

Mastercraft

MAXIMUM

ORBITAL JIGSAW WITH LASER
LINE AND 360° SCROLL CUTTING



model no. 054-1232-4

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

Laser Diode Type	Red Laser Diode 650 nm
Laser Class	Class IIIa, power output ≤2.5 mW
No load Speed	800-3000 SPM
Rated Voltage	120V~, 60Hz
Rated Power Input	6A
Cutting angle range	0-45° left and right
Cutting depth in wood	3 11/32" (85 mm)
Cutting depth in steel	1/4" (6 mm)
Weight	6 lb 3 oz (2.85 kg)

RULES FOR SAFE OPERATION

KNOW YOUR TOOL

To operate this tool, carefully read this Instruction Manual and all labels affixed to the 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 CAREFULLY

SAVE THESE INSTRUCTIONS

GENERAL POWER TOOL SAFETY WARNINGS



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 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 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 the tool while 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.

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 LASERS

This orbital jigsaw has a built-in laser light. The laser is a Class IIIa and emits a maximum output power of 2.5 mW at 650 wavelengths. These lasers do not normally present an optical hazard. However, do not stare at the beam, because this can cause flash blindness.

The following label is on your tool. It indicates where the saw emits the laser light. Be aware of the location of the laser light when using. Always make sure that any bystanders in the vicinity of use are made aware of the dangers of looking directly into the laser.



WARNING!

 Laser light. Laser radiation. Avoid Direct Eye Exposure. Do not stare into beam. Only turn laser beam on when the saw is on the workpiece. Class IIIa laser.

WARNING!

 The use of controls, adjustments or performance of procedures other than those specified in this manual may result in hazardous radiation exposure.

WARNING!

 The use of optical instruments to view the laser beam, including but not limited to telescopes or transits, will increase eye hazard.

- Do not remove or deface any product labels. Removing product labels increases the risk of exposure to laser radiation.

- **The laser beam can be harmful to the eyes.** Always avoid direct eye exposure. Do not look directly into the laser beam output aperture during operation. Do not project the laser beam directly into the eyes of others. Turn the laser on only when making cuts.
- **The laser on the orbital jigsaw is not a toy.** Always keep the tool out of the reach of children. The laser light emitted from this device should never be directed toward any person for any reason.
- **Be sure the laser beam is aimed at a workpiece (such as wood or rough coated surfaces) that does not have a reflective surface.**
- **Do not use on surfaces like sheet steel that have a shiny, reflective surface.** The shiny surface may reflect the beam back at the operator. Be aware that laser light reflected off a mirror or any other reflective surfaces can also be dangerous.
- **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!

Always follow the instructions in this manual when using this laser. The use of this feature in any manner other than what appears in this manual may result in hazardous radiation exposure.

- **Do not attempt to modify the performance of this laser device in any way.** This may result in a dangerous exposure to laser radiation.
- **Use only the accessories that are recommended by manufacturer for use with this model.** The use of accessories that have been designed for use with other laser tools could result in serious injury.

SAFETY INSTRUCTIONS FOR THE ORBITAL JIGSAW

- **Hold the tool by the insulated gripping surfaces (handles) when performing any operation where the cutting tool may contact hidden wiring or its own cord.** Contact with a "live" wire will make the exposed metal parts of the tool "live", and may shock the operator.
- **Secure the workpiece before cutting.** Never hold a workpiece in your hand or on your legs. Small or thin material may flex or vibrate with the blade, causing loss of control.

ADDITIONAL SAFETY INSTRUCTIONS FOR OPERATION

- **Know your power tool.** Read the Manual carefully. Learn the applications, as well as the specific potential hazards related to this tool. Following this rule will reduce the risk of electric shock, fire or serious injury.
- **Always wear safety glasses or eye shields when using this saw.** Everyday eyeglasses only have impact-resistant lenses. They are not safety glasses.
- **Protect your lungs.** Wear a facemask or dust mask if the operation is dusty.

- **Protect your hearing.** Wear appropriate personal hearing protection during use. Under some conditions, noise from this product may contribute to hearing loss.
- **All visitors and bystanders must wear the same safety equipment required for the operator.**
- **Inspect the tool's power cords periodically, and if they are damaged, have them repaired by a qualified service technician. Be aware of the location of the cord.**
- **Always check the tool for damaged parts.** Before using the tool, any 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.
- **Inspect and remove all nails from lumber before sawing.**
- **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 also have these instructions.
- **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

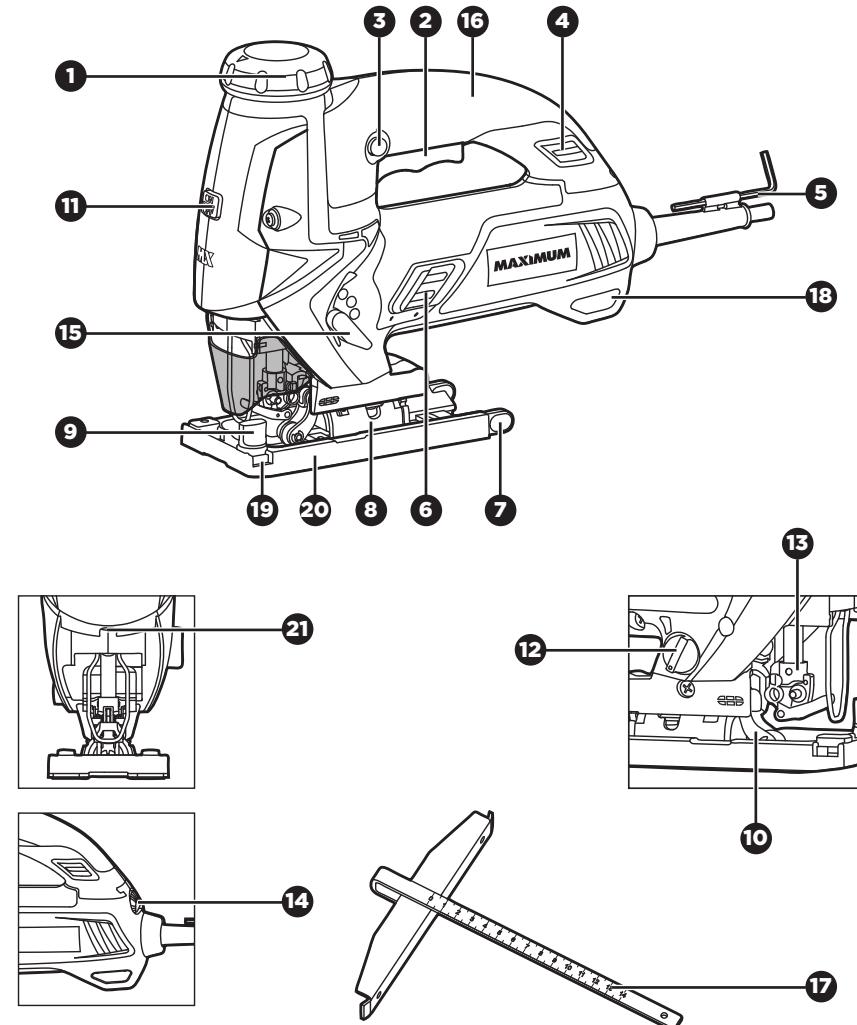
 Class II Construction

.../min Revolutions or reciprocation per minute

 Grounding terminal

BPM Beats per minute

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



PACKAGE CONTENTS

Orbital jigsaw, wood cutting blade, dust extraction port, edge guide and instruction manual

KEY PARTS DIAGRAM

NO.	PART
1	Scrolling control knob
2	On/Off trigger switch
3	Power Lock-on button
4	Release button
5	Hex wrench
6	Push-on switch
7	Blade storage
8	Bevel-angle scale
9	Locking knob for edge guide
10	Blade guide
11	Laser on/off button
12	Vacuum blower knob
13	Tool-less blade clamp
14	Variable-speed dial
15	Scrolling/Orbit control lever
16	Top handle
17	Edge guide
18	"Live tool indicator" LED light
19	Edge-guide mounting slot
20	Base plate
21	Laser aperture

IMPORTANT INFORMATION

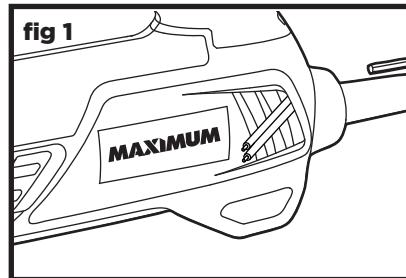
Before attempting to use this orbital jigsaw, become familiar with all of its operating features and safety requirements. For optimum performance and safety, read the following operating instructions carefully before using the saw.

LED WORKLIGHT

Your orbital jigsaw has a built-in LED worklight for illuminating the cutting area. To activate the LED worklight, plug in your orbital jigsaw. The LED worklight turns on automatically when the tool is plugged in to a power source.

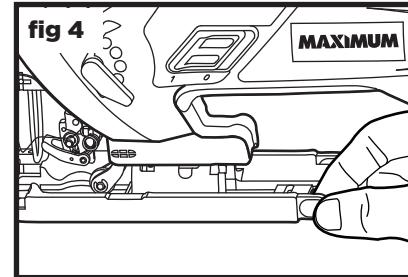
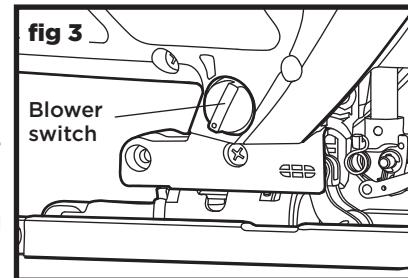
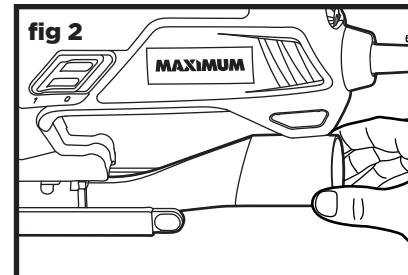
LED "LIVE TOOL INDICATOR" LIGHT (fig 1)

Your orbital jigsaw has a green LED "live tool indicator" light, located where the power cord enters the handle. This light turns on automatically when the saw is plugged into a power source.

**2-WAY SAWDUST REMOVAL**

Your orbital jigsaw is equipped with a 2-way sawdust removal system. Push the vacuum/blower knob to blow debris away from the cutting area, or attach the vacuum adapter (fig 2) to a wet/dry vac hose with a 1 1/2" (38 mm) adapter, all sold separately.

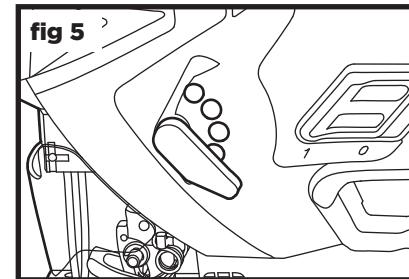
1. Unplug the saw.
2. Switch the vacuum/blower knob to the "BLOWER" position in order to blow sawdust, metal and plastic chips away from the cutting area.
3. Switch the vacuum/blower knob (fig 3) to the "VACUUM" position. Connect the saw's vacuum adapter to a standard wet/dry shop vac (sold separately) in order to vacuum up sawdust, metal and plastic chips.

**ON-BOARD BLADE STORAGE (fig 4)**

A convenient feature on the saw is the blade storage compartment. The blade storage compartment is located on either side of the shoe. To open: pull the blade storage cover out. To close: push the cover in with your thumb or finger.

SCROLLING AND ORBITAL ACTION (fig 5)

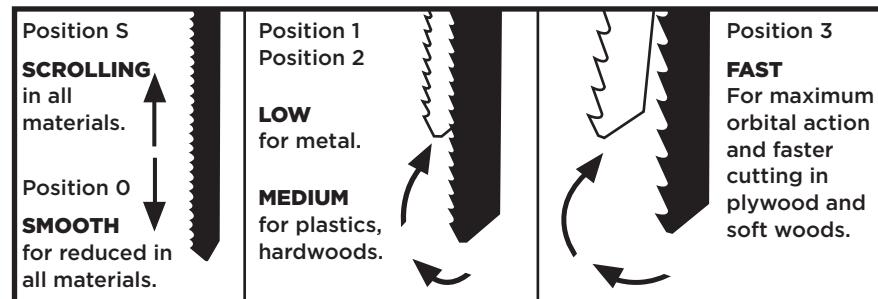
- **SCROLLING "S"**- this mode allows 360° blade rotation using the scrolling knob. There is no orbital action in this mode. Use with a scroll blade to cut intricate scroll patterns in all materials.
- **SMOOTH "O"**- for cutting all materials using the normal up and down blade motion with minimal splintering. There is no orbital action in this mode. Use this mode for cutting hardwoods, mild steel, soft and hard materials using fine wood-cutting and smooth metal cutting blades.
- **LOW "1"**- for cutting most metal, plastics and hardwoods, with a slightly aggressive orbital action.
- **MEDIUM "2"**- for cutting most metal, plastics, and hardwoods with a more aggressive orbital action than the LOW mode.
- **FAST "3"**- for maximum orbital action and the fastest cutting speed in plywood, soft woods and softer materials.



Choose the SCROLLING (S) or SMOOTH (O) setting with the scrolling/orbital control lever for normal up and down blade motion (position S and O).

Choose the LOW or MEDIUM settings for the least aggressive orbital blade actions (positions 1 and 2).

Choose the FAST setting for the fastest, most aggressive cutting with maximum orbital blade action (position 3).

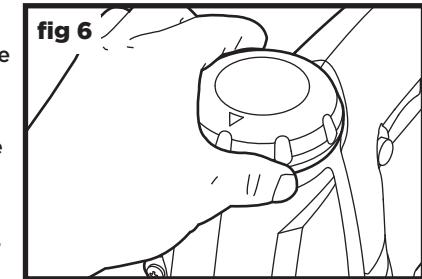


NOTE: In order to reach full orbital action, the blade must be facing straight ahead, and the back of the blade must rest in the groove of the guide roller. The foot must be positioned all the way forward. Orbital action is not observable when the saw is free-running. The saw must be cutting in order for orbital action to occur. The cutting speed is easier to see in thicker materials.

SCROLLING CONTROL KNOB (fig 6)

The scrolling feature allows the blade to be rotated 360°. It is ideal for cutting curves, designs and detailed pattern work.

1. To engage the scrolling function, move the scrolling/orbit control lever to the SCROLLING position (fig 5).
2. Grasp the scrolling control knob (fig 6).
3. The scrolling control knob can be rotated 360° to the left or right while guiding the saw in order to follow intricate cutting lines.



IMPORTANT: When you are scroll cutting with the scrolling control knob, always hold the saw handle in one hand and rotate the scrolling knob with the other hand while applying pressure to the front of the saw so that it does not jump out of the workpiece.

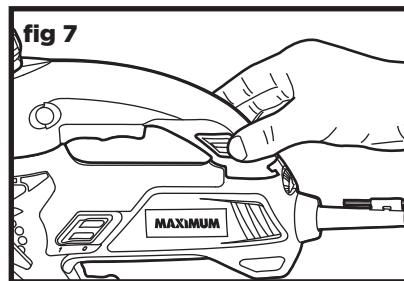
NOTE:

- The blade can be locked into any scrolling position within 360° by switching the scrolling/orbit control lever to the "SMOOTH" position.
- After moving the lever into the scrolling position, turn the scrolling knob back and forth to be sure the blade plunger assembly is locked into the desired position.
- When scroll cutting intricate designs, we recommend that you use a scroll cutting blade.
- Excessive side pressure on the blade could break the blade, which could damage the material that is being cut.

ASSEMBLY INSTRUCTIONS

ATTACHING THE TOP HANDLE TO THE ORBITAL JIGSAW (fig 7)

1. Align and slide the rear bottom of the top handle with the attaching plate compartment.
2. Slide the top handle onto the attaching plate compartment, and hold down the handle-release buttons until the top handle snaps and locks into place (fig 7).



NOTE: The push-on switch cannot be switched on when the top handle is on the orbital jigsaw.



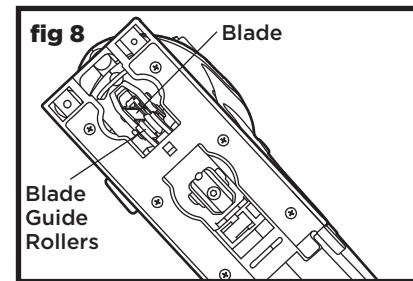
WARNING!

- Make sure the push-on switch is OFF when attaching the top handle to the orbital jigsaw.

TOOL-LESS BLADE INSTALLATION (fig 8)

The tool-less blade change control allows you to remove and replace the saw blade quickly and easily, without the use of additional tools.

1. Unplug the saw.
2. Raise the clear chip shield, lift one side of its mounting slot, and remove the shield from the saw. Apply slight force when lifting and removing the shield from the saw.
3. Turn the saw upside down so that you can access the blade clamp.
4. Depress the tool-less blade-change lever. Insert the blade directly into the slot of the tool-less blade change holder (fig 8). The teeth of the blade should be facing the front and pointing up (when saw is right side up, in cutting position), and the back of the blade must rest in the groove of the blade guide rollers.
5. Pull the blade to make sure it is securely locked in place.



NOTE: For use with both "T" & "U" shanked blades.

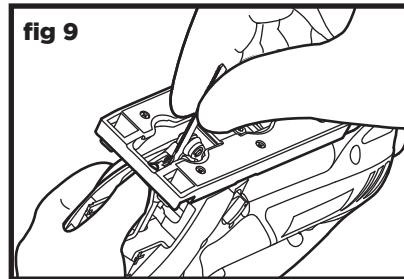


CAUTION!

- Once the blade is installed in the saw, it is always exposed. There is no lower blade guard. Use caution when handling the saw so that the blade does not catch clothing, skin, etc. Each time you set the saw down, take care not to bend the blade. Always set the saw down on its side when the blade is installed. Always remove the blade when saw is not being used.

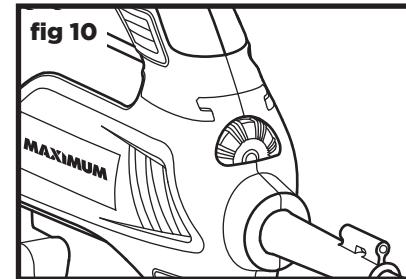
REMOVING THE BLADE (fig 9)

1. Unplug the saw.
2. Raise the clear chip shield, lift one side of its mounting slot, and remove the shield from the saw. Apply slight force when lifting and removing the shield from the saw.
3. Turn the saw upside down so that you can access the blade clamp.
4. Depress the tool-less blade-change lever (fig 9)
5. Carefully remove the blade.
6. Reattach the clear chip shield, and snap it down to its proper position.

**ADJUSTING THE CUTTING SPEED WITH THE VARIABLE-SPEED DIAL (fig 10)**

The variable speed feature of this orbital jigsaw allows you to match the proper cutting speed to the material being cut, enhancing the overall performance of your saw and helping to save the blades from undue wear.

1. The variable-speed dial is used to adjust the speed of the blade.
2. Turn the dial to increase or decrease the speed of the blade (fig 10).
3. Position "1" selects the slowest blade speed, position "6" selects the fastest blade speed. Adjust blade speed for optimum performance.



WORKPIECE TO BE CUT	NUMBER ON THE VARIABLE-SPEED DIAL
Wood	5-6
Mild steel	2-5
Stainless steel	3-4
Aluminium	3-6
Plastic	1-4

NOTE: Determine the optimum speed for cutting your workpiece by making a trial cut in a scrap piece of material. Your experience will determine the best results for a particular application. However, as a general rule, use slower speeds for harder, denser materials and faster speeds for soft materials.

**WARNING!**

- Failure to unplug the saw from the power source when assembling parts, making adjustments or changing blades could result in accidental starting causing possible serious injury.

ADJUSTING THE BASE PLATE FOR BEVEL CUTTING (figs 11, 12)

1. Unplug the saw and remove the blade.
2. To adjust the cutting angle, first turn the tool upside down and pull the dust extraction port to remove it from the tool.
3. Use the hex key to loosen the hex screw securing the saw base.
4. Move the base of the saw slightly forward, and tilt it to the required angle, between 0° and 45°, using the scale marked on the base bracket.
5. Install a cutting blade.
6. Slide the blade guide assembly until the blade guide rests against the back edge of the blade.
7. Re-tighten the hex screws. For accurate work, it is necessary to make a trial cut, measure the work, and reset the angle until the correct setting is achieved.

fig 11

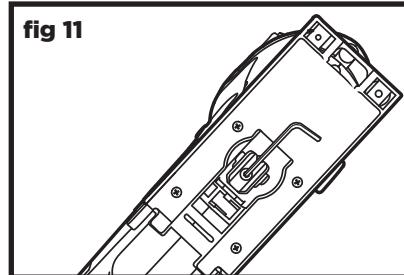
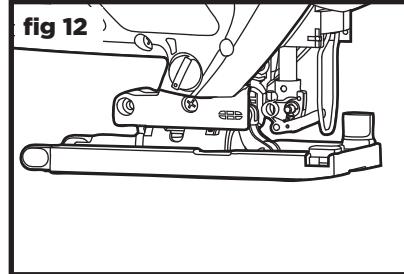


fig 12



CAUTION!

- Always remove the blade before adjusting the cutting angle.
- In order to prevent damage to the tool when angle or bevel cutting, the scroll mechanism must be locked in place, with the cutting edge of the blade facing the front of the tool.

WARNING!

- Do not let familiarity with your saw make you careless. Remember that a fraction of a second of carelessness is sufficient to cause severe injury.

USING THE EDGE GUIDE (fig 13)

The edge guide (included) is used for straight cutting:

1. Insert the bar of the edge guide through the slots in the base of the orbital jigsaw. It can be inserted from either side of the base, with the edge guide facing down.
2. Screw the edge-guide locking knob into the threaded hole in the base in order to tighten the edge-guide bar in place.
3. 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 in order to secure the edge guide in place (fig 14).

fig 13

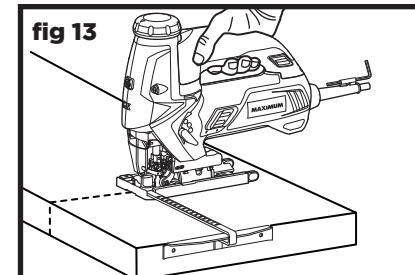
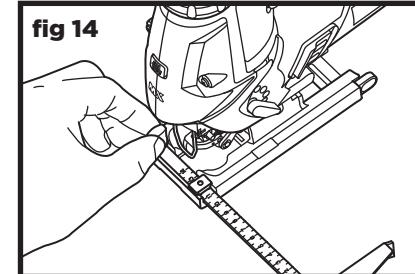


fig 14



WARNING!

- Always unplug the saw from the power source before making any adjustment or attaching accessories.

OPERATING INSTRUCTIONS**TURNING THE SAW ON-OFF WHEN BARREL GRIPPING THE ORBITAL JIGSAW (fig 15)**

1. Connect the power cord of your saw to a standard household power outlet.
2. Turn your saw on by sliding the push-on switch forward until it clicks into the start position.
3. To turn the power off, press in on the rear section of the push-on switch to stop the tool.

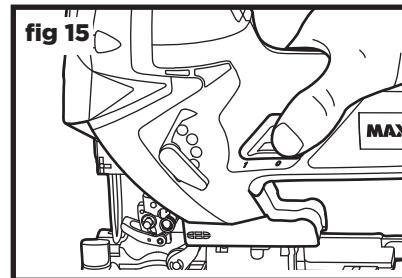


fig 15

TURNING THE POWER ON/OFF AND USING THE LOCK-ON BUTTON WHEN USING THE TOP HANDLE (fig 16)

1. Connect the power cord of your saw to a standard household power outlet.
2. Start the tool by squeezing the on/off trigger switch.
3. Release the on/off trigger switch to stop the tool.
4. To lock the on/off trigger switch in the "on" position, press the trigger switch, and press in the lock-on button from either side while holding it "on". The power lock-on button allows the operator to keep the orbital jigsaw running without squeezing the trigger switch. This feature is convenient for continuous sawing applications.
5. To release the lock-on button, press and release the trigger switch.

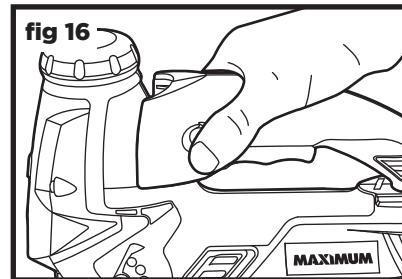


fig 16

**CAUTION!**

- Do not let familiarity with your saw make you careless. Remember that a fraction of a second of carelessness is sufficient to cause severe injury.

WARNING!

- If the "lock-on" button is depressed continuously, the trigger cannot be released.

USING THE LASER LIGHT FEATURE (fig 17)

Your orbital jigsaw has a built-in laser light. To activate the laser, plug in your orbital jigsaw and press the laser ON/OFF button.

1. Mark the cutting line on the workpiece.
2. Adjust the cutting angle and cutting speed as needed.
3. Plug in the saw and push the laser button to turn on the laser.
4. Align the laser beam with the cutting line.
5. Turn on the trigger switch, and slowly push the saw forward, keeping the laser beam on the cutting line.
6. Shut off the laser light when finish cutting.

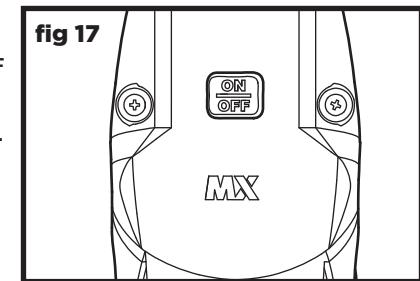


fig 17

**WARNING!**

- Laser light. Laser radiation. Avoid direct eye exposure. Do not stare into beam. Only turn laser beam on when the tool is on the workpiece. Class IIIa.
- Do not use the laser on reflective surfaces.

GENERAL CUTTING TIPS

1. Always place the best or "finished" side of the workpiece "face down" so that it does not get scraped or abused while sawing. Always clamp the workpiece securely before sawing.
2. Draw your cutting lines, patterns or designs on the "backside", facing you. This means that they should be reversed or backwards from the way they will appear on the "finished" side.
3. Always select the correct blade for your cutting application.
4. Place the front edge of the saw base on the material to be cut, and line up the blade with your cutting line, but do not allow the blade to contact the workpiece.
5. Hold the saw firmly and turn it on.
6. Press down (to keep the saw foot flat against the workpiece) as you slowly push the saw in the direction of the cut.
7. Gradually build up the blade speed, cutting as close to the line as possible (unless you wish to leave enough room for finishing sanding).
8. You may need to reposition the vise or clamps as you cut in order to keep the workpiece stable.
9. Do not force the saw, because the blade teeth may rub and wear without cutting, which may result in breaking the blade.
10. Let the saw do most of the work.
11. Always cut slowly when following curves, so that the blade can cut through cross grain. This will provide an accurate cut, and will prevent the blade from wandering.

NOTE: Always apply a steady, firm "DOWNWARD" pressure on the front and body of the saw as you cut. This will keep the saw blade from jumping out of the workpiece.

CUTTING METAL

When cutting metal, always clamp down the metal workpiece and use a metal cutting blade. Be extremely careful to move the saw very slowly as you cut. Use the low speeds (position 1, 2 or 3 on the variable-speed dial). Also use the **LOW** position on the orbital control lever.

Do not twist, bend or force the blade. If the saw jumps or bounces as you cut, change to a blade with finer teeth. If the blade begins to clog when cutting soft metal, change to a blade with coarser teeth.

For easier cutting, lubricate the blade with a stick of cutting wax (if available) or cutting oil when cutting steel. Thin metal should be sandwiched between two pieces of wood, or tightly clamped onto a single piece of wood (the wood on top of the metal). Draw the cutting lines or design on the top piece of wood.

When cutting aluminium extrusion or angle iron, clamp the work in a bench vise and saw close to the vise jaws. When sawing tubing with a diameter that is larger than the depth of the blade, cut through the wall of the tubing and then insert the blade into the cut, rotating the tube as you saw.

Spread the oil onto the blade or workpiece at regular intervals during cutting in order to reduce wear or overheating of the blade.

**WARNING!**

- Always unplug the saw from the power source before oiling the blade or making any adjustments or attaching accessories.
- Always clamp and secure workpiece securely. Always maintain proper control of the saw. Failure to clamp and support the workpiece and loss of control of the saw could result in serious injury.

CUTTING WITH A STRAIGHTEDGE (fig 18)

1. Mark the cutting line. Position the straightedge parallel to the cutting line, at the same distance as between the blade and the side edge of the saw base.
2. Mark the side edge of the saw base, and then clamp the straightedge on the mark, parallel to the cut.
3. As you cut, keep the edge of the saw base flush against the straightedge and flat on the workpiece.

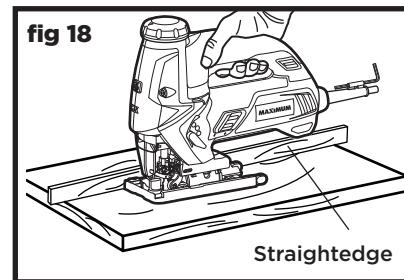


fig 18

PLUNGE CUTTING (fig 19)

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

1. Draw lines for the opening you want to cut.
2. Hold the saw firmly, and tilt it forward so that the toe of the saw foot rests on the workpiece.
3. Make sure that the blade is well clear of the workpiece.
4. Start the saw and then gradually lower the blade into the workpiece, firmly holding the toe of the saw base in order to prevent side wobble.
5. Slowly pivot the saw downward, as if on a hinge, until the blade cuts through and the base rests flat on the workpiece.
6. Begin sawing along the cutting line in the usual manner.

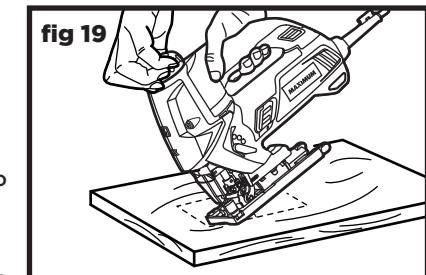


fig 19

NOTE: Always use a rough-cut blade whenever possible.

**WARNING!**

- To avoid accidents, always disconnect the tool from the power source before making any adjustments or attaching accessories.
- Do not let familiarity with your saw make you careless. Remember that a fraction of a second of carelessness is sufficient to cause severe injury.
- Always wear safety goggles or safety glasses when operating this tool.

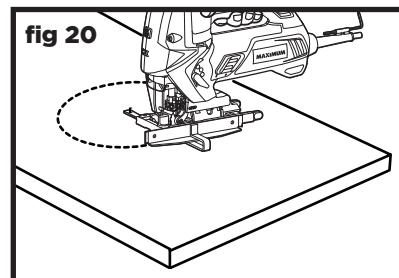
**WARNING!**

- Do not use a scroll blade for plunge cutting.
- Do not try to plunge cut into hard materials, such as hardwoods like oak or maple, or metal such as steel.

CUTTING CIRCLES (fig 20)

This requires using a circle cutting/straight edge guide (sold separately).

1. Before attaching the edge guide, draw a circle and drill a hole in the centre of the circle.
2. Drill or plunge cut near the edge of the circle.
3. Turn the saw off, and disconnect the plug from power source.
4. Attach the edge guide to the saw (the same way you attached the included edge guide), with the edge guide facing up.
5. Place the metal centre point on the edge into the hole in the centre of the circle. In order for the edge guide to cut a circle, the metal centre point must be aligned with the saw blade.
6. Measure the distance from the selected hole to the blade. This distance is equal to the radius of the circle.
7. Insert the saw's plug into a power source.
8. Hold the saw firmly, squeeze the trigger switch, and slowly push the saw forward.



NOTE: To make a hole, cut from inside the circle. To make wheels or discs, cut from outside the circle.

MAINTENANCE**BEFORE EACH USE:**

- Inspect the orbital jigsaw, the on/off switch, and the cord for damage.
- Check for damaged, missing, or worn parts.
- Check for loose screws, misalignment or binding of moving parts, or any other condition that may affect the operation.
- If abnormal vibration or noise occurs, turn the saw off immediately, and have the problem corrected before further use. Unplug the saw from the socket 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 power cord is damaged, it must be replaced with an identical replacement part and be installed by an authorized service technician.

WARNING!

- Do not let brake fluids, gasoline, petroleum-based products, penetrating oil, etc. come into contact with plastic parts. These substances contain chemicals that can damage, weaken, or destroy plastic.
- When servicing, use only identical replacement parts. The use of any other parts may create a hazard or cause damage to the product.
- Use only accessories that are recommended for this saw 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	Cause of the Problem	Suggested Corrective Action
Laser line is not projected	Laser switch is not turned on or the tool isn't plunged in	Make sure the tool is plugged in and the laser switch is turned on
Laser line is hard to see	Working condition is too bright	Use laser-enhancing glasses (available separately)
LED worklight does not light	The tool isn't plunged in	Make sure the tool is plugged in
The scrolling control cannot be turned	The Orbit/Scrolling lever is not in the "Scrolling" position	Set the lever in the "Scrolling" position

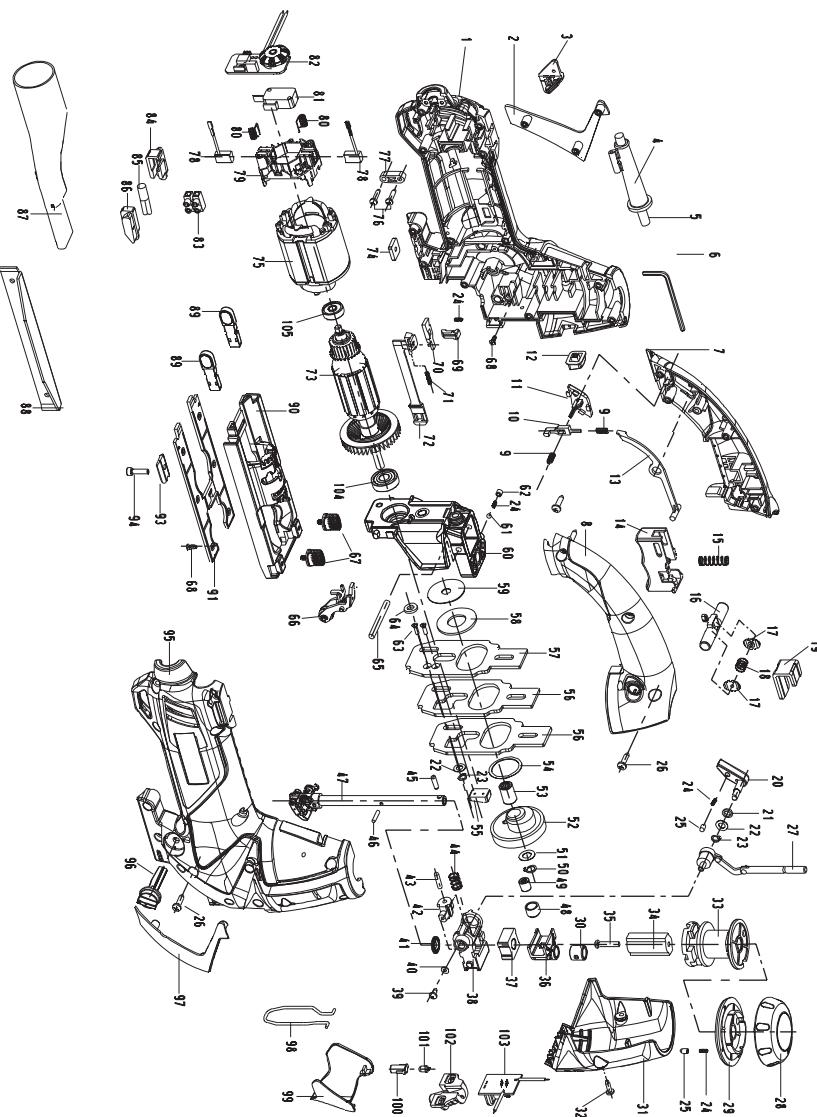
If the problem remains unsolved after performing the checks described above, call the toll-free helpline at 1-800-689-9928.



WARNING!

- Turn the ON/OFF switch to the "OFF" position and unplug the saw from the power source before performing troubleshooting procedures.

EXPLODED VIEW



No.	Part No.	Description	No.	Part No.	Description
1	3320601000	Left Housing Assembly	28	3320103000	Knob Set
2	3420338000	Left Alum Cover	29	3320104000	Knob Assembly
3	3320616000	Push Button	30	3551339000	Bush
4	3121037000	Cord Guard	31	3420945000	Alum Cover
5	4810002000	Power Cord & Plug	32	5610022000	Tapping Screw
6	5680019000	Hexagon Wrench	33	3120477000	Bearing Holder
7	3320819000	Left Handle Assembly	34	3520055000	Aligning Bearing
8	3320820000	Right Handle Assembly	35	5610106000	Tapping Screw
9	3660030000	Spring	36	3420946000	Drive Bracket
10	3123857000	Lock Pin	37	3520057000	Lower Sliding Bearing
11	3320615000	Lock Button	38	3420129000	Sliding Bearing Support
12	3121459000	Switch Cover	39	5610021000	Tapping Screw
13	3420675000	Hander Lever	40	5650001000	Plain Washer
14	3320105000	Switch Lock A	41	3120444000	Dust Seal
15	3660072000	Spring	42	3120491000	Guiding Block
16	3123856000	Trigger Lock	43	3550213000	Pendulum Pin
17	3120457000	Limiting Piece	44	3660071000	Spring
18	3660054000	Spring	45	3550202000	Pin
19	3700220000	Connecting Piece	46	3550191000	Pin 1
20	3121471000	Pendulum Lever	47	2822446000	Plunger Assembly
21	3700536000	Felt Ring	48	3550214000	Crank Roller
22	3700145000	Washer	49	5700022000	Needle Bearing
23	5660027000	Circlips For Shaft	50	5660007000	Circlips For Shaft
24	3660050000	Spring B	51	3700183000	Washer C
25	3700191000	Cap	52	3550993000	Gear Set
26	5610040000	Tapping Screw	53	5700030000	Needle Bearing
27	2822669000	Link Assembly	54	3700203000	Washer 1

No.	Part No.	Description	No.	Part No.	Description
55	3520058000	Pendulum Plate	80	3660055000	Carbon brush Spring
56	3700224000	Counterweight A	81	4870043000	Switch
57	3700225000	Counterweight	82	4890524000	PCB Assembly
58	3700226000	Washer	83	4930004000	Connecter
59	3700184000	Washer D	84	3123861000	Left Indictor Cover
60	2820588000	Bearing Support Assembly	85	4540017000	Power Supply Indicator
61	5700045000	Steel Ball	86	3123860000	Right Indictor Cover
62	3120016000	Spring Tube	87	3320248000	Vacuum Adapter
63	5620064000	Screw	88	3700675000	Rip Fence
64	3700227000	Washer	89	3124066000	Blade Storage
65	3550201000	Located Pin	90	3420814000	Base Plate
66	2822593000	Roller Support Set	91	3124065000	Base Plate Cover
67	3400175000	Knob	93	3700236000	Clamp Washer
68	5610079000	Thread Forming Screw	94	5620013000	Hexagon Socket Screw
69	3123859000	Switch Actuator	95	3320602000	Right Housing Assembly
70	3123858000	Lever	96	2822242000	Blowing Knob
71	3660051000	Spring	97	3420339000	Right Alum Cover
72	3123855000	Link	98	3650099000	Wire Guard
73	2750897000	Rotor	99	3121368000	Guard
74	3700164000	Square Nut	100	3123507000	Transparent Cap
75	2740270000	Stator	101	4360001000	LED
76	5610024000	Tapping Screw	102	2780030000	Laser Set
77	3120234000	Cord Anchorage	103	4890523000	PCB Assembly
78	4960017000	Carbon Brush	104	5700011000	Ball Bearing
79	2820587000	Brush Support Assembly	105	5700004000	Ball Bearing

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

5-YEAR LIMITED WARRANTY

This Mastercraft Maximum product is guaranteed against defects in workmanship and materials for a period of 5 years from the date of original retail purchase, with the exception of the following components:

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

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 labour costs relating thereto.

This warranty is 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 that is worn or broken, or that 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 that 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 and that are expected to become inoperative or unusable after a reasonable period of use;
- d) This warranty will not apply to routine maintenance and consumable items, including 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 if 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, including 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 but not limited to 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

