

# MAXIMUM<sup>®</sup>

## 20V max\*

**Cordless Angle Grinder/Cut-off Tool  
with Brushless Motor**



**Model No. 054-7283-6**

**IMPORTANT:**

Please read this manual carefully before using this product, and save it for reference.

**INSTRUCTION  
MANUAL**

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**NOTE:** If any parts are missing or damaged, or if you have any questions, please call our toll-free helpline at 1-888-670-6682.



## SAVE THESE INSTRUCTIONS

This manual contains important safety and operating instructions. Read all instructions and follow them with use of this product.

model no. 054-7283-6 | contact us 1-888-670-6682

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## TECHNICAL SPECIFICATIONS

MOTOR	18V DC BRUSHLESS
RATED SPEED	7500 RPM
SPINDLE THREAD	5/8"-11 (15.9 mm)
WHEEL SIZE	4 1/2" (115 mm)
COMPATIBLE MAXIMUM BATTERY	054-3203-2 (2.0 Ah) (SOLD SEPARATELY); 054-3206-6 (4.0 Ah) (SOLD SEPARATELY)
COMPATIBLE MAXIMUM CHARGER	054-3204-0 (SOLD SEPARATELY)
NET WEIGHT	3 lb 7 oz (1.55 kg) WITHOUT BATTERY

## WORK AREA SAFETY

- **Keep your work area clean and well lit.** Cluttered, dark areas invite accidents.
- **Do not operate power tools in an explosive atmosphere, such as in the presence of flammable liquids, gases, or dust.** Power tools create sparks, which may ignite 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 adaptor plugs with grounded power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is 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 the cord away from heat, oil, sharp edges or moving parts.** Replace damaged cords immediately. Damaged or tangled 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 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 when 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.



## WARNING!

- Before operating this tool, carefully read this Instruction Manual and all of the labels affixed to the tool. Failure to follow all warnings and instructions may result in electric shock, fire and/or serious injury.
- The term "power tool" in the warnings refers to your main operated (corded) power tool or battery operated (cordless) power tool.
- Save all warnings and instructions for future reference.

- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to a power source and/or battery pack, or picking up or carrying the tool.** Carrying tools with your fingers 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, jewelry, 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.
- **Do not use on a ladder or unstable support.** Stable footing on a solid surface allows for better control of the power tool in unexpected situations.

#### 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 battery pack from the power tool before making any adjustments, changing accessories, or storing the tool.** Such preventative safety measures reduce the risk of starting the 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.

#### BATTERY TOOL USE AND CARE

- **Ensure the switch is in the off-position before inserting the battery pack.** Inserting the battery pack into power tools that have the switch on invites accidents.
- **Recharge 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 power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other 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 with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

#### SERVICE

- **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.
- **When servicing a tool, use only identical replacement parts.** Follow the instructions in the **MAINTENANCE** section of this manual. The use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

#### SAFETY WARNINGS COMMON FOR GRINDING, ABRASIVE CUTTING-OFF OPERATIONS:

- **This power tool is intended to function as a grinder, or cut-off tool. Read all safety warnings, instructions, illustrations and specifications provided with this power tool.** Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.
- **Operations such as sanding, wire brushing or polishing are not recommended to be performed with this power tool.** Operations for which the power tool was not designed may create a hazard and cause personal injury.
- **Do not use accessories that are not specifically designed and recommended by the tool manufacturer.** Just because the accessory can be attached to your power tool, it does not assure safe operation.



- **The rated speed of the accessory must be at least equal to the maximum speed marked on the power tool.** Accessories running faster than their RATED SPEED can break and fly apart.
- **The outside diameter and the thickness of your accessory must be within the capacity rating of your power tool.** Incorrectly sized accessories cannot be adequately guarded or controlled.
- **The arbor size of wheels, flanges, backing pads or any other accessory must properly fit the spindle of the power tool.** Accessories with arbor holes that do not match the mounting hardware of the power tool will run out of balance, vibrate excessively and may cause loss of control.
- **Do not use a damaged accessory. Before each use inspect the accessory, such as the abrasive wheel for chips and cracks or the backing pad for cracks, tear or excess wear. If the power tool or accessory is dropped, inspect for damage or install an undamaged accessory. After inspecting and installing an accessory, position yourself and bystanders away from the plane of the rotating accessory and run the power tool at maximum no-load speed for one minute.** Damaged accessories will normally break apart during this test time.
- **Wear personal protective equipment. Depending on application, use a face shield, safety goggles or safety glasses. As appropriate, wear a dust mask, hearing protectors, gloves and a workshop apron capable of stopping small abrasive or workpiece fragments.** The eye protection must be capable of stopping flying debris generated by various operations. The dust mask or respirator must be capable of filtering particles generated by your operation. Prolonged exposure to high intensity noise may cause hearing loss.
- **Keep bystanders a safe distance away from work area. Anyone entering the work area must wear personal protective equipment.** Fragments of a workpiece or of a broken accessory may fly away and cause injury beyond the immediate area of operation.
- **Hold the power tool by the insulated gripping surfaces only when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** The cutting accessory contacting a “live” wire may make exposed metal parts of the power tool “live” and shock the operator.
- **Position the cord clear of the spinning accessory.** If you lose control, the cord may be cut or snagged and your hand or arm may be pulled into the spinning accessory.
- **Never lay the power tool down until the accessory has come to a complete stop.** The spinning accessory may grab the surface and pull the power tool out of your control.
- **Do not run the power tool while carrying it at your side.** Accidental contact with the spinning accessory could snag your clothing, pulling the accessory into your body.

- **Regularly clean the power tool’s air vents.** The motor’s fan will draw the dust inside the housing and excessive accumulation of powdered metal may cause electrical hazards.
- **Do not operate the power tool near flammable materials.** Sparks could ignite these materials.
- **Do not use accessories that require liquid coolants.** Using water or other liquid coolants may result in electrocution or shock.
- **Do not use Type 11 (flaring cup) wheels on this tool.** Using inappropriate accessories can result in injury.
- **Always use the auxiliary handle. Tighten the handle securely.** The auxiliary handle should always be used to maintain control of the tool at all times.

#### KICKBACK AND RELATED WARNINGS

Kickback is a sudden reaction to a pinched or snagged rotating wheel, backing pad, brush or any other accessory. Pinching or snagging causes rapid stalling of the rotating accessory, which in turn causes the uncontrolled power tool to be forced in the direction opposite of the accessory’s rotation at the point of the binding.

For example, if an abrasive wheel is snagged or pinched by the workpiece, the edge of the wheel that is entering into the pinch point can dig into the surface of the material causing the wheel to climb out or kick out. The wheel may either jump toward or away from the operator, depending on direction of the wheel’s movement at the point of pinching. Abrasive wheels may also break under these conditions.

Kickback is the result of power tool misuse and/or incorrect operating procedures or conditions and can be avoided by taking proper precautions as given below.

- **Maintain a firm grip on the power tool and position your body and arm to allow you to resist kickback forces. Always use the 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.
- **Never place your hand near the rotating accessory.** The accessory may kickback over your hand.
- **Do not position your body in the area where the power tool will move if kickback occurs.** Kickback will propel the tool in the direction opposite to the wheel’s movement at the point of snagging.
- **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.
- **Do not attach a saw chain woodcarving blade or toothed saw blade.** Such blades create frequent kickback and loss of control.

**SAFETY WARNINGS SPECIFIC FOR GRINDING AND ABRASIVE CUTTING-OFF OPERATIONS:**

- Use only wheel types that are recommended for your power tool and the specific guard designed for the selected wheel. Wheels for which the power tool was not designed cannot be adequately guarded and are unsafe.
- 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 and accidental contact with the wheel.
- Wheels must be used only for recommended applications. For example: do not grind with the side of the cut-off wheel. Abrasive cut-off wheels are intended for peripheral grinding; side forces applied to these wheels may cause them to shatter.
- Always use undamaged wheel flanges that are the 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.
- Do not use worn down wheels from larger power tools. Wheels intended for larger power tools are not suitable for the higher speed of a smaller tool and may burst.

**ADDITIONAL SAFETY WARNINGS SPECIFIC FOR ABRASIVE CUTTING-OFF OPERATIONS**

- Do not “jam” the cut-off wheel or apply excessive pressure. Do not attempt to make an excessive depth of cut. Overstressing the wheel increases the loading and susceptibility to twisting or binding of the wheel in the cut and the possibility of kickback or wheel breakage.
- 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



**WARNING:** Use safety glasses. Everyday eyeglasses are NOT safety glasses. Also use a face or dust mask if operation is dusty. ALWAYS WEAR CERTIFIED SAFETY EQUIPMENT:

- ANSI Z87.1 eye protection (CAN/CSA Z94.3),
- ANSI S12.6 (S3.19) hearing protection,
- NIOSH/OSHA/MSHA respiratory protection.

**WARNING!**

Use of this tool can generate and/or disperse dust, which may cause serious and permanent respiratory or other injury. Always use NIOSH/OSHA approved respiratory protection appropriate for the dust exposure. Direct particles away from face and body.

kickback may propel the spinning wheel and the power tool directly at you.

- When the wheel is binding or when interrupting a cut for any reason, switch off the power tool and hold the power tool motionless until the wheel comes to a complete stop. Never attempt to remove the cut-off wheel from the cut while the wheel is in motion, otherwise kickback may occur. Investigate and take corrective action to eliminate the cause of wheel binding.
- Do not restart the cutting operation in the workpiece. Let the wheel reach full speed and carefully reenter the cut. The wheel may bind, walk up or kickback if the power tool is restarted in the workpiece.
- Support panels or any oversized workpiece to minimize the risk of wheel pinching and kickback. Large workpieces tend to sag under their own weight. Supports must be placed under the workpiece near the line of cut and near the edge of the workpiece on both sides of the wheel.

**CAUTION!**

To reduce the risk of personal injury, use extra care when working into a corner or edge because a sudden, sharp movement of the tool may be experienced when the wheel or other accessory contacts a secondary surface or a surface edge.

**WARNING!**

Always wear proper personal hearing protection that conforms to ANSI S12.6 (S3.19) during use. Under some conditions and duration of use, noise from this product may contribute to hearing loss.

**WARNING!**

Always use eye protection. All users and bystanders must wear eye protection that conforms to ANSI Z87.1.

**WARNING!**

When not in use, place grinder on a stable surface where it will not move inadvertently, roll or cause a tripping or falling hazard.

**WARNING!**

This manual contains important safety and operating instructions for your battery and charger. Before using the charger, read all instructions and warnings on the charger, the battery pack and the tool.

- Use extra caution when making a “pocket cut” into existing walls or other blind areas. The protruding wheel may cut gas or water pipes, electrical wiring or objects that can cause kickback.

#### ADDITIONAL SAFETY INFORMATION

- Do not use flat abrasive or diamond wheels without the proper cutting wheel guard.
- Avoid prolonged contact with dust from power sanding, sawing, grinding, drilling, and other construction activities. Wear protective clothing and wash exposed areas with soap and water. Allowing dust to get into your mouth, eyes, or lay on the skin may promote absorption of harmful chemicals.

#### SAFETY RULES FOR BATTERY PACK AND CHARGER

- If the battery pack casing is cracked or damaged, do not insert into the charger. There is a danger of electric shock or electrocution.
- Don't allow any liquid to get inside the charger. Electric shock may result. To facilitate cooling of the battery pack after use, avoid placing the charger or battery pack in a warm environment such as in a metal shed, or a trailer that is not insulated.
- This charger is not intended for any uses other than charging rechargeable batteries. Any other use may result in risk of fire, electric shock or electrocution.
- Do not place any object on top of the charger or place the charger on a soft surface that may result in excessive internal heat. Do not place the charger near any heat source.
- To reduce the potential risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger from the power supply.
- Make sure the cord is located so it will not be stepped on, tripped over, or otherwise subjected to damage or stress.
- An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in a risk of fire, electric shock or electrocution.
- Do not operate the charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Do not disassemble the charger. Take it to a Service Agent when service or repair is required. Incorrect reassembly may result in a risk of electric shock, electrocution or fire.
- To prevent the risk of electric shock, unplug the charger from the outlet before attempting to clean it. Only removing the battery pack from the charger will not reduce this risk.
- DO NOT store or use the tool and battery pack in locations where the temperature may reach or exceed 50 °C (122 °F), which can lead to deterioration of the storage battery.
- The charger is designed to operate on standard household electrical power. Do not attempt to use it on any other voltage.

#### ADDITIONAL INFORMATION ON BATTERY AND CHARGER

- The battery pack is not fully charged out of the carton. First read the safety instructions and then follow the charging notes and procedures.
- The longest life and best performance can be obtained if the battery pack is charged when the air temperature is 15-25 °C (59-77 °F). Do not charge the battery pack where the air temperature is below 0 °C (32 °F) or above 45 °C (113 °F). This is important and will prevent damage to the battery pack.
- Do not incinerate the battery pack even if it is seriously damaged or is completely worn out. The battery can explode in a fire.
- Never attempt to open the battery pack for any reason. If the plastic housing of the battery pack breaks or cracks, immediately discontinue use and do not recharge.
- The length of service from your battery will depend on the type of work you are doing. The battery has been designed to provide maximum trouble-free life. However, like all batteries, it will eventually wear out.
- To obtain the longest possible battery life, we suggest the following:
  - Store and charge your battery in a cool area. Temperatures above or below normal room temperature will shorten battery life.
  - Never store the battery in a discharged condition. Recharge it immediately after it has been discharged.
- All batteries gradually lose their charge. The higher the temperature, the quicker they lose their charge. If you store your tool for long periods of time without use, recharge the battery every month or two. This practice will prolong battery life.

#### BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING

To preserve natural resources, please recycle or dispose of batteries properly. Local, provincial or federal laws may prohibit disposal of lithium-ion batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.



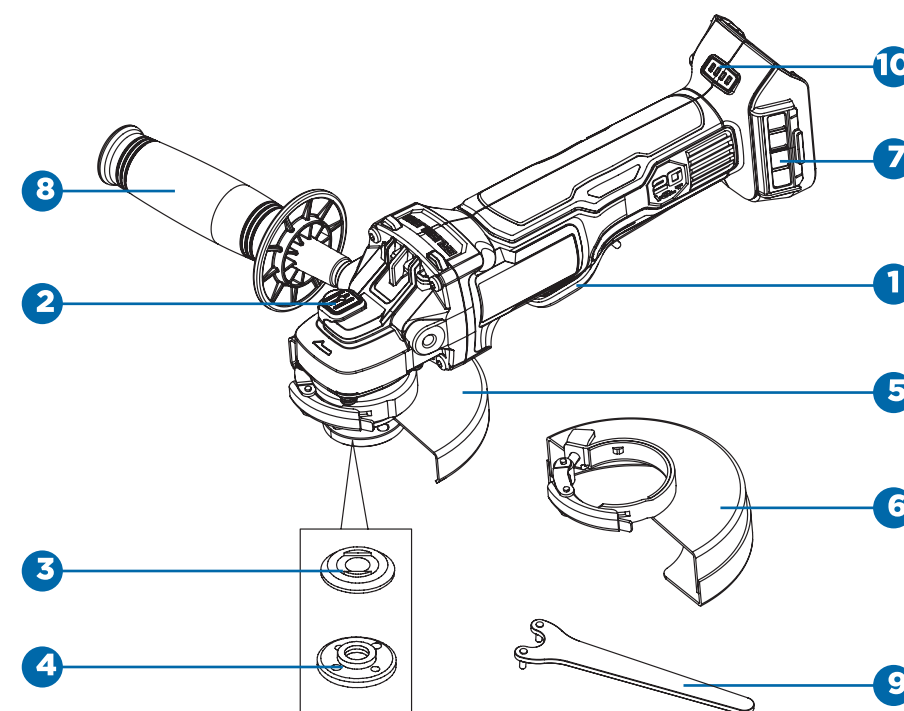
#### WARNING!

Upon removal, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble.

## WARNING ICONS

	Read the Instruction Manual.	To reduce the risk of injury, the user must read the instruction manual.
	Wear eye protection.	
	Wear hearing protection.	Always wear hearing/eye/breathing protection when operating this product.
	Wear breathing protection.	
	Warning symbol	Alerts user to warning messages.
	Warning symbol	Must not be used for face or angle grinding.
	Warning symbol	Only use for cut-off applications.

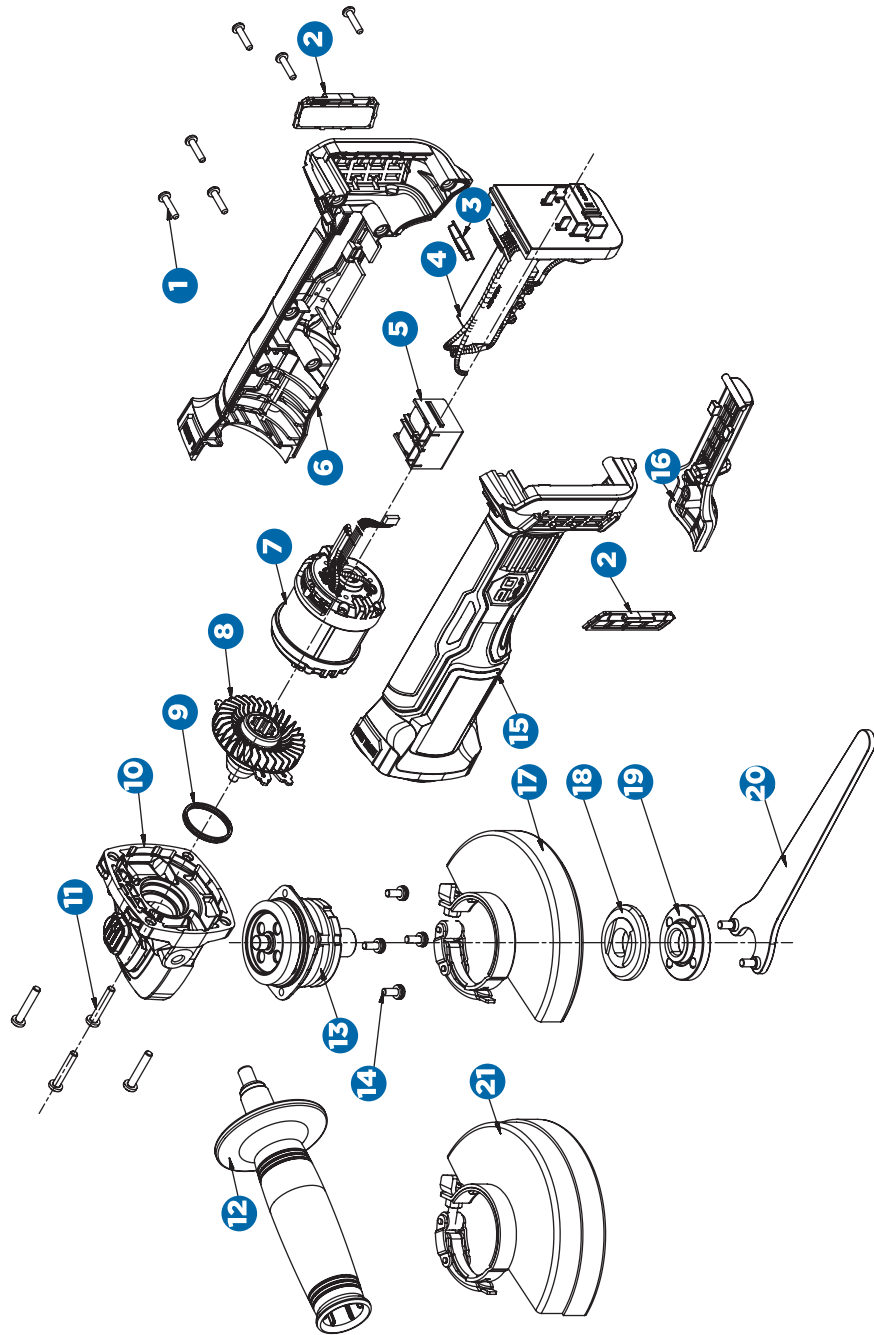
No.	Description	No.	Description
1	Paddle switch	6	Cutting wheel guard
2	Spindle lock	7	Removable mesh filter cover
3	Backing flange	8	Auxiliary handle
4	Threaded clamp nut	9	Wrench
5	Grinding wheel guard	10	Charge level indicator



## WARNING!

- Remove the product and any accessories from the package. Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the carton or any packaging material until all parts have been examined.



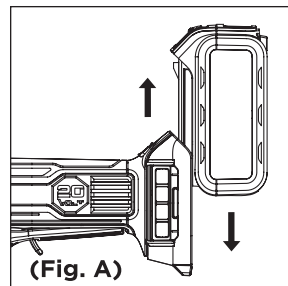


NO.	DESCRIPTION
1	SCREW
2	REMOVABLE MESH FILTER COVER
3	LED COVER
4	PCB ASSY
5	SWITCH
6	RIGHT HOUSING
7	MOTOR ASSY
8	FAN ASSY
9	RUBBER RING
10	GEAR CASE ASSY
11	SCREW

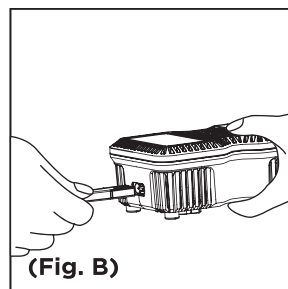
NO.	DESCRIPTION
12	AUXILIARY HANDLE
13	GEAR CASE COVER ASSY
14	SCREW
15	LEFT HOUSING
16	SWITCH PADDLE ASSY
17	GRINDING WHEEL GUARD
18	BACKING FLANGE
19	THREADED CLAMP NUT
20	WRENCH
21	CUTTING WHEEL GUARD

**FITTING AND REMOVING THE BATTERY PACK TO THE ANGLE GRINDER**

- To install the battery pack to the tool, align the raised portion of the battery pack with the grooves on the bottom of the tool and slide it firmly into the tool until you hear the lock snap into place. (Fig. A)
- To remove the battery pack from the tool, press the battery pack release button and slide the battery pack completely out of the tool.

**CHARGING PROCEDURE**

- Connect the plug cable to the charger, and then plug into an appropriate outlet before inserting the battery pack. (Fig. B) All three charging lights will be on for two seconds and then off.
- Insert the battery pack into the charger, making sure the pack is fully seated in the charger. (Fig. C) During the charging process, the charging lights will indicate the charging status as follows:
  - Less than 30% charged, all three charging lights will blink in sequence.
  - Less than 60% charged, one light will stay on, while the other two lights will blink in sequence.

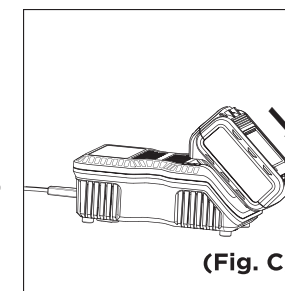


- Over 60% charged, two lights will stay on, while the remaining light will blink continuously.
- Fully charged, all three lights will remain on continuously.
- The charging process will last approximately 35 minutes (2.0 Ah battery pack) or 65 minutes (4.0 Ah battery pack) and permanent lighting of all three charging lights will indicate charging is complete.

**CHARGER DIAGNOSTICS**

The charger is designed to detect certain problems that can arise with battery packs.

- When the charger detects a battery pack that is overheated, all three charging lights will blink at the same time. Please remove the battery and allow it to cool down for 15-30 minutes and re-insert.
- When the charger detects a malfunction in the battery, two charging lights will blink at the same time. Please remove the battery and allow it to cool down for 15-30 minutes. Then re-insert the battery pack into the charger. If two charging lights still flash, the battery may require service.
- When the charger detects a malfunction of the charger itself, three charging lights will blink at the same time. Please remove the battery pack and unplug the charger for at least 2 minutes. After 2 minutes, plug charger back in and re-insert the pack into the charger. If all three charging lights still blink at the same time, the charger may require service.

**WARNING!**

- Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is enough to cause serious injury.
- Before attempting to use this cordless tool, become familiar with all of its operating features and safety requirements.
- To reduce the risk of serious personal injury, turn the tool off and disconnect the battery pack before making any adjustments or removing/installing attachments or accessories.

**CAUTION!**

When placing the battery pack in the tool, be sure the raised rib on the battery pack aligns with the bottom of the tool and latches into place properly. Improper installation of the battery pack can cause damage to internal components.

**CAUTION!**





- Before attempting to charge the battery, check the charger and the battery to ensure the charging equipment matches the battery supplied. The components are all labeled with component numbers.
- The rechargeable battery is not fully charged on leaving the factory. Charge the rechargeable battery before first use.
- Recharge discharged batteries as soon as possible after use or battery life may be greatly diminished. For longest battery life, do not discharge batteries fully.
- The working temperature of the charger is 0-45 °C (32-113 °F).

**NOTE:** Charging times may be longer depending on the surrounding temperature and battery conditions.



**CHARGE LEVEL INDICATOR**

If the tool is turned on, the charge level indicator lights for 5 seconds and the battery's charge level can be checked.

LED INDICATOR		CHARGE LEVEL
1		0-25%
2		25-50%
3		50-75%
4		75-100%

**OVERLOAD PROTECTION**

This angle grinder is fitted with overload protection. If the grinder is excessively forced, or the task being performed is too great, it will automatically go into overload mode. When it goes into overload mode, the tool will automatically and suddenly stop. To reset the overload, simply release the switch. When the paddle switch is pressed again, the tool will restart.

**TEMPERATURE CUT-OUT**

When used as intended, the angle grinder cannot be subjected to overload. But running continuously at full load for a long time will cause the battery pack to overheat. If the allowable battery temperature range is exceeded, the battery pack will automatically stop operating and will not restart until it has cooled to a safe level.

**LOW-VOLTAGE CUT-OUT**

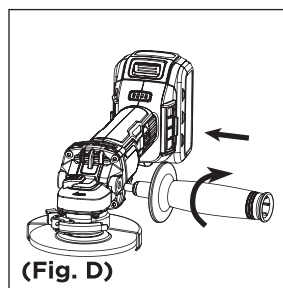
The battery pack used on this tool is fitted with a low voltage cut-out feature within the circuitry. The low-voltage cut-out feature operates when the voltage drops below a pre-set value. This feature automatically stops the tool from operating. When this condition occurs, you will need to either insert another battery pack into the tool or recharge the existing battery pack.

**ANTI-KICK BACK**

During operation, the tool may suddenly become stuck. If the motor does not stop on time, this would result in kick-back and could cause serious injury. This tool detects the change instantly and automatically shuts off the tool safely.

**INSTALLING THE AUXILIARY HANDLE (Fig. D)**

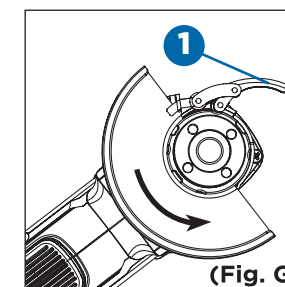
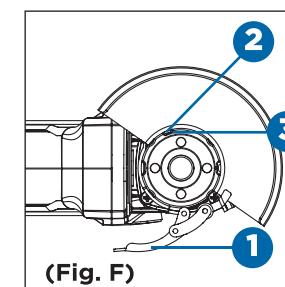
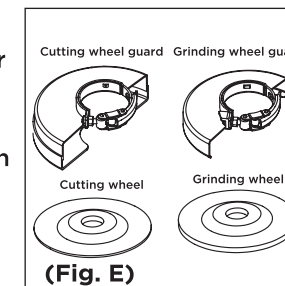
- Remove the battery pack before installing or removing the auxiliary handle.
- Screw the auxiliary handle into the gear housing.
- Tighten the auxiliary handle securely.

**MOUNTING THE WHEEL GUARD (Fig. E, F, G)**

It is important to choose the correct guards to use with grinder accessories. See Fig. E for information on choosing the correct accessories.

The grinding wheel guard and the cutting wheel guard are both attached and removed using the same steps:

- Open the guard latch (1), and align the lugs (2) on the guard with the slots (3) on the gear case cover.
- Push the guard down until the guard lugs engage and rotate freely in the groove on the gear case hub.
- With the guard latch open, rotate the guard into the desired working position. The guard body should be positioned between the spindle and the operator to provide maximum operator protection.
- Close the guard latch (1) to secure the guard on the gear case. You should not be able to rotate the guard by hand when the latch is closed. Don't operate the grinder with a loose guard or with the guard latch in an open position.
- To remove the guard, open the guard latch, rotate the guard so that the lugs and slots are aligned, and pull up on the guard.

**CAUTION!**

You can install the auxiliary handle on the left or right side of the grinder, depending on operator preference. It must always be used to prevent loss of control and possible serious injury.

Make sure the handle is tightened before operation. There could be large pressure applied to the handle during operation. Loosening the handle might result in serious injury.

**ADJUSTING THE WHEEL GUARD (Fig. H)**

The guard is pre-adjusted to the diameter of the gear case hub at the factory. If, after a period of time, the guard becomes loose, tighten the adjusting screw (1) with the latch in the closed position and the guard installed on the tool.

**SPINDLE LOCK (Fig. I, J)**

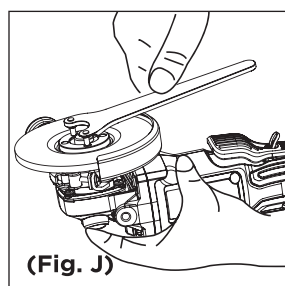
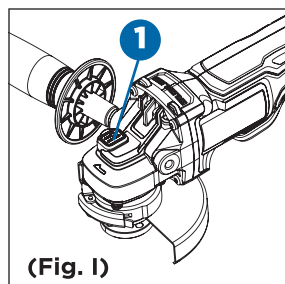
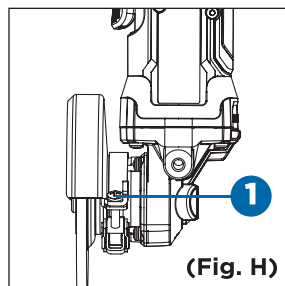
The spindle lock button (1) is provided to prevent the spindle from rotating when installing or removing wheels. Operate the spindle lock only when the tool is turned off and the wheel has come to a complete stop.

To engage the lock, press the spindle lock button (1) and rotate the spindle until you are unable to rotate the spindle further.

**INSTALLING AND REMOVING THE WHEEL (Fig. K, L)**

Depressed centre wheel must be used with the included flanges.

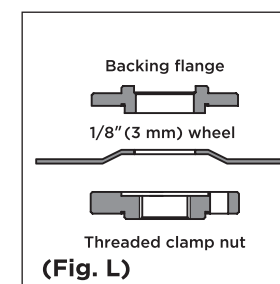
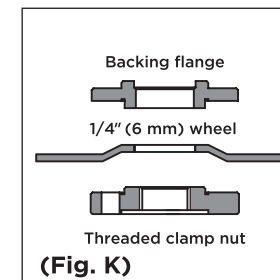
- Turn off the tool and remove the battery pack.
- Install the unthreaded backing flange on the spindle with the raised section (pilot) against the wheel.
- Place the wheel against the backing flange, centring the wheel on the raised section (pilot) of the backing flange.
- While pressing the spindle lock button, thread the threaded clamp nut on the spindle.



If the wheel you are installing is more than 1/8" (3 mm) thick, place the threaded clamp nut on the spindle so that the raised section (pilot) fits into the centre of the wheel.

If the wheel you are installing is 1/8" (3 mm) thick or less, place the threaded clamp nut on the spindle so that the raised section (pilot) is not against the wheel.

- While pressing the spindle lock button, tighten the threaded clamp nut with the included wrench.
- To remove the wheel, press the spindle lock button and loosen the threaded clamp nut with the included wrench.



**NOTE:** If the wheel spins after the threaded clamp nut is tightened, check the orientation of the threaded clamp nut. If a thin wheel is installed with the pilot on the clamp nut against the wheel, it will spin because the height of the pilot prevents the clamp nut from holding the wheel.

**CAUTION!**

Guards must be used with grinding wheels and cut-off wheels. The grinder is provided with a grinding guard intended for use with grinding wheels and a cutting guard intended for use with cutting wheels.

Make sure the wheel guard is locked properly and in protection angle position, otherwise a broken blade might cause serious injury.

To prevent accidental operation, turn off the tool and remove the battery pack before performing the following operations. Failure to do this could result in serious personal injury.

If the guard cannot be tightened by the guard latch, do not use the tool and take the tool and guard to a service centre to repair or replace the guard.

**CAUTION!**

Do not tighten the adjusting screw with the latch in the open position. Undetectable damage to the guard or the mounting hub may result.

**WARNING!**

Do not engage the spindle lock while the tool is operating. Damage to the tool will result and the attached accessory may spin off, possibly resulting in injury.

**WARNING!**

Always take off and remove the battery before changing the accessories. Failure to do this could result in serious personal injury.

Only use accessories with a safe operating speed higher than rated speed of the tool.

**PADDLE SWITCH (Fig. M)**

Grasp the tool body and the auxiliary handle firmly. Push the lock-up button forward (1) and press the paddle (2) to start the tool.

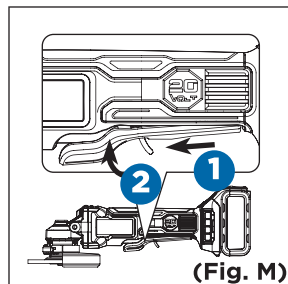
To stop it, release the paddle.

**SOFT START**

With this feature, the tool starts gradually and increases the comfort level.

**ELECTRIC BRAKE**

The electric brake engages when the switch is released, causing the wheel to stop. Generally, the wheel stops within two seconds. However, there may be a delay between the time you release the switch and when the brake engages. Occasionally the brake may miss completely. If the brake misses frequently, the grinder needs servicing by an authorized service facility.



**NOTE:** This tool has no provision to lock the switch in the ON position. The tool should never be locked ON by any means.

**NOTE:** This tool is equipped with an electric brake. When the brake is functioning properly, sparks may be visible through the vent slots in the housing. This is normal and is the action of the brake.

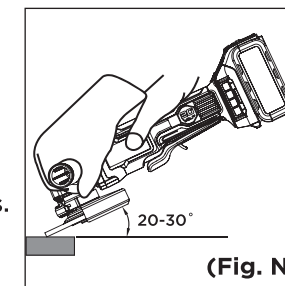
**CAUTION!**

After the paddle is released, the wheel will still rotate for 3 seconds. Make sure the wheel stops before laying down the tool.

**GRINDING WITH GRINDING WHEELS (Fig. N)**

Always carefully select and use grinding wheels that are recommended for the material to be ground. Make sure that the operating speed of any accessory wheel selected is rated at 7500 RPM or more. Pay attention to the dimensions of the grinding tools. The mounting hole diameter must fit the mounting flange without play. Do not use reducers or adaptors.

- Secure all work in a vise or clamp to a workbench.
- Hold the grinder in front and away from you with both hands, keeping the grinding wheel clear of the workpiece.
- Turn on the grinder and let the motor and grinding wheel build up to full speed.
- Lower the grinder gradually until the grinding wheel contacts the workpiece.
- Maintain a 20 to 30° angle between the tool and the work surface.
- Move the grinder continuously at a steady, consistent pace.
- Use just enough pressure to keep the grinder from chattering or bouncing.
- Lift the grinder away from the workpiece before turning off the grinder.

**NOTE:**

If the grinder is held in one spot too long, it will gouge and cut grooves in the workpiece. If the grinder is held at too sharp an angle, it will also gouge the workpiece because of concentration of pressure on a small area.

Heavy pressure will decrease the grinder's speed and put strain on the motor. Normally the weight of the tool alone is adequate for most grinding jobs. Use light pressure when grinding jagged edges or loose bolts where there is the potential for the grinder to snag on the metal edge.

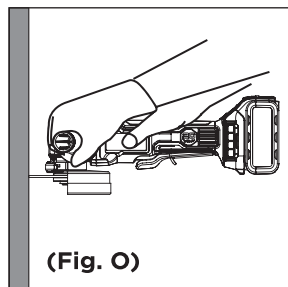
**DANGER!**

Never use the grinder with the wheel guard removed and always be sure the wheel guard is locked into place. It has been designed for use only with the wheel guard installed. Attempting to use the grinder with the wheel guard removed will result in loose particles being thrown against the operator resulting in serious personal injury.

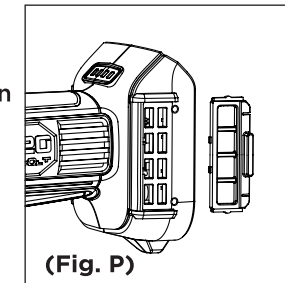
**CUTTING WITH CUTTING WHEELS (Fig. O)**

Always carefully select and use cutting wheels that are recommended for the material to be ground. Make sure that the operating speed of any accessory wheel selected is rated at 7500 RPM or more. Pay attention to the dimensions of the grinding tools. The mounting hole diameter must fit the mounting flange without play. Do not use reducers or adaptors.

- Secure all work in a vise or clamp to a workbench.
- Hold the grinder in front and away from you with both hands, keeping the cutting wheel clear of the workpiece.
- Turn on the grinder and let the motor and cutting wheel build up to full speed.
- Allow the tool to reach full speed before touching the tool to the work surface.
- Apply minimum pressure to the work surface, allowing the tool to operate at high speed. The cutting rate is greatest when the tool operates at high speed.
- Once a cut is begun and a notch is established in the workpiece, do not change the angle of the cut. Changing the angle will cause the wheel to bend and may cause wheel breakage.
- Remove the tool from the work surface before turning the tool off. Allow the tool to stop rotating before setting it down.

**REMOVABLE MESH FILTER COVER (Fig. P)**

The removable mesh filter cover is designed to prevent debris contamination overtime. Take the mesh filter cover out to clean the dust. (Fig. P)

**WARNING!**

To prevent loss of control and possible serious personal injury, always operate the tool with both hands, keeping one hand on the auxiliary handle.

Do not start the tool on the work piece. Let the wheel reach full speed to work. If started on the work piece, the wheel could kick back and might result in injury.

Make sure the tool stops rotating before laying it down. Otherwise it might cause serious injury.

Avoid placing excessive pressure on the tool. Heavy pressure increases the possibility of the wheel breaking and the motor overheating.

**WARNING!**

The cutting wheel guard must be used while using cutting wheels.

Never change the cutting angle during operation. The change might result in a break or crack in the cut-off wheel.



**GENERAL MAINTENANCE**

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

**BATTERIES**

The battery pack is equipped with lithium-ion rechargeable batteries. The duration of use from each charge will depend on the type of work performed.

The batteries in this tool have been designed to provide maximum trouble-free life. Like all batteries, they will eventually wear out. Do not disassemble the battery pack or attempt to replace the batteries. Handling of the batteries, especially when wearing rings and jewelry, could result in a serious burn.

To obtain the longest possible battery life, read and understand the operator's manual.

- It is good practice to unplug the charger/adaptor and remove the lithium-ion battery pack when not in use.

**FOR LITHIUM-ION BATTERY PACK STORAGE LONGER THAN 30 DAYS:**

- Store the lithium-ion battery pack where the temperature is below 26 °C (79 °F) and free of moisture.
- Store lithium-ion battery packs in a 30-50% charged condition.
- Every six months of storage, fully charge the lithium-ion battery pack.
- The exterior may be cleaned with a cloth or soft non-metallic brush.

**WARNING!**

- To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.
- When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician.
- It is not recommended to use compressed dry air to clean the tool. If cleaning with compressed air is the only method available, always wear safety goggles or safety glasses with side shields when using compressed air to clean the tool. If the operation is dusty, also wear a dust mask.
- Do not at any time allow brake fluids, gasoline, petroleum-based products, penetrating oils, etc. to come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic, which may result in serious personal injury.

**BATTERY PACK REMOVAL AND PREPARATION FOR RECYCLING**

To preserve natural resources, please recycle or dispose of batteries properly. This product contains lithium-ion batteries. Local, state, or federal laws may prohibit disposal of lithium-ion batteries in ordinary trash. Consult your local waste authority for information regarding available recycling and/or disposal options.

To ensure safety and reliability, all repairs should be performed by a qualified service technician.

**WASTE DISPOSAL**

The product must not be discarded with normal household waste. It must be disposed of properly.

**WARNING!**

Upon removal of the battery pack for disposal or recycling, cover the battery pack's terminals with heavy-duty adhesive tape. Do not attempt to destroy or disassemble the battery pack or remove any of its components. Lithium-ion batteries must be recycled or disposed of properly. Also, never touch the terminals with metal objects and/or body parts as a short circuit may result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

**5-YEAR LIMITED WARRANTY**

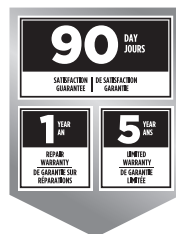
This MAXIMUM product is guaranteed for a period of 5 years from the date of original retail purchase against defects in workmanship and materials only and is subject to the following components:

- a) Component A: The carrying case is guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.
- b) Component B: Accessories, including drill bits and saw blades, do not carry a warranty.

Subject to the conditions and limitations described below, this product, if returned to us with proof of purchase within the stated warranty period and if covered under this warranty, will be repaired or replaced (with the same model, or one of equal value or specification), at the sole discretion of the Maximum Canada authorized repair centre ("Service Provider"). We will bear the cost of any repair or replacement and any costs of labour relating thereto.

**These warranties are subject to the following conditions and limitations:**

- a) a bill of sale verifying the purchase and purchase date must be provided;
- b) defects in workmanship and material to be assessed and determined by the Service Provider
- c) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions);
- d) this warranty does not apply to normal wear and tear or to expendable parts or accessories (including drill bits and saw blades) that may be supplied with the product that by their nature have a limited life span and are expected to become inoperative or unusable after a reasonable period of use;
- e) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, rubber o-rings, tune-ups or adjustments;
- f) this warranty excludes the following components that may accompany your product:
  - (1) The carrying case, which is only for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.
  - (2) Accessories, including drill bits and saw blades, which do not carry a warranty of any kind.
- g) this warranty will not apply where damage is caused by repairs made or attempted by anyone other than the Service Provider (i.e. persons not authorized by the manufacturer), and any such unauthorized repairs or attempted repairs shall void this warranty in its entirety;
- h) this warranty will not apply to any parts other than original parts, except to the extent that the retailer or manufacturer or persons authorized by either of them have repaired or replaced them;



- i) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- j) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- k) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- l) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under that product manufacturer's warranty, if any;
- m) any products replaced by the retailer in attempt to fulfill warranty obligations is subject to the original product warranty conditions and related time period as initiated by the original date of purchase; if product is purchased in Quebec, the warranty term will be extended for a period equal to the time during which the Quebec retailer possesses the product in attempt to fulfill warranty obligations; replaced product will not default to new product warranty conditions; and
- n) The retailer and manufacturer's sole obligation and the purchaser's sole remedy under this warranty shall be as set out herein. The warranties contained herein are not transferable and are given only to the purchaser. FURTHER, THE WARRANTIES SET OUT HEREIN ARE IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, WHETHER EXPRESS, IMPLIED OR STATUTORY (INCLUDING SUCH AS ARISE UNDER THE SALE OF GOODS ACT OR THE INTERNATIONAL SALE OF GOODS ACT), ARISING OUT OF A COURSE OF DEALING OR USAGE OF TRADE OR OTHERWISE, INCLUDING, SUBJECT TO APPLICABLE LAW, ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, MERCHANTABILITY, QUALITY, FITNESS OR ADEQUACY FOR A PARTICULAR PURPOSE OR USE, AND ALL OTHER SUCH WARRANTIES ARE EXPRESSLY DISCLAIMED BY THE RETAILER AND MANUFACTURER.

**ADDITIONAL LIMITATIONS**

This warranty applies only to the original purchaser and may not be transferred.

This warranty applies for a period of 5 years from the date of original retail purchase, as indicated on the bill of sale.

Neither the retailer, Maximum Canada, nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

Under no circumstances shall the retailer, Maximum Canada, or manufacturer be liable to the purchaser for any claim for (a) indirect, special, punitive, incidental, exemplary, or consequential damages, (b) compensation for loss of profits, anticipated revenue, savings or goodwill, or other economic loss of the purchaser, (c) exemplary,



aggravated or punitive damages howsoever incurred, (d) contribution or set-off in respect of any claims against the purchaser, (e) any damages whatsoever relating to third party products or services or the purchaser's materials, or (f) any damages whatsoever relating to interruption, delays, errors or omissions; in each case under any theory of law or equity, arising out of or in any way related to this warranty, even if advised of the possibility thereof. Notwithstanding any provision herein or entitlement of the purchaser at law, in equity or otherwise, in no event shall the liability of the retailer or manufacturer under this warranty, whether in contract, tort, product liability or otherwise, exceed, in the aggregate, the amount paid by the purchaser to the retailer for the product to which this warranty applies.

### **NOTICE TO CONSUMER**

This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal legislation.

In addition to the 5-Year Limited Warranty, this MAXIMUM product is covered by our:

### **1-YEAR REPAIR WARRANTY**

Maximum Canada will maintain this product and replace critical parts which have worn beyond reasonable use through normal use of such product, any time during the first year after purchase.

**The following are excluded from this 1-Year Repair Warranty:**

- a) Missing or damaged parts or components that are a result of abuse or misuse;
- b) Any wear and tear to non-critical parts or accessories that do not affect the core function of the product.

### **90-DAY SATISFACTION GUARANTEE**

If you are not completely satisfied with the performance of your MAXIMUM product for any reason, you can return it within 90 days from the date of purchase with proof of purchase for exchange or a full refund.

Made in China

Imported by MAXIMUM Canada Toronto, Canada M4S 2B8