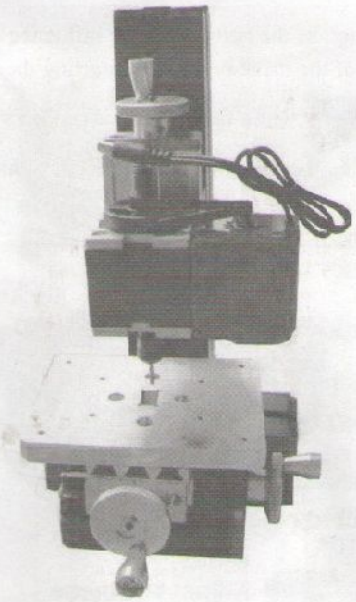
INSTRUCTION

Drilling Machine -Z20004/M



Please read this instruction carefully before using the machine

Component combination and usage

1.Motor-Gear Box Unit(Z1)

The followings are steps for assembling the Motor-Wheel Gear Box Unit (Z1):

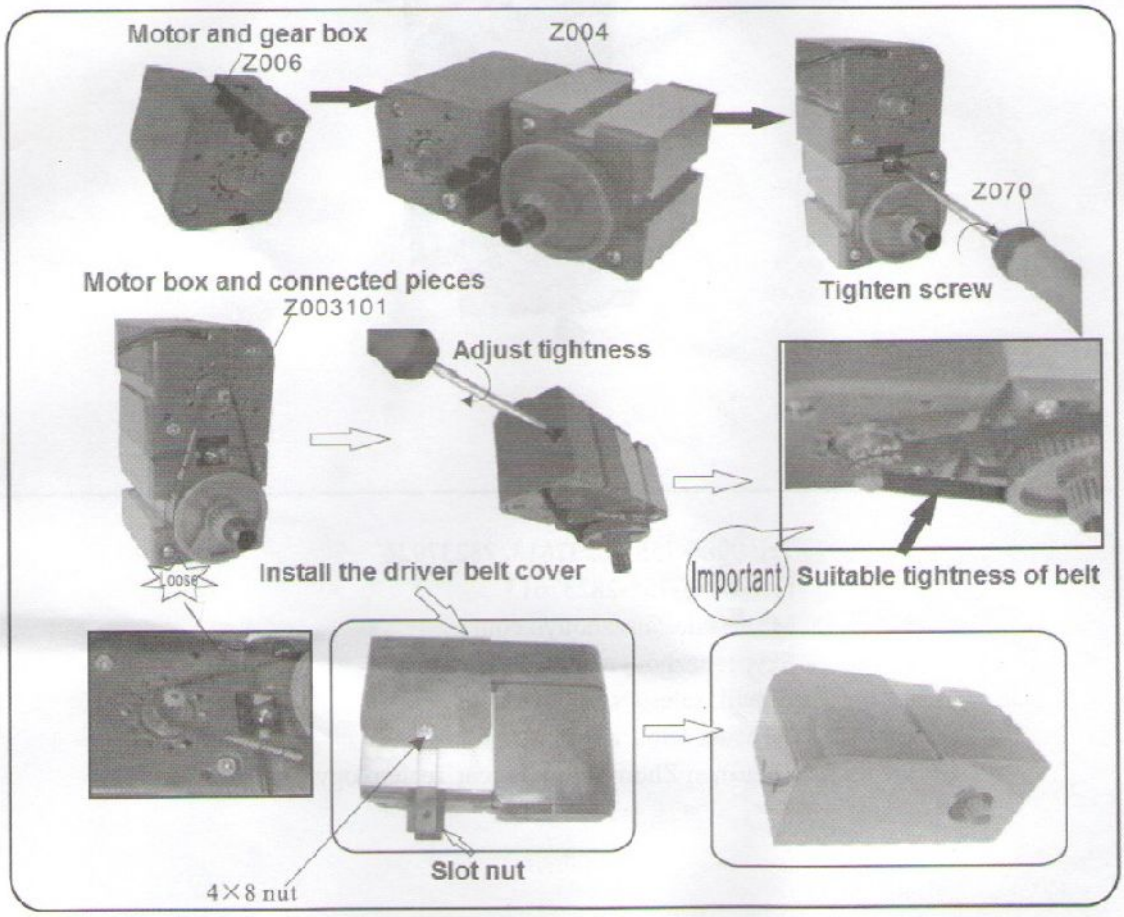
Slide the Dovetail Connection Block (Z013) into the Motor (Z006).After inserting the Dovetail Connection Block into the Motor, connect the Motor with the Wheel Gear Box (Z004) by sliding the Connection Block into the groove of the Motor as shown in Fig.Once both the Motor and the Wheel Gear Box are in the corrected position, fasten and tighten the connection block to hold the Motor and the Wheel Gear Box together.Fit the toothed belt (Z031) into the Motor and Gear Box.

Finally, the Motor-Wheel Gear Box Unit (Z1) has been assembled. Adjust the belt tension by tightening or loosening the screw of the motor with a ScrewDriver (Z070) as shown in the diagram.

Ensure the belt having the right tension as the belt has major influence on the motor and work performance. It is very important to adjust the tension of the drive belt before starting the motor.

The motor rotating direction is clockwise while face to the motor leaf's slice.

Using the nut and bolt (Z065) to fasten the driver belt cover (Z032) onto the motor to protect the toothed belt in most situations.



2. Small Slide-Large Slide Unit(Z2)

As shown in Fig

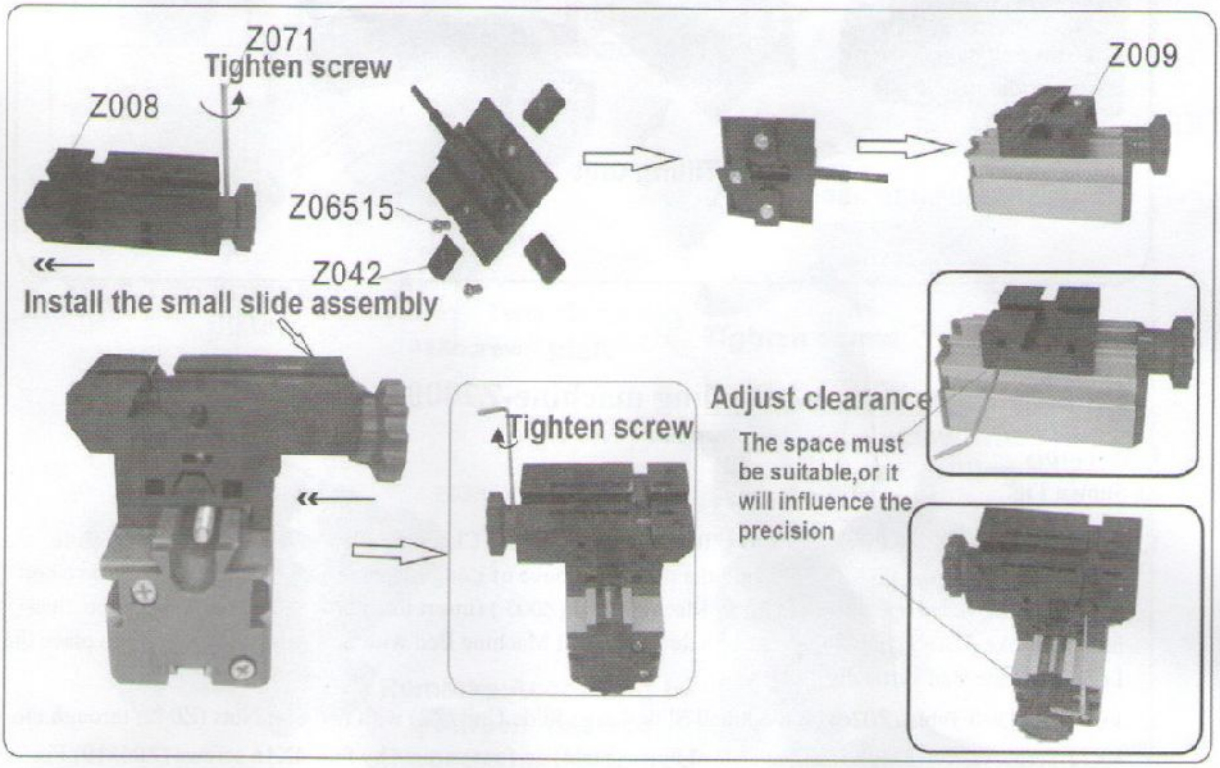
Hold the Small Slide (Z008) tightly , use the Socket Screw Wrench (Z071) to loosen the bolt in the position as shown in the diagram.

After that, push the base of small slide out. Slide three Greased Slot Nuts (Z042) into the dovetail groove of the Large Slide (Z009). Then, fix the Small Slide base on the Large Slide by tightening the bolts into the three Slot Nuts.

Place the other parts of the Small Slide on the base, use the Socket Screw Wrench to tighten the bolt in the handle.

When the above adjustment is done, the Small Slide and the Large Slide Unit (Z2) have completed as shown in the diagram.

Grease the movable sections as required, such as bolt, dovetail groove of small slide, Large slide, etc



3. Small Slide(Z008) And Intermediate Piece(Z030) Unit (Z3):

As shown in Fig :

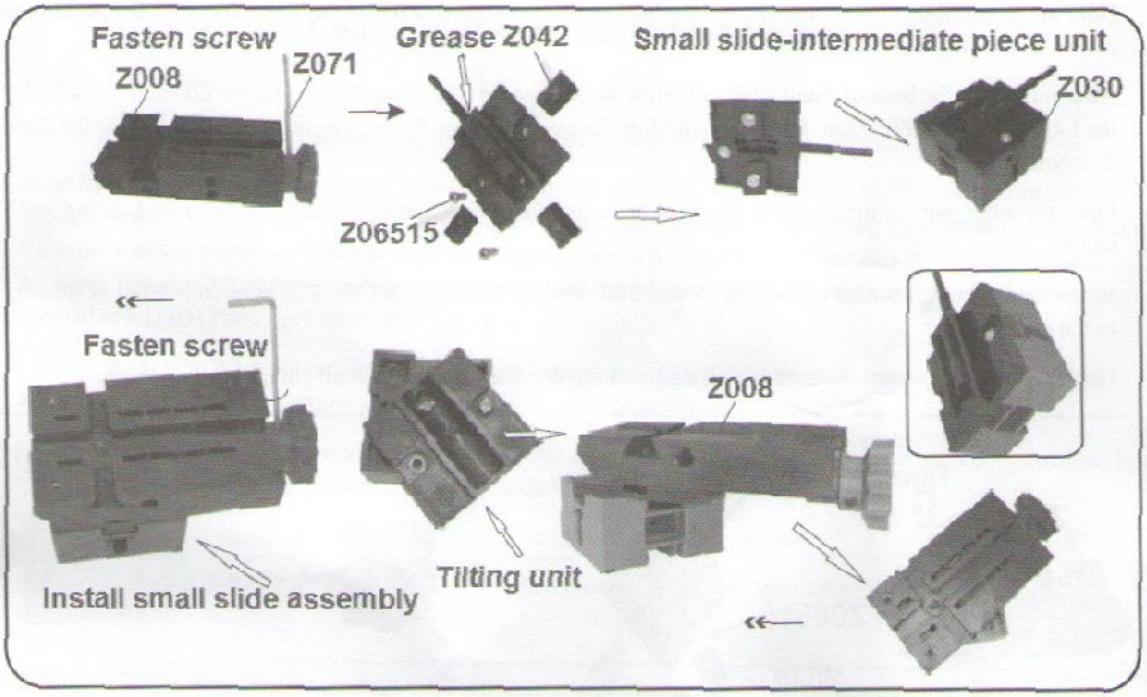
Use the Scoket Screw Wrench (Z071) to loosen the bolt in the handle of the Small Slide (Z008). Then, push the base of Small Slide out .

Slide three slot nuts (Z042) into the dovetail groove of the Intermediate Piece (Z030), fix the Small Slide base on the Intermediate Piece by tightening the bolts into three slot nuts.

Replace the other parts of the Small Slide on the base, tighten the bolt in the handle by Socket Screw Wrench.

Completing above steps, the Small Slide-Intermediate Piece Unit (Z3) has been assembled as shown in the diagram.

If you are working with tilted slide, you may need to tighten slide base to the intermediate piece in a desired angle as shown in the diagram.



Drilling machine-Z20004

1.Assembly

As Shown Fig.

1.1As Shown in Fig, Slide two 4X7 Bolts (Z06515) into Two Hole Clamping Plate (Z043) ,Put this Two Hole Clamping Plate with two 4X7 bolts into the dovetail groove of Long Machine Bed (Z002), insert the two bolt heads into the pearshaped holes of Short Machine Bed (Z003) (insert them into bulge-like part of hole, then into neck-like part), firmly tighten screws through Short Machine Bed with Screwdriver (Z070), then place the Long Machine Bed vertically.

1.2 Install the Drill Table (Z026) on the Small Slide-Large Slide Unit (Z2) with two Slot Nuts (Z042) through the 4X12 Screw (Z06518).Fix four Lathe Tool Fixer (Z044) on four corners by four 4X16 screws (Z06519).Fix the Small Slide-Large Slide Unit on Short Machine Bed by two Dovetail Connection Blocks (Z013).

1.3 Fix the Motor-Gear Box Unit (Z1) tightly on the Small Slide-Large Slide Unit (Z3) by dovetail connecting blocks.Lock the Drill Bit (Z07401) in the Gear Box by Collet and Collet Fixing Nut.Fix the whole unit on Long Machine Bed by Dovetail Connection Block.

1.4 Rotate the handle of Small Slide clockwise to the limit, Loose the screw on the handle with Socket Screw Wrench (Z071), Put the Drill Lever (Z027) into the hole of Intermediate Piece and Small Slide.Swing the Lever,the unit can travel up and down.

2.Operation

2.1 Verify the workpiece locked before processing.

2.2 Do not touch the rotating driller with your hand ,never touch the revolving drill bit or gear with any part of your body or clothes, as the Belt Cover is not assemble on the Motor-Wheel Gear Box unit (Z1) regarding to

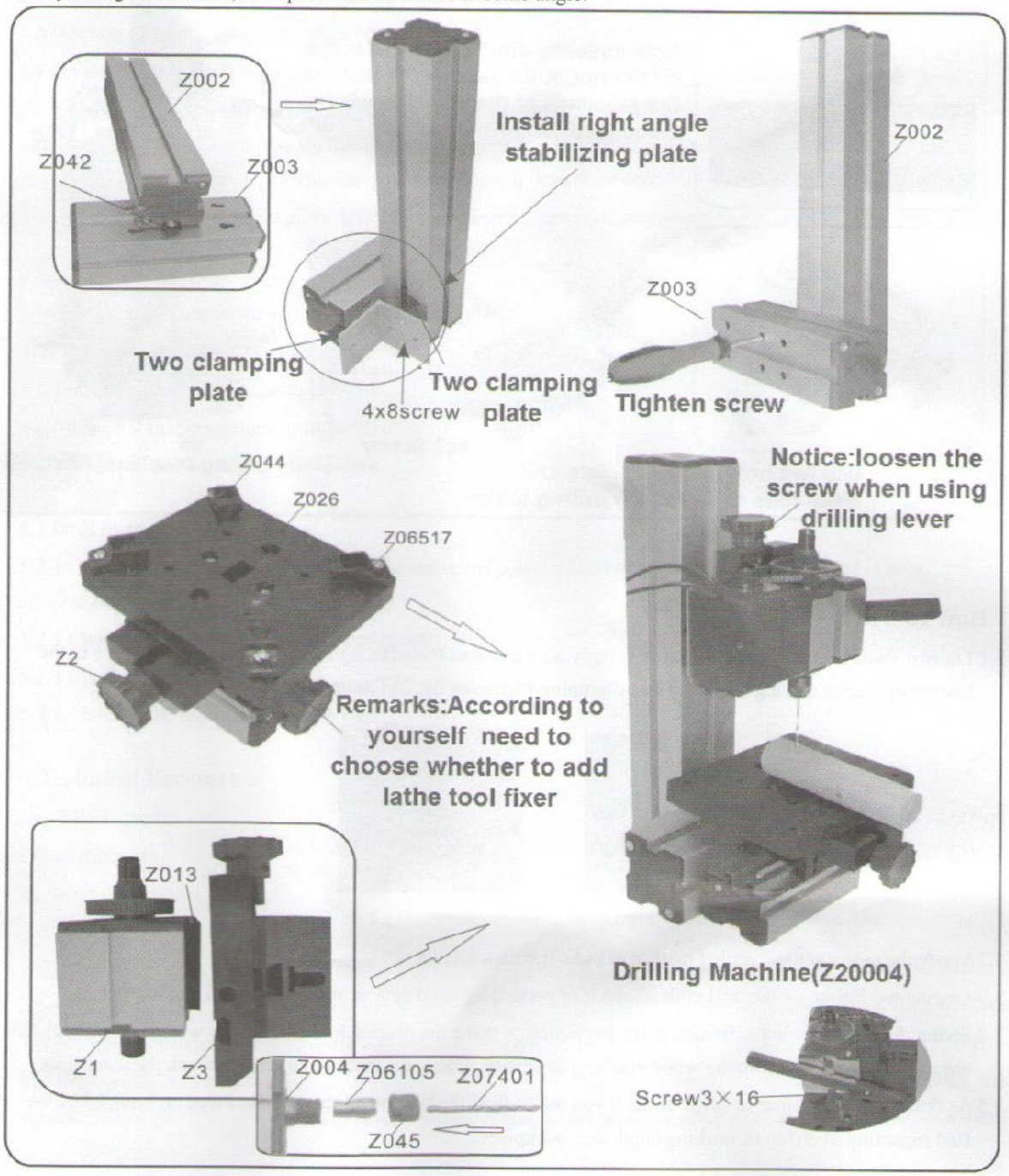
drilling machine.Put on protecting goggles.

2.3 As the stroke of Drilling Lever is limited, you may adjust the height of Intermediate Piece on Long Machine Bed regarding to different working depth and workpiece.

2.4 Change chuck when changing drilling bit in other size.

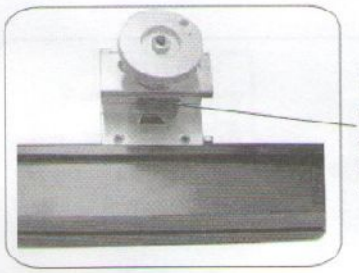
2.5 Adjust the position of Large Slide on long machine bed if the stroke of Large Slide can not meet the demand of the workpiece.

2.6 By tilting Small Slide, workpiece can be drilled at some angle.

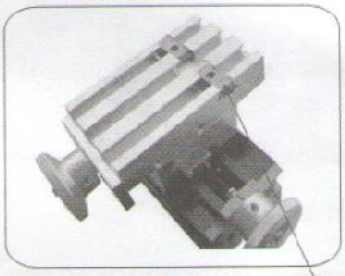


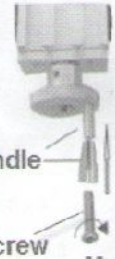
Metal drilling machine(Z20004M)

The assembly method of metal drilling machine is shown as the following fig.



Notice:please don't move the screw on the nut,or the running of bolt and the precision of the machine will be influenced.





Handle

4x7 Screw

Use two hole clamping plate and M4x8 nuts to fasten the drilling table

Metal drilling machine(Z20004M)

3.How To Use

3.1 Fix two Two Hole Clamping Plates dividingly on a board or table (as fig.1).Slide the dovetail groove in the bottom of machine along the Two Hole Clamping Plates (as fig. 2).Fasten the screws.

Fig.1

Fig.2

3.2 Verify the position to be drilled,mark it or poke it with a pricker.

3.3 Lay the workpiece on the drill table,clamp it or press it by hand depending on the actual situation.

3.4 Swing the drill lever with strength at the beginning to make the drilling bit drill into the workpiece quickly.But reduce the force to prevent the wood cracking or spicule when you are about to drill through the workpiece.

3.5 As the stroke of Drilling Lever is limited, you may adjust the height of Intermediate Piece on Long Machine Bed regarding to different working depth and workpiece.

4.Notice

4.1 Fix the machine on the board or other table.

4.2 Wear Protect Goggles when operating the machine.

4.3 Put the Power Adaptor in the ventilated and dry condition when operating the machine.Turn off the 12V adaptor when you do not operate the machine.

4.4 Make sure the drill bit points to the square hole of the drill table before operating.

4.5 Hold on the workpiece tight when operating.

4.6 Do not touch the rotating object especially the drill bit.

4.7 Do not feed too much every time.Feed reasonable according to actual process requirement.

4.8 If motor stop or slow down obviously by resistance,Cut off the power and remove the resistance in five seconds.Do not delay to turn off the power,or you will burn the motor. Pull out the power plug after work.

4.9 Clean and maintain the machine oftenly, grease motive parts frequently.

5.Trouble Shooting

5.1The motor do not work after connecting the power

5.1.1Check if the drill bit is chucked tightly.

5.1.2 Check if the drill bit match to chuck.

5.1.3 Check if the process material is suitable.

5.1.4 Check if the toothed belt is wearout.

5.2 Drill hard

5.2.1 Check if the power is connecting,if the socket of power adaptor or power supply connector is poor connecting.

5.2.2 Check if the motor wire is poor connecting.

5.2.3 Check if the gear box is stuck..

5.2.4 Check if the toothed belt is too tight.

6.Technical Parameter

Headstock speed:	2,000rpm
Motor input:	12VDC
Slide travel:	50 and 20 respectively
Stroke:	25mm
8 collects:	from 0.5 to 6 mm
Table size:	123 x 100mm
Working radius (distance between drill and machine bed):	71mm
Material:	Carbon steel, Aluminum, ABS
Process Material:	soft-aluminum, brass, copper, wood, plastics, other soft, colored and precious metals