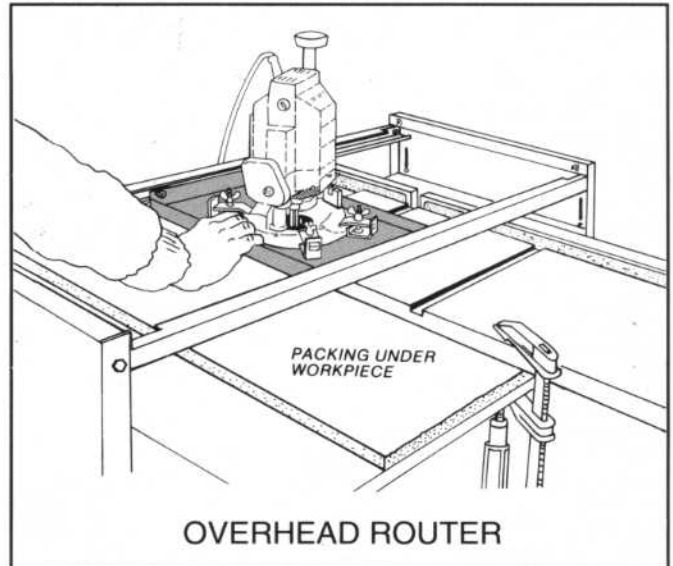
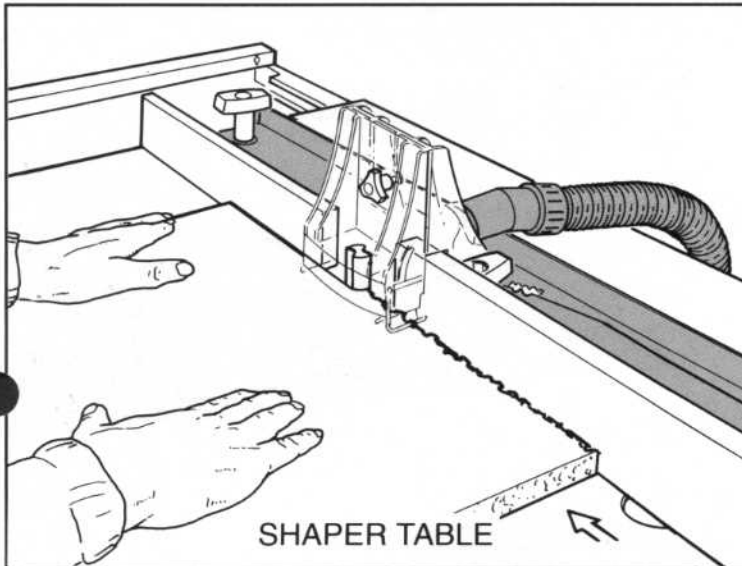




ROUTER / JIGSAW TABLE SERIES 2000



OPERATING MANUAL

Dear Triton Owner...

Thank you for your purchase of the Triton Router/Jigsaw Table. If you follow our instructions for set-up and use, and fit good quality cutters, you will obtain excellent results.

Please read these instructions carefully before using your Router/Jigsaw Table. Power tools can be dangerous if not used correctly, and our operating instructions have been written with your safety in mind.

Reading the manual carefully will also ensure that you obtain the maximum use and enjoyment from your equipment. Many different cutting and shaping functions are possible with the Router/Jigsaw Table. We have detailed the most common operations, and have provided hints and tips to ensure efficiency and accuracy.

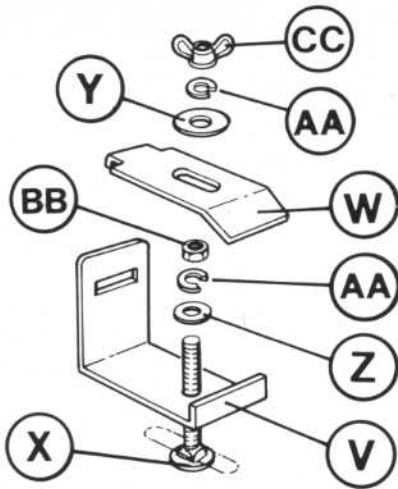
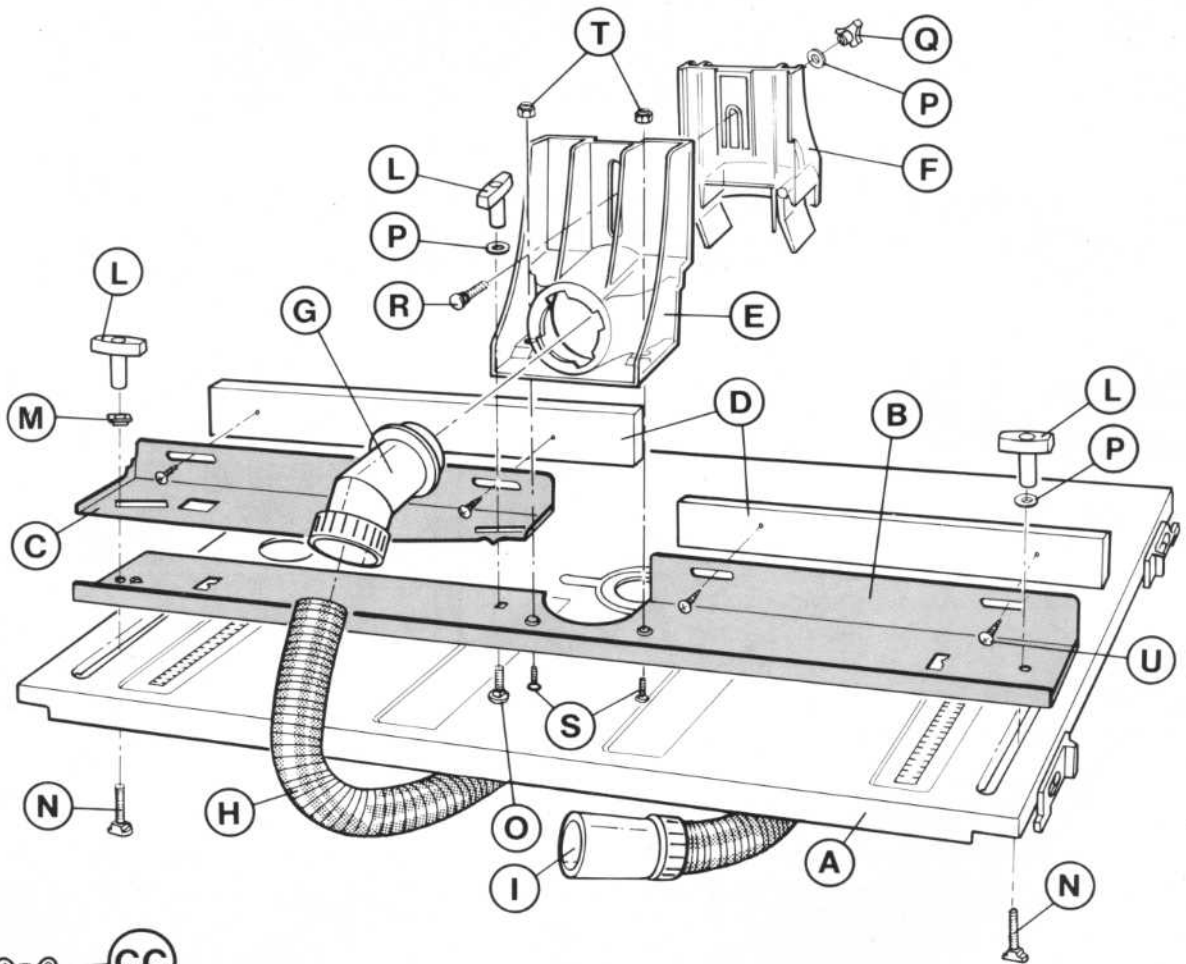
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COMPONENTS

- A Router/Jigsaw Table
- B Main (rear) fence
- C Front fence
- D MDF sub-fences (2)
- E Guard housing
- F Safety guard
- G Hose adaptor
- H Vacuum hose
- I Hose nozzle
- J Mounting plate
- K Alignment disc

FASTENERS FOR FENCES AND GUARD

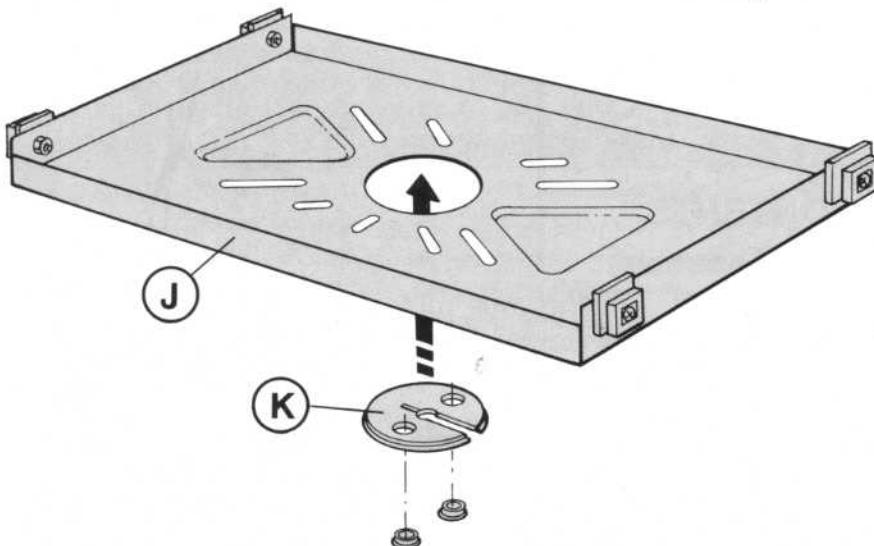
- L T-handles (3)
- M Bridge washer
- N Fence clamping feet (2)
- O Flat headed clamping bolt
- P Large flat washers (3)
- Q Tri-knob
- R Coach bolt (short)
- S Guard mounting screws (2)
- T Nyloc nuts (2)
- U Self-tapping screws (4)

FASTENERS FOR MOUNTING ROUTER

- V Router locators (4)
- W Top clamps (4)
- X Coach bolts (long) (4)
- Y Large flat washers (4)
- Z Small flat washers (4)
- AA Spring washers (8)
- BB Hex nuts (4)
- CC Wing nuts (4)

FASTENERS FOR MOUNTING JIGSAW

- (Not illustrated)
- Coach bolts (medium) (4)



ASSEMBLING THE FENCES

The adjustable front fence (C) is supplied already attached to the main fence (B).

Fix the two MDF sub-fences (D) to the front fence and the main fence by means of the self-tapping screws (U) provided. Note that the MDF has been pre-punched to indicate the screw locations. **Figure 1.**

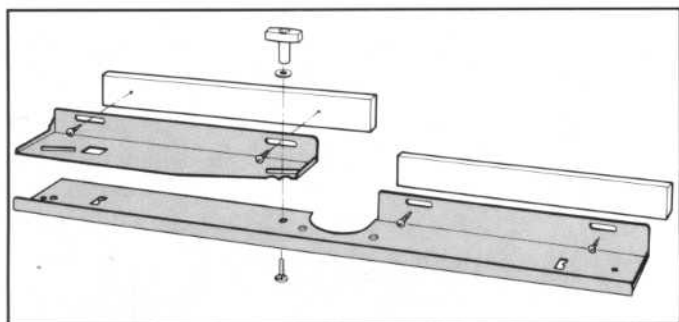


FIGURE 1

Fit the guard housing (E) to the main fence using the two Phillips-head screws (S) and the Nyloc nuts (T). Because of limited clearance you may find long-nose pliers are helpful to hold the nuts in place. Otherwise, hold the nuts in place with a fingertip while you turn the screws.

Attach the safety guard (F) to the housing, using the coach bolt (R), flat washer (P) and tri-knob (Q). **Figure 2.** Loosen the tri-knob, and check that the guard slides smoothly up and down for height adjustment. Tighten the tri-knob to secure the guard.

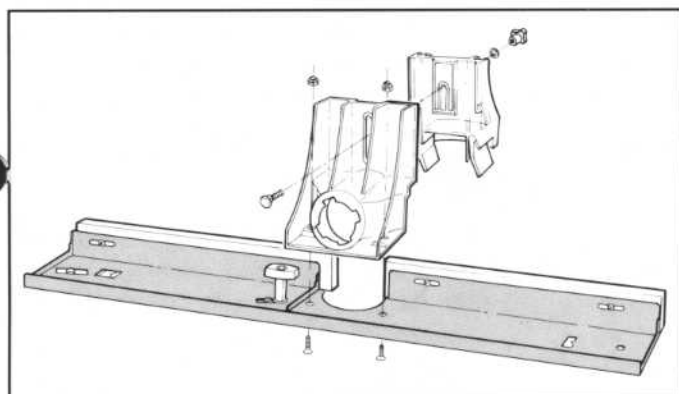


FIGURE 2

Note from the main exploded view (*page 2*) how the fence assembly is fastened to the table. The bridge washer (M) is used on the front fence as shown. It allows the front fence to be adjusted for planing operations without loosening the two outer T-handles.

The fence clamping feet (N) are designed to pass through the table slots and then be turned through 90°, locking the fence to the table when the T-handles (L) are tightened.

Loosen the T-handle next to the safety guard and test the sliding action of the front fence by pushing it back and forward along its angled guides.

If the front fence does not slide smoothly through the full adjustment range, lubricate the contact surfaces with a spray or dry lubricant.

The calibration scale stamped into the front fence provides a guide for depth of cut when edge planing.

FITTING YOUR ROUTER

The alignment disc (K) provides easy and accurate positioning of the router on the mounting plate.

First fit a straight router cutter to your router. The alignment disc fits onto a 1/2" (12.7 mm) shank cutter, but if you are fitting a 1/4" (6.35 mm) or a 5/16" (8 mm) shank cutter, use the appropriate adaptor ring (K1 or K2). The adaptor ring fits into the centre of the alignment disc. It should be fitted to the cutter shank before fitting the cutter to the router.

Fit the mounting plate (J) into the bearing channels of your Workcentre or Router Stand, as shown in **Figure 3.**

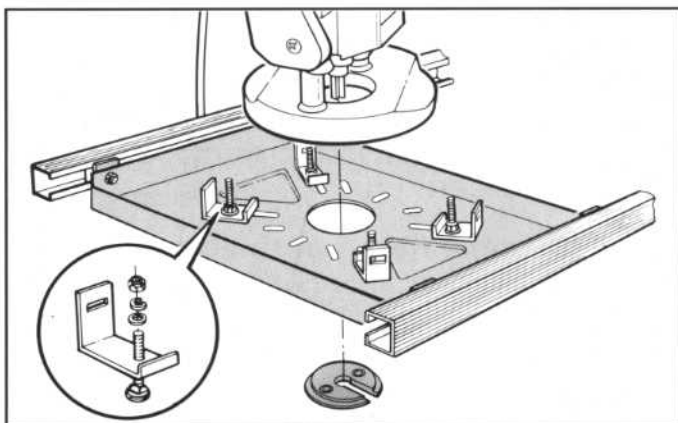


FIGURE 3

Set your router height so that the cutter shank protrudes through the hole in the mounting plate. Push the alignment disc onto the shank of the cutter and snap it into the centred position.

Manoeuvre the router until you are able to clip the disc into the hole in the mounting plate. Your router is now exactly centred over the hole in the plate.

Fit the four router locators (V) to the longer slots in the plate, using the four long coach bolts (X), flat washers (Z), spring washers (AA), and hexagon nuts (BB), as shown. Note that the lower lip of each locator should fit hard up against the side of the router base. Do not fully tighten the hex nuts yet.

If your router has a round base you should now be able to rotate the router until you have four clear positions on the top edge of the base for fitting the top clamps. The handles of the router may have to overhang the edges of the plate but try to keep the overhang to a minimum.

If your router has a square or rectangular base you may need to reposition one or more of the locators until you have found four clear positions for fitting the top clamps. See "Some possible fitting problems" overleaf.

Note that the four clamps should be spaced as equally as possible around the router base. Once the locators are correctly positioned, use a spanner to securely tighten the hex nuts. Place the top clamps (W) over the coach bolts, and hook them into the locators. Note that the bent portions of the top clamps angle downwards.

The top clamps are secured by the wing nuts (CC), after first placing the large washers (Y) and then the spring washers (AA) onto the coach bolts. **Figure 4.**

Remove the alignment disc from your cutter shank and store it for possible future use.

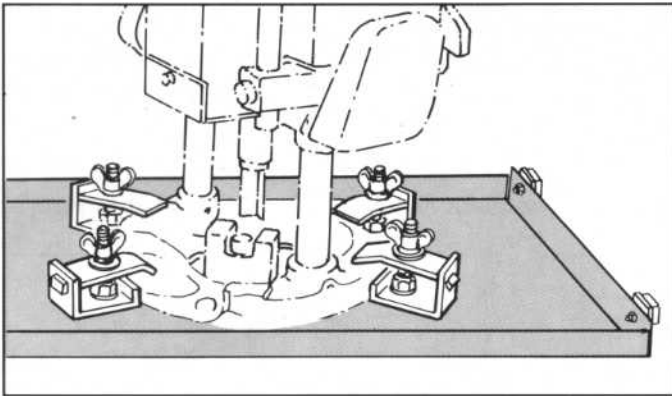


FIGURE 4

Some possible fitting problems

If you cannot find four clear positions for the top clamps, because of obstructions on the router base, you may need to slightly modify one or more of the clamps. Either file off a corner, or use a hacksaw to cut away part of the clamp so that it clears the obstruction.

In rare cases where it is still impossible to fit all four clamps even with modifications, you may need to re-locate one or more of the clamps. Sometimes the jigsaw mounting slots can be used. Alternatively, drill a new hole or holes (7 mm or 9/32") in the mounting plate.

If your router has a large D-handle (eg. Makita 3601B), angle the handle diagonally across the mounting plate.

FITTING THE ROUTER TABLE TO THE WORKCENTRE

Fit the mounting plate into the bearing channels of the Workcentre with the router upside-down. If the router handles overhang the plate, they may foul the end panels or the table support rails.

You may need to adjust the router height (possibly to the maximum depth of cut position) to enable fitting of the mounting plate.

Place the router table over the plate, with the two router cutter holes lined up, and the red slide catches closest to the rear panel. (Front panel has switchbox).

Insert your Workcentre locking keys fully into the end holes of the router table. (Unlike the case with the saw table, the "ears" of the locking keys are on the *inside* of the table. **Figure 5.**) Push the red slide catches as far as they will go into the open faces of the bearing channels. They should have a firm action, but spray some lubricant on them if they are too stiff.

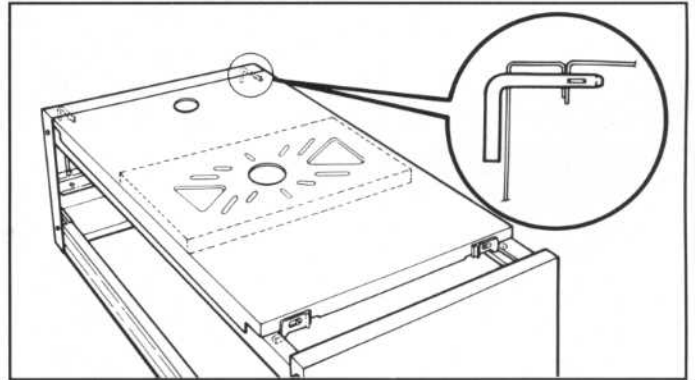


FIGURE 5

FITTING THE ROUTER TABLE TO THE ROUTER STAND

Fit the mounting plate into the bearing channels of the Router Stand with the router upside down.

Centralise the plate so that it is roughly half-way between the two end panels.

Fit the Router/Jigsaw table top as shown in **Figure 6** by placing the end which has two round holes over the studs at the top of the front panel, and lowering the table over the two upstanding "fingers" at the top of the rear panel.

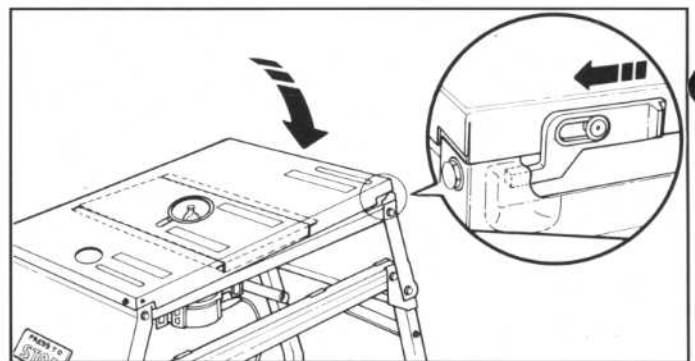


FIGURE 6

You may have to slightly adjust the position of the mounting plate, to guide it between the two locating angles welded to the underside of the table. Once the exact position of the plate is determined, mark reference lines on the bearing channels to make future setups easier.

Lock the table firmly in position by sliding home the two red plastic catches at the rear of the table top, as shown in the rear view inset in **Figure 6.** They should have a firm action, but spray some lubricant on them if they are too stiff.

DUST EXTRACTION

Your Router/Jigsaw Table Series 2000 is designed to be used with a vacuum cleaner for sawdust extraction. We strongly recommend the use of vacuum dust extraction whenever possible. Sawdust is harmful to your lungs.

Screw the hose adaptor (G) and the hose nozzle (I) onto the Vacuum hose (H). Note that they have *left-handed* threads. The hose adaptor locks into the guard housing by a quarter turn clockwise to engage the bayonet fastening.

When using, firmly plug the chromed steel or plastic wand of a vacuum cleaner (or ducted vacuum system) into the tapered end of the hose nozzle. It covers all tube diameters from 29 mm to 37 mm.

A domestic vacuum cleaner can be used provided you regularly empty or replace the collection bag, and clean the exhaust air filter (if fitted) from time to time to prevent the risk of fire.

If buying a vacuum cleaner for your workshop use, we recommend the upright tub type. They have greater capacity, and have no collection bags which can become clogged.

The best option is to connect the hose to a dedicated sawdust extraction system.

The router table can be used without dust extraction. If doing so, ensure shavings do not build up between the fences and your workpiece. Brush or blow away accumulated shavings after every few cuts, **when the cutter has stopped spinning completely**.

For your safety, you must keep the hose adaptor (G) in place on the vacuum housing when using the router table without the vacuum hose.

POWER CONNECTING WARNING

The combined electrical load of your router and vacuum cleaner may exceed the rated amperage of your domestic extension lead (10 amps) or the switch in the Triton switchbox (16 amps).

Therefore, as a safety precaution, you should always connect your vacuum cleaner and router to separate electrical outlets, and switch on both appliances separately.

USE OF HOLD-DOWN/ ANTI-KICKBACK FINGERS

The two poly-carbonate pressure fingers which protrude from the bottom of the safety guard have two important functions.

When set correctly they ensure your workpiece is held firmly down onto the router table, thereby providing a consistent quality of cut, and eliminating the need to pass your hands near the cutter.

They also provide a significant anti-kickback function, giving you greater safety and security especially when routing smaller section material, or wood with difficult grain.

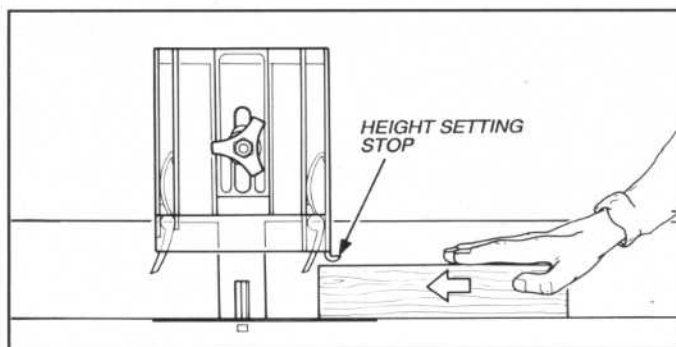


FIGURE 7

Set the guard height so that your material just passes under the "bull-nose" lower edge of the guard. **Figure 7.**

You may notice some minor flexing of the fence and the guard when the pressure fingers engage. The system is designed to accommodate this flexing and it will not adversely affect the quality or accuracy of your cut.

Use the guard and its pressure fingers whenever possible. If you set up for a cut, but decide not to go ahead, pull the workpiece out sideways, or raise the guard to remove it.

GENERAL POINTS

1. If you are not familiar with using a router, read the section of this manual entitled "Using the router – getting the best cuts", before proceeding. The size and type of router cutter, the depth of cut, the material being cut, and the feed rate will all determine the quality of your cuts.
2. The main calibration scales on the table are for reference only. They do not relate to any actual dimensions, which are determined by the diameter of the cutter used.
3. Unlike the saw's rip fence, the router fence does not have to be locked *parallel* on the table. The readings in both fence windows may differ.
4. If trenching or grooving a wide piece, you can gain an extra 50 mm of fence capacity by turning the whole fence assembly around and guiding the workpieces along the lower side of the fence. You may have to disconnect the vacuum hose for these cuts.
5. Note that when operating as a Shaper Table, the direction of rotation of the cutter (as shown by the curved arrows around the central hole) is critical for safe operation. You must feed **against** the direction of rotation, **not with it**, you must always feed from the front panel (switchbox) end of the Workcentre or Router Stand – never from the rear.

6. When using narrow cutters or when working on end sections or small components, reduce the gap between the fences and the cutter to a minimum, by loosening the fastening screws and pushing the MDF sub-fences towards each other, to just clear the cutter. After any adjustments check that the cutter cannot hit the fences before switching on.
7. When using cutters larger than 38 mm diameter (up to a maximum of 65 mm diameter), remove the reducing ring fitted to your router table. Lever it out using a large flat screwdriver as shown. Always fit the reducing ring when working with cutters smaller than 38 mm. It snaps into place when pressed down firmly. **Figure 8.**

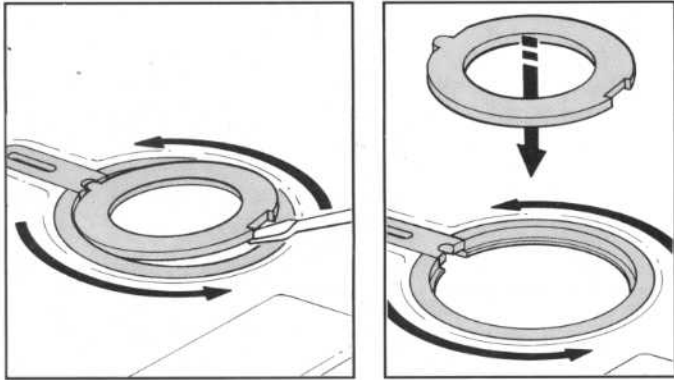


FIGURE 8

SAFETY

There are a number of important safety rules that must be adhered to for safe operation of your equipment:

- Never trail your fingers behind the workpiece when using the router in the shaper mode.
- Always use a push-stick when working on narrow workpieces.
- Never work free hand. Always use the fences, or a pilot bearing on your cutter, to support and guide your workpiece.
- Use the safety guard whenever possible, and keep it correctly adjusted.
- Always disconnect your power cord whenever fitting or changing router cutters or jigsaw blades.
- Always ensure that the cutter is clear of the sub-fences, the safety guard, and the workpiece before turning the router on.
- Always ensure that the router cutter has at least 2mm clearance between its cutting flutes and the holes in the table and the mounting plate.
- Always wear eye protection.
- Wear a dust mask and use ear muffs when operating routers.
- Do not wear loose clothing or jewellery when operating power tools.
- Always disconnect your power cord when clearing sawdust or shavings from the guard or guard housing.

SHAPER TABLE

Trenching / Rebating (Dadoing)

When making an edge rebate, **Figure 9**, or a longitudinal groove, **Figure 10**, set the front fence in line with the rear fence.

Keep both hands visibly on top of the workpiece, and press it down on the table and against the fences during the cut.

Always feed from the front of the Workcentre, and make the cut in one smooth pass if possible. Every time you pause, you risk developing a slight burn mark on the edge.

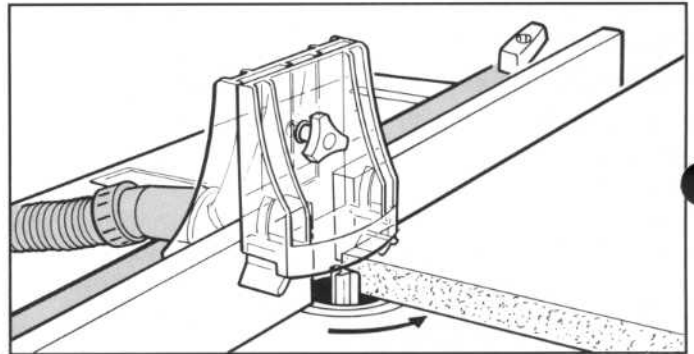


FIGURE 9

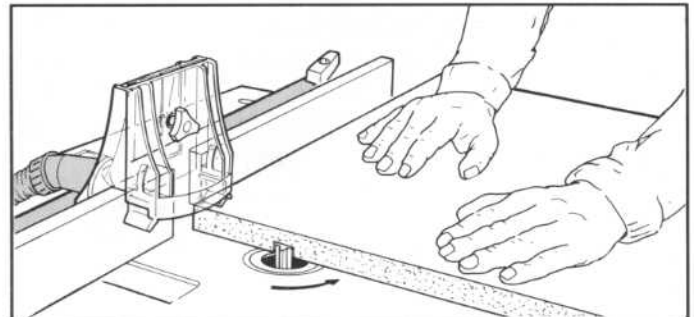


FIGURE 10

Planing with a Router

Use a sharp straight cutter, preferably tungsten carbide tipped. The front fence adjusts inwards relative to the rear fence for planing operations.

When your material is thin enough to be planed in one pass, the rear fence must be set directly in line with the arc of the cutter. **Disconnect the power cord**, hold a straight edge against the rear fence, and turn the cutter by hand while adjusting the fence setting, until the cutter is *just* scraping the straight edge.

Then set the front fence in by the amount you want to plane off.

The fence slides back at an angle of 5:1. To plane 2mm off your material the fence must be moved back 10mm (away from the cutter). The calibration scales indicate how much will be planed off in each pass. **Figure 11.** This fence arrangement permits fine tuning of your planing cut. For example, moving the fence back or forward by 1mm will change the depth of cut by 0.2mm. The maximum depth of cut in a single pass is 3mm.

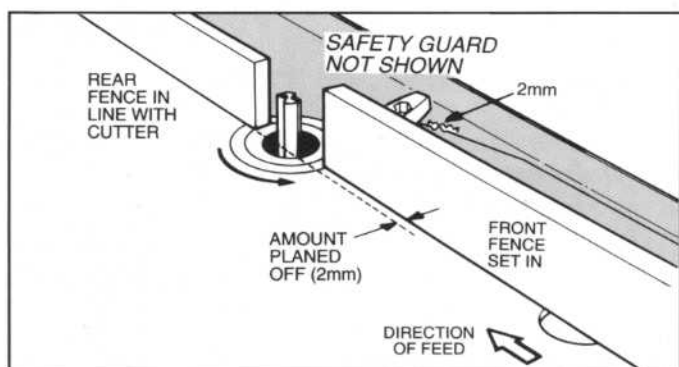


FIGURE 11

Adjust the MDF subfences as close to the cutter as possible, especially when planing thin, flexible material.

Planing a wide face

This may require two passes. If your fences are taller than your cutter, set the fences in line for the first pass, with the cutter protruding out from the fences by the amount you wish to plane off.

For the second pass, set the rear fence in line with the arc of the cutter as described above, and set the front fence in by the amount you planed off in the first pass. **Figure 12.**

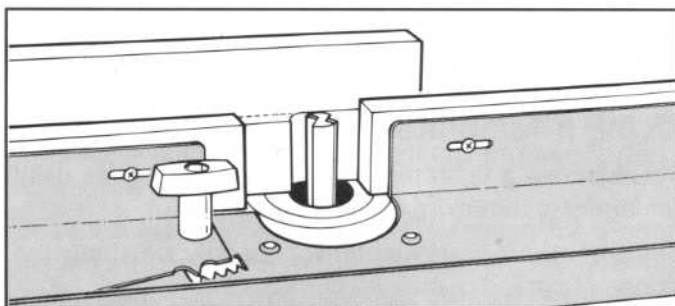


FIGURE 12

If using a cutter taller than the fences, make all cuts with the front fence set in, and the rear fence in line with the arc of the cutter.

Planing Veneered Board

When working with veneered or laminated board for tabletops or cupboards, your saw blade may leave a splintered edge on the underside of the cut. You can achieve a clean, sharp edge by using the planing technique shown in **Figure 13.** When sawing your

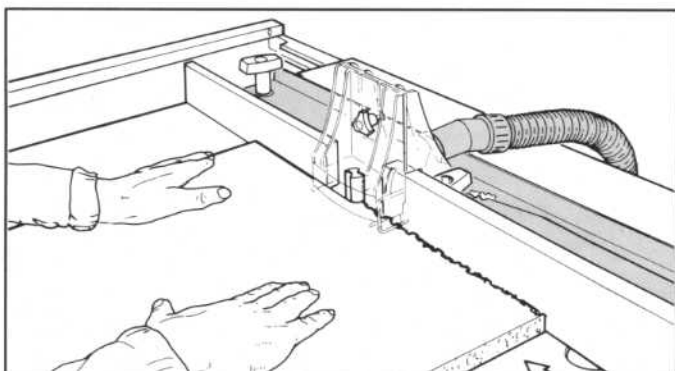


FIGURE 13

boards to size, allow an extra 2mm (say) all around. Set the fences to remove 2mm and run each edge past the cutter. Apply pressure equally against the front and rear fences, but as you finish the cut, transfer all the pressure to the rear fence, and pull the workpiece through.

Safety Warning

NEVER make planing cuts with the workpiece passing between the cutter and the fence.

The cutter will flex aside, "climb up" on the work, and rip the workpiece out of your hands – or pull your hand into the cutter. **Figure 14 shows an incorrect and dangerous practice.**

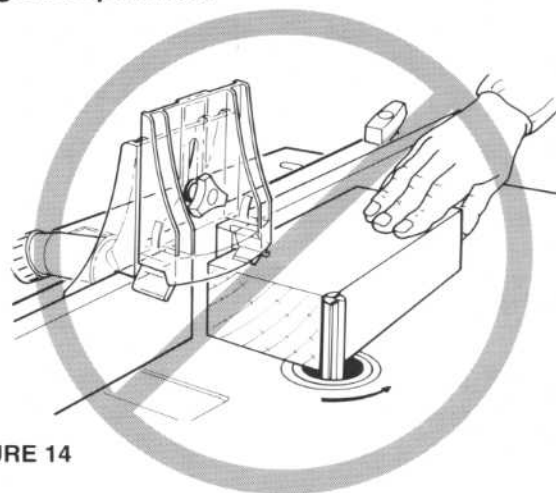


FIGURE 14

Planing cuts should be made as detailed in **Figures 11, 12, and 13,** with the cutter mostly hidden behind the fences.

Always feed your work **against** the direction of rotation of the cutter, **never with it.**

Bevelling with a Router

By fitting a 45 degree bevelling bit, you can achieve extremely smooth bevels on long pieces, especially veneered particleboard. Set the front and rear fences exactly in line, and have no more than half the cutter protruding from the fences.

By test cutting on an offcut of the same thickness material, raise or lower the height of the cutter until you achieve a perfect bevel with sharp, clean edges. **Figure 15.**

If you wish to bevel material up to 20mm in thickness, you will need a cutter with a base diameter of 40mm.

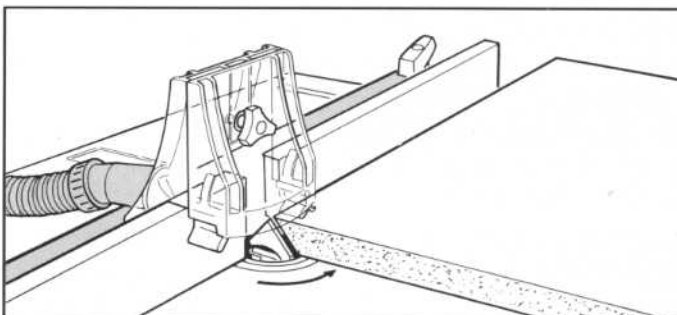


FIGURE 15

Edge Shaping with the Fences

Decorative cutters commonly have a ball bearing (or high speed steel) pilot on top, which can be used instead of a fence. However, there are times when it is essential to use the fences.

For example, if your workpiece has an uneven edge, or if there is no support for the pilot at the beginning or end of the cut, as in the bevel cut piece shown in **Figure 16**, you should use the fences rather than the pilot.

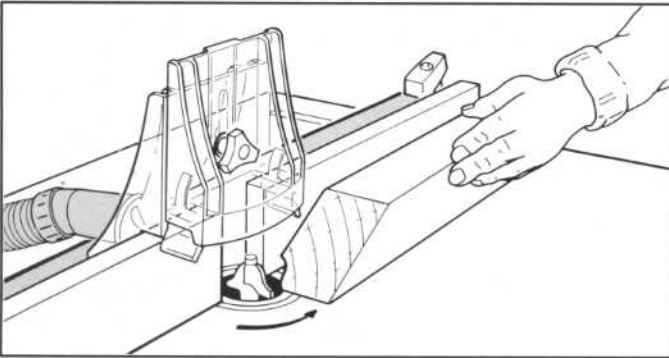


FIGURE 16

The fences must be in line and adjusted so that the pilot is just behind the working faces of the fences.

On occasions it helps to make two or three shallow cuts rather than one deep cut. This lessens the chances of tearout or splintering, especially when working across or against the grain. Adjust the fence so that you take two or three cuts, each time exposing more of the cutter.

When edge shaping regular straight workpieces it is still preferable to use the fences. Use the front fence to lead onto the pilot, and the rear fence to provide tailout support. Have the fences in line, with the bearing of the cutter just proud of the working faces of the fences.

If you want to rout a decorative edge around all four edges of a workpiece, try to do so in one continuous motion rather than starting and stopping.

Try to keep the workpiece in contact with the pilot at all times. To start off, plunge the workpiece onto the cutter, midway along any edge, and then feed continuously against the direction of rotation of the cutter, slowing down and taking care as you round each corner.

If you want to decorate only one edge, plunge the workpiece onto the cutter a little way back from the end of the wood. By holding the workpiece firmly, you can inch it back towards you (moving *with* the direction of rotation for a moment) until the pilot is right on the leading corner of the workpiece.

Then make the main cut, feeding the workpiece correctly **against** the direction of rotation until you reach the other end of the workpiece.

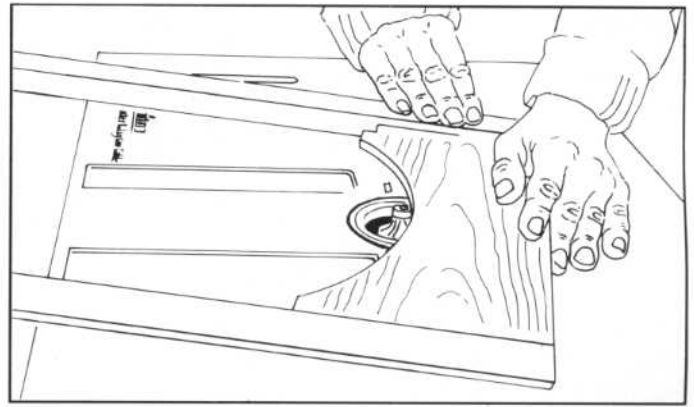


FIGURE 17

Following a Pilot / Ball Bearing Guide

There are situations which prevent use of either the safety guard or the fences, for example when decorating the inner edges of concave workpieces as shown in **Figure 17**.

The four important safety rules for this operation are:

- Keep your fingers well clear of the cutter
- Feed against the direction of rotation of the cutter
- Hold the workpiece firmly
- Do a "dummy run" with the power off to ensure that you can complete the cut while constantly feeding the workpiece against the cutter's direction of rotation.

Using a Template Guide

You can use a flush trim bit with top bearing (as used for laminate trimming) for template routing.

Templates are very useful for cleanly finishing the edges of curved or shaped components.

First, rough out the shape of the workpiece with a jigsaw. Then using tacks or double sided tape attach the template to the top of your workpiece. Set the height of the flush trim bit so that the bearing runs only along the template. The workpiece will then finish exactly the same size as your template. **Figure 18**.

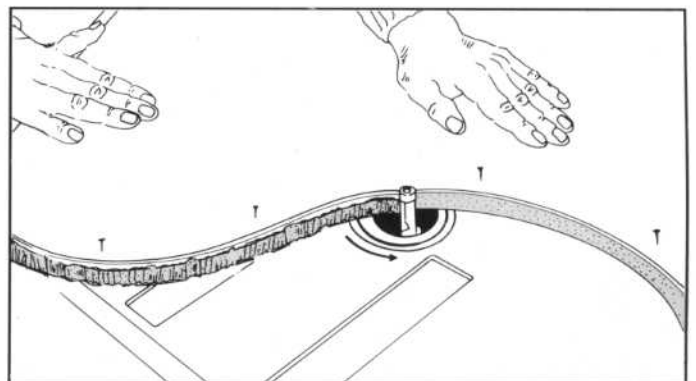


FIGURE 18

Feed against the direction of rotation, and keep both hands well clear of the cutter and on top of your workpiece.

Morticing

You can cut mortices in the shaper table mode to house the stub tenons cut with your saw in the tablesaw mode. You will need to remove the safety guard and set the fence a small distance away from the cutter for morticing. Keep your hands well clear of the cutter at all times and hold your workpiece firmly.

The procedure is as follows:

Have the fences exactly in line. Position and lock the fence assembly so that the workpiece will be in approximately the right position above the cutter.

Test the position of the fences by taking a piece of scrap the same thickness as your workpiece, and plunging it onto the cutter as shown in **Figure 19**.

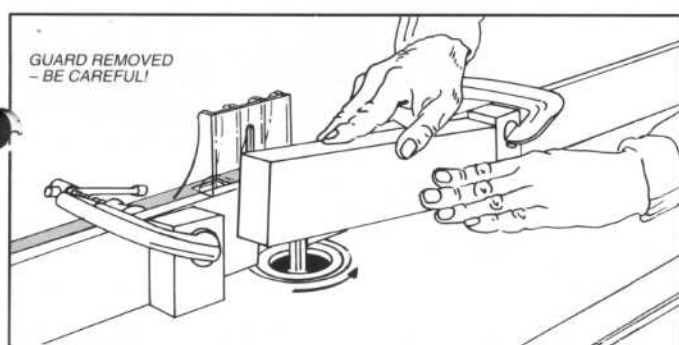


FIGURE 19

Do not set the cutter too high. If you want to make a mortice say 15mm deep, make it in three cuts of 5mm each time.

Slide the piece forward along the fences for a short distance. The cutter will tend to push the material away from the fence, so firm sideways pressure against the fence is necessary. Stop the router, lift off the scrap piece, and inspect the mortice.

Readjust the fence assembly, if necessary, and repeat the test elsewhere on the scrap until the mortice is central, or in the desired position.

To establish the beginning and end of the mortice, it is best to work between two stop blocks clamped to the fences. If the workpieces are too long to use stop blocks fitted to your normal fences, attach a long straight wooden batten to the fences and fit the blocks to it.

With extremely long workpieces (where it is not possible to work between stop blocks) reference the mortice position by drawing lines onto the side of your workpiece and aligning these with pencil lines drawn onto the table to indicate the position of your cutter.

If you plan to cut many mortices, invest in a router bit with an end cutting insert. These are more suitable than standard bits for "plunging on" operations.

HINT: Don't bother chiselling your mortices square at the ends. Round off the tenons instead. You will find it easier.

OVERHEAD ROUTER *(Triton Workcentre only)*

Remove the Router/Jigsaw Table and flip over the mounting plate so that the router is rightway up.

Check the slide action of the plate in the bearing channels, and spray some lubricant (RP7, WD40 or similar) into the bearing channels to ensure a smooth slide. The main table of the Workcentre is used to support material when overhead routing.

The router cutter will probably not reach the workpiece even at full cutter depth. Do not raise the table. Rather, use flat packing (18mm particleboard or similar) to raise the workpiece.

If you ever do raise the table, make sure you lower it again when refitting your saw, or you may accidentally cut into the subframe bars under the blade slot.

Cross Trenching

When working with long, wide or heavy pieces, such as shelving, cupboard sides etc., cross trench as shown in **Figure 20**.

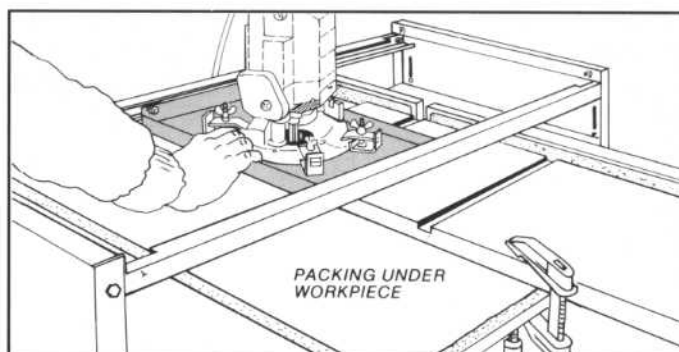


FIGURE 20

Use the on/off switch on the Workcentre rather than the switch on the router itself, and push the mounting plate rather than the router. The cutter will exert strong sideways thrust on the workpiece. Preferably clamp it in position as shown.

If the resulting trench is not square to the edge which was against the workstops, or if the cut is slightly curved, it is likely that the workpiece moved during the cut. Try making the trench in two shallow cuts rather than one deep cut.

Before making any cuts with your router, check that the cutter cannot hit the notched workstop.

Always do a "dummy run" after each new set-up. Remove the workpiece, keep the power switched off and make sure the cutter won't hit anything as you slide the mounting plate from end to end.

Angled Trenching

If angle trenching (for louvres, steps, etc.) remove the workstops and clamp a straight wooden guide across the table at the desired angle.

When possible, clamp the workpiece to the table.

Stopped Trenches

Clamp a piece of scrap wood to the bearing channel, as shown in **Figure 21**, to act as a stop block for "blind" or "stopped" trenches.

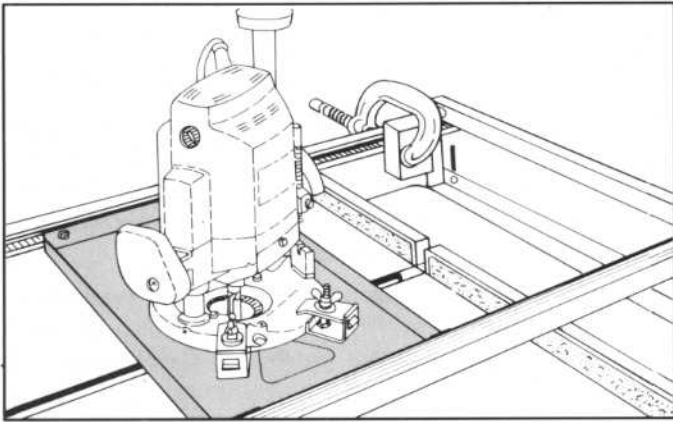


FIGURE 21

Make a Router Platform

If you intend to do a considerable amount of overhead routing, we recommend that you make up the platform as shown in **Figure 22**. The benefits are that you will not need to find any flat scrap material to lift up your workpieces, and the attached wooden fence will both limit splintering at the end of the cut, and provide a sighting notch for lining up cuts.

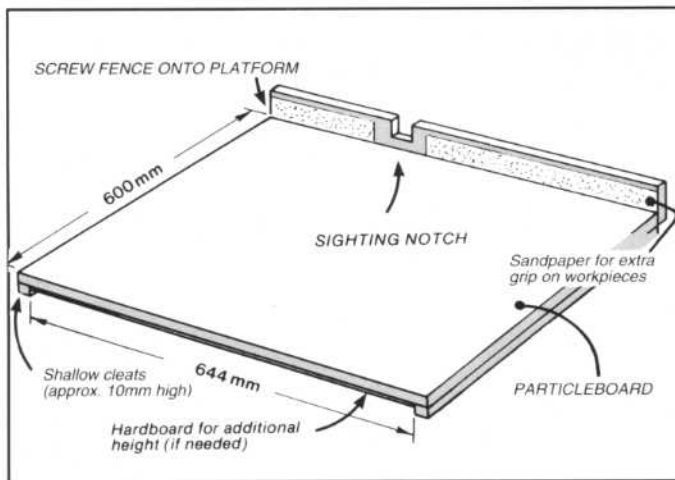


FIGURE 22

To check that the platform is dead flat and in exactly the right plane to the cutter, adjust the cutter downwards until it is just touching the platform. Without switching on the power, slide the router forwards and backwards and see whether the cutter scrapes evenly over the top of the platform. Adjust the table height or use packers to get the platform level.

If the shallow cleats on the underside of the platform are a snug fit on the edges of your Workcentre table, you can now create an accurate sighting notch for lining up your cuts.

Cut the notch in the fence with the cutter you use most often. When you use other cutters which require a

different sighting notch, either replace the fence with a new one, or attach a second sacrificial subfence in front of your main fence, and make a new sighting notch.

Sighting up cuts

A router platform with a fence and sighting notch is the best way of correctly positioning your cuts. Simply extend your marking out lines to the edge of the workpiece which is resting against the fence, and reference the pencil lines against the sighting notch. The notch should exactly define the path of the cutter.

If making a trench which is wider than the cutter, make the first cut just inside the righthand marking out line.

Then move the workpiece to the left a fraction and make the finishing cut. **Figure 23**.

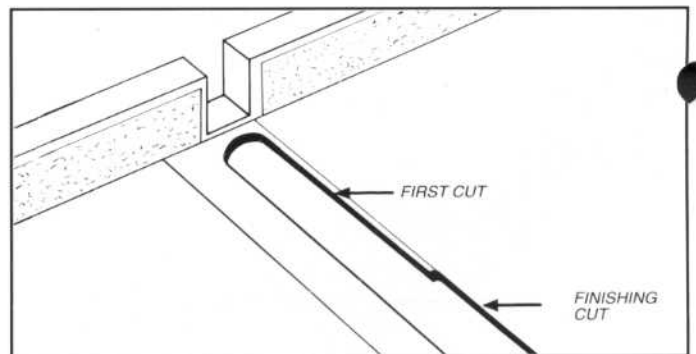


FIGURE 23

Then move the workpiece to the right and proceed to the lefthand line. Again your finishing cut should be a small one, and should just shave your marking out line. **Figure 24**.

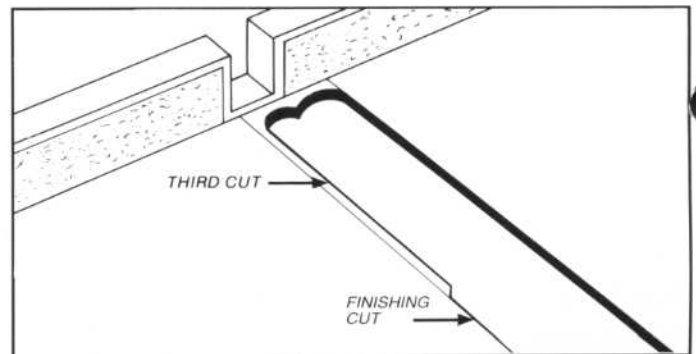


FIGURE 24

If you haven't built the above platform, create a similar sighting notch in a straight strip of wood screwed to both workstops and use packing under the work. Otherwise you will have to sight up overhead router cuts using guesswork and trial and error.

Deep Trenches

Make deep trenches by making two or three shallow passes rather than one deep pass, as shown in **Figure 25**. This results in more accurate trenches and a smoother finish, and your router cutters will stay sharp longer.

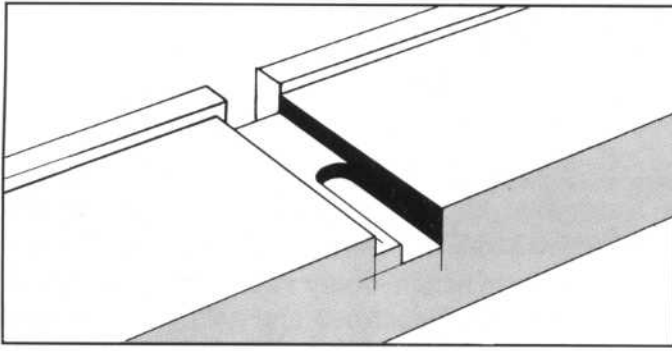


FIGURE 25

Bowed Timber

If the wood you want to use is slightly bowed, use a carpenter's clamp through the centre slot in the table to flatten and clamp it down. The small protrusion at the base of the clamp may have to be filed off to allow the clamp to be dismantled for fitting through the slot. Make sure the head of the clamp doesn't foul the path of the router. **Figure 26.**

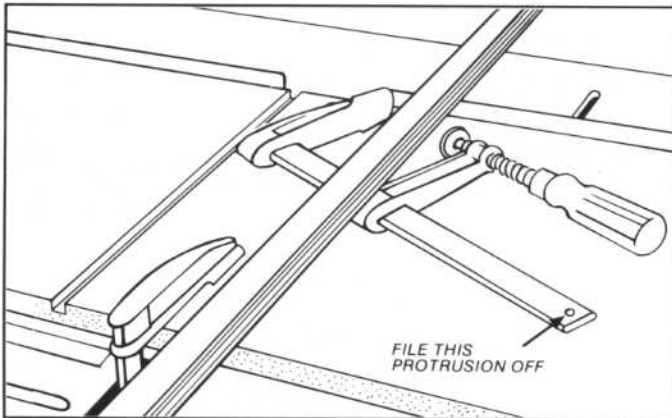


FIGURE 26

USING THE ROUTER – GETTING THE BEST CUTS

The quality of your cuts when using a router depends on a number of important factors:

The Feed Rate

Don't overload your cutter. Take into account the size of the motor, cutter size and type, depth and width of cut, and the type of material.

Too rapid a rate of feed will cause the router to overload. Cutting will be difficult to control, and tearout (splintering) is likely. Damage may occur to your router motor or chuck, and in extreme cases your bit could break.

On the other hand, too slow a rate of feed will cause the bit to scrape instead of cutting. This shows up as burn marks on your workpiece.

The optimum feed rate will be determined with practice. The cut quality, and the sound of the router motor are guides to the correct feed rate.

The Depth of Cut

As a general rule, when using small, straight cutters (up to 10mm in diameter) make sure that the depth of cut does not exceed the diameter of the bit. With larger diameter bits, it is generally better to make two or three shallow cuts rather than one deep cut.

The Importance of Quality Router Bits

Routers operate at freerunning speeds of between 18,000 and 24,000 r.p.m. If you want consistently clean cuts, free of burn marks and tearout, sharp cutters are essential. We do not recommend high speed steel bits because they generally do not retain their sharp edges for long.

We recommend that you purchase tungsten carbide tipped router cutters. Tungsten carbide is the hardest commercially available cutting edge material.

When profile cutting or edge trimming, look for bits which have a ball bearing pilot on top. The pilot rotates much slower than the bit itself and consequently does not mark the workpiece. Bits which have an integral pilot (i.e. no ball bearing race) often burn or mark the work.

RECOMMENDATIONS FOR ROUTER SELECTION

If you haven't yet selected your router, or are thinking of upgrading your equipment, you may wish to read our recommendations concerning router selection.

Type

You can basically choose between "plunge" routers and "screw-adjustment" routers. The terms refer to the means of adjusting the depth of cut of the router.

Plunge routers offer faster and easier cutter height adjustment. Some have a three position turret for setting three different routing depths. Double stopped trenches can be cut easily in the overhead mode with a plunge router.

Screw-adjustment routers are often cheaper, but they are slower to adjust. However, *fine-tuning adjustment* of the cutter depth is often easier and more positive with this type of router.

Size

Your Router/Jigsaw Table enables the use of 1/4", 3/8" and 1/2" chuck routers. 1/4" routers are generally small, lightweight units with power ratings up to 1 HP. They are effective as long as they are not overloaded in use. However there are limitations to the size and especially the length of the cutters that can be fitted. On the other hand, their light weight makes them ideal for handheld use, and this could be an important factor in your decision.

3/8" routers and router bits are not commonly available. If you buy a 3/8" router, you will probably need to fit a reducing collet so that you can use 1/4" router bits.

If your router will be mostly used in your Router/Jigsaw Table, and you can justify the cost, we recommend that you consider a 1/2" router. They are built for heavy duty, professional use. They have a powerful motor, which enables the removal of greater amounts of material at each pass compared to smaller routers.

A greater range of long shank and/or large profile bits is available on a 1/2" shank. Smaller shank router bits (1/4" and 3/8") can be used by fitting the appropriate reduction collets usually supplied with the router.

FITTING YOUR JIGSAW

To fit your jigsaw to the mounting plate use the medium length coach bolts supplied, and only use the top clamps (W) as shown in **Figure 27**. Use the large washers, spring washers and wing nuts as illustrated.

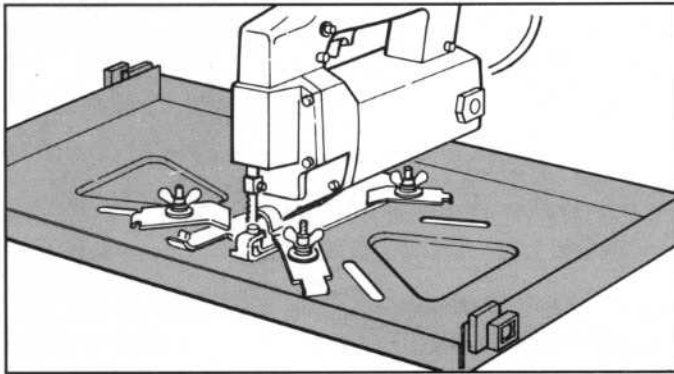


FIGURE 27

The jigsaw blade should be positioned centrally in its small slot in the mounting plate.

If the size or shape of your jigsaw base is unusual, you may need to relocate one or more of the clamps by drilling the mounting plate. Alternatively, you may prefer to drill holes in the base of your jigsaw and bolt it directly to the plate.

It should be possible, in most cases, to leave the router locators (V) in position, which will enable you to quickly replace your router after jigsawing.

A separate mounting plate is available for your jigsaw, so that you can have the router and jigsaw on separate plates for extra fast conversion. See your Triton Stockist (Part No. AJA001, Jigsaw Mounting Plate).

USING THE JIGSAW

- Use the jigsaw upside down in conjunction with the Router/Jigsaw Table.
- Always keep fingers well clear of the blade.
- Never start the jigsaw with the blade touching the workpiece.
- If you wish to stop mid-way through a cut, switch off the power with your knee and hold the workpiece steady until the blade has completely stopped.
- Don't try to cut too tight a radius in thick material. If necessary, edge up to the line in a series of shallow cuts, whittling away the waste.
- Keep watching the blade to ensure you don't twist or deflect it sideways.
- Feed the workpiece slowly, particularly when cutting along the grain, or when using finetoothed blades. Smoking or burn marks on the cut edges indicate the curves were too tight, or the feed rate was too fast. Overheating can dull a blade rapidly.
- There is a wide selection of jigsaw blades available, and using the right blade for the material being cut will ensure best results. For cutting circles and sharp curves we suggest you fit a scrolling blade these are narrow and thin compared to standard blades.

RECOMMENDATIONS FOR JIGSAW SELECTION

Most manufacturers offer a range of models. However, better jigsaws have the following features:

- Large cutting capacity in timber (50mm or better).
- Variable cutting speeds (useful for cutting different materials).
- A roller guide at the back of the blade which provides support when cutting, ensuring less sideways deflection of the blade.
- A tilting base plate for bevel cutting when hand held.
- Some of the top of the line models have an orbital or elliptical cutting motion. This feature speeds up the cutting of thicker materials.

WARRANTY

This product is fully warranted to be free from factory faults in workmanship or materials for a period of **THREE YEARS** from date of purchase.

This warranty does not extend to damage as a result of accident or abuse.

Please note that due to our company policy of continuous product improvement, specifications may change without notice.