

CT127 BENCH TOP MORTISER OWNERS MANUAL







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GENERAL SAFETY INSTRUCTIONS

EXTREME CAUTION SHOULD BE USED IN OPERATING ALL POWER TOOLS. KNOW YOUR POWER TOOL, BE FAMILIAR WITH ITS OPERATION. READ THE OWNER'S MANUAL AND PRACTICE SAFE USAGE PROCEDURES AT ALL TIMES.

- CONNECT your machine ONLY to the matched and specified power source.
- WEAR SAFETY GLASSES, RESPIRATORS, HEARING PROTECTION and SAFETY SHOES when operating heavy machinery. <u>Always wear</u> <u>safety glasses.</u>
- **DO NOT** wear loose clothing or jewellery when operating machinery.
- A Safe Environment is important. Keep the area free of dust, dirt and other debris in the immediate vicinity of the machine.
- BE ALERT! Do Not Use prescription or other drugs that may affect your ability or judgement to safely use this machine.
- DISCONNECT the power source when changing tool bits and or any equipment.
- NEVER leave an operating tool unattended.
- ALWAYS keep blades, knives or bits sharp and properly aligned.
- ALWAYS keep all safety guards in place and ensure their proper function.
- ALWAYS make sure that any tools used for adjustments are removed before operating the machine.
- ALWAYS secure your work with the appropriate clamps or vices.
- ALWAYS keep bystanders safely away while operating machinery.
- THINK SAFETY. WORK SAFELY. Never attempt a procedure if it does not feel safe or comfortable.

Safety Rules for Hollow Chisel Mortiser

Do Not operate this machine until it is fully assembled and installed according to this manual.

Follow all wiring codes and land recommended electrical connections.

Make Certain the machine is fastened to a supporting surface to prevent it from tipping over during operation.

Never Turn the Mortiser on before cleaning the table of all objects (tools, scraps, etc.)

Always Keep hands, fingers and hair away from rotating bit.

Do Not attempt to mortise material that does not have a flat surface, unless a suitable support is used.

Always position the hold down directly over work piece to prevent work piece from lifting during operation.

Always support work piece securely against fence to prevent rotation.

Be Sure the chisel is sharp, not damaged and properly secured in the chuck before you start the machine.

Make Sure the chuck key has been removed before starting the machine.

Never turn the power on with the drill bit or chisel contacting the work piece.

Never perform layout, assembly or set up work on the table while the Mortiser is operating.

Adjust the depth stop to avoid drilling into the table.

Always turn off the power before removing scrap pieces from the table.

Should any part of your tool be missing, damaged or fail in any way, shut off and remove the plug from power source. Replace any damaged or missing parts before resuming operation.

Turn the Machine Off and disconnect the machine from the power source. Clean the table/work area before leaving the machine. Lock the switch in the off position to prevent unauthorized use.



GROUNDING INSTRUCTIONS

This appliance must be grounded, if it should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This appliance is equipped with a cord having equipment-ground conductor and grounding plug. The plug must be inserted into an appropriate outlet that is properly installed and grounded in accordance with all local codes and ordinances.

WARNING – Improper connection of the equipment-grounding conductor can result in a risk of electric shock. Check with a qualified electrician or service person if you are in doubt as to whether the outlet is properly grounded. Do not modify the plug provided with the appliance – if it will not fit the outlet have a proper outlet installed by a qualified electrician.

For grounded, cord – connected appliances:

This appliance is for use on a circuit having a normal rating more than 120volt and is factory – equipped with a specific electric cord and plug to permit connection to a proper electric circuit. Make sure that the appliance is connected to an outlet having the same configuration as the plug. No adapter should be used with this appliance. If the appliance must be reconnected for use on a different circuit, qualified service personnel should make the reconnection.

For permanently connected appliance:

This appliance must be connected to a ground metal, permanent wiring system; or an equipment – grounding conductor must be run with the circuit conductors and connected to the equipment grounding terminal or lead on the appliance.

As part of the growing line of Craftex woodworking equipment, we are proud to offer the CT127 Mortising Machine. The Craftex name guarantees Craft Excellence. By following the instructions and procedures laid out in this owner's manual, you will receive years of excellent service and satisfaction. The CT127 is a professional tool and like all power tools, proper care and safety procedures should be adhered to. The CT127 is easier to operate than a conventional drill press. The CT127 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.

Specifications

Motor: 1/2HP, 1 Phase, 110V

Spindle speed: 1720 RPM

Chisel capacity: 1/4" - 1/2"

Max. Mortising Depth: 3"

Chisel shank: 3/4"

Spindle to Fence: 3 1/2"

Chisel to Table: 5"

Drill Chuck Capacity: 1/16" – 1/2"

Bushing Size: 3/4"

Table Size: 6" x 13 1/4"

Weight: 60 lbs.

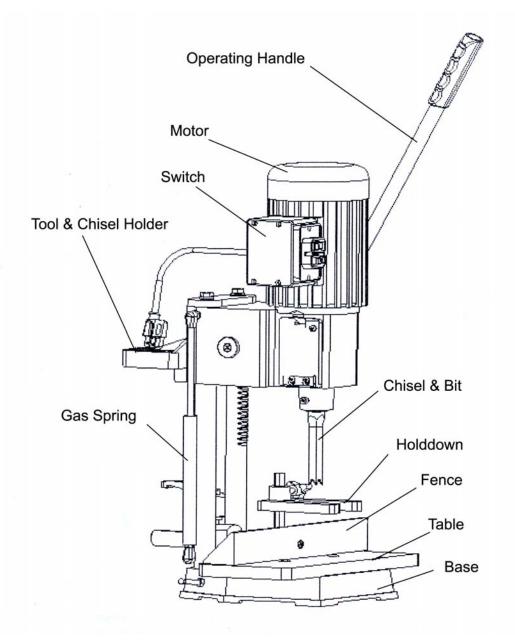
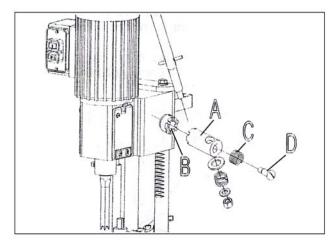


Fig. 1

Unpacking and Cleaning

Carefully unpack the machine and all loose items from the shipping carton. Remove the protective coating from all unpainted surfaces. This coating may be removed with a soft cloth moistened with kerosene. **Do Not** use gasoline, lacquer thinner or acetone for this purpose.

After cleaning cover all unpainted surfaces with a good sealant such as Top Cote or past wax.



Assembly

Assemble the hub of the handle assembly (A) to end of pinion shaft (B). Fasten handle to pinion shaft using spring (c) and screw (D).

Fig. 2

Fig. 2

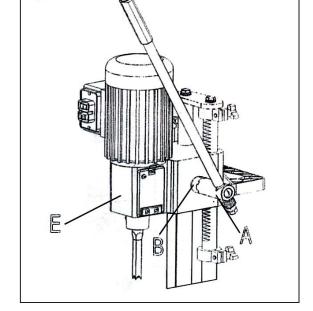


Fig. 3

Raise mortising machine head (E) to the up position by turning handle (A) clockwise. The handle is spring loaded and can be repositioned by pulling out handle and repositioning it on pinion shaft. Fig. 3

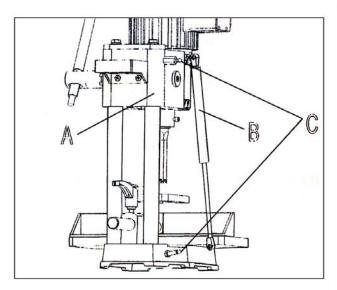


Gas Spring

Make sure the head (A) 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.

Fig. 4

The gas spring when assembled to the machine keeps the head in the up position. Fig. 5



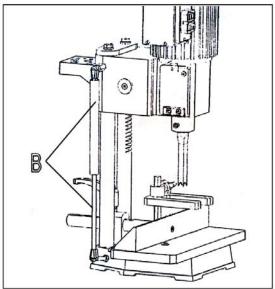


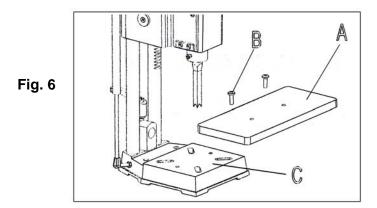
Fig. 4 Fig. 5

CT127 Bench Top Mortise Machine Assembly Cont.

Table

Assemble the table to the base using the two M6x1x35mm flat head screws. Insert the two screws into the two holes in table. Place the two T nuts into the slots provided in the bottom of the base and tighten the two screws into the two T nuts securely.

The table can be moved in or out by loosening the two screws and repositioning the table and then tightening screws. Fig. 6



Fence and Hold Down

Locate handle assembly (A) and remove screw, and spring from handle. Separate handle from stud. Insert bar of fence assembly through hole in column (B) as shown. Tighten handle against flat on fence bar to hold fence in position. Insert bar (F) into hole on top of fence as shown and tighten set screw (G) against flat on bar.

Assemble the hold down (H) onto bar as shown and tighten knob (J) against flat on bar.

Assemble the hold down onto bar as shown and tighten set screw against flat on bar.

Fig. 7

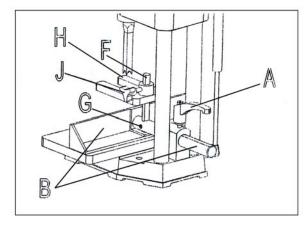


Fig. 7



CT127 Bench Top Mortise Machine Assembly Cont.

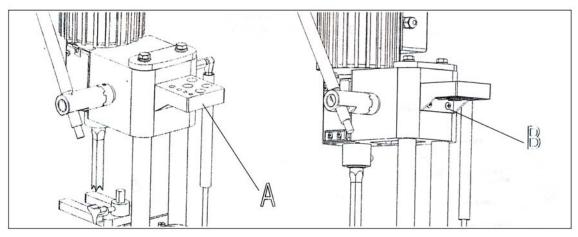


Fig. 8

Operating Controls and Adjustments

Raising and Lowering the Head

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

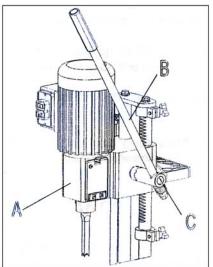


Fig. 9

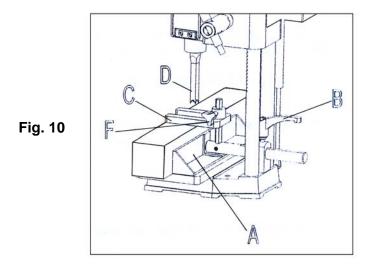


CT127 Bench Top Mortise Machine Operation Cont.

Fence and Hold Down

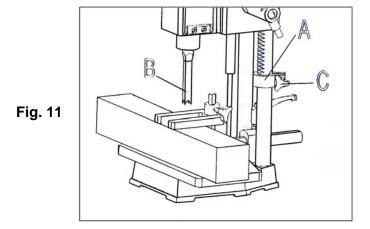
The fence can be moved in or out by loosening lever (B) and sliding fence (A) to the desired position and tightening lever. The hold down (c) can be raised and lowered by loosening knob (F).

Fig. 10



Depth Stop

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



CT127 Bench Top Mortise Machine Operation Cont.

Installing Chisel and Bit

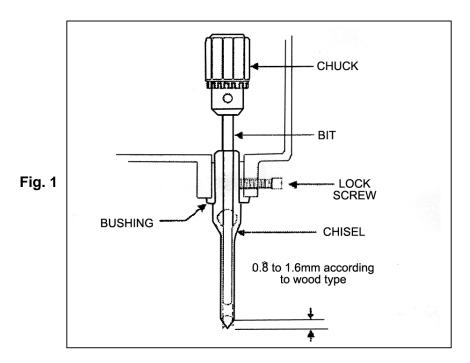
A. Loosen lock screw as shown.

B. Insert chisels bushing into the head. Tighten the screw just 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.

- **C**. 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 used. Tighten the screw to hold the chisel in place.
- **D**. Push bit up through the chisel opening as far as it will go. Lock the drill bit in place with the chuck key.
- **E**. Loosen screw and push chisel up against the bushing and then tighten screw. This should provide the proper distance between the points of the chisel and the bit.

Fig. 12

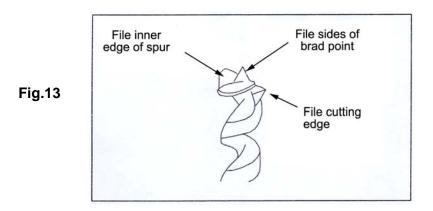


Maintenance

The Mortiser requires only minor maintenance, such as cleaning, 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 and moving parts.

CT127 Bench Top Mortise Machine Sharpening Chisel and Bit

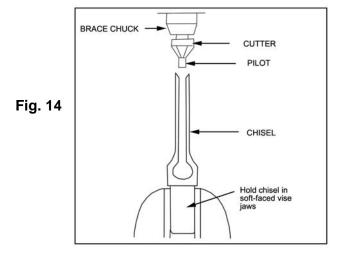


The chisel and bit should be kept sharp for best performance. Blunt edges will give inaccurate mortises and can lead to overheating and breakage to chisel or bit. If chisel and bit are badly worn and become difficult to sharpen, they should be replaced. Sharpen the bit by using a small, smooth file,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

Do not file the outside edge of the spur, as this will affect the diameter of the bit. Fig. 13

Sharpen the chisel with a mortise chisel cutter with the correct size piolt. (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. Fig.14

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



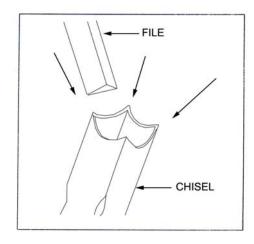
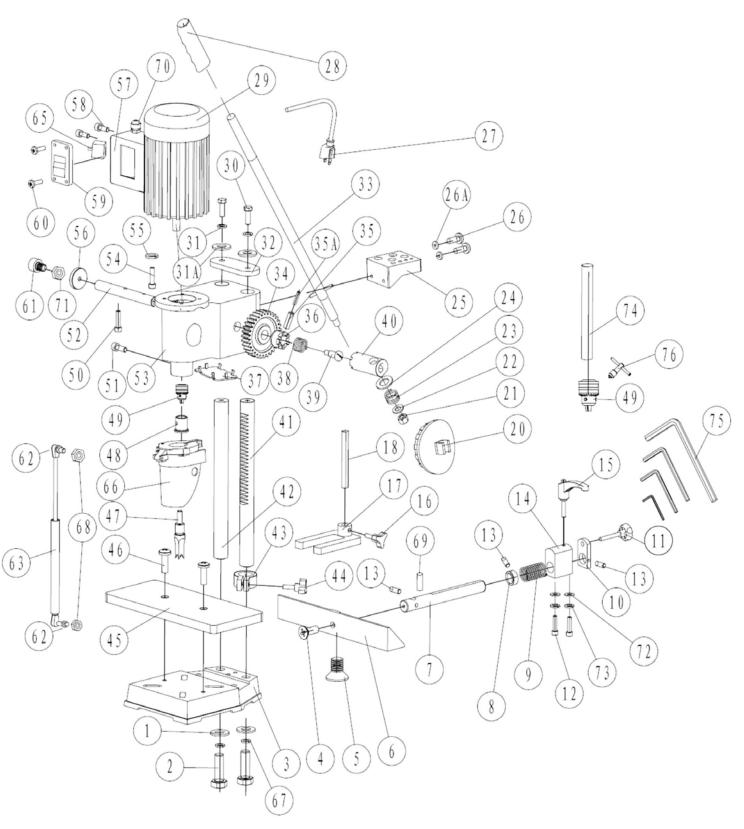


Fig. 15



CT127 Bench Top Mortise Machine Schematic



CT127 Bench Top Mortise Machine Parts List

Part #	Description	Quantity	Part #	Description	Quantity
1	Lock Washer	2	37	Cover	1
2	Bolt	2	38	Spring	1
3	Base	1	39	Screw	1
4	Screw	1	40	Connecting Bend B	1
5	Screw	1	41	Gear Column	1
6	Fence	1	42	Guide Column	1
7	Guide Column	1	43	Depth Set Guide	1
8	Collar	1	44	Lock Handle	1
9	Spring	1	45	Wood Table	1
10	Stop Bracket	1	46	Screw	2
11	Set Screw Handle	1	47	Chisel	1
12	Screw	2	48	Chisel Bushing	1
13	Screw	1	49	Chuck	2
14	Guide Bracket	1	50	Screw	1
15	Lock Handle	1	51	Screw	1
16	Knob	1	52	Gear Shaft	1
17	Hold Down Clamp	1	53	Gear Casing	1
18	Guide Column	1	54	Screw	3
20	Cover	2	55	Lock Washer	3
21	Nut	1	56	Cover	1
22	Washer	1	57	Switch Box	1
23	Spring	1	58	Screw	4
24	Washer	1	59	Switch	1
25	Tool Rack	1	60	Screw	4
26	Screw	2	61	Screw	1
26A	Spring Washer	2	62	Angle Connector	2
27	Power Cord	1	63	Gas Spring	1
28	Handle Gloves	1	65	Circuit Breaker	1
29	Motor	1	66	Guard	1
30	Bolt	2	67	Lock Washer	2
31	Lock Washer	2	68	Nut M8	2
31A	Washer	2	69	Pin 4X30	1
32	Step Plate	1	70	Plastic Jaw Nut	1
33	Handle	1	71	Spring Washer	1
34	Gear	1	72	Spring Washer	2
35	Pin—8x35	1	73	Washer	2
35A	Pin—5x35	1	74	Shaft	1
36	Connecting Bend A	1	75	Wrench	1
			76	Chuck Key	1



WARRANTY

CRAFTEX 2 YEAR LIMITED WARRANTY

Craftex warrants every product to be free from defects in materials and agrees to correct such defects where applicable. This warranty covers **two years** for parts and 90 days for labour (unless specified otherwise), to the original purchaser from the date of purchase but does not apply to malfunctions arising directly or indirectly from misuse, abuse, improper installation or assembly, negligence, accidents, repairs or alterations or lack of maintenance.

Proof of purchase is necessary.

All warranty claims are subject to inspection of such products or part thereof and Craftex reserves the right to inspect any returned item before a refund or replacement may be issued.

This warranty shall not apply to consumable products such as blades, bits, belts, cutters, chisels, punches etceteras.

Craftex shall in no event be liable for injuries, accidental or otherwise, death to persons or damage to property or for incidental contingent, special or consequential damages arising from the use of our products.

RETURNS, REPAIRS AND REPLACEMENTS

To return, repair, or replace a Craftex product, you must visit the appropriate Busy Bee Tools showroom. Craftex is a brand of equipment that is exclusive to Busy Bee Tools. For replacement parts directly from Busy Bee Tools, for this machine, please call 1-800-461-BUSY(2879), and have your credit card and part number handy.

 All returned merchandise will be subject to a minimum charge of 15% for re-stocking and handling with the following qualifications.

Returns must be pre-authorized by us in writing.

- We do not accept collect shipments.
- Items returned for warranty purposes must be insured and shipped pre-paid to the nearest warehouse (see locations on inside back cover of this manual).
- Returns must be accompanied with a copy of your original invoice as proof of purchase.
 Returns must be in an un-used condition and shipped in their original packaging a letter explaining your reason for the return. Incurred shipping and handling charges are not refundable.
- Busy Bee will repair or replace the item at our discretion and subject to our inspection.
- Repaired or replaced items will be returned to you pre-paid by our choice of carriers.
- Busy Bee reserves the right to refuse reimbursement or repairs or replacement if a third party without our prior authorization has carried out repairs to the item.
- Repairs made by Busy Bee are warranted for 30 days on parts and labour.
- Any unforeseen repair charges will be reported to you for acceptance prior to making the repairs.
- The Busy Bee Parts & Service Departments are fully equipped to do repairs on all products purchased from us with the exception of some products that require the return to their authorized repair depots. A Busy Bee representative will provide you with the necessary information to have this done.
- For faster service it is advisable to contact the nearest Busy Bee location for parts availability prior to bringing your product in for repairs.