

Gladiator®

WOODWORKER



© 1206

10" TABLE SAW Model CTS11

Operating & Maintenance
Instructions

ClarkeTM INTERNATIONAL

This is an important document, and should be retained.



DECLARATION OF CONFORMITY

We declare that this product complies to the following standards/directives:

- **98/37/EC (ANNEX 4)**

CERTIFICATE No. BM 6008940 0001
REPORT No. 17700687 001

Issued by TÜV Rheinland Product Safety GmbH,
Am Grauen Stein, D-51105 Köln

Sound Power Level: **112.3 dBL_{WA}**
Product Description: **10" (254mm) Table Saw**
Model Number: **CTS11**
Serial (Batch) No: **See product data plate**

Signed _____


Clarke INTERNATIONAL
Hemnal Street, Epping, Essex CM16 4LG

Clarke International is a trading style of Clarke International Limited

Thank you for purchasing your new CLARKE 10" TABLE SAW, which is designed for DIY, and hobby use ONLY.

Before attempting to operate this machine, please read this instruction manual thoroughly and follow all directions carefully. In doing so you will ensure the safety of both yourself and others around you, and, at the same time, you should look forward to it providing long and trouble free service.

GUARANTEE

This product is guaranteed against faults in manufacture for 12 months from purchase date. Keep your receipt as proof of purchase. This guarantee is invalid if the product has been found to have been abused in any way, or not used for the purpose for which it was intended, or to have been tampered with in any way. The reason for return must be clearly stated. This guarantee does not affect your statutory rights.

CONTENTS

Specifications	4
Safety Instructions	5
Electrical Connections	8
Features	9
Glossary of Terms	10
Unpacking and Checking Contents	11
Assembly	12
Mounting the Saw	16
Important Checks before Starting	18
Operation	18
Starting & Stopping	18
Adjustments	19
Cutting Methods	22
Maintenance	26
Changing the Blade	26
Renewal Motor Brush	27
Trouble Shooting	28
Parts Lists and Diagrams	29

SPECIFICATIONS

Model No	CTS11
Part No.....	6500753
Motor	230V~ 50Hz 1ph
Power rating	1.5Kw
Speed	4435 rpm
Fuse rating	13 Amps
Saw Blade	10" dia. (254x16mm) TCT
Maximum depth of cut at 0°	75 mm
Maximum depth of cut at 45°	55 mm
Product Weight	23.5 kg
Noise level at operating position	112.3dB LWA (under load)
Dimensions (LxWxH)	668 x 468 x 301 mm
Dimensions (LxWxH) with extensions ...	848 x 730 x 301 mm

Use of machine

This machine is designed to rip and cross cut wood exclusively, up to a maximum thickness of 75mm.

For correct operation it must be fixed and operated as laid down in this manual.

This saw is intended for DIY, and hobby use ONLY.

Restrictions of use

This saw is NOT suitable for cutting:

- Timber greater than 75mm in thickness.
- Metal, Stone, Rubber, Plastic, Bones, Etc.
- Logs or round timber.

DO NOT use to rebate, tenon, mould or groove.

DO NOT fit any other tool or combination of blades.

DO NOT use as a free standing machine or as a hand held machine.

DO NOT modify the machine or its guards/controls in any way.

DO NOT use with any covers/guards removed.



When disposing of this product, it must be disposed of according to law. Do not dispose of with general waste.

SAFETY INSTRUCTIONS

KEEP WORK AREA CLEAN : Cluttered areas and benches invite injuries.

CONSIDER WORK AREA ENVIRONMENT: Do not expose power tools to rain. Do not use power tools in damp, or wet locations. Keep the work area well lit. Do not use this saw in the presence of flammable liquids or gases.

GUARD AGAINST ELECTRIC SHOCK: Avoid body contact with earthed, or grounded surfaces, e.g. pipes, radiators, ranges, refrigerators etc.

KEEP CHILDREN AWAY: Do not let children, or persons not involved in the work, touch the tool, or the extension lead and keep them away from the work area.

STORE IDLE TOOLS: When not in use, all tools should be stored in a dry, locked up place, out of reach of children.

DO NOT FORCE THE TOOL: It will do the job better and safer at the rate for which it was intended.

USE THE RIGHT TOOL: Do not force small tools, to do the job of a heavy duty tool. Do not use tools for purposes not intended.

DRESS PROPERLY: Do not wear loose clothing, or jewellery that can be caught in moving parts. Non-skid footwear is recommended when working outdoors. Wear protective hair covering to contain long hair.

SAFETY GLASSES: Use safety glasses when operating this tool.

DUST MASKS: If the work is dusty, use dust masks to reduce the risk of inhalation of harmful dust.

CONNECT DUST EXTRACTION EQUIPMENT: Always connect a suitable vacuum cleaner attachment.

PROTECT YOUR EARS: Hearing protection should be worn when using this tool.

DO NOT ABUSE THE MAINS LEAD: Never pull the mains lead to disconnect it from the mains socket. Keep the mains lead away from heat, oil and sharp edges.

SECURE THE WORK: Use clamps, or vices to hold the workpiece. It is safer than using your hand.

DO NOT OVERREACH: Keep proper footing and balance at all times.

MAINTAIN TOOLS WITH CARE: Keep the blade clean for better and safer performance. Follow the instructions for changing the blade. Inspect the mains lead periodically and if damaged have it repaired by an authorised service facility. Inspect extension leads periodically and replace if damaged. Keep all handles and grips dry, clean and free from oil and grease.

DISCONNECT TOOLS: Disconnect tools from mains supply when not in use, before servicing and when changing accessories such as blades.

REMOVE ADJUSTING KEYS AND WRENCHES: Form the habit of checking to see that all keys and adjusting wrenches are removed from the tool before turning it on.

TRANSPORTING THE TABLE SAW: When moving or transporting the table saw, only lift from the table top. Do not use the blade guard for lifting, moving or transporting the saw.

SAFETY INSTRUCTIONS

USE OUTDOOR EXTENSION LEADS: When the tool is used outdoors, use only extension leads intended for outdoor use and so marked. Always make sure that the extension lead is suitably rated for the tool. Position the extension lead so that it does not create a hazard.

STAY ALERT: Watch what you are doing. Use common sense. Do not operate tools when you are tired.

CHECK DAMAGED PARTS: Before further use of the tool, any part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, free running of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. Any part that is damaged should be properly repaired, or replaced, by authorised service personnel, unless otherwise indicated in this User Guide. Have defective switches replaced by authorised service personnel. Do not use the tool if the switch does not turn it on and off.

WARNING: The use of any accessory, or attachment, other than those recommended in this User Guide, may present a risk of personal injury.

HAVE YOUR TOOL REPAIRED BY A QUALIFIED PERSON: This electric tool is in accordance with the relevant safety requirements. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

SAW BLADES: Do not use saw blades which are damaged or deformed. Use only saw blades recommended by the manufacturer which conform to EN847-1 . Do not use High Speed Steel (HSS) blades. Use only saw blades for which the maximum possible speed is not less than the maximum spindle speed (no load speed) of the table saw and the material to be cut.

USE THE BLADE GUARD: Make sure that the blade guard moves freely on its pivot point and that the front of the guard is always in contact with the saw table when not cutting. Always use the blade guard and riving knife for every operation.

NEVER: Use this saw for non-through cutting operations.

SUITABLE MATERIALS: Do not use the saw to cut materials other than wood.

MAXIMUM DEPTH OF CUT: The maximum depth of cut of this table saw is 75 mm. See the Product Specification on page 4.

PROVIDE ADEQUATE SUPPORT FOR LONG WORKPIECES: Provide adequate support to the rear and sides of the saw table for wide, or long pieces of work. Saw horses or similar devices should be used to prevent the ends of the workpiece from drooping.

ASSEMBLY: Do not operate this saw until it has been fully assembled and correctly prepared for use in accordance with the instructions in this User Guide.

MIND YOUR HANDS: Keep your hands well away from the blade area at all times. Do not place them in the path of the blade when operating the saw.

WEAR GLOVES: Wear gloves when handling saw blades and rough material. Saw blades should be carried in a holder whenever practical.

SECURE HANDLES AND CLAMPS: Make sure that all handles, clamps and guards are securely fitted before operating the saw. Do not perform any cutting operation freehand.

SAFETY INSTRUCTIONS

USE THE MITRE GAUGE: Always hold the work firmly against the mitre gauge fence when cross cutting.

LOCK THE GUIDES: Always ensure the rip fence guide is securely fastened when in use.

USE A PUSH STICK: Use a push-stick to feed the workpiece past the saw blade. The push stick should always be stored with the machine when not in use.

DO NOT WORK FREE-HAND: Never perform any operation 'free-hand' i.e. do not use your hands alone to support, or guide the workpiece. Always use either the parallel fence guide, or the mitre gauge (as appropriate) to position and guide the work.

STAY CLEAR : Never stand, or have any part of your body in line with the path of the saw blade. A small cut-off piece could be caught by the back of the blade and thrown towards the operator. Stand to one side of the blade. Keep your hands out of the line of the saw blade.

CROSSCUTTING: Move the parallel fence guide out of the way when crosscutting. Never use the parallel fence guide as a cut-off gauge when crosscutting.

SWITCH OFF: If off-cuts of wood become jammed in the machine, switch off and disconnect from the mains supply before removal.

STALLED BLADE: If the blade stalls, or stops while cutting, **switch off** and disconnect from the mains supply before attempting to free the blade.

RIPPING: When ripping or bevel ripping, always use the parallel fence guide, together with the push stick. Never make these cuts freehand. The blade could bind in the cut and cause a **kickback**.

MOUNTING THE SAW TABLE: Mount the table saw to the stand or workbench before performing any cutting operations.

REMOVE THE MITRE GAUGE: Remove the mitre gauge from the table during any cutting operations which involve the parallel fence guide.

MAXIMUM BLADE EXTENSION: Have the blade extended to approximately 22mm above the top of the workpiece. Additional blade exposure would be potentially dangerous.

DO NOT REACH OVER: Do not reach over, or behind the blade for any reason.

SMALL PIECES AND TRAPPED PIECES: Do not pick up small pieces of cut-off material from the table. Remove them by pushing them off the table with the push stick. They could be thrown back at you by the rear of the blade. Do not remove small pieces of cut-off material that may become trapped inside the blade guard while the saw is running. This could endanger your hands, or cause a **kickback**. Turn the saw OFF and when the blade has stopped turning, lift the guard and remove the piece of debris.

REBATING AND GROOVING: Rebating and grooving should not be undertaken on the saw.

SLOTING: The table saw must not be used for slotting (stopped groove).

ELECTRICAL CONNECTIONS



WARNING! THIS APPLIANCE MUST BE EARTHED.

Connect the mains lead to a 230 volt (50Hz) domestic electrical supply via a standard 13 amp BS 1363 plug fitted with a 13 amp fuse, or a suitably fused isolator switch.

IMPORTANT: The wires in the mains lead are coloured in accordance with the following code:

Green & Yellow - Earth
Blue - Neutral
Brown - Live

As the colours of the flexible cord of this appliance may not correspond with the coloured markings identifying terminals in your plug, proceed as follows:

Connect GREEN & YELLOW coloured cord to plug terminal marked with a letter "E" or Earth symbol '⏏' or coloured GREEN or GREEN & YELLOW.

Connect BROWN coloured cord to plug terminal marked letter "L" or coloured RED.

Connect BLUE coloured cord to plug terminal marked letter "N" or coloured BLACK.

We strongly recommend that this unit is connected to the mains supply via a Residual Current Device (RCD).

IMPORTANT!

If this appliance is fitted with a plug which is moulded onto the electric cable (i.e. non-re-wireable) please note:

1. The plug must be thrown away if it is cut from the electric cable. There is a danger of electric shock if it is subsequently inserted into a socket outlet.
2. Never use the plug without the fuse cover fitted.
3. Should you wish to replace a detachable fuse carrier, ensure that the correct replacement is used (as indicated by marking or colour code).
4. Replacement fuse covers can be obtained from your local dealer or most electrical stockists.

Fuse Rating

The fuse in the plug must be replaced with one of the same rating (**13 amps**) and this replacement must be ASTA approved to BS1362.

Extension Cable

If an extension cable is fitted, ensure the minimum cross section of the conductor is 1.5mm² for up to 15 metres in length, and 2.5mm² for up to 25 metres.

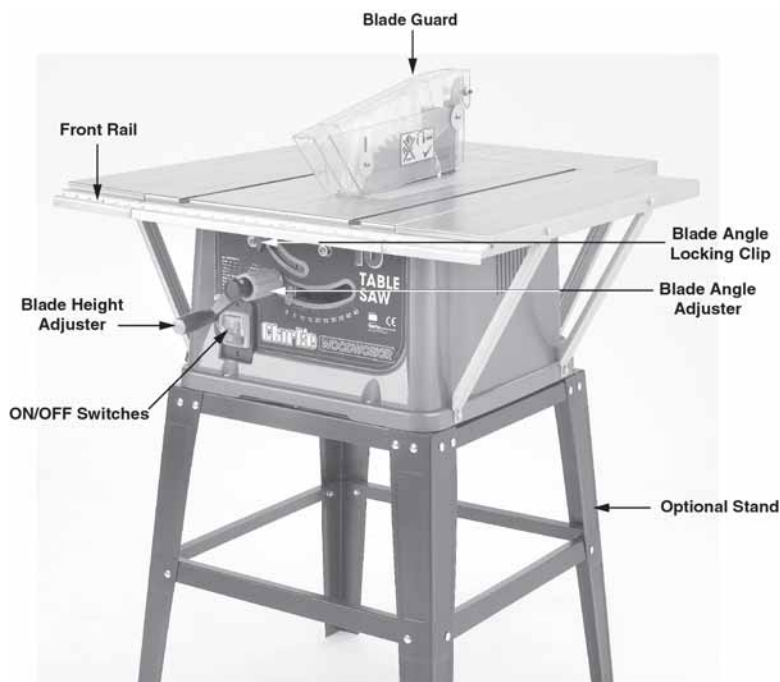


WARNING:

If the power cable is worn or cut, or damaged in any way, have it replaced

FEATURES

Fig.1



1. The switch panel incorporates the ON and OFF switches.
2. A dust extraction port is provided at the rear of the machine. A vacuum extractor with a suitable flexible hose (30mm diameter), may be connected if required.
3. The table is provided with two slots, one each side of the saw blade, running front to back. These slots are for use with the mitre gauge when cross cutting either square or mitres and is explained under 'Operation'. A scale on the mitre gauge indicates the angle at which the workpiece is being mitred.
4. Four holes are provided in the base so that the saw may be bolted to a table stand. Please note that the machine **MUST** be firmly secured to either a workbench or a stand to ensure its complete stability.

NOTE: The stand illustrated is designed specifically for the CTS11 and is available from your Clarke dealer.

5. The blade height adjuster raises or lowers the blade.
6. The blade angle adjuster, allows the saw blade to be tilted to any angle from 0° to 45° , as shown on the scale on the front panel.
7. The rip fence is for use when rip cutting timber. It locates on the front rail and can be easily moved or locked in place by pushing the locking handle down.
8. A mitre gauge assembly may be used either side of the saw blade, the mitre gauge fence allows the workpiece to be held at any angle for accurate cross cutting.
9. The blade guard protects the operator and must **ALWAYS** be in place and working properly.

WARNING: THIS MACHINE IS NOT DESIGNED FOR 'NON-THROUGH CUTTING' OPERATIONS

10. The table insert is removable to facilitate the installation or removal of the saw blade, and must **ALWAYS** be in place when the table saw is being used.

GLOSSARY OF TERMS

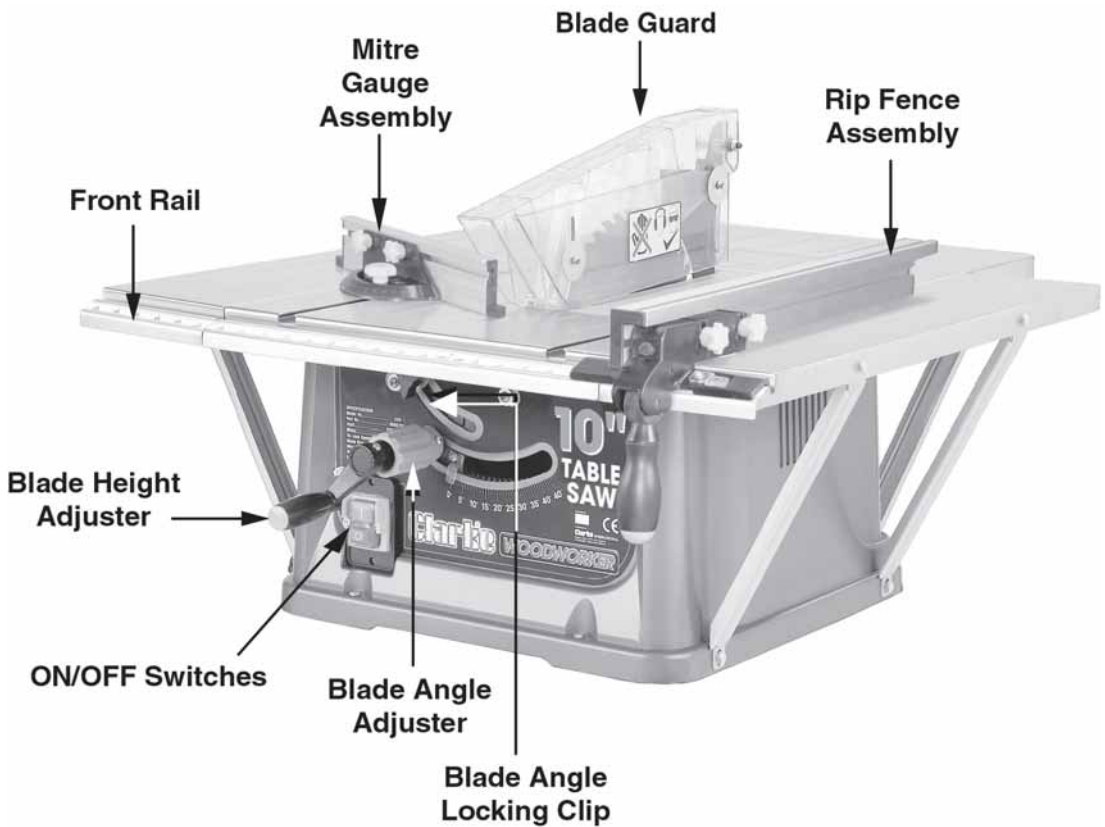
Crosscut	A cutting operation made across the width of the workpiece - across the grain.
Featherboard	A device which can help guide workpieces during rip type operation.
Heel	Misalignment of the blade.
Kerf	The amount of material removed by the blade in a through cut.
Kickback	An uncontrolled grabbing, and throwing of the workpiece back toward the front of the saw during a rip type operation.
Leading End	The end of the workpiece which, during a rip type operation, is pushed into the cutting tool first.
Push Stick	A device used to feed the workpiece through the saw during narrow ripping type operation and which helps keep the operator's hands well away from the blade.
Push Block	A device used for ripping type operations too narrow to allow use of a push stick.
Rabbet	A notch in the edge of a workpiece.
Ripping	A cutting operation along the length of the workpiece - in the direction of the grain.
Riving Knife	Positioned behind the saw blade to prevent wood closing and jamming after being cut.

UNPACKING AND CHECKING CONTENTS

The Table Saw is shipped complete in one carton.

Separate all parts from the packing materials and check to ensure that all components are accounted for, according to the following list, before discarding any packing material.

Fig.2



Should any component be missing or damaged in transit, please contact your CLARKE dealer immediately, or CLARKE Customer Service Department on 020 8558 7400

WARNING!

DO NOT plug the table saw into the mains until it is fully assembled and checks made according to these instructions.

ASSEMBLY

IMPORTANT:

Take great care to avoid contact with the saw teeth which are extremely sharp when performing the following operations.

Handle

1. Attach the handle to the blade angle adjuster as shown.
2. Use the screw to secure the handle to the shaft.



Fig. 3

Table Extensions

1. Lower the blade as far as possible.
2. Carefully turn over the table saw so that it rests on its table and remove the bottom grille.
3. Attach 2 short extension support struts, to each side with a single M6x15 bolt, using a flat and spring washer on the inside.

DO NOT tighten at this stage.

4. Attach each Table Extension, noting that they are 'handed' i.e. left hand and right hand, due to the positioning of the support strut securing holes.
5. Secure each extension to the table with bolts with washers, taking great care NOT to cross thread the bolts.

Attach the support struts to each extension. Tighten the nuts whilst pushing down on the extension, to ensure it lies flat and level with the table.

6. Repeat the process using the 2 long extension support struts and the rear table extension.
7. Replace the bottom grille and, with assistance, turn the table saw on to its base.

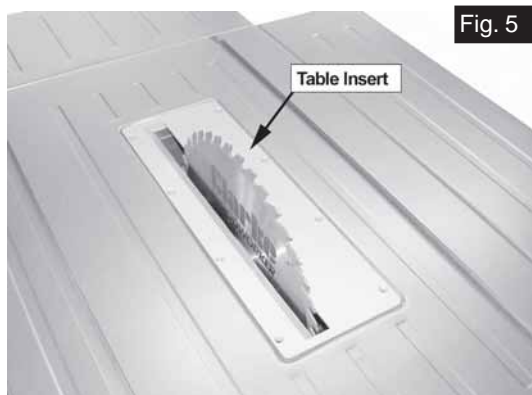


Fig. 4

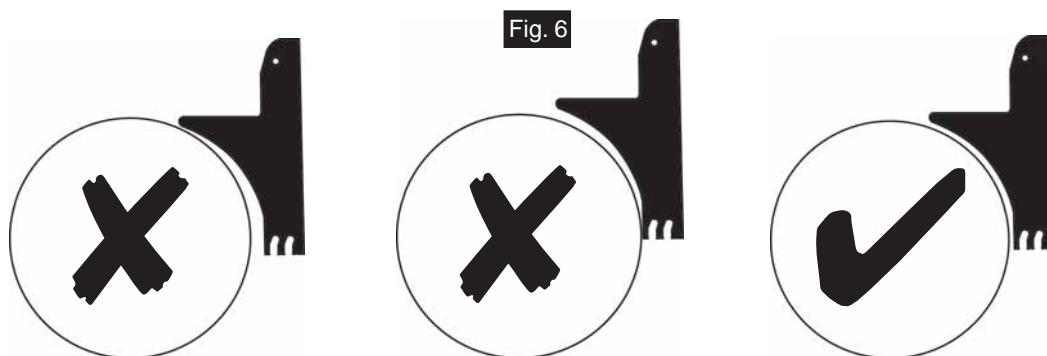
NOTE: If the optional stand is to be used, the saw should be bolted to it at this stage.

Riving Knife

1. Remove the table insert.



2. Raise the blade as far as possible. You may find it helpful to adjust the blade angle, so that the blade lays on its side.
3. Slide the Riving Knife into position, and adjust the Riving knife so that a clearance of no more than 5mm exists between blade and knife, and along the full length of the riving knife, as shown in Fig. 5



4. Tighten the riving knife securing bolts as shown in Fig. 4.



5. When satisfied, tighten the riving knife securing bolt before replacing the Table Insert.

Note:

Make sure that the Riving Knife is directly in line with the blade at all times. If at any time it becomes misaligned, it must be straightened before the table saw is used.

Fitting The Blade Guard

Fig. 8

1. Raise the saw blade as far as possible.
 2. Attach the blade guard to the riving knife, as shown.
- The guard should be secure, but capable of dropping under its own weight.



Rip Fence

The rip fence has the following parts:

- A. The handle assembly 'A'
- B. The fence 'B'
- C. Two fixings, each comprising a coach bolt and securing knobs 'C'.

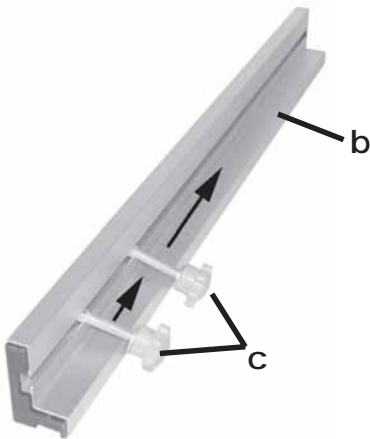


Fig. 9



1. Slide the two coach bolts (c) into the fence (b) as shown above.
2. Place the fence onto the handle assembly, making sure that the two coach bolts locate into the slots provided.
3. Tighten the securing knobs (c) to fix the fence to the handle assembly.

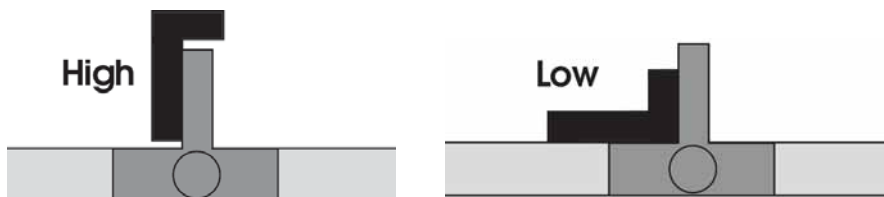


Fig. 10

Note: The rip Fence has two slots, allowing the fence to be attached in the 'high' or 'low' position

Dust Outlet

1. Connect a vacuum cleaner hose to the dust outlet port on the rear of the table saw.



MOUNTING THE SAW

IMPORTANT

If the saw is to be a permanent fixture, ensure it is sited in an area with adequate illumination and power supply.

DO NOT place it where you will be working in your own shadow, or where extension cables are required - these are hazardous in a workshop environment.

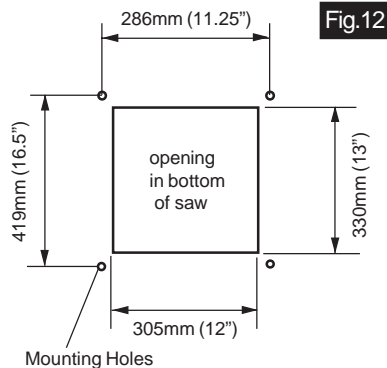
If the table saw is to be used in a permanent location, it should be fastened securely to a firm supporting surface such as a stand or workbench, using the four mounting holes in the base.

A Floor Stand, specially designed for your CTS11 Table Saw is available from your CLARKE dealer .

Holes should be drilled through the supporting surface of the workbench using the dimensions illustrated and the machine should be bolted down firmly.

If a VACUUM DUST EXTRACTION device is not to be used, an opening **MUST** also be made in the workbench, the same size as the opening in the bottom of the saw. (which houses the Bottom Grid). This is in order to allow the saw dust to drop through.

Dimensions of the opening are shown in Fig.12.



IMPORTANT

Ensure the Bottom Grid is in place when bolting the machine to the workbench.

1. Each of the four mounting holes should be bolted securely using 8mm bolts (not included) which should be 12mm longer than the thickness of the bench top.
2. Locate and mark where the saw is to be mounted.
3. Drill four (4) 10mm diameter holes through workbench.
4. Place the table saw on the workbench aligning the holes in the base with the holes drilled in the workbench.
5. Insert four (4) 8mm bolts and tighten.

Mounting to Plywood

An alternative method of securing your table saw is to fasten the saw base to a mounting board, 600x600mm minimum size, to prevent the saw from tipping whilst in use. A good grade of plywood with a minimum thickness of 19mm is recommended.

1. Follow the instructions for mounting to a workbench, substituting a plywood board with a minimum size of 600x600mm.

The opening in the board should be the same as that shown in the diagram above.

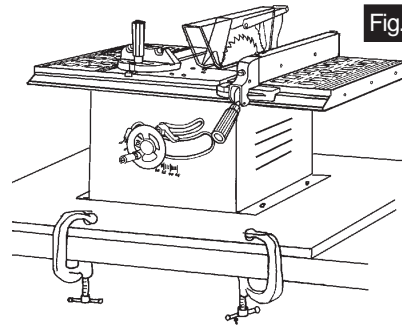
To secure the table saw to the plywood board use 8mm countersunk screws with lock washers and hex nuts (not included). Screw length must be at least 12mm more than the thickness of the mounting board.

NOTE: For proper stability, holes must be counter sunk on the underside of the plywood so that screw heads are flush with the bottom surface of the mounting board.

IMPORTANT

Ensure the Bottom Grid is in place when bolting the machine to the workbench.

2. Securely clamp the board to a workbench using two or more "G" clamps, as illustrated in Fig. 13.



IMPORTANT CHECKS - BEFORE STARTING

IMPORTANT:

Before attempting to use the machine, it is necessary to ensure the various components are correctly adjusted, and securely fitted.

- Make sure the Saw is fitted to the bench or stand securely.
- Make sure that the blade is securely fitted.
- Make sure that the blade guard is fitted securely and is capable of dropping under its own weight.
- Remove all tools and pieces of wood from the top of the table.
- If the rip fence is being used, make sure it is secure.
- Make sure the saw blade is at the required height and that the angle lock knob is tight before use.

OPERATION

Starting And Stopping The Machine

The ON and OFF switches are located on the front of the table saw.

1. Plug the mains plug into the mains supply.
2. Press the Green button of (I).
 - The table saw will now start. Always allow the blade to reach full speed before performing any cutting operations.

To switch the saw off:

4. Push the Red button (O).
 - The table saw will stop.

NOTE: The blade will continue to rotate for a few seconds after the saw has been switched off.

If, during use, the power is interrupted for any reason, the table saw will automatically switch OFF.

- It will not start again when power is restored.

You can restart the table saw by pressing the Green ON button.

Overload Cut-Out

Your machine also features an overload cut-out device, so that if the machine is overloaded (due to feed pressure being too great, a dull blade or low voltage etc.), the overload relay will intervene and the motor will automatically cut out. In this event:

- a. Disconnect from the mains supply.
- b. Allow the motor to cool for at least five minutes.
- c. Push the reset button, adjacent to the ON/OFF switches, which resets the overload device.
- d. Plug the machine back into the mains supply, and switch the saw back on.

WARNING!

THE MACHINE MUST BE IN THE OFF POSITION, AND THE PLUG REMOVED FROM THE POWER SOURCE WHILST COOLING DOWN TAKES PLACE. THIS PREVENTS ACCIDENTAL STARTING WHEN THE RESET BUTTON IS PUSHED, AS THE NO VOLT RELEASE WILL NOT HAVE TRIPPED .

ADJUSTMENTS

Changing The Blade Height

Turn the blade height handle to adjust the height of the blade.

- Rotate the blade height adjuster clockwise to lower the blade.
- Rotate the blade height adjuster anticlockwise to raise the blade.



Changing The Blade Angle (Bevel Cutting)

Turn the blade angle adjustment dial to adjust the angle of the blade (0-45 degrees).

1. Loosen, the blade angle locking knob.
 - Rotate the blade angle adjuster clockwise to increase the angle.
 - Rotate the blade angle adjuster anticlockwise to decrease the angle.
2. Tighten the blade angle locking knob.



Using The Mitre Gauge

1. Slide the securing bolts into the slot on the fence as shown.
2. Slide the mitre gauge assembly into one of the slots on the table.
3. Loosen the Locking knob and set the mitre gauge to the required angle.
4. Tighten the Locking knob.
5. The mitre gauge is suitable for most applications but for extra accuracy, a protractor or other measuring device should be used when setting the cutting angle. Test the accuracy of the angle on a piece of scrap material before cutting the workpiece.

Fig. 16

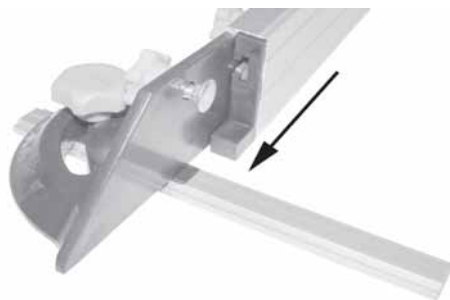
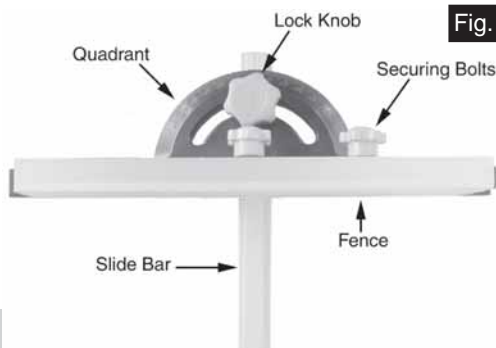


Fig. 17

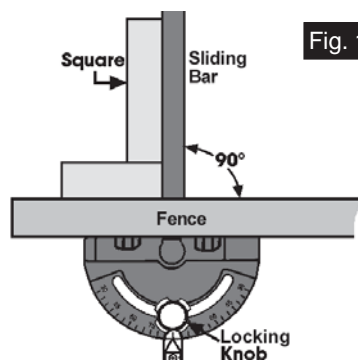


Mitre Gauge Adjustment

To produce an accurate cut at 90° you should check the gauge as follows:

1. Loosen the lock knob and, using a set square as shown, set the slide bar at 90° to the body.
 2. Tighten the Locking knob and re-check with the square to ensure no movement has taken place during the tightening process.
- The graduations on the mitre gauge provide accuracy for average woodworking. In some cases where extreme accuracy is required, make a trial cut and then recheck it with an accurate square or protractor.
 - When using the left hand groove, hold the workpiece firmly against the mitre gauge head with your left hand, and push with your right hand.
 - When using the right hand groove, hold the work piece with the right hand and push with the left.

Fig. 18



WARNING: THE RIP FENCE MUST BE REMOVED FROM THE TABLE WHEN USING THE MITRE GAUGE.

Adjusting The Rip Fence

1. Lift the fence handle up.
2. Slide the rip fence to the position you require.
3. Push the fence handle down to lock into place.

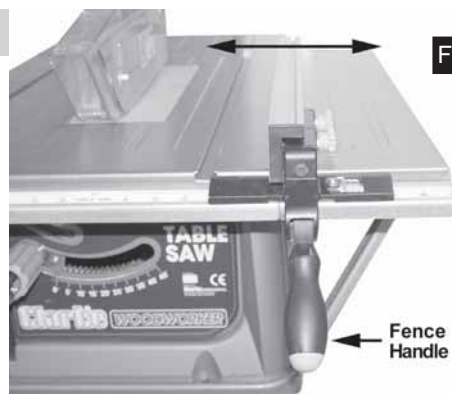


Fig. 19

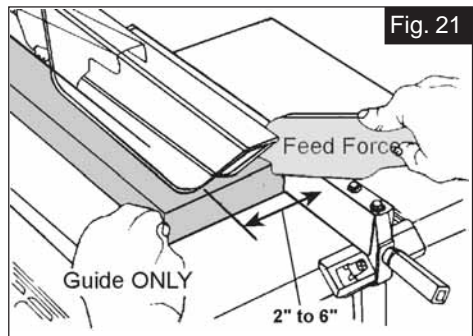
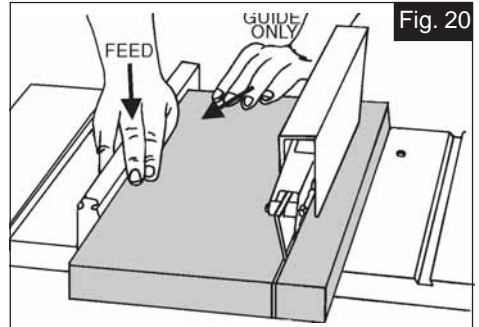
CUTTING METHODS

Ripping Or Rip Cutting

Ripping means to cut a piece of timber in the same direction as the grain, i.e. usually lengthwise.

- The rip fence can be positioned to the right or left of the saw blade, and can be adjusted to suit the width of cut required,

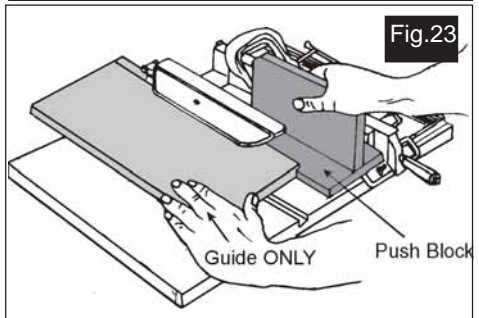
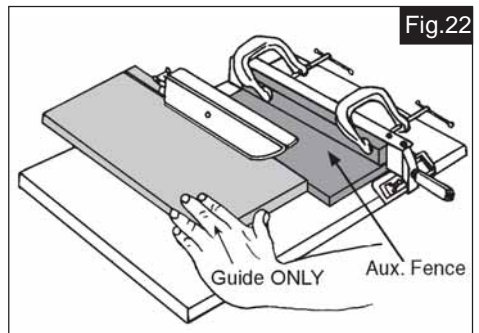
1. Lock the rip fence into position.
 - When the width of rip is 150mm (6") and wider use your right hand to feed the workpiece, only use left hand to guide the workpiece. (Fig.20).
 - If the width of rip is narrower than 50mm (2"), the push stick cannot be used because it will interfere with the guard. It is therefore necessary to use an auxiliary fence, and push block as shown in fig. 15. (SEE PAGE 18 FOR RIP FENCE & AUX. FENCE)
2. Attach auxiliary fence to rip fence with two 'G' clamps as shown in fig 22.
3. Feed the workpiece by hand until the end is approximately 1" from the front edge of the table. Continue to feed using the push block until the cut is complete.



Rip Cutting A Bevel

By tilting the saw blade (up to 45°), it is possible to rip cut a bevel in your work. To do this:

1. Set the blade angle using the blade angle adjuster.
 - If the workpiece is less than 150mm (6") wide, position the rip fence on the RIGHT SIDE of the blade. This will provide more space between the fence and the saw blade for the use of a push stick.

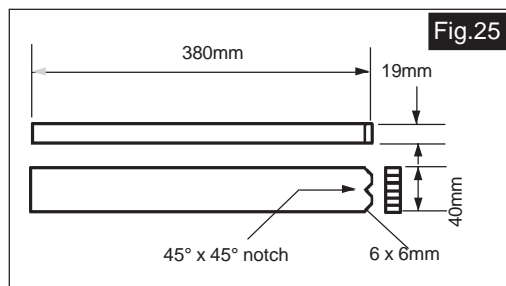
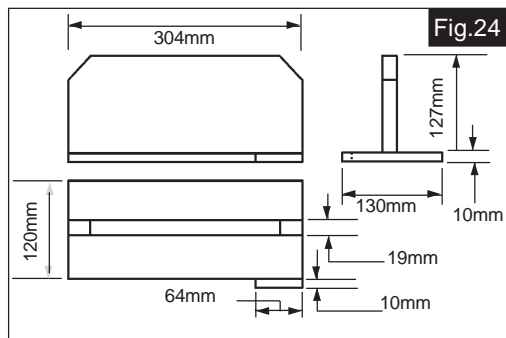


Push Stick And Push Block

Make the Push Block using pieces of 10mm plywood and 19mm hardwood as shown in Fig.24.

- The small piece of wood 10x10x64mm should be GLUED to the plywood. DO NOT USE NAILS or SCREWS. This is to prevent damaging the saw blade in the event you mistakenly cut into the push block.
- Position the handle in the centre of the plywood and fasten together with glue and wood screws screwed in from below. (Ensure the screw holes are countersunk. The screw heads must not be proud).

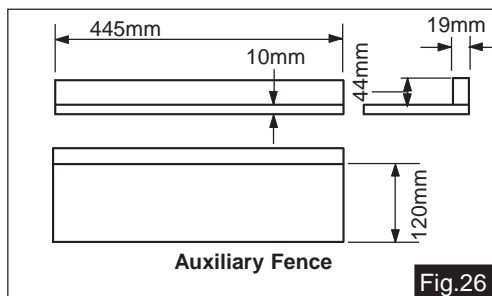
Replacement Push Sticks can be made using a suitable piece of timber as shown in Fig. 25.



Auxiliary Fence

Make an auxiliary fence using pieces of 10mm plywood and 19mm hardwood. Fasten together with glue and wood screws. Dimensions are shown in Fig. 26.

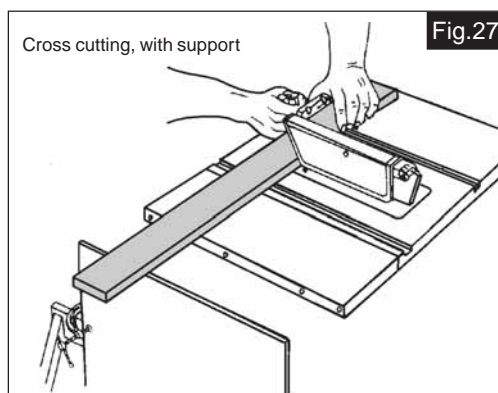
NOTE: The Push Block is used with the Auxiliary Fence, the 120mm dimensions must be identical on both the pieces.



Crosscutting

Crosscutting is the term used to describe cuts made in timber across the grain. This type of cut requires the use of the MITRE GAUGE. This includes bevel cutting, mitre cutting and compound mitre cutting (described later in this paragraph).

1. To perform a cross cutting operation, hold the work firmly against the mitre gauge fence.
2. With the timber carefully lined up with the saw blade, the mitre gauge is gently pushed along the groove, past the saw blade, producing the desired cut.



CROSSCUTTING TIPS

1. Do not make cuts freehand (without using the mitre gauge or other auxiliary device) the blade may bind in the cut and cause kickback or cause your fingers or hand to slip into the blade.
2. Always lock the mitre gauge when in use.
3. Remove rip fence from table when not in use.
4. Make sure blade guard is installed (for all operations).
5. Set the saw blade height to the thickness of the wood plus 2-3mm.
6. Do not stand in front of the blade in case of a throwback (small cutoff piece caught by the back of the blade and thrown toward the operator). Always stand slightly to one side of the blade.
7. Keep your hands clear, and away from the blade.
8. If the blade stalls or stops during the cutting process, switch the machine OFF and disconnect from the mains supply, before you attempt to free the blade.
9. Do not reach over or behind the blade for any reason.
10. Do not pick up small pieces of cutoff material from the table. Remove them by pushing them off the table with a stick.
11. Do not remove small pieces of cutoff material that may become trapped inside the blade guard while the saw is running. Turn the saw off. Once the blade has stopped turning, lift the guard and remove the trapped piece with a stick.
12. If the workpiece is warped, place the concave side down. This will prevent it from rocking while it is being cut.

Repetitive Cutting

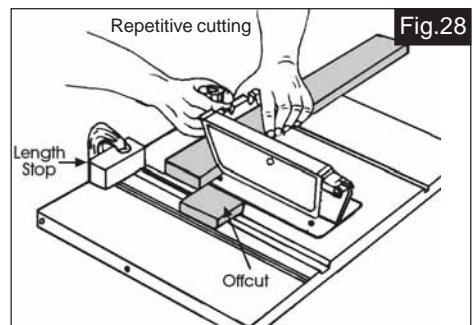
Repetitive cutting is the term used when cutting a quantity of pieces of the same length without having to mark each piece.

When making repetitive cuts from a long workpiece, **make sure it is supported.**

1. When making repetitive cuts, clamp a block of wood 75mm (3") long to the table at the desired length to act as a length stop.

NOTE: When clamping the block, make sure that the end of the block is well in front of the saw blade. Make sure it is clamped securely.

2. Slide the workpiece along the mitre gauge until it touches the block, hold it securely. When cutting long workpieces, make sure the end is supported.
3. Make the cut, pull the workpiece back and push the offcut off of the table using a push stick, **DO NOT ATTEMPT TO PICK IT UP AS THIS COULD ENDANGER YOUR HANDS.**



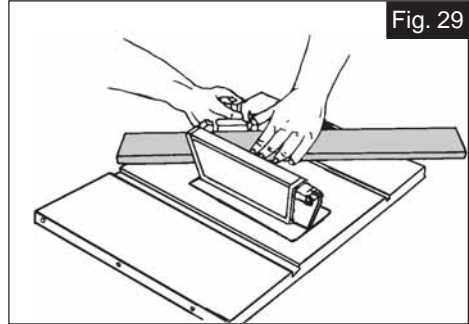
WARNING!

NEVER USE THE RIP FENCE AS A LENGTH STOP BECAUSE THE CUT-OFF PIECE COULD BIND BETWEEN THE FENCE AND THE BLADE CAUSING A KICKBACK.

Mitre Cutting

Mitre cutting is the term used for cutting at an angle other than 90° to the edge of the wood.

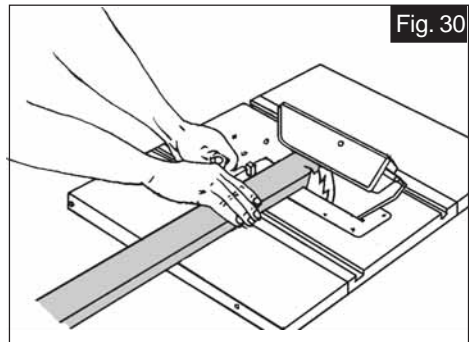
1. Adjust the mitre gauge to the desired angle, and lock it.
 - The mitre gauge may be used in either of the grooves in the table.
 - When using the mitre gauge in the LEFT hand groove, hold the workpiece firmly against the mitre gauge with your left hand and push with your right.
 - When using the RIGHT hand groove, hold the workpiece with your RIGHT HAND and the lock knob with your left hand.



Bevel Crosscutting

Bevel crosscutting is the same as crosscutting except that the wood is also cut at an angle, other than 90 degrees with the flat side of the wood.

1. Adjust the blade to the desired height and angle.
 - Use the mitre gauge in the right hand groove. Do not use the left hand groove, the blade guard will interfere.
 - Hold the workpiece with your right hand and the push with your left hand.



Compound Mitre Cutting

Compound mitre cutting is a combination of mitre cutting and bevel crosscutting. The cut is made at an angle other than 90° to both the edge and the flat side of the wood.

- Adjust the mitre gauge and the blade to the desired angle.
- Make sure the mitre gauge body is locked.

WARNING!

WHEN MITRE CUTTING, AN AREA OF BLADE IS EXPOSED.

GREAT CARE MUST BE TAKEN WHEN USING THE TABLE SAW FOR THIS OPERATION.

MAINTENANCE

WARNING!

FOR YOUR OWN SAFETY, SWITCH MACHINE OFF AND REMOVE PLUG FROM POWER SOURCE BEFORE ADJUSTING, MAINTAINING OR LUBRICATING YOUR SAW.

Do not allow sawdust build up inside the saw. Use the dust extraction port

Inspect the power cable frequently. If it is worn or cut, or damaged in any way, have it replaced immediately by a qualified service agent.

NOTE: Do not use any of the following to clean this table saw: gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents which contain ammonia.

You may apply a coat of wax to the table to keep the surface clean and allow wood being cut to slide more freely.

Changing The Blade

- Use only Clarke Blades, (see parts list for part numbers).
- Replace the blade when teeth become damaged or dull.

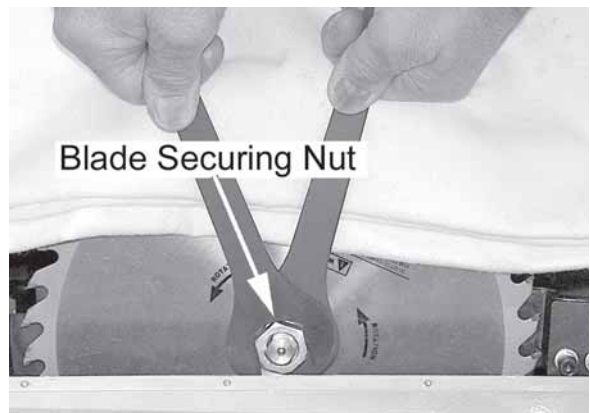
WARNING!

TO PREVENT PERSONAL INJURY, ALWAYS DISCONNECT PLUG FROM POWER SOURCE BEFORE CHANGING BLADES.

TAKE GREAT CARE WHEN HANDLING SAW BLADES - THE TEETH ARE EXTREMELY SHARP, AND CARELESSNESS CAN CAUSE SERIOUS PERSONAL INJURY

1. Raise the blade as far as possible, then remove the blade guard.
2. Remove the table insert.
3. Turn the blade angle adjuster to 45°.
4. Use the two spanners provided to remove the blade securing nut, one to engage with the flats on the outer flange, the other to remove the nut.
5. Replace the blade in reverse order, ensuring the teeth point down towards the table at the front, and it sits snugly on the boss on the inner flange before replacing the outer flange and tightening the securing nut.

Fig.31



Renewing Motor Brushes

WARNING!

ENSURE THE PLUG IS DISCONNECTED FROM THE POWER SUPPLY BEFORE PROCEEDING

- Lower the blade to minimum height and remove the riving knife and blade guard.
 - Turn the table saw over so that it rests on its table top .
1. Remove the bottom grill by removing the 6 screws shown.



Fig.32

2. Unscrew and remove the brush caps, (one either side of the motor housing), then withdraw the brush with springs attached.
 3. Carefully insert replacement brushes and replace the screw on caps.
- Always replace both brushes at the same time.

TROUBLE SHOOTING

<i>TROUBLE</i>	<i>PROBABLE CAUSE</i>	<i>REMEDY</i>
Saw will not start	<ol style="list-style-type: none"> 1. Saw not plugged in 2. Fuse blown or circuit breaker tripped 3. Power cable damaged 	<ol style="list-style-type: none"> 1. Plug in the machine 2. Replace fuse or reset circuit breaker 3. Have cable replaced by authorised service centre
Material Pinches Blade When Ripping	<ol style="list-style-type: none"> 1. Rip fence not aligned with blade 2. Warped wood, edge against fence not straight 	<ol style="list-style-type: none"> 1. Check and adjust rip fence 2. Select another piece of wood
Material binds on Riving Knife	<ol style="list-style-type: none"> 1. Riving knife not aligned correctly with blade 	<ol style="list-style-type: none"> 1. Check and align Riving knife with blade
Saw makes unsatisfactory cuts	<ol style="list-style-type: none"> 1. Dull blade 2. Blade mounted backwards 3. Gum or pitch on blade 4. Incorrect blade for work 5. Gum or pitch on table causing erratic feed 	<ol style="list-style-type: none"> 1. Replace blade 2. Turn blade around 3. Remove blade and clean with turpentine and coarse steel wool 4. Change the blade 5. Clean table with turpentine and steel wool and apply wax
Material kicked back from blade slot	<ol style="list-style-type: none"> 1. Rip fence out of alignment 2. Riving knife not aligned with blade 3. Feeding stock without rip fence 4. Riving knife not in place 5. Letting go of material before it is all the way past the saw blade 6. Dull blade 7. Mitre angle lock knob is not tight 	<ol style="list-style-type: none"> 1. Align rip fence with blade 2. Align Riving knife with blade 3. Install and use rip fence 4. Install and use Riving knife with guard 5. Push material all the way past blade before releasing work 6. Replace blade 7. Tighten knob
Blade does not raise or tilt freely	<ol style="list-style-type: none"> 1. Sawdust and dirt in raising and tilting mechanism 	<ol style="list-style-type: none"> 1. Brush or blow out loose dust and dirt
Blade does not come up to speed	<ol style="list-style-type: none"> 1. Extension cable too light or too long 2. Low voltage 	<ol style="list-style-type: none"> 1. Replace with adequate size cable 2. Contact your electric company
Machine vibrates	<ol style="list-style-type: none"> 1. Saw not mounted securely to Stand or work bench 2. Stand or bench on uneven floor 3. Damaged saw blade 	<ol style="list-style-type: none"> 1. Tighten all mounting hardware 2. Reposition on flat level surface Fasten to floor if necessary 3. Replace blade
Does not make accurate 45° and 90° crosscuts	<ol style="list-style-type: none"> 1. Mitre gauge out of adjustment 	<ol style="list-style-type: none"> 1. Adjust mitre gauge

PARTS LISTS

No.	Description	Qty	Part No	No.	Description	Qty	Part No
1	Locking nut M6	4	HTCTS11001	39	End cover	3	HTCTS11039
2	Flat washer	39	HTCTS11002	40	Fence	1	HTCTS11040
3	Left board	1	HTCTS11003	41	End cover	1	HTCTS11041
4	Guard support	1	HTCTS11004	42	Screw M4×10	1	HTCTS11042
5	Elastic pin	1	HTCTS11005	43	Pad	1	HTCTS11043
6	Right board	1	HTCTS11006	44	Locking base	1	HTCTS11044
7	Locking bolt	1	HTCTS11007	45	Guide	1	HTCTS11045
8	Screw ST3.2×8	6	HTCTS11008	46	Screw M4×10	1	HTCTS11046
9	End cover	1	HTCTS11009	47	Screw M6×35	2	HTCTS11047
10	Fence	1	HTCTS11010	48	Shaft(a)	1	HTCTS11048
11	End cover	1	HTCTS11011	49	Shaft(b)	1	HTCTS11049
12	Screw M6×16	2	HTCTS11012	50	Eccentric Wheel	1	HTCTS11050
13	Locking Knob(a)	4	HTCTS11013	51	Handle	1	HTCTS11051
14	Locking Knob(b)	1	HTCTS11014	52	Handle cover	1	HTCTS11052
15	Flat washer	1	HTCTS11015	53	Clamp piece	1	HTCTS11053
16	Mitre Gauge	1	HTCTS11016	54	Clamp paw	1	HTCTS11054
17	Plastic Piece	1	HTCTS11017	55	Screw	1	HTCTS11055
18	Bar	1	HTCTS11018	56	Elastic pin	1	HTCTS11056
19	Screw M6×16	6	HTCTS11019	57	Spring	1	HTCTS11057
20	Elastic washer	32	HTCTS11020	58	Nut M16	1	HTCTS11058
21	Nut M6	25	HTCTS11021	59	Outer Flange	1	HTCTS11059
22	Rear Extension table support	2	HTCTS11022	60	Saw Blade	1	HTCTS11060
23	Screw M5×12	18	HTCTS11023	61	Inner Flange	1	HTCTS11061
24	Flat washer	20	HTCTS11024	62	Lower Blade Guard	1	HTCTS11062
25	Rear Extension table	1	HTCTS11025	63	Flat washer	12	HTCTS11063
26	Screw M6×16	6	HTCTS11026	64	Dust tube	1	HTCTS11064
27	Left Extension table	1	HTCTS11027	65	Screw	2	HTCTS11065
28	Left/Right Extension table support	4	HTCTS11028	66	Fixing board	1	HTCTS11066
29	Screw M5×20	4	HTCTS11029	67	Circlip	1	HTCTS11067
30	Screw M4×8	6	HTCTS11030	68	Fixing Ring	1	HTCTS11068
31	Elastic washer	2	HTCTS11031	69	Flat Pin	1	HTCTS11069
32	Flat washer	4	HTCTS11032	70	Screw M4×14	3	HTCTS11070
33	Washer	2	HTCTS11033	71	Nut	1	HTCTS11071
34	Screw M4×8	12	HTCTS11034	72	Spring	1	HTCTS11072
35	Blade guard	1	HTCTS11035	73	Screw	1	HTCTS11073
36	Main table	1	HTCTS11036	74	Spring bar	1	HTCTS11074
37	Scale Label	1	HTCTS11037	75	E ring	1	HTCTS11075
38	Right Extension table	1	HTCTS11038	76	Lower support	1	HTCTS11076
				77	Motor	1	HTCTS11077
				78	Motor support	1	HTCTS11078

PARTS LISTS

No.	Description	Qty	Part No	No.	Description	Qty	Part No
79	Screw	2	HTCTS11079	108	Push stick clip	2	HTCTS11108
80	Screw	2	HTCTS11080	109	Push stick	1	HTCTS11109
81	Flat washer	4	HTCTS11081	110	Screw M4×25	3	HTCTS11110
82	Elastic washer	4	HTCTS11082	111	Main label	1	HTCTS11111
83	Screw M5×16	4	HTCTS11083	112	Locking handle	1	HTCTS11112
84	Pin	1	HTCTS11084	113	Elastic pin	1	HTCTS11113
85	Shaft	1	HTCTS11085	114	Flat washer	2	HTCTS11114
86	Turing base	1	HTCTS11086	115	Pin	1	HTCTS11115
87	Base	1	HTCTS11087	116	Handle cap	1	HTCTS11116
88	Adjusting Nut	1	HTCTS11088	117	Handle	1	HTCTS11117
89	Gear	1	HTCTS11089	118	Rocker	1	HTCTS11118
90	Angle pointer	1	HTCTS11090	119	Turing handle	1	HTCTS11119
91	Adjusting Bar	1	HTCTS11091	120	Nut	1	HTCTS11120
92	Flat washer	5	HTCTS11092	121	Label	1	HTCTS11121
93	Elastic washer	4	HTCTS11093	122	Magnetic Switch	1	HTCTS11122
94	Screw M8×20	4	HTCTS11094	123	Screw ST4.2×16	8	HTCTS11123
95	Screw ST4.2×12	6	HTCTS11095	124	Cable clamp	1	HTCTS11124
96	Guard ring (a)	1	HTCTS11096	125	Bottom Plate	1	HTCTS11125
97	Guard ring (b)	1	HTCTS11097	126	Guard ring	1	HTCTS11126
98	Screw ST3.2×10	6	HTCTS11098	127	Cable	1	HTCTS11127
99	Cable collect	1	HTCTS11099	128	Damping washer	4	HTCTS11128
100	Over-load protector	1	HTCTS11100	129	Leg	4	HTCTS11129
101	Cable collect housing	1	HTCTS11101	130	Support leg	4	HTCTS11130
102	Nut	2	HTCTS11102	131	Screw M6×16	16	HTCTS11131
103	Locking Nut M4	3	HTCTS11103	132	Wrench(a)	1	HTCTS11132
104	Angle adjusting base	1	HTCTS11104	133	Wrench(b)	1	HTCTS11133
105	Fence	1	HTCTS11105	134	Allen key	1	HTCTS11134
106	Dust adaptor	1	HTCTS11106	135	Capacitor	1	HTCTS11135
107	Machine housing	1	HTCTS11107				

PARTS AND SERVICE CONTACTS

For Spare Parts and Service, please contact your nearest dealer,
or CLARKE International, on one of the following numbers.

PARTS & SERVICE TEL: 020 8988 7400

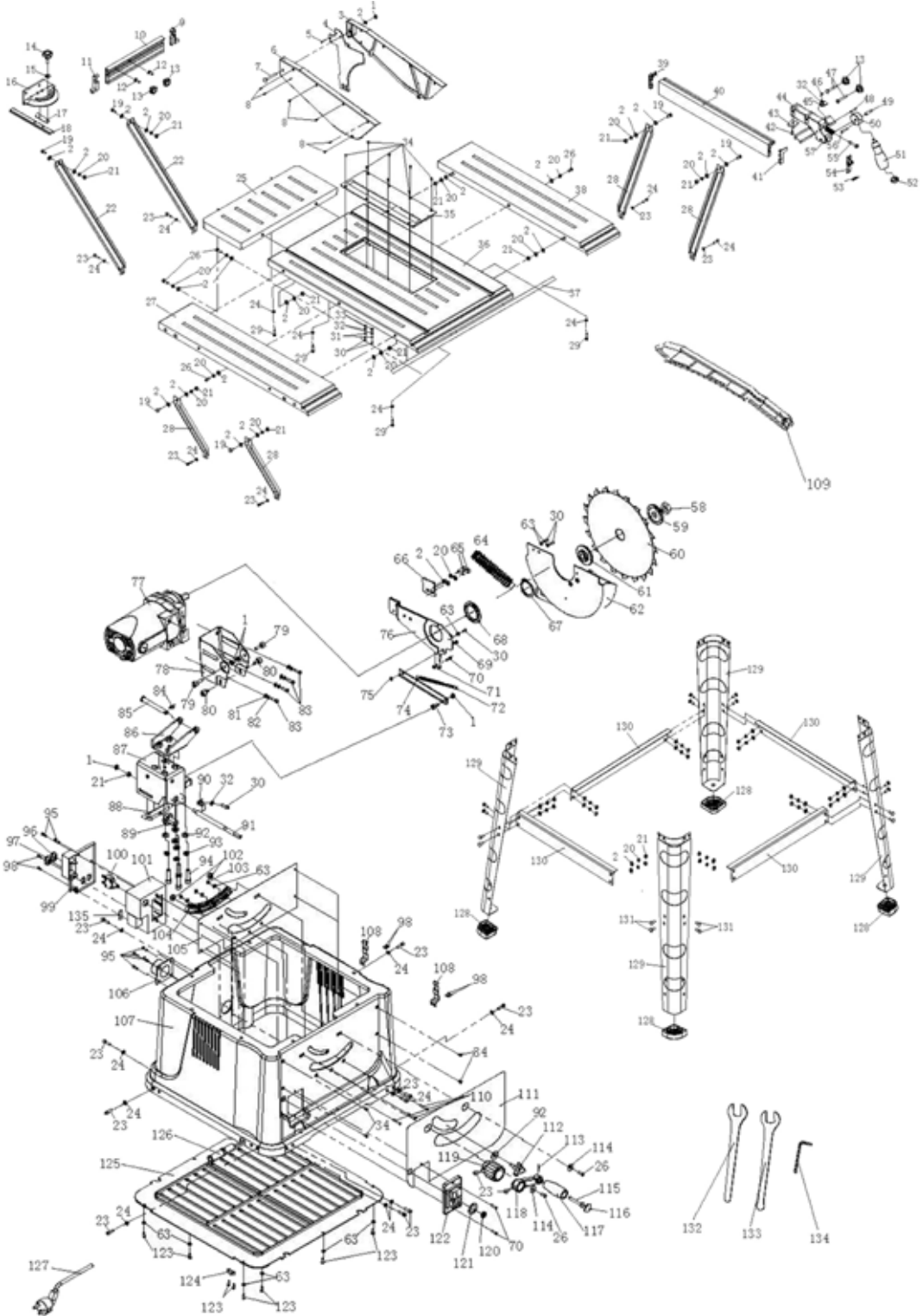
PARTS & SERVICE FAX: 020 8558 3622

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