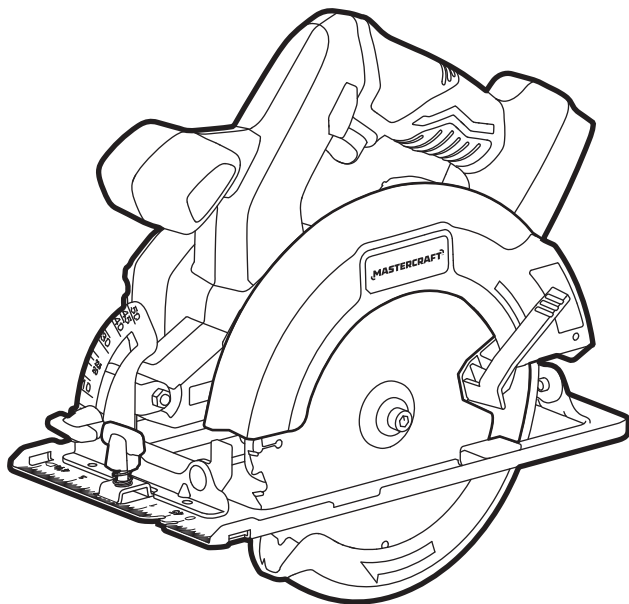


# MASTERCRAFT™/MC

## 6 1/2" (165 MM) CIRCULAR SAW 054-8285-6



### **IMPORTANT:**

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

## **INSTRUCTION MANUAL**



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### NOTE:

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



### SAVE THESE INSTRUCTIONS

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

**TECHNICAL SPECIFICATIONS**

Rated Voltage	20 V d.c.
No-load Speed	4500 RPM
Blade Diameter	6 1/2" (165 mm)
Blade Arbor	5/8" (16 mm)
Maximum Cutting Depth	2 1/8" (54 mm) at 90°
	1 3/4" (44.5 mm) at 45°
Bevel Gauge	0 – 50°

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

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

### SAFETY GUIDELINES:



#### WARNING!

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



#### WARNING!

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

### KNOW YOUR TOOL

To operate this tool, carefully read this Instruction Manual and all labels affixed to the Cordless 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 adaptor plugs with earthed (grounded) power tools.** Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces, such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord. Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts.** Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a groundfault 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 a power source and/or battery pack, picking up or carrying the tool.** Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair and clothing away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used.** Use of dust collection can reduce dust-related hazards.
- **Do not let familiarity gained from frequent use of tools allow you to become complacent and ignore tool safety principles.** A careless action can cause severe injury within a fraction of a second.

### POWER TOOL USE AND CARE

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

### BATTERY TOOL USE AND CARE

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically designated battery packs.** Use of any other battery packs may create a risk of injury and fire.
- **When battery pack is not in use, keep it away from other metal objects, like paper clips, coins, keys, nails, screws, or other small metal objects, that can make a connection from one terminal to another.** Shorting the battery terminals together may cause burns or a fire.
- **Under abusive conditions, liquid may be ejected from the battery; avoid contact. If contact accidentally occurs, flush with water. If liquid contacts eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.
- **Do not use a battery pack or tool that is damaged or modified.** Damaged or modified batteries may exhibit unpredictable behaviour resulting in fire, explosion or risk of injury.

- **Do not expose a battery pack or tool to fire or excessive temperature.** Exposure to fire or temperature above 130°C (265°F) may cause explosion.
- **Follow all charging instructions and do not charge the battery pack or tool outside the temperature range specified in the instructions.** Charging improperly or at temperatures outside the specified range may damage the battery and increase the risk of fire.

## SERVICE

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

## ADDITIONAL SAFETY INSTRUCTIONS FOR CIRCULAR SAWS

### SAFETY INSTRUCTIONS FOR ALL SAWS

#### CUTTING PROCEDURES



#### **DANGER!**

Keep hands away from the cutting area and the blade. Keep your second hand on auxiliary handle, or motor housing. 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 or its own cord.** 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.

### 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 with both hands 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 kickback from the workpiece as the saw is restarted.
- **Support large panels to minimise 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.

## FURTHER SAFETY INSTRUCTIONS FOR CIRCULAR SAW

- **The label on your tool may include the following symbols. The symbols and their definitions are as follows:**
  - V ..... Volts
  - A ..... Amperes
  - W ..... Watts
  - min ..... Minutes
  - .../min or ...min<sup>-1</sup> ..... Revolutions or reciprocations per minute
  -  or d.c. .... Direct current
  - n<sub>0</sub> ..... No-load speed
  - 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® batteries and chargers listed.

#### BATTERY PACKS

054-3124-0, 054-7553-4, 054-7557-6, 054-2434-8

#### CHARGERS

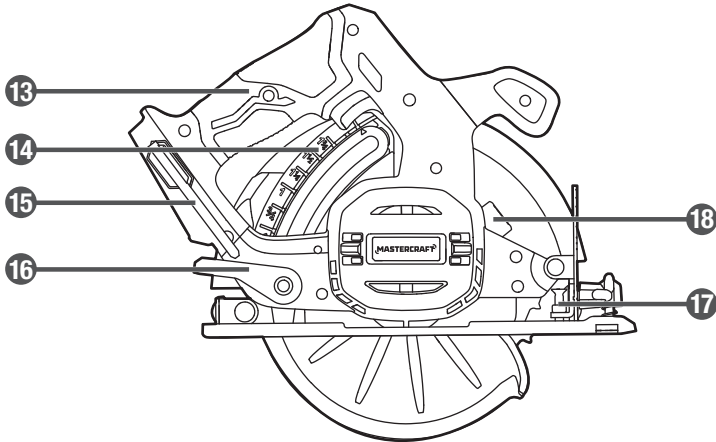
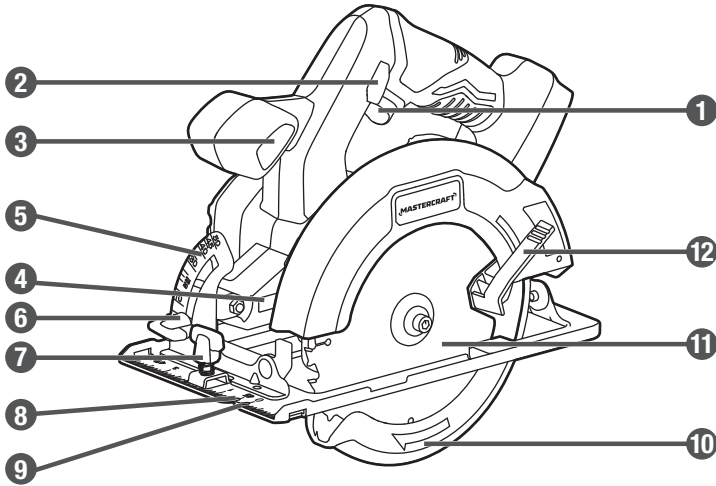
054-3126-6, 054-7559-2

- **For best results, your battery tool should be stored and used in a location where the temperature is more than 5°C (41°F) but less than 40°C (104°F).** Do not store outside or in vehicles.
- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions and durations of use, noise from this product may contribute to hearing loss.

## PACKAGE CONTENTS:

Cordless circular saw, 6-1/2" (165 mm) 24-tooth general-purpose carbide-tipped saw blade, blade wrench, vacuum adaptor, screw, edge guide and instruction manual

## KEY PARTS DIAGRAM



No.	Description
1	Trigger switch
2	Lock-off button
3	Auxiliary handle
4	LED worklight
5	Bevel scale
6	Bevel-adjustment knob
7	Edge-guide locking knob
8	45° blade-guide notch
9	0° blade-guide notch

No.	Description
10	Lower blade guard
11	Blade
12	Lower-blade-guard lever
13	Main handle
14	Depth scale
15	Blade wrench
16	Depth-of-cut quick-adjustment lever
17	0° bevel-stop adjusting screw
18	Spindle-lock button

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 this product.

**WARNING!**

- Remove the cordless 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 cordless 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.
- The safe use of this product requires an understanding of the information on the tool and in this instruction manual, as well as knowledge of the operation you are performing. Before use of this product, familiarize yourself with all operating features and safety rules.

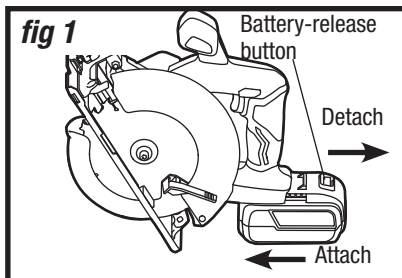
## OPERATING INSTRUCTIONS

### TO ATTACH BATTERY PACK (fig 1)

1. Make sure that the circular saw is turned off.
2. Align the raised rib on the battery pack with the grooves on the bottom of the saw, and then attach the battery pack to the saw.

### TO DETACH BATTERY PACK (fig 1)

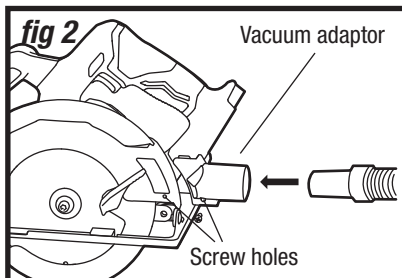
1. Make sure that the circular saw is turned off.
2. Depress the battery-release button, located on the front of the battery pack, to release the battery pack.
3. Pull forward on the battery pack to remove it from the tool.



### VACUUM ADAPTOR (fig 2)

Your tool is equipped with a vacuum adaptor (Ø1-1/4") for connecting a vacuum cleaner.

1. To attach a vacuum adaptor to the saw, insert it into the slot of the upper blade guard and then use the locking screw (included) to secure it.
2. To remove the vacuum adaptor from the saw, just loosen the locking screw on the vacuum adaptor.



**NOTICE:** When attaching the battery pack to the tool, make sure that the raised platform on the pack aligns with the grooves on the bottom of the tool and that the latches snap properly into place. Improper assembly of the battery pack can cause damage to internal components.



### WARNING!

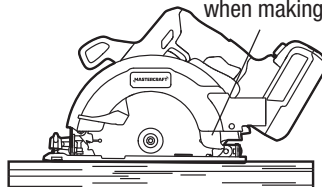
- Choose a suitable vacuum-cleaner hose or use an adaptor, if necessary.
- Never allow a vacuum-cleaner hose to interfere with the lower guard or the cutting operation.
- To have a better working environment, always use the vacuum cleaner to connect your vacuum adaptor to reduce the wood dust.

**BLADE-GUARD SYSTEM (fig 3)**

The lower blade guard attached to your circular saw is there for your protection and safety. It should never be altered for any reason. If it becomes damaged or begins to return slowly or sluggishly, do not operate the saw until the lower blade guard has been repaired or replaced. Always leave the lower blade guard in its correct operating position when using the saw.

**fig 3**

Lower blade guard is in the up position when making a cut



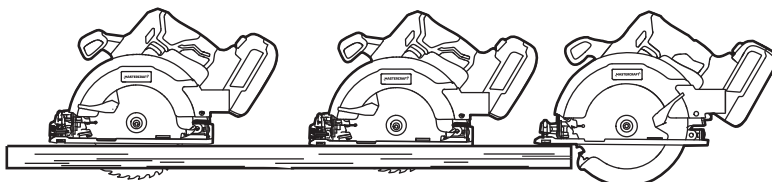
Blade exposed on underside of workpiece

**SAW BLADES**

Even the best of saw blades will not cut efficiently unless it is kept clean, sharp, and properly set. Using a dull blade places a heavy load on the saw and increases the danger of kickback. Keep extra blades on hand, so sharp blades are always available. Gum and wood pitch hardened on the blade will slow the saw down. Use gum and pitch remover, hot water, or kerosene to remove them. Do not use gasoline.

**KICKBACK (fig 4-fig 7)****fig 4**

← DIRECTION OF CUT



Blade is set too deep

Correct blade depth

→ KICKBACK

**WARNING!**

- Battery tools are always in operating condition when the battery is installed. Therefore, the circular saw should always be turned off when not in use or when carrying the tool at your side.
- Never use the saw when the lower blade guard is not operating properly. The lower blade guard should be checked for correct operation before each use. If you drop your saw, check the lower blade guard and bumper for damage at all depth settings before using the saw.

**DANGER!**

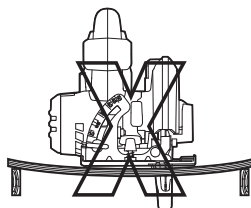
- When sawing through a workpiece, the lower blade guard does not cover the blade on the underside of the workpiece. Since the blade is exposed on the underside of the workpiece, ALWAYS keep hands and fingers away from the cutting area. Serious injury will result if any part of the body comes into contact with the moving blade.

Kickback occurs when the blade stalls rapidly and the saw is driven back towards the operator. Blade stalling is caused by any action that pinches the blade in the wood. Loss of control can lead to serious injury.

### TO GUARD AGAINST KICKBACK, AVOID UNSAFE PRACTICES SUCH AS THE FOLLOWING:

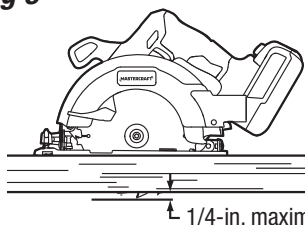
- Setting the blade depth incorrectly.
- Sawing into knots or nails in the workpiece.
- Twisting the blade while making a cut.
- Making a cut with a dull, gummed up, or improperly set blade.
- Supporting the workpiece incorrectly (fig 5).
- Forcing a cut.
- Cutting warped or wet lumber.
- Operating the tool incorrectly or misusing the tool.
- Attempting to cut with the blade at less than full speed.

**fig 5**



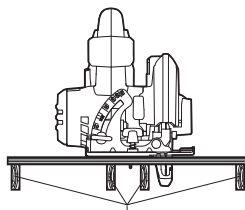
Wrong! Incorrect support

**fig 6**



1/4-in. maximum

**fig 7**



Correct support



### WARNING!

- When using the saw, always stay alert and exercise control. Do not remove the saw from the workpiece while the blade is moving.
- To avoid kickback, release the trigger switch immediately if the blade binds or the saw stalls. Kickback could cause you to lose control of the saw. Loss of control can lead to serious injury.

**TO REDUCE THE CHANCE OF KICKBACK:**

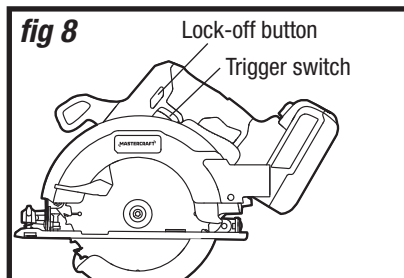
- Keep the blade at the correct depth setting. The depth setting should not exceed 1/4 inch below the material being cut (fig 6).
- Inspect the workpiece for knots or nails before cutting. Never saw into a knot or nail.
- Make straight cuts. Always use a straight edge guide when rip cutting. This helps keep the blade from twisting.
- Use clean, sharp, and properly set blades. Never make cuts with dull blades.
- Support the workpiece properly before beginning a cut (fig 7).
- Use steady, even pressure when making a cut. Never force a cut.
- Do not cut warped or wet lumber.
- Hold the saw firmly with both hands and keep your body in a balanced position to resist the forces if kickback should occur.

**LOCK-OFF BUTTON (fig 8)**

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 before you squeeze the trigger switch to start the saw.

**TO START THE SAW (fig 8)**

1. Depress the lock-off button.
2. Depress the trigger switch. Always allow the blade to reach full speed, and then guide the saw into the workpiece.

**TO STOP THE SAW (fig 8)**

1. Release the trigger switch.
2. After you release the trigger switch, allow the blade to come to a complete stop. Do not remove the saw from the workpiece while the blade is moving.

**NOTICE:**

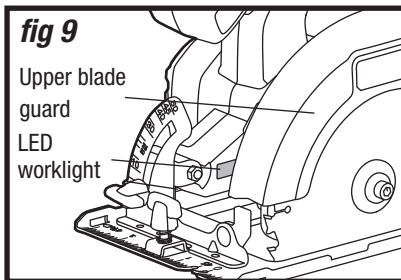
- The lock-off button can be operated from either the left or right side.

## ELECTRIC BRAKE

The saw has an electric brake to quickly stop the blade rotation. The electric brake engages when the trigger switch is released. When the brake is functioning properly, sparks may be visible through the vent slots in the motor housing. This is normal and is the action of the brake.

## LED WORKLIGHT (fig 9)

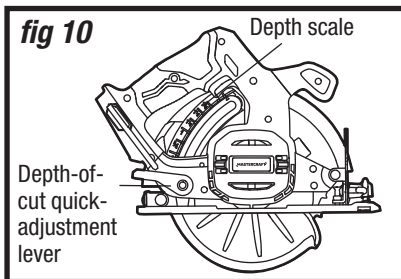
The LED worklight is located behind the upper blade guard. This provides additional light on the saw blade and the surface of the workpiece for operation in lower-light areas. The LED worklight will automatically turn on when the trigger switch is pressed and will turn off after the trigger switch is released.



## DEPTH-OF-CUT ADJUSTMENT (fig 10)

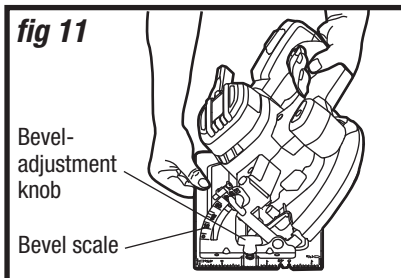
Always use the correct blade-depth setting. The correct blade-depth setting for all cuts should not be more than 1/4 inch below the material being cut. Greater blade depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth scale that enables you to accurately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

1. Remove the battery pack from the saw.
2. Loosen the depth-of-cut quick-adjustment lever.
3. Hold the base flat against the workpiece and raise or lower the saw until the indicator aligns with the desired depth on the scale.
4. Securely tighten the depth-of-cut quick-adjustment lever.



## TO ADJUST THE BEVEL ANGLE (fig 11)

1. Remove the battery pack from the saw.
2. Loosen the bevel-adjustment knob, located on the 0–50° bevel scale on the base plate.
3. Tilt the body of the saw until the required angle is reached (refer to the bevel scale).
4. Tighten the bevel-adjustment knob to secure the saw and bevel angle.



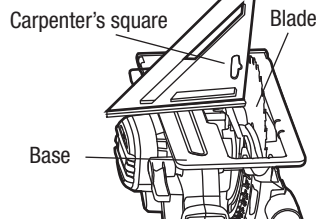
### WARNING!

- Attempting to make bevel cuts without the bevel adjustment knob securely tightened can result in serious injury.

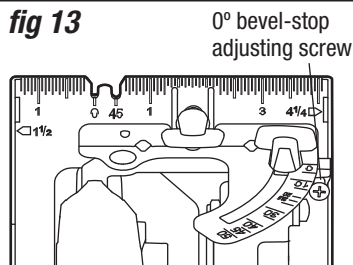
**TO CHECK 0° BEVEL STOP (fig 12)**

The saw has a 0° bevel stop that has been adjusted before shipment to assure that the blade is vertical to the base at 0° bevel cutting.

1. Remove the battery pack from the saw.
2. Using a carpenter's square, check that the saw blade is square (at a 90° angle) to the base of the saw.

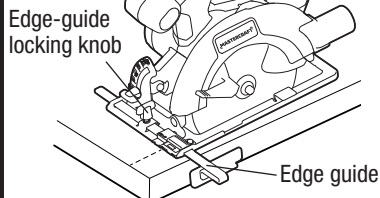
**fig 12****TO ADJUST 0° BEVEL STOP (fig 13)**

1. Remove the battery pack from the saw.
2. Loosen the bevel-adjustment knob.
3. Place the saw in an upside-down position on a workbench.
4. Using a cross-head screwdriver (available separately), turn the 0° bevel-stop adjusting screw until the base is square with the saw blade.

**fig 13****INSTALL AND USE THE EDGE GUIDE (fig 14)**

Always use an edge guide when making long or wide rip cuts with your saw. You can use either a straight edge or an edge guide.

1. Detach the battery pack from the circular saw.
2. Loosen the edge-guide locking knob. Insert the edge guide through the mounting slots at the front of the saw base.
3. Adjust the edge guide to the desired width of cut.
4. Tighten the edge-guide locking knob.
5. When using an edge guide, position the face of the edge guide 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.

**fig 14****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.

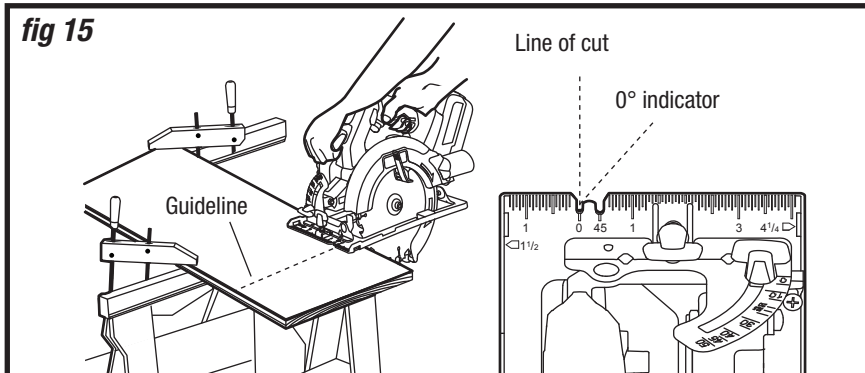
**WARNING!**

- Always remove the battery pack from the saw when assembling parts, changing blades or making adjustments. Failure to obey this warning could cause serious personal injury.
- This tool is for cutting wood only. Use only the correct saw blades for wood-cutting operations. Do not use any abrasive wheels.

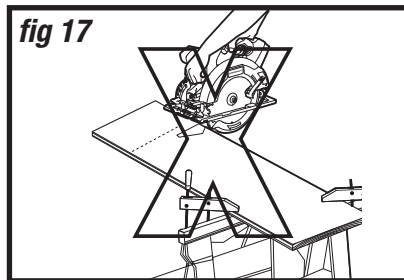
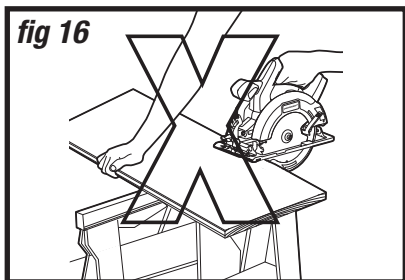
## CROSS CUTTING (fig 15)

### INTEGRATED CROSSCUT RULERS

Marked along the base across the front of the saw is a ruler for measuring repetitive cuts. It is marked 1-1/2 inches to the left of 0° and 4-1/4 inches to the right of 0° in 1/16-inch increments.



**TO MAKE THE SAFEST AND BEST POSSIBLE CUT, FOLLOW THESE HELPFUL HINTS:**



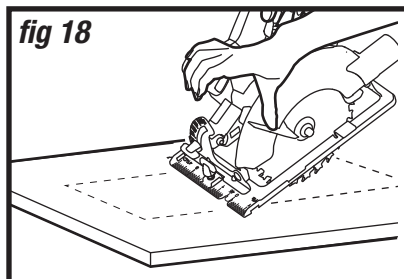
1. Draw a guideline along the desired cutting line before beginning the cut.
2. Support the workpiece so that the cut is always to the operator's side and not directly in line with the operator's body.
3. Support the workpiece near the cut.
4. Clamp the workpiece securely so that the workpiece will not move during the cut (fig 15).
5. Hold the saw firmly with both hands. Avoid placing your hand on the workpiece while making a cut (fig 16).

**NOTICE:** Position your body to right side of the blade to operate the circular saw.

6. Always place the weight of the saw on the portion of the workpiece that is supported, as shown in fig 15, and not on the “cut-off” piece, as shown in fig 17.
7. Place the workpiece with the “good” side down.
8. Align the cutting line with the blade-guide notch on the base (fig 15).
9. Rest the front edge of the base on the workpiece without touching the blade to the workpiece.
10. Start the saw and allow the blade to reach full speed.
11. Guide the saw into the workpiece and make the cut.
12. Release the trigger switch and allow the blade to come to a complete stop.

### MAKE A POCKET CUT (fig 18)

1. Remove the battery pack.
2. Adjust the bevel setting to 0° and tighten the bevel-adjustment knob.
3. Set the blade to the correct blade depth setting and tighten the depth-of-cut quick-adjustment lever.
4. Attach the battery pack.
5. Rest the front of the base flat against the workpiece, with the rear of the handle raised, so that the blade does not touch the workpiece.
6. Raise the lower blade guard and hold it in place with the lower-blade-guard lever.
7. Press the lock-off button and depress the trigger switch to start the saw.
8. Allow the blade to reach full speed, then pivot the saw on the front of the base to cut into the workpiece.
9. As the blade starts cutting the material, release the lower-blade-guard lever.
10. 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.
11. Release the trigger switch and allow the blade to come to a complete stop.
12. Lift the saw from the workpiece.



**NOTE:** The saw blade aligns with the middle of the guide notch. Make a trial cut in scrap material along a guideline to determine how much to offset the cutting guideline on the cutting material.

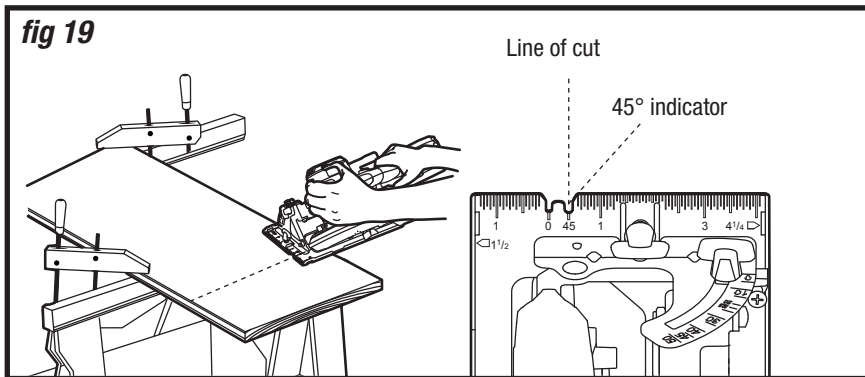


### WARNING!

- 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.
- As the blade starts cutting the material, release the lower-blade-guard lever immediately. 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.
- Never tie the lower blade guard in the raised position. Leaving the blade exposed could result in serious injury.

## MAKING A BEVEL CUT (fig 19)

**fig 19**



1. Remove the battery pack.
2. Adjust the angle of cut to any desired setting between 0° and 50°.
3. Attach the battery pack.
4. Align the cutting line with the 45° blade-guide notch on the base when making 45° bevel cuts.
5. Hold the saw firmly with both hands, as shown.
6. Rest the front edge of the base 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.

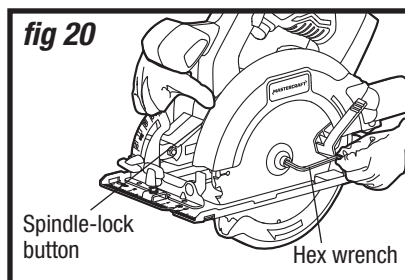
## MAINTENANCE

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

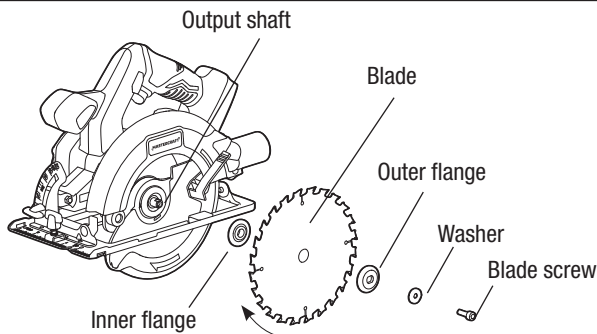
- Inspect the tool, the trigger switch.
- Check for damaged, missing, or worn parts.
- Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
- If abnormal vibration or noise occurs, turn the cordless tool off immediately, and have the problem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

### CHANGE THE BLADE (fig 20-21)

1. Remove the battery pack from the saw.
2. Loosen the depth-of-cut quick-adjustment lever. Raise the saw to the maximum height and tighten the depth-of-cut quick-adjustment lever. This practice allows easier access to the blade mounting.
3. Depress the spindle-lock button, place the hex wrench in the blade screw, and move it back and forth until you feel the spindle-lock button depress further. This action locks the blade in position so that the blade screw can be removed (fig 20).
4. With the spindle-lock button firmly depressed, turn the blade screw clockwise to remove it.
5. Raise the lower blade guard with the lower-blade-guard lever and hold it in the raised position.
6. Remove the blade screw, the outer flange, and the blade (fig 21).
7. The inner flange, which fits around the output shaft, does not need to be removed.
8. Put a drop of good-quality machine oil onto the inner flange and the outer flange where they will contact the blade.
9. Place a new saw blade inside the lower blade guard, onto the output shaft, and against the inner flange.
10. Replace the outer flange.
11. Depress and hold the spindle-lock button as you replace the blade screw and hand-tighten the screw in a counter-clockwise direction. Use the hex wrench to tighten the blade screw securely.



**fig 21**



### 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!

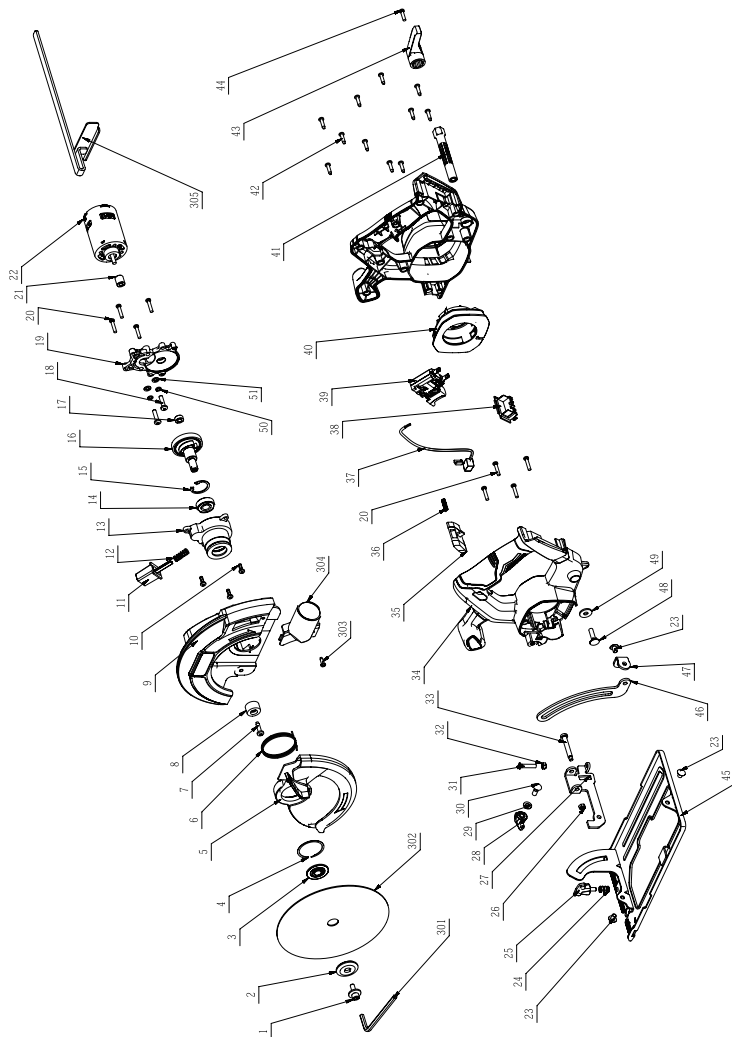
- To avoid personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.
- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc. to come into contact with plastic parts. These substances contain chemicals that can damage, weaken, 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 tool 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.
- Always remove the battery pack from the saw when assembling parts, changing blades or making adjustments. Failure to obey this warning could cause serious personal injury.
- A 6-1/2" blade is the maximum blade capacity of the saw. Use only a 6-1/2" blade when replacing a worn or damaged blade. Never use a blade that is too thick to allow the outer blade washer to engage with the flats on the spindle. Thicker blades will prevent the blade screw from securing the blade on the spindle, resulting in serious personal injury.
- Never use a blade with a rated speed lower than the speed shown on the tool.
- Be sure to wear protective work gloves while handling a saw blade. The blade can injure unprotected hands.

**TROUBLESHOOTING**

Problem	Possible Causes	Solution
The circular saw does not work.	The battery 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 at 1-800-689-9928.

## EXPLODED VIEW



## PARTS LIST

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

No.	Part No.	Description
1	3550688000	Flange Bolt
2	3551376000	Outer Flange
3	3520217000	Inner Flange
4	5660135000	Circlips For Shaft
5	3130255000	Lower Guard
6	3660414000	Torsion Spring
7	5610055000	Tapping Screw
8	3121051000	Stopper
9	3130254000	Upper Guard
10	5610030000	Thread Forming Screw
11	3402485000	Spindle Lock
12	3660326000	Spring
13	3421240000	Gear Case
14	5700048000	Ball Bearing
15	5660020000	Circlips For Hole
16	2822711000	Gear Set
17	5700163000	Oil Impreging Bearing
18	5620421000	Screw
19	3421239000	Gear Case Cover
20	5610248000	Tapping Screw
21	3550927000	Pinion
22	2730209000	DC Motor
23	5680009000	Rivet
24	3660071000	Spring
25	5640204000	Wing Bolt
26	5630007000	Prevailing Torque Hexagon Nut
27	3706727000	Support Plate
28	5630258000	Wing Nut
29	5650016000	Plain Washer
30	5640019000	Square Neck Bolt
31	5620076000	Screw

No.	Part No.	Description
32	5630003000	Hexagon Nut
33	5640198000	Bolt
34	3900207000	L R Housing Set
35	3124920000	Lock Pin
36	3660075000	Spring
37	2826705000	LED Assembly
38	3402627000	Contact Receptacle Assy
39	4870304000	Switch
40	3130256000	Fan Baffle
41	3402167000	Lock Rod
42	5610290000	Tapping Screw
43	3125805000	Depth Adjusting Lever
44	5610103000	Tapping Screw
45	2822734000	Base Plate Assy
46	3706730000	Depth Bracket
47	3704608000	Support
48	5640155000	Bolt
49	5650053000	Washer
50	5650015000	Spring Washer
51	5650013000	Plain Washer
301	5680028000	Hexagon Wrench
302	3810380000	Blade
303	5610093000	Tapping Screw
304	3130045000	Vacuum Adapter
305	2826143000	Rip Fence

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; 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.

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8