

JET

JMD-1144GHV MILLING AND DRILLING MACHINE SPF DRO

Original:
GB
Operating Instructions



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In addition to the safety requirements contained in these operating instructions and your country's applicable regulations, you should observe the generally recognized technical rules concerning the operation of metal machines. Any other use exceeds authorization. In the event of unauthorized use of the machine, the manufacturer renounces all liability and the responsibility is transferred exclusively to the operator.

General safety notes

Read and understand the entire instruction manual before attempting assembly or operation.



Keep this operating instruction close by the machine, protected from dirt and humidity, and pass it over to the new owner if you part with the tool. No changes to the machine may be made. Daily inspect the function and existence of the safety appliances before you start the machine. Do not attempt operation in this case, protect the machine by unplugging the power cord.

Before operating the machine, remove tie, rings, watches, other jewellery, and roll up sleeves above the elbows.

Remove all loose clothing and confine long hair.

Wear safety shoes; never wear leisure shoes or sandals.

Always wear the approved working outfit:

- safety goggles
- ear protection



Do not wear gloves while operating this machine.



Install the machine so that there is sufficient space for safe operation and workpiece handling.

Keep work area well lighted.

The machine is designed to operate in closed rooms and must be bolted stable on firm and levelled table surface or on the supplied cabinet stand.

Make sure that the power cord does not impede work and cause people to trip.

Keep the floor around the machine clean and free of scrap material, oil and grease.

Stay alert!

Give your work undivided attention.

Use common sense. Do not operate the machine when you are tired.

Keep an ergonomic body position. Maintain a balanced stance at all times.

Do not operate the machine under the influence of drugs, alcohol or any medication. Be aware that medication can change your behaviour.



Never reach into the machine while it is operating or running down.



Keep children and visitors a safe distance from the work area. Never leave a running machine unattended. Before you leave the workplace switch off the machine.

Do not operate the electric tool near inflammable liquids or gases. Observe the fire fighting and fire alert options, for example the fire extinguisher operation and place.

Do not use the machine in a damp environment and do not expose it to rain.

Before machining, remove any nails and other foreign bodies from the workpiece.

Work only with well sharpened tools.

Machine only stock which rests securely on the table. Always close the chuck cover before you start the machine.

Specifications regarding the maximum or minimum size of the workpiece must be observed.

Do not remove chips and workpiece parts until the machine is at a standstill.

Do not stand on the machine.

Connection and repair work on the electrical installation may be carried out by a qualified electrician only.



Have a damaged or worn power cord replaced immediately.

Make all machine adjustments or maintenance with the machine unplugged from the power source.



Do not over extrude material from the back of spindle bore while machine running.



WARNING

1. Read and understand the entire instruction manual before operating machine.
2. Always wear approved safety glass/face shield while using this machine.
3. Make certain the machine is properly grounded.
4. Before operating the machine, remove tie, rings, Watches other jewelry, and roll up sleeves above the elbows. Remove all loose clothing and confine long hair. DO NOT wear glove.
5. Keep the floor around the machine clean and free of scrap material, oil and grease.
6. Keep machine guards in place at all times when the machine is in use. If remove for maintenance purposes , use extreme caution and replace the guards immediately.
7. DO NOT over reach. Maintain a balance stance at all time So that you do not fall or lean against blades or other moving parts.
8. Make all machine adjustments or maintenance with the Machine unplugged from the power source.
9. Use the right tool. Don't force a tool or attachment

to do a job which it was not designed for..

10. Make certain the motor switch is in the OFF position

Before connecting the machine to the power supply.

11. Keep visitors a safe distance from the work area.

12. Never attempt any operation or adjustment if the

Procedure is not understood.

13. Keep fingers away from revolving parts and cutting

Tools while in operation.

14. Do not attempt to adjust or remove tools during

operation.

15. Always keep cutters sharp.

16. Keep away from the turning handwheel, especially high

speed.

17. Must pour the machine oil into the Gear Box and the power

Feed(optional) rightly.

18. Failure to comply with all of these warnings may cause

serious injury.

1. Attention

1.1 Inspection And Acceptance

Please check carefully when open the package and make sure no parts are missing.

1.2 Safety

Please read the operation manual carefully before the installation and adjustment of the machine. when finish the installation ,check all the details and trial run the machine idly before put it into operation .

1.3 Caution

Keep in mind the safety measures for electrical and operating protection.

2. Work Environment

2.1 The elevation of workshop has to be 2000m or less.

2.2 NO conductive dust allowed.

2.3 NO explosive factor allowed.

2.4 NO corrosive gas or steam which may corrode metal or damage the insulation.

2.5 Keep away from the source of impact or vibration.

3. Operation Instruction

3.1.1 Before starting themachine,read carefully the operation manual and be fully acquainted with all the details.

3.1.2 The operator should be familiar with all the rules and points of attention of running and maintaining the machine.

3.1.3 Remove all the anti-rust coating or grease from the machine .

3.1.4 There' s a reliable ground protection the ground wire must be connected properly before it in operation.

4. Lubrication

Lubricate the sliding and rotating part before trial run.

Pour NO.40 machine oil into the Gear Box and power Feed(optional).Till indicating through the oil level indicators then do a overall check.

Keep oil lever above the mark.

I USAGE

The machine is used for cutting metals and nonmetals. It's suitable to drill, and widely used in the field for instrument, machining, repairing for cutting a single part or a batch of parts.

II USE AND MAINTENANCE

(Refer to chart 1.)

1. The user must read the Operation Manual carefully, know structure and ability of every handle, the system of transmission and lubrication well.

2. Before operating, inspect the normal condition of the column lock handle, the spindle sleeve and electric equipments. The ground line must be connected in the ground.

3. When the position of spindle Box to the working table needs to be adjusted, two clamping shafts ① located on the right side of the hoist descend sliding must be loosened firstly, then turn the hoist descend handle in front of machine, to hoist or descend the working table to the ideal position, finally clamp the clamping shaft ②.

4. A microfeeding institute is applied to the machine, before using, please turn the locking bolt ③ in right side to form the handle

body with microgear, then turn the wheel④ in front of the head, the microfeeding can be realized.

5. The handle body must be separated from microgear during drilling, when drilling finished, loosen the handle⑤, the sleeve will reset automatically. The elastic force can be adjusted after loosening the screw locating in bottom of Spindle Box and turning the spring to different position. The spindle sleeve clamping handle ⑥ should be clamped for milling. To obtain the best effect, pls choose the 3blade vertical milling tool, the most, the working table must be hoisted to the nearest position to the spindle when the 2blade milling tool is used.

6. The spindle box that transmitted by the belt can be survived at 90° (by gear $\pm 45^\circ$) when operating, pls loose the retaining nut and pay attention these nuts need only 1 pitch, then swivel screw lever by socket headscrew wrench(S21-24) to make the spindle box swivel to the place required (clockwise turn the nut, the spindle box will counter clockwise turn, or otherwise), while turning, pls pay attention to the following item:

i: while the spindle box turn from horizontal position or cloned position to vertical position, pls help push the upper of spindle box and gently twitter it.

ii: while the spindle box turn from vertical position to

horizontal position or cloned position, pls push the upper of spindle box with hand and twitter it gently.

7. The cross—slide of spindle box can be realized through the ram moving. For cross sliding, pls firstly loosen the two clamping bolts⑨ locating on the right side of the ram, turn the gear shaft ⑩, to move the ram and spindle box, and tight the two clamping bolts.

8 .The spindle box can turn 360° around the column in the horizontal plane. To realize this, firstly loosen the 4 pcs of clamping nuts(11) un—der the ram, turn the ram to the suitable position, finally tight the 4 pcs of clamping nuts.

9. The spindle' s turn and revolve can be realized by the switch loceted in the right side of hoistdescend sliding.

10. The horizontal milling can be realized . The spindle box must be turn 180° when the tool shaft and jack applied for assistance.

11. If the machine doesn' t work well or have irregular noise, plsimme—diately shut off machine.

SPECIFICATION

Model	JMD-1144GHV SPF DRO
Max. drilling dia. (Iron)	30mm
Max. end milling width (Iron)	100mm
Max. vertical milling dia.(Iron)	25mm
Spindle taper	ISO40
Spindle travel (V)	120mm
Worktable size	1120x280mm
T-slot size	5x14mm
Worktable travel	580/270mm
Distance between Vertical spindle and surface of column	230-650mm
Distance between Vertical spindle and surface of table	35-415mm
Distance between Horizontal spindle and surface of table	320mm (max)
Swing of headstock	±45°
Spindle speed (V : 8 steps)	90-2000
Spindle speed (H : 12 steps)	40-1300
Motor power	V: 2.2kw H: 2.2kw
NW/GW	1350/1450kg
Packing size	1600x1450x2250mm

V: THE SYSTEM OF TRANSMISSION AND CHANGED SPEED

1. Transmission of power

The machine power is transmitted through gear on the shaft of motor and moving gears to the gear of spindle.

2. ① Vertical shaft: when change speed, first cut off power, then change the handle to the position (A or B, C or D) you want (Gear Head).

② Horizontal shaft: when change speed, must cut off power then change the handle (12, 13, 14) to the position (I or II or III; A or B; C or D).

Lubricate the gears often.

3. Belt head of machine transmit power from double speed motor to spindle through a V-belt .

Vertical shaft: when changing speed , open the two side cover of upper spindle box, loosen the tightened bolt of motor, move handle on the right side to loosen the belt , change bolt to the position needed, remove motor and make belt fitted, tighten the tightened bolt and then work. (Belt head)

VI THE LUBRICATION OF MACHINE AND ROLLING BEARING

1. Each rolling bearing to lubricated with lubricating fat on time (prefer to chart-2)

2. spindle, sleeve, column, table etc, should be lubricated at the right moment.

VII ELECTRIC SYSTEM

1. Electrical circuit adopt the advanced international component to make up, which make the machine easy to operate and safe.

VIII TRANSPORT AND ATTENTION

1. While transporting machine, must be careful to carry and put down.

IX SIMPLE MALFUNCTION & OBVIATION

1. If the motor does not turn, please inspect it is right to connect wire or check electrical source.

2. If the radial run out of spindle is big with noise and heat, please inspect wether spindle is too loose.

Pls spindle the nut on the spindle assembly to the fittest.

3. When the machine wobble, pls check the motor mount and lever lock nut screw, machine head support on the spindle, ifloosing, pls adjust and lock.

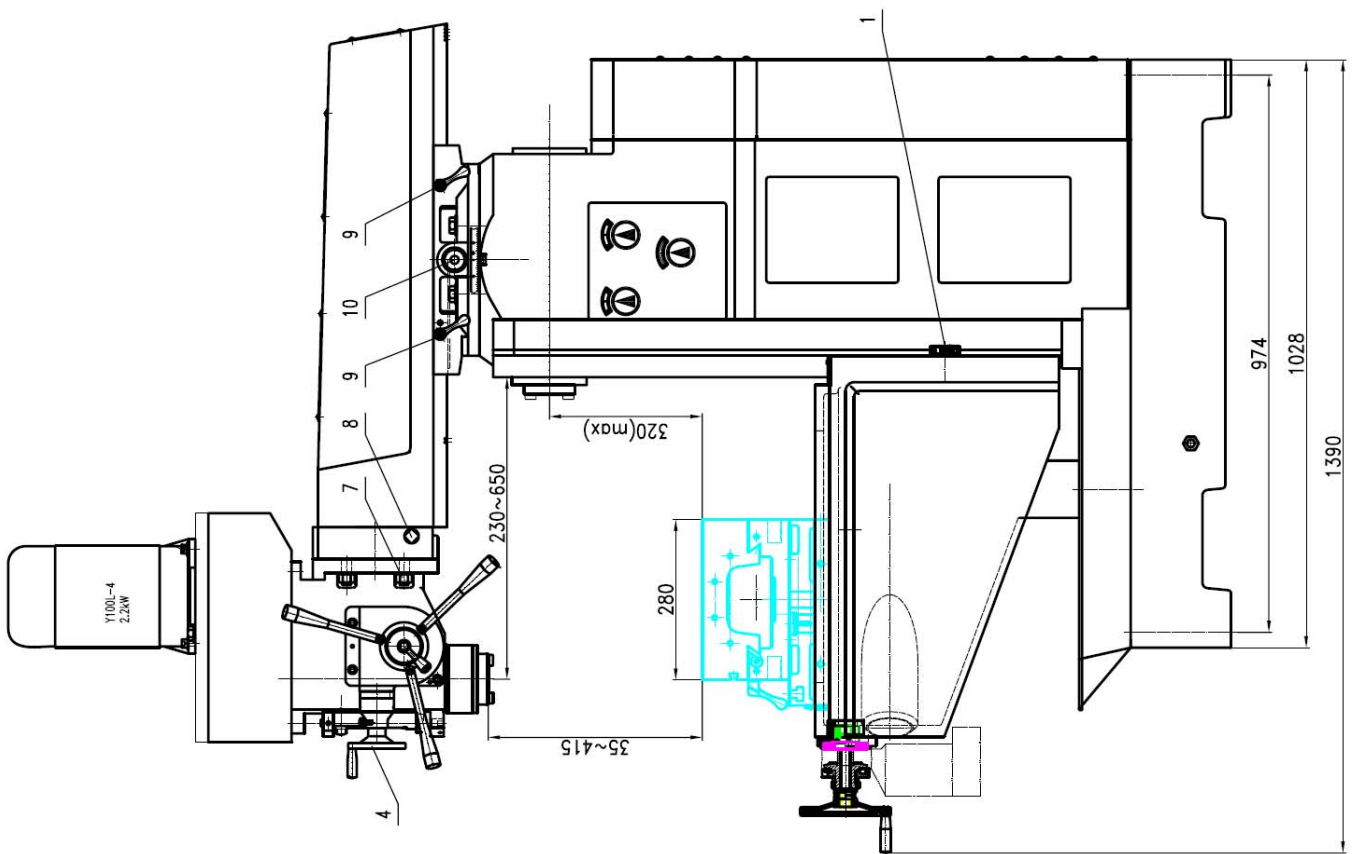
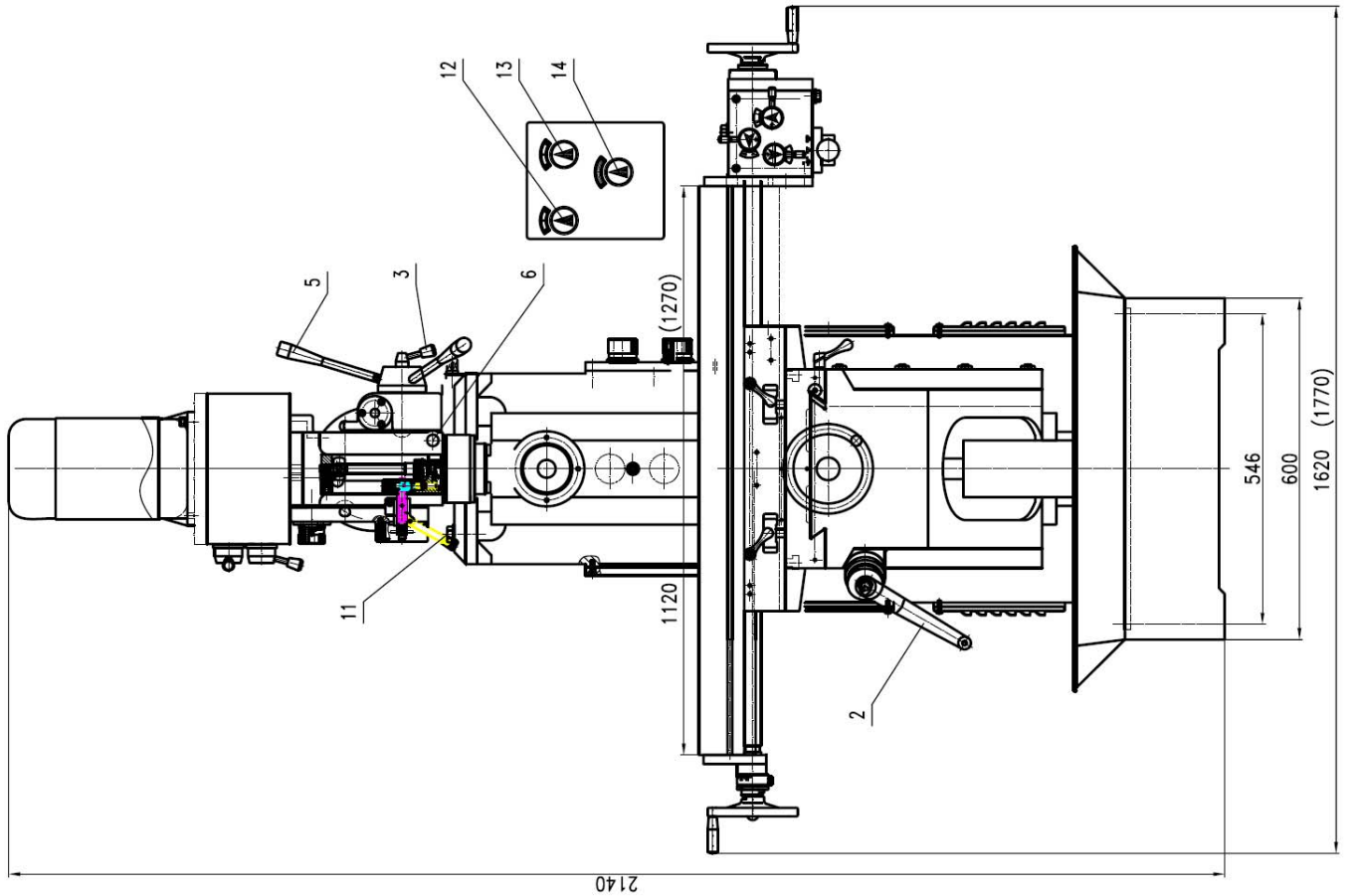
4. It is difficult for the spindle to rise, fall or not

replacing, pls inspect wether there is scrap iron and other something in the connection between spindle sleeve and gear shaft and fatigue of spindle, if finding them, pls clean them and apply oil and adjust spring to fittest.

5.If the knee table slide carrige does not rise steadily with noise, the table is steady, pls confirm wether wedge ship loose or not, and clean scrap iron add oil adjust wedge ship to fittest.

6.If there is noise in gear box,pls stop machine immediately to conform the position you require, then check that the oil meet standard.

7.Prohibited maintaining the machine with electric.



Preventive Maintenance

For securing the accuracy and life of the machine, we offer the following maintenance charts.

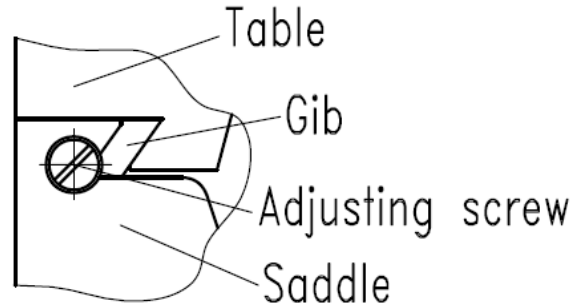
Frequency	Item
Daily	<ol style="list-style-type: none">1. It is necessary to oil each lubrication point before operation.2. It is necessary to release the clamps, clean and lubricate the table after operation.
Monthly	<ol style="list-style-type: none">1. Check all the gibs and adjust if necessary.2. Check all the backlash between screws and nuts ,and adjust it necessary.

MAINTENANCE

(1) Table saddle ways adjustment.

a. Remove all dirt (from area)

b. Turn the table gib screw clockwise while moving the until slight drag is felt.

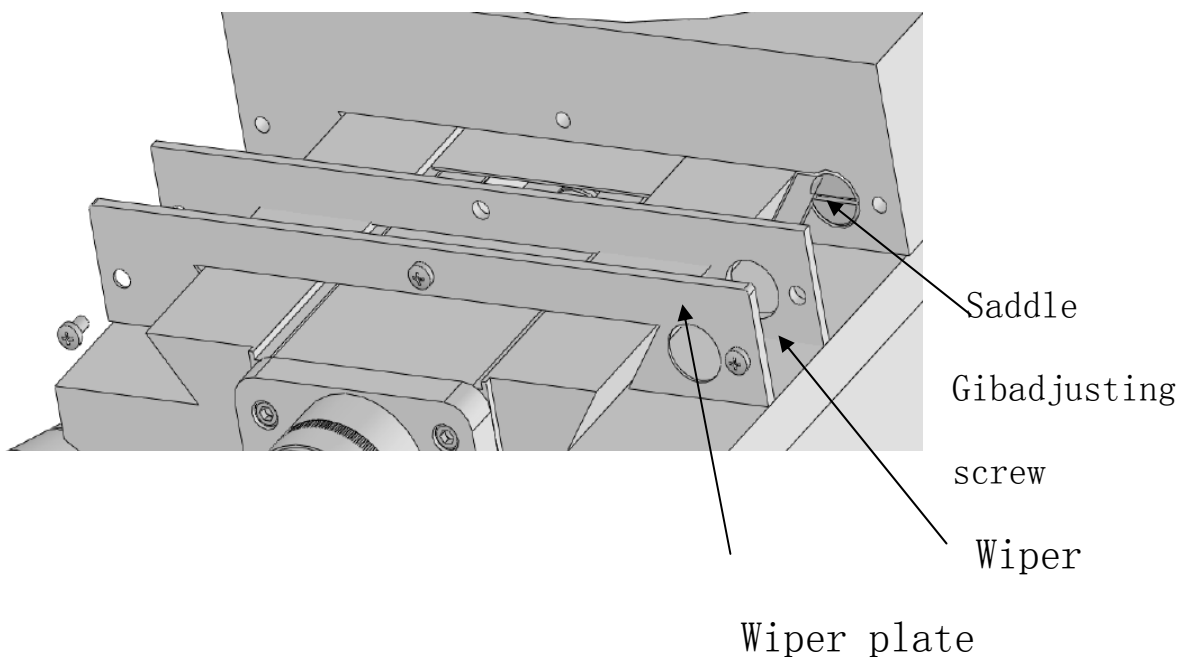


(2) Saddle knee ways adjustment.

a. Remove all dirt (from area)

b. Remove chip wiper guards and wiper.

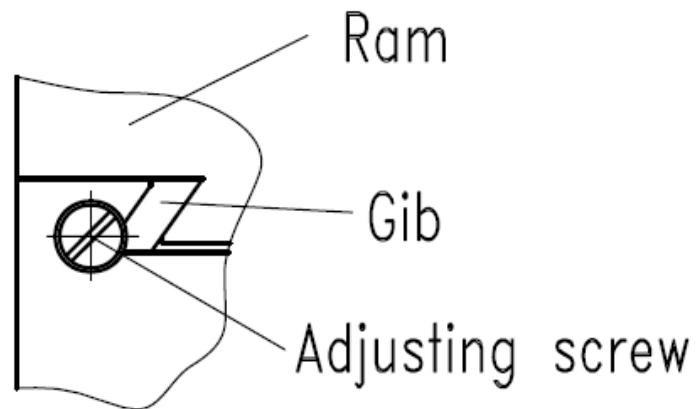
c. Turn gib adjusting screw clockwise while moving the saddle until slight drag is felt.



MAINTENANCE

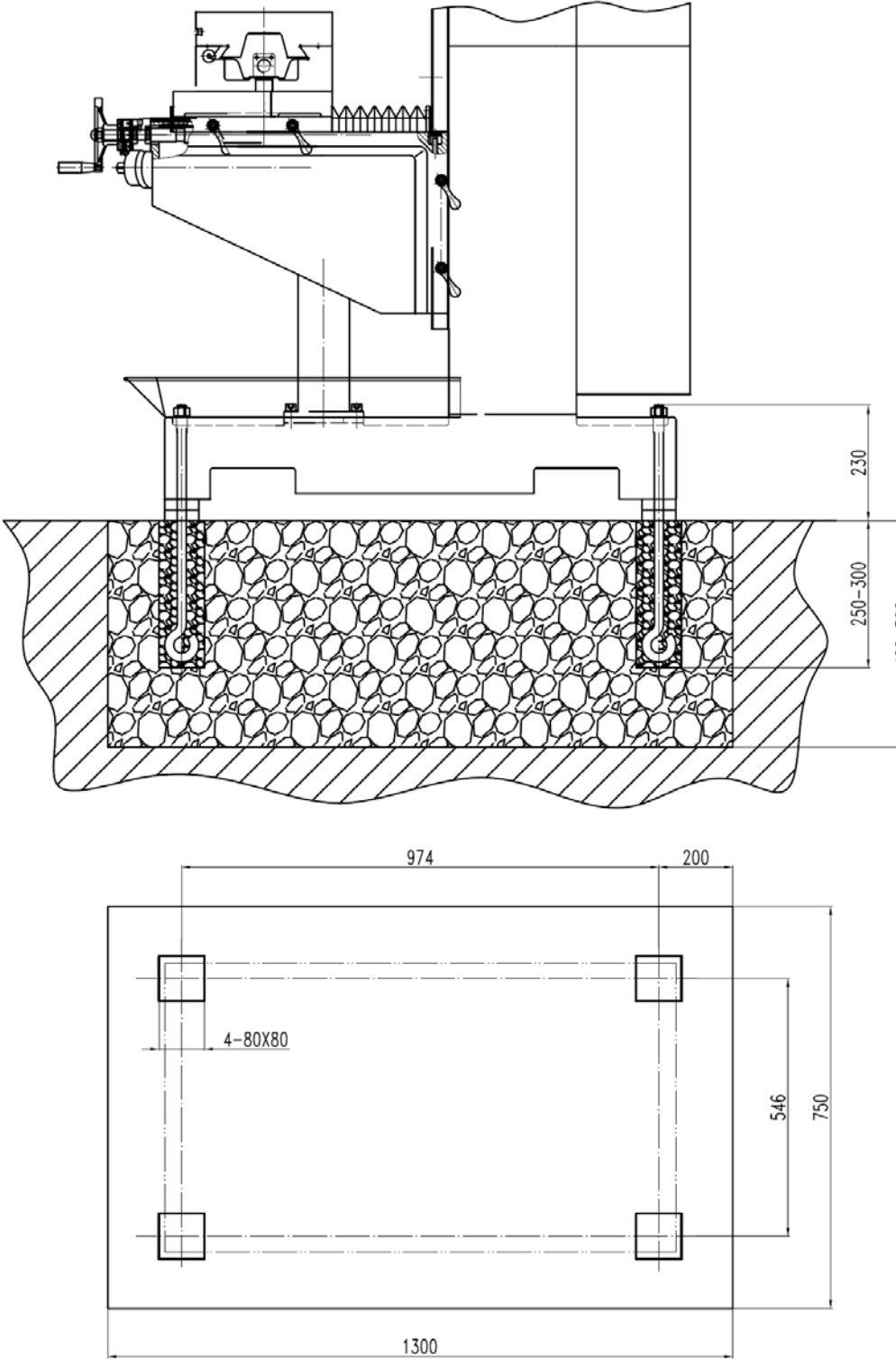
(3) Ram ways adjustment.

- a. Remove all dirt (from area)
- b. Turn the ram gib screw clockwise while moving the ram until slight drag is felt.



INSTALLATION

Ideally this machine should be Bolted to a concrete foundation. The machine should be placed on A solid level flo. or anti-vibration pads to prevent any rocking movement.



Foundation plan

INSTALLATION

Adjust the level of the machine to make sure the allowance is under 0.04/1000mm in the across and horizontal direction after fixing the machine on the base by four bolt.If necessary pads under the base.

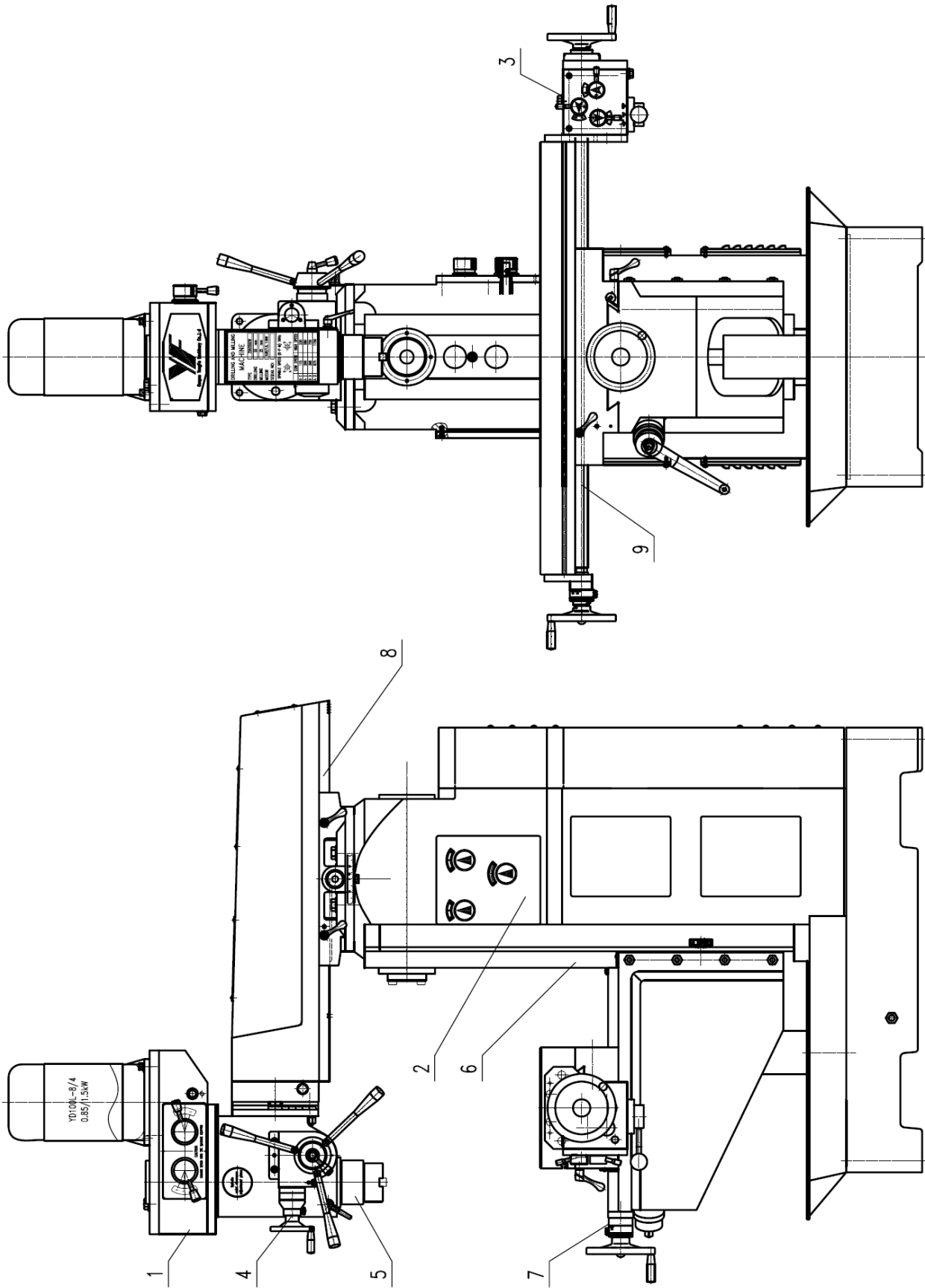
Trial Run



Before trial tun. Please carefully clean the anti-rust oil on the every part of the machine .But the metal tools and other tools which can hurt the parts surface are forbidden.Then coat a thin lager oil on the outer surface.

Lubricate the sliding and rotating part before trial run.Pour engine oil into the Gear Box and the Power Feed .Till indicating through the point then do a overall check.

Bofore putting the power,examine if the power parameters is consistent with the indicated parameters on the machine's date plate and at the same time the round direction of the spindle is all right.During the trial run,first run the machine unloaded at the lowest speed for around 30 min's then increase the speed step by step and mean while inspect if the handwheel or handle operates easily or reliably etc.

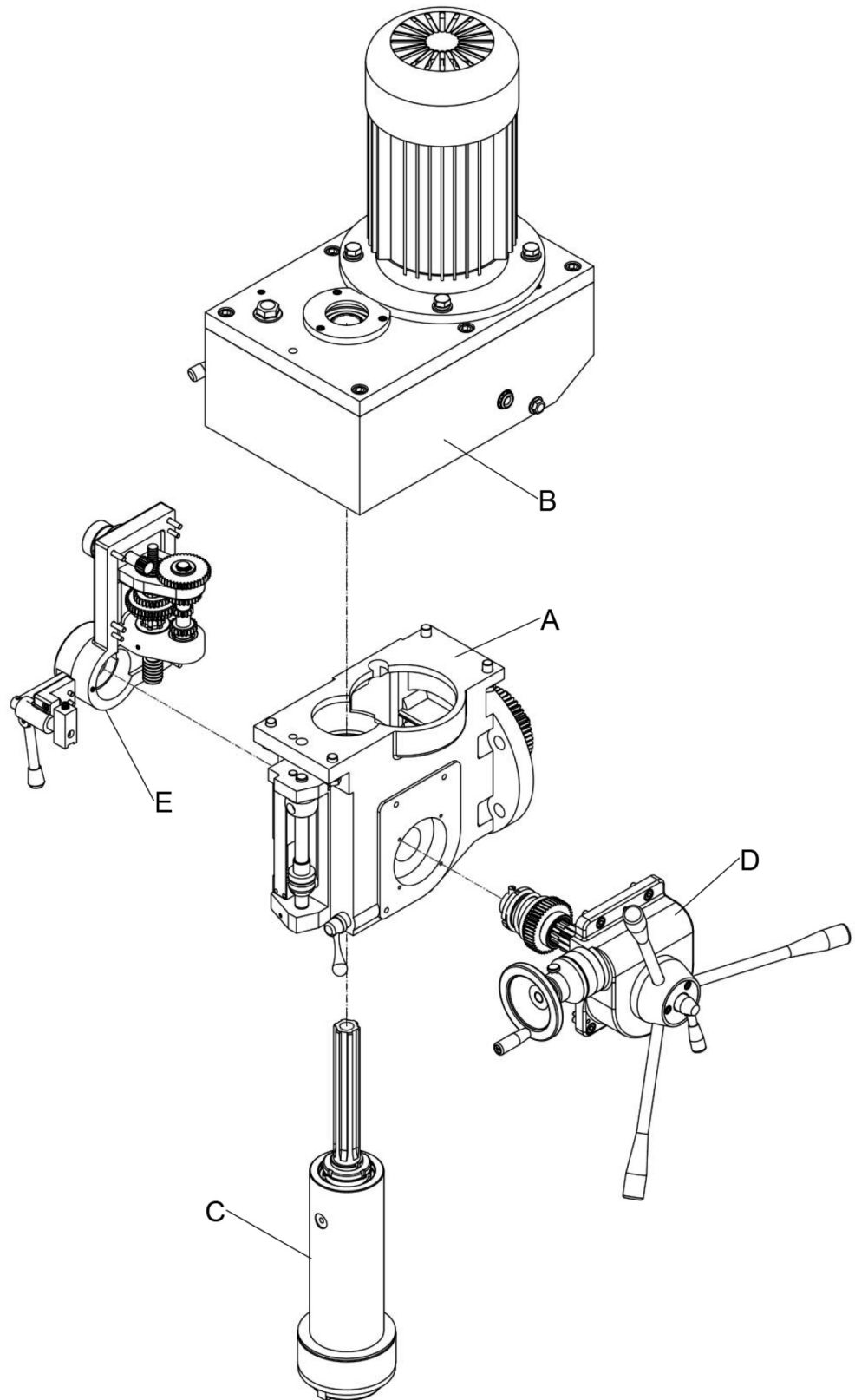
Notice:Must loosen the tighten handle before move the moving part.



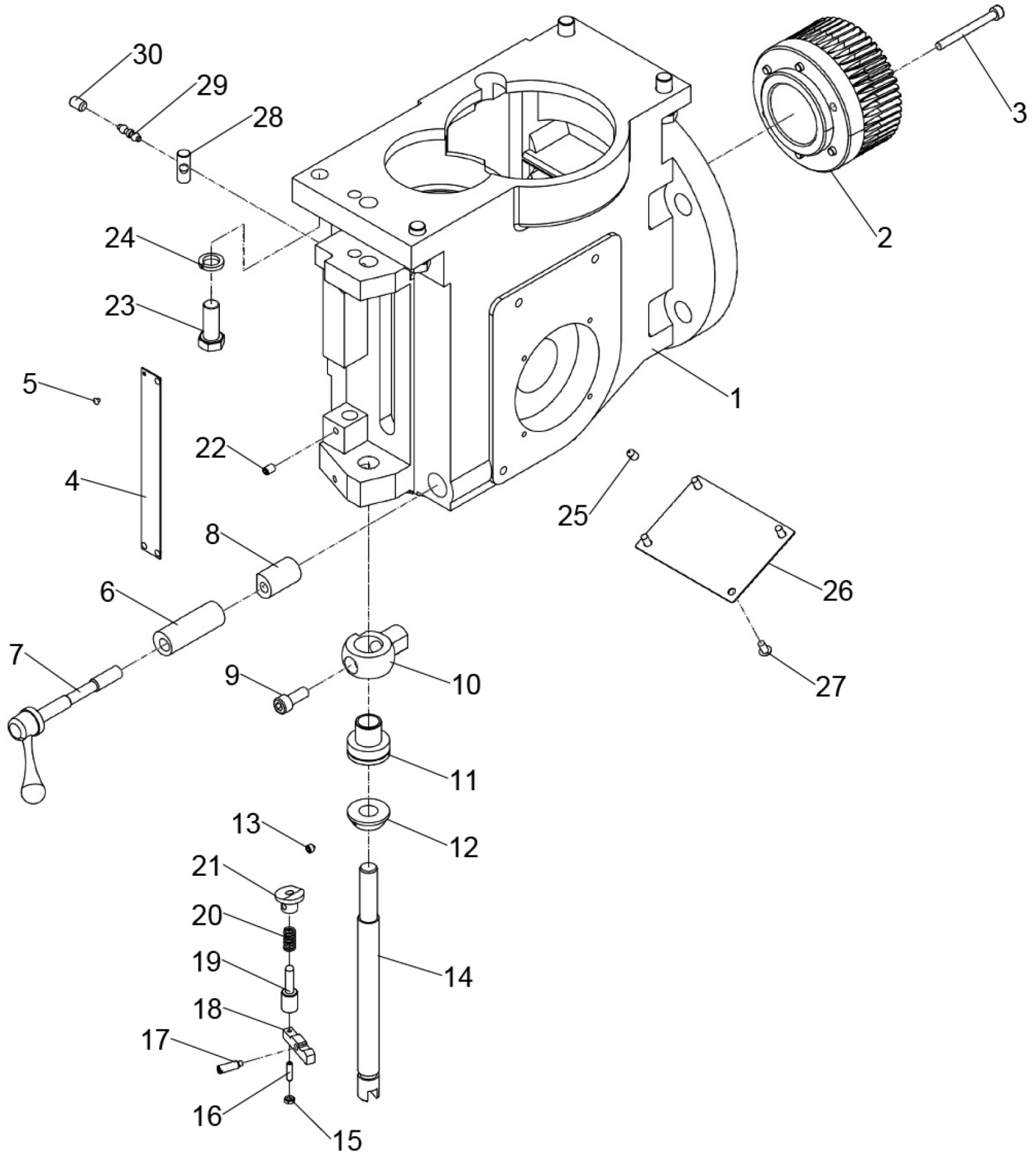
	1, 2, 3	Keep oil level, Change oil once every six months	N46 oil (summer)	N32 oil (winter)
	4,5,6,7,8,9	Fill oil four time per shift	N46 oil (summer)	N32 oil (winter)
Lubricating bearings with Li-grease, changing it once a year				

PARTS DIVISION AND PARTS LIST

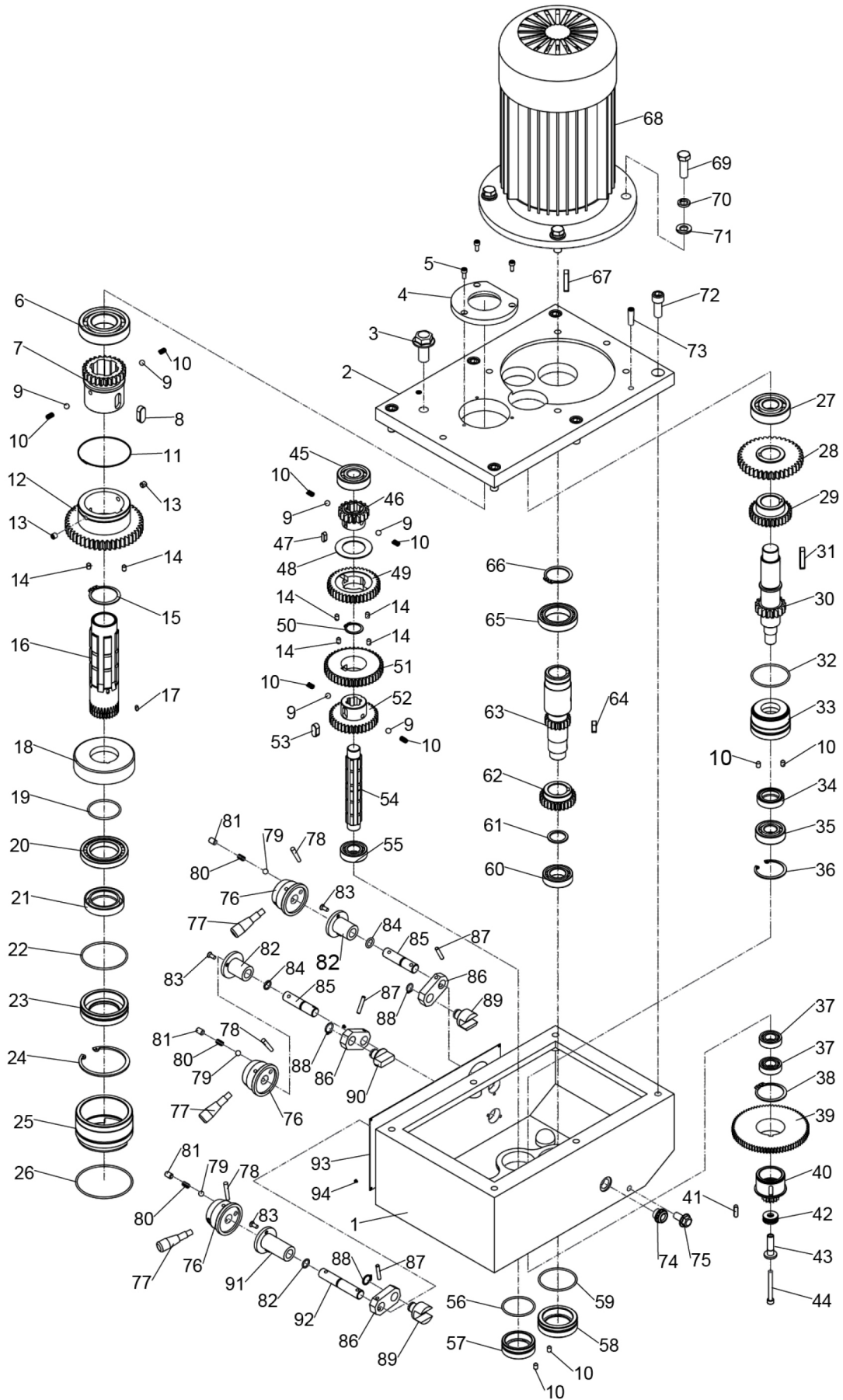
GEAR HEAD PARTS



JMD-1144GHV SPF DRO A: GEAR HEAD PARTS



JMD-1144GHV SPF DRO B: GEAR HEAD PARTS



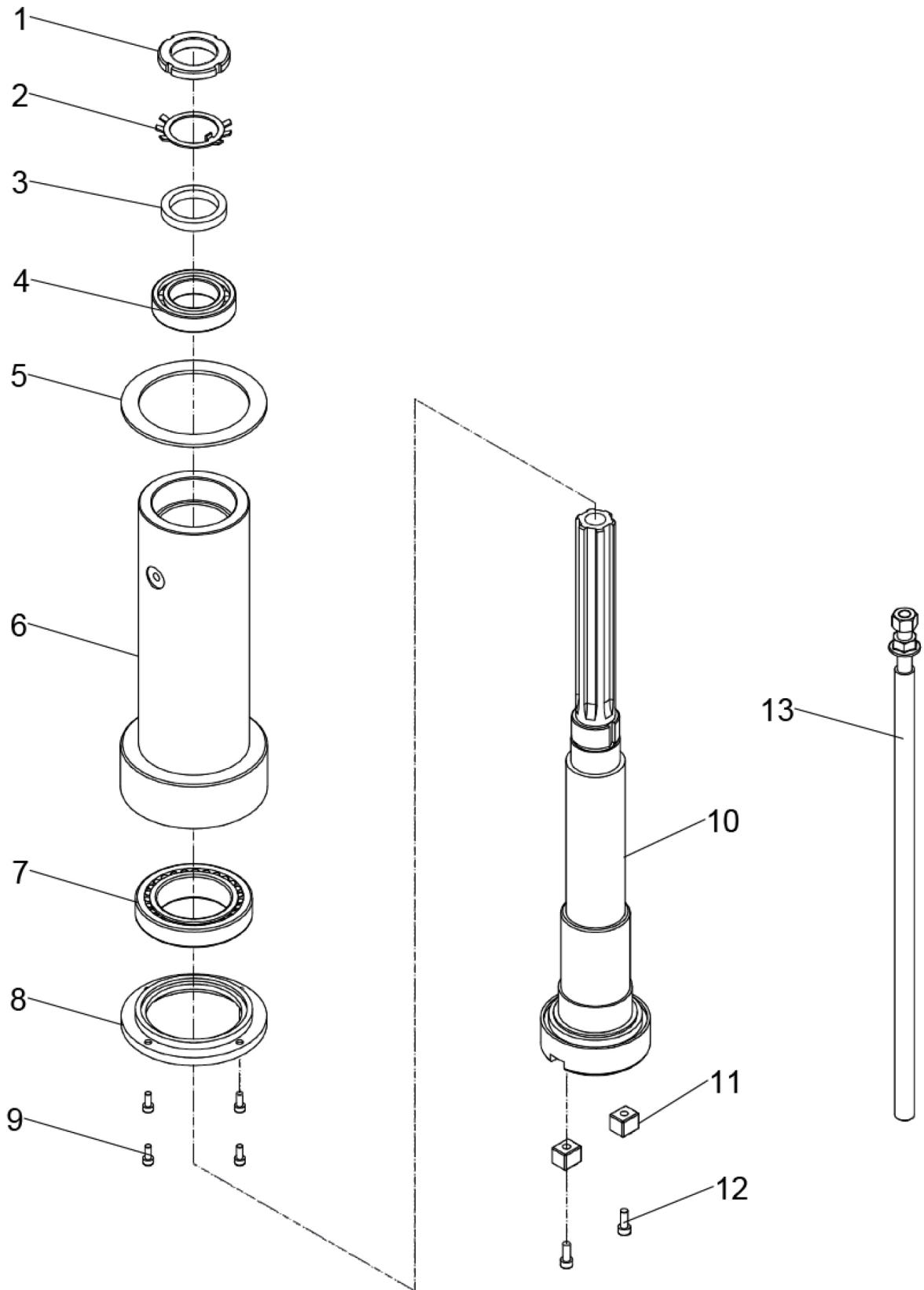
JMD-1144GHV SPF DRO B: GEAR HEAD PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-B1	GEAR BOX		1
2	JMD1144GHVSPF-B2	GEAR BOX COVER		1
3	JMD1144GHVSPF-B3	OIL FILL PLUG		1
4	JMD1144GHVSPF-B4	FLANGE		1
5	JMD1144GHVSPF-B5	CAP SCREW	M6x16	3
6	JMD1144GHVSPF-B6	BALL BEARING	6208ZZ	1
7	JMD1144GHVSPF-B7	GEAR	25T	1
8	JMD1144GHVSPF-B8	KEY	12x28	1
9	JMD1144GHVSPF-B9	STEEL BALL	6mm	6
10	JMD1144GHVSPF-B10	COMPRESSION SPRING		10
11	JMD1144GHVSPF-B11	RETAINING RING		1
12	JMD1144GHVSPF-B12	GEAR	47T	1
13	JMD1144GHVSPF-B13	SET SCREW	M8x8	2
14	JMD1144GHVSPF-B14	SET SCREW	M8x10	6
15	JMD1144GHVSPF-B15	EXT RETAINING RING	45mm	2
16	JMD1144GHVSPF-B16	SPLINE BUSHING		1
17	JMD1144GHVSPF-B17	KEY	4x8	1
18	JMD1144GHVSPF-B18	COLLAR		1
19	JMD1144GHVSPF-B19	O-RING	47.5x2.65	1
20	JMD1144GHVSPF-B20	BALL BEARING	16009	1
21	JMD1144GHVSPF-B21	OIL SEAL	FB45x62x12	1
22	JMD1144GHVSPF-B22	O-RING	69x2.65	1
23	JMD1144GHVSPF-B23	COLLAR		1
24	JMD1144GHVSPF-B24	INT RETAINING RING	75mm	1
25	JMD1144GHVSPF-B25	COLLAR		1
26	JMD1144GHVSPF-B26	O-RING	85x2.65	1
27	JMD1144GHVSPF-B27	BALL BEARING	6305ZZ	1
28	JMD1144GHVSPF-B28	GEAR	39T	1
29	JMD1144GHVSPF-B29	GEAR	31T	1
30	JMD1144GHVSPF-B30	GEAR SHAFT	39T	1
31	JMD1144GHVSPF-B31	KEY	8x40	1
32	JMD1144GHVSPF-B32	O-RING	58x2.65	1
33	JMD1144GHVSPF-B33	COLLAR		1
34	JMD1144GHVSPF-B34	OIL SEAL		1
35	JMD1144GHVSPF-B35	BALL BEARING	6204ZZ	1
36	JMD1144GHVSPF-B36	INT RETAINING RING	47mm	1
37	JMD1144GHVSPF-B37	BALL BEARING	6003ZZ	2
38	JMD1144GHVSPF-B38	EXT RETAINING RING	45mm	1
39	JMD1144GHVSPF-B39	GEAR	77T	1
40	JMD1144GHVSPF-B40	GEAR	15T	1

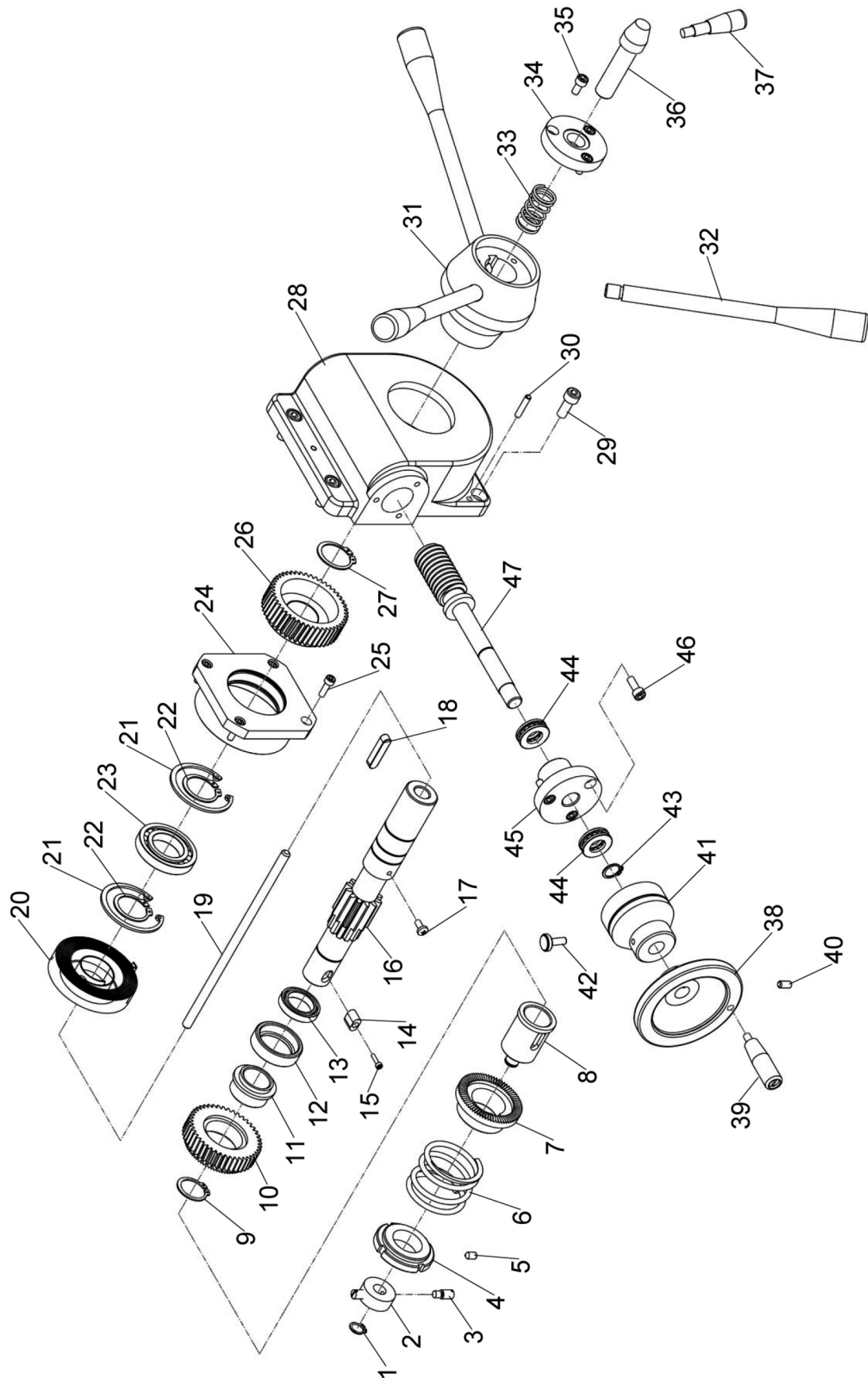
JMD-1144GHV SPF DRO B: GEAR HEAD PARTS

No.	Part No.	Name	Size	Qty.
41	JMD1144GHVSPF-B41	KEY	6x20	1
42	JMD1144GHVSPF-B42	THRUST BEARING	51100	1
43	JMD1144GHVSPF-B43	BUSHING		1
44	JMD1144GHVSPF-B44	CAP SCREW	M6x55	1
45	JMD1144GHVSPF-B45	BALL BEARING	6304ZZ	1
46	JMD1144GHVSPF-B46	GEAR	17T	1
47	JMD1144GHVSPF-B47	KEY	6x16	1
48	JMD1144GHVSPF-B48	RETAINER		1
49	JMD1144GHVSPF-B49	GEAR	39T	1
50	JMD1144GHVSPF-B50	EXT RETAINING RING	25mm	1
51	JMD1144GHVSPF-B51	GEAR	44T	1
52	JMD1144GHVSPF-B52	GEAR	36T	1
53	JMD1144GHVSPF-B53	KEY	10x20	1
54	JMD1144GHVSPF-B54	SHAFT		1
55	JMD1144GHVSPF-B55	BALL BEARING	6004ZZ	1
56	JMD1144GHVSPF-B56	O-RING	47.5x2.65	1
57	JMD1144GHVSPF-B57	COVER		1
58	JMD1144GHVSPF-B58	COVER		1
59	JMD1144GHVSPF-B59	O-RING	58x2.65	1
60	JMD1144GHVSPF-B60	BALL BEARING	6005ZZ	1
61	JMD1144GHVSPF-B61	COLLAR		1
62	JMD1144GHVSPF-B62	GEAR	26T	1
63	JMD1144GHVSPF-B63	GEAR SHAFT	18T	1
64	JMD1144GHVSPF-B64	KEY	8x20	1
65	JMD1144GHVSPF-B65	BALL BEARING	61908	1
66	JMD1144GHVSPF-B66	EXT RETAINING RING	40mm	1
67	JMD1144GHVSPF-B67	KEY	8x40	1
68	JMD1144GHVSPF-B68	MOTOR		1
69	JMD1144GHVSPF-B69	CAP SCREW	M12x35	4
70	JMD1144GHVSPF-B70	WASHER	12mm	4
71	JMD1144GHVSPF-B71	LOCK WASHER	12mm	4
72	JMD1144GHVSPF-B72	CAP SCREW	M12x30	6
73	JMD1144GHVSPF-B73	THREADED TAPER PIN	8x30	2
74	JMD1144GHVSPF-B74	OIL PLUG	M18x1.5	1
75	JMD1144GHVSPF-B75	OIL SIGHT GLASS	M10x1	1
76	JMD1144GHVSPF-B76	HANDLE HUB		3
77	JMD1144GHVSPF-B77	HANDLE		3
78	JMD1144GHVSPF-B78	TAPER PIN	4x45	3
79	JMD1144GHVSPF-B79	STEEL BALL	6mm	3
80	JMD1144GHVSPF-B80	COMPRESSION SPRING		3

JMD-1144GHV SPF DRO C: GEAR HEAD PARTS



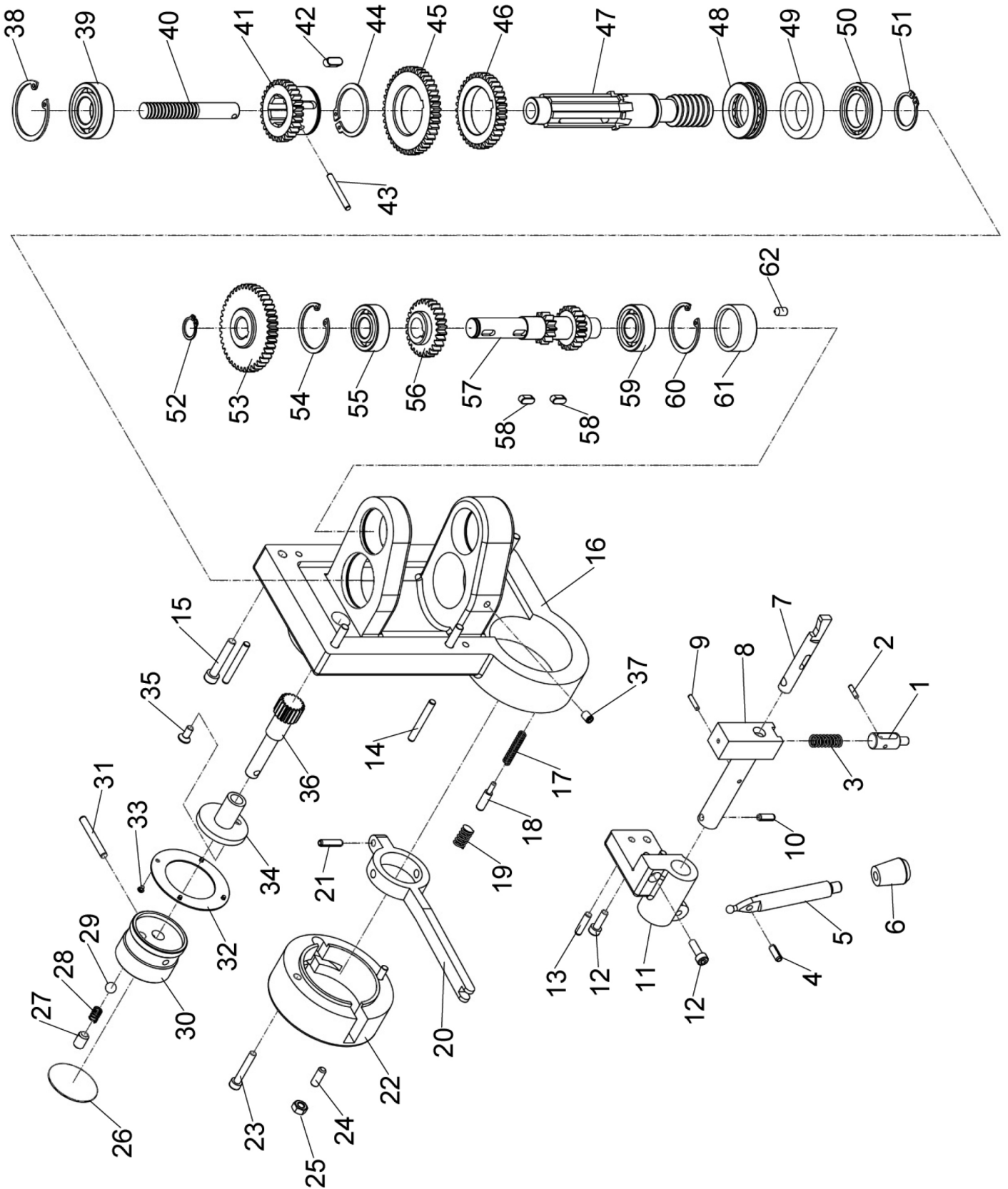
JMD-1144GHV SPF DRO D: GEAR HEAD PARTS



JMD-1144GHV SPF DRO D: GEAR HEAD PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-D1	EXT RETAINING RING	12mm	1
2	JMD1144GHVSPF-D2	COLLAR		1
3	JMD1144GHVSPF-D3	SCREW	M6x16	2
4	JMD1144GHVSPF-D4	SPANNER NUT		1
5	JMD1144GHVSPF-D5	SET SCREW	M6x10	1
6	JMD1144GHVSPF-D6	COMPRESSION SPRING		1
7	JMD1144GHVSPF-D7	CLUTCH		1
8	JMD1144GHVSPF-D8	SPLINE SLEEVE		1
9	JMD1144GHVSPF-D9	EXT RETAINING RING	25mm	1
10	JMD1144GHVSPF-D10	GEAR	44T	1
11	JMD1144GHVSPF-D11	COLLAR		1
12	JMD1144GHVSPF-D12	COLLAR		1
13	JMD1144GHVSPF-D13	BALL BEARING	61805	1
14	JMD1144GHVSPF-D14	KEY		1
15	JMD1144GHVSPF-D15	CAP SCREW	M3x10	1
16	JMD1144GHVSPF-D16	GEAR SHAFT	12T	1
17	JMD1144GHVSPF-D17	SCREW	M5x10	1
18	JMD1144GHVSPF-D18	KEY	8x36	1
19	JMD1144GHVSPF-D19	SHAFT		1
20	JMD1144GHVSPF-D20	FLAT COIL SPRING		1
21	JMD1144GHVSPF-D21	INT RETAINING RING	55mm	2
22	JMD1144GHVSPF-D22	EXT RETAINING RING	30mm	2
23	JMD1144GHVSPF-D23	BALL BEARING	16006	1
24	JMD1144GHVSPF-D24	SPRING BOX		1
25	JMD1144GHVSPF-D25	CAP SCREW	M5x16	4
26	JMD1144GHVSPF-D26	BEVEL GEAR	47T	1
27	JMD1144GHVSPF-D27	EXT RETAINING RING	30mm	1
28	JMD1144GHVSPF-D28	GEAR HOUSING		1
29	JMD1144GHVSPF-D29	CAP SCREW	M8x20	4
30	JMD1144GHVSPF-D30	TAPER PIN	5x20	2
31	JMD1144GHVSPF-D31	HANDLE HUB		1
32	JMD1144GHVSPF-D32	HANDLE		3
33	JMD1144GHVSPF-D33	COMPRESSION SPRING		1
34	JMD1144GHVSPF-D34	COVER		1
35	JMD1144GHVSPF-D35	CAP SCREW	M6x12	3
36	JMD1144GHVSPF-D36	LOCK BOLT		1
37	JMD1144GHVSPF-D37	HANDLE		1
38	JMD1144GHVSPF-D38	HANDWHEEL		1
39	JMD1144GHVSPF-D39	HANDLE		1
40	JMD1144GHVSPF-D40	SCREW	M6x10	1

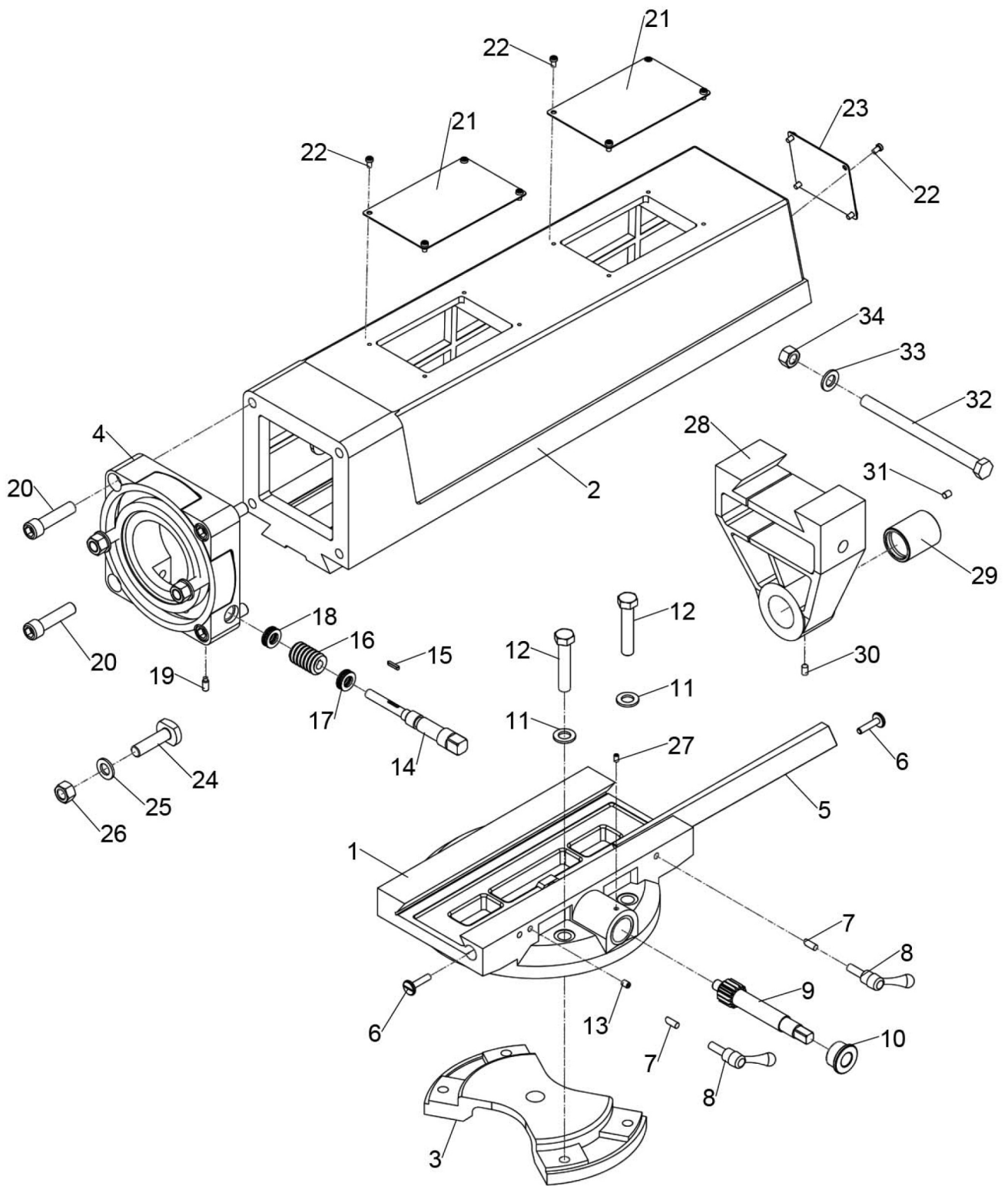
JMD-1144GHV SPF DRO E: GEAR HEAD PARTS



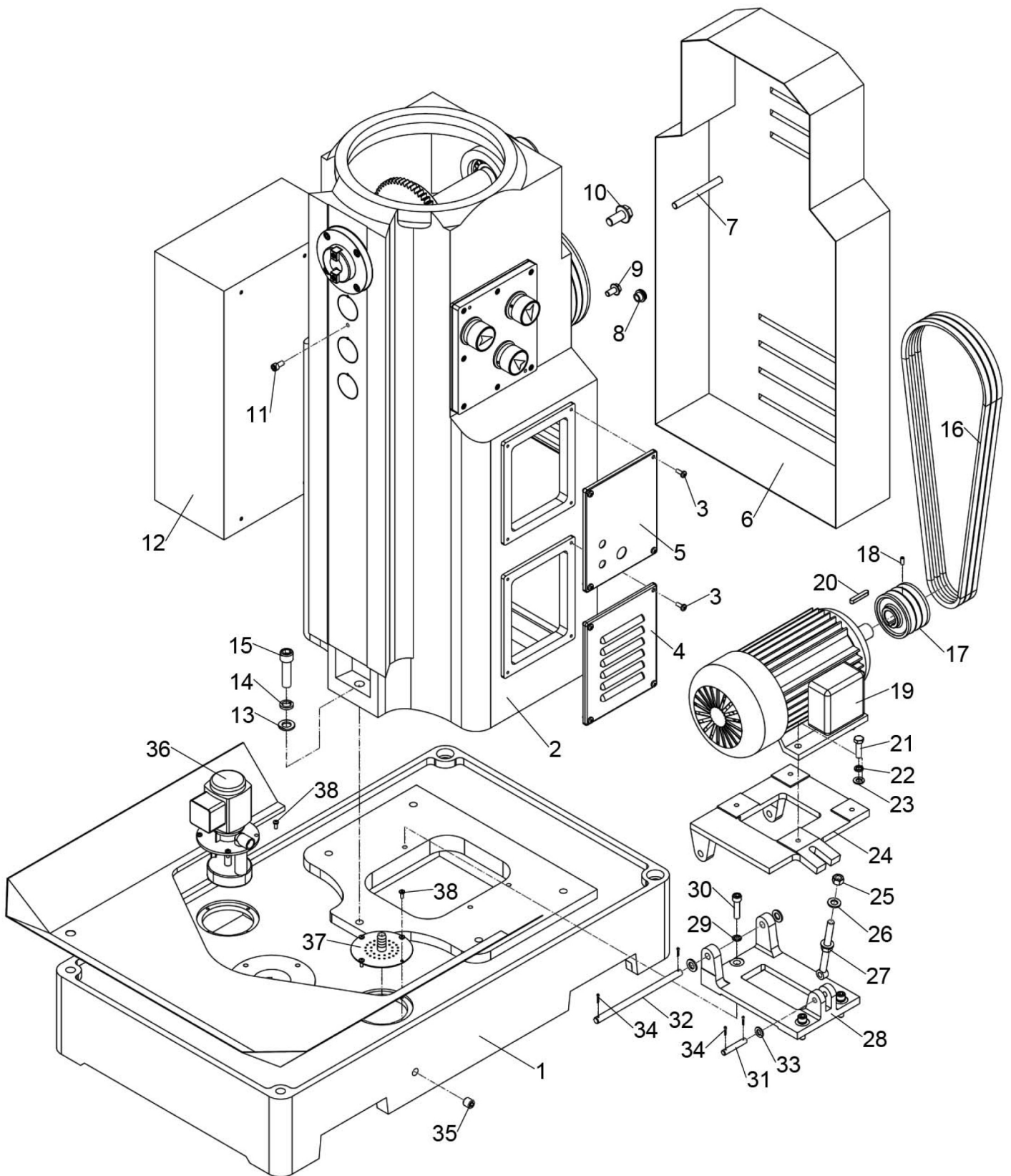
JMD-1144GHV SPF DRO E: GEAR HEAD PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-E1	SHAFT		1
2	JMD1144GHVSPF-E2	ROLL PIN	3x10	1
3	JMD1144GHVSPF-E3	COMPRESSION SPRING		1
4	JMD1144GHVSPF-E4	PIN	5x16	1
5	JMD1144GHVSPF-E5	CONTROL LEVER		1
6	JMD1144GHVSPF-E6	LEVER KNOB		1
7	JMD1144GHVSPF-E7	SHAFT		1
8	JMD1144GHVSPF-E8	BRACKET		1
9	JMD1144GHVSPF-E9	ROLL PIN	3x14	1
10	JMD1144GHVSPF-E10	PIN		1
11	JMD1144GHVSPF-E11	BRACKET		1
12	JMD1144GHVSPF-E12	CAP SCREW	M5x16	3
13	JMD1144GHVSPF-E13	TAPER PIN	4x18	2
14	JMD1144GHVSPF-E14	Threaded taper pin	6x35	2
15	JMD1144GHVSPF-E15	Cap screw	M6x25	5
16	JMD1144GHVSPF-E16	BRACKET		1
17	JMD1144GHVSPF-E17	COMPRESSION SPRING		1
18	JMD1144GHVSPF-E18	PIN		1
19	JMD1144GHVSPF-E19	COMPRESSION SPRING		1
20	JMD1144GHVSPF-E20	CONNECTING ROD		1
21	JMD1144GHVSPF-E21	PIN	5x20	1
22	JMD1144GHVSPF-E22	COVER		1
23	JMD1144GHVSPF-E23	CAP SCREW	M5x40	2
24	JMD1144GHVSPF-E24	SET SCREW	M6x14	1
25	JMD1144GHVSPF-E25	THIN HEX NUT	M6	1
26	JMD1144GHVSPF-E26	INDICATOR PLATE		1
27	JMD1144GHVSPF-E27	SET SCREW	M8x10	1
28	JMD1144GHVSPF-E28	COMPRESSION SPRING		1
29	JMD1144GHVSPF-E29	STEEL BALL	6mm	1
30	JMD1144GHVSPF-E30	KNOB		1
31	JMD1144GHVSPF-E31	PIN	5x40	1
32	JMD1144GHVSPF-E32	INDICATOR PLATE		1
33	JMD1144GHVSPF-E33	RIVET	2.5x4	4
34	JMD1144GHVSPF-E34	COLLAR		1
35	JMD1144GHVSPF-E35	SET SCREW	M6x10	1
36	JMD1144GHVSPF-E36	GEAR	18T	1
37	JMD1144GHVSPF-E37	SCREW	M6x10	1
38	JMD1144GHVSPF-E38	EXT RETAINING RING	42mm	1
39	JMD1144GHVSPF-E39	BALL BEARING	6004ZZ	1
40	JMD1144GHVSPF-E40	SHAFT		1

JMD-1144GHV SPF DRO F: RAM & RAM BASE PARTS



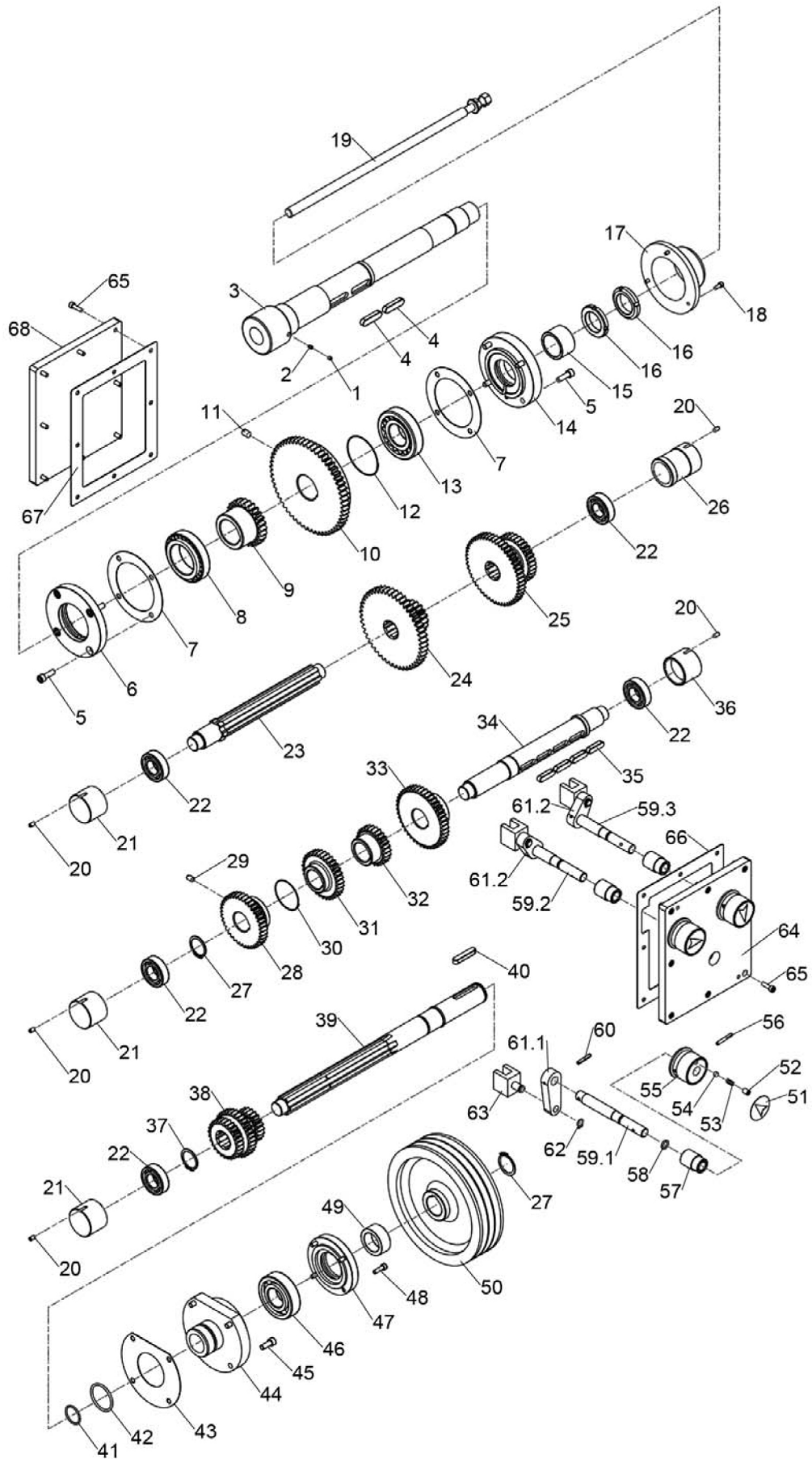
JMD-1144GHV SPF DRO G: BASE & COLUMN PARTS



JMD-1144GHV SPF DRO G: BASE & COLUMN PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-G1	BASE		1
2	JMD1144GHVSPF-G2	COLUMN		1
3	JMD1144GHVSPF-G3	PHLP HD SCR	M6x12	8
4	JMD1144GHVSPF-G4	COVER		2
5	JMD1144GHVSPF-G5	COVER		1
6	JMD1144GHVSPF-G6	REAR ACCESS PANEL		1
7	JMD1144GHVSPF-G7	KNOB	M10x155	1
8	JMD1144GHVSPF-G8	OIL SIGHT GLASS		1
9	JMD1144GHVSPF-G9	OIL PLUG	M10x8	1
10	JMD1144GHVSPF-G10	OIL PLUG	M16-1.5x8	1
11	JMD1144GHVSPF-G11	CAP SCREW	M8x16	1
12	JMD1144GHVSPF-G12	ELECTRICAL CABINET		1
13	JMD1144GHVSPF-G13	LOCK WASHER	16mm	5
14	JMD1144GHVSPF-G14	FLAT WASHER	16mm	5
15	JMD1144GHVSPF-G15	HEX BOLT	M16x60	5
16	JMD1144GHVSPF-G16	V-BELT	A-1420	3
17	JMD1144GHVSPF-G17	V-BELT PULLEY		1
18	JMD1144GHVSPF-G18	SET SCREW	M8x16	1
19	JMD1144GHV-D19	MOTOR		1
20	JMD1144GHVSPF-G20	KEY	8x50	1
21	JMD1144GHVSPF-G21	HEX BOLT	M10x30	4
22	JMD1144GHVSPF-G22	LOCK WASHER	10mm	4
23	JMD1144GHVSPF-G23	FLAT WASHER	10mm	4
24	JMD1144GHVSPF-G24	MOTOR MOUNT PLATE		1
25	JMD1144GHVSPF-G25	HEX NUT	M12	2
26	JMD1144GHVSPF-G26	LOCK WASHER	12mm	2
27	JMD1144GHVSPF-G27	ADJUSTING BOLT		2
28	JMD1144GHVSPF-G28	MOTOR BASE PLATE		1
29	JMD1144GHVSPF-G29	FLAT WASHER	10mm	3
30	JMD1144GHVSPF-G30	HEX BOLT	M10x40	3
31	JMD1144GHVSPF-G31	SHAFT		1
32	JMD1144GHVSPF-G32	SHAFT		1
33	JMD1144GHVSPF-G33	LOCK WASHER	12mm	4
34	JMD1144GHVSPF-G34	COTTER PIN	2.5x16	4
35	JMD1144GHVSPF-G35	FLANGE BOLT	M16x1.5	1
36	JMD1144GHVSPF-G36	COOLANT PUMP	DB-12	1
37	JMD1144GHVSPF-G37	COOLANT DRAIN SCREEN		1
38	JMD1144GHVSPF-G38	PHLP HD SCR	M6x12	8

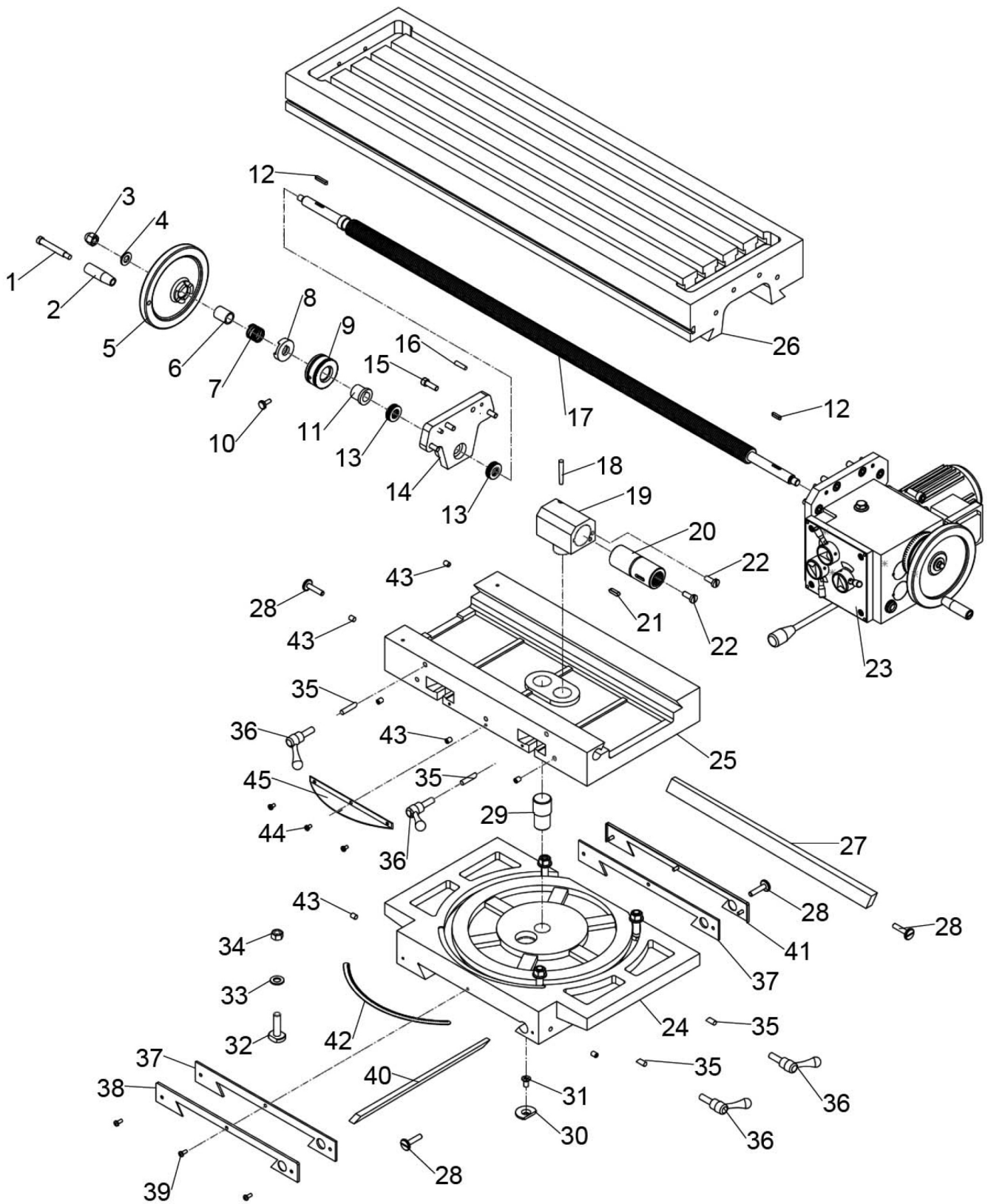
JMD-1144GHV SPF DRO H: BASE & COLUMN PARTS



JMD-1144GHV SPF DRO H: BASE & COLUMN PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-H1	SET SCREW	M5x6	1
2	JMD1144GHVSPF-H2	SET SCREW	M5x8 DOG-PT	1
3	JMD1144GHVSPF-H3	HORIZONTAL SPINDLE		1
4	JMD1144GHVSPF-H4	KEY	12x45	2
5	JMD1144GHVSPF-H5	CAP SCREW	M8x25	8
6	JMD1144GHVSPF-H6	END COVER		1
7	JMD1144GHVSPF-H7	GASKET		2
8	JMD1144GHVSPF-H8	BALL BEARING	32011-P5	1
9	JMD1144GHVSPF-H9	GEAR	26T	1
10	JMD1144GHVSPF-H10	GEAR	57T	1
11	JMD1144GHVSPF-H11	SET SCREW	M10x16	1
12	JMD1144GHVSPF-H12	SPECIAL RETAINER		1
13	JMD1144GHVSPF-H13	BALL BEARING	30308-P5	1
14	JMD1144GHVSPF-H14	END COVER		1
15	JMD1144GHVSPF-H15	BUSHING		1
16	JMD1144GHVSPF-H16	SPANNER NUT	M39x1.5	2
17	JMD1144GHVSPF-H17	COVER		1
18	JMD1144GHVSPF-H18	CAP SCREW	M5x12	3
19	JMD1144GHVSPF-H19	HORIZONTAL SPINDLE DRAWBAR		1
20	JMD1144GHVSPF-H20	SET SCREW	M6x10	5
21	JMD1144GHVSPF-H21	PLUG		3
22	JMD1144GHVSPF-H22	BALL BEARING	6205	5
23	JMD1144GHVSPF-H23	SPLINE SHAFT		1
24	JMD1144GHVSPF-H24	GEAR	48/17T	1
25	JMD1144GHVSPF-H25	GEAR	50/33T	1
26	JMD1144GHVSPF-H26	PLUG		1
27	JMD1144GHVSPF-H27	EXT RETAINING RING	35mm	2
28	JMD1144GHVSPF-H28	GEAR	38T	1
29	JMD1144GHVSPF-H29	SET SCREW	M8x14	1
30	JMD1144GHVSPF-H30	SPECIAL RETAINER		1
31	JMD1144GHVSPF-H31	GEAR	33T	1
32	JMD1144GHVSPF-H32	GEAR	26T	1
33	JMD1144GHVSPF-H33	GEAR	43T	1
34	JMD1144GHVSPF-H34	SHAFT		1
35	JMD1144GHVSPF-H35	KEY	10x36	4
36	JMD1144GHVSPF-H36	PLUG		1
37	JMD1144GHVSPF-H37	EXT RETAINING RING	34mm	1
38	JMD1144GHVSPF-H38	GEAR	27/32/22T	1
39	JMD1144GHVSPF-H39	SPLINE SHAFT		1
40	JMD1144GHVSPF-H40	KEY	10x50	1

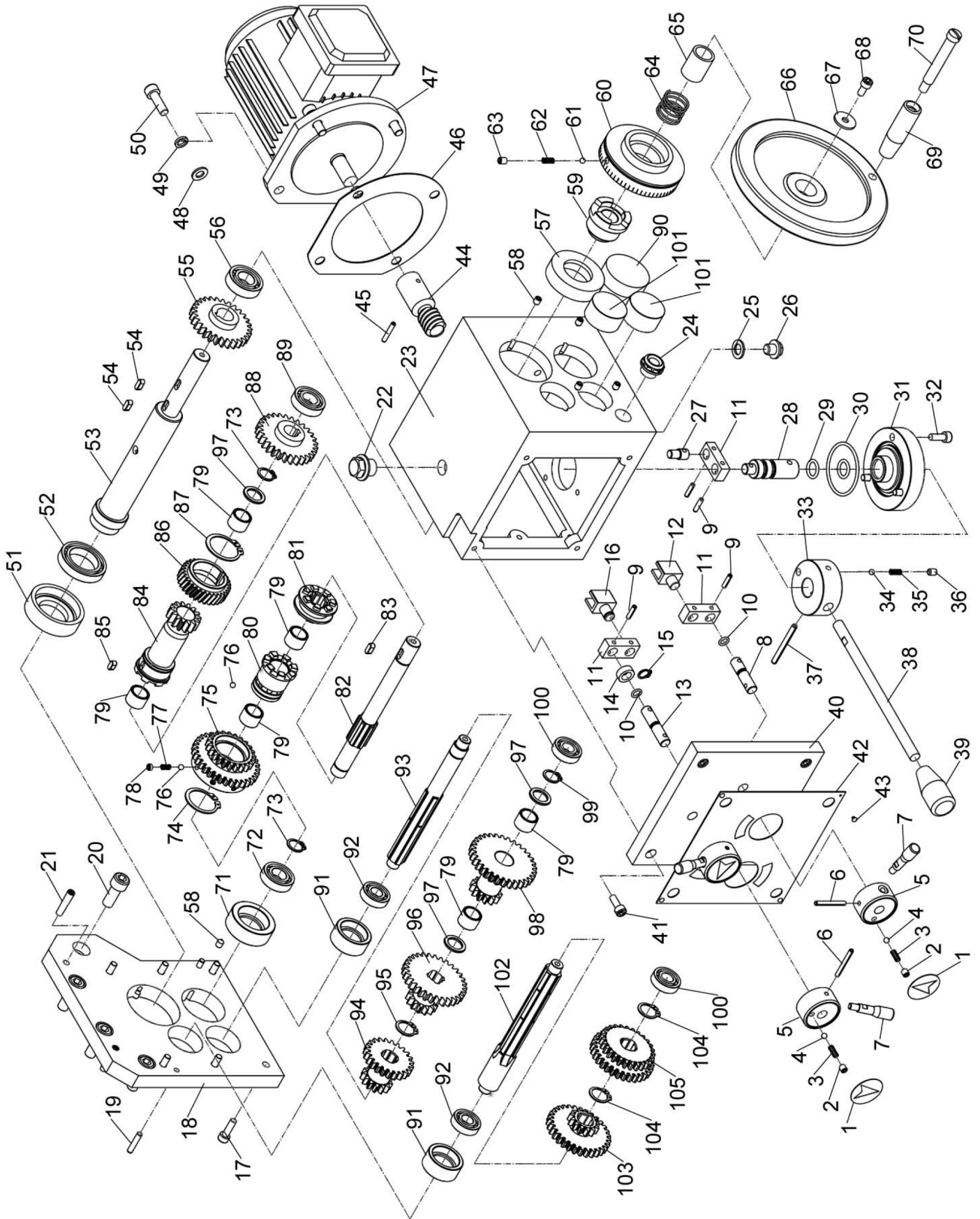
JMD-1144GHV SPF DRO I: TABLE PARTS



JMD-1144GHV SPF DRO I: TABLE PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-I1	HANDLE SPINDLE		2
2	JMD1144GHVSPF-I2	TAPER KNOB		2
3	JMD1144GHVSPF-I3	HEX NUT	M12	2
4	JMD1144GHVSPF-I4	LOCK WASHER	12mm	2
5	JMD1144GHVSPF-I5	HAND WHEEL		2
6	JMD1144GHVSPF-I6	BUSH		2
7	JMD1144GHVSPF-I7	SPRING		2
8	JMD1144GHVSPF-I8	CONNECT		2
9	JMD1144GHVSPF-I9	SCALE RING		1
10	JMD1144GHVSPF-I10	CAP SCREW	M6x16	1
11	JMD1144GHVSPF-I11	COLLAR		1
12	JMD1144GHVSPF-I12	KEY	6x22	2
13	JMD1144GHVSPF-I13	BALL BEARING	51103	2
14	JMD1144GHVSPF-I14	SUPPORT		1
15	JMD1144GHVSPF-I15	CAP SCREW	M8x25	4
16	JMD1144GHVSPF-I16	TAPER PIN	6x25	4
17	JMD1144GHVSPF-I17	LONGITUDINAL LEAD SCREW		1
18	JMD1144GHVSPF-I18	TAPER PIN	6x40	1
19	JMD1144GHVSPF-I19	NUT SEAT		1
20	JMD1144GHVSPF-I20	BUSHING		1
21	JMD1144GHVSPF-I21	KEY	6x22	1
22	JMD1144GHVSPF-I22	SPECIAL SCREW		2
23	JMD1144GHVSPF-I23	POWER FEED		1
24	JMD1144GHVSPF-I24	SCALE RING		1
25	JMD1144GHVSPF-I25	ROTARY BRACKET		1
26	JMD1144GHVSPF-I26	TABLE		1
27	JMD1144GHVSPF-I27	LONGITUDINAL GIB		1
28	JMD1144GHVSPF-I28	GIB ADJUSTING SCREW		4
29	JMD1144GHVSPF-I29	SHAFT		1
30	JMD1144GHVSPF-I30	WASHER		1
31	JMD1144GHVSPF-I31	SCREW		1
32	JMD1144GHVSPF-I32	T BOLT	M12x45	4
33	JMD1144GHVSPF-I33	WASHER	12	4
34	JMD1144GHVSPF-I34	HEX NUT	M12	4
35	JMD1144GHVSPF-I35	LOCK BUSHING		4
36	JMD1144GHVSPF-I36	LOCK HANDLE		4
37	JMD1144GHVSPF-I37	FELT GASKET		2
38	JMD1144GHVSPF-I38	WIPER COVER		1
39	JMD1144GHVSPF-I39	SCREW	M5x12	6
40	JMD1144GHVSPF-I40	CROSS GIB		1

JMD-1144GHV SPF DRO J: POWER FEED OF TABLE PARTS



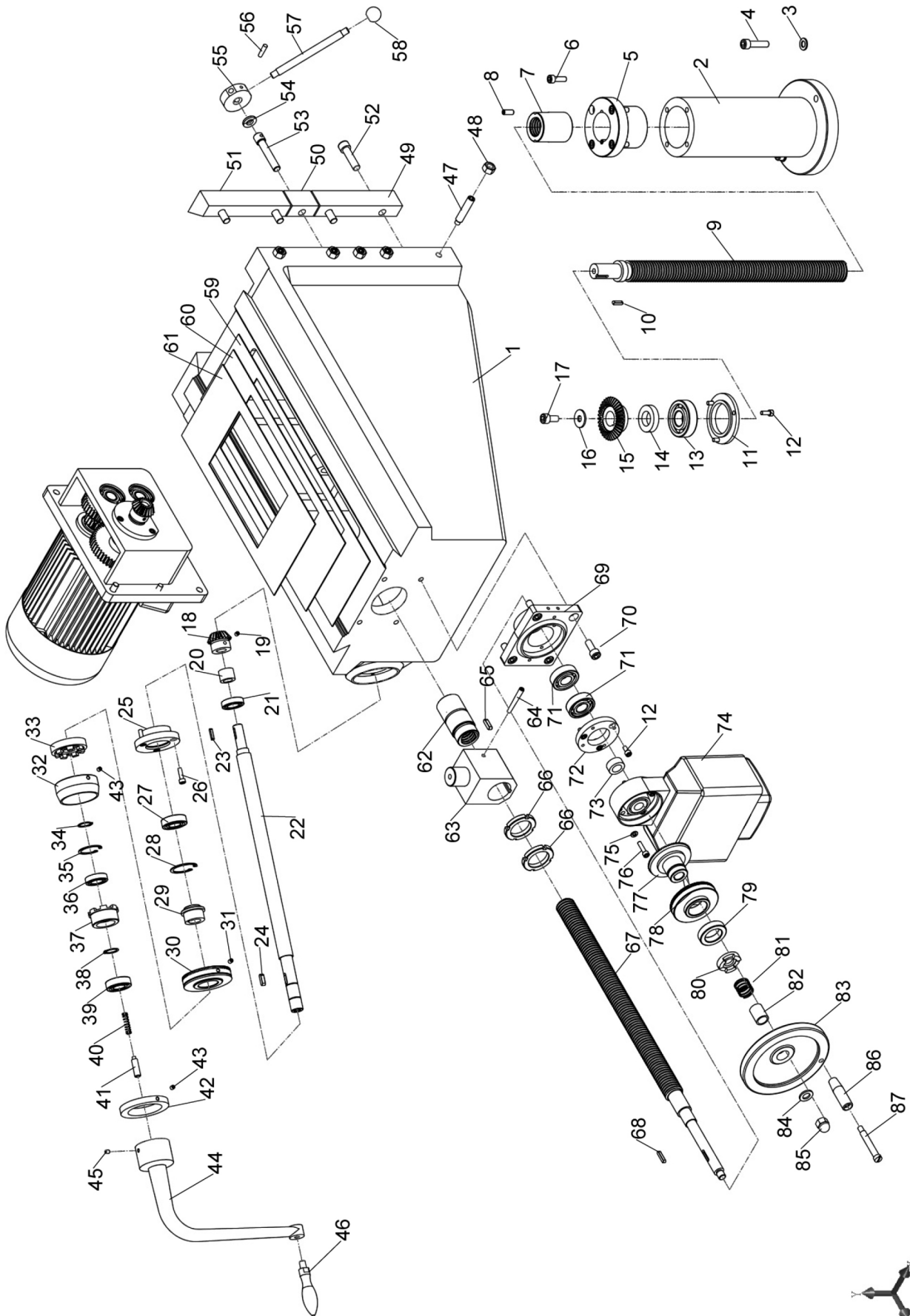
JMD-1144GHV SPF DRO J: POWER FEED OF TABLE PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-J1	Indicator plate		3
2	JMD1144GHVSPF-J2	Set screw	M6x6	12
3	JMD1144GHVSPF-J3	Compression spring	GB/T2089 1x4x12	3
4	JMD1144GHVSPF-J4	Steel ball	GB/T308 5	3
5	JMD1144GHVSPF-J5	Handle seat		3
6	JMD1144GHVSPF-J6	Elastic cylindrical pin	GB/T879.1 5x35	3
7	JMD1144GHVSPF-J7	Handle lever		3
8	JMD1144GHVSPF-J8	Shaft		2
9	JMD1144GHVSPF-J9	Elastic cylindrical pin	GB/T879.1 4x16	5
10	JMD1144GHVSPF-J10	O-ring	GB/T3452.1 7.1x1.8	3
11	JMD1144GHVSPF-J11	Rocker arm		3
12	JMD1144GHVSPF-J12	Shifting fork		2
13	JMD1144GHVSPF-J13	Shaft		1
14	JMD1144GHVSPF-J14	Collar		1
15	JMD1144GHVSPF-J15	Circlip for shaft	GB/T894.1 10	1
16	JMD1144GHVSPF-J16	Shifting fork		1
17	JMD1144GHVSPF-J17	Hex socket head bolt	M6x16	6
18	JMD1144GHVSPF-J18	Side plate		1
19	JMD1144GHVSPF-J19	Taper bolt	GB/T117 6x24	2
20	JMD1144GHVSPF-J20	Hex Socket head bolt	M10x25	4
21	JMD1144GHVSPF-J21	Taper bolt	GB/T117 5x24	2
22	JMD1144GHVSPF-J22	Oil plug	M16x1.5	1
23	JMD1144GHVSPF-J23	Box		1
24	JMD1144GHVSPF-J24	Oil gage	GB/T1160.2 M18x1.5	1
25	JMD1144GHVSPF-J25	Aluminum washer		1
26	JMD1144GHVSPF-J26	Oil plug	JB/T1000 M10x1	1
27	JMD1144GHVSPF-J27	Shaft		1
28	JMD1144GHVSPF-J28	Shaft		1
29	JMD1144GHV-J29	O-ring	GB/T3452.1 13.2x2.65	2
30	JMD1144GHVSPF-J30	O-ring	GB/T3452.1 46.2x2.65	1
31	JMD1144GHVSPF-J31	Gland		1
32	JMD1144GHVSPF-J32	Hex Socket head bolt	M6x16	3
33	JMD1144GHVSPF-J33	Handle seat		1
34	JMD1144GHVSPF-J34	Steel ball	GB/T308 5	1
35	JMD1144GHVSPF-J35	Compression spring	GB/T2089 1x4x12	1
36	JMD1144GHVSPF-J36	Set screw	M6x8	1
37	JMD1144GHVSPF-J37	Elastic cylindrical pin	GB/T879.1 5x50	1
38	JMD1144GHVSPF-J38	Handle lever		1
39	JMD1144GHVSPF-J39	Taper knob		1
40	JMD1144GHVSPF-J40	Front cover		1

JMD-1144GHV SPF DRO J: POWER FEED OF TABLE PARTS

No.	Part No.	Name	Size	Qty.
41	JMD1144GHVSPF-J41	Hex Socket head bolt	M6x18	4
42	JMD1144GHVSPF-J42	Information plate		1
43	JMD1144GHVSPF-J43	Rivet	GB/T827 2.5x4	4
44	JMD1144GHVSPF-J44	Worm	m=1.5 z=3	1
45	JMD1144GHVSPF-J45	Elastic cylindrical pin	GB/T879.1 5x24	1
46	JMD1144GHVSPF-J46	Seal ring		1
47	JMD1144GHV-G47	Electromotor	370W 2800rpm	1
48	JMD1144GHVSPF-J48	washer	8	4
49	JMD1144GHVSPF-J49	Spring washer	8	4
50	JMD1144GHVSPF-J50	Hex Socket head bolt	M8x20	4
51	JMD1144GHVSPF-J51	Bearing housing (A – left)		1
52	JMD1144GHVSPF-J52	Bearing	GB/T275 61906	1
53	JMD1144GHVSPF-J53	Shaft (A)		1
54	JMD1144GHVSPF-J54	Flat key	5x10	2
55	JMD1144GHVSPF-J55	Gear	m=2 z=29	1
56	JMD1144GHVSPF-J56	Bearing	GB/T276 6003	1
57	JMD1144GHVSPF-J57	Bearing housing (A - right)		1
58	JMD1144GHVSPF-J58	Set screw	M6x6	8
59	JMD1144GHVSPF-J59	Clutch		1
60	JMD1144GHVSPF-J60	Graduated dial		1
61	JMD1144GHVSPF-J61	Steel ball	GB/T308 5	1
62	JMD1144GHVSPF-J62	Compression spring	GB/T2089 1x4x12	1
63	JMD1144GHVSPF-J63	Set screw	M6x8	1
64	JMD1144GHVSPF-J64	Spring	GB/T2089 1.6x24x15	2
65	JMD1144GHVSPF-J65	Bushing		1
66	JMD1144GHVSPF-J66	Handwheel		1
67	JMD1144GHVSPF-J67	Washer		1
68	JMD1144GHVSPF-J68	Hex Socket head bolt	M6x16	1
69	JMD1144GHVSPF-J69	Handwheel handle		1
70	JMD1144GHVSPF-J70	Handle step screw		1
71	JMD1144GHVSPF-J71	Bearing housing (B – left)		1
72	JMD1144GHVSPF-J72	Bearing	GB/T276 6002	1
73	JMD1144GHVSPF-J73	Circlip for shaft	GB/T894.1 15	2
74	JMD1144GHVSPF-J74	Circlip for shaft	GB/T894.1 30	1
75	JMD1144GHVSPF-J75	Gear	m=2 z1=23 z2=33	1
76	JMD1144GHVSPF-J76	Steel ball	GB/T308 5	16
77	JMD1144GHVSPF-J77	Compression spring	GB/T2089 0.8x4x9	8
78	JMD1144GHVSPF-J78	Set screw	M6x6	8
79	JMD1144GHVSPF-J79	Sliding bearing		6
80	JMD1144GHVSPF-J80	Clutch		1

JMD-1144GHV SPF DRO K: KNEE SPINDLE PARTS



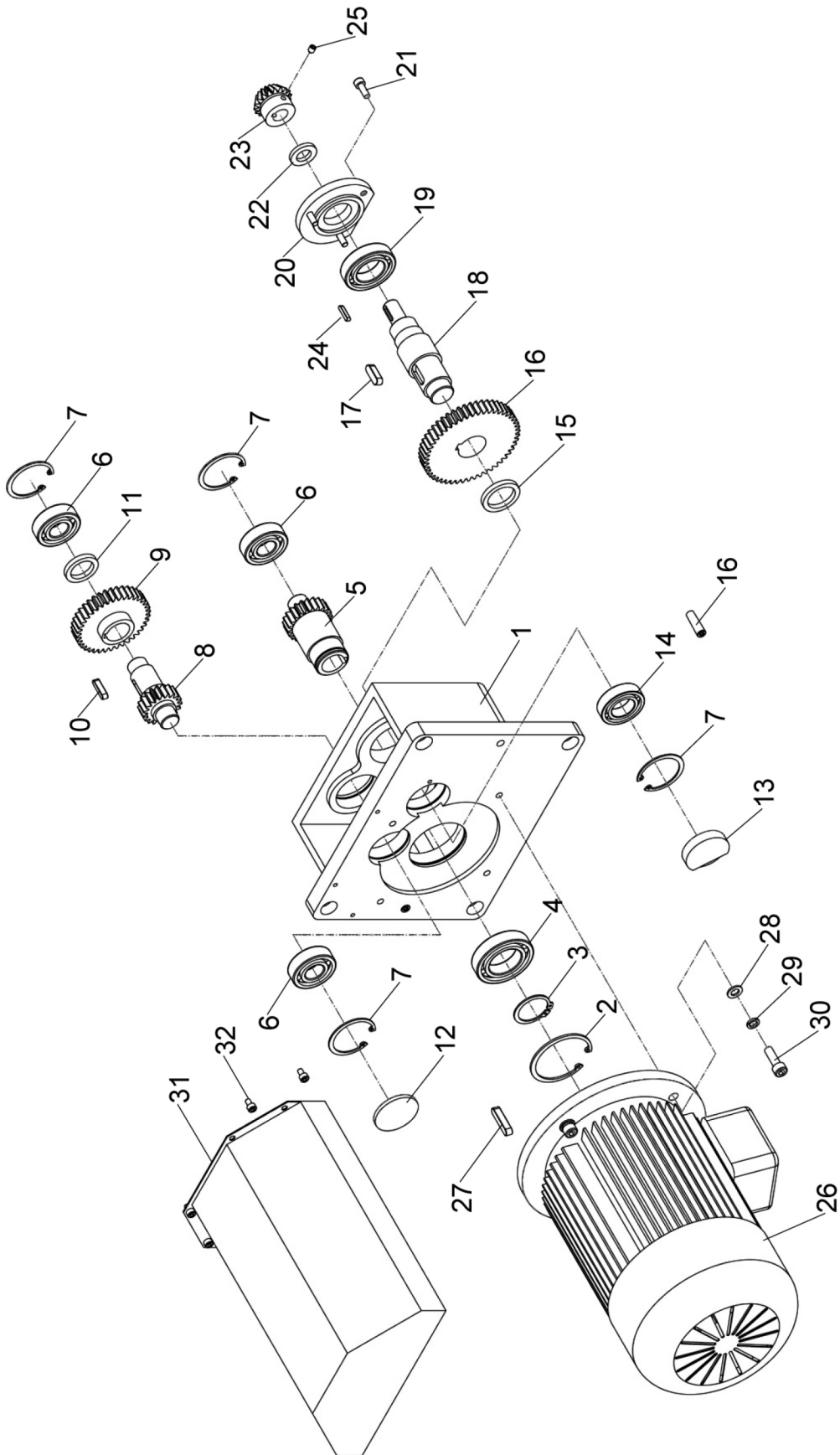
JMD-1144GHV SPF DRO K: KNEE SPINDLE PARTS

No.	Part No.	Name	Size	Qty.
1	JMD1144GHVSPF-K1	KNEE		1
2	JMD1144GHVSPF-K2	KNEE COLUMN		1
3	JMD1144GHVSPF-K3	LOCK WASHER	10	4
4	JMD1144GHVSPF-K4	SCREW	M10x40	4
5	JMD1144GHVSPF-K5	COLLAR		1
6	JMD1144GHVSPF-K6	SCREW	M8x30	4
7	JMD1144GHVSPF-K7	Z-AXIS LEADSCREW NUT		1
8	JMD1144GHVSPF-K8	SET SCREW	M8x20	2
9	JMD1144GHVSPF-K9	Z-AXIS LEAD SCREW		1
10	JMD1144GHVSPF-K10	KEY	5x20	1
11	JMD1144GHVSPF-K11	BEARING COVER		1
12	JMD1144GHVSPF-K12	SCREW	M6x20	3
13	JMD1144GHVSPF-K13	BEARING	6305-2RS/P5	1
14	JMD1144GHVSPF-K14	ADJUST WASHER		1
15	JMD1144GHVSPF-K15	BEVEL GEAR		1
16	JMD1144GHVSPF-K16	WASHER	10	1
17	JMD1144GHVSPF-K17	SCREW	M10x20	1
18	JMD1144GHVSPF-K18	BEVEL GEAR		1
19	JMD1144GHVSPF-K19	SCREW	M6x8	2
20	JMD1144GHVSPF-K20	BUSHING		1
21	JMD1144GHVSPF-K21	BEARING	61904-2RS/P5	1
22	JMD1144GHVSPF-K22	SHAFT		1
23	JMD1144GHVSPF-K23	KEY	4x20	1
24	JMD1144GHVSPF-K24	KEY	6x20	1
25	JMD1144GHVSPF-K25	BEARING SEAT		1
26	JMD1144GHVSPF-K26	SCREW	M6x20	3
27	JMD1144GHVSPF-K27	BEARING	6004-2RS/P5	1
28	JMD1144GHVSPF-K28	CIRCLIP FOR HOLE	42	1
29	JMD1144GHVSPF-K29	DIAL PAD		1
30	JMD1144GHVSPF-K30	GRADUATED DIAL		1
31	JMD1144GHVSPF-K31	STEEL BALL		1
32	JMD1144GHVSPF-K32	SHEATH		1
33	JMD1144GHVSPF-K33	LOCKING BUSHING		1
34	JMD1144GHVSPF-K34	EXTERNAL CIRCLIPS		1
35	JMD1144GHVSPF-K35	CIRCLIP FOR HOLE	37	1
36	JMD1144GHVSPF-K36	BEARING	61904-2RS/P5	1
37	JMD1144GHVSPF-K37	LOCKING BUSHING		1
38	JMD1144GHVSPF-K38	EXTERNAL CIRCLIPS		1
39	JMD1144GHVSPF-K39	BEARING 6004-2RS/P5		1
40	JMD1144GHVSPF-K40	SPRING		1

JMD-1144GHV SPF DRO K: KNEE SPINDLE PARTS

No.	Part No.	Name	Size	Qty.
41	JMD1144GHVSPF-K41	MANDRIL		1
42	JMD1144GHVSPF-K42	BAFFLE RING		1
43	JMD1144GHVSPF-K43	SCREW	M6x8	1
44	JMD1144GHVSPF-K44	LIFTING HANDLE		1
45	JMD1144GHVSPF-K45	SCREW		1
46	JMD1144GHVSPF-K46	CRANK HANDLE		1
47	JMD1144GHVSPF-K47	SCREW	M12x60	5
48	JMD1144GHVSPF-K48	NUT	M12	5
49	JMD1144GHVSPF-K49	KNEE GIB LONG		1
50	JMD1144GHVSPF-K50	KNEE GIB SHAFT		1
51	JMD1144GHVSPF-K51	KNEE GIB LONG		1
52	JMD1144GHVSPF-K52	SCREW	M12x45	4
53	JMD1144GHVSPF-K53	SPECIAL SCREW		1
54	JMD1144GHVSPF-K54	SPECIAL FLAT WASHER		1
55	JMD1144GHVSPF-K55	LOCK SLEEVE		1
56	JMD1144GHVSPF-K56	TAPER PIN	5x40	1
57	JMD1144GHVSPF-K57	LOCK HANDLE		1
58	JMD1144GHVSPF-K58	BALL KNOB		1
59	JMD1144GHVSPF-K59	WAY SLIDE BIG		1
60	JMD1144GHVSPF-K60	WAY SLIDE MEDIUM		1
61	JMD1144GHVSPF-K61	WAY SLIDE SMALL		1
62	JMD1144GHVSPF-K62	THREAD BUSHING		1
63	JMD1144GHVSPF-K63	NUT SEAT		1
64	JMD1144GHVSPF-K64	TAPER PIN	6x50	1
65	JMD1144GHVSPF-K65	KEY	6x6x22	1
66	JMD1144GHVSPF-K66	SPANNER NUT		2
67	JMD1144GHVSPF-K67	Y-AXIS LEADSCREW		1
68	JMD1144GHVSPF-K68	KEY	5x25	1
69	JMD1144GHVSPF-K69	Y-AXIS BEARING SEAT		1
70	JMD1144GHVSPF-K70	SCREW	M10x25	4
71	JMD1144GHVSPF-K71	BEARING	6204-2RS-P5	2
72	JMD1144GHVSPF-K72	BEARING COVER		1
73	JMD1144GHVSPF-K73	BUSHING		1
74	JMD1144GHVSPF-K74	POWER FEED		1
75	JMD1144GHVSPF-K75	WASHER		1
76	JMD1144GHVSPF-K76	SCREW	M6x25	4
77	JMD1144GHVSPF-K77	POWER FEED SLEEVE		1
78	JMD1144GHVSPF-K78	GRADUATED DIAL		1
79	JMD1144GHVSPF-K79	COLLAR		1
80	JMD1144GHVSPF-K80	CONJUNCTION TOOTH		1

JMD-1144GHV SPF DRO L: Z-AXIS POWER PARTS



Complementarity Specification

I:VERTICAL TRAVEL OF KNEE

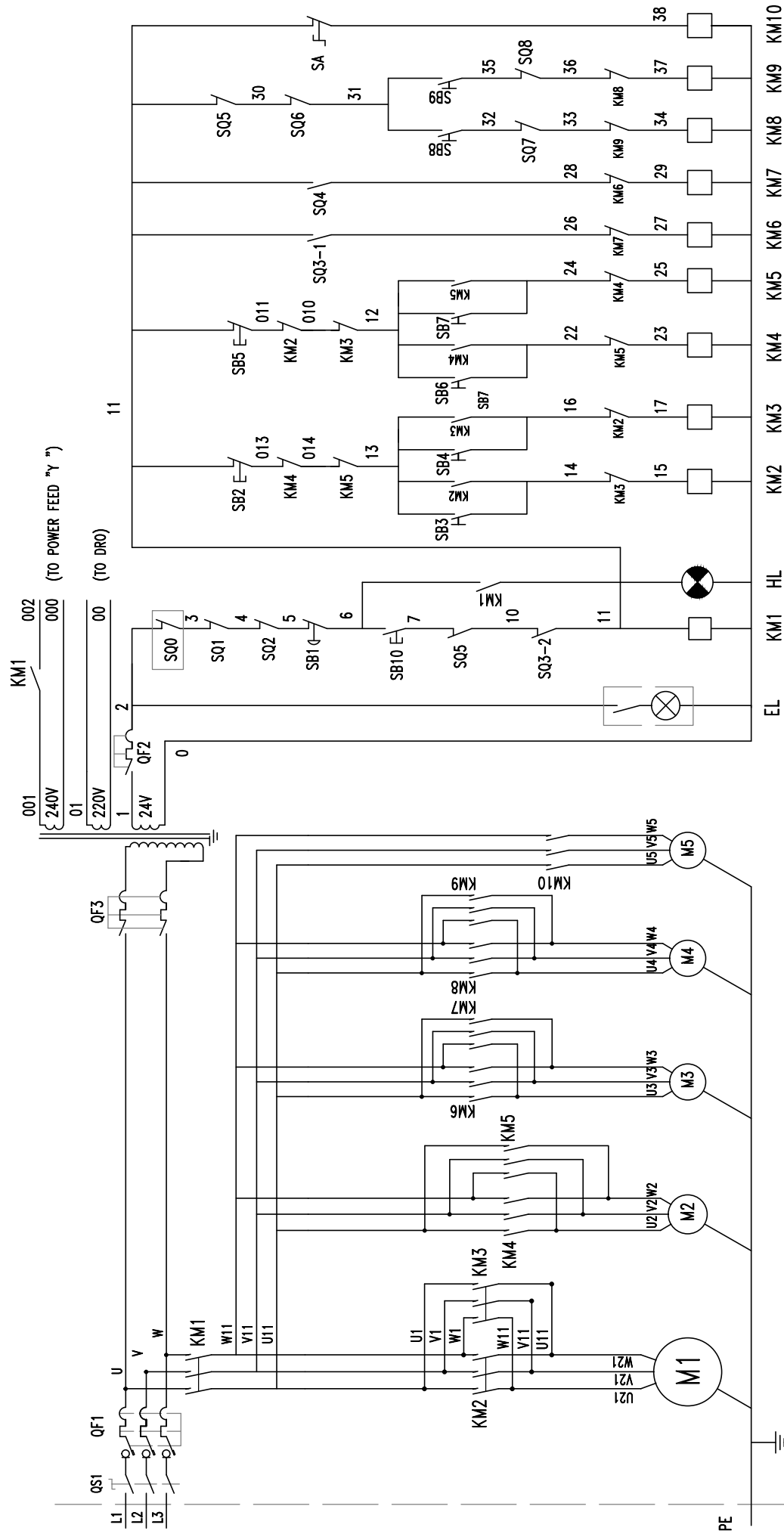
1. Vertical travel of knee by power is on the left of the knee.
2. The knee travel is restricted in the extreme position by means of limit switch.

When Vertical travel of knee by power the crank handle is disengaged automatically.

The crank handle is engaged when the table is brought to travel by manual in vertical direction.

3. WARNING

- 1) Vertical travel of knee by power doesn't do when the lock handle is locking. The lock handle and Vertical travel by power are linking.
- 2) Must loose the lock handle before Vertical travel of knee.
- 3) Don't engage the lock handle when Vertical travel of knee by power.



WIRING DIAGRAM

JMD-1144GHV SPF DRO

NO	Electrical code	Model and Specification	Function description	Supplier
1	QS1	JCH13-20 20/41000	Change-over switch	JUCHE
2	TC	JBK5-160VA	Transformer	AOHENG
3	QF1	JCM6-25	Circuit breaker	JUCHE
4	QF2	DZ47-63 D2	Circuit breaker	JUCHE
5	QF3	DZ47-63 D2	Circuit breaker	JUCHE
6	SB1	LA125H-BS542	Emergency stop button	MINGER
7	SB2	LA125H-BA42	stop button (V)	MINGER
8	SB3	LA125H-BA31	Forward (V)	MINGER
9	SB4	LA125H-BA31	Reverse (V)	MINGER
10	SB5	LA125H-BA42	stop button (H)	MINGER
11	SB6	LA125H-BA31	Forward (H)	MINGER
12	SB7	LA125H-BA31	Reverse (H)	MINGER
13	SB8	LA125H-BA21	Up Button	MINGER
14	SB9	LA125H-BA21	Down Button	MINGER
15	SB10	LA125J-11D/206A	Start button	MINGER
16	SA	LA125H-BD21	Cooling pump button	MINGER
17	SQ1	KW-7	Spindle protect	LEMA
18	SQ2	LXW5-11Q1	Belt cover protect	LONGJING
19	SQ3-1	OV-152-1C25	Micro switch	Oumilang
20	SQ3-2	OV-152-1C25	Micro switch	Oumilang
21	SQ4	OV-152-1C25	Micro switch	Oumilang
22	SQ5	OV-152-1C25	Micro switch	Oumilang
23	SQ5-2	CZ-811N	Limit switch	CNTD
24	SQ6	XCK-P	Limit switch	SNJDQ
25	SQ7	YBLX-JW2/11H/L	Up limit switch	CHNT
26	SQ8	QKS7	Down limit switch	KEDU
27	KM1	3TH82	Contactor	SIEMENS
28	KM2	3TH82	Contactor	SIEMENS
29	KM3	3TH82	Contactor	SIEMENS
30	KM4	3TH82	Contactor	SIEMENS
31	KM5	3TH82	Contactor	SIEMENS
32	KM6	3TH82	Contactor	SIEMENS
33	KM7	3TH82	Contactor	SIEMENS

34	KM8	3TH82	Contactator	SIEMENS
35	KM9	3TH82	Contactator	SIEMENS
36	KM10	3TH82	Contactator	SIEMENS
37	EL	JC38F-3	LED working lamp	JINYE
38	DRO	SDS6	DRO	SINO
39	Power feed Y	AS-350-Y	Power feed Y	ASONG
40	M1	JMD1144GHVSPF-B68 (Y100L-4)	Vertical Motor	DONGTAI
41	M2	JMD1144GHV- D19 (Y100L-4)	Horizontal Motor	DONGTAI
42	M3	JMD1144GHV-G47 (YS6344)	Power feed X Motor	DONGTAI
43	M4	JMD1144GHVSPF-L26 (Y90L1-8)	Table up and down Motor	DONGTAI
44	M5	JMD1144GHVSPF-G36 (DB-12)	Cooling pump	DONGYANG

DRILLING/MILLING MACHINE

QUALITY CERTIFICATE

Item	Test Illustration		Allowance error	Measured Value
1	Flathness	A Horizontal B Cross	0.04/1000 0.04/1000	
2	Work flatness		0.04/200	
3	Run out of Spindle bore	A End spindle face B 200mm to spindle face	0.02 0.04	
4	Kick of spindle		0.02	
5	The perpendicular between Spindle and table	A Longitudinal B corss	0.10/200 0.10/200	
6	The perpendicular between Vertical movement of spindle and table	A Longitudinal B corss	0.10/100 0.10/100	
7	The parallelism between the work flatness and table	A Longitudinal B corss	0.05/200 0.05/200	
8	The straightness of basis "T"		0.03/200	
9	The parallelism between basis "T" and table		0.15/200	
10	The perpendicular between longitudinal move of table and cross move of table.		0.10/200	
11	Straightness of vertical movement of knee	A Longitudinal B corss	0.05/200 0.05/200	
12	The perpendicular between bodway and vertical guideway	A Longitudinal B corss	0.10/200 0.10/200	
13	The perpendicular between table and ram moving		0.10/200	
14	The perpendicular between table and roating plate rotate	Left 30° 0° Right 30°	0.10/200	
15	The parallelism between spindle and worktable		0.10/200	
16	The parallelism between cross move of work and spindle	A Longitudinal B corss	0.10/200 0.10/200	
17	The parallelism between the guideway of ram and spindle	A Longitudinal B corss	0.10/200 0.10/200	
18	Coaxialism between the hole of surporthilt and axis of spindle	A Longitudinal B corss	0.10 0.10	

PACKING LIST FOR

DRILLING & MILLING MACHINE JMD-1144GHV SPF DRO

Series No:		Dimension:			
G/W:		N/W:			
No.	Name	Spec	Model	Quantity	Remark
1	Milling & Drilling Machine		JMD-1144GHV SPF DRO	1	
2	Draw bar	M16x500/475mm		1+1	
3	Adapter	ISO40/MT3 MT3/MT2		1+1	
4	Taper shank for drilling chuck	ISO40/B18		1	
5	Drilling chuck	Φ 3~Φ 16		1	
6	T slot bolt	M14x55		2	
7	Washer	14		2	
8	Nut	M14		2	
9	Inner hexagonal spanner	2.5 3. 4. 5. 6 .8		1	
10	Tilted wedge			1+1	
11	Spanner	17-19/22-24/8-10		1+1+1	
12	Horizontal milling bar	ISO40-22/27		1+1	
13	Oil gun			1	
14	Handle			3+1	
15	Crank			1	
16	Extension rod			1	
17	Instruction Manual			1	
18	Certificate of inspection			1	
19	Packing list			1	

Packing inspector _____

Date _____