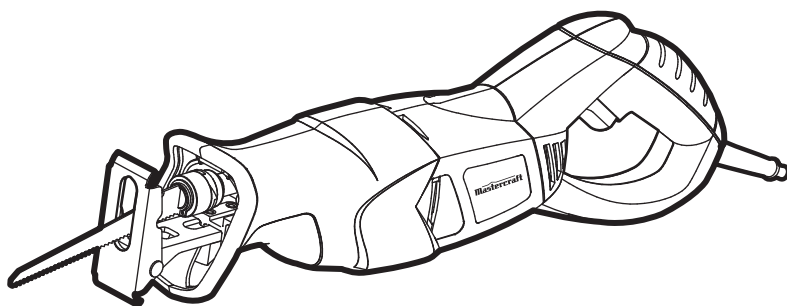


model no. 054-8161-0

**Mastercraft™**

## COMPACT RECIPROCATING SAW



### **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	120V~, 60Hz
Rated power input	6A
Variable speed	0–2700 SPM
Blade stroke	25/32"
Weight	6 lb 6 oz (2.9 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 Compact Reciprocating Saw before using. Keep this manual available for future reference.

**IMPORTANT**

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

**READ ALL INSTRUCTIONS THOROUGHLY****SAVE THESE INSTRUCTIONS****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 explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks, which may ignite the dust or fumes.
- **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

## ELECTRICAL SAFETY

- **Power tool plugs must match the outlet.** Never modify the plug in any way. Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
- **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
- **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- **Do not abuse the cord.** Never use the cord for carrying, pulling or unplugging the power tool. Keep the cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
- **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
- **If operating a power tools in a damp location is unavoidable, use a ground-fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

## PERSONAL SAFETY

- **Stay alert, watch what you are doing and use common sense when operating a power tool.** Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication. A moment of inattention while operating power tools may result in serious personal injury.
- **Use personal protective equipment.** Always wear eye protection. Protective equipment such as dust mask, non-skid safety shoes, hard hat, or hearing protection used for appropriate conditions will reduce personal injuries.
- **Prevent unintentional starting.** Ensure that the switch is in the off-position before connecting to power source or battery pack, picking up or carrying the tool. Carrying power tools with your finger on the switch or energising power tools that have the switch on invites accidents.
- **Remove any adjusting key or wrench before turning the power tool on.** A wrench or a key left attached to a rotating part of the power tool may result in personal injury.
- **Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- **Dress properly. Do not wear loose clothing or jewellery. Keep your hair, clothing and gloves away from moving parts.** Loose clothes, jewellery or long hair can be caught in moving parts.
- **If devices are provided for the connection of dust extraction and collection facilities, ensure that these are connected and properly used.** Use of dust collection devices can reduce dust-related hazards.

## POWER TOOL USE AND CARE

- **Do not force the power tool.** Use the correct power tool for your application. The correct power tool will do the job better and more safely at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source and/or the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.** Such preventive safety measures reduce the risk of starting the power tool accidentally.
- **Store idle power tools out of the reach of children and do not allow persons unfamiliar with the power tool or these instructions to operate the power tool.** Power tools are dangerous in the hands of untrained users.
- **Maintain power tools.** Check for misalignment or binding of moving parts, breakage of parts and any other condition that may affect the power tool's operation. If damaged, have the power tool repaired before use. Many accidents are caused by poorly maintained power tools.
- **Keep cutting tools sharp and clean.** Properly maintained cutting tools with sharp cutting edges are less likely to bind and are easier to control;
- **Use the power tool, accessories, tool bits, etc. in accordance with these instructions, taking into account the working conditions and the work to be performed.** Use of the power tool for operations different from those intended could result in a hazardous situation.

## SERVICE

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

## SAFETY INSTRUCTIONS FOR RECIPROCATING SAW

- **Hold the power tool by insulated gripping surfaces when performing an operation where the cutting accessory may contact hidden wiring or its own cord.** If a cutting accessory contacts a “live” wire, it may cause the exposed metal parts of the power tool to become “live” and shock the operator.
- **Use clamps or another practical way to support the workpiece and secure it to a stable platform.** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- **The label on your tool may include the following symbols. The symbols and their definitions are as follows:**

V ..... Volts

A ..... Amperes

Hz ..... Hertz

W ..... Watts

min ..... Minutes

~ ..... Alternating current

— — ..... Direct current

n<sub>0</sub> ..... No load speed

□ ..... Class II Construction

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

⏏ ..... Grounding terminal

BPM ..... Beats per minute

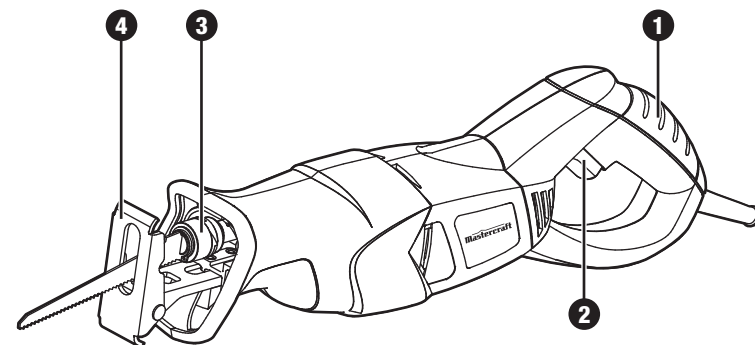
⚠ ..... WARNING – To reduce the risk of injury, user must read instruction manual.

- **The saw blade must be securely locked in its holder.** Check that it has been securely seated before use.
- **Make certain that all adjusting levers and the blade holder are tight before making a cut.** Loose adjusting levers and holders can cause the tool or blade to slip; loss of control may result.
- **Check that the switch is “off” before plugging the tool in or attaching a battery.** Accidental starting could cause injury.
- **Secure material before cutting.** Never hold the workpiece in your hand or across your legs. Small or thin material may flex or vibrate with the blade, causing loss of control.
- **Never touch the saw blade immediately after use.** It may be hot after prolonged use.
- **Always wear safety goggles or eye protection when using this tool.** Use a dust mask or respirator if cutting generates a great amount of dust.
- **Keep hands away from the cutting area.** Do not reach under the material being cut. The proximity of the blade to your hand is hidden from your sight.
- **Do not use dull or damaged saw blades and accessories.**

## PACKAGE CONTENTS

Compact reciprocating saw, general-cutting blade, hex key and instruction manual

## KEY PARTS DIAGRAM



No.	Part
1	Handle
2	Trigger Switch

No.	Part
3	Tool-less Blade Clamp
4	Pivoting shoe



### WARNING!

- Remove the reciprocating saw from the carton and examine it carefully. Do not discard carton or any packaging material until all parts are examined.
- If any part of the saw is missing or damaged, do not attach the reciprocating saw to a power source until the damaged part is repaired or replaced.

**IMPORTANT INFORMATION**

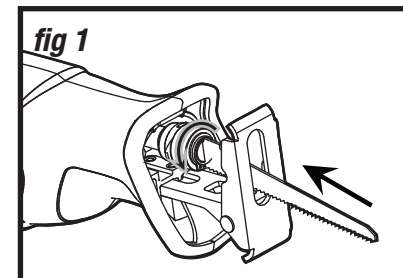
Before attempting to use this reciprocating saw, familiarize yourself with all of its operating features and safety requirements.

**WARNING!**

- Do not allow familiarity with your reciprocating saw to make you careless. Remember that a careless fraction of a second is sufficient to inflict severe injury.

**ASSEMBLY AND ADJUSTMENT INSTRUCTIONS****INSTALLING AND REMOVING THE BLADES (fig 1)**

1. Turn the tool-less blade clamp counter-clockwise.
2. Insert the blade into the slot of blade clamp.
3. Release the blade clamp to lock the blade.



**NOTICE:** The blade may be installed with the teeth pointing either up or down, according to the needs of the cutting operation.

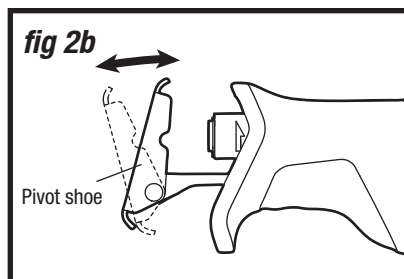
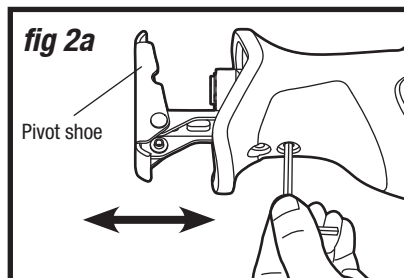
**WARNING!**

- To avoid injury, ALWAYS turn the switch OFF and disconnect the reciprocating saw from the power outlet before installing or changing the saw blade.
- When changing a blade immediately after operation, allow the blade to cool before removing to avoid possible burning.

**PIVOT SHOE****SLIDING THE SHOE IN OR OUT (fig 2a)**

For maximum control and longer blade life, the base assembly slides in or out to adjust the effective stroke length.

1. Unplug the reciprocating saw from the power supply.
2. Loosen the two shoe-adjustment screws with the hex key (supplied), and slide the shoe to the desired position. The shoe can be locked in any position.
3. Tighten the shoe-adjustment screws to lock the shoe in the desired position.

**PIVOTING THE SHOE (fig 2b)**

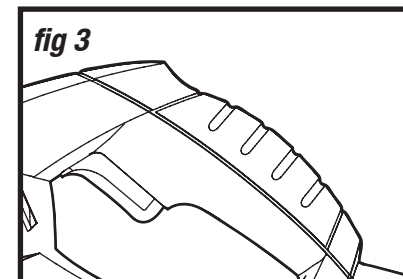
The shoe pivots to provide maximum control against the surface being cut.

1. Unplug the reciprocating saw from the power supply.
2. Hold the saw firmly, and then pivot the shoe to the desired angle.

**OPERATING INSTRUCTIONS****TURNING THE SAW ON AND OFF AND CONTROLLING THE SPEED (fig 3)**

Your reciprocating saw is equipped with a trigger switch to turn the saw on and off, and to control the speed.

1. To start the saw, squeeze the trigger switch.
2. To stop the saw, release the trigger switch and allow it to return to the OFF position.
3. To vary the speed, simply increase or decrease the pressure on the trigger switch. The tighter the trigger switch is squeezed, the higher the speed.

**WARNING!**

- To avoid injury and damage, do not operate the saw without the pivoting shoe. The spindle may strike against the workpiece and damage the reciprocating mechanism.

## GENERAL CUTTING

1. Unplug the reciprocating saw from the power supply.
2. Make sure that the workpiece is firmly anchored. Clamp the workpiece to prevent it from slipping or moving while cutting.
3. Use the appropriate type and size of blade for the workpiece material and size.
4. Adjust the pivoting shoe as necessary to make sure that the blade will extend beyond the shoe and the workpiece at all times.
5. Adjust the pivoting shoe as necessary to expose unused blade teeth for longer blade life.
6. Check for clearance beyond the workpiece so the blade will not impact another surface.
7. Mark the line of cut clearly. If cutting metal, apply cutting oil on the line.
8. Plug in the saw.
9. Hold the saw firmly with both hands. Make sure to keep your hands on the insulated gripping areas only.
10. Depress the trigger switch to start the saw and bring it to maximum desired cutting speed before applying the blade to the workpiece.
11. Do not force the tool. Place the pivoting shoe firmly on the workpiece while cutting. Use only enough steady pressure on the blade to keep the saw cutting. Reduce pressure as the blade comes to the end of the cut.
12. Cutting speeds should vary with the workpiece. Hard materials, such as metals, require lower speeds; use higher speeds for softer materials.
13. Allow the saw to come to a complete stop before removing the blade from the workpiece.
14. If sawing fibreglass, plaster, wallboard, or spackling compound, clean the saw motor vents frequently with a vacuum or compressed air. These materials are highly abrasive and may accelerate the wear on motor bearings and brushes.



### WARNING!

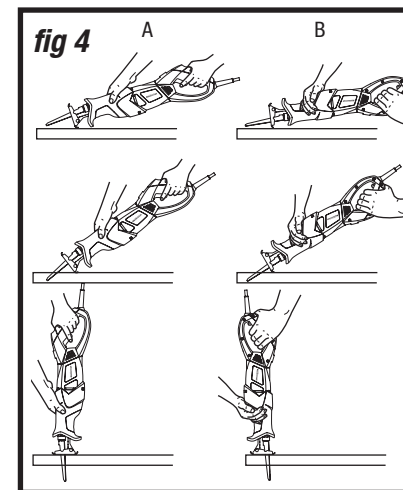
- Before plugging in the tool, always check to see that the switch is actuated properly and returns to the off position when released.
- Hold the tool only by the plastic handle and the insulated grip area, which will help prevent electrical shock. When sawing into walls or floors, you may encounter electrical wiring. Sawing into a "live" wire will cause electric shock.
- Do not allow familiarity with the saw to make you careless. One careless fraction of a second is enough to inflict serious injury.

## PLUNGE CUTTING (fig 4)

Your reciprocating saw is ideal for plunge cutting directly into surfaces that cannot be cut from an edge, such as walls or floors. Plunge cutting may be performed two ways, depending on how the blade is inserted.

Column A shows how to plunge cut with the teeth of the blade facing down. Column B shows how to plunge cut with the teeth of the blade facing up.

1. Unplug the reciprocating saw from power supply.
2. Make sure that the workpiece is firmly clamped in place.
3. Use the appropriate type and size of blade for the workpiece material and size.
4. Insert the blade into the tool.
5. Adjust the pivoting shoe as necessary to make sure that the blade will extend beyond the shoe and the workpiece at all times.
6. Adjust the pivoting shoe as necessary to expose unworn blade teeth for longer blade life.
7. Check for clearance behind the workpiece so that the blade will not impact another surface.
8. Plug in the saw.
9. Column A shows how to plunge cut with the teeth of the blade facing down. Column B shows how to plunge cut with the teeth of the blade facing up.
10. While resting the edge of the shoe on the workpiece and with the blade just above the workpiece, depress the lock-off button and trigger switch to start the saw and bring it to the maximum desired cutting speed. Then, using the edge of the shoe as a pivot, lower the blade into the workpiece.
11. As the blade starts cutting, raise the handle of the tool slowly, until the shoe rests firmly on the workpiece.
12. After the blade has penetrated through the workpiece, continue sawing along the marked cutting line.



**NOTICE:** To make plunge cutting easier, use a heavy gauge blade and install the blade with the teeth facing upward as show in Column B.



### WARNING!

- Do not plunge cut into metal materials.
- To reduce the risk of explosion, electric shock and property damage, always check the work area for hidden gas pipes, electrical wires or water pipes when making blind or plunge cuts.
- To avoid loss of control and serious injury, make sure that the blade reaches maximum speed before touching it to the workpiece.



**METAL CUTTING**

The saw can be used to cut metals, such as sheet steel, pipe, steel rods, aluminum, brass, and copper. Be careful not to twist or bend the saw blade. Do not force the tool.

The use of cutting oil is recommended when cutting soft metals and steel. Cutting oil will keep the blade cool, increase cutting action, and prolong blade life.

1. Securely clamp the workpiece in position, and make the cut close to the clamping point to minimize vibration.
2. When cutting conduit pipe or angle iron, clamp the work in a vise, if possible, and cut close to the vise.
3. To cut thin sheet material, "sandwich" the material between pieces of hardboard or plywood, and clamp the layers together to reduce vibration and tearing of the material.

**WARNING!**

- Do not make plunge cuts in metal materials.
- Never use gasoline as a cutting oil, because normal sparking could ignite the fumes.

**MAINTENANCE**

Before each use, inspect the reciprocating saw, on/off switch and cord for damage. Check for damaged, missing, or worn parts. Check for loose screws, misalignment or binding of moving parts, or any other conditions that may affect the operation. If abnormal vibration or noise occurs, turn the tool off immediately and have the problem corrected before further use.

Before cleaning or performing any maintenance, the tool should be unplugged from the power supply. Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools with compressed air.

**WARNING!**

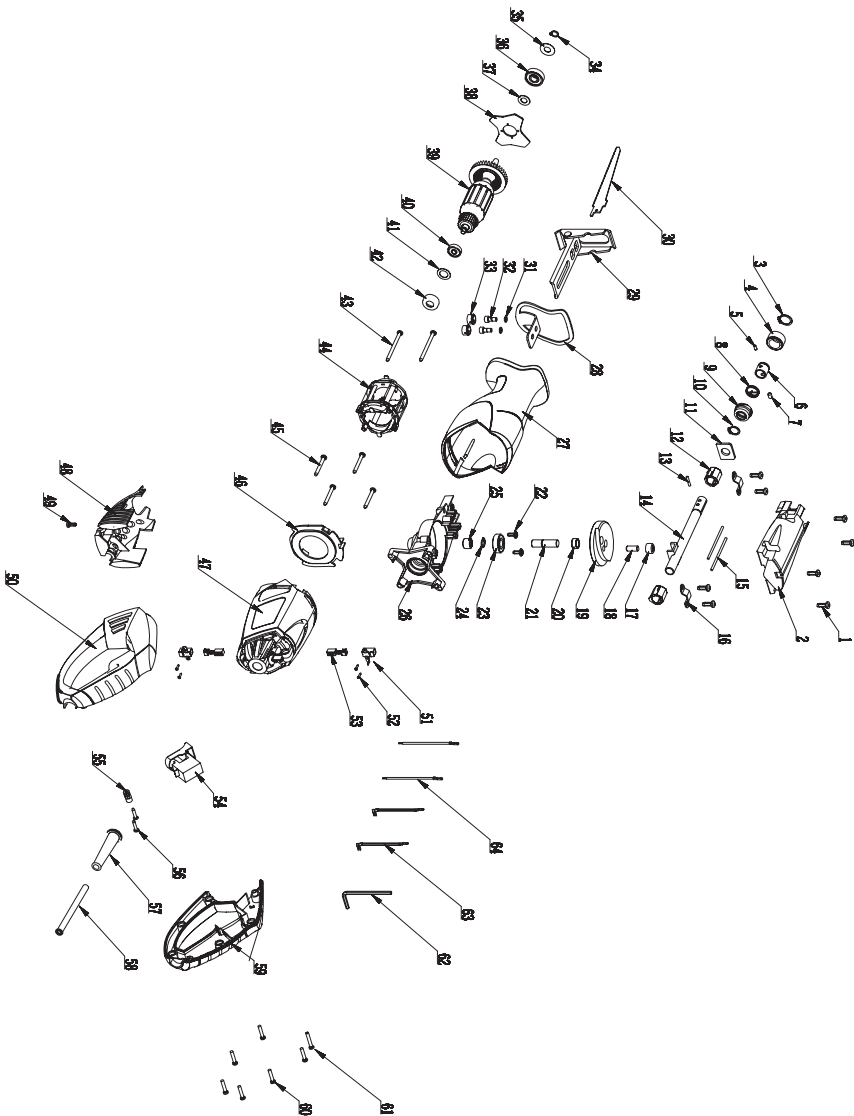
- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc., come in contact with plastic parts. They contain chemicals that can damage, weaken or destroy plastic.
- When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.
- Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.
- Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.
- Check extension cords before each use. If damaged, replace immediately. Never use tool with a damaged cord.
- To ensure safety and reliability, all repairs should be performed by a qualified service technician.

TROUBLE SHOOTING

Problem	Possible Causes	Solution
The motor does not start	The tool is not connected to a power source	Connect the tool to a power source
Blade cannot be removed	Saw dust in the clamp slot	Clean the clamp slot with a brush
Cutting is difficult	Saw blade is dull	Replace the saw blade

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

EXPLODED VIEW



No.	Part No.	Description	No.	Part No.	Description
1	5610057000	Thread Forming Screw	33	3122839000	Screw Cover
2	3127645000	Gear Case Cover	34	5660009000	Circlips For Shaft
3	5660145000	Circlips For Shaft	35	5650043000	Plain Washer
4	3550864000	Rotate Bush	36	5700010000	Ball Bearing
5	5670042000	Located Pin	37	5650199000	Plain Washer
6	3550863000	Bush	38	3705765000	Bearing Retainer
7	5670169000	Pin	39	2750873000	Rotor
8	3660296000	Torsion Spring	40	5700004000	Ball Bearing
9	3123316000	Cover	41	5650038000	Plain Washer
10	5660032000	Circlips For Shaft	42	3121026000	Bearing Holder
11	3700546000	Felt Block	43	5610049000	Tapping Screw
12	5700283000	Aligning Bearing	44	2740103000	Stator
13	5670039000	Pin	45	5610047000	Tapping Screw
14	2822253000	Plunger Assembly	46	3123301000	Fan Baffle
15	3650158000	Clamp Wire	47	3123256000	Motor Housing
16	3705764000	Bearing Clamp	48	3127646000	Support
17	3550277000	Crank Roller	49	5610097000	Thread Forming Screw
18	5670241000	Pin	50	3320451000	Left handle
19	3552228000	Gear	51	2800153000	Brush Holder
20	3520797000	Bush	52	5610006000	Tapping Screw
21	3550843000	Gear Shaft	53	4960010000	Carbon Brush
22	5620506000	Flange Screw	54	4870337000	Switch
23	5700048000	Ball Bearing	55	3120234000	Cord Anchorage
24	5660011000	Circlips For Shaft	56	5610024000	Tapping Screw
25	5700032000	Needle Bearing	57	3121045000	Cord Guard
26	3421600000	Gear Case	58	4810002000	Power Cord & Plug
27	3123255000	Front Handle	59	3320452000	Right Handle
28	3703859000	Front Handle Support	60	5610106000	Tapping Screw
29	2822287000	Pivot Shoe	61	5610034000	Tapping Screw
30	3810008000	Reciprocating saw Blade	62	5680031000	Hexagon Wrench
31	5650015000	Spring Washer	63	4860266000	Internal Wire Assembly
32	5620018000	Hexagon Socket Screw	64	4860265000	Internal Wire Assembly

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



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

- 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;
- 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 bill of sale verifying the purchase and purchase date must be provided;
- this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product that are expected to become inoperative or unusable after a seasonable period of use;
- 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;
- this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;
- this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

**Additional Limitations**

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

**Notice to Consumer**

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

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