XHD LITHIUM CORDLESS CIRCULAR SAW BRUSHLESS 184MM 18V - BARE TOOL

XHD5

OPERATORS MANUAL

TABLE OF CONTENTS

Note

This manual is for your reference only. Due to the continuous improvement of the XHD Lithium products, changes may be made at any time without obligation or notice.

Thank You

For the purchase of this XHD Lithium product. We try our hardest to supply customers like you with the best quality products available, at the best price possible. We cant wait to continue working together in the future.

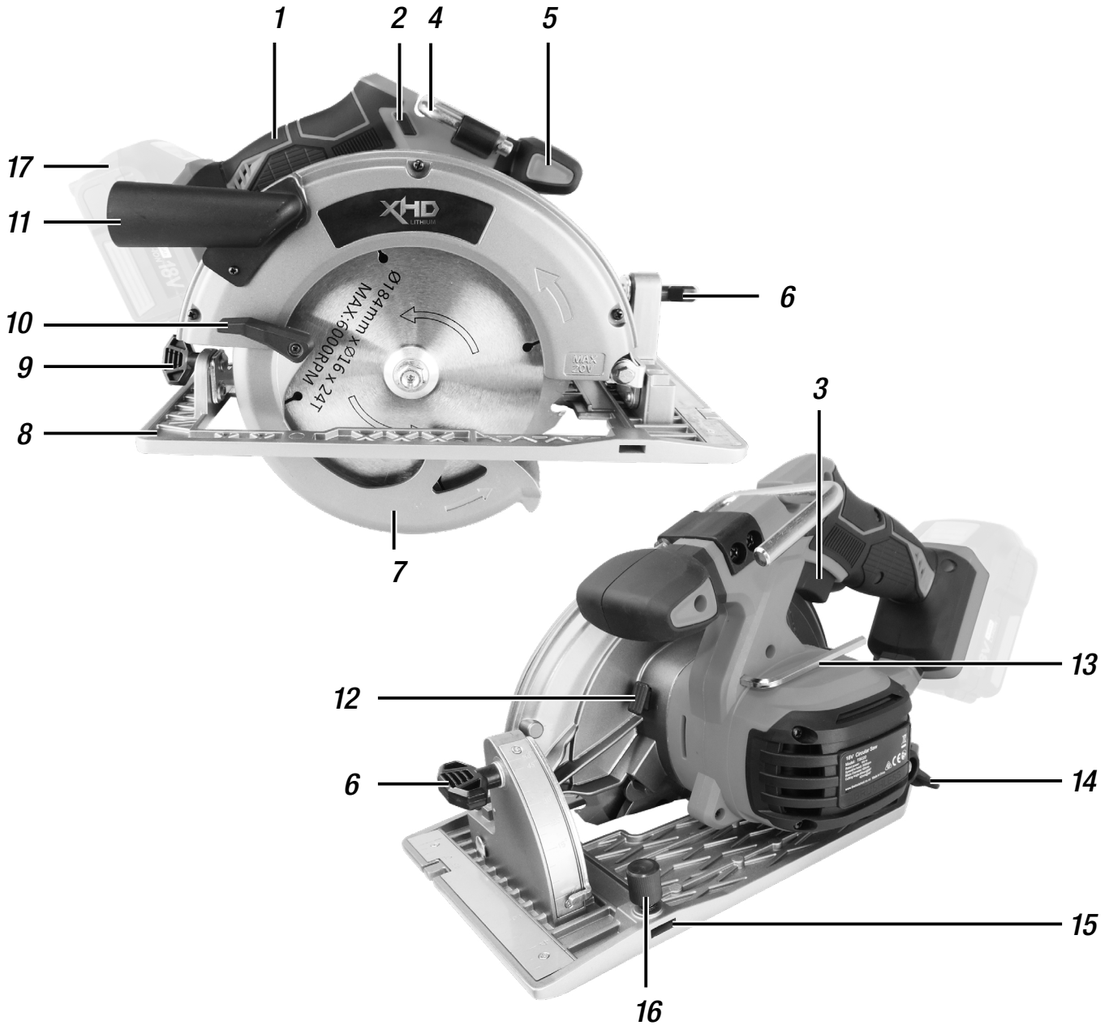
SPECIFICATIONS

Blade Diameter	184 mm Ø
Maximum Cutting Depth at 0°	50 mm
Maximum Cutting Depth at 45° Bevel	35 mm
No Load Speed	3650 RPM
Rated Voltage	18 V D.C.

Intended Use

The tool is intended for performing lengthways and crossways straight cuts and mitre cuts with angles in wood while in firm contact with the workpiece.

PRODUCT IDENTIFICATION



1 Ergonomic Rubber Grip Handle
2 Trigger Switch Lock-Off Button
3 Trigger Switch
4 Hang Hook
5 Front Handle
6 Front Bevel Adjustment Knob
7 Lower Blade Guard
8 Base
9 Rear Bevel Adjustment Knob
10 Lower Blade Guard Retracting Lever
11 Dust Extraction Port
12 Spindle Lock
13 Hex Key
14 Depth of Cut Adjustment Knob
15 Guide Rule Slot
16 Guide Rule Clamping Screw
17 XHD Lithium Battery (Not Included)

SAFETY GUIDELINES

⚠ WARNING

READ ALL SAFETY WARNINGS & INSTRUCTIONS. Failure to follow instructions and warnings could lead to serious injury, electric shock, or fire.

Work Area Safety

- **Ensure that your work area is kept clean and well lit.** Lack of visibility and clutter greatly increase the risk of accident when using tools.
- **Keep bystanders, pets, and children clear when operating this power tool or machine.** They can cause distraction or risk injury to themselves.
- **Ensure you are not operating the power tool or machinery in the presence of dust, liquids, flammable gases, or anything that can create an explosive atmosphere.** Power tools and machinery can create sparks which can lead to ignition and fire hazards in working environments.

Personal Safety

- **Always wear personal protective equipment (PPE).** Eye protection, ear protection, dust masks, and other protective equipment will help to reduce the risk of personal injury or long-term illnesses.
- **Dress appropriately. DO NOT wear loose clothing that can get caught in moving parts.** Keep hair, loose clothing, jewellery, and anything else that could be of risk, away from moving parts in the machine, or they could become caught therein.
- **Always remain alert and DO NOT operate power tools or machinery under the influence of any substances such as alcohol or drugs, including prescription medications.** Lack of focus could lead to injury or accidents while operating these power tools and machinery.
- **Always ensure proper footing and balance.** Overreaching can lead to slipping and falling which can result in injury or accident.
- **Ensure the power switch is in the OFF position before connecting any battery, or power source to the power tool or machinery.** This can cause injury as tools and machinery can suddenly fire incidentally when live, causing accidents.
- **Use all provided dust collection and extraction attachments, if included.** This equipment, along with the use of PPE dust masks, can help keep you safe from dust inhalation, and keep your work site clear from hazards.
- **Ensure loose parts such as wrenches or adjusting keys are removed before starting the power tool or machinery.**

SAFETY GUIDELINES

Power Tool & Machinery Use & Care

- **Use the correct tool for the job.** Forcing a tool to do a job it was not designed for increases the risk of accident or injury.
- **Disconnect tools and machinery from power, or remove batteries before doing any maintenance or adjustments, or before storing the tools and machinery.** This reduces or removes the risk of a power connection that causes the tool or machinery to accidentally fire, which can help prevent injury or accident.
- **Check the general condition of the power tool for damage or any problems that could affect the way the tool or machine works.** An unrepaired tool or machine can lead to accident and injury. Only have your tool or machine repaired with genuine parts from your local distributor
- **Only use the power tool and machinery with genuine parts or accessories that are designed to be used with this power tool and machinery.** Failure to do so could result in accident or injury, or damage your tool or machinery.
- **Store your tool or machinery out of reach of children, and away from untrained personnel when not in use.** Use by somebody untrained, or a child, could lead to accident or serious injury.

Service

- **Have your tools and machinery serviced by your local distributor with genuine XHD Lithium replacement parts.** This will ensure that the safety of the power tool or machine is maintained.

⚠ WARNING

The warnings and precautions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Always Use Common Sense

- It is not possible to cover every conceivable situation you can face. Always exercise care and use your common sense. If you get into a situation where you feel unsafe, stop and seek expert advise. Contact your dealer, service agent, or an experienced user. Do not attempt any task you feel unsure of!
- **Do not let familiarity gained from the 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.

SAFETY GUIDELINES

Battery Tool Use & Care

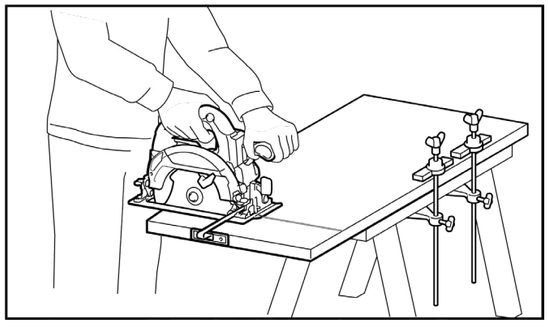
- Prevent unintentional starting. Ensure the switch is in the OFF position before connecting to the battery pack, picking up, or carrying the machine. Carrying the machine with your finger on the switch or energising a machine that has the switch ON invites accidents.
- Disconnect the battery pack from the machine before making any adjustments, changing accessories, or storing the machine. Such preventive safety measures reduce the risk of starting the machine accidentally.
- Recharge the battery only with the charger specified by the manufacturer. A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- Use machines only with specific battery packs. Use of any other battery packs may create a risk of injury and fire.
- When the battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or small metal objects, that can make a connection from one terminal to another. Shorting the battery terminals together may cause burns or a fire.
- Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush the area with water. If liquid contacts eyes, seek medical help. Liquid ejected from the battery may be acidic and may cause irritation or burns.
- Do not use a battery pack or machine that is damaged or modified. Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion, or risk of injury.
- Do not expose a battery pack or machine to fire or excessive temperature. Exposure to fire or temperature above 130°C may cause explosion.
- Follow all charging instructions and do not charge the battery pack or machine outside of the temperature range specified in the instructions.
- Charging the battery improperly, or at temperatures outside of the specified range may damage the battery and increase the risk of fire.
- Have servicing performed by a local XHD distributor using only identical replacement parts. This will ensure that the safety of the product is maintained.
- Do not modify or attempt to repair the machine or the battery pack except as indicated in the instructions for use and care.

Battery Long Life Tips

- Charge the battery cartridge before it is completely discharged. Always stop tool operation and charge the battery cartridge when you notice less tool power.
- Never recharge a fully charged battery cartridge. Overcharging shortens the battery service life.
- Charge the battery cartridge with room temperature at 10°C – 40°C. Allow a hot battery to cool before charging it.
- Charge the battery cartridge once in every six months if you do not use it for extended periods at a time.

Circular Saw Specific Safety

- 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 the workpiece in your hands or across your leg while cutting. Secure the workpiece to a stable platform. It is important to support the work properly to minimise body exposure, blade binding, or loss of control.



- Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring. 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 arbor holes. Blades that do not match the mounting hardware of the saw will run off-centre, 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.

⚠ WARNING

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- ***Lead from lead-based paint,***
- ***Crystalline silica from bricks, cement, and other masonry products, and,***
- ***Arsenic and chromium from chemically-treated lumber.***

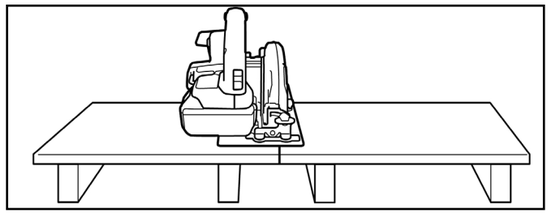
Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: work in a well ventilated area, and work with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

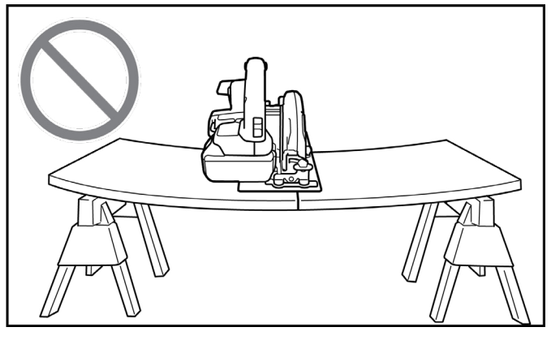
Kickback and Related Warnings

- Kickback is a sudden reaction to a pinched, jammed 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 jammed 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.

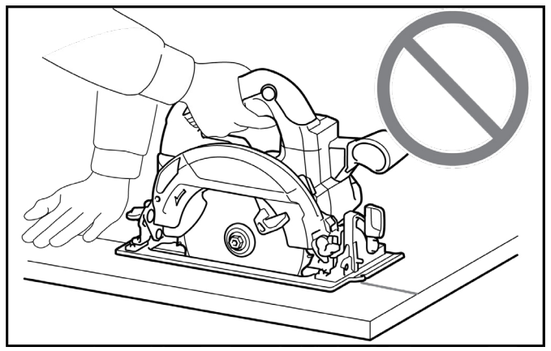
1. Maintain a firm grip with both hands on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade. Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
2. 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.
3. When restarting a saw in the workpiece, centre the saw blade in the kerf so that the saw teeth are not engaged into the material. If a saw blade binds, it may walk up or kickback from the workpiece as the saw is restarted.
4. 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.





5. Do not use dull or damaged blades. Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
6. Blade depth and bevel adjusting locking levers must be tight and secure before making the cut. If blade adjustment shifts while cutting, it may cause binding and kickback.
7. Use extra caution when sawing into existing walls or other blind areas. The protruding blade may cut objects that can cause kickback.

8. ALWAYS hold the tool firmly with both hands. NEVER place your hand, leg or any part of your body under the tool base or behind the saw, especially when making cross-cuts. If kickback occurs, the saw could easily jump backwards over your hand, leading to serious personal injury.



9. Never force the saw. Push the saw forward at a speed so that the blade cuts without slowing. Forcing the saw can cause uneven cuts, loss of accuracy, and possible kickback.

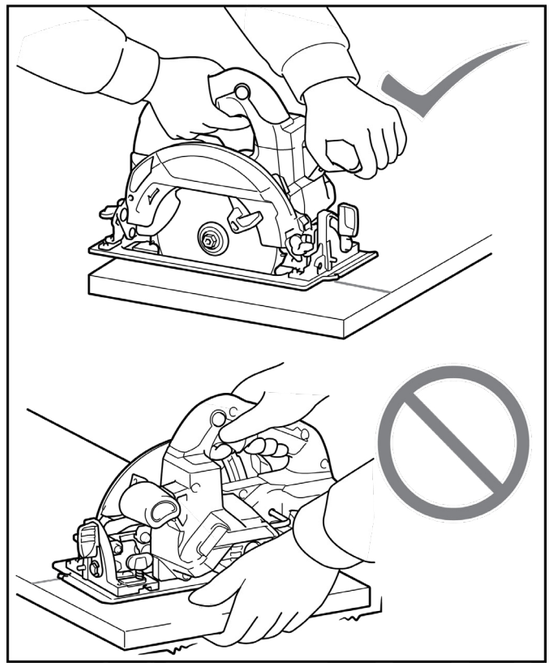
Lower Guard Function

1. Check the lower guard for proper closing before each use. Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position. If the saw is accidentally dropped, the 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.
2. 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.
3. The lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts”. Raise the lower guard by the retracting the handle and as soon as the blade enters the material, the lower guard must be released. For all other sawing, the lower guard should operate automatically.
4. Always observe that the lower guard is covering the blade before placing the 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.
5. To check the lower guard, open lower guard by hand, then release and watch the guard closure. Also check to see that the retracting handle does not touch the tool housing. Leaving the blade exposed is VERY DANGEROUS and can lead to serious personal injury.

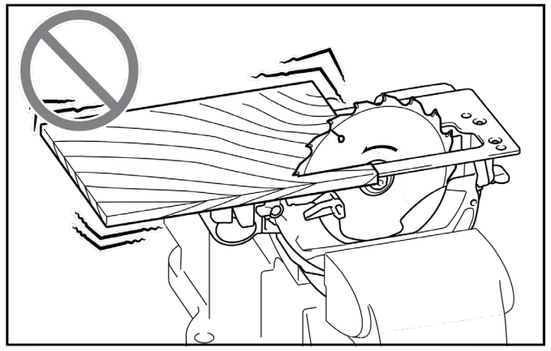
Intended Use

- This tool is intended to cut wood products only. Accumulated sawdust on the lower guard and hub from other materials may effect the proper closure of the lower guard which could lead to serious personal injury.
- Use extra caution when cutting damp wood, pressure treated lumber, or wood

containing knots. Maintain a smooth advancement of the tool without a decrease in blade speed to avoid overheating the blade tips.
- Do not attempt to remove cut material when the blade is moving. Wait until the blade stops before grasping the cut material. Blades coast after turn off.
- Avoid cutting nails. Inspect for and remove all nails from lumber before cutting.
- Place the wider portion of the saw base on the part of the workpiece which is solidly supported, not on the section that will fall off when the cut is made. If the workpiece is short or small, clamp it down. DO NOT TRY TO HOLD SHORT PIECES BY HAND!



- Before setting the tool down after completing a cut, be sure that the guard has closed and the blade has come to a complete stop.
- Never attempt to saw with the circular saw held upside down in a vise. This is extremely dangerous and can lead to serious accidents.



- Do not stop the blades by lateral pressure on the saw blade.
- Do not use any abrasive wheels.
- Only use the saw blade with the diameter that is marked on the tool or specified in the manual. Use of an incorrectly sized blade may affect the proper guarding of the blade or guard operation which could result in serious personal injury.
- Keep the blade sharp and clean. Gum and wood pitch hardened on blades slows the saw and increases potential for kickback. Keep the blade clean by first removing it from the tool, then cleaning it with gum and pitch remover, hot water, or kerosene. Never use gasoline.
- Wear a dust mask and hearing protection when use the tool.
- Always use the saw blade intended for cutting the material that you are going to cut.
- Only use the saw blades that are marked with a speed equal or higher than the speed marked on the tool.

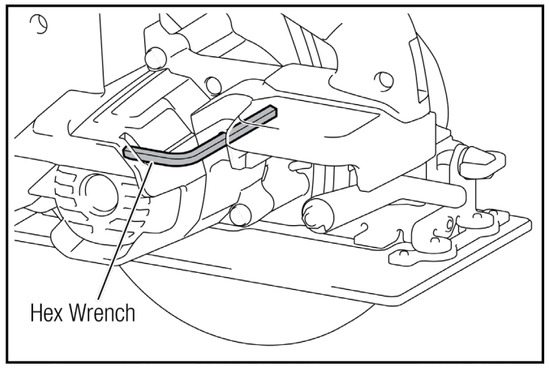
ASSEMBLY

⚠ WARNING

Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking the tool.

Hex Wrench Storage

- When not in use, store the hex wrench as shown in the figure for safe keeping.

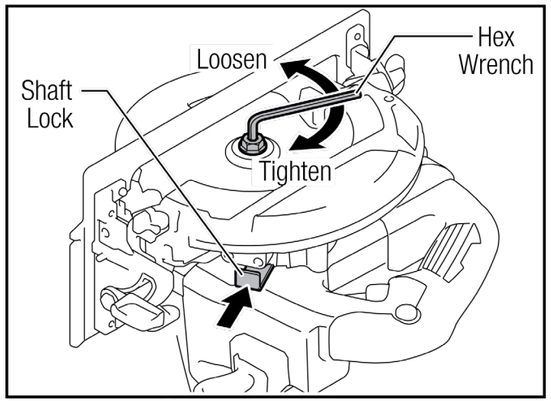


Removing or Installing the Circular Saw Blade

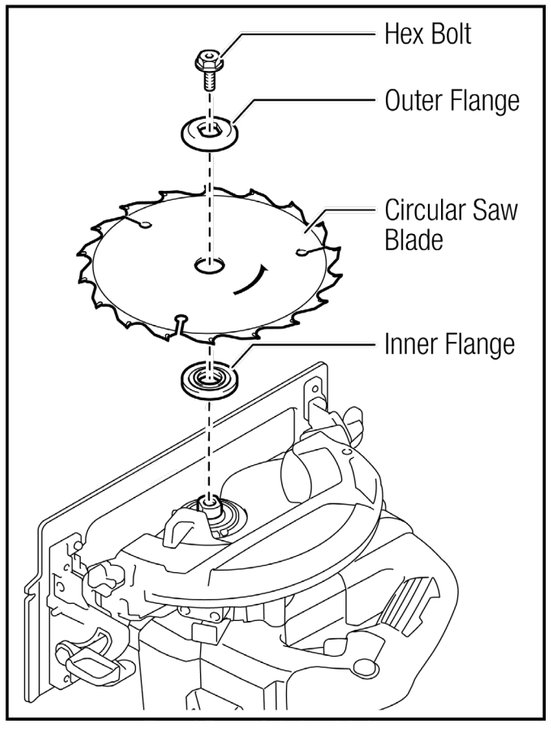
⚠ CAUTION

Be sure the circular saw blade is installed with teeth pointing up at the front of the tool.

- To remove the circular saw blade, press the shaft lock fully so that the circular saw blade cannot revolve and use the supplied hex wrench to loosen the hex bolt. Then remove the hex bolt, ring, outer flange, and circular saw blade.

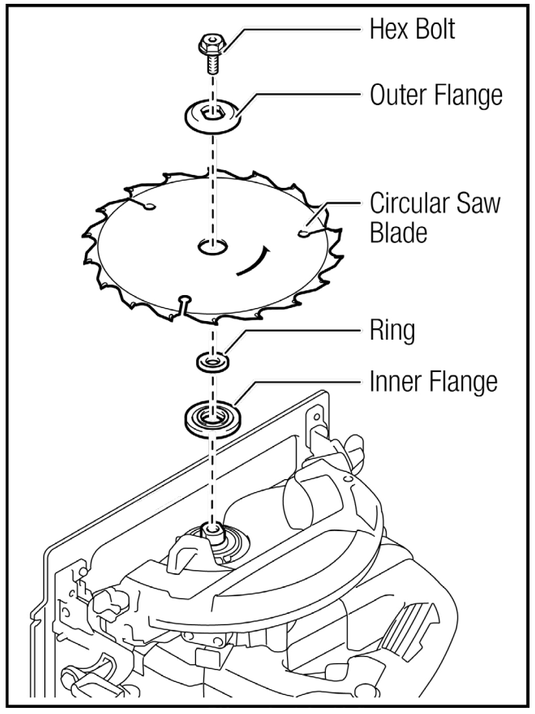


For tool without the ring:



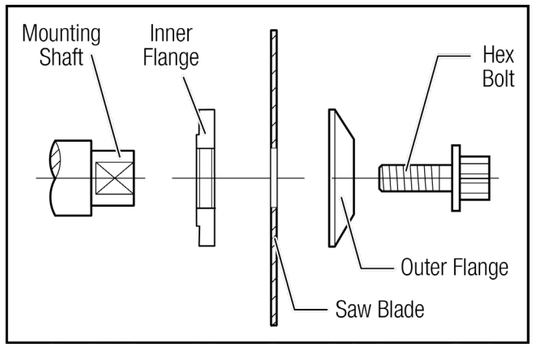
ASSEMBLY

For tool with the ring:

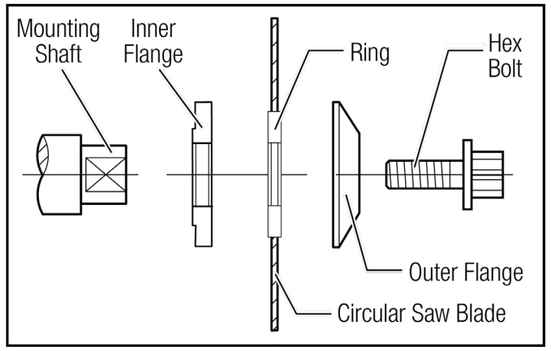


- To install the circular saw blade, follow the removal procedure in reverse.
- Mount the inner flange with its recessed side facing outward onto the mounting shaft and then place circular the saw blade (with the ring attached if needed), outer flange, and hex bolt.

For tool without the ring:



For tool with the ring:



⚠ WARNING

BE SURE TO TIGHTEN THE HEX BOLT CLOCKWISE SECURELY. Also be careful not to tighten the bolt forcibly. Slipping your hand from the hex wrench can cause a personal injury.

If the ring is needed to mount the blade onto the spindle, always be sure that the correct ring for the blade's arbor hole you intend to use is installed between the inner and the outer flanges. Use of the incorrect arbor hole ring may result in the improper mounting of the blade causing blade movement and severe vibration resulting in possible loss of control during operation and in serious personal injury.

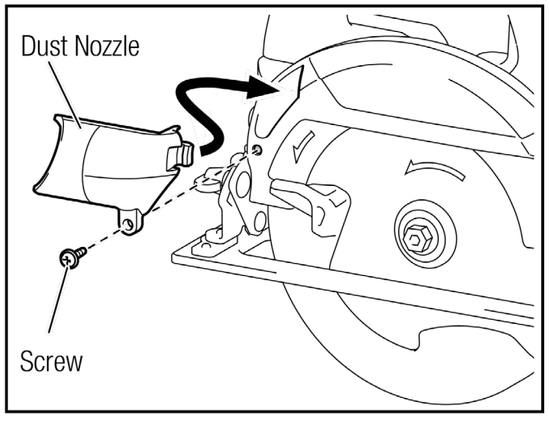
ASSEMBLY

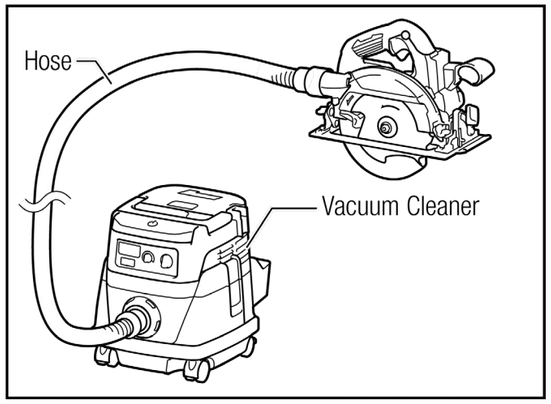
Blade Guard Cleaning

- When changing the circular saw blade, make sure to also clean the upper and lower blade guards of accumulated sawdust as discussed in the Maintenance section. Such efforts do not replace the need to check lower guard operation before each use.

Connecting a Vacuum Cleaner

- When you wish to perform clean cutting operation, connect a vacuum cleaner to your tool. Connect a hose of the vacuum cleaner to the dust nozzle as shown in the figure below.





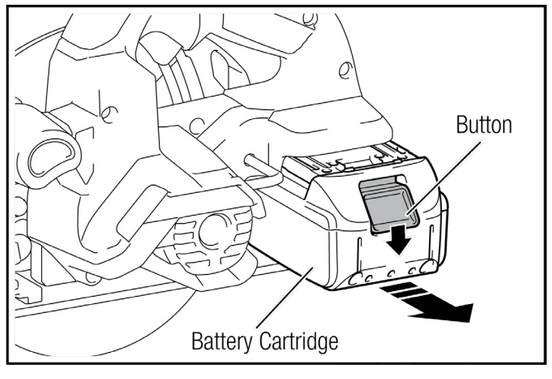
OPERATION

⚠ WARNING

Always be sure that the tool is switched off and the battery cartridge is removed before adjusting or checking the tool.

Installing or Removing the Battery

- To remove the battery cartridge, slide it from the tool while depressing the button on the front of the cartridge.
- To install the battery cartridge, align the tongue on the battery cartridge with the groove in the housing and slip it into place. Insert it all the way until it locks in place with a little click. If you can see the red indicator on the upper side of the button, that means it is not locked completely.



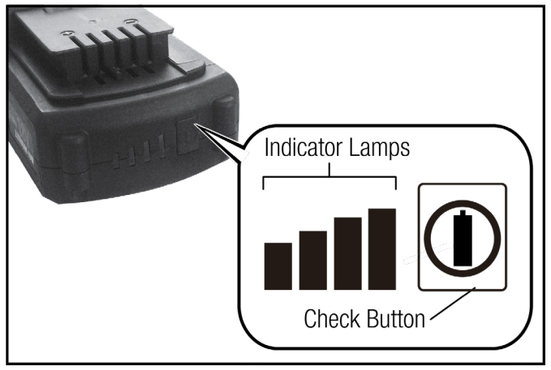
⚠ CAUTION

Do not install the battery cartridge forcibly. If the cartridge does not slide in easily, it is not being inserted correctly.

Indicating the Remaining Battery Capacity

- Press the check button on the battery cartridge to indicate the remaining capacity.

NOTE: Depending on the conditions of use and the ambient temperature, the indication may differ slightly from the actual capacity.



INDICATOR LAMPS			*REMAINING CAPACITY*
LIGHTED	*OFF*	*BLINKING*	
■ ■ ■ ■			75% to 100%
■ ■ ■		□	50% to 75%
■ ■	□ □		25% to 50%
■	□ □	□	0% to 25%
◪	□ □	□	Charge the Battery.
■ ■ ↑ □ □ ↓	□ □	■ ■	The Battery may have Malfunctioned

OPERATION

Tool/Battery Protection System

- The tool is equipped with a tool/battery protection system. This system automatically cuts off power to the motor to extend tool and battery life. The tool will automatically stop during operation if the tool or battery is placed under one of the following conditions:

Overload Protection

- When the tool/battery is operated in a manner that causes it to draw an abnormally high current, the tool automatically stops without any indication. In this situation, turn the tool off and stop the application that caused the tool to become overloaded. Then turn the tool on to restart.

Overheat Protection

- When the tool/battery is overheated, the tool stops automatically. In this situation, let the tool/battery cool before turning the tool on again.

Over Discharge Protection

- When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

⚠ CAUTION

Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

Switch Action

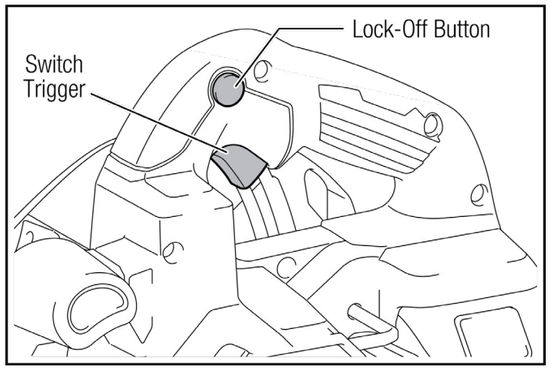
⚠ WARNING

Before installing the battery cartridge into the tool, always check to see that the switch trigger actuates properly and returns to the "OFF" position when released.

NEVER defeat the lock-off button by taping it down, or some other means. A switch with a negated lock-off button may result in unintentional operation and serious personal injury.

NEVER use the tool if it runs when you simply pull the switch trigger without pressing the lock-off button. Return tool to your local XHD Service Centre for proper repairs BEFORE further usage.

- To prevent the switch trigger from being accidentally pulled, a lock-off button is provided. To start the tool, depress the lock-off button and pull the switch trigger.
- Release the switch trigger to stop.



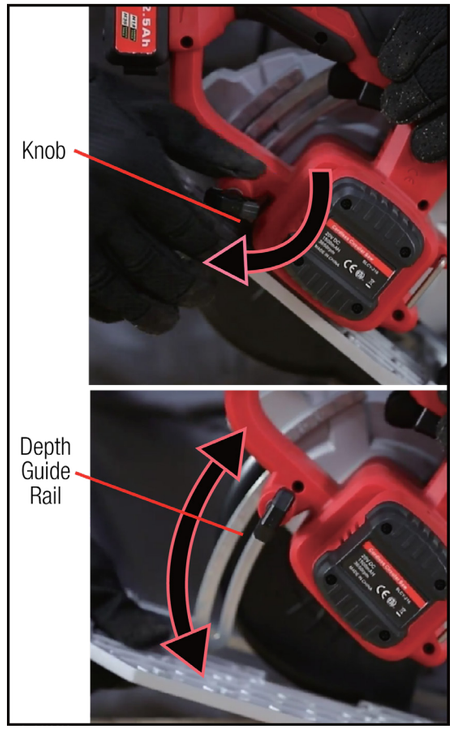
OPERATION

Adjusting Depth of Cut

⚠ CAUTION

After adjusting the depth of cut, always tighten the lever securely.

- Loosen the knob and move the base up or down to align the guide rail with your desired depth on the depth guide. At the desired depth of cut, secure the base by tightening the knob.
- For cleaner, safer cuts, set cut depth so that no more than one blade tooth projects below workpiece. Using proper cut depth helps to reduce potential for dangerous KICKBACKS which can cause personal injury.

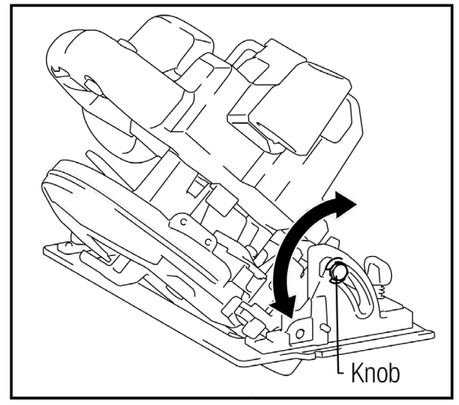


Bevel Cutting

⚠ CAUTION

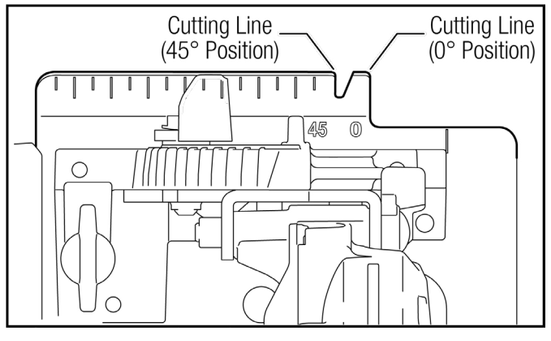
After adjusting the bevel angle, always tighten the lever and clamping screw securely.

- Loosen the knob. Set for the desired angle by tilting accordingly, then tighten the knob screw securely.



Sighting

- For straight cuts, align the 0° position on the front of the base with your cutting line. For 45° bevel cuts, align the 45° position with it.



OPERATION

Electric Brake

- This tool is equipped with an electric blade brake. If the tool consistently fails to quickly stop the blade after the switch lever release, have tool serviced at an XHD service centre.

⚠ CAUTION

The blade brake system is not a substitute for a blade guard. NEVER USE A TOOL WITHOUT A FUNCTIONING BLADE GUARD. SERIOUS PERSONAL INJURY CAN RESULT.

Electric Function

- The tools equipped with electronic function are easy to operate because of the following feature:

Soft Start Feature

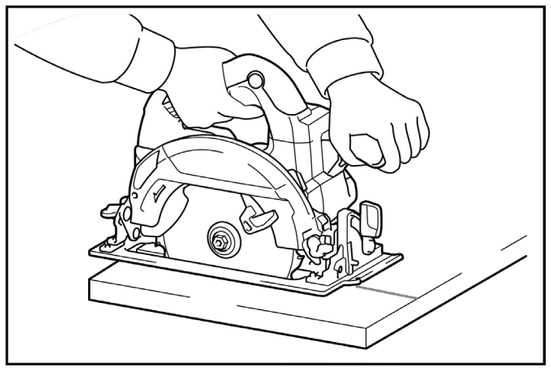
- Soft start because of suppressed starting shock.

⚠ CAUTION

Be sure to move the tool forward in a straight line gently. Forcing or twisting the tool will result in overheating the motor and dangerous kickback, possibly causing severe injury.

Best Use Practices

NOTE: When the battery cartridge temperature is low, the tool may not work to its full capacity. At this time, for example, use the tool for a light-duty cut for a while until the battery cartridge warms up as high as room temperature. Then, the tool can work to its full capacity.



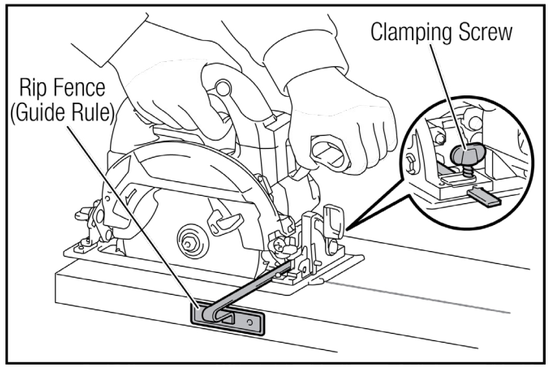
- Hold the tool firmly. The tool is provided with both a front grip and rear handle. Use both to best grasp the tool. If both hands are holding the saw, they cannot be cut by the circular saw blade. Set the base on the workpiece to be cut without the circular saw blade making any contact. Then turn the tool on and wait until the circular saw blade attains full speed. Now simply move the tool forward over the workpiece surface, keeping it flat and advancing smoothly until the sawing is completed.
- To get clean cuts, keep your sawing line straight and your speed of advance uniform. If the cut fails to properly follow your intended cut line, do not attempt to turn or force the tool back to the cut line. Doing so may bind the circular saw blade and lead to dangerous kickback and possible serious injury. Release the switch, wait for circular saw blade to stop and then withdraw tool. Realign tool on new cut line, and start cut again. Attempt to avoid positioning which exposes operator to chips and wood dust being ejected from saw. Use eye protection to help avoid injury.

OPERATION

Rip Fence (Guide Rule)

Optional Accessory.

- The handy rip fence allows you to do extra-accurate straight cuts. Simply slide the rip fence up snugly against the side of the workpiece and secure it in position with the clamping screw on the front of the base. It also makes repeated cuts of uniform width possible.



MAINTENANCE

⚠ WARNING

Always be sure that the tool is switched off and the battery removed before attempting to perform any inspection or maintenance.

- Before cleaning or performing any maintenance, you must ensure the tool is switched off and disconnected from the power supply.
- Compressed air is the most effective way to clean this tool. Always wear PPE safety goggles when cleaning tools with compressed air.
- Ventilation openings and switch levers must be kept clean. DO NOT attempt to clean by inserting pointed objects through openings.
- Do not use harsh chemicals or solvents when cleaning this tool.
- If you discover any damaged or broken parts, consult your local XHD distributor for replacements and advise.

Battery Disposal

- Batteries and electronics should not be disposed of in household garbage. Please return your old batteries to your local distributor for safe and environmentally friendly disposal.
- Together, we can care for the environment.

Environment & Disposal

- Packaging materials are raw materials and can be re-used. Separate the different packaging materials and take them to the appropriate waste disposal facility. More information can be obtained from your local authorities.
- Old machines do not belong in your household garbage! Dispose of old machines appropriately, we are all responsible for the environment.