

POWERMATIC®

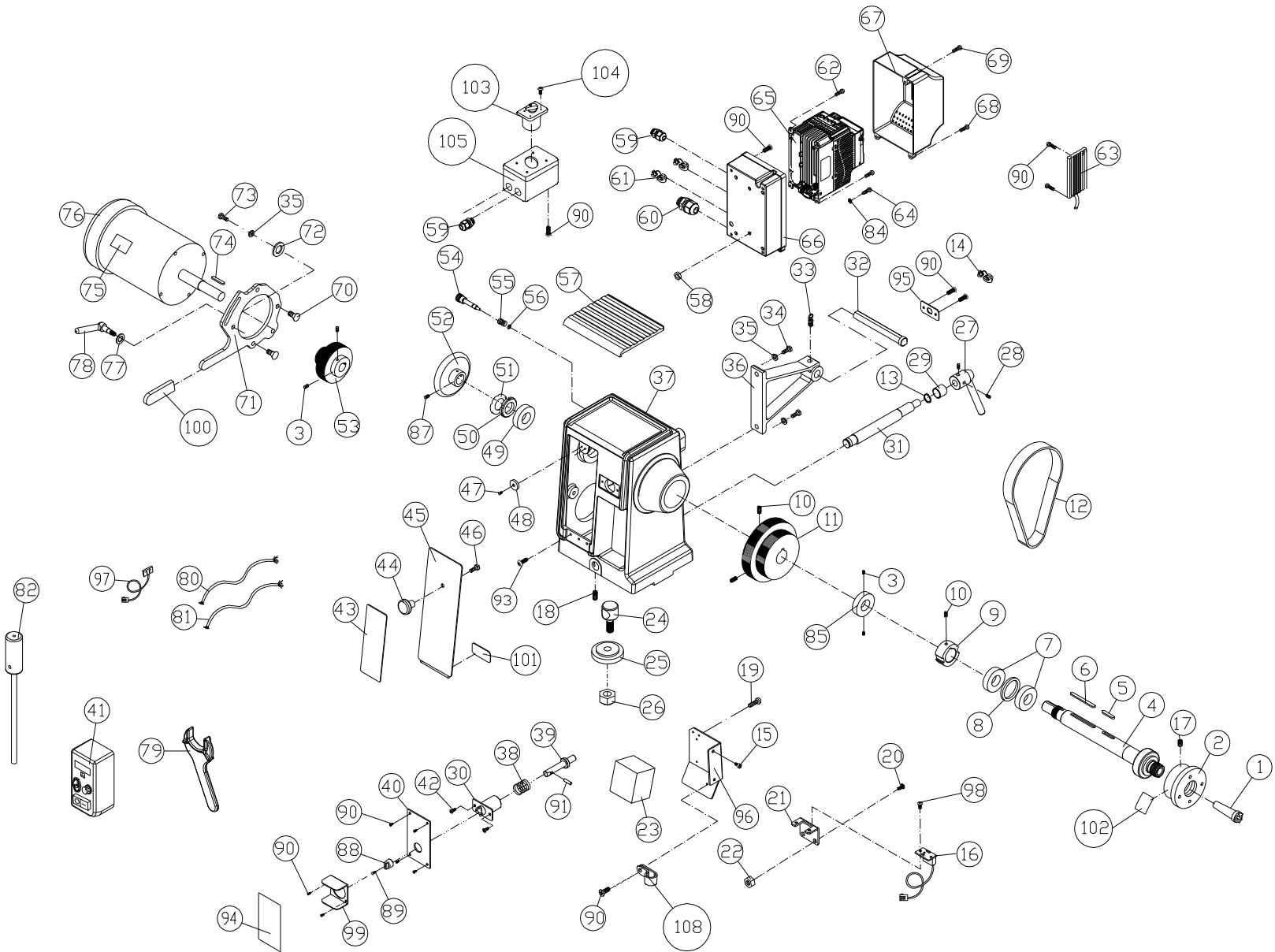
Operating Instructions and Parts Manual 35" x 20" Woodturning Lathe Model 3520C



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15.1.1 3520C Headstock Assembly – Exploded View

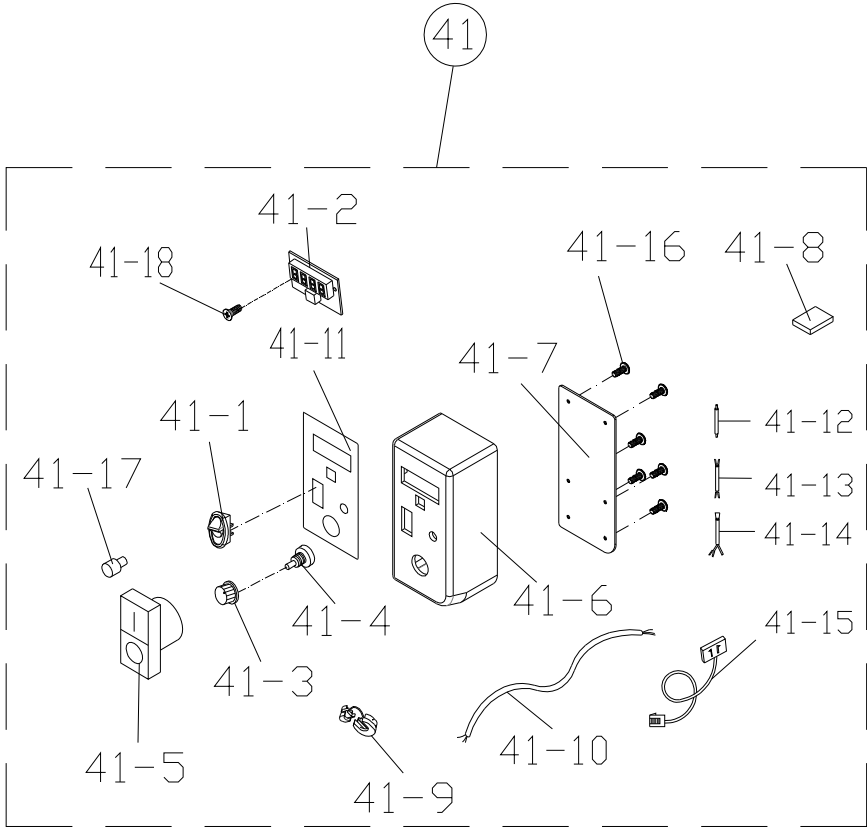


15.1.2 3520C Headstock Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
1	6294725	Spur Center	MT2	1
2	6294736	Faceplate (includes #17 and 102)	1-1/4-8, Ø 3"	1
3	6295796	Nylon Insert Socket Set Screw	1/4"-20 x 3/8"	4
4	3520C-104	Spindle		1
5	F014007	Flat Key, Dbl Rd Hd	8x8x40mm	1
6	F014008	Flat Key, Dbl Rd Hd	8x8x80mm	1
7	BB-6207ZZ	Bearing	6207ZZ	2
8	3520B-208	Bushing		1
9	JWL1642-174	Locking Collar		1
10	TS-0270021	Socket Set Screw	5/16"-18 x 5/16"	3
11	3520C-111	Spindle Pulley		1
12	6077228	Belt	260J-10V	1
13	F006048	C-Retaining Ring, Ext	S-22	1
14	SR-6P3	Strain Relief	SR-6P3	2
15	TS-2246252	Socket Head Button Screw	M6-1.0x25	2
16	JWL1640EVS-125	Sensor with Cable		1
17	6295796	Nylon Insert Socket Set Screw	1/4"-20x3/8"	2
18	3520B-273	Socket Set Screw	#10-24x1"	1
19	JWL1642-127	Machine Screw	M3-0.5x10	4
20	F009669	Socket Head Button Screw	#10-24x3/8"	2
21	3520C-121	Bracket		1
22	TS-0560071	Hex Nut	#10-24	2
23	3520C-123	Spindle Encoder PCB Assembly		1
24	3058001	Clamp Bolt		1
25	3092095	Clamp		1
26	6520009	Hex Nylon Lock Nut	5/8"-11	1
27	3520C-127	Lock Handle Assembly		1
28	TS-0271031	Socket Set Screw	3/8"-16 x 3/8"	2
29	6095038	Bushing		1
30	3520C-130	Spindle Lock Plunger Seat		1
31	3520C-131	Headstock Eccentric Shaft		1
32	3520B-275	Spindle Comparator Spur Center		1
33	6644005	Plunger Retainer		1
34	TS-0209061	Socket Head Cap Screw	3/8"-16x1-1/4"	2
35	TS-0720091	Lock Washer	3/8"	3
36	3064711	Lathe Guard Bracket		1
37	3520C-137	Headstock Casting		1
38	3520C-138	Spring		1
39	3520C-139	Spindle Lock Pin		1
40	3520C-140	Cover Plate (includes #94)		1
41	3520C-141	Control Box Assembly		1
42	F010675	Flat Head Socket Screw	#10-24x3/8"	2
43	LM000303	Speed Label, 3520C		1
44	6295717	Knob	M8	1
45	3520C-145	Access Door (includes #43 and 101)		1
46	TS-1490021	Hex Cap Screw	M8-1.25x16	1
47	F010878	Flat Head Socket Screw	M3-0.5x10	2
48	3520C-148	Magnet		2
49	BB-6206VV	Bearing	6206VV	1
50	6864006	Bearing Lock Washer		1
51	6549006	Bearing Nut		1
52	3271081	Handwheel		1
53	3719189	Motor Sheave		1
54	3520C-154	Spindle Index Pin		1
55	3520C-155	Spring		1
56	F006086	C-Retaining Ring, Ext	S-9	1
57	3520C-157	Cushion		1
58	TS-1540071	Hex Nut	#10-24	9
59	JWL1440-141	Strain Relief	M16	3
60	SR-PG13.5	Strain Relief	PG-13.5	1

Index No.	Part No.	Description	Size	Qty
61	SR-6P3	Strain Relief	SR-6P3	1
62	TS-081C062	Phillips Pan Head Machine Screw	#10-24x1"	4
63	JWL1642-169	Braking Resistor		1
64	F000648	Phillips Pan Head Machine Screw	#10-24x1/4"	1
65	3520C-165	Inverter		1
66	JWL1640EVS-163	Inverter Lower Box		1
67	JWL1640EVS-161	Inverter Upper Cover		1
68	TS-081C062	Phillips Pan Head Machine Screw	#10-24x1"	2
69	TS-081C052	Phillips Pan Head Machine Screw	#10-24x3/4"	1
70	F010749	Flat Head Socket Screw	3/8"-16x3/4"	4
71	3520C-171	Motor Mount Plate		1
72	TS-0680041	Flat Washer	3/8"	1
73	TS-0209061	Socket Head Cap Screw	3/8"-16x1-1/4"	1
74	F014009	Flat Key, Dbl Rd Hd	3/16"x3/16"x2-1/2"	1
75	LM000302	Motor Label		1
76	3520C-176	Motor	2HP	1
	3520C-176JBC	Junction Box Cover		1
	3520C-176MF	Motor Fan		1
	3520C-176MFC	Motor Fan Cover		1
77	TS-0680041	Flat Washer	3/8"	1
78	3520C-178	Lock Handle	3/8"-16x1"	1
79	6294744	Face Plate Wrench		1
80	3520C-180	Motor Cord		1
81	3520C-181	Signal Cord (Inverter box to Encoder PCB box)		1
82	6294754	Knockout Rod Assembly		1
84	TS-0733031	Lock Washer Ext Tooth	#10	1
85	3520C-185	Sensor Collar		1
87	TS-0267021	Socket Set Screw	1/4"-20x1/4"	2
88	3520C-188	Knob		1
89	TS-2244102	Socket Head Button Screw	M4-0.7x10	1
90	TS-0253031	Socket Head Button Screw	#10-24x1/2"	19
91	AP2-16	Spring Pin	Ø6 x 25mm	1
93	F009669	Socket Head Button Screw BO	#10-24x3/8"	3
94	3520C-194	Spindle Lock Label		1
95	3520C-195	Fixed Plate		1
96	3520C-196	Sensor Bracket		1
97	3520C-14110	Signal Cable (Remote Box to Inverter)		1
98	TS-2283102	Pan Head Screw	M3-0.5x10	2
99	3520C-199	Spindle Lock Guard		1
100	3520C-1100	Sleeve		1
101	3520B-294	Warning Label – Belt Adjustment		1
102	4224B-1124	Warning Label – Faceplate		1
103	3520C-1103	Main Switch (includes #104)		1
104	TS-1512021	Flat Head Screw	M4-0.7x12	4
105	3520C-1105	Main Switch Box		1
106	3520C-1106	Power Cable (Main switch box to Inverter, not shown)		1
107	3520C-1107	Strain Relief, Motor (not shown)	7N-2	1
108	JWL1015-172	Clamp		1

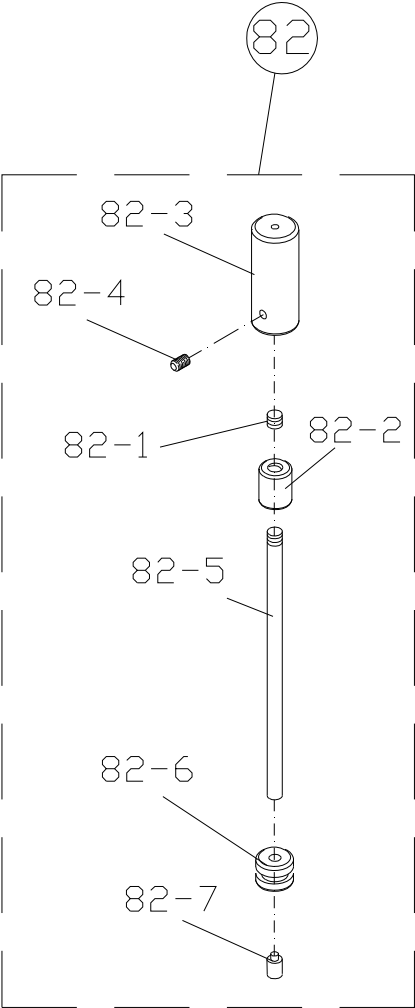
15.2.1 3520C Remote Control Box Assembly – Exploded View



15.2.2 3520C Remote Control Box Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
41	3520C-141	Remote Control Box Assembly (includes # 41-1 thru 41-18)		1
41-1	4224B-148	Switch Fwd /Rev		1
41-2	3520C-1412	Digital Readout Display		1
41-3	6430047	Knob		1
41-4	6295915	Control Pot Assembly		1
41-5	3520C-1415	Control Switch		1
41-6	3520C-1416	Remote Control Box (includes #41-11)		1
41-7	3520C-1417	Control Box Back Plate		1
41-8	4224B-1112	Magnet		1
41-9	SR-6P3	Strain Relief	SR-6P3	1
41-10	3520C-14110	Signal Cable (Remote switch box to Inverter)		1
41-11	3520C-14111	Control Box Label		1
41-12	3520C-14112	Wire (Control Pot to control switch, White)		2
41-13	3520C-14113	Wire 2 (for control switch, Brown)		1
41-14	3520C-14114	Wire 3 (control switch to Fwd /Rev Switch, yellow)		1
41-15	3520C-14115	Signal Cable		1
41-16	F010944	Flat Head Socket Screw BO	M3-0.5x20	6
41-17	3520C-14117	LED Light		1
41-18	F010987	Flat Head Socket Screw BO	M3-0.5x10	2

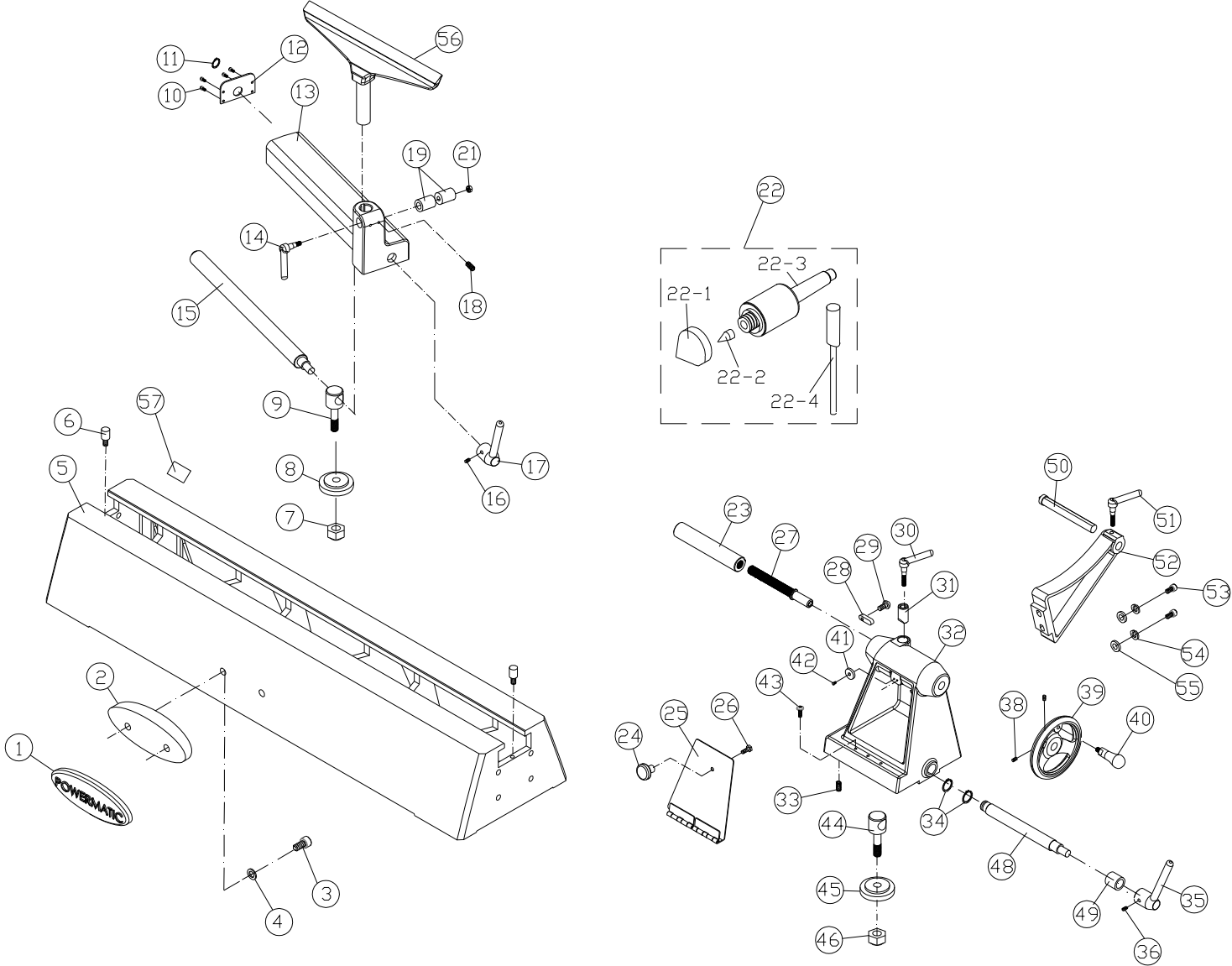
15.3.1 Spindle Centers Knockout Assembly – Exploded View



15.3.2 Spindle Centers Knockout Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
82	6294754	Knockout Rod Assembly (includes # 82-1 thru 82-7)		1
82-1	TS-0270031	Socket Set Screw	5/16-18x3/8"	1
82-2	3520B-287	Slide Hammer		1
82-3	3520B-288	Slide Handle		1
82-4	6295796	Nylon Insert Socket Set Screw	1/4-20x3/8"	2
82-5	3520B-290	Rod		1
82-6	3520B-291	Retaining Collar		1
82-7	3520B-292	Brass Tip		1

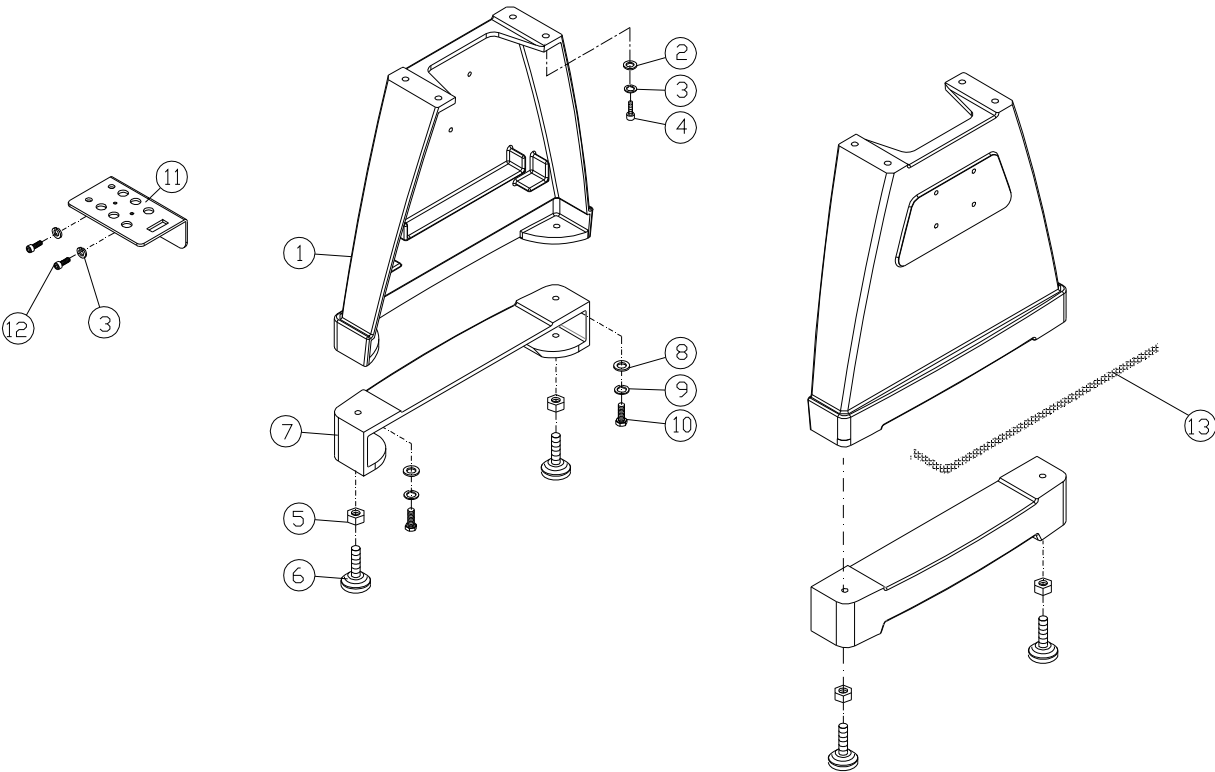
15.4.1 Bed, Banjo and Tailstock Assembly – Exploded View



15.4.2 Bed, Banjo and Tailstock Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
1	3520B-140	Powermatic Nameplate		1
2	3520C-202	Backer Plate		1
3	TS-0207071	Socket Head Cap Screw	1/4"-20x1-1/4"	2
4	TS-0680021	Flat Washer	1/4"	2
5	3520C-205	Bed		1
6	6295754	Stop Bolt		2
	3520C-BA	Banjo Assembly (includes #7 thru 21)		1
7	TS-0650081	Hex Nylon Lock Nut	3/4"-10	1
8	6294770	Clamp		1
9	3058001	Clamp Bolt	3/4"-10	1
10	6710015	Socket Head Cap Screw	#10-24x1/2"	4
11	F006048	C-Retaining Ring, Ext	S-22	1
12	3520C-212	End Cover		1
13	3520C-213	Tool Rest Support Base		1
14	JWL1440-206	Locking Handle	3/8"	1
15	3520C-215	Tool Support Rod		1
16	TS-0271031	Set Screw	3/8"-16x3/8"	2
17	3520C-127	Lock Handle Assembly		1
18	TS-0267021	Set Screw	1/4"-20x1/4"	2
19	JWL1440-207	Tool Rest Lock Bushing Set		1
21	TS-0570031	Hex Nut	3/8"-16	1
22	6295902	Ball Bearing Live Center Assembly (includes #22-1 thru 22-4)		1
22-1	6295905	Live Center Cap		1
22-2	6295904	Live Center Tip		1
22-3	6295903	Live Center Body		1
22-4	6295906	Live Center Rod		1
	3520C-TA	Tailstock Assembly (includes #23 thru 49)		1
23	3520C-223	Tailstock Quill		1
24	6295717	Knob	M8	1
25	3520C-225	Cover		1
26	TS-1490021	Hex Cap Screw	M8-1.25x16	1
27	3520C-227	Lead Screw		1
28	JWL1221VS-227	Key		1
29	JWL1640EVS-323	Socket Head Button Screw	#10-32x5/8"	1
30	6295910	Lock Handle	3/8"	1
31	3520C-231	Brass Bushing		1
32	3520C-232	Tailstock		1
33	6760102	Socket Set Screw	#10-32x1"	1
34	F006050	C-Retaining Ring, Ext	S-25	2
35	3520C-127	Lock Handle Assembly		1
36	TS-0271031	Socket Set Screw	3/8"-16x3/8"	2
38	TS-0270011	Socket Set Screw	5/16"-18x1/4"	2
39	3520B-125	Tailstock Handwheel		1
40	3520B-126	Swivel Handle		1
41	3520C-148	Magnet		2
42	F010987	Flat Head Socket Screw BO	M3-0.5x10	2
43	F009669	Socket Head Button Screw BO	#10-24x3/8"	3
44	3058001	Clamp Bolt		1
45	3092095	Clamp		1
46	6520009	Nylon Lock Hex Nut	5/8"-11	1
48	3520C-248	Eccentric Rod		1
49	6095038	Bushing	7/8" x 1" x 7/8"	1
50	3520B-251	Comparator Rear Center		1
51	3520C-251	Lock Handle		1
52	3520B-150	Comparator Rear Bracket		1
53	TS-0209061	Socket Head Cap Screw	3/8"-16x1-1/4"	2
54	TS-0720091	Lock Washer	3/8"	2
55	TS-0680041	Flat Washer	3/8"	2
56	6294742	Tool Support	14"	1
57	LM000301	I.D Label, 3520C (not shown)		1
58	3520C-258	Black Stripe (not shown)	3/4" x 51"	2

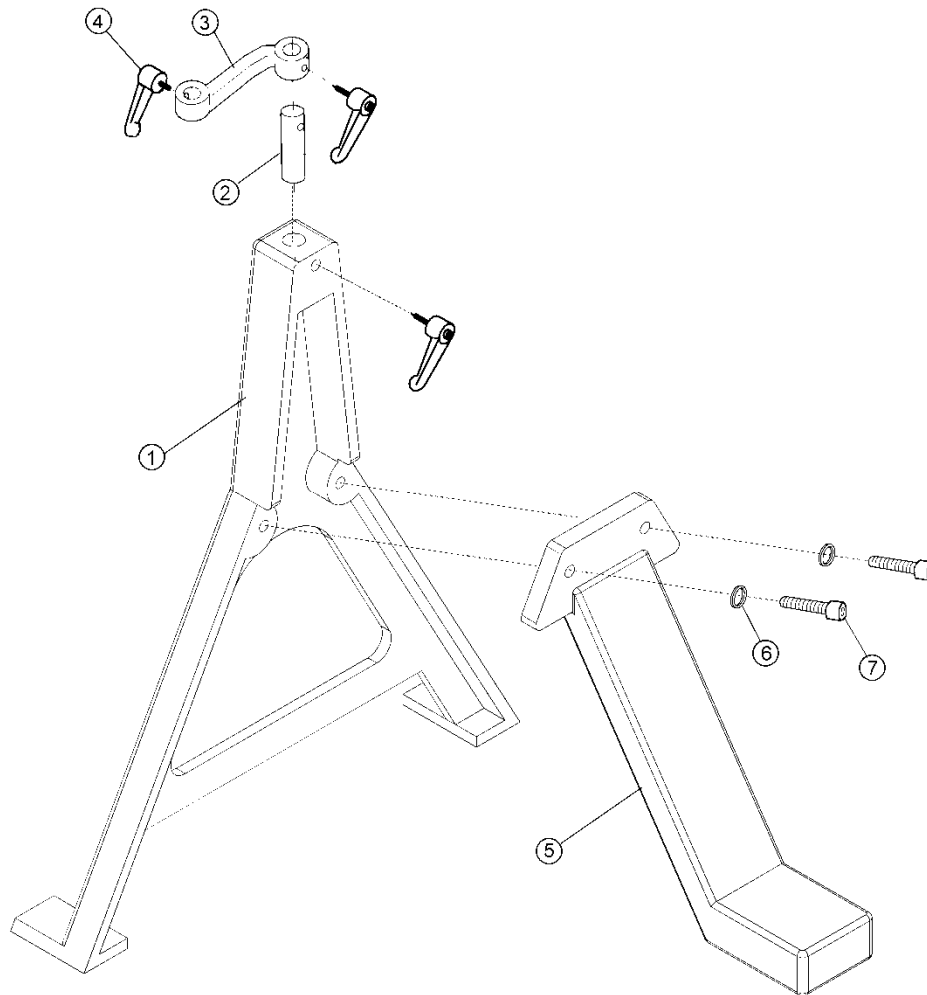
15.5.1 Stand Assembly – Exploded View



15.5.2 Stand Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
1	3520C-301	Stand		2
2	TS-0680042	Flat Washer	3/8"	8
3	TS-0720091	Lock Washer	3/8"	10
4	TS-0209061	Socket Head Cap Screw	3/8"-16x1-3/4"	8
5	4224B-263	Hex Nut	1/2"-12	4
6	4224B-262	Adjustable Leveler	1/2"-12	4
7	3520C-307	Riser Block	4"	2
8	TS-0680061	Flat Washer	1/2"	4
9	TS-0720111	Lock Washer	1/2"	4
10	3520C-310	Hex Cap Screw	1/2"-12 x 2"	4
11	3520B-143	Shelf		1
12	TS-0209061	Socket Head Cap Screw	3/8-16 x1-1/4"	2
13	3520C-313	Black Stripe	1/2" x 30"	2
14	6294773	Warning Label (not shown)		1
	1353003	Riser Kit (#7 thru 10)		

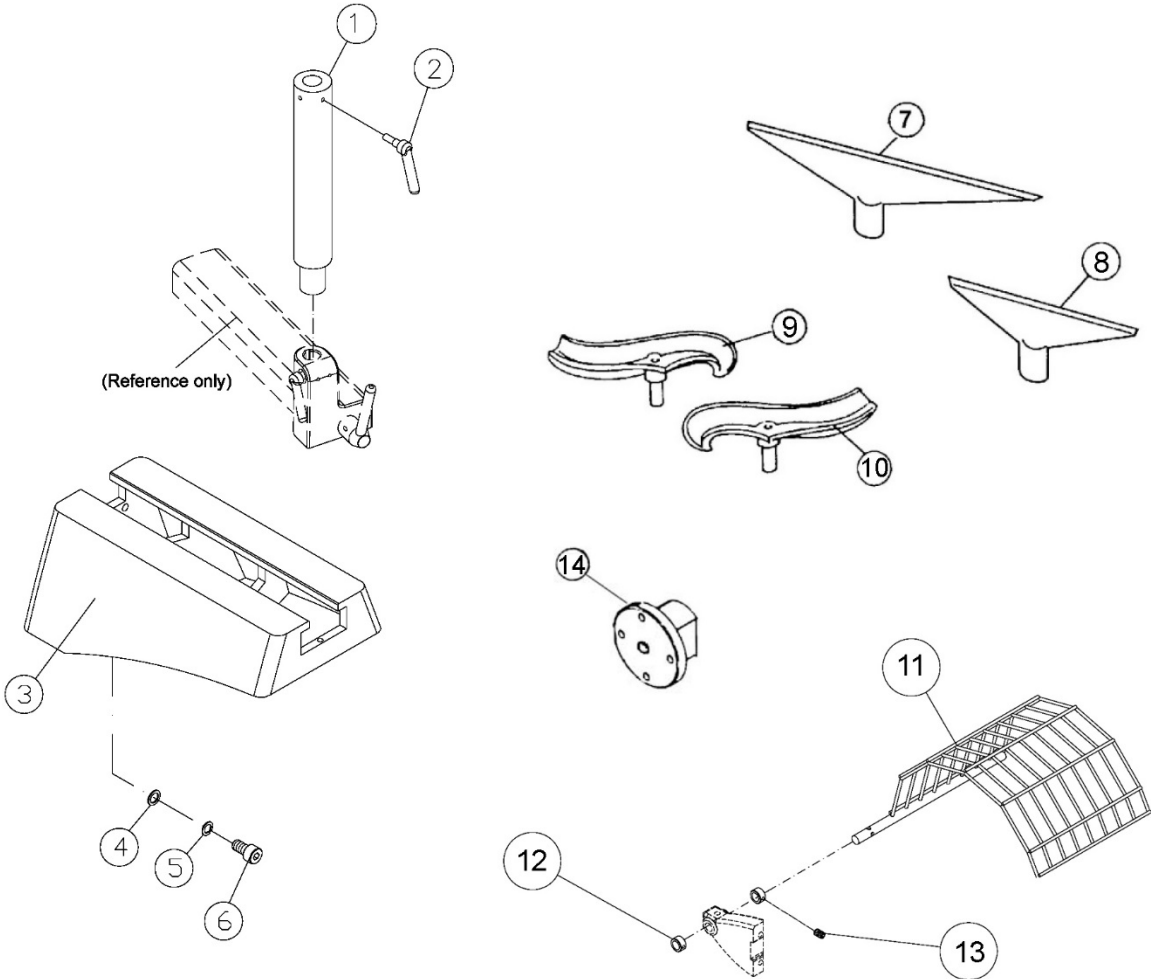
15.6 Optional Accessories: #6294732, Outboard Turning Stand



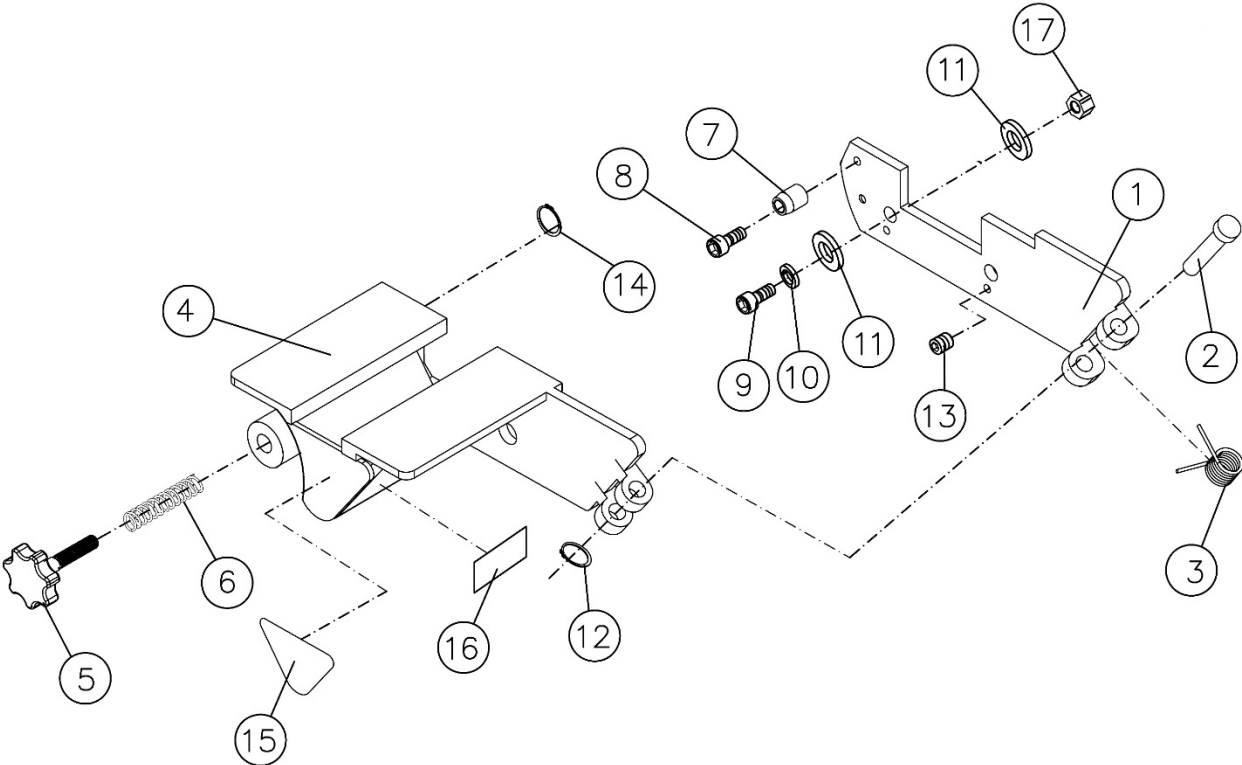
Index No.	Part No.	Description	Size	Qty.
.....	6294732	Heavy Duty Outboard Turning Stand Assembly (items 1 thru 7)		.....
1	3042503	Turning Stand Base		1
2	6295897	Offset Tool Support Pin	1.00" diameter	1
3	6295898	Offset Tool Support Casting	1.00" hole	1
4	2695026	Screw Lock Assembly		3
5	3423055	Turning Stand Leg		1
6	6861700	Lock Washer	5/8"	2
7	6769002	Socket Head Cap Screw	5/8"-18 x 2"	2

15.7 Optional Accessories: Bed Extension, Face Plate, Tool Supports, Guard

Index No.	Part No.	Description	Size	Qty.
.....	1353002	20" Bed Extension Kit (includes #1 thru 6)	.....	.....
1	3520B-310	Extension Post	.....	1
2	6294763	Locking Handle	.....	1
3	3520C-403	20" Bed Extension	.....	1
4	TS-0680041	Flat Washer	3/8"	4
5	TS-0720091	Lock Washer	3/8"	4
6	TS-0209081	Socket Head Cap Screw	3/8-16x1-3/4"	4
7	6294742	14" Tool Support	.....	1
8	6294739	6" Tool Support	.....	1
9	6294740	Bowl Turning Tool Support (RH)	.....	1
10	6294751	Bowl Turning Tool Support (LH)	.....	1
11	6294728	Guard Assembly	.....	1
12	6143004	Retaining Collar	.....	2
13	TS-0270011	Socket Set Screw	5/16-18x1/4"	2
14	6294736	Faceplate (includes set screws)	1-1/4-8, Ø 3"	1
.....	6295902	Ball Bearing Live Center (not shown)	.....	1

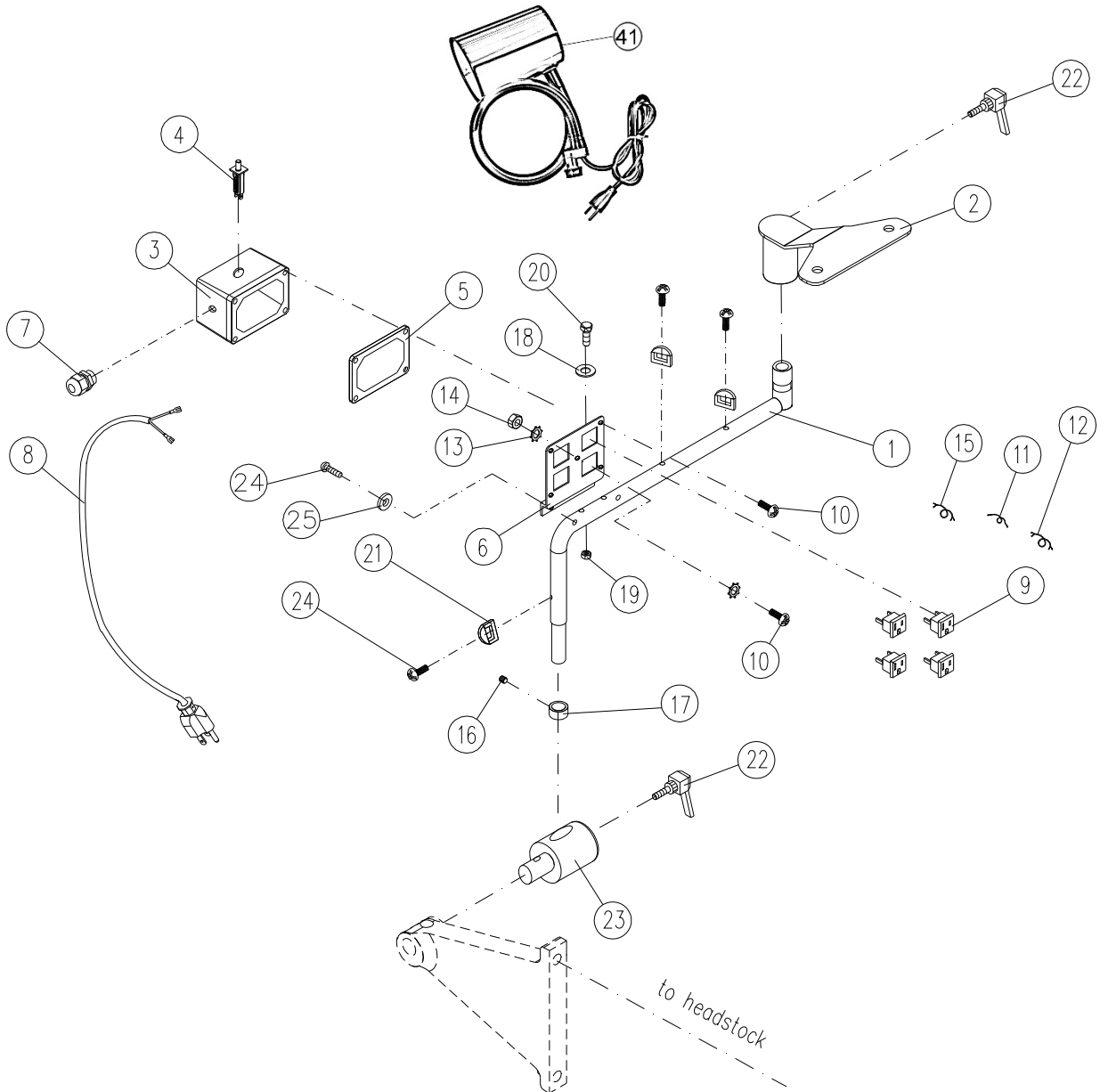


15.8 Optional Accessories: #6294721, Tailstock Swing Away



Index No	Part No	Description	Size	Qty
1		Front Plate		1
2	PMSA-102	Pivot Pin		1
3	PMSA-103	Twist Spring		1
4		Rear Plate		1
5	PMSA-105	Knob		1
6	PMSA-106	Spring		1
7	PMSA-107	Guide Pin		1
8	TS-0209011	Socket Head Cap Screw	3/8"-16x1/2"	1
9	TS-0209061	Socket Head Cap Screw	3/8"-16x1-1/4"	2
10	TS-0720091	Spring Washer	3/8"	2
11	TS-0680041	Flat Washer	3/8"	4
12	PMSA-112	C-Ring	S-11	1
13	TS-0271051	Set Screw	3/8"-16x1/2"	2
14	PMSA-114	C-Ring	S-9	1
15	LM000011	Warning Label (EN)		1
	LM000065	Warning Label (FR)		1
16	LM000012	ID Label		1
17	TS-0561031	Hex Nut	3/8"-16	2

15.9.1 Optional Accessories: #6294901, Lamp Holder Set – exploded view



15.9.2 Optional Accessories: #6294901, Lamp Holder Set – parts list

Index No	Part No	Description	Size	Qty
	6294901	Lamp Holder Set <i>(includes #1 thru 25)</i>		1
1	4224B-301	Support Tube		1
2	4224B-302	Lamp Holder		1
3	4224B-303	Junction Box		1
4	4224B-304	Current Overload Switch	15A	1
5	4224B-305	Gasket		1
6	4224B-306	Receptacle Cover Plate		1
7	4224B-307	Strain Relief	PG11	1
8	4224B-308	Power Cord	AWG14	1
9	4224B-309	Socket with Cover		4
10	TS-1533062	Phillips Pan Head Machine Screw	M5 x 20	5
11	4224B-311	Jumper (Black)		4
12	4224B-312	Jumper (White)		3
13	TS-0733041	Star Washer	M5	2
14	TS-1540031	Hex Nut	M5	2
15	4224B-315	Ground Jumper (Green)		4
16	TS-0270011	Set Screw	5/16"-18 x 1/4"	1
17	6143004	Retaining Collar		1
18	TS-1550031	Flat washer	M5	4
19	TS-1541011	Nylon Hex Nut	M5	2
20	TS-1481081	Hex Bolt	M5 x 35	2
21	4224B-321	Cord Restraint		3
22	JML-59A	Lock Handle		2
23	4224B-323	Holder Shaft		1
24	TS-0253031	Socket Head Button Screw	#10-24 x 1/2"	5
25	TS-069204	Flat Washer	#10	2

15.9.3 Lamp Kit – Parts List

Index No.	Part No.	Description	Size	Qty.
	6294901K	Lamp Kit <i>(includes #40-44)</i>		1
40	6294901	Lamp Holder Set <i>(includes #1 thru 25)</i>		1
41	6294902	Lamp (bulb not included) <i>(includes #42-44)</i>	100W	2
42	*	Stud	M51	2
43	*	Lock Washer, Internal tooth	3/8"	2
44	*	Jam Nut	3/8"	2

NOTE: Powermatic lamps are supplied by Moffatt. For replacement parts indicated by an asterisk (*), contact Moffatt directly at 800-346-0761.