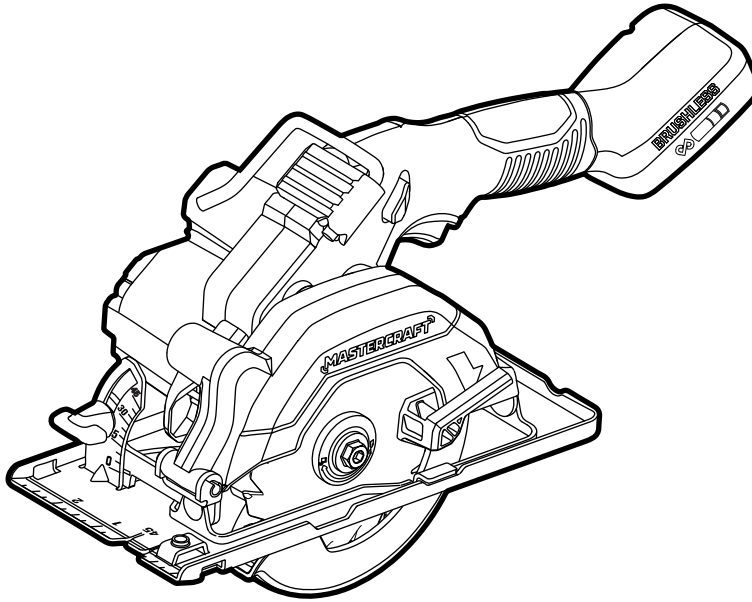
MASTERCRAFT™/MC

BRUSHLESS
4 1/2” (115 MM) MINI CIRCULAR SAW

054-8705-8



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

INSTRUCTION MANUAL

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

SAVE THESE INSTRUCTIONS

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

TECHNICAL SPECIFICATIONS

Rated Voltage	20 V d.c. max*
No-load Speed	6000 /min
Blade Diameter	4 1/2" (115 mm)
Blade Arbour	3/8" (9.5 mm)
Maximum Cutting Depth at 90°	1 17/32" (39 mm)
Maximum Cutting Depth at 45°	63/64" (25 mm)
Bevel Angle	0 – 45°

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

Recommend using tool with Mastercraft® and PWR POD™ 20 V max* Lithium-ion 4.0 Ah battery (054-7557-6 and 054-7564-8; sold separately) for optimal performance.

COMPATIBLE BATTERIES AND CHARGERS

Brand	Battery Pack	Charger
PWR POD™	2.0 Ah: 054-7563-0 4.0 Ah: 054-7564-8 5.0 Ah: 054-7558-4 8.0 Ah: 054-7569-8	90 W Fast Charger: 054-7565-6 60 W x2 Dual-Port Charger: 054-7567-2 150 W Four Port Fast Charger: 054-7571-0
Mastercraft®	1.5 Ah: 054-3124-0 2.0 Ah: 054-7553-4 4.0 Ah: 054-7557-6 5.0 Ah: 054-2434-8	45 W Charger: 054-3126-6 90 W Fast Charger: 054-7559-2 60 W x2 Dual-Port Charger: 054-8299-4

Batteries with an Ah of 4.0 or higher are recommended for optimal runtime and performance.

SAFETY GUIDELINES

WARNING!

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

WARNING!

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

KNOW YOUR TOOL

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

IMPORTANT

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

READ ALL INSTRUCTIONS THOROUGHLY.

SAVE THESE INSTRUCTIONS.

GENERAL POWER TOOL SAFETY WARNINGS

WARNING!

Read all safety warnings, instructions, illustrations and specifications provided with this power tool. Failure to follow all instructions listed below may result in electric shock, fire and/or serious injury.

SAVE ALL WARNINGS AND INSTRUCTIONS FOR FUTURE REFERENCE.

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

WORK AREA SAFETY

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

ELECTRICAL SAFETY

- **Power tool plugs must match the outlet. Never modify the plug in any way. Do not use any 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 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 a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment. Always wear eye protection.** Protective equipment such as a dust mask, non-skid safety shoes, hard hat or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Ensure the switch is in the off-position before connecting to power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energizing power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.
- **Disconnect the plug from the power source and/or remove the battery pack, if detachable, from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools and accessories. Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use.** Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control.
- **Use the power tool, accessories and tool bits etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.
- **Keep handles and grasping surfaces dry, clean and free from oil and grease.** Slippery handles and grasping surfaces do not allow for safe handling and control of the tool in unexpected situations.

BATTERY TOOL USE AND CARE

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.
- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 265°F (130°C) may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

SERVICE

- **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.
- **Never service damaged battery packs.** Service of battery packs should only be performed by the manufacturer or authorized service providers.

MINI CIRCULAR SAW SAFETY WARNINGS

SAFETY INSTRUCTIONS FOR ALL SAWS

CUTTING PROCEDURES

DANGER!

Keep hands away from the cutting area and the blade. If both hands are holding the saw, they cannot be cut by the blade.

- **Do not reach underneath the workpiece.** The guard cannot protect you from the blade below the workpiece.
- **Adjust the cutting depth to the thickness of the workpiece.** Less than a full tooth of the blade teeth should be visible below the workpiece.
- **Never hold the workpiece in your hands or across your leg while cutting. Secure the workpiece to a stable platform.** It is important to support the work properly to minimise body exposure, blade binding, or loss of control.
- **Hold the power tool by insulated gripping surfaces, when performing an operation where the cutting tool may contact hidden wiring.** Contact with a “live” wire will also make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **When ripping, always use a rip fence or straight edge guide.** This improves the accuracy of cut and reduces the chance of blade binding.
- **Always use blades with correct size and shape (diamond versus round) of arbour holes.** Blades that do not match the mounting hardware of the saw will run off-centre, causing loss of control.
- **Never use damaged or incorrect blade washers or bolt.** The blade washers and bolt were specially designed for your saw, for optimum performance and safety of operation.

FURTHER SAFETY INSTRUCTIONS FOR ALL SAWS

KICKBACK CAUSES AND RELATED WARNINGS

- Kickback is a sudden reaction to a pinched, jammed or misaligned saw blade, causing an uncontrolled saw to lift up and out of the workpiece toward the operator.
- When the blade is pinched or jammed tightly by the kerf closing down, the blade stalls and the motor reaction drives the unit rapidly back toward the operator.

- If the blade becomes twisted or misaligned in the cut, the teeth at the back edge of the blade can dig into the top surface of the wood causing the blade to climb out of the kerf and jump back toward the operator.

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

- **Maintain a firm grip on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.** Kickback could cause the saw to jump backwards, but kickback forces can be controlled by the operator, if proper precautions are taken.
- **When blade is binding, or when interrupting a cut for any reason, release the trigger and hold the saw motionless in the material until the blade comes to a complete stop. Never attempt to remove the saw from the work or pull the saw backward while the blade is in motion or kickback may occur.** Investigate and take corrective actions to eliminate the cause of blade binding.
- **When restarting a saw in the workpiece, centre the saw blade in the kerf so that the saw teeth are not engaged into the material.** If a saw blade binds, it may walk up or kick back from the workpiece as the saw is restarted.
- **Support large panels to minimize the risk of blade pinching and kickback.** Large panels tend to sag under their own weight. Supports must be placed under the panel on both sides, near the line of cut and near the edge of the panel.
- **Do not use dull or damaged blades.** Unsharpened or improperly set blades produce narrow kerf causing excessive friction, blade binding and kickback.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making the cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when sawing into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

LOWER GUARD FUNCTION

- **Check the lower guard for proper closing before each use. Do not operate the saw if the lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If the saw is accidentally dropped, the lower guard may be bent. Raise the lower guard with the retracting handle and make sure it moves freely and does not touch the blade or any other part, in all angles and depths of cut.
- **Check the operation of the lower guard spring. If the guard and the spring are not operating properly, they must be serviced before use.** Lower guard may operate sluggishly due to damaged parts, gummy deposits, or a build-up of debris.
- **The lower guard may be retracted manually only for special cuts such as “plunge cuts” and “compound cuts”. Raise the lower guard by the retracting handle and as soon as the blade enters the material, the lower guard must be released.** For all other sawing, the lower guard should operate automatically.
- **Always observe that the lower guard is covering the blade before placing the saw down on bench or floor.** An unprotected, coasting blade will cause the saw to walk backwards, cutting whatever is in its path. Be aware of the time it takes for the blade to stop after switch is released.

ADDITIONAL SAFETY GUIDELINES FOR MINI CIRCULAR SAW

- **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

⎓ or d.c. ..... Direct current

n_0 ..... No-load speed

…/min ..... Revolutions or reciprocation per minute

RPM ..... Revolutions per minute

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

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

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

WARNING!

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

Brand	Battery Pack	Charger
PWR POD™	2.0 Ah: 054-7563-0 4.0 Ah: 054-7564-8 5.0 Ah: 054-7558-4 8.0 Ah: 054-7569-8	90 W Fast Charger: 054-7565-6 60 W x2 Dual-Port Charger: 054-7567-2 150 W Four Port Fast Charger: 054-7571-0
Mastercraft®	1.5 Ah: 054-3124-0 2.0 Ah: 054-7553-4 4.0 Ah: 054-7557-6 5.0 Ah: 054-2434-8	45 W Charger: 054-3126-6 90 W Fast Charger: 054-7559-2 60 W x2 Dual-Port Charger: 054-8299-4

Batteries with an Ah of 4.0 or higher are recommended for optimal runtime and performance.

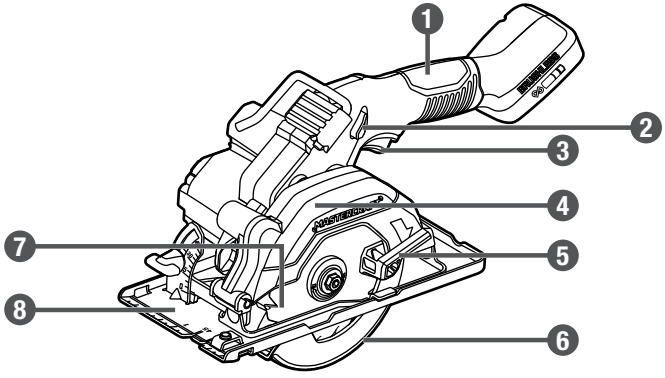
- **For best results, your battery tool should be stored and used in a location where the temperature is more than 41°F (5°C) but less than 104°F (40°C).** Do not store outside or in vehicles.

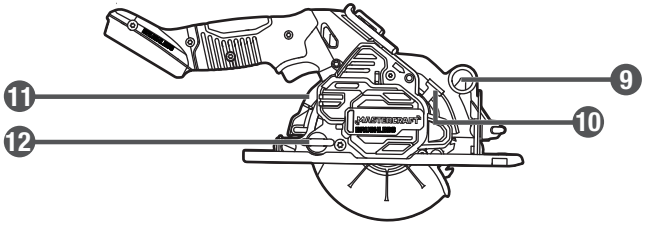
SAVE THESE INSTRUCTIONS!

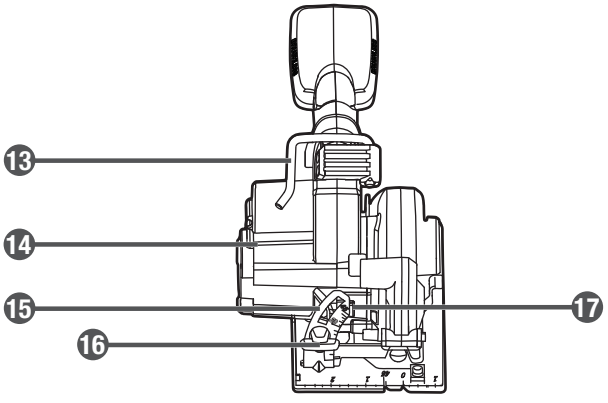
PACKAGE CONTENTS:

Mini circular saw, rip fence, vacuum adaptor, saw blade, hex key and instruction manual

KEY PARTS DIAGRAM







KEY PARTS DIAGRAM

No.	Description
1	Main Handle
2	Lock-off Button
3	Trigger Switch
4	Upper Blade Guard
5	Lower-blade-guard Lever
6	Lower Blade Guard
7	Blade
8	Base Plate
9	Dust Collection Port

No.	Description
10	Spindle-lock Button
11	Depth Scale
12	Depth-adjustment Knob
13	Hook
14	Hex Key
15	Bevel Scale
16	Bevel-adjustment Knob
17	LED Worklight

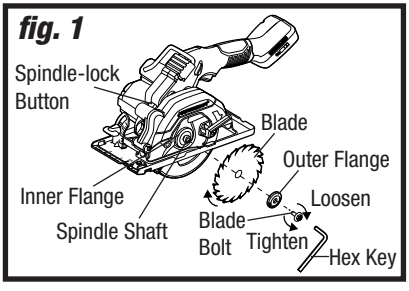
Before attempting to use this tool, become familiar with all of its operating features and safety requirements. For optimum performance and safety, read the following operating instructions carefully before using.

WARNING!

- Remove the mini circular saw from the package and examine it carefully. Do not discard the carton or any packaging material until all parts have been examined.
- If any part of the mini circular saw is missing or damaged, do not attach the battery pack to the tool or use the tool until the part has been repaired or replaced. Failure to heed this warning could result in serious injury.
- Do not let familiarity with the mini circular saw cause a lack of alertness. A fraction of a second of carelessness is enough to cause severe injury.
- Do not attempt to modify this tool or create accessories not recommended for use with this tool. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury.
- To prevent accidental starting that could cause serious personal injury, always remove the battery pack from the tool when assembling parts.

OPERATING INSTRUCTIONS

INSTALL THE BLADE *(fig. 1)*



1. Remove the battery pack from the mini circular saw.
2. Depress the spindle-lock button, insert the hex key (attached with the tool) into the blade bolt and rotate it back and forth until you feel the spindle-lock button depress deeper. This action locks the blade in position so that the blade bolt can be removed.
3. With the spindle-lock button firmly depressed, turn the blade bolt clockwise to loosen it.
4. Raise the lower blade guard with the lower-blade-guard lever and hold it in the raised position.
5. Remove the blade blot, the outer flange, and the blade.
6. The inner flange, which fits around the output shaft, does not need to be removed.
7. Put a drop of good-quality machine oil onto the inner flange and the outer flange where they will contact the blade.
8. Place a new saw blade inside the lower blade guard, onto the output shaft, and against the inner flange.
9. Replace the outer flange.
10. Depress and hold the spindle-lock button as you replace the blade bolt and hand-tighten the blade bolt in a counter-clockwise direction. Use the hex key to tighten the blade bolt securely.
11. Return the hex key into the storage area. Make sure the hex key is securely placed.

NOTICE:

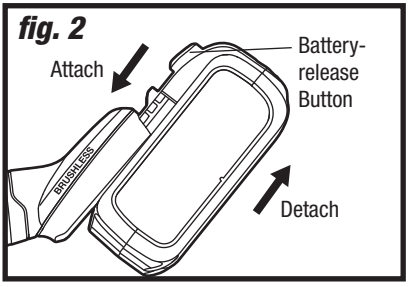
- The teeth of the blade should point upward at the front of the saw.
- Never use a blade that is too thick to allow the outer blade washer to engage with the flat side of the spindle.

WARNING!

- Use only 4 1/2" (115 mm) blade rated 6000/min or greater. Using blade not designed for the saw may result in serious personal injury and property damage.
- Be sure to wear protective work gloves while handling a saw blade. The sharp teeth can injure unprotected hands.

ATTACH THE BATTERY PACK *(fig. 2)*

1. Release the trigger switch and ensure the lock-off button is in the centre position.
2. Align the raised rib on the battery pack with the grooves in the tool, and then slide the battery pack onto the tool.
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.



DETACH THE BATTERY PACK *(fig. 2)*

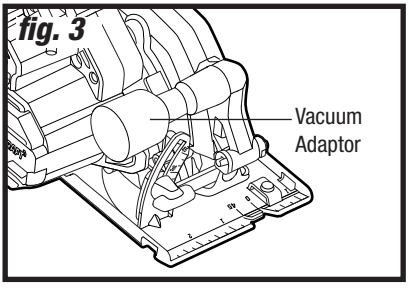
1. Release the trigger switch and ensure the lock-off button is in the centre position.
2. Depress the battery-release button, located on the front of the battery pack, to release the battery pack.
3. Pull the battery pack out and remove it from the tool.

DUST EXTRACTION *(fig. 3)*

To use this feature, align the vacuum adaptor with the dust collection port on the upper blade guard and insert it.

To remove the vacuum adaptor, simply pull it from the dust collection port.

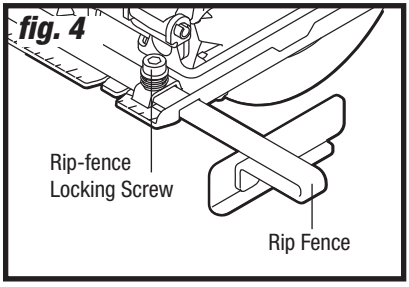
The vacuum adaptor packed with this mini circular saw is compatible with Ø 1 1/4" (32 mm) vacuum hoses or adapters to connect a vacuum cleaner.



WARNING!

- 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.

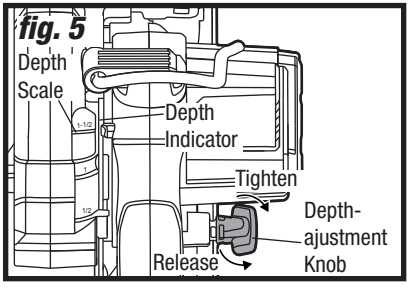
INSTALL AND USE THE RIP FENCE *(fig. 4)*



Always use a rip fence when making long or wide rip cuts with your saw.

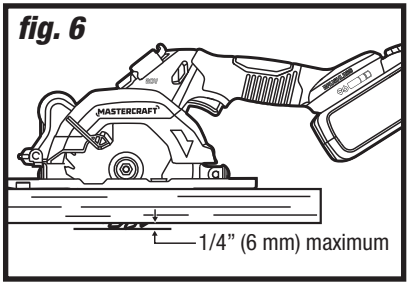
1. Detach the battery pack from the mini circular saw.
2. Release the rip-fence locking screw. Insert the rip fence through the mounting slots at the front of the base plate.
3. Adjust the rip fence to the desired width of cut.
4. Tighten the rip-fence locking screw.
5. When using a rip fence, position the face of the rip fence firmly against the edge of the workpiece. This will help make a true cut without binding the blade. The edge of the workpiece must be straight for the cut to be straight. Use caution to prevent the blade from binding in the cut.

DEPTH-OF-CUT ADJUSTMENT *(fig. 5 - fig. 6)*



Always use the correct blade-depth setting. The correct blade-depth setting for all cuts should not be more than 1/4" (6 mm) below the material being cut. Greater blade depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth scale that enables you to accurately set the depth-of-cut.

1. Remove the battery pack from the saw.
2. Rotate the depth-adjustment knob anticlockwise to release it.
3. Hold the base plate of the saw flat against the edge of the workpiece and use the handle to raise or lower the saw. Align the depth indicator with the desired depth scale and tighten the knob.
4. Securely lock the depth-adjustment knob.

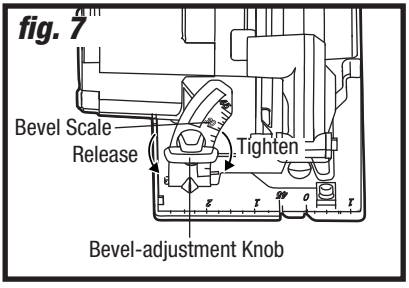


WARNING!

- Check the desired depth. No more than 1/4" (6 mm) below the material being cut (fig. 6). Excessive blade exposure below the workpiece could result in personal injury and/or property damage.
- This tool is for cutting wood only. Use only the correct saw blades for wood-cutting operations. Do not use any abrasive wheels.

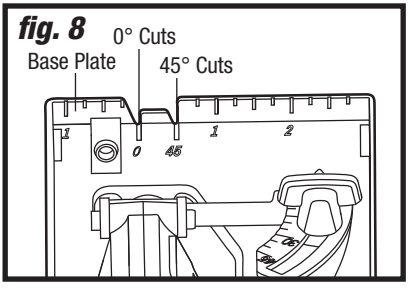
ADJUST THE BEVEL ANGLE *(fig. 7)*

1. Remove the battery pack from the saw.
2. Release the bevel-adjustment knob, located on the bevel scale on the base plate.
3. Tilt the base until the required angle is reached (refer to the bevel scale).
4. Tighten the bevel-adjustment knob to secure the saw and bevel angle.



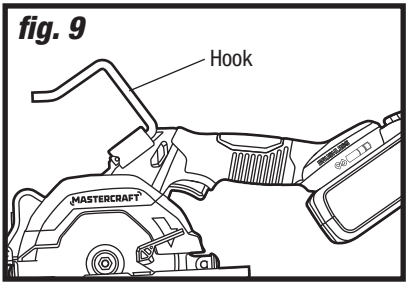
LINE GUIDE *(fig. 8)*

For a 0° cut, use the notch on the left of the base plate for guidance. For 45° bevel cuts, use the notch on the right. The cutting guide notch will indicate an approximate line of cut. Make sample cuts in scrap lumber to verify the actual line of cut. This will be helpful because of the variety of different blade types and thicknesses available.



HOOK *(fig. 9)*

Tool is equipped with a convenient hook. Use the hook to hang the saw from a rafter or beam or other similar secure structure for temporary storage during work. To use, simply lift up hook until it snaps into the open position. When not in use for hanging, always lower the hook until it snaps into the closed position.

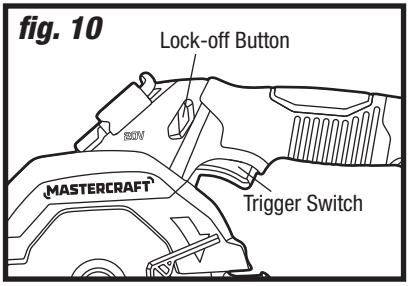


WARNING!

- Always remove the battery pack from the saw when assembling parts or making adjustments. Failure to obey this warning could cause serious personal injury.
- Attempting to make bevel cuts without the bevel adjustment knob securely tightened can result in serious injury.

LOCK-OFF BUTTON *(fig. 10)*

The lock-off button reduces the possibility of accidental starting. The lock-off button is located on the handle above the trigger switch. The lock-off button must be depressed to either side before you depress the trigger switch to start the saw.

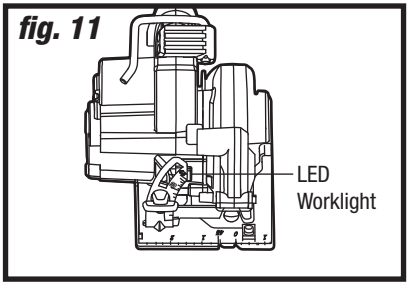


TURN ON AND OFF THE SAW *(fig. 10)*

1. Attach the battery to the mini circular saw.
2. Depress the lock-off button to either side and depress the trigger switch. Always allow the blade to reach full speed, and then guide the saw into the workpiece.
3. To turn off the mini circular saw, release the trigger switch. Lock-off button will automatically move to the centre position.

LED WORKLIGHT *(fig. 11)*

The LED worklight, located in the front of the mini circular saw, will illuminate when the trigger switch is depressed, and will automatically turn off a while after the trigger switch is released. This provides additional light on the surface of the workpiece for operation in lower light situations.



ELECTRIC BRAKE

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

NOTICE:

- Your saw should be running at full speed BEFORE starting the cut, and turned off only AFTER completing the cut. To increase switch life, do not turn switch on and off while cutting.
- The worklight is for lighting the immediate work surface and is not intended to be used as a flashlight.

OPERATE THE SAW

It is important to understand the correct method for operating the saw. Refer to the instructions in this section to learn the correct and incorrect ways of handling the saw.

GENERAL CUTS

Maintain a firm grip on the saw and position your arms to resist kickback forces. Position your body to either side of the blade, but not in line with the blade.

When cutting across the grain, the fibers of the wood have a tendency to tear and lift.

Advancing the saw slowly minimizes this effect. For a finished cut, a cross cut blade or miter blade is recommended.

To ensure minimum splintering on the good side of the material to be cut, face the good side down.

To resume cutting after cutting is interrupted, depress the lock-off button, depress the trigger, and allow the blade to reach full speed, then re-enter the cut slowly, and resume cutting.

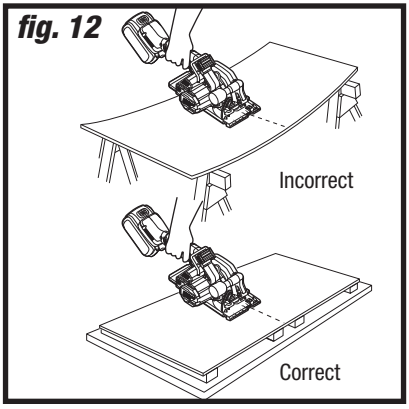
NOTICE:

- Always wear a dust mask when using this tool.

WARNING!

- Select the right blade for the material you are going to cut. Do not use abrasive wheels with mini circular saw. Abrasive dust may cause lower guard to not operate properly.
- After completing a cut and releasing the trigger, be aware of the necessary time it takes for the blade to come to a complete stop during coast down.
- Do not allow the saw to brush against your leg or side; since the lower guard is retractable, it could catch on your clothing and expose the blade. Be aware of the necessary blade exposures that exist in both the upper and lower guard areas.

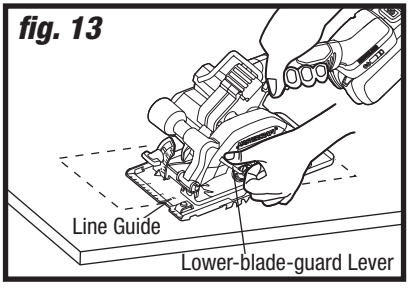
CUT LARGE SHEETS *(fig. 12)*



Large sheets and long boards can sag or bend, depending on support. If you attempt to cut without levelling and properly supporting the piece, the blade will tend to bind, causing KICKBACK and extra load on the motor.

Support the panel or board close to the cut. Be sure to set the depth of the cut so that you cut through the sheet or board only and not the table or work bench that is supporting it. The two-by-fours used to raise and support the work should be positioned so that the wide sides support the work and rest on the table or bench. Do not support the work with the narrow sides, as this is an unsteady arrangement. If the sheet or board to be cut is too large for a table or work bench, use the supporting two-by-fours on the floor to secure the sheet or board.

MAKE A POCKET CUT *(fig. 13)*

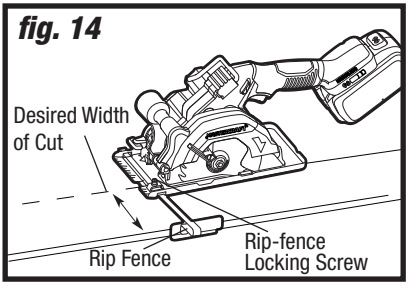


1. Remove the battery pack from the mini circular saw.
2. Set the depth adjustment according to the thickness of the material to be cut.
3. Attach the battery pack.
4. Rest the front of the base plate flat against the workpiece, with the rear of the handle raised, so that the blade does not touch the workpiece. Align the cutting-guide notch with the line you've drawn.
5. Raise the lower blade guard and hold it in place with the lower-blade-guard lever.
6. Press the lock-off button and depress the trigger switch to start the saw.
7. Allow the blade to reach full speed, then pivot the saw on the front of the base to cut into the workpiece.
8. As the blade starts cutting the material, release the lower-blade-guard lever.
9. When the foot of the lower blade guard rests flat on the surface being cut, proceed cutting in a forward direction to the end of the cut.
10. Release the trigger switch and allow the blade to come to a complete stop.
11. Lift the saw from the workpiece.

WARNING!

- Allow the blade to come to a complete stop before lifting the saw from the cut. Also, never pull the saw backward, since the blade will climb out of the material and KICKBACK will occur.
- Always adjust the bevel setting to zero before making a pocket cut. Attempting a pocket cut at any other setting can result in a loss of control of the saw, which can result in serious injury.
- Always cut in a forward direction when making a pocket cut. Cutting in the reverse direction could cause the saw to climb up on the workpiece and kick back toward you, possibly causing serious injury.
- Never tie the lower blade guard in the raised position. Leaving the blade exposed could result in serious injury.

MAKE A RIP CUT *(fig. 14)*

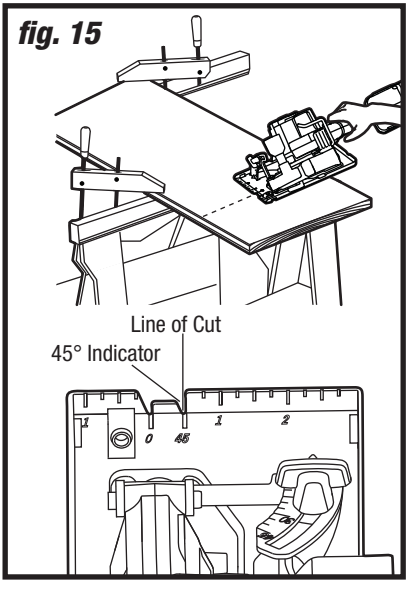


The blade provided with your saw is for rip cuts. Ripping is cutting lengthwise with the grain of the wood. When rip cutting a large sheet, use a rip fence (included).

To attach the rip fence, insert the fence through the slots on the base plate to the desired width as shown, and secure it with the rip-fence locking screw using the blade wrench.

1. Secure the workpiece.
2. Attach the battery.
3. Start the saw and allow the blade to reach full speed before engaging the blade in the workpiece.
4. Carefully guide the saw along the workpiece.
5. After completing the cut, release the trigger switch and allow the blade to come to a complete stop. After the blade has stopped, remove the saw from the workpiece.

MAKE A BEVEL CUT *(fig. 15)*



1. Remove the battery pack.
2. Adjust the bevel angle to any desired setting between 0° and 45°.
3. Attach the battery pack.
4. Align the cutting line with the 45° indicator on the base plate when making 45° bevel cuts.
5. Hold the saw firmly.
6. Rest the front edge of the base plate on the workpiece without touching the blade to the workpiece.
7. Start the saw and allow the blade to reach full speed.
8. Guide the saw into the workpiece and make the cut.
9. Release the trigger switch and allow the blade to come to a complete stop.
10. Lift the saw from the workpiece.

WARNING!

- Always securely clamp and support the workpiece. Always maintain proper control of the saw. Failure to clamp and support the workpiece and loss of control of the saw could result in serious injury.
- Attempting a bevel cut without having the bevel-adjustment knob securely locked in place can result in serious injury.
- If the blade comes in contact with the workpiece before it reaches full speed, it could cause the saw to kick back towards you, possibly resulting in serious injury.

MAINTENANCE

BEFORE EACH USE

1. Inspect the mini circular saw, 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.

CLEANING

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

STORAGE

Store the tool indoors in a place that is inaccessible to children. Keep away from corrosive agents.

WARNING!

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

TROUBLESHOOTING

Problem	Possible Causes	Solution
Tool will not start.	Battery pack is depleted.	Charge the battery.
	Battery pack is not installed properly.	Confirm battery is properly secured to the tool.
The blade does not follow a straight line.	The blade teeth are dull.	Replace the blade.
	Blade is bent.	Change to a new blade.
The blade binds or smokes from friction.	The blade is dull.	Replace the blade.
	The blade is on backwards.	Install the blade correctly.
	The blade is bent.	Replace the blade.
	The workpiece is not properly supported.	Clamp the workpiece correctly and tightly.
	The incorrect blade is being used.	Use the correct blade.

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

EXPLODED VIEW

PARTS LIST

No.	Part No.	Description
201	2825182001	Gear Set
1	5700199001	Ball Bearing
2	3570204001	Gear
3	3580328001	Lock Ring
4	3403327001	Gear Case Cover
5	3555896001	Output Shaft
6	5610352001	Thread Forming Screw
7	3133386001	Moving Guard
8	3660962001	Tension Spring
9	5660190001	Circlips For Shaft
10	3520316001	Inner Flange
11	3580398001	Outer Flange
12	5640370001	Flange Screw
13	5610280002	Tapping Screw
202	2824772001	Pothook Assembly
14	3133387001	Hook Mounting
15	3660521001	Compression Spring
16	3552935001	Bush
17	3708501001	Pothook
18	5670011001	Spring Pin
19	3403354002	Lock Pole
20	5610248003	Tapping Screw
21	5620169003	Tapping Screw
22	5610290004	Tapping Screw
203	3900684001	L R Handle Set
23	3323471001	Right Handle
24	3323472001	Left Handle
25	2831247001	Electric Assembly
26	4870923001	Switch and Wire Assembly
27	2831242001	LED Electric Assembly
28	3132858002	Switch Trigger

No.	Part No.	Description
29	3123928002	Rubber Pole
30	3660028003	Stop Spring
31	3133376001	Lock Off Button
32	3323470001	Housing
33	2740632001	Stator
34	3132659001	Fan Baffle
35	5610014002	Tapping Screw
204	2751457001	Rotor Set
36	5700003001	Ball Bearing
37	2751452001	Rotor
38	5700048015	Ball Bearing
39	3121048001	Rubber Ring
40	3423256003	Gear Case
41	3708260001	Spindle Lock
42	3660670001	Compression Spring
43	3704010001	Felt Block
44	3134142001	Upper Guard
45	3128590001	Stopper
46	5640019003	Square Neck Bolt
47	5630258002	Wing Nut
48	5650016007	Plain Washer
49	5670232001	Spring Pin
205	2825158002	Base Plate Set
50	3708231001	Angle Support
51	3708498001	Base Plate
52	5680009001	Rivet
53	3708497002	Depth Bracket
54	3708499001	Depth Bracket Support
301	5680028002	Hexagon Wrench
302	3133372001	Vacuum Adapter
303	5620546001	Hexagon Socket Screw

No.	Part No.	Description
304	3810912004	Circular Saw Blade

No.	Part No.	Description
305	2826143001	Rip Fence

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

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

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

b) Component B: Accessories, which are guaranteed for a period of 1 year from the date of original retail purchase against defects in workmanship and materials.

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

These warranties are subject to the following conditions and limitations:

a) a bill of sale verifying the purchase and purchase date must be provided;

b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;

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 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;

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.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8