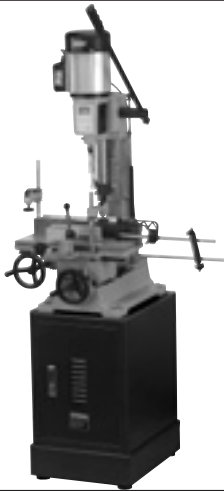


# DRAPER<sup>®</sup>

## INSTRUCTIONS FOR 1" Bench Morticer and Stand

Stock No.09896 Part No.BM25/AABM25

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.



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### GENERAL INFORMATION

This manual has been compiled by Draper Tools and is an integrated part of the product with which it is enclosed and should be kept with it for future references.

This manual describes the purpose for which the product has been designed and contains all the necessary information to ensure its correct and safe use. We recommend that this manual is read before any operation or, before performing any kind of adjustment to the product and prior to any maintenance tasks. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself.

All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product.

Whilst every effort has been made to ensure accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.



# CONTENTS

Contents/Guarantee ..... 1

Specification.....2

Power supply.....3

General safety instructions ..... 4

Additional safety information..... 5

Getting to know your bench morticer ..... 6

Assembly ..... 7-8

Operation and use..... 9-10

Optional accessories..... 11

Disposal of power tools..... 12

Declaration ..... enclosed



# GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England.  
 Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is ninety days from the date of purchase. The guarantee is extended to 24 months for parts only. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

Draper Tools Limited.



# SPECIFICATION

The Draper Tools policy of continuous improvement determines the right to change specification without notice.

Stock no. ....	09896
Part no.....	BM25/AABM25
Rated voltage.....	230V~50Hz
Rated input.....	750W
Revolutions per minute .....	1400r/min <sup>-1</sup>
Chisel square capacity .....	25.4mm (1")
Chisel bushes (supplied) .....	19mm, 1 <sup>3</sup> / <sub>16</sub> ", 1 <sup>3</sup> / <sub>16</sub> "
Max. chisel stroke.....	220mm
Max. clamping height .....	200mm
Max. clamping width .....	150mm
Chuck capacity.....	16mm
Fence to chisel centre .....	140mm
Table size .....	400 x 150mm
Base size .....	300 x 450mm
Net weight .....	108.0kg
Sound pressure level .....	75.2dB(A)
Sound power level.....	84.4dB(A)
Vibration level.....	<2.5m/s <sup>2</sup>

**ALWAYS WEAR APPROVED SAFETY GOGGLES**

**NOTE:** Due to the weight of this machine always seek assistance when lifting or moving it.

**CAUTION: Risk of electric shock. Do not open.**

This appliance is supplied with a moulded 3 pin mains plug for your safety. The value of the fuse fitted is marked on the pin face of the plug. Should the fuse need replacing, ensure the substitute is of the correct rating, approved to BS1362 and ASTA or BS Kite marked.

ASTA   
BSI 

The fuse cover is removable with a small plain slot screwdriver. Ensure the fuse cover is replaced before attempting to connect the plug to an electrical outlet. If the cover is missing, a replacement must be obtained or the plug replaced with a suitable type.

If a replacement plug is to be fitted this must be carried out by a qualified electrician.

The damaged or incomplete plug, when cut from the cable shall be disabled to prevent connection to a live electrical outlet.

This appliance is Class I<sup>†</sup> and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instruction supplied with the extension lead.

<sup>†</sup>Earthed  : This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.



# GENERAL SAFETY INSTRUCTIONS FOR POWER TOOLS

**WARNING:** When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following.

Read all these instructions before attempting to operate this product and save these instructions.

Safe operation

## 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 tools 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 persons away

- Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

## 5. Store idle tools

- When not in use, tool 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 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 jewellery, they can be caught in moving parts.
- Non-skid 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 working operations create dust.

## 10. Connect dust extraction equipment

- If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

## 11. Do not abuse the cord

- Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

## 12. Secure work

- Where possible use clamps or a vice to hold the work. It is safer than using your hand.

## 13. Do not overreach

- 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 instruction for lubricating and changing accessories.
- Inspect tool cords periodically and if damaged have them repaired by an authorised service facility.
- Inspect extension cords 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 and 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. Use outdoor extension leads

- When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

## 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 tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
- Have defective switches replaced by an authorized service centre.
- Do not use the tool if the switch does not turn it 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.

For your own safety read and understand the instruction manual before operating this machine.

This morticer is designed for mortising and drilling wood only.

Before morticing or drilling always securely clamp the workpiece. Any movement of the workpiece will result in a rough hole and possible bit breakage.

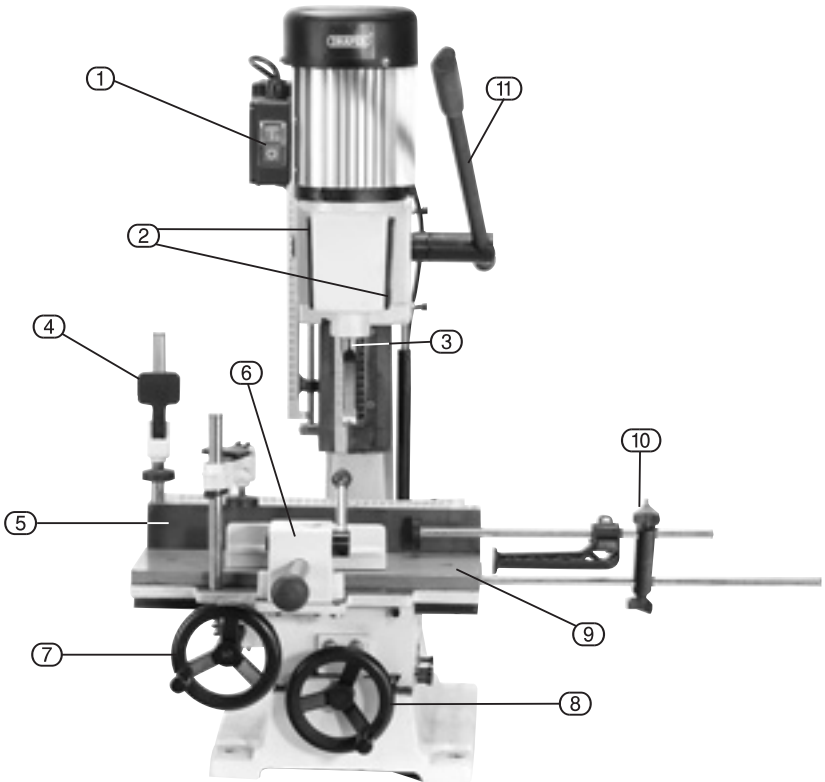
Ensure the bit is secure and the chuck key has been removed prior to use. Ensure all protective covers and guards are in place.

Ensure the morticer is securely fixed to a work surface or cabinet base. Position on a flat and level surface with adequate space around to accept large workpieces.

This morticer is intended for use by trained/experienced operators. Seek training before use.

- **NOTE:**

Due to the weight of this machine, seek help when lifting/moving to avoid injury.



- |                          |  |
|--------------------------|--|
| ① No-volt on/off switch. | ⑦ Table adjustment wheel (left/right).   |
| ② Chuck access covers.   | ⑧ Table adjustment wheel (back/forward). |
| ③ Chisel and bit.        | ⑨ Work table.                            |
| ④ Quick action clamp.    | ⑩ Workpiece end stop.                    |
| ⑤ Fence.                 | ⑪ Plunge handle.                         |
| ⑥ Quick action vice.     |  |

- **UNPACKING:** After removing the packing material, make sure the product is in perfect condition and that there are no visible damaged parts. If in doubt, do not use the bench morticer and contact the dealer from whom it was purchased.

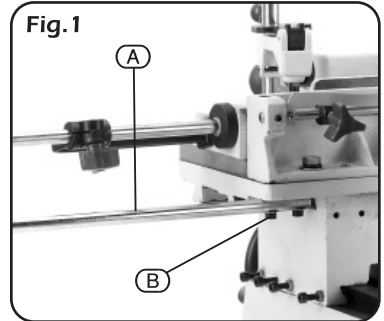
The packaging materials (plastic bags, polystyrene, etc.), must be disposed of in an appropriate refuse collection container. These materials must not be left within the reach of children as they are potential sources of danger.

- **NOTE:**  
Due to the weight of this machine, seek help when lifting/moving to avoid injury.
- **NOTE:**  
Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

- **WORKPIECE END STOP (Fig.1):**

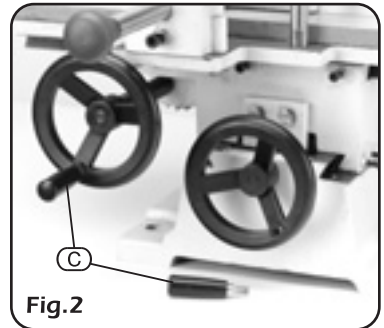
Attach the complete workpiece end stop assembly (A) to the back of the rear fence casting (B) with the two bolts and washers supplied.

- **NOTE:**  
The exact design of the end stop assembly may differ slightly.



- **TABLE ADJUSTMENT WHEELS (Fig.2):**

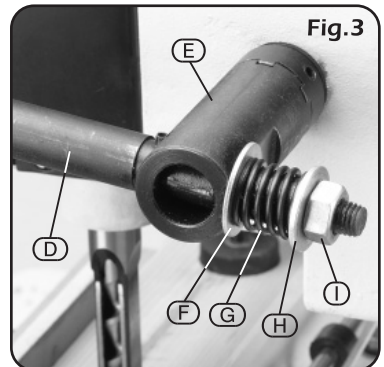
The backward/forward table adjustment wheel and the lateral table adjustment wheel require handles (C) to be fitted. Screw the handles into the wheel and tighten to secure.



- **PLUNGE HANDLE (Fig.3):**

Insert plunge handle (D) through the plunge mechanism shaft (E). Over the threaded end, place the large washer (F), spring (G), washer (H) and secure with nut (I).

This type of product must be securely assembled to a suitable workbench or the Draper cabinet stand, Stock No.79021 (see page 11).



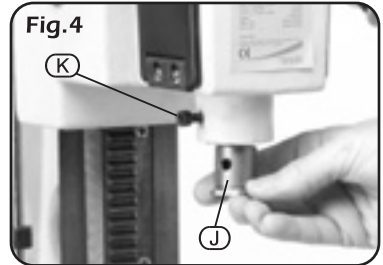


- **NOTE:**

Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

- **FITTING THE CHISEL BUSH (Fig.4):**

Depending on the chisel shank, select the appropriate reducing bush (J). Insert the selected bush up into the housing. The hole in the bush must correspond with the screw hole in the housing. Insert and tighten screw (K) enough to hold the reducing bush in place, but still allow the chisel to be fitted.



- **FITTING/ADJUSTING MORTICE BITS (Fig.5 & 6):**

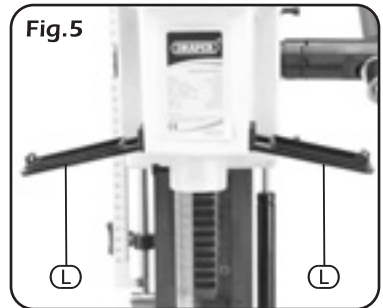
To access the chuck, unclip and lower the covers (L).

Select the correct chisel for the job. Pass the mortice chisel with the mortice bit still in the centre carefully up into the bush.

- **NOTE:**

Care must be taken when handling the mortice bits as they are extremely sharp.

With the chisel fully inserted and square, lock in place with the screw (M), with the chuck jaws open pass the bit up fully allowing approximately 5mm gap from the back of the chuck, and tighten to hold.



- **NOTE:**

Use a small engineers square against the rear fence to check the chisel.

Gap (N) from the point of the chisel to the edge of the mortice bit must measure between 1.0mm up to a max. of 2.5mm for optimum performance.

- **NOTE:**

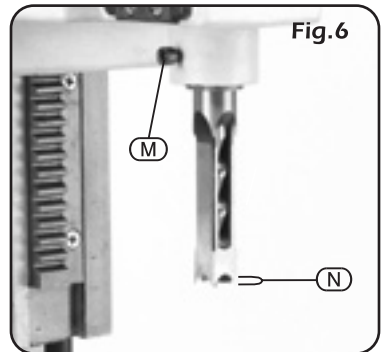
For some chisels the length of the mortice bit may require shortening. The best method is to fit the chisel and bit as normal, measure the gap (N) and minus 1.0-2.5mm from the total. Remove the chisel and bit. Separate the bit and saw the required amount off the shank end of the bit. Rebuild the chisel and install in the morticer ready for use.

Ensure all covers are replaced, the chuck fully tightened and the chuck key removed prior to operation.

- **NOTE:**

When cutting slots, position the slot in the chisel so debris is ejected into the already cut workpiece section.

When cutting deep mortices, make the cut in several stages up to 25mm each to allow the debris to clear.



- **NO-VOLT ON/OFF SWITCH (Fig.7):**

This machine is fitted with a no-volt type ON/OFF switch.

In the event of a power failure the machine will have to be manually restarted once the power has been re-instated.

To switch the machine "ON" press the green "I" button.

To switch the machine "OFF" press the red "O" button.

Fig.7

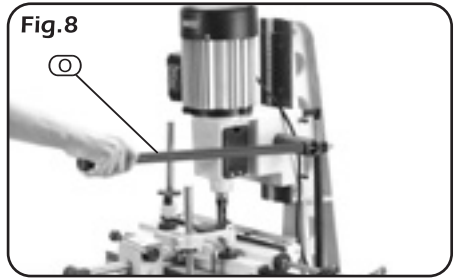


- **LOWERING THE HEAD (Fig.8):**

With the bit rotating lower the head using the plunge handle (O).

To move the handle without moving the head push the handle to the right. This disengages the mechanism. Raise or lower the handle to re-engage the mechanism.

Fig.8



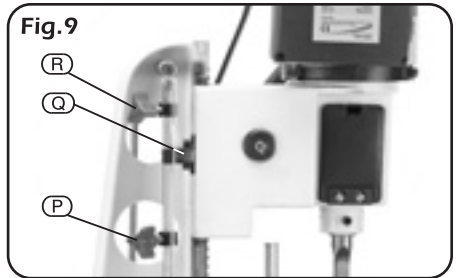
- **DEPTH LOCKING KNOB (Fig.9):**

For repeated plunging to the same depth the bench morticer is fitted with a depth stop.

Lower the head to the desired depth, loosen locking knob (P) and position the stop indicator (Q) under the head, when located, tighten locking knob (P). This will now act as a stop.

There is also a height lock (R) if required. The mortice width lock works in the same way but on the lateral table movement.

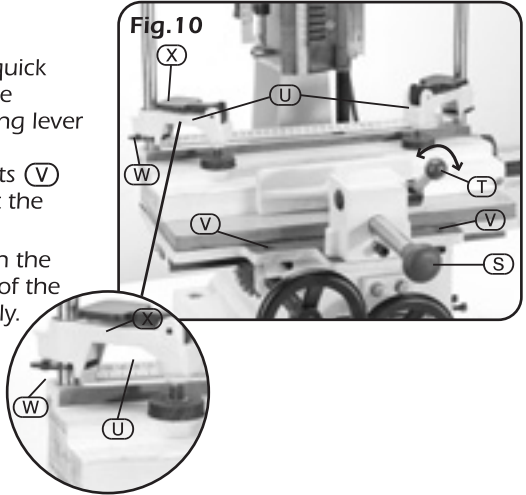
Fig.9



## - WORKPIECE VICES (Fig.10):

To hold the workpiece firmly during morticing operations there are several clamps. Slide the quick action vice (S) forward to clamp the workpiece between the table. Lock in place by push/pulling lever (T). The two quick action clamps (U) can be mounted on the rear fence (as shown) or points (V) depending on the workpiece, to quickly adjust the height.

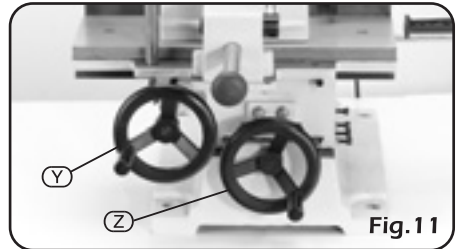
Pull up lever (W) and slide the clamp up/down the rod. Adjust the height to lightly touch the top of the workpiece. Fold down lever (X) to lock securely.



## - TABLE MOVEMENT (Fig.11):

The table adjustment wheel (Y) moves the table laterally from left to right. Rotating the wheel clockwise moves the table to the right, and anti-clockwise moves the table to the left.

The table adjustment wheel (Z) moves the table back and forth. Rotating the wheel clockwise moves the table forward and anti-clockwise moves the table backwards.



Form a habit of checking the following points before starting a job:

1. That the chisel and bit are secure. See page 8. The chisel bit should protrude from the chisel by approximately 1.0mm-2.5mm.
2. The workpiece is securely clamped and against the work fence.
3. The depth stop bar is set at the required level.
4. Always ensure that the chisel and bit being used are sharp and of good quality, (see page 11 for full range available). Otherwise your mortice cuts will be of poor quality.
5. When cutting deep mortice joints, we recommend you cut it in stages - a maximum of 25mm (1") per stroke.
6. The rate at which you cut into softwood will be different to that of hardwood. Feed the bit too quickly and you could overload the motor, too slowly and the bit tip could burn.
7. If you are cutting through the workpiece, place an old piece of wood underneath it, so you do not cut into the wooden worktable when the chisel and bit break through the workpiece.



# OPTIONAL ACCESSORIES

## MORTICE CHISEL WITH BITS:

Stock Number	Mortice Sq.	Chisel Shank
43043	1/4"	19mm
43044	3/8"	19mm
43045	1/2"	19mm
43050	1"	19mm
43046	1/4"	13/16"
43047	3/8"	13/16"
43049	1/2"	13/16"
48014	1/4"	11/64"
48030	3/8"	1/4"
48056	1/2"	3/8"
48072	5/8"	1/2"
48080	3/4"	1/2"

## MORTICE CHISELS:

Stock Number	Mortice Sq.	Chisel Shank
78996	1/4"	13/16"
79019	3/8"	13/16"
79035	1/2"	13/16"
79051	5/8"	13/16"
79069	3/4"	1 3/16"

## MORTICE BITS:

Stock Number	Chisel Bit Dia.	Bit Shank Dia.
78897	1/4"	11/64"
78912	3/8"	1/4"
78920	1/2"	3/8"
78954	5/8"	1/2"
78962	3/4"	1/2"

<b>Stock No.</b>	09897
<b>Part No.</b>	AABM25
<b>Description</b>	Cabinet Stand for BM25 Morticer

Due to the weight of the morticer, assistance to lift or move the machine on to the cabinet will be required.

Move the machine on to the cabinet so the holes in the top align with the morticer base. Pass the four bolts supplied down through the machine base and cabinet. Place over each bolt a large washer, a spring washer and secure in place with the nut.

**NOTE:**

All fixings supplied.

- At the end of the machine's working life, or when it can no longer be prepared, ensure that it is disposed of according to UK regulations.
- Contact your local authority for details of collection schemes in your area.

In all circumstances:

- Do not dispose of power tools with domestic waste.
- Do not incinerate.
- Do not abandon in the environment.
- Do not dispose of WEEE\* as unsorted municipal waste.



\* WEEE Waste Electrical & Electronic Equipment.





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- **Service/Warranty Repair Agent**  
For aftersales servicing or warranty repairs, please  
contact the Draper Tools Helpline for details of an  
agent in your local area.

YOUR DRAPER STOCKIST

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