



Model No.:	Stock No.:
Serial No.:	
Purchased From:	
Date Purchased:	Date Installed:

Operating Instructions and Parts Manual

Electronic Variable Speed Turret Mill

Model JTM-1050EVS



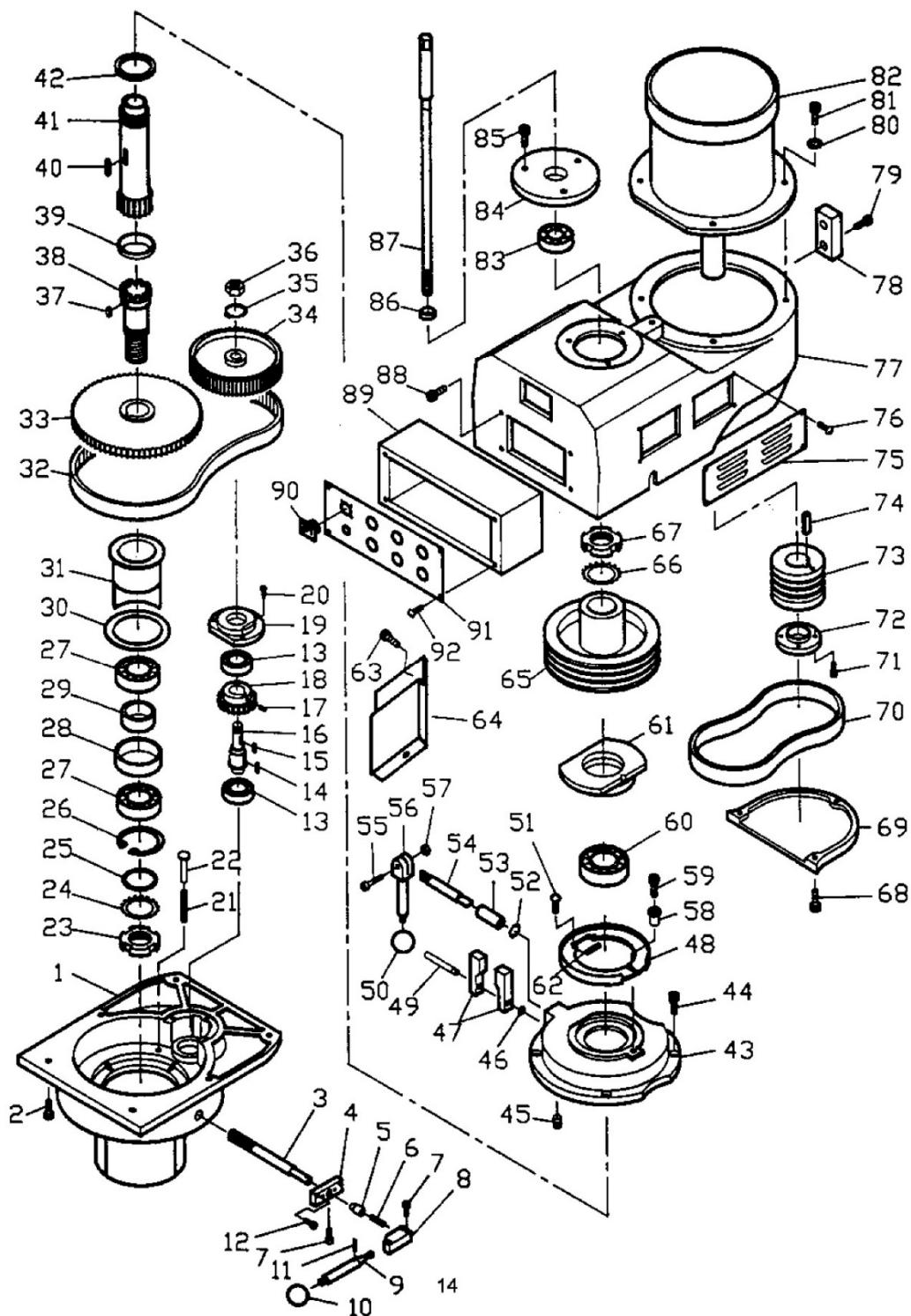
JET
427 New Sanford Road
LaVergne, Tennessee 37086
Ph.: 800-274-6848
www.jettools.com

Part No. M-690060
Revision G1 06/2015
Copyright © 2015 JET

14.0 Replacement parts

Replacement parts are listed on the following pages. To order parts or reach our service department, call 1-800-274-6848 Monday through Friday, 8:00 a.m. to 5:00 p.m. CST. Having the Model Number and Serial Number of your machine available when you call will allow us to serve you quickly and accurately.

14.1.1 JTM-1050EVS Inverter Speed Head Assembly – Exploded View

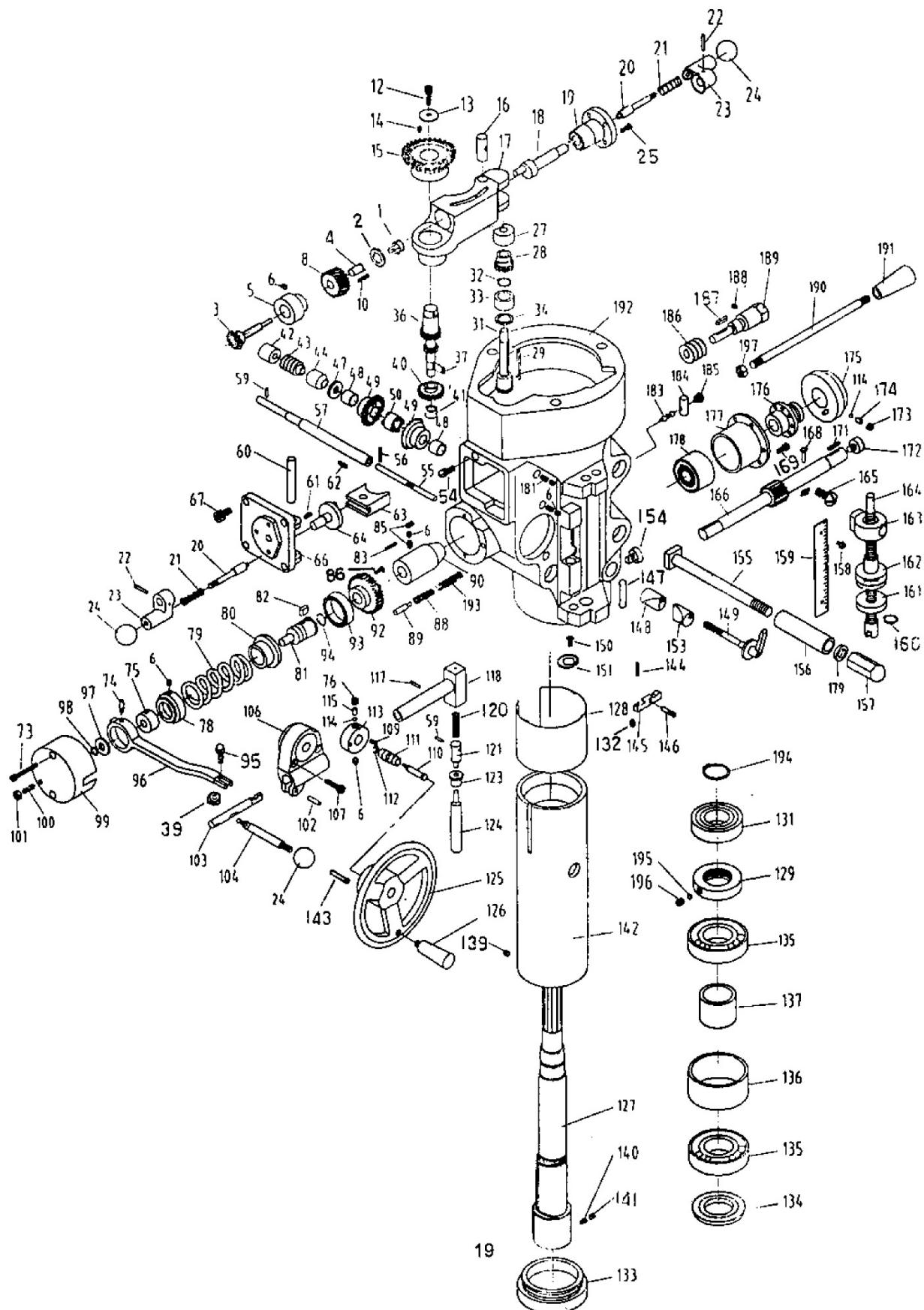


14.1.2 JTM-1050EVS Inverter Speed Head Assembly – Parts List

Index No	Part No	Description	Size	Qty
1	PVS-082	Housing		1
2	TS-1503051	Hex Socket Cap Screw	M6*20	6
3	PVS-087	Gear Shaft Pinion		1
4	PVS-089	Detent Plate		1
5	PVS-090	Bearing Stop		1
6	PVS-091	Spring		1
7	TS-1503011	Hex Socket Cap Screw	M5*14	3
8	PVS-092	Pinion Block		1
9	PVS-094	Pinion Crank		1
10	PVS-099	Plastic Ball		1
11	IVS-011	Spring Pin	3*20	1
12	TS-1502041	Hex Socket Cap Screw	M5*16	3
13	BB-6203ZZ	Ball Bearing	6203ZZ	2
14	KEY5518	Key	5*5*18	1
15	KEY5515	Key	5*5*15	1
16	PVS-067	Counter Shaft		1
17	TS-1523011	Set Screw	M6*6	1
18	PVS-066	Bull Gear		1
19	PVS-064	Bearing Housing		1
20	TS-1502051	Hex Socket Cap Screw	M5*20	3
21	PVS-084	Spring		3
22	PVS-102	Spring Shaft		3
23	PVS-081	Nut		1
24	PVS-109	Lock Washer		1
25	PVS-103	Washer		1
26	PVS-080	Snap Ring	C-62	1
27	BB-6908ZZ	Ball Bearing	6908ZZ	2
28	PVS-079	Bearing Washer		1
29	PVS-078	Bearing Washer		1
30	PVS-076	Washer		1
31	PVS-075	Rack Cup		1
32	PVS-063	Timing Belt	225L100	1
33	PVS-074	Gear		1
34	PVS-062	Timing Belt Pulley		1
35	IVS-035	Spring Washer	5/8"	1
36	PVS-061	Nut	5/8"-18NF	1
37	KEY8712	Key	8*7*12	1
38	PVS-073	Spindle Gear Hub		1
39	PVS-100	Collar		1
40	KEY7740	Key	7*7*40	1
41	4VS-H003	Spindle Pulley Hub		1
42	IVS-042	Collar		2
43	PVS-050	Lower Housing Cover		1
44	TS-1503051	Hex Socket Cap Screw	M6*20	4
45	TS-1523011	Set Screw	M6*6	1
46	IVS-046	Snap Ring	S-8	1
47	PVS-059	Brake Stud		2
48	PVS-047	Brake Lining		1
49	PVS-058	Brake Finger Pivot Stud		1
50	PVS-099	Plastic Ball		2
51	IVS-051	Round Head Screw		4
52	IVS-052	Snap Ring	S-12	1
53	PVS-052	Brake Shaft Sleeve		1
54	PVS-053	Brake Lock Shaft		1
55	TS-1503061	Hex Socket Cap Screw	M6*25	1
56	PVS-054	Brake Lock Block		1
57	TS-1540041	Nut	M6	1
58	PVS-048	Lock Screw		1
59	TS-1502041	Hex Socket Cap Screw	M5*16	1
60	BB-6010ZZ	Ball Bearing	6010ZZ	1

Index No	Part No	Description	Size	Qty
61	PVS-046	Bearing Cover.....		1
62	PVS-049	Brake Spring.....		2
63	TS-1502051	Hex Socket Cap Screw.....	M5*20.....	4
64	4VS-001	Brake Ring.....		1
65	4VS-002	Pulley.....		1
66	IVS-066	Washer		1
67	IVS-067	Lock Nut.....		1
68	TS-1502051	Hex Socket Cap Screw.....	M5*20.....	3
69	PVS-011	Motor Pulley Cover		1
70	IVS-070	Belt.....		1
71	TS-1502041	Hex Socket Cap Screw.....	M5*16.....	6
72	1020-H071	Lock Ring.....		1
73	1020-H070	Motor Pulley.....		1
74	KEY10830	Key	10*8*30.....	1
75	PVS-101	Cover		2
76	IVS-076	Round Head Screw		8
77	PVS-001	Housing.....		1
	1050FA	Fan Assembly (not shown)		1
78	SP-060	Block		1
79	TS-1504051	Hex Socket Cap Screw.....	M8*25.....	3
80	IVS-080	Spring Washer.....	M10.....	4
81	IVS-081	Hex Socket Cap Screw.....	M10*30.....	4
82	IVS-082	Inverter Motor	3HP/4P.....	1
	MR516D	Motor Fan (not shown).....		1
83	BB-6007ZZ	Ball Bearing	6007ZZ.....	1
84	PVS-013	Cover		1
85	TS-1502041	Hex Socket Cap Screw.....	M5*16.....	3
86	PVS-115	Draw Bar Washer		1
87	PVS-114	Draw Bar.....		1
88	TS-1503021	Hex Socket Cap Screw.....	M6*10.....	4
89	4VSE187	Operation Box.....		1
90	IVS-090	R.P.M Indicator		1
91	4VSE186	Operation Panel.....		1
92	IVS-092	Round Head Screw.....		6
	1050EVS-RMC1100..	Short Cable (Switch-Junction) (not-shown)		1
	1050EVS-REC4000..	Long Cable (Switch-Electrical Box) (not shown).....		1

14.2.1 JTM-1050EVS Head Assembly – Exploded View



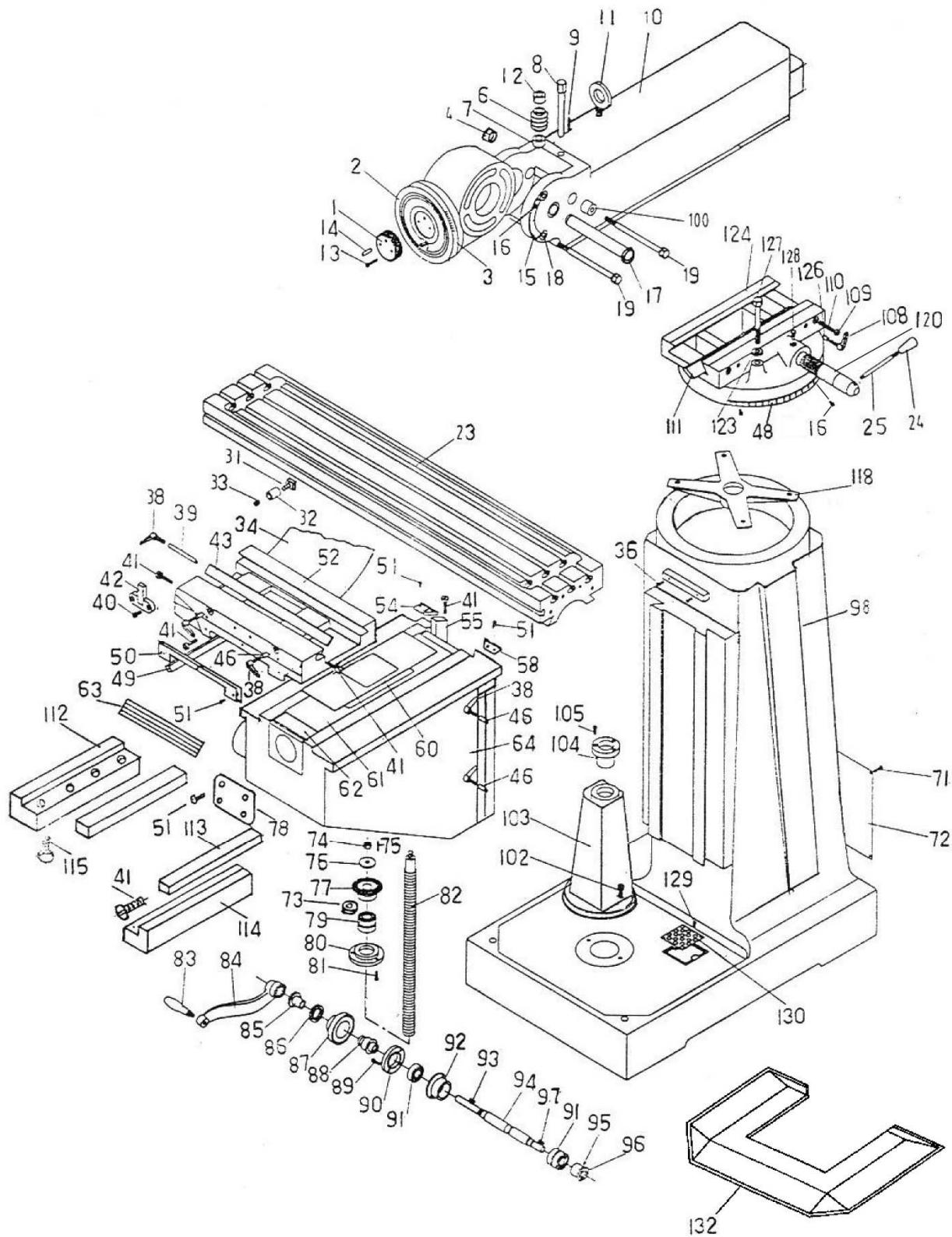
14.2.2 JTM-1050EVS Head Assembly – Parts List

Index No	Part No	Description	Size	Qty
1	TS-1503031	Hex Socket Cap Screw.....	M6*12.....	1
2	1050B-2	Washer .....	.....	1
3	1050B-3	Feed Bevel Pinion.....	.....	1
4	1050B-4	Worm Gear Shaft Sleeve.....	.....	1
5	1050B-5	Bushing.....	.....	1
6	TS-1522011	Set Screw .....	.....	1
8	1050B-8	Worm Gear .....	.....	1
10	KEY3312	Key.....	3*3*12.....	1
12	TS-1504031	Hex Socket Cap Screw.....	M8*16.....	1
13	B-13	Washer .....	.....	1
14	KEY3308	Key.....	3*3*8.....	2
15	B-15	Bevel Gear.....	.....	1
16	B-16	Feed Engage Pin.....	.....	1
17	1050B-17	Worm Gear Cradle.....	.....	1
18	B-18	Worm Gear Cradle Shaft.....	.....	1
19	1050B-19	Shaft Sleeve .....	.....	1
20	B-20	Gear Shaft Plunger .....	.....	2
21	B-21	Spring .....	.....	2
22	1050B-22	Spring Pin	3*20.....	2
23	B-23	Shift Crank .....	.....	2
24	B-24	Black Plastic Ball .....	.....	3
25	TS-1503010	Hex Socket Cap Screw.....	M5x12.....	3
27	B-27	Bushing.....	.....	1
28	B-28	Gear.....	.....	1
29	KEY3345	Key.....	3*3*45.....	1
31	1050B-31	Gear Shaft .....	.....	1
32	1050B-32	Snap Ring	S-16	1
33	1050B-33	Bevel Gear Bushing.....	.....	1
34	1050B-34	Spacer .....	.....	1
36	1050B-36	Gear.....	.....	1
39	TS-1540031	Nut	M5.....	1
40	1050B-40	Feed Drive Gear .....	.....	1
41	1050B-41	Needle Bearing .....	.....	1
42	1050B-42	Bushing.....	.....	1
43	1050B-43	Worm Gear .....	.....	1
44	B-44	Bushing.....	.....	1
47	B-47	Washer .....	.....	1
48	B-48	Bushing.....	.....	2
49	B-49	Bevel Gear .....	.....	2
50	B-50	Feed Reverse Clutch.....	.....	1
54	TS-1503061	Hex Socket Cap Screw.....	M6*25.....	1
55	B-55	Reverse Clutch Rod.....	.....	1
56	B-56	Spring Pin	3*20.....	1
57	B-57	Feed Worm Shaft .....	.....	1
58	TS-1523011	Set Screw	M6*6.....	1
59	B-59	Spring Pin	3*12.....	2
60	B-60	Chip Guards.....	.....	1
61	TS-1522031	Set Screw	M5*10.....	1
62	KEY3315	Key.....	3*3*15.....	2
63	B-63	Feed Gear Shift Fork .....	.....	1
64	B-64	Gear Shift Crank .....	.....	1
66	B-66	Cluster Gear Cover.....	.....	1
67	TS-1502031	Hex Socket Cap Screw.....	M5*12.....	4
73	TS-1502081	Hex Socket Cap Screw.....	M5*35.....	2
74	B-74	Clutch Ring Pin .....	.....	2
75	B-75	Clutch Ring .....	.....	1
76	TS-1523021	Set Screw	M6*8.....	1
78	B-78	Clutch Locknut .....	.....	1
79	B-79	Safety Clutch Locknut.....	.....	1
80	B-80	Overload Clutch.....	.....	1

Index No	Part No	Description	Size	Qty
81	B-81	Overload Clutch Sleeve		1
82	KEY5813	Key	5*8*13	1
83	B-83	Hex Socket Head Bolt		3
85	TS-1523011	Set Screw	M6*6	2
86	B-86	Cross Plate Screw	M4*16	4
88	B-88	Spring		1
89	B-89	Spring Plunger		1
90	B-90	Bushing		1
92	B-92	Worm Gear		1
93	B-93	Clutch Ring		1
94	B-94	Snap Ring	S-10	1
95	TS-1502051	Hex Socket Cap Screw	M5*20	1
96	B-96	Clutch Trip Lever		1
97	B-97	Clutch Washer		1
98	B-98	Snap Ring	S-10	1
99	B-99	Clutch Arm Cover		1
100	C-19-1	Set Screw	M6*16	1
101	TS-1540041	Nut	M6	1
102	B-102	Spring Pin	5*18	1
103	B-103	Cam Rod		1
104	B-104	Trip Handle		1
106	B-106	Feed Trip Bracket		1
107	TS-1503051	Hex Socket Cap Screw	M6*20	1
108	TS-1523031	Set Screw	M6*10	1
109	KEY3310	Key	3*3*10	1
110	B-110	Knob Stud		1
111	B-111	Reverse Knob		1
112	B-112	E-Ring	E-6	1
113	B-113	Handle Wheel Clutch		1
114	B-114	Steel Ball	3/16"	2
115	B-115	Compression Spring		2
116	B-116	Set Screw	M8*6	1
117	B-117	Spring Pin	3*15	1
118	B-118	Cam Rod Sleeve		1
119	B-119	Spring Pin	3*12	1
120	B-120	Compression Spring		1
121	B-121	Trip Plunger		1
123	B-123	Bushing		4
124	B-124	Feed Trip Plunger		1
125	B-125	Handle Wheel		1
126	B-126	Handle		1
127	B-127	Spindle		1
128	B-128	Quill Skirt		1
129	B-129	Locknut		1
131	BB-6206ZZ	Ball Bearing	6206ZZ	1
132	B-132	Nut	M4	1
133	B-133	Nose Piece		1
134	B-134	Spindle Dirt Shield		1
135	BB-7207C	Angular Bearing	7207	1
136	B-136	Spacer		1
137	B-137	Spacer		1
138	BB-7207C	Angular Bearing	7207	1
139	B-139	Set Screw		1
140	B-140	Set Screw		1
141	TS-1523011	Set Screw	M6*6	1
142	B-142	Quill		1
143	B-143	Spring Pin	3*16	1
144	B-144	Set Screw	M4*20	1
145	B-145	Feed Trip Lever		1
146	B-146	Trip Lever Pin		1
147	B-147	Indicator Rod		1
148	B-148	Quill Lock Sleeve		1

Index No	Part No	Description	Size	Qty
149	B-149.....	Lock Handle.....	.....	1
150	B-150.....	Round Head Screw.....	M5*8.....	2
151	B-151.....	Washer	M5.....	2
153	B-153.....	Quill Lock Sleeve .....	.....	1
154	B-154.....	Indicator Rod Screw .....	.....	1
155	B-155.....	T-Bolt .....	.....	4
156	B-156.....	Spacer .....	.....	4
157	B-157.....	Adapter Nut.....	.....	4
158	B-158.....	Round Head Screw.....	.....	2
159	B-159.....	Micrometer Scale.....	.....	1
160	B-160.....	Snap Ring	S-16	1
161	B-161.....	Quill Micro-Stop Nut .....	.....	1
162	B-162.....	Quill Micro-Stop Nut .....	.....	1
163	B-163.....	Quill Stop Knob .....	.....	1
164	B-164.....	Quill Micro-Stop Nut .....	.....	1
165	B-165.....	Round Head Screw.....	M10*15.....	1
166	B-166.....	Quill Pinion Shaft .....	.....	1
168	B-168.....	Pin.....	.....	1
169	TS-1503010	Hex Socket Cap Screw.....	M5*12.....	2
171	KEY3320	Key.....	3*3*20	1
172	B-172.....	Pinion Shaft Hub Screw .....	.....	1
173	B-173.....	Set Screw	5/16**1/4"	1
174	B-174.....	Compression Spring .....	.....	1
175	B-175.....	Handle Hub .....	.....	1
176	B-176.....	Hub Sleeve .....	.....	1
177	B-177.....	Cover with #178 Spring .....	.....	1
178	B-178.....	Clock Spring .....	.....	1
179	B-179.....	Washer .....	.....	4
181	TS-1523041	Set Screw	M6*12	2
183	B-183.....	Reverse Trip Ball Lever .....	.....	1
184	B-184.....	Reverse Trip Plunger .....	.....	1
185	B-185.....	Trip Ball Lever Screw .....	.....	1
186	B-186.....	Worm Gear .....	.....	1
187	KEY4418	Key.....	4*4*18	1
188	B-188.....	Set Screw .....	.....	1
189	B-189.....	Worm Shaft .....	.....	1
190	B-190.....	Pinion Shaft Hub Handle .....	.....	1
191	B-191.....	Black Plastic Ball .....	.....	1
192	B-192.....	Quill Housing .....	.....	1
193	B-193.....	Compression Spring .....	.....	1
194	B-194.....	Snap Ring	S-30	1
195	B-195.....	Bush.....	.....	1
196	TS-1523011	Set Screw	M6*6	1
197	B-197.....	Nut .....	.....	1

14.3.1 JTM-1050EVS Base Assembly – Exploded View

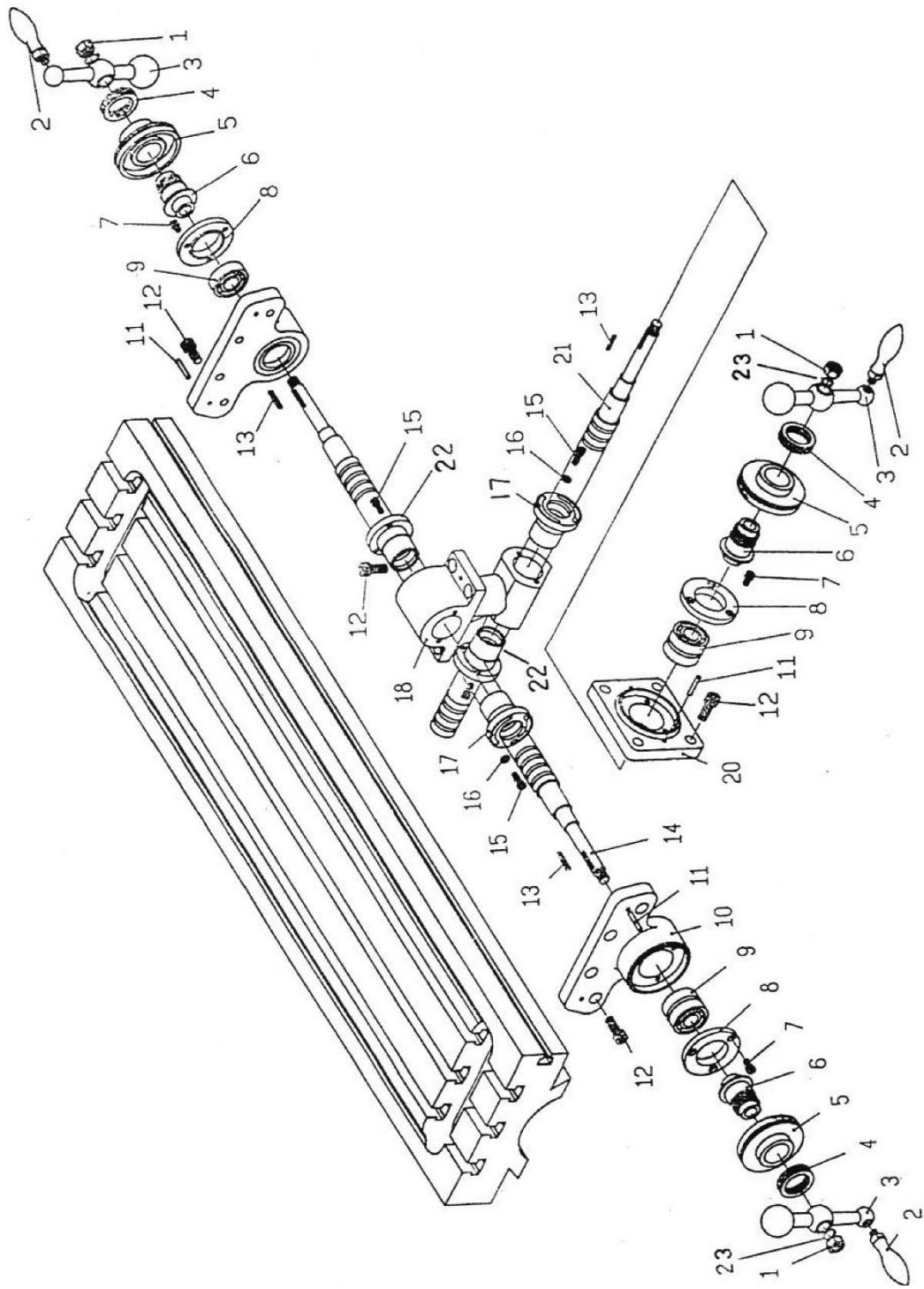


14.3.2 JTM-1050EVS Base Assembly – Parts List

Index No	Part No	Description	Size	Qty
1	1050C-1	Worm Washer		1
2	1050C-2	Ram Adaptor.....		1
3	1050C-3	Adaptor Scale		1
4	1050C-4	Lock Nut.....		1
6	1050C-6	Worm Gear		1
7	1050C-12	Collar		1
8	1050C-8	Worm Shaft.....		1
9	OVS10-033	Key.....	5x5x50	1
10	1050C-10	Ram		1
11	1050C-11	Hock	3/4"	1
12	C-7-1	Washer		1
13	TS-1504061	Hex Socket Cap Screw.....	M8x30	2
14	1050C-14	Spring Pin		1
15	1050C-15	Angle Plate		1
16	1050C-16	Rivet.....		12
17	1050C-17	Adaptor Pivot Stud		1
18	C-18	Washer		3
19	C-19	Locking Bolt		3
23	C-23	Table.....		1
31	C-31	T-Bolt		2
32	C-32	Table Stop Piece		2
33	C-33	Hex Nut.....	3/8"-16NC	2
34	C-34	Chip Guard		1
36	C-36	Pan Head Screw.....	3/16"x3/8"	4
38	C-38A	Saddle Lock Bolt.....		5
39	C-29	Saddle Lock Plunger.....		1
40	C-40	Hex Socket Cap Screw.....		2
41	C-41	Adjusting Screw		10
42	C-42	Table Stop Bracket		1
43	C-43	Gib		1
46	C-46	Table Lock Plunger		4
48	C-48	Turret Scale, JTM-1050		1
49	C-49	Saddle Knee Gib.....		1
50	C-50-1	Wiper		2
51	C-51	Pan Head Screw.....		18
52	C-52	Saddle.....		1
54	C-54	Knee Wiper Felt		1
55	C-55	Knee Column Gib		1
58	C-58	Knee Wiper Felt		1
60	C-60	Chip Guard		1
61	C-61	Chip Guard		1
62	C-62	Chip Guard		1
63	C-63	Chip Guard		1
64	C-64	Knee		1
71	C-71	Pan Head Screw		8
72	C-72	Cover		1
73	C-23-1	Washer		1
74	C-74	Nut	1/2"-20NF	1
75	KEY5525	Key.....	5x5x25	1
76	C-76	Washer		1
77	C-77	Bevel Gear		1
78	C-78	Front Cover		1
79	BB-5305ZZ	Ball Bearing	5305	1
80	C-80	Bearing Stop		1
81	TS-1503051	Hex Socket Cap Screw.....	M6x20	3
82	C-82	Leadscrew		1
83	C-83	Handle		1
84	C-84	Elevating Crank		1
85	C-85	Gear Shear Clutch		1
86	C-86	Dial Lock Nut		1

Index No	Part No	Description	Size	Qty
87	C-87	Dial.....		1
88	C-88	Dial Holder.....		1
89	TS-1503051	Hex Socket Cap Screw.....	M6x20	3
90	C-90	Bearing Stop.....		1
91	BB-6204ZZ	Ball Bearing	6204ZZ	2
92	C-92	Bearing Stop.....		1
93	KEY3318	Key.....	3x3x18	1
94	C-94	Shaft		1
95	C-95	Grub Set Screw		1
96	C-96	Bevel Gear.....		1
97	KEY4418	Key.....	4x4x18	1
98	C-98	Column		1
100	C-19-1	Collar		1
102	TS-1505051	Hex Socket Cap Screw.....	M10x35	2
103	C-103	Lead Screw Housing.....		1
104	C-82-1	Lead Screw Nut		1
105	TS-1503051	Hex Socket Cap Screw.....	M6x20	3
108	C-38A	Lock Bolt.....		2
109	C-109	Nut	3/8"	2
110	C-110	Set Screw		2
111	C-111	Gib		1
112	C-112	Gib Holder (L)		1
113	C-113	Gib		1
114	C-114	Gib Holder (R).....		1
115	TS-1505051	Hex Socket Cap Screw.....	M10x35	8
118	C-118	Spider		1
120	C-120	Ram Pinion		1
123	C-123	Spring Washer.....		4
124	C-124	Turret		1
126	C-126	Ram Lock Plunger		2
127	C-127	Locking Bolt		4
128	C-128	Ram Pinion Set Screw.....		1
129	C-129	Rivet.....		2
130	C-130	Strainer		1
131	STRIPE-1-3/4	JET Stripe (not shown)	1-3/4"W	per ft.
132	C-132	Chip Pan.....		1
	1050EVSTBC	Toolbox Complete (not shown).....		1
	1050EVSBOX	Inverter Side Box with Door (not shown)		1
	1050EVSLOCK	Door Lock with Key (not shown)		2
	1050EFA	Electric Box Fan (not shown).....		1

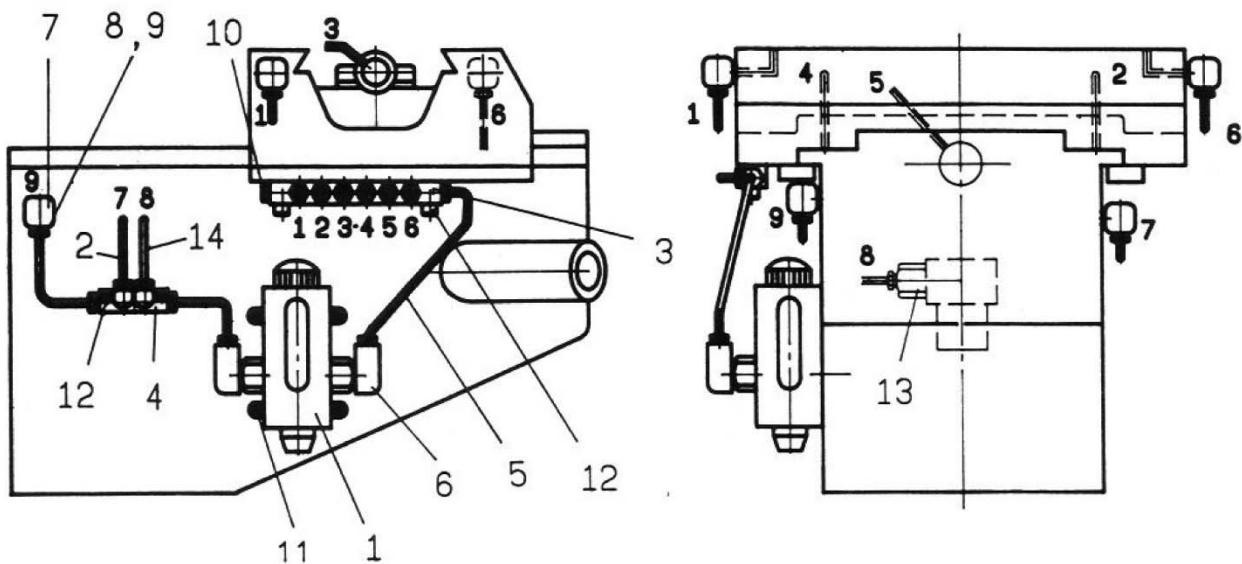
14.4.1 JTM-1050EVS Table Leadscrew Assembly – Exploded View



14.4.2 JTM-1050EVS Table Leadscrew Assembly – Parts List

Index No	Part No	Description	Size	Qty
1	D-1	Nut	1/2"-20NF.....	3
2	D-2	Handle		3
3	D-3	Ball Crank		3
4	D-4	Dial Lock Nut		3
5	D-5	Dial.....		3
6	D-6	Dial Holder.....		3
7	TS-1503031	Hex Socket Cap Screw.....	M6x12.....	9
8	C-90	Bearing Stop.....		3
9	BB-6204ZZ	Ball Bearing	6024ZZ.....	5
10	D-10	Bearing Bracket		2
11	D-11	Spring Pin	5x25	6
12	TS-1505031	Hex Socket Cap Screw.....		16
13	KEY3325	Key.....	3x3x25	3
14	D-14	Leadscrew		1
15	TS-1503061	Hex Socket Cap Screw.....		10
16	H-9	Washer		4
17	D-17	Feed Screw Nut.....		2
18	D-18	Feed Nut Bracket.....		1
20	D-20	Cross Bearing Bracket		1
21	D-21	Cross Feed Screw		1
22	D-22	Cross Feed Nut.....		2
23	D-23	Spring Washer	1/2".....	3

14.5.1 JTM-1050EVS One-Shot Lubrication System – Exploded View



14.5.2 JTM-1050EVS One-Shot Lubrication System – Parts List

Index No	Part No	Description	Size	Qty
1	CLA-8	Handle Oiler		1
2	ALMP-04	Aluminum Pipe	13.5x450mm	1
3	A-8	Oil Regulation Distributor		1
4	A-4	Oil Regulation Distributor		1
5	A-5	Flexible Steel Tube	4x550	1
6	PH-4011	Elbow Joint		2
7	PI-401	Elbow Joint		6
8	PA-4	Thimble Nut		20
9	PB-4	Thimble		20
10	PG-004	Union		1
11	JTM4VS-BUTW1458	Screw	M6x14	4
12	TS-1502061	Hex Socket Cap Screw	M5x25	4
13	PD-401	Straight Joint		1
14	A-14	Nylon Piece	4x700	1

14.6.1 JTM-1050EVS Electrical Panel – Parts List

Index No	Part No	Description	Size	Qty
1	1050EVS-SB1	Emergency Stop		1
2	1050EVS-SB2	Spindle Stop		1
3	1050EVS-SB3	Power Feed On.....		1
4	1050EVS-SA1	Fwd.-0-Rev. Spindle On		1
5	1050EVS-SA2	Pump Select Switch.....		1
6	1050EVS-MS	Power On/Off.....		1
7	1050EVS-L1	Power Lamp.....		1
8	1050EVS-L2	Power Feed Lamp		1
9	1050EVS-TR	Transformer		1
10	1050EVS-M1	Motor Fwd. Contact Relay		1
11	1050EVS-M2	Motor Rev. Contact Relay.....		1
12	1050EVS-M3	Power Feed Contact Relay.....		1
13	1050EVS-M4	Pump Motor Contact Relay.....		1
14	1050EVS-M5	Inv. Motor Contact Relay		1
15	1050EVS-FU1	High Voltage Fuse		1
16	1050EVS-FU2	Low Voltage Fuse		1
17	1050EVS-FU3	Low Voltage Fuse		1
18	1050EVS-LS1	Door Limit Switch.....		1
19	1050EVS-LS2	Brake Limit Switch		1
20	1050EVS-VR1	Speed Adjuster Spindle		1
21	1050EVS-R1	Relay.....		1
22	1050EVS-R	Regenerative Brake (230V)		1
	1050EVS-RB	Regenerative Brake (460V)		1
23	1050EVS-L	Work Light (option)		1
24	1050EVS-PF	Power Feed (option)		1
25	1050EVS-INV	Spindle Control		1
	FR-A024-2.2K	230V EVS Inverter (not shown)		1
	FR-A044-2.2K	460V EVS Inverter (not shown)		1

14.6.2 JTM-1050EVS Electrical Panel Layout I

