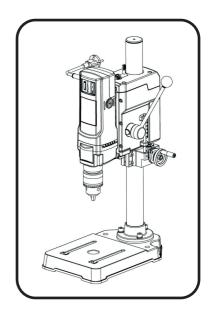
# MINI BENCH DRILL

# Handling Instructions



Please read the operating instructions carefully before use

Dear valued customer,

Thanks for your choose our products, and hope it will bring the convenience and enjoyment to you.

#### ! WARNING

**Read and understand all instructions.** Failure to follow all instructions listed below, may result in electric shock, fire and/or serious personal injury.

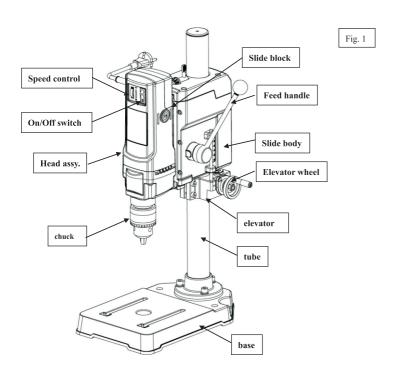
#### SAVE THESE INSTRUCTIONS

This mini bench drill is designed for a precision drilling and milling machine, and suitable for industry and home use both, thanks to Alu.-cast base and extra thickness tube, powerful motor, gear transmission, with variable speed controller. It is really DIY funs wise choice.

#### Specifications

Note: the specification is different to different models. Please check with the nameplate on the machine you get for correct data

MODEL	Rated Voltage and Frequency	Rated input Power	No load Speed	Clamping diameter	Travel length
Model 1	220V~50/60Hz	1050W	800r/min	3-16mm	60mm
Model 2	220V~50/60Hz	880W	2500r/min	1.5-13mm	60mm



#### Safety Rules

#### ! WARNING

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#### SAVE THESE INSTRUCTIONS

#### Work Area

Keep your work area clean and well lit. Cluttered benches and dark areas invite accidents. Keep the floor around the machine clean and free of scrap material, oil and grease.

Do not operate drill press in explosive atmospheres, such as in the presence of flammable liquids, gases, or dust. Machine creates sparks which may ignite the dust or fumes.

Keep by-standers, children, and visitors away while operating a machine. Distractions can cause you to lose control.

#### **Electrical Safety**

Before plugging in the machine, be certain the outlet voltage supplied is within the voltage marked on the nameplate. Do not use "AC only" rated machine with a DC power supply.

Make sure the machine is properly grounded.

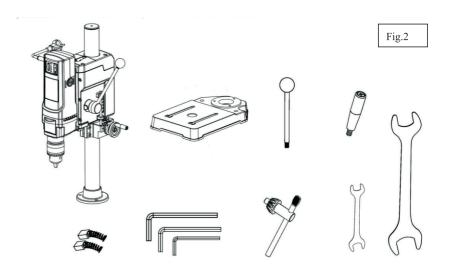
Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded. Electrician's rubber gloves and footwear will further enhance your personal safety.

Don't expose this drill press to rain or wet conditions. Water entering a machine will increase the risk of electric shock

**Do not abuse the cord.** Never use the cord to carry the machines or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

#### **Shipping Contents**

Unpack the carton and verify that all parts listed below are included



MODEL 1		MODEL 2	
Head assy. (included chuck)	1 set	Head assy. (included chuck)	1 set
Base (included bolts)	1 piece	Base (included bolts)	1 piece
Feed handle	1 set	Feed handle	1 set
Elevator wheel (with screws)	1 set	Elevator wheel (with screws)	1 set
Wrench (27mm)	1 piece	Wrench (17mm)	1 piece
Spare carbon brushes	1 pair	Spare carbon brushes	1 pair
Hex key (3mm、5mm、6mm)	3 pieces	Hex key (3mm、5mm、8mm)	3 pieces
Chuck key (16mm)	1 piece	Chuck key (13mm)	1 piece
Wrench (7mm)	1 piece	Wrench (7mm)	1 piece

#### Assembly

WARNING Read and understand all assembly instructions before attempting assembly! Failure to comply may cause serious injury!

<u>I WARNING</u> Do not attempt to turn on power before this machine is completely assembled.

#### **Column Assembly**

- 1, Place the base on a level floor.
- 2, Place the column(77with75) on the base(74).
- 3. Using attached 6 mm Hex Key to tight the three pieces Hex Bolts on the base. (Fig.3)  $\,$

Assembly Feed Handle

Screw the Feed Handle into the Feed Shaft (81), and tighten it

#### **Adjustment**

WARNING Unplug the machine from the power source before making any adjustmen

#### Adjusting the guide play

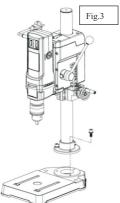
If, after a time, the bench drill guide is found to have too much o too little play, the play can be reset using the adjusting screws. It order to adjust the play, first release the nut, then set the play using the set screw, Lock by re-tightening nut.

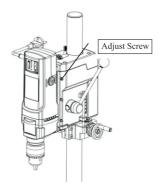
(Note: Do not over-tighten the set screws as the guide will be damaged.)

#### Raise or Down the head

- 1, Loosen two lock lever (47) by the other hand
- 2, Loosen two screws (40) of elevator(61)
- 3, Lift or down the head and elevator to desired height
- 4, Tighten the lock lever firmly again.

#### Raise or Down the head in small size





This machine can be raise or down the head in small size, smaller than 60mm,by elevator.

Loosen the above mentioned lock lever(47) and rotate the elevator wheel to adjust the head height. It's down or up be showed by depth point.

#### CAUTION

Certain cleaning agents and solvents damage plastic parts. Some of these are: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

#### Adjust the Depth Stop (Fig. 5)

- 1, Loosen the fixed screw (34) of depth point.
- 2, Feed down the handle and let drill bit tough to the workpiece.
- 3, Adjust the point(35) to the depth of you desited.
- 4, Tighten the fixed screw again.

#### Change Spindle Speed

This press drill is designed to adjust the output speed by electronic speed controller (10)

- 1, Rotate the Adjustment Knob down or forward the sign of "+" means higher speed.
- 2, Rotate the Adjustment Knob up or forward the sign of "-" means lower speed.

#### **Installing Drills**

Insert the Drill Bit into the chuck jaws with about 10mm insertion. When using a small drill do not insert it so far that the jaws touch the flutes of the drill. Make sure the drill bit is centered in the chuck before tightening the chuck with the key.

To tighten chuck, insert key into each of the three key holes in succession and tighten clockwise firmly. The chuck can be released by using one hole only.

### Maintenance

#### Service

#### ! WARNING

Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components which could cause serious hazard. We

recommend that all machine service be performed by a Factory Authorized Service Station.

#### **Tool Lubrication**

Your machine has been properly lubricated and is ready to use. It is recommended that machines with gears be regreased with a special gear lubricant at every brush change.

#### **Carbon Brushes**

The brushes and commutator in your machine have been engineered for many hours of dependable service. To maintain peak efficiency of the motor, we recommend every

50 hours of operation the brushes be examined. Only genuine replacement brushes specially designed for your machine should be used.

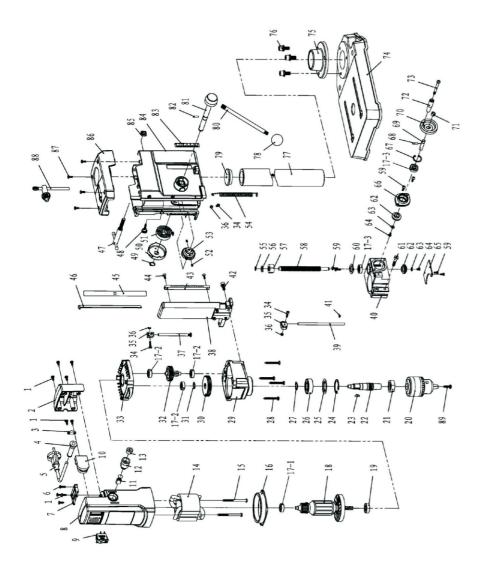
#### Cleaning

#### ! WARNING

To avoid accidents always disconnect the machine from the power supply before cleaning or performing any maintenance. The machine may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air. Ventilation openings and switch levers must be kept clean and free of foreign matter. Do not attempt to clean by inserting pointed objects through openings.



## [Explosive view]



5

1	Screw ST4x12	46	Copper Bent Sheet
2	Rare Cover	47	T Wrench
3	Cord Anchor	48	Screw M4x8
4	Cord Sleeve	49	Circlip for shaft 12
5	Cord	50	Coil Spring Cover
6	Screw M4x14	51	Coil Spring
7		52	Screw M4x6
	Connector		
8	Housing	53	Elevator Gear
9	On/Off Switch	54	Spring
10	Speed Controller	55	Circlip for shaft 8
11	Carbon Brush	56	Flat Washer8 x
12	Brush Holder	57	Nut Tr12
13	Brush Cap	58	Thread Bar Tr12
14	Stator	59	Screw M5x8
15	Screw ST5x65	60	Bearing Cover
16	Air Defector	61	Screw M6x30
17	Bear 608	62	Cone Gear
18	Armature	63	Flat Washer 4
19	Bearing 6000	64	Screw M4x6
20	Chuck B16	65	Cover
21	Hex Nut M18x1.5	66	Side Cover
22	Spindle	67	Circlip for hole 22
23	Woodruff KeyB4	68	Column Pin Ø3x10
24	Circlip for hole 40	69	Hand Wheel Shaft
25	Washer ø39	70	Hand Wheel
26	Bearing 6203	71	Screw M8
27	Circlip for shaft 17	72	Hand Wheel Handle
28	Screw ST5x40	73	Screw M5×51
29	Gear Box	74	Base
30	Gear	75	Tube Fixed Supporter
31	Circlip for shaft 14	76	Screw M8x20
32	Middle Gear	77	Tube Ø45
33	Middle Cover	78	Handle Ball
34	Screw M4x12	79	Top Cover of tube
35	Pointer	80	Feed Handle
36	Nut M4	81	Feed Shaft
37	Stop Rod	82	Column Pin Ø4x12
38	Slide Block	83	Scale
39	Guide Rod	84	Slide Body
40	Elevator	85	Nut M8
41	Screw M5x5	86	Slide Block Cover
42	Screw M6x16	87	Screw M4x10
43	Rack	88	Chuck Key B16
44	Screw M4 x14	89	Screw M5x16
45	Copper Straight Sheet	90	
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