

# MAXIMUM®

**20V max\***

**Cordless Drill/Driver**



**Model no. 054-1349-8**

**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.

**TECHNICAL SPECIFICATIONS**

MOTOR	18V DC
KEYLESS CHUCK	1/2" METAL, single-sleeve
VARIABLE SPEED RANGES	0-450 / 0-1550 RPM (no load)
TORQUE CLUTCH POSITION	16 including drilling mode
MAX. TORQUE	450 in-lb
ON BOARD WORK LIGHT	LED
BATTERY	20V max* (2.0 Ah) lithium-ion
COMPATIBLE MAXIMUM BATTERY	054-3203-2; 054-3206-6
CHARGER	35-minute, diagnostic
COMPATIBLE MAXIMUM CHARGER	054-3204-0 & 7109-B-2
OPTIMUM CHARGING TEMPERATURE	40 to 104°F (4-40°C)
DIMENSIONS	7 1/4 x 7 5/8 x 2 11/16" (184 x 193 x 68 mm)
WEIGHT	2 lb 11 oz (1.22 kg) without battery

\*Maximum battery voltage without workload; with workload nominal voltage is 18V.

**GENERAL POWER TOOL SAFETY WARNINGS**

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery operated (cordless) power tool.

**WORK AREA SAFETY**

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

**ELECTRICAL SAFETY**

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a Residual Current Device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.

**WARNING!**

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.

**PERSONAL SAFETY**

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from 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.

**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 remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. 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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

**BATTERY TOOL USE AND CARE**

- **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.
- **Do not use a battery pack or tool 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 tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C (266°F) may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

**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.
- **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

**SPECIFIC SAFETY RULES FOR CORDLESS DRILL/DRIVER**

- **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting accessory or fasteners may contact hidden wiring.** Cutting accessory or fasteners contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **Wear hearing protection during extended periods of operation.** Exposure to noise can cause hearing loss.
- **Use auxiliary handle(s), if supplied with the tool.** Loss of control can cause personal injury.
- **Wear safety goggles or other eye protection.** Hammering and drilling operations cause chips to fly. Flying particles can cause permanent eye damage.
- **Use a dust mask or respirator for applications if the operation is dusty.**
- **Secure the workpiece.** Clamping devices or a vise will hold the workpiece in place better and more safely than holding it by hand.
- **Be aware that this tool is always in an operating condition,** since it does not have to be plugged into an electrical outlet.
- **Accessories and tool may get hot during operation.** Wear gloves when handling them if performing heat producing applications such as drilling metals.

**SAFETY INSTRUCTIONS WHEN USING LONG DRILL BITS**

- **Never operate at higher speed than the maximum speed rating of the drill bit.** At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
- **Always start drilling at low speed and with the bit tip in contact with the workpiece.** At higher speeds, the bit is likely to bend if allowed to rotate freely without contacting the workpiece, resulting in personal injury.
- **Apply pressure only in direct line with the bit and do not apply excessive pressure.** Bits can bend causing breakage or loss of control, resulting in personal injury.

**SAFETY RULES FOR BATTERY PACK AND CHARGER**

- **If the battery pack casing is cracked or damaged, do not insert into charger.** There is a danger of electric shock or electrocution.
- **Don't allow any liquid to get inside 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 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 122 °F (50 °C),** which can lead to deterioration of the storage battery.
- **The charger is designed to operate on standard household electrical power (120 V AC).** 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 59-77 °F (15-25 °C). Do not charge the battery pack where the air temperature is below 32 °F (0 °C) or above 113 °F (45 °C). 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**

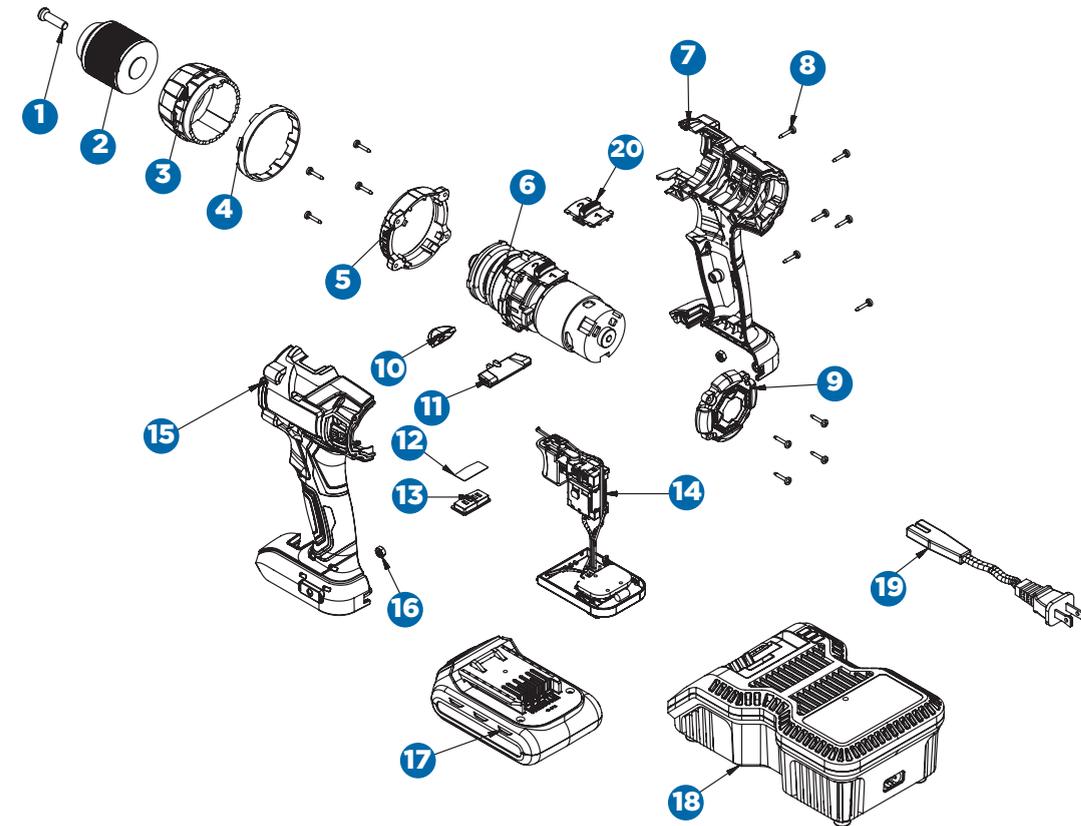
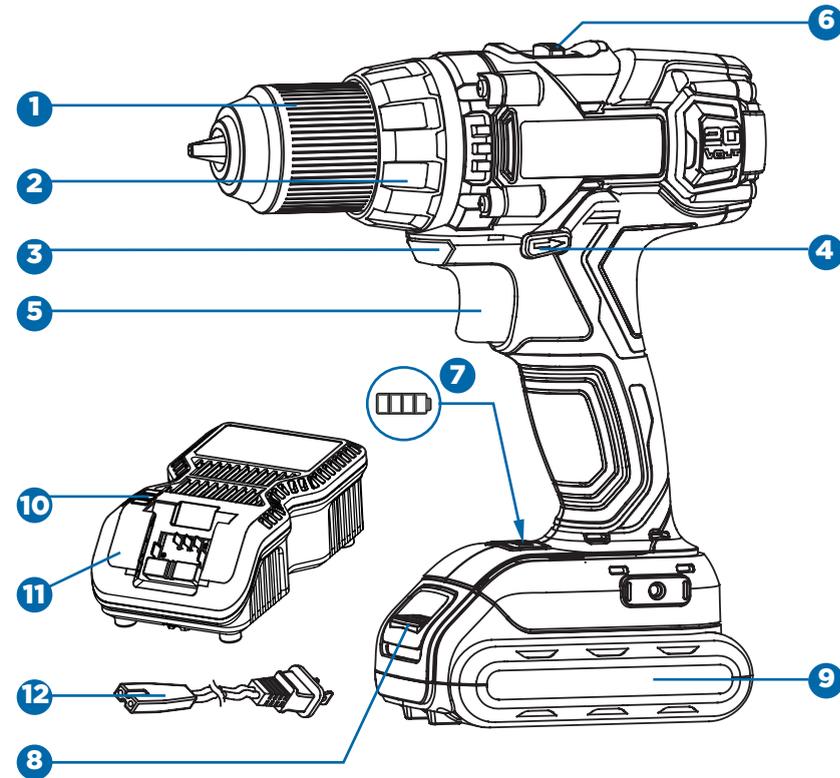
To preserve natural resources, please recycle or dispose of batteries properly. This product contains a lithium-ion battery. Local, provincial or federal laws may prohibit disposal of lithium-ion batteries in ordinary trash. Consult your local waste authority for information regarding available recycling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

**SYMBOL**

Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

No.	Description
V	Volts
A	Amperes
Hz	Hertz
W	Watts
n <sub>0</sub>	No-load speed
RPM	Revolutions per minute
BPM	Beats per minute
~	Alternating current
≡	Direct current
Ah	Ampere-hours
Li-ion	Lithium-ion battery
∅	Diameter
BFP	Backfeed protection
	Safety alert symbol
	To reduce the risk of injury, user must read operator's manual.
	Always wear eye protection.
	Contains lithium-ion battery. Battery must be recycled or disposed of properly.
	Conforms to bear the ETL mark and complies with relevant industry standards.

No.	Description	No.	Description
1	Keyless chuck	7	Remaining power indicator
2	Torque clutch	8	Battery release button
3	LED worklight	9	Rechargeable battery pack
4	Forward & reverse lever	10	Charging indicator
5	Trigger switch	11	Charger
6	High/low speed range selector	12	Detachable cable & plug



NO.	DESCRIPTION	NO.	DESCRIPTION
1	SCREW	11	FORWARD & REVERSE LEVER
2	CHUCK	12	LED LABEL
3	TORQUE SLEEVE	13	POWER INDICATION COVER
4	PRINTING RING	14	SWITCH & PCB ASSY
5	FRONT HOUSING	15	LEFT HOUSING
6	GEAR BOX ASSY	16	NUT
7	RIGHT HOUSING	17	BATTERY PACK
8	SCREW	18	CHARGER
9	REAR COVER	19	DETACHABLE CABLE & PLUG
10	LED COVER	20	SPEED SELECTOR

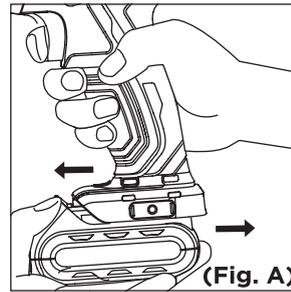


**WARNING!**

- 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.

**FITTING AND REMOVING THE BATTERY PACK TO THE DRILL DRIVER**

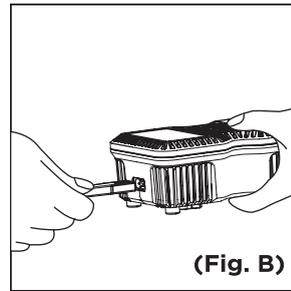
- To install the battery pack to the tool, align the raised portion of the battery pack with the grooves on the bottom of the tool handle, and slide it firmly into the handle until you hear the lock snap into place. (Fig. A)
- To remove the battery pack from the tool, press the battery pack release button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



(Fig. A)

**CHARGING PROCEDURE**

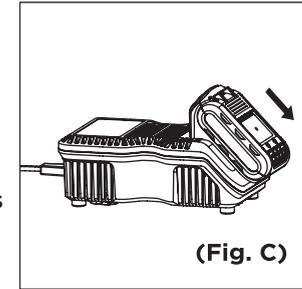
- Connect the plug cable to the charger, and then plug into an appropriate outlet before inserting battery pack (Fig. B). All three charging lights will be on for two seconds and then off.
- Insert the battery pack into the charger, making sure the pack is fully seated in the charger (Fig. C). During 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



(Fig. B)

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 be last approximately 35 minutes and permanent lighting of all three charging lights will indicate charging is complete.



(Fig. C)

**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.

**ON/OFF TRIGGER SWITCH**

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch.

**VARIABLE SPEED**

The variable speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure. For maximum tool life, use variable speed only for starting holes or fasteners.

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

**CAUTION!**

The variable speed control function is not intended to be used for long periods of time during the operation of the task being performed. Use the variable speed to start drilling and screwing tasks, and then fully press the once the trigger switch task has started.

**WARNING!**

- Do not allow familiarity with tools to make you careless. Remember that a careless fraction of a second is enough to cause severe 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 tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories.

**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 4-40°C (40-104°F).

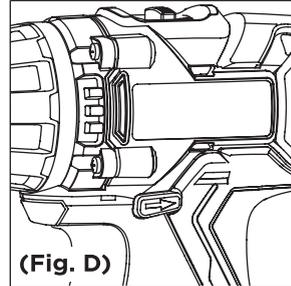
**FORWARD AND REVERSE**

The direction of bit rotation is reversible and is controlled by a selector located above the trigger switch. (Fig. D)

Drilling uses the forward mode. The reverse mode is intended for the removal of screws and assisting with the removal of jammed drill bits.

With the drill held in normal operating positions:

- Positioning the forward/reverse selector to the left of the tool for forward.
- Positioning the forward/reverse selector to the right of the tool for reverse.
- Positioning the forward/reverse selector in the centre will lock the switch trigger to help reduce the possibility of accidental starting when not in use.



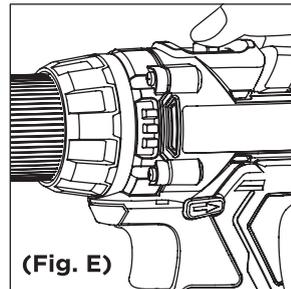
(Fig. D)

**TWO-SPEED GEAR CONTROL**

The high/low speed range selector allows you to select the gear with the optimum speed and torque to suit the application. (Fig. E)

To select the low speed, high torque setting, turn the tool off and allow it to stop. Slide the gear selector forward (towards the chuck). The word 1 will be displayed.

To select the high speed, low torque setting, turn the tool off and allow it to stop. Slide the gear shifter back (away from chuck). The word 2 will be displayed.



(Fig. E)

**NOTE:** The drill will not run unless the direction of forward/reverse selector is engaged fully to the left or right.

**CAUTION!**

To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation.

**CAUTION!**

Do not change between low speed and high speed while the tool is running. Failure to obey this caution could result in serious damage to the drill.

**ADJUSTABLE TORQUE CONTROL**

This drill is equipped with 16 torque clutch positions, including one drill mode, which are controlled by the torque clutch. All of the torque settings are clearly identified on the torque collar. To adjust the torque settings, rotate the torque collar. The higher the number, the higher the torque setting. (Fig. F)

Controlling the torque allows for better control when using the drill on specific screwing tasks and prevents over-fastening and over-tightening.

For drilling, always use the drill mode by aligning the drill icon with the triangular indicator on the front face of the drill near the torque collar.

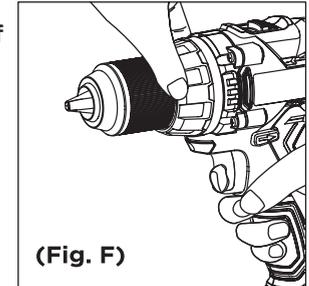
The proper setting will depend on the type of material and the size of the screw that is being used. Select the option that best matches the type of bit, the fastener, and the type of material.

**DRILL MODE**

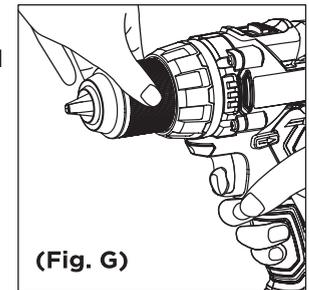
Select the drill mode for drilling and other heavy-duty applications, especially for hardwood and metal. To select the drill mode, rotate the torque clutch until the drill icon is aligned with the triangular indicator on the front face of the drill near the torque clutch.

**KEYLESS CHUCK**

The arrows on the chuck indicate the direction of rotation of the body of the chuck to grip or release the drill bit. (Fig. G)



(Fig. F)



(Fig. G)

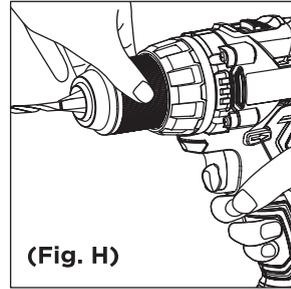
**NOTE:** This device is fitted with a spindle lock and the chuck is a one-handed operation.

**WARNING!**

Do not hold the body of the chuck with one hand while using the power of the drill to tighten the jaws of the chuck on the drill bit. The body of the chuck could slip in your hand, or your hand could slip and come into contact with the rotating bit. This could cause an accident and result in serious personal injury.

**INSTALLING AND REMOVING BITS**

- Open the chuck by unscrewing it in a counter-clockwise direction while holding the drill. Do this sufficiently to allow the drill bit to enter the jaws of the chuck.
- Ensure the drill bit is fully inserted, so that the chuck jaws grip the straight section of the bit.
- Rotate the chuck clockwise until the jaws tighten on the drill bit. The collar of the chuck needs to be tightened firmly to ensure the drill bit is held securely. (Fig. H)
- To remove the drill bit, rotate the chuck in a counter-clockwise direction sufficiently to allow the drill bit to be removed.



(Fig. H)

**LED WORKLIGHT**

When the unit is switched on, the LED worklight also comes on to ensure better vision and to make working in dark areas safer. LED work light remains on for 15 seconds after the trigger switch is released.

**REMAINING POWER INDICATOR**

If the trigger switch is pressed, the remaining power indicator lights for 5 seconds and the battery's remaining power can be checked.

LED INDICATOR	REMAINING POWER STATUS
1	0-25 %
2	25-50 %
3	50-75 %
4	75-100 %

**BELT HOOK**

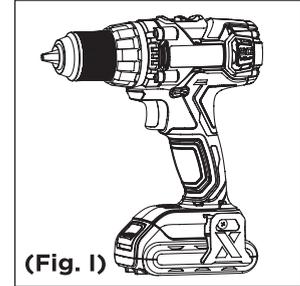
The belt hook is used to hang the tool on your waist belt while working. Install the belt hook securely in the groove of the drill and tighten the screw to fix the hook firmly. (Fig. I)

**ACCESSORY HOLDER**

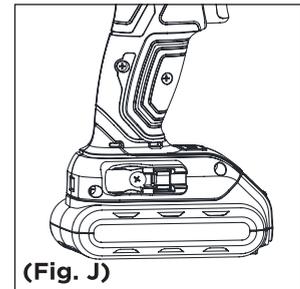
Install the accessory holder securely in the groove of the drill and tighten the screw to fix the holder firmly. (Fig. J) A bit may be stored on the accessory holder by snapping it into place.

**OVERLOAD PROTECTION**

This drill is fitted with an overload protection. If the drill is excessively forced, or the task being performed is too great for the drill, the drill will automatically go into an overload mode. When the drill goes into overload, the drill will automatically and suddenly stop. To reset the overload, simply release the trigger switch. When the trigger switch is pressed again, the drill will restart. Resume work after the overload has been reset, but reduce the load by using a smaller drill bit or re-sharpen the existing drill bit and reduce the amount of force placed on the drill. If the drill is set to high speed on the gear selector, consider changing to low speed selection.



(Fig. I)



(Fig. J)

**NOTE:**

- The drill/driver will not restart until the battery pack has cooled.
- Do not force cool the pack in any way. Do not place in refrigerator or freezer. To reduce the temperature of the cells remove the battery pack from the drill and place the battery pack in a free air environment, out of direct sunlight or any other heat source.



**WARNING!**

Do not insert and remove bits while the tool is activated. Make sure the battery pack is removed or the forward/reverse selector is in the centre locking position when inserting and removing bits.



**WARNING!**

Be sure to insert the drill bit straight into the jaws of the chuck. Do not tighten the jaws of the chuck with the drill bit inserted at an angle. Doing so could cause the drill bit to be thrown from the drill, which could result in serious personal injury or damage to the chuck.



**CAUTION!**

- When using the belt hook, hang the power tool firmly so as not to drop it accidentally. If the power tool is dropped, it may lead to an accident.
- When carrying the tool hooked to your waist belt, do not fit any bit to the top of the power tool, as this may lead to accidental injury.



**CAUTION!**

Do not continue to overload the drill and constantly reset the overload. Doing this will cause the battery cells to overheat.

**TEMPERATURE CUT OUT**

If the drill is constantly overloaded, or the drill is used constantly at maximum rating in high ambient temperatures, the battery cells may overheat causing the battery pack to shut down. When this occurs you will need to immediately stop drilling and allow the battery cells to cool down.

**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 (similar to that of the overload condition). When this condition occurs you will need to either insert another battery pack into the tool or recharge the existing battery pack.

**DRILLING METALS**

- Always clamp sheet metal.
- Support thin metal with a block of wood to avoid distorting it.
- Use a punch to mark the centre of the hole.
- Use a suitable lubricant for the material you are working on.

USE:	FOR:
Oil	Steel
Turpentine or paraffin	Aluminum
Do not lubricate	Brass, copper or cast iron

**NOTE:** Attempting to restart the tool without either recharging the battery or installing another battery (with charge) will lead to drill restarting and then stopping again, after only a few seconds of operation.

**DRILLING PLASTICS AND PLASTIC COATED CHIPBOARD**

- Use high-speed drill bits
- See “Drilling wood” below

**DRILLING MASONRY**

This drill is not designed for drilling masonry. Purchase or rent a hammer drill.

**DRILLING WOOD**

- Clamp a piece of scrap wood to the back of your work to prevent splintering.

**ALL DRILLING OPERATIONS**

- Mark off the centre of the hole using a centre punch or nail.
- Don't force the drill; let it work at its own pace.
- Keep the drill bit sharp.
- Reduce pressure as the drill is about to break through the item being drilled.



**WARNING!**

Be prepared for binding when the bit breaks through the workpiece, because the drill has a tendency to grab and kick opposite to the direction of rotation, which could cause a loss of control. If the operator is not prepared, this loss of control could result in serious injury.

**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 jewellery, could result in a serious burn.

To obtain the longest possible battery life, read and understand the instruction 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 79°F (26°C) 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.
- 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 driver. 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.

**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:

#### 3-YEAR BATTERY/CHARGER REPAIR WARRANTY

Maximum Canada will repair or replace the batteries/chargers which have worn beyond reasonable use due to normal use of such items, for a period of three (3) years from the date of original purchase.

Any defects with such battery and/or charger will be subject to repair or replacement as determined by the Service Provider. For proper servicing, both the battery and charger will require diagnosis to evaluate warranty requirements and therefore must both be provided to the Service Provider at the time of service request.

The following is excluded from this 3-Year Battery/Charger Repair Warranty:

- a) Damages that are a result of abuse or misuse
- b) Any wear and tear that does not affect the core function of the product.

#### 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

# MAXIMUM®

## 20V max\*

### Cordless Impact Driver



Model no. 054-3224-2

**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. 054-3224-2 | contact us 1-888-670-6682

MAXIMUM®

## TECHNICAL SPECIFICATIONS

MOTOR	18V DC
HEX-DRIVE CHUCK	1/4" quick-connect
VARIABLE SPEEDS	0-2700 RPM / 0-3300 BPM
MAX. TORQUE	1500 in-lb
ON-BOARD WORK LIGHT	LED
BATTERY	20V max* (2.0 Ah) lithium-ion
COMPATIBLE MAXIMUM® BATTERY	054-3203-2 ; 054-3206-6
CHARGER	35-minute, diagnostic
COMPATIBLE MAXIMUM® CHARGER	054-3204-0 & 7109-B-2
OPTIMUM CHARGING TEMPERATURE	40 to 104°F (4 to 40°C)
DIMENSIONS	6 3/16 x 7 13/32 x 2 11/16" (156 x 188 x 68 mm)
WEIGHT	2 lb 5 oz (1.05 kg) without battery

\*Maximum battery voltage without workload; with workload nominal voltage is 18V.

## GENERAL POWER TOOL SAFETY WARNINGS

Save all warnings and instructions for future reference.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or battery operated (cordless) power tool.

## WORK AREA SAFETY

- Keep work area clean and well lit. Cluttered or dark areas invite accidents.
- Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust. Power tools create sparks which may ignite the dust or fumes.
- Keep children and bystanders away while operating a power tool. Distractions can cause you to lose control.

## ELECTRICAL SAFETY

- Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any adaptor plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is earthed or grounded.
- Do not expose power tools to rain or wet conditions. Water entering a power tool will increase the risk of electric shock.
- Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- When operating a power tool outdoors, use an extension cord suitable for outdoor use. Use of a cord suitable for outdoor use reduces the risk of electric shock.
- If operating a power tool in a damp location is unavoidable, use a Residual Current Device (RCD) protected supply. Use of an RCD reduces the risk of electric shock.



### WARNING!

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.

**PERSONAL SAFETY**

- **Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from 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.

**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 remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. 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.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

**BATTERY TOOL USE AND CARE**

- **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.
- **Do not use a battery pack or tool 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 tool to fire or excessive temperature.** Exposure to fire or temperature above 130 °C (266°F) may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

**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.
- **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

**SPECIFIC SAFETY RULES FOR CORDLESS IMPACT DRIVER**

- **Hold the power tool by insulated gripping surfaces when performing an operation where the fastener may contact hidden wiring.** Fasteners contacting a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **Wear hearing protection with impact driver.** Exposure to noise can cause hearing loss.
- **Wear safety goggles or other eye protection.** Hammering and drilling operations cause chips to fly. Flying particles can cause permanent eye damage.
- **Use a dust mask or respirator for applications if the operation is dusty.**
- **Use protective gloves and limit the exposure time by taking frequent rest periods.** Vibration caused by hammer-drill action may be harmful to your hands and arms.
- **Secure the workpiece.** Clamping devices or a vise will hold the workpiece in place better and more safely than holding it by hand.
- **Be aware that this tool is always in an operating condition,** since it does not have to be plugged into an electrical outlet.
- **Be prepared for a reaction torque when “seating” or removing a fastener.** The screwdriver housing may tend to twist in the opposite direction of bit rotation when “seating” or removing a fastener depending on the torque setting of the tool.
- **Accessories and tool may get hot during operation.** Wear gloves when handling them if performing heat producing applications such as drilling metals.

**SAFETY RULES FOR BATTERY PACK AND CHARGER**

- **If the battery pack casing is cracked or damaged, do not insert into charger.** There is a danger of electric shock or electrocution.
- **Don’t allow any liquid to get inside 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 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 122°F (50°C),** which can lead to deterioration of the storage battery.
- **The charger is designed to operate on standard household electrical power (120 V AC).** 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 between 59–77°F (15–25°C). Do not charge the battery pack where the air temperature is below 32°F (0°C) or above 113°F (45°C). 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. This product contains a lithium-ion battery. 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.

**SYMBOL**

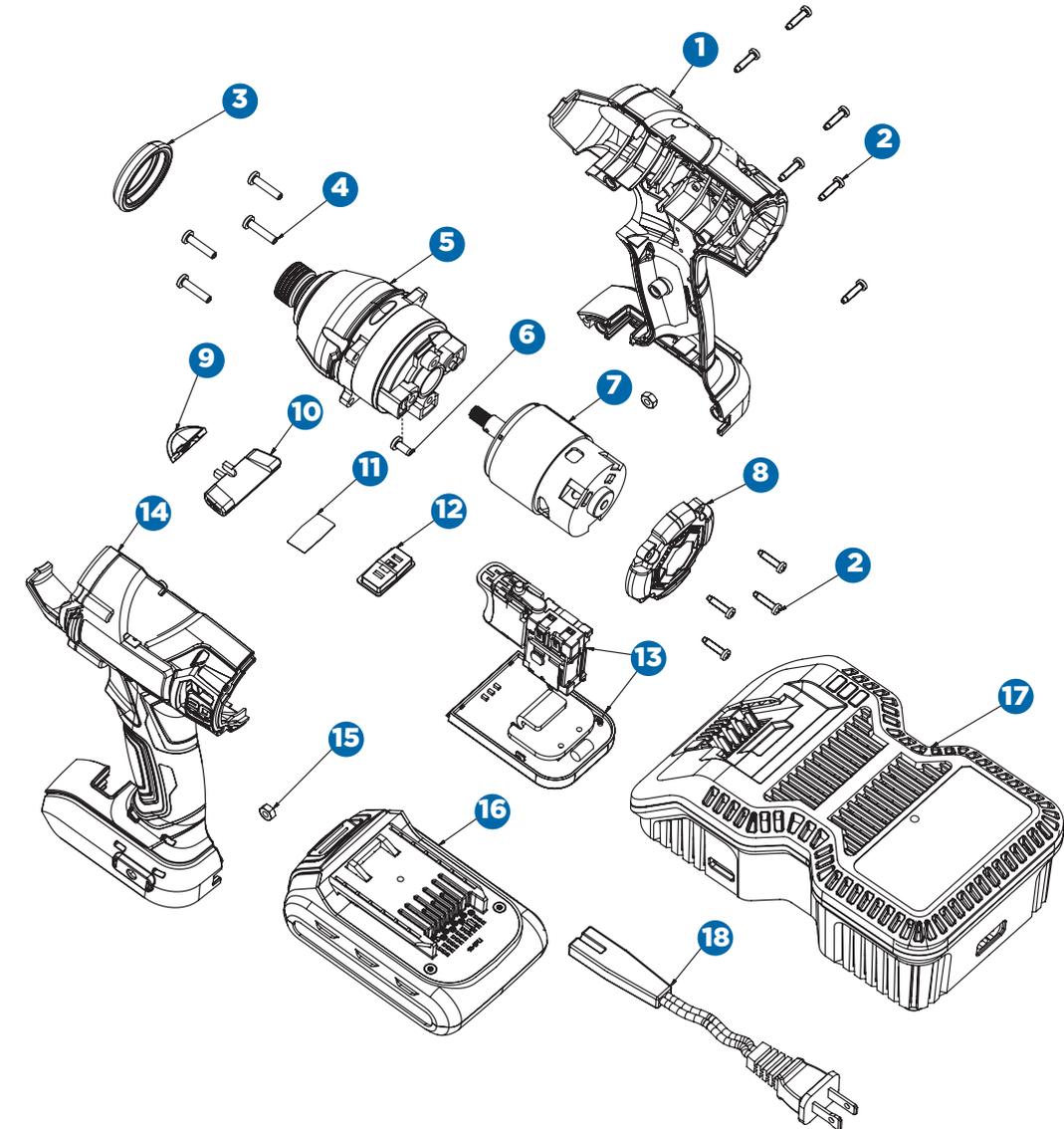
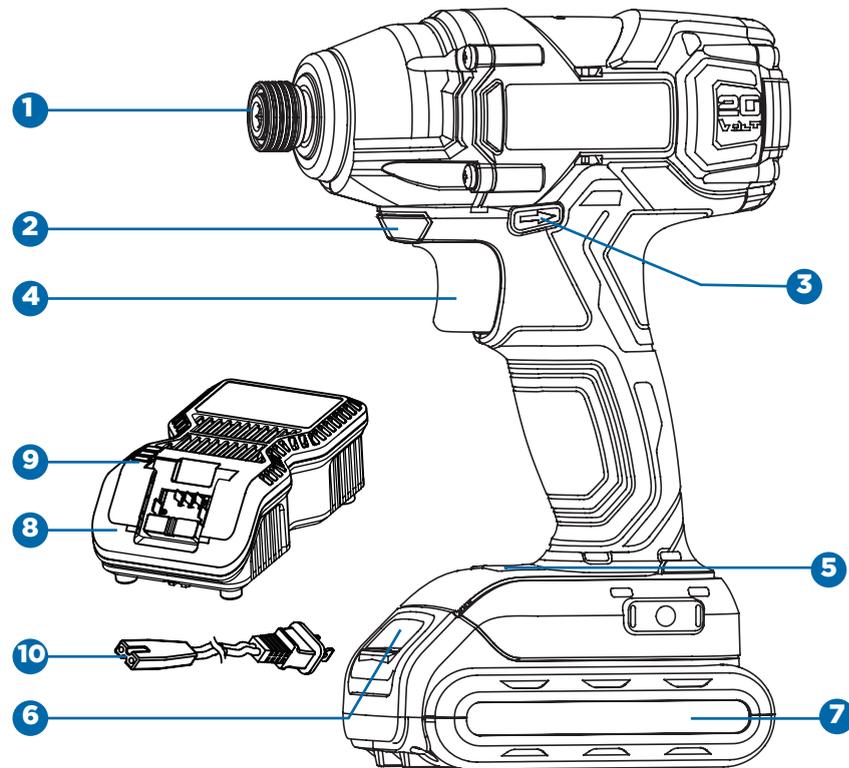
Some of the following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

No.	Description
V	Volts
A	Amperes
Hz	Hertz
W	Watts
$n_0$	No-load speed
RPM	Revolutions per minute
BPM	Beats per minute
~	Alternating current
≡	Direct current
Ah	Ampere-hours
Li-ion	Lithium-ion battery
∅	Diameter
BFP	Backfeed protection
	Safety alert symbol
	To reduce the risk of injury, user must read operator's manual.
	Always wear eye protection.
	Contains lithium-ion battery. Battery must be recycled or disposed of properly.
	Conforms to bear the ETL mark and complies with relevant industry standards.

**PARTS LIST**

**KNOW YOUR TOOL**

No.	Description	No.	Description
1	Locking sleeve	7	Rechargeable battery pack
2	LED worklight	8	Charger
3	Forward & reverse lever	9	Charging indicator
4	Trigger switch	10	Detachable cable & plug
5	Remaining power indicator		
6	Battery release button		



NO.	DESCRIPTION	NO.	DESCRIPTION
1	RIGHT HOUSING	10	FORWARD & REVERSE LEVER
2	SCREW	11	LED LABEL
3	BUMPER	12	POWER INDICATOR COVER
4	SCREW	13	SWITCH & PCB ASSEMBLY
5	GEAR BOX ASSY	14	LEFT HOUSING
6	SCREW	15	NUT
7	MOTOR	16	BATTERY PACK
8	REAR COVER	17	CHARGER
9	LED COVER	18	DETACHABLE CABLE & PLUG



**WARNING!**

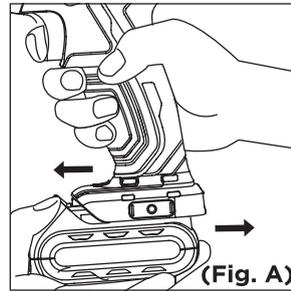
- Remove the product and any accessories from the package. Inspect the tool carefully to make sure no breakage or damage occurred during shipping.
- Do not discard the carton or any packaging material until all parts have been examined.

**INTENDED USE**

This tool is intended for the fastening and loosening of bolts, nuts and various threaded fasteners within the respective range of dimensions. This cordless impact driver has a collet that accepts only standard 1/4" (6.35 mm) hexagonal shank accessories with power groove. The electronic variable speed also provides more control to prevent stripping of the screw and damage to the work surface.

**FITTING AND REMOVING THE BATTERY PACK TO THE IMPACT DRIVER**

- 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 handle 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 tool handle.

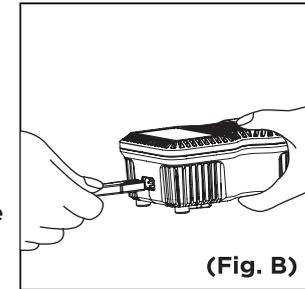


(Fig. A)

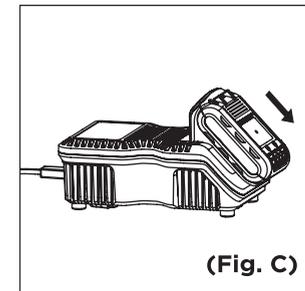
**CHARGING PROCEDURE**

- Connect the plug cable to the charger, then plug into an appropriate outlet before inserting 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 and permanent lighting of all three charging lights will indicate charging is complete.



(Fig. B)



(Fig. C)

**CHARGER DIAGNOSTICS**

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

- When the charger detects the battery pack 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 then 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 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 tool off and disconnect battery pack before making any adjustments or removing/installing attachments or accessories.

**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.

**CAUTION!**

The working temperature of the charger is 40 to 104°F (4 to 40°C).

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

**ON/OFF TRIGGER SWITCH**

To turn the tool on, squeeze the trigger switch. To turn the tool off, release the trigger switch.

**VARIABLE SPEED**

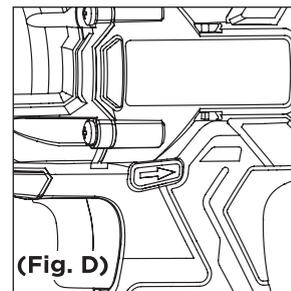
The variable speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure. Use the variable speed to start screwing tasks, then fully press the trigger switch once the task has started.

**FORWARD AND REVERSE**

The direction of bit rotation is reversible and is controlled by a selector located above the trigger switch. Screwing in uses the forward mode. The reverse mode is intended for the removal of screws. (Fig. D)

With the impact driver held in normal operating positions:

- Position the forward/reverse selector to the left of the tool for forward.
- Position the forward/reverse selector to the right of the tool for reverse.
- Position the forward/reverse selector in the centre to lock the switch trigger to help reduce the possibility of accidental starting when not in use.



**LED WORKLIGHT**

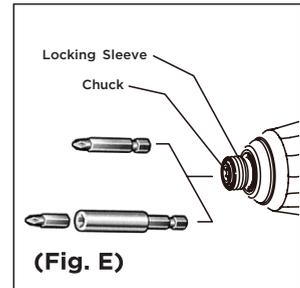
When the unit is switched on, the LED worklight illuminates to ensure better vision and to make working in dark areas safer. The LED work light remains lit for 15 seconds after the trigger switch is released.

**INSTALLING AND REMOVING BITS**

- Your tool is equipped with a quick release chuck. To insert an accessory, simply pull

the locking sleeve forward, insert the desired accessory into the chuck and release the locking sleeve. (Fig. E)

- To remove an accessory, pull the locking sleeve forward and simply remove the accessory from the chuck.
- To avoid loss of control, ensure the bit is locked into the chuck by pulling on the bit after it has been inserted.



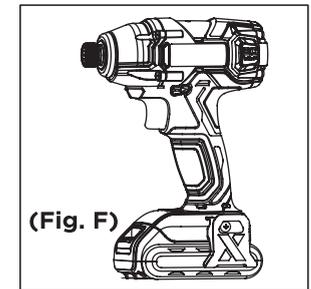
**REMAINING POWER INDICATOR**

If the trigger switch is pressed, the remaining power indicator lights for 5 seconds and the battery's remaining power can be checked.

LED INDICATOR	REMAINING POWER STATUS
1	0-25 %
2	25-50 %
3	50-75 %
4	75-100 %

**BELT HOOK**

The belt hook is used to hang the tool from your waist belt while working. Install the belt hook securely in the groove of the drill and tighten the screw to fix the hook firmly. (Fig. F)



**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.

**NOTE:** The impact driver will not run unless the direction of forward/reverse selector is engaged fully to the left or right.

**CAUTION!**

To prevent gear damage, always allow the chuck to come to a complete stop before changing the direction of rotation.



**WARNING!**

Do not insert or remove bits while the tool is activated. Make sure the battery pack is removed or the forward & reverse lever is in the centre locking position when inserting or removing bits.



**CAUTION!**

- When using the belt hook, hang the power tool firmly so as not to drop it accidentally. If the power tool is dropped, it may lead to an accident.
- When carrying the tool hooked to your waist belt, do not fit any bit to the top of the power tool, as this may lead to accidental injury

**ACCESSORY HOLDER**

Install the accessory holder securely in the groove of the drill and tighten the screw to fix the holder firmly. (Fig. G) A bit may be stored on the accessory holder by snapping it into place.

**TEMPERATURE CUT-OUT**

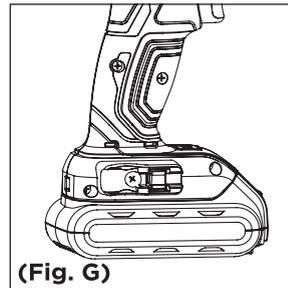
When used as intended, the driver cannot be subjected to overload. But running continuously at full load for a long time will cause the battery pack to overheat. If the allowable battery temperature range of 32–158°F (0–70°C) is exceeded, the battery pack will automatically stop operating and will not 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.

**OPERATING TIPS**

You will extend the life of your bits and do neater work if you always put the bit in contact with the work before starting the tool. During the operation, hold the tool firmly and exert light, steady pressure. Too much pressure at low speed will stall the tool. Too little pressure will keep the bit from cutting and cause excess friction by sliding over the surface. This can be damaging to both tool and bit.



(Fig. G)

**DRIVING SCREWS WITH VARIABLE SPEED**

The technique is to start slowly, increasing the speed as the screw runs down. Set the screw snugly by slowing to a stop. Prior to driving screws, pilot and clearance holes should be drilled. Always hold the machine straight on the screw to be tightened.

The best method to determine the right impacting/tightening duration is by means of a trial. For small screws, the right impacting/tightening duration can be reached in less than 0.5 sec. Therefore, work with low RPM and switch the machine off immediately when the screw is tight and the impacting sound is heard.

For screwing larger, longer wood screws into hard material, pre-drilling is the best method.

**TIGHTENING TORQUE**

The tightening torque depends on the duration of the impacting/tightening action. The largest tightening torque is achieved after approx. 6 to 10 seconds of impacting/tightening action. The torque build-up depends on the following factors:

- Hardness of the bolts/nuts.
- Type of washer (disk washer, spring washer, seal).
- Hardness of the material to be joined.
- Lubricating effect at the surfaces of the junction.

This leads to the following application cases:

- Hard case: The joining of metal to metal with a disk washer. The maximum torque is reached after a relatively short impacting/tightening action.
- Medium case: The joining of metal to metal where spring ring washer, disk spring washer, stud bolts or bolts/nuts with conical seats are used.
- Soft case: The joining of e.g. metal to wood or insulation material.

For middle or soft joining cases, the maximum tightening torque is less than for hard cases. Therefore, a longer impacting/tightening action is necessary to arrive at the maximum tightening torque.

**NOTE:**

- The impact driver will not restart until the battery pack has cooled.
- DO NOT force cool the pack in any way. Do not place in refrigerator or freezer. To reduce the temperature of the cells remove the battery pack from the tool and place the battery pack in a free air environment, out of direct sunlight or any other heat source.

**NOTE:** Attempting to restart the tool without either recharging the battery or installing another battery (with charge) will lead to tool restarting and then stopping again, after only a few seconds of operation.

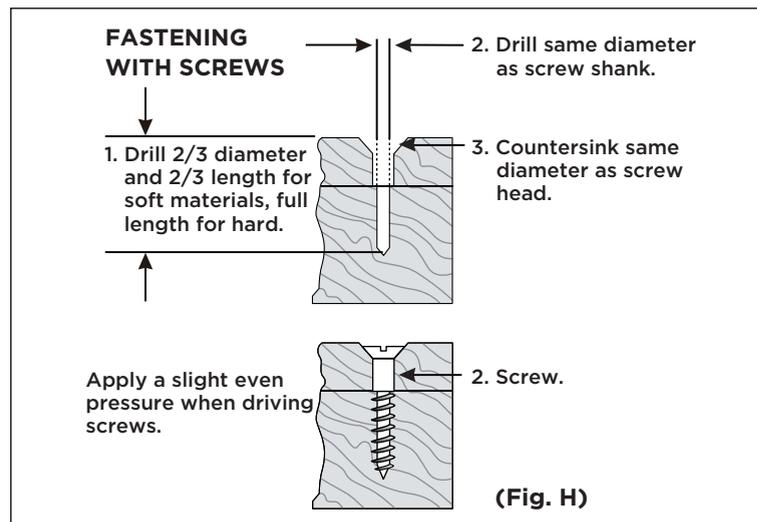
**FASTENING WITH SCREWS**

This procedure will enable you to fasten materials together with your tool without stripping, splitting or separating the material. (Fig. H)

First, clamp the pieces together and drill the first hole 2/3 the diameter of the screw. If the material is soft, drill only 2/3 the proper length. If it is hard, drill the entire length.

Second, unclamp the pieces and drill the second hole the same diameter as the screw shank in the first or top piece of wood.

Third, if flat head screw is used, countersink the hole to make the screw flush with the surface. Then, simply apply even pressure while driving the screw. The screw shank clearance hole in the first piece allows the screw head to pull the pieces tightly together.

**RUNNING NUTS AND BOLTS**

Variable speed control must be used with caution for driving nuts and bolts with socket set attachments. The technique is to start slowly, increasing speed as the nut or bolt runs down. Set the nut or bolt snugly by slowing the tool to a stop. If this procedure is not followed, the tool will have a tendency to torque or twist in your hands when the nut or bolt seats.

**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 79 °F (26 °C) 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.
- 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 driver. 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 let 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.

**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:**

#### 3-YEAR BATTERY/CHARGER REPAIR WARRANTY

Maximum Canada will repair or replace the batteries/chargers which have worn beyond reasonable use due to normal use of such items, for a period of three (3) years from the date of original purchase.

Any defects with such battery and/or charger will be subject to repair or replacement as determined by the Service Provider. For proper servicing, both the battery and charger will require diagnosis to evaluate warranty requirements and therefore must both be provided to the Service Provider at the time of service request.

**The following is excluded from this 3-Year Battery/Charger Repair Warranty:**

- a) Damages that are a result of abuse or misuse
- b) Any wear and tear that does not affect the core function of the product.

#### 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