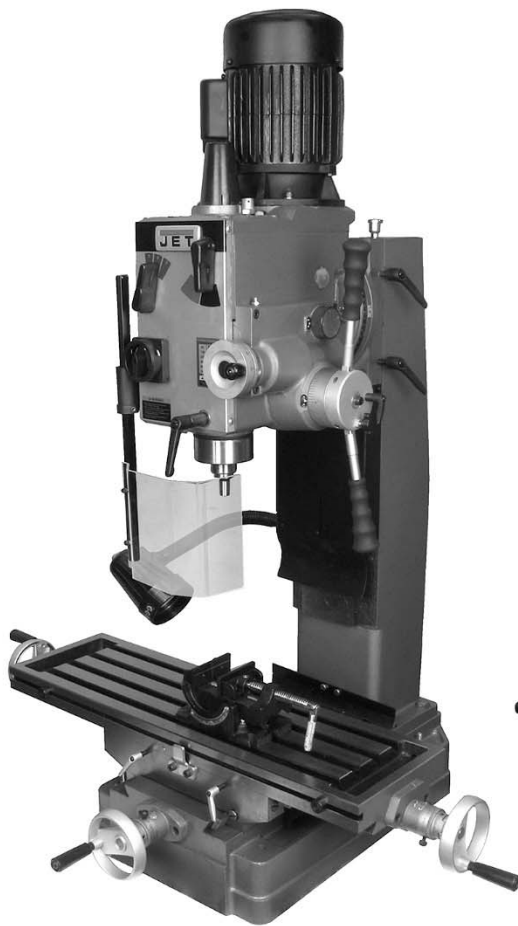




# Operating Instructions and Parts Manual Geared Head Mill-Drill Machines

Models: JMD-40GH, JMD-40GHPF, JMD-45GH, JMD-45GHPF



JMD-45GHPF

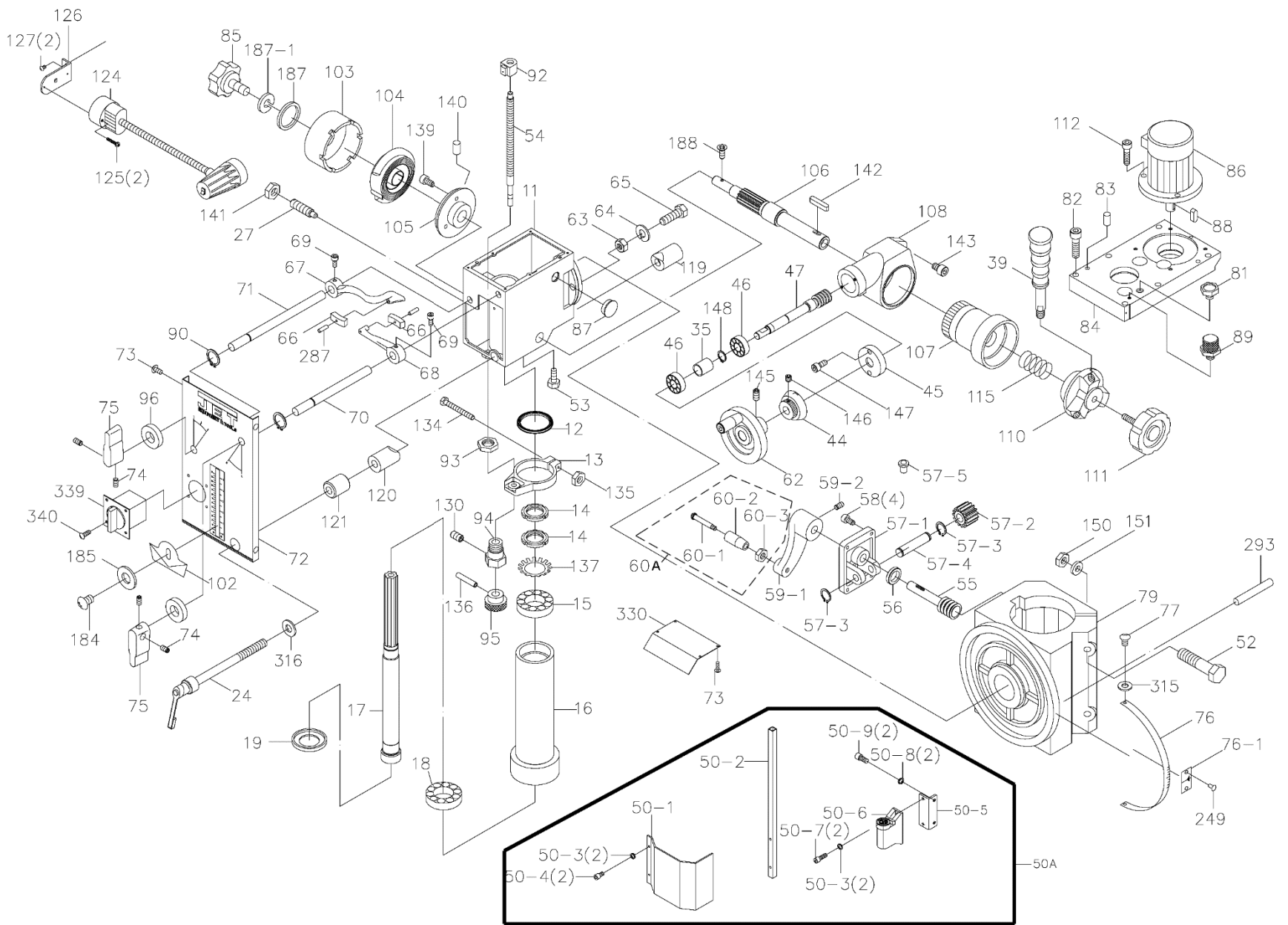


JMD-40GH

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**Part No. M-351040**  
Edition 2 03/2017  
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12.2.1 JMD-40GH,-45GH (non-powerfeed) Gear Head Assembly – Exploded View



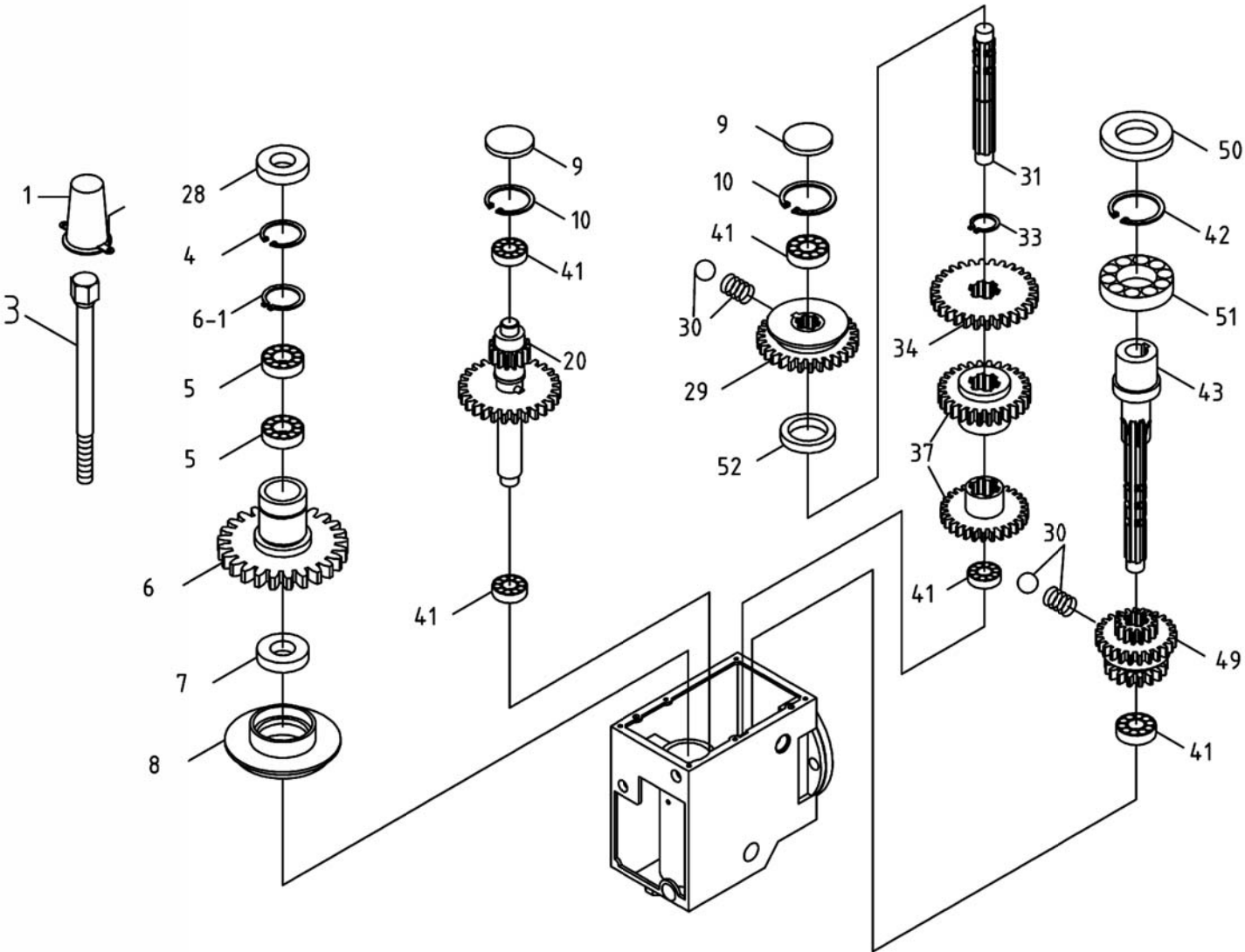
## 12.2.2 JMD-40GH,-45GH (non-powerfeed) Gear Head Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
11	2401011G	Head Casting		1
12	6112	Rubber Gasket		1
13	6513	Feed Base		1
14	6114	Lock Nut		2
15	BB-30206	Taper Roller Bearing	30206	1
16	6116-R8	Quill	R8	1
17	6117-R8	Spindle Shaft	R8	1
18	BB-30207	Taper Roller Bearing	30207	1
19	6119	Bearing Cap		1
24	2421003	Handle Rod Assembly		1
27	6127	Screw Key		1
35	6135	Bearing Spacer		1
39	6139N	Handle Rod		3
44	6144	Micro Adjusting Indicator		1
45	6145	Worm Cover		1
46	BB-6202Z	Ball Bearing	6202Z	2
47	6147	Worm Shaft		1
50-A	GHD20-50-A	Chuck Guard Assembly (#50-1 thru 50-9)		1
50-1	JMD18-125-1	Chuck Guard and Support Rod		1
50-2	JMD18-125-2	Support Rod (RE: JMD18-125-1)		1
50-3	TS-2361051	Lock Washer	M5	4
50-4	TS-1502021	Hex Socket Head Cap Screw	M5 x 10	2
50-5	GHD20-50-5	Chuck Guard Bracket		1
50-6	JMD18-125-5	Rotary Support Base		1
50-7	JMD18-125-6	Hex Socket Head Cap Screw	M5x15L	2
50-8	TS-1551041	Lock Washer	M6	2
50-9	6286490	Hex Socket Head Cap Screw	M6x15L	2
52	TS-0071141	Hex Cap Screw	5/8"-11 x 5-1/2"	2
53	GHD20-53	Oil Plug		1
54	GHD20-54	Threaded Rod		1
55	JMD40GH-55	Worm Shaft		1
56	JMD40GH-56	O-Ring		1
57-1	JMD40GH-57-1	Bracket		1
57-2	JMD40GH-57-2	Worm Gear		1
57-3	F006042	C-Ring, External	S14	2
57-4	JMD40GH-57-4	Shaft		1
57-5	JMD40GH-57-5	Ball Oiler		1
58	TS-0207041	Hex Socket Head Cap Screw	1/4"-20x3/4"	4
59-1	JMD40GH-59-1	Crank		1
59-2	TS-0271052	Set Screw	3/8"-24x1/2"	1
60A	JMD18-201A	Handle Assembly (#60-1 thru 60-3)		1
60-1	TS-0561031	Hex Socket Head Cap Screw	3/8"-16x16UNC	1
60-2	JMD18-201-2	Handle		1
60-3	TS-0561031	Hex Nut	3/8"-16	1
62	6142-2	Handwheel		1
63	F001600	Full Nylon Insert Lock Nut	5/8"-11	3
64	TS-0680081	Flat Washer	5/8"	2
65	F008242	Hex Cap Screw	5/8"-11 x 2-1/4"	3
66	2401066	Gear Lever Bracket		2
67	2401067	Gear Lever (Left)		1
68	2401068	Gear Lever (Right)		1
69	GHD20-69	Screw	1/4" x 1/2"	2
70	2401070	Lever Shaft (Right)		1
71	2401071	Lever Shaft (Left)		1
72	JMD40GH-72	Name Plate		1
	JET-92	JET Logo (not shown)	92x38MM	1
73	GHD20-73	Phillips Head Screw	3/16" x 3/8"	8
74	TS-0267021	Set Screw	1/4"-20 x 1/4"	8
75	2401075	Speed Lever		2
76	2401076	Scale		1

Index No.	Part No.	Description	Size	Qty
76-1	2401076-1	Pointer		1
77	GHD20-77	Screw		2
79	2412001G	Casting		1
81	GHD20-81	Oil Plug		1
82	TS-0209031	Hex Socket Cap Screw	3/8"-16 x 3/4"	6
83	GHD20-83	Miter Pin		2
84	2401084G	Cover		1
85	6185	Lock Knob		1
86	JMD40GH-86	Motor	1.5HP 1PH 115/230V	1
	JMD40GH-86MF	Motor Fan		1
	JMD40GH-86MFC	Motor Fan Cover		1
	JMD40GH-86SC	Start Capacitor	400MFD 125VAC	1
	JMD40GH-86CC	Capacitor Cover		1
	JMD40GH-86JB	Junction Box		1
	JMD40GH-86JBC	Junction Box Cover		1
87	GHD20-87	Oil Sight Glass		1
88	GHD20-88	Key	6 x 6 x 30mm	1
89	GHD20-89	Brass Fitting		1
90	6286478	C-Ring, External	S12	2
92	6192	Block		1
93	6193	Nut		1
94	6194	Support Base		1
95	6195	Knurled Knob Assembly		1
96	GHD20-96	Oil Seal		2
102	61102	Limit Plate		1
103	61103S	Spring and Cover (includes #104)		1
104	61104	Spring (RE:61103S)		1
105	61105	Spring Base		1
106	61106	Pinion Shaft		1
107	61107	Worm Gear		1
108	61108G	Feed Cover		1
110	61110	Spring Base		1
111	6138	Lock Bolt w/ Knob		1
112	TS-0209051	Hex Socket Head Cap Screw	3/8"-16 x 1"	3
115	61115	Compression Spring		1
119	6126-1	Collar (threaded)		1
120	6125-1	Collar Nut		1
121	6125-2	Collar		1
124	JMD40GH-124	Lamp Assembly	110V	1
125	TS-2284352	Phillips Pan Head Machine Screw	M4-0.7x35L	2
126	GHD20-126	Lamp Base		1
127	TS-1503031	Hex Socket Head Cap Screw	M6-1.0 x 12L	2
130	TS-1501021	Hex Socket Head Cap Screw	M4-0.7 x 8	1
134	TS-0050091	Hex Cap Screw	1/4"-20 x 2"	1
135	TS-0561011	Hex Nut	1/4"-20	1
136	F012072	Roll Pin	Ø4x20L	1
137	GHD20-137	Star Washer, Ext. Tooth	M30	1
139	GHD20-139	Screw	3/16" x 3/4"	3
140	GHD20-140	Spring Pin	Ø3x12L	1
141	TS-0561031	Hex Nut	3/8"-16	1
142	GHD20-142	Double Rd. Hd. Key	7 x 7 x 20 mm	1
143	TS-0208021	Hex Socket Head Cap Screw	5/16"-18 x 1/2"	2
145	TS-0270021	Set Screw	5/16"-18x 5/16"	1
146	TS-0267021	Set Screw	1/4"-20 x 1/4"	1
147	GHD20-147	Hex Socket Head Cap Screw	3/16" x 7/16"	2
148	GHD20-148	C-Ring, External	S15	1
150	TS-0561071	Hex Nut	5/8"-11	2
151	TS-0680081	Flat Washer	5/8"	2
184	F000197	Phillips Pan Hd Machine Screw	#8-32 x 1/4"	1
185	GHD20-185	Flat Washer	1/4"	1
187	TS-0680021	Flat Washer	1/4"	1
187-1	TS-0720071	Lock Washer	1/4"	1

Index No.	Part No.	Description	Size	Qty
188	GHD20-188	Screw	3/16" x 3/8"	1
249	GHD20-249	Rivet		2
287	GHD20-287	Spring Pin	Ø4x16Lmm	2
293	HP309	Taper Pin	M6xØ7 (1:48)	1
315	TS-0680011	Flat Washer	3/16"	2
316	GHD20-374	Flat Washer	1/2"x7/8"x2"	1
330	2401085	Dust Plate		1
339	JMD40GH-339	For/Rev Switch		1
340	GHD20-340	Screw		2
341	JMD40GH-341	Motor Cord (not shown)	14AWGx5C 300V	1
342	JMD40GH-342	Power Cord (not shown)	.3x3.31mm <sup>2</sup> 12AWG, 5-20P	1
	LM000286	Warning Label, Mill-Drills (not shown)		1

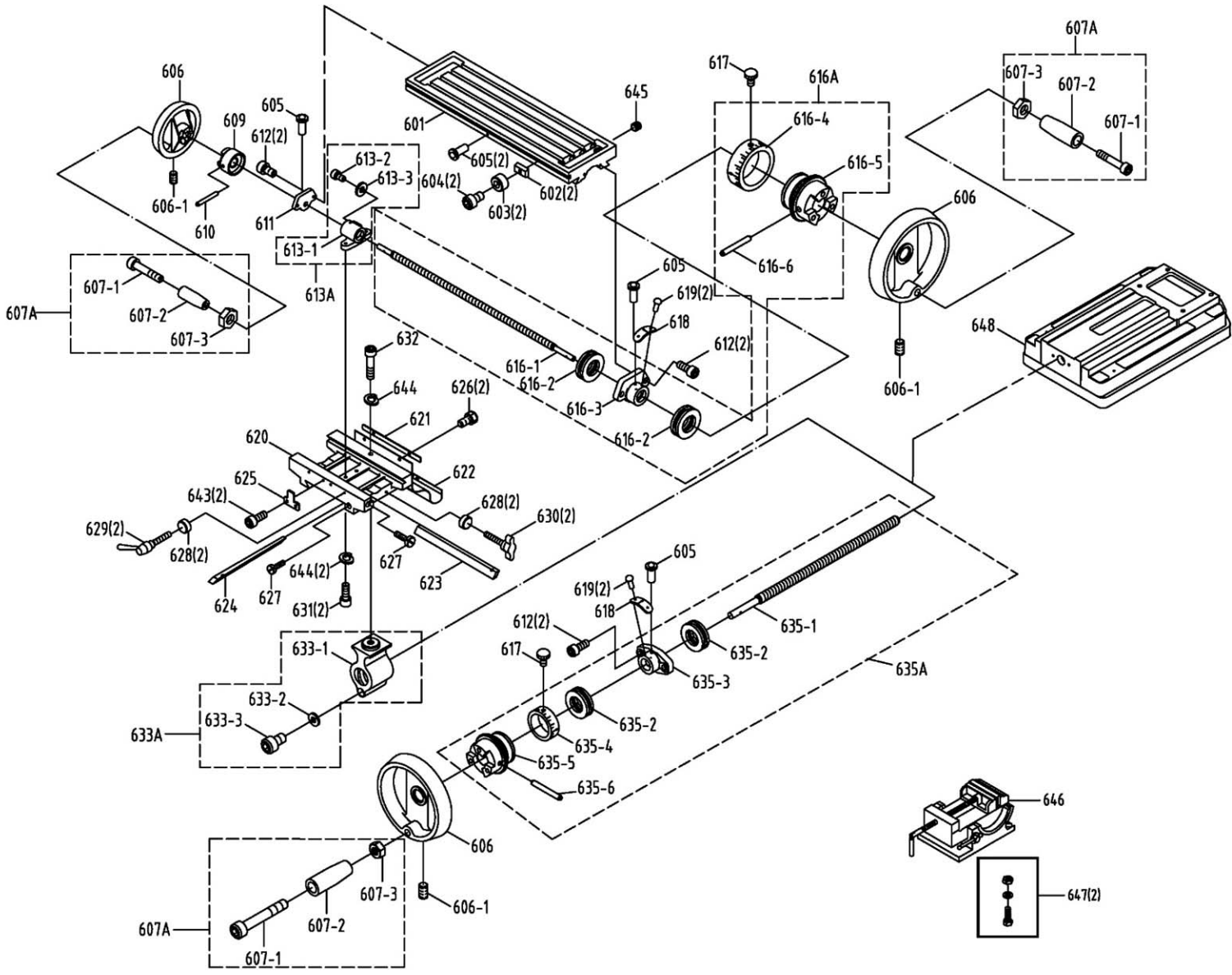
12.3.1 JMD-40GH,-45GH (non-powered) Gears Assembly – Exploded View



### 12.3.2 JMD-40GH,-45GH (non-powerfeed) Gears Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
1	2401001-2	Main Shaft Cover		1
3	JMD40GH-03	Draw Bar	7/16"	1
4	GHD20-4	Retainer Ring, Internal	R68	1
5	BB-6008ZZ	Ball Bearing	6008ZZ	2
6	2401006	Idle Gear	53T	1
6-1	F006055	C-Ring, External	S40	1
7	GHD20-7	Oil Seal		1
8	2401008	Oil Seal Ring		1
9	GHD20-9	Dust Cover		2
10	GHD20-10	C-Ring, External	S17	2
20	2401020A	Gear Shaft Assembly	15/41T	1
28	GHD20-28	Oil Seal		1
29	2401029N	Idle Gear	42/16T	1
30	GHD20-30	Steel Ball w/ Spring	5/16"	3
31	2401031	Pinion Shaft (RE: T2401031BS)		1
	T2401031BS	Pinion Shaft w/Gear Assembly (includes #29,31,33,34,37,52)		1
33	GHD20-33	C-Ring	S18	1
34	2401055N	Idle Gear	44T	1
37	2401037N	Idle Gear (2 piece)	35/28T	1
41	BB-6002ZZ	Ball Bearing	6002ZZ	5
42	GHD20-42	C-Ring, Internal	R62	1
43	2401043	Pinion Shaft (RE: T2401043BS)		1
	T2401043BS	Pinion Shaft w/Gear Assembly (includes #,43,49,50)		1
49	2401049N	Idle Gear (RE: T2401043BS)	15/31/23T	1
50	GHD20-50	Oil Seal		1
51	BB-6007ZZ	Ball Bearing	6007ZZ	1
52	2401192	Bushing		1

12.6.1 JMD-45GH,-45GHPF Table and Base Assembly – Exploded View





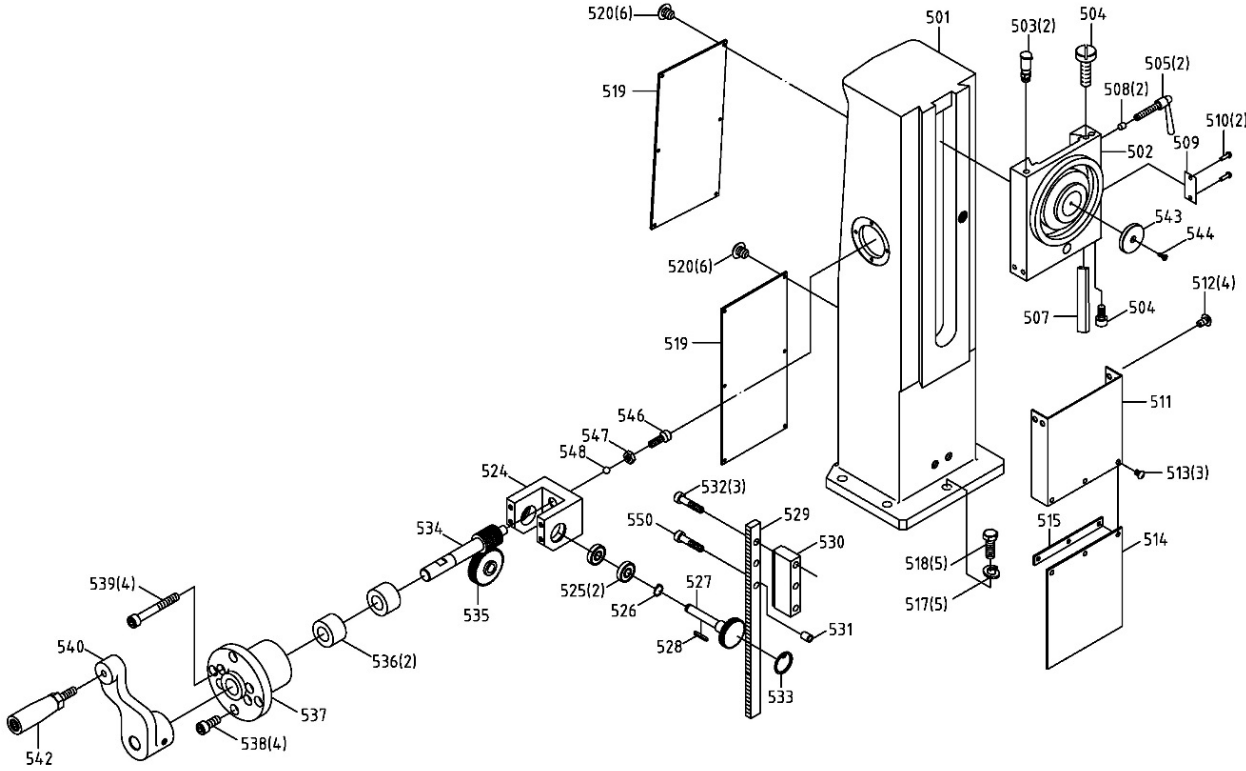
## 12.6.2 JMD-45GH,-45GHPF Table and Base Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
601	JMD18-228G	Table	31L	1
602	JMD18-229	Fixed T-Block		2
603	JMD18-230	Stop Ring		2
604	TS-0207021	Hex Socket Head Cap Screw	1/4"-20x1/2"	2
605	JMD18-368	Ball Oiler	1/4"	5
606	JMD18-201	Table Handwheel		3
606-1	TS-0267041	Set Screw	1/4"-20x3/8"	3
607A	JMD18-201A	Handle Assembly (#607-1 thru 607-3)		3
607-1	JMD18-201-1	Hex Socket Head Cap Screw (RE: JMD18-201-2)	3/8"-16x16	3
607-2	JMD18-201-2	Handle		3
607-3	TS-0561031	Hex Nut	3/8"-16	3
609	JMD18-220	Table Clutch		1
610	JMD18-366	Spring Pin	5x38L mm	1
611	JMD18-222	Left Flange		1
612	TS-0208061	Hex Socket Head Cap Screw	5/16"-18x1"	6
613A	JMD18-223A	Table Nut Set (#613-1 thru 616-3)		1
613-1	JMD18-223	Table Nut	TM23.7-10	1
613-2	TS-1502041	Hex Socket Head Cap Screw	M5-0.8x16	1
613-3	TS-1550031	Flat Washer	M5	1
616A	JMD18-224A	Table Screw Assembly (#616-1 thru 616-6)		1
616-1	JMD18-224	Table Lead Screw		1
616-2	BB-51103	Thrust Bearing	51103	2
616-3	JMD18-226	Right Flange		1
616-4	JMD18-202-1	Graduated Dial		1
616-5	JMD18-202	Dial Clutch		1
616-6	JMD18-366	Spring Pin	5x38L mm	1
617	JMD18N-617	Link Screw		2
618	JMD18-121	Indicator Plate		2
619	JMD18-204-2	Rivet	2mm	4
620	JMD18-216G	Center Base	31L	1
621	JMD18-219	Anti-Dust Plate		1
622	JMD18-217	Anti-Dust Plate Assembly		1
623	JMD18-227	Gib Strip	31L	1
624	JMD18-207	Gib Strip	31L	1
625	JMD18-214	Fixed Block		1
626	TS-0051011	Hex Cap Screw	5/16"-18x1/2"	4
627	JMD18-212	Gib Strip Bolt		2
628	JMD18N-628	Bushing		4
629	JMD18-213-1	Locking Handle		2
630	JMD18-213	Leaf Screw		2
631	TS-0208061	Hex Socket Head Cap Screw	5/16"-18x1"	2
632	TS-0051101	Hex Socket Head Cap Screw	5/16"-18x2-1/4"	1
633A	JMD18-215A	ACME Nut Assembly (#633-1 thru 633-3)		1
635A	JMD18-205A	ACME Nut Assembly (#635-1 thru 635-6)		1
635-1	JMD18-205	Cross Lead Screw	TM23	1
635-2	BB-51103	Thrust Bearing	51103	2
635-3	JMD18-204	Square Flange		1
635-4	JMD18-202-1	Graduated Dial		1
635-5	JMD18-202	Dial Clutch		1
635-6	JMD18-366	Spring Pin	5x38 mm	1
643	TS-0208022	Hex Socket Head Cap Screw	5/16"-24x1/2"	2
644	JMD18N-644	Lock Washer	5/16"	3
645	JMD18N-645	Plug	PT1/4"x3/8"	1
646	365534	Angle Vise		1
647	365534-01	Hardware Package (2 Bolts, 2 Nuts, 2 Washers)		1
648	JMD45GH-648	Base		1
	JMD40GH-AP	Accessory Package (not shown) *		1

\* Contents of JMD40GH-AP Accessory Package:

.....JMD18-020.....	Cutter Arbor .....	1
.....JMD18-022.....	Handle .....	4
.....JMD18-039.....	Handle Rod.....	3
.....JMD18-040.....	Knob .....	3
.....JMD18-050.....	Lock Handle.....	1
.....561704 .....	Drill Chuck w/Chuck Key .....	JT6, 1/2" (13mm) ..... 1
.....JMD18-086.....	Face Mill Cutter Assembly.....	3" (74mm) ..... 1
.....JMD18-086A .....	Cutter Insert (Installed) .....	4
.....JMD18-021.....	Chuck Arbor (Installed).....	1
.....365534 .....	Angle Vise .....	1
.....JMD18-058.....	Handle Crank.....	1
.....JMD18-201.....	Wheel.....	3
.....TS-152704 .....	Hex Wrench.....	3mm..... 1
.....TS-152705 .....	Hex Wrench.....	4mm..... 1
.....TS-152706 .....	Hex Wrench.....	5mm..... 1
.....TS-0209051 .....	Hex Socket Cap Screw.....	3/8"-16x1" ..... 1
.....TS-0680041 .....	Flat Washer .....	3/8"..... 1
.....365534-01 .....	Hardware Package (2 Bolts, 2 Nuts, 2 Washers) ....	1
.....JMD40GH-PW .....	Plum Wrench .....	1

12.7.1 JMD-45GH,-45GHPF Square Column Assembly – Exploded View



## 12.7.2 JMD-45GH,-45GHPF Square Column Assembly – Parts List

Index No.	Part No.	Description	Size	Qty
501	JMD45GH-501	Vertical Square Column		1
502	JMD45GH-502	Headstock Swivel Base		1
503	JMD45GH-503	Oil Cup	PT1/8"	2
504	JMD45GH-504	Adjustable Screw		2
505	JMD45GH-505	Handle		2
507	JMD45GH-507	Gib		1
508	JMD45GH-508	Bushing		2
509	JMD45GH-509	Index		1
510	JMD45GH-510	Rivet	φ2-5L	2
511	JMD45GH-511	Anti-Dust Plate		1
512	F001216	Phillips Pan Hd Machine Screw BO	M5x10L	4
513	F001175	Phillips Pan Hd Machine Screw BO	M4x8L	3
514	JMD45GH-514	Anti-Dust Plate		1
515	JMD45GH-515	Press Board		1
517	TS-0720131	Lock Washer	5/8"	5
518	TS-0071051	Hex Cap Screw	5/8"-11x2-1/2"L	5
519	JMD45GH-519	Steel Plate		2
520	F001216	Phillips Pan Hd Machine Screw BO	M5x10L	12
524	JMD45GH-524	Bracket		1
525	BB-6003ZZ	Ball Bearing	6003ZZ	2
526	F006045	C-Retainer Ring, External	S17	1
527	JMD45GH-527	Gear Shaft		1
528	JMD45GH-528	Key, Double Rd. Head	5x5x28L mm	1
529	JMD45GH-529	Rack		1
530	JMD45GH-530	Block		1
531	JMD45GH-531	Bushing		1
532	F005671	Hex Socket Head Cap Screw	M12x85L	4
533	F006033	C-Retainer Ring, Internal	R35	1
534	JMD45GH-534	Worm Shaft		1
535	JMD45GH-535	Worm Gear		1
536	JMD45GH-536	Bearing		2
537	JMD45GH-537	Support Flange		1
538	TS-1504051	Hex Socket Head Cap Screw	M8x25L	4
539	TS-1504121	Hex Socket Head Cap Screw	M8x60L	4
540	JMD40GH-59-1	Crank		1
542	JMD18-201A	Handle Assembly		1
543	JMD45GH-543	Swivel Base Flange		1
544	JMD45GH-544	Hex Socket Flat Head Screw		1
546	TS-1504041	Hex Socket Head Cap Screw	M8x20L	1
547	TS-1540061	Hex Nut	M8	1
548	SB-6MM	Steel Ball	Ø6mm	1
550	F005461	Hex Socket Head Cap Screw	M12-1.75x75	1