



Woodworking machinery at its best!

**ROUTER TABLE
OWNERS MANUAL**



**Charnwood, Cedar Court, Walker Road,
Hilltop Industrial Estate, Bardon Hill, Leicestershire, LE67 1TU**

**Tel. 01530 516 926 Fax. 01530 516 929
email: sales@charnwood.net website: www.charnwood.net**

GENERAL SAFETY RULES



WARNING: Do not attempt to operate the machine until you have read thoroughly and understood completely all instructions, rules, etc. contained in this manual. Failure to comply may result in accidents involving fire, electric shock, or serious personal injury. Keep this owner's manual and review frequently for continuous safe operation.

1. Know your machine. For your own safety, read the owner's manual carefully. Learn its application and limitations, as well as specific potential hazards pertinent to this machine.
2. Make sure all tools are properly earthed.
3. Keep guards in place and in working order. If a guard must be removed for maintenance or cleaning, make sure it is properly replaced before using the machine again.
4. Remove adjusting keys and spanners. Form a habit of checking to see that the keys and adjusting spanners are removed from the machine before switched it on.
5. Keep your work area clean. Cluttered areas and workbenches increase the chance of an accident.'
6. Do not use in dangerous environments. Do not use power tools in damp or wet locations, or expose them to rain. Keep work areas well illuminated.
7. Keep children away. All visitors should be kept a safe distance from the work area.
8. Make workshop childproof. Use padlocks, master switches and remove starter keys.
9. Do not force the machine. It will do the job better and be safer at the rate for which it is designed.
10. Use the right tools. Do not force the machine or attachments to do a job for which they are not designed. Contact the manufacturer or distributor if there is any question about the machine's suitability for a particular job.
11. Wear proper apparel. Avoid loose clothing, gloves, ties, rings, bracelets, and jewellery which could get caught in moving parts. Non-slip footwear is recommended. Wear protective hair covering to contain long hair.
12. Always use safety glasses. Normal spectacles only have impact resistant lenses. They are not safety glasses.
13. Do not over-reach. Keep proper footing and balance at all times.
14. Maintain machine in good condition. Keep machine clean for best and safest performance. Follow instructions for lubrication and changing accessories.

15. Disconnect the machine from power source before servicing and when changing accessories or (if using a fixed base router) when mounting or remounting the motor.

16. To avoid accidental starting, make sure the switch is in the OFF position before plugging in the mains cable.

17. Never leave the machine running unattended. Turn the power off. Do not leave the machine until it comes to a complete stop.

18. Do not use any power tools while under the effects of drugs, alcohol or medication.

19. Always wear a face or dust mask if operation creates a lot of dust and/or chips. Always operate the tool in a well ventilated area and provide for proper dust removal. Use a suitable dust extractor.

ADDITIONAL RULES FOR ROUTER TABLES

1. Always hold the work piece against the fence.

2. Never perform any "free hand" operation. Do not use only your hands to support or guide the work piece. Always use feather boards to help secure the work piece when cutting smaller pieces.

3. Feed the work piece to the router bit against the rotating direction. Feed direction will normally be from right to left.

4. Never draw the workpiece back during cutting. Wait until the router bit stops before drawing back the workpiece.

5. Make sure the portable router has been installed securely before starting the machine.

6. Make sure the router bit is locked securely before operating.

Features

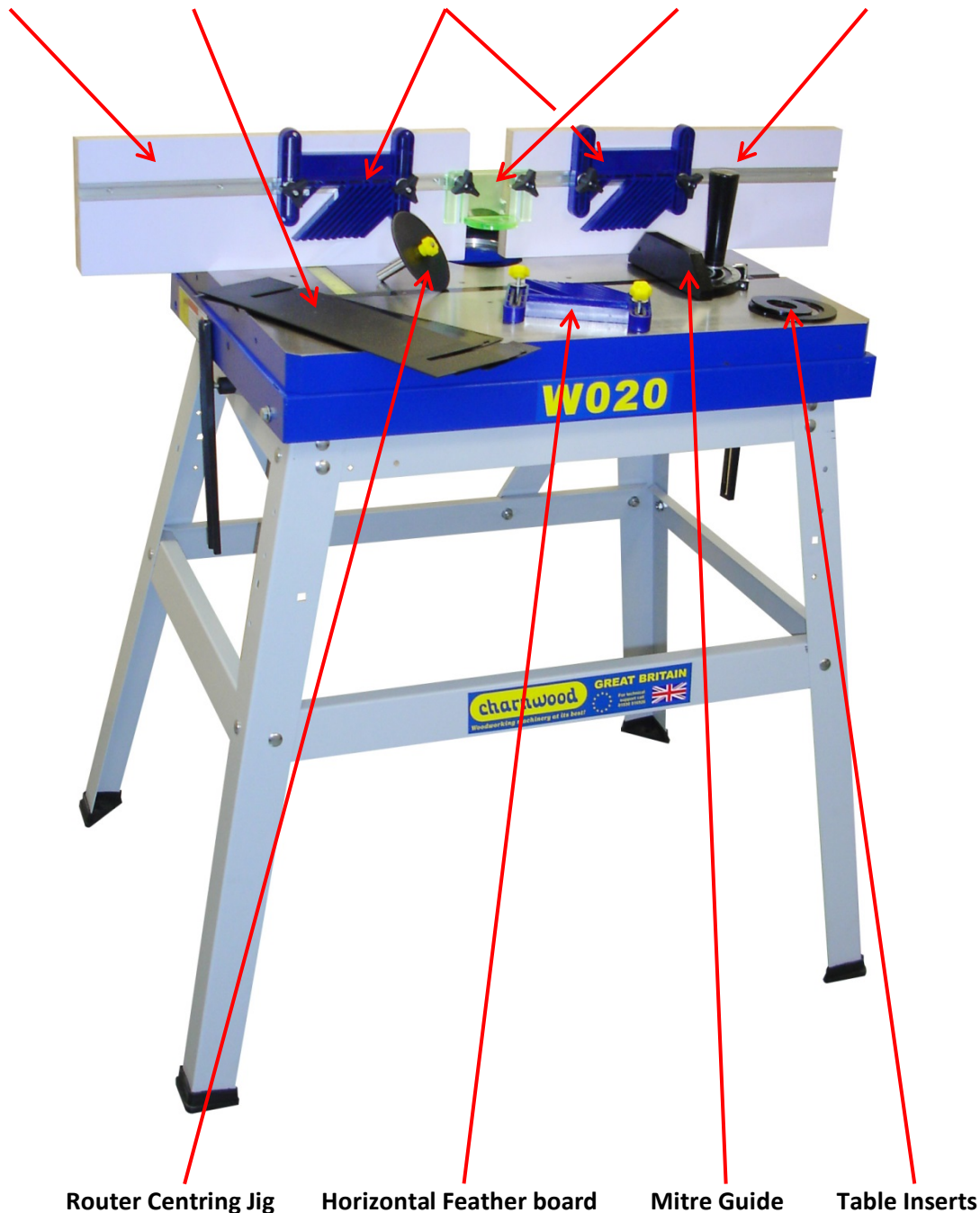
- Accepts any brand of router
- Large, machined cast iron table
- Table top can be tilted to 45 degrees for easy router adjustment and removal
- Generously sized fence with mounting slots for feather boards
- Two large, easy read scales built into the table top
- Large mitre fence with pre-sets at 90 & 45 degrees
- Two insert rings supplied to match aperture to cutter size
- Outfeed fence adjustable with shims supplied for full-face cuts
- Easy set mounting jig for centralising of router
- Router mounted with clamps – no need for drilling

Specification

Table Surface	680mm x 510mm
Table apertures	92, 60 & 30
Table Height	860mm
Dust Hood Outlet dia.	56/63/68mm internal & 63/68/75mm external
Net Weight	53kg
Rating	Trade

Overview of the Router Table

Left Fence Fence Shims Vertical Feather boards Cutter Guard Right Fence



Unpacking

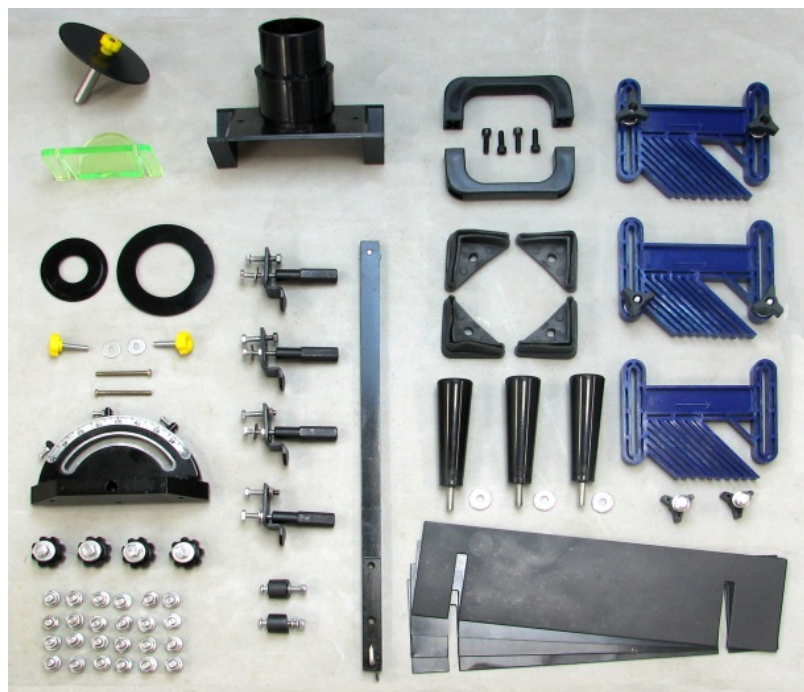
All parts are packed in one carton.



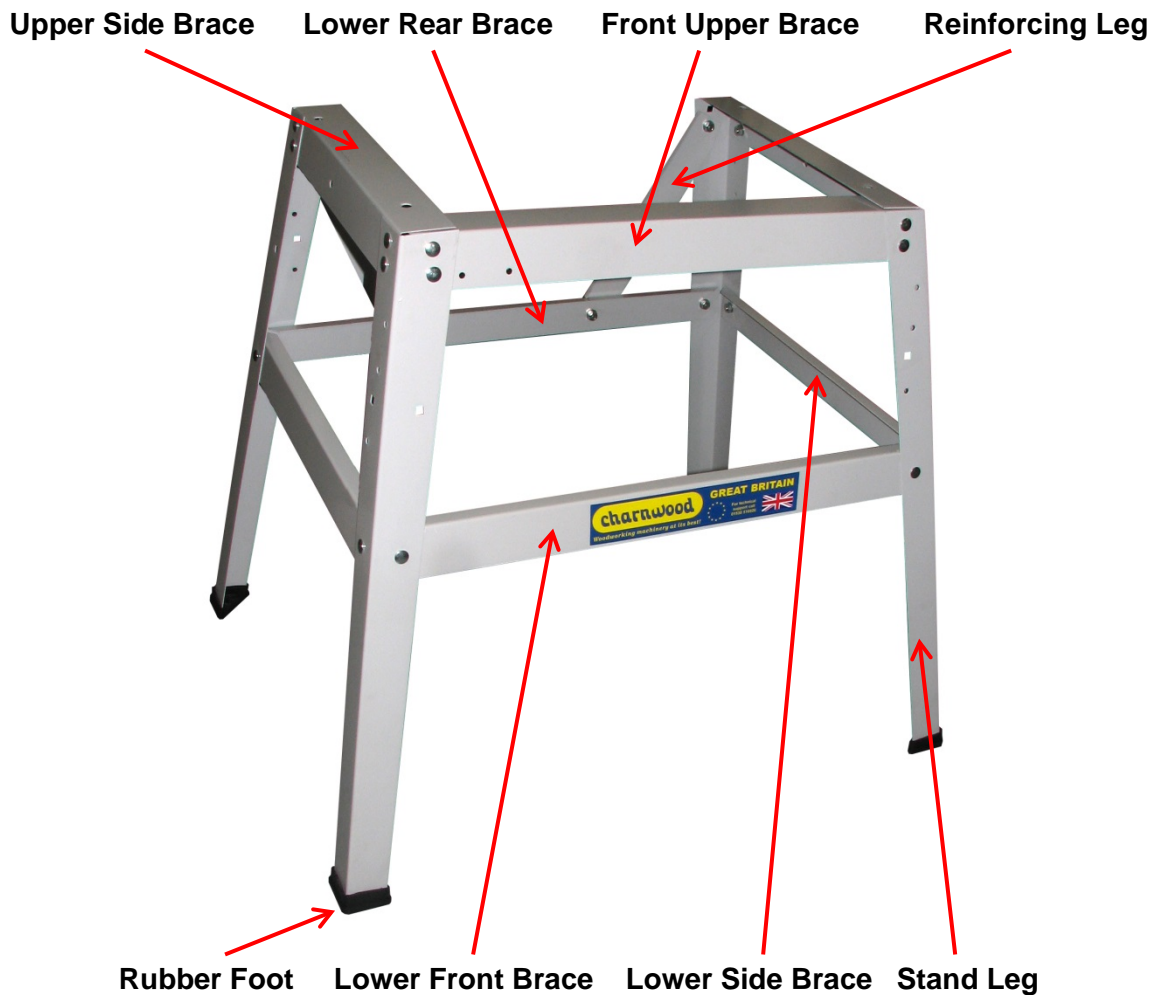
Unpack the parts carefully and check that everything is present as in the following photographs.

If anything is missing contact your retailer immediately.

The cast iron table is protected with oil which should be removed with a suitable degreaser, such as WD40. The table is heavy and you might require assistance when removing it from the carton and attaching to the leg stand.



Assembling the Floor Stand



Important: All nuts and bolts should be fastened only finger tight until assembly is complete.



Lay the two upper side braces and front upper brace on a suitable flat surface, ensuring that the table fixing holes are positioned exactly as in the photograph



Attach the tops of the four legs to the upper braces



Fit the two reinforcing legs and rear lower brace to the stand rear legs. Please note the rear lower brace is the one with the required mounting holes for the reinforcing braces

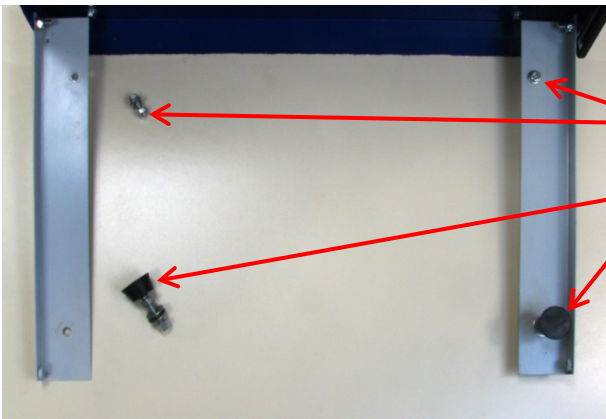
Attach the front and side lower braces to the legs

Fit a rubber foot to the end of each leg

Invert the leg stand and place on a level surface.

After checking the stand is square and the upper braces are level, tighten all nuts/bolts using a spanner

Attaching the table to the stand



Remove the two rubber bumpers and two bolts from the table side brackets.

Mounting Bolts

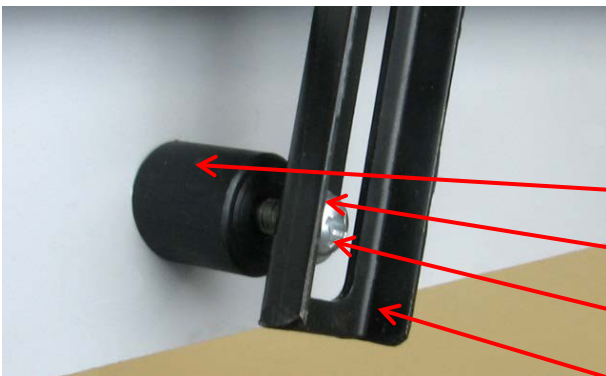
Rubber Bumpers

With assistance, lift the table onto the stand, so that the holes in supporting brackets align with those in the upper side braces. Note that the hinged side of the table is at the front of the stand, in line with the front upper brace.



Attach the table support brackets to the stand with two M8 nuts & bolts and the M10 rubber bumper bolts.

Adjust the height of the bumpers in order to level the table.



Remove the bolts, nuts and washers from the table tilt support lever bottom collars and with one washer behind the bolt head, assemble as in the photograph – one for each lever.

Threaded Support Collar

Washer

Support Bolt

Support Strut



Attach the two lifting handles to the rear of the table using a 5mm hex key.

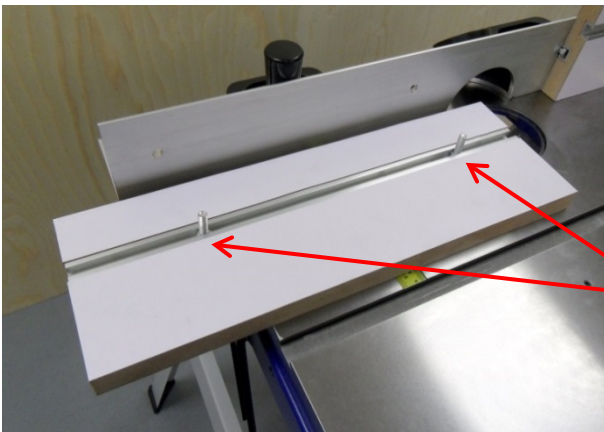
Assembling the Fence and Cutter Guard



Place the aluminium angle fence carrier on the cast iron table, aligning the two long slots with a pair of tapped holes as illustrated.

Clamp the fence carrier using the two long handles with M8 studs.

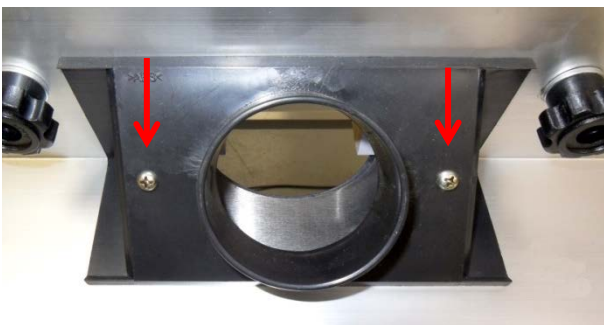
There are a series of holes which allow the fence to be adjusted according to the size/type of router cutter being employed and type of operation being undertaken.



Slide the heads of two hex head bolts into the channel in the rear of the fence and fit them through the two holes in the fence carrier.

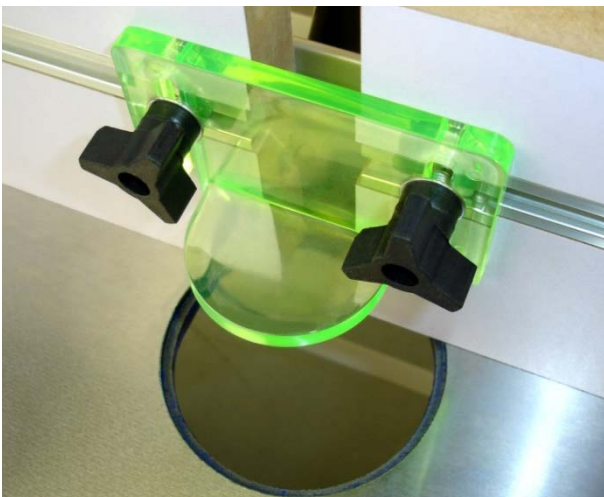
Secure with two washers and castellated knobs. Repeat for the other side of the fence.

Fence fixing bolt



Fit the dust extractor port as shown using the two long screws provided.

Adaptors are available to enable a variety of extractor hose diameters to be connected.



Take the two bolts that are fitted with tri-wing knobs and slide each bolt head into the channel in the front of the fence.

Fit the cutter guard slots over the bolts and tighten the knobs.

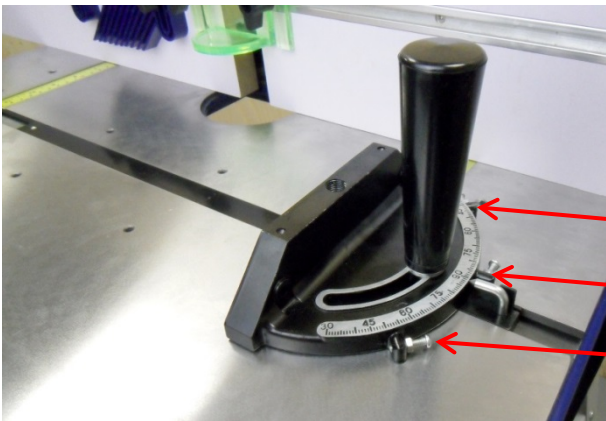
By loosening these knobs and sliding the guard up and down, different sizes of cutter and work piece can be accommodated.

When operating, slide the fences in or out to support the work piece as close to the cutter as is practical.



Locate the hinge pin in the underside of the mitre fence into the hole in the runner.

Secure the mitre fence to the runner with the handle bolt and washer.



Slide the runner into the table slot from the end.

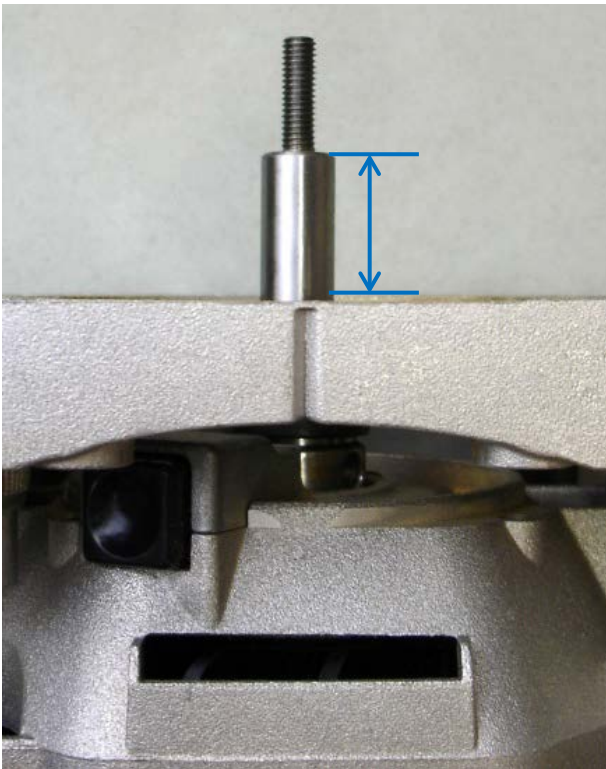
There are adjustable preset stops for setting the mitre fence at 90 degrees and 45 degrees left & right

45 Degrees Right

90 Degrees

45 Degrees left

Attaching the Router to the Table

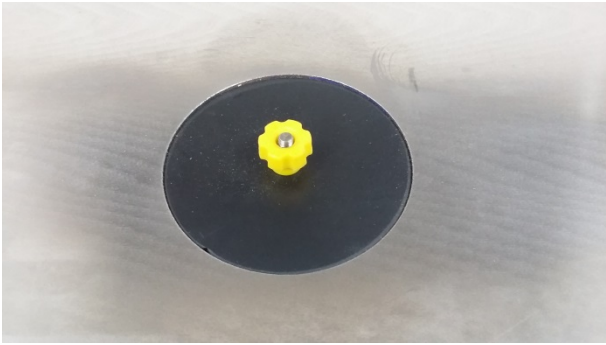


Consider removing the faceplate cover from the router base. Doing so will increase the maximum plunge depth by an amount equal to the baseplate thickness.

The router table is supplied with our unique centring jig to speed up accurate mounting of 1/2" collet routers.

Fully plunge the router and lock the 1/2" diameter shaft of the Centring Jig into the routers collet.

Ensure the body of the shaft projects from the base plate by approximately 30mm.

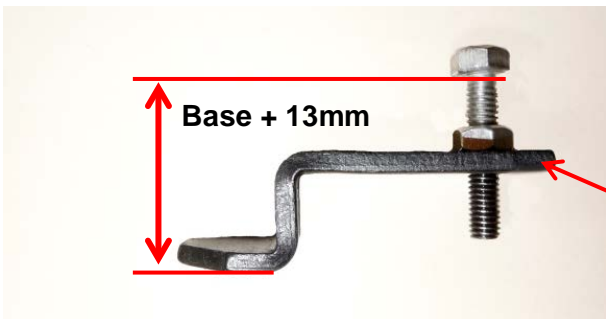


Offer the router up to the underside of the table with the shaft passing through the cutter aperture.

Holding the router in position, place the centring disc over the threaded shaft and then use the thumb screw to secure it.

Ensuring that the centring disc is correctly seated in the aperture, release the router plunge lock and the router will then be held in place against the underside of the table. Lock the plunge mechanism again.

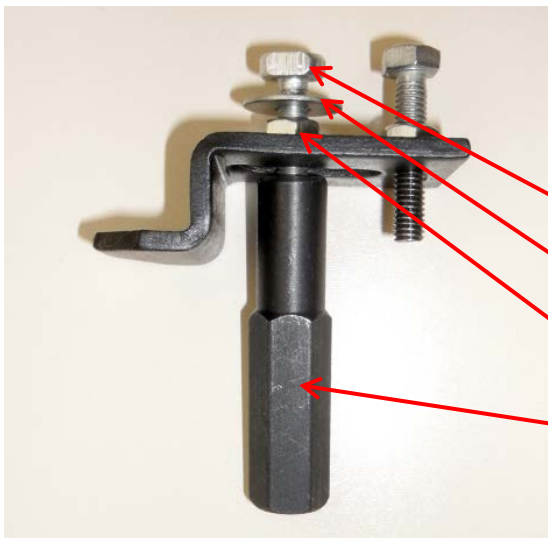
Rotate the router body to the most convenient position for access to the depth and speed controls. It might subsequently be necessary to adjust this position slightly to allow the four clamps to be positioned on convenient parts of the baseplate.



Adjust the rear bolt and locknut on each of the four mounting clamps as shown.

The distance shown should be equal to the thickness of your router base plus 13mm.

Mounting Clamp



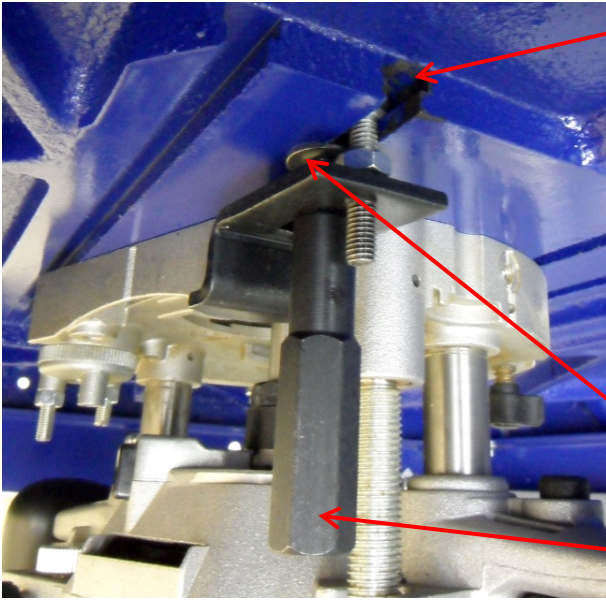
Add the clamp lock, locking nut, washer and bolt as shown.

Bolt

Washer

Locking nut

Clamp Lock



Slide both bolt heads into a slot in the underside of the table and position the mounting clamp on a convenient part of the router baseplate.

The clamps should be spaced as equally as possible in order to provide maximum support to the router.

With the mounting clamp pushed up against the router base plate, Slide the Clamp Lock and its bolt away from the router, until it is at the end of the slot in the mounting clamp.

Next, tighten the locking nut against the underside of the table, using a 10mm spanner.

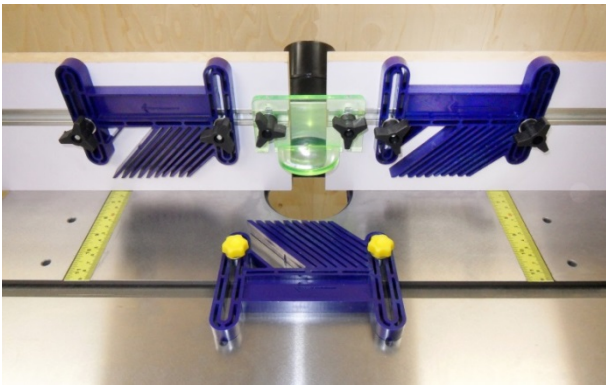
Now clamp the router to the table by tightening the 4 Clamp Locks, using a 14mm spanner.

Increase the plunge depth slightly, unlock the router collet and remove the centring jig.

The router is now mounted, ready for use.

In future, only the 4 Clamp Locks need to be undone to remove or remount the same router.

To remove the router, loosen the 4 Clamp Locks and slide the 4 clamps out, away from the router.



For safe and accurate routing, three feather boards have been supplied and these should be used whenever possible.

Two feather boards should be fitted vertically to the fence.

One feather board should be attached to the table in the horizontal plane. There are two sets of holes in the table to accommodate different sizes of work piece.

Optional Accessories



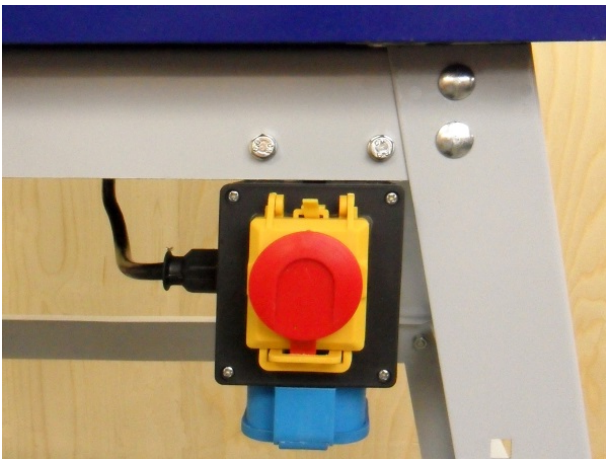
CE12 Collet Extension

A collet extension is available to extend the plunge depth of your router. It can be used with 1/2" shank router bits and extends the collet by 65mm.



100/63RC 100mm Diameter Extraction Adapter

This connector can be used to convert the extraction outlet for use with a 100mm diameter hose.



W026 NVR Safety Switch

We strongly recommend the use of a secondary switch to start and stop the router without reaching under the table.

Mounting holes for this item are provided in the front upper brace.

Basic Operating Instructions

1) EDGING AND PROFILING

One of the most common operations undertaken using a router is Edging or Profiling, i.e. running a shaped cutter along the edge of the work piece. In many instance this is for decorative purposes but it can also be to make a joint or fitting such as a raised panel.

Using a router table for this type of work vastly reduces the setting up time required and does away with many awkward clamping devices. Router table users soon find that having both hands free to control the work piece, rather than holding a machine, makes the task far more comfortable and generally a lot safer.

SET THE CUTTER HEIGHT:- First fit a suitable cutter after making sure the router is unplugged. It is often easier to do this by lifting the mounting plate and router from the table. Draw a profile of the required cut onto the edge of the work piece and adjust the cutter height to match. Adjusting the cutter height is made much easier if a fine height adjuster is fitted to the router. With many models this now comes as standard, but on others it is available as an accessory produced by the router manufacturer. Having set the cutter height fit the router back into the table.

SET THE FENCE:- The next step is to set the fence in a position to give the desired width of cut. Use the profile drawn on the end of the work piece to set the fence and lock into position. There are two scales set into the table to assist in rapid fence setting. Make a note of the fence position if you are likely to run the same job again.

When using a cutter fitted with a guide bearing the fence should be set in line or just in front of the edge of the bearing so that the work piece runs on the face of the bearing. The distance between the two fence faces can be adjusted by undoing the plastic handles at the rear and sliding the fence face along. The fence faces should be set so that the edges just clear the cutter. This provides the maximum amount of support to the work piece during the cut.

SET THE FEATHERBOARDS:- Adjust the Feather boards so that they provide a positive pressure against the fence or against the table. Set them somewhere between 2mm & 5mm less than the dimension of the work piece. This will hold the work piece securely up against the cutter and prevent 'kick-back' during the cut. When the feather boards are correctly set, the operator merely has to push the work piece across the table from right to left. It is still recommended to use a push stick for small work pieces. Please Note: Some work pieces may be too big to fit underneath the feather boards and they can simply be removed from the router table. The function of the feather boards is twofold; to hold the work piece securely against the cutter and to keep the hands well away from it. When using larger work pieces the increased weight will help to keep it against the cutter and the danger of hands being too near the cutter is greatly reduced.

SET THE CUTTER GUARD:- Adjust the cutter guard so that it just clears the top of either the cutter or the work piece. It will deflect any chips or dust which are thrown upwards. If possible, connect a dust collector or vacuum extractor to the dust outlet before commencing the cut.

To test the settings you have made, make a cut with a scrap piece of wood before using the work piece. Mistakes cannot usually be rectified afterwards.

2) GROOVING

Grooving and Trenching operations are often carried out to form joints such as slot dovetails or to make fittings such as draw runner grooves.

SET THE FENCE:- The table is set up in the same manner except the fence will be set further back away from the cutter. The cutter guard can be removed and the 2 fence faces can be moved closer together so they are touching.

SET THE CUTTER HEIGHT:- For this kind of operation the work piece will be run directly over the top of the cutter. Set the cutter height carefully and ensure enough material is left at the bottom of the trench to avoid break out.

3) USING THE MITRE GUIDE

For some operations it is not possible to use the fence as a guide, for example cutting across the grain, trenching at an angle or cutting a tenon. To do these jobs the sliding mitre fence is used which runs in the T-slot across the front of the table

SET THE BACK FENCE:- Undo the two plastic knobs and move it back to a position where it will not interfere with the cut.

SET THE ANGLE:- To change the angle of the mitre fence, undo the locking knob and read off the engraved scale on the casting. There are preset angles at 90 degrees and 45 degrees each way. Tighten the knob to lock the fence at the required angle.

SACRIFICIAL FENCE:- The mitre fence can be enhanced by adding a longer wooden sacrificial fence to the front of the sliding fence. The sacrificial fence can run all the way up to the cutter and can be used to prevent breakout on the back edge of the work piece.

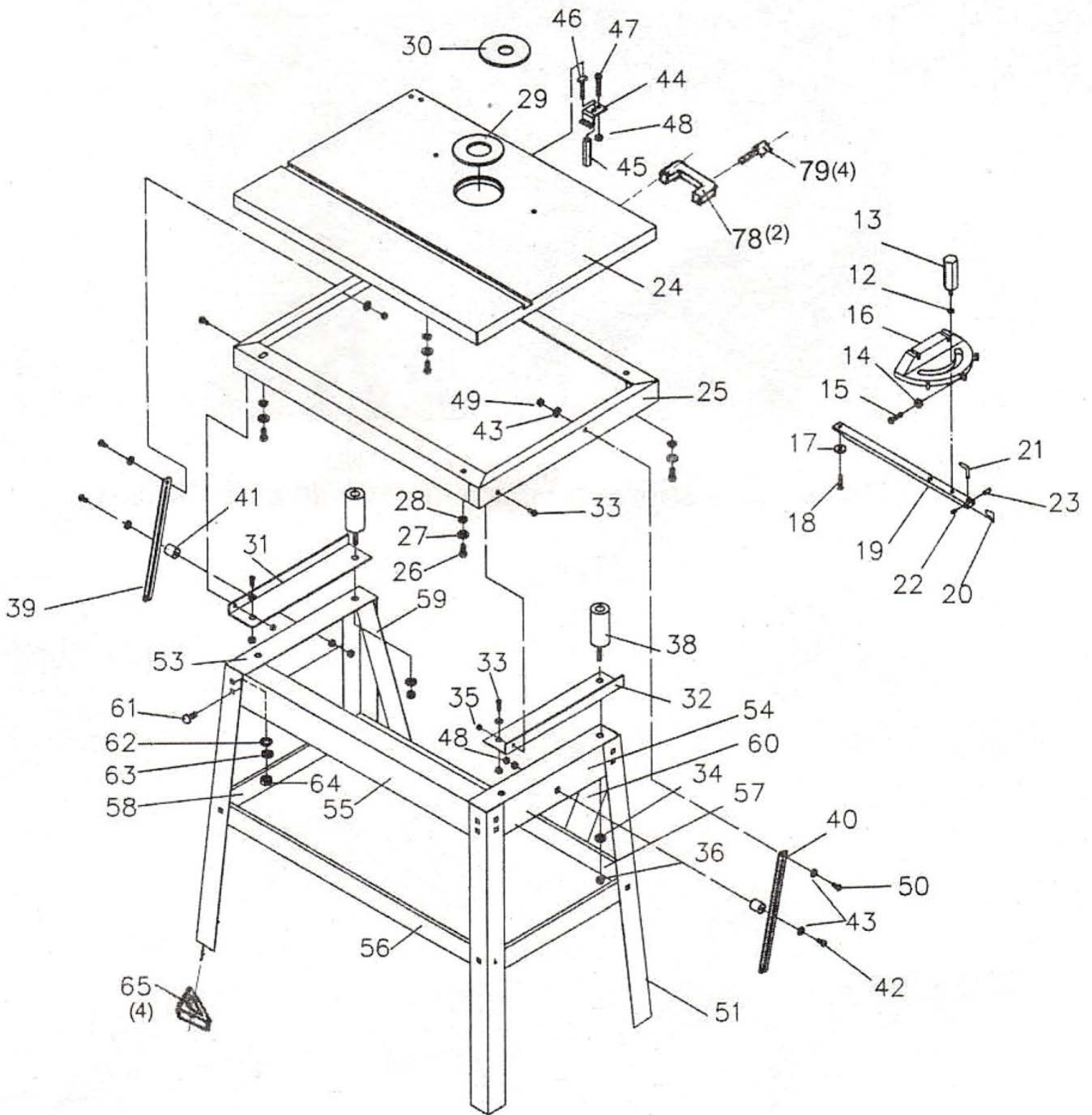
4) REMOVING A COMPLETE EDGE

If the complete edge is to be removed you may need to step the outfeed fence out to correctly support the work piece during the cut. To achieve this undo the two locking knobs on the back of the outfeed fence and insert one or more of the metal shims between the aluminium support and the wooden fence. There are a set of 4 shims provided with the table.



The shims vary in thickness and the set consists of 1 x 0.5mm, 2 x 1mm, 1 x 2mm. By using a combination of the shims, anything up to 4.5mm in 0.5mm increments can be set.

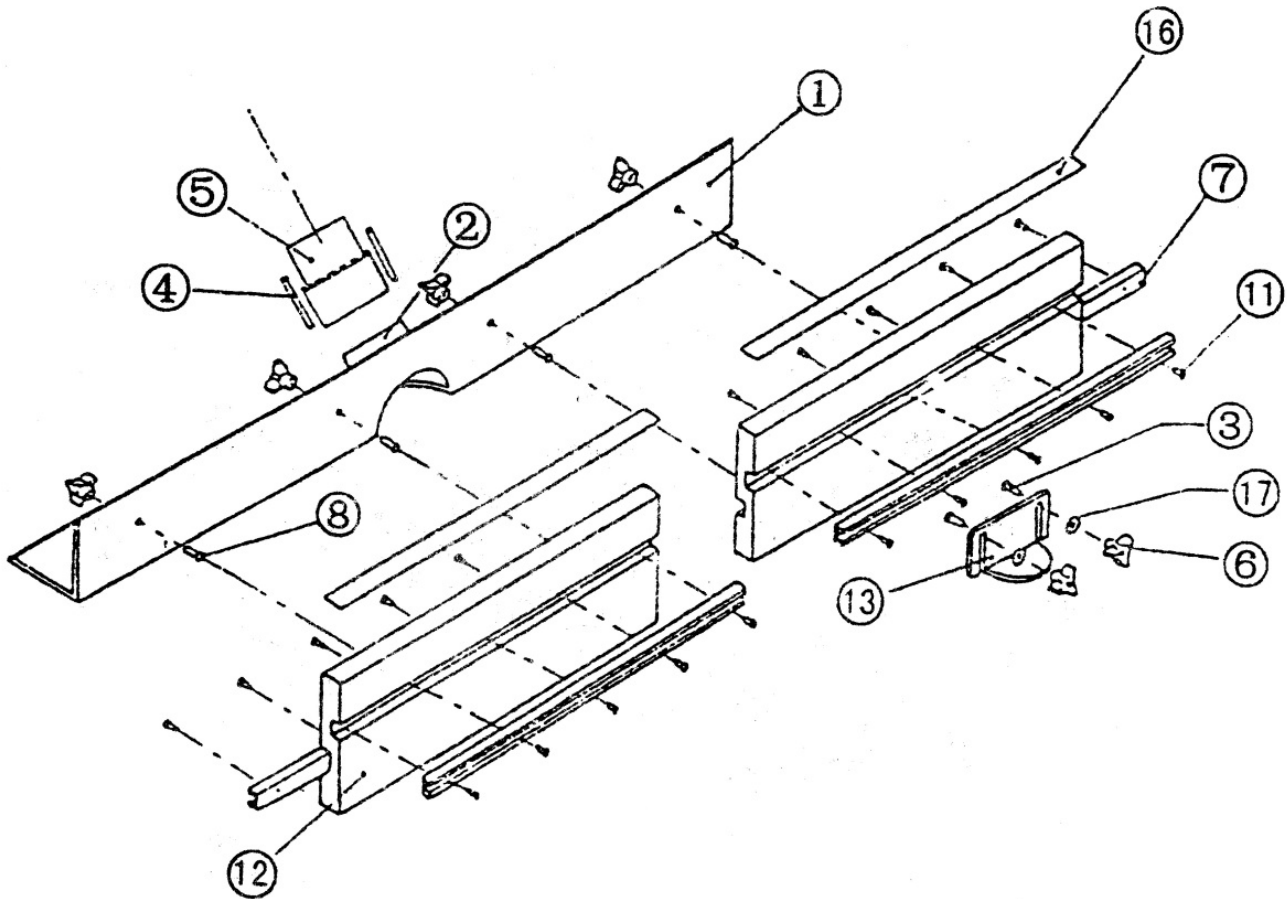
Charnwood W020 Parts Drawing



Charnwood W020 Parts List

No.	Description	No.	Description
12	Flat Washer	13	Mitre Gauge Handle
14	Hex Nut	15	Pozi Screw
16	Mitre Gauge Body	17	Sliding Block
18	Screw	19	Guide Bar
20	Locating Plate	21	Pointer
22	Set Screw	23	Roll Pin
24	Table Top	25	Table Frame
26	Hex Bolt	27	Lock Washer
28	Flat Washer	29	Table Insert 60mm
30	Table Insert 29mm	31	Table Left Support
32	Table Right Support	33	Hex Bolt
34	Flat Washer	35	Hex Nut
36	Hex Nut	38	Bumper
39	Left 45 degree Positioning Piece	40	Right 45 degree Positioning Piece
41	Positioning Piece	42	Round Head Screw
43	Flat Washer	44	Mounting Clamp
45	Clamp Lock	46	Hex Bolt
47	Hex Bolt	48	Hex Nut
49	Hex Lock Nut	50	Hex Bolt
51	Floor Stand Leg	53	Upper Left Angle Plate
54	Upper Right Angle Plate	55	Front Upper Brace
56	Front Lower Brace	57	Rear Lower Brace
58	Lower Side Brace	59	Left Bracket
60	Right Bracket	61	Carriage Bolt
62	Flat Washer	63	Lock Washer
64	Hex Nut	65	Rubber Feet
78	Arched Handle	79	Hex Socket Head Screw M6 x 20
80	Fence Measuring Scale	81	Set of Fence Shims
82	Centring Jig		

Charnwood W020 Fence Parts Drawing



No.	Description
B01	Aluminium Fence Support
B02	Black, Castellated Knobs
B03	Captive Bolt
B04	Pozi Head Screw
B05	Optional - Dust Port
B06	Black, Tri-wing Knob
B07	T-track
B08	Hex-head Bolt
B11	Countersunk Screw
B12	Fence
B13	Cutter Guard
B15	Black Castellated Knob
B17	Washer
B18	Feather board assembly
B19	Yellow Plastic Knob
B20	Washer



Woodworking machinery at its best!

**Charnwood, Cedar Court, Walker Road,
Hilltop Industrial Estate, Bardon Hill, Leicestershire, LE67 1TU**

**Tel. 01530 516 926 Fax. 01530 516 929
email: sales@charnwood.net website: www.charnwood.net**