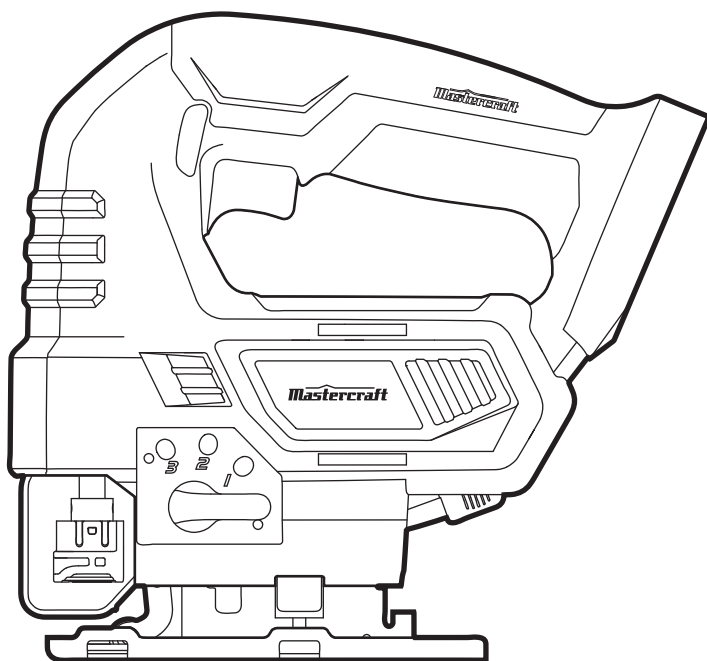


model no. 054-4289-2

Mastercraft®
MD

20V max* LITHIUM-ION CORDLESS ORBITAL JIGSAW



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

No-load speed	0-2800 SPM
Length of stroke	1" (25.4 mm)
Cutting capacity: wood	2 9/16" (65 mm)
Cutting capacity: metal	1/4" (6 mm)
Blade type	T- and U-shank
Cutting-angle range	0-45° left & right
Weight	3 lb 11 oz (1.68 kg) without battery
Battery voltage	20V max* DC

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

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

ELECTRICAL SAFETY

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

PERSONAL SAFETY

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

POWER TOOL USE AND CARE

- **Do not force the power tool. Use the correct power tool for your application.** The correct power tool will do the job better and more safely at the rate for which it was designed.

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

BATTERY TOOL USE AND CARE

- **Recharge only with the charger specified by the manufacturer.** A charger that is suitable for one type of battery pack may create a risk of fire when used with another battery pack.
- **Use power tools only with specifically 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 contact eyes, additionally seek medical help.** Liquid ejected from the battery may cause irritation or burns.

SERVICE

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

SAFETY GUIDELINES FOR CORDLESS ORBITAL JIGSAW



WARNING!

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

BATTERY PACK

CHARGER

054-3124-0, 054-3125-8

054-3126-6

- **Hold power tools by insulated gripping surfaces when performing an operation where the tool may contact hidden wiring or its own cord.** Contact with a “live” wire may make exposed metal parts of the power tool “live” and could give the operator an electric shock.
- **Use clamps or another practical way to support and secure the workpiece to a stable platform.** Holding the work by hand or against your body is unstable and may lead to loss of control.
- **Keep hands away from 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 blades.** Bent blade can break easily or cause kickback.
- **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 or connect the tool to an external dust vacuum if the cutting generates a great amount of dust.
- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions noise from this product may contribute to hearing loss.
- **The label on your tool may include the following symbols. The symbols and their definitions are as follows:**

V Volts

A Amperes

Hz Hertz

W Watts

min Minutes

~ Alternating current

— — — Direct current

n_0 No-load speed



..... Class II Construction

.../min Revolutions or reciprocation per minute



..... Grounding terminal

BPM Beats per minute

SPM Strokes per minute



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



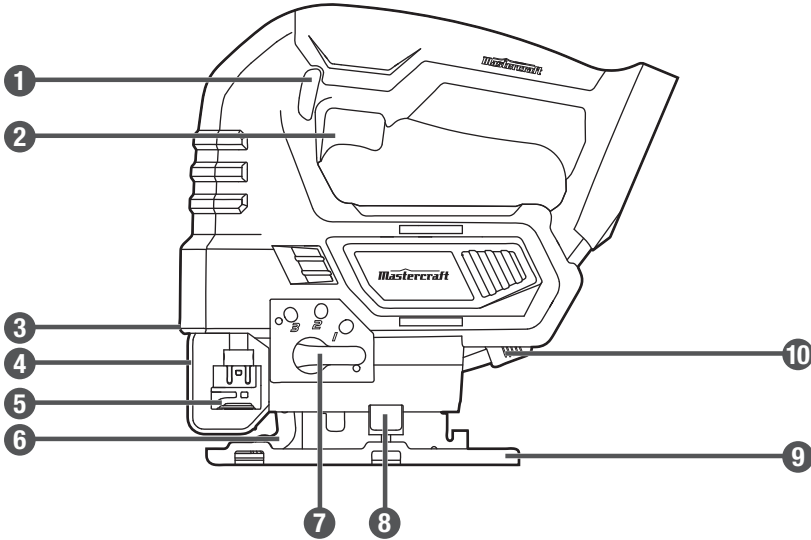
..... WARNING – To reduce the risk of injury always wear eye protection.



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

PACKAGE CONTENTS:

Jigsaw, wood-cutting blade, straight edge guide, vacuum adapter and instruction manual

KEY PARTS DIAGRAM

No.	Description
1	Lock-off button
2	Trigger switch
3	LED worklight
4	Blade guard
5	Tool-less blade clamp

No.	Description
6	Blade roller guide
7	Blade-action selector lever
8	Locking knob
9	Base plate
10	Keyless bevel lever

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 the tool.

**WARNING!**

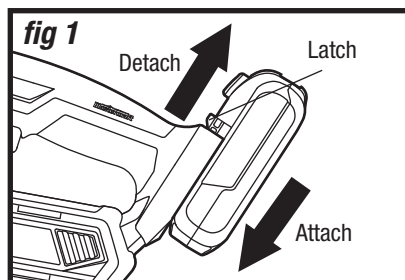
- Remove the jigsaw from the package and examine it carefully. Do not discard the carton or any packaging material until all parts are examined.
- If any part of the jigsaw is missing or damaged, do not attach the battery pack to the tool or use the tool until the part has been repaired or replaced. Failure to heed this warning could result in serious injury.
- Do not allow familiarity with the cordless jigsaw to cause a lack of alertness. A fraction of a second of carelessness is enough to cause severe injury.
- Carefully read the Instruction Manual for your Mastercraft 20V max* Lithium-Ion Battery and Mastercraft 20V max* Lithium-Ion Charger for safety operation instructions.

ASSEMBLY INSTRUCTIONS**TO ATTACH BATTERY PACK (fig 1)**

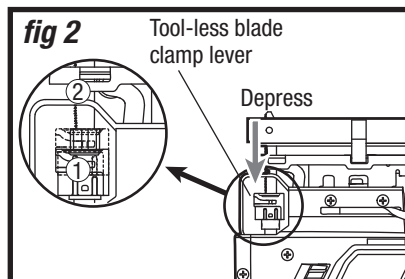
1. Align the raised portion on the battery pack with the groove on the bottom of the tool, then slide the battery pack into the body of the tool.
2. Make sure that the battery pack latches securely.

TO DETACH BATTERY PACK (fig 1)

Depress the battery-release button, located on the front of the battery pack

**INSTALLING AND REMOVING THE SAW BLADE (fig 2)**

1. Detach the battery pack from the tool.
2. Turn the tool upside down.
3. Depress the tool-less blade clamp and hold it.
4. Insert the saw blade with the back of the blade resting in the groove in the guide roller. Make sure that the blade shank is completely inserted in to the blade clamp. Then release the tool-less blade clamp.
5. Verify that the blade has been secured in place firmly by pulling on the blade.
6. To remove a saw blade, depress the tool-less blade clamp and hold it, then simply pull the blade out of the blade clamp.

**CAUTION!**

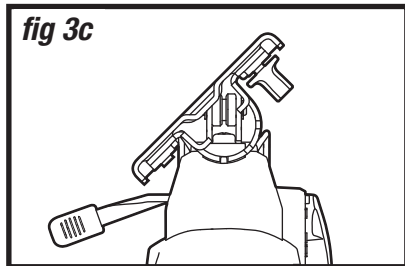
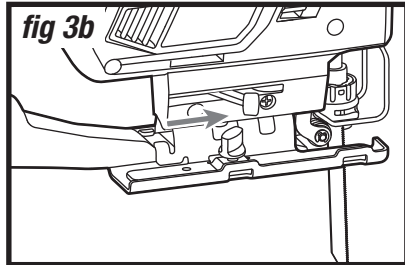
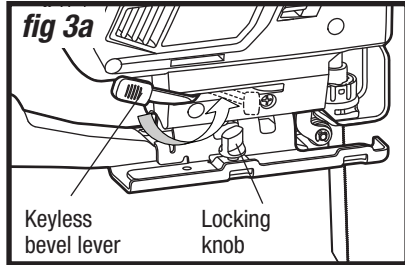
- When changing the blade, always wear protective gloves. The sharp edge of the blade can cause personal injury.
- The blade can be very hot after working. Allow the blade to cool after use. The blade can be dangerously hot.

WARNING!

- Check to see if the blade is correctly fastened. An incorrectly or insecurely fastened blade can become loose during operation and cause a hazard.
- Always ensure that the tool is turned OFF before making any adjustments and installing any attachments.

ADJUSTING THE BASE PLATE FOR BEVEL CUTTING(*fig 3a, 3b & 3c*)

1. Rotate the keyless bevel lever to unlock the base plate; refer to fig 3a.
2. When the adjustment is blocked by the locking knob on the plate base, change it to another side.
3. Move the base plate forward so that the base plate can be beveled; refer to fig 3b.
4. The base plate can be beveled to the left or to the right and has detents at 0° and 45°; refer to fig 3c. The base plate can be manually stopped between 0° and 45° according to the scale marked on the base bracket.
5. When the desired bevel angle is achieved, move the base plate backward; rotate the keyless bevel lever back to lock the base plate.
6. Accurate work requires a trial cut. Measure the work after cutting and reset the angle as necessary setting until the correct setting is achieved.



WARNING!

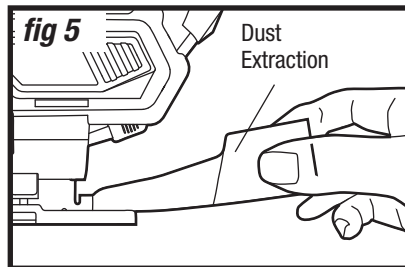
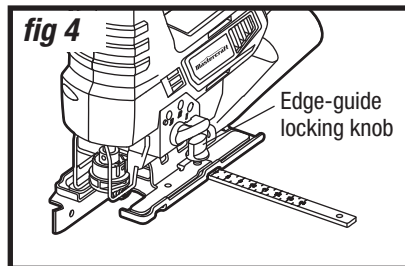
- Do not use a dust extraction system or a vacuum cleaner when cutting metal. Sparks may ignite residual wood dust.

INSTALLING THE STRAIGHT EDGE GUIDE (fig 4)

1. Loosen the edge-guide locking knob.
2. Insert the bar of the edge guide through the slots in the base of the jigsaw with the edge guide facing down. The edge guide can be inserted from either side of the base.
3. Measure the distance from the edge of the workpiece to the line of the cut. Slide the edge guide to this desired distance and tighten the locking knob to secure the edge guide in place.

DUST EXTRACTION (fig 5)

To use this feature, attach extraction tube to the base plate.



OPERATION INSTRUCTIONS

TURNING ON AND OFF (fig 6)

1. To turn the saw ON, press the lock-off button and while holding it down, press the trigger switch. (The lock-off button can be pressed on either side.)
2. To turn the tool OFF, release the trigger switch.

VARIABLE-SPEED TRIGGER SWITCH

Your tool is equipped with a variable-speed trigger switch. The speed can be adjusted from the minimum to maximum SPM by the pressure you apply to the trigger. Apply more pressure to increase the speed and decrease pressure to the decrease speed.

ELECTRICAL BRAKE

When the trigger is released it activates the electrical brake to stop the blade quickly. This feature is especially useful when making repetitive cuts.

BLADE-ACTION SELECTOR LEVER (fig 7)

Maximum cutting efficiency can be obtained by adjusting the blade-action selector lever to suit the material being cut.

The following table will help you determine which setting to use for your application. This table is intended as a guideline only, and test cuts in scrap material should be performed first to determine the best setting.

Orbit setting	Orbit Action	Material Type	Suggested Blade Type	TPI (Teeth per inch)
Setting "0"	No orbit	Counter top, laminate board	Wood Cutting Blade	10-12 (Down stroke blade)
	No orbit	Thin sheet metal	Metal Cutting Blade	14-24
Setting "1"	Minimal orbit	Plastics and PVC	Wood Cutting Blade	10-12
Setting "2"	Medium orbit	Plywood, decking and hardwood	Wood Cutting Blade	6-12
Setting "3"	Maximum orbit	General lumber and soft wood	Wood Cutting Blade	6-10

fig 6

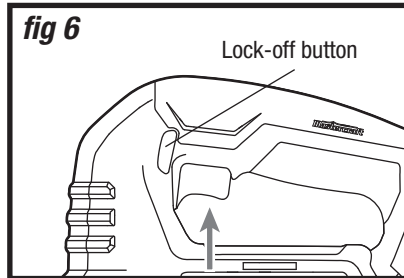
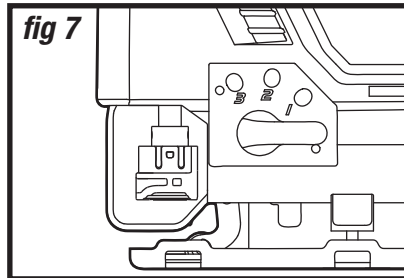


fig 7



LED WORKLIGHT (fig 8)

The LED worklight will illuminate when the trigger switch is pressed. This provides additional light on the surface of the workpiece for operation in lower light situations.

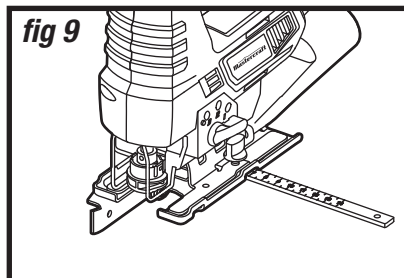
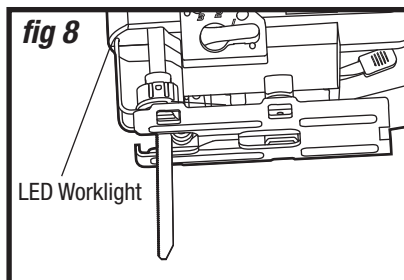
STRAIGHT CUTTING (fig 9)

A straight cut can be made by clamping a piece of wood or a straight edge to the workpiece and guiding the edge of the saw against it. Make the cut from one direction only. Never cut halfway and then complete the cut from the opposite end.

The straight cut can be also made by using the edge guide supplied with this tool.

GENERAL CUTTING

1. Firmly clamp the workpiece in place.
2. Use the appropriate type and size of blade for the workpiece.
3. Check the clearance behind the workpiece and assure that the blade will not impact another surface.
4. Clearly mark the line of the cut.
5. Hold the saw firmly. Make sure that your hand is on the insulated gripping areas only.
6. Rest the base plate on the workpiece so that the blade is not in contact with the workpiece.
7. Turn on the jigsaw and bring it to the maximum desired cutting speed before applying the blade to the workpiece.
8. Slowly move the jig saw into the workpiece.
9. Do not force the tool. Keep the base plate flat against the workpiece while cutting. Use only enough steady pressure on the blade to keep the saw cutting.
10. Reduce pressure as the blade comes to the end of the cut.
11. Allow the saw to come to a complete stop before removing the blade from the workpiece.
12. If sawing fiberglass, plaster, wallboard, or spackling compound, clean the saw motor vents frequently with a vacuum or compressed air. Always wear safety goggles when cleaning tools using compressed air. These materials are highly abrasive and may accelerate the wear on motor bearings and brushes.

**WARNING!**

- Allow the blade to come to a complete standstill before setting the jigsaw down.

METAL CUTTING

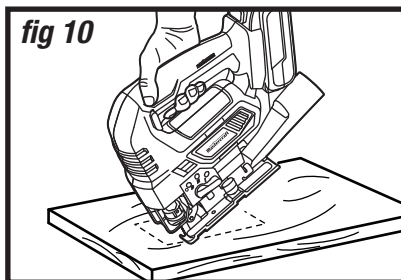
When cutting metal, always clamp down the material. Be careful to move the saw along slowly. Use lower speeds. Do not twist, bend, or force the blade. If the saw jumps or bounces, use a blade with finer teeth. If the blade is clogged when cutting soft metal, use a blade with coarser teeth.

For easier cutting, lubricate the blade with a stick of cutting wax, if available, or use cutting oil when cutting steel. Never use gasoline!! Thin metal should be sandwiched between two pieces of wood or tightly clamped onto a single piece of wood (wood on top of the metal). Draw the cut lines or design on the top piece of wood.

PLUNGE CUTTING (fig 10)

Plunge cutting is useful and time-saving for making rough openings in soft materials. It makes it unnecessary to drill a hole for an inside or pocket cut.

1. Draw cutting lines for the opening.
2. Hold the saw firmly and tilt it forward so the toe of the shoe plate rests on the workpiece.
3. Make sure that the blade is well clear of the workpiece.
4. With the toe of the shoe plate held firmly against the workpiece to prevent side wobble, start the saw and then gradually lower the blade into the workpiece.
5. When the blade touches the workpiece, continue pressing down on the toe of the shoe plate.
6. Slowly pivot the saw like a hinge until the blade cuts through the workpiece and the shoe plate rests flat on the workpiece.
7. Then begin sawing in the usual manner along the cut line.



NOTICE: Always apply a steady, firm, downward pressure on the front of the saw as you cut. This will keep the saw blade from jumping out of the workpiece.



WARNING!

- Before attempting to use this tool, become familiar with all of its operating features and safety requirements.
- Always securely and support the workpiece. Always maintain proper control of the jigsaw. Failure to clamp and support the workpiece and loss of control of the saw could result in serious injury.

MAINTENANCE

BEFORE EACH USE

1. Inspect the jigsaw, the trigger switch and the accessories 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 off the tool immediately and have the problem corrected before further use. Detach the battery before cleaning or performing any maintenance. Using compressed air may be the most effective cleaning method. Always wear safety goggles when cleaning tools using compressed air.



WARNING!

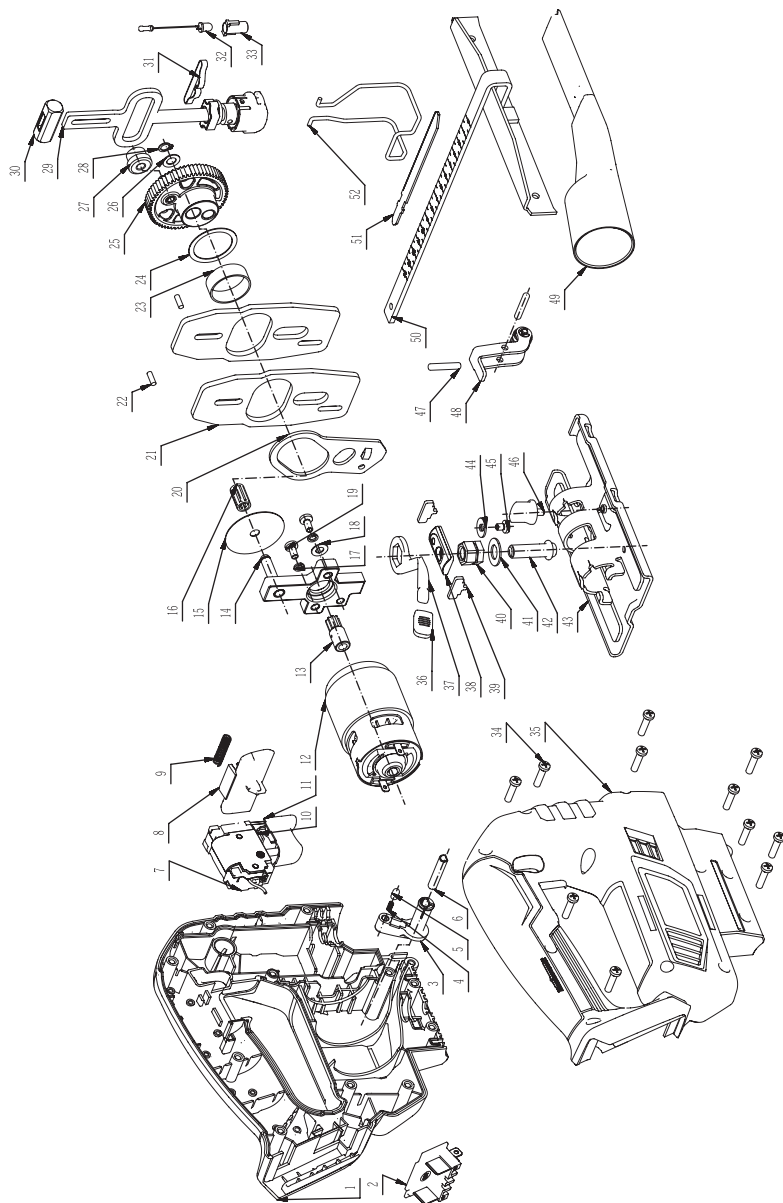
- Do not allow brake fluids, gasoline, other petroleum-based products, penetrating oil, etc. to come into contact with plastic parts. These substances contain chemicals that can damage, weaken, or destroy plastic.
- When servicing, use only identical replacement parts. The use of any other parts may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

TROUBLESHOOTING

Problem	Possible Causes	Solution
The jigsaw does not start	The battery is depleted	Charge the battery
Blade cannot be removed	Saw dust in the blade clamp	Clean the clamp slot with a brush
Cutting is difficult	Saw blade is worn	Replace the saw 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
1	3321558000	Left Housing
2	3402407000	Contact Receptacle Assembly
3	3128596000	Pendulum Lever
4	3660050000	Spring B
5	3700191000	Cap
6	3520668000	Pendulum Lever Shaft
7	4870452000	Trigger Switch
8	3128606000	Switch Button
9	3660427000	Spring
10	3126279000	Located Block
11	3126278000	Switch Button
12	2730214000	DC Motor
13	3520943000	Pinion
14	2823427000	Bearing Support Assembly
15	5650556000	Wash
16	5700184000	Needle Bearing
17	5650007000	Spring Washer
18	3700197000	Washer
19	5620038000	Screw
20	3704792000	Pendulum Plate
21	3704959000	Counterweight
22	3550147000	Needle Pin
23	3552550000	Bush
24	5650555000	Washer
25	2823330000	Gear Set
26	3700145000	Washer

No.	Part No.	Description
27	3520945000	Crank Roller
28	5660027000	Circlips For Shaft
29	2823084000	Quick Clamp Assembly
30	5700305000	Upper Sliding Bearing
31	3705624000	Sping Piece
32	2830082000	Electric Assembly
33	3123507000	Transparent Cap
34	5610103000	Tapping Screw
35	3321557000	English Name
36	3126938000	Sleeve
37	3705465000	Adjusting Lever
38	3520719000	Clamp Washer
39	3704869000	Located Block
40	5630046000	Nut
41	5650199000	plain Washer
42	5640213000	Flange Bolt
43	2822996000	Base Plate Assembly
44	5650278000	Washer
45	5620036000	Screw
46	3400175000	Knob
47	3550177000	Guiding Roller Support Pin
48	2822813000	Roller Support Set
49	3126446000	Vacuum Adapter
50	3700675000	Rip Fence
51	3810049000	Jigsaw Blade
52	3650185000	Wire Guard

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



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

- a) Component A: Batteries, chargers and carrying case, which are guaranteed for a period of 2 years from the date of original retail purchase against defects in workmanship and materials;
- b) Component B: Accessories, which are guaranteed for a period of 1-year from the date of original retail purchase against defects in workmanship and materials.

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

These warranties are subject to the following conditions and limitations:

- a) a bill of sale verifying the purchase and purchase date must be provided;
- b) this warranty will not apply to any product or part thereof which is worn or broken or which has become inoperative due to abuse, misuse, accidental damage, neglect or lack of proper installation, operation or maintenance (as outlined in the applicable owner's manual or operating instructions) or which is being used for industrial, professional, commercial or rental purposes;
- c) this warranty will not apply to normal wear and tear or to expendable parts or accessories that may be supplied with the product which are expected to become inoperative or unusable after a reasonable period of use;
- d) this warranty will not apply to routine maintenance and consumable items such as, but not limited to, fuel, lubricants, vacuum bags, blades, belts, sandpaper, bits, fluids, tune-ups or adjustments;
- e) this warranty will not apply where damage is caused by repairs made or attempted by others (i.e. persons not authorized by the manufacturer);
- f) this warranty will not apply to any product that was sold to the original purchaser as a reconditioned or refurbished product (unless otherwise specified in writing);
- g) this warranty will not apply to any product or part thereof if any part from another manufacturer is installed therein or any repairs or alterations have been made or attempted by unauthorized persons;

- h) this warranty will not apply to normal deterioration of the exterior finish, such as, but not limited to, scratches, dents, paint chips, or to any corrosion or discolouring by heat, abrasive and chemical cleaners; and
- i) this warranty will not apply to component parts sold by and identified as the product of another company, which shall be covered under the product manufacturer's warranty, if any.

Additional Limitations

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

Notice to Consumer

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

Made in China

Imported by

Mastercraft Canada Toronto, Canada M4S 2B8

