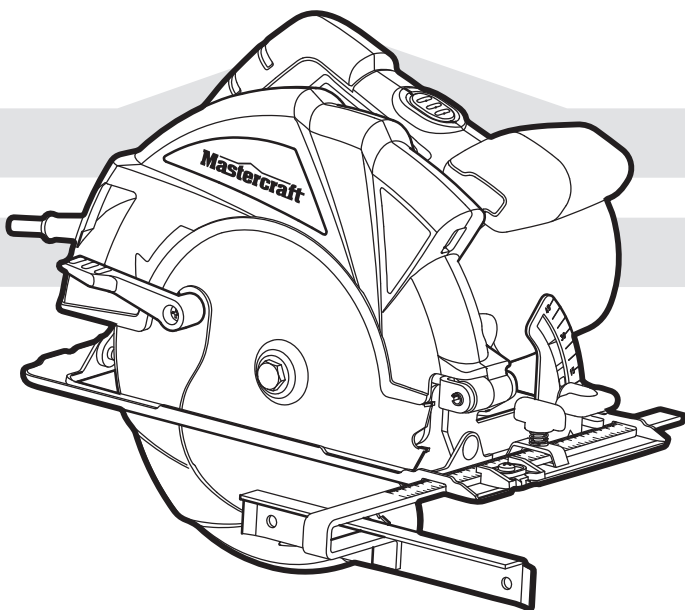


# ***Mastercraft***® MD

## **HAWKEYE** **L A S E R**® MD



INSTRUCTION MANUAL

## **7 1/4" CIRCULAR SAW WITH LASER LINE**

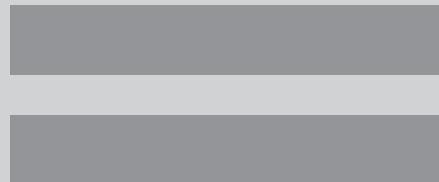
054-8347-0

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.



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|                       |  |
|-----------------------|--|
| MODEL                 | 054-8347-0   |
| MOTOR                 | 120 V ~60 Hz, 14 A                                 |
| SPEED                 | 5500 RPM (no load)                                 |
| BLADE                 | 7 1/4" (24-tooth)                                  |
| CUTTING ANGLE         | 0°~45°   |
| MAXIMUM CUTTING DEPTH | 2 1/2" (63.5 mm) at 90°<br>1 13/16" (46 mm) at 45° |
| LASER                 | Class IIIa   |
| WAVELENGTH            | 635-665 nm   |
| MAXIMUM OUTPUT        | ≤5 mW  |
| WEIGHT                | 11 lb 2 oz (5.05 kg)                               |

### Rules for safe operation



#### 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 7 1/4" Circular Saw with Laser Line 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 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 work area clean and well lit.** Cluttered or dark areas invite accidents.
- **Do not operate power tools in an explosive environment, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks that 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

- **The plug on the power tool must match the outlet. Never modify the plug in any way. Do not use adaptor 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 that is suitable for outdoor use.** The use of a cord that is suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tool in a damp location is unavoidable, use a power supply that is protected by a ground-fault circuit interrupter.** The 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 tool while tired or under the influence of drugs, alcohol, or medication.** A moment of inattention while operating a power tool 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, a hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting. Verify that the switch is in the off position before connecting to the power source and/or battery pack, and before picking up or carrying the tool.** Carrying power tools with your finger on the switch or connecting a power tool that has the switch on invites accidents.

- **Remove any adjusting keys or wrenches 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 get caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, verify these are connected and properly used.** The use of these devices can reduce dust-related hazards.

## Use and care of power tools

- **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 when used at the rate at which it was designed to work.
- **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 disconnect the battery pack from the power tool before making any adjustments, changing accessories, or storing the power tool.** 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 who are 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, broken 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.** Using the power tool for operations different from those for which it is intended could result in a hazardous situation.

## 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.

## Additional safety rules for laser lights

The laser light/laser radiation used in this system is Class III, with maximum 5mW And wavelengths of 635-665 nm. Under normal circumstances, these lasers do not present an optical hazard, but staring at the beam may cause flash blindness.

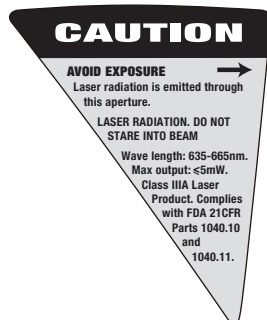


### WARNING!

Do not stare directly at the laser beam.

A hazard may exist if you deliberately stare into the beam. Please observe all of the following safety rules:

- The laser must be used and maintained in accordance with the manufacturer's instructions.
- Never aim the beam at any person or any object other than the workpiece.
- Always ensure that the laser beam is aimed at a sturdy workpiece that does not have reflective surfaces. Wood and rough coated surfaces are acceptable. Bright, shiny reflective sheet steel or similar materials are not suitable for laser use, because the reflective surface could direct the beam back at the operator.
- Do not replace the laser light assembly with a different type. Repairs must be carried out by the laser manufacturer, or by an authorized agent.
- ALWAYS turn the laser beam off when not in use. Leaving the tool on increases the risk of someone inadvertently staring into the laser's beam.



### CAUTION!

Using controls or adjustments or performing procedures other than those specified herein may result in hazardous radiation exposure.

## Specific safety rules for circular saws

### DANGER

- **Keep hands away from cutting area and 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 work piece.** The guard cannot protect you from the blade below the work piece.

- **Adjust the cutting depth to the thickness of the work piece..** Less than a full tooth of the blade teeth should be visible below the work piece.
- **Never hold piece being cut in your hands or across your leg. Secure the work piece to a stable platform.** It is important to support the work properly to minimize body exposure, blade binding, or loss of control.
- **Hold 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 shock the operator.
- **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 arbor holes.** Blades that do not match the mounting hardware of the saw will run eccentrically, 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.

### CAUSES AND OPERATOR PREVENTION OF KICKBACK

- kickback is sudden reaction to a pinched, bound 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 bound 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 if the wood causing the blade to climb out the kerf and jump back toward the operator.

**KICKBACK IS THE RESULT OF SAW MISUSE AND/OR INCORRECT OPERATION 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 work piece, centre the saw blade in the kerfs and check that saw teeth are not engaged into the material.** If saw blade is binding, it may walk up or kickback from the work piece 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 kerfs causing excessive friction, blade binding and kickback.
- **Blade depth and bevel adjusting locking levers must be tight and secure before making cut.** If blade adjustment shifts while cutting, it may cause binding and kickback.
- **Use extra caution when making a 'plunge cut' into existing walls or other blind areas.** The protruding blade may cut objects that can cause kickback.

#### SAFETY INSTRUCTIONS FOR SAWS WITH THE LOWER BLADE GUARD

- **Check lower guard for proper closing before each use. Do not operate the saw if lower guard does not move freely and close instantly. Never clamp or tie the lower guard into the open position.** If saw is accidentally dropped, 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.
- **Lower guard should be retracted manually only for special cuts such as 'plunge cuts' and 'compound cuts'. Raise lower guard by retracting handle and as soon as 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 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 instructions for operation



##### WARNING!

Keep hands and body away from and to the side of the blade. Contact with blade will result in serious injury.



##### WARNING!

To reduce the risk of injury, user must read instruction manual. Check lower guard. It must cover the blade instantly! Hold saw with both hands. Support and clamp work. Wear eye protection.



##### WARNING!

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

- **Know your power tool.** Read the Owner's Manual carefully. Learn the applications and the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire or serious injury.
- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions, noise from this product may contribute to hearing loss.
- **Always wear safety glasses.** Everyday eyeglasses have only impact-resistant lenses; they are NOT safety glasses. Following this rule will reduce the risk of serious personal injury.
- **Protect your lungs.** Wear a face or dust mask if the operation is dusty. Following this rule will reduce the risk of serious personal injury.
- **All visitors and bystanders must wear the same safety equipment as the operator.**
- **Only use saw blade recommended; do not use any abrasive wheels.**
- **Inspect the tool cords periodically,** and if damaged, have them repaired by a qualified service technician. Be aware of the cord location.
- **Always check the tool for damaged parts.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine whether it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, broken parts, and any other condition that may affect the tool's operation. A guard or other part that is damaged should be properly repaired or replaced by a qualified service technician.
- **Save these instructions.** Refer to them frequently, and use them to instruct others who may use this tool. If someone borrows this tool, make sure they have these instructions also.

- **Use the appropriate extension cord if operating a power tool outdoors. Use of a cord suitable for outdoor use** reduces the risk of electric shock. When using an extension cord, be sure to use one sturdy enough for the amperage drawn by your tool. An undersized cord will produce a drop in line voltage, resulting in reduced power and overheating. The following table illustrates the correct cord size, depending on cord length and the tool's ampere rating. If in doubt, use the next heavier gauge. The lower the gauge, the heavier the cord.

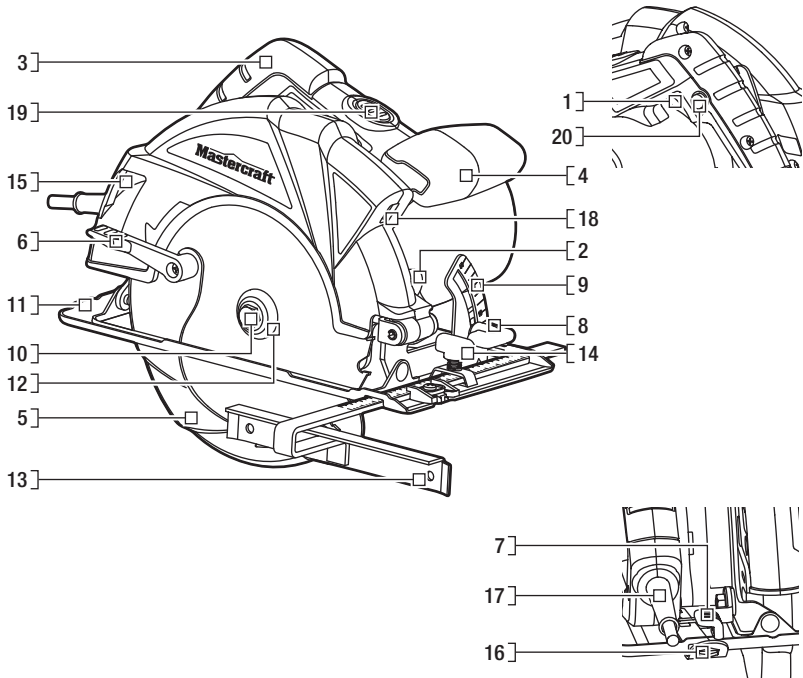
Recommended sizes of extension cords

| Ampere rating of the tool | Volts | Total length of cord in feet cord size in A.W.G(minimum) |             |                 |              |
|---------------------------|-------|--|-------------|-----------------|--------------|
|                           |       | 25' (7.6m)   | 50' (15.2m) | 100' (30.4m)    | 150' (45.7m) |
| 0-6                       | 120V~ | 18   | 16          | 16              | 14           |
| 6-10                      |       | 18   | 16          | 14              | 12           |
| 10-12                     |       | 16   | 16          | 14              | 12           |
| 12-16                     |       | 14   | 12          | Not Recommended |              |

Package contents:

Circular saw, blade (installed in the tool), parallel fence guide, blade wrench, Instruction Manual

Know your circular saw



| No. | Description                                | No. | Description                 |
|-----|--|-----|-----------------------------|
| 1   | On/off trigger switch with lock-off button | 11  | Base plate                  |
| 2   | Spindle-lock button                        | 12  | Flange                      |
| 3   | Main handle                                | 13  | Parallel fence guide        |
| 4   | Front handle                               | 14  | Parallel fence locking knob |
| 5   | Lower blade guard                          | 15  | Dust-extraction port        |
| 6   | Blade-guard lever                          | 16  | Wrench                      |
| 7   | Depth-adjustment lever                     | 17  | Cord guard                  |
| 8   | Bevel adjustment lever                     | 18  | Laser aperture              |
| 9   | 0–45° bevel gauge                          | 19  | Laser switch                |
| 10  | Hexagon bolt                               | 20  | Switch lock-off button      |

**WARNING!**

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 product you are attempting. Before use of this product, familiarize yourself with all of the operation features and safety rules.

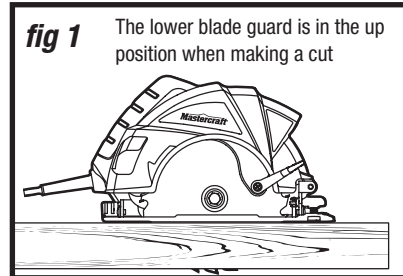
**Saw blades**

All saw blades need to be kept clean, sharp and properly set in order to cut efficiently. Using a dull blade will place a heavy load on the saw and increase the danger of kickback. Keep extra blades on hand, so sharp blades are always available.

Gum and wood pitch hardened on the blade slow the saw down. Remove the saw blade from the tool and use gum and pitch remover, hot water or kerosene to remove them. DO NOT use gasoline.

**Blade guard system (fig 1)**

The lower blade guard on the circular saw is there for the operator's protection and safety. Do not alter it for any reason. If it becomes damaged or begins to run slowly or sluggishly, DO NOT operate the saw until the damaged part has been repaired or replaced. ALWAYS leave the guard in its correct operating position when 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.

**CAUTION!**

To avoid possible serious injury, never use the saw when the lower blade guard is not operating correctly. Check the lower blade guard for correct operation before each use. The lower blade guard is operating correctly when it moves freely and instantly returns to the closed position. If the saw is dropped, check the lower blade guard and bumper for damage at all depth settings before using it.

If, at any time, the lower blade guard does not snap closed, unplug the saw from the power supply. Exercise the lower blade guard by moving it rapidly back and forth from the full open position to the closed position several times. This will often restore the lower blade guard to its normal operating condition. If this does not correct a slow or sluggishly closing lower blade guard, do not use the saw. Take it to a qualified service technician for repair.

**Kickback**

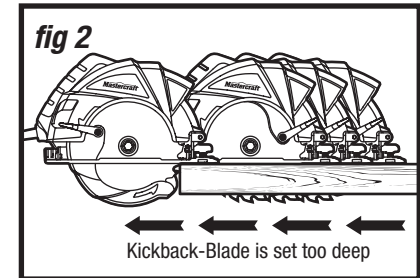
Kickback occurs when the blade stalls rapidly and the saw is driven back toward the operator. Blade stalling is caused by any action that pinches the blade in the wood.

**DANGER!**

Release the switch immediately if the blade binds or the saw stalls. Kick back could cause loss of control of the saw. Loss of control can lead to serious personal injury.

**TO GUARD AGAINST KICKBACK, AVOID DANGEROUS PRACTICES SUCH AS THE FOLLOWING:**

1. Setting the blade depth incorrectly.
2. Sawing into knots or nails in the workpiece.
3. Twisting the blade while making a cut.
4. Making a cut with a dull, gummed up, or improperly set blade.
5. Supporting the workpiece incorrectly.
6. Forcing a cut.
7. Cutting warped or wet lumber.
8. Operating the tool incorrectly or misusing the tool.



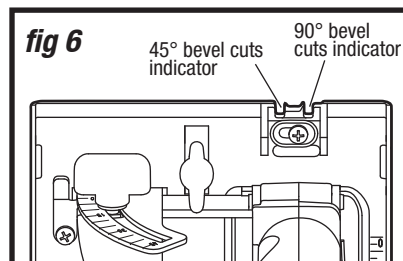
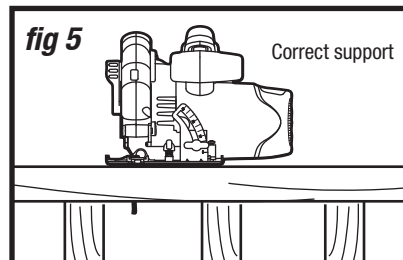
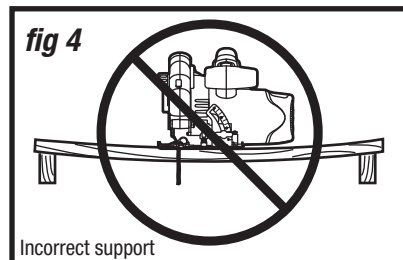
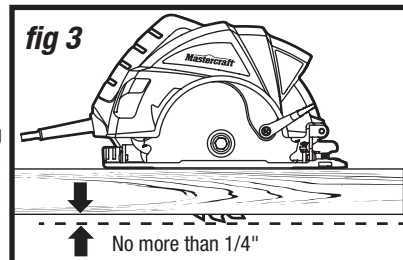


### TO REDUCE THE CHANCE OF KICKBACK, FOLLOW THESE SAFETY PRACTICES:

1. Keep the blade at the correct depth setting. The depth setting should not extend more than 1/4" (see fig 3) below the material that is being cut.
2. Inspect the workpiece for knots or nails before cutting. Never saw into a knot or nail.
3. Make straight cuts. Always use a straight-edge guide when rip cutting. This helps keep the blade from twisting.
4. Use clean, sharp and properly set blades. Never make cuts with dull blades.
5. Support the workpiece properly before beginning a cut. Never force a cut.
6. Do not cut warped or wet lumber (see fig 4).
7. Hold the saw firmly with both hands, and maintain a balanced position to resist the forces if kickback should occur.

### Line guide (fig 6)

For a straight 90° cut, use the right side of the notch in the base plate. For 45° bevel cuts, use the left side of the notch. The cutting guide notch will give 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 number of different blade types and thicknesses available. To ensure minimum splintering on the good side of the material to be cut, place the good side so that it is facing down.



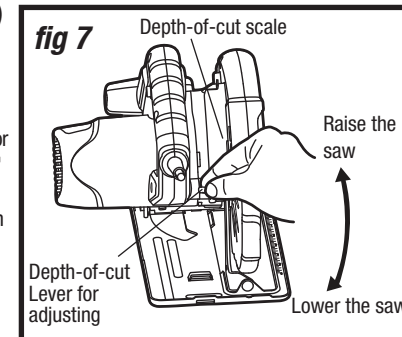
### Depth-of-cut adjustments (fig 7)



#### WARNING!

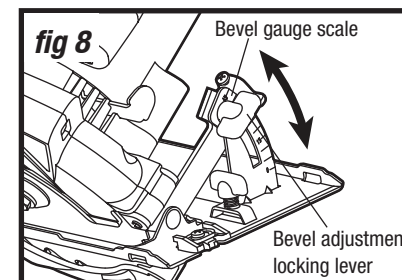
ALWAYS use the correct blade depth setting. The correct blade depth setting for all cuts should not permit more than 1/4" of the blade to extend below the material being cut (see fig 3). Allowing more depth will increase the chance of kickback and cause the cut to be rough. Your saw is equipped with a depth-of-cut scale that provides depth-of-cut accuracy. The depth-of-cut scale is located on the inside back of the upper blade guard.

1. Unplug the saw.
2. Pivot the depth-adjustment lever upward to release it.
3. Determine the desired depth of cut.
4. Hold the base flat against the workpiece, and raise or lower the saw until the indicator mark on the saw aligns with the desired depth on the scale.
5. Push down on the depth-adjustment lever to lock it into position.



### Adjusting the cutting angle (fig 8)

1. Unplug the saw.
2. Loosen the bevel-lock lever, which is located on the bevel gauge on the base plate.
3. Tilt the body of the saw until the required bevel angle is reached (refer to the scale on the bevel gauge).
4. Tighten the bevel-lock lever.



## Using the laser line



### WARNING!

Do not stare directly at the laser beam. Only turn the laser beam on when the saw is on the workpiece.

1. Mark the cutting line on the workpiece.
2. Unplug the saw.
3. Adjust the cutting angle and cutting depth as needed.
4. Plug in the saw and press the laser switch down to turn on the laser.
5. Align laser beam with the mark on the workpiece.
6. Squeeze the trigger switch and slowly push the saw forward, using both hands. Keep the laser line on the mark.
7. Always turn off the laser beam when you have finished cutting work.

## Starting a cut

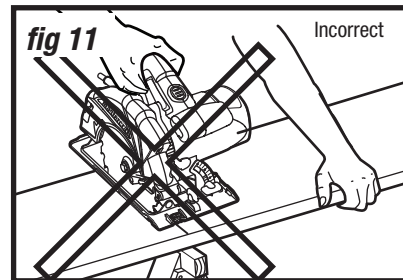
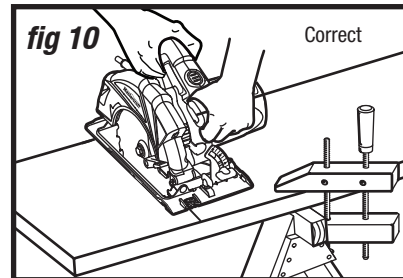
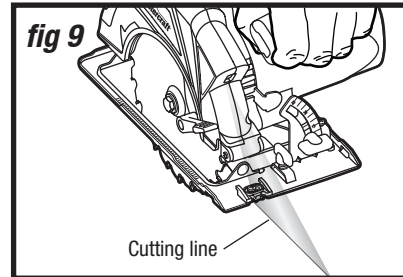
ALWAYS use your saw with your hands positioned correctly: with one hand on the main handle and operating the trigger switch and the other hand on the front assist handle (fig 10).

NEVER use the saw with your hands positioned as shown in fig 11.



### WARNING!

When lifting the saw from the workpiece, the blade is exposed on the underside of the saw until the lower blade guard closes. Make sure that the lower blade guard is closed before setting the saw down.



### WARNING!

To make sawing easier and safer, always maintain proper control of the saw. Loss of control could cause an accident, resulting in possible serious injury.

### TO MAKE THE BEST POSSIBLE CUT, FOLLOW THESE HELPFUL TIPS:

1. Place the workpiece with the "good" side facing down.

**NOTICE:** The good side of the workpiece is the side where appearance is important

2. Support the workpiece so that the cut is always to the operator's side.
3. Support the workpiece near the cut.
4. Clamp the workpiece securely so that the workpiece will not move during the cut.
5. Draw a guideline along the desired cutting line before beginning the cut.
6. Always place the saw on the portion of the workpiece that is supported, and not on the "cut off" piece.
7. Hold the saw firmly with both hands.
8. Do not place your hand on the workpiece while making a cut.
9. Keep the cord away from the cutting area. Always place the cord so that it is not hanging on the workpiece while making a cut.
10. Depress the trigger switch to start the saw.
11. Always allow the saw blade to reach full speed before starting the cut.
12. When the cut is complete, release the trigger switch and allow the blade to come to a complete stop.
13. Lift the saw from the workpiece.



### DANGER!

If the cord hangs up on the workpiece during a cut, release the trigger switch immediately. To avoid injury, unplug the saw and move the cord to prevent it from hanging up again.



### DANGER!

Using the saw with a damaged cord could result in serious injury or death. If the cord has been damaged, have it replaced before using the saw again.

### Starting/stopping the saw (fig 12)

**To start the saw:** Depress the lock-off button, and then depress the switch trigger. Always allow the blade reach full speed, and then guide the saw into the work-piece.



#### WARNING!

If the blade comes into contact with the workpiece before it reaches full speed, this may cause the saw to “kick back” toward the operator, resulting in serious injury.

**To stop the saw:** Release the trigger switch. After releasing 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.

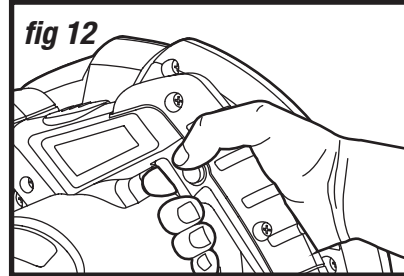


fig 12

### Making a crosscut or rip cut (fig 13, 14)

When making a cross cut or rip cut, align the line of cut with the blade guide notch on the base.

Since blade thicknesses vary, always make a trial cut in scrap material along a guideline to determine how much, if any, you must offset the guideline to produce an accurate cut.

**NOTICE:** The distance from the cutting line to the guideline is the amount by which the guide should be offset. Use a guide when making long or wide rip cuts.

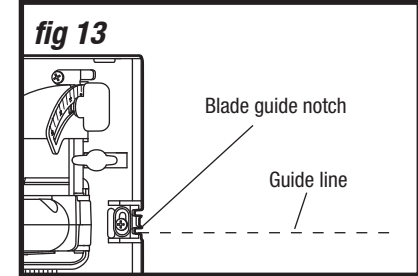


fig 13

### Rip cutting using a straight edge (fig 14)

1. Secure the workpiece.
2. Clamp a straight edge to the work-piece using C-clamps (available separately).

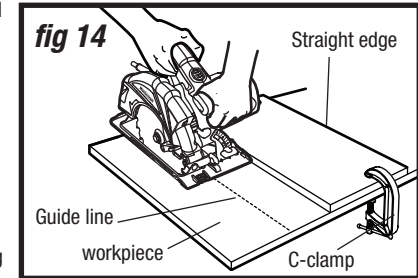


fig 14

**NOTICE:** Position the C-clamps so that they will not interfere with the saw housing during the cut.

3. Rest the front edge of the base on the work piece.
4. Depress the trigger switch to start the saw.
5. Allow the blade to reach full speed, then guide the saw into the workpiece and make the cut.
6. Saw along the straight edge to achieve a straight rip cut.
7. When the cut is complete, release the trigger switch and allow the blade to come to a complete stop.
8. Lift the saw from the workpiece.

**NOTICE:** Do not bind the blade in the cut.

**Making a bevel cut (fig 15)****ADJUST THE BEVEL SETTING:**

1. Unplug the saw.

**WARNING!**

ALWAYS unplug saw before making any adjustments. Failure to unplug the saw could result in accidental starting which may cause serious personal injury.

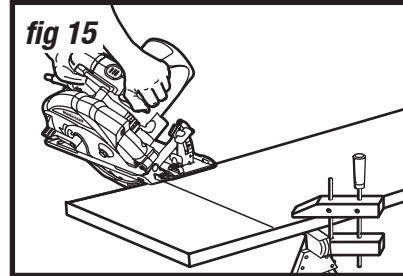
2. Loosen the bevel adjustment knob.
3. Raise the motor housing end of the saw until you reach the desired angle setting on the bevel scale.
4. Tighten the bevel adjustment knob securely.

**WARNING!**

Attempting a bevel cut without having the bevel adjustment knob securely tightened can result in serious injury.

**MAKE A BEVEL CUT:**

1. Hold the saw firmly with both hands as shown.
2. Rest the front edge of the base on the workpiece.
3. Start the saw and let the blade reach full speed.
4. Guide the saw into the workpiece and make the cut.
5. When the cut is complete, release the trigger and allow the blade to come to a complete stop.
6. Lift the saw from the workpiece.

**fig 15****Making pocket cuts (fig 16)****WARNING!**

Always adjust the bevel setting to 0° before making a pocket cut. Attempting a pocket cut at any other setting can result in loss of control of the saw and possible serious injury.

1. Unplug the saw.
2. Adjust the bevel setting to 0°.
3. Set the blade to the correct blade-depth setting.
4. Plug in the saw.
5. Swing the lower blade guard up using the lower blade guard lever

**WARNING!**

Always raise the lower blade guard with the lower blade guard lever to avoid serious injury.

6. Hold the lower blade guard in place with the blade guard lever.
7. Rest the front of the base flat against the workpiece, with the rear of the saw raised so that the blade does not touch the workpiece.
8. Start the saw, and allow the blade to reach full speed.
9. Lower the saw into the workpiece, and make the cut.

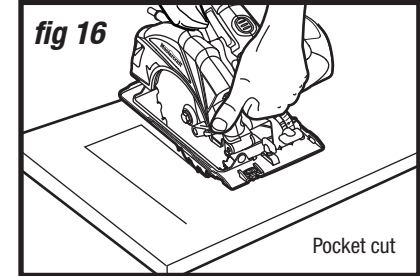
**WARNING!**

Always cut in a forward direction when pocket cutting. Cutting in the reverse direction could cause the saw to climb up on the workpiece and kick back toward the operator.

10. When the cut is complete, release the trigger, and allow the blade to come to a complete stop.
11. Lift the saw from the workpiece.
12. Clear the corners out with a hand saw.

**WARNING!**

Never tie the lower blade guard in a raised position. Leaving the blade exposed could lead to serious injury.

**fig 16**

Pocket cut

## Installing and using the edge guide (fig 17)

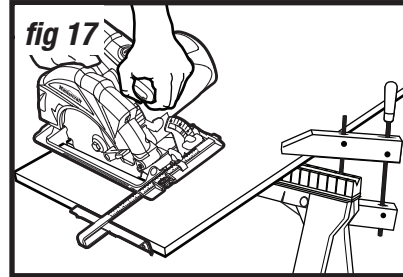
Your saw comes with an edge guide which allows you to make accurate parallel cuts when trimming a workpiece. It attaches to the saw's base.

1. Unplug the saw.



### WARNING!

ALWAYS unplug saw before making any adjustments. Failure to unplug the saw could result in accidental starting which can cause serious personal injury.



2. Insert the bar of the edge guide through the slots in the base of the saw with the edge guide facing down.
3. Screw the edge-guide locking knob into the threaded hole in the base in order to tighten the edge-guide bar in place.
4. Measure the distance from the edge of the workpiece to the cutting line. Slide the edge guide to this desired distance, and tighten the locking knob to secure the edge guide in place.
5. Clamp and support the workpiece securely before making your cut.
6. Place the edge guide firmly against the edge of the workpiece (see fig 16). Doing this will give you a true cut without pinching the blade.
7. BE SURE that the guiding edge of the workpiece is straight so you can get a straight cut.
8. Always allow the blade to reach full speed then carefully guide the saw into the workpiece. DO NOT bind the blade in the cut.
9. When the cut is complete, release the trigger and allow the blade to come to a complete stop.
10. Lift the saw from the workpiece.



### WARNING!

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



### 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!

Unplug the saw from the power source 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.

If the supply cord is damaged, it must be replaced by a specially prepared cord available through the service organization.



### WARNING!

Do not allow 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.

### BEFORE EACH USE:

1. Inspect the saw, the switch, and the cord 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 saw off immediately, and have the problem corrected before further use.

### Changing the saw blade (fig 18, 19)



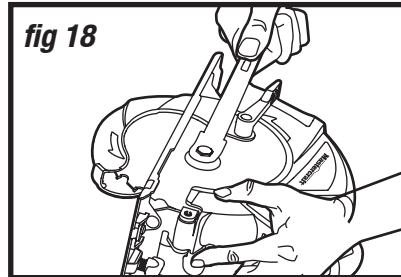
#### WARNING!

To prevent personal injury, always disconnect the plug from the power source before installing or removing the saw blade!



#### WARNING!

BE SURE to wear protective work gloves while handling a saw blade. The blade can injure unprotected hands.



#### TO REMOVE THE SAW BLADE:

1. Unplug the saw.
2. Depress and hold the spindle-lock button, and use the blade wrench to loosen the blade screw by turning it counter-clockwise.
3. Remove the blade screw and the outer blade flange.
4. Lift the lower blade guard and remove the blade.

#### TO INSTALL THE SAW BLADE:

1. Unplug the saw.
2. Loosen the depth-adjustment lever, fully raise the saw, and lock the saw in the raised position. Place the saw on its side on a flat surface.
3. Depress and hold the spindle-lock button.
4. Remove the blade screw by turning it counter-clockwise with the wrench (included) while keeping the spindle-lock button depressed.
5. Remove the outer blade flange.



#### WARNING!

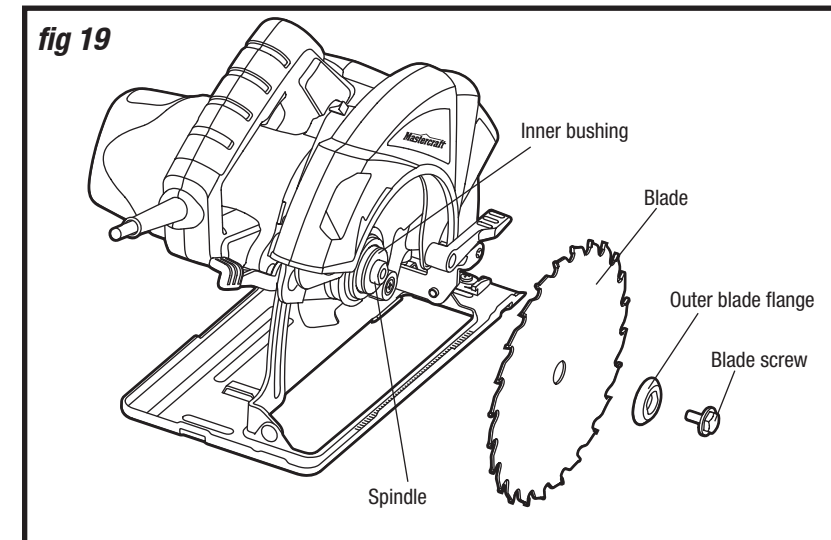
If the inner bushing has been removed, replace it before placing the blade on the spindle. Failure to do so will prevent the blade from tightening properly, and could result in serious personal injury.

6. Use the lower blade guard lever to retract the lower blade guard into the upper blade guard. Make sure that the lower guard spring works properly and allows the guard to move freely.
7. Verify that the saw teeth, the arrow on the saw blade and the arrow on the lower guard are all pointing in the same direction.

**NOTICE:** The saw teeth should point upward at the front of the saw, as shown in fig 19.

8. Fit the saw blade inside the lower blade guard and onto the spindle.
9. Replace the outer blade flange.
10. Depress and hold the spindle-lock button, and replace the blade screw.
11. Tighten the blade screw securely by turning it clockwise with the wrench.

**NOTICE:** Never use a blade that is too thick to allow the outer blade flange to engage with the flat section of the spindle.



### Lubrication

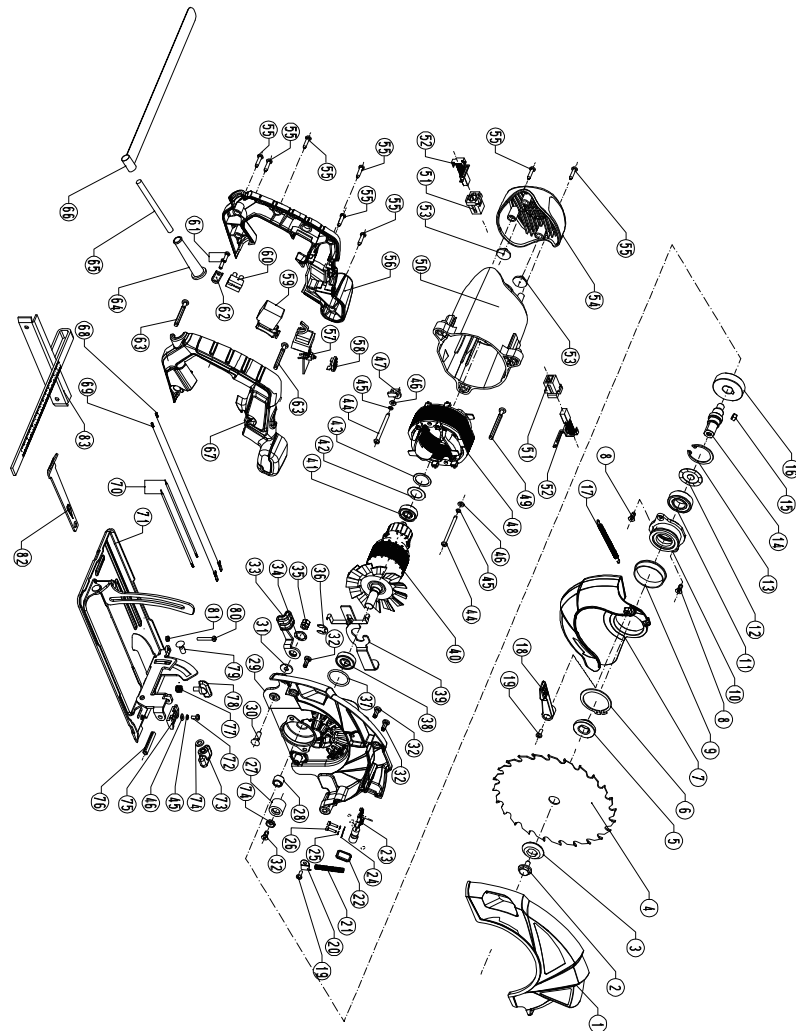
All of the bearings in this tool are lubricated with a sufficient amount of high-grade lubricant for the life of the tool under normal operating conditions. Therefore, no further lubrication is required.



| PROBLEM                                   | POSSIBLE CAUSES   | SOLUTIONS                                 |
|---|---|---|
| The circular saw does not work            | The saw is not connected to a power source  | Connect the plug to a power source        |
| The blade does not follow a straight line | The teeth are dull. This is caused by hitting a hard object such as a nail, dulling teeth on one side. The blade tends to cut to the side with the sharpest teeth | Replace the blade                         |
|   | The edge guide or straight edge is not being used   | Use an edge guide or straight edge        |
| 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



| No. | Part No.   | Description          | No. | Part No.   | Description                   |
|-----|------------|----------------------|-----|------------|-------------------------------|
| 1   | 3420368000 | Upper Guard          | 31  | 5650017000 | Plain Washer                  |
| 2   | 5620149000 | Flange Screw         | 32  | 5610057000 | Thread Forming Screw          |
| 3   | 3550222000 | Outer Flange         | 33  | 2820127000 | Lever Set                     |
| 4   | 3810073000 | Saw Blade            | 34  | 3700257000 | Wave Washer                   |
| 5   | 3520734000 | Inner Flange         | 35  | 5630043000 | Nut                           |
| 6   | 5660026000 | Circlips For Shaft   | 36  | 5660010000 | E Ring                        |
| 7   | 3420369000 | Lower Guard          | 37  | 3121044000 | O Ring                        |
| 8   | 5610086000 | Thread Forming Screw | 38  | 5700014000 | Ball Bearing                  |
| 9   | 3120558000 | Bush                 | 39  | 2820139000 | Spindle Lock Set              |
| 10  | 3420160000 | Gear Case Cover      | 40  | 2750822000 | Rotor                         |
| 11  | 5700019000 | Ball Bearing         | 41  | 5700010000 | Ball Bearing                  |
| 12  | 3700281000 | Wave Washer          | 42  | 3700255000 | Washer                        |
| 13  | 5660023000 | Circlips For Hole    | 43  | 3121054000 | Spring                        |
| 14  | 3550226000 | Gear Shaft           | 44  | 5610048000 | Tapping Screw                 |
| 15  | 5680002000 | Plain Key            | 45  | 5650007000 | Spring Washer                 |
| 16  | 3550235000 | Gear                 | 46  | 5650005000 | Plain Washer                  |
| 17  | 3660062000 | Spring               | 47  | 3120552000 | Wire Clamp                    |
| 18  | 3121170000 | Plunge Lock Level    | 48  | 2740125000 | Stator                        |
| 19  | 5620039000 | Screw                | 49  | 5610064000 | Thread Forming Screw          |
| 20  | 3700262000 | Wire Holder          | 50  | 3120548000 | Motor Housing                 |
| 21  | 3660069000 | Spring               | 51  | 2800031000 | Brush Holder                  |
| 22  | 3120561000 | Lens                 | 52  | 4960020000 | Carbon Brush                  |
| 23  | 2820616000 | Laser Assembly       | 53  | 3121055000 | Rubber Insert                 |
| 24  | 5650001000 | Plain Washer         | 54  | 3120550000 | Rear Cover                    |
| 25  | 5650003000 | Spring Washer        | 55  | 5610042000 | Tapping Screw                 |
| 26  | 5620006000 | Hexagon Socket Screw | 56  | 3320266000 | Left Handle                   |
| 27  | 3121046000 | Stopper              | 57  | 2822097000 | Transformer & Switch Assembly |
| 28  | 5700041000 | Porous Bearing       | 58  | 3120554000 | Cap                           |
| 29  | 3420367000 | Gear Case            | 59  | 4870091000 | Switch                        |
| 30  | 5620150000 | Screw                | 60  | 4930432000 | Connector                     |

**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            | No. | Part No.   | Description      |
|-----|------------|------------------------|-----|------------|------------------|
| 61  | 5610031000 | Tapping Screw          | 73  | 3400010000 | Wing Nut         |
| 62  | 3700367000 | Cord Anchorage         | 74  | 5650016000 | Plain Washer     |
| 63  | 5610063000 | Thread Forming Screw   | 75  | 3120562000 | Line Guide       |
| 64  | 3121047000 | Cord Guard             | 76  | 5670008000 | Spring Pin       |
| 65  | 4810002000 | Power Cord & Plug      | 77  | 3660071000 | Spring           |
| 66  | 2490136000 | Nylon String           | 78  | 3400011000 | Wing Bolt        |
| 67  | 3320267000 | Right Handle           | 79  | 5640019000 | Square Neck Bolt |
| 68  | 2820764000 | Internal Wire Assembly | 80  | 5620044000 | Screw            |
| 69  | 2820772000 | Internal Wire Assembly | 81  | 5630001000 | Hexagon Nut      |
| 70  | 2822076000 | Internal Wire Assembly | 82  | 3700865000 | Wrench           |
| 71  | 2822027000 | Base Plate Set         | 83  | 3700663000 | Rip Fence        |
| 72  | 5620038000 | 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 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 seasonable 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.

