

# 315mm 2000W 230V Contractors Saw

Stock No.84708

Part No.CTS315A

**IMPORTANT:** PLEASE READ THESE INSTRUCTIONS CAREFULLY TO ENSURE THE SAFE AND EFFECTIVE USE OF THIS PRODUCT.





## **GENERAL INFORMATION**

These instructions accompanying the product are the original instructions. This document is part of the product, keep it for the life of the product passing it on to any subsequent holder of the product. Read all these instructions before assembling, operating or maintaining this product.

This manual has been compiled by Draper Tools describing the purpose for which the product has been designed, and contains all the necessary information to ensure its correct and safe use. By following all the general safety instructions contained in this manual, it will ensure both product and operator safety, together with longer life of the product itself. All photographs and drawings in this manual are supplied by Draper Tools to help illustrate the operation of the product. Whilst every effort has been made to ensure the accuracy of information contained in this manual, the Draper Tools policy of continuous improvement determines the right to make modifications without prior warning.

## TITLE PAGE

#### 1.1 INTRODUCTION:

USER MANUAL FOR:

315mm 2000W 230V CONTRACTORS SAW

Stock no. 84708. Part no. CTS315A.

### 1.2 REVISIONS:

Date first published January 2016	

As our user manuals are continually updated, users should make sure that they use the very latest version.

Downloads are available from: http://www.drapertools.com/manuals

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## 1.3 UNDERSTANDING THIS MANUALS SAFETY CONTENT:

**WARNING!** Information that draws attention to the risk of injury or death.

**CAUTION!** Information that draws attention to the risk of damage to the product or

surroundings.

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## GUARANTEE

#### 3.1 GUARANTEE

Draper tools have been carefully tested and inspected before shipment and are guaranteed to be free from defective materials and workmanship.

Should the tool develop a fault, please return the complete tool to your nearest distributor or contact Draper Tools Limited, Chandler's Ford, Eastleigh, Hampshire, SO53 1YF. England. Telephone Sales Desk: (023) 8049 4333 or Product Helpline (023) 8049 4344.

A proof of purchase must be provided with the tool.

If upon inspection it is found that the fault occurring is due to defective materials or workmanship, repairs will be carried out free of charge. This guarantee period covering parts/labour is 12 months from the date of purchase except where tools are hired out when the guarantee period is 90 days from the date of purchase. This guarantee does not apply to normal wear and tear, nor does it cover any damage caused by misuse, careless or unsafe handling, alterations, accidents, or repairs attempted or made by any personnel other than the authorised Draper warranty repair agent.

Note: If the tool is found not to be within the terms of warranty, repairs and carriage charges will be quoted and made accordingly.

This guarantee applies in lieu of any other guarantee expressed or implied and variations of its terms are not authorised.

Your Draper guarantee is not effective unless you can produce upon request a dated receipt or invoice to verify your proof of purchase within the guarantee period.

Please note that this guarantee is an additional benefit and does not affect your statutory rights.

**Draper Tools Limited.** 

## 4. INTRODUCTION

#### 4.1 SCOPE

The table saw described in this manual is designed to cut wood and wood derived materials. The work piece is manually fed on to the saw blade. Any other application is considered misuse.

## 4.2 SPECIFICATION

Stock nos.	84708
Stock nos	CTS315A
Motor:	
Rated voltage	230V
Rated frequency	50Hz
Rated input	2000W
Revolutions per minute (no load)	2950r/min
Maximum depth of cut	
at 90°	85mm
at 45°	46mm
Blade diameter	315mm
Bore size	30mm
Table size	800 × 550mm
extension table	800 × 400mm
Sound power level	95.3dB(A)
Sound pressure level	82.3B(A)
Weight	
<b>5</b>	3

#### 4.3 HANDLING & STORAGE

The environment will have a negative result on its operation if you are not careful. If the air is damp, components will rust. If the machine is unprotected from dust and debris; components will become clogged: And if not cleaned and maintained correctly or regularly the machine will not perform at its best.

## HEALTH & SAFETY INFORMATION

## 5.1 GENERAL SAFETY INSTRUCTIONS FOR POWER TOOL USE

When using any type of power tool there are steps that should be taken to make sure that you, as the user, remain safe.

Common sense and a respect for the tool will help reduce the risk of injury.

Read the instruction manual fully. Do not attempt any operation until you have read and understood this manual.

Most important you must know how to safely start and stop this machine, especially in an emergency.

Keep the work area tidy and clean. Attempting to clear clutter from around the machine during use will reduce your concentration. Mess on the floor creates a trip hazard. Any liquid spilt on the floor could result in you slipping.

Find a suitable location. If the machine is bench mounted; the location should provide good natural light or artificial lighting as a replacement. Avoid damp and dust locations as it will have a negative effect on the machine's performance. If the machine is portable; do not expose the tool to rain. In all cases do not operate power tools near any flammable materials.

**Beware of electric shock.** Avoid contact with earthed surfaces; because they can conduct electricity if there is an electrical fault with the power tool. Always protect the power cable and route it away from danger.

**Keep bystanders away.** Children, onlookers and passers by must be restricted from entering the work area for their own protection. The barrier must extend a suitable distance from the tool user.

**Unplug and house all power tools that are not in use.** A power tool should never be left unattended while connected to the power supply. They must be housed in a suitable location, away locked up and from children.

**Do not overload or misuse the tool.** All tools are designed for a purpose and are limited to what they are capable of doing. Do not attempt to use a power tool (or adapt it in any way) for an application it is not designed for. Select a tool appropriate for the size of the job. Overloading a tool will result in tool failure and user injury: This covers the use of accessories.

**Dress properly.** Loose clothing, long hair and jewellery are all dangerous because they can become entangled in moving machinery: This can also result in parts of body being pulled into the machine. Clothing should be close fitted, with any long hair tired back and jewellery and neck ties removed. Footwear must be fully enclosed and have a nonslip sole.

Wear personal protective equipment (PPE). Dust, noise, vibration and swarf can all be dangerous if not suitably protected against. If the work involving the power tool creates dust or fumes; wear a dust mask. Vibration to the hand, caused by operating some tools for longer periods must be protected against. Wear vibration reducing gloves and allow long breaks between uses. Protect against dust and swarf by wearing approved safety goggles or a face shield. These are some of the more common hazards and preventions; however, always find out what hazards are associated with the machine/work process and wear the most suitable protective equipment available.

**Do not breathe contaminated air.** If the work creates dust or fumes; connect the machine (if possible) to an extraction system either locally or remotely. Working outdoors can also help if possible.

**Move the machine as instructed.** If the machine is hand held, do not carry it by the power supply cable. If the product is heavy; employ a second or third person to help move it safely or use a mechanical device. Always refer to the instructions for the correct method.

**Do not overreach.** Extending your body too far can result in a loss of balance and you falling. This could be from a height or onto a machine and will result in injury.

Maintain your tools correctly. A well maintained tool will do the job safely. Replace any damaged or missing parts immediately with original parts from the manufacturer. As applicable; keep blades sharp; moving parts clean, oiled or greased; handles clean; and emergency devices working.

## HEALTH & SAFETY INFORMATION

Wait for the machine to stop. Unless the machine is fitted with a safety brake; some parts may continue to move due to momentum. Wait for all parts to stop; then unplug it from the power supply before making any adjustments, carrying out maintenance operations or just finishing using the tool.

Remove and check setting tools. Some machinery requires the use of additional tools or keys to set, load or adjust the power tool. Before starting the power tool always check to make certain they have been removed and are safely away from the machine.

**Prevent unintentional starting.** Before plugging any machine in to the power supply, make sure the switch is in the OFF position. If the machine is portable; do not hold the machine near the switch and take care when putting the machine down; that nothing can operate the switch.

Carefully select an extension lead. Some machines are not suitable for use with extension leads. If the tool is designed for use outdoors; use an extension lead also suitable for that environment. When using an extended lead, select one capable of handling the current (amps) drawn by the machine in use. Fully extend the lead regardless of the distance between the power supply and the tool. Excess current (amps) and a coiled extension lead will both cause the cable to heat up and can result in fire.

**Concentrate and stay alert.** Distractions are likely to cause an accident. Never operate a power tool if you are under the influence of drugs (prescription or otherwise), including alcohol or if you are feeling tired. Being disorientated will result in an accident.

Have this tool repaired by a qualified person. This tool is designed to confirm to the relevant international and local standards and as such should be maintained and repaired by someone qualified; using only original parts supplied by the manufacturer: This will ensure the tool remains safe to use.

## 5.2 SPECIFIC SAFETY INSTRUCTIONS FOR TABLE SAWS

#### WARNING

For your own safety, do not operate your saw until it is completely assembled and installed according to the instructions....and until you have read and understood the safety rules, assembly procedures, adjustment procedures and maintenance etc.

#### 1. STABILITY.

There may be a tendency for the saw to tip over or move during certain cutting operations, such as, cutting extremely large heavy panels or long heavy boards, so the saw must be bolted down.

#### 2. MINIMISE POTENTIAL ACCIDENTS.

Most accidents are caused by **FAILURE TO FOLLOW SET UP AND OPERATION INSTRUCTIONS.** Avoid awkward hand positions, where a sudden slip could cause a hand to move into a saw blade or other cutting tool. Never reach behind, or around the blade with the hand holding down the workpiece for any reason.

#### DO NOT PLACE FINGERS OR HANDS IN THE PATH OF THE SAW BLADE.

- 3. Never reach under your machine when operating or make any adjustments when it is running.
- **4.** Turn the saw 'OFF' and disconnect the power supply when changing the blade, removing or replacing the blade guard, or making any adjustments.
- 5. Always maintain control of the workpiece. **DO NOT 'LET GO'** of the workpiece until the machine has stopped.
- **6.** When removing short workpieces, or cleaning up around the table, be sure the saw is switched 'OFF'.
- 7. Never turn the saw 'ON' before clearing the table of all tools, wood scraps, etc., except the workpiece and related feed or support devices for the operation.
- 8. When moving the saw, disconnect power supply.

## 5. HEALTH & SAFETY INFORMATION

- 9. Never hold onto or touch the 'free end' of the workpiece or a 'free piece' that is cut off, while power is 'ON' and/or the saw blade is rotating.
- 10. If you stall or jam the saw blade in the workpiece, turn power 'OFF', remove the workpiece from the saw blade and check to see if the saw blade is parallel to the table slots or grooves and if the riving knife is in alignment with the saw blade. If ripping at the time, check to see if the rip fence is parallel with the saw blade. Adjust as indicated in this manual. WARNING: Do not allow familiarity (gained from frequent use of your saw) to become commonplace. Always remember that a careless fraction of a second is sufficient to inflict severe injury.
- **11. MAKE SURE YOUR FINGERS DO NOT CONTACT THE TERMINALS OF THE POWER PLUG** when installing or removing from the mains power supply.

#### 12, KICKBACKS - THEIR CAUSE,

Kickbacks can cause serious injury. A kickback occurs when a part of the workpiece binds between the saw blade and the rip fence or another object rises from the table and is thrown towards the operator. Kickbacks can be avoided by attention to the following conditions:

#### 13. KICKBACK - HOW TO AVOID THEM AND PROTECT YOURSELF FROM POSSIBLE INJURY.

- a) Be certain that the saw blade is parallel to the rip fence.
- b) Do not rip by applying the feed force to the section of the workpiece that will become the cut-off (free) piece. Feed force when ripping should always be applied between the saw blade and the fence....use a push-stick for short work or less than 6" wide.
- c) Keep saw blade guard and riving knife in place and operating properly. The riving knife must be in alignment with the saw blade.
- **14.** Do not leave a long board (or other workpiece) unsupported so the spring of the board causes it to shift on the table. Provide proper support for the workpiece, based on its size and the type of operation to be performed. Hold the work firmly against the fence and down against the table surface.
- 15. Never use a length stop on the free end of the workpiece when cross cutting. Never hold onto or touch the free end of the workpiece when cross cutting, or a free piece that is cut off when ripping while power is 'ON' and/or the saw blade is rotating. In short, the cut-off piece in any 'through-sawing' (cutting completely through the workpiece) operation must never be confined it must be allowed to move laterally.
- 16. IF YOUR SAW MAKES AN UNFAMILIAR NOISE OR IF IT VIBRATES EXCESSIVELY, CEASE OPERATING IMMEDIATELY UNTIL THE SOURCE HAS BEEN LOCATED AND THE PROBLEM CORRECTED.

#### 17. EXTENSION LEADS

The use of any extension lead will cause some loss of power. Use only extension leads which have a 3-pin plug and 3-pin sockets which accept the tools plug.

#### 18. SAFETY PRECAUTIONS

- Do not use saw blades which are damaged or deformed:
- Replace table insert when worn;
- Use only saw blades recommended by the manufacturer, which conform to EN 847-1.
- WARNING: Ensure that the dimensions of the replacement blade are equal to the one you are replacing, i.e. bore size, diameter and thickness.
- Take care that the selection of the saw blade is suitable for the material to be cut;
- Wear suitable personal protective equipment when necessary, which should include:
  - hearing protection to reduce the risk of induced hearing loss,
  - respiratory protection to reduce the risk of inhalation of harmful dust,
  - gloves when handling saw blades and rough material. Saw blades shall be carried in a holder whenever practicable.
  - eye protection to reduce risk of particles entering eyes.

## HEALTH & SAFETY INFORMATION

- Connect circular saws to a dust-collecting device when sawing.
- Do not use High speed steel (HSS) blades;
- The push-stick or push block should always be stored with the machine when not in use.

#### 19. SAFE OPERATION

- Use push-sticks or push blocks to feed the workpiece past the saw blade;
- Use and correct adjustment of the riving knife;
- Use and correct adjustment of the upper saw blade guard;
- Rebating or grooving should not be carried out.
- Saws shall not be used for slotting (stopping groove);
- Use only saw blades for which the maximum possible speed is not less than the maximum spindle speed of the tool and the material to be cut;
- When transporting the machine use only transportation devices and do not use guards for handling or transportation;
- During transportation the saw blade should be lowered below the table height.

## 5.3 CONNECTION TO THE POWER SUPPLY

Make sure the power supply information on the machine's rating plate are compatible with the power supply you intend to connect it to.

If a replacement plug is to be fitted this must be carried out by a qualified electrician.

The damaged or incomplete plug, when cut from the cable shall be disabled to prevent connection to a live electrical outlet.

This appliance is Class  $I^{\dagger}$  and is designed for connection to a power supply matching that detailed on the rating label and compatible with the plug fitted.

If an extension lead is required, use an approved and compatible lead rated for this appliance. Follow all the instruction supplied with the extension lead.

†Earthed \( \preceq \): This product requires an earth connection to protect against electric shock from accessible conductive parts in the event of a failure of the basic insulation.

## 6. TECHNICAL DESCRIPTION

## **6.1 IDENTIFICATION**



- (1) Handles
- 2 No-volt On/off switch
- 3 Push block
- 4 Blade guard
- 5 Blade
- 6 Riving knife
- (7) Table extension

- 8 Wheel set
- 9 Dust extraction outlet
- 10 Blade height adjustment
- 11 Mitre gauge
- 12 Power connection
- 36) Blade angle locking knob

## 7. UNPACKING & CHECKING

#### 7.1 PACKAGING

Carefully remove the product from the packaging and examine it for any sign of damage that may have happened during shipping. Lay the contents out and check them against the parts shown below. If any part is damaged or missing; please contact the Draper Helpline (the telephone number appears on the Title page) and do not attempt to use the product.

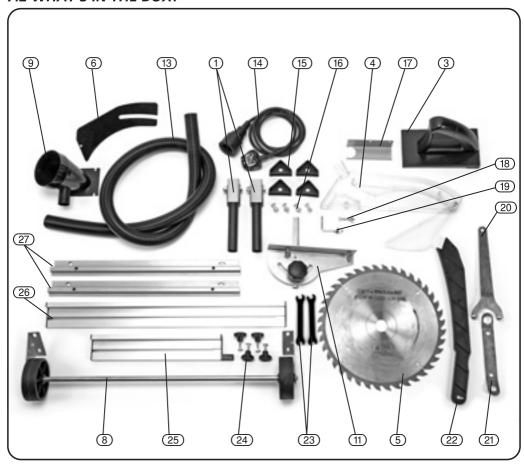
The packaging material should be retained at least during the guarantee period: in case the machine needs to be returned for repair.

Warning! Some of the packaging materials used may be harmful to children. Do not leave any of these materials within their reach.

If any of the packaging is to be thrown away, make sure they are disposed of correctly; according to local regulations.

## 7. UNPACKING & CHECKING

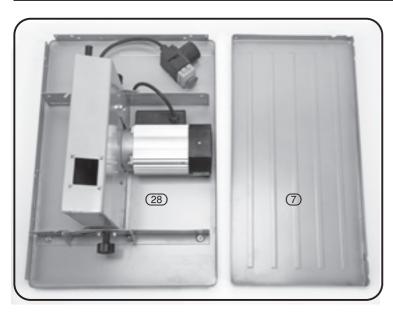
### 7.2 WHAT'S IN THE BOX?



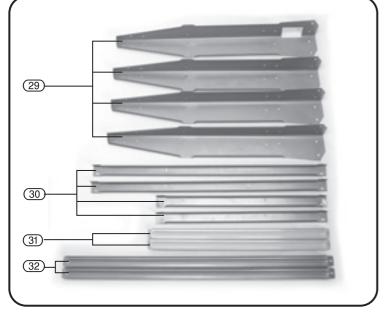
- 9 Dust port.
- 6 Riving knife.
- (13) Dust extraction flexible hose.
- (1) Handles.
- 14 Power cable and plug.
- (15) Rubber feet.
- 16) Bolts to secure feet (4xM8).
- 4 Blade guard.
- 17 Hose support.
- (3) Push block.
- 18) Blade guard bolt.
- 19 Push stick hook.
- 20 Double pin blade spanner

- (21) Blade spanner.
- 22) Push stick.
- ⑤ Blade.
- 11) Mitre gauge.
- 23) 2x frame assembly spanners.
- (24) Rail adjustment knobs.
- 25 Mitre fence.
- 8 Wheel set.
- (26) Ripping fence.
- (27) Guide rails.
- (34) 4x self tapping screws.
- (35) 3x Pan head cross slot screws+washers.

# 7. UNPACKING & CHECKING



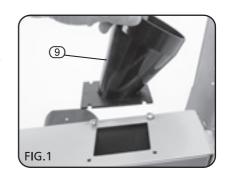
- (28) Motor and work top
- (7) Extension table.



- 29 Stand legs.
- 30 Stand leg struts.
- (31) Extension table supports side.
- (32) Extension table supports back.
- 37) 38x M6 nuts+bolts.

# 8.1 ATTACH THE DUST EXTRACTION OUTLET- FIG. 1

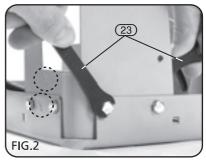
Lay the table top on the floor, as shown and attach the extraction outlet (9) with 4x self tap screws (34).



#### 8.2 ATTACH THE LEGS - FIG. 2

Attach the 4 legs with bolts using 2 spanners supplied (23).

Only the leg that is marked "A" needs to be fitted next to the corresponding mark "A" on the upturned top. NOTE: Some items are added later in the construction (such as the side and front rails and the hose support) using the same bolts that are used to attach the legs (33).



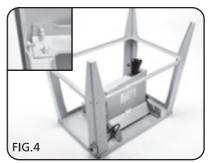
## 8.3 ON/OFF SWITCH - FIG. 3

The leg marked "A" has a hole, pass the ON/OFF switch through the hole and secure with 3 cross slot screws and washers (35).



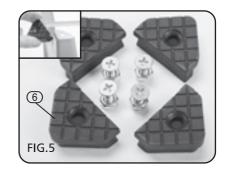
## 8.4 ATTACH THE LEG STRUTS - FIG. 4

Attach the struts between legs with 3 bolts and nuts (as insert) to each leg using spanners supplied.



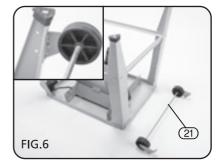
## 8.5 ATTACH RUBBER FEET - FIG. 5

Push the rubber feet (6) onto the legs, and secure in place with bolt and nut supplied (16).



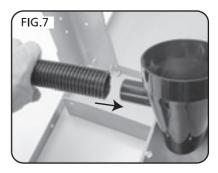
## 8.6 ATTACH WHEEL SET - FIG. 6

Attach the wheel set (21) using 4 bolts with nuts near the base of the back legs.



## 8.7 DUST EXTRACTION - FIG. 7

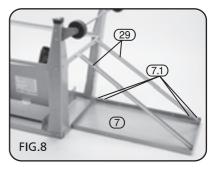
While the table in upside down the flexible hose is connected to the outlet, it's a tight push fit.



## 8.8 ATTACH EXTENSION TABLE - FIG. 8

The extension table is fitted easiest when the table is upside down, the extension top ⑦ is laid next to the table. Bolted to the table top then connected with struts ③2).

NOTE: If connecting to the side of the table the shorter struts (31) will be used, and the extension top needs to turned so the notches (7.1) on the side correspond with the bolt heads on the table side so there is no gapping.



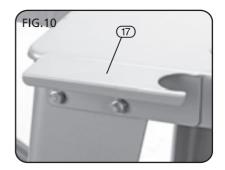
## 8.9 ATTACH EXTRACTION HOSE - FIG. 9

Fit a dust extraction unit to the outlet.



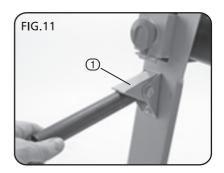
## 8.10 EXTRACTION HOSE SUPPORT - FIG. 10

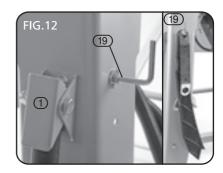
The hose support (7) is fitted on the LHS at the back, remove the leg bolts. Slot the bolts through the hose support, leg and table top then refasten.



## 8.11 ATTACH HANDLES - FIGS. 11 & 12

The handles 1 are attached using two bolts and nuts each to the predrilled holes on both front legs. Then add the push stick and spanner hook 19 on the

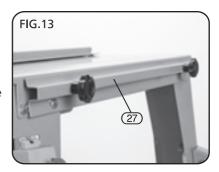


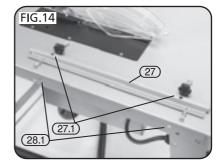


RHS.

#### 8.12 ATTACH GUIDE RAILS - FIGS. 13 & 14

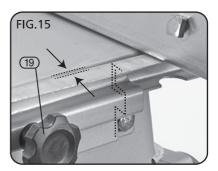
Both the front and LHS have guide rails (27) for the mitre gauge to slide along. Some bolts will need to be removed and re-used to secure the rails in position. Then the guide adjustment knobs need to be fitted through both the square hole in the table (28.1) and the rail (27.1) as shown. The square shoulders of the bolt fit into the square hole of the table.





## 8.13 ATTACH THE MITRE GAUGE - FIG. 15

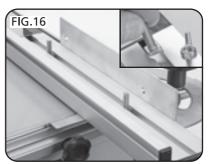
Slide the mitre gauge into the rails. The knobs (19) are tightened to adjust the gap that the mitre block slides along.



#### 8.14 ATTACH THE MITRE FENCE- FIG. 16

The mitre fence has an opening at one end (pic insert) for the square head of the bolt to fit in and slide along. Line up with the holes on the mitre block, push through and secure with wingnuts. The wing nuts enable the mitre fence to slide along the face of the mitre block supporting the workpiece close to the blade.

NOTE: The same method is used to attach the rip fence.



#### 8.15ATTACH BLADE - FIGS. 17 - 18

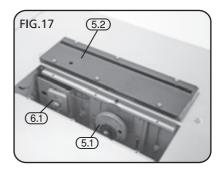
Turn the table saw over onto it's feet.

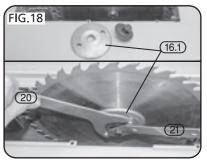
Note: Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

Raise the saw blade mechanism to its highest point. Remove the 6 cross head bolts and lift the table insert (5.2) to gain access to the flange plate (5.1) and the riving knife fixing plates (6.1).

Insert the pins on spanner (20) into flange plate (5.1) this will stop rotation, then using spanner (21) remove the bolt and washer (remember right hand thread).

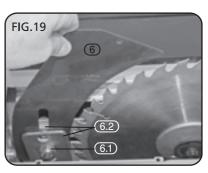
Check the new blade for damage, missing teeth, sharpness etc. Fit the new blade, ensure that the teeth are pointing towards the front of the machine. Put the flange plate onto the shaft and twist on the saw bolt. Spin the bolt up finger tight and check the blade is correctly seated. tighten using same spanners as before. Reconnect the machine to the mains supply. Give the machine a 'quick' burst check (i.e. quick ON-OFF) to ensure everything is O.K. If everything is satisfactory, continue to use the machine.

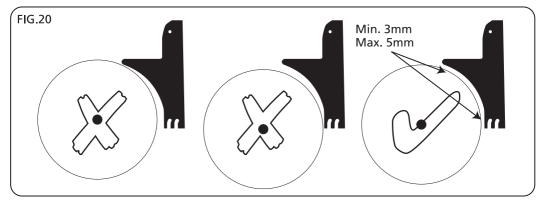




## 8.16 ATTACH THE RIVING KNIFE - FIGS. 19 - 20

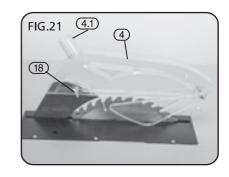
Using spanner (21) loosen the nut so that the riving knife (6) can slide between the two plates (6.1). Position the riving knife approximately 3mm - 5mm to the circular saw blade (as below) and tighten the nut to secure.





## 8.17 ATTACH BLADE GUARD - FIG. 21

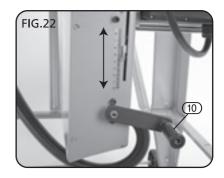
Attach the blade guard 4 to the riving knife using bolt and wing nut 18. Once the guard is in place then the extraction hose is a push fit onto the top 4.1.



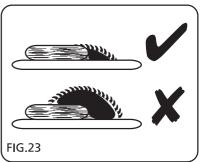
## SETTING UP THE TABLE SAW

# 9.1 CHANGING THE BLADE HEIGHT - FIGS. 22 - 23

Adjust the cut height with the hand wheel ①. Select the cutting height so that the saw blade teeth still protrude from the work piece to be processed.

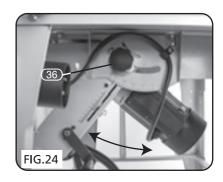


**CAUTION:** The saw blade must be set approximately 5mm above the work piece top. Any greater exposure of the saw blade increases the risk of kick back.



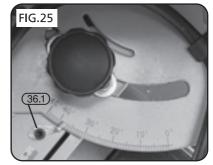
# 9.2 CHANGING THE BLADE ANGLE (BEVEL ANGLE) – FIGS. 24 - 25

Release the locking knob (36). The saw blade can now be adjusted (from 90° to 45°). Once the correct angle is achieved lock in place with locking knob (36), the blade height can then be adjusted to make cut safe.



There is a hex. bolt on the angle pointer (36.1) this can be adjusted to make angles more accurate.

Note: The angles are an estimate, for a true angle to be achieved a measuring device such as a protractor can be used against the blade and the saw table.

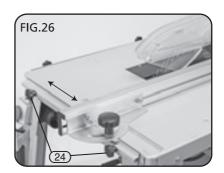


## SETTING UP THE TABLE SAW

#### 9.3 RIP FENCE ALIGNMENT- FIG. 26

When ripping material the mitre gauge is fitted with the rip fence (rip fence is longer than the mitre fence). Slide fence along the front rail against the scale on the table top, when in correct position tighten the guide adjustment knobs (24) to lock in position.

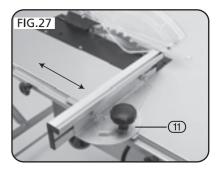
NOTE: Mitre gauge must be set at 90° otherwise the material will pinch the blade.



## 9.4 MITRE GAUGE - FIG. 27

The mitre gauge is used for cross cut, mitre cut and compound mitre cut when mounted on the side rail.

Setting the angle on the 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 work piece.



## 9.5 NO-VOLT SWITCH - FIGS. 28 - 29

The table saw is fitted with a no-volt switch with an emergency shut-off cover ②.

In the event of an emergency, closing the cover firmly will cause the stop button to be triggered, stopping the machine. To re-open the cover, slide red stop button up, lift cover and press green button. In the event of a power failure the saw will have to be manually re-started.

To switch the saw on, lift up the cover and push the green button marked 'I' (2.1).

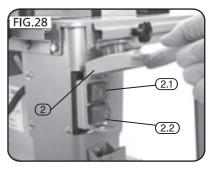
To switch the saw off, lift up the sprung cover and push the red button marked '0' (2.2).

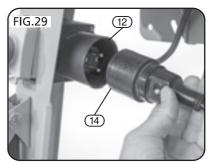
To switch the saw off in an emergency striking the cover firmly will trigger the '0' button.

Note: Regular inspection/cleaning should be carried out to prevent any build up of sawdust, etc.

Power supply is connected to the table saw with power lead (14) to the back of the no-volt switch.

**IMPORTANT:** Ensure saw is used in a well lit environment.





## 10. BASIC TABLE SAW OPERATION

# 10.1 CUTTING METHODS – FIGS. 30 - 32 RIPPING:

- Secure the mitre gauge with rip fence to the front rail of the table.
- Raise the blade to 5mm higher than the top of the work piece.
- Hold the work piece flat on the table and against the fence. Keep the work piece about 25mm back from the blade.

CAUTION: The work piece must have a straight edge against the fence and must not be warped, twisted or bowed in any way.

- Keep both hands away from the blade and away from the path of the blade.
- Turn the saw on and allow the blade to reach full speed.
- Keeping the work piece against the table and fence, slowly feed the work piece towards the saw blade.
- Stand with your body to one side of the work piece and at the front of the table when feeding the wood. This will reduce the risk of injury should a piece of wood kickback or kick up.
- Continue pushing the work piece until it is clear of the guard. Do not overload the motor. Never try to pull a work piece back with the blade turning. Turn the switch off, allow the blade to stop and slide the work piece out. As the end of the work piece approaches the blade use the push stick provided to complete the cut and push it clear.

#### RIPPING SMALL/FLAT PIECES OF WOOD:

- This is an unsafe practice and not recommended. It is not safe to have your hands close to the blade. Instead, rip a large piece of material to obtain the desired size.
- When a small piece requires ripping use a push stick to hold the work piece in place, keeping your hands away from the blade.

#### BEVEL RIPPING:

 This operation is the same as ripping except that the blade angle is set to an angle greater than 0°.
 WARNING: Only operate with the work piece and rip fence on the right side of the blade to reduce the risk of kickback.



## 10. BASIC TABLE SAW OPERATION

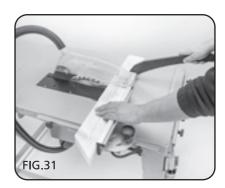
#### **WORK PIECE SUPPORT:**

- Longer pieces need extra supports, for example, a roller stand (A) (Draper stock No.13886 or 19192). The supports should be placed to the side for wider material or to the rear for longer material so the work piece does not sag or kick up.
- The support should allow the work piece to lay flat on the table during the cutting operation.

#### CROSS CUTTING:

Using a mitre guide.

- Set the blade height 5mm above the work piece top.
- Hold the work piece firmly against the mitre guide with both hands.
- Start the saw and allow the blade to spin up to full speed. Whilst gripping the work piece firmly against the guide and pushing flat against the table, slowly slide the wood through the blade.



#### **BEVEL CROSS CUTTING:**

 This operation is the same as cross cutting except that the blade angle is set to an angle greater than 0°.

#### MITRE CUTTING:

There are two methods available to cut a mitre.

- This operation is the same as cross cutting except the mitre guide is set at any angle other than 90°.
- (i) Sliding the mitre gauge in the rail on the side of the table top.

Note: As with the bevel angle the mitre cut angles are an estimate, for a true angle to be achieved then a piece of spare wood needs to be cut and measured, any fine adjustments can be made until correct angle is achieved.

#### COMPOUND MITRE CUTTING:

- This is a combination of bevel cross cutting and mitre cutting. It is very infrequently used.
- Follow the instructions for both mitre cutting and bevel cross cutting.



# 11. MAINTENANCE

## 11.1 BLADE REPLACEMENT

Note: Remove the plug from the socket before carrying out adjustment, servicing or maintenance.

Refer to PREPARING THE TABLE SAW section 8.15 for blade replacement.

# 12. TROUBLESHOOTING

## 12.1 TROUBLESHOOTING

**WARNING**: For your own safety, turn the switch off and remove the plug from the power supply socket.

Trouble	Probable Cause	Remedy
Saw will not start.	Saw not plugged in.     Fuse blown or circuit breaker tripped.     Cable damaged.	Plug in saw.     Replace fuse or reset circuit breaker.     Have cable replaced.
Does not make accurate 45° and 90° rip cuts.	Tilt angle pointer not set accurately.	Check blade with square and adjust pointer to zero.
Material pinches blade when ripping.	<ol> <li>Rip fence not aligned with blade.</li> <li>Warped wood, edge against fence not straight.</li> </ol>	Check and adjust rip fence.     Select another piece of wood.
Material binds on riving knife.	Riving knife not aligned correctly with blade.	Check and align riving knife with blade.
Saw makes unsatisfactory cuts	<ol> <li>Blunt blade.</li> <li>Blade mounted backwards.</li> <li>Gum or pitch on blade.</li> <li>Incorrect blade for work piece.</li> <li>Gum or pitch on table causing erratic feed.</li> </ol>	<ol> <li>Re sharpen or replace blade.</li> <li>Turn blade around.</li> <li>Remove blade and clean with white spirit and coarse steel wool.</li> <li>Change to correct type of blade.</li> <li>Clean the table.</li> </ol>
Material kicked back from blade	<ol> <li>Rip fence out of alignment.</li> <li>Riving knife not aligned with blade.</li> <li>Feeding work piece without rip fence.</li> <li>Riving knife not in place.</li> <li>Dull blade.</li> <li>Letting go of material before it is past saw blade.</li> <li>Blade angle locking knob not tight.</li> </ol>	<ol> <li>Align rip fence with blade.</li> <li>Align riving knife with the blade.</li> <li>Install and use the rip fence.</li> <li>Install and use riving knife (with guard).</li> <li>Replace the blade.</li> <li>Push material all the way past saw blade before releasing the work.</li> <li>Tighten knob.</li> </ol>
Blade does not raise or tilt freely.	Sawdust and dirt in raising and tilting mechanism.	1. Vacuum out loose dust and dirt.
Blade does not run up to speed.	<ol> <li>Extension cable too light or too long.</li> <li>Low mains voltage.</li> </ol>	Replace with adequate size extension cable.     Check supply voltage.
Machine vibrates excessively.	<ol> <li>Saw not mounted securely to stand or work bench.</li> <li>Stand or bench on uneven floor.</li> <li>Damaged saw blade.</li> </ol>	Tighten all fixings.     Reposition on flat level surface.     Fasten to floor if necessary.     Replace blade.
Does not make accurate 45° and 90° cross cuts.	1. Mitre gauge out of adjustment.	1. Adjust mitre gauge.

**IMPORTANT:** Please note all repairs/service should be carried out by a qualified person.

## 13. EXPLANATION OF SYMBOLS

## 13.1 EXPLANATION OF SYMBOLS



Warning! Wear dust mask.



Warning! Wear ear defenders.



Warning! Wear goggles.



Keep hands away from saw blades.



Warning! Read the instruction Manual



Single value noise marking. (maximum declared A-Weighted sound power level in decibels).



WEEE Do not dispose of Waste Electrical & Electronic Equipment in with domestic rubbish.

## 14. DISPOSAL

#### 14.1 DISPOSAL

- At the end of the machine's working life, or when it can no longer be repaired, ensure that it is disposed of according to national regulations.
- Contact your local authority for details of collection schemes in your area. In all circumstances:
  - Do not dispose of power tools with domestic waste.
  - Do not incinerate.
  - Do not abandon in the environment.
  - Do not dispose of WEEE\* as unsorted municipal waste.



\* Waste Electrical & Electronic Equipment.

#### 15.1 GLOSSARY

## Alphabetical list of words relating to this manual

**BEVELLING** An angle cutting operation through the face of the work piece.

**BLADE TOOTH** 

The distance that the teeth of the saw blade are bent (on set)

outward from the side of the blade.

COMPOUND CUTTING

SET

A simultaneous bevel and mitre cutting operation.

**CROSS CUT** A cutting operation made across the grain of the wood.

**FEATHERBOARD** A device which can help guide work pieces during rip type

operation.

**HEEL** Misalignment of the blade.

**KERF** The material which is removed by the blade in a through cut or

the slot produced by the blade in a non-through or partial cut.

**KICKBACK** An uncontrolled grabbing, and throwing of the work piece back

toward the front of the saw during a rip type operation.

**LEADING EDGE** The edge of the work piece which is pushed into the blade first.

**MITRING** An angle cutting operation through the face of the work piece.

**PUSH BLOCK** A device used for ripping type operations too narrow to allow use

of a push stick.

**PUSH STICK** A device used to feed the work piece through the saw during

narrow ripping type operation and which helps keep the

operator's hands well away from the blade.

**RABBET** A notch in the edge of a work piece.

**RESIN** A sticky sap-based substance that has dried.

**RIPPING** A cutting operation along the length of the work piece - in the

direction of the grain.

**RIVING KNIFE** Positioned behind the saw blade to prevent wood closing and

jamming after being cut.

**SAW BLADE PATH** The area of the work piece directly in line with and moving

towards the saw blade edge.

**TRAILING EDGE** The work piece edge last cut by the saw blade.

WORK PIECE The item on which the cutting operation is being performed. The

surfaces of the work piece are commonly referred to as faces, ends

and edges.



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