

UK Subject to change

Document Ref:
FBM-370/18914/PMR26/Issue 1/April 02

Copyright©
These instructions are the sole property of Ferm-Omega Tools and may not be reproduced

USER'S MANUAL

Ferm Bench Morticer

FBM-370



Ferm[®]

Art.nr. 733600
Screwfix Art.nr. 18914

FERM TABLE BENCH MORTISER

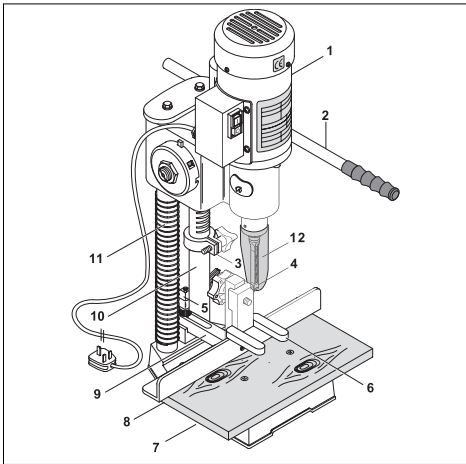
FBM-370

USERS MANUAL

TECHNICAL SPECIFICATIONS

Voltage	230 V~
Frequency	50 Hz
Power input	450 W
IP-code	IP40
Speed, no load	2800/min
Mortising capacity	13 mm
Max. drilling capacity	16 mm
Max. chisel travel	115 mm
Nett weight	25 kg
Lpa (sound pressure)	72.3 dB(A)
Lwa (sound power level)	85.3 dB(A)
Vibration value	2.5 m/s ²

PRODUCT INFORMATION



1. Machine head

2. Handle

3. Depth set guide

4. Chisel and bit

5. Fence clamping lever

6. Hold down clamp

7. Fence

8. Table

9. Bracket

10. Gear column

11. Guide column

12. Protection guard

PACKAGE CONTENTS

- |

Mortising machine

|

3/4" Chisel Bush

|

Allen key 5 mm

|

Allen key 6 mm

|

Mortise chisel set 13mm

|

Chuck key

|

Arbor

|

Chuck

Check the machine, loose parts and accessories for transport damage.

SAFETY INSTRUCTIONS

The following symbols are used in these instructions for use:

!

Denotes risk of personal injury, loss of life or damage to the tool in case of non-observance of the instructions in this manual.

⚡

Denotes risk of electric shock.

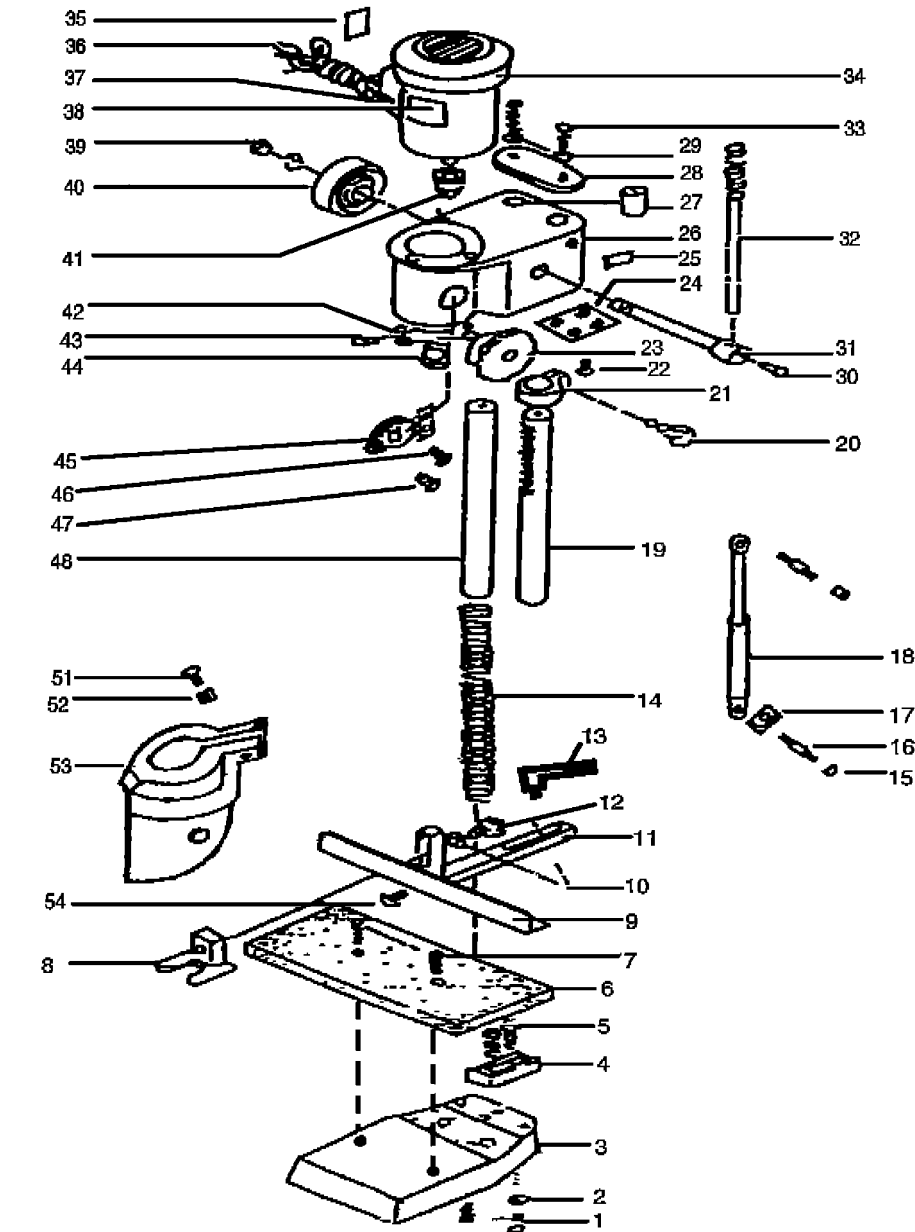
Carefully read this manual before using the machine. Make sure that you know how the machine functions and how to operate it. Maintain the machine in accordance with the instructions to make sure it functions properly. Keep this manual and the enclosed documentation with the machine.

Ferm products are manufactured to high quality standards they are safe and fit for purpose at time of sale, but all tools can be dangerous if the correct precautions are not taken. Always follow these instructions, do not carry out the operation until you are sure you can do so in safety. Remember consider the work environment for safe operation as well as safety for tool use.

!

Warning! When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury. Read all these instructions before attempting to operate this product. Save these instructions for future reference.

EXPLODED VIEW



SPARE PARTS LIST FBM-370 PART 2

REF NR	DESCRIPTION	FERM NR
45	GUARD COVER	
46	SCREW	
47	SCREW	
48	GUIDE COLUMN	
51	SCREW	
52	NUT	
53	PROTECTING CASING	
54	SCREW	

PERSONAL SAFETY

Use Personal Protection Safety Equipment

Protect eyes with safety glasses or goggles note: the use of safety protective eyewear without the CE mark can lead to serious injury if the glass breaks. A suitable dust mask should be worn if cutting drilling or sanding is dusty, in particular chipboard or MDF.

Approved safety footwear and headgear should worn as appropriate, for example on building works or when heavy weights are involved.

Dress properly

Do not wear loose clothing or jewellery. It can get caught in moving parts. Non-skid footwear is recommended when working out doors. Wear protective hair covering to contain long hair.

Stay alert

Watch what you are doing Use common sense. Do not operate tools when tired or after taking alcohol or prescription/ non-prescription drugs.

OPERATIONAL SAFETY

Concentrate

Do not allow routine, which occurs when using the machine frequently, to lead to mistakes. Remember that a slight lack of concentration can result in serious injuries in a split second.

Keep work area clean

Cluttered areas and benches invite injuries.

Consider the work environment

Do not expose power tools to rain or use them in damp or wet locations. Keep work area well lit. Do not use power tools in the presence of flammable liquids, vapours or gases.

Guard against electric shock

This unit contains dangerous voltages. Use a RCD (residual current device) to provide protection against electrical shock. Prevent body contact with grounded surfaces (e.g. pipes, radiator, ranges or refrigerators).

Keep children and pets away

Do not let children or pets come into contact with the tool, extension cable or work area.

Do not force the tool

It will work better and safer at the rate for which it was intended.

Use the right tool

Do not force small tools or attachments to do the job of a heavy-duty tool. Do not use tools for purposes for which they were not intended; for example do not use a circular saw for cutting trees or logs.

Do not abuse cable

Never carry tool by the cable or pull it to disconnect it from the power socket. Keep cable away from heat, oil and sharp edges. Do not touch the metal plug pins when connecting or removing the plug.

Secure Work

Use clamps or a vice to hold work. It is safer than using your hand and it frees both hands to operate the tool.

Do not over-reach

Keep a proper footing and balance at all times.

Disconnect tools from power supply

When not in use, before servicing and when changing accessories such as blades, bits and cutters.



Always switch off and unplug the appliance from the power supply when making adjustments

Remove adjusting keys and wrenches

Ensure that they are removed from the tool before switching on.

Avoid unintentional starting

Do not carry plugged in tools with your finger on the switch. Check that the switch is off before plugging in to socket.

Outdoor use extension cables

When the tool is used outdoors use only an extension cable intended for outdoor use and marked accordingly. Use a RCD (residual current device) to provide protection against electrical shock. Do not use in rain or damp conditions.

Connect a dust extraction device

Whenever there are facilities for fitting a dust extraction system, make sure it is connected and used.

Use recommended accessories

The use of any other accessory or attachment other than recommended in the instructions or catalogue may present a risk of personal injury.

BEFORE USING THE BENCH MORTISER



Ensure the mortiser is unplugged from mains and is switched off.

Refer to illustration below.

- The mortiser should be mounted on a stable surface and secured with suitable bolts/screws (not supplied) through the two holes in the centre of the footplate.
- Use washers as necessary to make sure the unit is securely fixed. The footplate is cast iron, do not over tighten the fixings.
- Route the mains cable well away from the chisel/chuck and front side of mortiser, ensure that it cannot get caught in moving parts or the workpiece.

ASSEMBLY



Ensure the machine is switched off and unplugged from mains.

The machine is delivered with the metal parts protected by a rust inhibiting grease; this should be removed before assembly with biodegradable, non-flammable and non-toxic solvent.

Refer to illustrations below.

Fasten the handle (2)

- Slide the handle into the hole on boss on right side of machine making sure the rear end of the handle does not foul the guide rod behind it.
- Tighten the Allen bolt with the 5mm wrench supplied to secure the handle.

Remove packing piece

- Lower the machine head with the handle and remove the black H section packing piece from the gear column, this is used for transporting the machine only.
- Allow the machine head to move to its upper position.

Attach the support bracket

Place the support bracket between the gear and guide columns and secure with the two cap head Allen bolts, tighten with the 6mm wrench.

Attach the wood base (8)

- The wood base is fixed to the machine footplate with the two countersunk screws provided.
- Tighten with a suitable crosshead screwdriver (not supplied).

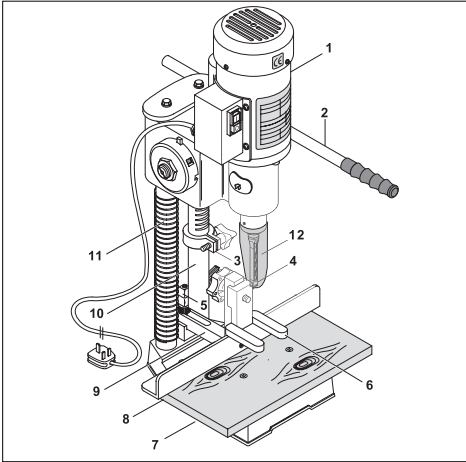
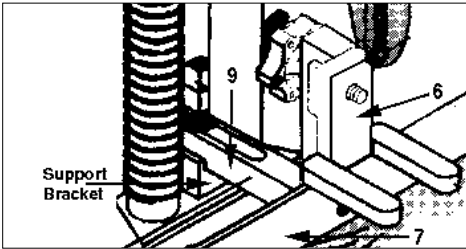
Attach the fence (7)

Take the clamp bracket (6) and attach to the shorter slotted bracket on the fence assembly (7) with the red thumb knob and washer supplied.

Attach the fence assembly to the support bracket

- Remove the red lever from the fence clamp by undoing the Allen screw and removing it, the spring and lever from the top of the clamp.
- Put the threaded part of the clamp with the washer provided through the long slotted bracket on the fence assembly.
- Screw into the threaded hole in the support bracket hand tight. Refit the lever, spring and Allen screw and tighten with 5mm wrench.

Note: The clamp lever can be adjusted for the best operating position by pulling up the lever and turning to the desired position.



SPARE PARTS LIST FBM-370 PART I

REF NR	DESCRIPTION	FERM NR
1	BOLT	
2	LOCK WASHER	
3	BASE	
4	BRACKET A	
5	HEX KEY SCREW	
6	WOOD BASE	
7	SCREW	
8	HOLD DOWN CLAMP	
9	FENCE	
10	WASHER	
11	BRACKET B	
12	KNOB	
13	HANDLE	
14	SPRING	
15	NUT	
16	SCREW	
17	WASHER	
18	DAMPER	
19	GEAR COLOMN	
20	KNOB	
21	DEPTH SET GUIDE	
22	SCREW	
23	GEAR	
24	GEAR ACCESS PLATE	
25	WARNING PLATE	
26	GEAR CASING	
27	GUIDE SLEEVE	
28	STEP PLATE	
29	WASHER	
30	SET SCREW	
31	GEAR SHAFT	
32	HANDLE	
33	SCREW	
34	MOTOR	
35	NAME PLATE	
36	POWER CORD	
37	SWITCH	
38	WARNING PLATE	
39	NUT	
40	INNER SPRING	
41	CHUCK	
42	SCREW	
43	CHISEL BUSHING SCREW	
44	CHISEL Busing	

GUARANTEE

The guarantee conditions can be found on the separately enclosed guarantee card.

CE DECLARATION OF CONFORMITY (UK)

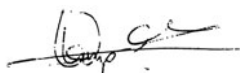
We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents

**EN55014-1, EN-55014-2,
EN61000-3-2, EN61000-3-3,
EN61029-1, Annex 1 of MD**

in accordance with the regulations

**98/37/EEC
73/23/EEC
89/336/EEC**

from 03-07-2001
GENEMUIDEN NL
W. Kamphof
Quality department



Attaching/removing chisels and bits

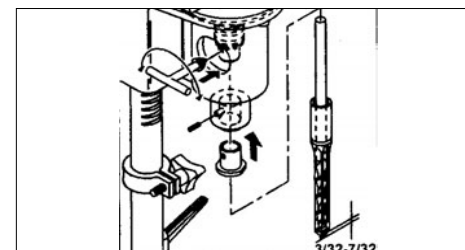


The chisels and bits are sharp! Wear suitable gloves during this operation. (Do not wear gloves while operating this machine).

- Remove the counter sunk crosshead screws from the left and right red covers on the machine head with a suitable screwdriver (not supplied).
- Loosen the chuck with the chuck key supplied.
- Loosen the chisel bush screw with the 5mm wrench supplied.
- Slide the bit into the chisel.
- Insert the chisel (with the bit inside) into bush with the opening facing either left or right to allow for chip ejection during operation. Secure the chisel by tightening the bush screw with the 5mm wrench.
- Slide the bit upwards into the chuck; ensure there is at least 2.4 – 5.5mm (3/32" – 7/32") protruding from the end of the chisel. Tighten the bit in the chuck with the chuck key.

Note: The chuck key stows in the clips on the red covers.

- Replace the securing screws in the red covers.
- Removal of chisels and bits is a reverse of these instructions.



Fitting the external drill chuck

- Remove the chisel and bit as previously described.
- Degrease the arbour and the inside of the separate chuck.
- Push the tapered end of the arbour into the plain end of the chuck and tap gently with a soft face hammer.
- Insert the small diameter end of the arbour into the machine's chuck and tighten with the chuck key.
- Close and secure red door.

Fitting the safety shield

- Slacken the nut/bolt on the safety shield clamp and slide the assembly on to the boss at lower part of the machine head.
- Secure by tightening the clamp nut/bolt, make sure the assembly is securely fixed and that there is enough room to unscrew the bush securing screw.

Note: During operation the safety shield should be in the down position.

OPERATING THE MORTISER

- Plug into a suitable mains supply and switch on.
- Check that the chuck guard is in the down position.

To switch the drill ON

Push the green button on the left hand side of the machine head in.

To switch the drill OFF

Push the red button on the left hand side of machine head in.

Note: This is a no volt release switch and will not operate without the power connected.

MORTISING



Ensure the mortiser is unplugged from mains and is switched off.

- Position the fence to locate the workpiece in the desired location.
- Clamp the workpiece with the clamp and tighten thumb knob to secure.
- Set the depth stop in the desired position and tighten the thumbwheel to secure.

Switch the machine ON

- Let the motor come to full speed
- Lower the handle slowly until the mortise is complete.

Note: Do not mortise deeper than 1" (25mm) in one go, for deeper mortises take several steps so the chips can be ejected easily.

- When the mortising is finished switch off, raise the machine head to upper position and unplug from mains.

MORTISING SLOTS

Operate as for mortising

- Slots and mortises longer than 1" (12.5mm) can be made by moving the workpiece along the fence after the initial cut.
- Make sure the open part of the chisel is facing in the direction you moving so the chips will be ejected easily.

USING THE MACHINE AS A DRILL

If required the wood base can be removed to increase the height capacity, the machine footplate has grooves for clamps or a machine vice.

- Remove the chisel and bit, mount the external drill chuck as previously described.
- Insert a drill into the chuck.
- Make sure the drill is suitable for the material you are using, that it is sharp and the shank is in good condition.
- Tighten using the chuck key provided. Remove the chuck key.
- Make sure the drill is secure in the chuck, if it slips during drilling the shank will be damaged and you will not be able to centre it in the chuck next time it's used.
- Set the depth stop as required
- Secure the workpiece. Always use clamps to secure the workpiece.



Never hold the workpiece with your hand.

- When the drilling is finished switch off, raise the machine head to upper position and unplug from mains.

DURING USE

- Let the bit come to full speed before mortising/drilling the workpiece.
- Use appropriate feed rate for the drill bit/material being used.
- Do not force the mortiser. Press the machine head downwards with gentle pressure. Let the machine do the work.
- Clamp material properly. Do not use hand or foot to support the work piece. Use a suitable clamp to secure the workpiece against the fence/table
- Be aware that this is a powerful machine. Unclamped or unsupported workpieces can kick causing injury.
- Do not hold workpieces with your hands while drilling them.
- Do not wear gloves while drilling; they can get caught in the bit resulting in injury.
- Never mortise/drill several workpieces at the same time.
- Use constant gentle pressure.
- If the bit seizes, switch off, unplug and rotate the bit anti-clockwise to release. Never switch the machine on with the bit jammed.
- Do not use the machine without the safety guard in position.
- Remove chips from the table and clamp etc with a suitable brush (switch the mortiser off first). Do not use your hands
- Regularly inspect the chisel/bit (switch the machine off first) during use for signs of damage or wear and sharpen/replace when required. Only use recommended drill bits suitable for the material and speed you are using.
- Ensure you remove the chuck key - after tightening the drill bit make it a habit to remove the key straight away.
- Switch the machine off before removing the plug from the mains socket.
- Be careful. Keep your hands away from the chisel/bit.
- Do not use the drill as a press.

MAINTENANCE, CARE AND REPAIR

SHARPENING



Protect your hands. Chisels and bits are sharp!

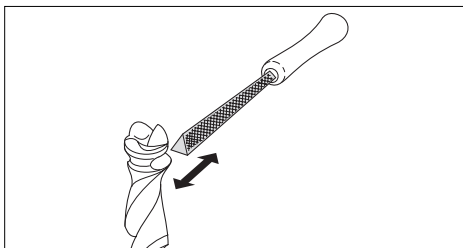


Ensure the mortiser is unplugged from mains and is switched off.

To sharpen the bit

Refer to illustration below.

- Remove the bit from the machine.
- Check for wear and dullness, replace if badly worn, if not-
- Sharpen the inner edge of the spurs and the cutting edge of the twist with a suitable three-cornered file.



To sharpen the chisel

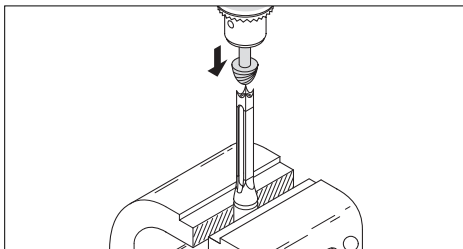
Refer to illustration below.

- Remove the chisel from the machine.
- Examine the walls of the chisel, if they are noticeably thin the chisel cannot be sharpened and will have to be replaced. If not, fix the chisel, cutting edge up, in a vice.
- Use a drill with a suitable rotary stone to sharpen the inner edges.



Caution! *Use very slow speed for this operation and sharpen a little at a time otherwise you will overheat the chisel and its temper will be drawn.*

- Remove the chisel from the vice after sharpening and remove any burrs from the outside with a file or by rubbing flat on a sharpening stone.



CLEANING

Clean the mortiser with a soft brush or a wiper moistened with a suitable biodegradable solvent. Do not use inflammable liquids like petrol or alcohol, they are a fire risk and will damage the plastic parts.

After cleaning protect metal parts from rust with a light coating of rust inhibiting spray.

FAULTS

Switch OFF immediately at the mains plug and remove the plug when:

- The plug or cable is damaged.
- The switch on the machine is defective.
- You smell or see smoke caused by scorched insulation in the machine.

The mortiser does not work when switched on

- Damaged plug/fuse.
Replace as required.
- Defective switch.
Take to local dealer for repair.

Excessive Sparking

- Indicates dirt in the motor or worn bushes.
Take the drill to your Ferm dealer.

Overheating

- Clean the motor ventilation with brush or dry cloth.
- The drill is overloaded.
Apply less load. Use sharp drills.
- The motor is defective.
Take to your Ferm Dealer.

Maintain tools with care

Keep tools sharp and clean for better and safer performance.

Follow instructions for changing accessories. Inspect tool and extension cables periodically and if damaged, have them repaired by a qualified person or authorised service body. Keep handles free from oil or grease. Keep the ventilation slots clean to prevent motor overheating.

Check for damaged parts

Do not use a tool with damaged parts, before further use a damaged tool must be carefully checked by a qualified person to determine that it will operate properly. Check for alignment of moving parts, binding or breakage of parts, mounting and other conditions that may affect its operation.

A damaged part or guard should be properly repaired by an authorised service centre, unless indicated otherwise in the instruction manual. Have defective switches replaced by an authorised service centre. Do not use a tool if the switch does not turn on and off.

Have your tool repaired by an expert

This appliance is manufactured in accordance with relevant safety standards. Only experts must carry out repairing of electrical appliances, otherwise considerable danger for the user may result.

Storing tools

When not in use tools should be stored in the dry, out of reach of children.

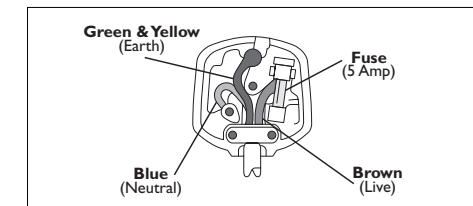
ELECTRICAL INFORMATION

This product is complete with a pre-wired mains plug. If the plug needs replacing follow these instructions.

Wire correctly

The mains wires in this machine are coloured in the following way:

- | | |
|--------------|--------------------|
| BLUE | • Neutral (N) |
| BROWN | • Live (L) |
| EARTH | • Green/Yellow (E) |



Securing wires

Secure wires carefully and firmly to the correct terminals. Secure the mains cable in the plug cord grip firmly. Fit a 5-amp fuse. If a 13 amp (BS1363) plug is used a 5 amp fuse must be fitted.

Recycle/Dispose of old plug and cable

Prevent inadvertent connection to socket and risk of electric shock. **If in doubt always consult a Qualified Electrician.**

ENVIRONMENT

At the end of this products or its accessories life please recycle where facilities exist. Phone the Helpline for current advice on recycling.

Helpline

For any questions relating to operational or safety matters contact:

Ferm Customer Helpline on:	0115 966 1199
Monday-Friday	8am – 6pm
Saturday	9am – 1pm