

1/2" (13 MM) BRUSHLESS HAMMER DRILL

054-7544-6



IMPORTANT:

Read and understand this instruction manual thoroughly before using the product.

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 1-800-689-9928.



SAVE THESE INSTRUCTIONS

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

TECHNICAL SPECIFICATIONS

| Rated Voltage | 20 V d.c. |
|-----------------|----------------------------|
| Chuck Capacity | 1/2" (13 mm) |
| No-load Speed | 0-500 RPM / 0-1800 RPM |
| Impact Rate | 0-8,000 BPM / 0-28,800 BPM |
| Max. Torque | 460 in-lb |
| Clutch Settings | 24 |

^{*}Maximum battery voltage without workload; with workload nominal voltage is 18V.

SAFETY GUIDELINES:



WARNING!

Safety symbols in this Instruction Manual are used to flag possible dangers. The safety symbols and their explanations require your full understanding. The safety warnings do not, by themselves, eliminate any danger, nor are they substitutes for proper accident prevention measures.



WARNING!

This Safety Alert Symbol indicates caution, warning, or danger. Failure to obey a safety warning can result in serious injury to yourself or others. To reduce the risk of injury, fire, or electric shock, always follow the safety precautions.

KNOW YOUR TOOL

To operate this tool, carefully read this Instruction Manual and all labels affixed to the cordless hammer drill before using. Keep this instruction manual available for future reference.

IMPORTANT

This tool should only be serviced by a qualified service technician. For more information, call the tollfree helpline at 1-800-689-9928.

READ ALL INSTRUCTIONS THOROUGHLY.

SAVE THESE INSTRUCTIONS.

GENERAL POWER TOOL SAFETY WARNINGS



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.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

The term "power tool" in the warnings refers to your mains-operated (corded) power tool or batteryoperated (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 vou 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 ground-fault circuit interrupter (GFCI) protected supply. Use of an GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a 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 and clothing 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 dustrelated 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 (265°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.

DRILL SAFETY WARNINGS

SAFETY INSTRUCTIONS FOR ALL OPERATIONS

- Wear ear protectors when impact drilling. Exposure to noise can cause hearing loss.
- Hold the power tool by insulated gripping surfaces when performing an operation where
 the cutting accessory or fasteners may contact hidden wiring or its own cord. 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.

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.

ADDITIONAL SAFETY GUIDELINES FOR CORDLESS HAMMER DRILL

- Use auxiliary handle(s), if supplied with the tool. Loss of control can cause personal injury.
- When working with the power tool, always hold it firmly with both hands and provide for a secure stance. The power tool is quided more securely with both hands.
- Secure the workpiece. Clamping devices or a vise will hold the workpiece in place better than
 the hand.
- Do not allow gasoline, oils, petroleum-based products, etc., to come in contact with
 plastic parts. These materials contain chemicals that can damage, weaken, or destroy plastic.
- Always wait until the machine has come to a complete stop before placing it down.
 The tool insert can jam and lead to loss of control over the power tool.
- Before performing any kind of work on the machine (e.g., maintenance, tool change, etc.), as well as when transporting and storing it, always set the direction-of-rotation switch to the centre (locked) position. Unintentional activation of the On/Off switch may result in personal injury.
- Use protective gloves when removing the bit from the tool, or first allow the clamp to cool down. The bit may be hot after prolonged use.
- Use protective gloves when operating the tool. Protective gloves can help to keep you from being burnt and hurt.

- Keep your hands away from the motor-housing vents. Hot gas comes from the vents during operation.
- Release the trigger immediately when a screw is tightened to avoid breaking the screw.
- The label on your tool may include the following symbols. The symbols and their definitions are as follows:

| aominaono aro | |
|-------------------|---|
| $V \ldots \ldots$ | Volts |
| Α | Amperes |
| Hz | Hertz |
| W | Watts |
| min | Minutes |
| $\sim\!$ | Alternating current |
| === or d.c | Direct current |
| <u>no</u> | No-load speed |
| □ | Class II Construction |
| /min | Revolutions or reciprocation per minute |
| <u></u> | Grounding terminal |
| BPM | Beats per minute |
| RPM | Revolutions per minute |
| & | $\label{eq:WARNING-To} \textbf{WARNING-To} \ \ \textbf{reduce} \ \ \textbf{the} \ \ \textbf{risk} \ \ \textbf{of} \ \ \textbf{injury}, \ \textbf{user} \ \ \textbf{must} \ \ \textbf{read} \ \ \textbf{instruction} \ \ \textbf{manual}.$ |
| | WARNING – To reduce the risk of injury always wear eye protection. |
| | WARNING – To reduce the risk of injury always wear ear protection. |

- **Do not open the battery.** There is risk of a short circuit.
- Protect the battery from heat and fire. There is risk of explosion.



WARNING!

To reduce the risk of electric shock or damage to the charger and battery, use only the Mastercraft® batteries and chargers listed.

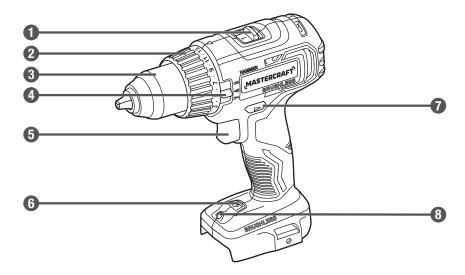
| BATTERY PACK | CHARGER |
|--|------------------------|
| 054-3124-0, 054-7553-4, 054-7557-6, 054-2434-8 | 054-3126-6, 054-7559-2 |

- Keep the cord and charger from heat to prevent damage to the housing or internal parts.
- For best results, your battery tool should be stored and used in a location where the temperature is more than 5°C (41°F) but less than 40°C (104°F). Do not store outside or in vehicles.

PACKAGE CONTENTS:

Cordless hammer drill, 2 screwdriver bits, 1 belt clip, 1 bit holder, and instruction manual.

KEY PARTS DIAGRAM



| No. | Description |
|-----|--------------------------|
| 1 | Two-speed gearbox switch |
| 2 | Torque-adjustment ring |
| 3 | Keyless chuck |
| 4 | Function mode selector |

| No. | Description |
|-----|--------------------------------|
| 5 | Variable-speed trigger switch |
| 6 | LED-worklight switch |
| 7 | Direction-of-rotation selector |
| 8 | LFD worklight |



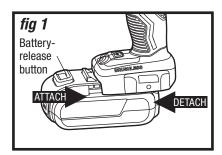
WARNING!

- Remove the cordless hammer drill from the package and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.
- If any part of the cordless hammer drill is missing or damaged, do not attach the battery pack to the tool or use the tool until
 the part has been repaired or replaced. Failure to heed this warning could result in serious injury.
- Do not allow familiarity with the cordless hammer drill to cause a lack of alertness. A fraction of a second of carelessness is
 enough to cause severe injury.

OPERATING INSTRUCTIONS

TO ATTACH BATTERY PACK (fig 1)

- 1. Lock the variable-speed trigger switch on the hammer drill by placing the direction-of-rotation (forward/centre-lock/reverse) selector in the centre position.
- 2. Align the raised portion on the battery pack with the groove on the bottom of the hammer drill, and then attach the battery pack to the hammer drill as shown.



MASTERCRAFT

3. Make sure that the latch on the battery pack snaps into place and that the battery pack is secured to the hammer drill before beginning operation.

TO DETACH BATTERY PACK (fig 1)

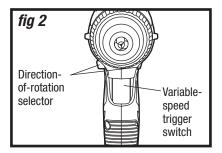
- 1. Lock the variable-speed trigger switch on the hammer drill by placing the direction-of-rotation selector (forward/centre-lock/reverse) in the centre position.
- 2. Depress the battery-release button located on the front of the battery pack to release the battery pack.
- 3. Pull forward on the battery pack to remove it from the hammer drill.

TRIGGER SWITCH (fig 2)

To turn the hammer drill ON, depress the variablespeed trigger switch. To turn it OFF, release the variable-speed trigger switch.

VARIABLE SPEED (fig 2)

The variable-speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.



NOTICE: When placing a battery pack on the tool, be sure that the raised rib on the battery pack aligns with the groove on the cordless hammer drill and the latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.



CAUTION!

Avoid the possibility of accidental starting. Always take care not to activate the variable-speed trigger switch when you are attaching the battery pack or performing other adjustments to the tool.

DIRECTION-OF-ROTATION SELECTOR (FORWARD/CENTRE-LOCK/REVERSE) (fig 3)

The direction of rotation of the bit is reversible and is controlled with the direction-of-rotation selector, located above the variable-speed trigger switch. With the hammer drill held in normal operating position:

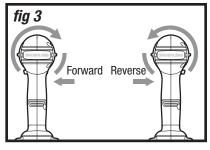
Position the direction-of-rotation selector to the left of the tool for forward rotation.

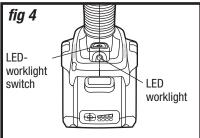
Position the direction-of-rotation selector to the right of the tool for reverse rotation.

Position the direction-of-rotation selector in the centre to lock the tool off.

LED WORKLIGHT (fig 4)

The LED worklight, located on the base of the cordless hammer drill, will illuminate when the variable-speed trigger switch is depressed and will automatically turn off about 10 seconds after the variable-speed trigger switch is released. This provides increased visibility in dark places.





The LED worklight can also be controlled by the LED-worklight switch and will illuminate when the LED-worklight switch is pressed. The LED worklight will turn off when the LED-worklight switch is pressed again. The LED worklight will illuminate for about 20 minutes after turning on the LED-worklight switch.

ELECTRIC BRAKE

To stop the tool, release the variable-speed trigger switch and allow the keyless chuck to come to a complete stop. The electric brake quickly stops rotation. This feature engages automatically when you release the variable-speed trigger switch.

NOTE:

- . To prevent gear damage, always allow the hammer drill to come to a complete stop before changing the direction of rotation.
- . The hammer drill will not run unless the direction-of-rotation selector is engaged fully to the left or right.

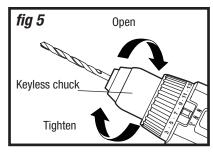


WARNING!

Do not hold the body of the keyless chuck with one hand while using the power of the hammer drill to tighten the jaws of the chuck on the drill bit. The body of the keyless 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.

KEYLESS CHUCK (fig 5)

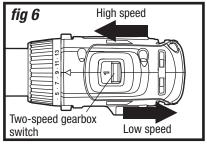
The arrows in the fig 5 indicate the rotation direction of the body of the chuck to tighten or open the jaws of the chuck on the drill bit.



TWO-SPEED GEAR BOX (fig 6)

This hammer drill features a two-speed gearbox that is designed for drilling or driving at speed 1 (low speed) or speed 2 (high speed). A slide switch is located on the top of the hammer drill to select either low or high speed.

When using the hammer drill in the low-speed range, the hammer drill will have more power and torque. When using the hammer drill in the high-speed range, the hammer drill will have less power and torque.

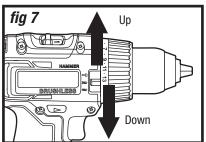


Use low speed for high power and torque applications, and use high speed for fast drilling or driving applications.

FUNCTION MODE SELECTOR (fig 7)

The hammer drill is equipped with a separate function mode selector to switch among drilling, screw-driving, and hammer-drilling modes.

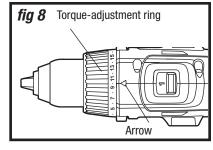
- To use the screw-driving mode, rotate the function mode selector to the centre so that the raised knob on the function mode selector is aligned with the screw symbol "A".
- To use the drilling mode, rotate the function mode selector down so that the raised knob on the function mode selector is aligned with the drill symbol " 8".
- 3. To use hammer-drilling mode, rotate the function mode selector up so that the raised knob on the function mode selector is aligned with the hammer drill symbol " \(\mathbb{T} \) ".



ADJUSTABLE TORQUE CLUTCH (fig 8)

The torque clutch can be adjusted to any of 24 different driving settings. However, the torque-adjustment ring is engaged only during screw-driving mode (it is not engaged in the drill and hammer-drilling modes). The higher the torque setting, the more force the cordless hammer drill produces to turn an object in either low or high speed.

When using the cordless hammer drill for driving applications, it is necessary to increase or decrease



the torque to help prevent damage to screw heads, threads, and the workpiece. Adjust the torque by rotating the torque-adjustment ring. The proper setting depends on the job and the type of bit, fastener, and material you will be using.

In general, use greater torque for larger screws; but if the torque is too high, the screws may be damaged or broken. For delicate operations, such as removing a partially stripped screw, use a low torque setting. For operations such as drilling into hardwood, use a higher torque setting.

INSTALL THE BIT HOLDER (fig 9)

- 1. Remove the battery from the tool.
- 2. Align the rib of the bit holder with the hole on the base of the hammer drill.
- Insert the screw (included) and tighten the screw securely with a screwdriver (not included). The bit holder can be positioned on either side of the tool.

fig 9 Bit holder Screw

REMOVE THE BIT HOLDER (fig 9)

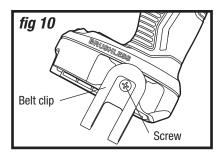
- 1. Remove the battery from the tool.
- 2. Use a screwdriver (not included) to loosen the screw that attaches the bit holder to the hammer drill.
- 3. Remove the screw and the bit holder.

NOTE:

- Do not rotate the torque-adjustment ring while the tool is running.
- When adjusting the torque ring, make sure that the speed switch is either completely at the low speed or high speed position.

INSTALL THE BELT CLIP (fig 10)

- 1. Remove the battery from the tool.
- 2. Align the rib of the clip with the hole on the base of the hammer drill.
- Insert the screw (included) and tighten the screw securely with a screwdriver (not included). The belt clip can be positioned on either side of the tool.



REMOVE THE BELT CLIP (fig 10)

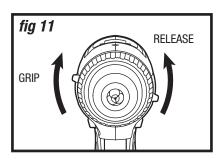
- 1. Remove the battery from the tool.
- 2. Use a screwdriver (not included) to loosen the screw that attaches the belt clip to the hammer drill.
- 3. Remove the screw and the belt clip.

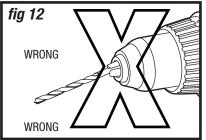
INSTALLING A BIT (fig 11)

- Lock the variable-speed trigger switch by placing the direction-of rotation selector in the OFF (centre) position.
- 2. Rotate the chuck in the "RELEASE" direction to release the jaws of the chuck.
- 3 Insert the drill bit
- 4. Rotate the chuck in the "GRIP" direction to tighten the jaws of the chuck securely on the bit.

REMOVING A BIT (fig 11)

- Lock the variable-speed trigger switch by placing the direction-of-rotation selector in the OFF (centre) position.
- Open the jaws of the chuck (rotate in the "RELEASE" direction.)
- 3. Remove the drill bit.





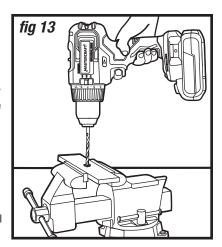


WARNING!

- 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, as shown in fig 12. Doing so could cause the drill bit to be thrown from the
 hammer drill, which could result in possibly serious personal injury or damage to the chuck.
- Use protective gloves when removing the bit from the tool, or first allow the clamp to cool down. The bit
 may be hot after prolonged use.

GENERAL DRILLING (fig 13)

- 1. Check the direction-of-rotation selector for the correct setting (forward or reverse).
- 2. Use a vise or clamps to secure the material to be drilled to keep it from turning as the drill bit rotates.
- 3. Hold the cordless hammer drill firmly, and place the bit at the point to be drilled.
- Depress the variable-speed trigger switch to start the cordless hammer drill.
- Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting.
- Do not force the cordless hammer drill or apply sideways pressure to elongate a hole. Allow the tool to do the work.



- When drilling hard, smooth surfaces, use a centre punch to mark the desired location of the hole. This will prevent the drill bit from slipping off-centre when the hole is started.
- When drilling metal, use light oil on the drill bit to prevent it from overheating. The oil will prolong the life of the bit and will increase the drilling efficiency.
- If the bit jams in the workpiece or if the hammer drill stalls, stop the tool immediately. Reverse the direction of rotation and gently squeeze the variable-speed trigger switch to remove the bit from the workpiece. Investigate and correct the cause of jamming before resuming work.

DRILLING MODE OPERATION

For drilling in wood, use twist bits, spade bits, power auger bits or hole saws.

- When drilling "through" holes, place a block of wood behind the workpiece to prevent ragged or splintered edges on the back side of the hole.
- 2. Select the desired speed range to match the planned operation.
- 3. Begin drilling at a very low speed to prevent the bit from slipping off of the starting point, and then increase the speed as the drill bit bites into the material.



WARNING!

- Always wear safety goggles or safety glasses with side shields during power tool operation or when blowing dust. If the
 operation is dusty, also wear a dust mask.
- Be prepared for binding when the bit breaks through the workpiece, because the hammer 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.

- 4. If the hammer drill stalls, it is usually because it is being overloaded. Release the variable-speed trigger switch immediately, reverse the direction of rotation and gently squeeze the variable-speed trigger switch to remove the bit from the workpiece. Investigate and correct the cause of stalling before resuming work.
- 5. Keep the motor running when pulling the bit back out of the completed hole. This will prevent jamming.

For drilling in metal, use high-speed, steel-twist drill bits.

- Use light oil on the drill bit to keep it from overheating; the oil will prolong the life of the bit and increase
 the drilling action.
- 2. When drilling a large hole, first use a smaller bit to drill a small pilot hole to prevent the larger bit from slipping.
- 3. Select the desired speed to match the planned operation.
- 4. Begin drilling at a very low speed to prevent the bit from slipping off the starting point. Maintain a speed and pressure that allows cutting without overheating the bit.
- 5. If the hammer drill stalls, it is usually because it is being overloaded. Release the variable-speed trigger switch immediately, reverse the direction of rotation and gently squeeze the variable-speed trigger switch to remove the bit from the workpiece. Investigate and correct the cause of stalling before resuming work.
- 6. Keep the motor running when pulling the bit back out of completed hole. This will prevent jamming.

HAMMER-DRILLING MODE OPERATION

- When hammer drilling, use just enough force on the drill to keep it from bouncing excessively. Too much force will cause slower drilling speeds, overheating and a lower drilling rate.
- Do not exert side pressure on the bit when drilling as this will cause clogging of the bit flutes and a slower drilling speed.
- If the drill speed starts to drop off when drilling deep holes, pull the bit partially out of the hole with the tool still running to help clear debris from the hole.

For masonry, use carbide-tipped bits or masonry bits. A smooth, even flow of dust indicates the proper drilling rate.

SCREWDRIVER OPERATION

- 1. Select the desired speed/torque range to match the planned operation.
- 2. Attach the desired fastener accessory into the chuck.
- 3. Make a few practice runs in a scrap piece before working.

MAINTENANCE

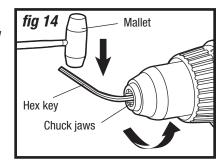
The tool may be cleaned most effectively with compressed dry air. Always wear safety goggles when cleaning tools with compressed air. Before each use:

- Inspect the cordless hammer drill, the variable-speed trigger switch, and the cord for damage.
- Check for damaged, missing, or worn parts.
- Check for loose screws, misalignment or binding of moving parts, or any other condition that may
 affect the operation.
- If abnormal vibration or noise occurs, turn the cordless hammer drill off immediately, and have the
 problem corrected before further use.

CHUCK REMOVAL (fig 14)

The chuck can be removed and replaced with a new one.

- Lock the variable-speed trigger switch by placing the direction-of-rotation selector in the centre position.
- 2. Open the chuck jaws. Using a screwdriver, remove the chuck screw by turning it clockwise.
- Insert a 5/16" (8 mm) or larger hex key into the chuck of the hammer drill and tighten the chuck jaws securely.



- Tap the hex key sharply with a mallet in a counter-clockwise direction. This will loosen the chuck for easy removal.
- 5. Attach a new chuck to the spindle and tighten the chuck screw.



WARNING!

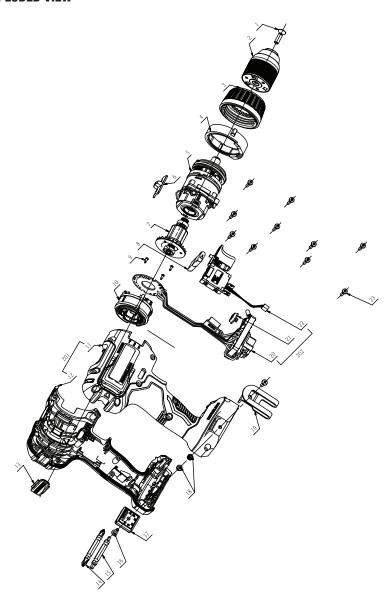
- To avoid personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.
- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc., come into contact with plastic parts. These substances contain chemicals that can damage, weaken, or destroy plastic.
- When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.
- Use only accessories that are recommended by the manufacturer for this hammer drill. Accessories that may be suitable for
 one tool may become hazardous when used with another tool.
- To ensure safety and reliability, all repairs should be performed by a qualified service technician.
- 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 battery pack or remove any of its components. Lithium-ion batteries must be
 recycled or disposed of properly. Also, never touch both terminals with metal objects and/or body parts as short circuit may
 result. Keep away from children. Failure to comply with these warnings could result in fire and/or serious injury.

TROUBLESHOOTING

| Problem | Possible Causes | Solution |
|---------------------------------|---|--|
| The hammer drill does not work. | The battery is depleted. | Charge the battery. |
| The bit cannot be | 1. The chuck is not opened. | 1. Open the chuck. |
| installed. | 2. The bit does not fit the chuck. | 2. Use a suitable bit. |
| The motor is overheating. | Be sure the cooling vents are free from dust and obstacles. | Clean and clear the vents. Do not cover with your hand during operation. |

If the problem remains unsolved after performing the checks described above, call the toll-free helpline at 1-800-689-9928.

EXPLODED VIEW



| No. | Part No. | Description | No. | Part No. | Description |
|-----|------------|-----------------------|-----|------------|----------------------|
| 1 | 5620488000 | Screw (L.H.) | 14 | 3810461000 | Screw Bit |
| 2 | 3860134000 | Chuck | 15 | 3810405000 | Screw Bits |
| 3 | 3129847000 | Clutch Cap | 16 | 5620040000 | Screw |
| 4 | 3129848000 | Turntable Clutch Cap | 17 | 3321321000 | Bit Holder |
| 5 | 2790451000 | Gear Case Assembly | 18 | 5630231000 | Nut |
| 6 | 3129851000 | Speed Change Button | 19 | 3705301000 | Hook |
| 7 | 2826134000 | Motor & Gear Assembly | 202 | 2830393000 | Electric Assembly |
| 8 | 3127732000 | F/R Button | 20 | 2830392000 | Electric Assembly |
| 9 | 5610005000 | Tapping Screw | 21 | 3129915000 | Button |
| 10 | 2740493000 | Stator | 22 | 4870601000 | Trigger Switch |
| 201 | 3900114000 | L R Housing Set | 23 | 5610225000 | Hexagon Lobuar Screv |
| 11 | 3322467000 | Right Housing | | | |
| 12 | 3322466000 | Left Housing | | | |
| 13 | 3129854000 | Logo | | | |

If any parts are missing or damaged, or if you have any questions, please call the toll-free helpline at 1-800-689-9928.

This Mastercraft product is guaranteed for a period of **3 years from the date of original retail purchase** against defects in workmanship and materials, except for the following components:

- a) Component A: Batteries, chargers and carrying case, which are guaranteed for a period of 2 years from the date of original retail purchase against defects in workmanship and materials;
- b) Component B: Accessories, which are guaranteed for a period of 1 year from the date of original retail purchase against defects in workmanship and materials.

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 our option. 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) 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) or which is being used for industrial, professional, commercial or rental purposes;
- this warranty will not apply to normal wear and tear or to expendable parts or accessories that
 may be supplied with the product that are expected to become inoperative or unusable after a
 reasonable period of use;
- d) 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, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e., persons not authorized by the manufacturer);
- f) 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);
- g) 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;

- 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
- this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional Limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer 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.

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.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8



1/4" (6.4 MM) BRUSHLESS IMPACT DRIVER

054-7547-0



IMPORTANT:

Read and understand this instruction manual thoroughly before using the product.

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 1-800-689-9928.



SAVE THESE INSTRUCTIONS

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

TECHNICAL SPECIFICATIONS

| Rated Voltage | 20 V d.c. |
|-----------------|-------------------|
| Max. Torque | 2800 in-lb |
| No-load Speed | 0-2800 RPM |
| Impact Rate | 0-3300 BPM |
| Collet Capacity | Hex 1/4" (6.4 mm) |

^{*}Maximum battery voltage without workload; with workload nominal voltage is 18V.

Recommend using tool with Mastercraft® 20V max* Lithium-lon 4.0 Ah battery (054-7557-6; sold separately) for optimal performance.

SAFETY GUIDELINES:



WARNING!

Safety symbols in this Instruction Manual are used to flag possible dangers. The safety symbols and their explanations require your full understanding. The safety warnings do not, by themselves, eliminate any danger, nor are they substitutes for proper accident prevention measures.



WARNING!

This Safety Alert Symbol indicates caution, warning, or danger. Failure to obey a safety warning can result in serious injury to yourself or others. To reduce the risk of injury, fire, or electric shock, always follow the safety precautions.

KNOW YOUR TOOL

To operate this tool, carefully read this Instruction Manual and all labels affixed to the cordless impact driver before using. Keep this instruction manual available for future reference.

IMPORTANT

This tool should only be serviced by a qualified service technician. For more information, call the toll-free helpline at 1-800-689-9928.

READ ALL INSTRUCTIONS THOROUGHLY.

SAVE THESE INSTRUCTIONS.

GENERAL POWER TOOL SAFETY WARNINGS



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.

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 ground fault circuit interrupter (GFCI) protected supply. Use of an GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- Use personal protective equipment. Always wear eye protection. Protective equipment such as a 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 and clothing 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 dustrelated 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 (265°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.

IMPACT DRIVER SAFETY WARNINGS

Volte

SAFETY INSTRUCTIONS FOR ALL OPERATIONS

Hold the power tool by insulated gripping surfaces when performing an operation
where the fastener may contact hidden wiring or its own cord. Fasteners contacting a
"live" wire may make exposed metal parts of the power tool "live" and could give the operator an
electric shock.

ADDITIONAL SAFETY GUIDELINES FOR CORDLESS IMPACT DRIVER

 The label on your tool may include the following symbols. The symbols and their definitions are as follows:

| • | 10.10 |
|----------------|--|
| A | Amperes |
| Hz | Hertz |
| W | Watts |
| min | Minutes |
| \sim | Alternating current |
| === or d.c | Direct current |
| n ₀ | No-load speed |
| <u> </u> | Class II Construction |
| /min | Revolutions or reciprocation per minute |
| € | Grounding terminal |
| BPM | Revolutions per minute |
| RPM | Beats per minute |
| & | WARNING – To reduce the risk of injury, user must read instruction manual. |

SAFETY GUIDELINES

WARNING – To reduce the risk of injury always wear eye protection.

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WARNING – To reduce the risk of injury always wear ear protection.

- **Secure the workpiece.** Clamping devices or a vise will hold the workpiece in place better than the hand.
- Always wait until the tool has come to a complete stop before placing it down. The tool insert can jam, which can lead to loss of control.
- Always set the rotational direction switch to centre position before performing any kind of work on the machine (e.g., maintenance, tool change, etc.), and when transporting and storing it. Unintentional activation of the On/Off switch may result in personal injury.
- Wear ear protectors when using the impact driver. Exposure to noise can cause hearing loss.
- Use protective gloves when removing the bit from the tool, or allow the clamp to cool **down first.** The bit may be not after prolonged use.
- Use protective gloves when operating the tool. Protective gloves can help to keep you from being burnt and hurt.
- **Keep your hands away from the motor housing yents.** Hot gas comes from the vents during operation.
- Release the trigger immediately when the screw is tightened to avoid breaking the screw.



WARNING!

To reduce the risk of electric shock or damage to the charger and battery, use only the Mastercraft® batteries and chargers listed.

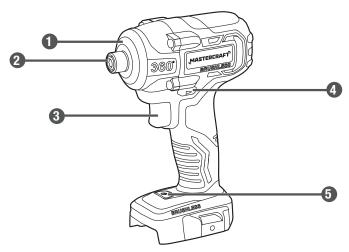
| BATTERY PACK | CHARGER |
|--|------------------------|
| 054-3124-0, 054-7553-4, 054-7557-6, 054-2434-8 | 054-3126-6, 054-7559-2 |

For best results, your battery tool should be stored and used in a location where the temperature is more than 5°C (41°F) but less than 40°C (104°F). Do not store outside or in vehicles.

PACKAGE CONTENTS:

Cordless impact driver, 1 belt clip, 1 bit holder, 2 single-ended screwdriver bits, and instruction manual.

KEY PARTS DIAGRAM



| No. | Description |
|-----|-------------------------------|
| 1 | LED worklight |
| 2 | Sleeve |
| 3 | Variable-speed trigger switch |

| No. | Description |
|-----|--------------------------------|
| 4 | Direction-of-rotation selector |
| 5 | LED-worklight switch |

Before attempting to use this tool, become familiar with all of its operating features and safety requirements. For optimum performance and safety, read the following operating instructions carefully before using.



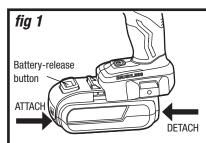
WARNING!

- Remove the cordless impact driver from the package and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.
- If any part of the impact driver is missing or damaged, do not attach the battery pack to the tool or use the
 tool until the part has been repaired or replaced. Failure to heed this warning could result in serious injury.
- Do not let familiarity with the cordless impact driver to cause a lack of alertness. A fraction of a second of carelessness is enough to cause severe injury.

OPERATING INSTRUCTIONS

TO ATTACH BATTERY PACK (fig 1)

- Lock the variable-speed trigger switch on the impact driver by placing the direction-of-rotation selector (forward/centre-lock/reverse) in the centre position.
- Align the raised rib on the battery pack with the grooves of the impact driver, and then attach the battery pack to the impact driver.
- 3. Make sure that the latch on the battery pack snaps into place, and that the battery pack is attached securely to the tool before beginning operation.



TO DETACH THE BATTERY PACK (fig 1)

- Lock the variable-speed trigger switch on the impact driver by placing the direction-of-rotation selector (forward/centre-lock/reverse) in the centre position.
- 2. Depress the battery-release button, located on the front of the battery pack, to release the battery pack.
- 3. Pull the battery pack out and remove it from the tool.

NOTICE: When placing a battery pack on the tool, be sure that the raised rib on the battery pack aligns with the groove on the cordless impact driver and the latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.

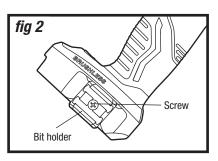


WARNING!

To avoid the possibility of accidental starting, always take care to lock the variable-speed trigger switch by placing the direction-of-rotation selector in the centre (locked) position when you are attaching the battery pack or performing other adjustments to the tool.

INSTALL THE BIT HOLDER (fig 2)

- 1. Remove the battery from the tool.
- Align the rib of the bit holder with the hole on the base of the cordless impact driver.
- Insert the screw (included) and tighten the screw securely with a screwdriver (not included). The bit holder can be positioned on either side of the tool.

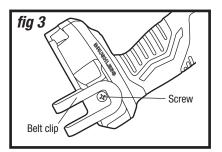


REMOVE THE BIT HOLDER (fig 2)

- 1. Remove the battery from the tool.
- Use a screwdriver (not included) to loosen the screw that attaches the bit holder to the cordless impact driver.
- 3. Remove the screw and the bit holder.

INSTALL THE BELT CLIP (fig 3)

- 1. Remove the battery from the tool.
- 2. Align the rib of the clip with the hole on the base of the cordless impact driver.
- Insert the screw (included) and tighten the screw securely with a screwdriver (not included). The belt clip can be positioned on either side of the tool.



REMOVE THE BELT CLIP (fig 3)

- 1. Remove the battery from the tool.
- Use a screwdriver (not included) to loosen the screw that attaches the belt clip to the cordless impact driver.
- 3. Remove the screw and the belt clip.

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Variable-speed

trigger switch

TRIGGER SWITCH (fig 4)

- 1. To turn the impact driver ON, depress the variable-speed trigger switch.
- 2. To turn it OFF, release the variable-speed trigger switch.

VARIABLE SPEED (fig 4)

The variable-speed trigger switch delivers higher speed with increased trigger pressure and lower speed with decreased trigger pressure.

DIRECTION-OF-ROTATION **SELECTOR** (fig 5)

The direction of rotation of the bit is reversible and is controlled by a selector located above the variablespeed trigger switch. With the impact driver held in normal operating position:

of the tool for forward rotation

Position the direction-of-rotation selector to the right of the tool for reverse rotation.

Position the direction-of-rotation selector in the centre to lock the tool off.

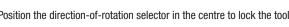
Position the direction-of-rotation selector to the left Forward Reverse

fia 4

Direction-of-

fig 5

rotation selector



ELECTRIC BRAKE

To stop the impact driver, release the variable-speed trigger switch and allow the tool to come to a complete stop. The electric brake quickly stops the rotation. This feature engages automatically when you release the variable-speed trigger switch.

NOTICE:

- To prevent gear damage, always allow the impact driver to come to a complete stop before changing the direction of
- The impact driver will not run unless the direction-of-rotation selector is engaged fully to the left or to the right.

LED WORKLIGHT (fig 6)

The LED worklight, located in the front of the cordless impact driver, will illuminate when the variable-speed trigger switch is depressed and will automatically turn off about 10 seconds after the variable-speed trigger switch is released. This provides increased visibility in dark places.

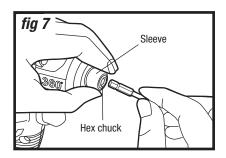
The LED worklight can also be separately controlled by the LED-worklight switch. The LED worklight will illuminate when the LED-worklight switch is pressed



and will turn off when it is pressed again. The LED worklight will illuminate for up to 20 minutes after turning on the LED-worklight switch.

INSTALLING A DRIVER BIT OR SOCKET BIT (fig 7)

- Lock the variable-speed trigger switch by placing the direction-of-rotation selector in the OFF (centre) position.
- 2. With one hand, pull the sleeve toward the front of the tool and hold it in place.
- 3. With the other hand, insert a 1/4" (6.4 mm) bit into the hex chuck in the bit retainer.
- 4. Release the sleeve and verify that it returns to its original position.



REMOVING A DRIVER BIT OR SOCKET BIT (fig 7)

- Lock the variable-speed trigger switch by placing the direction-of-rotation selector in the OFF (centre) position.
- 2. Pull the sleeve toward the front of the tool and hold it in place.
- 3. Remove the bit from the hex chuck in the bit retainer.
- 4. Release the sleeve.



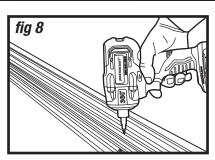
- If the sleeve does not return to its original position, the bit is not correctly installed. Retry until the bit is properly installed.
- Only use sockets designed for impact drivers. Sockets not designed for impact drivers could break and result
 in user injury. Inspect sockets prior to use to ensure that they have no cracks or other visible damage.
- Use protective gloves when removing the bit from the tool or allow the bit to cool down first. The bit may be hot after prolonged use.

TIGHTENING SCREWS OR NUTS (fig 8/fig 9)

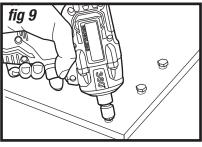
- 1. Install the correct bit/socket.
- 2. Position the direction-of-rotation selector to the left of the tool for forward rotation.
- 3. Apply just enough pressure to keep the bit/ socket engaged on the screw or nut.
- 4. Apply minimal pressure to the variable-speed trigger switch initially. Increase the speed only when full control can be maintained.

LOOSENING SCREWS AND NUTS (fig 8/fig 9)

- 1. Install the correct bit/socket.
- 2. Position the direction-of-rotation selector to the right of the tool for reverse rotation.
- 3. Apply just enough pressure to keep the bit/ socket engaged on the screw or nut.
- 4. Apply minimal pressure to the variable-speed trigger switch initially. Increase the speed only when full control can be maintained.



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TIGHTENING TOROUE

The fastening torque is affected by a wide variety of factors, including the those listed below. After fastening, always check the torque with a torque wrench.

Voltage: Low voltage, due to a nearly discharged battery, will reduce fastening torque.

Socket size: Failure to use the correct socket size will cause a reduction in fastening torque.

Bolt size: Larger bolt diameters generally require higher fastening torque. Fastening torque will also vary according to length, grade, and torque coefficient.

Bolt: Ensure that all threads are free of rust and other debris to allow proper fastening torque.

Material: The type of material and surface finish of the material will affect fastening torque.

NOTICE: Before starting your job, always perform a test operation to determine the proper fastening time.



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MAINTENANCE

BEFORE EACH USE:

- Inspect the cordless impact driver, the variable-speed trigger switch, and the battery pack for damage.
- 2. Check for damaged, missing, or worn parts.
- Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
- If abnormal vibration or noise occurs, turn the tool off immediately and have the problem corrected before further use. Remove the battery from the power tool before cleaning or performing any maintenance.

CLEANING

Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools using compressed air.

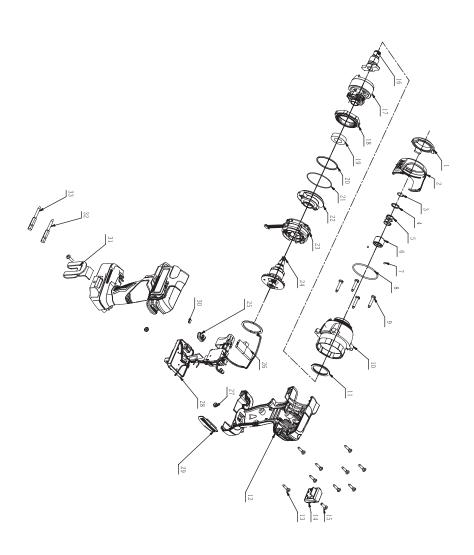


- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc., come into contact with
 plastic parts. These substances contain chemicals that can damage, weaken, or destroy plastic.
- When servicing, use only identical replacement parts. The use of any other parts may create a hazard or
 cause damage to the product.
- Use only accessories that are recommended for this cordless impact driver by the manufacturer. Accessories
 that may be suitable for one tool may become hazardous when used with another tool.
- To ensure safety and reliability, all repairs should be performed by a qualified service technician.

TROUBLESHOOTING

| Problem | Possible Causes | Solution |
|------------------------------|---|---|
| The bit council be installed | The sleeve is not released. | Release the sleeve. |
| The bit cannot be installed. | The bit does not fit the sleeve. | Use a suitable bit. |
| The motor overheats. | Be sure the cooling vents are free of dust and obstacles. | Clean and clear vents. Do not cover with hand during operation. |
| The impact driver does | The battery is depleted. | Charge the battery. |
| not work. | The tool is overheated. | Allow the tool to cool down. |

If the problem remains unsolved after performing the checks described above, call the toll-free helpline at 1-800-689-9928.



| No. | Part No. | Description | No. | Part No. | Description |
|-----|------------|-----------------------------|-----|------------|-------------------|
| 1 | 3127567000 | LED Cover | 18 | 3520984000 | Ring Gear |
| 2 | 3130018000 | Decorative Cover | 19 | 5700181000 | Bearing |
| 3 | 5660035000 | Circlips For Shaft | 20 | 5690271000 | Rubber Ring |
| 4 | 5650192000 | Washer | 21 | 5690357000 | 0 Ring |
| 5 | 3660177000 | Spring | 22 | 3129083000 | Rear Gear Housing |
| 6 | 3551835000 | Bush | 23 | 2740401000 | Stator |
| 7 | 5700178000 | Steel Ball | 24 | 2826357000 | Rotor Assembly |
| 8 | 5660274000 | C Ring | 25 | 3129915000 | Button |
| 9 | 5610284000 | Tapping Screw | 26 | 3127732000 | F/R Button |
| 10 | 2826340000 | Front Gear Housing Assembly | 27 | 5630231000 | Nut |
| 11 | 5650501000 | Washer | 28 | 2830485000 | Electric Assembly |
| 12 | 3900145000 | L R Housing set | 29 | 3129854000 | Logo |
| 13 | 5610225000 | Hexagon Lobuar Screw | 30 | 3121038000 | Rubber Stick |
| 14 | 3321321000 | Bit Holder | 31 | 3705301000 | Hook |
| 15 | 5620040000 | Screw | 32 | 3810426000 | Screw Bit |
| 16 | 3552639000 | Output Shaft | 33 | 3810429000 | Screw Bit |
| 17 | 2825806000 | Impact Block Assembly | | | |

If any parts are missing or damaged, or if you have any questions, please call the toll-free helpline at 1-800-689-9928.

This Mastercraft product is guaranteed for a period of **3 years from the date of original retail purchase** against defects in workmanship and materials, except for the following components:

- a) Component A: Batteries, chargers and carrying case, which are guaranteed for a period of 2 years from the date of original retail purchase against defects in workmanship and materials;
- b) Component B: Accessories, which are guaranteed for a period of 1 year from the date of original retail purchase against defects in workmanship and materials.

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 our option. 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;
- 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) or which is being
 used for industrial, professional, commercial or rental purposes:
- this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product that are expected to become inoperative or unusable after a reasonable period of use;
- d) 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, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e., persons not authorized by the manufacturer);
- 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);
- g) 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;
- 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

 this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional Limitations

This warranty applies only to the original purchaser and may not be transferred. Neither the retailer 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.

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.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8