



*Woodworking machinery at its best!*

# HEAVY DUTY ROUTER TABLE OWNERS MANUAL

**MODEL: W015**



**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](mailto:sales@charnwood.net) website: [www.charnwood.net](http://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.

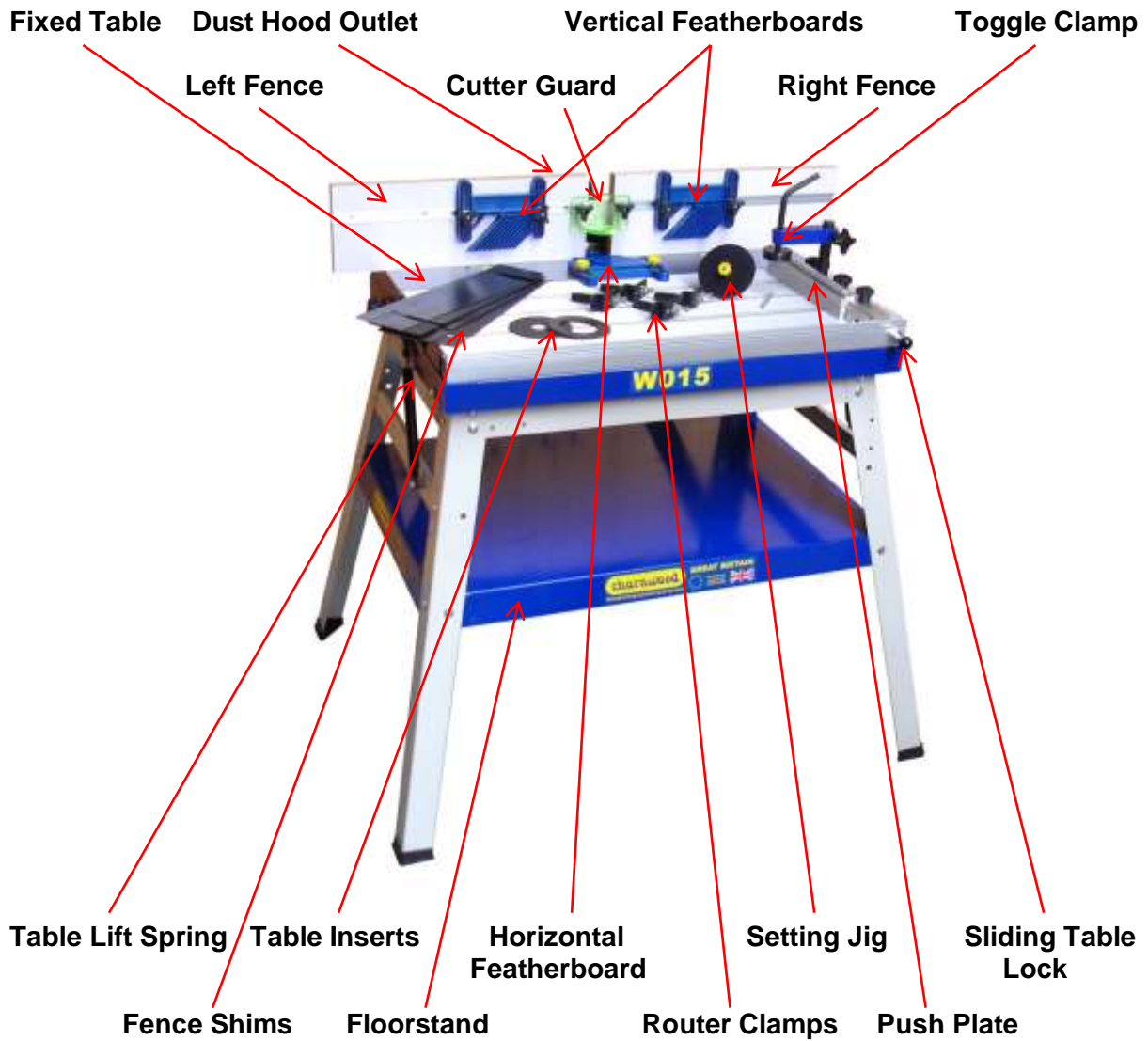
## **ADDITIONAL RULES FOR ROUTER TABLES**

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.

## **Specification**

Main Table Surface	780mm x 250mm
Sliding Table Surface	784mm x 310mm
Table Tilt	45 degrees
Table Aperture Diameter	100mm, 60mm & 30mm
Dust Outlet Diameter (Internal / External)	63mm / 69mm
Table Height	875mm
Net Weight	58kg
Gross Weight	60kg
Package Dimensions	890mm x 660mm x 200mm
Rating	Trade

# Overview of the Router Table



## Unpacking



All parts are packed in one carton.



Unpack the parts carefully and check that everything is present as shown.  
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 it to the leg stand.



# Assembly



**Important:** All nuts and bolts should only be fastened 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 as shown



Attach the four legs to the upper braces.

Ensure that the legs are on the outside and the front upper brace is on top of the both of the upper side braces.



Lay the leg assembly on the floor and attach the middle shelf.



Attach the two rear braces as shown.

Note: The position of the top fixing bolt is through the lower square hole.



Fit a rubber foot to each of the legs and place on a level surface.



Fit a table lift support rail to either side of the table.

Ensure that the hole is towards the front of the table.



Remove the protective film from the cast iron table. The surface is protected with oil which should be removed with a suitable degreaser, such as WD40.

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



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

With assistance, lift the table onto the stand so that the holes in the table side rails align with those in the upper side braces.

Note: The rubber bumpers will be situated at the rear of the table.



Attach the table side rails to the stand with two nuts & bolts and the rubber bumper bolts.

Now, check the table is level and tighten all the bolts on the floorstand.



Fit both table lift gas filled springs, starting with the bottom end first.

Attach the spring ends to the table lift support rail using an M8 bolt, washers and NyLoc nut.

Note: There should be one washer between the bolt head and the spring, and three washers between the cylinder and the rail. This ensures a clearance between the spring and the stand.

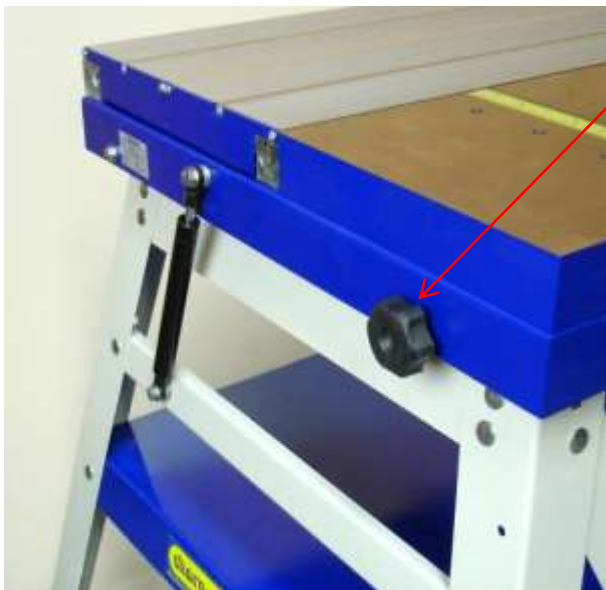




Note: Do not overtighten the NyLoc nuts as the spring needs to pivot.

Lift the table up and attach the top of the gas spring using the same configuration of bolts, washers and NyLoc nuts.

**DO NOT ATTEMPT TO CLOSE THE TABLE WITH ONLY ONE STRUT ATTACHED.**



When closing the table top it will be necessary to secure it in the lowered position using the two table locking knobs.



Attach the sliding carriage lock to the table by fitting a locking nut either side of the extrusion wall. This can then be adjusted to engage the hole in the sliding carriage rail.

The lock is engaged or disengaged by pulling forwards and turning through 90 degrees to locate the pin into the recess.



Assemble the Push Block as shown.

It is fixed to the sliding table with captive head bolts which slide into the corresponding slots in the table.

The block can be adjusted to suit the workpiece. Always ensure that the aluminium fence is kept clear of the cutter.

The use of a sacrificial fence is recommended to minimise breakout.

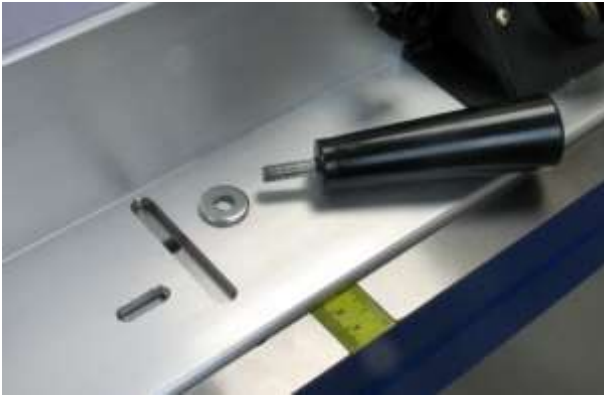
It will be necessary to set the fence accurately to 90 degrees using a square.



To set the Push Block to 45 degrees, remove the inner locking knob and reposition the bolt in the slot nearest to the fence.

Set accurately using a mitre square.

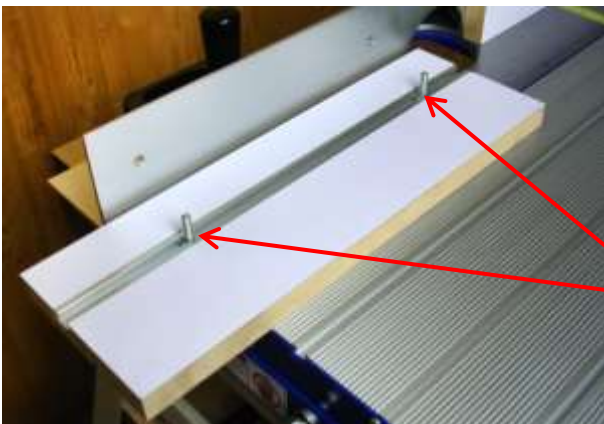
# Assembling The Fence



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.

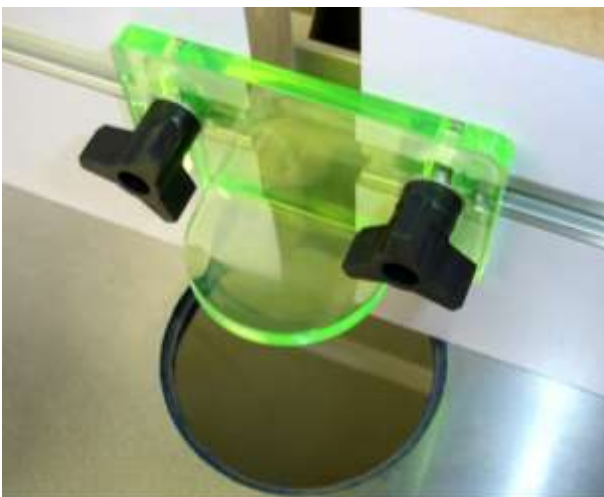
Secure with two washers and castellated knobs. Repeat for the other side of the fence.

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.



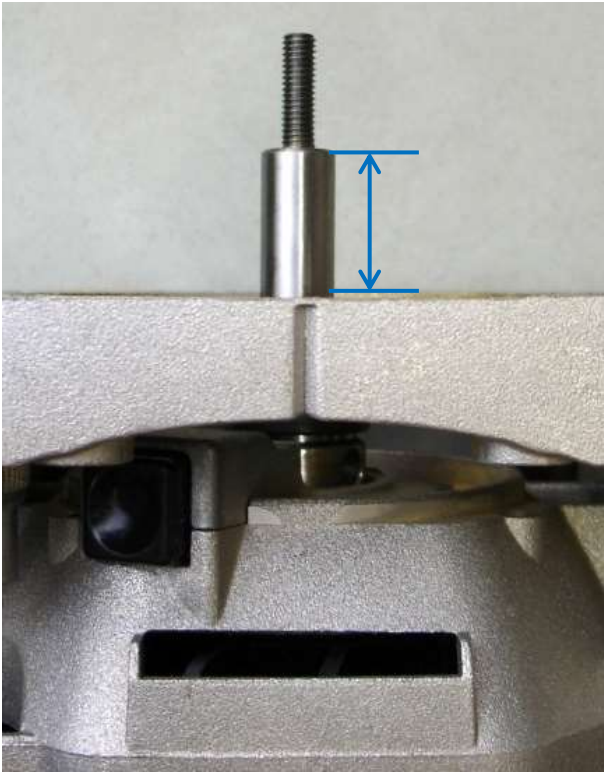
Take the two bolts that are fitted with tri-wing knobs and slide each bolt head into the channel in the front of the fence.

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.

# 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 1/4" & 1/2" collet routers.

Fully plunge the router and lock the appropriate 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.

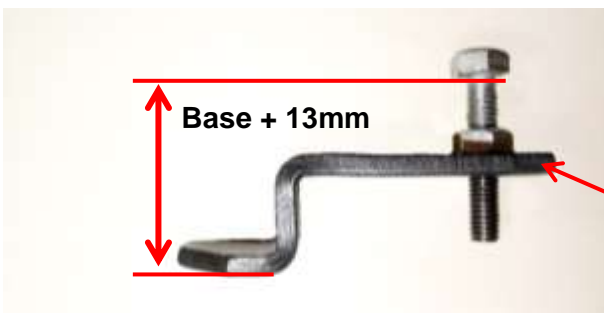
Holding the router in position, place the centring disc over the threaded shaft and then use the thumb screw to secure it.

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

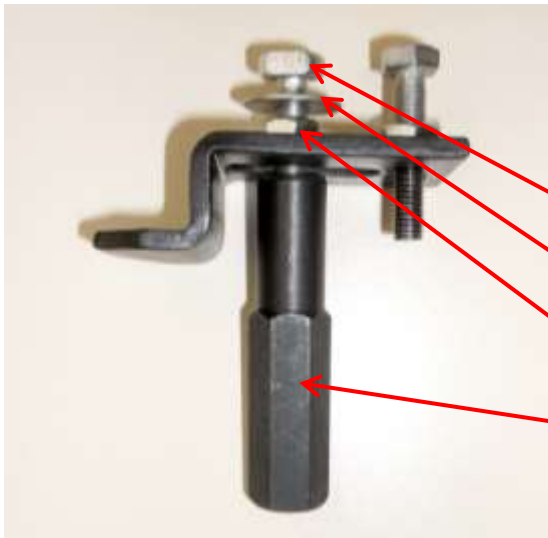
Rotate the router body to the most convenient position for access to the depth and speed controls. It might subsequently be necessary to adjust this position slightly to allow the four clamps to be positioned on convenient parts of the baseplate.

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



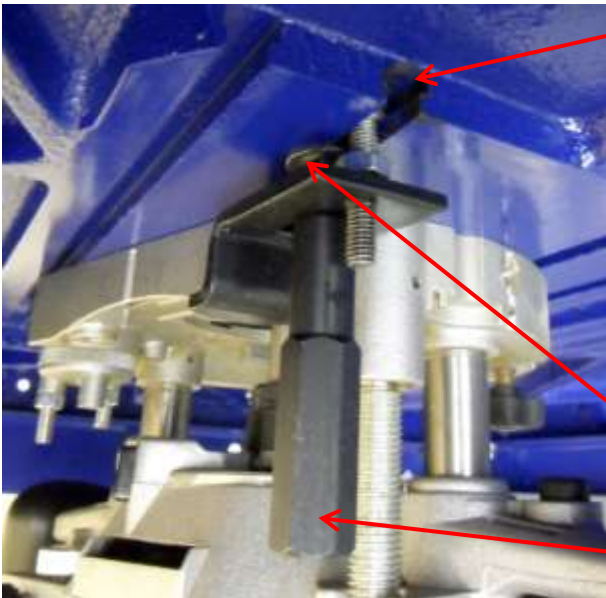
Add the clamp lock, locking nut, washer and bolt as shown.

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.

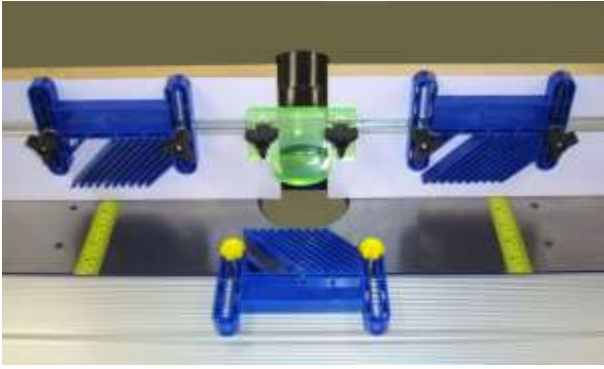
Now clamp the router to the table by tightening the 4 Clamp Locks, using a 14mm spanner.

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.



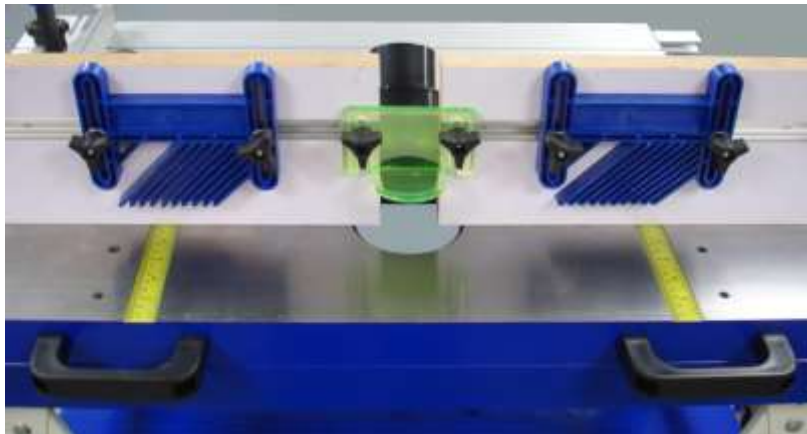
For safe and accurate routing, three feather boards have been supplied and these should be used whenever possible.

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. Set them so that the fingers are very lightly compressed against the workpiece.

## Working from the rear of the Table

When working with smaller pieces, it is possible to dispense with the sliding table, should the operator prefer to do so. This is achieved by reversing the fence and working from the rear.



Undo the two fence fixing knobs, turn the fence through 180 degrees and then refit it using the two tapped holes nearest to the sliding table. This will often result in a more comfortable working position as the need to reach over the sliding table is eliminated.

# 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 instances 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. Then 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. 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) 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.

## 4) USING THE SLIDING TABLE

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. The sliding table and push plate are used for these tasks.

**SET THE BACK FENCE** – Undo the two locking handles and move the fence back to a position where it will not interfere with the cut.

**ADJUST THE PUSH BLOCK** – The fence must be adjusted accurately using a square for 90 degree cuts or a mitre square for 45 degree cuts. The inner push block locking knob will need to be inserted through the centre hole for 90 degree cuts and through the inner hole for 45 degree cuts. Secure the work piece to the sliding table using the toggle clamp.

**SACRIFICIAL FENCE** – The push plate 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.



# 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.



## 100/75RC Extraction Adapter

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

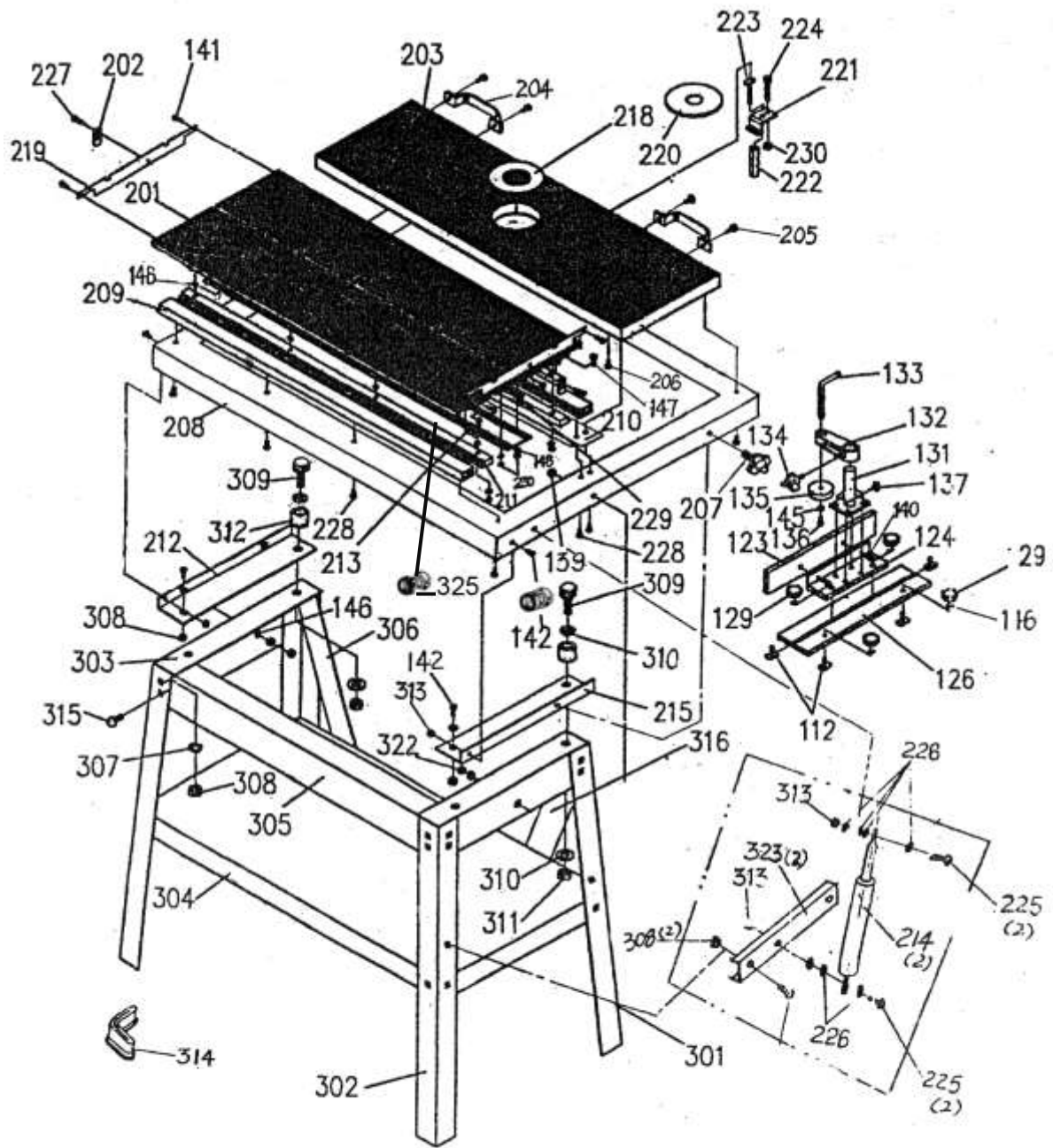


## W026 NVR Safety Switch

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.

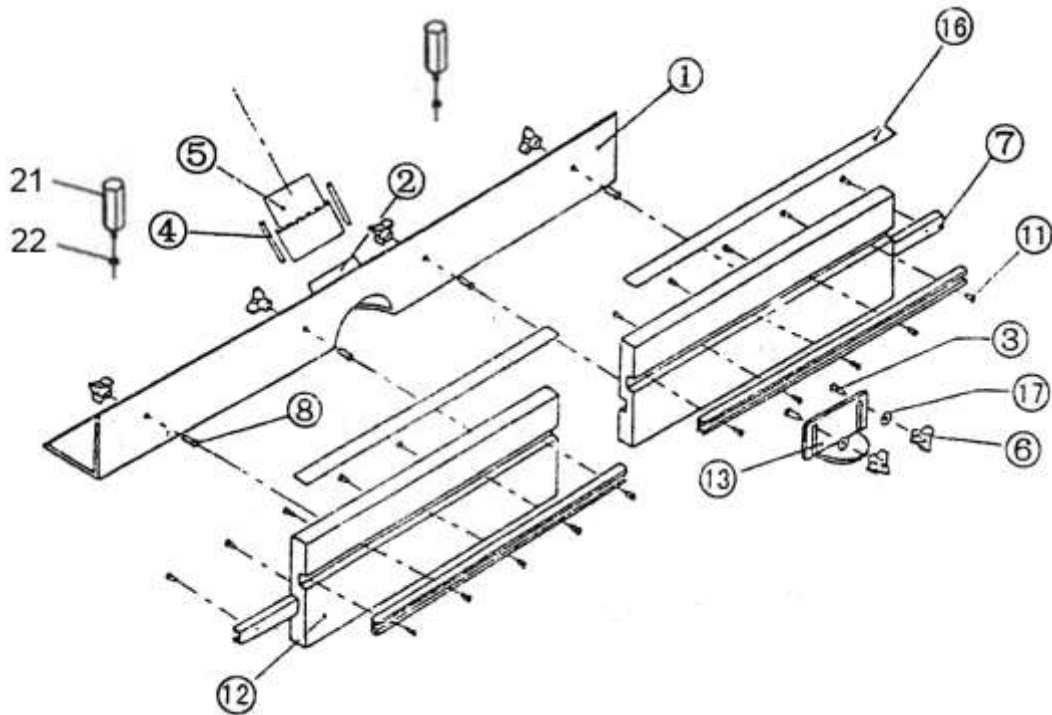
# Charnwood W015 Parts Drawing A



# Charnwood W015 Main Parts List

Part No	Description	Part No.	Description
112	Sliding Screw M6 x 20mm	123	Fence Plate
124	Clamp Holder	126	Short Fence
129	Knob Nut M6	131	Clamp Bracket
132	Bracket	133	Clamp Rod
134	Knob M6 x 20	135	Clamp Plate
136	Round Cross Head Screw M5 x 10mm	137	Hexagonal Socket Head Screw M6 x 12mm
139	NyLoc Nut M6	140	Hexagonal Screw M6 x 12mm
141	Round Cross Head Screw M5 x 12mm	142	Hexagonal Screw M8 x 25mm
143	Nut M5	145	Washer M5
146	Washer M6	147	Hexagonal Screw M6 x 25mm
201	Sliding Table	202	Upper Plate
203	Fixed Table	204	Lifting Handle
205	Hexagonal Socket Head Screw M6 x 20mm	206	Hexagonal Screw M8 x 20mm
207	Table Locking Knob M8 x 30mm	208	Frame
209	Slide Way	210	Middle Bracket
211	Slide Rail	212	Table Right Support
213	Fix Piece	214	Gas Filled Spring
215	Table side Rail	218	60mm Insert Plate
219	Guard	220	29mm Insert Plate
221	Motor Clamp Piece	222	Hexagonal Clamp Shaft
223	Sliding Screw M6 x 50mm	224	Hexagonal Screw M6 x 25mm
225	Hexagonal Screw M8 x 30mm	226	Thick Washer M8
227	Hexagonal Screw M6 x 12mm	228	Round Cross Head Screw M5 x 10mm
229	Hexagonal Screw M6 x 12mm	230	Nut M6
301	Floor Stand Leg	302	Floor Stand Leg
303	Upper Side Brace	304	Shelf
305	Front Upper Brace	306	Rear Brace
307	Washer M8	308	Nut M8
309	Hexagonal Socket Head Screw	310	Washer M8
311	Nut M8	312	Rubber Bumper
313	NyLoc Nut M8	314	Rubber Foot
315	Screw M8 x 12mm	316	Left Bracket
322	Nut M6	323	Table Lift Support Rail
325	Carriage Lock Bolt Assembly	326	Router Setting Jig
327	Fence Shim Set		

# Charnwood W015 Fence Parts Drawing B



## Parts List B

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
B21	Fence Fixing Handle
B22	Washer for Fence Handle

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