

Symbols



Switch the product off and disconnect it from the power supply before assembly, cleaning, adjustments, maintenance, storage and transportation.



This product is of protection class II. That means it is equipped with enhanced or double insulation.



The product complies with the applicable European directives and an evaluation method of conformity for these directives was done.



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



Laser warning! Do not stare into the beam, class 2 laser product.

Safety warnings

- > This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.
- > Children should be supervised to ensure that they do not play with the product.

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.

Work area safety

- > **Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- > **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.
- > **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

Electrical safety

- > **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.
- > **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.
- > **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- > **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.
- > **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.
- > **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.

Personal safety

- > **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.
- > **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.

Safety warnings

- > **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.
- > **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.
- > **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- > **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.
- > **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.

Power tool use and care

- > **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.
- > **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.
- > **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.
- > **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.
- > **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.

- > **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- > **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.

Service

- > **Have your power tools serviced by a qualified repair person using only identical replacement parts.** This will ensure that safety of the power tool is maintained.

Circular saw safety warnings

Safety instructions for all saws - Cutting procedures

- > **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.
- > **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- > **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.
- > **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.
- > **Hold the power tool by insulated gripping surfaces only, 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.
- > **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- > **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.
- > **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.

Safety warnings

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.
- > **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.
- > **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.
- > **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.
- > **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.
- > **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.

- > **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.
- > **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 circular saws with outer pendulum guard - Lower guard function

- > **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 lever and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- > **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.
- > **Lower guard may be retracted manually only for special cuts such as "plunge cuts" and "compound cuts".** Raise lower guard by retracting lever and as soon as blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
- > **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.

Saw blade safety warnings

- > Only use saw blades if you have knowledge of how to use and handle them.
- > Pay attention to the maximum rotational speed. The maximum rotational speed marked on the saw blade shall not be exceeded. Where stated, the speed range shall be adhered to.
- > Do not use working saw blades which are cracked. Scrap of saw blades which bodies are cracked. Repairing is not permitted.
- > Clamping surfaces shall be cleaned to remove dirt, grease, oil and water.
- > Do not use loose rings or sleeves to «make up» bore sizes on saw blades.
- > Pay attention that fixed rings for securing the saw blades have the same diameter and at least 1/3 of the cutting diameter.

Safety warnings

- > Ensure fixed rings are parallel to each other.
- > Handle saw blades with care. Store them in the original packaging or in special boxes. Wear gloves for handling and to reduce injuries.
- > Ensure all guards are correctly fixed before using saw blades
- > Before use, make sure that the saw blade complies with technical requirements of the power tool and correctly fixed.
- > Use the supplied saw blade only for cutting of wood, never for metal.

Laser safety warnings

- > Protect yourself and your environment against risk of accident through appropriate precautions!
- > Do not stare directly into the laser beam without eye protection. A laser beam hitting the eye can cause permanent damage to the retina.
- > Do not stare directly into the laser with other optical instruments, e.g. a magnifier.
- > Do not direct the laser beam at persons or animals or onto reflecting surfaces. Persons and animals can become blinded or irritated. Even a low power laser can damage the eye.
- > Caution – when executing processes different from those described here, this can lead to a dangerous radiation exposure.
- > Never open or manipulate the laser module. It might cause an unexpected radiation exposure.

Vibration and noise reduction

To reduce the impact of noise and vibration emission, limit the time of operation, use low-vibration and low-noise operating modes as well as wear personal protective equipment.

Take the following points into account to minimize the vibration and noise exposure risks:

- > Only use the product as intended by its design and these instructions.
- > Ensure that the product is in good condition and well maintained.
- > Use correct application tools for the product and ensure they in good condition.
- > Keep tight grip on the handles/grip surface.

- > Maintain this product in accordance with these instructions and keep it well lubricated (where appropriate).
- > Plan your work schedule to spread any high vibration tool use across a number of days.

Emergency

Familiarise yourself with the use of this product by means of this instruction manual. Memorise the safety directions and follow them to the letter. This will help to prevent risks and hazards.

- > **Always be alert when using this product, so that you can recognise and handle risks early.** Fast intervention can prevent serious injury and damage to property.
- > **Switch off and disconnect from the power supply if there is any malfunction.** Have the product checked by a qualified specialist and repaired, if necessary, before you put it into operation again.

Residual risks

Even if you are operating this product in accordance with all the safety requirements, potential risks of injury and damage remain. The following dangers can arise in connection with the structure and design of this product:

- > Health defects resulting from vibration emission if the product is being used over long periods of time or not adequately managed and properly maintained.
- > Injuries and damage to property due to broken application tools or the sudden impact of hidden objects during use.
- > Danger of injury and property damage caused by flying objects.



WARNING! This product produces an electromagnetic field during operation! This field may under some circumstances interfere with active or passive medical implants! To reduce the risk of serious or fatal injury, we recommend persons with medical implants to consult their doctor and the medical implant manufacturer before operating this product!