

# POWERTEC 205C, 255C & 305C

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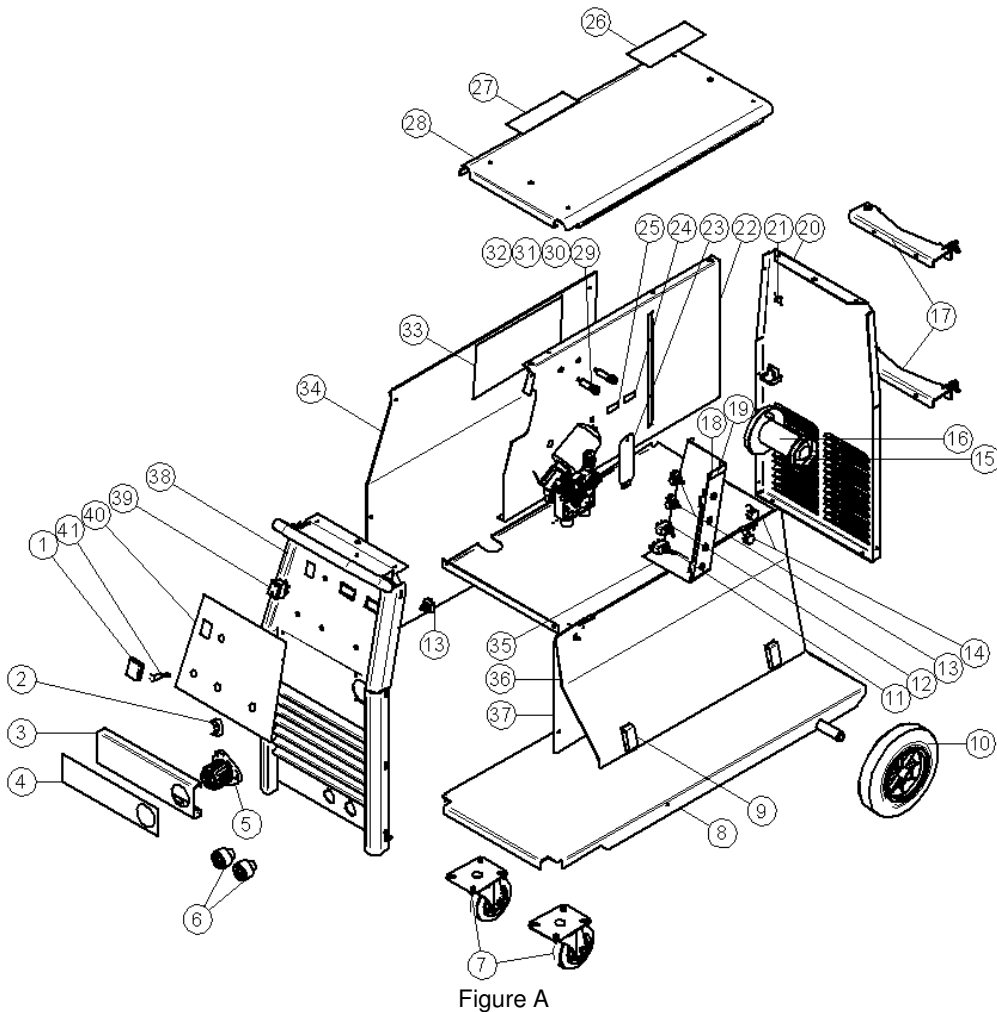


# Spare Parts

SP50234/50235/50236/50237/50238/50239/50240/50241 REV01  
07/03

## POWERTEC 205C, 255C & 305C

ASSEMBLY PAGE NAME			Machine Assembly 1	Machine Assembly 2	Feeding Unit Assembly: (2 /-4 Rolls Wire Drive System)				
CODE NO.:	K NO.:	FIGURE NO.:	A	B	C				
50234	K14054-1	POWERTEC-205C 400V3Ph	1	1	1				
50235	K14054-2	POWERTEC-205C 230/400V3Ph	2	2	1				
50236	K14055-1	POWERTEC-255C 400V3Ph	3	3	1				
50237	K14055-2	POWERTEC-255C 230/400V3Ph	4	4	1				
50238	K14056-1	POWERTEC-305C 400V3Ph	5	5	1				
50239	K14056-2	POWERTEC-305C 230/400V3Ph	6	6	1				
50240	K14056-3	POWERTEC-305C 4R 400V3Ph	7	7	2				
50241	K14056-4	POWERTEC-305C 4R 230/400V3Ph	8	8	2				



**Figure A: Machine Assembly 1**

Item	Description	Part Number	QTY	1	2	3	4	5	6	7	8
1	BLACK FRAME SHIELD	1115-299-073R	1	X	X	X	X	X	X	X	X
2	KNOB	9ET10491R	1	X	X	X	X	X	X	X	X
3	COVER	R-1019-205-1/02R	1	•	•	X	X	X	X	X	X
	COVER	R-1019-221-1/02R	1	X	X	•	•	•	•	•	•
4	LABEL	R-0010-256-1R	1	•	•	•	•	X	X	X	X
	LABEL	R-0010-255-1R	1	•	•	X	X	•	•	•	•
	LABEL	R-0010-266-1R	1	X	X	•	•	•	•	•	•
5	EURO COVER	C-2611-010-1R	1	X	X	X	X	X	X	X	X
6	WELDING SOCKET	C-2986-001-2R	2	X	X	X	X	X	X	X	X
7	WHEEL	1029-660-101R	2	X	X	X	X	X	X	X	X
8	BASE	R-3019-179-1/08R	1	•	•	X	X	X	X	X	X
	BASE	R-3019-121-2/08R	1	X	X	•	•	•	•	•	•
9	LOCK	0654-610-004R	2	X	X	X	X	X	X	X	X
10	WHEEL	1029-660-201R	2	X	X	X	X	X	X	X	X
11	SWITCH	1115-280-004R	1	X	X	X	X	X	X	X	X
12	SWITCH	1115-280-005R	1	X	X	X	X	X	X	X	X
13	POTENTIOMETR	1158-113-304R	2	X	X	X	X	X	X	X	X
14	KNOB	9ET13639-3R	2	X	X	X	X	X	X	X	X
15	PLASIC CAP	B11035-1	1	X	X	X	X	X	X	X	X
16	SLEEVE	0744-000-192R	1	X	X	X	X	X	X	X	X
17	SUPPORT	R-1019-153-1/08R	2	•	•	X	X	X	X	X	X
18	COVER	R-1019-186-1/08R	1	X	X	X	X	X	X	X	X
19	LABEL	R-0010-280-1R	1	X	X	X	X	X	X	X	X
20	BACK PANEL	R-1019-198-1/08R	1	•	•	X	X	X	X	X	X
	BACK PANEL	R-1012-202-4/08R	1	X	X	•	•	•	•	•	•
21	HOLE PLUG	1361-599-058R	1	X	X	X	X	X	X	X	X
22	DIVIDER	R-3019-182-1/08R	1	•	•	X	X	X	X	X	X
	DIVIDER	R-1012-207-3/08R	1	X	X	•	•	•	•	•	•
23	COVER	R-1019-202-1/08R	1	X	X	X	X	X	X	X	X
24	LABEL	2719-107-111R	1	•	•	X	X	X	X	X	X
25	LABEL	R-0010-193-1R	1	•	•	X	X	X	X	X	X
	LABEL	R-0010-276-1R	1	X	X	•	•	•	•	•	•
26	LABEL	R-0010-279-1R	1	X	X	X	X	X	X	X	X
27	LABEL	2719-107-728R	1	X	X	X	X	X	X	X	X
28	TOP PANEL	R-1019-199-1/02R	1	•	•	X	X	X	X	X	X
	TOP PANEL	R-1012-209-2/02R	1	X	X	•	•	•	•	•	•
29	FUSE SOCKET	1158-632-032R	2	X	X	X	X	X	X	X	X
30	FUSE CAP	1158-632-033R	2	X	X	X	X	X	X	X	X
31	FUSE 2A	1158-660-010R	1	X	X	X	X	X	X	X	X
32	FUSE 4A	1158-660-084R	1	X	X	X	X	X	X	X	X
33	LABEL	R-0010-298-1R	1	•	•	X	•	X	•	X	•
	LABEL	R-0010-299-1R	1	•	•	•	X	•	X	•	X
	LABEL	R-0010-265-1R	1	•	X	•	•	•	•	•	•
	LABEL	R-0010-264-1R	1	X	•	•	•	•	•	•	•
34	LEFT SIDE PANEL	R-1019-216-1R	1	•	•	X	X	X	X	X	X
	LEFT SIDE PANEL	R-1019-189-1R		X	X	•	•	•	•	•	•
35	COVER	R-1019-197-1/08R	1	X	X	•	•	•	•	•	•
	COVER	R-1019-203-1/08R	1	•	•	X	X	X	X	X	X
36	SIDE PANEL	R-1019-217-1R	1	•	•	X	X	X	X	X	X
	SIDE PANEL	R-1019-190-1R	1	X	X	•	•	•	•	•	•
37	SIDE PANEL	R-3019-184-1/02R	1	•	•	X	X	X	X	X	X
	SIDE PANEL	R-3019-122-1/02R	1	X	X	•	•	•	•	•	•
38	FRONT PANEL	R-3019-180-1/08R	1	•	•	X	X	X	X	X	X
	FRONT PANEL	R-3019-120-4/08R	1	X	X	•	•	•	•	•	•
39	SWITCH	1115-270-019R	1	X	X	X	X	X	X	X	X
40	LABEL	R-0010-254-1R	1	•	•	X	X	X	X	X	X
	LABEL	R-0010-263-1R	1	X	X	•	•	•	•	•	•
41	LAMP	0917-421-024R	1	X	X	X	X	X	X	X	X

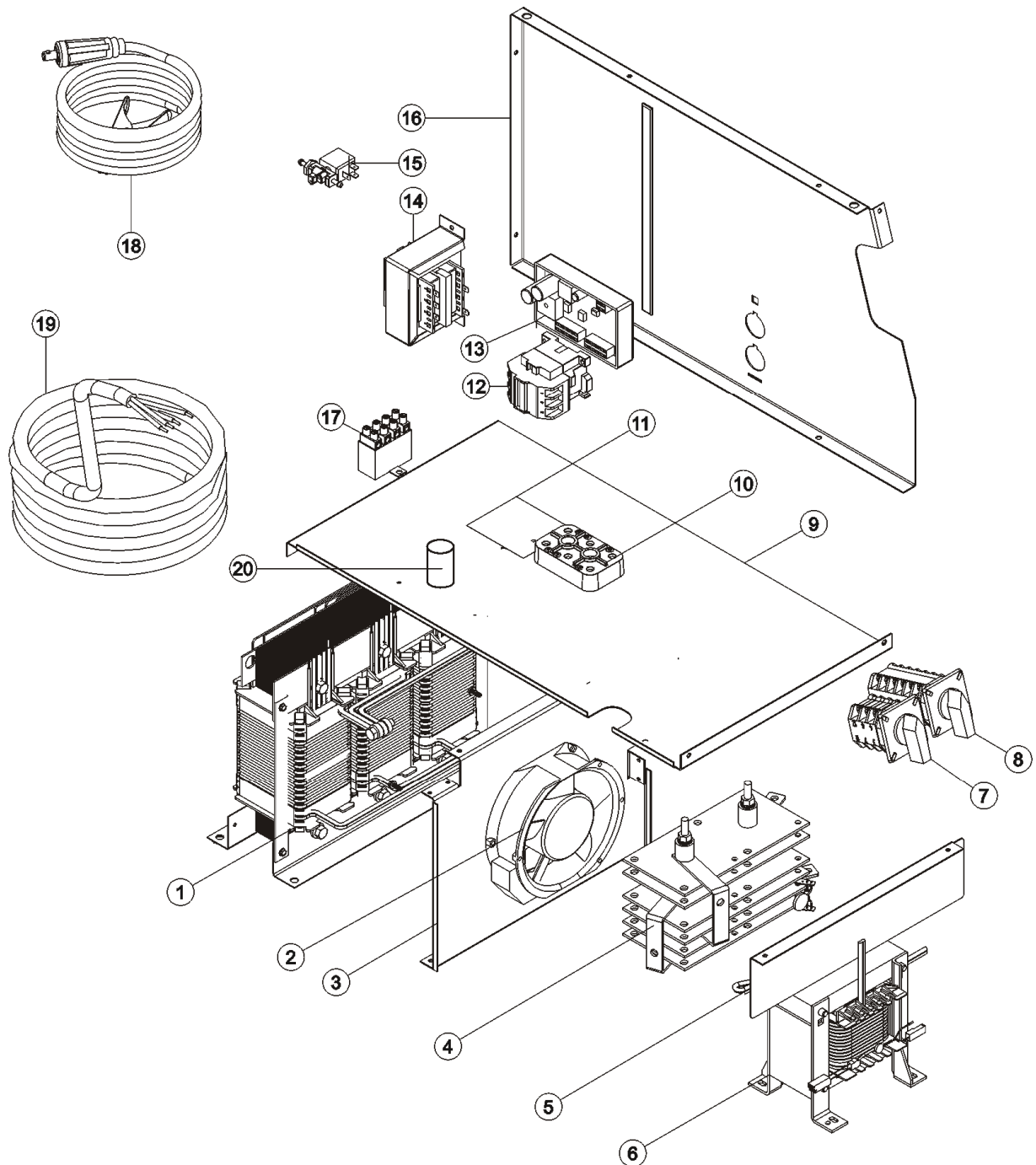


Figure B

**Figure B: Machine Assembly 2**

Item	Description	Part Number	QTY	1	2	3	4	5	6	7	8
1	MAIN TRANSFORMER	R-4034-080-1R	1	•	X	•	•	•	•	•	•
	MAIN TRANSFORMER	R-4034-096-1R	1	X	•	•	•	•	•	•	•
	MAIN TRANSFORMER	R-4034-082-1R	1	•	•	X	X	•	•	•	•
	MAIN TRANSFORMER	R-4034-083-1R	1	•	•	•	•	X	X	X	X
2	FAN	0873-100-031R	1	X	X	X	X	•	•	•	•
	FAN	R-8040-255-1R	1	•	•	•	•	X	X	X	X
3	DIVIDER	R-1019-204-1/08R	1	X	X	•	•	•	•	•	•
	DIVIDER	R-1019-201-1/08R	1	•	•	X	X	•	•	•	•
	DIVIDER	R-3019-183-1/08R	1	•	•	•	•	X	X	X	X
4	RECTIFIER SET	R-0010-309-1R	1	X	X	•	•	•	•	•	•
	RECTIFIER SET	R-0010-294-1R	1	•	•	X	X	•	•	•	•
	RECTIFIER SET	R-0010-295-1R	1	•	•	•	•	X	X	X	X
5	SHIELD	R-1019-220-1/08R	1	•	•	X	X	X	X	X	X

6	CHOKE	R-4034-089-1R	1	X	X	X	X	X	X	X	X	X
7	SWITCH	1115-260-166R	1	•	•	X	X	X	X	X	X	X
	SWITCH	1115-260-168R	1	X	X	•	•	•	•	•	•	•
8	SWITCH	1115-260-167R	1	•	•	X	X	X	X	X	X	X
9	SHELF	R-3019-181-1/08R	1	•	•	X	X	X	X	X	X	X
	SHELF	R-3019-123-3/08R	1	X	X	•	•	•	•	•	•	•
10	TERMINAL BLOCK	1361-599-255R	1	•	X	•	X	•	X	•	X	•
11	LABEL	R-0010-221-1R	1	•	X	•	X	•	X	•	X	•
12	CONTACTOR CI-16	1115-212-220R	1	X	X	X	•	•	•	•	•	•
	CONTACTOR CI-25	1115-212-219R	1	•	•	•	X	X	•	X	•	•
	CONTACTOR CI-30	1115-212-210R	1	•	•	•	•	•	X	•	X	•
13	P. C. BOARD US-69	0918-432-096R	1	X	X	X	X	X	X	X	X	X
14	AUXILIARY TRANSFORMER	C-4244-374-2R	1	X	X	X	X	X	X	X	X	X
15	SOLENOID GAS	0972-423-005R	1	X	X	X	X	X	X	X	X	X
16	DIVIDER	R-3019-182-1/08R	1	•	•	X	X	X	X	X	X	X
	DIVIDER	R-1012-207-3/08R	1	X	X	•	•	•	•	•	•	•
17	RC FILTER	0874-400-011R	1	X	X	X	X	X	X	X	X	X
18	MAS CABLE	K14033-1	1	X	X	X	X	X	X	X	X	X
19	POWER CABLE	D-5578-176-1R	1	X	X	•	•	•	•	•	•	•
	POWER CABLE	D-5578-171-1R	1	•	•	X	•	X	•	X	•	•
	POWER CABLE	D-5578-171-2R	1	•	•	•	X	•	X	•	X	•
20	CAPACITOR	1158-121-045R	1	•	•	•	•	X	X	X	X	X

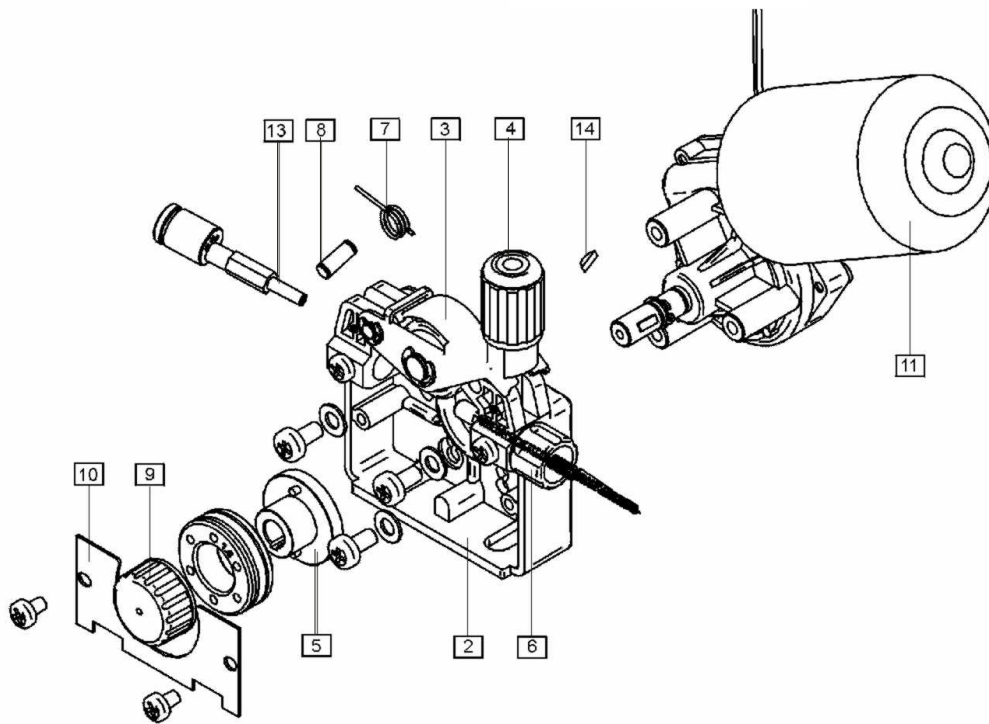


Figure C<sub>1</sub>: 2 Rolls Wire Drive System (Standard)

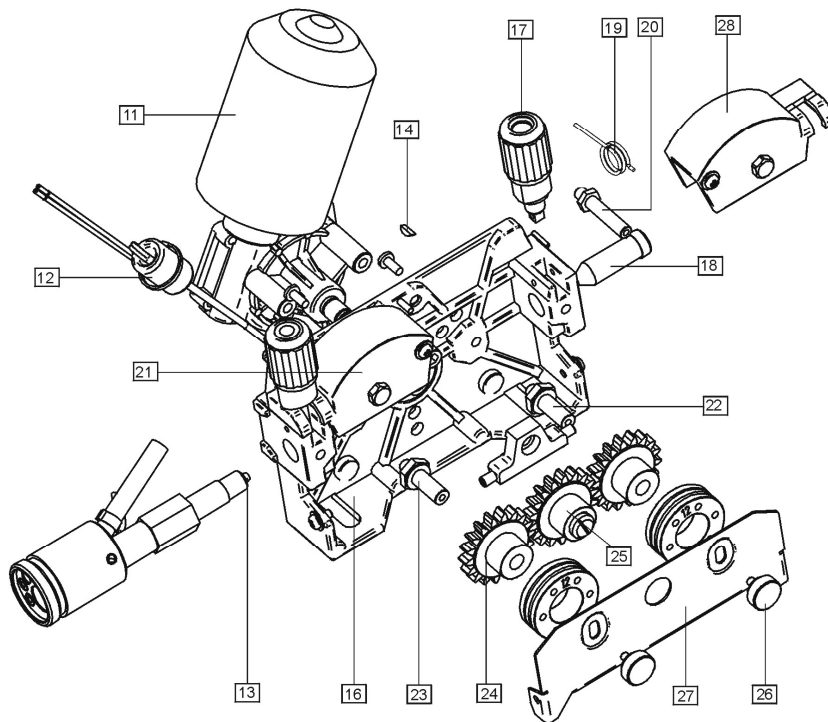


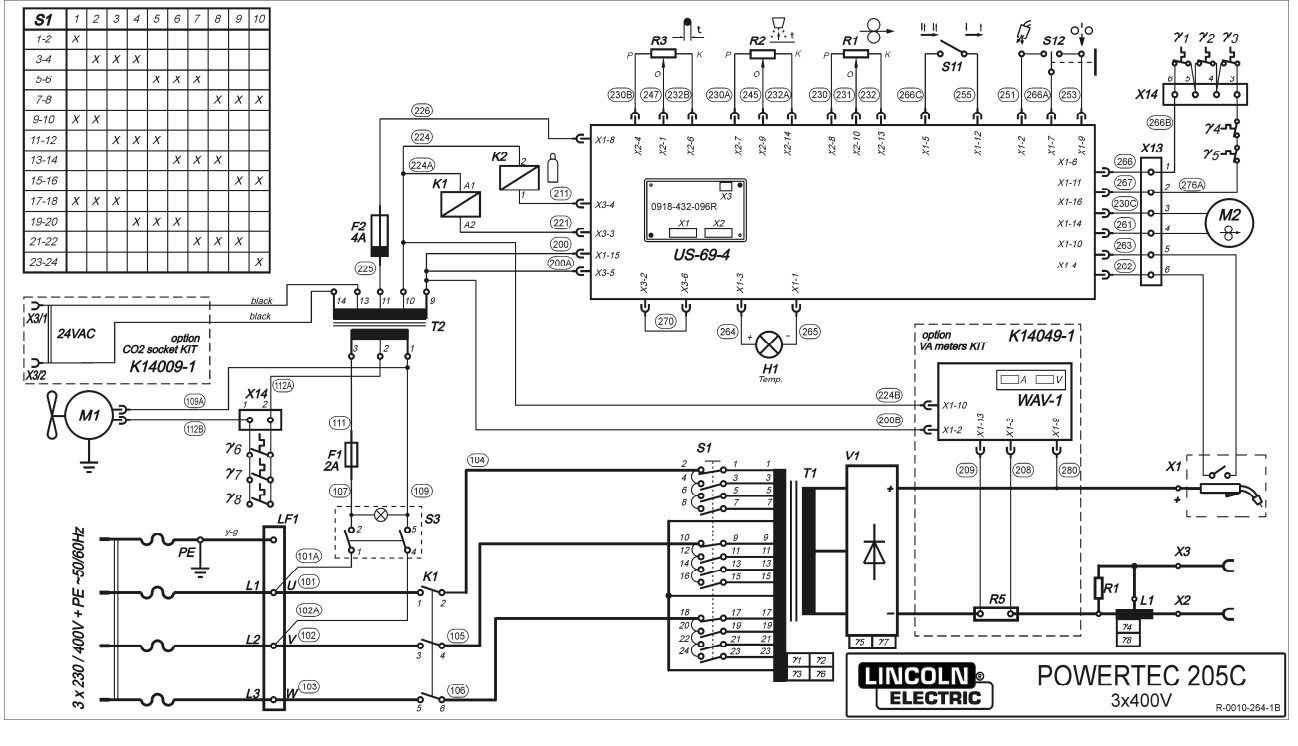
Figure C2: 4 Rolls Wire Drive System (POWERTEC 305C Only)

**Figure C: Feeding Unit Assembly**

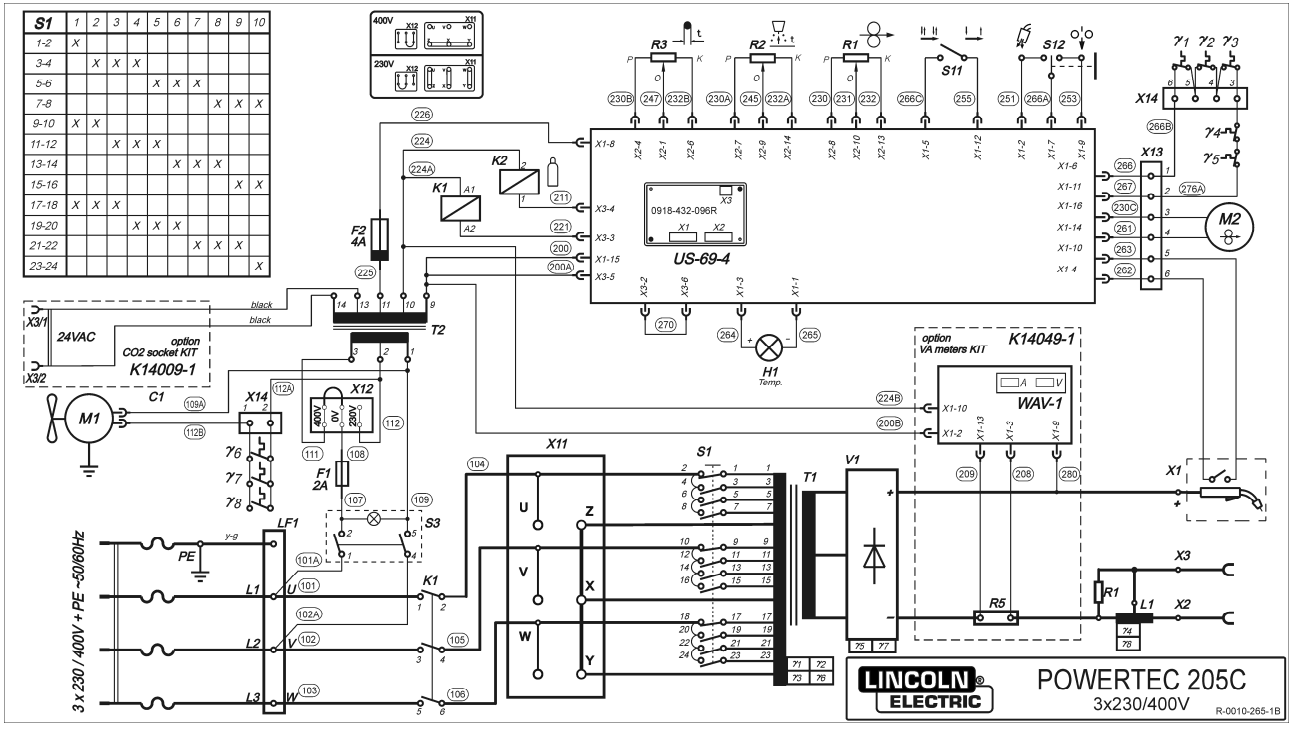
Item	Description	Part Number	QTY	1	2	3	4	5	6	7	8
1	WIRE FEEDER COMPLETE	0744-000-160R	1	X	•						
2	FEED PLATE	0744-000-219R	1	X	•						
3	PRESSURE ARM COMPLETE	0744-000-221R	1	X	•						
4	FIXING ARM COMPL.	0744-000-223R	1	X	•						
5	ADAPTER COPL.	0744-000-227R	1	X	•						
6	INLET GUIDE COMPLETE	0744-000-224R	1	X	•						
7	SPRING PRESSURE ARM	0744-000-220R	1	X	•						
8	AXIS PRESSURE ARM	0646-231-120R	1	X	•						
9	FIXING CAP	0744-000-216R	1	X	•						
10	METAL COVER	0744-000-218R	1	X	•						
11	D.C. MOTOR	0744-000-229R	1	X	X						
12	FERRITE TUBE	1158-290-036R	1	X	X						
13	WIRE GUIDE TUBE	D-1829-066-4R	1	X	X						
14	WOODRUFF KEY	0646-231-102R	1	X	X						
15	WIRE FEEDER COMPLETE	0744-000-167R	1	•	X						
16	FEED PLATE	0646-233-002R	1	•	X						
17	FIXING ARM COMPLETE	0646-233-015R	2	•	X						
18	INLET GUIDE	0646-233-025R	1	•	X						
19	AXIS PRESSURE ARM	0646-233-003R	2	•	X						
20	SPRING PRESSURE ARM	0646-233-013R	2	•	X						
21	PRESSURE ARM COMPLETE LEFT	0646-233-007R	1	•	X						
22	INTERMEDIATE GUIDE	0646-233-023R	1	•	X						
23	AXIS DRIVE ROLL	0646-233-020R	2	•	X						
24	GEAR WHEEL ROLL	0646-231-090R	2	•	X						
25	GEAR WHEEL MOTOR	0646-233-028R	1	•	X						
26	FIXING CAP	0646-233-022R	2	•	X						
27	METAL COVER	0646-233-027R	1	•	X						
28	PRESSURE ARM COMPLETE RIGHT	0646-233-005R	1	•	X						

# Electrical Schematic

## POWERTEC 205C code 50234



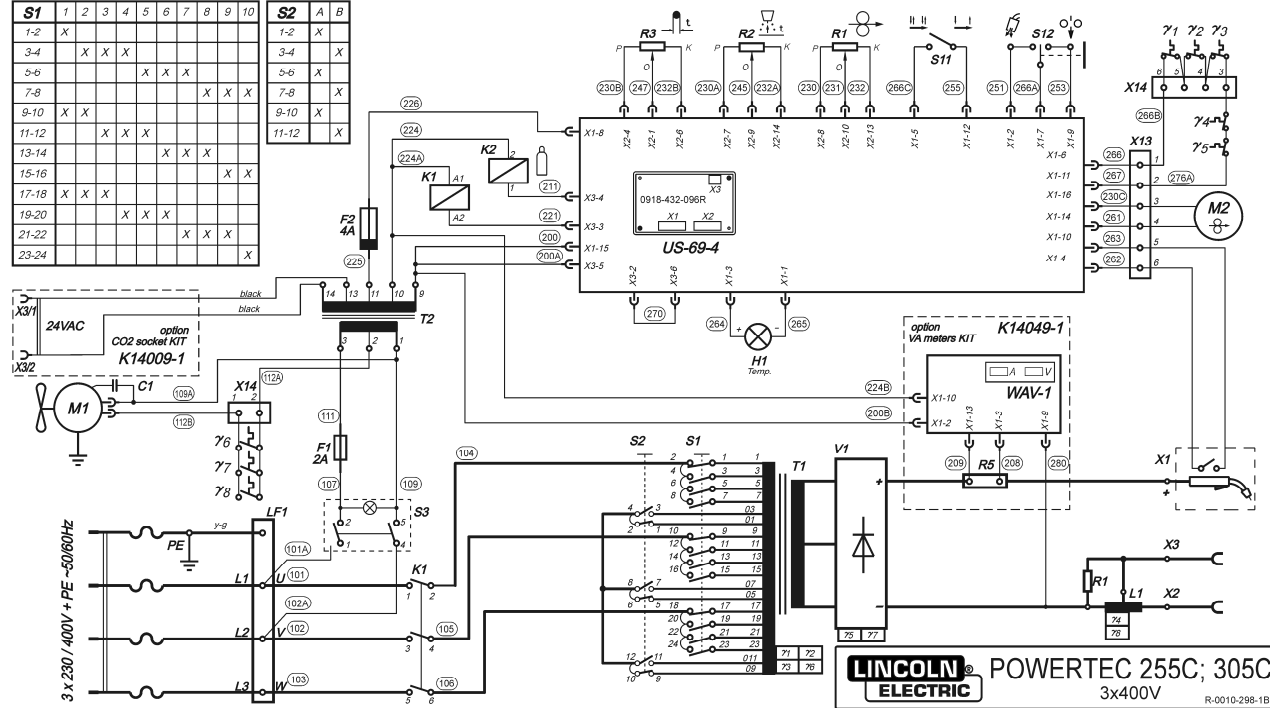
## POWERTEC 205C code 50235



**POWERTEC 255C code 50236, POWERTEC 305C code 50238, 50240**

S1	1	2	3	4	5	6	7	8	9	10
1-2	X									
3-4	X	X	X							
5-6			X	X	X	X	X			
7-8						X	X	X	X	
9-10	X	X					X	X	X	
11-12			X	X	X					
13-14					X	X	X			
15-16								X	X	
17-18	X	X	X							
19-20			X	X	X					
21-22					X	X	X			
23-24								X	X	X

S2	A	B
1-2	X	
3-4	X	
5-6	X	
7-8	X	
9-10	X	
11-12	X	

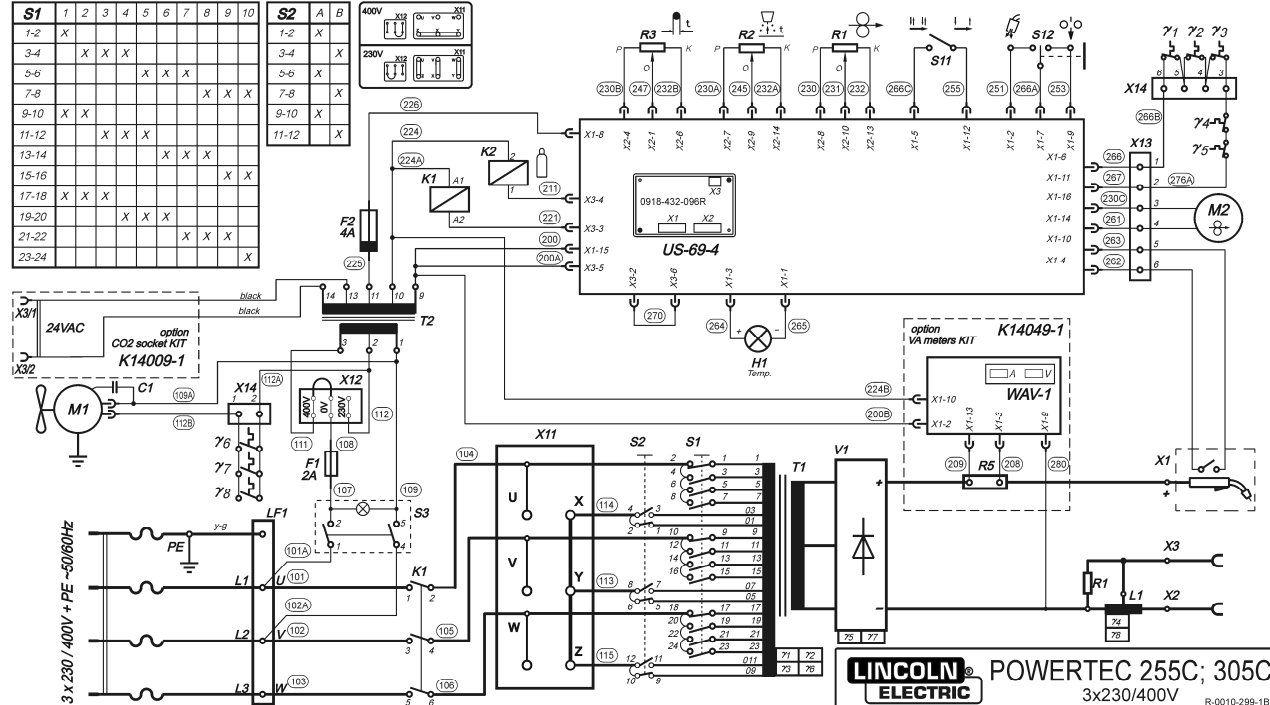


**LINCOLN ELECTRIC** POWERTEC 255C; 305C  
3x400V R-0010-298-1B

**POWERTEC 255C code 50237, POWERTEC 305C code 50239, 50241**

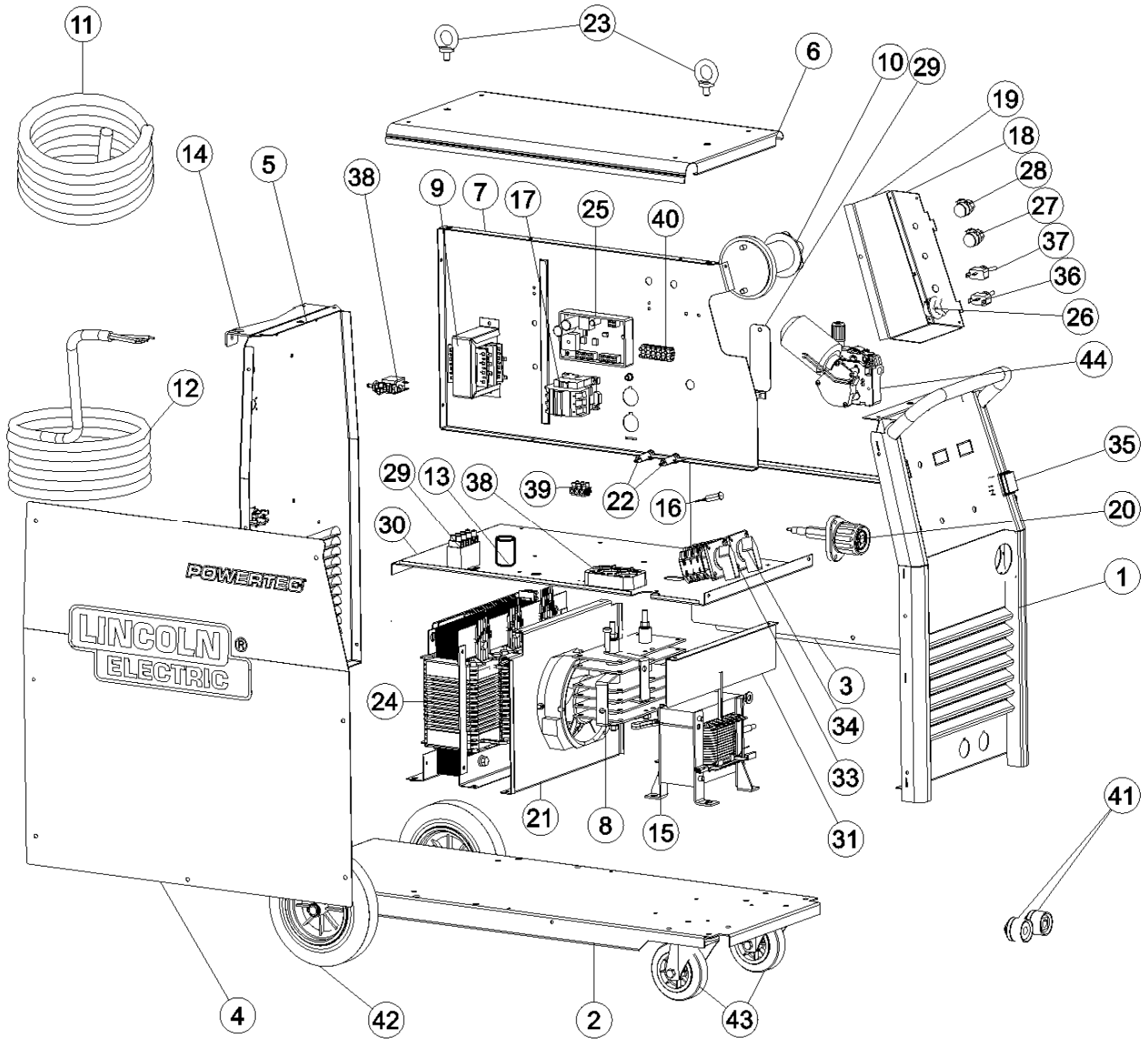
S1	1	2	3	4	5	6	7	8	9	10
1-2	X									
3-4	X	X	X							
5-6			X	X	X	X	X			
7-8						X	X	X	X	
9-10	X	X					X	X	X	
11-12			X	X	X					
13-14					X	X	X			
15-16								X	X	
17-18	X	X	X							
19-20			X	X	X					
21-22					X	X	X			
23-24								X	X	X

S2	A	B
1-2	X	
3-4	X	
5-6	X	
7-8	X	
9-10	X	
11-12	X	



**LINCOLN ELECTRIC** POWERTEC 255C; 305C  
3x230/400V R-0010-298-1B





	Ref.	Recycle				ST				
		Fe	Al	Cu	Brass	Boards	Plastics	Liquid Cristal	External Electric Cables	Capacitors
Front Panel Assembly	1	X								
Base Assembly	2	X								
Right Side Access Panel	3	X								
Left Side Panel	4	X								
Rear Panel Assembly	5	X								
Top Panel Assembly	6	X								
Divider Panel Asseblly	7	X								
3-phase Bridge Rectifier	8		X				X			
Auxiliary Transformer	9	X		X			X			
Brake	10						X			
Cables	11,12			X			X		X	
Capacitor	13									X
Chain	14	X								
Choke	15	X		X			X			
Colorless Lamp	16						X			
Contactora	17	X		X						
Cover	18,19	X								
Euro Connector Assembly	20				X		X			
Fan Assembly	21	X		X						
Fuse Socket	22						X			
Lug Screws	23	X								
Main Transformer	24	X		X			X			
P.C.Board Assembly US-69	25					X	X			
Potentiometers	26,27,28						X			
RC Filter	29						X			
Shelf	30	X								
Shield	31									
Solenoid Valve	32			X	X		X			
Switches	33,34,35,36,37	X					X			
Terminal Blocks	38,39,40	X					X			
Welding Socket	41				X		X			
Wheels	42,43	X					X			
Wire Drive Motor Assembly	44	X	X	X			X			