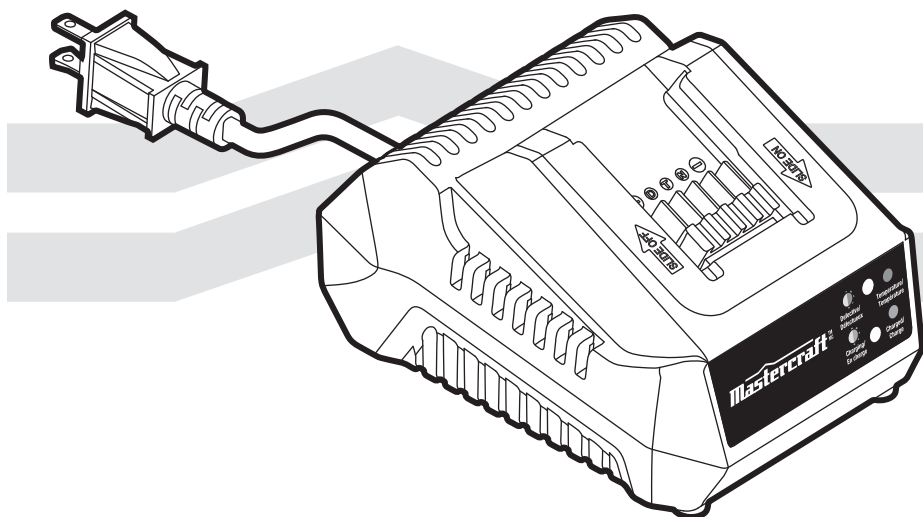


# Mastercraft™



INSTRUCTION MANUAL

## 20V max\* LITHIUM-ION BATTERY CHARGER

054-3126-6

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



Read and understand this instruction manual thoroughly before using the product. It contains important information for your safety as well as operating and maintenance advice.

Keep this instruction manual for future use. Should this product be passed on to a third party, then this instruction manual must be included.



<b>TECHNICAL SPECIFICATIONS</b>	<b>3</b>
<b>SAFETY GUIDELINES</b>	<b>4–8</b>
<b>DESCRIPTION</b>	<b>9</b>
<b>OPERATING INSTRUCTIONS</b>	<b>10–12</b>
<b>MAINTENANCE</b>	<b>13</b>
<b>TROUBLESHOOTING</b>	<b>14</b>
<b>PARTS LIST</b>	<b>15</b>
<b>WARRANTY</b>	<b>16–17</b>

CHARGER INPUT	120V ~ 60Hz 45W
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CHARGING TIMES FOR BATTERIES	054-3124-0: 60 min
	054-3125-8: 120 min

CHARGER WEIGHT	1 lb (0.45kg)
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OPTIMUM CHARGING TEMPERATURE RANGE	5-40°C (41-104°F)
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**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 Charger before using it. 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 and instructions. Failure to follow the warnings and instructions 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 the 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 adapter 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 the 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 a 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 tool while 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 that the switch is in the off-position before connecting to a power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or plugging in 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 jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

## 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 more safely 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 the battery pack 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.** 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, tool bits, etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## Battery tool use and care

- **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.** The use of any other battery pack may create a risk of injury and fire.
- **When the battery pack is not in use, keep it away from other metal objects, such as 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 occurs, flush with water. If liquid comes into contact with the eyes, seek medical help. Liquid ejected from the battery may cause irritation or burns.

## Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

## Important safety instructions



### WARNING!

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.



### CAUTION!

To reduce the risk of electric shock or damage to the charger and the battery, charge only recommend rechargeable batteries as specifically designated on your charger. Other types of batteries may burst, causing personal injury or damage.

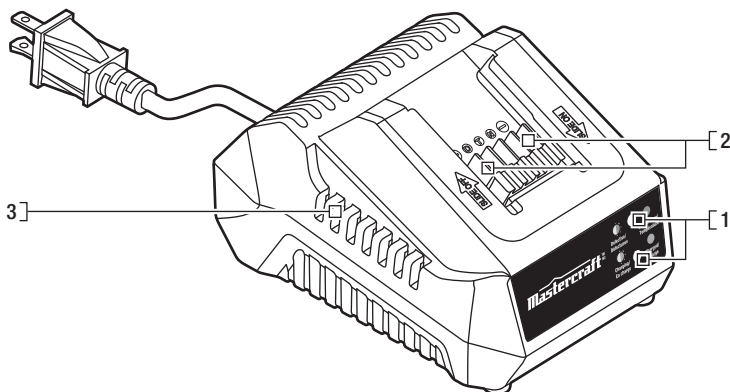
- **For indoor use only.**
- **Dry location use only.**
- **Risk of fire and electric shock.**
- **Risk of injury.**
- **SAVE THESE INSTRUCTIONS** – This manual contains important safety and operating instructions for battery charger Model 054-3126-6.
- Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.
- **CAUTION** – To reduce risk of injury, **charge only Mastercraft® 054-3124-0, 054-3125-8 20V Rechargeable Battery Packs.** Other types of battery packs may burst, causing injury to persons and damage.
- To reduce risk of battery explosion, follow these instructions and those marked on the battery.
- Never charge a frozen battery.
- Do not operate charger in a closed-in area or restrict ventilation in any way.
- **Do not use the charger outdoors or expose it to wet or damp conditions.** Water entering the charger will increase the risk of electric shock.



- **Use of an attachment not recommended or sold by the battery-charger manufacturer may result in a risk of fire, electric shock or injury to persons.**
- **Do not abuse the cord or charger.** Never use the cord to carry the charger. Do not pull the charger cord to disconnect the plug from a receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.
- **Make sure that the cord is located so that it will not be stepped on or tripped over, come in contact with sharp edges or moving parts, or otherwise be subjected to damage or stress.** This will reduce the risk of accidental falls, which could cause injury and damage to the cord, which could then result in electric shock.
- **Keep the cord and charger away from heat to prevent damage to the housing or internal parts.**
- **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.
- **Do not operate the charger with a damaged cord or plug, which could cause shorting and electric shock.** If damaged, have the charger repaired or replaced by a qualified service technician.
- **Do not operate the charger if it has received a sharp blow, been dropped, or has otherwise been damaged in any way.** Take it to a qualified service technician for an electrical check to determine if the charger is in good working order.
- **Do not disassemble the charger.** Take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.
- **Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.**
- **Disconnect the charger from the power supply when it is not in use.** This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It will also help prevent damage to the charger during a power surge.
- **Risk of electric shock. Do not touch the uninsulated portion of the output connector or uninsulated battery terminal.**
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

## Contents

Battery Charger, Instruction Manual

**Know your 20V max\* lithium-ion battery charger**

No.	Description	No.	Description
1	LED lights	3	Air vents
2	Electric contacts		

Before attempting to use the charger, familiarize yourself with all of its operating features and safety requirements.

**WARNING!**

Do not allow familiarity with the charger to cause carelessness. Remember that one careless moment is enough to cause severe injury. Before attempting to use any tool, be sure to become familiar with all of the operating features and safety instructions.

## When to charge the battery pack

The Lithium-Ion battery pack can be charged at any time and will not develop a “memory” when charged after only a partial discharge. It is not necessary to run down the battery pack charge before recharging.

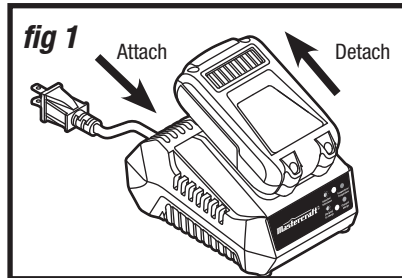
Remove the battery pack from the tool and recharge it when it is convenient for you and your job.

- You can “top-off” your battery pack’s charge before starting a big job or a long period of use.
- Due to Lithium-Ion’s fade-free properties, the only time it is necessary to charge the Lithium-Ion battery pack is when the pack has reached the end of its charge. To signal the end of charge, power to the tool will drop quickly. Charge the battery pack as needed.





## How to charge the battery pack (fig 1)

A fully discharged battery pack will charge in about 60-120 minutes, depending on the battery, at a temperature between 5-40°C (41-104°F).

1. Charge the battery pack with the correct charger.
2. Connect the charger to a power supply.
3. Attach the battery pack to the charger by aligning the raised ribs of the battery pack with the slot in the charger. Slide the battery pack onto the charger (fig 1).
4. The charger will communicate with the battery pack circuitry to evaluate the condition of the battery pack.
5. The green LED light will flash continuously during normal charging.
6. After charging is complete, the green LED on the charger will remain on.
7. The battery pack will fully charge, but will not overcharge, if left on the charger.



## LED functions of charger (fig 2)

LED Indicator	Battery Pack	Red LED	Green LED	Action
 Temperature	Hot/Cold battery	On	Off	Fast charge will begin when battery returns to between 5-40°C (41-104°F)
 Defective	Defective	Flashing	Off	Battery pack or charger is defective
 Charging	Charging	Off	Flashing	Charging
 Charged	Fully charged	Off	On	Charging is complete

### Charging a hot battery pack

If the battery pack is above the normal temperature range, the red LED will illuminate and the green LED will be off. When the battery pack cools down to approximately 104°F (40°C), the charger will automatically begin charging.

### Charging a cold battery pack

If the battery pack is below the normal temperature range, the red LED will illuminate and the green LED will be off. When the battery warms to a temperature of more than 41°F (5°C), the charger will automatically begin charging.

### Defective battery

If the charger detects a problem, the red LED will begin flashing and the green LED will be off.

1. If registering as defective, remove and reinsert the battery pack in the charger. If the LED status reads “defective” a second time, try to charge a different battery pack.
2. If a different battery pack charges normally, dispose of the defective battery pack (see Maintenance section).
3. If a different battery pack also indicates “defective,” the charger may be defective.

### Battery charging

If the battery pack is within the normal temperature range, the green LED will begin flashing and the red LED will be off.

## Battery full

After the battery is fully charged, the green LED light on the charger will be on and the red LED light will be off.

**NOTICE:** The battery pack will fully charge, but will not overcharge, if left on the charger.

**NOTICE:** Charger may warm with several continuous charge cycles. This is part of the normal operation of the charge. Always charge in a well-ventilated area.

# 13

## MAINTENANCE



### **WARNING!**

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



### **WARNING!**

When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.



### **WARNING!**

To avoid serious personal injury, always remove the battery pack from the tool when cleaning it or performing any maintenance.



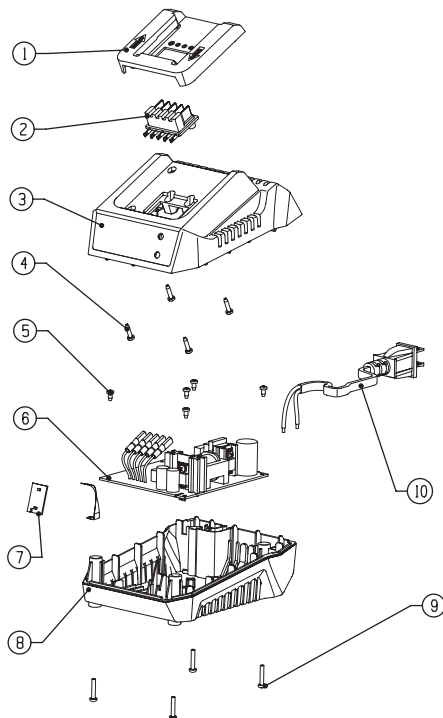
### **WARNING!**

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.

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The battery pack isn't charging	The battery pack is not connected to the charger	Attach the battery pack to the charger again

**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	3125529000	Drive Bracket	6	4890750000	PCB Assembly
2	2823639000	Wiring Harness Assembly	7	4890721000	PCB Assembly
3	3125527000	Upper Housing	8	3125528000	Lower Housing
4	5610012000	Tapping Screw	9	5610218000	Screw
5	5610016000	Tapping Screw	10	4810002000	Power Cord & Plug

**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 **two (2) years from the date of original retail purchase** against defects in materials and workmanship, 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 the purchase date must be provided;
- b) this warranty will not apply to any product or part thereof that is worn or broken or that 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 that is being used for industrial, professional, commercial or rental purposes;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product and 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, including 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;
- h) this warranty will not apply to normal deterioration of the exterior finish, including but not limited to scratches, dents, paint chips, or to any corrosion or discolouring caused by heat, abrasive and chemical cleaners; and
- i) 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**

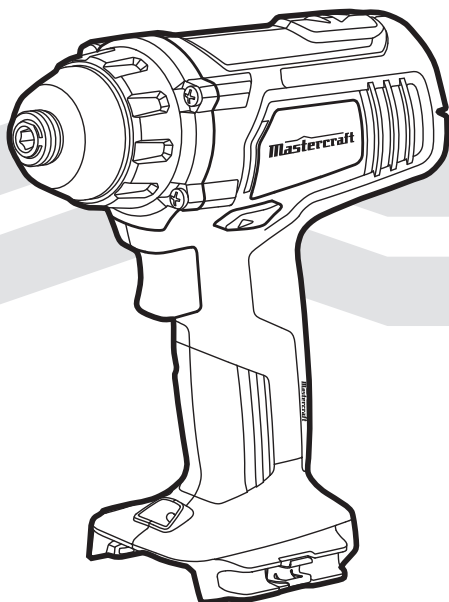
This warranty applies only to the original purchaser and cannot be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including but not limited to any indirect, incidental, consequential or exemplary damages arising in connection with the sale, use or inability to use this product.

### **Notice to the 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.

**IMPORTED BY MASTERCRAFT CANADA TORONTO, CANADA M4S 2B8**

# ***Mastercraft***™



INSTRUCTION MANUAL

## **20V max\* LITHIUM-ION CORDLESS IMPACT DRIVER**

054-3175-8

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



Read and understand this instruction manual thoroughly before using the product. It contains important information for your safety as well as operating and maintenance advice.

Keep this instruction manual for future use. Should this product be passed on to a third party, then this instruction manual must be included.



<b>TECHNICAL SPECIFICATIONS</b>	<b>3</b>
<b>SAFETY GUIDELINES</b>	<b>4–8</b>
<b>DESCRIPTION</b>	<b>9</b>
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<b>TROUBLESHOOTING</b>	<b>16</b>
<b>PARTS LIST</b>	<b>17–18</b>
<b>WARRANTY</b>	<b>19–20</b>

MOTOR	20V DC
NO-LOAD SPEED	0–2500 RPM
IMPACT RATE	0–3200 BPM
COLLET CAPACITY	Hex 1/4" (6.35 mm)
MAX. TORQUE	1400 in-lb
TOOL WEIGHT (WITHOUT BATTERY)	2 lb 12 oz (1.22 kg)
BATTERY TYPE	Lithium-Ion
BATTERY VOLTAGE	20V max* DC
CHARGE INPUT	120V, 60 Hz AC only
OPTIMUM CHARGING TEMPERATURE	0–40°C (32–104°F)

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

**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 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 and instructions. Failure to follow the warnings and instructions 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 the 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 adapter plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce the 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 the 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 a 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 the tool while 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 that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

## 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 more safely 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 the battery pack 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. 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, tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## Battery tool use and care

- **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 designed 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, also seek medical help. Liquid ejected from the battery may cause irritation or burns.

## Service

- Have your power tool serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the power tool is maintained.

## Safety guidelines for cordless impact driver

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

Battery pack	Charger
054-3124-0	054-3126-6
054-3125-8	

- Hold power tools by insulated gripping surfaces when performing an operation where the tool may contact hidden wiring or its own cord. Contact with a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- The label on your tool may include the following symbols. The symbols and their definitions are as follows:

V ..... Volts

A ..... Amperes

Hz ..... Hertz

W ..... Watts

min ..... Minutes

~ ..... Alternating current

— — — ..... Direct current

$n_0$  ..... No-load speed

 ..... Class II Construction

.../min ..... Revolutions per minute



..... Grounding terminal

BPM ..... Beats per minute



..... WARNING – To reduce the risk of injury, user must read instruction manual.

- **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 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 the screw is tightened to avoid breaking the screw.**

## Contents:

Cordless impact driver, 2 single ended bits, nylon tote and instruction manual.



### WARNING!

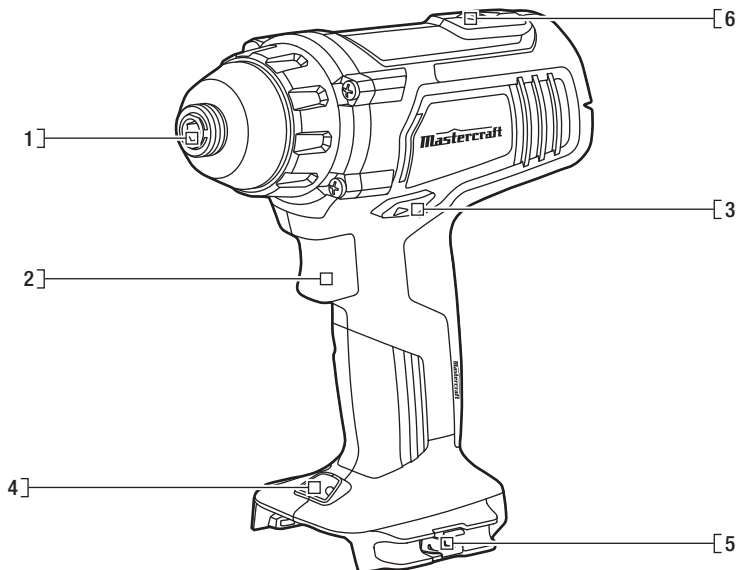
Remove the cordless impact driver from the package and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.



### WARNING!

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.

## Know your tool



No.	Description	No.	Description
1	Sleeve	4	LED Worklight
2	Variable-speed Trigger Switch	5	Bit Clip
3	Direction-of-rotation Selector	6	Forward/reverse LED indicator

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!**

Do not allow 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.

## To attach the battery pack (fig 1)

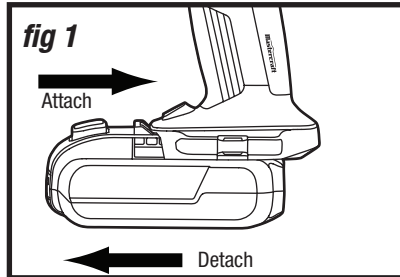


### WARNING!

To avoid the possibility of accidental starting, always take care not to activate the trigger switch when you are attaching the battery pack or performing other adjustments to the tool.

1. Lock the trigger switch on the impact driver by placing the direction-of-rotation selector (forward/centre lock/reverse) in the centre position.
2. 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.

**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.



## To detach the battery pack (fig 1)

1. Lock the 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.

## Trigger switch (fig 2)

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

## Direction-of-rotation selector (forward/centre lock/reverse) (fig 2-4)

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

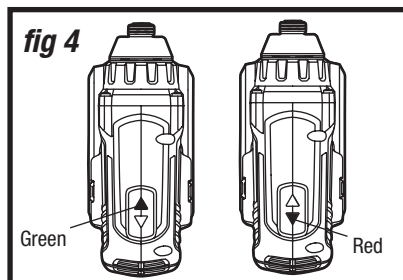
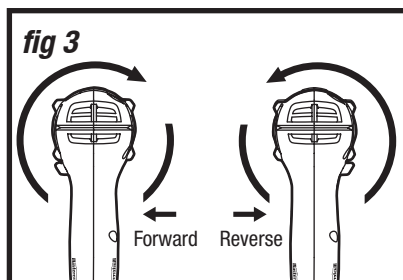
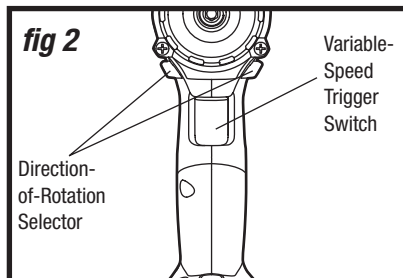
Position the direction-of-rotation selector to the left of the tool for forward rotation. The forward/reverse LED indicator on the impact driver will shine green (fig 4).

Position the direction-of-rotation selector to the right of the tool for reverse rotation. The forward/reverse LED indicator on the impact driver will shine red (fig 4).

Position the switch in the OFF (centre lock) position helps reduce the possibility of accidental starting when not in use.

**NOTICE:** To prevent gear damage, always allow the impact driver to come to a complete stop before changing the direction of rotation.

**NOTICE:** The impact driver will not run unless the direction-of-rotation selector is engaged fully to the left or right.

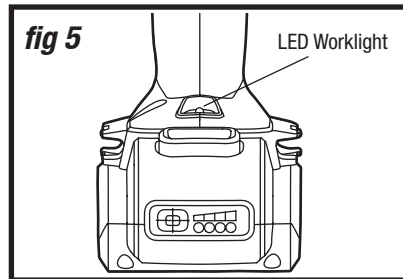


## Electric brake

To stop the impact driver, release the 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 trigger switch.

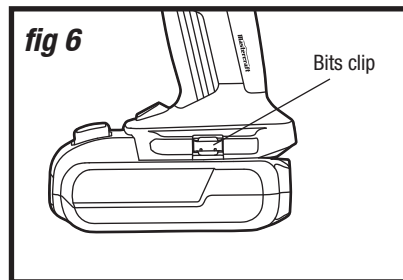
## LED worklight (fig 5)

The LED worklight, located on the base of the impact driver, will illuminate when the trigger switch is depressed. The LED worklight will turn off when the trigger switch is released.



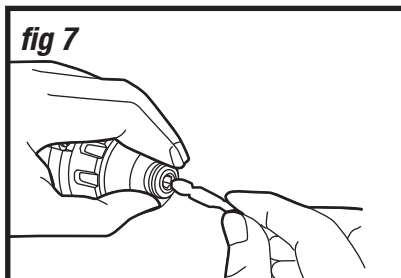
## Bit storage (fig 6)

When not in use, a bit may be stored on either side of the cordless impact driver by snapping it into place in the bit clip.



## Installing a driver bit or socket bit *(fig 7)*

1. Lock the 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 the 1/4" (6.35 mm) bit into the hexagonal hole in the bit retainer.
4. Release the sleeve, and verify that it returns to its original position.



### **WARNING!**

If the sleeve does not return to its original position, the bit is not correctly installed. Retry until the bit is properly installed.



### **WARNING!**

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.

## Removing a driver bit or socket bit *(fig 7)*

1. Lock the 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 hexagonal hole in the bit retainer.
4. Release the sleeve.



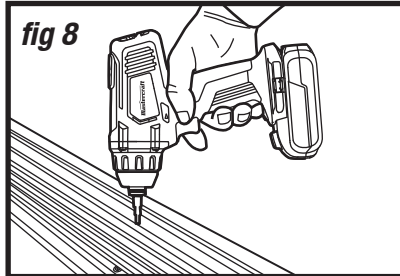
### **WARNING!**

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)

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



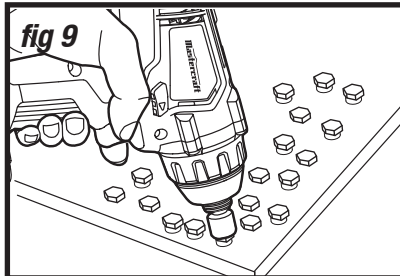
#### WARNING!

Do not over-tighten, because the force of the impact driver can break the fastener. Keep the impact driver pointed straight at the fastener to avoid damaging the fastener head.

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

### Loosening screws and nuts (fig 9)

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



### Tightening torque

The fastening torque is affected by a wide variety of factors including the following. 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.

**Before each use**

1. Inspect the cordless impact driver, the trigger switch, and the battery pack for damage.
2. Check for damaged, missing, or worn parts.
3. Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
4. 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. Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools using compressed air.

**WARNING!**

Do not allow 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.

**WARNING!**

When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.

**WARNING!**

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.

**WARNING!**

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

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The impact driver does not work	The battery is depleted	Charge the battery
The bit cannot be installed	The sleeve is not released	Release the sleeve
	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

**WARNING!**

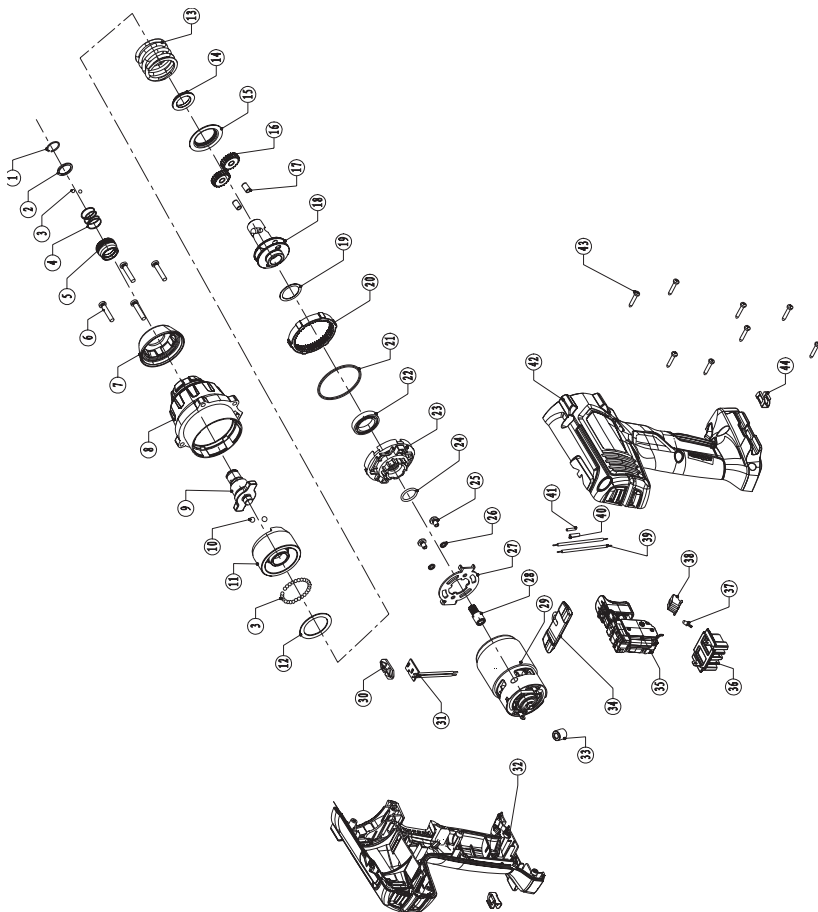
Turn the trigger switch to the “OFF” (centre) position and remove the battery from the power tool before performing troubleshooting procedures.

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

# 17

## PARTS LIST

### Exploded view



No. Part No.	Description	No. Part No.	Description
1 5660035000	Circlips For Shaft	23 3126562000	Rear Gear Housing
2 5650192000	Washer	24 5690007000	O Ring
3 5700178000	Steel Ball	25 5620037000	Screw
4 3660177000	Spring	26 5650007000	Spring Washer
5 3550606000	Bushing	27 3703951000	Bracket
6 5610106000	Tapping Screw	28 3520658000	Pinion
7 3126543000	Cover	29 2730195000	DC Motor
8 3421381000	Front Gear Housing	30 3126503000	Lens
9 3551807000	Spindle	31 4890709000	PCB Assembly
10 5700226000	Steel Ball	32 3321620000	Left Housing Assembly
11 3551809000	Impact Block	33 3680140000	Magnet Ring
12 5650430000	Washer	34 3126501000	F/R Button
13 3660528000	Compression Spring	35 4870452000	Trigger Switch
14 5690274000	Rubber Ring	36 3402385000	Contact Receptacle Assembly
15 5650163000	Spring Washer	37 4360225000	LED
16 3520657000	Planet Gear	38 3126500000	LED Cover
17 5670319000	Torque Pin	39 4860003000	Inner Wire
18 3551808000	Spindle	40 4920154000	Shrinkable Tube
19 5650429000	Washer	41 4920158000	Shrinkable Tube
20 3520656000	Ring Gear	42 3321616000	Right Housing Assembly
21 5690142000	O Ring	43 5610013000	Tapping Screw
22 5700179000	Bearing	44 3703673000	Bits Holder

**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 **three (3) years from the date of original retail purchase** against defects in materials and workmanship, 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;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which 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;
- h) 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
- i) 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**

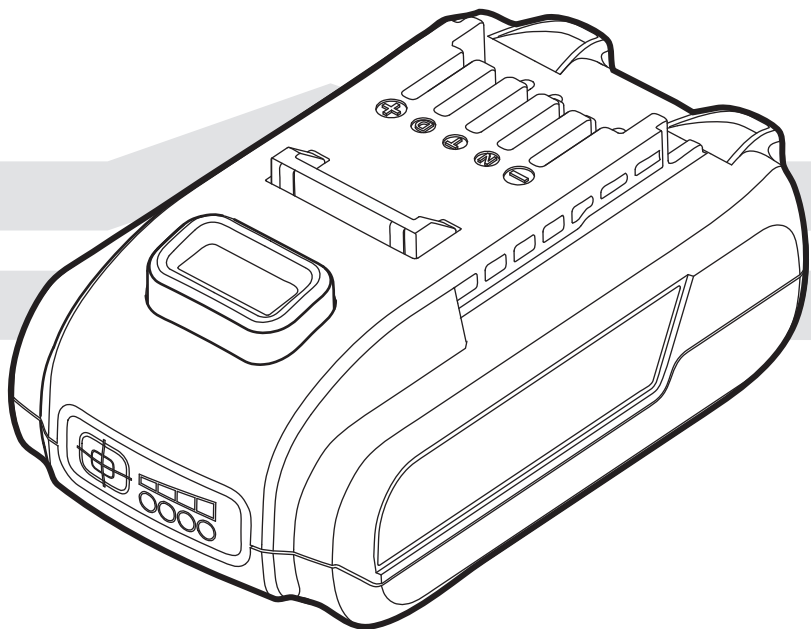
This warranty applies only to the original purchaser and may not be transferred. Neither the retailer nor the manufacturer shall be liable for any other expense, loss or damage, including, without limitation, any indirect, incidental, consequential or exemplary damages arising in connection with the 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.

**IMPORTED BY MASTERCRAFT CANADA TORONTO, CANADA M4S 2B8**

# ***Mastercraft***<sup>TM</sup>



INSTRUCTION MANUAL

## **20V max\* (1.5 AH) LITHIUM-ION RECHARGEABLE BATTERY**

054-3124-0



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



Read and understand this instruction manual thoroughly before using the product. It contains important information for your safety as well as operating and maintenance advice.

Keep this instruction manual for future use. Should this product be passed on to a third party, then this instruction manual must be included.



<b>TECHNICAL SPECIFICATIONS</b>	<b>3</b>
<b>SAFETY GUIDELINES</b>	<b>4–6</b>
<b>DESCRIPTION</b>	<b>7</b>
<b>OPERATING INSTRUCTIONS</b>	<b>8–10</b>
<b>MAINTENANCE</b>	<b>11–12</b>
<b>PARTS LIST</b>	<b>13</b>
<b>WARRANTY</b>	<b>14–15</b>

BATTERY TYPE	Lithium-Ion
BATTERY PACK VOLTAGE	20V max* DC
CAPACITY	1.5 Ah
CHARGE TIME	60 min.
BATTERY PACK WEIGHT	15 oz (0.43 kg)
BATTERY CHARGER	054-3126-6 5331

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

## Rules for safe operation

### Know your tool

To operate this tool, carefully read this Instruction Manual and all labels affixed to the battery pack 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

### Safety guidelines for power tools



#### **WARNING!**

**Read all safety warnings and all instructions.** Failure to follow all warnings and instructions 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 the 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

- **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.

## 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 the 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, also seek medical help. Liquid ejected from the battery may cause irritation or burns.

## Service

- **Have your battery pack serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

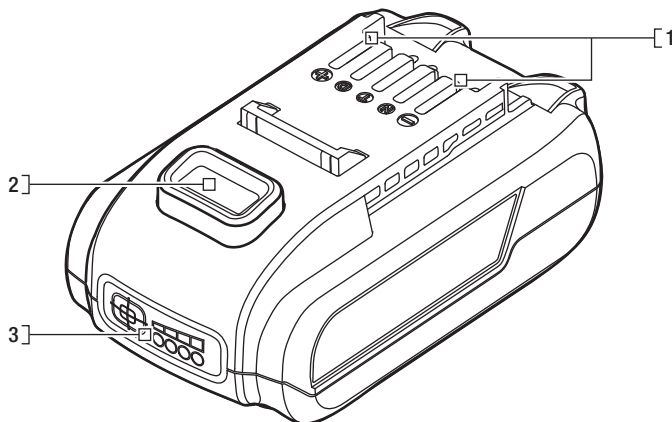
## Specific safety guidelines for battery pack

**USE THIS BATTERY PACK ONLY WITH THE CHARGER LISTED.**

BATTERY PACK	CHARGER
054-3124-0	054-3126-6/5331

- **Know your power tool.** Read the Instruction Manual carefully. Learn the tool's applications and limitations, as well as the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire, or serious injury.
- **Do not place the battery near fire or heat.** This will reduce the risk of explosion and possible injury.
- **Do not crush, drop or damage the battery pack.** Do not use a battery pack or charger that has been dropped or received a sharp blow. A damaged battery is subject to explosion. Properly dispose of a dropped or damaged battery immediately.
- **Batteries vent hydrogen gas and can explode in the presence of a source of ignition, such as a pilot light.** To reduce the risk of serious personal injury, never use any cordless product in the presence of an open flame. An exploded battery can propel debris and chemicals. If exposed, flush with water immediately.
- **Do not charge the battery pack in a damp or wet location.** Following this rule will reduce the risk of electric shock.
- **For best results, your battery pack should be charged in a location where the temperature is more than 0°C (32°F) but less than 40°C (104°F).** Do not store the battery pack outside or in vehicles.
- **Under extreme usage or temperature conditions, battery leakage may occur.** If liquid comes in contact with your skin, wash immediately with soap and water, then neutralize with lemon juice or vinegar. If liquid gets in your eyes, flush them with clean water for at least 10 minutes, and then seek immediate medical attention. Following this rule will reduce the risk of serious personal injury.
- **Do not let gasoline, oils, petroleum-based products, etc. come in contact with plastic parts.** They contain chemicals that can damage, weaken or destroy plastic.
- **Have your battery pack serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the battery pack is maintained.
- **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you lend someone this tool, lend them these instructions also to prevent misuse of the product and possible injury.

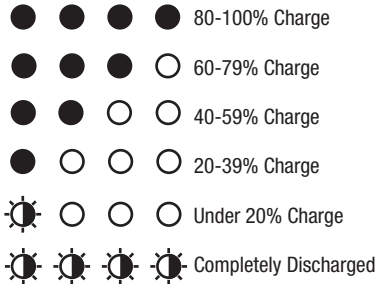
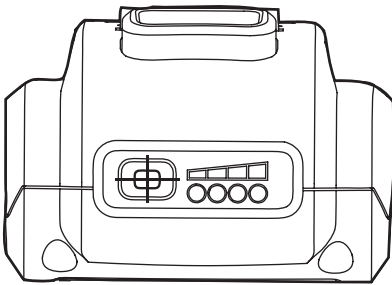
## Know your lithium-ion rechargeable battery



No.	Description	No.	Description
1	Electrical Contacts	3	Fuel Gauge
2	Battery-Release Button		

Before using this product, familiarize yourself with all operating features and safety rules.

## Fuel gauge



This Lithium-Ion battery pack is equipped with a Fuel Gauge, which displays the remaining charge of the battery pack. Press the Fuel Gauge button to display the LED lights. The LED lights will stay lit for approximately 4 seconds.

**NOTE:** The Fuel Gauge can be used when the battery pack is attached to or removed from the tool.

## Low capacity warning

If one LED on the Fuel Gauge begins to flash, the battery pack's charge is under 20% capacity and should be recharged.

Unlike other battery types, Lithium-Ion batteries deliver fade-free power for their entire run time. The tool will not experience a slow, gradual loss of power as you work. To signal that the battery pack is at the end of its run time and needs to be charged, power to the tool will drop quickly. The Fuel Gauge will begin to display four flashing LED lights when it is completely discharged. When this happens, remove the tool from the work piece, remove the battery pack and charge the battery pack as needed.



## Battery protection

To protect the battery pack from damage and prolong its life, the battery pack's circuitry will turn off the battery pack if it becomes overloaded or if the temperature becomes too high during use. This may happen in extremely high torque, binding and stalling situations. The battery pack will begin normal operation when it cools down.

The Fuel Gauge will display four flashing LED lights if the circuitry detects a momentary overload. You can conveniently reset the battery pack by releasing the power tool trigger switch. Press the Fuel Gauge button again to display the remaining charge.

**NOTE:** If the Fuel Gauge continues to flash four LED lights after reset, place the battery pack on the charger to evaluate the battery pack condition.

**NOTE:** A significantly reduced run time after fully charging the battery pack indicates that the battery pack is near the end of its usable life and must be replaced.

## Cold weather operation

When the battery pack is very cold, it may “pulse” for the first minute of use to warm itself. Put the battery pack on a tool and use the tool in a light application. After about a minute, the battery pack will have warmed itself and will operate normally.

## When to charge the battery pack

**NOTE:** This Lithium-Ion battery pack is shipped partially charged. Before using it the first time, fully charge the battery pack.

The Lithium-Ion battery pack can be charged at any time and will not develop a “memory” when charged after only a partial discharge. It is not necessary to run down the battery pack charge before recharging. Remove the battery pack from the tool when it is convenient for you and your job.

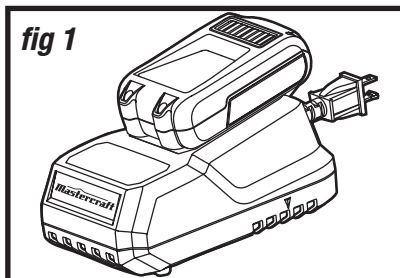
1. Use the Fuel Gauge to determine when you need to recharge the battery pack.
2. You can “top-off” your battery pack's charge before starting a big job or long period of use.
3. Due to Lithium-Ion's fade-free properties, the only time it is necessary to charge the Lithium-Ion battery pack is when the pack has reached the end of its charge. To signal the end of charge, power to the tool will drop quickly. Charge the battery pack as needed.

## How to charge the battery pack

**NOTE:** This Lithium-Ion battery pack is shipped partially charged. Before using it the first time, fully charge the battery pack.

A fully discharged battery pack will charge about 60 minutes in a surrounding temperature between 0°C (32° F) and 40°C (104° F).

1. Charge the Lithium-Ion battery pack with the correct charger (Mastercraft 054-3126-6, 5331).
2. Connect the charger to a power supply.
3. Attach the battery pack to the charger by aligning the raised ribs of the battery pack with the slot in the charger. Slide the battery pack onto the charger (fig 1).
4. The charger will communicate with the battery pack's circuitry to evaluate the condition of the battery pack.
5. The Fuel Gauge LED lights will cycle from right to left during charging. This is part of the normal charging operation.
6. After charging is complete, the green LED on the charger will be on and the Fuel Gauge LED lights will turn off. The Fuel Gauge LED lights will not be displayed when the Fuel Gauge button is pressed while the battery pack is on the charger.
7. The battery pack will fully charge, but will not overcharge, if left on the charger.



**WARNING!**

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

**WARNING!**

When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.

**WARNING!**

To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

**WARNING!**

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.

**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.

This battery pack has 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 Instruction Manual.
- It is good practice to unplug the charger and remove the Lithium-Ion battery pack when not in use.

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

- Store the Lithium-Ion battery pack where the temperature is below 26°C (80°F) and free of moisture.
- Store Lithium-Ion battery packs in a 30%-50% charged condition.
- Every six months of storage, fully charge the Lithium-Ion battery pack.
- Exterior may be cleaned with a cloth or soft non-metallic brush.

Please see page 8 for disposal instructions.

## Battery pack removal and preparation for recycling

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



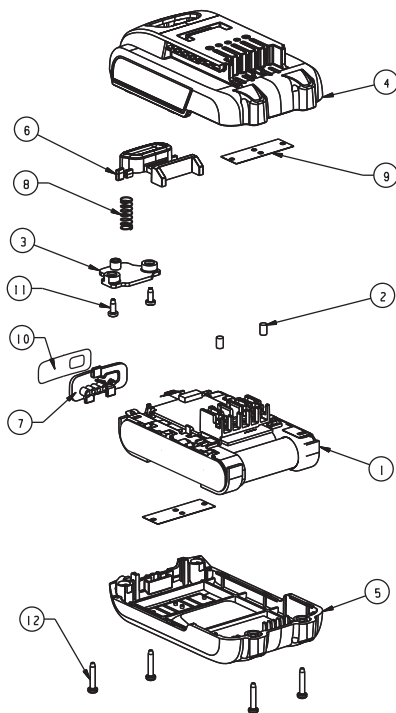
### WARNING!

Upon removal 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 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.

# 13

## PARTS LIST

### Exploded view



No.	Part No.	Description	No.	Part No.	Description
01	2770231000	Battery Assembly	07	3126468000	Power Indicator Cover
02	3121038000	Rubber Stick	08	3660522000	Compression Spring
03	3126204000	Plate	09	3704001000	Dust Cover
04	3126465000	Power Pack Cover	10	4870487000	Film Switch
05	3126466000	Power Pack Housing	11	5610010000	Tapping Screw
06	3126467000	Battery-Release Button	12	5610241000	Screw

**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 **two (2) years from the date of original retail purchase** against defects in materials and workmanship.

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 that is worn or broken or that has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable Instruction Manual or operating instructions) or that is being used for industrial, professional, commercial or rental purposes;
- c) 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, including 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;

# 15

## WARRANTY

- h) This warranty will not apply to normal deterioration of the exterior finish, including but not limited to scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners;
- i) 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.

### 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

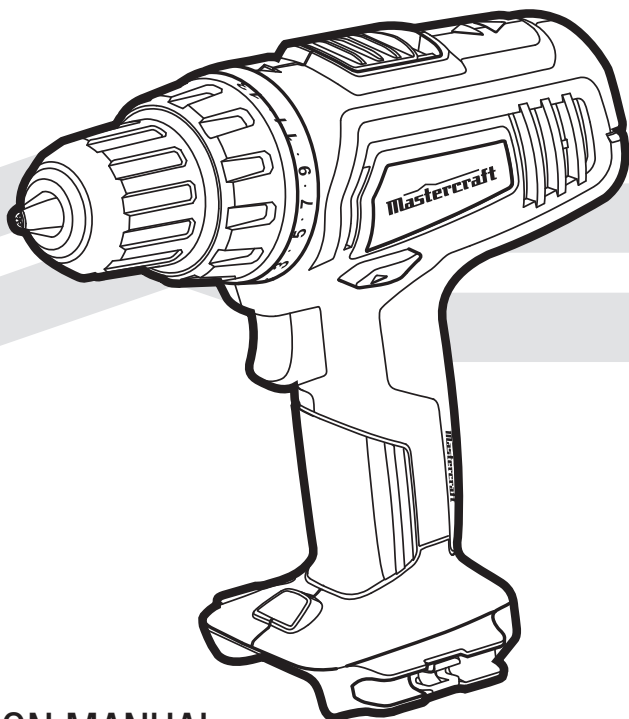
This warranty gives you specific legal rights, and you may have other rights, which may vary from province to province. The provisions contained in this warranty are not intended to limit, modify, take away from, disclaim or exclude any statutory warranties set forth in any applicable provincial or federal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

**IMPORTED BY MASTERCRAFT CANADA TORONTO, CANADA M4S 2B8**



20V max\* LITHIUM-ION 1.5 AH RECHARGEABLE BATTERY - 054-3124-0

# ***Mastercraft***<sup>TM</sup>



INSTRUCTION MANUAL

## **20V max\* LITHIUM-ION CORDLESS DRILL/DRIVER**

054-3118-6



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



Read and understand this instruction manual thoroughly before using the product. It contains important information for your safety as well as operating and maintenance advice.

Keep this instruction manual for future use. Should this product be passed on to a third party, then this instruction manual must be included.



<b>TECHNICAL SPECIFICATIONS</b>	<b>3</b>
<b>SAFETY GUIDELINES</b>	<b>4–8</b>
<b>DESCRIPTION</b>	<b>9</b>
<b>OPERATING INSTRUCTIONS</b>	<b>10–16</b>
<b>MAINTENANCE</b>	<b>17–18</b>
<b>TROUBLESHOOTING</b>	<b>19</b>
<b>PARTS LIST</b>	<b>20</b>
<b>WARRANTY</b>	<b>21–22</b>

<b>MOTOR</b>	<b>20V DC</b>
<b>CHUCK</b>	<b>1/2" Keyless chuck</b>
<b>NO-LOAD SPEED</b>	<b>0–420 RPM 0–1500 RPM</b>
<b>MAX. TORQUE</b>	<b>330 in-lb</b>
<b>CLUTCH</b>	<b>23+1 Position</b>
<b>CORDLESS DRILL/DRIVER WEIGHT (WITHOUT BATTERY)</b>	<b>2 lb 10 oz (1.2 KG)</b>
<b>BATTERY TYPE</b>	<b>Lithium-Ion</b>
<b>BATTERY VOLTAGE</b>	<b>20V max* DC</b>
<b>COMPATIBLE BATTERIES</b>	<b>1.5 Ah Li-ion (054-3124-0) 3.0 Ah Li-ion (054-3125-8)</b>
<b>BATTERY CHARGER</b>	<b>054-3126-6, 5331</b>

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

**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 Drill/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.****Safety guidelines for cordless power tools****WARNING!**

Read all safety warnings and instructions. Failure to follow the warnings and instructions 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 the 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 adapter 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 the 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 a 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 tool while 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 that the switch is in the off-position before connecting to a power source and/or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or plugging in 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 jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.** Use of these devices can reduce dust-related hazards.

## 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 more safely 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 the battery pack 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.** 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, tool bits, etc., in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## Battery tool use and care

- **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.** The use of any other battery pack may create a risk of injury and fire.
- **When the battery pack is not in use, keep it away from other metal objects, such as 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 occurs, flush with water. If liquid comes into contact with the eyes, seek medical help. Liquid ejected from the battery may cause irritation or burns.

## Service

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

## Safety guidelines for cordless drill/driver

- **Hold power tools by the insulated gripping surfaces when performing an operation where the tool may contact hidden wiring or its own cord.** Contact with a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **When working with the power tool, always hold it firmly with both hands and provide for a secure stance.** The power tool is guided more securely with both hands.
- **Keep the cord and charger from heat to prevent damage to the housing or internal parts.**
- **Secure the workpiece.** Clamping devices or a vise will hold the workpiece in place more effectively than your hand can.
- **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.) or when transporting and storing the tool, always set the direction-of-rotation switch to the centre (locked) position.** Unintentional activation of the On/Off switch may result in personal injury.
- **Do not open the battery.** There is a risk of a short circuit.
- **Protect the battery from heat and fire.** There is a risk of explosion.
- **Wear ear protectors when using the drill/driver.** Exposure to noise can cause hearing loss.
- **Use protective gloves when removing the bit from the tool, or first allow the bit 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 or injured.
- **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.**
- **For best results, your battery tool should be charged in a location where the temperature is more than 0°C (32°F) but less than 40°C (104°F).** Do not store outside or in vehicles.

## Contents

Cordless Drill/Driver, 2 double-ended bits, and Instruction Manual

**WARNING!**

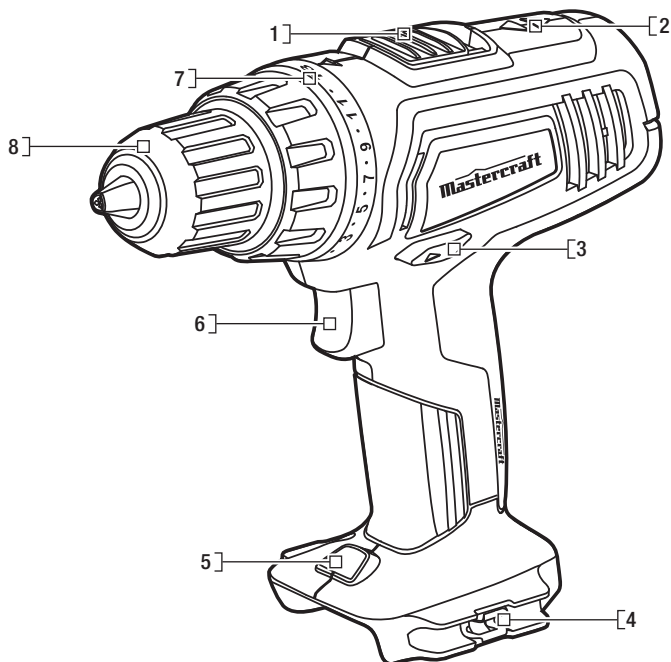
Remove the Cordless Drill/Driver from the package, and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.

**WARNING!**

If any part of the Cordless Drill/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.



## Know your cordless drill/driver



No.	Description	No.	Description
1	Two-speed gearbox switch	5	LED Worklight
2	Forward/reverse LED indicator	6	Trigger switch
3	Direction-of-rotation selector	7	Torque-adjustment ring
4	Bit clip	8	Keyless chuck



### WARNING!

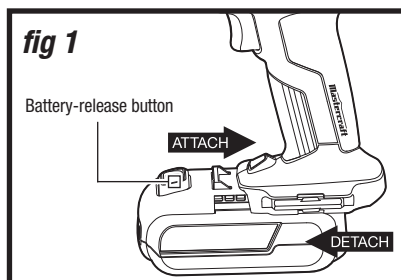
Do not allow familiarity with the Cordless Drill/Driver to cause a lack of alertness. A fraction of a second of carelessness is enough to cause severe injury.

**WARNING!**

Carefully read the Instruction Manuals for your Mastercraft 20V max\* Lithium-Ion Battery (054-3124-0/054-3125-8) and Mastercraft 20V max\* Lithium-Ion Charger (054-3126-6, 5320.3) for safety and operation instructions.

**To attach battery pack (fig 1)****CAUTION!**

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



**NOTE:** 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 drill/driver and the latches snap into place properly. Improper assembly of the battery pack can cause damage to internal components.

1. Lock the trigger switch on the drill/driver 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 drill/driver, and then attach the battery pack to the drill/driver as shown.
3. Make sure that the latch on the battery pack snaps into place and that the battery pack is secured to the drill/driver before beginning operation.

**To detach battery pack (fig 1)****CAUTION!**

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

1. Lock the trigger switch on the drill/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 forward on the battery pack to remove it from the drill/driver.

## Trigger switch (fig 2)

To turn the drill/driver ON, depress the trigger switch. To turn it OFF, release the 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.

## Direction-of-rotation selector (forward/centre-lock/reverse)

(fig 3-4)

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

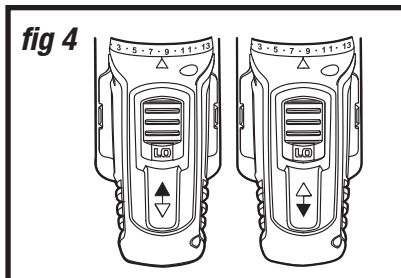
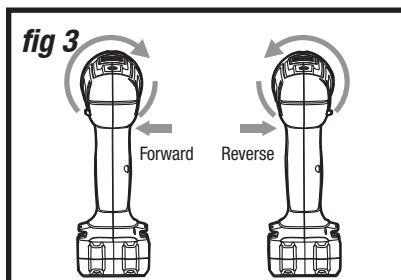
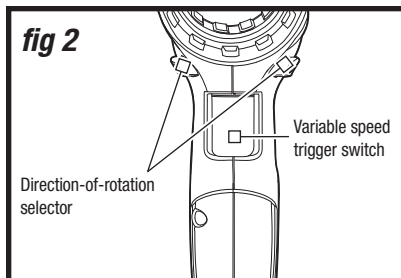
Position the direction-of-rotation selector to the left of the tool for forward rotation. The forward/reverse LED indicator the drill/driver will shine green (fig 4).

Position the direction-of-rotation selector to the right of the tool for reverse rotation. The forward/reverse LED indicator on the drill/driver will shine red (fig 4).

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

**NOTE:** To prevent gear damage, always allow the drill/driver to come to a complete stop before changing the direction of rotation.

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



### LED Worklight (fig 5)

The LED worklight, located on the base of the cordless drill/driver, will illuminate when the trigger switch is depressed. This provides additional light on the surface of the workpiece for operation in lower light situations. The LED worklight will turn off when the trigger switch is released.

### Electric brake

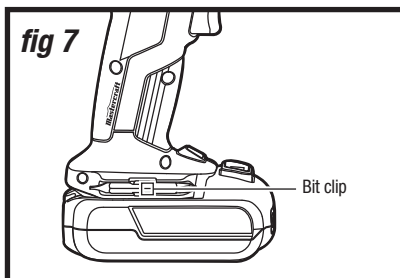
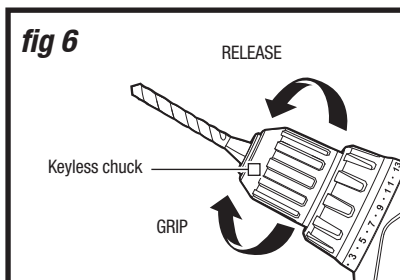
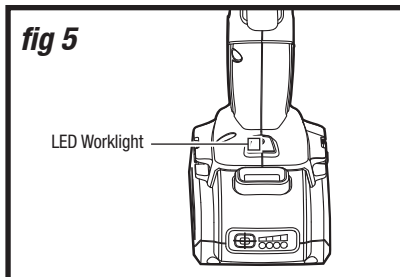
To stop the tool, release the trigger switch and allow the chuck to come to a complete stop. The electric brake quickly stops rotation. This feature engages automatically when you release the trigger switch.

### Keyless chuck (fig 6)

The arrows on the chuck indicate the direction of rotation of the body of the chuck to: GRIP (tighten) or OPEN (release) the jaws of the chuck on the drill bit.

### Bit storage (fig 7)

When not in use, the bits may be stored on either side of the cordless drill/driver by snapping the bit into place in one of the bit clips.



## Two-speed gear box (fig 8)

This drill/driver features a two-speed gearbox that is designed for drilling or driving at LO speed or HI speed. A slide switch is located on the top of the cordless drill/driver to select either LO or HI speed.

When using the cordless drill/driver in the LO speed range, the speed will decrease and the cordless drill/driver will have more power and torque.

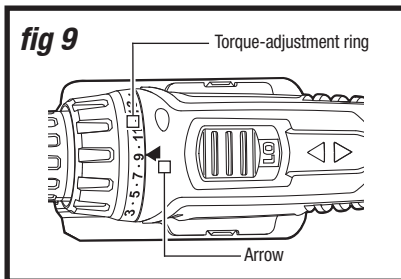
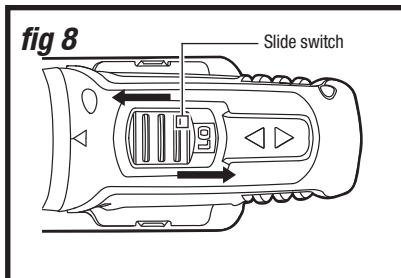
When using the cordless drill/driver in the HI speed range, the speed will increase and the cordless drill/driver will have less power and torque.

Use LO speed for high power and torque applications, and use HI speed for fast drilling applications.



### CAUTION!

Do not change between LO speed and HI speed while the tool is running. Failure to obey this caution could result in serious damage to the cordless drill/driver.



## Adjustable torque clutch (fig 9)

The torque clutch can be adjusted to any of 24 different settings (23 driving and 1 drilling). The higher the torque setting, the more force the cordless drill/driver produces to turn an object in either LO or HI rotation speed.

When using the cordless drill/driver 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.

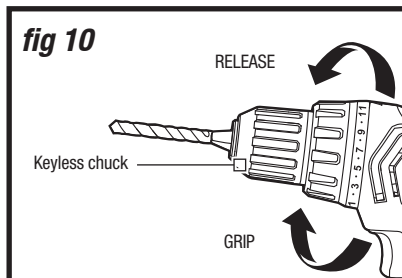
In general, use greater torque for larger screws, but if the torque is too high, the screws may be damaged or broken. For delicate operations, such as removing a partially stripped screw, use a low torque setting. For operations such as drilling into hardwood, use a higher torque setting.

**NOTE:** Do not change the torque setting when the tool is running.

**NOTE:** When adjusting the torque ring, make sure that the speed switch is either completely in the LO or the HI position.

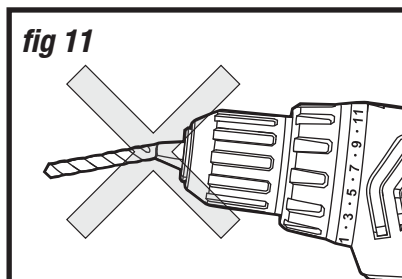
### Installing a bit (fig 10)

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



#### WARNING!

Do not hold the body of the chuck with one hand while using the power of the drill/driver 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.



#### 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 11. Doing so could cause the drill bit to be thrown from the drill/driver, which could result in possibly serious personal injury or damage to the chuck.

### Removing a bit (fig 10)

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

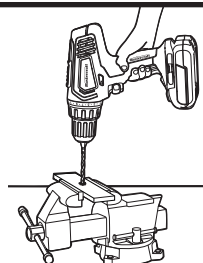


#### WARNING!

Use protective gloves when removing the bit from the tool, or first allow the bit to cool down. The bit may be hot after prolonged use.

**General drilling (fig 12)****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.

**fig 12**

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 drill/driver firmly, and place the bit at the point to be drilled.
4. Depress the trigger switch to start the cordless drill/driver.
5. Move the drill bit into the workpiece, applying only enough pressure to keep the bit cutting.
6. Do not force the cordless drill/driver or apply sideways pressure to elongate a hole. Allow the tool to do the work.
7. 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.
8. 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.
9. If the bit jams in the workpiece or if the drill/driver stalls, stop the tool immediately. Reverse the direction of rotation and gently squeeze the trigger to remove the bit from the workpiece. Investigate and correct the cause of jamming before resuming work.

**WARNING!**

Be prepared for binding when the bit breaks through the workpiece, because the drill/driver 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.

## Drilling mode operation

### FOR DRILLING IN WOOD, USE TWIST BITS, SPADE BITS, POWER AUGER BITS OR HOLE SAWS.

1. 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 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.
4. If the drill/driver stalls, it is usually because it is being overloaded. Release the trigger switch immediately, remove the drill bit from the work, and determine the cause of stalling.
5. Keep the motor running when pulling the bit back out of the drilled hole. This will prevent jamming.

### FOR DRILLING IN METAL, USE HIGH SPEED STEEL TWIST DRILL BITS.

1. 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 which allows cutting without overheating the bit.
5. If the drill stalls, it is usually because it is being overloaded. Release the trigger switch immediately, remove the drill bit from the work, and determine the cause of stalling.
6. Keep the motor running when pulling the bit back out of the drilled hole. This will prevent jamming.

## 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.



## General maintenance



### WARNING!

To avoid personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.



### WARNING!

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.

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 drill/driver, the 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 drill/driver off immediately, and have the problem corrected before further use.



### WARNING!

When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.



### WARNING!

Use only accessories that are recommended for this drill/driver by the manufacturer. Accessories that may be suitable for one tool may become hazardous when used with another tool.



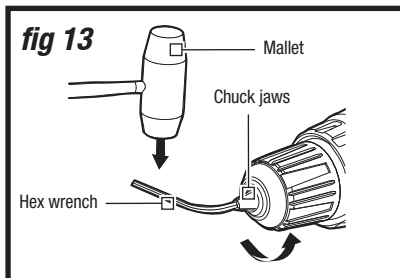
### WARNING!

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

### Chuck removal (fig 13)

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

1. Remove the battery.
2. Lock the trigger switch by placing the direction-of-rotation selector in the centre position.
3. Open the chuck jaws. Using a screwdriver, remove the chuck screw by turning it clockwise.
4. Insert a 5/16-in. or larger hex key into the chuck of the drill/driver and tighten the chuck jaws securely.
5. Tap the hex key sharply with a mallet in a counter-clock wise direction. This will loosen the chuck for easy removal.
6. Attach a new chuck to the spindle and tighten the chuck screw.



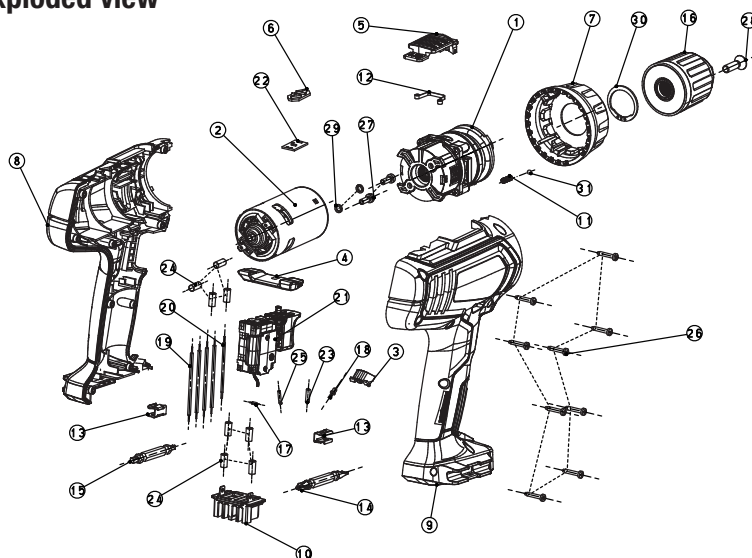
# 19

## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSES	SOLUTIONS
The drill/driver does not work.	The battery is depleted.	Charge the battery.
The bit cannot be installed.	1. The chuck is not opened.	1. Open the chuck.
	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
01	2790306000	Gear Case Assembly	17	4120311001	Lead Resistor
02	2790307000	Motor And Gear Assembly	18	4360225000	LED
03	3126500000	LED Cover	19	4860003000	Inner Wire
04	3126501000	F/R Button	20	4860007000	Inner Wire
05	3126502000	Speed Change Button	21	4870452000	Trigger Switch
06	3126503000	Lens	22	4890709000	PCB Assembly
07	3126506000	Clutch Cap	23	4920154000	Shrinkable Tube
08	3321410000	Left Housing Assembly	24	4920156000	Shrinkable Tube
09	3321411000	Right Housing Assembly	25	4920158000	Shrinkable Tube
10	3402385000	Contact Receptacle Assembly	26	5610013000	Tapping Screw
11	3660466000	Compression Spring	27	5620422000	Screw
12	3700961000	Stop Spring	28	5620488000	Screw (L.H.)
13	3703673000	Bits Holder	29	5650007000	Spring Washer
14	3810357000	Screw Bit	30	5660142000	Circlips For Shaft-Type B
15	3810405000	Screw Bits	31	5700178000	Steel Ball
16	3860112000	Chuck			



This Mastercraft product is guaranteed three (3) years from the date of original retail purchase against defects in materials and workmanship, 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 there to.

### **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;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which 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;
- h) 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

i) 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.

**IMPORTED BY MASTERCRAFT CANADA TORONTO, CANADA M4S 2B8**