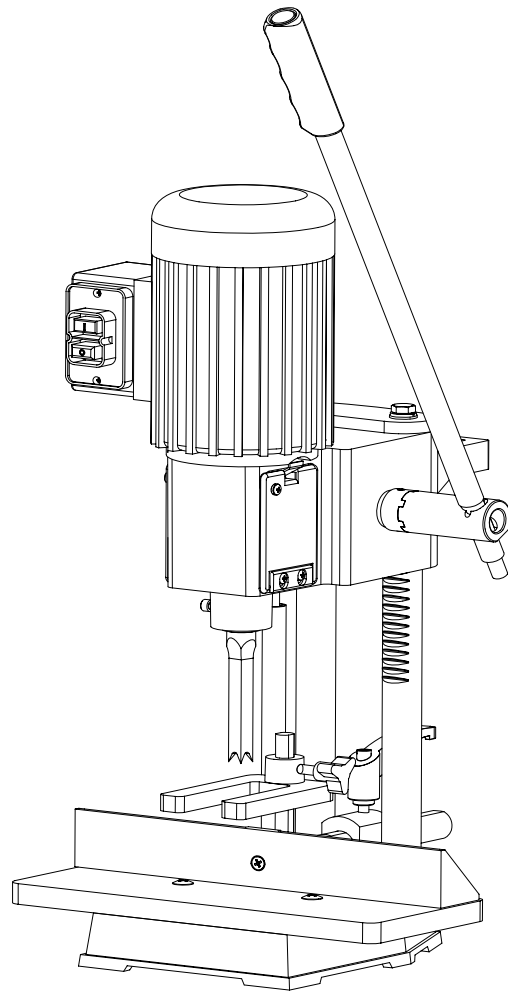


HOLLOW CHISEL MORTISER

MODEL MS36127A3

OWNER'S OPERATING MANUAL & SERVICE INSTRUCTIONS



CAUTION: Read the instruction manual before using the appliance

GENERAL SAFETY RULES

1. **Keep work area clear.** Cluttered areas and benches invite injuries.
2. **Consider work area environment.** Do not expose tools to rain. Do not use tool in damp or wet locations. Keep work area well lit. Do not use tools in the presence of flammable liquids or gases.
3. **Guard against electric shock.** Avoid body contact with earthed or grounded surfaces(e.g. pipes, radiators, ranges, refrigerators).
4. **Keep other people away.** Do not let other persons, especially children, not involved in the work touch of the tool or the extension lead and keep them away from the work area.
5. **Store idle tools.** When not in use, tools should be stored in a dry locked-up place, out of reach of children.
6. **Do not force the tool.** It will do the job better and safer at the rate for which it was intended.
7. **Use the right tool.** Do not force small tools to do the job of a heavy-duty tool. Do not use tools for purposes not intended, for example, do not use circular saws to cut tree limbs or logs.
8. **Dress properly.** Do not wear loose clothing or jewelry they can be caught in moving parts. Non-slip footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.
9. **Use protective equipment.** Use safety glasses. Use face or dust mask if cutting operations create dust.
10. **Connect dust extraction equipment .**If devices are provided for the connection of dust extraction and collection equipment, ensure these are connected and properly used.
11. **Do not abuse the cable.** Never pull the power cable to disconnect it from the socket. Keep the cable from the socket. Keep the cable away from heat, oil and sharp edge.
12. **Secure work.** Where possible use clamps or a vice to hold the work. It is safer than using your hand.
13. **Do not over reach.** Keep proper footing and balance at all times.
14. **Maintain tools with care.** Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect power cables periodically and if damaged have them replaced by an authorized service facility. Inspect extension cables periodically and replace if damaged, Keep handles dry, clean and free from oil and grease.
15. **Disconnect tools.** When not in use, before servicing and when changing accessories such as blades, bits, cutters, disconnect tools from the power supply.
16. **Remove adjusting keys and wrenches.** Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
17. **Avoid unintentional starting.** Ensure switch is in " OFF " position when plugging in.
18. **It's recommended to wear hearing protection to reduce the harm arising from noise.**
19. **Stay alert.** Watch what you are doing, use common sense and do not operate the tool when you are tired.
20. **Check damaged parts.** Before further use of the tools, It should be carefully checked to determine that it operates properly and perform its intended functions. Check the alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A

TONGTAI MACHINE

guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated in this instruction manual. Do not use the tool if the switch does not turn on and off.

21. **Warning.** The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

22. **Have your tool repaired by a qualified person.** This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

23. **Never use the machine if the appropriate guard is not in place and correctly adjusted.**

24. **Do not use knives which are blunt as this increases the danger of kickback.**

25. **Any portion of the cutter block not being used for planing shall be guarded.**

26. **When planing short work pieces, a push stick should be used.**

27. When planing narrow work pieces, additional measures, such as the use of horizontal pressure devices and spring-loaded guards, may be necessary to ensure safe working.

28. The effectiveness of the device for the prevention of kickback and the feed roller should be regularly inspected to ensure safe operation.

29. Tool equipped with chip collection and extraction hoods shall be connected to the Woodworking can be dangerous if safe and proper operating procedures are not followed. As with all machinery, there are certain hazards involved with the operation of the product. Using the machine with respect and caution will considerably lessen the possibility of personal injury. However, if normal safety precautions are overlooked or ignored, personal injury to the operator may result. Safety equipment such as guards, push sticks, hold-downs, featherboards, goggles, dust masks and hearing protection can reduce your potential for injury. But even the best guard will not make up for poor judgment, carelessness or inattention. Always use common sense and exercise caution in the workshop. If a procedure feels dangerous, do not try it. Figure out an alternative procedure that feels safer. **REMEMBER:** Your personal safety is your responsibility.

ADDITIONAL SAFETY RULES FOR HOLLOW CHISEL MORTISERS

1. **DO NOT OPERATE THIS MACHINE** until it is **assembled** and **installed** according to the instructions.
2. **OBTAIN ADVICE FROM YOUR SUPERVISOR, instructor, or another qualified person** if you are not familiar with the operation of this machine.
3. **FOLLOW ALL WIRING CODES** and recommended electrical connections.
4. **MAKE CERTAIN** the machine is fastened to a supporting surface to prevent it from tipping over during operation.
5. **NEVER** turn the mortiser **“ON”** before clearing the table of all objects (tools, scrap pieces, etc.).
6. **ALWAYS** keep hands, fingers and hair away from the rotating bit.
7. **DO NOT** attempt to mortise material that does not have a flat surface, unless a suitable support is used.
8. **ALWAYS** position holddown directly over workpiece to prevent workpiece from lifting during

TONGTAI MACHINE

operation.

9. **ALWAYS** support workpiece securely against fence to prevent rotation.
10. **BE SURE** drill bit is sharp, not damaged, and properly secured in the chuck before operation.
11. **MAKE SURE** chuck key is removed before starting machine.
12. **NEVER** turn on the power with the drill bit or chisel contacting the workpiece.
13. **NEVER** perform layout, assembly, or set-up work on the table while the mortiser is operating.
14. **ADJUST** the depth stop to avoid drilling into the table.
15. **ALWAYS** turn off the power before removing scrap pieces from the table.
16. **SHUT-OFF** the power, remove the drill bit and chisel, and clean the table before leaving the machine.
17. **FOR YOUR OWN SAFETY** – Don’ t wear gloves when operating the machine.
18. **SHOULD** any part of your tool be missing, damaged, or fail in any way, or any electrical component fail to perform properly, shut off switch and remove plug from power supply outlet. Replace missing, damaged, or failed parts before resuming operation.
19. **THE USE** of attachments and accessories not recommended by Delta may result in the risk of injuries.
20. **TURN THE MACHINE “OFF” AND DISCONNECT THE MACHINE** from the power source before installing or removing accessories, before adjusting or changing set-ups, or when making repairs.
21. **TURN THE MACHINE “OFF”** , disconnect the machine from the power source, and clean the table/work area before leaving the machine. **LOCK THE SWITCH IN THE “OFF” POSITION** to prevent unauthorized use.

WARNING: FAILURE TO FOLLOW THESE RULES MAY RESULT IN SERIOUS PERSONAL INJURY.

SAVE THESE INSTRUCTIONS.
Refer to them often
and use them to instruct others.

CONNECTING TOOL TO POWER SOURCE

POWER CONNECTIONS

A separate electrical circuit should be used for your tools. If an extension cord is used, use only 3-wire extension cords, which have grounding type plugs and receptacles, which accept the tool’s plug. Before connecting the motor to the power line, make sure the switch is in the “OFF” position and be sure that the electric current is of the same characteristics as indicated on the tool.

All line connections should make good contact. Running on low voltage will damage the motor.

WARNING: DO NOT EXPOSE THE TOOL TO RAIN OR OPERATE THE TOOL IN DAMP LOCATIONS.

MOTOR SPECIFICATIONS

Your tool is wired for 230 volt, 50 Hz alternating current. Before connecting the tool to the power source, make sure the machine is cut off from power source.

GROUNDING INSTRUCTIONS

WARNING: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

All grounded, cord-connected tools:

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided - if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in risk of electric shock. The conductor with insulation having an outer surface that is green with or without yellow stripes is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or service personnel if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

Use only 3-wire extension cords that have grounding type plugs and receptacles that accept the tool's plug.

Repair or replace damaged or worn cord immediately.

WARNING: IN ALL CASES, MAKE CERTAIN THE RECEPTACLE IN QUESTION IS PROPERLY GROUNDED. IF YOU ARE NOT SURE, HAVE A QUALIFIED ELECTRICIAN CHECK THE RECEPTACLE.

Use proper extension cords. Make sure your extension cord is in good condition and is a 3-wire extension cord, which has a grounding type plug and a receptacle, which will accept the tool's plug. When using an extension cord, be sure to use one heavy enough to carry the current of the tool. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating.

OPERATING INSTRUCTIONS

FOREWORD

Model MS36127A3 is easier to operate than a conventional drill press equipped with a mortising attachment. The model MS36127A3 is made of cast-iron and steel for rigidity and stability. The mortiser comes with a standard 3-jaw type key chuck for positive gripping of mortising bits.

UNPACKING AND CLEANING

Carefully unpack the machine and all loose items from the shipping carton(s). Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene (do not use acetone, gasoline or lacquer thinner for this purpose). After cleaning, cover the

TONGTAI MACHINE

unpainted surfaces with a good quality household floor paste wax.

NOTICE: THE MANUAL COVER PHOTO ILLUSTRATES THE CURRENT PRODUCTION MODEL. ALL OTHER ILLUSTRATIONS ARE REPRESENTATIVE ONLY AND MAY NOT DEPICT THE ACTUAL COLOR, LABELING OR ACCESSORIES AND MAY BE INTENDED TO ILLUSTRATE TECHNIQUE ONLY.

HOLLOW CHISEL MORTISER PARTS

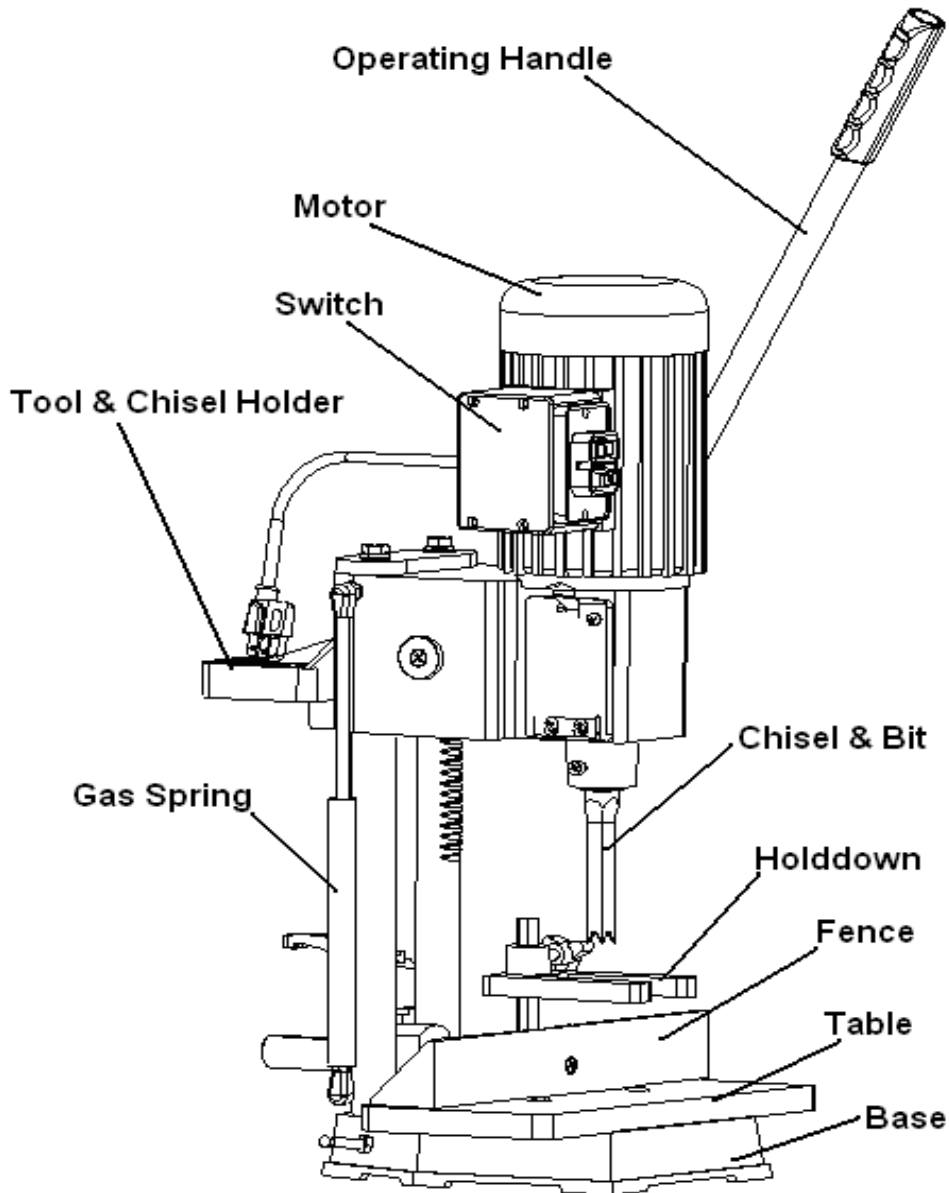


Fig. 1

SPECIFICATIONS

Motor	370W (input), 1PH, 230V, 50Hz, Class B	
Spindle speed	1400rpm	
Chisel capacity	6—12mm	
Max.Mortising Depth	76mm	
Chisel shank	19.05mm	
Spindle to Fence(max.)	90mm	
Chisel to Table(max.)	127mm	
Drill Chuck Capacity	1-13mm	
Bushing size	19.05mm	
Table size	340x150mm	
Over Height	700mm	
Weight	27kg	
Noise	Sound power level	84dB(A)
	Sound pressure level	75dB(A)
Vibration	$\leq 2.5\text{m/s}^2$	

ASSEMBLY

WARNING: FOR YOUR OWN SAFETY, DO NOT CONNECT THE MACHINE TO THE POWER SOURCE UNTIL THE MACHINE IS COMPLETELY ASSEMBLED AND YOU READ AND UNDERSTAND THE ENTIRE INSTRUCTION MANUAL.

RAISING AND LOWERING

HANDLE

1. Assemble hub of handle assembly (A) Fig. 2, to end of pinion shaft (B) and fasten handle to pinion shaft using special screw (C) and spring (D).

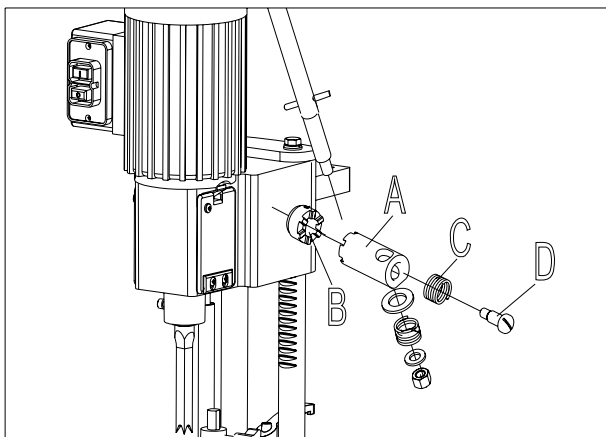


Fig 2

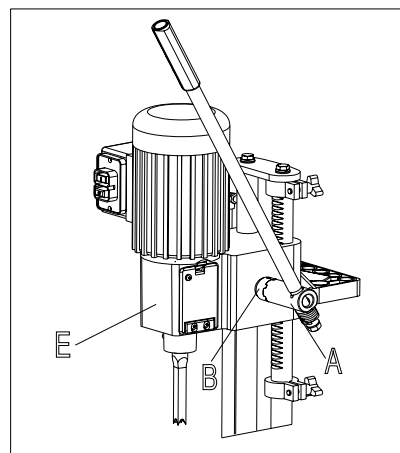


Fig 3

2. Raise mortising machine head (E) Fig. 3, to the up position by turning handle (A) clockwise. **NOTE:** Handle (A) is spring-loaded and can be repositioned by pulling out handle and repositioning it on pinion shaft (B).

GAS SPRING

1. Make sure head (A) Fig.4, is held in the up position and assemble the gas spring (B) to the two fittings (C), one located on the column and the other on the back of the head.

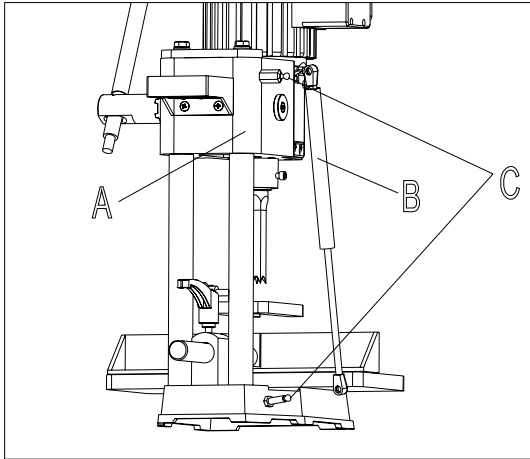


Fig4

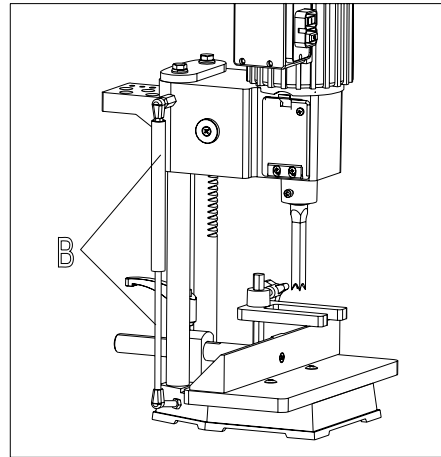


Fig5

2. Fig. 5, illustrates the gas spring (B) assembled to the machine. The gas spring (B) keeps the head in the up position.

TABLE

1. Assemble the table (A) Fig. 6, to the base using the two M6x1x35mm flat head screws (B). Insert the two screws (B) into the two holes (D) in table (A). Place the two T-nuts (C) into the slots (E) provided in the bottom of the base and tighten the two screws (B) into the two T-nuts (C) securely.

2. The table (A) Fig. 6, can be moved in or out by loosening the two screws (B), and re-positioning the table, and then tightening screws (B).

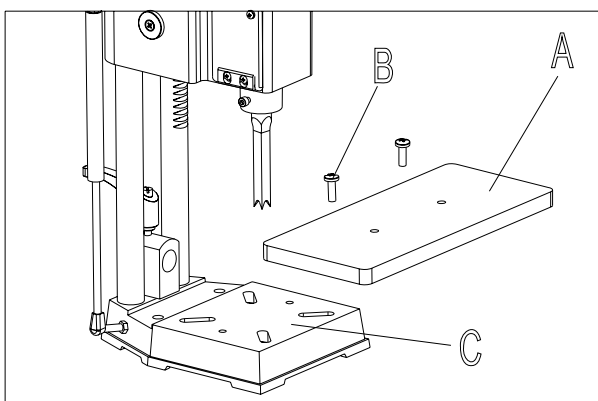


Fig6

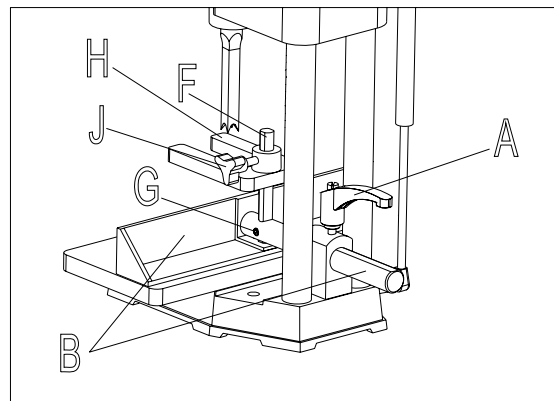


Fig7

FENCE AND HOLDDOWN

1. Locate handle assembly and remove screw (A) Fig.7, and spring (B) from handle (C). Sperate handle

TONGTAI MACHINE

(C) from stud (D).

5. Insert bar of fence assembly (E) Fig. 7, through hole in column as shown. Tighten handle (C) against flat on fence bar to hold fence in position. **NOTE:** Handle (C) is spring-loaded and can be repositioned on the stud located underneath the handle by pulling out the handle and repositioning it on the stud.

6. Insert bar (F) Fig. 7, into hole on top of fence as shown, and tighten set screw (G) against flat on bar (F).

7. Assemble the holddown (H) Fig. 7, onto bar (F) as shown, and tighten set screw (J) against flat on bar.

TOOL AND CHISEL HOLDER

1. Assemble tool and chisel holder (A) Fig. 8, to side of column using the two M6x1x25mm screws (B) and M6 flat washers as shown.

2. Illustrates the chuck key, wrench and chisels and bits in holes of tool and chisel holder (A) when not in use.

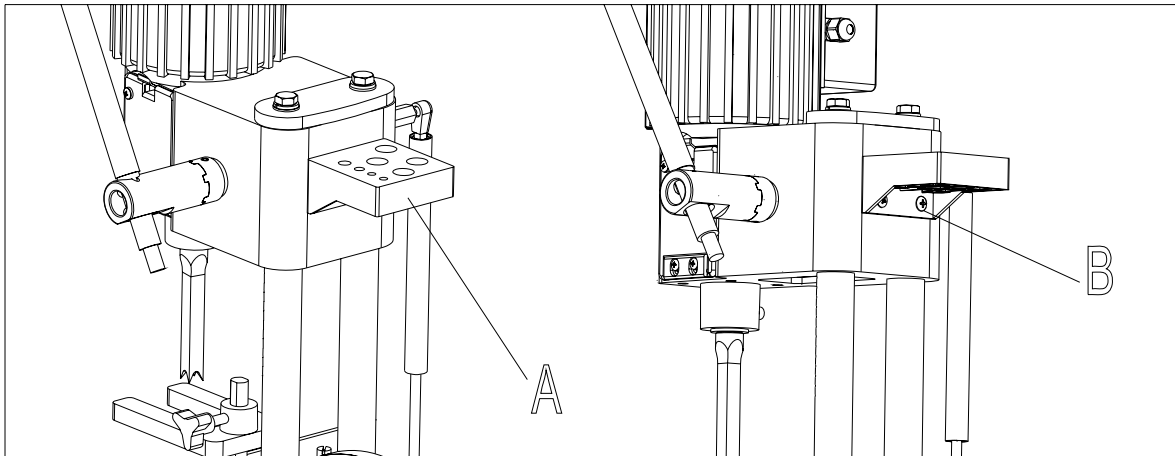


Fig 8

OPERATING CONTROLS AND ADJUSTMENTS

RAISING AND LOWERING THE HEAD

The head (A) Fig. 9, is raised and lowered by means of the lever (B). For maximum leverage during the mortising operation, the lever (B) can be repositioned by pulling out the hub (C) of the lever assembly and repositioning hub on the pinion shaft.

TONGTAI MACHINE

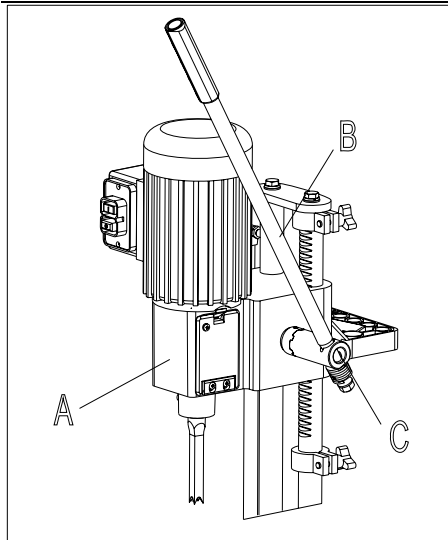


Fig 9

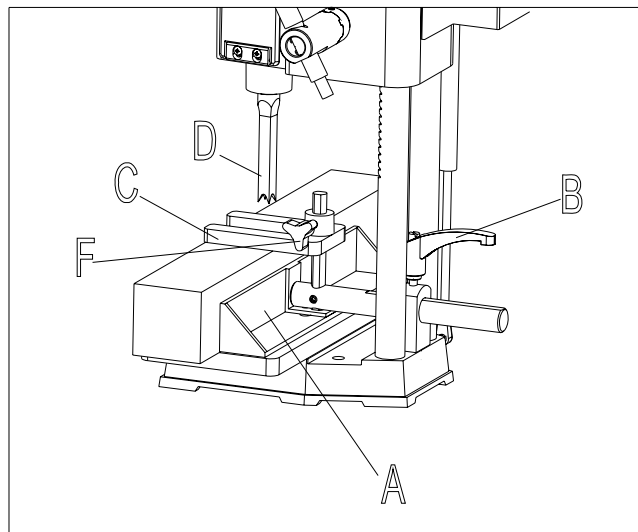


Fig 10

FENCE

The fence (A) Fig. 10, can be moved in or out by loosening lever (B), sliding fence to the desired position and tightening lever (B). **NOTE:** Lever (B) is spring-loaded and can be repositioned by pulling out on the lever and repositioning it on the serrated nut located underneath the lever.

DEPTH STOP

A depth stop guide (A) Fig. 11, is provided to limit the depth of the chisel (B). To adjust the depth stop guide (A), loosen screw (C) and lower head until the chisel (B) is at the desired depth. Lower depth stop guide (A) until it is at the desired depth, tighten screw (C).

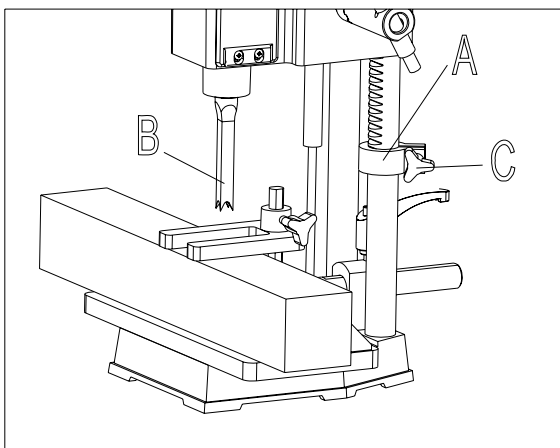


Fig 11

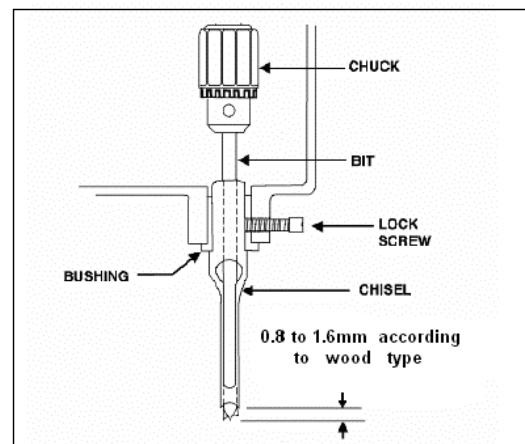


Fig 12

INSTALLING CHISEL & BIT

1. Loosen lock screw, shown in Figure 12.
2. Insert chisel bushing (with the hole facing forward) into the head. Tighten the screw just

TONGTAI MACHINE

enough to hold the chisel in place.

NOTE: Set the slot in the side of the chisel *to the left or right*, NOT to the front or back. This will allow chips to escape when cutting mortises.

3. Push the chisel up as far as possible into the head. Then lower the chisel approximately 0.8mm to 1.6mm, depending on the type of wood being worked. Tighten the screw to hold chisel in place.

4. Push bit up through the chisel opening as far as it will go. Lock the drill bit in place with the chuck key.

5. Loosen screw and push chisel up against the bushing, then tighten screw. This should provide the proper distance between the points of the chisel and the bit.

MAINTENANCE

The Mortiser requires only minor maintenance, such as cleaning and lubrication and routine adjustment and sharpening of the chisel and bit.

Dust the machine down after each use and, as necessary, use light applications of oil or grease to lubricate linkages, moving parts, etc.

SHARPENING CHISEL & BIT

The chisel and bit should be kept sharp for best performance. Blunt edges will give inaccurate mortises and can lead to overheating and breakage to chisel or bit. If chisel and bit are badly worn and become difficult to sharpen, they should be replaced.

1. Sharpen the bit by using a small, smooth file, *following the original shape of the bit*. File the inside edge of the spur, the sides of the brad point, and the cutting edge inwards toward the flute of the bit. See Fig. 13. Do not file the outside edge of the spur as this will affect the diameter of the bit.

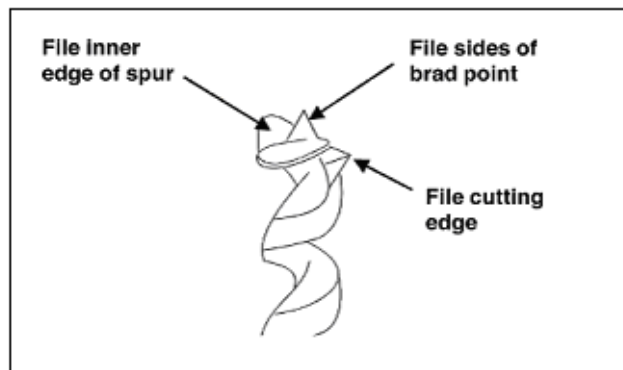


Fig 13

2. Sharpen the chisel with a mortise chisel cutter with the correct size pilot. (Pilot size will differ depending on the size of your chisel). Two or three turns of the cutter in a carpenter's brace chuck should be enough to sharpen the chisel, as shown in Fig. 14

TONGTAI MACHINE

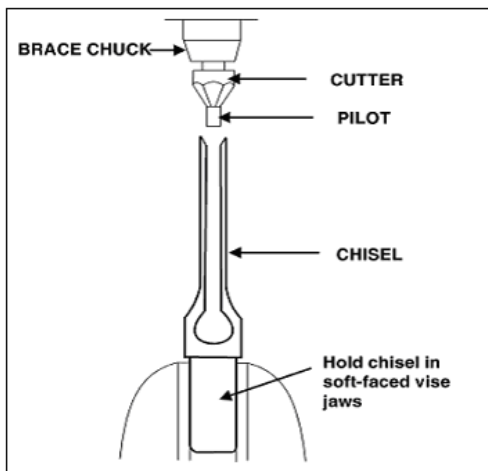


Fig 14

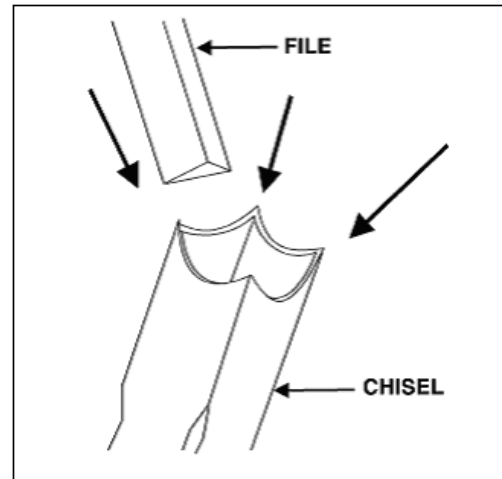
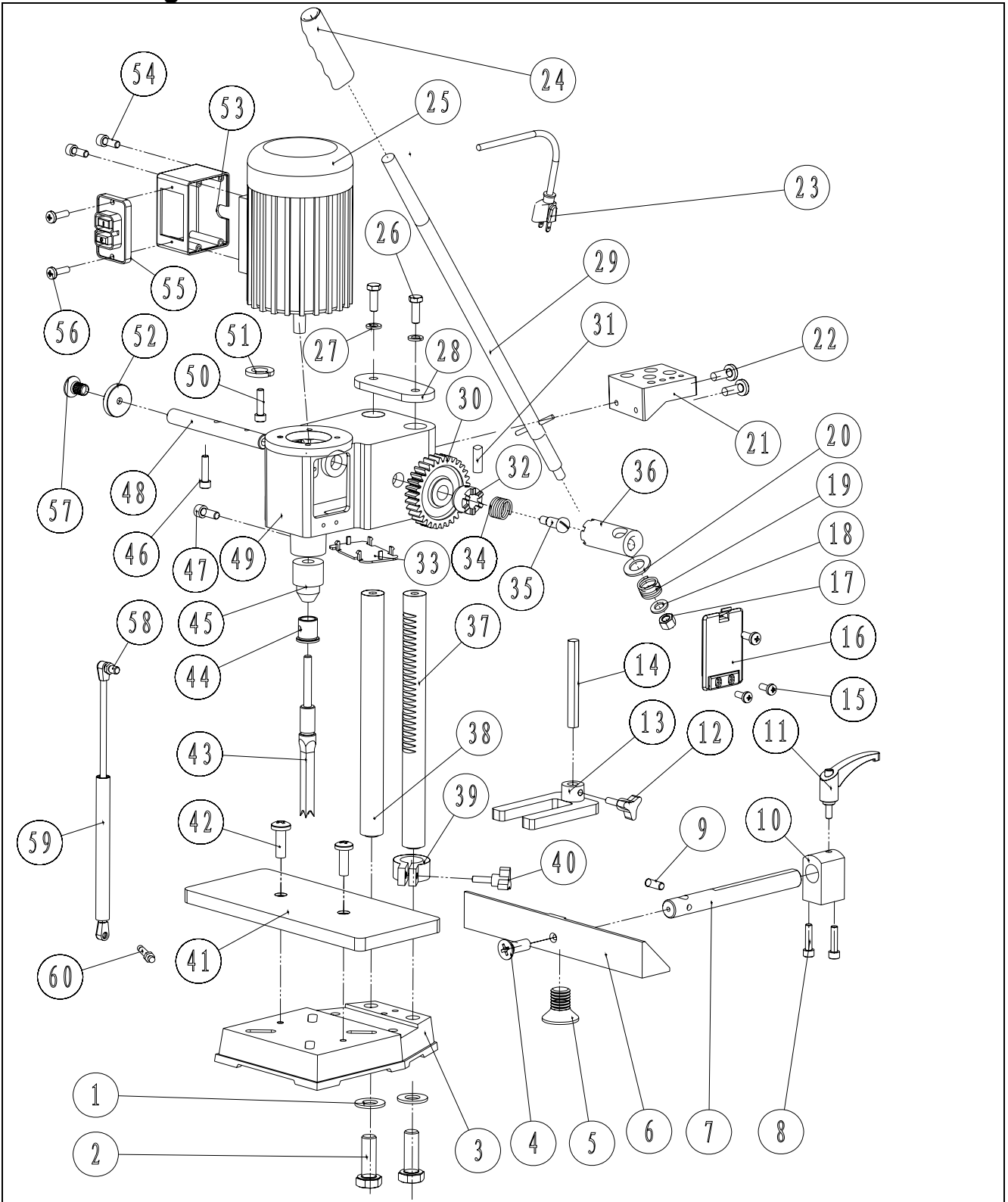


Fig 15

3. Use a small, triangular, smooth file to relieve the inner corners of the chisel. See Fig.15. Remove any burrs from the outside of the chisel with a fine oilstone.

Parts Diagram

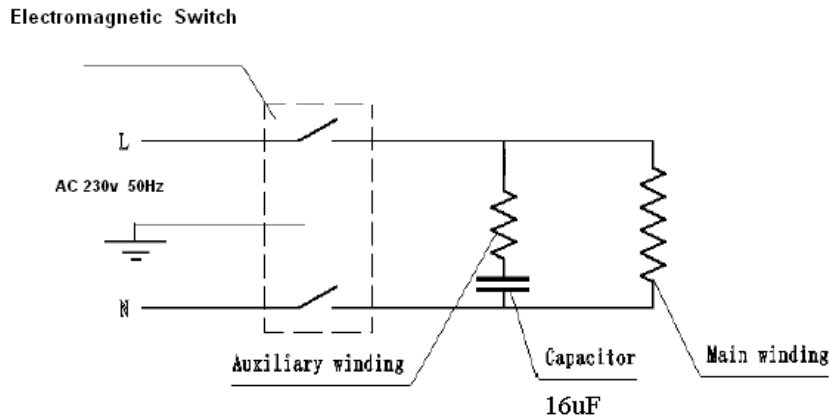


TONGTAI MACHINE

Parts List

Part NO.	DESCRIPTION	Q'TY	Part NO.	DESCRIPTION	Q'TY
1	Lock Washer	2	31	Pin	1
2	Bolt	2	32	Connecting Bend A	1
3	Base	1	33	Cover	1
4	Screw	1	34	Spring	1
5	Screw	1	35	Screw	1
6	Fence	1	36	Connecting Bend B	1
7	Guide Column	1	37	Gear Column	1
8	Screw	2	38	Guide Column	1
9	Screw	1	39	Depth Set Guide	1
10	Guide Bracket	1	40	Lock Handle	1
11	Lock Handle	1	41	Wood Table	1
12	Knob	1	42	Screw	2
13	Hold Down Clamp	1	43	Chisel	1
14	Guide Column	1	44	Chisel Bushing	1
15	Screw	6	45	Chuck	1
16	Cover	2	46	Screw	1
17	Nut	1	47	Screw	1
18	Washer	1	48	Gear Shaft	1
19	Spring	1	49	Gear Casing	1
20	Washer	1	50	Screw	4
21	Tool Rack	1	51	Lock Washer	4
22	Screw	2	52	Cover	1
23	Power Cord	1	53	Switch Box	1
24	Handle Gloves	1	54	Screw	4
25	Motor	1	55	Switch	1
26	Bolt	2	56	Screw	2
27	Lock Washer	2	57	Screw	1
28	Step Plate	1	58	Screw	1
29	Handle	1	59	Gas Spring	1
30	Gear	1	60	Screw	1

WIRING DIAGRAM



IDENTIFICATION OF THE NAMEPLATE & WARNING LABEL

HOLLOW CHISEL MORTISER	
Model.....	MS36127A3
Rating.....	6.35-12.7mm
Power.....	230V,50Hz,370W
Bushing Size.....	19.05mm
IP Code.....	IP40
Class.....	B
Manufacture Yrar.....	2006
No. 01022006	Weight:27kg
LAIZHOU TONGTAI MACHINERY CO.,LTD.	
Chengguo Dongfeng Shandong,LaiZhou 261437 P.R.China	
	

This service instructions contains except general information about the type MS36127A3 also a list of the equipments delivered on request. The showed rating plate is placed on the Headstock.

TONGTAI MACHINE

! WARNING

FOR YOUR OWN SAFETY

1. Read and understand the instruction manual before operating the machine.
2. Always wear eye protection.
3. Do not wear gloves, neckties, jewelry or loose clothing.
4. Disconnect machine from power source before making repair or adjustment.
5. Do not operate while under influence of drugs, alcohol or medication.

! AVERTISSEMENT

POUR VOTRE PROPRE SECURITE

1. LIRE ET COMPRENDRE LA NOTICE D'UTILISATION AVANT DE METTRE EN MARCHÉ LA MISE-À-JOUR.
2. Toujours porter des lunettes de sécurité.
3. Ne porter ni gants, ni cravate, ni bijoux, ni vêtements amples.
4. Débrancher la machine avant tout réglage ou toute réparation.
5. Ne pas utiliser la machine sous l'influence de drogues, alcool ou médicaments.

! WARNHINWEISE

ZU IHREER SICHERHEIT

1. LESEN UND VERSTEHEN SIE DIE BETRIEBSANLEITUNG VOR DER ANWENDEUNG.
2. Immer Schutzhelm und Stahlschutzbrille tragen.
3. Keine Krawatte, Schmuck oder lose Kleidung tragen.
4. Vor Werkzeugwechsel oder Wartungsarbeiten Netzstecker ziehen.
5. Gerät nicht benutzen, wenn Sie unter Drogen-, Alkohol- oder Medikamenteneinfluss stehen.



FOR D'06017

This warning label sticks on the Column of the machine.



Please dispose of packaging for the product in a responsible manner. It is suitable for recycling. Help to protect the environment, take the packaging to the local amenity tip and place into the appropriate recycling bin.



Only for EU countries

Do not dispose of electric tools together with household waste material!

In observance of European Directive 2002/96/EC on waste electrical and electronic equipment and its implementation in accordance with national law, electric tools that have reached the end of their life must be collected separately and returned to an environmentally compatible recycling facility.