AXMINSTER Hobby SERIES

Code: 501253

AW19FM Floor Standing Morticer

Axminster Tool Centre,
Unit 10 Weycroft Avenue, Axminster, Devon EX13 5PH

www.axminster.co.uk

Declaration of Conformity

Copied from CE Certificate

The undersigned, K. Bodenstein authorised by

Laizhou Tongtai Machinery Co.,Ltd.
Shilipu Chenggang Road, Laizhou, Shandong
261400 P.R. China declares that this product:

Model number

MS3840, MS3840T Morticer

manufactured by Laizhou Tongtai Machinery Co. in compliance with the following standards or standardisation documents in accordance with Council Directives

98/37/EC

Warning

The symbols below advise that you follow the correct safety procedures when using this machine.

Fully read manual and safety instructions before use

Ear protection should be worn

Eye protection should be worn

Dust mask should be worn

HAZARD
Motor gets hot

Quantity	Item	Model Number
1 No.	AW19FM Morticer	MS3840
1 No.	Cabinet Stand with Shelf and Lockable Drawer	
4 No.	M12 x 120 Hex Head Bolts and Washers	
1 No.	$^{5}/_{8}$" Chisel and Bit	
1 No.	$^{3}/_{4}$" Chisel Bushing	
1 No.	$^{13}/_{16}$" Chisel Bushing	
3 No.	Hexagon Keys	
1 No.	Chuck Key	
1 No.	Instruction Leaflet	
1 No.	Guarantee Card	

Good Working Practices/Safety

The following suggestions will enable you to observe good working practices, keep yourself and fellow workers safe and maintain your tools and equipment in good working order.

WARNING!! **KEEP TOOLS AND EQUIPMENT OUT OF THE REACH OF YOUNG CHILDREN**

Electrical Safety

- Check that the mains power supply is earthed
- Regularly check the mains lead and plug for damage
- Ensure that a fuse of the correct amperage is fitted to the plug
- Ensure that any extension lead used is correctly rated to suit the machine or power tool
- Ensure that the power lead and any extension lead is kept clear of the blades or other sharp obstacles
- Do not use electrical machines or power tools in wet or damp areas or locations
- If a replacement mains plug is fitted at any time this must be of the appropriate size and fitted with the correct size of fuse.

General Safety

- Mount the machine on a flat level bench or surface. Secure the machine to the surface where applicable.
- Always use machines or power tools in an uncluttered area. To reduce the risk of accidents, avoid leaving materials or other items within the working area and allow clear access to all machine parts and controls.

General Instructions for 230V Machines

• Clean machines by wiping with a damp soapy cloth. Do not use solvents or cleaners that may damage plastic parts or painted/coated surfaces. Keep water and solvents away from all electrical components, leads and plugs.

• When storing or leaving tools for any length of time, spray bare metal surfaces with a protective spray to minimise surface corrosion.

• Always isolate machines and power tools from the power supply when not in use or when changing parts, cutters and blades or when making any adjustments.

• Before using any machine or power tool, ensure that all locking-nuts, chucks etc, are tightened and secure. Check that all loose keys, spanners and other tools have been removed.

• Always ensure that long hair is tied back or retained by a band, hat or safety helmet. Remove all loose jewellery to prevent it from catching in rotating parts of the machine.

• Always check that the correct machining or cutting speed has been selected.

• Do not operate machinery or power tools when tired or under the influence of alcohol, drugs or certain medicines.

• WHEN USING MACHINES ALWAYS WEAR SUITABLE EYE PROTECTION, EAR DEFENDERS AND DUST OR FUME INHALATION PROTECTION.

• WARNING!! KEEP TOOLS AND EQUIPMENT OUT OF THE REACH OF CHILDREN, UNLESS THEY ARE UNDER SUPERVISION.

Specific Safety Instruction for Morticers

• Ensure that the morticer is firmly fixed to its base as the force exerted through the operating handle could be enough to over balance the machine.

• Ensure that the operating handle is returned to the upright position after cutting a mortice.

• Mortice chisels have very sharp ends, handle them with great care.

• Make sure that the timber is held firmly down against the table, either with the vice or the hold down clamps. This prevents the possibility of the timber being pulled upwards as the mortice chisel is withdrawn from the hole.

Remove the morticer and stand from the shipping cartons. Report any shortages or damage to Axminster Power Tools Customer Services Department. **(03332 406406)**

Read the manual thoroughly, familiarising yourself with the correct safety, operating and maintenance procedures before proceeding further.

The machine and stand are both supplied fully assembled so the initial assembly work is limited to positioning the morticer on the stand and securing with four M12 x 120mm long hexagon head bolts.

Fit the adjustable length stop if required using the two screws and washers supplied .

To avoid the possibility of injury it is essential to use the appropriate lifting equipment when positioning the machine on the stand.

When positioning the machine in the workshop, ensure that there is adequate room on either side for the size of timber you plan to use.

Specifications

Model	AW19FM
Produt Code	501253
Rating	Trade
Power	750W (230V, 1ph)
Chisel Stroke	220mm
Centre of Chisel to Back Fence	140mm
Max Height of Timber with 12.7mm Chisel and Bit	220mm
Max Chisel Size Softwood	19mm
Max Chisel Size Hardwood	16mm
Overall L x W x H	560 x 400 x 1,540mm
Weight	130kg

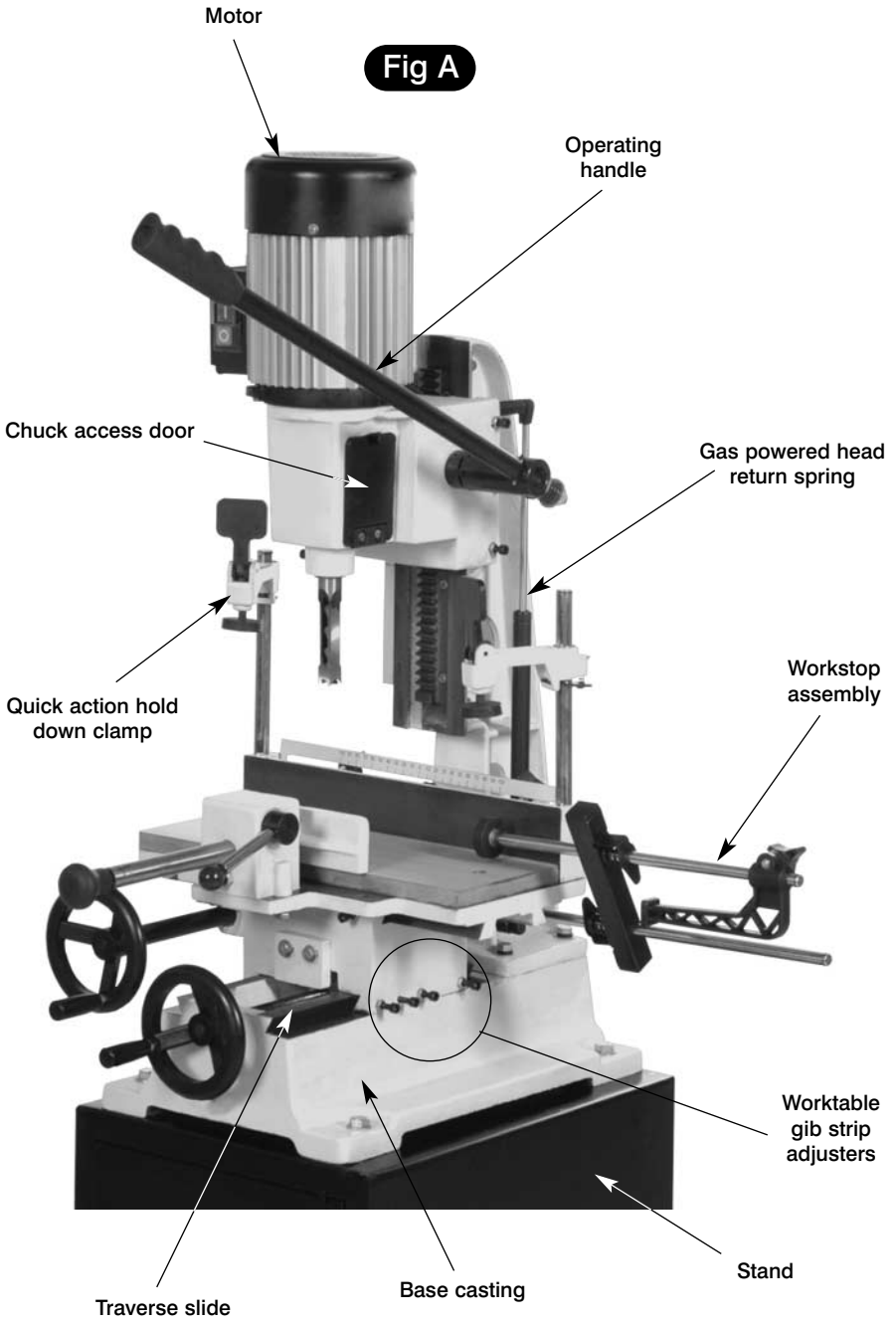

Motor
Fig A
Operating handle
Chuck access door
Gas powered head return spring
Quick action hold down clamp
Workstop assembly
Worktable gib strip adjusters
Stand
Traverse slide
Base casting

Fig B

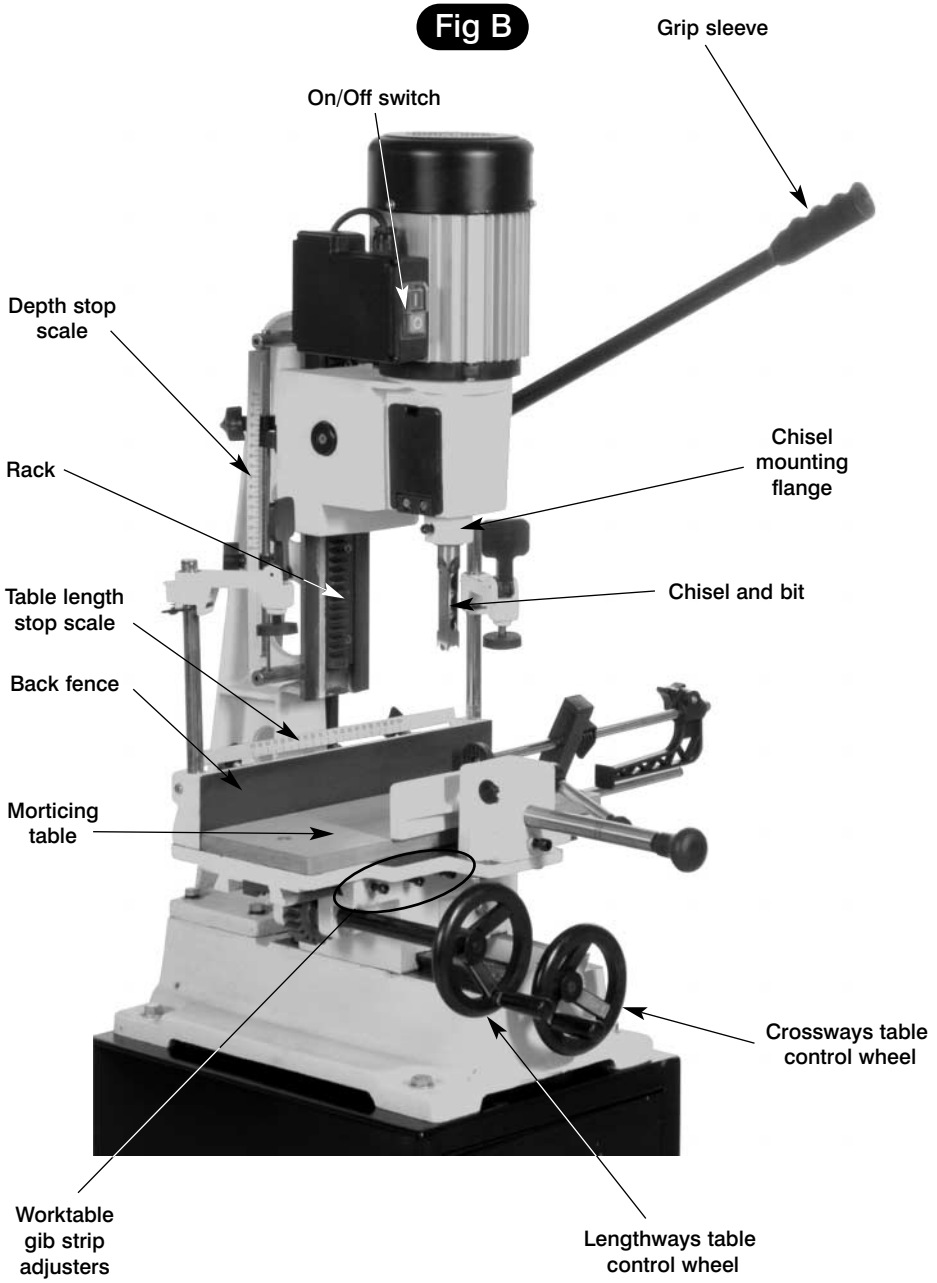

Grip sleeve
On/Off switch
Depth stop scale
Rack
Chisel mounting flange
Chisel and bit
Table length stop scale
Back fence
Morticing table
Crossways table control wheel
Worktable gib strip adjusters
Lengthways table control wheel

Fig C

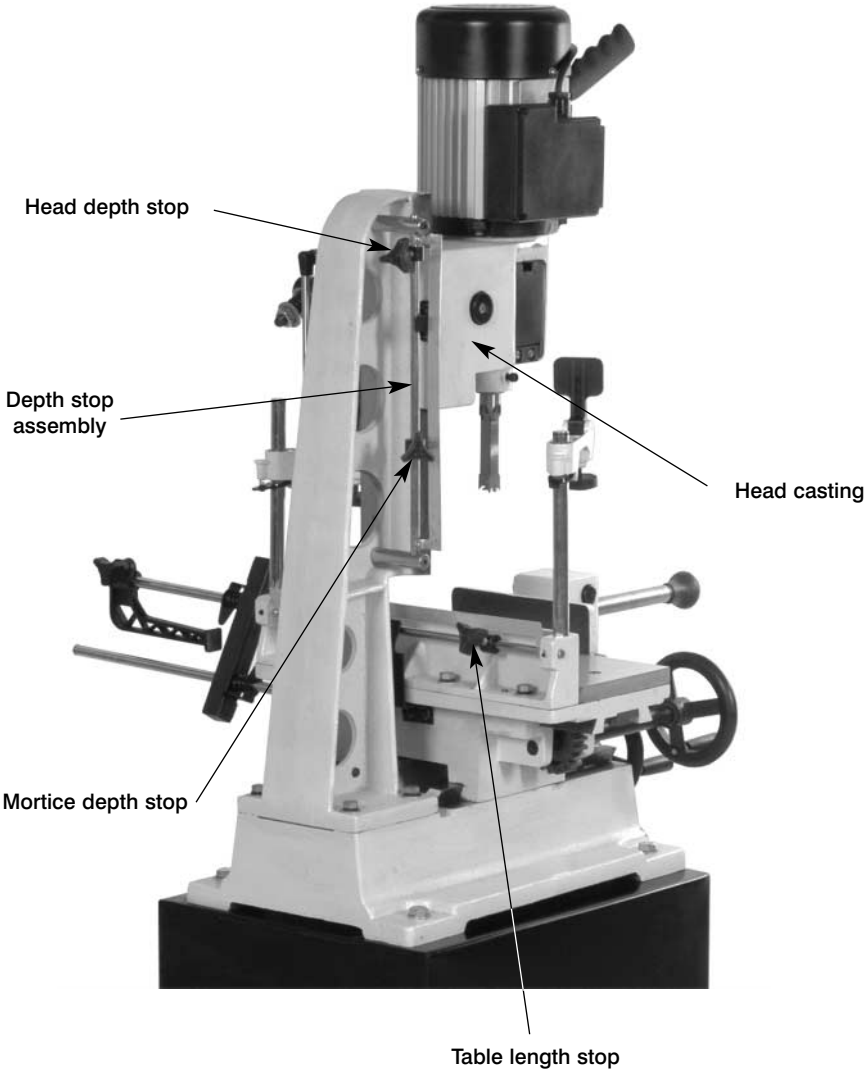
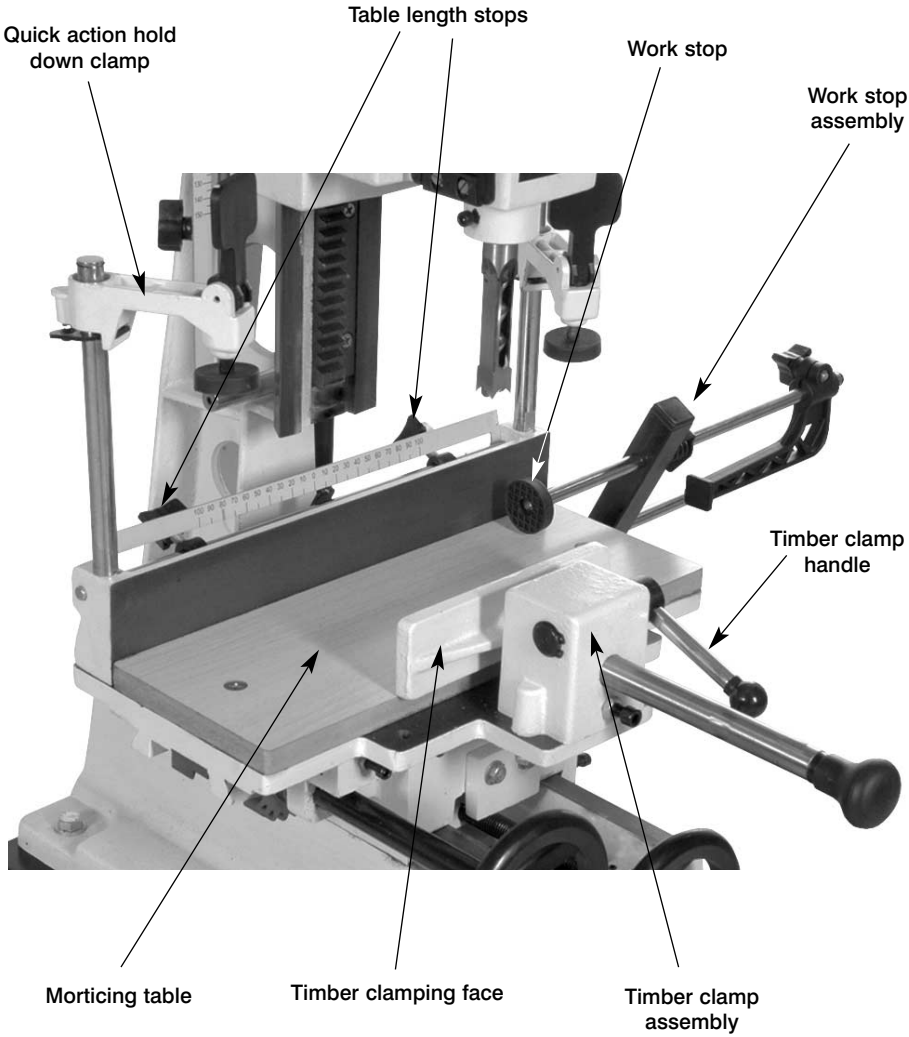

Head depth stop
Depth stop assembly
Head casting
Mortice depth stop
Table length stop

Fig D


Quick action hold down clamp
Table length stops
Work stop
Work stop assembly
Timber clamp handle
Morticing table
Timber clamping face
Timber clamp assembly

1. Select the size of mounting bush to suit the chisel being used and fit into the morticing head.

2. Insert the chisel into the bush and tighten the screw just enough to hold the chisel in place. Rotate the chisel so that the slot in the side of the chisel is positioned either to the left or right, not the front or back; this will allow the chips to escape freely when cutting.

3. Push the chisel fully into the bush and then retract it by about 1.5 mm, using a spacer such as a coin as shown in Fig E to establish the correct position. Tighten up the locking screw.

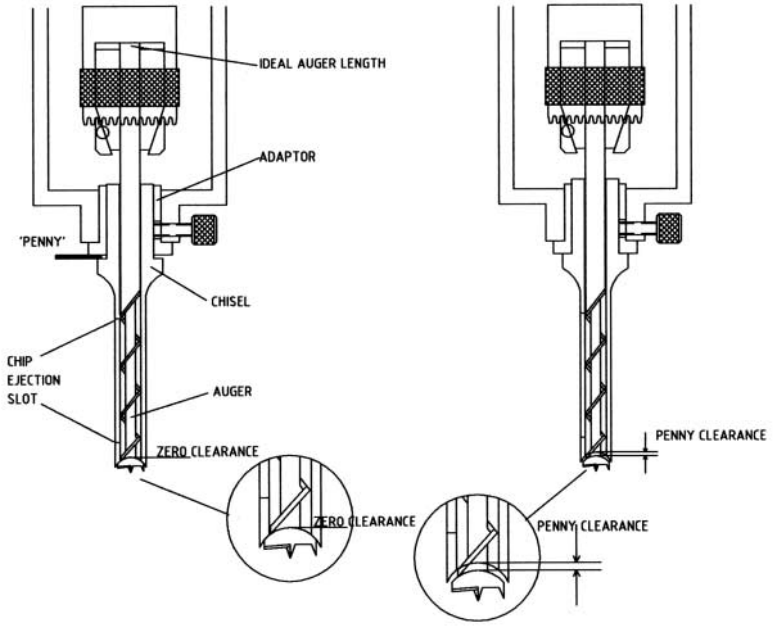
4. Insert the auger into the chisel and push it fully up so that it contacts the recess in the end of the chisel and then fully secure the shank of the auger in the chuck.

Be careful when handling morticing chisels as the ends are very sharp.

5. Now slacken off the chisel clamping screw, remove the spacer, push the chisel fully home and re-tighten the screw. This procedure will ensure that there is a small clearance between the end of the auger and the chisel, essential in order to avoid waste jamming and overheating the chisel.

6. The final operation is to check that the chisel is perfectly square to the table; this is best done by bringing the table forward until the vertical face just touches the back face of the chisel and using this as a datum for aligning the chisel. Ensure that the chisel is securely clamped in position before starting work.

Fig E



1. Set the depth of the mortice with the lower of the two depth stops (Fig C) on page 8. The upward travel of the head can be limited by adjusting the upper stop; this prevents unnecessary movement of the operating handle when cutting shallow mortices.

2. Place the workpiece on the table and clamp in position with the vice or the hold down clamps. Use the left handwheel to move the table forwards and backwards in order to position the mortice in the required position across the timber.

3. Adjust the two table stops shown in Fig D on page 9 to give the required length of mortice and tighten up the two thumbscrews.

4. Turn the machine on and feed the chisel and bit steadily into the work by pulling down on the operating handle. The handle can be re-positioned on its spindle so that it is in the most convenient position.

5. After making the first cut, the table is moved along with the left hand wheel for successive cuts until the mortice is complete. The direction of movement of the table will depend on which side of the chisel the clearance slot is located - movement should be away from the slot so that the chippings can clear freely.

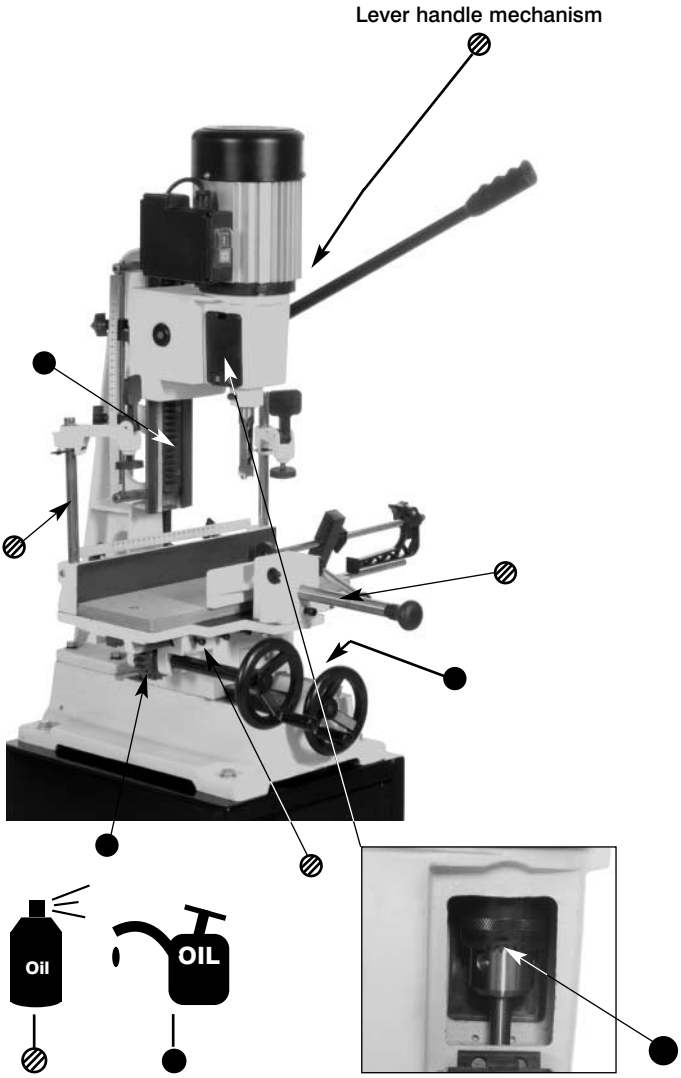
6. The rate of feed of the chisel should be fast enough to prevent burning of the tip of the chisel but not so fast as to risk breaking the auger. The ideal speed for any combination of chisel size and timber type will be learned through experience.

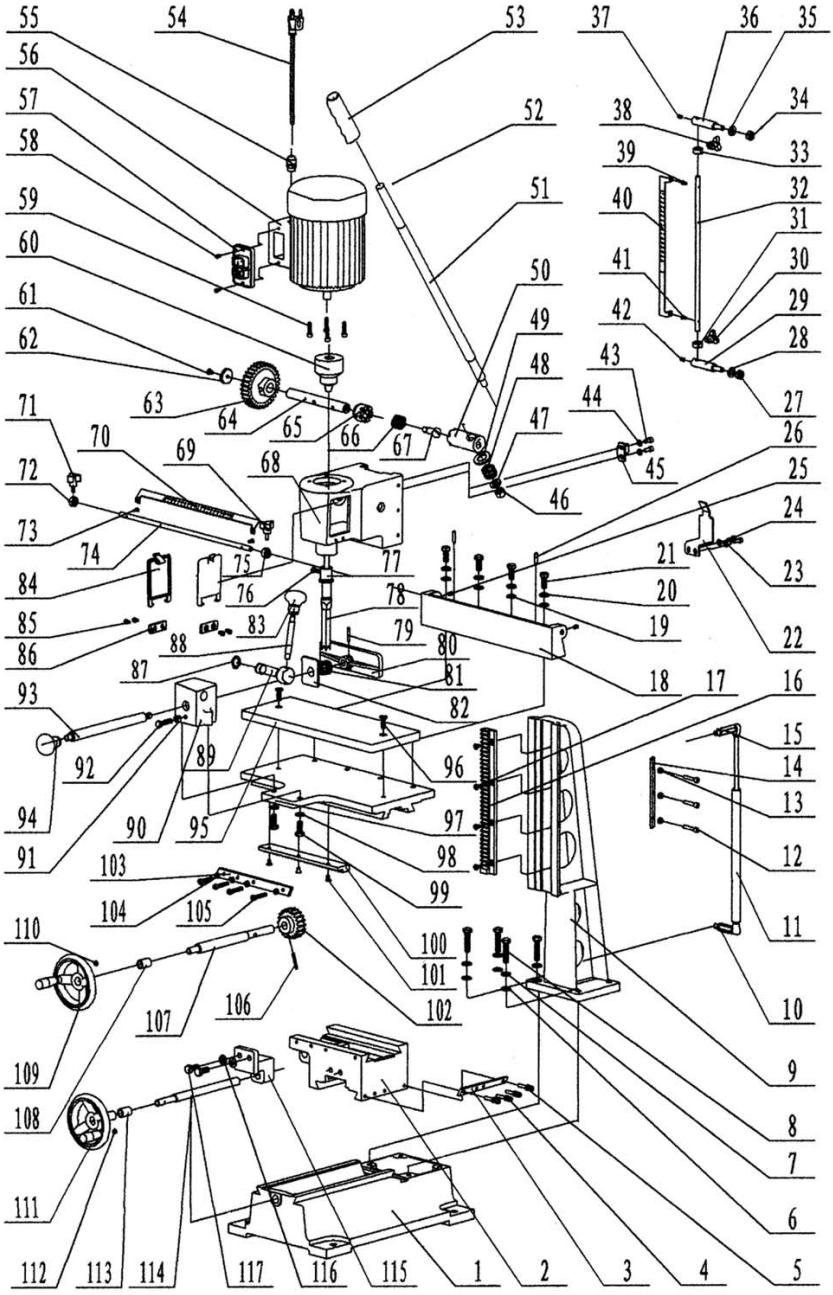
7. Deep mortices are best cut in a series of shallower cuts to allow the chippings to clear and prevent blocking of the chisel.

The morticer requires only minor maintenance such as routine cleaning and lubrication. Keep the machine clean and use a light application of thin oil to the moving parts.

Chisels and bits should be kept sharp for best performance, a discoloured tip is usually a sign of excessive heat caused by a blunt auger and/or chisel. Bits are best sharpened with a small file and chisels with the special mortice chisel sharpeners available through Axminster Power Tool Centre **(03332 406406)**.

Burrs can be removed from the sides of the chisel on a fine oilstone or waterstone but great care must be taken not to taper the chisel as this will cause the chisel to jam in the timber.

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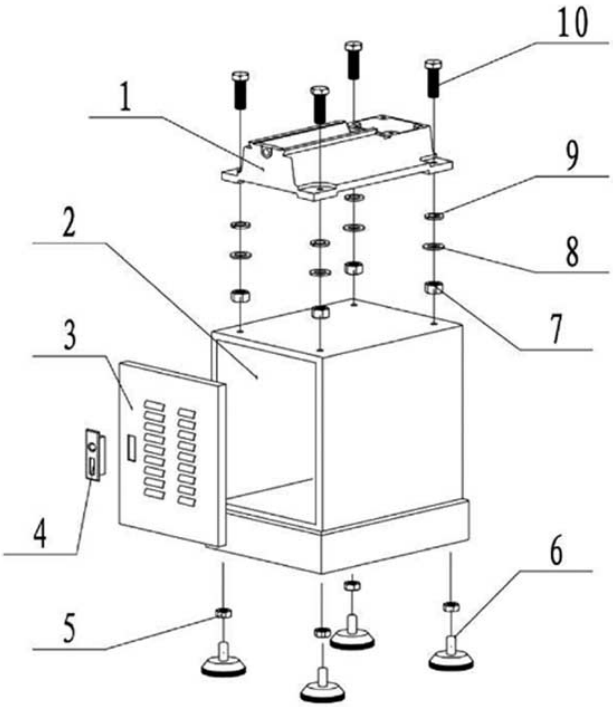
NO.	Description	Quantity	NO.	Description	Quantity
1	Base	1	51	Handle	1
2	Middle Base	1	52	Motor	1
3	Drift	1	53	Handle Grip	1
4	Set Screw, M6x35	4	54	Power Cord	1
5	Hex Nut, M6	4	55	Strain Relief Bushing	1
6	Washer, 10	4	56	Switch Box	1
7	Wave Washer, 10	4	57	Switch	1
8	Cap Screw, M10x40	4	58	Screw, M4x15	2
9	Column	1	59	Screw, M6x25	4
10	Screw	1	60	Chuck, 16mm	1
11	Gas Spring	1	61	Screw, M6x10	1
12	Set Screw, M6x35	3	62	Cover	1
13	Hex Nut,	3	63	Gear	1
14	Drift	1	64	Shaft	1
15	Screw	1	65	Connecting Bend	1
16	Rack	1	66	Spring	1
17	Screw, M6x10	4	67	Screw	1
18	Fence	1	68	Headstock	1
19	Washer, 10	4	69	Screw	1
20	Wave Washer, 10	4	70	Ruler mark	1
21	Cap Screw, M10x25	4	71	Screw	1
22	Localizer	1	72	Setting Collar	1
23	Washer, 6	2	73	Screw, M4x12...	2
24	Screw, M6x15	2	74	Setting Rod	1
25	Screw, M6x10	2	75	Setting Collar	1
26	Pin	2	76	Screw, M6x25	1
27	Hex Nut, M10	1	77	Bushing	1
28	Washer, 10	1	78	Mortising Chisel And Bit	1
29	Screw	1	79	Pin	1
30	Screw	1	80	Clamp Plate	1
31	Setting Collar	1	81	Spring	1
32	Setting Rod	1	82	Spring Cover	1
33	Setting Collar	1	83	Handle	1
34	Hex Nut, M10	1	84	Cover	1
35	Washer, 10	1	85	Screw, M5x10	4
36	Screw	1	86	Cover Base	2
37	Screw, M6x15	1	87	C—Spring C-20	2
38	Screw	1	88	Handle	1
39	Screw, M4x12	1	89	Shaft	1
40	Depth Ruler	1	90	Clamping Block	1
41	Screw, M4x12	1	91	Nut ,M10	1
42	Screw, M6x15	1	92	Screw, M8x25	2
43	Screw, M6x15	2	93	Locking Shaft	1
44	Washer, 6	2	94	Handle	1
45	Localizer	1	95	Wood Table	1
46	Hex Nut, M12	1	96	Screw, M8x25	2
47	Washer, 12	1	97	Table	1
48	Spring	1	98	Washer , 10	2
49	Washer, 14	1	99	Screw, M10x25	2
50	Connecting Bend	1	100	Rack	1

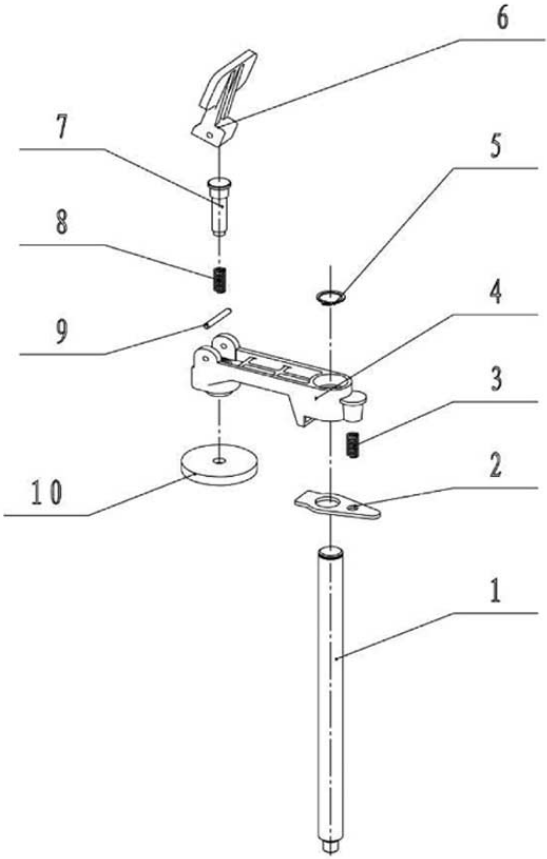
Cabinet Assembly

Item No.	Description	Quantity
B-1	Base	1
B-2	Stand	1
B-3	Door	1
B-4	Door latch	1
B-5	Hex nut, M10	4
B-6	Stand base	4
B-7	Hex nut, M10	4
B-8	Washer, 10	4
B-9	Wave washer 10	4
B-10	Cap screw, M12x40	4



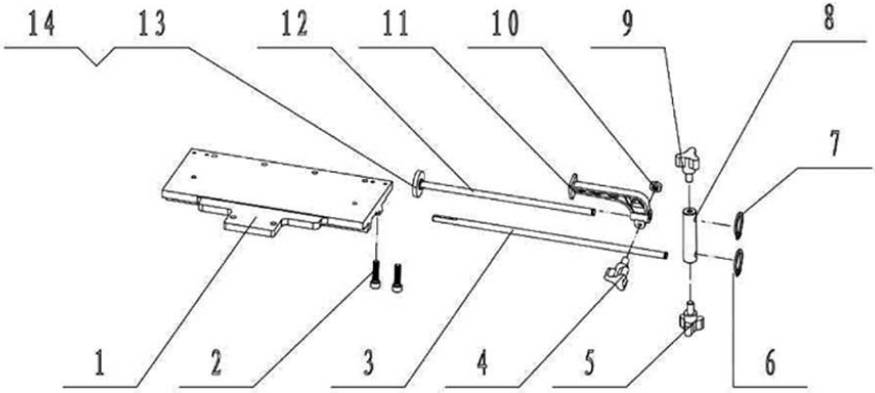
Clamping Bar Assembly

Item No.	Description	Quantity
C-1	Shaft	2
C-2	Setting piece	2
C-3	Spring	2
C-4	Clamping body	2
C-5	C-Clip	2
C-6	Locking handle	2
C-7	Locking screw	2
C-8	Spring	2
C-9	Pin	2
C-10	Stop disc	2



Work Stop Assembly

NO.	Description	Quantity	NO.	Description	Quantity
D-1	Table	1	D-8	Length Setting Block	1
D-2	Cap Screw M6x25	2	D-9	Handle Screw (big)	1
D-3	Rear Length Setting Rod	1	D-10	Nut M6	1
D-4	Handle Screw	1	D-11	Stop Disc	1
D-5	Handle Screw (big)	1	D-12	Front Length Setting Rod	1
D-6	C-Clip	1	D-13	Washer	1
D-7	C-Clip	1	D-14	Stop Disc	



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 recycling centre 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.