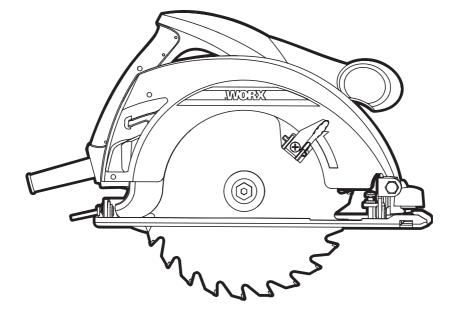
Circular saw



SAFETY AND OPERATING MANUAL





GENERAL POWER TOOL SAFETY WARNINGS

WARNING! Read all safety warnings and all instructions. Failure to follow the warnings and instructions 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, clothing and gloves 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 these devices can reduce dust-related hazards.



- 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 the battery pack 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. 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.

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 ALL SAWS

- a) DANGER: Keep hands away from cutting area and the blade. Keep your second hand on auxiliary 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 could give the operator an electric shock.
- 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 arbour 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

Kickback causes and related warnings:

 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.
- g) Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

Safety instructions for saws (Circular saw with inner pendulum guard Lower guard function

- a) Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If saw is accidentally dropped, lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- b) Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use. Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- c) Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts." Raise lower guard by retracting handle and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- d) Always observe that the lower guard is covering the blade before placing saw down on bench or floor. An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it



takes for the blade to stop after switch is released.

ADDITIONAL SAFETY RULES FOR YOUR CIRCULAR SAW

- 1. Only use saw blades recommended in the specification.
- 2. Do not use any abrasive wheels.

SYMBOLS



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



Warning



Double insulation



Wear eye protection



Wear ear protection



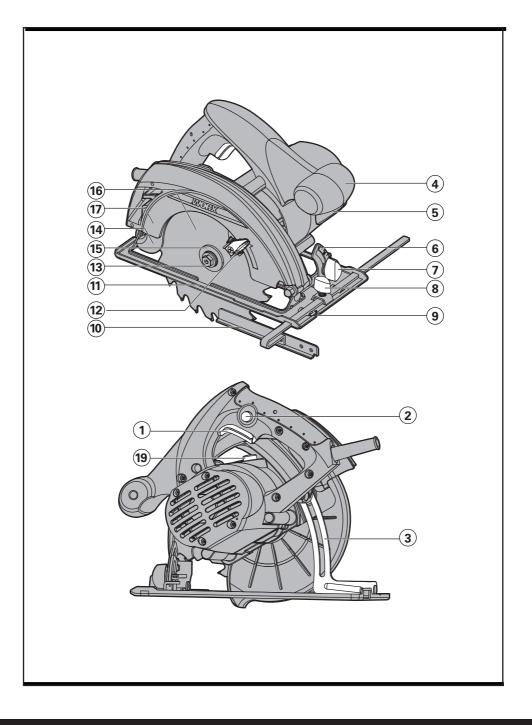
Wear dust mask



RCM marking











1. SAFETY ON/OFF SWITCH	1.	SAFETY	ON/OFF	SWITCH
-------------------------	----	--------	---------------	--------

2. LOCK-OFF BUTTON

3. DEPTH OF CUT ADJUSTMENT LEVER

4. FRONT HANDLE

- 5. MOTOR HOUSING
- 6. BASE PLATE ANGLE SCALE
- 7. BASE PLATE BEVEL LOCK
- 8. PARALLEL GUIDE LOCK KNOB
- 9. CUTTING GUIDE NOTCH
- **10. PARALLEL GUIDE**
- **11. BASE PLATE**
- **12. LOWER GUARD LEVER**
- **13. BLADE BOLT**
- **14. LOWER BLADE GUARD**
- **15. OUTER FLANGE**
- 16. SAW BLADE*
- **17. UPPER BLADE GUARD**
- 18. WRENCH (See Fig. K)
- **19. SPINDLE LOCK BUTTON**
- 20. INNER FLANGE (See Fig. K)

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





TECHNICAL DATA

Voltage		230-240V~50Hz
Power input		1200W
No load speed		5000/min
Blade size		185mm*16mm*24T
Blade bore		16mm
Cutting capacity	90°	62mm
	45°	46mm
Bevel capacity		0-45°
Protection class		□ /II
Weight		4.8kg

ACCESSORIES

We recommend that you purchase your accessories from the same store that sold you the tool. Use good quality accessories marked with a well-known brand name. Choose the type according to the work you intend to undertake. Refer to the accessory packaging for further details. Store personnel can assist you and offer advice.





OPERATING INSTRUCTIONS



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

We recommend that this tool always be supplied via a residual current device with a rated residual current of 30mA or less.

1. DEPTH OF CUT ADJUSTMENT (See Fig. A)

Lift the depth of cut lock lever and raise the saw body away from the base plate. Set the depth of cut with the scale and tighten the screw to lock. Always add 3 mm to your depth of cut so that the blade can cut through the material.

2. BASE PLATE ANGLE AJUSTMENT (See Fig.B,C,D)

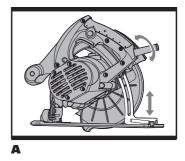
Loosen the base plate bevel lock knob and rotate the base plate to set the bevel angle with the angle scale provided. Then clamp the base plate position with the bevel lock. Finally, check the angle and ensure that the base plate is firmly clamped. The angle markings on the base plate are accurate for most general purposes but it is recommended to set the angle with a protractor and make a test cut on other material for accurate work. Do not use the depth of cut scale when making bevel cuts due to possible inaccuracy.

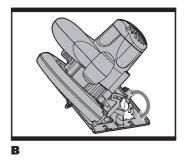
3. SAFETY ON/OFF SWITCH (See Fig. E)

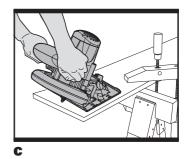
Your switch is locked off to prevent accidental starting. Depress lock off button then on/off switch and release lock off button. Your switch is now on. To switch off, just release the on/off switch.

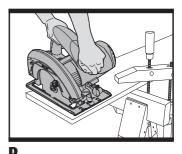
4. PARALLEL GUIDE ADJUSTMENT (See Fig.F)

It is used for making cuts parallel to a workpiece edge at a chosen distance. Slide the parallel guide arm through both fixtures to achieve the required cutting distance and tighten the screw to lock into position. The cutting distance is shown on the scale by the 90° or 45° notch edge. Always make a trial cut to check the setting.

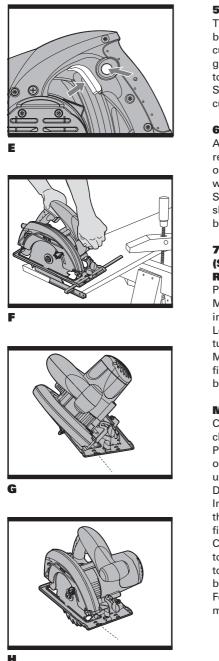












5. CUTTING GUIDE

There is a cutting guide notch (10) on the front of the base plate (11) for use with a parallel guide. For straight cuts, use the 0° guide mark to align with your parallel guide scale. For a 45° bevel cut, use the 45° guide mark to align with your parallel guide scale (See Fig. G,H). Securely clamp the parallel guide Always make a trial cut to check the setting.

6. FRONT HANDLE (See Fig.I, J)

Adjust the base plate angle and cutting depth to the required level and then place front of the base plate on the workpiece (do not allow the blade to touch the workpiece at this time).

Start the saw, when the saw is at maximum speed slowly pushing forward. Hold the saw securely with both hands.

7. FITTING AND CHANGING A SAW BLADE (See Fig.K) **REMOVING THE BLADE**

Press the spindle lock button(19) and keep it depressed. Manually rotate the blade until the spindle lock "clicks" into place and keeps the blade from spinning freely. Loosen the blade bolt (13) with the wrench (18) by turning it anti-clockwise. Remove the outer flange(15). Manually retract back the lower blade guard and hold it firmly with the lower guard lever (12). Remove the saw blade (16).

MOUNTING THE BLADE

Check to make sure the blade surface and flanges are clean before reinstalling.

Place the blade onto the spindle making sure the arrow on the blade matches the arrow direction on the fixed upper guard.

Depress the spindle lock button(19).

Insert the outer flange (15) over the spindle and tighten the bolt (turning it clockwise) with 1/4 turn more than finger tight using the wrench.

Check that the blade is securely fastened by continuing to hold down the spindle lock button and attempting to manually rotate the blade. If installed correctly, the blade should not spin.

For best cutting results, use a saw blade suited to the material and cut quality desired.





WORKING HINTS FOR YOUR CIRCULAR SAW

If your power tool becomes too hot, run your circular saw no load for 2-3 minutes to cool the motor. Avoid prolonged usage at very low speeds.

Always use a blade suited to the material and material thickness to be cut. The quality of cut will improve as the number of blade teeth increase.

Always ensure the work-piece is firmly held or clamped to prevent movement. Support large panels close to the cut line. Any movement of the material may affect the quality of the cut. The blade cuts on the upward stroke and may chip the uppermost surface or edges of your work piece. When cutting, ensure your uppermost surface is a non-visible surface when your work is finished. Feeding too fast significantly reduces the performance of the machine and shortens the life of the saw blade. Always face the good side of the work-piece down, to ensure minimum splintering. Only use sharp saw blades of the correct type.

MAINTENANCE

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

Your power tool requires no additional lubrication 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.

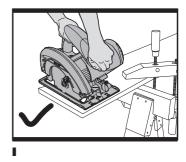
If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

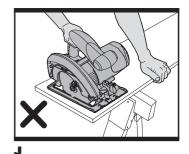
TROUBLESHOOTING

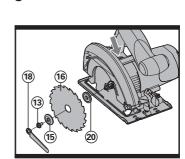
1. If your power tool does not start, check the plug on the power supply first.

2. If your power tool use in low efficiency, check the tool speed and type of accessory.

3. If a fault can not be rectified, return the tool to an authorized dealer for repair.













Copyright $\textcircled{\sc c}$ 2013, Positec. All Rights Reserved. 2PSC04CPK11000A0