AXMINSTER Trade SERIES

Code **508488**

ATM25

Floor Standing Morticer

AXMINSTER • THREE YEAR GUARANTEE • 3

AT&M: 13/06/2017
BOOK REF : 101616

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Declaration of Conformity

Copied from CE Certificate

The undersigned, authorised by Jason Lin
Authorised by Yeon Chuan Machinery Co., Ltd.
No. 222, Tsung-yi, 6-th St., Taiping City, Taichung,
Taiwan 411

Model Number: 2308 (Hollow Chisel Morticer)

Manufactured **Yeon Chuan Machinery Co., Ltd.** is in compliance with the standards determined in the following Council Directive.

SGS-TW Reference No: **EZ/2007/A0002C**

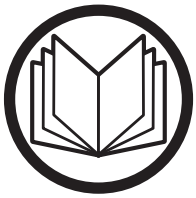
Applicable Standards: **EN 1050: 1996, EN ISO 12100-1:2003, EN ISO 12100-2:2003, EN 60204-1:2006**

Machinery Directive: **98/37/EC**

Low Voltage Directive: **2006/95/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

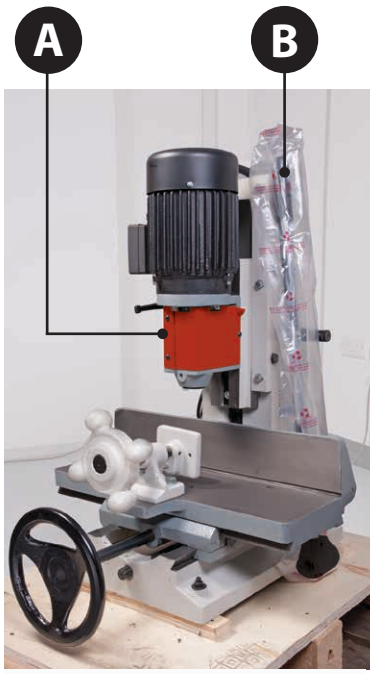
Eye protection should be worn

Dust mask should be worn

Two Man Assembly

HAZARD Motor gets hot

Quantity	Item	Part	Model Number
			2308
1 No	ATM25 Morticer	**A**	
1 No	Operating Lever	**B**	
Stand Assembly		**C**	(Assembly Required)
2 No	Leg Stand Support Brackets	**a**	
2 No	Leg Stands	**b**	
4 No	Hex M8x60mm Bolts	**c**	
4 No	5/16" Large Washers	**d**	
8 No	Hex M8x16mm Bolts	**e**	
8 No	Small Washers	**f**	
1 No	3-4-6mm Hex Keys	**D**	
1 No	Chuck Key	**E**	
2 No	Bush Adaptors 1.3/16" and 13/16"	**F**	
1 No	11-13,12-14,17-19,22-24mm Spanners	**G**	
1 No	Screwdriver	**H**	
1 No	Instruction Manual		



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What's Included

General Safety Instructions for 230V Machines

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

• The machine is not designed for working outside, do not use when or where it is liable to get wet. If the machine does get wet; dry it off as soon as possible with a cloth or paper towel.

• Do not use 230V a.c. powered machines anywhere within a site area that is flooded or puddled, and do not trail extension cables across wet areas.

• 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 Safety 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.

Specification

Code	508488
Model	ATM25
Rating	Trade
Power	0.75kW 230V, 1ph
Chisel Stroke	125mm
Max Height of Timber with 12.7mm Chisel and Bit	225mm
Max Chisel Size Softwood	25mm
Max Chisel Size Hardwood	19mm
Overall L x W x H	660x 515 x 1,538mm
Weight	160kg

Assembly

Remove the morticer and stand parts from the shipping cartons. Report any shortages or damage to Axminster Tool Centre Customer Services Department. (03332 406406)

HAVING UNPACKED YOUR ACCESSORIES PLEASE DISPOSE OF ANY UNWANTED PACKAGING PROPERLY. THE POLYTHENE AND CARD IS RECYCLABLE.

The machine and its accessories will arrive coated with heavy corrosion preventative grease and greased wax paper. These may need to be cleaned from the machine, its component and accessories prior to it being set up and commissioned. Use paraffin or a proprietary degreaser to remove the barrier grease.

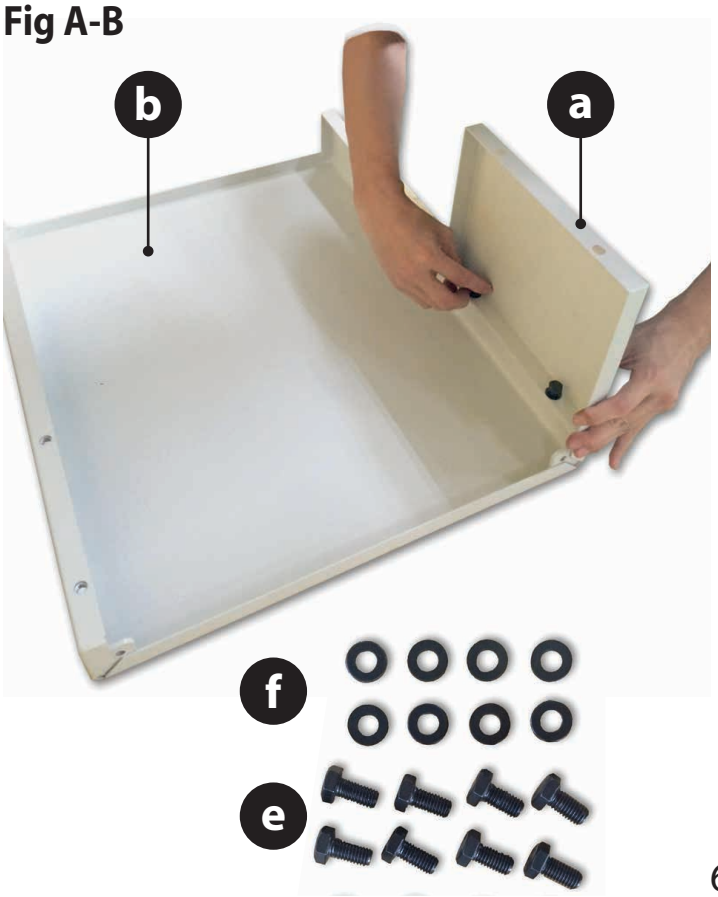
Read the manual thoroughly, familiarising yourself with the correct safety, operating and maintenance procedures before proceeding further.

Stand Assembly

You will require the leg stand brackets (a), leg stands (b), eight M8x16mm Hex bolts, (e) and small washers (f).

Step 1 Line up the first two pre-drilled holes in the leg stand bracket (a) with the threaded holes to one side of the leg stand (b) and secure using two M8 Hex bolts (e) and small washers (f), see fig A.

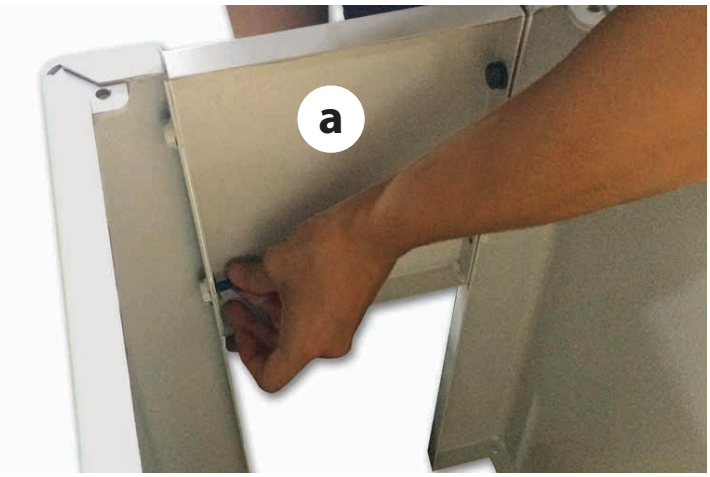
Fig A-B



Step 2 Attach the remaining leg stand (b) to the opposite end of the leg stand bracket (a) with a further two Hex bolts and washers (e-f), see fig B.

Step 3 Locate the remaining leg stand bracket (a), line up the four hole with the threaded holes to the opposite end of the leg stands (b) and secure in place with the remaining M8 Hex bolts and washers (e-f), see fig C.

Fig C



Step 4 Securely tighten all the bolts and turn the stand upright, see fig fig D.

Fig D

Mounting the Morticer to the Stand

WARNING! THE MORTICER IS A HEAVY PIECE OF MACHINERY, WE STRONGLY ADVISE YOU GET THE ASSISTANCE OF ANOTHER PERSON OR USE SOME SORT OF LIFTING DEVICE, (HOIST, ENGINE CRANE), BEFORE YOU ATTEMPT TO LIFT OR MOVE THIS MACHINE!

Locate the four M8x60mm Hex bolts (c) and the large 5/16" washer (d). Lift the morticer (A) onto the stand (C). Line up the four pre-drilled holes to the base of the morticer with the threaded holes to the corners of the stand assembly (C). Place a larger washer (d) over the thread Hex bolts (c), insert the bolt down through the holes in the morticers base and screw them into the stand, see fig F.

Fig E

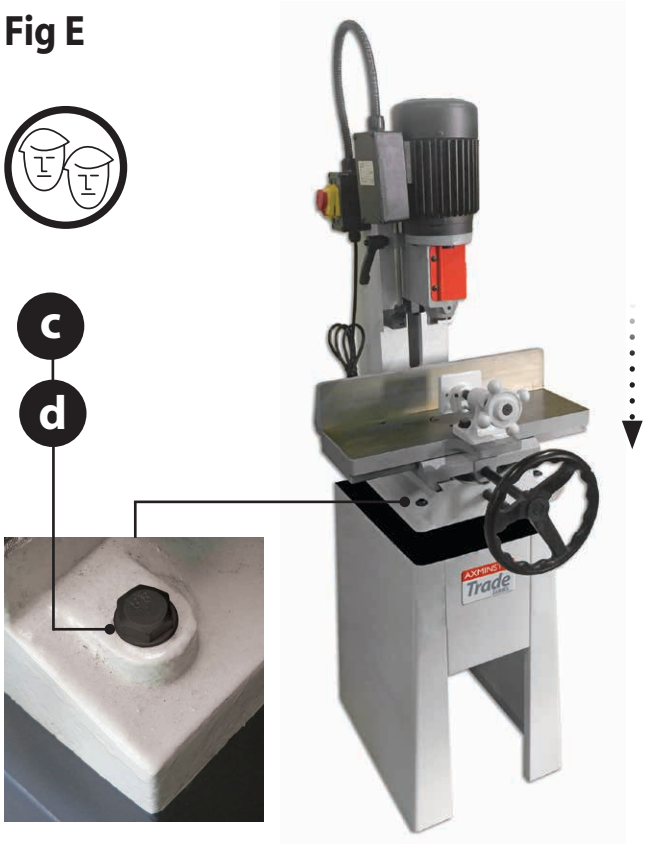
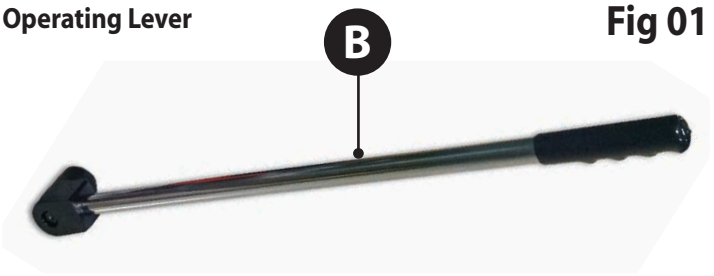


Fig F

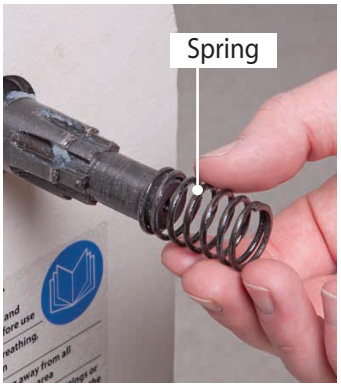
Operating Lever

Fig 01



1) Locate the operating lever (B), using a Hex key remove the Hex screw washer and spring from the rack and pinion assembly and place close to hand, see figs 02-03-04.

Fig 02-03-04



Continues Over....

IMPORTANT NOTE: THE HEAD STOCK ASSEMBLY HAS BEEN LOWERED FOR SHIPPING AND NEEDS TO BE RAISED TO ITS HIGHEST POSITION. TO DO THIS INSERT THE LEVER COUPLING OVER THE PINION ASSEMBLY UNTIL THE TEETH MESH THEN RAISE THE HEAD STOCK.

2) Re-position the lever (B) coupling over the rack and pinion assembly so that the lever is in the upright position and the teeth are meshed together, see figs 05-06.

Fig 05

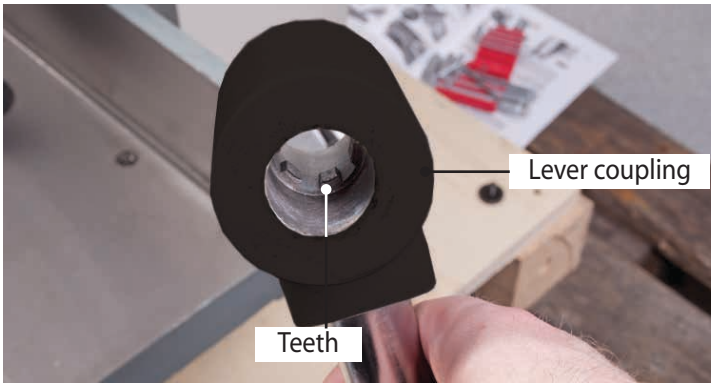


Fig 06

3) Push the lever coupling face up against the support column and replace the spring and Hex screw washer. Re-tighten using the Hex key, **NOTE: DO NOT OVERTIGHTEN** , see figs 07-08-09.

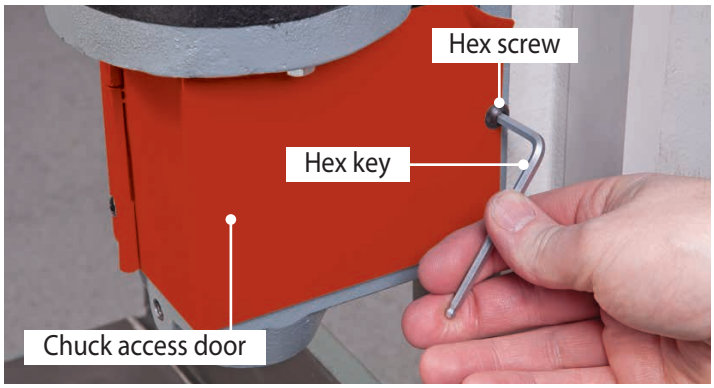
Fig 07-08

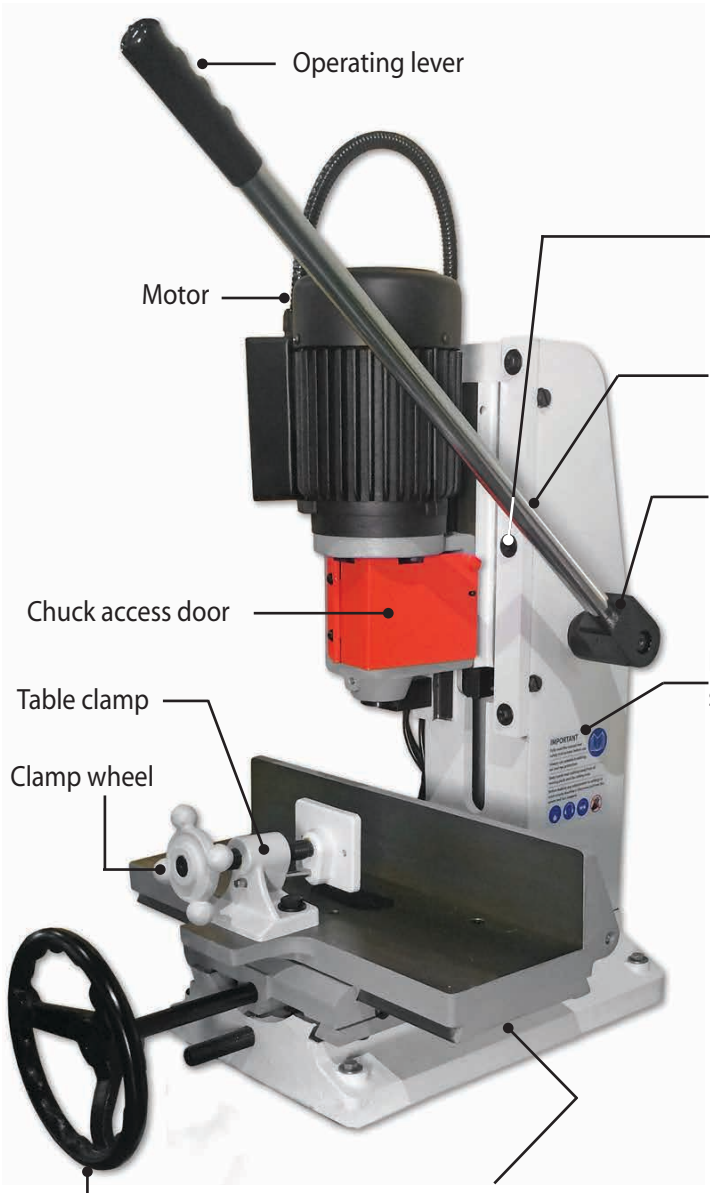
Fig 09

Chuck Compartment

Open the chuck access door by removing the Hex screw and placing it safely aside. Remove the transport packaging, see fig 10 and wipe the chuck over with a cloth. Close the access door and replace the Hex screw.

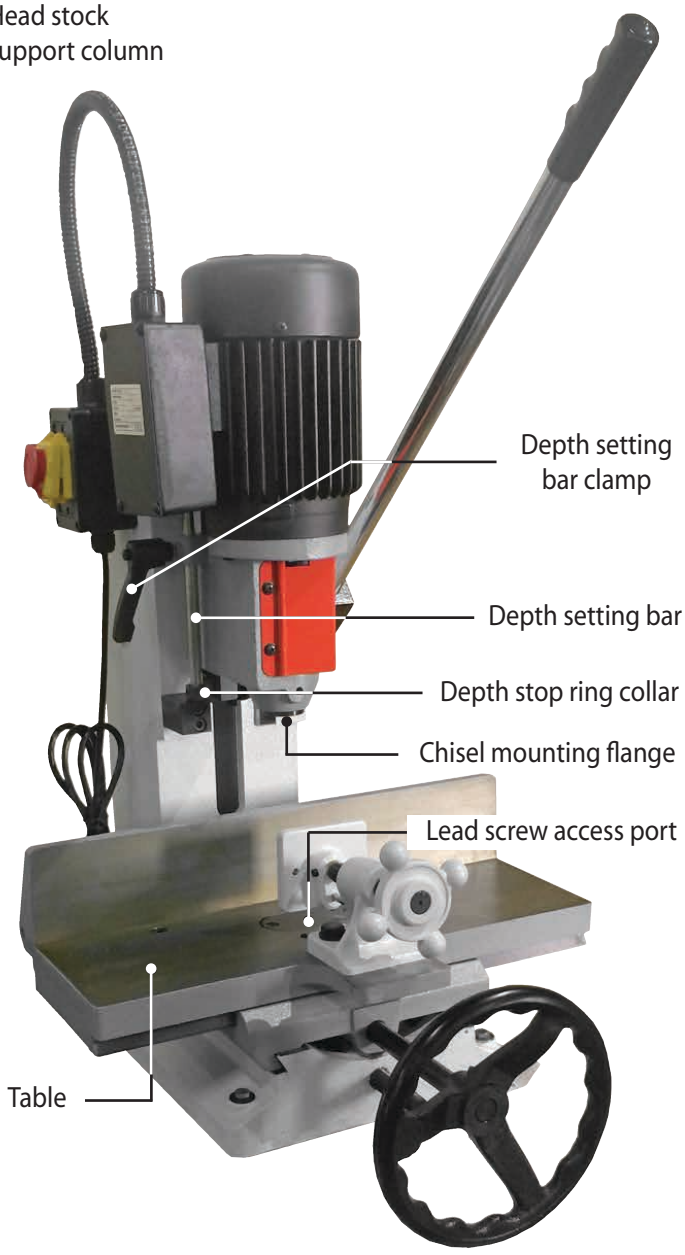
Fig 10





Push operating wheel to engage the gears to move the table from left to right

Pull wheel out to engage the lead screw to move the table front and back movement



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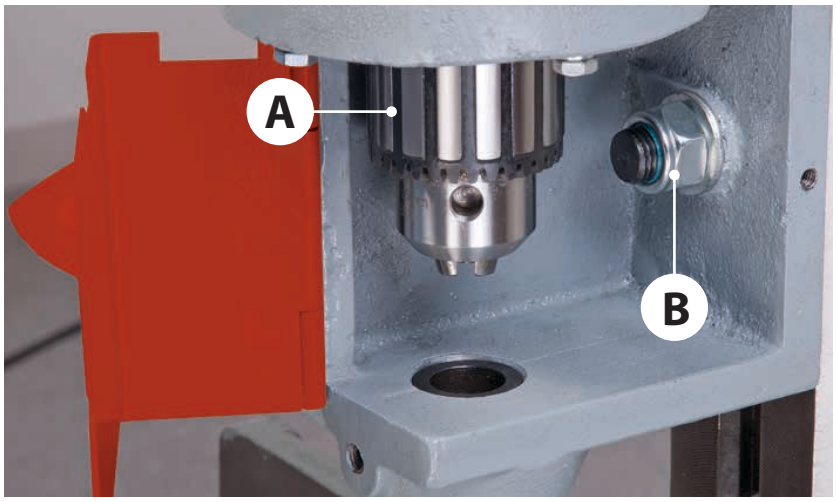
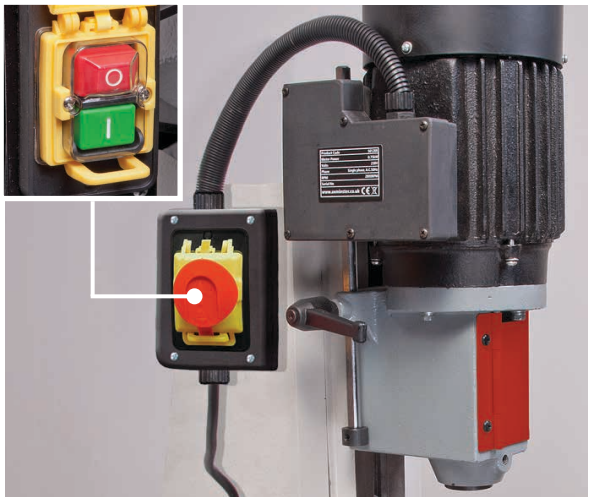
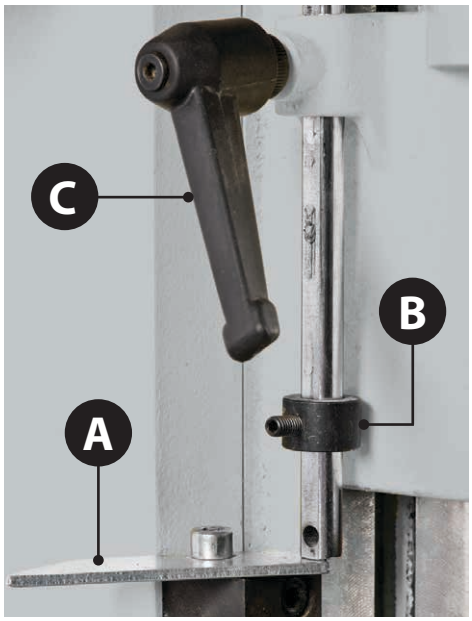
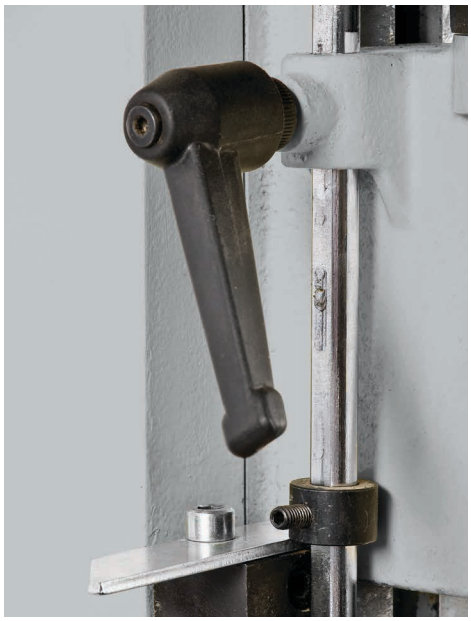


Chuck (A), Morticer head clamping nut (B)
for independent vertical adjustment



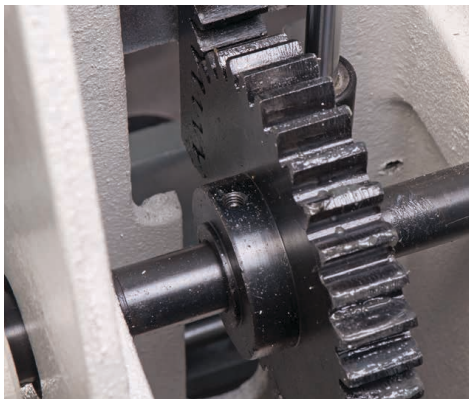
NVR ON/OFF Switch shroud



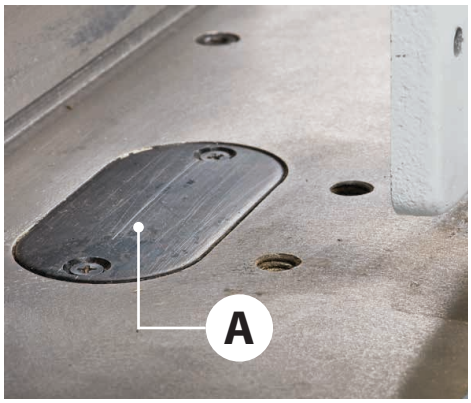


Depth stop plate (A), Depth ring collar (B) and clamping handle (C).
The depth stop plate can be repositioned to give a second specific depth

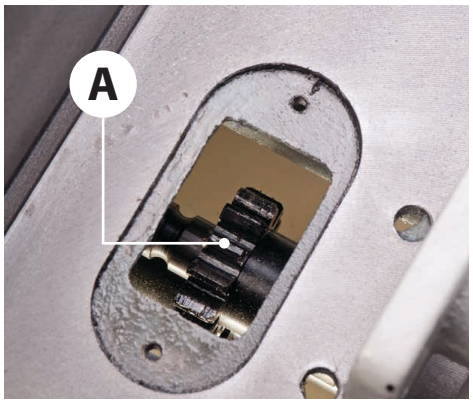
Rack and pinion rise
and fall mechanism



Rack and pinion drive



Lead screw access plate (A)



Drive wheel gear (A)

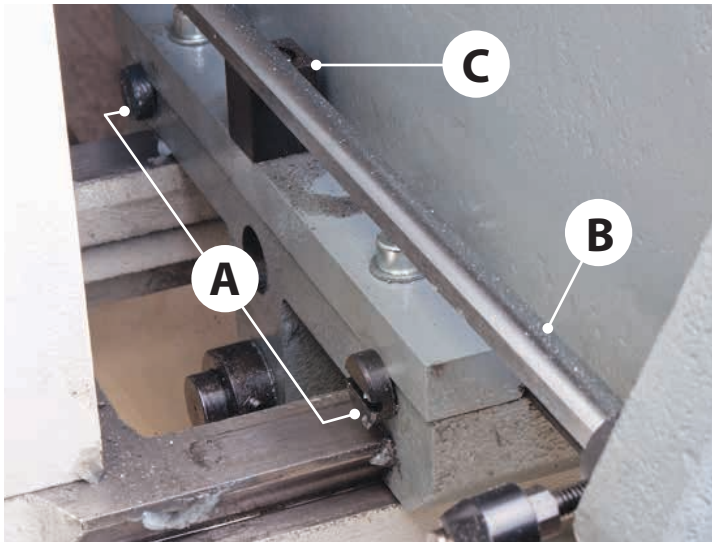


Table adjustment screws (A), Collar stop bar (B) and Collar stop block (C)

Collar stop (A)
Clamping handle (B)

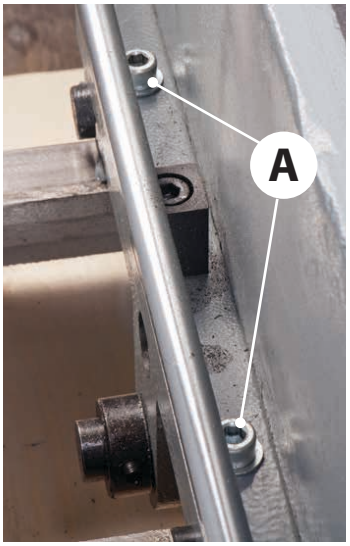


Table adjustment locking nuts (A)

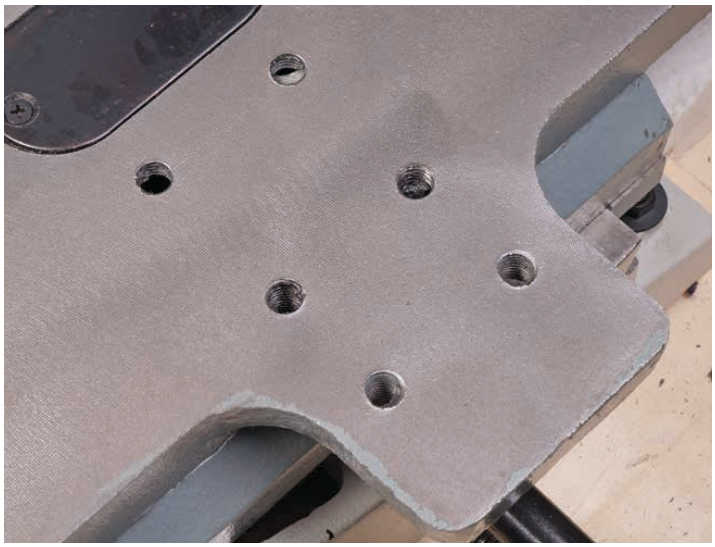
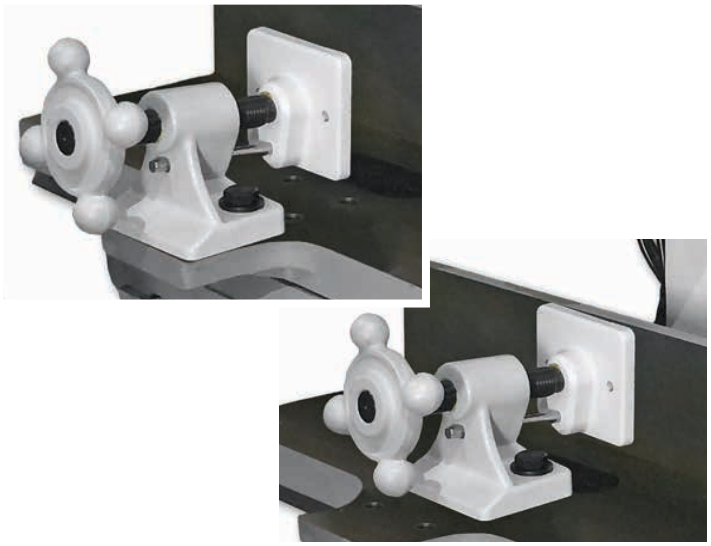
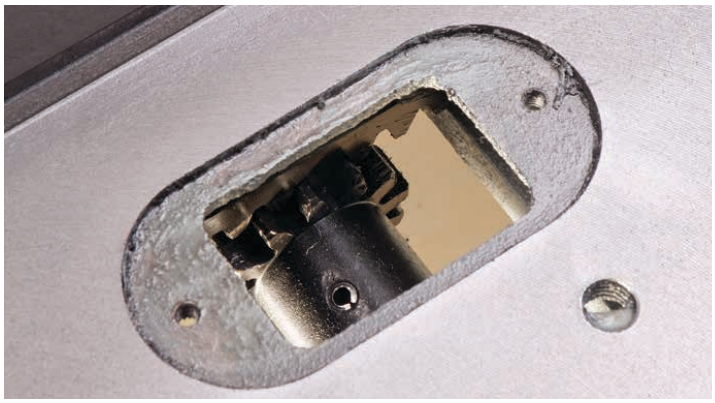


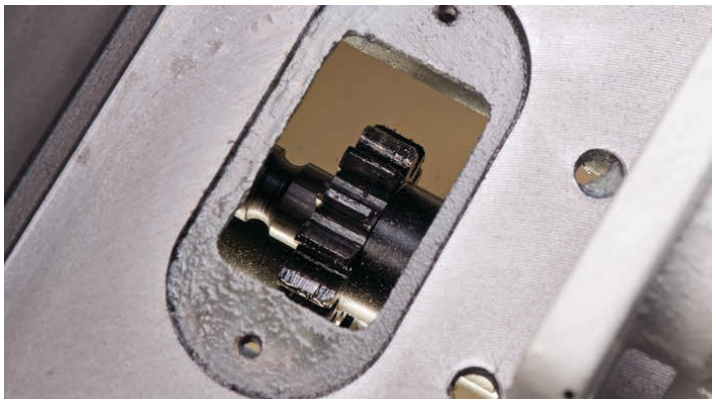
Table clamp positioning holes



The table clamp can be adjusted to accommodate different sizes of timber



Gear engaged to move the table from side to side

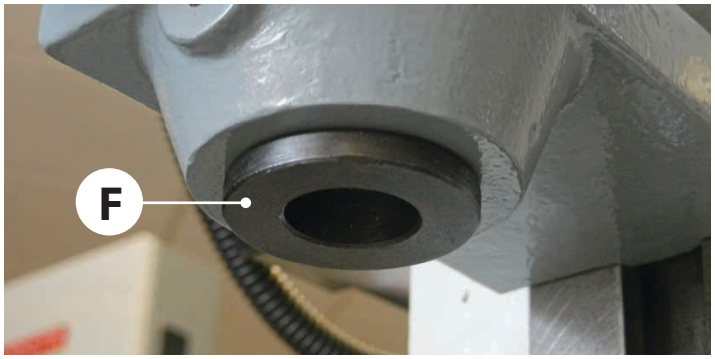


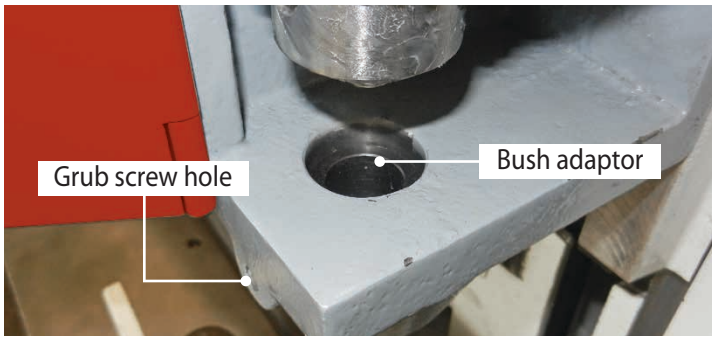
Gear engaged onto the lead screw to move the table from back to front

Initial Setup

NOTE: Select the correct bush adaptor (F) for the shank of the required chisel and introduce it into the underside of the chisel head stock. Push the bush up as far as it will go, at the same time lining up the hole in the side of the bush and screwing in the grub screw, far enough to prevent the bush from falling out, see fig A.

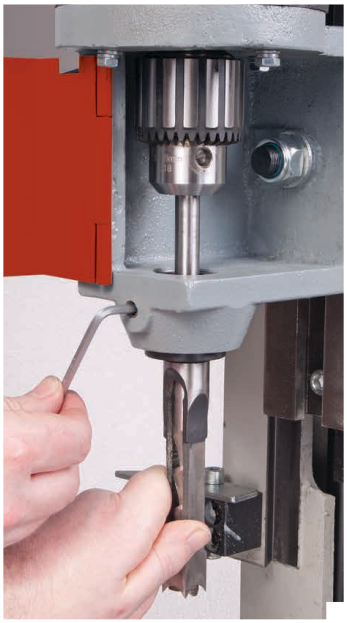
Fig A





Introduce the chisel into the adaptor collar, press the auger bit up into the chuck and tighten the chuck, see fig 11, withdraw the chuck key. Gently pinch the chisel in place by nipping tight the grub screw, see fig 12.

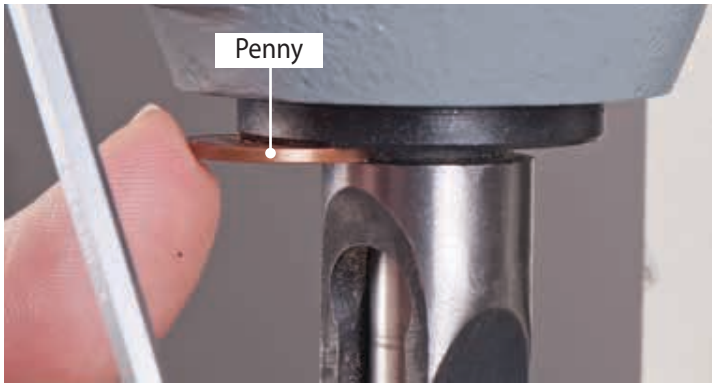
Fig 11-12



Setting the Chisel Auger Clearance

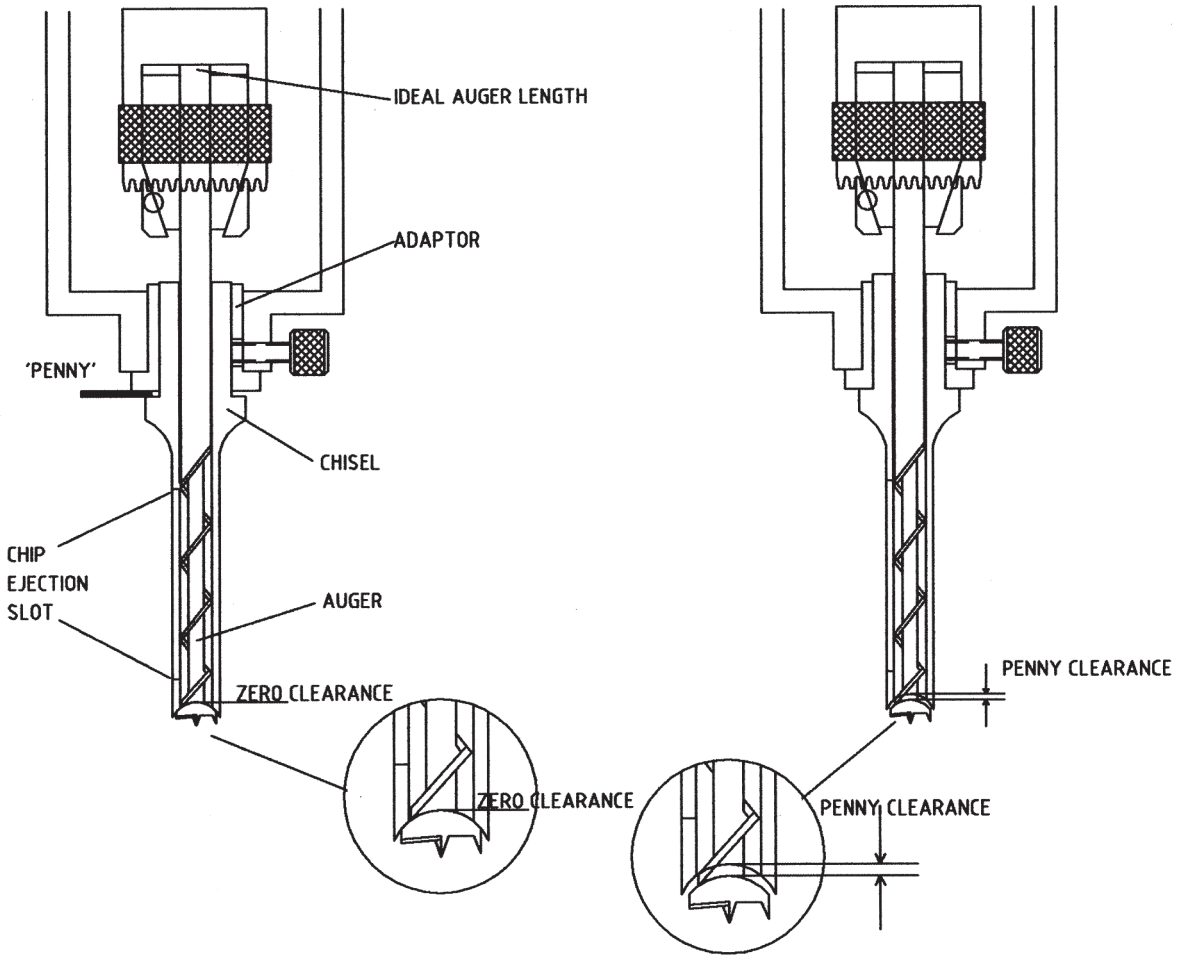
The old rule of thumb for chisel auger clearance was known as "the one penny width". This was achieved by introducing a penny between the locating shoulder of the chisel and the adaptor face, with the auger locked in place and with the chisel pulled hard down on the auger. The penny was then removed and the chisel pushed up to the adaptor face and, locked in place, this established the "one penny width" between the chisel and the auger, which for general timbers and mortice sizes is quite adequate, see figs 13-14. Traditional morticers normally had a cross pin in the auger mounting mandrel, to prevent the auger being pushed back up into the chisel. The mounting method on the newer morticers is a chuck.

Fig 13-14



It is well worth taking the extra time and care to prepare your augers to give the correct 'reach' when 'bottomed' out in the chuck. This will prevent the auger being pushed back towards the chisel and altering the clearance setting, see fig B.

Fig B



General Notes

The mortise will generate a lot of 'grip' on the chisel, especially the first cut, or if the timber is a little green. Make sure you use the table clamp assembly to help control the timber during the raise operation of the morticer.

Setting the Chisel Square

When the chisel is tightened in the machine it must normally be square to the back fence. The easiest way to achieve this is to bring the head stock down to bring the chisel as close to the table as possible, set a square against the back fence and set the side of the chisel against the square and clamp tight. (Remember to have the chip ejection slot in the chisel to the side from which you will cut the mortice).

Quick Setting of the Mortice Depth

Put a mark on an easily accessible end of the work piece to be mortised, at the depth you require. Pull the head stock down, and put the end of the timber against the chisel, position the head stock so that the chisel points or the auger point are at the depth required, raise the depth stop collar to the underside of the head stock and tighten gently. Recheck the depth of the chisel point, if it is satisfactory tighten securely, if not it can be gently 'nudged' down the column with the head stock, then tighten. Reposition the operating handle to give the most comfortable position and purchase on the lever, over the full distance of the movement you have just set.

Head Stock Rise Adjustment

Coupled with the depth stop on the same assembly is the head stock rise limiter. This limits the rise of the head stock / chisel to a convenient distance above the work by the use of a locking collar positioned above the stop finger on the side of the head stock. The travel of this assembly is then restricted to your chosen setting rather than having to return it to the top of the slide each time.

Continues Over....

Setting the Chisel Depth

The chisel depth can be set to give two depth settings; the first method is adjusting the setting bar and the second is to adjust the ring collar clamp (B). First method, with the stop plate (A) set in the angled position, set the bar depth then lower the head stock so the bar rests on top of the stop plate (A) giving the first depth, see fig 15.

The second depth can also be set by repositioning the stop plate (A) in the square position allowing the setting bar to drop so the ring collar clamp (B) rests against the stop plate (A) giving the second depth, see fig 16.

Fig 15

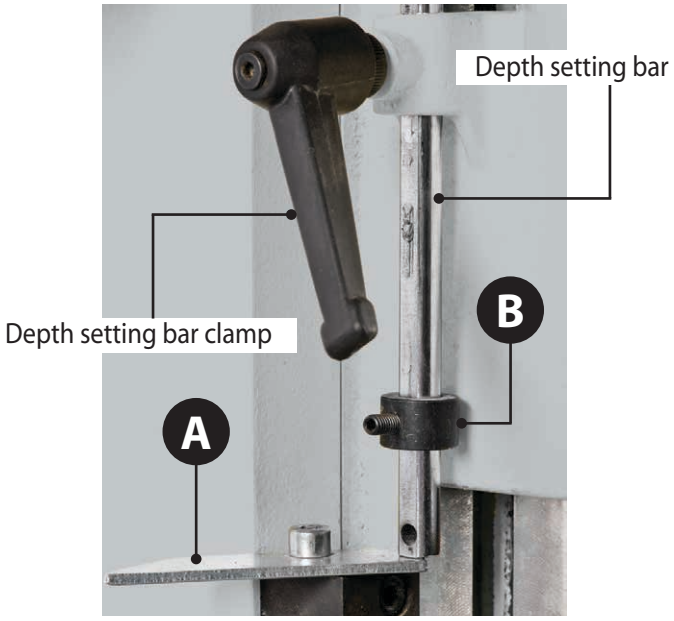
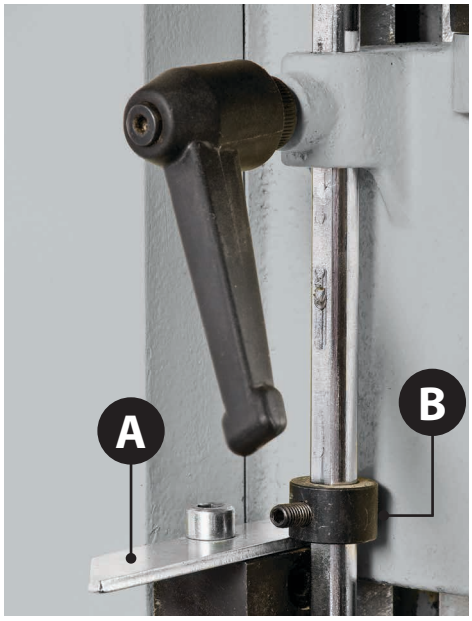


Fig 16



WARNING!! DISCONNECT THE MORTICER FROM THE MAINS SUPPLY BEFORE CONTINUING!

Morticer Head Adjustment

The morticer's head has a independent adjustment to improve the correct leverage depth.

WARNING!! THE MORTICERS HEAD IS VERY HEAVY YOU ARE ADVISED TO SEEK HELP!

1) Remove the Hex screw holding the chuck door in place and put safely aside, open the access door.

NOTE: To prevent the morticer's head from falling when the securing nut is loosened, lower the depth setting bar onto the stop plate (A), see fig 15 and clamp it in place. This will give added support to the morticer.

2) Loosen the securing nut and, with assistance, lower the head to the desired position then re-secure the head by tightening the nut, see fig 17-18. Close the chuck door and replace the Hex screw you removed earlier.

Fig 17-18

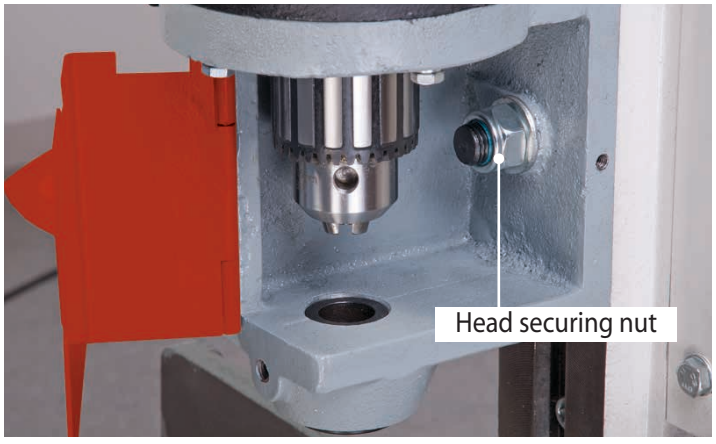
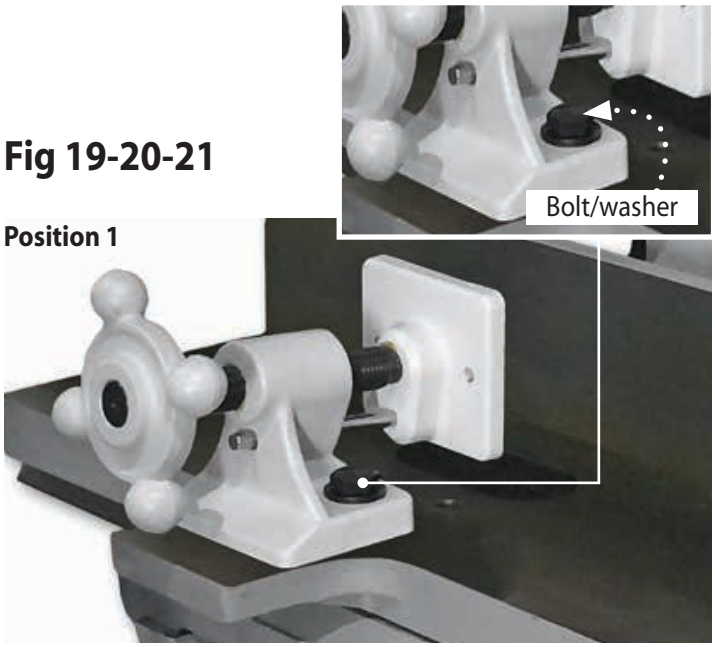


Table Clamp

The table camp can be adjusted to accommodate different sizes of timber using the pre-drilled holes in the table. Using a spanner remove the two bolts and washers and place safely aside. Re position the clamp assembly to the desired position and replace the two bolts and washers and tighten, see figs 19-20-21.

Fig 19-20-21



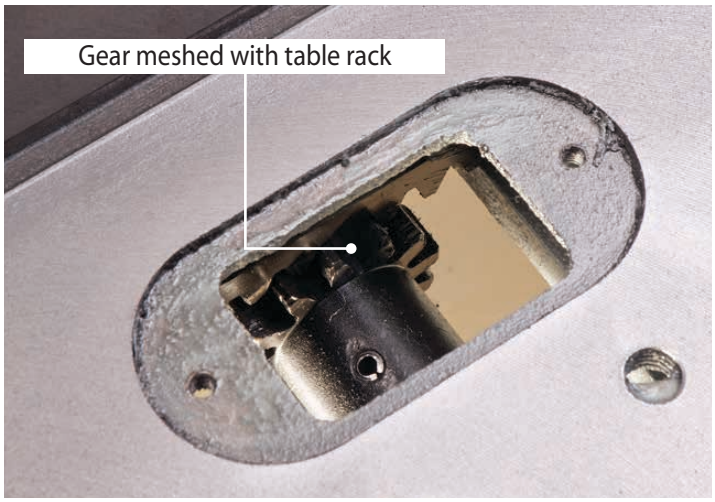
Adjusting the Table

The work table can be adjusted from back to front and from left to right by the operating the, main control wheel to the front of the morticer.

Left to Right Movement

Push the operating wheel forward to engage the drive gear into the table rack thus enabling the table to move from left to right, see figs 22-23-24.

Fig 22-23-24

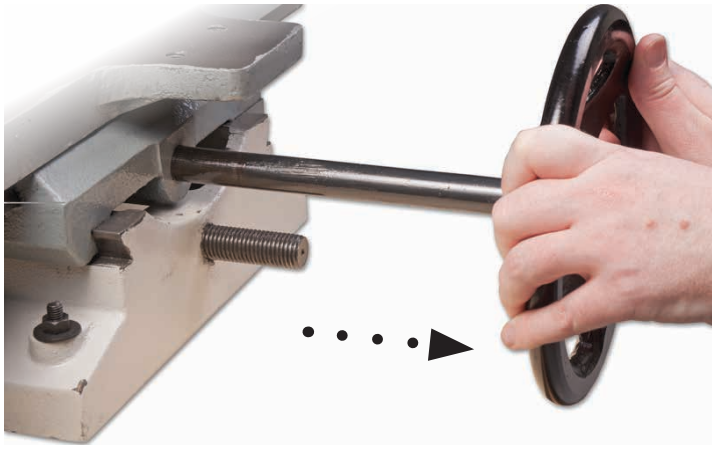


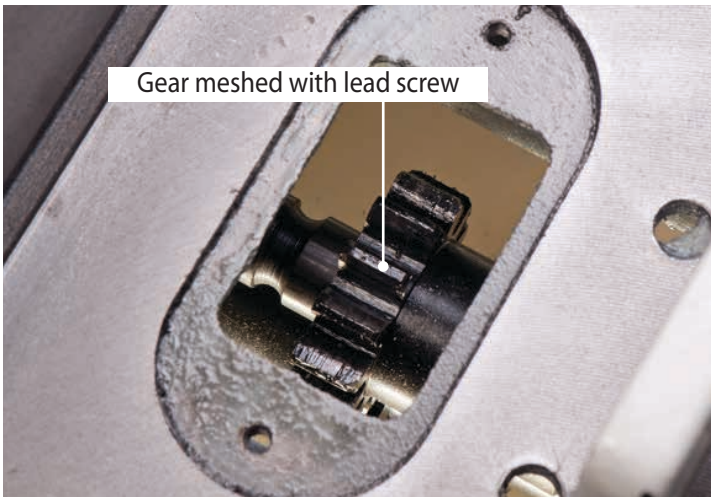
Continues Over....

Front to Back Movement

Pull the wheel out to engage the drive gear into the lead screw thus enablining the table to move from front to back, see figs 25-26-27.

Fig 25-26-27





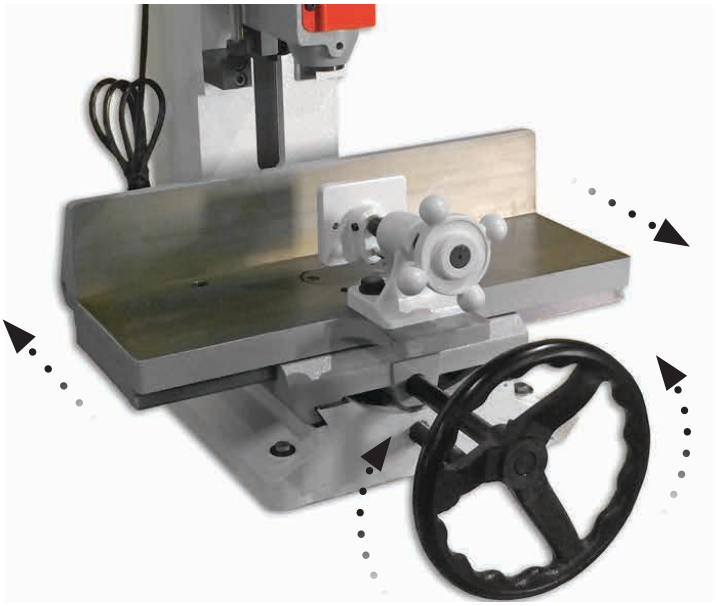
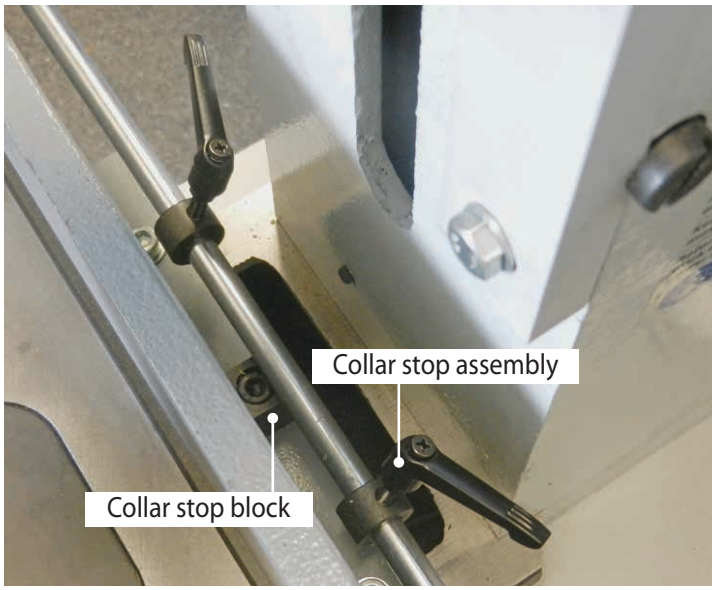


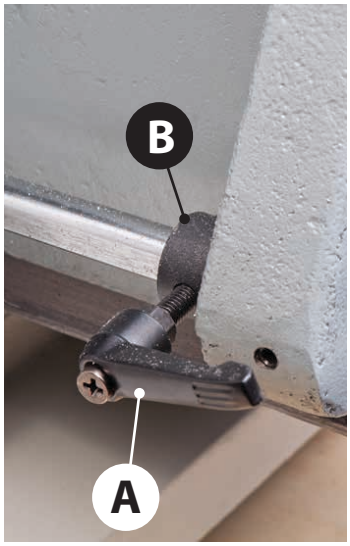
Table Distance Stops

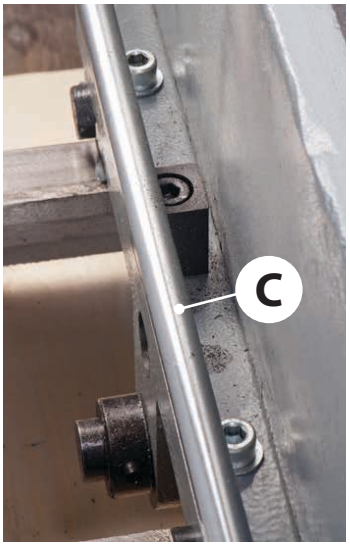
To the rear of the worktable there are two collar stops to set a required distance for repetitive work.

Loosen the collar clamping handle (A) and slide the collar (B) along the collar stop bar (C) until required distance is reached then re-tighten the handle to lock the collar in position. Repeat for the other collar, see figs 28-29-30.

Fig 28-29-30







Morticing Chisels Introduction

Types of Chisel

The Japanese pattern has a point on the end of the bit and one cutting spur and spiral for rapid chip clearance. The single spur is easy to sharpen and cuts evenly and fast, even in the hardest of timbers.
Whatever the choice, the chisels need to be installed carefully if good results are to be achieved.

Installation

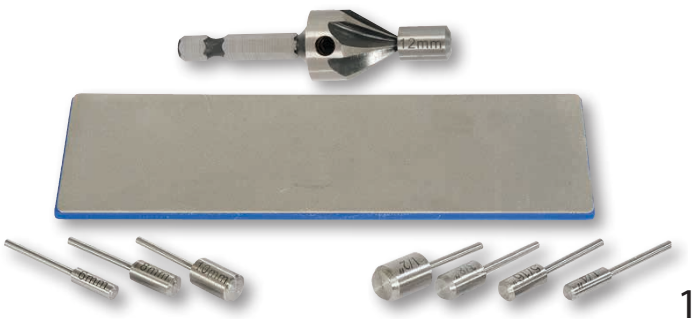
The chisel needs to be installed square to the back fence. The other important adjustment is to get the correct clearance between the cutting edge of the auger and the conical recess in the base of the chisel; this will ensure that there is both sufficient support for the auger in the chisel and adequate space for chip clearance. One convenient way to achieve this is to install in position with a spacer (such as a two pence coin) between the collar of the chisel and the locating face on the machine, then bring the bit up so that the cutting part is hard against the base of the chisel and then tighten up the shank of the bit in the chuck. The spacer is then removed, the chisel moved up to its correct position and re-tightened.

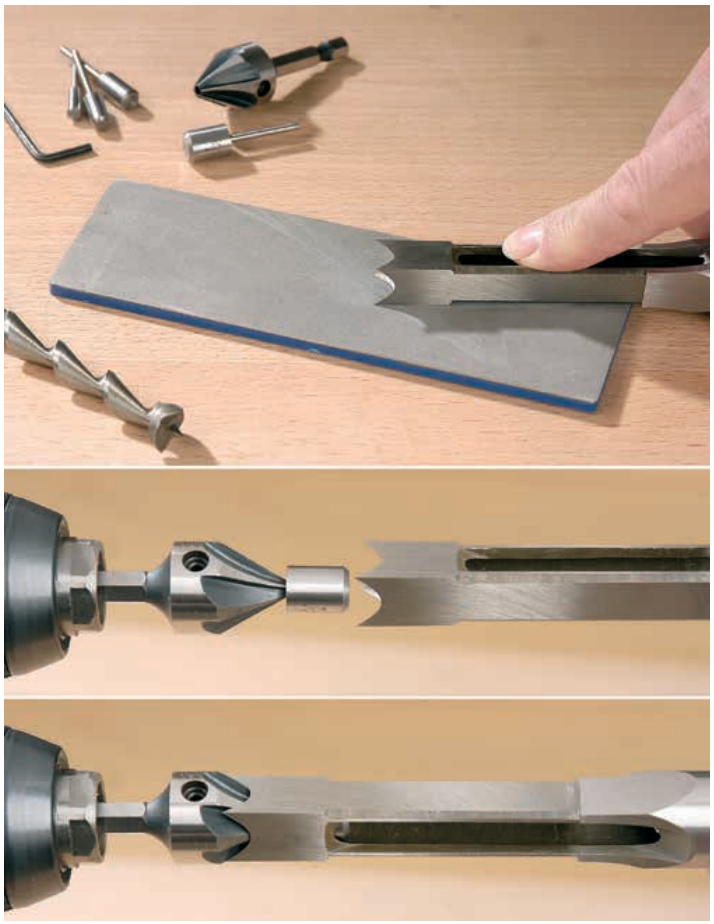
Sharpening

Sharpening of the cutting spur is best achieved with a flat needle file whilst the chisels are best sharpened with the special piloted reamers.

Morticing Chisel Sharpening Set Code: 700173

Sharpening chisels for morticing machines doesn't get much easier than this. Fit the multi- flute conical reamer with the appropriate size pilot piece, just a few turns removes a tiny amount of metal from the chisel's internal bevel. Using the fine diamond honing stone included with the kit, touches up the outer faces of the chisel by removing any burrs thrown up by the reamer, it's as simple as that. A sharp chisel cuts cleaner and is far less prone to burning and, of course, puts far less strain on the morticing machine. It leaves the internal faces of the mortice smoother and cleaner making for a better fitting joint. This Axminster mortice chisel sharpening kit will fit most Taiwanese and Japanese mortice chisels metric and imperial sizes up to 12mm/1/2". N.B. Touch up the chisels auger at the same time using a simple triangular needle or saw file.





Diamond Cone Mortice Chisel Sharpener Code: 502458

Sharpening a mortice chisel significantly improves performance. We can recommend this pair of specially made diamond coated cones for most Taiwanese and Japanese mortice chisels, and Veritas square hole punches. A coarse grit cone gives an initial grind, followed by a finer honing cone to create a sharp even edge.

Continues Over....

Accessories

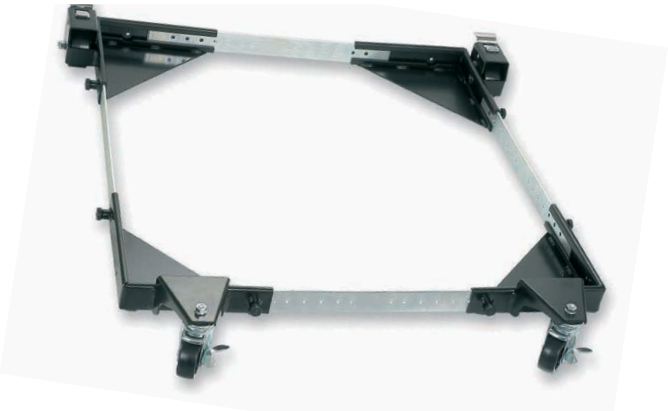
Instructions

Use the cones in a drill press or your morticer if you have a chuck adaptor (a handheld drill is neither suitable nor safe). Clamp the bit vertically and securely, or drill a hole in a block of wood the same diameter as the chisel's shank. The chisel must be held firmly and perpendicular.

Fasten the coarse cone in the chuck and align it with the chisel so it centres exactly in the end of the chisel, do this BEFORE switching on. Running at low speed (150 to 250rpm), gently lower the cone until it just makes contact with the mortice bit. Carefully grind until you obtain a clean surface around the entire bevel. Replace it with the 350-grit cone and repeat the process, lightly honing the inside bevel. Use a fine flat stone lap the sides of the bit to remove any burrs.

Machine Moblie Base Code: 708118

A steel base, adjustable for size, with fixed wheels on the back corners and two lockable castoring wheels on the front. The base will fit machine bases from 610mm to 860mm and take a weight of 540kg.



Maintenance

WARNING!! DISCONNECT THE MORTICER FROM THE MAINS SUPPLY BEFORE CONTINUING!

Table and Head Stock Adjustment

After long periods of use, if you notice a degree of side play developing on both the table and head stock, you will need to adjust the gib strip screws until the slide play is eliminated.

Table Adjustment Left to Right

To adjust the left to right movement slacken the two Hex locking bolts (A) beneath the right hand side of the table, see fig 31 then very carefully adjust the two gib strip screws (B), see fig 32.

NOTE: make small adjustments, turning the operating wheel until the table slides smoothly across, but not too much causing the table to tighten or jam.

When you feel the slide play has been eliminated, tighten the two locking Hex bolts (A) to secure the setting.

Table Adjustment Front to Back

To adjust the front to back movement slacken the two locking Hex bolts (C), to the rear of the table, then adjust the two gib strip screws (D) until the side play has been eliminated. Tighten the Hex bolt (C) to secure the setting, see figs 33-34.

Fig 31

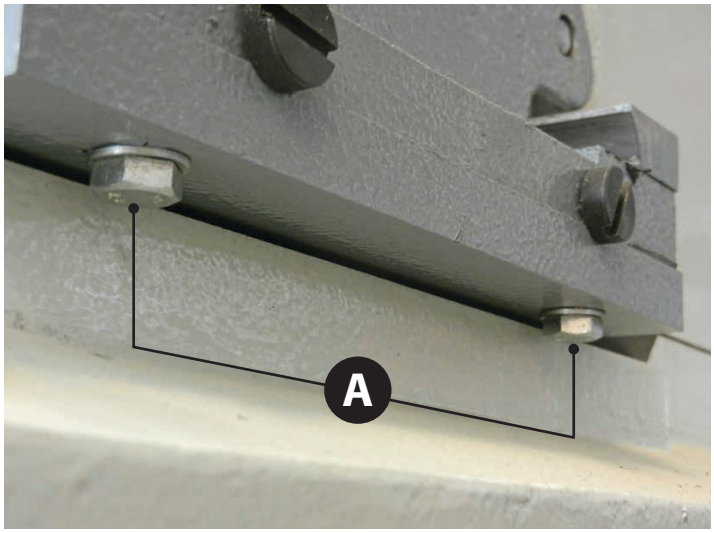


Fig 32

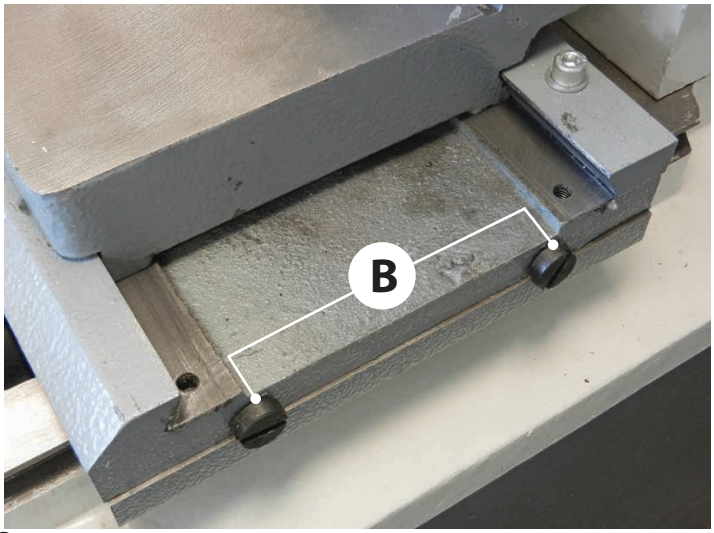
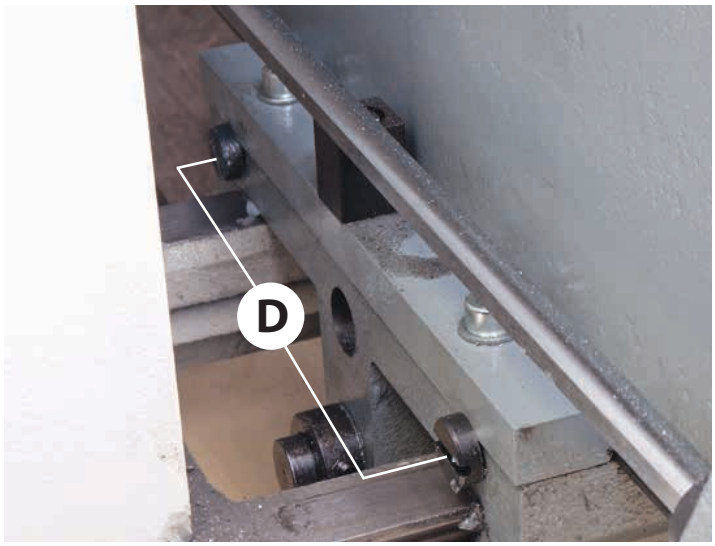


Fig 33-34



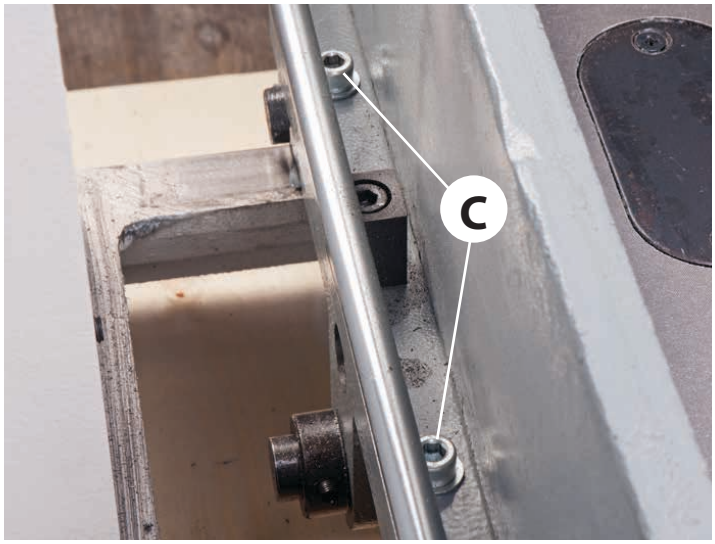
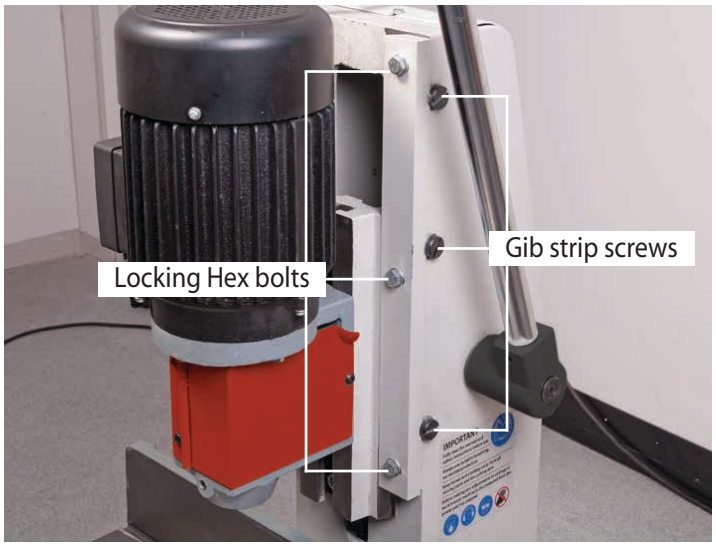
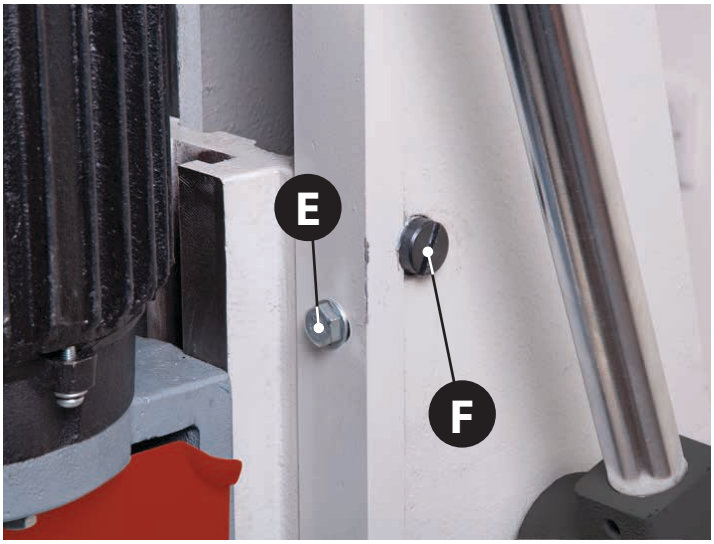


Fig 35-36





Head Stock Adjustment

If there is sufficient play happening in the head stock assembly, loosen the three locking Hex bolts (E) to the right side of the head stock column and carefully adjust the three gib strip screws (F), see figs 35-36.

NOTE: make small adjustments, pulling the operating lever down until the head stock slides smoothly up and down the column, but not too much causing the head stock to tighten or jam.

When you feel the slide play has been eliminated, tighten the three locking Hex bolts (E) on the column to secure the setting.

General Maintenance

WARNING!! DISCONNECT THE MORTICER FROM THE MAINS SUPPLY BEFORE CONTINUING!

To ensure optimum performance from your morticer routine cleaning and lubrication is required.

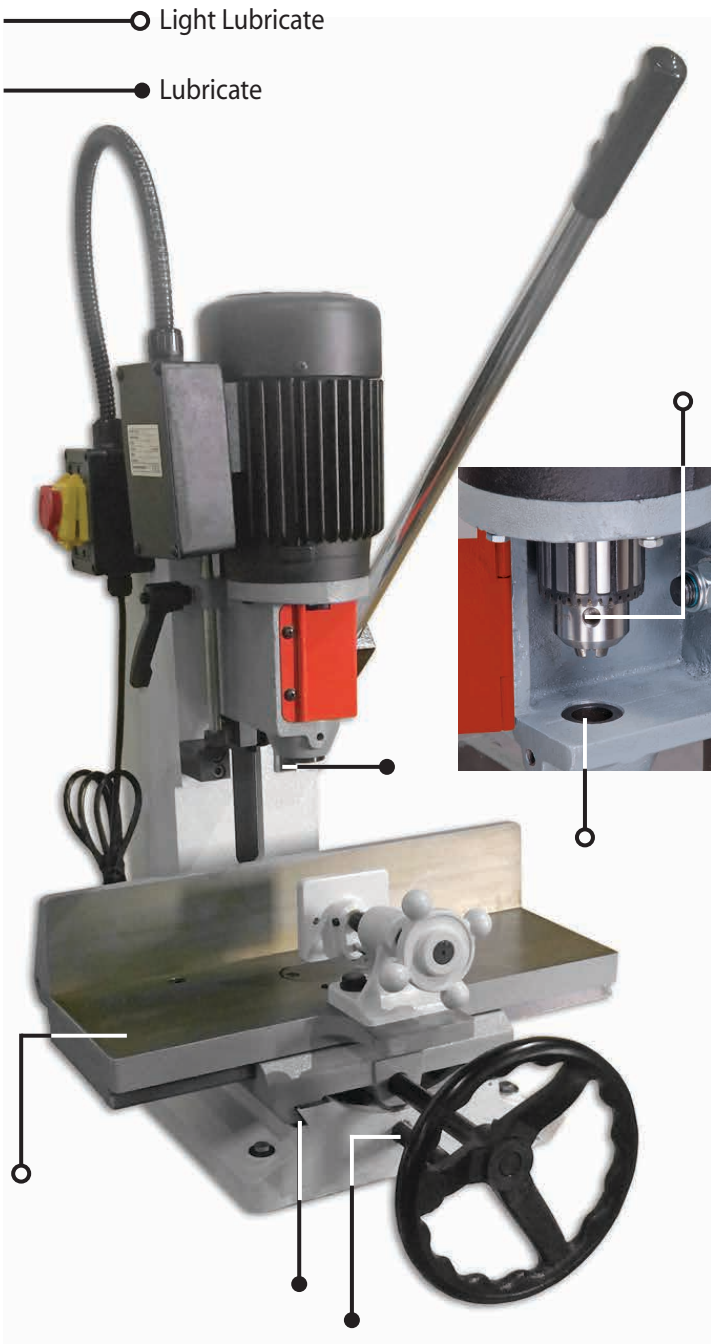
After long periods of use wood and resin deposits will build up on the table and the rack and pinion gears. Clean all surfaces using "Axcaliber Blade and Bit Cleaner Code 951145" then apply a light application of lubricant to all moving parts using "Axcaliber Dry Lubricant Code 503468".

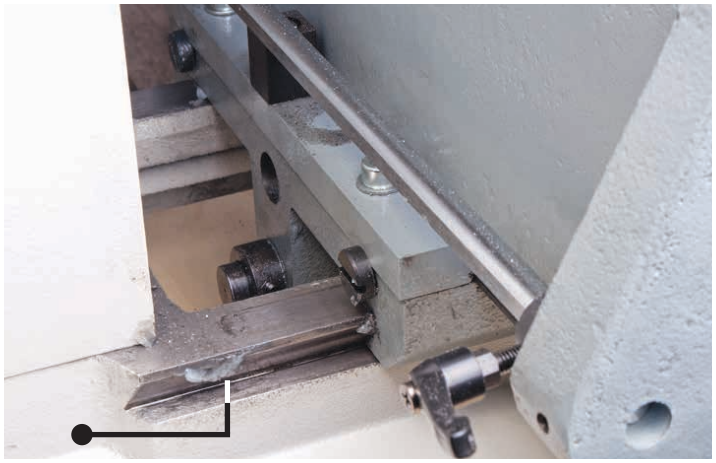
Code: 503468

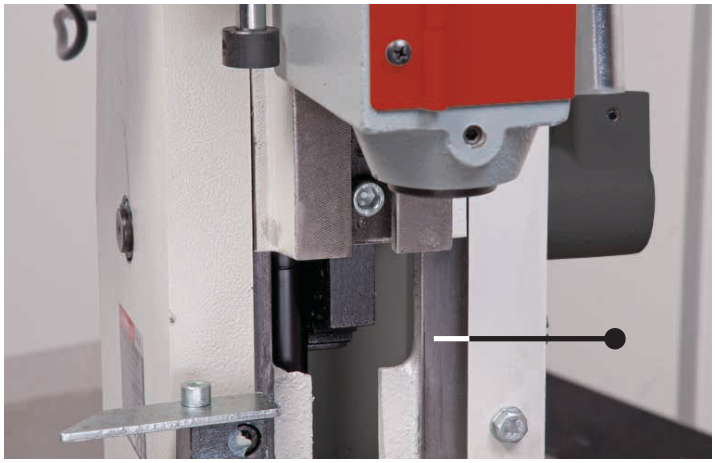
Code: 951145

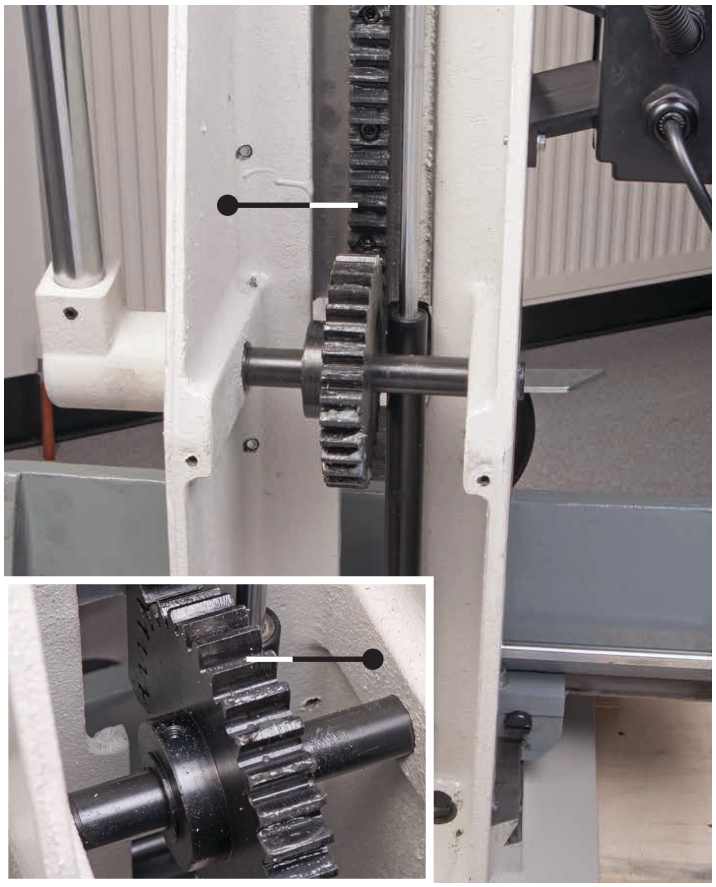
Continues Over....

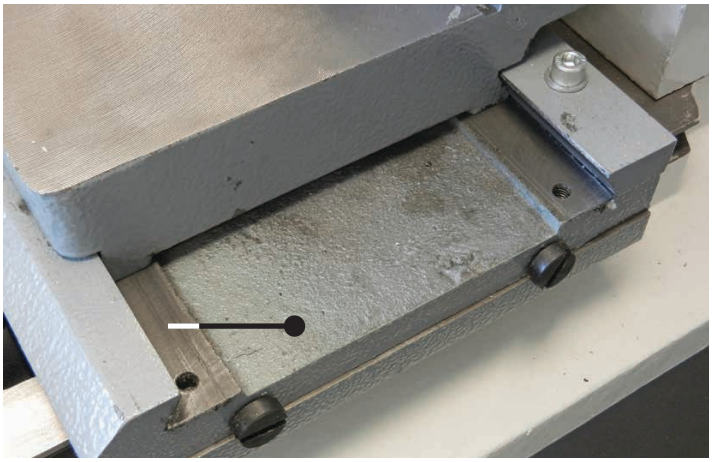
General Maintenance











Introduction

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, see our catalogue or visit our website at axminster.co.uk

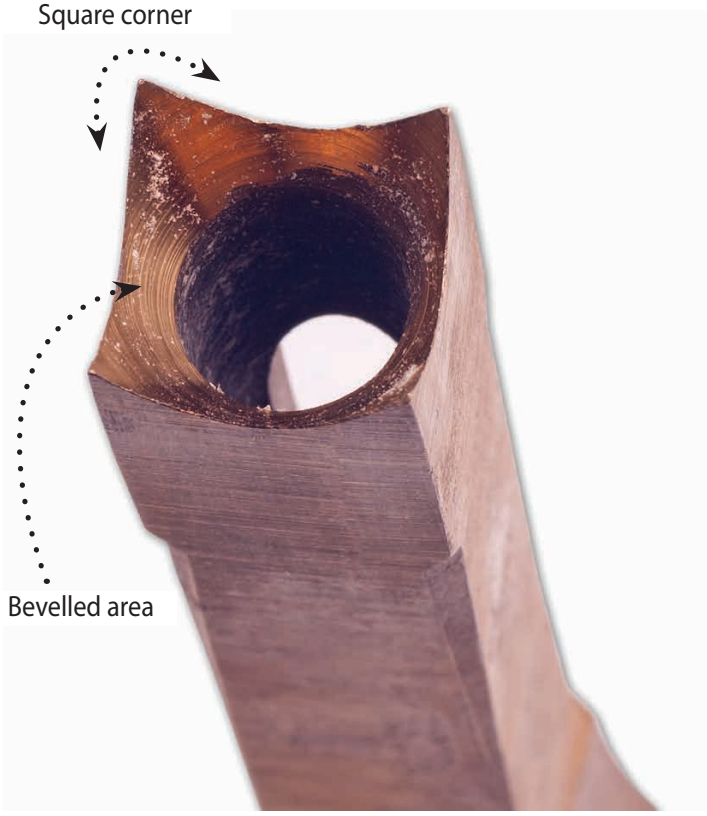
Burrs can be removed from the sides of the chisel on a fine oilstone or waterstone but great care must be taken not to taper the chisel as this will cause the chisel to jam in the timber.

Chisel Abrasion

Look into the hollow of the chisel and check around the corners for signs of dulled or rounded corners, see fig 37. If there are any deviations in the chisel we recommend using the multi- flute conical reamer sharpening set, code 700173 with the appropriate size pilot piece, just a few turns removes a tiny amount of metal from the chisel's internal bevel.

When abrasion occurs to the extent that the chisel bit tip becomes thin and liable to break, it is advisable to replace it with a new one.

Fig 37



Sharpening Chisel Auger Bit

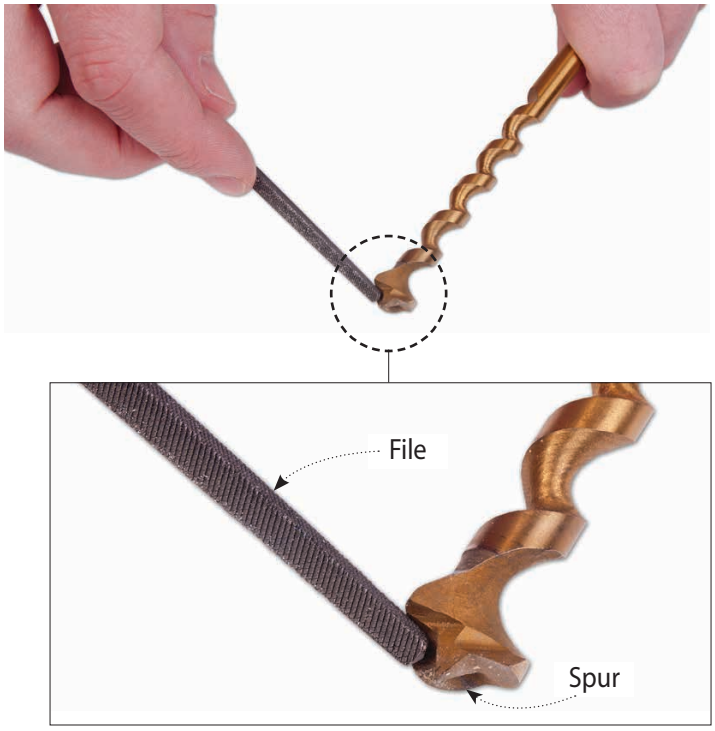
A well sharpened auger bit will cut more efficiently, passing easily through the twist and being ejected through the slot in the side of the chisel. Sharpen the spur on the auger bit using a small square or flat file and sharpen the inside only, see figs 37-38.

WARNING!! DO NOT SHARPEN, STONE OR GRIND THE BIT ON THE OUTSIDE WHICH WILL REDUCE ITS DIAMETER CAUSING WOOD SHAVINGS TO BUILD UP INSIDE THE CHISEL!

Inside of Spur

Fig 37

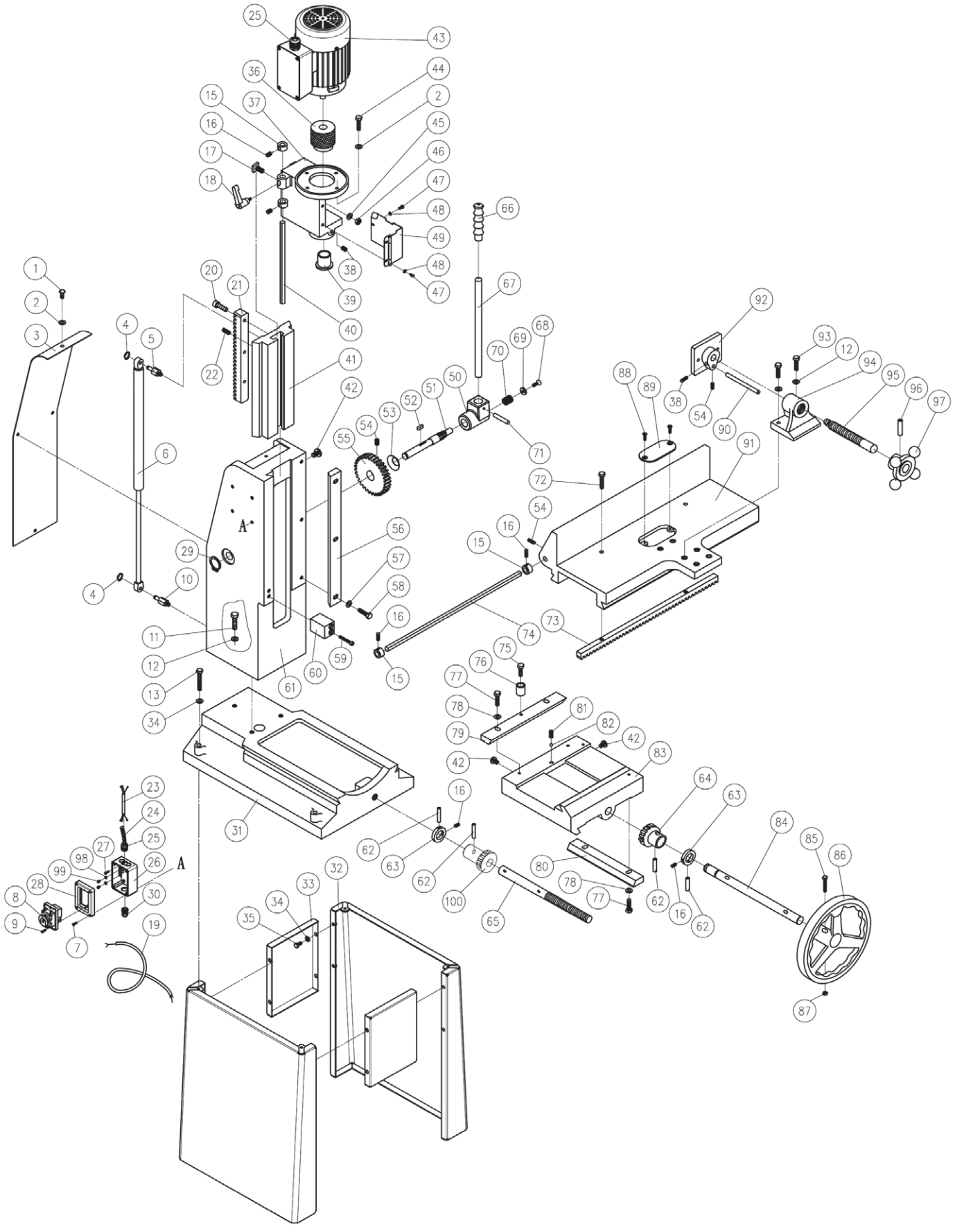
Fig 38



Troubleshooting

Symptom	Possible Causes	Solutions
Morticer will not start	1. Fuse blown or circuit breaker tripped.	Replace fuse or reset circuit breaker
	2. Cord damaged.	Replace the power cord by a qualified electrician.
Overload kicks out frequently	1. Extension cord too light or too long.	1. Replace with adequate size cord.
	2. Chisel and bit in poor condition (dull or broken).	2. Clean or replace the chisel and bit.
	3. Timber is too wet.	3. Dry timber before cutting.
Bit does not come up to full speed	1. Extension cord too light or too long.	1. Replace with adequate size cord.
	2. Low current.	2. Consult a qualified electrician.
	3. Motor not wired for correct voltage.	3. Check motor name plate for correct wiring or consult a qualified electrician.
Morticer makes unsatisfactory cuts	1. Dull hollow square chisel and bit.	1. Sharpen or replace the chisel and bit.
	2. Gum or pitch on the chisel and bit.	2. Remove the chisel and bit and clean using "Axcaliber Blade and Bit Cleaner Code 951145".
	3. Gum or pitch on the worktable or fence causing an un-square cut	3. Clean the worktable and fence as described above.
	4. The chisel and bit was not correctly set.	4. Make sure the entire assembly is correctly held with proper clearance of 2mm-5mm.
The work starts to burn	1. Dull chisel and bit.	1. Sharpen or replace the chisel and bit.
	2. The bit has worn out or is broken.	2. Replace the worn bit with a new one.
The drill bit is down drilling	1. The bit is worn out or broken.	1. Replace the worn bit with a new one.
	2. The bit is not sharp enough.	2. Sharpen the bit.
	3. The drill bit has come loose in the chuck.	3. Tighten the drill chuck with the key provided.
The machine vibrates	1. Damaged chisel bit.	1. Replace the damaged bit with a new one.
	2. Stand on uneven floor.	2. Reposition on flat level surface. Fasten to floor if possible.

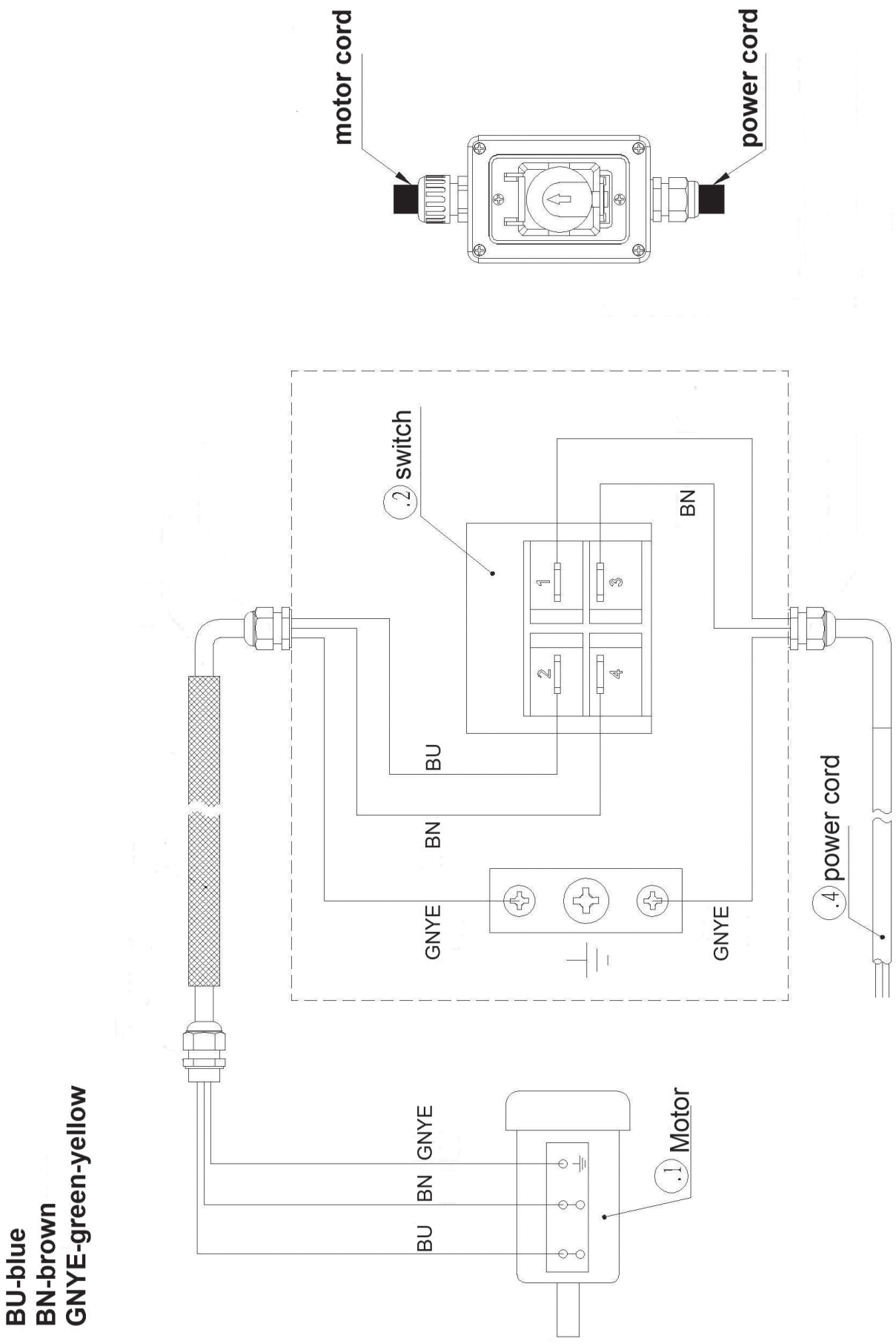
ATM25 (2311 (BOM)



Exploded Diagram/List

Ref No	Part No	Description	Specification	Qty
1	50104048	Round head screw	M6x1.0Px10L	4
2	50351003	Flat washer	1/4″x13x1t	8
3	23031013	Rear cover		1
4	50403001	ETW-7	ETW-7	2
5	23081007	Cylinder fitting		1
6	23041101	Air cylinder		1
7	50123004	Round head self-tapping screw	M4x15L	4
8	2311160A	Magnetic switch		1
9	50123007	Round head self-tapping screw	M4x10L	2
10	23081006	Cylinder fitting		1
11	50101049	Hex screw	M12x1.75Px40L	3
12	50351062	Flat washer	1/2″x28x3t	5
13	50101042	Hex screw	M8x1.25Px60L	4
15	23041037	Collar stop		4
16	50103041	SET screw	M6x1.0Px6L	6
17	23031008	T-slot bolt	M16x1.5Px50	1
18	50114005	Lock knob	M8x1.25Px15L	1
19	2308180A	Power cord		1
20	50102006	CAP screw	M6x1.0Px16L	3
21	23051022	Gear rack		1
22	50103058	SET screw	M8x1.25Px30L	1
23	2308170A	Motor cord		1
24	23031050	Wire protector		1
25	51104021	Cable gland	S-MGS20-18B-ST	2
26	23111001	Switch box		1
27	50104049	Round head screw	M4x0.7Px12L	4
28	23111002	Switch cover		1
29	50401002	C ring	STW-20	1
30	51104016	Cable gland	PG13.5(8 CE)	1
31	23031047	Base		1
32	23112001	Stand-left & right		2
33	23112002	Stand-front & rear		2
34	50301031	Flat washer	8.5x16x1.5t	12
35	50101064	Hex screw	M8x1.25Px16L	8
36	23031053	Chuck	1/2″	1
37	23051060	Motor base	30.2	1
38	50103007	SET screw	M8x1.25Px16L	2
39A	23051061	Bushing	3/4″	1
39B	23051062	Bushing	13/16″	1
40	23031006	Depth setting bar		1
41	23051023	Vertical slider		1
42	23031015	Screw		7
43	2308150A	Motor		1
44	50101045	Hex screw	M6x1.0Px30L	4
45	50301095	Flat washer	17x30x3t	1
46	50201023	Hex nut	M16x1.5P	1
47	50104059	Round head screw	M5x0.8Px12L	3
48	50301096	Flat washer	5.2x12x1t	3
49	23081005	Chuck guard		1

50	23081014	Connectiing bend		1
51	23081013	Shaft		1
52	50604017	Key	5x5x30L	1
53	50305002	Washer	AK-6300(34.6x20.4x0.4t)	1
54	50103015	SET screw	M6x1.0Px10L	5
55	23051010	Gear		1
56	23031014	Strip		1
57	50351048	Flat washer	5/16″x23x2t	3
58	50101046	Hex screw	M8x1.25Px30L	3
59	50102015	CAP screw	M8x1.25Px50L	2
60	23031011	Locating block		1
61	23081001	Column		1
62	50602012	Spring pin	6x32L	4
63	23031043	Setting collar		2
64	23031041	Gear		2
65	23031045	Lead screw		1
66	23031019	Grip		1
67	23031028	Operating lever		1
68	50108004	Hex socket screw	M6x1.0Px16L	1
69	23041049	Spacer		1
70	23041047	Spring		1
71	50602046	Spring pin	6x45L	1
72	50102014	CAP screw	M8x1.25Px35L	2
73	23031039	Gear rack		1
74	23031033	Setting bar		1
75	50102013	CAP screw	M8x1.25Px30L	1
76	23031032	Collar stop		1
77	50101034	Hex. Screw	M8x1.25Px25L	4
78	50351060	Flat washer	5/16″x18x2t	4
79	23031031	Strip		1
80	23031046	Strip		1
81	23031055	Spring		1
82	51301003	Steel ball	8mm	1
83	23031040	Lateral slide		1
84	23031042	Operating shaft		1
85	50102045	CAP screw	M6x1.0Px45L	1
86	23031044	Handle wheel		1
87	50202010	Nylon nut	M6x1.0P	1
88	50105021	Screw	M5x0.8Px15L	2
89	23031030	Table insert		1
90	23031036	Clamp rod		1
91	23031029	Working table		1
92	23031034	Clamp plate		1
93	50101047	Hex. Screw	M12*1.75P*30L	2
94	23031037	Base		1
95	23031035	Lead screw		1
96	50602013	Spring pin	6x36L	1
97	23031038	Handle wheel		1
98	50154042	Round head screw	3/16″-24UNCx5/16″L	2
99	50303006	Washer	M4	2
100	23081015	Gear		1


motor cord
power cord
.2 switch
1
2
3
4
BN
BU
BN
GNYE
GNYE
.4 power cord
GNYE
BN
BU
.1 Motor
BU-blue
BN-brown
GNYE-green-yellow

The **Axminster guarantee** is available on Hobby, Trade, Industrial, Engineer, Air Tools & CNC Technology Series machines

It's probably the most comprehensive FREE guarantee ever- buy with confidence from Axminster!
So sure are we of the quality, we cover all parts and labour free of charge for three years!

- **Look for the icon and put your trust in Axminster**
- **No registration necessary - just keep your proof of purchase**
- **Optional Service Plan for Industrial Series machinery**

AXMINSTER Hobby SERIES

Great value & easy-to-use, perfect for use at home

AXMINSTER Trade SERIES

Solid, reliable machines designed for daily use

AXMINSTER INDUSTRIAL SERIES

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Quality, precision machines for the workshop or education

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Compressors and tools for home or workshop use; durable and great value

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Precision CNC machines for industry and education

Free Three Year Guarantee on Axminster Hobby, Trade and Industrial Series woodworking and engineering machines, Axminster Air compressors and Air Tools, and bench top grinders - no registration necessary just proof of purchase.

We will repair or replace at our discretion and will collect only from a UK mainland address, irrespective of the original delivery address.

The Guarantee assumes that you have bought the correct machine for the required operation, in accordance with our guidelines; have operated and maintained it in accordance with the instruction manual; and that all cutting machines will be used with a blade which is sharp and serviceable at all times. It does not cover consumable items purchased with the original product, including original blades or abrasives.

Normal wear and tear; misuse, abuse and neglect are excluded and the machine should not have been modified in any way. Please do not attempt to service the product without first contacting us; we are happy to guide you but failure to do so may invalidate the guarantee.

The Guarantee is transferable from owner to owner in the first three years but you must have original proof of purchase. Should we need to replace a machine in the first three years the guarantee will still continue to be effective from the original purchase date.

Full Terms and Conditions can be found at **axminster.co.uk/terms**

This guarantee does not affect your statutory rights.

For more information visit **axminster.co.uk/3years**

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.

Axminster Tools & Machinery Ltd
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axminster.co.uk