

# **POWERMATIC<sup>®</sup>**

## **Operating Instructions and Parts Manual CNC Routers**

**Models PM-2X2R and PM-2X4SP**

(router not included)



PM-2X2R

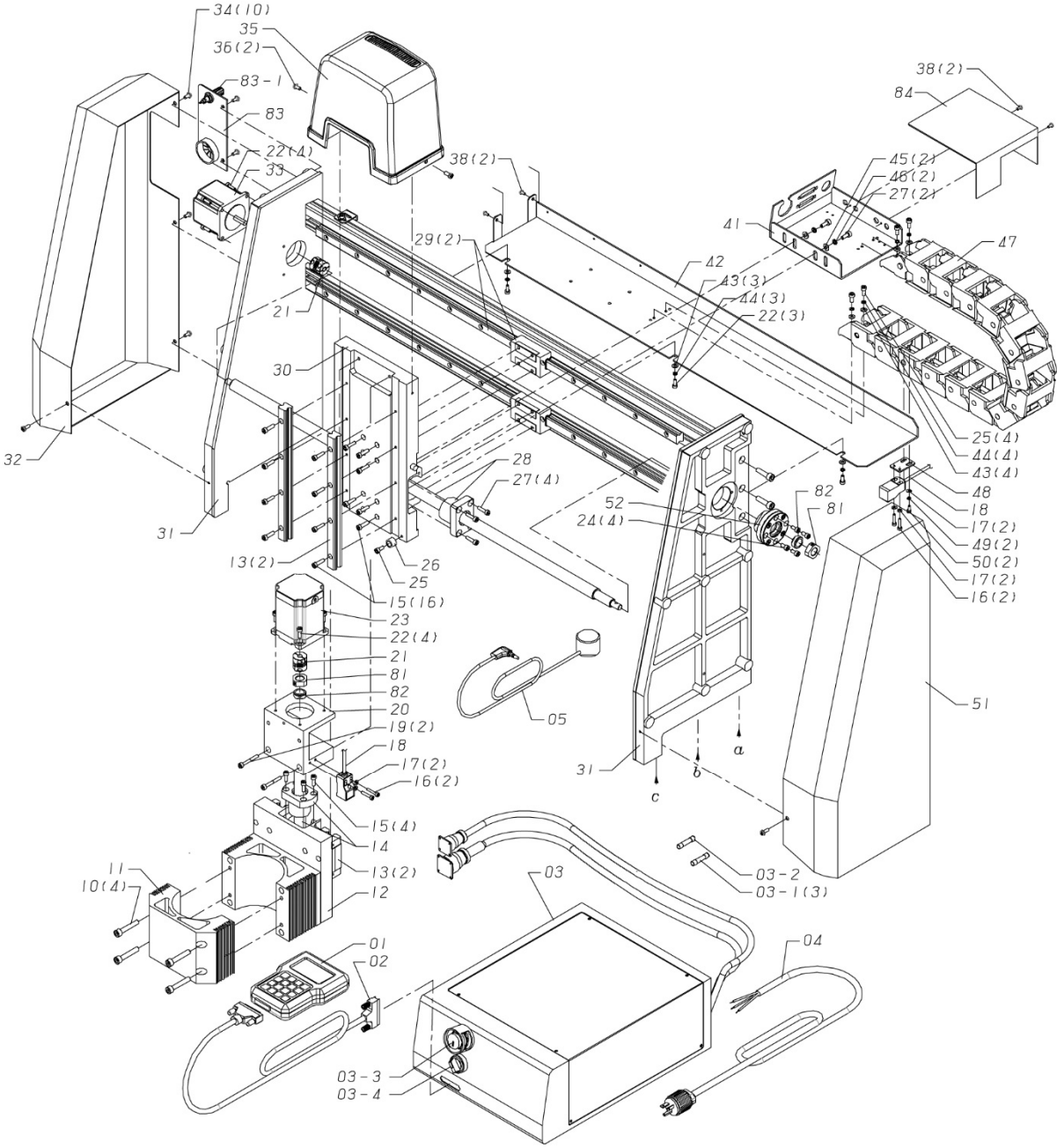


PM-2X4SP

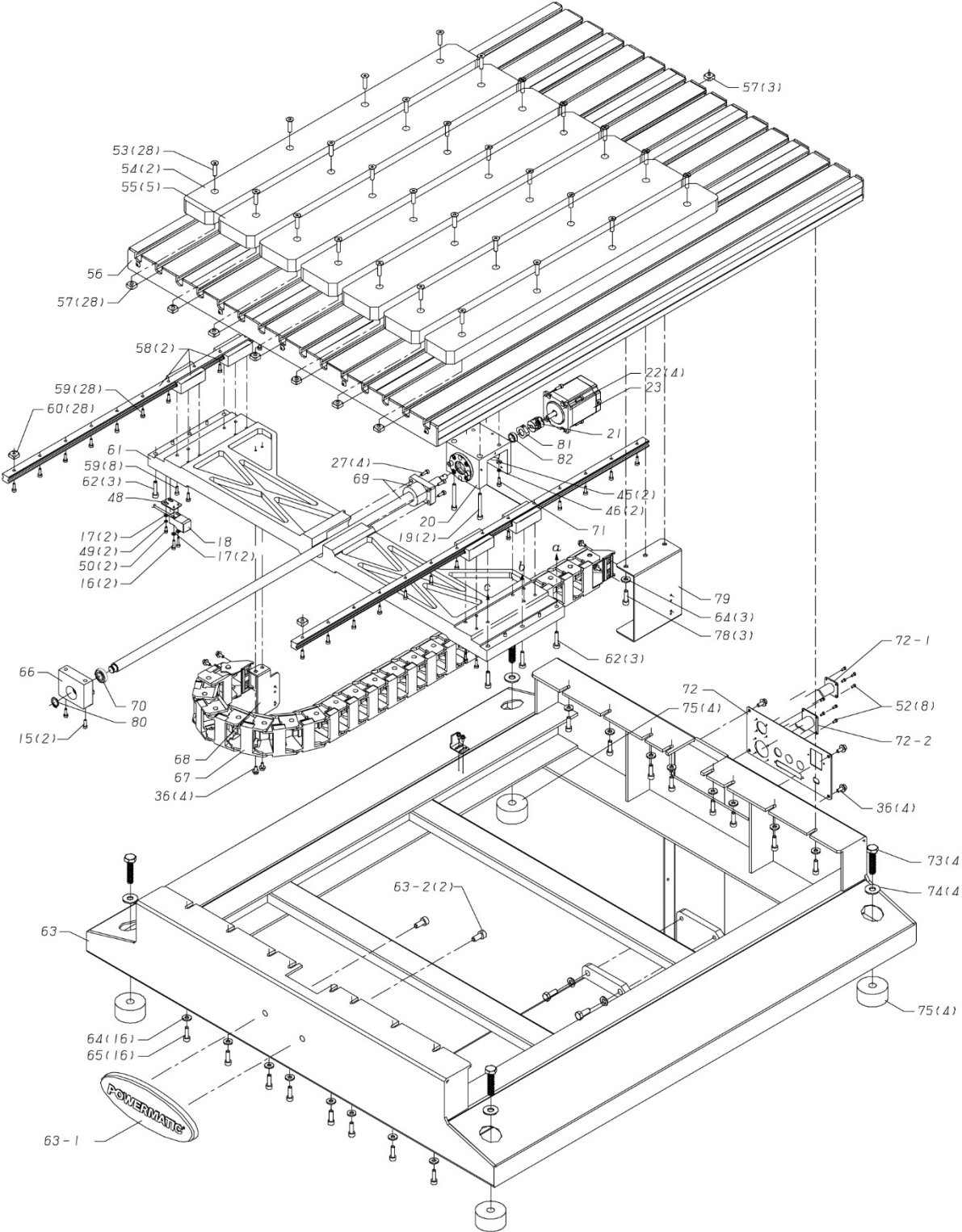
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### 15.1.1 PM-2X2R Assembly I – Exploded View



# 15.1.2 PM-2X2R Assembly II – Exploded View

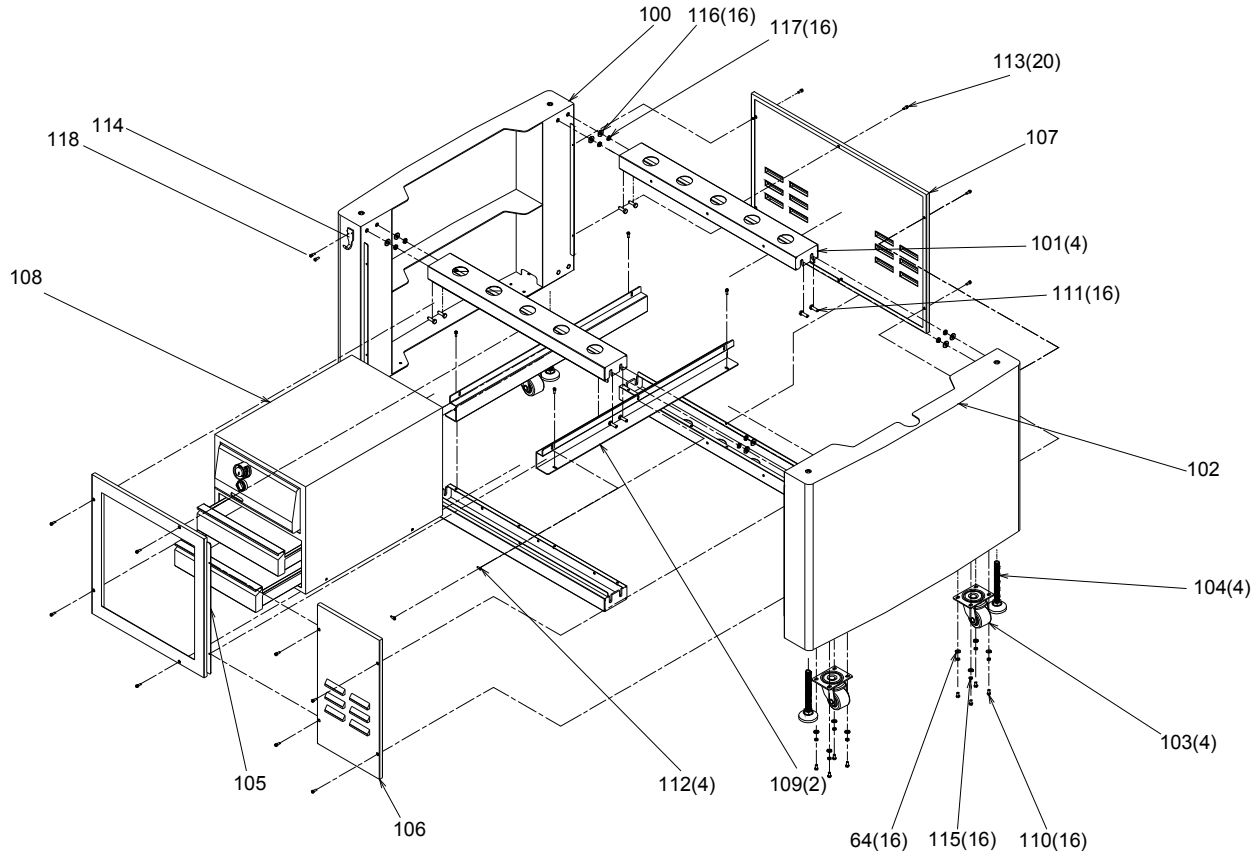


### 15.1.3 PM-2X2R Assemblies – Parts List

Index No	Part No	Description	Size	Qty
1	PM2X2R-1	Handheld Controller	RichAuto-A11E	1
2	PM2X2R-2	Controller Cable	VW-1/30V/80°C	1
3	PM2X2R-3	Electric Cabinet Assembly		1
3-1	PM2X2R-3-1	Fuse	10A	3
3-2	PM2X2R-3-2	Fuse	3A	1
3-3	PM2X2R-3-3	E-Stop Switch	E2R1RAB	1
3-4	PM2X2R-3-4	Power Switch	A204F-2E20QH-G-U	1
4	PM2X2R-4	Power Cord	14AWGx3Cx2100L, Plug type B	1
5	PM2X2R-5	Tool Touch-Off Puck		1
10	TS-1503081	Hex Socket Head Cap Screw	M6-1.0x35L	4
11	PM2X2R-11	Front Motor Holder		1
12	PM2X2R-12	Rear Motor Holder Assembly		1
13	PM2X2R-13	Z-Axis Linear Guide	15x13x220L	2
14	PM2X2R-14	Z-Axis Ball Screw	M16xP5 ,L=282.5	1
15	TS-1501051	Hex Socket Head Cap Screw	M4-0.7x16L	20
16	F005235	Hex Socket Head Cap Screw	M3-0.5x16L	6
17	TS-1550011	Flat Washer	Ø3.2x7x0.5t	10
18	PM2X2R-18	Limit Switch	DA-1805N0	3
19	TS-1502101	Hex Socket Head Cap Screw	M5-0.8x45L	4
20	PM2X2R-20	Z-Axis Motor Seat		2
21	PM2X2R-21	Coupling	SCT-20C	3
22	TS-1501041	Hex Socket Head Cap Screw	M4-0.7x12L	15
23	PM2X2R-23	Stepper Motor	TK268D-02A5	2
24	TS-1501011	Hex Socket Head Cap Screw	M4-0.7x6L	4
25	TS-1501031	Hex Socket Head Cap Screw	M4-0.7x10L	10
26	PM2X2R-26	Rubber Pad	Ø12x8 mm	1
27	TS-1502031	Hex Socket Head Cap Screw	M5-0.8x12L	7
28	PM2X2R-28	X-Axis Ball Screw	M16xP10,L=795	1
29	PM2X2R-29	X-Axis Linear Guide	15x13x700L	2
30	PM2X2R-30	X-Axis Slide Seat		1
31	PM2X2R-31	X-Axis Moving Gantry		1
32	PM2X2R-32	Left Side Cover		1
33	PM2X2R-33	Stepper Motor	TK266D-02A5	1
34	TS-1520041	Hex Socket Head Cap Screw	M4-0.7x6L	12
35	PM2X2R-35	Top Housing		1
36	PM2X2R-36	Truss Head Phillips Screw	M4-0.7x10L	6
38	TS-1531012	Round Head Phillips Screw	M3-0.5x6L	4
41	PM2X2R-41	X-Axis Drag Chain Seat Upper		1
42	PM2X2R-42	X-Axis Drag Chain Seat Lower		1
43	TS-1550021	Flat Washer	Ø4.2x10x0.8t	13
44	TS-2361041	Lock Washer	M4	13
45	TS-1550031	Flat Washer	Ø5.2x12x1.0t	4
46	TS-2361051	Lock Washer	M5	4
47	PM2X2R-47	X-Axis Drag Chain	A0450.21 KR52-658mm	1
48	PM2X2R-48	Limit Switch Fixed Plate		2
49	TS-2361031	Spring Washer	M3	4
50	TS-1520021	Hex Socket Head Cap Screw	M3-0.5x6L	10
51	PM2X2R-51	Right Side Cover		1
53	TS-1514041	Hex Socket Flat Head Screw	M6-1.0x25L	28
54	PM2X2R-54	MDF Spoil Strip, Side	630x65x25.4 mm	2
55	PM2X2R-55	MDF Spoil Strip, Middle	630x80x25.4 mm	5
56	PM2X2R-56	Table Assembly	989x145.3x40 mm	1
57	PM2X2R-57	Square Nut 3	M6-1.0	31
58	PM2X2R-58	Y-Axis Linear Guide	15x13x820L	2
59	TS-1501061	Hex Socket Head Cap Screw	M4-0.7x20L	44
60	PM2X2R-60	Square Nut 2	M4-0.7	28
61	PM2X2R-61	Y-Axis Slide Seat		1
62	TS-1503061	Hex Socket Head Cap Screw	M6-1.0x25L	6
63	PM2X2R-63	Base		1

Index No	Part No	Description	Size	Qty
63-1	PM2x2R-63-1	Powermatic Logo	242x89x15 mm	1
63-2	TS-0207041	Socket HD Cap Screw	1/4"-20UNCx3/4	2
64	TS-1550041	Flat Washer	M6	35
65	TS-1503051	Hex Socket Head Cap Screw	M6-1.0x20L	16
66	PM2X2R-66	Y-Axis Bearing Seat		1
67	PM2X2R-67	Y-Axis Drag Chain	L=987	
68	PM2X2R-68	Y-Axis Drag Chain Fixed Plate A		1
69	PM2X2R-69	Y-Axis Ball Screw	M16xP10,L=810	1
70	BB-6901ZZ	Bearing	#6901ZZ	1
71	TS-1502051	Hex Socket Head Cap Screw	M5-0.8x20L	2
72	PM2X2R-72	Base Rear Plate		1
72-1	PM2x2R-72-1	Cable A For 110v Power Cable		1
72-2	PM2x2R-72-2	Cable B For Step Motor/Sensor		1
73	F009506	Hex Cap Screw	M10-1.5x45L	4
74	TS-1550071	Washer	Ø10.2x25x2t	4
75	PM2X2R-75	Table Foot		4
78	TS-1503041	Hex Socket Head Cap Screw	M6-1.0x16L	3
79	PM2X2R-79	Y-Axis Drag Chain Fixed Plate B		1
80	PM2x2R-80	Retaining Ring	Φ12	1
81	PM2x2R-81	Locking Nut		3
82	PM2x2R-82	Spacer		3
83	PM2x2R-83	Cable Entry Plate		1
83-1	PM2x2R-83-1	Tool Touch-off Receptacle	N1535	1
84	PM2x2R-84	X Axis Drag Chain Seat Cover		1
	PM2X2R-HP1	Hardware Package 1 (not shown) (see sect.7.1 to identify)		
	PM2X2R-HP2	Hardware Package 2 (not shown) (see sect.7.1 to identify)		
	PM2X2R-HP3	Hardware Package 3 (not shown) (see sect.7.1 to identify)		

15.2.1 PM-2X2S Stand Assembly – Exploded View



## 15.2.2 PM-2X2S Stand Assembly – Parts List

Index No	Part No	Description	Size	Qty
64	TS-1550041	Flat Washer	M6	16
100	PM2x2S-100	Front Panel		1
101	PM2x2S-101	Cross Brace		4
102	PM2x2S-102	Rear Panel		1
103	PM2x2S-103	Swivel Caster		4
104	PM2x2S-104	Leveling Foot		4
105	PM2x2S-105	Open Side Panel		1
106	PM2x2S-106	Right Side Panel		1
107	PM2x2S-107	Left Side Panel		1
108	PM2x2S-108	Tool Cabinet Assembly		1
109	PM2x2S-109	Tool Cabinet Brace		2
110	TS-1482021	Hex Cap Screw	M6x12	16
111	TS-1490041	Hex Cap Screw	M8x25	16
112	TS-1501031	Socket Head Cap Screw	M4x10	4
113	TS-1481031	Socket Head Cap Screw	M5x12	20
114	PM2x2S-114	Controller Hook		1
115	TS-2361061	Lock Washer	M6	16
116	TS-1550061	Flat Washer	M8	16
117	TS-2361081	Lock Washer	M8	16
118	TS-2171012	Phillips Pan Hd Machine Screw	M4x6	2
	PM2X2S-HP	Stand Hardware Package (includes # 64,110,111,114-118)		