XHD LITHIUM CORDLESS ANGLE GRINDER BRUSHLESS 125MM 18V - BARE TOOL

XHD4

OPERATORS MANUAL

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Note

This manual is for 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

Disc Diameter	125mm
Motor Type	Brushless Motor
Rated Voltage	18V DC
Spindle Thread	M14
No Load Speed	8500 RPM
Overall Length	350 x 270 x 130mm
Net Weight	1.7 kg

PRODUCT IDENTIFICATION

1	Auxiliary Handle	*6*	On/Off Paddle Switch
2	Exhaust Vents	*7*	Lock-On Lever
3	Resting Frame	*8*	Disc Guard
4	Ergonomic Handle	*9*	Shaft/Spindle Lock
5	Intake Vents	*10*	XHD 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

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 specifically designated 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 repair person 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 cartridge 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.

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.

Angle Grinder Specific Safety

- Do not operate the power tool near flammable materials. Sparks could ignite these materials.
- Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.
- Wear personal protective equipment. Depending on application, use face shield, safety goggles or safety glasses. As appropriate, wear dust mask, hearing protectors, gloves and workshop apron capable of stopping small abrasive or work piece fragments. The eye protection must be capable of stopping flying debris generated by various operations . The dust mask or respirator must be capable of filtrating particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- Check that the ventilation openings on the grinder are not clogged.
- Always fasten the work piece with clamps or similar. Never hold the work piece by hand.
- Always use the right type of grinding or cutting disc for the task at hand.
- Never use discs which their maximum speed is less than the maximum speed of the tool.
- Never use damaged or worn discs, or discs that can not be easily mounted on the angle grinder spindle. Never use an adapter ring or similar to mount washers with excessive holes. The disc must not be in contact with the work piece or other objects when starting the angle grinder.
- Never stick your hand near the disc while the angle grinder is running.
- Keep the handle and the angle grinder itself free of oil, grease, water or other liquids.
- Never press the spindle lock while the disc is rotating.
- Do not move or lay down the angle grinder until the disc has stopped moving completely.
- Do not touch the machined item or metal shavings immediately after grinding, as they can be very hot.
- Before use always check the blade guard is undamaged and fastened correctly. Do not use this tool without the blade guard.
- Always hold and operate the tool firmly with two hands.
- Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.
- Do not position your body in line with and behind the rotating wheel. When the wheel, at the point of operation, is moving away from your body, the possible kickback may propel the spinning wheel and the power tool directly at you.
- Do not restart the cutting operation in the work piece. Let the wheel reach full speed and carefully re-enter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the work piece.

SAFETY GUIDELINES

⚠ WARNING

Some dust created by grinding, power sanding, sawing, 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.

SAFETY GUIDELINES

Kickback & Related Warnings

- Kickback is a sudden reaction caused when a rotating wheel, brush, or accessory is pinched or snagged. This can stall the accessory and force the tool in the opposite direction of rotation. For example, if an abrasive wheel binds in the workpiece, it may dig in and climb out, causing the wheel to kick toward or away from the operator, or even break. Kickback results from misuse or incorrect operation and can be prevented by following the precautions below.

1. Position your body and arm to allow you to resist kickback forces. Always use auxiliary handle, if provided, for maximum control over kickback or torque reaction during start-up. The operator can control torque reactions or kickback forces, if proper precautions are taken.

2. Never place your hand near the rotating accessory. Accessory may kickback over your hand.

3. Do not position your body in the area where power tool will move if kickback occurs. Kickback will propel the tool in direction opposite to the wheel's movement at the point of snagging.

4. Use special care when working corners, sharp edges etc. Avoid bouncing and snagging the accessory. Corners, sharp edges or bouncing have a tendency to snag the rotating accessory and cause loss of control or kickback.

5. Do not attach a saw chain woodcarving blade or toothed saw blade. Such blades

Grinding/Abrasive Cut-Off Operations

1. Use only wheel types that are recommended designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.

2. The grinding surface of centre depressed wheels must be mounted below the plane of the guard lip. An improperly mounted wheel that projects through the plane of the guard lip cannot be adequately protected.

3. The guard must be securely attached to the power tool and positioned for maximum safety, so the least amount of wheel is exposed towards the operator. The guard helps to protect the operator from broken wheel fragments, accidental contact with wheel and sparks that could ignite clothing.

4. Wheels must be used only for recommended applications. For example: do not grind with the side of cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding, side forces applied to these wheels may cause them to shatter.

5. Always use undamaged wheel flanges that are of correct size and shape for your selected wheel. Proper wheel flanges support the wheel thus reducing the possibility of wheel breakage. Flanges for cut-off wheels may be different from grinding wheel flanges.

6. Do not use worn down wheels from larger power tools. Wheel intended for larger power tool is not suitable for the higher speed of a smaller tool and may burst.

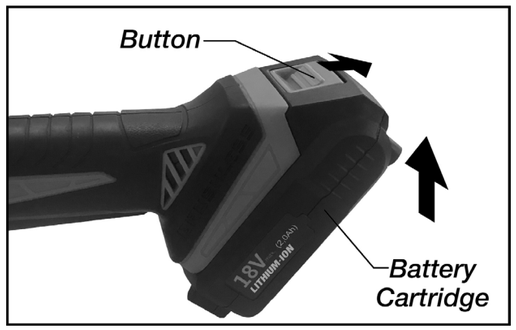
OPERATION

⚠ 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.



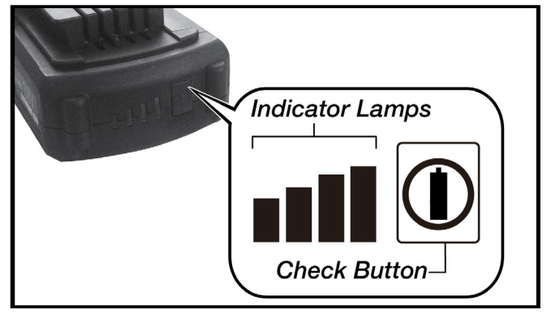
⚠ CAUTION

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 battery capacity. The indicator will light up for few seconds.

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

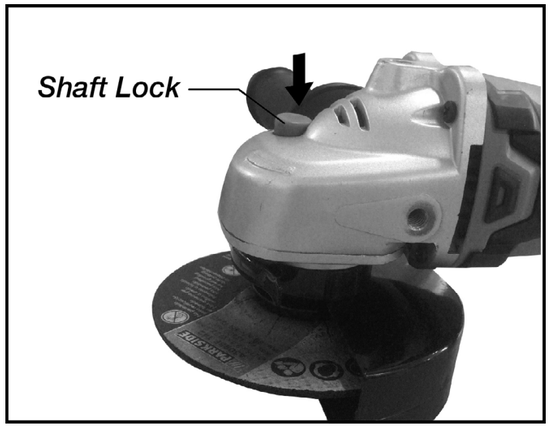
- When the battery capacity is not enough, the tool stops automatically. In this case, remove the battery from the tool and charge the battery.

⚠ 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.

Shaft/Spindle Lock

- Press the shaft lock to prevent spindle rotation when installing or removing accessories.



NOTE: Never actuate the shaft lock when the spindle is moving. The tool may be damaged.

Lever Switch Action

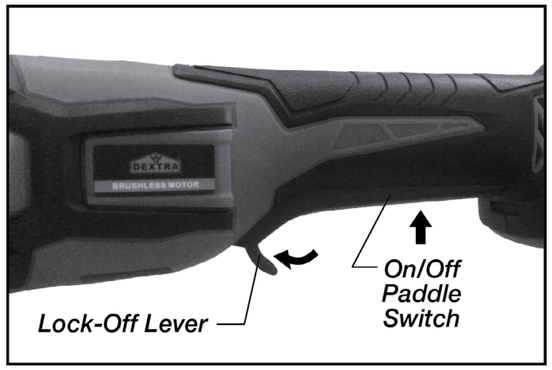
⚠ CAUTION

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

Do not pull the switch lever hard without pulling the lock-off lever. This can cause switch breakage.

OPERATION

- To prevent the switch lever from being accidentally pulled, a lock-off lever is provided.
- To start the tool, pull the lock-off lever toward the operator and then pull the switch lever.
- To stop the tool, release the switch lever.



Installing the Side Auxiliary Handle

- Screw the side grip securely on the position of the tool as shown in the figure.

Installing/Removing the Disc Guard

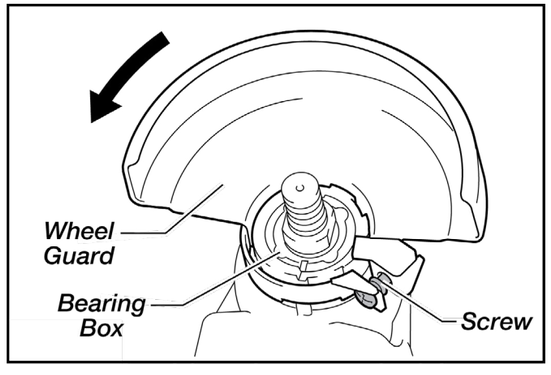
⚠ CAUTION

When using a depressed centre wheel, wire wheel crush, the wheel guard must be fitted on the tool so that the closed side of the guard always points toward the operator.

When using an abrasive cut-off/ diamond wheel, be sure to use only the special wheel guard designed for use with cut-off wheels.

For tool with locking screw type wheel guard

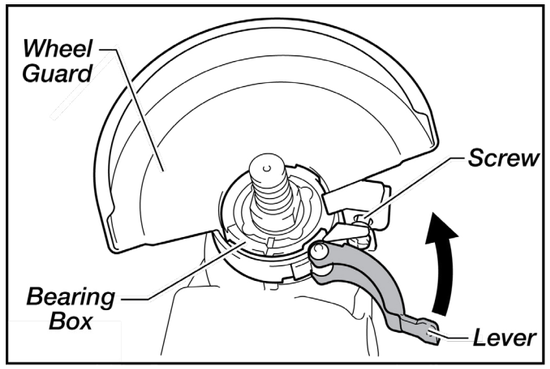
- Mount the wheel guard with the protrusions on the wheel guard band aligned with the notches on the bearing box. Then rotate the wheel guard to such an angle that it can protect the operator according to work. Be sure to tighten the screw securely.
- To remove wheel guard, follow the installation procedure in reverse.



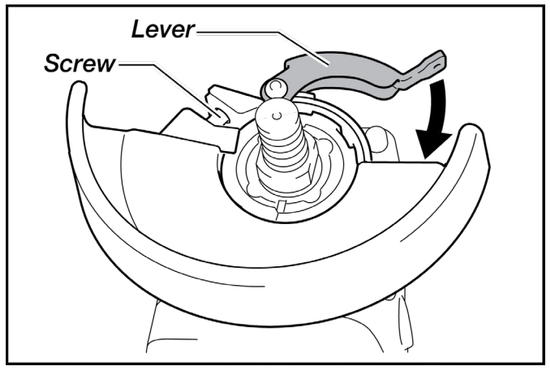
OPERATION

For tool with clamp lever type wheel guard

- Loosen the screw, and then pull the lever in the direction of the arrow. Mount the wheel guard with the protrusions on the wheel guard band aligned with the notches on the bearing box. Then rotate the wheel guard to such an angle that it can protect the operator according to work.



- Pull the lever in the direction of the arrow, then secure the wheel guard by tightening the screw. Ensure the screw is firmly tightened. The angle of the wheel guard can be adjusted using the lever.



- To remove wheel guard, follow the installation procedure in reverse.

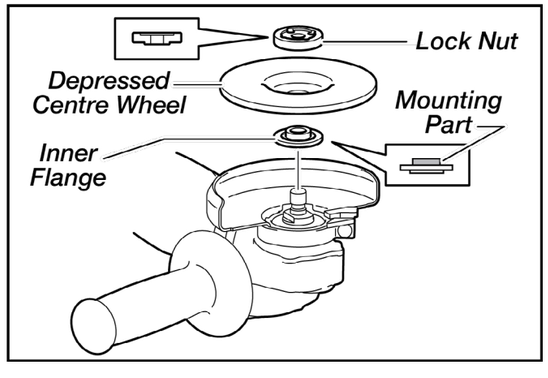
Installing/Removing Depressed Centre Wheels or Flap Discs

⚠ WARNING

When using a depressed centre wheel or flap disc, the wheel guard must be fitted on the tool so that the closed side of the guard always points toward the operator.

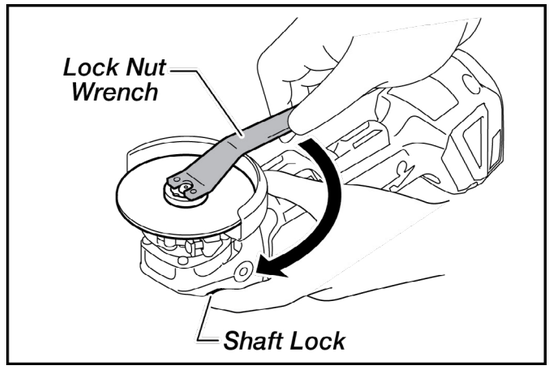
Make sure that the mounting part of the inner flange fits onto the inner diameter of the depressed centre wheel/flap disc perfectly. Mounting the inner flange on the wrong side may result in dangerous vibrations.

- Mount the inner flange onto the spindle.
- Make sure to fit the dented part of the inner flange onto the straight part at the bottom of the spindle.
- Fit the depressed centre wheel/flap disc on the inner flange and screw the lock nut onto the spindle.



OPERATION

- To tighten the lock nut, press the shaft lock firmly to prevent the spindle from rotating. Then use the lock nut wrench to tighten it securely in a clockwise direction.

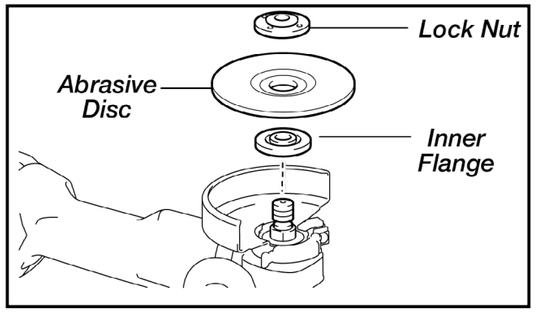


- To remove the wheel, follow the installation procedure in reverse.

Installing/Removing Abrasive Discs

⚠ WARNING

Always use the supplied guard when operating the tool with a flex wheel. The wheel may shatter during use, and the guard helps protect the user from potential injury.



⚠ WARNING

You should never need to force the tool. Its own weight provides sufficient pressure. Applying excessive force may cause the wheel to break and create a safety hazard.

ALWAYS replace the wheel if the tool is dropped while grinding.

NEVER strike or force the grinding disc or wheel against the workpiece.

Avoid bouncing and snagging the wheel, especially when working corners, sharp edges etc. This can cause loss of control and kickback.

NEVER use tool with wood cutting blades and other saw blades. Such blades when used on a grinder frequently kick and cause loss of control leading to personal injury.

⚠ CAUTION

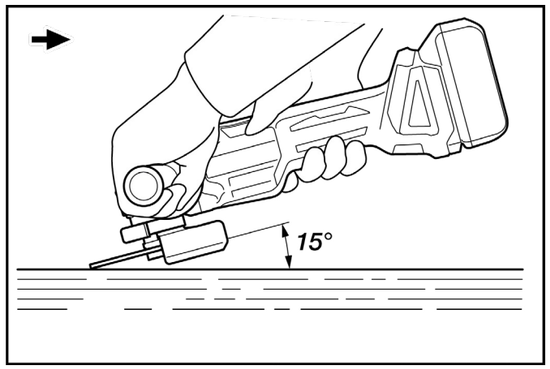
Never switch on the tool when it is in contact with the workpiece, it may cause an injury to operator.

Always wear safety goggles or a face shield during operation.

After operation, always switch off the tool and wait until the wheel has come to a complete stop before putting the tool down.

OPERATION

Grinding/Sanding Operation



- Turn the tool on before applying the wheel or disc to the workpiece.
- Keep the edge of the wheel or disc at an angle of about 15° to the workpiece surface.
- During the break-in period with a new wheel, avoid working in the forward direction as it may cut into the workpiece. Once the wheel edge has been rounded through use, it can be worked in both forward and backward directions.

Operation With Abrasive Cut-Off/Diamond Wheel

⚠ WARNING

When using an abrasive cut-off/ diamond wheel, be sure to use only the special wheel guard designed for use with cut-off wheels.

NEVER use cut-off wheel for side grinding.

⚠ WARNING

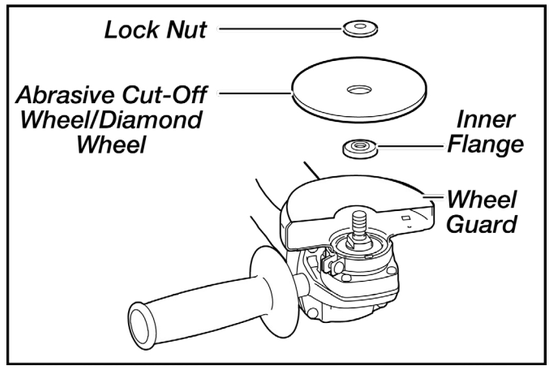
Do not "jam" the wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Over stressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback, wheel breakage and overheating of the motor may occur.

Do not start the cutting operation in the workpiece. Let the wheel reach full speed and carefully enter into the cut moving the tool forward over the workpiece surface. The wheel may bind, walk up or kickback if the power tool is started in the workpiece.

During cutting operations, never change the angle of the wheel. Placing side pressure on the cut-off wheel (as in grinding) will cause the wheel to crack and break, causing serious personal injury.

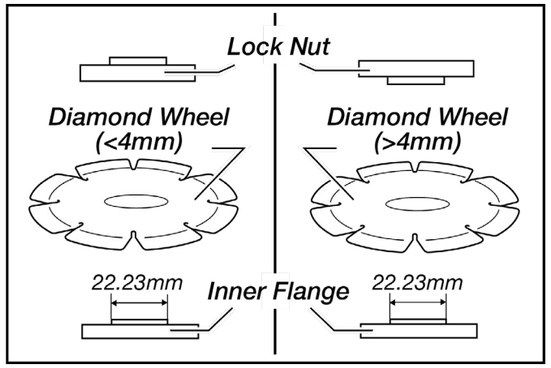
A diamond wheel shall be operated perpendicular to the material being cut.

OPERATION

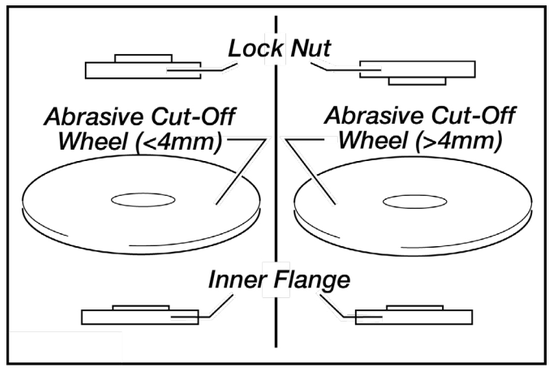


- For installation, follow the instructions under *"Installing/Removing Depressed Centre Wheels or Flap Discs"* on page 12.
- The correct orientation of the lock nut and inner flange depends on the wheel type and thickness. Refer to the figures below.

When Installing the Diamond Wheel



When Installing the Abrasive Cut-Off Wheel



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.

⚠ WARNING

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

Air vent cleaning

- The tool and its air vents have to be kept clean.
- Regularly clean the tool's air vents or whenever the vents start to become obstructed.