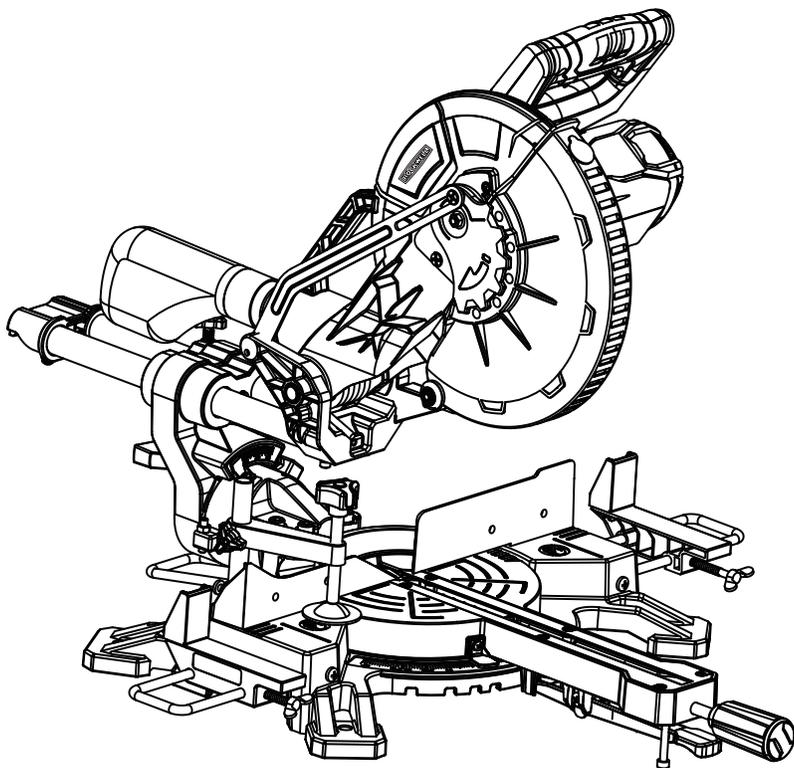


# ROCKWELL®



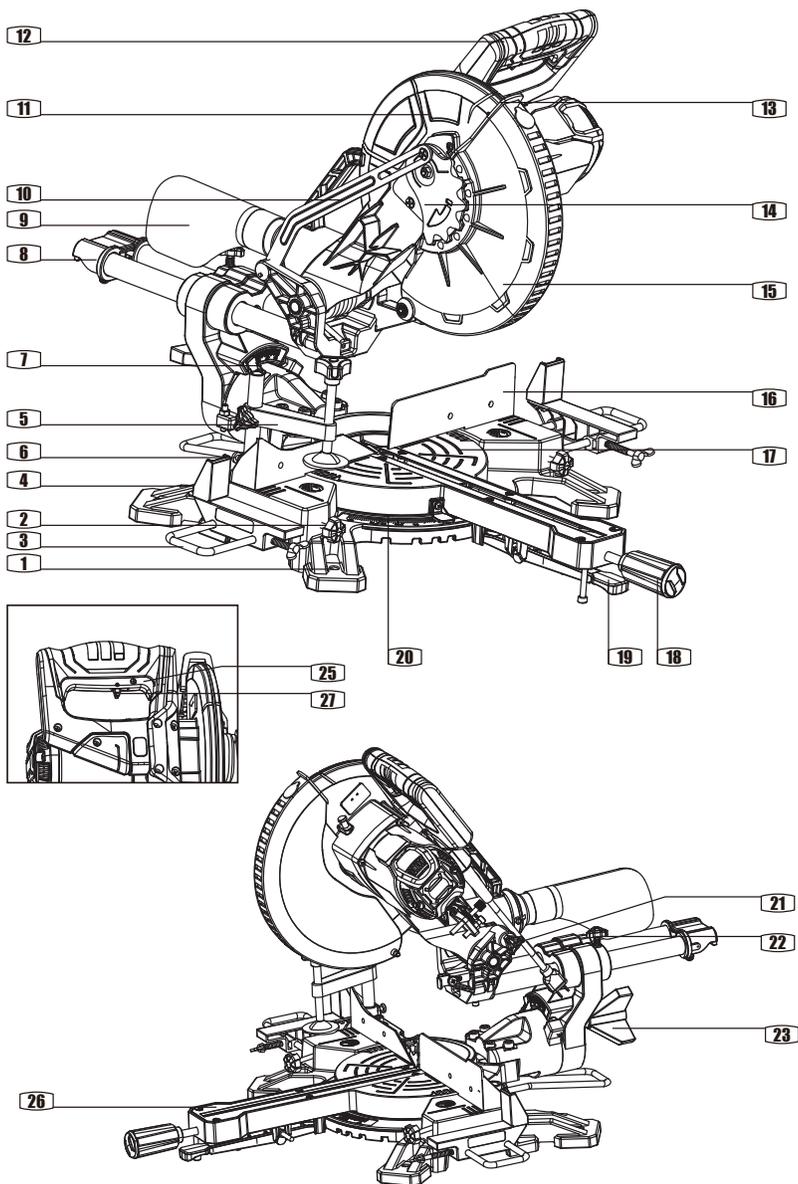
**RT7147**

**MITRE SAW**

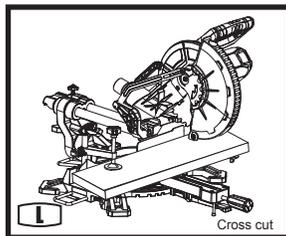
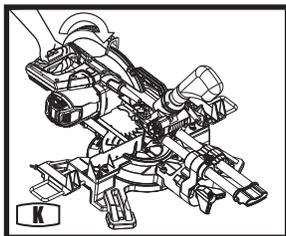
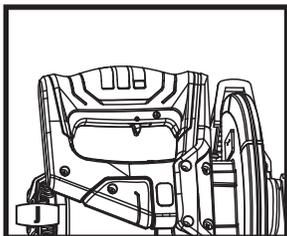
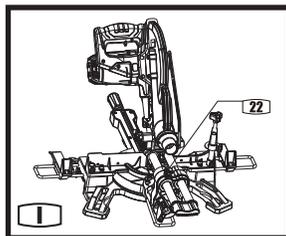
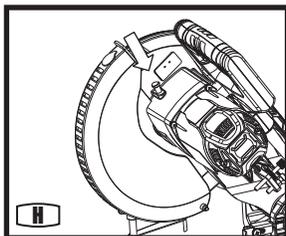
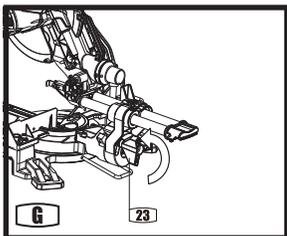
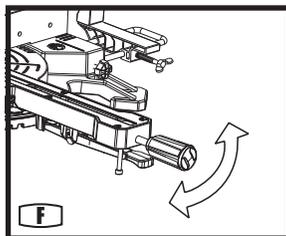
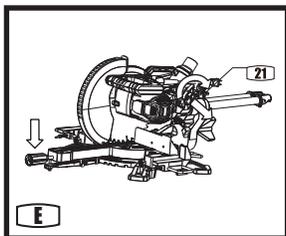
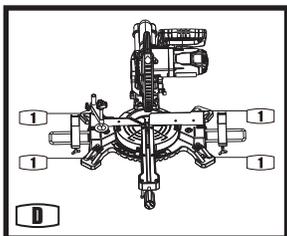
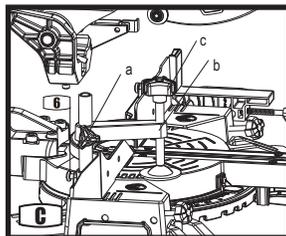
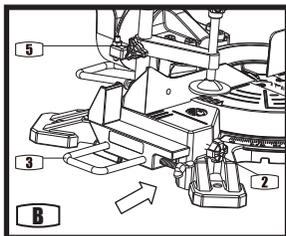
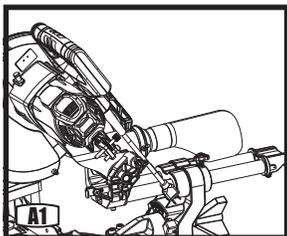
**EN**



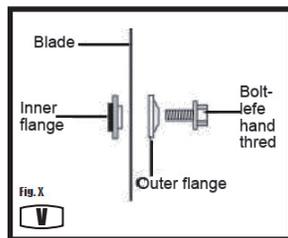
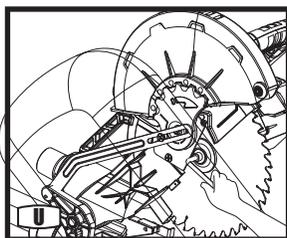
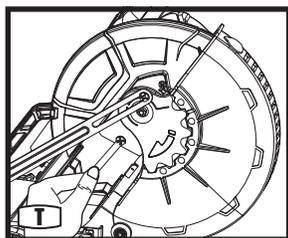
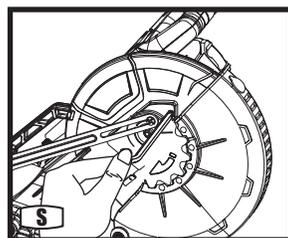
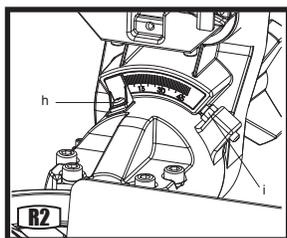
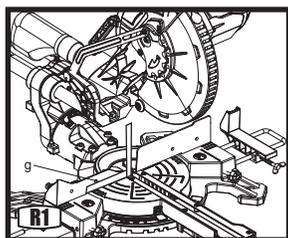
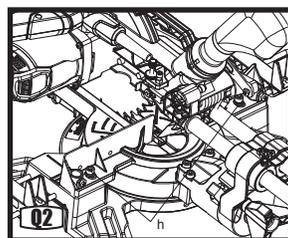
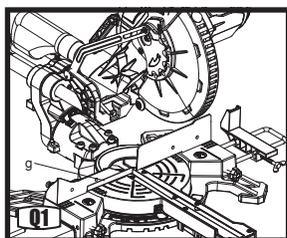
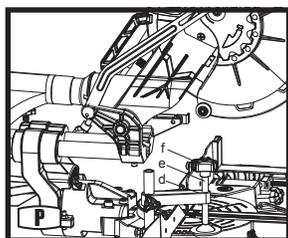
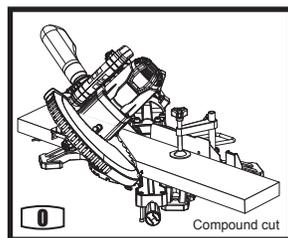
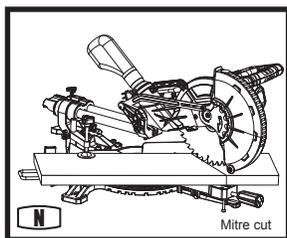
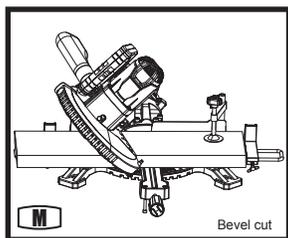
# RT7147



# RT7147



# RT7147



**COMPONENT LIST**

- |    |                                      |
|----|--------------------------------------|
| 1  | Mounting hole                        |
| 2  | Table extension rail adjustment knob |
| 3  | Table extension rail                 |
| 4  | Hex key                              |
| 5  | Work clamp                           |
| 6  | Work clamp adjustment knob           |
| 7  | Bevel scale                          |
| 8  | Slide rod                            |
| 9  | Dust bag                             |
| 10 | Guard retraction arm                 |
| 11 | Upper fixed blade guard              |
| 12 | Operating handle                     |
| 13 | Guard                                |
| 14 | Blade bolt cover                     |
| 15 | Rotating blade guard                 |
| 16 | Fence                                |
| 17 | Mitre table                          |
| 18 | Mitre table lock knob                |
| 19 | Mitre latch                          |
| 20 | Mitre scale                          |
| 21 | Release knob                         |
| 22 | Slide lock button                    |
| 23 | Bevel lock                           |
| 24 | Spindle lock button                  |
| 25 | Trigger switch                       |
| 26 | Table insert                         |
| 27 | Lock-off button                      |

**Not all the accessories illustrated or described are included in standard delivery.**

## ACCESSORIES

Extension rail	2
Work clamp	1
Dust bag	1
Allen key	1

We recommend that you purchase your accessories from the same store that sold you the tool. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.

## GENERAL POWER TOOL SAFETY WARNINGS

**⚠ WARNING** Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.  
**Save all warnings and instructions for future reference.**

The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

### 1) WORK AREA SAFETY

- a) **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- b) **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
- c) **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

### 2) Electrical safety

- a) **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- b) **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- c) **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- d) **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- e) **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- f) **If operating a power tool in a damp location is unavoidable, use a residual current device (RCD) protected supply.** Use of an RCD reduces the risk

of electric shock.

### 3) Personal safety

- a) **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
  - b) **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
  - c) **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
  - d) **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
  - e) **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
  - f) **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
  - g) **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
  - h) **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.
- 4) **Power tool use and care**
- a) **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
  - b) **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- c) **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
  - d) **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
  - e) **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
  - f) **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
  - g) **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
  - h) **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.
- 5) **Service**
- a) **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

---

## SAFETY INSTRUCTIONS FOR MITRE SAWS

- a) **Mitre saws are intended to cut wood or wood-like products, they cannot be used with abrasive cut-off wheels for cutting ferrous material such as bars, rods, studs, etc.** Abrasive dust causes moving parts such as the lower guard to jam. Sparks from abrasive cutting will burn the lower guard, the kerf insert and other plastic parts.
- b) **Use clamps to support the workpiece whenever**

- possible. If supporting the workpiece by hand, you must always keep your hand at least 100 mm from either side of the saw blade. Do not use this saw to cut pieces that are too small to be securely clamped or held by hand.** If your hand is placed too close to the saw blade, there is an increased risk of injury from blade contact.
- c) The workpiece must be stationary and clamped or held against both the fence and the table. Do not feed the workpiece into the blade or cut “freehand” in any way.** Unrestrained or moving workpieces could be thrown at high speeds, causing injury.
  - d) Push the saw through the workpiece. Do not pull the saw through the workpiece. To make a cut, raise the saw head and pull it out over the workpiece without cutting, start the motor, press the saw head down and push the saw through the workpiece.** Cutting on the pull stroke is likely to cause the saw blade to climb on top of the workpiece and violently throw the blade assembly towards the operator.
  - e) Never cross your hand over the intended line of cutting either in front or behind the saw blade.** Supporting the workpiece “cross handed” i.e. holding the workpiece to the right of the saw blade with your left hand or vice versa is very dangerous.
  - f) Do not reach behind the fence with either hand closer than 100 mm from either side of the saw blade, to remove wood scraps, or for any other reason while the blade is spinning.** The proximity of the spinning saw blade to your hand may not be obvious and you may be seriously injured.
  - g) Inspect your workpiece before cutting. If the workpiece is bowed or warped, clamp it with the outside bowed face toward the fence. Always make certain that there is no gap between the workpiece, fence and table along the line of the cut.** Bent or warped workpieces can twist or shift and may cause binding on the spinning saw blade while cutting. There should be no nails or foreign objects in the workpiece.
  - h) Do not use the saw until the table is clear of all tools, wood scraps, etc., except for the workpiece.** Small debris or loose pieces of wood or other objects that contact the revolving blade can be thrown with high speed.
  - i) Cut only one workpiece at a time.** Stacked multiple workpieces cannot be adequately clamped or braced and may bind on the blade or shift during cutting.
  - j) Ensure the mitre saw is mounted or placed on a level, firm work surface before use.** A level and firm work surface reduces the risk of the mitre saw becoming unstable.
  - k) Plan your work. Every time you change the bevel or mitre angle setting, make sure the adjustable fence is set correctly to support the workpiece and will not interfere with the blade or the guarding system.** Without turning the tool “ON” and with no workpiece on the table, move the saw blade through a complete simulated cut to assure there will be no interference or danger of cutting the fence.
  - l) Provide adequate support such as table extensions, saw horses, etc. for a workpiece that is wider or longer than the table top.** Workpieces longer or wider than the mitre saw table can tip if not securely supported. If the cut-off piece or workpiece tips, it can lift the lower guard or be thrown by the spinning blade.
  - m) Do not use another person as a substitute for a table extension or as additional support.** Unstable support for the workpiece can cause the blade to bind or the workpiece to shift during the cutting operation pulling you and the helper into the spinning blade.
  - n) The cut-off piece must not be jammed or pressed by any means against the spinning saw blade.** If confined, i.e. using length stops, the cut-off piece could get wedged against the blade and thrown violently.
  - o) Always use a clamp or a fixture designed to properly support round material such as rods or tubing.** Rods have a tendency to roll while being cut, causing the blade to “bite” and pull the work with your hand into the blade.
  - p) Let the blade reach full speed before contacting the workpiece.** This will reduce the risk of the workpiece being thrown.
  - q) If the workpiece or blade becomes jammed, turn the mitre saw off. Wait for all moving parts to stop and disconnect the plug from the power source and/or remove the battery pack. Then work to free the jammed material.** Continued sawing with a jammed workpiece could cause loss of control or damage to the mitre saw.
  - r) After finishing the cut, release the switch, hold**

- the saw head down and wait for the blade to stop before removing the cut-off piece. Reaching with your hand near the coasting blade is dangerous.
- s) **Hold the handle firmly when making an incomplete cut or when releasing the switch before the saw head is completely in the down position.** The braking action of the saw may cause the saw head to be suddenly pulled downward, causing a risk of injury.

## SYMBOL



To reduce the risk of injury, user must read instruction manual



Wear ear protection



Wear eye protection



Wear dust mask



Double insulation



RCM marking

**ABN:** Australian Business Number. By this number, business information such as entity type, status, business location etc. can be found at website <http://abr.business.gov.au>.  
ABN of Positec Australia Pty Limited is 14 101 682 357

## TECHNICAL DATA

Rated voltage	230-240V~50Hz
Rated Input power	2000W
No load speed	5000/min
Bevel capacity	0-45°Left
Blade size	255mm
Double insulation	 II
Machine weight	13kg

## CUTTING CAPACITY:

Max cutting mitre/bevel 0°/45°	305*40mm
Max cutting mitre/bevel 45°/45°	210*40mm
Max cutting mitre/bevel 0°/0°	305*90mm
Max cutting mitre/bevel (R) 0°/45°	305*40mm

## OPERATION INSTRUCTIONS



**NOTE:** Before using the tool, read the instruction book carefully.

### Intended Use

The electro-tool is intended as a stationary machine for making straight lengthways and crossways cuts in wood. Horizontal mitre angles of -45° to +45° as well as vertical bevel angles of 0° to +45° are possible.

### ASSEMBLY

#### 1. DUST EXTRACTION PORT (SEE FIG. A)

This mitre saw comes with a dust bag (9) help you keep the work area clean. The dust bag is ideal for smaller jobs. Attaching the Dust Bag: Place the open end of the dust bag over the exhaust port in the upper blade guard.

#### 2. TABLE EXTENSION RAIL (SEE FIG. B)

To install table extension rail (3), insert ends of extensions into the holes in either or both sides of the base. Secure them in place by tightening table extension rail adjustment knob (2) on the base. Long work-pieces require extra supports. The

supports should be placed along the work-piece so it does not sag. The support should allow the work-piece to lay flat on the base of the saw and work table during the cutting operation. Use the work clamp (5) to secure the work-piece.

The plastic slider on the table extension rail is used to stable wooden board the on the table.

### 3. CLAMPING WORKPIECE (SEE FIG. C)

When cutting workpieces, the boards should always be clamped with a work clamp (5).

Work clamp adjustment knob (6) is used to secure the work clamp (5) on the base.

Adjustment knob (a) is used to adjust the height of the rail (b).

Adjustment knob (c) is used to lock the workpieces.

### 4. MOUNTING BOLT (SEE FIG. D)

Your sliding mitre saw should be permanently mounted to a firm, stable-supporting surface, such as a workbench. Four mounting holes (1) have been provided in the saw base for this purpose. Each of these four mounting holes should be securely bolted using  $\varnothing 12\text{mm}$  machine bolts, lock washers and hex nuts (not supplied). Bolts should be long enough to fit through the saw base, lock washers, hex nuts and the thickness of the workbench.

Tighten all four bolts securely. Carefully check the workbench after mounting the saw to make sure that no movement can occur during use. If any tipping, sliding or walking is noted, secure the workbench to the floor before operating.



**WARNING:** Always make sure your compound mitre saw is securely mounted to a workbench or an approved work-stand. Failure to do so could result in an accident, resulting in possible serious personal injury.

## BEFORE OPERATION



**WARNING:** To prevent personal injury, always disconnect the plug from power source before assembling parts, making adjustments or changing blades.

### 1. RELEASE KNOB (SEE FIG. E)

When boxed or during storage, transportation, the saw head is locked in the down position. To release the head ready for operation, apply downward pressure on the saw arm and pull out the release knob (21), rotate

the knob to unlock the saw head. The head will be raised gently to upper position. The saw must never be used with the release knob locking the head down.

### 3. MITRE TABLE LOCKS (SEE FIG. F)

The mitre table lock knob (18) is used to lock the table at the desired mitre angle.

The mitre saw cuts from  $0^\circ$  to  $45^\circ$  both left and right.

To adjust the mitre angle, loosen the mitre table lock knob (18) and raise the mitre table gently and adjust to the desired position, then release the mitre latch (19) and tighten the mitre table lock knob (18) clockwise. The mitre table features positive click stops at  $0^\circ$ ,  $15^\circ$ ,  $22.5^\circ$ ,  $30^\circ$  and  $45^\circ$  for quick setting of common mitre angles.

### 4. BEVEL LOCK (SEE FIG. G)

The bevel lock (23) is used to set the blade at the desired bevel angle. The mitre saw bevel cuts from  $0^\circ$  to  $45^\circ$  to the left. To adjust the bevel angle loosen the bevel lock and adjust the saw arm to the desired bevel angle.

**NOTE:** Assembly the work clamp (5) on the right side before adjusting into bevel cut mode.

### 5. SPINDLE LOCK BUTTON (SEE FIG. H)

The spindle lock button (24) prevents the blade in the saw from rotating. Depress and hold the spindle lock button while installing, changing, or removing the blade.

### 6. SLIDE LOCK BUTTON (SEE FIG. I)

The slide lock button (22) is used to set the saw head to the desired position. Loosen the slide lock button (22) by rotating clockwise and tighten it in anti-clockwise direction.

## OPERATION

### 1. STARTING THE SAW (SEE FIG. J)

To turn on the saw, squeeze the trigger switch (25). Release switch to shut off.

### 2. CHOP CUT (SEE FIG. K)

Chop cut is used mainly for narrow pieces, i.e. the lock screw of slide rod is tightened and the head assembly is lowered to cut through the workpiece.

1. Connect the machine to power outlet ensure that the mains cable is clear of the blade and base plate.

2. Position the material to be cut on the rotating mitre table (17), ensure it is firmly clamped so that it will not move during cutting with the work clamp (5). (See Fig. C)

3. Slide the cutting head to rear position as far as it will go and lock the slide rod by rotating the slide lock button (22) clockwise.

Ensure that the mitre table lock knob (18) and bevel lock (23) are tightened before cutting.



**WARNING: Failure to tighten the lock screw can cause the blade to suddenly climb up on the top of workpiece and force itself toward you.**

4. Before turning on the saw, perform a dry run of the cutting operation just to make sure that no problems will occur when the cut is made.

5. Operate the lock-off button, Hold the saw handle firmly, when squeezing the trigger switch. Allow several seconds for the blade to reach maximum speed.

6. Release the trigger switch and allow the saw blade to stop rotating BEFORE raising the blade out of the work-piece. Wait until the electric brake stops the blade from turning BEFORE removing the work-piece from the mitre table.

### 3. CROSS CUT (SEE FIG. L)

Cross pull cut is used mainly for wide pieces, allowing you to cut wider pieces of wood, i.e. the slide rod lock screw is loose, the saw head is pulled towards the operator, the saw head is lowered to the workpiece and then pushed to the rear of saw to make a cut to do this, follow the procedures below:

1. Connect the machine to power outlet ensure that the mains cable is clear of the blade and base plate.

2. Position the material to be cut on the rotating mitre table (17), ensure it is firmly clamped so that it will not move during cutting with the work clamp (5). (See Fig. C)

3. Slide the cutting head to rear position as far as it will go and lock the slide rod by rotating the slide lock button (22) clockwise.

4. Loosen the slide lock button (22).

5. Before switching on, pull the saw head towards you whilst in the upright position, until the blade clears the workpiece or to its maximum extension if blade cannot clear the workpiece.

6. Before turning on the saw, perform a dry run of the cutting operation just to make sure that no problems will occur when the cut is made.

7. Operate the lock-off button, Hold the saw handle

firmly, when squeezing the trigger switch. Allow several seconds for the blade to reach maximum speed.

8. Release the trigger switch and allow the saw blade to stop rotating BEFORE raising the blade out of the work-piece. Wait until the electric brake stops the blade from turning BEFORE removing the work-piece from the mitre table.

### 4. BEVEL CUT (SEE FIG. N)

A bevel cut is a cut made across the grain of the work-piece with the blade at an angle to the work-piece.

A straight bevel cut is made with the mitre table set in the 0° position and the blade set at an angle between 0° and 45°.

Please follow the procedures of chop cut.

### 5. MITRE CUT (SEE FIG. O)

Adjust the saw head to the ideal position as shown in Fig. O. Please follow the procedures of chop cut.

### 6. COMPOUND CUT (SEE FIG. P)

A compound mitre cut is a cut made using a mitre angle and a bevel angle at the same time. This type of cut is used for moldings, picture frames, and boxes with sloping sides. Please follow the procedures of chop cut.

### 7. SETTING THE CUTTING DEPTH (SEE FIG. Q)

To set the blade for partial through cutting proceed as follows.

1. Pull out the depth stop lever (f).

2. Loosen the knurled adjusting locking nut (e).

3. Adjust the partial cut depth until the required depth setting is achieved.

(i.e. lower cutting arm until adjusting bolt (d) touches the top of the depth stop lever.)

4. Screw the adjusting bolt (d) in, if the blade needs to be raised.

5. Screw the bolt (d) out, if the blade needs to be lowered.

6. Tighten the knurled adjusting locking nut.

7. Return the depth stop lever (f) to its original position when not in use.

## MAINTENANCE

**Remove the plug from the socket before carrying out any adjustment, servicing or maintenance.**

There are no user serviceable parts in your power tool. Never use water or chemical cleaners to clean your power tool. Wipe clean with a dry cloth. Always store your power tool in a dry place. Keep the motor ventilation slots clean. Keep all working controls free of dust. Occasionally you may see sparks through the ventilation slots. This is normal and will not damage your power tool.

If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

### 1. PRECISION SETTING OF ANGLES (SEE FIG. R1, R2, S1, S2)

While the machine has been factory set, it is advisable that the 0° setting of the rotary table and the 90° perpendicular setting of the tilt be checked, as these positions may have moved in transit.

To confirm the 0° rotary table setting, set the rotary table at 0° and tighten the rotary table locking knob. Check that the angle between the straight guide and the blade is 90° using a try square (g, not supplied) as shown in Fig. R1. If the angle requires adjustment, loosen the locking screws for straight guide (h), and align the fence against the try square.

Re-tighten the locking screws for straight guide. (SEE R1, R2)

Similarly, check that the angle of the blade to the face of the rotary table is 90°. If necessary, adjust the tilt angle of the saw head at the 90° position: loosen the bevel lock (23) and adjust the 0° bevel adjustment screw (f) to bring the saw blade into alignment with the square. Loosen the head screw (g) holding the pointer of the bevel scale (7) and adjust the position of the pointer so that it accurately indicates zero on the scale. Retighten the screw. Retighten the bevel lock (23) and the 0° bevel adjustment screw (f). (SEE FIG. S1, S2)

### 2. CHANGING THE SAW BLADE (SEE FIG. T, U, V, W)

1. Unplug the saw.

 **Warning:** To prevent personal injury, always disconnect the plug from power source before assembling parts, making adjustments or changing blades.

2. Push down on saw arm and pull out the release knob to release saw arm.

3. Raise saw arm to its full raised position. Be cautious because saw arm is spring loaded to rise.

4. Loosen the screw from the lower left of the guard mounting plate. Do not unscrew the screw completely.

Then unscrew the screw.

5. Rotate the lower blade guard bracket and the blade bolt cover up and back to expose the blade bolt.

6. Press the spindle lock button (24) and rotate the blade bolt until the spindle locks. (See Fig. H)

7. Use the hex key (4) to loosen and remove the blade bolt. Turn the blade bolt clockwise to loosen. **DO NOT** remove the inner blade washer.

8. Wipe a drop of oil onto the inner blade washer and the outer blade washer where they come in contact with the blade.

 **Warning:** If the inner blade washer has been removed, replace it **BEFORE** placing blade on the spindle. Failure to do so could cause an accident because the blade will not tighten properly.

**Caution: ALWAYS** install the blade with the blade teeth and the arrow printed on the side of the blade pointing down at the front of the saw. The direction of blade rotation is also stamped with an arrow on the lower blade guard.

 **Warning:** To prevent damage to the spindle lock, always allow the motor to come to a complete stop before engaging the spindle lock. Always make sure the spindle lock is disengaged before reconnecting saw to the power source. Your compound mitre saw has been adjusted at the factory for making very accurate cuts. However, some of the components may have been jarred out of alignment during shipping. Also over a period of time, some readjustment will probably become necessary due to wear. After unpacking your saw, check the following adjustments **BEFORE** using your saw. Make any adjustments that are necessary and periodically check the parts alignment to be sure that your saw is cutting accurately.

Your saw should never be connected to a power source when you are assembling parts, making adjustments, installing or removing blades, or when not in use.

Disconnecting your saw will prevent accidental starting that could cause serious injury.

**NOTE:** Many of the drawings in this manual show only portion of your compound mitre saw. This was intentional, so we can clearly illustrate the points being made. Never operate your saw without all the guards securely in place and in good operating condition.







**POSITEC AUSTRALIA PTY LTD**  
**ABN 14 101 682 357**

**MADE IN PRC**