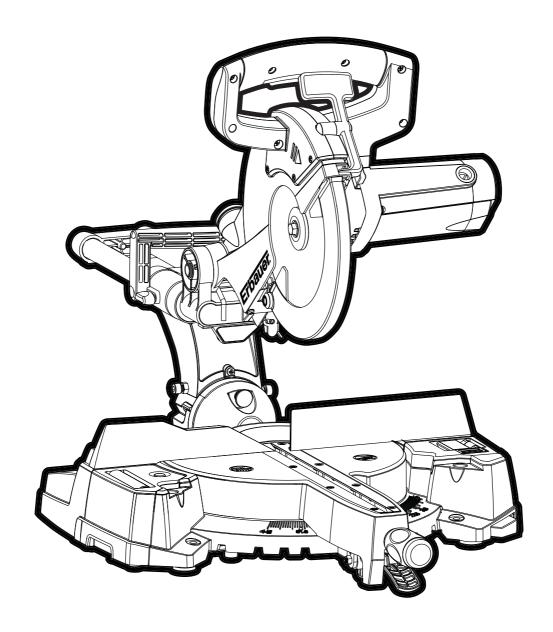
# Erbauer



# **Original Instructions**

Patent Pending 1008829.2

Read instructions fully before operating this tool

ERB238MSW

(SKU NO 33776 - J1X-KZ13-2555)







Congratulations on your purchase of a quality power tool from Erbauer Ltd. This product should give you reliable service for your peace of mind this power tool does carry a 24-month guarantee, the terms of which are detailed below.

If this product develops a fault within the guarantee period contact your retailer.

Please retain this handbook in case you need to refer to safety, care or guarantee information in the future.

#### **GUARANTEE**

This **Erbauer** product carries an Erbauer Ltd guarantee of 24 months. If your product develops a fault within this period, you should, in the first instance contact your retailer. If the fault occurs within the first 24 months, you may return the goods for a full refund or we will repair or replace the goods if you prefer. When repair is not practical or identical goods are not available, alternative goods of similar specification and quality will usually be provided but, failing this, you will be offered a partial or full refund depending on the time period since purchase.

This guarantee specifically excludes losses caused due to:

- -Fair wear and tear
- -Misuse or abuse
- -Lack of routine maintenance
- -Failure of consumable items (such as batteries)
- -Accidental damage
- -Cosmetic damage
- -Failure to follow manufacturer's guidelines
- -Loss of use of the goods
- -Repairs attempted by anyone, unless authorised by Erbauer Ltd.

This guarantee does not affect your statutory rights. This guarantee is only valid in the UK.

For further technical advice and spare parts, please contact your retailer quoting your Erbauer model number.

#### **SAFETY INSTRUCTIONS**



**WARNING!** When using electric tools basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury including the following.

Read all these instructions before attempting to operate this product and save these instructions.

# **SAVE THESE INSTRUCTIONS**

The term "power tool" in the warning refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

# 1 Keep work area clear

- Cluttered areas and benches invite injuries.

#### 2 Consider work area environment

- Do not expose tools to rain.
- Do not use tools in damp or wet locations.
- Keep work area well lit.
- Do not use tools in the presence of flammable liquids or gases.

### 3 Guard against electric shock

- Avoid body contact with earthed or grounded surfaces (e.g. pipes, radiators, ranges, refrigerators).

# 4 Keep other persons away

- Do not let persons, especially children, not involved in the work touch the tool or the extension cord and keep them away from the work area.

#### 5 Store idle tools

- When not in use, tools should be stored in a dry locked-up place, out of reach of children.

#### 6 Do not force the tool

- It will do the job better and safer at the rate for which it was intended.

#### 7 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; for example do not use circular saws to cut tree limbs or logs.

#### 8 Dress properly

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

#### 9 Use protective equipment

- Use safety glasses.
- Use face or dust mask if working operations create dust.

#### 10 Connect dust extraction equipment

- If the tool is provided for the connection of dust extraction and collecting equipment, ensure these are connected and properly used.

#### 11 Do not abuse the cord

- Never yank the cord to disconnect it from the socket. Keep the cord away from heat, oil and sharp edges.

#### 12 Secure work

- Where possible use clamps or a vice to hold the work. It is safer than using your hand.

#### 13 Do not overreach

- Keep proper footing and balance at all times.

#### 14 Maintain tools with care

- Keep cutting tools sharp and clean for better and safer performance.
- Follow instruction for lubricating and changing accessories.
- Inspect tool cords periodically and if damaged have them repaired by an authorized service facility.
- Inspect extension cords periodically and replace if damaged.
- Keep handles dry, clean and free from oil and grease.

#### 15 Disconnect tools

- When not in use, before servicing and when changing accessories such as blades, bits and cutters, disconnect tools from the power supply.

### 16 Remove adjusting keys and wrenches

- Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.

### 17 Avoid unintentional starting

- Ensure switch is in "off" position when plugging in.

#### 18 Use outdoor extension leads

- When the tool is used outdoors, use only extension cords intended for outdoor use and so marked.

#### 19 Stay alert

- Watch what you are doing, use common sense and do not operate the tool when you are tired.

#### 20 Check damaged parts

- Before further use of tool, it should be carefully checked to determine that it will operate properly and perform its intended function.
- Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation.
- A guard or other part that is damaged should be properly repaired or replaced by an authorised service centre unless otherwise indicated in this instruction manual.
- Have defective switches replaced by an authorised service centre.
- Do not use the tool if the switch does not turn it on and off.

#### 21 Warning

- The use of any accessory or attachment other than one recommended in this instruction manual may present a risk of personal injury.

#### 22 Have your tool repaired by a qualified person

- This electric tool complies with the relevant safety rules. Repairs should only be carried out by qualified persons using original spare parts, otherwise this may result in considerable danger to the user.

# **HEALTH ADVICE**

Warning! When drilling, sanding, sawing or grinding, dust particles will be produced. In some instances, depending on the materials you are working with, this dust can be particularly harmful to you (e.g. lead from old gloss paint). You are advised to consider the risks associated with the materials you are working with and to reduce the risk of exposure. You should:

- -Work in a well-ventilated area.
- -Work with approved safety equipment, such as dust masks that are specially designed to filter microscopic particles.

# **SAFETY INSTRUCTIONS FOR ALL SAWS**

- a. DANGER: Keep hands away from cutting area and the blade. Keep your second hand on the handle, or motor housing. If both hands are holding the saw, they cannot be cut by the blade.
- **b. Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **c.** Adjust the cutting depth to the thickness of the workpiece. Less than a full tooth of the blade teeth should be visible below the workpiece.
- d. Never hold piece being cut in your hands or across your leg. Secure the workpiece to a stable platform. It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- e. Hold power tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will also make exposed metal parts of the power tool "live" and shock the operator.
- **f. When ripping always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- g. Always use blades with correct size and shape (diamond versus round) of arbor holes. Blades that do not match the mounting hardware of the saw will run eccentrically, causing loss of control.
- **h. Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

# Further safety instructions for all saws

Causes and operator prevention of kickback:

- kickback is a sudden reaction to a pinched, bound or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator;
- when the blade is pinched or bound tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator;
- if the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

Kickback is the result of saw misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- a. Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- b. When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur. Investigate and take corrective actions to eliminate the cause of blade binding.
- c. When restarting a saw in the workpiece, centre the saw blade in the kerf and check that saw teeth are not engaged into the material. If saw blade is binding, it may walk up or kickback from the workpiece as the saw is restarted.
- d. Support large panels to minimise the risk of blade pinching and kickback. Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- **e. Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- f. Blade depth and bevel adjusting locking levers must be tight and secure before making cut. If blade adjustment shifts while cutting, it may cause binding and kickback.

#### ADDITIONAL SAFETY INSTRUCTIONS FOR YOUR MITRE SAW

Warning: Be sure to read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire and/or serious personal injury.

- 1. Know your power tool. Read operator's manual carefully. Learn the applications and limitations, as well as the specific potential hazards related to this tool.
- 2. Always wear safety glasses or eye shields when using this mitre saw. Everyday eyeglasses have only impact-resistant lenses; they are not safety glasses.
- 3. Always protect your lungs. Wear a face mask or dust mask if the operation is dusty. Always use dust extraction equipment to minimise dust.
- 4. Always protect your hearing. Wear hearing protection during extended periods of operation.
- 5. Always inspect the tool cords periodically and if damaged have them repaired. Always be aware of the cord location.
- 6. Always check for damaged parts. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine if it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. A guard or other part that is damaged should be properly repaired or replaced at a qualified service centre.
- 7. Do not abuse the cord. Never use the cord to carry the tools or pull the plug from the socket. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.
- 8. Always make sure that your extension cord is in good condition. When using an extension cord be sure to use one that is heavy enough to carry the current that your tool will draw. An undersized cord will cause a drop in line voltage, resulting in loss of power and overheating.
- 9. Always inspect and remove all nails from lumber before sawing.
- **10.** Do not use the tool while tired or under the influence of drugs, alcohol or any medication. Following this rule will reduce the risk of electric shock, fire or serious personal injury.
- 11. Save these instructions. Refer to them frequently and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions also.
- 12. When the correct blade to cut the material has been fitted, this saw is recommended for cutting wood and plastic only.
- 13. Do not use saw blades with High Speed Steel (HSS) or damaged or deformed blades.
- 14. Replace the table insert when worn.
- 15. Use only saw blades recommended by the manufacturer and which have the exact bore and diameter required for this machine.
- 16. Connect your mitre saw to a dust collecting device (I. D.Ø32mm) when sawing.
- 17. Select saw blades in relation to the material to be cut.
- 18. Check the maximum depth of cut.
- 19. When sawing long work pieces, always use extra support to provide better support, and use clamps or other clamping devices.

- 20. The operator is adequately trained in the use, adjustment and operation and operation of the machine.
- 21. Provide for adequate room lighting at your workplace or for adequate lighting of the immediate work area.
- 22. When fitted with laser no exchange with different type of laser is permitted. Repairs shall only be carried out by the laser manufacturer or an authorised agent.
- 23. Refrain from removing any cut-offs or other parts of the workpiece from the cutting area whilst the machine is running and the saw head is not the rest position.
- 24. Never stand on this tool. Serious injuries could occur when this tool tips over or when coming in contact with the saw blade.
- 25. Only use the saw with guards in good working order and properly maintained, and in position.
- 26. Keep the floor area free of loose material e.g. chips and cut-offs.
- 27. Ensure the speed marked on the saw blade is at least equal to the speed marked on the saw.
- 28. Warning. Not replace the laser with a different type. Instruction that repairs shall only be carried out by the laser manufacturer or an authorised agent.

**WARNING:** the operation of any mitre saw can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shield and a full face shield when needed.

**WARNING:** If any parts are missing, do not operate your mitre saw until the missing parts are replaced. Failure to follow this rule could result in serious personal injury.

**Caution:** Do not let familiarity with your mitre saw make you careless. Remember that a careless fraction of a second is sufficient to cause severe injury.

#### Double insulation:

The tool is double insulated. This means that all the external metal parts are electrically insulated from the mains power supply. This is done by placing insulation barriers between the electrical and mechanical components making it unnecessary for the tool to be earthed.

#### Important note

Be sure the supply is the same as the voltage given on the rating plate. The tool is fitted with a two-core cable and plug. Remove the mains plug from socket before carrying out any adjustment or servicing.

#### SAFETY RULES FOR LASER LIGHT

The laser light/laser radiation used is Class 2 with maximum 1mW power and 650nm wavelength.

These lasers do not normally present an optical hazard, although staring at the beam may causeflash blindness.



**WARNING:** Do not stare directly at the laser beam. A hazard may exist if you deliberately stare into the beam, please observe all safety rules as follows:

- The laser shall be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or an object other than the workpiece.
- The laser beam shall not be deliberately aimed at personnel and shall be prevented from being directed towards the eye of a person for longer than 0.25s.
- Always ensure the laser beam is aimed at a sturdy workpiece without reflective surfaces. i.e. wood or rough coated surfaces are acceptable. Bright shiny reflective sheet steel or the like is not suitable for laser use as the reflective surface could direct the beam back at the operator.
- Do not change the laser light assembly with a different type. Repairs must be carried out by the laser manufacturer or an authorised agent.

### **SPECIFIC SAFETY RULES & SYMBOLS**



# **WARNING!**

Do not operate machine if warning and / or instruction labels are missing or damaged.

Symbol	Description
V	Volts
А	Amperes
Hz	Hertz
Min-1	Speed
~	Alternating Current
no	No Load Speed
	Double Insulated
	Wear Safety Goggles
	Wear Ear Protection
	Wear Dust Mask
	Read Instruction Manual
	Laser Warning Symbol
C€	Conforms to relevant safety standards
$\triangle$	General Warning

# **KNOW YOUR SLIDING MITRE SAW**

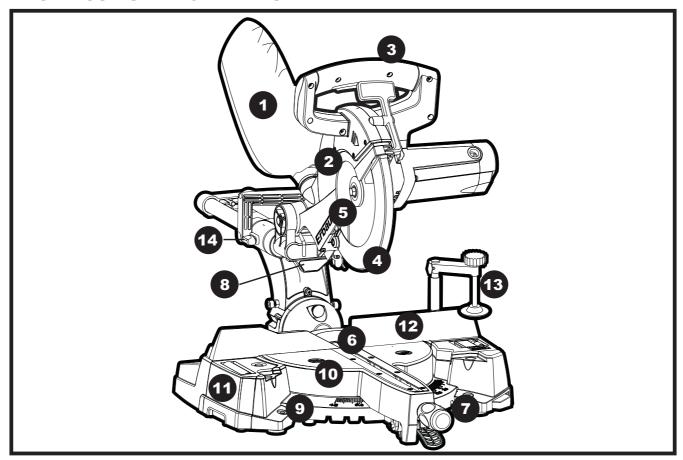


Fig 1

1. DUST BAG
2. UPPER BLADE GUARD
3. CUTTING HANDLE
4. LOWER BLADE GUARD
5. BLADE
6. TABLE INSERT
7. MITRE HANDLE
8. LASER GUIDE
9. BASE
10. TURNTABLE
11. LEFT EXTENSION TABLE
12. FENCE
13. HOLD-DOWN CLAMP
14. SLIDE CARRIAGE LOCK KNOB

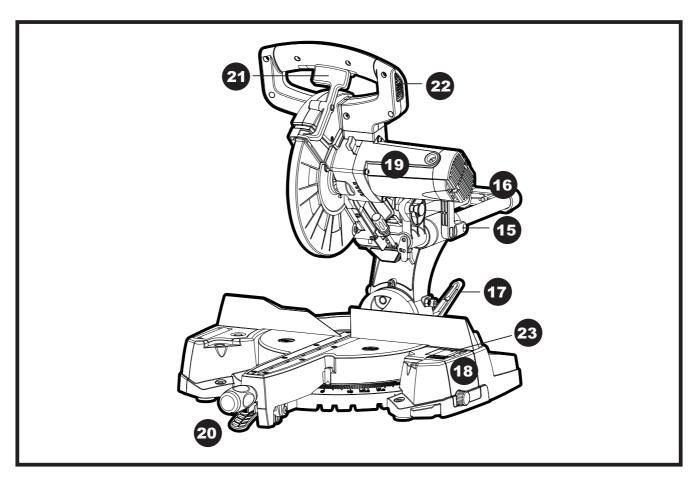


Fig 2

<b>15</b> .	CARRYING HANDLE
16.	SLIDE CARRIAGE
17.	BEVEL LOCK HANDLE
18.	RIGHT EXTENSION TABLE
19.	MOTOR
20.	POSITIVE STOP LOCKING LEVER
21.	LOWER BLADE GUARD LOCK LEVER
22.	LASER ON/OFF SWITCH
23.	ADJUSTABLE CUTTING STOP

# TECHNICAL DATA

Volts: 230V~50Hz

Power input: 1600W

No-load speed: 4300min<sup>-1</sup>

Insulation class: II

Net weight: 21.4 kg

Blade: Ø254 mm; Ø30 mm Bore

Turntable: Ø295 mm

Mitre stops: 0°,15°, 22.5°, 31.6°, 45° Left

Mitre angle range: 0° to 45° Left

Bevel angle range: 0° to 45° Left

Maximum capacity:

Cross cut (0° Bevel x0° Table) 81 mm x 300 mm

Mitre cut (0° Bevel x0° Table) 50 mm x 300 mm

Bevel cut (45° Bevel x0° Table) 50 mm x 300 mm

#### NOISE AND VIBRATION DATA

Sound pressure level LPA: 94.6 dB (A) (K=3dB(A))

Compound cut (45° Bevel x45° Table) 50mm x 210 mm

Sound power level LWA: 107.6 dB (A) (K=3dB(A))

Vibration level: 2.745m/s<sup>2</sup> (K = 2.5m/s<sup>2</sup>)

- The declared vibration total value has been measured in accordance with a standard test method and may be used for comparing one tool with another.
- The declared vibration total value may also be used in a preliminary assessment of exposure.

**WARNING:** The vibration emission during actual use of the power tool can differ from the declared total value depending on the ways in which the tool is used; and of the need to identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time).

#### **ACCESSORIES**

Allen Key 1 pc
Dust Bag 1 pc
Hold-Down Clamp 1 pc
Mitre Handle 1 pc

#### **VIBRATION**

The European Physical Agents (Vibration) Directive has been brought in to help reducehand arm vibration syndrome injuries to power tool users. The directive requires power tool manufacturers and suppliers to provide indicative vibration test results to enable users to make informed decisions as to the period of time a power tool can be used safely on a daily basis and the choice of tool. Further Advice can be found at www.hse.gov.uk

Vibration total values (triax vector sum) determined ac	n total values (triax vector sum) determined according to EN 61029		
Test specification; Standard = EN61029-1 2009.	Vibration emission value ah = 2.745m/s²		
Test prodcure GS mark.	Uncertainty K = 2.5m/s <sup>2</sup>		

The declared vibration emission value should be used as a minimum level should be used with the current guidance on vibration.

Calculating the actual period of the actual period off use can be difficult and the HSE website has further information.

The declared vibration emission been measured in accordance with a standardised test stated above and may be used to compare one tool with another.

The declared vibration emission value may also be used in a preliminary assessment of exposure.



**Warning:** The vibration emission value during actual use of the power tool can differ from the declared value depending on the ways in which the tool is used

dependant on the following examples and other variations on how the tool is used:-

How the tool is used and the materials being cut or drilled.

The tool being in good condition and well maintained

The use the correct accessory for the tool and ensuring it is sharp and in good condition.

And the tool is being used as intended by its design and these instructions.

# This tool may cause hand-arm vibration syndrome if its use is not adequately managed

**Warning:** identify safety measures to protect the operator that are based on an estimation of exposure in the actual conditions of use (taking account of all parts of the operating cycle such as the times when the tool is switched off and when it is running idle in addition to the trigger time). Note The use of other tools will reduce the users' total working period on this tool. Helping to minimise your vibration exposure risk.

ALWAYS use sharp chisels, drills and blades. Maintain this tool in accordance with these instructions and keep well lubricated (where appropriate)

Avoid using tools in temperatures of 10C or less

Plan your work schedule to spread any high vibration tool use across a number of days.

#### **Health Surveillance**

All employees should be part of an employer's health surveillance scheme to help identity any vibration related diseases at an early stage, prevent disease progression and help employees stay in work.

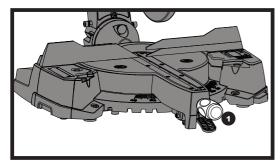


Fig 3

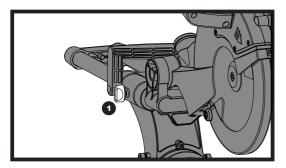


Fig 4

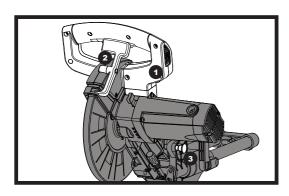


Fig 5

# **ASSEMBLY INSTRUCTIONS**

Warning: To avoid injury, do not connect this mitre saw to the power source until it is completely assembled and adjusted and you have read and understood this Operator's Manual.

# 1. Installing the mitre handle

1) Thread the mitre handle (1) into the hole located at the front of the mitre table. (See fig. 3)

#### 2. Unlocking the slide carriage

After removing the saw from the carton, loosen the slide carriage lock knob (1). When transporting or storing the mitre saw, the slide carriage should always be locked in position. The slide carriage lock knob (1) is located on the side of the slide carriage. (See fig. 4)

### 3. Raising the Cutting Head

- 1) Push down slightly on the switch handle (1) and the lock lever (2).
- 2) Pull out the stop latch knob (3).
- 3) Allow the cutting head to rise to the up position. (See fig. 5)

Warning: To avoid injury and damage to the saw, transport and store the mitre saw with the cutting head locked in the down position. Never use the stop latch to hold the cutting head in a down position for cutting operations.

#### Locking

When transporting or storing the mitre saw, the cutting head should always be locked in the down position.

- 1) Push the lock lever (2) and cutting head down to its lowest position.
- 2) Push the stop latch knob (3) into the locking hole.

#### **IMPORTANT**

To avoid damage, never carry the mitre saw by the cutting arm or the mitre handle. ALWAYS use both designated carrying handles together.

# 4. Installing the dust bag

- 1) Squeeze the metal collar wings (2) of the dust bag (1).
- 2) Place the dust bag neck opening around the exhaust port (3), and release the metal collar wings. (See fig. 6)

### 5. Installing the hold-down clamp

- 1) Loosen the lock knob (1) from the rear side of the saw base (2). (See fig. 7)
- 2) Place the hold-down clamp assembly (3) in one of the mounting holes (4). (See fig. 8)
- 3) Tighten the lock knob (1). (See fig. 7)

Warning: When using stop block on the right side, hold-down clamp must also be in right side. Using hold-down clamp on the left side during this operation can cause kickback and serious injury to the operator.

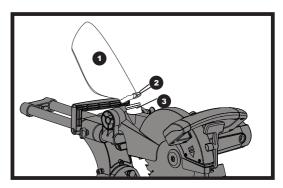


Fig 6

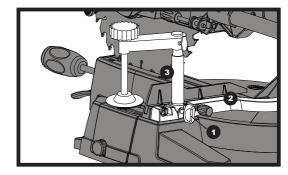


Fig 7

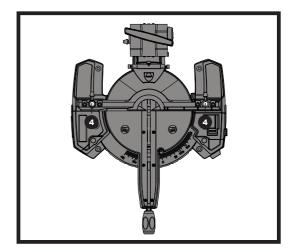


Fig 8

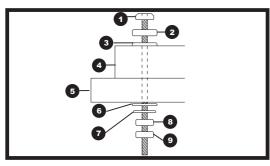


Fig 9

- 1) Hex headed bolt
- 2) Spring washer
- 3) Flat washer
- 4) Mitre saw base
- 5) Workbench
- 6) Flat washer
- 7) Spring washer
- 8) Hex nut
- 9) Lock nut

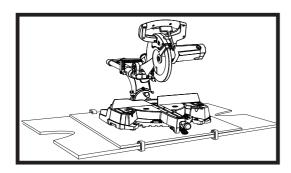


Fig 10

# 6. Mounting the mitre saw



**Warning:** To avoid injury from unexpected saw movement:

- Disconnect the power cord from the socket, and lock the cutting head in the lower position using the stop latch.
- Lock the slide carriage in place by tightening the slide carriage lock knob.
- To avoid back injury, lift the saw by using the designated carrying handles located on the top of the machine. When lifting, bend at your knees, not from your back.
- Never carry the mitre saw by the power cord or by the switch handle. Carrying the tool by the power cord could cause damage to the insulation or the wire connections resulting in electric shock or fire.
- To avoid injury from flying debris, do not allow visitors to stand near the saw during any cutting operation.
- Support the saw on a level work surface.
- Bolt or clamp the saw to its support.

# **Mounting instructions**

- 1) For stationary use, place the saw in the desired location, directly on a workbench where there is room for handling and proper support of the workpiece. The base of the saw has four mounting holes. Bolt the base of the mitre saw (1) to the work surface (5), using the fastening method as shown in Fig 9.
- 2) For portable use, place the saw on a 20mm(approx) thick piece of plywood. Bolt the base of the mitre saw securely to the plywood using the mounting holes on the base. Use G-clamps to clamp this mounting board to a stable work surface at the worksite. (See fig. 10)

**Note:** Mounting hardware is not included with this tool. Bolts, nuts, washers and screws must be purchased separately.

# 7. Removing and installing the blade



### Warning:

- Do not use a blade larger than 254 mm in diameter.
- To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source socket.
- For clarity the operators hands are shown in figs13 and 14. We recommend that the operator considers wearing protective gloves when handling or installing the blade.



- 1) Unplug the saw from the socket.
- 2) The slide carriage should be locked in position by tightening the slide carriage lock knob (1). (See fig. 11)
- 3) Allow the cutting head to rise to the upright position. (See fig. 11)
- 4) Release the lower blade guard by operating the blade guard handle, and rotate the guard into its upper position.
- 5) Locate the spindle lock (1). (See fig. 12)
- 6) Hold the guard in position with your thumb and press the spindle lock gently with a finger. (See fig. 13)Rotate the blade using the correct sized allen key inserted into the arbor bolt (See fig. 14) until positive location is felt.
- 7) Keeping the spindle lock firmly pressed undo the arbor bolt with the allen key by turning it in a clockwise direction.
- 8) Remove the bolt and outer flange from the machine.
- 9) With the arbor bolt and out flange removed, gently ease the blade from the spindle and remove downwards and away from the cutting head.

**Note:** Pay attention to the pieces removed, noting their position and direction they face. Wipe the blade collars clean of any sawdust before installing a new blade.

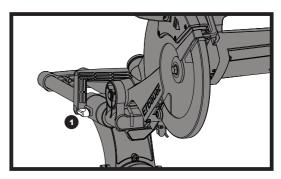


Fig 11

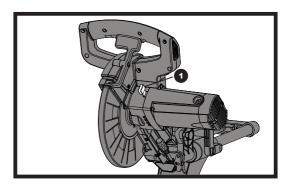


Fig 12

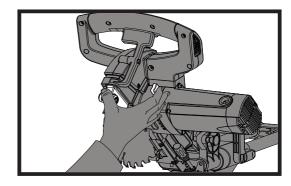


Fig 13

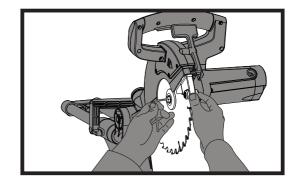


Fig 14

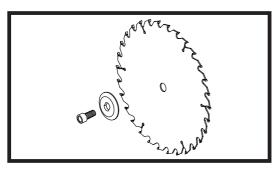


Fig 15

### 8. Installing Blade

Unplug the mitre saw before changing/installing the blade.

**Note:** Ensure that the saw blade bore is exactly the correct size for this machine and the diameter does not exceed 254 mm.

Rotate and hold lower blade guard in its upper position as already described.
 Install a 254 mm blade with 30 mm arbor, making sure the rotation arrow on the blade matches the clockwise rotation arrow on the upper guard and the blade teeth are pointing downward.
 Place the outer blade collar against the blade and on the arbor. Thread the arbor bolt onto the arbor in a counterclockwise direction. (See fig. 15)

#### **IMPORTANT**

Make sure the flats of the blade collars are engaged with the flats on the arbor shaft.

- 4) Place the allen key into the arbor bolt.
- 5) Press the arbor lock, holding gently while turning the blade counterclockwise. When arbor lock engages, continue to press it in firmly while tightening the arbor bolt securely. (See fig. 14) **Note:** Do not press arbor lock when blade is moving.

Warning: Be sure that the arbor lock is released so that the blade turns freely. Lower the blade into the lower table and check for any contact with the base or the mitre table by spinning the blade manually. Make sure the collars are clean and properly arranged. Check that the lower blade guard is functioning correctly and does not bind or stick.

### 9. Aligning the laser beam

Warning: For your own safety, never connect the plug to power source socket until all the adjustment steps are complete and you have read and understood the safety and operational instructions. The laser beam must always be correctly aligned with the blade to ensure straight, even cutting. Your tool is equipped with the Laser guide cutting guide using a Class II laser beam. The laser beam will enable the operator to preview the saw blade path on the stock to be cut before starting the saw. This laser guide is powered by the transformed alternating current supply directly through the power lead. The saw must be connected to the power source and the laser on/off switch must be turned on for the laser line to show. (See fig.16)



## Warning:

AVOID DIRECT EYE CONTACT

Laser radiated when laser guide is turned on. Avoid direct eye contact. Always unplug the mitre saw from power source before making any adjustments.

Laser Warning Label: Max output <1mW Wavelength: 630-670nm EN 60825-1/A1:2007. Laser radiation do not stare into beam Class 2 Laser Product Puissance.

**Note:** All the adjustments for the operation of this machine have been completed at the factory. Due to normal wear and use, some occasional readjustments may be necessary.

# A. Check Laser Beam Alignment

- 1) Mark a 90° straight line across a board to serve as a "pattern line" to test laser alignment. Lay the board on the mitre table.
- 2) Plug saw into socket and turn on the laser beam and line it up with the pattern line.
- 3) Lower saw blade to pattern line and if blade is not flush with the pattern line, adjustment may be necessary.

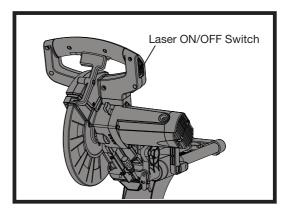


Fig 16

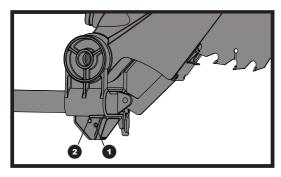


Fig 17

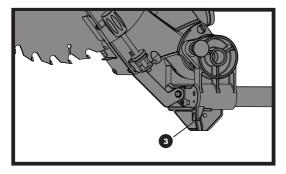


Fig 18

Three laser module mounting/adjustment screws are provided. Two (1,2) are positioned on the LH side of the laser housing, and one (3) on the RH side of the laser housing. These screws gently hold the laser module in place and on alignment by bearing on the laser modules casing. It is important that during any adjustment the pressure on the laser module casing is maintained as closely as possible to the factory setting. Do not over tighten any one screw – damage to the laser casing could result. (See fig. 17&18)

# **B** Adjusting the Angle of the Laser Guide

- 1) Loosen the single screw on the RH side of the laser housing  $\frac{1}{2}$  a turn.
- 2)Turn the laser element in the desired direction to adjust the laser angle.
- 3)Retighten the adjustment screw.

# C Aligning the Laser Beam

- 1)Use the two adjusting screws on the LH side of the laser housing.
- 2)Adjust both screws until laser alignment is achieved.

Warning: Use only the correct sized allen key when adjusting these screws. Turn one screw at a time and only ¼ turn in either direction before checking laser alignment. Maintain as far as possible the original factory pressure setting that these screws exert on the laser module.

#### **ADJUSTMENT INSTRUCTIONS**

### 1. Bevel stop adjustment

Warning: To avoid injury from an accidental start, make sure the switch is in the OFF position and the plug is not connected to the power source socket.

#### 2. 90° (0°) Bevel adjustment

- 1) Loosen bevel lock handle (1) and rotate the cutting arm completely to the right until it stops against the vertical stop. Tighten the bevel lock handle.
- 2) Place a combination square (2) on the mitre table with the ruler against the table and the heel of the square against the saw blade.
- 3) If the blade is not 90° (0°) square with the mitre table (5), loosen the bevel lock handle (1), tilt the cutting head to the left, loosen the locknut (4) on the bevel angle adjustment bolt (3) and use an allen key to adjust the socket headed stop bolt (3) depth in or out to increase or decrease the bevel angle.
- 4) Tilt the cutting arm to back to the right at 90° (0°) bevel and recheck for alignment.
- 5) Repeat steps 1 through 4 if further adjustment is needed.
- 6) Tighten bevel lock handle (1) and locknut (4) when alignment is achieved. (See fig. 19)

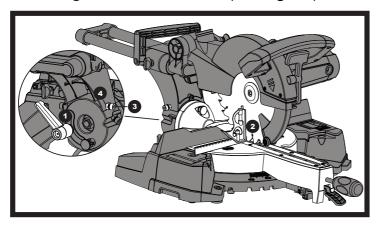


Fig 19

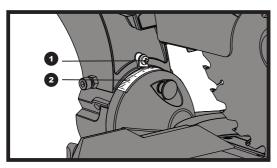


Fig 20

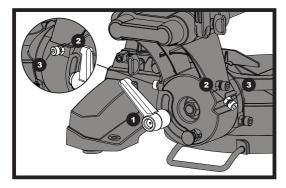


Fig 21

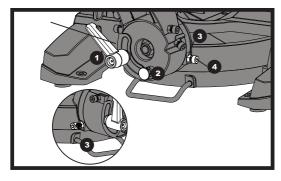


Fig 22

# 3. Bevel pointer adjustment

- 1) When the blade is exactly 90° (0°) to the table, loosen the bevel indicator screw (1) using a # 2 Phillips screwdriver.
- 2) Adjust bevel indicator (2) to the "0" mark on the bevel scale and retighten the screw. (See fig. 20)

### 4. Bevel adjustment 45°

- 1) Loosen the bevel lock handle (1) and tilt the cutting head completely to the left.
- 2) Using a combination square, check to see if the blade angle is 45° to the table.
- 3) If the blade is not at 45° to the mitre table, tilt the cutting arm to the right, loosen the locknut (2) on the bevel angle adjustment bolt
- (3) and use an allen key to adjust the stop bolt
- (3) depth in or out to increase or decrease the bevel angle.
- 4) Tilt the cutting arm to the left to 45° bevel and recheck for alignment.
- 5) Repeat steps 1 through 4 until the blade is at 45° to the mitre table.
- 6) Tighten bevel lock handle (1) and locknut (2) when alignment is achieved. (See fig. 21)

#### 5. Bevel Setting for Crown Moulding

The cutting arm can also be set at 33.9° for cutting crown mouldings.

- 1) Twist and deploy sprung-loaded crown moulding pin (2).
- 2) Loosen the bevel lock handle (1) and rotate the cutting head in the required direction until it indexes with the moulding pin (2). Tighten the bevel lock. (See fig. 22)

### 6. Bevel adjustment 33.9°

If necessary the 33.9° settings can be checked and adjusted. A vernier angle gauge will be required and this must be accurately set to 33.9°

- 1) Set the cutting head to 33.9° by deploying the crown moulding pin. Check the angle of the blade against the machine table using the vernier angle gauge. (See fig. 23)
- 2) If adjustment is required loosen the locknut (3) to the relevant socket headed stop screw. Adjust the screw in or out until the correct bevel angle is achieved. Retighten the locknut. (See fig. 22)

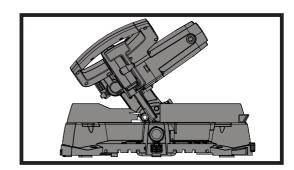


Fig 23

### 7. Mitre angle adjustment

The sliding compound mitre saw scale can be easily read, showing mitre angles from 0° to 45° to the left, and 0° to 45° to the right. The mitre saw table has nine of the most common angle settings with positive stops at 0°, 15°, 22.5°, 31.6°, and 45°. These positive stops position the blade at the desired angle quickly and accurately. Follow the process below for quickest and most accurate adjustments.

- 1) Unlock the mitre table by turning the mitre handle (1) counterclockwise.
- 2) Move the turntable while lifting up on the positive stop locking lever (2) to align the indicator (3) to the desired degree measurement.
- 3) If the desired angle is one of the nine positive stops, release the positive stop locking lever, making sure the lever snaps into position, and then secure by tightening the mitre handle.
- 4) If the mitre angle desired is not one of the nine positive stops, simply lock the mitre table into position by turning the mitre handle in the clockwise direction. (See fig. 24)

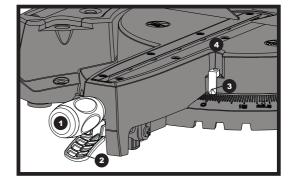


Fig 24

# 8. Mitre scale indicator adjustment

- 1) Move the table to the  $0^{\circ}$  positive stop.
- 2) Loosen the screw (4) that holds the indicator with a Phillips screwdriver.
- 3) Adjust the indicator (3) to the 0° mark and retighten screw. (See fig. 24)

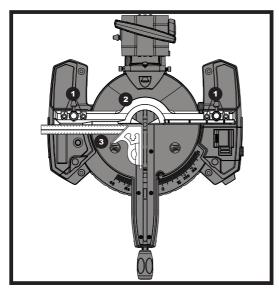


Fig 25

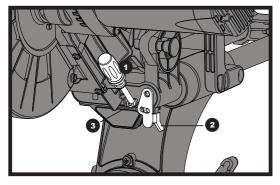


Fig 26

### 9. Adjusting fence squareness

- 1) Loosen the four fence locking bolts (1).
- 2) Lower the cutting arm and lock in position.
- 3) Using a square (3), lay the heel of the square against the blade and the ruler against the fence(2) as shown.
- 4) Adjust the fence 90° to the blade and tighten the four fence locking bolts. (See fig. 25)

**Caution:** If the saw has not been used recently, recheck blade squareness to the fence and readjust if needed.

5) After fence has been aligned, using a scrap piece of wood, make a cut and check 'squareness' of the cut in the piece. Readjust if necessary.

### 10. Setting cutting depth

The depth of cut can be preset for even and repetitive shallow cuts.

- 1) Adjust the cutting head down (See CUTTING HEAD section) until the teeth of the blade are at the desired depth.
- 2) While holding the upper arm in that position, turn the stop knob (1) until it touches the stop plate (2).
- 3) Recheck the blade depth by moving the cutting head front to back through the full motion of a typical cut along the control arm. (See fig. 26)

#### 11. Adjusting cutting depth

The maximum depth travel of the cutting head was set at the factory. Check to see that the blade does not extend more than 6.35 mm below the table insert, and does not touch the control arm throat or any part of the base or table. If the maximum depth needs readjusting:

- 1) Loosen the depth control screw locknut (3).
- 2) Pull the cutting head down until it indexes with the depth control screw.
- 3) Adjust the depth control screw until the blade extends 6.35mm below the table insert.
- 4) Recheck the blade depth by moving the cutting head front to back through the full motion of a cut along the control arm. If the blade touches the inside of the control arm, readjust the setting. Tighten the locknut when the correct setting is achieved. (See fig. 26)

# **OPERATION INSTRUCTIONS**

Warning: Before using your mitre saw be sure to read the instruction manual carefully.

# **Operating instructions**

#### 1. Know your mitre saw

Read and understand the Operator's Manual and labels affixed to the tool. Learn its application and limitations as well as the potential hazards specific to this tool. To avoid injury from accidental contact with moving parts, do not lay out, assemble or set up work on the mitre saw.

#### 2. Electrical connection

Your mitre saw has a precision-built electric motor and it should only be connected to a 230 V. 50Hz. Power supply (normal household current). Do not operate on direct current (DC). This large voltage drop will cause a loss of power that will overheat the motor. If your mitre saw does not operate when plugged into an socket, have a professional electrician check the power supply.

Warning: Avoid accidental starting.

Make sure the switch is in the

OFF position before plugging the mitre saw into a power socket.

# 3. Body and Hand position

Warning: Never place hands near the cutting area. Proper positioning of your body and hands when operating the mitre saw will make cutting easier and safer. Keep children away. Keep all visitors at a safe distance from the mitre saw. Make sure bystanders are clear of the saw and workpiece. Don't force the saw. It will do the job better and safer at its designed rate.

#### Starting a cut:

- Place hands at least 190.5 mm away from the blade – out of the "no-hands zone" (1). (See Fig 27)
- Clamp workpiece firmly against the fence to prevent movement toward the blade.

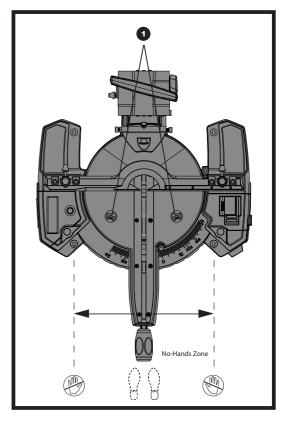


Fig 27

- With the power switch OFF, bring the saw blade down to the workpiece to see the cutting path of the blade
- Squeeze trigger switch to start saw.
- Lower blade into workpiece with a firm downward motion.

# Finishing a cut:

- Hold the cutting arm in the down position.
- Release trigger switch and wait for all moving parts to stop before moving your hands and raising the cutting arm.

# Before releasing jammed material:

- Release trigger switch.
- Wait for all moving parts to stop.
- Unplug the mitre saw.

# 4. Basic saw operations

Warning: For your convenience, your saw has a blade brake. The brake is not a safety device. Never rely on it to replace the proper use of the guard on your saw. If the blade doesn't stop within approximately 8 seconds, wait for the blade to stop, unplug the saw and contact customer service.



Push down the lock lever (1) and squeeze the trigger switch (2) to turn the mitre saw ON. Release the trigger switch to turn the saw OFF. (See fig. 28)

# 5. Sliding carriage system

- 1) For chop cutting operations on small workpieces, slide the cutting head assembly completely toward the rear of the unit and tighten the carriage lock knob (1).
- 2) To cut wide boards up to 300mm, the carriage lock knob must be loosened to allow the cutting head to slide freely. (See fig. 29)

# Before leaving the saw

- Never leave tool running unattended. Turn power OFF. Wait for all moving parts to stop.
- Make workshop childproof. Lock the shop.
   Disconnect master switches. Store tool away from children and other unqualified users.

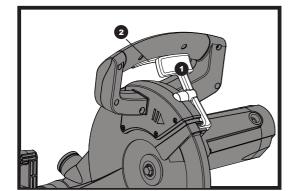


Fig 28

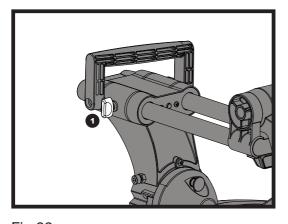


Fig 29

Warning: To avoid injury from materials being thrown, always unplug the saw to avoid accidental starting, and remove small pieces of material from the table cavity.

#### 6. Mitre cut

- 1) When a mitre cut is required, unlock the mitre table by turning the mitre handle (1) counterclockwise.
- 2) While holding the mitre handle, lift up on the positive stop locking lever (2).
- 3) Rotate the mitre table to the right or left with the mitre handle.
- 4) When the table is in the desired position, as shown on the mitre scale (3), release the positive stop locking lever and tighten the mitre handle. The table is now locked at the desired angle. Positive stops are provided at 0°, 15°, 22.5°, 31.6° and 45°. (See fig. 30)

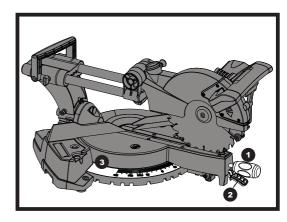


Fig 30

#### **IMPORTANT**

Always tighten the mitre table lock handle before performing every cutting operation.

#### 7. Bevel cut

- 1) When a bevel cut is required, loosen the bevel lock handle (1) by turning it clockwise.
- 2) Tilt the cutting head to the desired angle, as shown on the bevel scale (2)
- 3) The blade can be positioned at any angle, from a 90° straight cut (0° on the scale) to a 45° left bevel. Tighten the bevel lock handle (1) to lock the cutting head in position. Positive stops are provided at 0°, 33.9° and 45°. (See fig. 31)

**Note:** When cutting at 45 degrees, ensure guard does not catch on work or machine base plate.

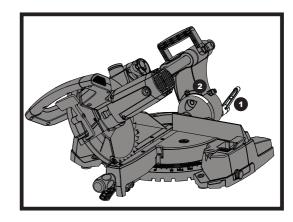


Fig 31

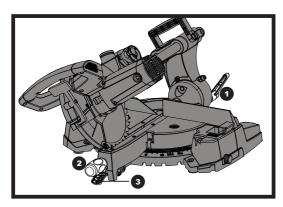


Fig 32

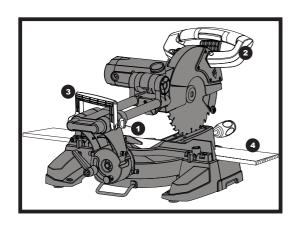


Fig 33

### 8. Compound cut

A compound cut is the combination of a mitre and a bevel cut simultaneously.

- 1) Loosen the bevel lock handle (1) and position the cutting head at the desired bevel position. Lock the bevel lock handle.
- 2) Loosen the mitre handle (2). Press down the positive stop locking lever (3) and position the table at the desired angle. Release the positive stop locking lever and lock the mitre handle. (See fig. 32)

# 9. Slide cutting wide boards up to 300mm wide



# Warning:

# To avoid injury:

- Never pull the cutting head assembly and spinning blade toward you during the cut. The blade may try to climb up on the top of the workpiece, causing the cutting assembly and spinning blade to kick back, forcefully. The cutting head assembly should be drawn back completely then pushed forward when sawing.
- Let the blade reach full speed before cutting. This will help reduce the risk of a thrown workpiece.

#### To slide cut wide boards

- 1) Unlock the carriage lock handle (1) and allow the cutting head assembly to move freely.
- 2) Set both the desired bevel angle and/or the mitre angle and lock into position.
- 3) Use a hold down clamp to secure the workpiece.
- 4) Grasp the switch handle (2) and pull the carriage (3) forward until the centre of the saw blade is over the front of the workpiece (4).
- 5) Engage the trigger to turn the saw on.
- 6) When the saw reaches full speed, push the switch handle down, slowly, cutting through the leading edge of the workpiece.
- 7) Slowly move the switch handle toward the fence, completing the cut.
- 8) Release the trigger and allow the blade to stop spinning before allowing the cutting head to raise to its upper position. (See fig. 33)

#### 10. Cutting bowed material

A bowed workpiece must be positioned against the fence and secured with a clamping devise before cutting as shown.

Warning: Do not position workpiece incorrectly or try to cut the workpiece without the support of the fence. (See fig. 34) This will cause the blade to bind and could result in personal injury.

#### 11. Satellite workpiece support

Incorporated into the LH side of the machine base is a removable satellite stand. Use this stand to help support long pieces of material. To remove the satellite stand, press the release button on the top, and slide the stand from the machine base. Position where convenient to adequately support long workpieces. To replace, simply slide the satellite stand back into the machine base until the release button provides positive location. (See fig. 35)

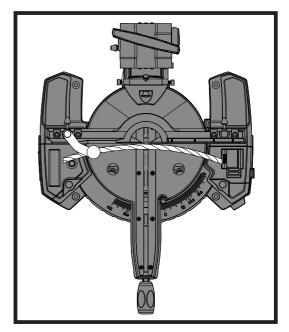


Fig 34

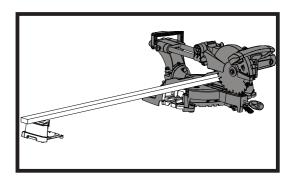


Fig 35

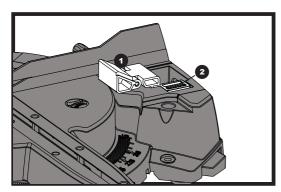


Fig 36

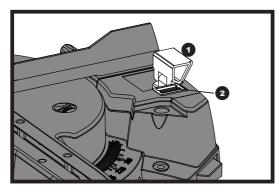


Fig 37

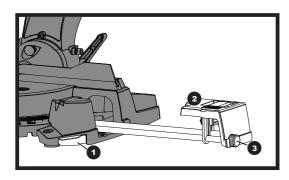


Fig 38

A stop plate designed for use during repetitive cutting is incorporated into the extension arm on the RH side of the machine base. The stop plate can be deployed in two positions, inboard and outboard.

The inboard position enables repetitive cuts of shorter lengths by positioning the stop plate close to the blade. The outboard position is used for the repetitive cutting of longer lengths by positioning the stop at its maximum distance from the blade.

#### To deploy the stop:

- 1) Slide the release lock forwards.
- 2) Pull the stop(1) from its stored position upwards and to the left. The stop will deploy.
- 3) Slide the release lock (2) backwards to lock the stop into position.
- 4) To stow away, reverse the above steps. (See fig. 36)

# To deploy the stop outboard:

- 1) Slide the sprung-loaded lock (2) forwards.
- 2) Whilst holding the release lock, pull the stop (1) from its stored position upwards and to the right. The stop will deploy to the outboard position.
- 3) Slide the release lock (2) backwards to lock the stop position.
- 4) To stow away, reverse the above steps. (See fig. 37)

#### Adjusting the stop plate

Deploy the stop plate as outlined above.

- 1) Push the release button (1) on the front of the machine base below the stop plate.
- 2) Slide the extension arm (2) from the machine base, and release the button (1) when at the approximate required distance.

The extension arm has a micro adjustment facility for final positioning.

Turn the adjustment knob (3) clockwise or counter clockwise as required for final exact positioning of the stop plate. (See fig. 38)

#### 13. Extension Arm

With the stop plate in its stored position the extension arm can be used to support long workpieces. (See fig. 38)

14. Cutting base moulding

Base mouldings and many other mouldings can be cut on a compound mitre saw. The setup of the saw depends on moulding characteristics and applications, as shown. Perform practice cuts on scrap material. To achieve best results: 1) Always make sure mouldings rest firmly against fence and table. Use hold-down or G-clamps, whenever possible, and place tape on the area being clamped to avoid marks. 2) Reduce splintering by taping the cut area prior to making cut. Mark cut line directly on the tape. 3) Splintering typically happens due to wrong blade application and thinness of the material. Note: Always perform a dry run cut so you can determine if the operation being attempted is possible before power is applied to the saw.

### 15. Cutting crown moulding

Your compound mitre saw is suited for the difficult task of cutting crown moulding. To fit properly, crown moulding must be compound mitred with extreme accuracy. The two surfaces on a piece of crown moulding that fit flat against the ceiling and wall are at angles that, **when added together, equal exactly 90°**. (See fig. 39&40)

Most crown moulding has a top rear angle (the section that fits flat against the ceiling) of 52° and a bottom rear angle (the section that fits flat against the wall) of 38°.

In order to accurately cut crown moulding for a **90°** inside or outside corner, lay the moulding with its broad back surface flat on the saw table.

When setting the bevel and mitre angles for compound mitres, remember that the settings are interdependent – changing one changes the other, as well. (See fig. 41&42)

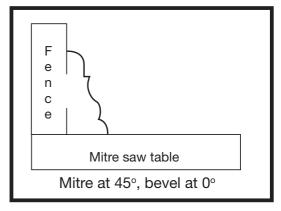


Fig 39

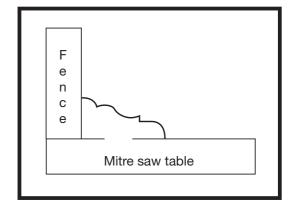


Fig 40

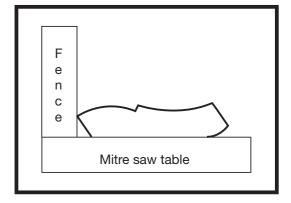


Fig 41

# **Bevel/Mitre Settings**

Settings for standard crown moulding lying flat on compound mitre saw table

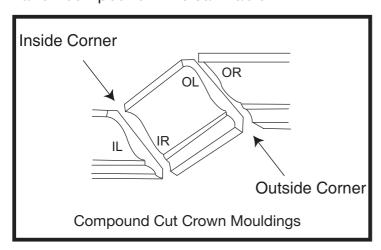


Fig 42

Note: The chart below references a compound cut for crown moulding ONLY WHEN THE ANGLE BETWEEN THE WALLS EQUALS 90°.

KEY	BEVEL SETTING	MITRE Setting	TYPE OF CUT	
			Inside Corner-Left side	
IL	33.9º	31.6º Right	1)Position top of moulding against fence 2)Mitre table set at Right 31.6° 3)Left side is finished piece	
Inside Corner-Right side				
IR	33.9º	31.6º Left	1)Position bottom of moulding against fence. 2)Mitre table set LEFT 31.6°	
Outside Corner-Left side				
OL	33.9º	31.6º Left	1)Position bottom of moulding against fence. 2)Mitre table set at Left 31.6° 3)RIGHT side is finished piece.	
Outside Corner-Right side				
OR	33.90	31.6º Right	1)Position top of moulding against fence. 2)Mitre table set at RIGHT 31.6 ° 3)RIGHT side is finished piece.	

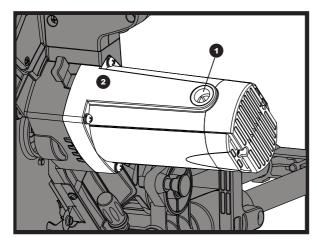


Fig 43

#### **MAINTENANCE**

Danger: To avoid injury, never put lubricants on the blade while it is spinning.

Warning: To avoid fire or toxic reaction, never use petrol, naphtha, acetone, lacquer thinner or similar highly volatile solvents to clean the mitre saw.

Warning: For your safety, this saw is double-insulated. To avoid electrical shock, fire or injury, use only parts identical to those identified in the parts list. Reassemble exactly as the original assembly to avoid electrical shock.

# Replacing carbon brushes

Replace both carbon brushes when either has less than 6 mm length of carbon remaining, or if the spring or wire is damaged or burned. To inspect or replace brushes, first unplug the saw. Then remove the black plastic cap (1) on the side of the motor (2). Remove the cap cautiously, because it is spring loaded. Then pull out the brush and replace. Replace for the other side. To reassemble reverse the procedure. The ears on the metal end of the assembly go in the same hole the carbon part fits into. Tighten the cap snugly, but do not overtighten. (See fig. 43)

**Note:** To reinstall the same brushes, first make sure the brushes go back in the way they came out. This will avoid serviceable brushes undergoing a second 'bedding in' process that could reduce motor performance and increases wear.

# Lower blade guard

Do not use the saw without the lower blade guard. The lower blade guard is attached to the saw for your protection. Should the lower guard become damaged, do not use the saw until the damaged guard has been replaced. Develop a regular check to make sure the lower guard is working properly. Clean the lower guard of any dust or buildup with a damp cloth.

Warning: Do not use solvents on the guard. They could make the plastic "cloudy" and brittle.

Warning: When cleaning the lower guard, unplug the saw from the power source to avoid unexpected startup.

#### Sawdust

Periodically, sawdust will accumulate under the work table and base. This could cause difficulty in the movement of the worktable when setting up a mitre cut. Frequently blow out or vacuum up the sawdust.



Warning: If blowing sawdust, wear proper eye protection to keep debris from blowing into eyes.

#### Lubrication

All the motor bearings in this tool are lubricated with a sufficient amount of high grade lubricant for the life of the unit under normal operating conditions; therefore, no further bearing lubrication is required. Lubricate the following as necessary: Chop pivot: Apply light machine oil. Central pivot of plastic guard: Use light household oil (sewing machine oil ) on metal-to-metal or metal-to-plastic guard contact areas as required for smooth, quiet operation. Avoid excessive oil, to which sawdust will cling. Guard arm: (which actuates the lower guard movement) may be oiled at the rear pivot, greased at ball bearing contact, and oiled where the guard arm actuates the acetyl roller of the lower guard, if the down chop motion is hard.

### **ENVIRONMENTAL PROTECTION**



Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.

#### PLUG REPLACEMENT

The fuse in the main plug of your power tool should always be replaced with one of identical rating.

Check the voltage given on your power tool matches the supply voltage.

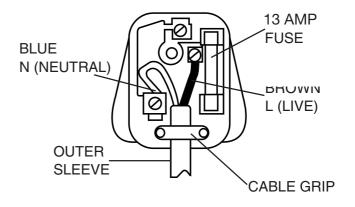
The power tool is supplied with a fitted plug, however if you should need to fit a new plug follows the instruction below.

#### **IMPORTANT**

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

Blue ---Neutral Brown ---Live

The wire that is coloured **blue** must be connected to the terminal that is marked with the letter **N**. The wire that is coloured **brown** must be connected to the terminal that is marked with the letter **L**. A 13AMP (BS1363 or BS1363/A) plug must be used and a 13 AMP fuse must be fitted.





Declaration of Conformity
We, Importer
Erbauer (UK) Ltd.
BA22 8RT

Declare that the product:

Complies with the essential health and safety requirements of the following directives:

2004/108/EC - EMC Directive

2006/95/EC - Low Voltage Directive

2006/42/EC - Machinery Directive

2002/95/EC - Restrictions of the Use of Certain Hazardous

Substances in electrical and electronic equipment

2002/96/EC and 2003/108/EC Waste Electrical and Electronic Equipment (WEEE)

Standards and technical specifications referred to:

EN55014-1:2006

EN55014-2/A2:2008

EN61000-3-2:2006

EN61000-3-11:2000

EN61029-1:2009

EN61029-2-9:2002

EN60825-1:2007

**Authorised Signatory** 

Date: 25/06/2010

Signature: PcH Name: Peter Harries
Erbauer (UK) Ltd
Quality Manager







