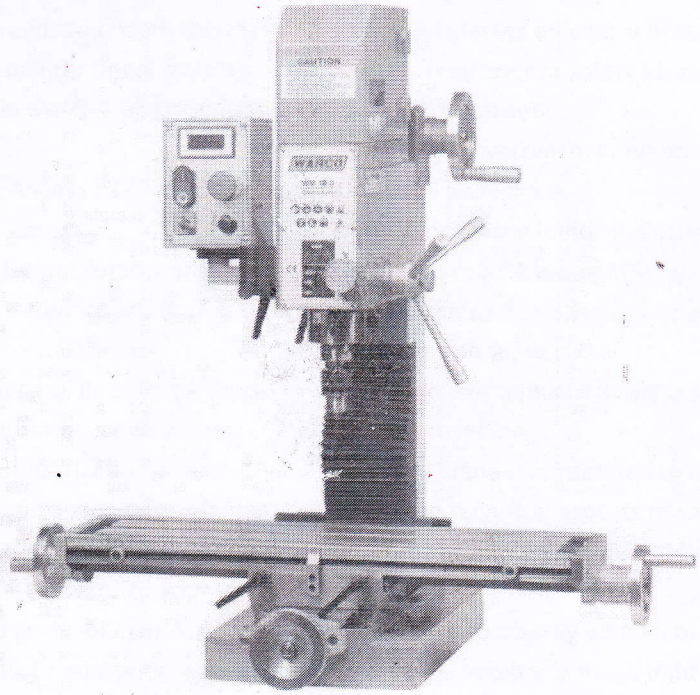
OPERATOR'S MANUAL

WM18 B



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WMD30VB VARIABLE SPEED LATHE

⚠ WARNING!

Read and understand the entire instruction manual before attempting set-up or operation of this mill/drill.

1.This machine is designed and intended for use by properly trained and experienced pe--rsonnel only. If you are not familiar with the proper safe use of mill/drills, do not use this machine until proper Training and knowledge has been obtained.

2.Keep guards in place. Safety guards must be kept in place and in working order.

3.Remover adjusting keys and wrenches. Before wrenches are removed from the tool.

4.Reduce the risk of unintentional starting. Make sure switch is in the OFF position before plugging in the tool.

5.Do not force tools. Always use a tool at the rate for which is was designed.

6.Use the right tool. Do not force a tool or attachment do a job for which it was not designed.

7.Maintain tools with care. Keep tools sharp and clean for best and safest performance. Follow instructions for lubrication and chan--ging accessories.

8.Always disconnect the tools from the power Source before adjusting or servicing.

9.Check for damaged parts. Chechk for align--ment of moving parts, breakage of parts, m--ounting, and any Other condition that may affect the tools operation.

10. Turn power off. Never leave a tool unatt--ended.

11. Keep work area clean. Cluttered areas and bench Invite accidents.

12. Do not use in a dangerous environment. Do not Use power tools in damp or wet loc--ations, or expose Them to rain. Keep work area well lighted.

13. Keep children and visitors away. All visitors should be kept a safe distance from the work area.

14. Make the workshop child proof. Use pad--locks, master switches and remove starter keys.

15. Wear proper apparel. Loose clothing , gloves, neckties, rings, bracelets, or other jewelry may get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair. Do not wear any glove.

16. Always use safety glasses. Also use face or dust mask if cutting operation is dusty. Every--day eyeglasses only have impact resistant le--nses, they are not safety glasses. accessories may be hazardous.

17. Do not overreach. Keep proper footing and balance at all times.

18. Do not place hands near the cutterhead w--hile the machine is operating.

19. Do not perform any setup work while mac--hine is operating.

20. Read and understand all warnings posted on the machine.

21. This manual is intended to familiarize you with the technical aspects of this mill/drill. It is not, nor was it intended to be, a training m--anual.

22. Failure to comply with all of theses warn--ings may result in serious injury.

23. Some dust created by power sanding, sawing, grinding, drilling and other con--struction activites contains chemicals known to cause cancer, birth defects or other repro--ductive harm.

24. Your risk from those exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals, work in a well ventilated are, and work with approved safety equipment.

WMD30VB VARIABLE SPEED LATHE

MAIN TECHNICAL SPECIFICATION

Specifications:	WMD30VB
Drilling Capacity	32mm
End Mill Capacity	20mm
Face Mill Capacity	76mm
Spindle Taper	MT3
Spindle Stroke	70mm
Head Tilt	±90°
Number of Spindle Speeds	Variable
Ranger of Spindle Speeds	50-2250RPM
Working Surface of Table	700*210mm
Max.Table longitudinal Travel	425mm
Max.Table Cross Travel	220mm
Max.vertical travel	370mm
Number of T-Slots	3
T-Slot Size	10mm
Motor	1.0KW,1Ph,230V
Overall Dimensions	710*890*1120mm
Net Weight(approx.)	220KGS
Shipping Weight(approx.)	260KGS

The specifications in this manual are given as general information and are not binding. WE--ISS reserves the right to effect, at any time and without prior notice, changes or alterations to parts, fitting and accessory equipment deemed necessary for any reason whatsoever.

WMD30VB VARIABLE SPEED LATHE

TABLE OF CONTENTS

⚠ WARNING!

Read and understand the entire contents of this. Manual before attempting setup or operation! Failure to comply may cause serious injure!

CONTENTS OF SHIPPING CONTAINER

1 WMD30VB Variio Milling & Drilling Machine
1 M10 Drawbar(installed on the machine)
1 Digital Scale & Speed Readout
1 Test Flow Chat
1 Operator manual
1 Toolbox & Tools

Toolbox Contents(Fig.01)

1 Oil Gun
1 MT2 Arbor
1 Double End Spanner(17-19,25mm)
6 Hex Socket Wrench(2.5,3,4,5,6mm)
1 Flat Blade Screwdriver
1 Cross Blade Screwdriver
4 Handle
2 M10 "T" Screw
2 M10 Washer
2 M10 Nut

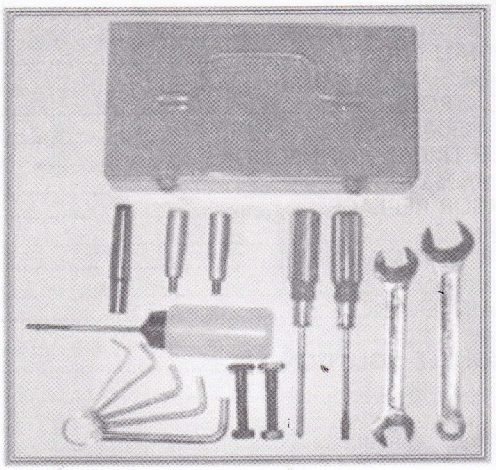


Fig. 01

Unpacking and Clean-up

1 .Finish removing the wooden crate from around the mill/drill.
2. Unbolt the machine from the crate bottom.
3. Sling mill/drill with the proper equipment.
4. Clean all rust protected surfaces using a mild commercial solvent, kerosence or diesel fuel. Do not use paint thinner,gasoline, or lacquer thinner. These will damage painted surfaces. Cover all cleaned surfaces with a light film of machine oil.

WMD30VB VARIABLE SPEED LATHE

Assembly

1. Screw handles(A, Fig.02)onto handwheel(B, Fig.03)and tighten.
2. Repeat for remaining handles of table.

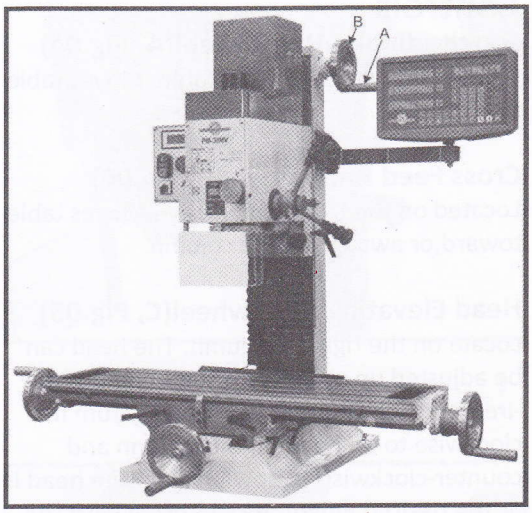


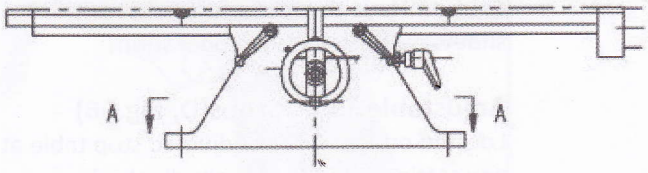
Fig.02

Installation

⚠ WARNING!

Machine is heavy! Use an appropriate lifting devive and use extreme caution when moving the machine to its final location. Failure to comply may cause serious injury!

1. The location for the mill/drill should be well lit, dry, and have room enough to allow the head to rotate 360°.
2. Carefully lift the mill/drill with properly rated equipment to a sturdy stand or working bench. For best performance, through bolt the mill/drill to a stand. **We do not recommend that unattached machines be operated,as the machine will move during operation!**
3. Before bolting the mill/drill to a bench or stand, the unit must be level in both direct--ions. Place a level on the table in both dir--ections.
4. If the table of mill is not level, shim under the low corner(s) until level. Tighten the fastening bolts. Check for level again. Ad--just as necessary until the mill/drill is level. Check again when securing bolts are tightened.



Installation Drawing(Fig.03)

The installation drawing described below may differ from the real dimensions. The tolera--nces are in the range of the general tolera--nces according to DIN 7168.

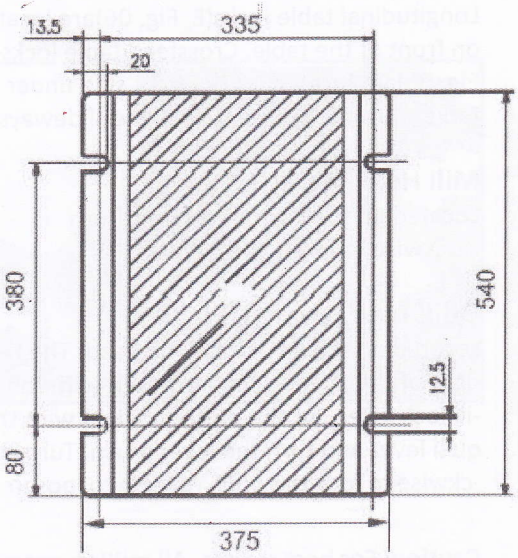


Fig. 03

WMD30VB VARIABLE SPEED LATHE

Controls

Longitudinal Handwheel(A, Fig.04)
Located on two side of the table. Moves table side to side.

Cross Feed Handwheel(B, Fig.04)
Located on the front of the base. Moves table toward,or away from the column.

Head Elevating handwheel(C, Fig.05)
Locate on the right of column. The head can be adjusted up or down to suit height requ--irements for different workpieces. Tum it clockwise to up head on the column and counter-clockwise to down. **When the head is at the desired height, lock in place with the locks.**

Caution:Have to loosen the locks for the slideways before above operation!

Adjustable Table Stops(D, Fig.06)
Located on table front.Adjust to stop table at any setting along the longitudinal axis.

Table locks
Longitudinal table locks(E, Fig. 06)are located on front of the table. Crossfeed table locks(F, Fig. 05)are located on the right side under the table.. Turn clockwise to lock the slideways.

Mill Head locks(G, Fig.07)
Located on the right of column. Turn clockwise to lock the mill head.

Quill Lock Lever(H, Fig.07)
Located on the left of the mill head. The he--ight of the spindle can be locked with the qu--ill lock lever. Set the desired height with the quill lever and turn the lever down. Turn clo--ckwise to lock the quill, reverse to loosen.

Caution: For best results. All milling opera--tions should be done with the quill/spindle as close to the head assembly as possible. Lock spindle, table and mill head in place before starting milling operations!

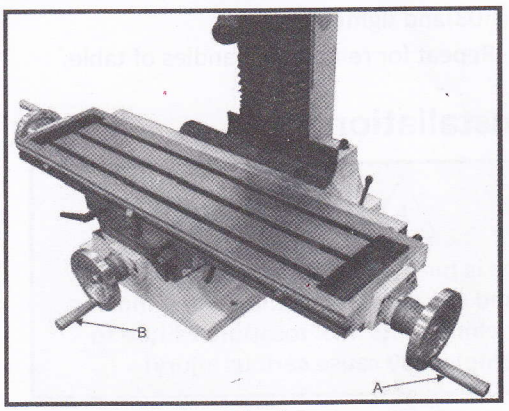


Fig.04

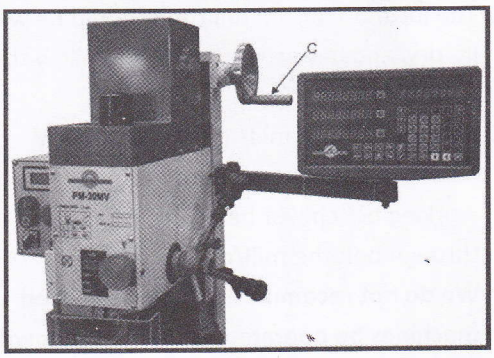


Fig.05

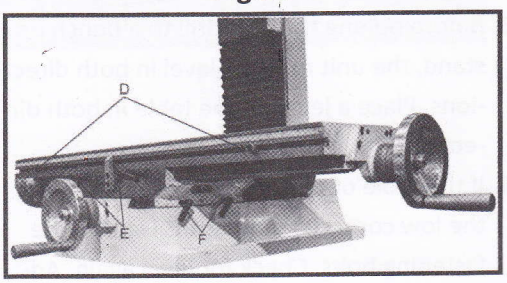


Fig.06

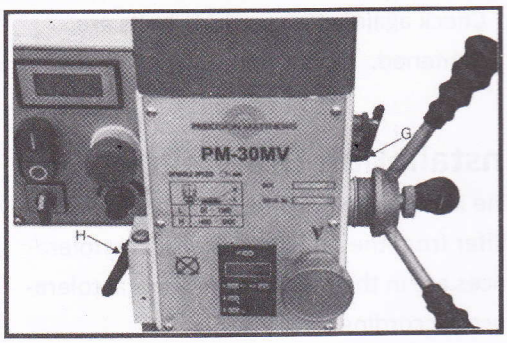


Fig.07

WMD30VB VARIABLE SPEED LATHE

Down feed Handles:(J, Fig. 08):
Located on the right side of the head casting. Counter-clockwise movement advances the quill toward the table. Return spring retracts the handles. **The knob(K, Fig. 08)must be lo--ose before the operating the handles.** The graduated dials(L, Fig. 08)on the handle base can be indexed or " zeroed "to help make ac--curate and convenient movements.

Fine Down Feed
Turn counter-clockwise the knob(K, Fig. 08)to engage the fine down feed knob(M, Fig. 08) what located on the front of the head. Turn it according to you want to move downward, Clockwise turn the hand wheel to down feed the spindle, reverse to retract it.

Mill Head Rotation
The head is designed to tilt 90°either left or right, enabling it to perform task such as angle drilling or horizontal slotting. Loosen the lock nuts(N,Fig.09)under the head. Rotate the head to its desired position, using the refe--rence guide(O, Fig. 09). Once in place, retighten the lock nuts.
Note: make sure to provide support for the head so it doesn't unexpectedly rotate on its own. Always maintain control of the head.

Keep in mind that the head must be dialed in when it's returned to the" zero "position if high levels of accuracy are required. If you are able to use an angle vise to accomplish your milling operation without tilting the mill head, you will save yourself a good amount of setup time.

Change Low/High Step Speed (P, Fig. 10)
Pls open the motor cover, loose the cap-screw to move the motor bracket--(D),then change the belt position. The up position is for high speed, the down position is for low speed.
Note: Change speed keep machine is at low speed!
See the chart below for spindle speeds:

SPINDLE SPEED ↗/ (min)

L	H
50-750	150-2250

Caution: Even at low spindle speeds,metal fragments from the cutting process can be expelled by the mill/drill. Always wear ey--ewear and protective clothing when oper--ating the machine!

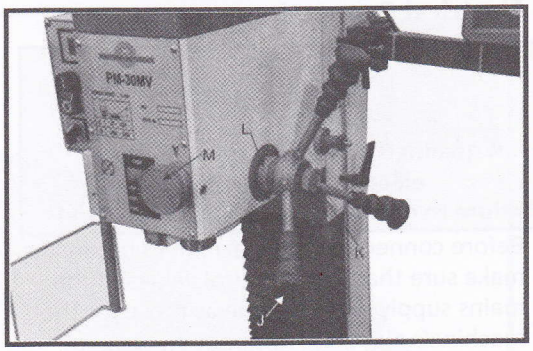


Fig.08

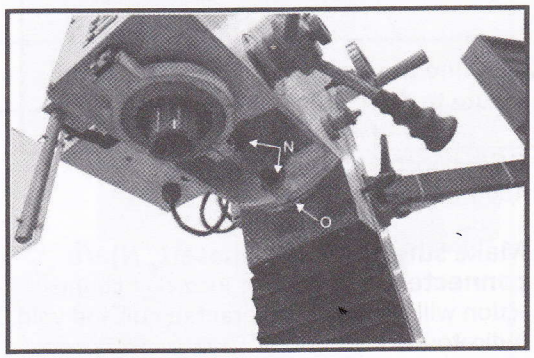


Fig.09

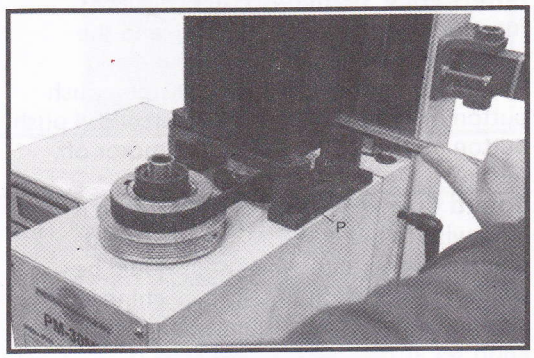


Fig.10

WMD30VB VARIABLE SPEED LATHE

Electrical Connections

⚠ WARNING!

A qualified electrician must make all electrical connections!
Failure to do so may cause serious injury!

Before connecting the machine to the mains, make sure that the electrical values of the mains supply are the same as those for the machine's electrical components. Use the wiring diagram(Fig. 11)for connecting the lathe to the mains supply.

⚠ WARNING!

Make sure the machine is properly ground!
Failure to do so may cause serious injury and damage to user!

DC – Motor - its type is 108ZYT, 230V, 4600rpm, 5.2A, 1.0KW.

Make sure that all 2 phase(L, N)are connected. Defective or incorrect conne--ction will render the guarantee null and void. Indicators are:
Motor runs hot immediately(3-4minutes).
Motor doesn't run silently and has no power.

Emergency Stop Switch(A, Fig. 12) function of emergency stopping and the protective function to the machine and electric components. (B,Fig.12)Green push button marked"I"to start the motor. Red push button marked"O"to switch the motor off.

Speed Control Knob(C,Fig.12)turn it clockwise to increase the spindle speed, reverse to decrease. The knob should be turned to zero each time the machine is stopped. Always start the machine with the knob set at zero.

F/R switch(D,Fig.12)changing the position of switch will reverse the direction of the mo--tor. F-forward direction, R-reverse direction.

Fuse Base(E,Fig.13)located on the back plate of electrical box. Fuse what rate is 12A is put in the base. Turn counter-clockwise the button to open and change the fuse, reverse to retighten.

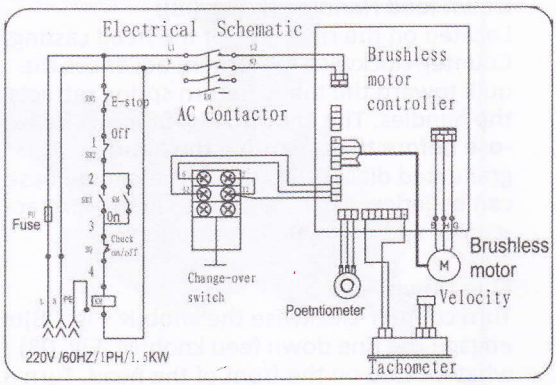


Fig.11

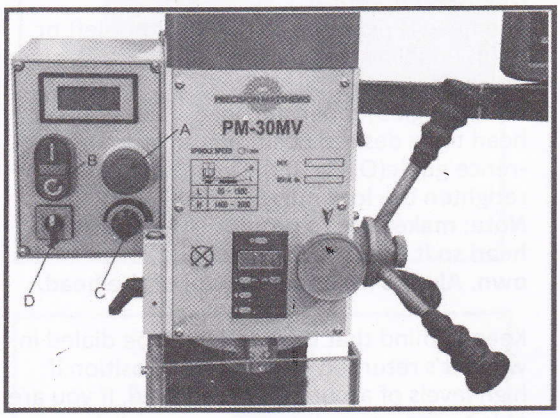


Fig.12

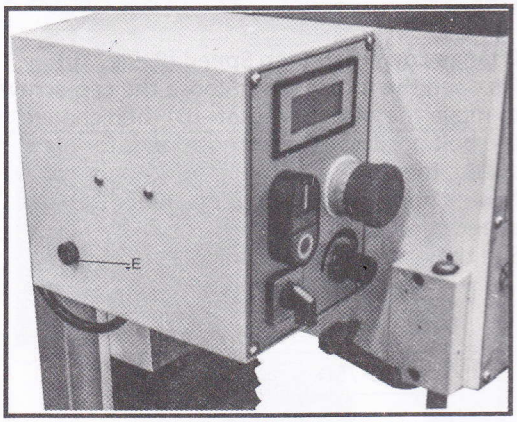


Fig.13

WMD30VB VARIABLE SPEED LATHE

⚠ WARNING!

This machine is designed and intended for use by properly trained and experienced personnel only! If you are not familiar with the proper and safe use of mill/drills, don't use the machine until proper training and knowledge have been obta--ined! Failure to comply may cause serious injury!

Arbor Replacement

1. Disconnect machine from the power source, unplug.

2. Remover the cover of drawbar onto the motor cover (A, Fig. 14)

3. Hold the flat of spindle(B, Fig. 15)to keep it from moving while loosening the drawbar (C, Fig. 16)with the 22-25 spanner in toolbox.

4. Loosen the drawbar approximately three to four full turns.

5. Tap the drawbar head with a rubber mallet to dislodge the arbor.

6. Grasp the arbor with on hand while loose--ning the drawbar with the other. Continue to loosen the drawbar until the arbor can be wit--hdrawn from the spindle. Wipe out the spin--dle with a clean dry rag.

7. Wipe down the new arbor with a clean dry rag and place the arbor into the spindle. Thr- Thread the drawbar into the arbor. Tighten the drawbar with a spanner while holding the spindle.

⚠ WARNING!

Do not loosen the drawbar more than three or four turns before hitting with a rubber mallet. Damage to the drawbar threads may occur!

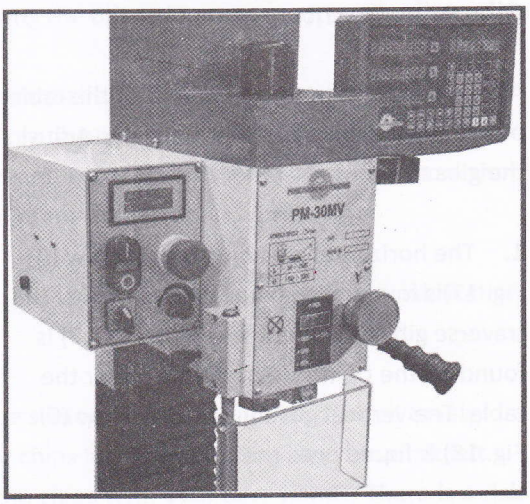


Fig.14

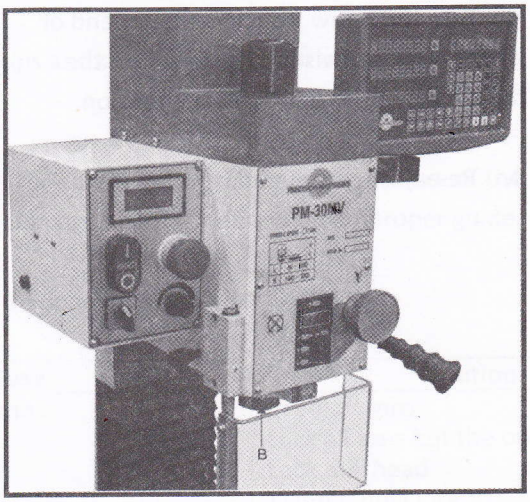


Fig.15

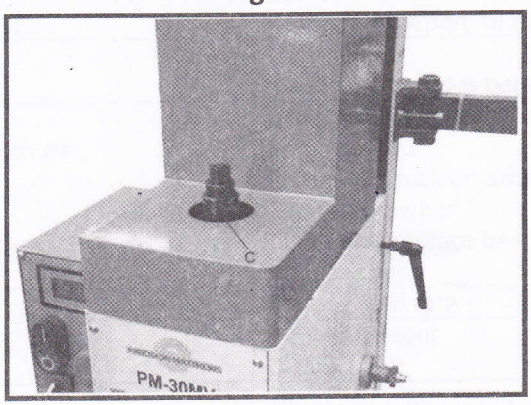


Fig.16

Gibs Adjustment

After a period of time, movement of the table over the ways will cause normal wear. Adjust the gibs to compensate for this wear.

1. The horizontal gib adjustment screw (A, Fig. 17)is found to the rear right on table. The traverse gib adjustment screw (B, Fig. 17) is found on the right side of saddle under the table. The vertical gib adjustment screw (C, Fig. 18) is found onto the column.

2. Loose the screw from small taper end of gib. Turn the screw from large taper end of gib slightly clockwise to tighten. Turn the table handwheel and check the tension.

3. Re-adjust as required.

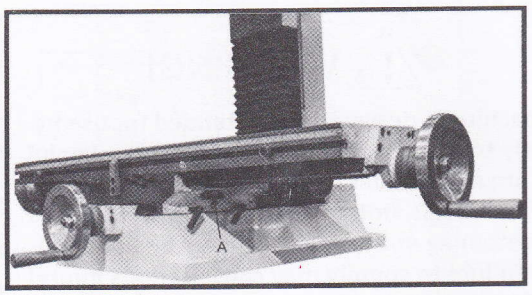


Fig.17

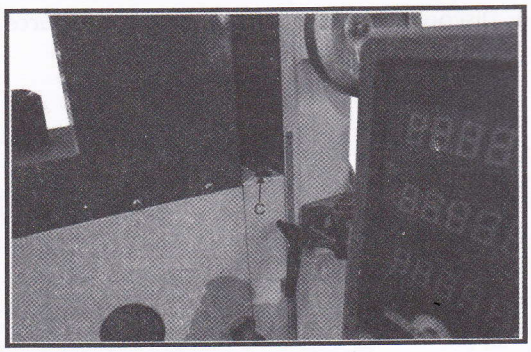


Fig.18

WMD30VB VARIABLE SPEED LATHE

Maintenance

Keep the maintenance of the machine tool during the operation to guarantee the accuracy and service life of the machine.

1. In order to retain the machine's precision and functionality, it is essential to treat it with care, keep it clean and grease and lubricate it regularly. Only through good care, you can be sure that the working quality of the machine will remain constant. **Disconnect the machine plug from the mains supply whenever you carry out cleaning, maintenance or repair work!**

2. Lubrication all slideways lightly before every use. The leadscrew must also be lightly lubrication with lithium base grease.

3. During the operation, the chips what falls onto the sliding surface should be cleaned timely, and the inspection should be often made to prevent chips falling into sliding ways. Asphalt felt should be cleaned at certain time. **Do not remove the chips with your bare hands. There is a risk of cuts due to sharp-edged chips.**

4. After the operation every day, eliminate all the chips and clean different part of the machine and apply machine oil to prevent rusting.

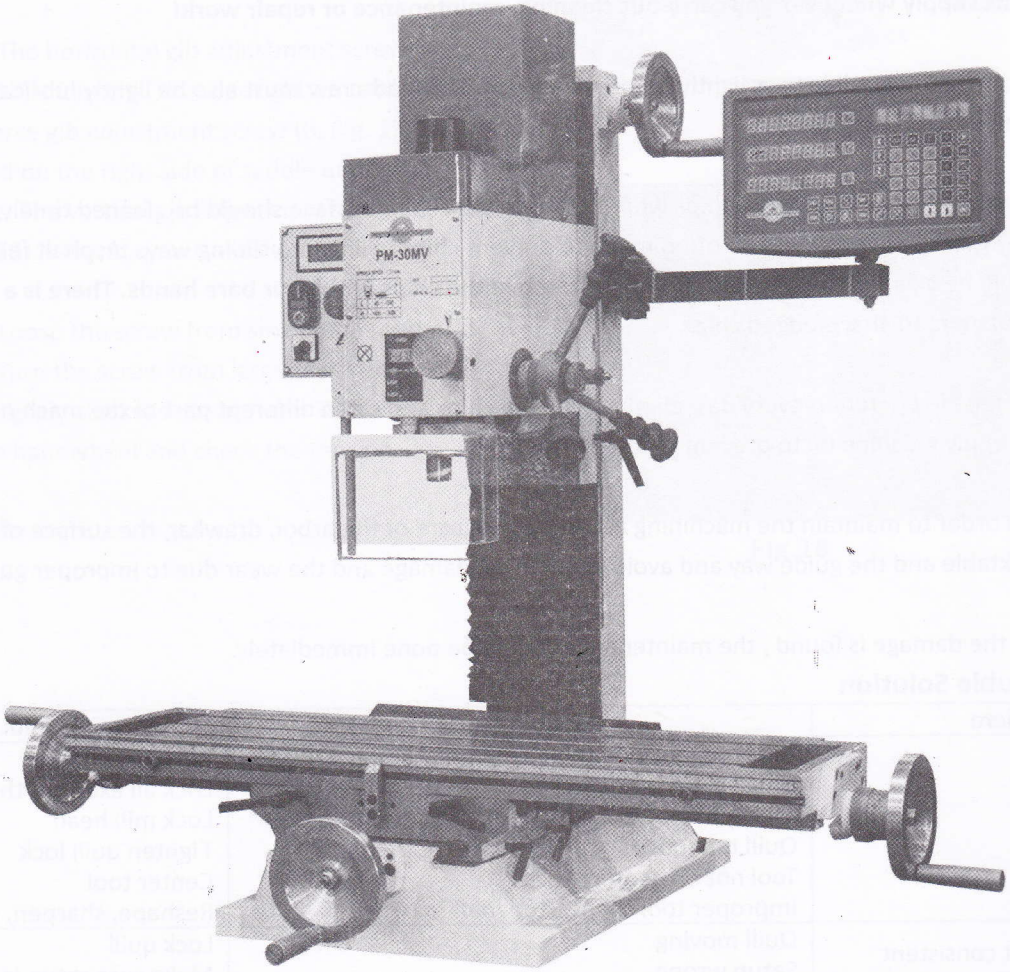
5. In order to maintain the machining accuracy, take care of the arbor, drawbar, the surface of the worktable and the guide way and avoid mechanical damage and the wear due to improper guide.

6. If the damage is found , the maintenance should be done immediately.

Trouble Solution

Problem	Possible Cause	Solution
Too chatters	Gibs too loose on table,column Unused feeds not locked Mill head not locked Quill too loose Tool not on center Improper tool shape , tool dull	Readjust gibs Lock all axes but the one moving Lock mill head Tighten quill lock Center tool Reshape, sharpen, or replace tool
Depth of cut is not consistent	Quill moving Setup wrong	Lock quill Make sure setup is parallel to table
Hole is off center or bit wanders	Bit dull Bit not mounted correctly in chuck Chuck loose in spindle Drawbar not secured Bearing loosen or worn Cutting too fast	Use sharp bits Remount tool Remount chuck on arbor Tighten drawbar Tighten or replace bearings Reduce speed
Bit turns erratically or stops	Bit fed into work too fast	Reduce feed rate
Chuck is difficult to tighten or loosen	Chuck sticking Debris in chuck	Apply lubricant Clean chuck
Chuck wobbles	Chuck loose on arbor Drawbar not tight	Clean arbor and remount Clean spindle and replace drawbar
Turn on machine and nothing happed	Machine unplugged Loose electrical connections	Plug in machine Tighten wiring connections

PARTS LIST FOR
WMD30VB

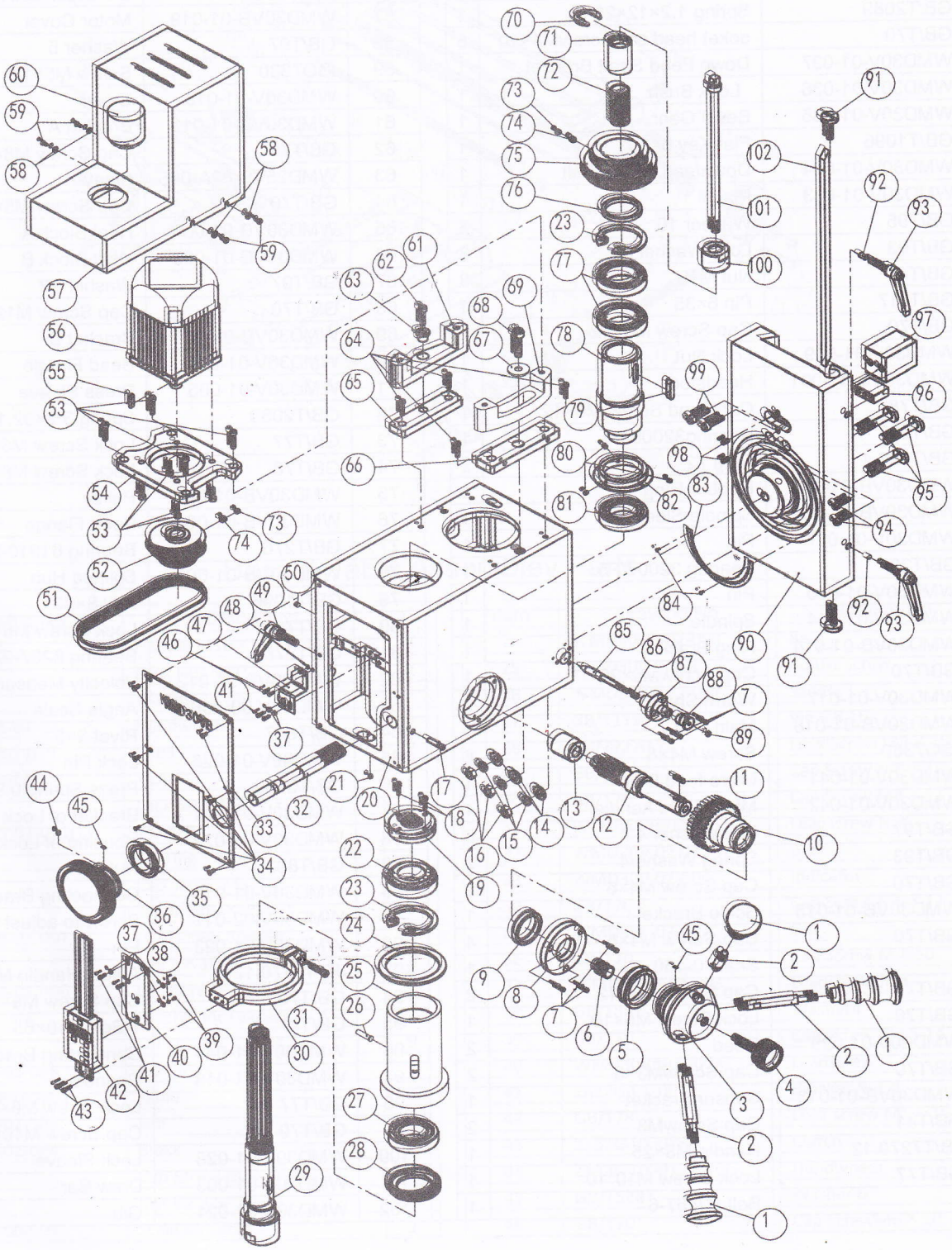


Keep Read and Understand the Operation Manual and Safely

Information Before Operation

WMD30VB D&M Machine Explosive view and Parts list

Headstock assemble Explosive View



Headstock assembley Parts List

Item	Drawing No	Discription	Q
1	WMD20V-01-047	Revolving Handle	3
2	ZAY7025FG-03-014	Handle	3
3	WMD30V-01-039	Handle Bracket	1
4	WMD20V-01-021	Knob Bolt	1
5	WMD30V-01-038	Dial Ring	1
6	GB/T2089	Spring 1.2×12×25	1
7	GB/T70	soket head cap screwM4×10	6
8	WMD30V-01-037	Down Feed Shaft Bracket	1
9	WMD30V-01-036	Lock Bush	1
10	WMD30V-01-035	Bevel Gear	1
11	GB/T1096	Flat Key 6×16	1
12	WMD30V-01-034	Downfeed Gear Shaft	1
13	WMD30V-01-033	Plag	1
14	GB/T95	Washer 10	3
15	GB/T93	Lock Washer10	3
16	GB/T41	Nut M10	3
17	GB/T117	Pin 6×35	1
18	GB/T70	Cap Screw M5×12	2
19	WMD30V-01-009	Lock Nut	1
20	WMD30VB-01-001	Headstock	1
21	GB/T78	Cone end Screw M6×12	1
22	GB/T297	Bearing32006/P5	1
23	GB/T893.1	Ring 72	2
24	WMD30VB-01-016	Rubber Ring	1
25	WMD30VB-01-002	Spindle Sleeve	1
26	WMD30V-01-027	Pin	1
27	GB/T297	Bearing 32007/P5	1
28	WMD30V-01-015	Pin	1
29	WMD30V-01-014	Spindle	1
30	WMD30VB-01-014	Ring Bracket	1
31	GB/T70	Cap ScrewM6×20	1
32	WMD30V-01-017	Worm Shaft	1
33	WMD30VB-01-018	Main Plat	1
34	ISO7380	Screw M4×8	6
35	WMD30V-01-041	Micro feed Dial	1
36	WMD30V-01-042	Micro Feed handle	1
37	GB/T97	Flat Washer 4	6
38	GB/T93	Spring Washer4	2
39	GB/T70	Cap Screw M4×6	2
40	WMD30VB-01-015	Scale Bracket	1
41	GB/T70	Cap Screw M4×8	4
42		Scale 0-150	1
43	GB/T70	Cap Screw M3×12	2
44	GB/T78	Lock Screw M5×10	1
45	WMD20V-01-029	Reed	2
46	GB/T70	Cap ScrewM3×6	2
47	WMD30VB-01-013	Sensor Bracket	1
48	GB/T41	Cap ScrewM3	2
49	JB/T7270.12	Handle M8×25	1
50	GB/T77	Lock Screw M10*10	1
51		Belt PJ457-6	1

Item	Drawing No	Discription	Q
52	WMD30VB-01-006	Pulley	1
53	GB/T70	Cap Screw M6×16	8
54	WMD30VB-01-007	Plate for Motor	1
55	GB/T1096	Key 6×20	1
56		DC Brushless Motor 1.5KW	1
57	WMD30VB-01-019	Motor Cover	1
58	GB/T97	Washer 5	4
59	ISO7380	Screw M5×12	4
60	WMD30V-01-013	Cover	1
61	WMD30VB-01-011	Bracket A	1
62	GB/T70	Cap Screw M8×35	1
63	WMD25VB-02A-005	Sleeve	1
64	GB/T70	Cap Screw M5×16	4
65	WMD30VB-01-008	Heel Block A	1
66	WMD30VB-01-009	Heel Block B	1
67	GB/T97	Washer 12	1
68	GB/T70	Cap Screw M12×50	1
69	WMD30VB-01-010	Bracket B	1
70	WMD30V-01-004	Bead Flange	1
71	WMD30V-01-005	Press Sleeve	1
72	GB/T2089	Spring 3.2×32.1×160	1
73	GB/T77	Lock Screw M6×8	2
74	GB/T78	Lock Screw M6×10	2
75	WMD30VB-01-005	Pulley	1
76	WMD30VB-01-004	Bead Flange	1
77	GB/T276	Bearing 61910-2RZ/P5	2
78	WMD30VB-01-003	Splined Hub	1
79	GB/T1096	Key 8×32	1
80	GB/T78	Lock Screw M6×8	3
81	GB/T276	Bearing 6207-2Z/P5	1
82	WMD30VB-01-012	Velocity Measurement Ring	1
83	WMD30V-00-006	Angle Scale	1
84	GB/T827	Rivet 2×5	2
85	WMD30V-01-025	Lock Pin	1
86	GB/T2089	Press Spring 0.9×8×20	1
87	WMD30V-01-024	Bracket of Lock Pin	1
88	WMD30V-01-022	Housing of Lock Pin	1
89	GB/T802	Nut M6	1
90	WMD30V-01-017	Connecting Bracket	1
91	WMD30V-02-011	Screw to adjust the gib	2
92	WMD30V-01-023	Pin	2
93	JB/T7270.12	Adjust Handle M8×20	2
94	GB/T70	Cap Screw M8×30	2
95	GB/T37	T Bolt M10×65	3
96	WMD30V-01-044	Connecting Bracket	1
97	WMD30V-01-018	Connecter	1
98	GB/T77	Lock screw M6×16	2
99	GB/T70	Cap Screw M10×35	2
100	WMD30V-01-028	Lock Sleeve	1
101	WMD30V-01-003	Draw Bar	1
102	WMD30V-01-021	Gib	1

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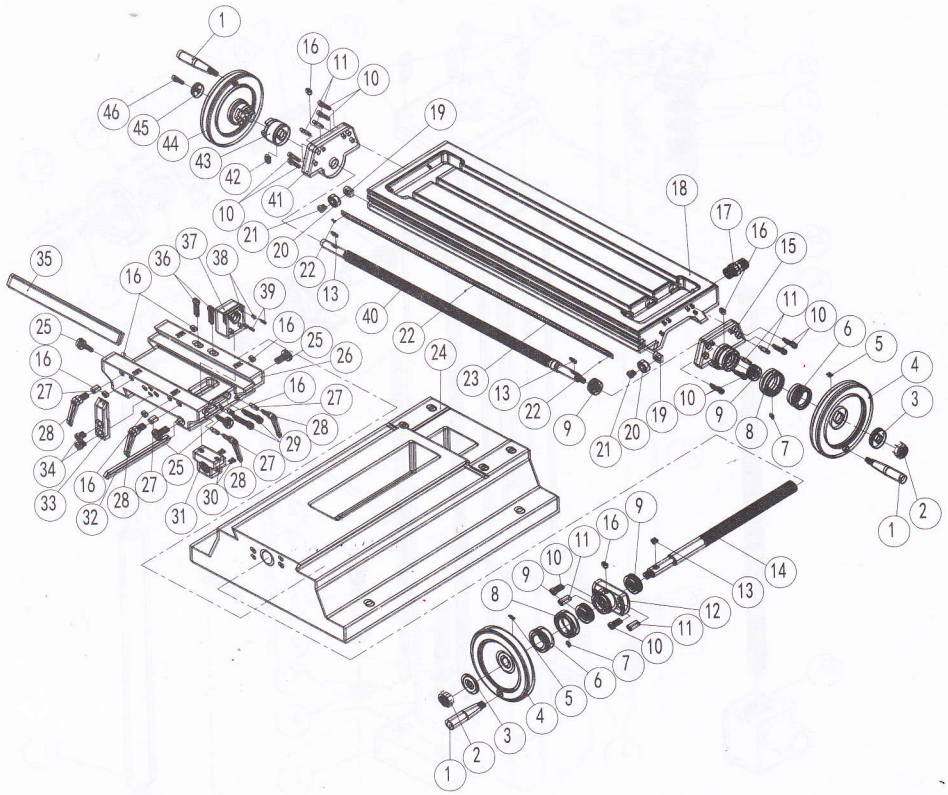
Bass and Table Assembley Explosive View

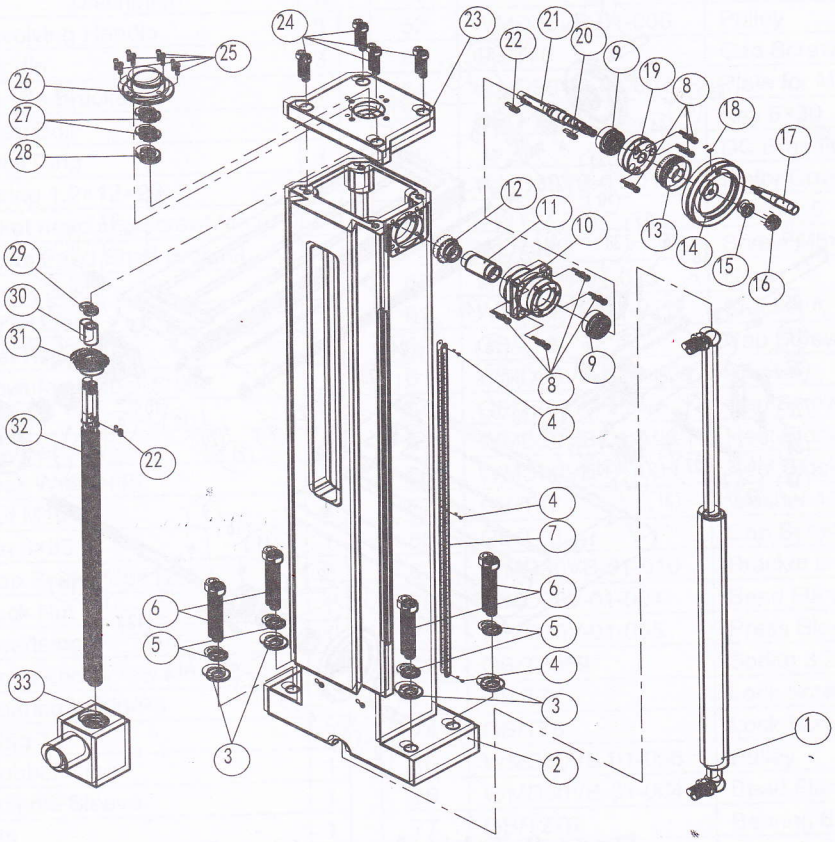


Bass & Table Assembley Parts

Item	Drawing No	Discription	Q
1	JB/T7270.5	Handle M10×80	3
2	GB/T6183	Lock Nut M10	2
3	GB/T96	Washer 10	2
4	ZAY7025FG-01-022	Handwheel	2
5	WMD20V-01-029	Reed	2
6	ZX32G-01-011	Y-Dial	2
7	GB/T78	Lock Screw M5×6	2
8	ZAY7025FG-01-021(1)	Y-Dial Bush	2
9	GB/T301	Bearing 51103	4
10	GB/T70	Cap screw M8×25	10
11	GB/T118	Taper Pin6×25	6
12	WMD30VB-02-007	Leadscrew Bracket	1
13	GB/T1096	Key 5×16	3
14	WMD30VB-02-006	Leadscrew	1
15	ZX32G-01-006	Bracket for Leadscrew A	1
16	GB/T1155	Oil Cup 6	9
17	WMD30V-02-008	Pipe Joint	1
18	WMD30VB-02-001	Table	1
19	WMD20V-02-005	Nut	2
20	WMD20V-02-004	Block	2
21	GB/T70	Cap Screw M6×10	2
22	GB/T827	Rivot 2×5	3
23	WMD30V-00-007	Scale on Table	1

Item	Drawing No	Discription	Q
24	WMD30VB-02-008	Bass	1
25	WMD30V-02-011	Adjust Screw	4
26	WMD30VB-02-002	Saddle	1
27	GB/T119	Pin 6×16	4
28	GB/T7270.12	Lock Screw M8×25	4
29	GB/T70	Cap Screw M8×35	2
30	GB/T70	Cap Screw M4×12	2
31	WMD30VB-02-005	Leadscrew Nut	1
32	WMD30V-02-017	Gib	1
33	WMD30V-02-004	Indicator	1
34	GB/T70	Cap Screw M6×12	2
35	WMD30V-02-012	Gib	1
36	GB/T70	Cap Screw M×50	2
37	WMD30VB-02-003	Leadscrew Nut	1
38	GB/T848	Washer4	2
39	GB/T70	Cap Screw M4×14	2
40	WMD30VB-02-004	Leadscrew	1
41	ZX32G-01-005	Bracket Nut B	1
42	GB/T78	Lock screw M5×10	1
43	ZX32G-01-013	Clutch	1
44	ZX32G-01-012	Handwheel	1
45	GB/T5287	Washer 6	1
46	GB/T70	Cap ScrewM6×20	1

Column Assembley Explosive View

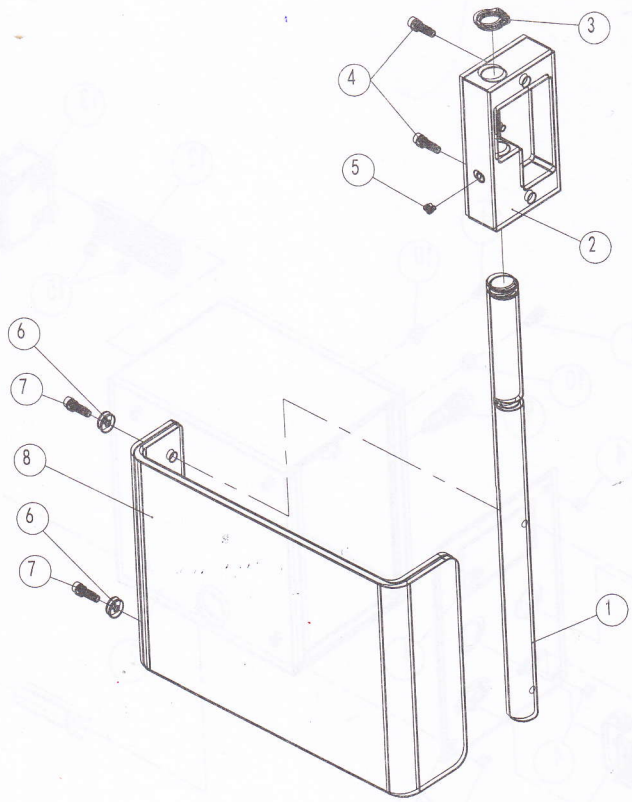


Column Assembley Parts List

Item	Drawing No	Disicription	Q
1	YQL	Air Spring	1
2	WMD30V-03-001	Column	1
3	GB/T97	Washer14×5	4
4	GB/T827	Rivet 2	3
5	GB/T93	Spring Washer 14	4
6	GB/T70.1	Cap Screw M14×80	4
7	WMD30V-00-005	Scale	1
8	GB/T70.1	Cap Screw M5×12	7
9	GB/T276	Bearing 6001-2Z	2
10	WMD20V-03-009	Bearing Bracket	1
11	WMD30V-03-006	Adjust Sleeve	1
12	WMD20V-03-007	Bevel Gear（2）	1
13	WMD30V-03-008	Dial	1
14	WMD20V-03-013	Handwheel	1
15	GB/T97	Washer8	1
16	GB/T41	Nut M8	1
17	JB/T7270.5	Handle M10×80	1

Item	Drawing No	Disicription	Q
18	WMD20V-01-029	Reed	1
19	WMD20V-03-010	Plug	1
20	GB/T1096	Key 4×12	1
21	WMD30V-03-007	Shaft	1
22	GB/T1096	Key 4×16	2
23	WMD30V-03-005	Cover Plate	1
24	GB/T70.1	Cap Screw M8×25	4
25	GB/T70.1	Cap Screw M5×8	4
26	WMD20V-03-001	Bellows	1
27	GB/T810	Nut M16×1.5	2
28	GB/T301	Bearing 51203	1
29	WMD20V-03-015	Coper Sleeve	1
30	WMD30V-03-004	Bush	1
31	WMD20V-03-006	Bevel Gear	1
32	WMD30V-03-003	Leadscrew	1
33	WMD30V-03-002	Leadscrew Nut	1

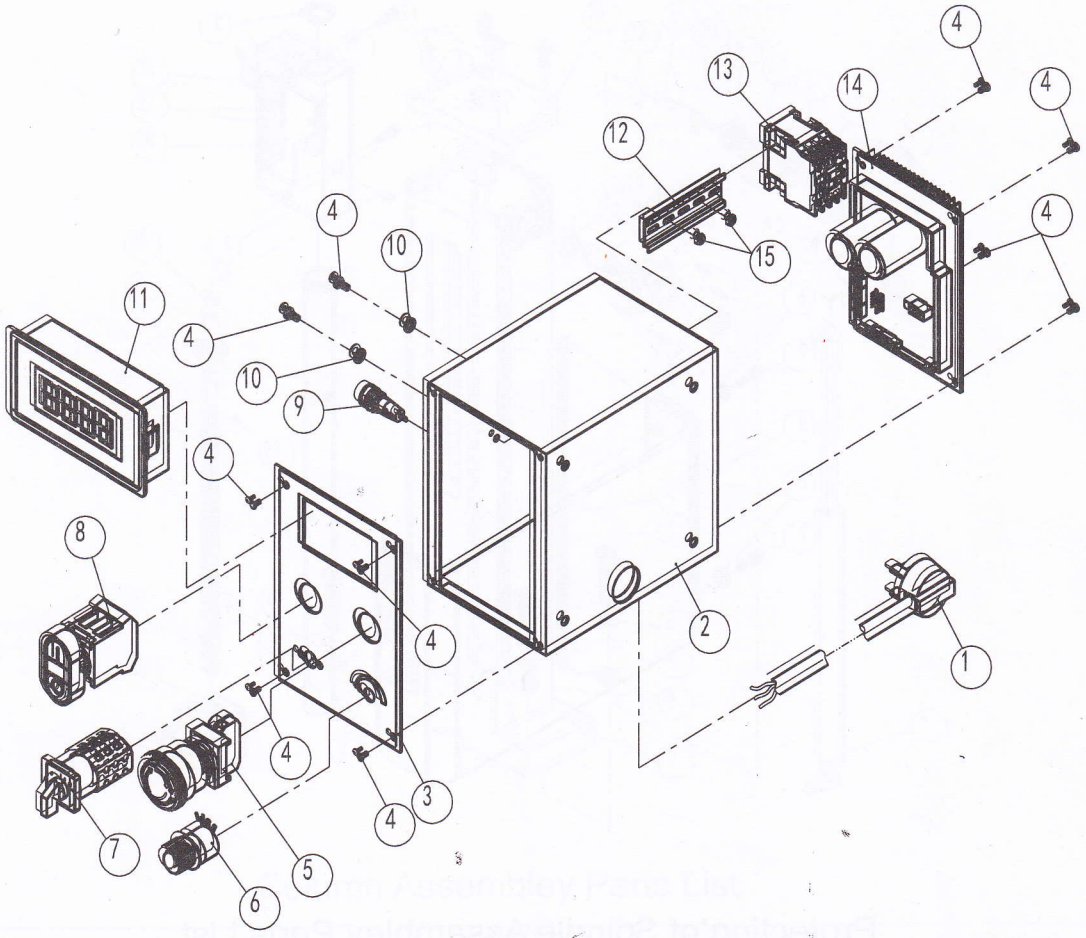
Protecting Of Spindle Assembley Explosive View



Protecting of Spindle Assembley Parts List

Item	Drawing No	Discription	Q
1	WMD20A-03-002	Bar	1
2	WMD20A-03-001	Switch Box	1
3	GB/T894.1	External Circlips 12	1
4	GB/T70	Cap Screw M5×16	2
5	GB/T79	Lock ScrewM5×8	1
6	GB/T96	Washer 4	2
7	GB/T70	Cap Screw M4×14	2
8	WMD30VB-03-001	Protecting	1

Electrical Box Assembley Explosive View



Electrical Box Assembley Parts List

Item	Drawing No	Discription	Q		Item	Drawing No	Discription	Q
1		Plug	1		9	BF015-10A	fuse	1
2	WMD30VB-04A-001	Box	1		10	GB95	washer4	2
3	WMD30VB-04-002	Installting Plate	1		11	MN40F Q1	Display	1
4	ISO7380	Screw M4×8	10		12	DZ47	Guide Way	1
5	YW1B-V4E01R	Emerhency Stop	1		13	LC1E1210M5N	Contactor	1
6	WX14-12 4K7	Potentiometer	1		14	DLK15	Control board	1
7	ZH-A	Switch	1		15	GB41	Nut M4	2
8	HB22	Button	1					