

# Gladiator<sup>®</sup> CONTRACTOR<sup>®</sup>



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## 10" TABLE SAW Model CTS12

Operating & Maintenance  
Instructions

## SPECIFICATIONS

Model No .....	CTS12
Part No. ....	6500754
Motor .....	230V~ 50Hz 1ph
Power rating .....	1.5Kw
Speed .....	6270 rpm
Fuse rating .....	13Amps
Saw Blade .....	10" dia. (254x30mm) TCT
Maximum depth of cut at 0° .....	75 mm
Maximum depth of cut at 45° .....	50 mm
Net Weight (Boxed) .....	29KG
Noise level at operating position .....	112.3dB LWA (under load)
Overall dimensions - (LxWxH) .....	870 x 920 x 1250 mm
Overall dimensions - with extensions ..	870 x 1240 x 1250 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.

### 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, do not dispose of with general waste. It must be disposed of according to law at a recognised disposal facility.**



Thank you for purchasing your new CLARKE 10" TABLE SAW.

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.

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## 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 the 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 spanners 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.

**AVOID UNINTENTIONAL STARTING:** Ensure that the switch is in the off position when plugging in to the mains supply. (Switch cover locked position).

## 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. Take care that the selection of the saw blade is suitable for the type of wood to be cut which meets the requirements on page 2. 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. **IMPORTANT: THIS SAW IS NOT DESIGNED 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 2.

**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.

**COMPOUND CUTTING:** Take care when making compound cuts. If both mitre angles and bevel angles are to be set for compound mitre cuts, set the bevel angle first. Make sure that the table saw is disconnected from the mains supply before changing to the required angles.

**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 is securely fastened when in use.

**USE A PUSH STICK:** Use a pushstick 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 FREEHAND:** Never perform any operation 'freehand' i.e. do not use your hands alone to support, or guide the workpiece. Always use either the rip fence, 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 rip fence out of the way when cross cutting. Never use the rip fence 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, **turn the switch off** and disconnect from the mains supply before attempting to free the blade.

**RIPPING:** When ripping or bevel ripping, always use the rip fence 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 table before performing any cutting operations. Refer to the assembly instructions on page 12.

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

**MAXIMUM BLADE EXTENSION:** Have the blade extended to approximately 22mm above the top of the workpiece. Additional blade exposure could 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, SLOTTING AND GROOVING:** Rebating, slotting and grooving should not be undertaken on the saw..it is not designed for non-through cutting operations.

## ADDITIONAL SAFETY RULES FOR TABLE SAWS

- ✓ **ALWAYS** use saw Blade Guard and Riving Knife for every operation.
- ✓ **ALWAYS** hold the work firmly against the mitre gauge or fence.
- ✓ **ALWAYS** use a push-stick when required. Always use a push-stick for ripping narrow stock. Refer to ripping applications in instruction manual where push-stick is covered in detail.
- ✓ **ALWAYS** use in a well ventilated area. Remove sawdust frequently. Clean out sawdust from the interior of the saw to prevent a potential fire hazard.
- ✓ **ALWAYS** move the rip fence out of the way when crosscutting.
- ✓ **ALWAYS** switch off and disconnect from supply before removing off cuts of wood from the machine
- ✓ **ALWAYS** provide adequate support to the rear and sides of the saw table for wide or long workpieces.
- ✓ **ALWAYS** keep the blade sharp, the Rip Fence parallel to the saw blade, and the Riving Knife and Blade Guard in place. Do not release work before it is pushed all the way past the saw blade.
- ✓ **ALWAYS** avoid awkward operations and hand positions where a sudden slip could cause your hand to move into the blade.
- ✓ **PERMANENTLY** mount your table saw before performing any cutting operations. Refer to 'Mounting the Saw' on page 17.
- ✗ **NEVER** stand or have any part of your body in line with the path of the saw blade. Keep your hands out of the line of the saw blade.
- ✗ **NEVER** reach behind or over the blade for any reason.
- ✗ **NEVER** use the fence as a cutoff gauge when crosscutting.
- ✗ **NEVER** attempt to free a stalled saw blade without first turning the saw OFF. Turn off power switch immediately to prevent motor damage.
- ✗ **NEVER** use solvents to clean plastic parts. Solvents could possibly dissolve or otherwise damage the material. Only a soft damp cloth should be used to clean plastic parts.
- ✗ **NEVER** force feed the work into the blade. A light pressure ONLY is required
- ✗ **NEVER** cut metals or materials which may make hazardous dust.
- ✗ **NEVER** perform any operation 'freehand' which means using your hands to support or guide the work piece. Always use either the fence or the mitre gauge to position and guide the work.

## 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 1.5mm<sup>2</sup> for up to 15 metres in length, and 2.5mm<sup>2</sup> for up to 25 metres.



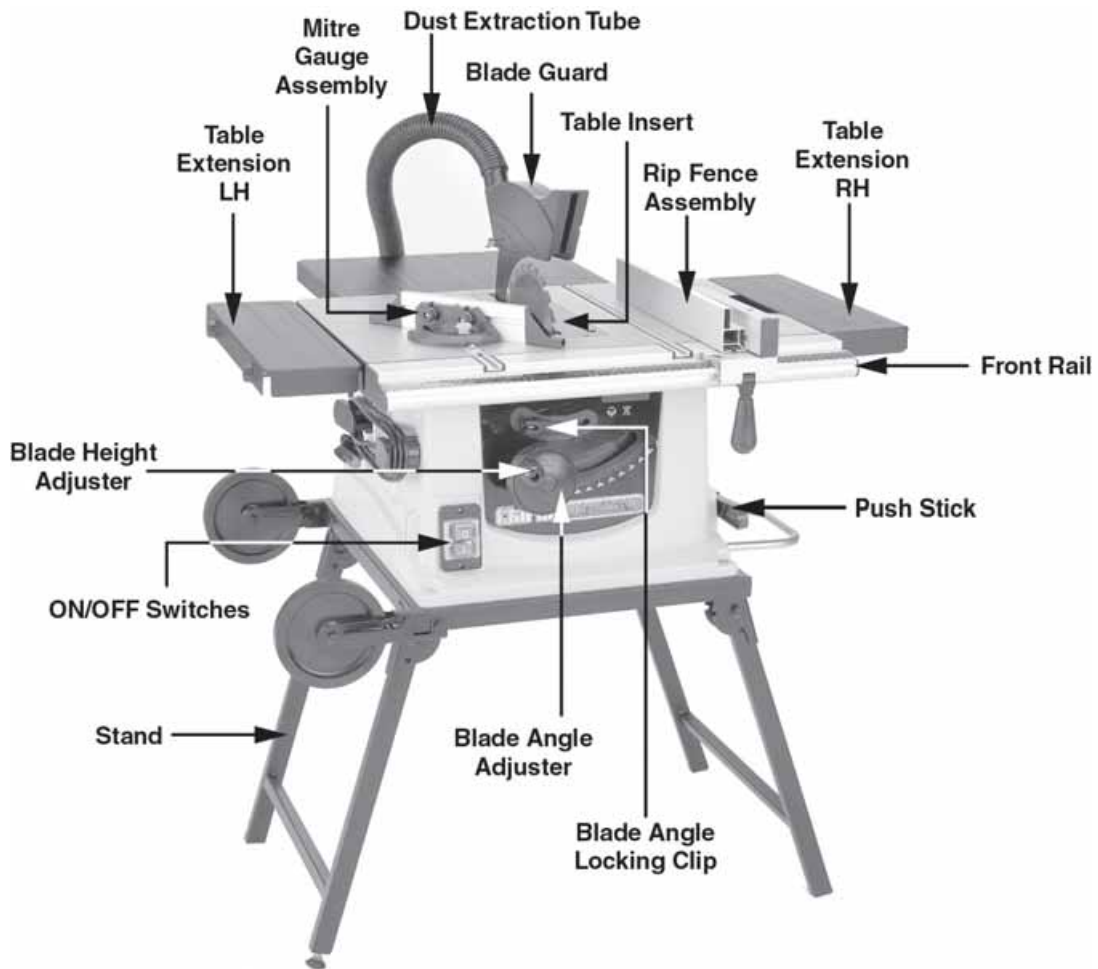
**WARNING:**

*If the power cable is worn or cut, or damaged in any way, have it replaced immediately to avoid shock or fire hazard.*



## FEATURES

Fig.1



To transport the machine, turn the assembly on its side, resting on the table wheels, then collapse the legs. The Handle may now be used to move the table saw as required.

## FEATURES

1. The switch panel incorporates the ON and OFF switches.  
Your saw also features an Overload Protection device, so that if the motor overheats (due to feed pressure being too great, dull blade or low voltage), the Overload Relay will intervene, and the motor will automatically cut out. A reset button is provided at the front of the machine... wait at least 5 minutes before pressing and trying to restart.
2. A Dust Extraction Tube is provided at the rear of the machine. A vacuum extractor with a suitable flexible hose (35mm ID.), may be connected and used either permanently or intermittently as 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 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 the table stand. Please note that the machine **MUST** be firmly secured to either a workbench or the stand supplied to ensure its complete stability. This is explained in detail under 'Mounting the Saw on page 15.
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. 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**

9. 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

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

## 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.

### LIST OF CONTENTS

1. 10" Table saw x 1
2. 254 mm (10") saw blade x 1
3. Rip cut extension table x 1
4. Rip cut extension table brackets x 2
5. Cross cut extension tables x 2
6. Table saw stand x 1
7. Wheels for stand x 2
8. Blade guard x 1
9. Rip fence x 1
10. Mitre gauge x 1
11. Push stick x 1
12. Dust extraction hose x 1
13. Riving knife (with laser cutting guide attached) x 1
14. Fixings pack (nuts & bolts etc) x 1

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

### A. TABLE EXTENSION

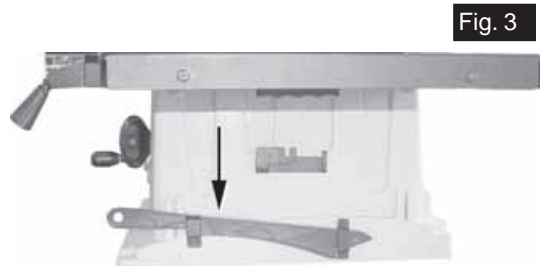
1. Loosen the extension table clamps.



2. Slide the extension table into the two holes on the side of the table saw.
3. Secure each extension table by tightening up the extension table clamps.

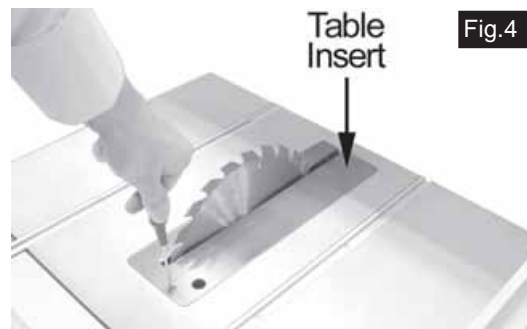
### B. PUSH STICK STORAGE

1. Store the Push Stick in the holder provided.



### C. RIVING KNIFE

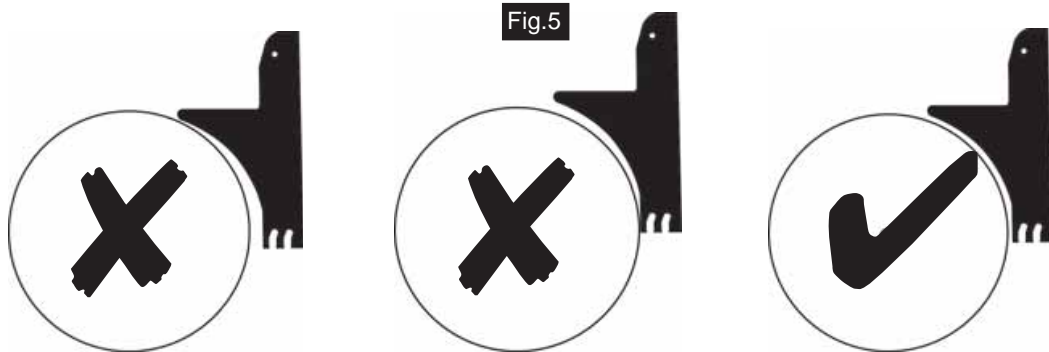
1. Remove the table insert (1 countersunk screw).
2. Raise the blade as far as possible and adjust the blade angle, so that the blade lays at a 45o angle.



#### IMPORTANT:

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

- 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 illustrated in Fig. 5



- Tighten the riving knife securing bolt as shown in Fig. 6.



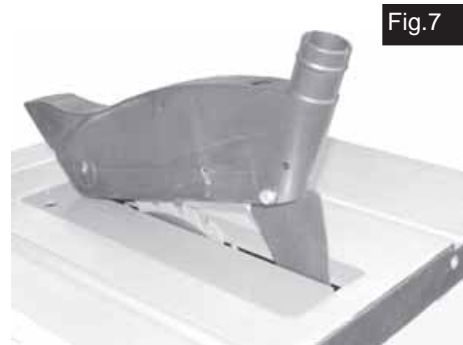
**Note:**

**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.**

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

#### **D FITTING THE BLADE GUARD**

- Raise the saw blade as far as possible.
  - Attach the Blade Guard to the Riving Knife, as shown.
- The guard should be secure, but still be capable of dropping under its own weight. Do not over tighten.



## E. RIP FENCE

The rip fence has the following parts:

1. The handle assembly 'A'
  2. The fence 'B'
  3. Two fixings, each comprising a coach bolt and securing knobs 'C'.
1. Slide the handle assembly (A) into the slot in the front rail, and push the handle down to lock the rip fence to the table.
  2. Pull the slide bar out slightly and slide the fence (B) behind the slide bar as shown.
  3. Tighten the securing knobs (C) to lock the fence to the handle assembly.

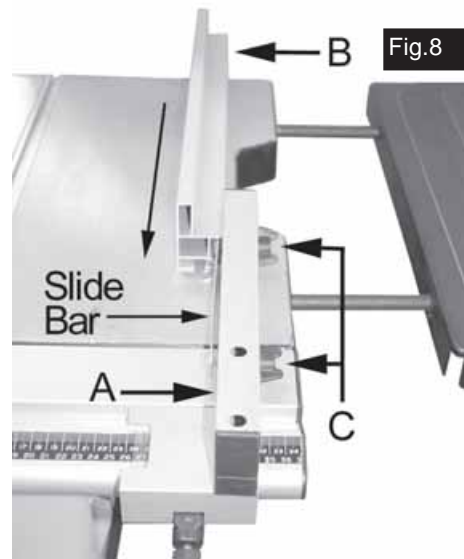


Fig. 19



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

Fig. 9

## F. CONNECT THE VACUUM HOSE

1. Attach the hose as shown in the diagram in Fig. 9
2. Connect a vacuum cleaner to the dust outlet port on the rear of the table saw.



## MOUNTING THE SAW ON TO THE STAND

### STAND SETUP

The Stand is supplied flat.

1. Stand the assembly on its two wheels.
2. Pull the front pair of legs down and out as shown until they click into place.



Fig.10

3. Repeat the process with the second pair of legs.



Fig.11

4. The stand should appear as shown in Fig.12.
5. Place table saw on the stand aligning the holes in the base with the holes drilled in the table.
6. Use the nuts, bolts and washers supplied to secure the table saw to the stand.



Fig.12

## 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 that the blade is securely fitted.
- Ensure the Blade Guard is fitted securely and capable of dropping under its own weight.
- Remove all tools or pieces of wood from the top of the table.
- If the Rip Fence is being use, make sure it is secure before use.
- Ensure the saw Blade is at the desired height and locked in place 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. Connect a vacuum cleaner nozzle to the dust outlet at the rear of the table saw.
3. Press the **Green** button of the switch marked '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 of the switch marked '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. You can restart the table saw by pressing the Green ON button.

### TURNING THE LASER ON/OFF.

The saw is fitted with a laser cutting guide.

1. Use the ON/Off switch to turn the laser on or off.



Fig.13



## OVERLOAD CUT-OUT

Your table saw features an OVERLOAD CUTOUT device, so that if the motor overheats (due to feed pressure being too great, a dull blade or low voltage etc.), the motor will automatically cut out. In this event,

1. Switch the machine OFF by pressing the red button 'O',
2. Unplug the machine from the mains supply and allow the machine to cool for three to five minutes before plugging in and attempting to restart.

Note the time taken to reset may be longer, depending upon ambient temperature etc.

### 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 handwheel 'A' Fig. 14, to adjust the height of the blade.

- Turn the blade height adjuster handwheel, clockwise to lower the blade and anticlockwise to raise the blade.

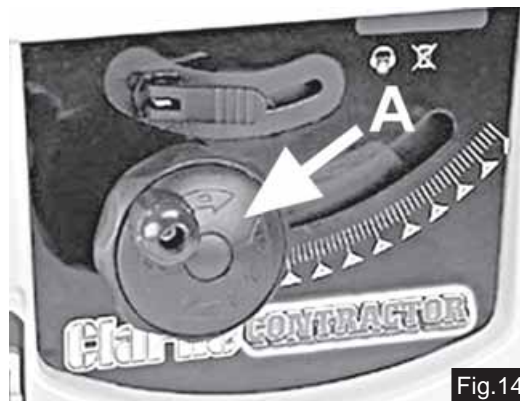


Fig.14

### CHANGING THE BLADE ANGLE

Release the blade angle locking lever 'B' Fig 15, by pulling the lever outwards.

- Grasp the blade angle adjustment wheel 'A' and move the complete assembly in the direction of the arrow in Fig. 15, so that the pointer is aligned with the desired angle as shown on the angle indicator .
- Lock the blade at the desired angle by pressing the locking lever 'B' firmly inwards.

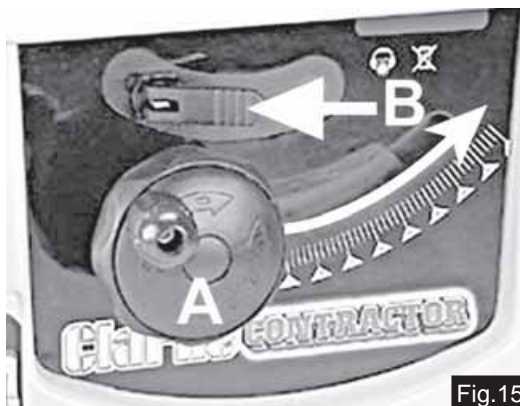
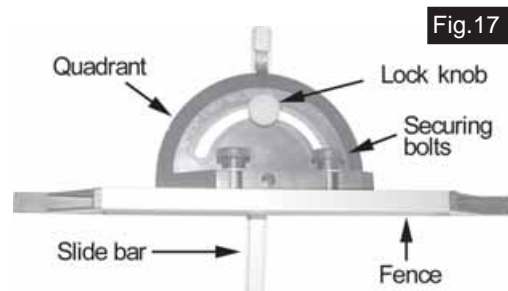


Fig.15

## USING THE MITRE GAUGE

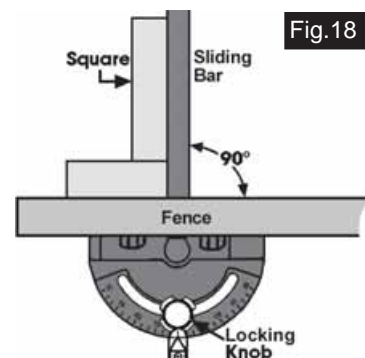
1. Screw the mitre gauge fence to the quadrant, using the two securing wheels. As shown.
2. Slide the mitre gauge into one of the slots on the top of the table.
3. Loosen the lock knob and set the mitre gauge to the required angle.
4. Tighten the lock knob.
5. The calibration on the mitre gauge is suitable 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.



## MITRE GAUGE ADJUSTMENT

To produce an accurate cut at  $90^\circ$  you should check the gauge as follows:

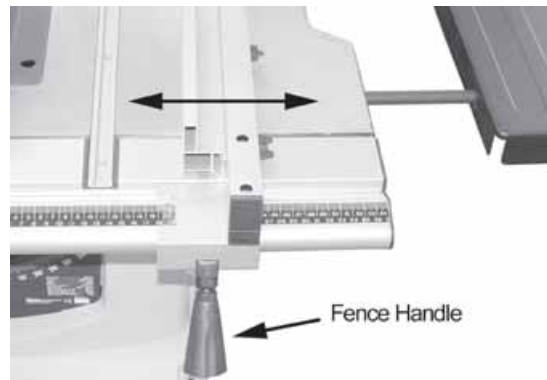
1. Loosen the lock knob and, using a set square as shown, set the slide bar at  $90^\circ$  to the body.
  2. Tighten the Lock knob and re-check with the square to ensure no movement has taken place during the tightening process.
- The graduations on the mitre gauge provide accuracy for average woodworking. 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.



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

## ADJUSTING THE RIP FENCE

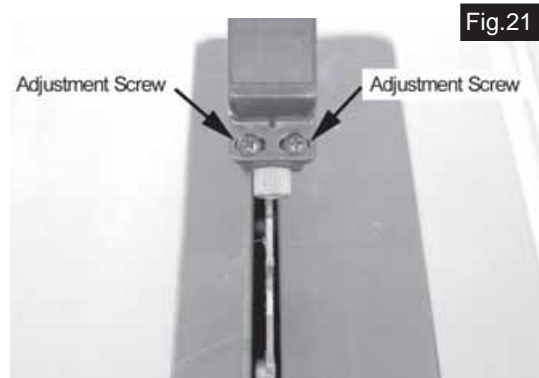
1. Lift the fence handle up.
2. Slide the rip fence to the position you require.
3. Push the fence handle down to lock the Rip Fence into place.



## ADJUSTING THE LASER GUIDE

To align the laser guide proceed as follows.

1. Set the blade angle to 0°.
2. Remove the blade guard. From this point on, take great care not to damage your hands on the saw blade teeth.
3. Switch the laser guide on.
4. Carefully grip the end bezel on the laser guide and turn it until the beam is parallel with the blade.
5. Loosen the two adjustment screws in the mounting bracket on the front of the laser holder (Fig.21).
6. Move the front of the laser holder until the beam is running along the edge of the blade.
7. Retighten the two adjustment screws.
8. Replace Blade Guard.

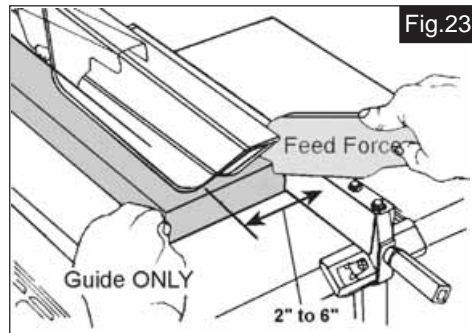
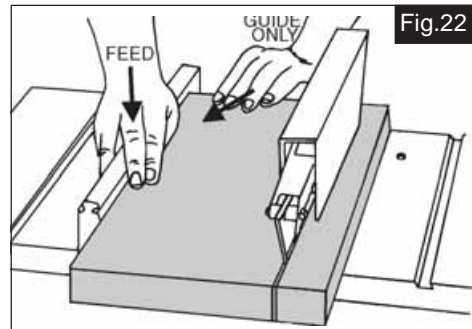


## CUTTING PRACTICES

### RIPPING OR RIP CUTTING

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

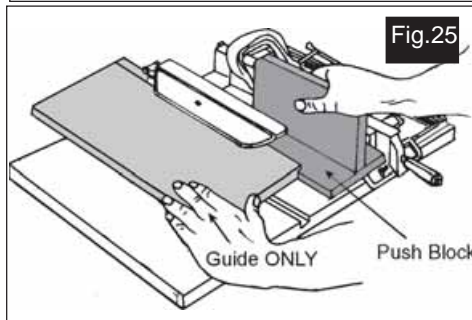
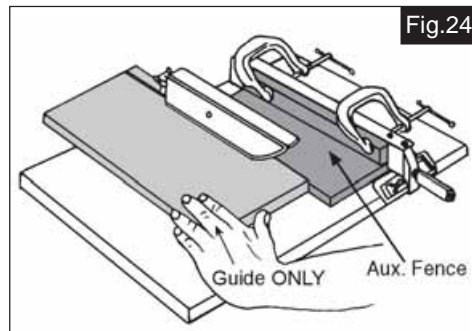
- The rip fence can be positioned to the right or left of the saw blade, and can be adjusted to suit the width of cut required.
1. Lock the rip fence into position.
    - When the width of rip is 150mm (6") and wider use your right hand to feed the workpiece, only use left hand to guide the workpiece. (Fig.22).
    - 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.
  2. Attach auxiliary fence to rip fence with two 'G' clamps as shown in fig 24.
  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.

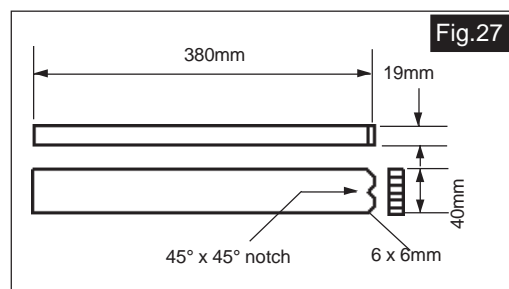
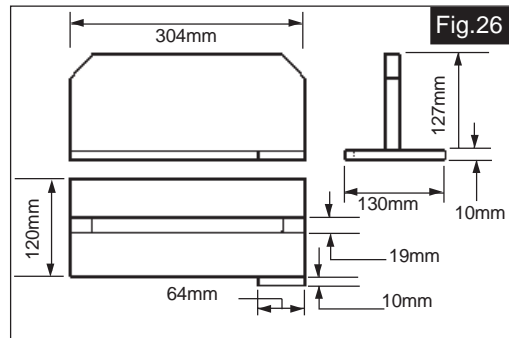


## PUSH STICK AND PUSH BLOCK

Make the Push Block using pieces of 10mm plywood and 19mm hardwood as shown in Fig.26.

- 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. 27.



## AUXILIARY FENCE

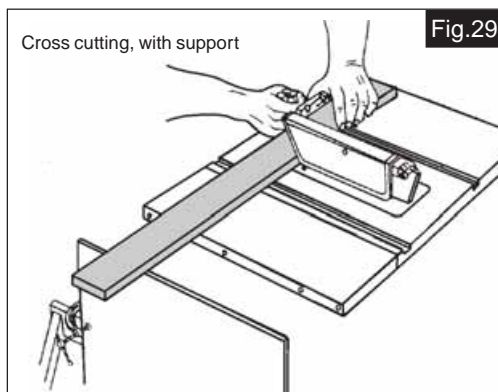
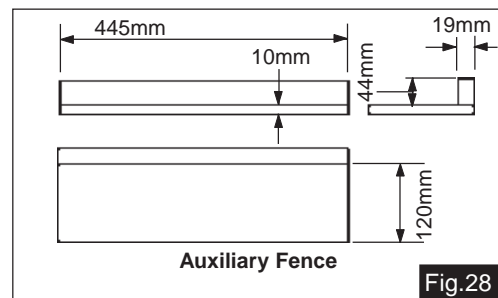
Make an auxiliary fence using pieces of 10mm plywood and 19mm hardwood. Fasten together with glue and wood screws. Dimensions are shown in Fig. 28.

**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 as shown in Fig.29.
  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.
- Long workpieces should be supported. A simple arrangement is to clamp a piece of plywood to a sawhorse as shown in Fig. 16



## WHEN CROSSCUTTING:

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

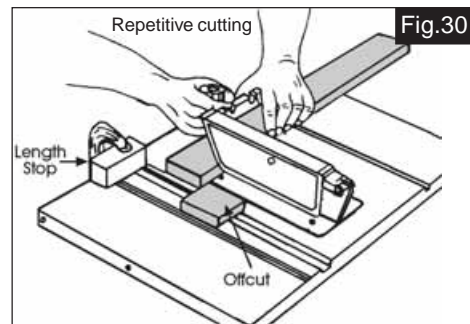
Repetitive cutting is the term used when cutting a quantity of pieces of the same length without having to mark each piece.

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 off-cut off of the table using a push stick, **DO NOT ATTEMPT TO PICK IT UP AS THIS COULD ENDANGER YOUR HANDS.**



### WARNING!

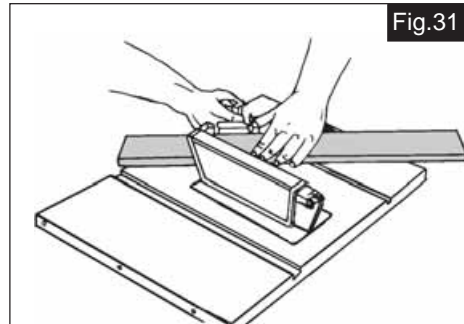
**NEVER USE THE RIP FENCE AS A LENGTH STOP BECAUSE THE CUT-OFF PIECE COULD BIND BETWEEN THE FENCE AND THE BLADE CAUSING A KICKBACK.**

## MITRE CUTTING

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

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.

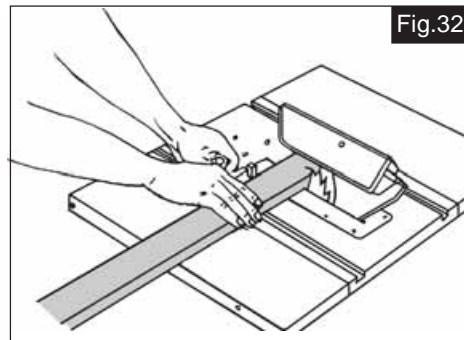


## BEVEL CROSSCUTTING

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.

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 to accumulate inside the saw. Use a dust extractor if possible, if not, frequently blow out any dust that may accumulate inside the saw cabinet and the motor.

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

**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.**

A coat of wax applied to the table will help 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.**

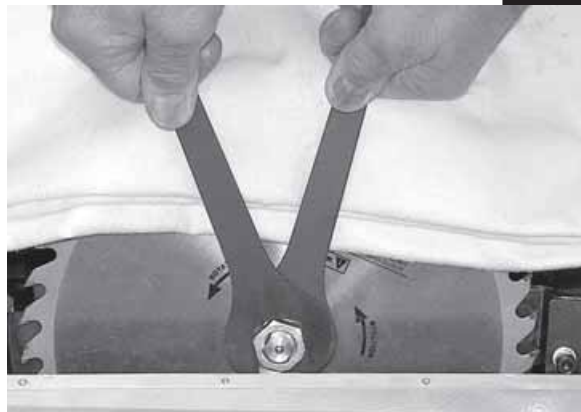
**TAKE GREAT CARE WHEN HANDLING SAW BLADES - THE TEETH ARE EXTREMELY SHARP, AND CARELESSNESS CAN CAUSE SERIOUS PERSONAL INJURY**

1. Remove the table insert.
2. Raise the blade as far as possible, then remove the blade guard.

It also helps to turn the blade angle adjuster so as to lay the blade on its side.

**NOTE: From this point, take great care to avoid contact with the tips of the saw blade, preferably place a thick cloth over the teeth, as shown in Fig 33.**

3. Undo the Blade securing nut, using the two spanners provided, one to engage with the flats on the outer flange, the other to remove the nut.
4. 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.





## ADJUSTING 90 AND 45 DEGREE POSITIVE STOPS

### WARNING!

ENSURE THE PLUG IS DISCONNECTED FROM THE POWER SUPPLY BEFORE PROCEEDING

### ADJUSTING THE POSITIVE STOPS

1. Raise the blade to maximum height.
2. Turn machine so that it rests on the table top's side edge and is supported in some way, ensuring it is stable.
3. Remove the bottom grill by removing the 6 screws shown.
4. Adjust the Positive stops, indicated in Fig. 35, as required, checking the blade angle using a set square and protractor as necessary.
5. When completely satisfied, ensure the stops are properly locked, then replace the bottom grille.

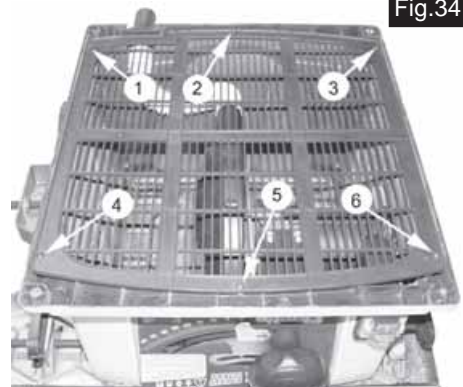


Fig.34

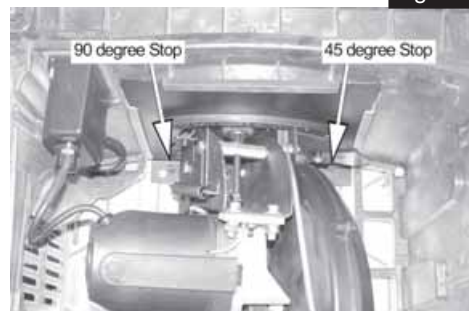


Fig.35

### RENEWING MOTOR BRUSHES

1. Turn machine so that it rests on the table top's side edge and is supported in some way, ensuring it is stable.
2. Remove bottom grille.
3. Unscrew and remove the Brush Caps, (one either side of the motor housing), then withdraw the brush with springs attached.
4. Carefully insert replacement brushes and replace the screw on caps.



Fig.36

*NOTE: Always replace both brushes at the same time.*

## TROUBLE SHOOTING

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

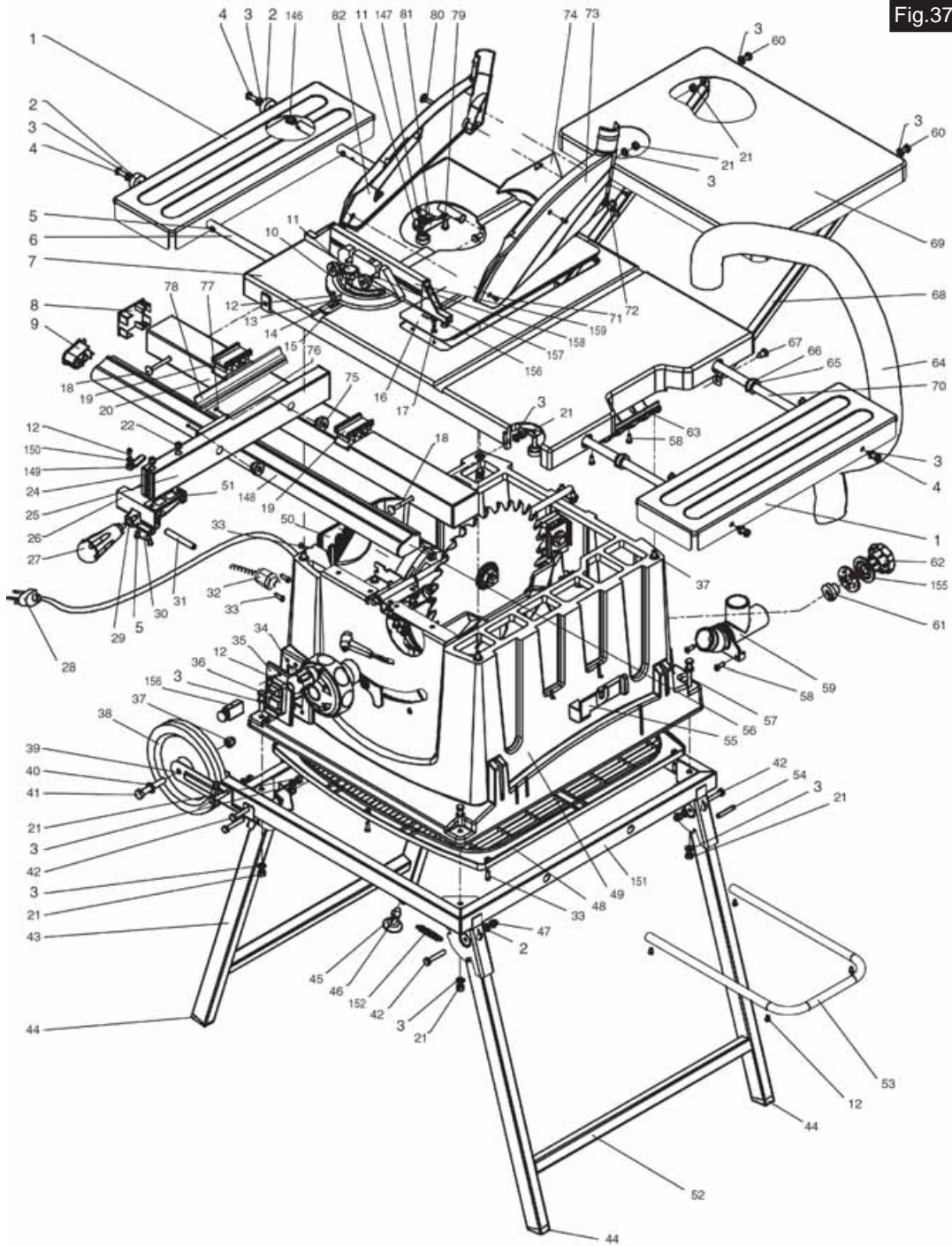
## PARTS LISTS

No.	Description	Qty	Part No	No.	Description	Qty	Part No
1	Side extension table	2	DDCTS12001	41	Hex bolt	2	DDCTS12041
2	Rubber foot	2	DDCTS12002	42	Hex bolt	1	DDCTS12042
3	Flat washer	39	DDCTS12003	43	Left stand assy.	1	DDCTS12043
4	Cross tapping screw	2	DDCTS12004	44	Foot block	3	DDCTS12044
5	Cross tapping screw	8	DDCTS12005	45	Adjustable foot	1	DDCTS12045
6	Slide bar	1	DDCTS12006	46	Hex nut	5	DDCTS12046
7	Main table	1	DDCTS12007	47	Special nut	7	DDCTS12047
8	Block	2	DDCTS12008	48	Base plate	1	DDCTS12048
9	Left block	1	DDCTS12009	49	Plastic housing	1	DDCTS12049
10	Mitre gauge	1	DDCTS12010	50	Blade guard	1	DDCTS12050
11	Knob	5	DDCTS12011	51	Plastic plate	1	DDCTS12051
12	Pan screw	2	DDCTS12012	52	Right stand assy	1	DDCTS12052
13	Washer	5	DDCTS12013	53	Draw handle	1	DDCTS12053
14	Indicator	1	DDCTS12014	54	Pin	4	DDCTS12054
15	Mitre guage slider	1	DDCTS12015	55	Mitre Guage Housing	1	DDCTS12055
16	Insert plate	1	DDCTS12016	56	Rip Fence Slide Bar	2	DDCTS12056
17	Cross screw	1	DDCTS12017	57	Hex. Bolt	4	DDCTS12057
18	Bolt	2	DDCTS12018	58	Self Tapping screw	1	DDCTS12058
19	Slot sleeve	1	DDCTS12019	59	Dust Extraction outlet	1	DDCTS12059
20	Slide A	1	DDCTS12020	60	Hex bolt	9	DDCTS12060
21	Nut	10	DDCTS12021	61	Blade holder	1	DDCTS12061
22	Screw	4	DDCTS12022	62	Spare Blade knob	1	DDCTS12062
23	Flat washer	5	DDCTS12023	63	Handle	2	DDCTS12063
24	Block	2	DDCTS12024	64	Dust tube	1	DDCTS12064
25	Rip Fence	1	DDCTS12025	65	Slide bar tube	4	DDCTS12065
26	Slider base	1	DDCTS12026	66	Retain ring	4	DDCTS12066
27	Locking handle	1	DDCTS12027	67	Tapping screw	2	DDCTS12067
28	Power cord set	1	DDCTS12028	68	Side support	2	DDCTS12068
29	Cam	1	DDCTS12029	69	Rear table	1	DDCTS12069
30	Clearance washer	1	DDCTS12030	70	Slide bar	1	DDCTS12070
31	Spindle	1	DDCTS12031	71	Tapping screw	6	DDCTS12071
32	Strain-relief	1	DDCTS12032	72	Washer	1	DDCTS12072
33	Self Tapping screw	14	DDCTS12033	73	Right guard	1	DDCTS12073
34	Switch box	1	DDCTS12034	74	Riving knife	1	DDCTS12074
35	Switch	1	DDCTS12035	75	Self Tapping screw	2	DDCTS12075
36	Screw bolt	6	DDCTS12036	76	Spring plate	1	DDCTS12076
37	Special nut	2	DDCTS12037	77	Bolt	2	DDCTS12077
38	Wheel	2	DDCTS12038	78	Nut	1	DDCTS12078
39	Wheel bracket	2	DDCTS12039	79	Screw	4	DDCTS12079
40	Flat washer	12	DDCTS12040	80	Bolt	1	DDCTS12080

No.	Description	Qty	Part No	No.	Description	Qty	Part No
81	Slide bar clamp	4	DDCTS12081	120	Screw	2	DDCTS12120
82	Left guard	1	DDCTS12082	121	Threaded spindle	2	DDCTS12121
83	Screw	1	DDCTS12083	122	Bolt	2	DDCTS12122
84	Handle 2	1	DDCTS12084	123	Spring	2	DDCTS12123
85	Handle 1	1	DDCTS12085	124	Gear	1	DDCTS12124
86	Handle cover	1	DDCTS12086	125	Belt	1	DDCTS12125
87	Hand wheel B	1	DDCTS12087	126	Drive wheel	1	DDCTS12126
88	Hand wheel A	1	DDCTS12088	127	Clamp 2	1	DDCTS12127
89	Screw	1	DDCTS12089	128	Spring	4	DDCTS12128
90	Indicator	1	DDCTS12090	129	Motor assy	1	DDCTS12129
91	Front table	1	DDCTS12091	130	Bolt	2	DDCTS12130
92	Rock	1	DDCTS12092	131	Screw	1	DDCTS12131
93	Nut	3	DDCTS12093	132	Big washer	7	DDCTS12132
94	Protection plate	1	DDCTS12094	133	Screw	1	DDCTS12133
95	Torque spring	1	DDCTS12095	134	Drive wheel	1	DDCTS12134
96	Small plate	1	DDCTS12096	135	Motor Bracket	1	DDCTS12135
97	Big washer	1	DDCTS12097	136	Guide Bracket	1	DDCTS12136
98	Riving knife bracket	1	DDCTS12098	137	Threaded bar	1	DDCTS12137
99	Retaining ring	1	DDCTS12099	138	Pin	1	DDCTS12138
100	Lower Blade Guard A	1	DDCTS12100	139	Clamping bracket	1	DDCTS12139
101	Shaft assy	1	DDCTS12101	140	Drive shaft assy	1	DDCTS12140
102	Blade	1	DDCTS12102	141	Bolt	1	DDCTS12141
103	Nut	1	DDCTS12103	142	Washer	1	DDCTS12142
103	Lower Blade Guard B	1	DDCTS12104	143	Locking handle	1	DDCTS12143
105	Blade flange	1	DDCTS12105	144	Pin	1	DDCTS12144
106	Bolt	1	DDCTS12106	145	Sleeve	1	DDCTS12145
107	Big washer	1	DDCTS12107	146	Slide block	3	DDCTS12146
108	Riving knife clamp	1	DDCTS12108	147	Spring	8	DDCTS12147
109	Screw	4	DDCTS12109	148	Rip fence Slide	1	DDCTS12148
110	Spring washer	4	DDCTS12110	149	Spring	1	DDCTS12149
111	Flat washer	4	DDCTS12111	150	Scale	1	DDCTS12150
112	Riving knife bracket	1	DDCTS12112	151	Flat washer	7	DDCTS12151
113	Nut	5	DDCTS12113	152	Bracket assy	1	DDCTS12152
114	Screw	4	DDCTS12114	153	Spring	4	DDCTS12153
115	Bearing	2	DDCTS12115	154	Washer	1	DDCTS12154
116	Retain ring	1	DDCTS12116	154	Spindle retaining ring	1	DDCTS12155
117	Screw	4	DDCTS12117	156	Blade fixing knob	2	DDCTS12156
118	Spring washer	4	DDCTS12118	157	Motor switch	1	DDCTS12157
119	Support bar	1	DDCTS12119				

# PARTS DIAGRAM

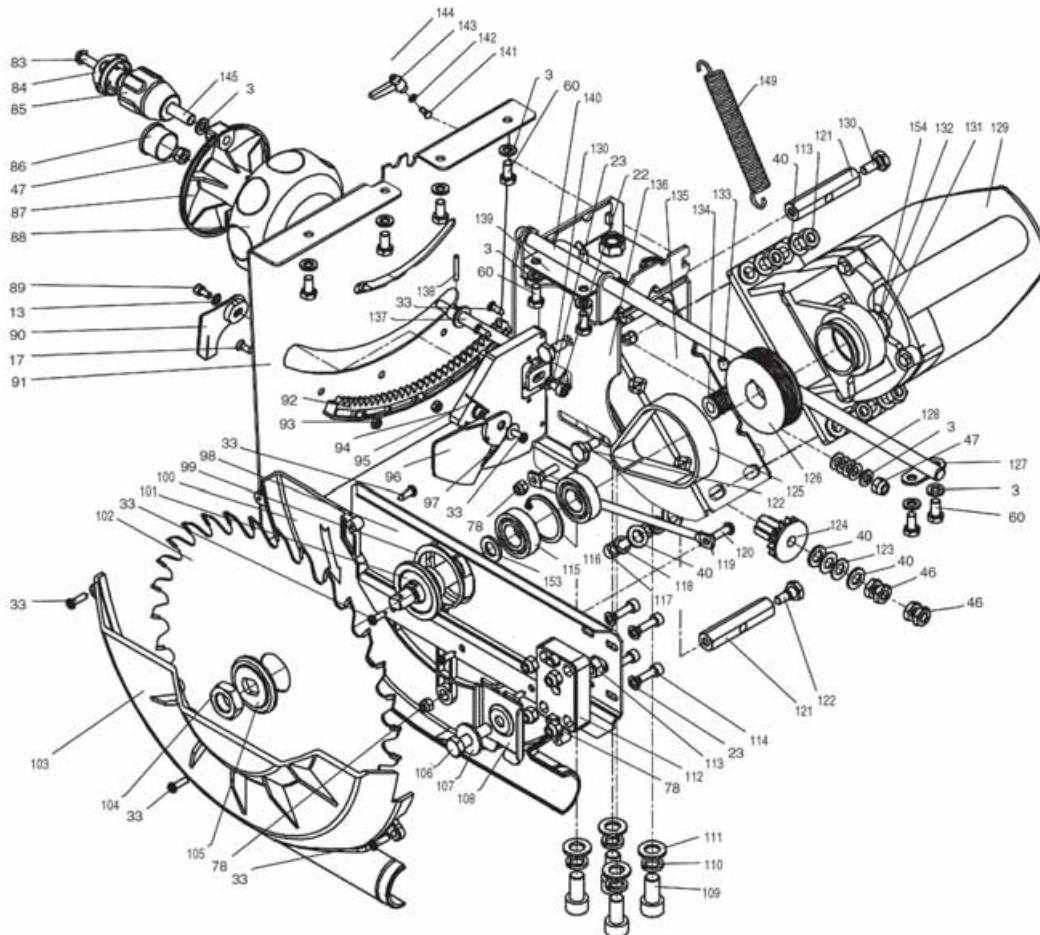
Fig.37





## PARTS DIAGRAM

Fig.38



## 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**

**or e-mail as follows:**

**PARTS: [Parts@clarkeinternational.com](mailto:Parts@clarkeinternational.com)**

**SERVICE: [Service@clarkeinternational.com](mailto:Service@clarkeinternational.com)**

# Clarke<sup>TM</sup> 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)
- 73/23/EEC
- 89/336/EEC

CERTIFICATE No. BM 60008940 0001  
REPORT No. 17700687 001

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

Sound Power Level: 112.3 dBL<sub>WA</sub>  
Product Description: 10" (254mm) Table Saw  
Model Number: CTS12  
Serial (Batch) No: See product data plate

Signed

A handwritten signature in black ink, appearing to be 'D. L. G.', written over a horizontal line.

**Clarke** INTERNATIONAL  
Hemnal Street, Epping, Essex CM16 4LG

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# Clarke<sup>TM</sup>

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