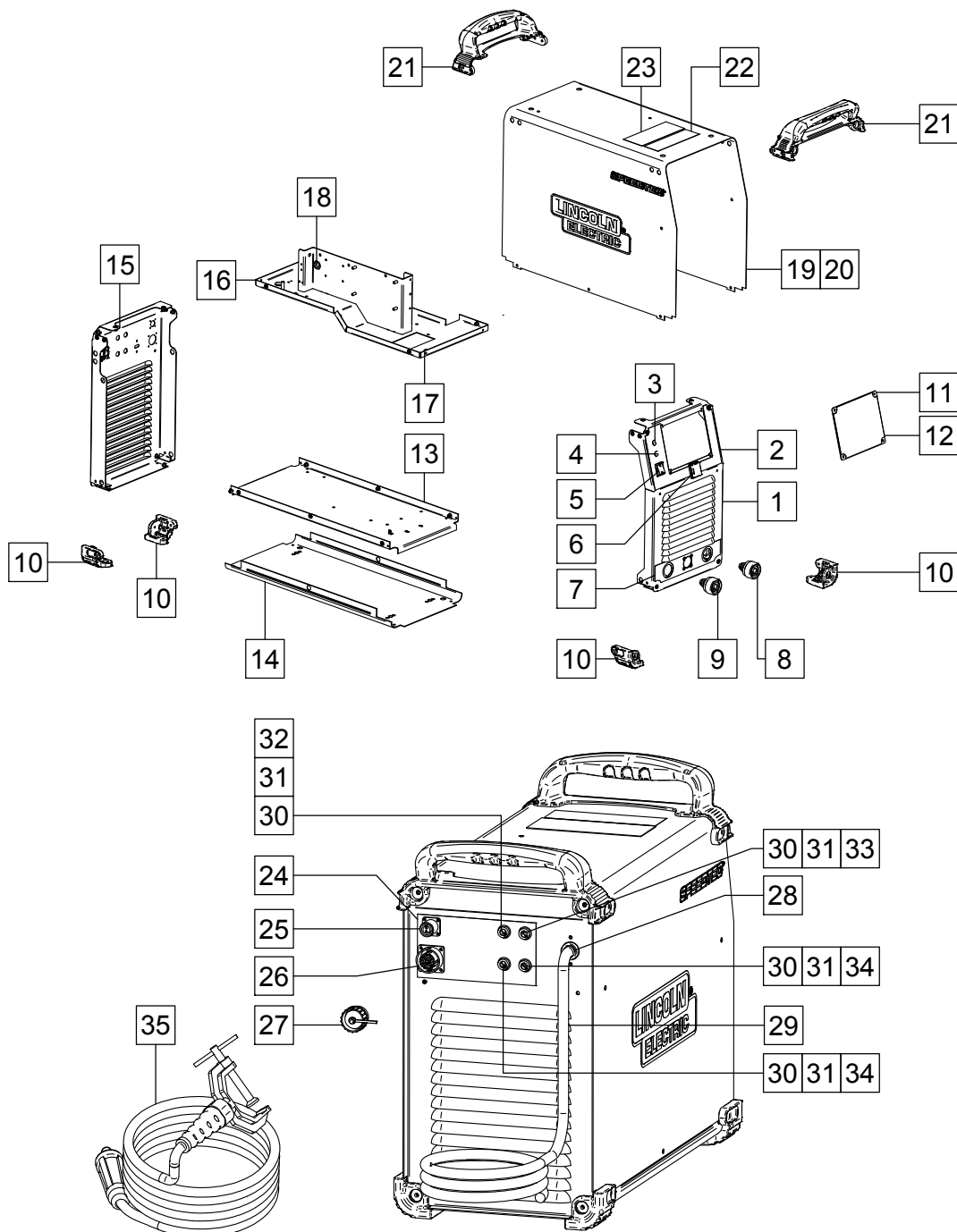


Figure A

Figure A: Machine Assembly

Item	Description	Part Number	QTY	1	2	3	4	5	6	7
1	FRONT PANEL	R-3019-302-1/08R	1	●	●	●	●			
2	STICKER	R-0010-505-1R	1	●	-	-	-			
	STICKER	R-0010-505-3R	1	-	●	-	-			
	STICKER	R-0010-505-2R	1	-	-	●	-			
	STICKER	R-0010-505-4R	1	-	-	-	●			
3	LED LAMP V4	0917-421-043R	1	●	●	●	●			
4	LED LAMP V5	0917-421-009R	1	●	●	●	●			
5	SWITCH	1115-270-019R	1	●	●	●	●			
6	BLACK FRAME SHIELD	1115-299-073R	1	●	●	●	●			
7	STICKER	R-0010-507-1R	1	●	●	●	●			
8	SOCKET X1	C-2986-001-3R	1	●	●	●	●			
9	SOCKET X2	R-8040-349-1R	1	●	●	●	●			
10	CORNER CAP	W95X1147R	4	●	●	●	●			
11	COVER	R-1019-369-1/08R	1	●	●	●	●			
12	STICKER	R-0010-506-1R	1	●	●	●	●			
13	BASE PANEL	R-3019-300-1/08R	1	●	●	●	●			
14	COVER	R-3019-304-1/02R	1	●	●	●	●			
15	REAR PANEL	R-3019-303-1/08R	1	●	●	●	●			
16	SHELF	R-3019-301-1/08R	1	●	●	●	●			
17	RUBBER CABLE BUSH	1361-599-197R	2	●	●	●	●			
18	RUBBER CABLE BUSH	1373-182-002R	3	●	●	●	●			
19	COVER	R-1019-387-1R	1	●	●	●	●			
20	STICKER (ELECTRICAL SCHEMATIC)	R-0010-509-1R	1	●	●	●	●			
21	HANDLES	R-0010-292-1R	2	●	●	●	●			
22	STICKER	2719-107-728R	1	●	●	●	●			
23	STICKER	R-0010-332-1R	1	●	●	●	●			
24	STICKER	R-0010-508-1R	1	●	●	●	●			
25	SOCKET	1158-641-003R	1	●	●	●	●			
26	SOCKET	1158-641-014R	1	●	●	●	●			
27	NUT	1158-641-015R	1	●	●	●	●			
28	CABLE RELEIF	1361-599-674R	1	●	●	●	●			
29	POWER LEAD (5m)	D-5578-171-2R	1	●	●	●	●			
30	FUSE SOCKET	1158-632-032R	4	●	●	●	●			
31	FUSE CAP	1158-632-033R	4	●	●	●	●			
32	SLOW-BLOW FUZE F3	1158-660-012R	1	●	●	●	●			
33	SLOW-BLOW FUZE F4	1158-660-008R	1	●	●	●	●			
34	SLOW-BLOW FUZE F1, F2	1158-660-010R	2	●	●	●	●			
35	WORK LEAD (3m)	K14033-1	1	●	●	●	●			

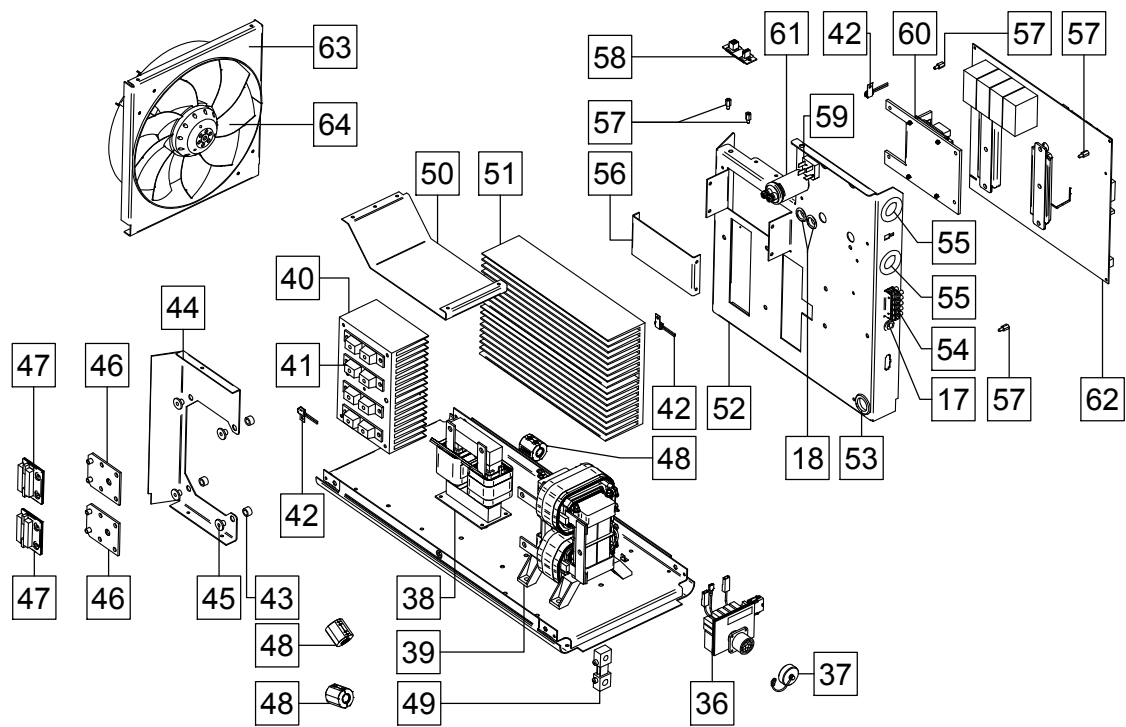


Figure B

Figure B: Machine Assembly

Item	Description	Part Number	QTY	1	2	3	4	5	6	7
36	P.C. BOARD (FILTER OUTPUT)	R-8040-339-1R	1	•	•	•	•			
37	NUT OF CONTROL RECEPTACLE	1158-641-128R	1	•	•	•	•			
38	CHOKE L1	R-4034-159-1R	1	•	•	•	•			
39	TRANSFORMER T1	R-4034-103-1R	1	•	•	•	•			
40	OUTPUT RECTIFIER HEATSINK	R-2013-120-2R	1	•	•	•	•			
41	DIODE MODULE ASSEMBLY	1156-113-314R	4	•	•	•	•			
42	TEMPERATURE SENSOR 80°C	1115-769-134R	3	•	•	•	•			
43	SLEEVES	1361-599-672R	4	•	•	•	•			
44	BRACKET	R-1012-554-1/08R	1	•	•	•	•			
45	SLEEVES	1361-599-671R	4	•	•	•	•			
46	SHORT-CIRCUITING SWITCH	R-3016-039-1R	2	•	•	•	•			
47	P.C. BOARDS	R-8040-341-1R	2	•	•	•	•			
48	FERRITE CORES	1158-290-010R	4	•	•	•	•			
49	SHUNT	R-2013-138-1R	1	•	•	•	•			
50	COVER	R-1019-417-1/08R	1	•	•	•	•			
51	HEATSINK	R-2013-120-1R	1	•	•	•	•			
52	DIVIDER	R-3016-037-1R	1	•	•	•	•			
53	RUBBER CABLE BUSH	1361-599-198R	1	•	•	•	•			
54	TERMINAL BLOCK X7	1131-990-005R	5	•	•	•	•			
55	RUBBER CABLE BUSHES	1373-111-331R	2	•	•	•	•			
56	COVER	R-1012-621-1R	1	•	•	•	•			
57	SLEEVES	1361-599-200R	5	•	•	•	•			
58	P.C. BOARD	R-8040-340-1R	1	•	•	•	•			
59	RECTIFIER	1156-112-100R	1	•	•	•	•			
60	P.C. BOARD ASSEMBLY (40VDC BUS POWER SUPPLY)	R-8040-348-1R	1	•	•	•	•			
61	CAPACITOR C2	1158-125-329R	1	•	•	•	•			
62	P.C. BOARD (SWITCH BOARD)	R-8040-342-1R	1	•	-	-	-			
	P.C. BOARD (SWITCH BOARD)	R-8040-342-3R	1	-	•	-	-			
	P.C. BOARD (SWITCH BOARD)	R-8040-342-2R	1	-	-	•	-			
	P.C. BOARD (SWITCH BOARD)	R-8040-342-4R	1	-	-	-	•			
63	FAN SHROUD	R-3019-306-1/08R	1	•	•	•	•			
64	FAN	R-8040-223-2R	1	•	•	•	•			

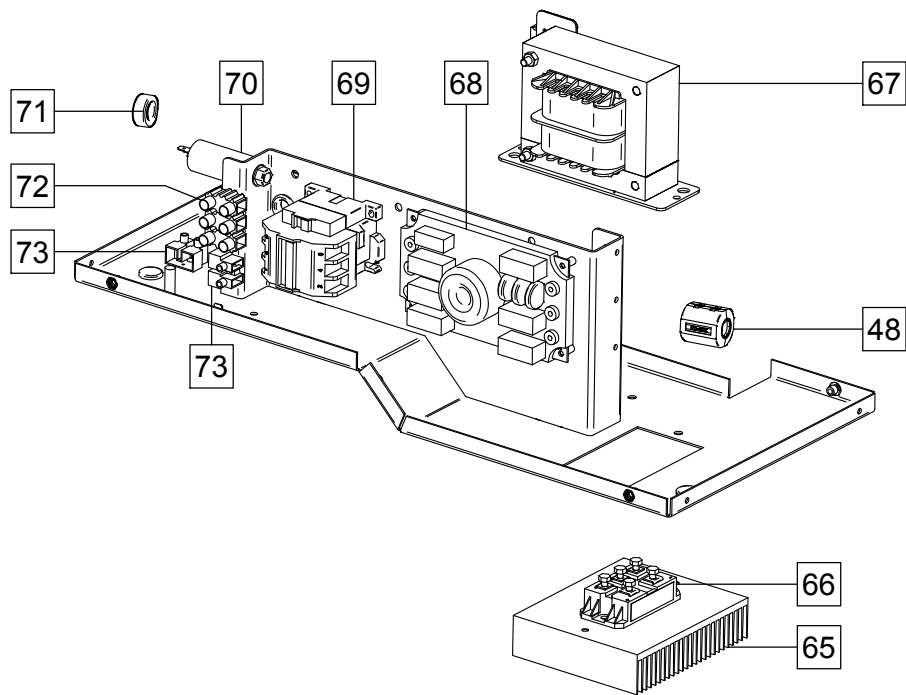


Figure C

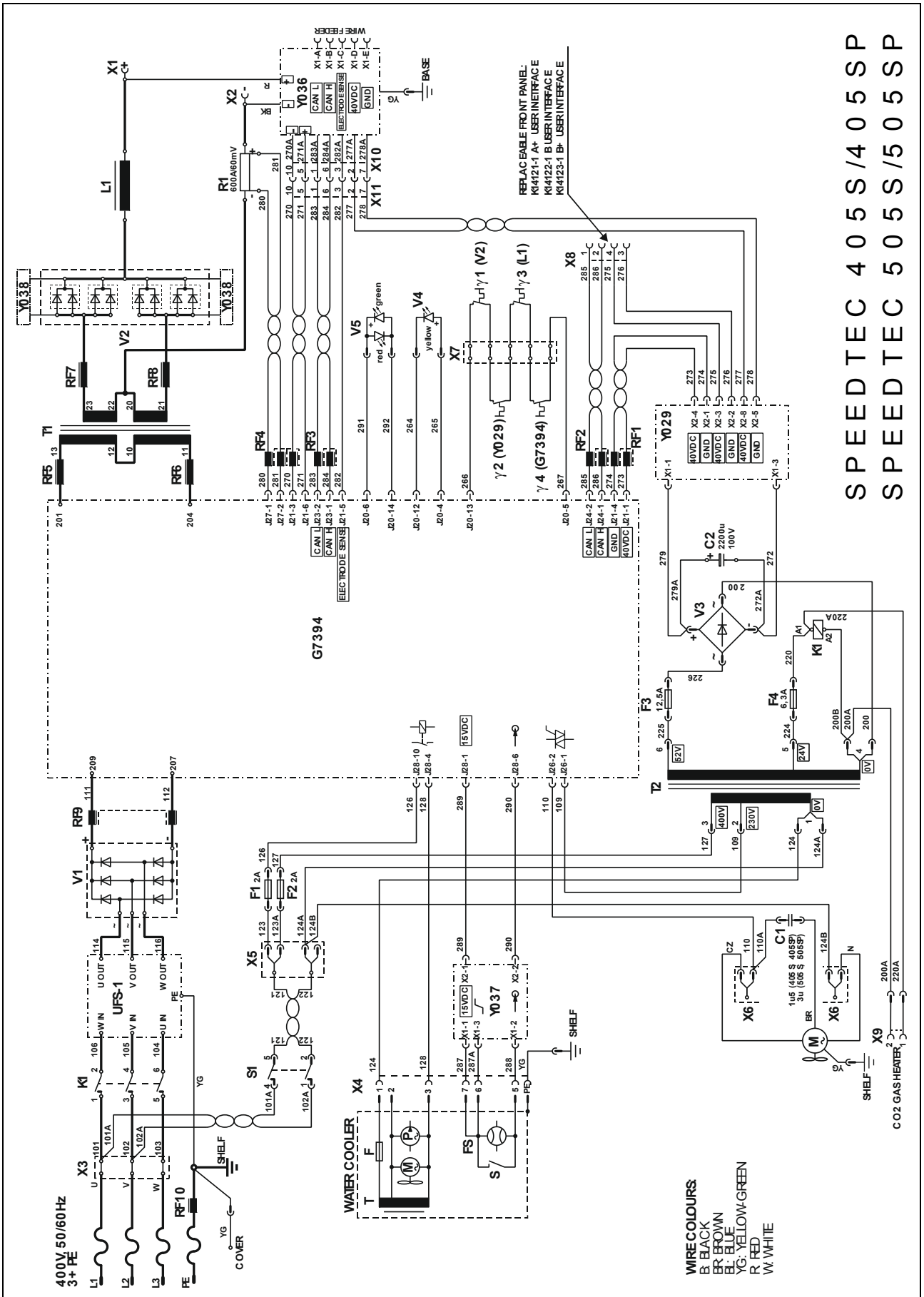
Figure C: Machine Assembly

Item	Description	Part Number	QTY	1	2	3	4	5	6	7
65	INPUT RECTIFIER HEATSINK	R-2013-127-1R	1	•	•	•	•			
66	INPUT RECTIFIER V1	M15454-14	1	•	•	•	•			
67	TRANSFORMER T2	R-4034-160-1R	1	•	•	•	•			
68	EMC FILTER PC BOARD UFS-1	0918-432-105R	1	•	•	•	•			
69	CONTACTOR K1	1115-212-210R	1	•	•	•	•			
70	CAPACITOR C1	1158-121-046R	1	•	•	•	•			
71	FERRITE CORE	W5600005R	1	•	•	•	•			
72	TERMINAL BLOCK X3	1131-990-011R	3	•	•	•	•			
73	TERMINAL BLOCKS X5, X6	1131-990-022R	2	•	•	•	•			

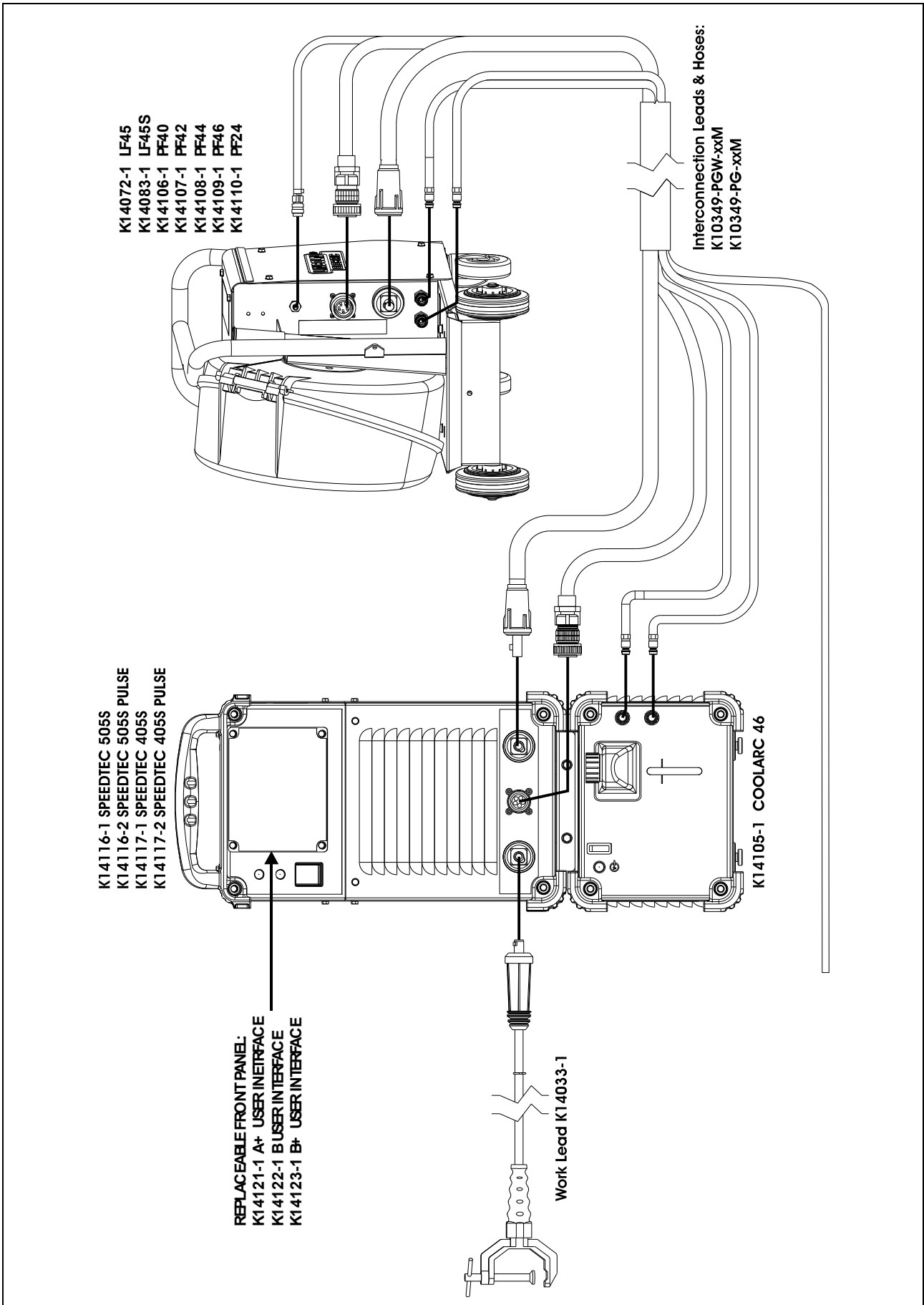
Miscellaneous Items (not shown in figure A, B, C)

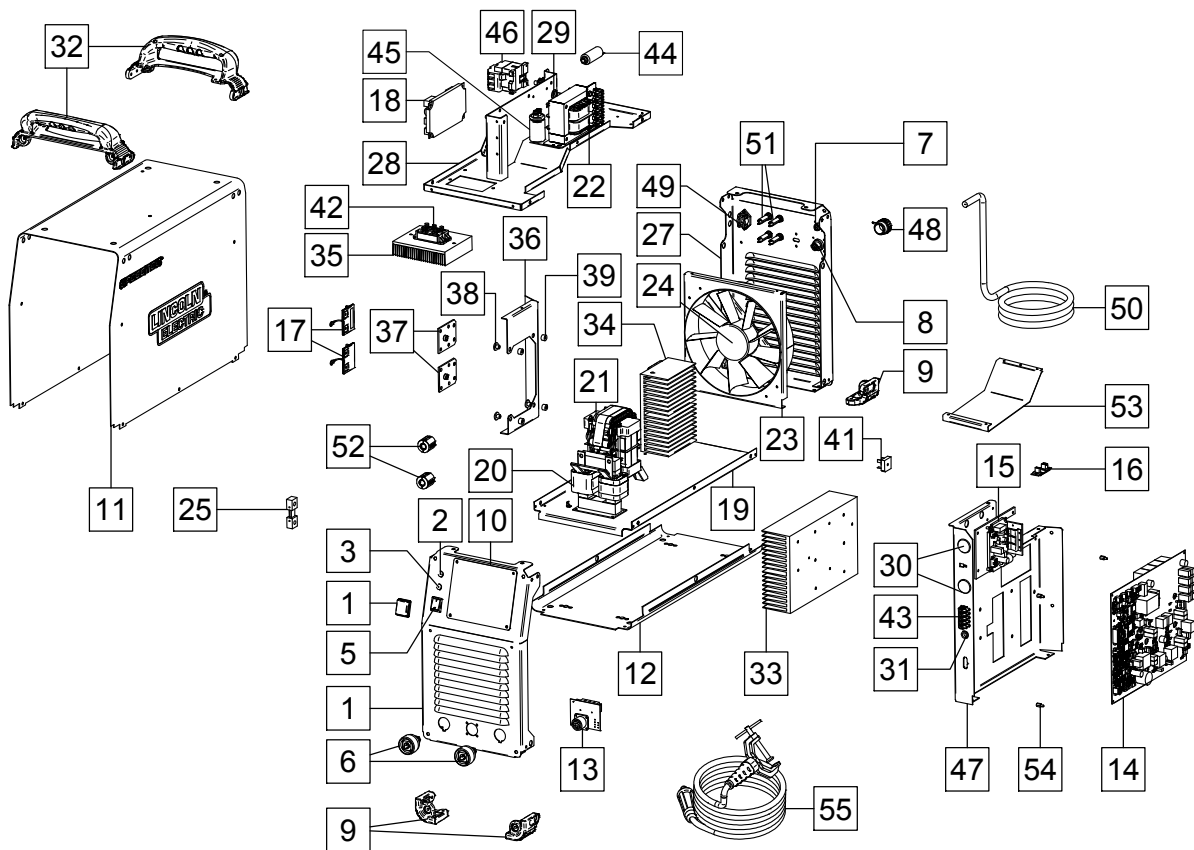
Item	Description	Part Number	QTY	1	2	3	4	5	6	7
74	WIRING HARNESS (PRIMARY A)	R-5041-299-1R	1	•	•	•	•			
75	WIRING HARNESS (PRIMARY B)	R-5041-300-1R	1	•	•	•	•			
76	WIRING HARNESS (SECONDARY A)	R-5041-302-1R	1	•	•	•	•			
77	WIRING HARNESS (SECONDARY B)	R-5041-303-1R	1	•	•	•	•			
78	WIRING HARNESS (COOLER)	R-5041-301-1R	1	•	•	•	•			
79	CONDUCTORS (TRANSFORMER T1 – RECTIFIER V2)	R-5041-195-2R	2	•	•	•	•			
80	CONDUCTOR (CHOKE L1 – RECTIFIER V2)	R-5041-336-1R	1	•	•	•	•			
81	CONDUCTOR (CHOKE L1 – SOCKET X1)	R-5041-294-2R	1	•	•	•	•			
82	CONDUCTORS (TRANSFORMER T1 – SHUNT R1)	R-5041-336-2R	1	•	•	•	•			
83	WIRING HARNESS WITH GAS HEATER SOCKET	R-5041-141-1R	1	•	•	•	•			

Electrical Schematic



Connection Diagram





Description	Ref.	Recycle				ST				
		Fe	Al	Cu	Brass	Boards	Plastics	Liquid Cristal	External Electric Cables	Capacitors
FRONT PANEL	1	X								
LED LAMPS	2, 3			X			X			
SWITCH	4	X			X		X			
BLACK FRAME SHIELD	5						X			
SOCKETS	6, 7, 8	X		X			X			
CORNER CAPS	9						X			
COVERS	10, 12, 53	X								
COVER	11		X							
P.C. BOARDS	13, 14, 15, 16, 17, 18					X				
BASE PANEL	19	X		X						
CHOKE	20									
TRANSFORMERS	21, 22									
FAN SHROUD	23	X								
FAN	24	X		X					X	
SHUNT	25			X						
REAR PANEL	27	X								
SHELF	28	X								
RUBBER CABLE BUSH	29, 30, 31						X			
HANDLES	32						X			
HEATSINKS	33, 34, 35		X							
BRACKET	36	X								
SHORT-CIRCUITING SWITCHES	37			X						
SLEEVES	38, 39, 54						X			
FERRITE CORES	40	X								
RECTIFIER	41, 42	X					X			
TERMINAL BLOCK	43	X		X			X			
CAPACITORS	44, 45									X
CONTACTOR	46	X		X			X			
DIVIDER	47		X							
NUT	48						X			
CABLE RELEIF	49						X			
POWER LEAD	50								X	
FUSE SOCKETS & CAPS	51	X					X			
FERRITE CORE	52	X								
WORK LEAD	55								X	