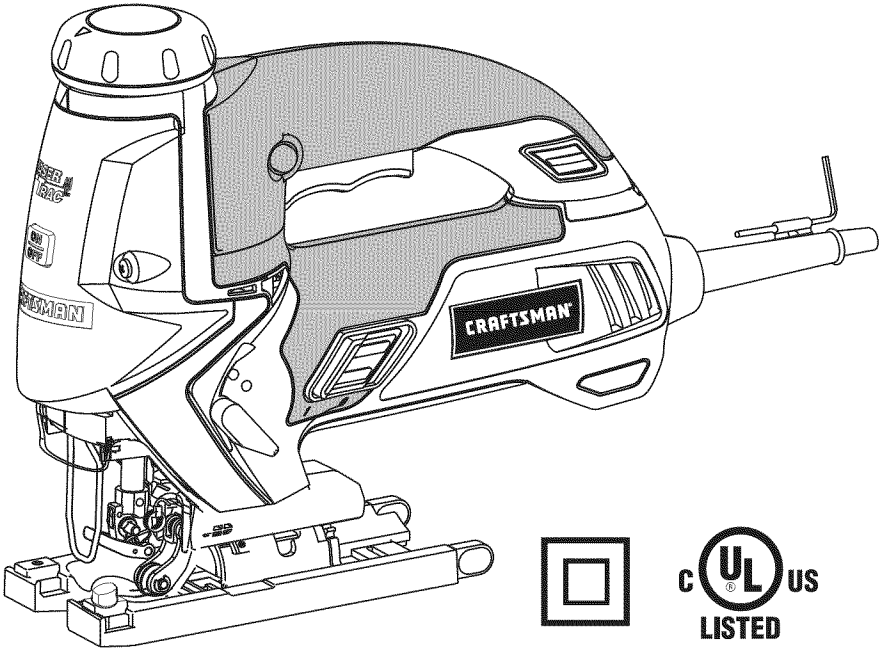
Operator's Manual

CRAFTSMAN®

6 Amp 2-in-1 Jig Saw

Model No. 320.28223



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⚠ WARNING: To reduce the risk of injury, the user must read and understand the Operator's manual before using this product.

- WARRANTY
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- DESCRIPTION
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- TROUBLESHOOTING
- ESPANÕL

Sears Brands Management Corporation, Hoffman Estates, IL 60179 U.S.A.
www.craftsman.com

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CRAFTSMAN ONE YEAR FULL WARRANTY

FOR ONE YEAR from the date of purchase, this product is warranted against any defects in material or workmanship. Defective product will be replaced free of charge.

For warranty coverage details to obtain free replacement, visit the web site: www.craftsman.com

This warranty does not cover blades and bulbs, which are expendable parts that can wear out from normal use within the warranty period.

This warranty is void if this product is ever used while providing commercial services or if rented to another person.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Sears Brands Management Corporation, Hoffman Estates, IL 60179

⚠ **WARNING:** Some dust created by using power tools contains chemicals known to the state of California to cause cancer and birth defects or other reproductive harm.

SAVE THESE INSTRUCTIONS!

READ ALL INSTRUCTIONS!

SAFETY SYMBOLS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

⚠ **WARNING**: Be sure to read and understand all safety instructions in this manual, including all safety alert symbols, such as **"DANGER," "WARNING,"** and **"CAUTION,"** before using this Jig Saw. Failure to following all instructions listed below may result in electric shock, fire and/or serious personal injury.

SYMBOL MEANING

SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, OR CAUTION. May be used in conjunction with other symbols or pictographs.

⚠ **DANGER:** Failure to obey this safety warning will result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.

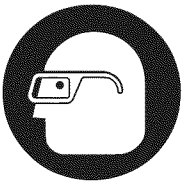
⚠ **WARNING:** Failure to obey this safety warning can result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric shock, and personal injury.

⚠ **CAUTION:** Failure to obey this safety warning may result in death or serious injury to yourself or to others. Always follow the safety precautions to reduce the risk of fire, electric, shock and personal injury.

DAMAGE PREVENTION AND INFORMATION MESSAGES

These inform user of important information and/or instructions that could lead to equipment or other property damage if not followed. Each message is preceded by the word **"NOTE"** as in the example below.

NOTE: Equipment and/or property damage may result if these instructions are not followed.



⚠ **WARNING:** The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full-face shield when needed. We recommend a Wide Vision Safety Mask for use over eyeglasses or standard safety glasses with side shields, available at Sears Stores or other Craftsman outlets. Always use eye protection that is marked to comply with ANSI Z87.1

Some of these following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and safer.

SYMBOL	NAME	DESIGNATION/EXPLANATION
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watt	Power
min	Minutes	Time
~	Alternating Current	Type of current
⎓	Direct Current	Type or a characteristic of current
n_0	No Load Speed	Rotational speed, at no load
⧈	Class II Construction	Double-insulated construction
.../min	Per Minute	Revolutions, strokes, surface speed, orbits, etc., per minute
	Wet Conditions Alert	Do not expose to rain or use in damp locations.
	Read The Operator's Manual	To reduce the risk of injury, user must read and understand operator's manual before using this product.
	Eye Protection	Always wear safety goggles or safety glasses with side shields and a full face shield when operating this product.
⚠	Safety Alert	Precautions that involve your safety.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	No Hands Symbol	Failure to keep your hands away from the blade will result in serious personal injury.
	Hot Surface	To reduce the risk of injury or damage, avoid contact with any hot surface.

SAFETY INSTRUCTIONS

⚠ WARNING: Be sure to read and understand all instructions in this manual before using the jig saw. Failure to follow all instructions may result in hazardous radiation exposure, electric shock, fire, and/or serious personal injury.

⚠ WARNING: Do not attempt to operate this tool until you have thoroughly read all instructions, safety rules, and warnings. Failure to comply with them can result in fire, electric shock, or serious personal injury. Save the manual and refer to it frequently.

SAFETY PRECAUTIONS FOR LASERS

This jig saw has a built-in laser light. The laser is a Class IIIa and emits output power of a maximum 2.5mW and 650 wavelengths. These lasers do not normally present an optical hazard. However, do not stare at the beam as 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 laser light location 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: 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 such as, but not limited to, telescopes or transits to view the laser beam will increase eye hazard.

⚠ CAUTION: Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

- **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 laser on only when making cuts.
- Laser enhancing safety glasses are included to enhance the laser beam in bright light conditions. Do not wear these glasses if they interfere with the safe operation of this saw.
- The laser on the jig saw is not a toy. Always keep out of the reach of children. The laser light emitted from this device should never be directed towards 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 such as sheet steel that have a shiny, reflective surface. The shiny surface could reflect the beam back at the operator. Be aware that laser light reflected off of 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 only the instructions contained in this manual when using this laser. Use of this feature in any manner other than what appears in this manual may result in a 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.
- **Always** use only the accessories that are recommended by Sears for use with this product. Use of accessories that have been designed for use with other laser tools could result in serious injury.
- For further information regarding lasers, refer to ANSI-Z136.1 the **STANDARD FOR THE SAFE USE OF LASERS**, available from the Laser Institute of America (407) 380-1553.

GENERAL SAFETY RULES

⚠ **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 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 residual current device (RCD) protected supply.** Use of an RCD 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 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 in 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 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 safer at the rate for which it was designed.
- **Do not use the power tool if the switch does not turn it on and off.** Any power tool that cannot be controlled with the switch is dangerous and must be repaired.

- **Disconnect the plug from the power source and/or the battery pack from the power tool before marking 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 and tool bits etc., in accordance with these instructions , taking into account the working conditions and the work to be performed**. Use of the power tool for operations different from those intended could result in a hazardous situation.

⚠ **WARNING:** When using power tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury.

⚠ **WARNING:** The operation of any tool can result in foreign objects being propelled into your eyes, resulting in severe eye damage. When operating power tool, always wear safety goggles or safety glasses with side shields and a full face shield when needed.

⚠ **WARNING:** If any parts are missing, do not operate the tool until the missing parts have been replaced. Doing so could result in serious personal injury.

SERVICE SAFETY

- **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.
- **If any part of this jig saw is missing or should break, bend,** or fail in any way; or should any electrical component fail to perform properly: shut off the power switch and remove the saw plug from the power source and have the missing, damaged, or failed parts replaced before resuming operation.
- **Tool service** must be performed only at a Sears Parts & Repair Service Center. Service or maintenance performed by unqualified personnel could result in a risk of injury.
- **Use only identical replacement parts** when servicing a tool. Follow the instructions in the maintenance section of this manual. Use of unauthorized parts or failure to follow maintenance instructions may create a risk of electric shock or injury.

SPECIFIC SAFETY RULES FOR JIG SAW

⚠ **DANGER:** Keep hands away from cutting area and blade. Keep your second hand on the auxiliary handle or motor housing. If both hands are holding the saw, the blade cannot cut them.

⚠ **CAUTION:** Blades coast after saw is switched off.

- **Hold tool by insulated gripping surfaces (handles) when performing an 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 shock the operator.
- **Use clamps or another practical way to secure and support the workpiece to a stable platform.** Holding the work by hand or against your body leaves it unstable and may lead to loss of control.
- **Check** that the switch is "off" before plugging the tool in. Accidental starting could cause injury.
- **Be aware of** the function of the switch "Lock-On" button. To switch the lock-on switch off just by first pressing the switch and then immediately releasing.
- **Keep** your body positioned to either side of the saw blade, but not in line with the saw blade.
- **Do not** reach underneath the work. The blade guard cannot protect you from the blade beneath the work.
- **Do not** touch the blade or the workpiece immediately after operation; they may be extremely hot and could burn your skin.
- **Do not** cut an oversized workpiece.
- **Check** for the proper clearance under the workpiece before cutting so that the blade will not strike the workbench or material under the workpiece.
- **Make sure** the blade is not contacting the workpiece before the switch is turned on.
- **Secure material before cutting.** Never hold a workpiece in your hand or legs. Small or thin material may flex or vibrate with the blade, causing loss of control.
- When ripping, **always use** a rip fence or straight edge guide (sold separately). This improves the accuracy of the cut and reduces the chance of the blade binding.
- **Never** cut more than one piece at a time. Do not stack more than one workpiece on the worktable at a time.
- **Avoid awkward operations** and hand positions where a sudden slip could cause your hand to move into the blade.
- **Never** reach into the cutting path of the blade.
- Blade guide rollers must support the blade when cutting. The rollers must rest against the back edge of blade. The only cutting operation when rollers do not support the blade is the scrolling mode. When Scrolling the blade must swivel as it is guided to follow scroll patterns. Always move the base back and blade guide up and back away from blade in scrolling mode.

ADDITIONAL RULES FOR SAFE OPERATION

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

- **Know your power tool.** Read operator's 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 have only impact-resistant lenses; they are not safety glasses.
- **Protect your lungs.** Wear a face mask 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 that the operator of the saw wears.
- **Inspect the tool cords periodically and if damaged have them repaired at your nearest** Sears Parts & Repair Service Center. **Be aware of the cord location.**
- **Always check the tool for damaged parts.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine if it will operate properly and perform its intended function. Check for misalignment or binding of moving parts, breakage of 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 at a Sears Parts & Repair Service Center.
- **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 have these instructions also.

UNPACKING

WARNING: Your saw should never be connected to the power source when you are assembling parts, making adjustments, installing or removing blades, cleaning, or when it is not in use. Disconnecting the jig saw will prevent accidental starting, which could cause serious personal injury.

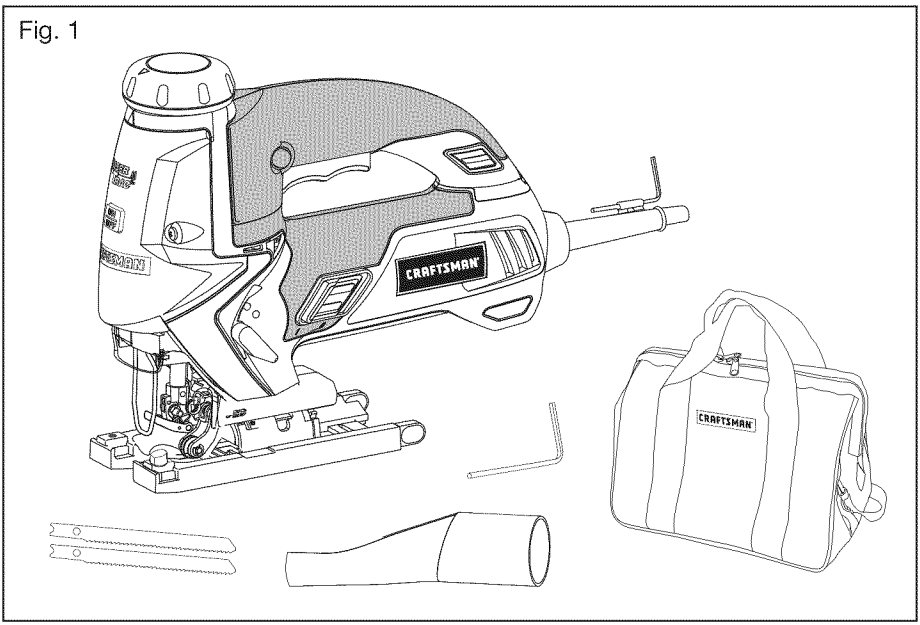
When unpacking the box, do not discard any packing materials until all of the contents are accounted for:

1. Carefully lift the jig saw out of the carton and place on a stable, flat surface.
2. Open the color box to locate the following:
   - Jig Saw
   - 2 blades
   - Dust tube
   - Hex key
   - Carry bag
   - Manual
3. Inspect the items carefully to make sure that no breakage or damage has occurred during shipping. If any of the items mentioned is missing, (refer to "PARTS LIST" illustration), return the jig saw to the Craftsman outlet from which it was purchased to have it replaced.

WARNING: If any parts are broken or missing, do not attempt to assemble the jig saw, plug in the power cord, or operate the saw until the broken or missing parts are replaced. Failure to do so could result in possible serious injury.

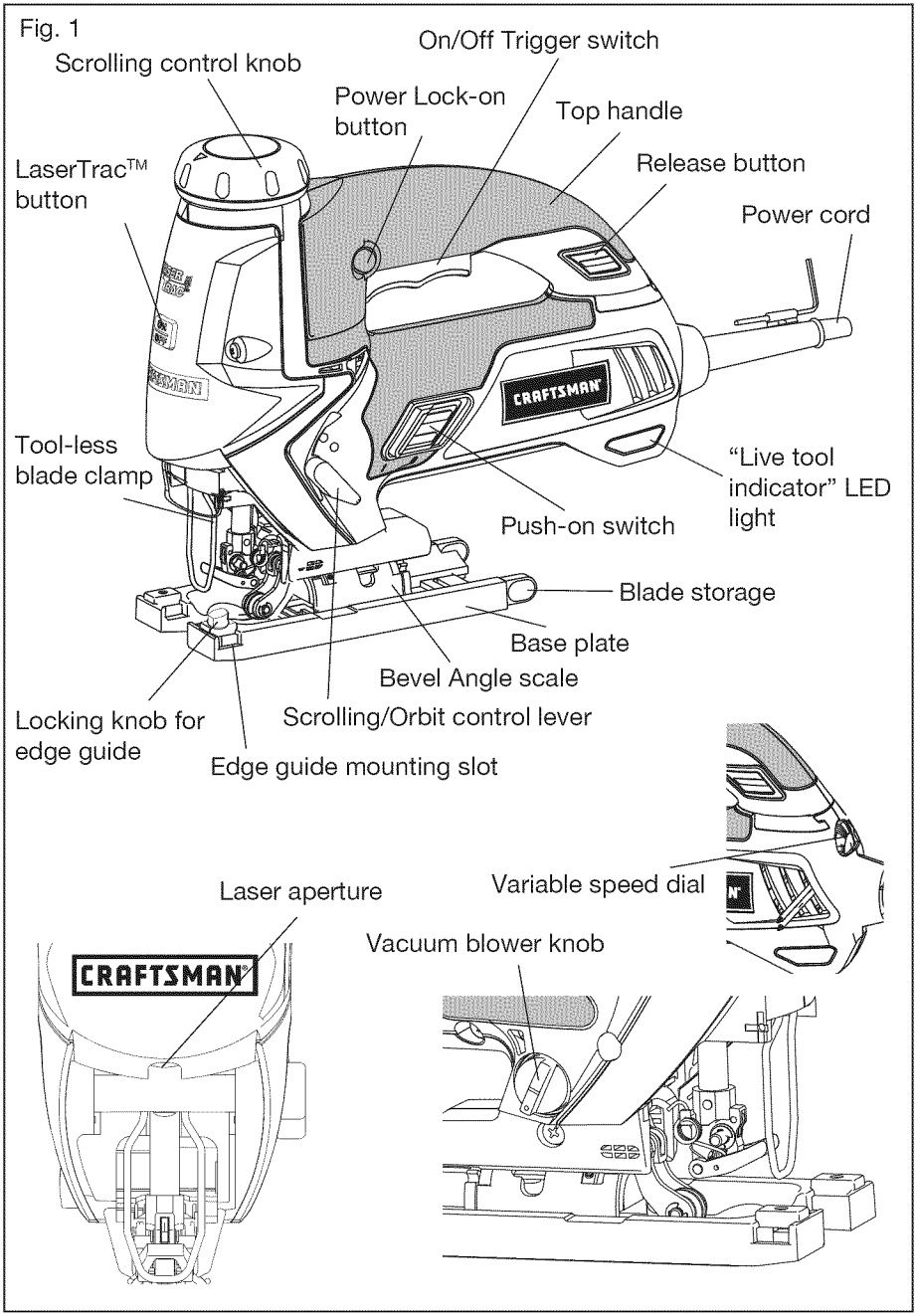
CARTON CONTENTS/LOOSE PARTS (Fig. 1)

Fig. 1



DESCRIPTION

KNOW YOUR JIG SAW (Fig. 2)



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

This Jig Saw has the following features:

- 2-in-1 design: use it with the top handle or remove the handle and use it as a barrel-grip saw.
- 6 Amp, 800 to 3000 SPM (strokes per minute) variable speed motor.
- LaserTrac™: laser generator displays a bright red line along the cutting line.
- Variable Speed is controlled by the speed dial located on the back of the trigger switch handle.
- Scrolling/Orbital Action: The control lever regulates the 5 cutting modes of the saw.
  1. **SCROLLING 360°** blade rotation using scrolling knob, normal up and down blade motion. No orbital action.
  2. **Smooth** minimal splintering**,** normal up and down blade motion. No orbital action.
  3. **Low** for cutting most metals, low orbital action.
  4. **Medium** for cutting plastics, hardboard, medium orbital action.
  5. **Fast** for maximum orbital action, used for fast cutting in plywood, softwoods.
- Blade guide support rollers provide added blade control.
- 15/16-inch blade stroke for faster cutting.
- Durable base glides smoothly over the workpiece.
- Bevel scale for easy adjustment.
- Bevel cutting capacity 0° to 45° left and right.
- Quick blade change without tools.
- LED worklight illuminates cutting area.
- "Live tool indicator" LED light is green when the saw is plugged into a power source.
- Ergonomically designed 2-in-1 soft-grip handles for maximum control and balance. Guide the with top mount handle, or use the barrel grip for low center of gravity precision.
- 2-way saw dust removal: 1. Blower position blows debris away from cutting line. 2. Vacuum position for attachment to a wet/dry vac (sold separately).
- On board blade storage at base.
- Durable cast aluminum and high-impact resistant housing and handle protect tool from damage.
- Include carry bag for easy carrying and storage.

PRODUCT SPECIFICATIONS	
Input	6 Amps
Laser Diode Type	Red Laser Diode 650 nm
Laser Class	Class IIIa, power output<2.5 mW
No load Speed	800-3000 SPM
Rating	120 volts, 60Hz AC
Cutting angle range	0-45° left and right
Cutting depth in wood	3-3/8'' (85mm)
Cutting depth in steel	1/4" (6mm)
Weight	6.15 lbs (2.79 kg)

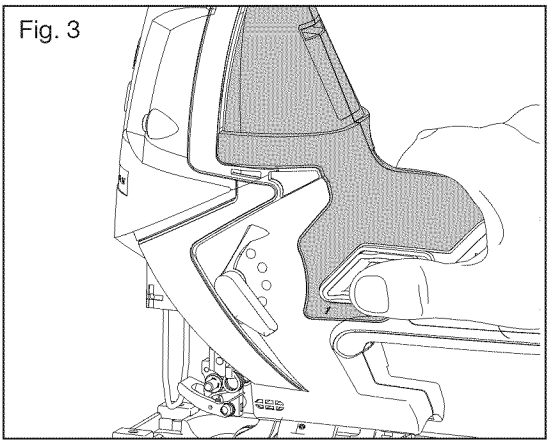
OPERATION

⚠ **CAUTION**: The blade guide supports the blade when cutting and must at all times rest against the back edge of the blade, except when in the scrolling mode. It should rotate freely.

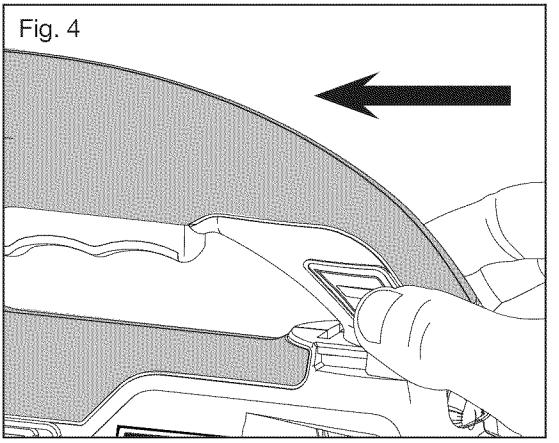
TURN POWER ON-OFF WHEN USING THE BARREL GRIP (Fig. 3)

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 power off, press in on the rear section of the push-on switch to stop the tool.

Fig. 3



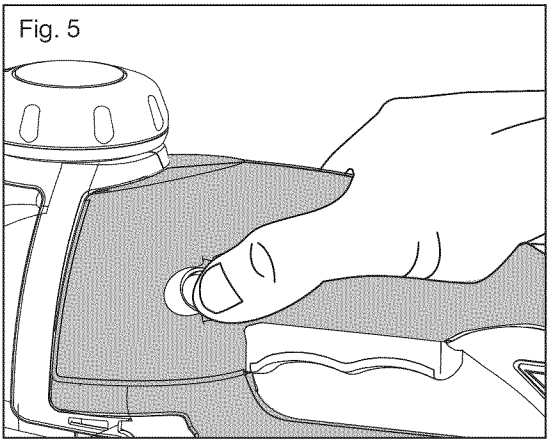
ATTACHING TOP HANDLE ONTO JIG SAW (Fig. 4)



1. Unplug the saw and put the push-on switch on the saw body in the off position.
2. Hold the handle so that the curve in the front of the handle corresponds with the curved surface of the saw body and the lower part of the rear of the handle aligns with the attaching plate on the saw body.
3. Slide the top handle onto the attaching plate, and hold down the handle-release buttons until the top handle snaps and locks into place (Fig 4). Release the handle release buttons.

NOTE: Make sure the push-on switch is off when attaching the top handle to the jig saw.

NOTE: When the top handle is on the jig saw, the push-on switch cannot be switched on.



TURNING POWER ON/ OFF AND USING LOCK-ON BUTTON (Fig. 5)

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 trigger switch and while holding it "on", press in the lock-on button from either side. The power lock-on button allows the operator to keep the jig saw 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.

⚠ **CAUTION**: Do not let familiarity with your saw make you careless. Remember that a careless fraction of a second is sufficient to cause severe injury.

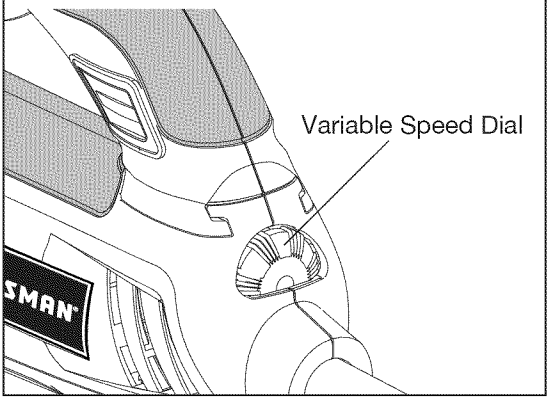
⚠ **WARNING**: If the "lock-on" button is continuously being depressed, the trigger cannot be released.

ADJUSTING THE CUTTING SPEED WITH THE VARIABLE SPEED DIAL (FIG. 6)

The variable speed feature of this jig saw 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. 6).
3. Position "1" selects the slowest blade speed; position "6" selects the fastest blade speed. Adjust blade speed for optimum performance.

Fig. 6



NOTE: Determine the optimum speed for cutting your workpiece by making a trial cut in a scrap piece of material.

Workpiece to be cut	Setting on variable speed dial
Wood	5- 6
Low-carbon (mild) steel	2- 5
Stainless steel	3- 4
Aluminium	3- 6
Plastic	1- 4

⚠ **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.

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 speed for harder, denser materials and faster speed for soft materials.

TOOL-LESS BLADE INSTALLATION (Fig. 7a, 7b)

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. Turn the saw upside down so you can access the blade clamp.
3. Lift the tool-less blade-change lever up (Fig. 7a), then insert the blade into the blade clamp (Fig. 7b). The teeth of the blade should be facing to 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.
4. Release the tool-less blade-change lever to lock the blade.
5. Pull on the blade (see Fig. 7b) to make sure it is securely locked in place.

Fig. 7a

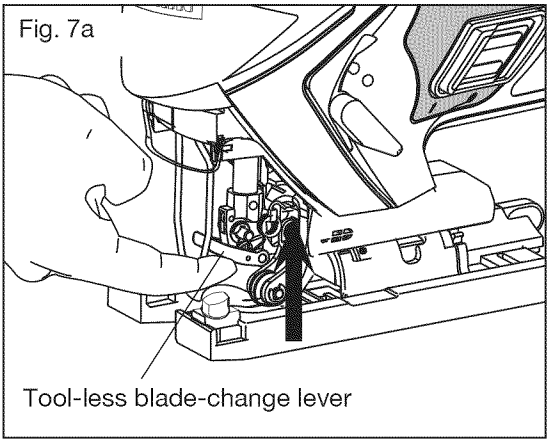
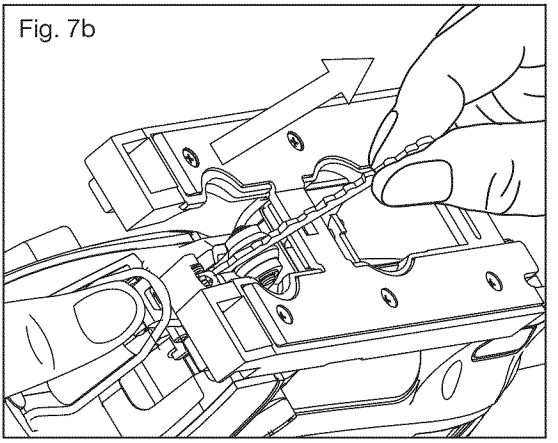


Fig. 7b



NOTE: For use with both "T" & "U" shank 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 saw down on its side when blade is installed. Always remove blade when saw is not being used.

⚠ CAUTION: The blade guide rollers support the blade when cutting. The blade guide rollers must rest against the back of the back edge of the blade. The ONLY cutting operation where the blade guide rollers do not support the blade is when the saw is in the scrolling mode. When scrolling, the blade must swivel as it is guided to follow the scroll pattern. Always move the base back and blade guide rollers up and back away from the blade when operating in scrolling mode. (Fig 8a, 8b)

Fig. 8a Blade guide rollers support the blade when cutting in all cutting modes except scrolling

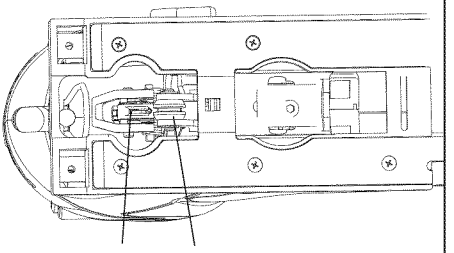
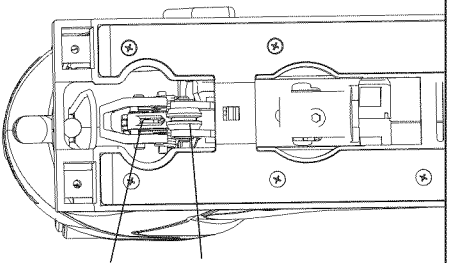


Fig. 8b Blade guide rollers up and back away from blade when operating in the scrolling mode.



REMOVING THE BLADE (Fig.7a, 7b)

1. Unplug the saw.

⚠ WARNING: Always unplug saw from the power source before changing blade or making any adjustments. Failure to unplug the saw could result in accidental starting which can cause serious personal injury.

2. Turn the saw upside down for blade removal.
3. Lift the tool-less blade change lever up and carefully remove the blade.

USING THE LASER TRAC™ LIGHT FEATURE (Fig. 9a)

Your jig saw has a built-in laser light. To activate the laser, plug in your jig saw.

⚠ **WARNING**: Laser light. Laser radiation. Avoid direct eye exposure. Do not stare into beam. Only turn laser beam on when tool is on the workpiece. Class II laser.

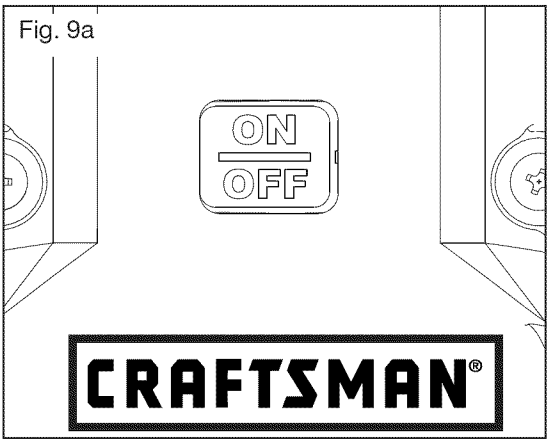


Fig. 9a

1. Mark the line of cut 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 line of cut.
5. Turn on the trigger switch and slowly push the saw forward, keeping the laser beam on the line of cut.
6. Shut off the laser light when finished cutting.

LED WORKLIGHT

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

"LIVE TOOL INDICATOR" LED LIGHT (FIG. 9B)

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

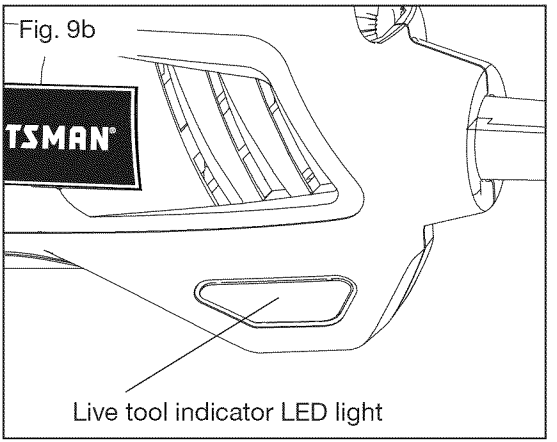


Fig. 9b

SCROLLING/ORBITAL CONTROL LEVER

This jig saw is equipped with an orbital control lever that enables you to select the type of orbital action best suited for your purpose and workpiece material. Shift the lever to one of the positions described below prior to starting your cut.

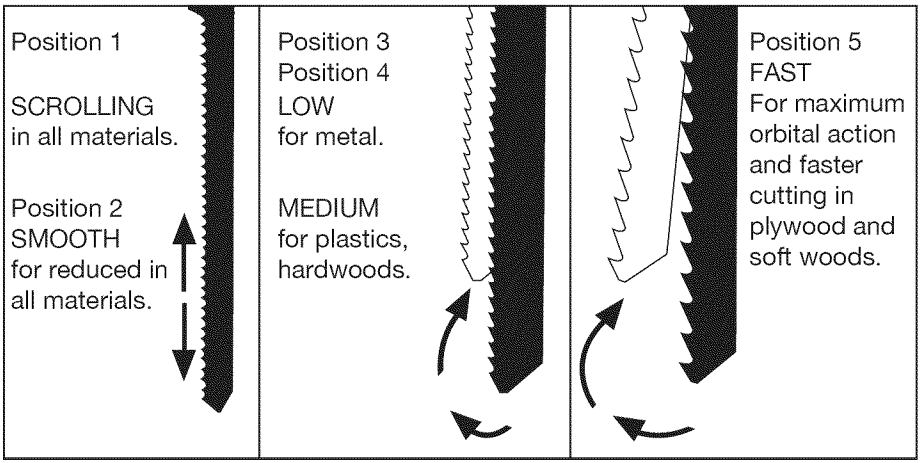
1. **SCROLLING**- this mode allows 360° blade rotation using the scrolling knob. In this mode, there is no orbital action. Use with a scroll blade (available separately) to cut intricate scroll patterns in all materials with normal up and down blade motion.
2. **SMOOTH**- for cutting all materials with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

Choose the SCROLLING or SMOOTH setting with the scrolling/orbital control lever for normal up and down blade motion (position 1 and 2).

Choose the LOW or MEDIUM settings for the least aggressive orbital blade actions (position 3 and 4).

Choose the FAST setting for the fastest, most aggressive cutting with maximum orbital blade action (position 5).

NOTE: In order to reach full orbital action, the blade must be facing straight forward and the back of the blade must rest in the groove of the guide roller.



CUTTING WITH ORBITAL ACTION

The foot must be all the way in the forward position:

1. Unplug the saw.
2. Turn the tool upside down.
3. Use the hex key to loosen the hex screw securing the saw base.
4. Move the base of the saw forward.
5. Re-tighten the hex screws.

Orbital action is not observable when the saw is free-running. The saw must be cutting for orbital action to occur. The speed of cut is easier to see in thicker materials. See GENERAL CUTTING TIPS for additional instructions.

SCROLLING

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. 10)
2. Grasp the scrolling control knob (Fig. 11).
3. The scrolling control knob can be rotated 360° to the left or right while guiding the saw to follow intricate cutting lines.

NOTE: The blade can be locked in any scrolling position within 360° by switching the Scrolling/orbit control lever to the "SMOOTH" position.

NOTE: After moving the lever into the scrolling position, turn the scrolling knob back and forth to be sure the blade mechanism is locked into the desired position.

Fig. 10

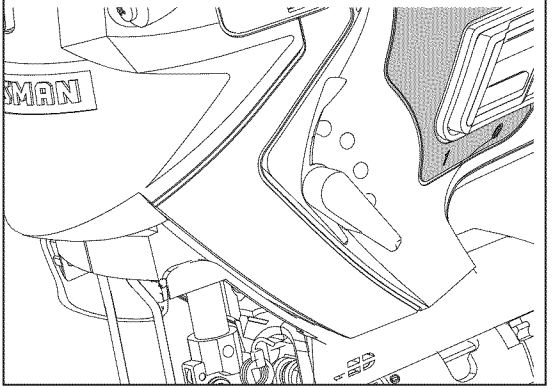
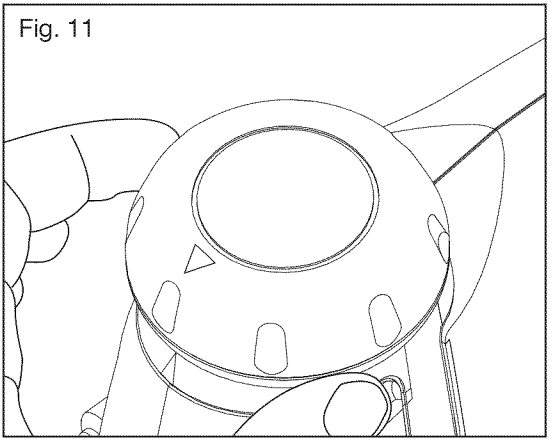


Fig. 11



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

NOTE: When scroll cutting intricate designs, we recommend that you use a scroll cutting blade.

⚠ **CAUTION**: Excessive side pressure to the blade could break the blade which could damage the material being cut.

2-WAY SAWDUST REMOVAL

Your jig saw is equipped with a 2-way sawdust removal system.

1. Unplug the saw.
2. Switch the vacuum/blower knob (Fig. 12) to the BLOWER position to blow sawdust, metal and plastic chips away from the cutting area.

OR

1. Unplug the saw.
2. Switch the vacuum/blower knob (Fig. 12) to the VACUUM position.
3. Attach the dust tube to the saw (Fig. 13).
4. Connect the dust tube to a ¼" vacuum adapter (sold separately) and then to a standard shop vac to remove sawdust, metal and plastic chips.

Fig. 12

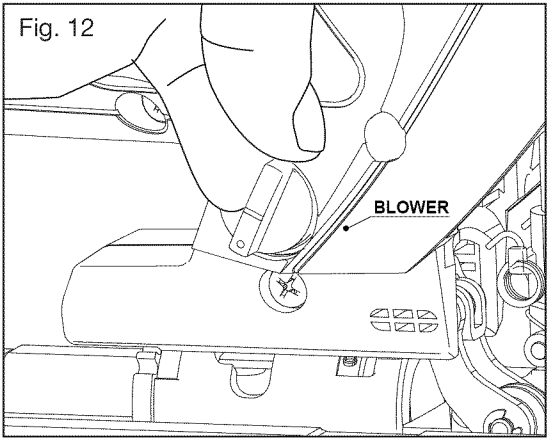
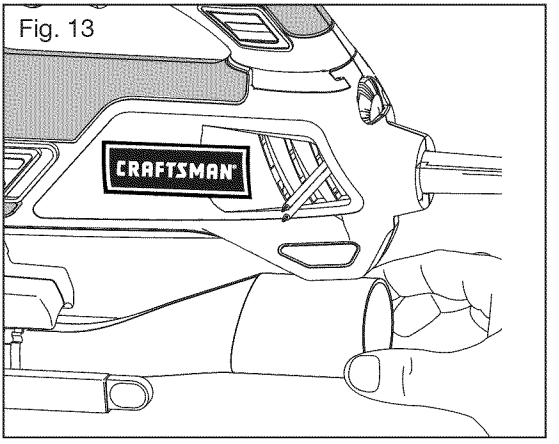
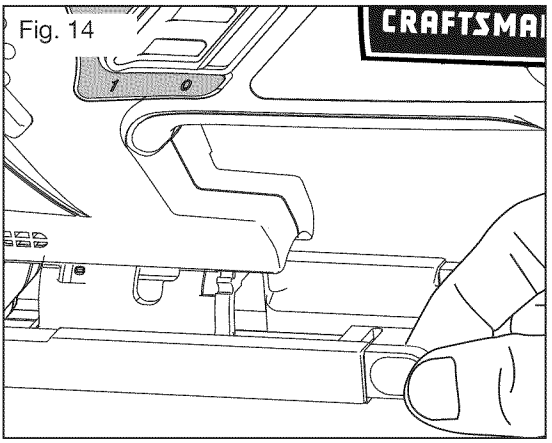


Fig. 13



ON BOARD BLADE STORAGE (Fig. 14)



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.

GENERAL CUTTING TIPS

1. Always place the best or "finished" side of the workpiece "face down" so 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 they would 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 front edge of saw base on the material to be cut and line up the blade with your cutting line.
5. Hold the saw firmly and turn it on.
6. Press down (to keep base plate 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 want to leave enough room for finished sanding).
8. As you cut, you may need to reposition the vise or clamps 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 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 "DOWN" 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 to a stable surface 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 on a single piece of wood (wood on top of the metal). Draw the cut lines or design on the top piece of wood.

When cutting aluminum extrusion or angel iron, clamp the work in a bench vise and saw close to the vise jaws.

When sawing tubing with a diameter larger than the blade is deep, cut through the wall of the tubing and then insert the blade into the cut, rotating the tube as you saw.

1. When cutting metals, a suitable cooling/cutting oil must be used.
2. Spread the oil onto the blade or workpiece at regular intervals during cutting in order to reduce wear or overheating the blade.

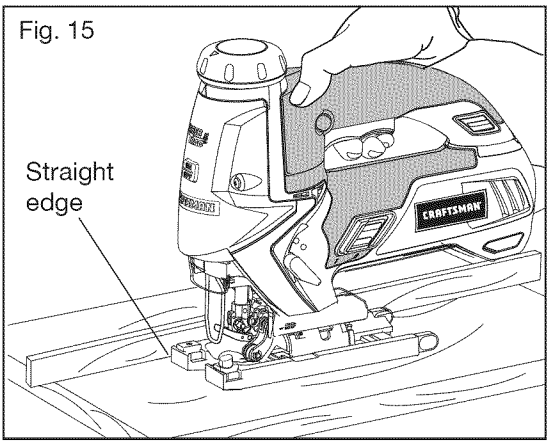
⚠ **WARNING**: Always unplug the saw from the power source before oiling the blade or making any adjustments or attaching accessories.

⚠ **WARNING**: Always clamp and secure workpiece securely. Always maintain proper control of saw. Failure to clamp and support workpiece and loss of control of saw could result in serious injury.

CUTTING WITH A STRAIGHT EDGE (Fig. 15)

1. Mark the the desired cut line.
2. Clamp a straight edge parallel to the cut line at a distance from the cut line that is equal to the distance between the blade and the edge of the saw base.
3. As you cut, keep the saw base edge flush against the straightedge and flat on the workpiece.

Fig. 15



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.

⚠ **WARNING**: Do not let familiarity with your saw make you careless. Remember that a careless fraction of a second is sufficient to cause severe injury.

⚠ **WARNING**: Always wear safety goggles or safety glasses when operating this tool.

PLUNGE CUTTING (Fig. 16)

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.

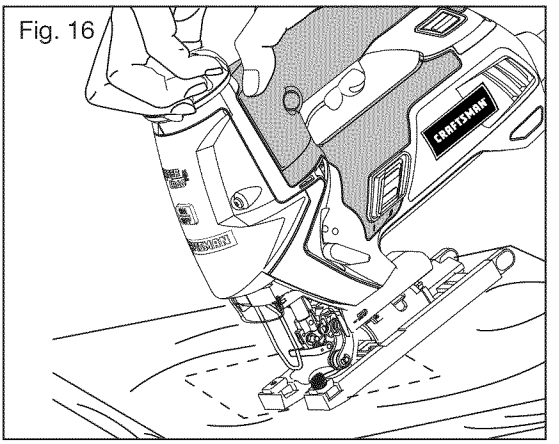


Fig. 16

1. Draw lines for the opening you want to cut.
2. Hold saw firmly and tilt it forward so the toe of the base 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 to prevent side wobble.
5. Slowly pivot the saw downward like a hinge until the blade cuts through and the base rests flat on the workpiece.
6. Begin sawing in the usual manner along the cut line.

⚠ **WARNING**: Do not use a scroll blade for plunger cutting.

⚠ **IMPORTANT**: Do not try to plunge cut into hard materials, such as hardwoods like oak or maple, or metal such as steel.

TO MAKE SHARP CORNERS (Fig. 17)

1. Cut up to the corner, then back up slightly before turning the corner.
2. After the opening is complete, go back to each corner and cut it from the opposite direction to square it off.

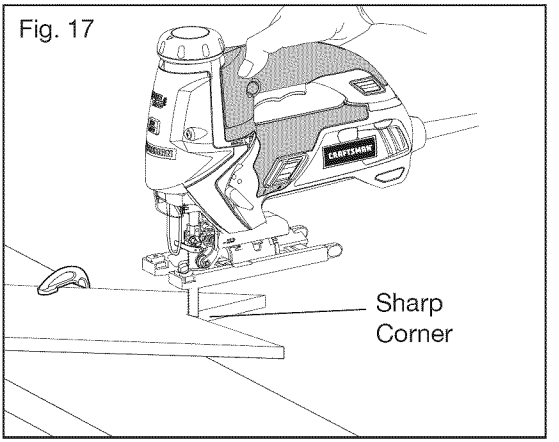


Fig. 17

TO ADJUST BASE PLATE FOR BEVEL CUTTING (Figs. 18 19)

⚠ **CAUTION:** Always remove the blade before adjusting the cutting angle.

⚠ **CAUTION**: 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.

1. To adjust the cutting angle, first turn the tool upside down.
2. Use the hex key to loosen the hex screw securing the saw base.
3. 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.
4. Install a cutting blade.
5. 5. Slide the blade guide assembly until the blade guide rests against the back edge of the blade.
6. 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

⚠ **WARNING**: Do not let familiarity with your saw make you careless. Remember that a careless fraction of a second is sufficient to cause severe injury.

Fig. 18

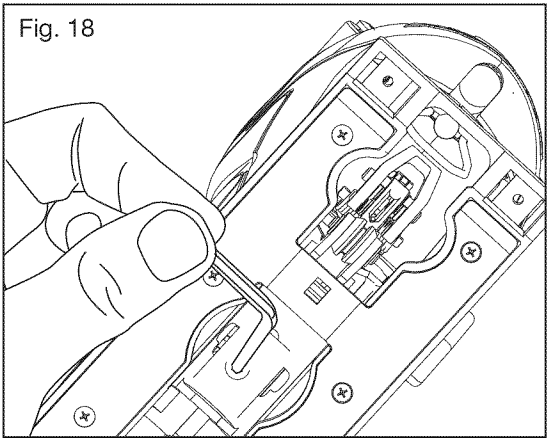
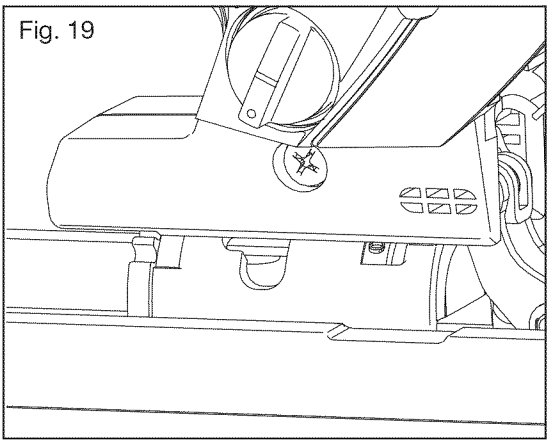


Fig. 19



USING AN EDGE GUIDE (sold separately) (Fig. 20)

An edge guide (sold separately) is used for straight cutting:

⚠ **WARNING**: Always unplug the saw from the power source before making any adjustment or attaching accessories.

1. Unplug the saw.
2. Insert the bar of the edge guide through the slots in the base of the jig saw (Fig.19). It can be inserted from either side of the base, with the edge guide facing down.
3. Screw the edge guide locking knob into the threaded hole in the base to tighten the edge guide bar in place.
4. Measure the distance from the edge of the workpiece to the line-of-cut. Slide the edge guide to this desired distance and then tighten the locking knob to secure edge guide in place. (Fig. 21).

Fig. 20

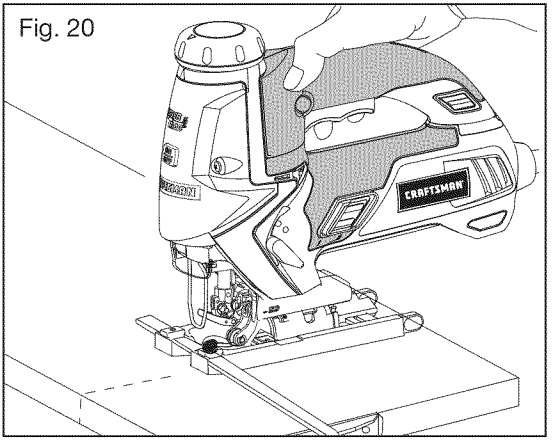
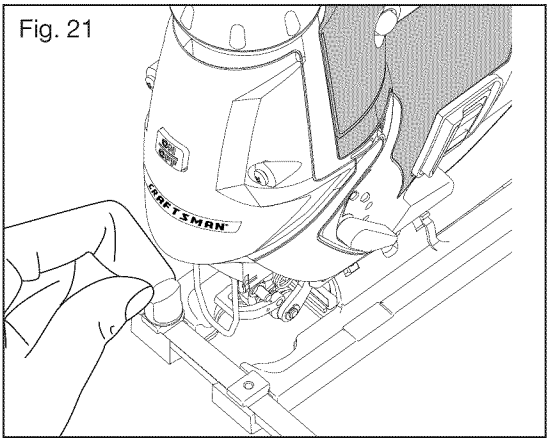


Fig. 21



CIRCLE CUTTING (FIG. 22)

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

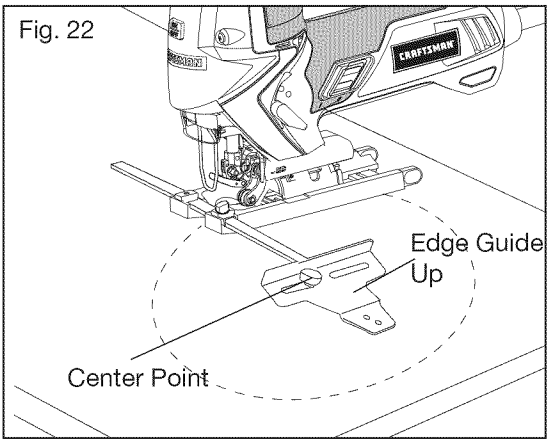


Fig. 22

1. Before attaching the edge guide, draw a circle and drill a hole in the center of the circle.
2. Drill or make a plunge cut near the edge of the circle.
3. Turn off saw and disconnect plug from power source.
4. Attach the edge guide to saw as instructed in USING AN EDGE GUIDE, with the edge guide facing up.
5. Place the metal center point on the edge into the hole in the center of the circle. In order for the edge guide to cut a circle, the metal center point must be in alignment with the saw blade.
6. Measure the distance from the selected hole to the blade; this distance is equal to the circle radius.
7. Insert saw plug into power source.
8. Hold 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 the outside.

MAINTENANCE

GENERAL MAINTENANCE

⚠ **WARNING:** When servicing, use only identical Craftsman replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician at a Sears Parts & Repair Service Center.

⚠ **WARNING:** For your safety, always turn off the switch and unplug the saw motor from the power source before performing any maintenance or cleaning.

⚠ **WARNING:** Always wear safety goggles or safety glasses with side shields during power tool operations or when blowing dust. If operation is dusty, also wear a dust mask.

⚠ **WARNING:** Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

JIG SAW MAINTENANCE

Periodic maintenance of your jig saw allows for long life and trouble-free operation. The saw can generate considerable quantities of cutting residue.

A cleaning and maintenance schedule should be maintained.

As a common-sense and preventive maintenance practice, follow these recommended steps:

- Inspect the blade; check the rim for wear or damage.
- Keep the ventilation slots of the motor clean to prevent overheating of the motor.
- Electric tools are subject to accelerated wear and possible premature failure when they are used to work on fiberglass boats and sports cars, wallboard, spackling compounds or plaster. The chips and grindings from these materials are highly abrasive to electrical tool parts, such as bearings, brushes, commutators, etc. Consequently, it is not recommended that this tool be used for extended work on any fiberglass material, wallboard, spackling compound, or plaster. During any use on these materials, it is extremely important that the tool is cleaned frequently by blowing with an air jet.
- Use a soft clean and damp cloth to wipe the tool housing. A mild detergent can be used but nothing like alcohol, petrol or other cleaning agent. Never use caustic agents to clean plastic parts.

⚠ **WARNING:** When changing a blade immediately after operation, allow the blade to cool before removing it to avoid possible burning.

⚠ **WARNING:** Keep the tool's air vents unclogged and clean at all times.

⚠ **WARNING:** Do not at any time let brake fluids, gasoline, petroleum-based products, penetrating oils, etc. to come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

⚠ **WARNING:** Water must never come into the tool.

LUBRICATION

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

ACCESSORIES

The following recommended accessories are currently available at Sears stores and other selected Craftsman outlets..

⚠ **WARNING:** The use of attachments or accessories that are not recommended might be dangerous and could result in serious injury.

EXTENSION CORDS:

The use of any extension cord will cause some loss of power. To keep the loss at a minimum and to prevent overheating, use an extension cord that is heavy enough to carry the current that the tool will draw.

A wire gauge (AWG) of at least 14 is recommended for an extension cord 25 feet or less in length. When working outdoors ALWAYS use an extension cord that is suitable for outdoor use. The cord's jacket will be marked WA.

⚠ **CAUTION:** Keep extension cords away from the cutting area and position the cord so it will not get caught on lumber, tools, etc. during the cutting operation.

⚠ **WARNING:** Check extension cords before each use. If damaged, replace it immediately. **Never** use a tool with a damaged extension cord because touching the damaged area could cause electrical shock resulting in serious injury.

BLADES

Craftsman has a large selection of jig saw blades for fast, efficient cutting in a variety of materials and applications

6-in. long, 7 teeth per in	Fast-cutting wood Blade
3-1/8-in. long, 10 teeth per in	Fine scrolling in wood
2-3/4-in. long, 20 teeth per in.	Super-fine wood scrolling
3-5/8-in. long, 10 teeth per in.	Super-fine wood scrolling
3-1/2-in. long, 8 teeth per in	Wallboard, plaster
2-3/4-in. long, 20 teeth per in.	General metal cutting
3-5/8-in. long, 10 teeth per in.	Bi-metal; general wood
3-5/8-in. long, 6 teeth per in.	Bi-metal; fast-cut wood
2-3/4-in. long, 12 teeth per in.	Bi-metal; general metal
3-in. long	"Knife-edge"-linoleum, rubber, leather

Craftsman also offers Combination Squares, Framing Squares and various length Edge Guides to help you with all your cutting needs.

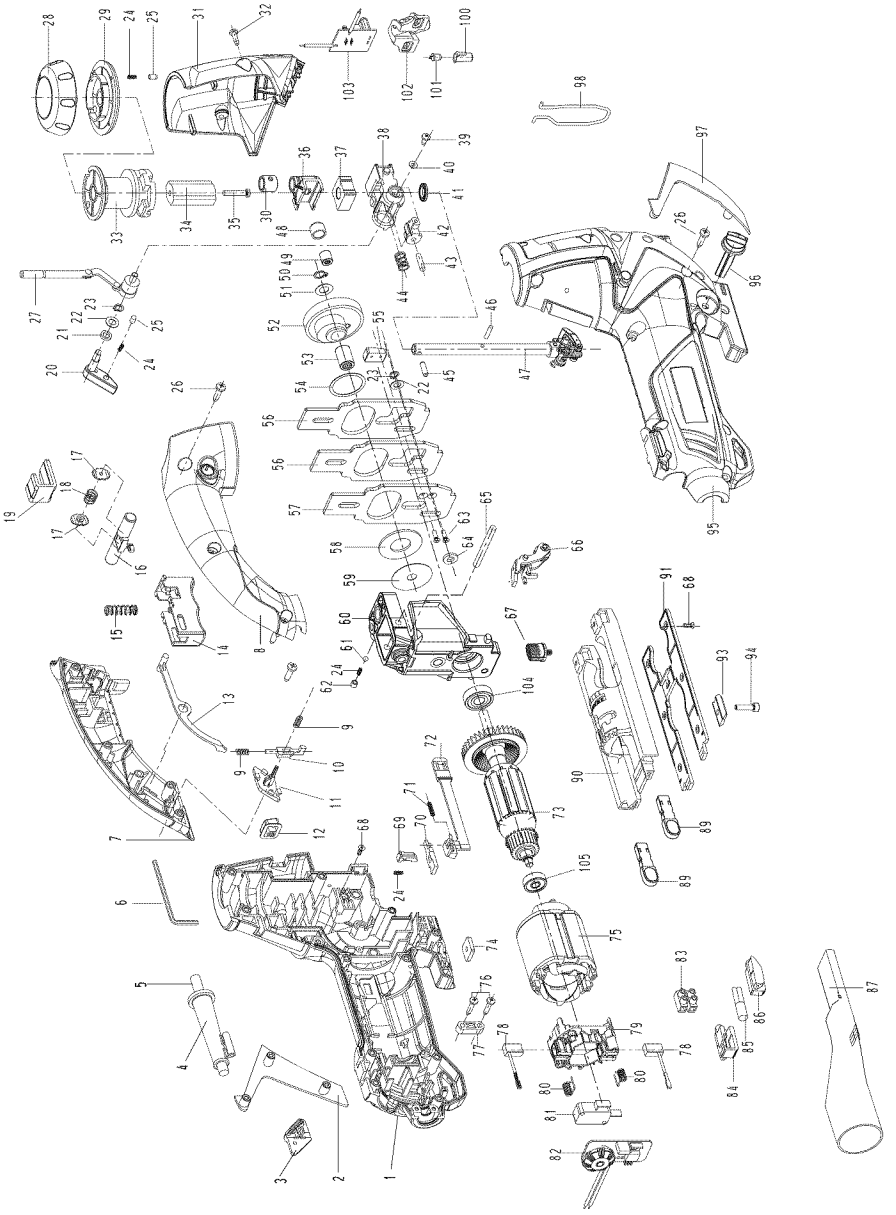
TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
Laser line is not projected.	Laser is not turned on, or the tool is not plugged in.	Make sure that the tool is plugged in, and press Laser ON/OFF button to turn laser on.
Laser line is hard to see.	Working condition is too bright.	Reduce surrounding light level.
LED worklight does not illuminate.	LED worklight illuminates automatically when tool is plugged in. Check to see if tool is plugged in.	Plug tool in. LED worklight illuminates automatically once tool is plugged into electrical source.
The Scrolling Control Knob cannot be turned.	The Scrolling/Orbital Control Lever is not set to the Scrolling position.	Set the Scrolling/Orbital Control Lever to the Scrolling position.

PARTS LIST

6A Jig Saw MODEL NUMBER 320.28223

The Model Number will be found on the Nameplate. Always mention the Model Number when ordering parts for this tool.



PARTS LIST

6A Jig Saw MODEL NUMBER 320.28223

The Model Number will be found on the Nameplate. Always mention the Model Number when ordering parts for this tool.

No	Part No	Part Name	QTY
1	3320601000	Left Housing Assembly	1
2	3420338000	Left Alum Cover	1
3	3125316000	Push Button	1
4	3121037000	Cord Guard	1
5	4810002000	Power Cord & Plug	1
6	5680019000	Hexagon Wrench	1
7	3320603000	Left Handle Assembly	1
8	3320604000	Right Handle Assembly	1
9	3660030000	Spring	2
10	3123857000	Lock Pin	1
11	3320615000	Lock Button	1
12	3121459000	Switch Cover	1
13	3420675000	Hander Lever	1
14	3125317000	Switch Lock A	1
15	3660072000	Spring	1
16	3123856000	Trigger Lock	1
17	3120457000	Limiting Piece	2
18	3660054000	Spring	1
19	3700220000	Connecting Piece	1
20	3121471000	Pendulum Lever	1
21	3700536000	Felt Ring	1
22	3700145000	Washer	2
23	5660027000	Circlips For Shaft	2
24	3660050000	Spring B	4
25	3700191000	Cap	2
26	5610040000	Tapping Screw	15
27	2822669000	Link Assembly	1

No	Part No	Part Name	QTY
28	3320103000	Knob Set	1
29	3320104000	Knob Assembly	1
30	3551339000	Bush	1
31	3420351000	Alum Cover	1
32	5610022000	Tapping Screw	2
33	3120477000	Bearing Holder	1
34	3520055000	Aligning Bearing	1
35	5610106000	Tapping Screw	1
36	3420946000	Drive Bracket	1
37	3520057000	Lower Sliding Bearing	1
38	3420129000	Sliding Bearing Support	1
39	5610021000	Tapping Screw	3
40	5650001000	Plain Washer	1
41	3120444000	Dust Seal	1
42	3120491000	Guiding Block	1
43	3550213000	Pendulum Pin	1
44	3660071000	Spring	1
45	3550202000	Pin	1
46	3550191000	Pin 1	1
47	2822446000	Plunger Assembly	1
48	3550214000	Crank Roller	1
49	5700022000	Needle Bearing	1
50	5660007000	Circlips For Shaft	1
51	3700183000	Washer C	1
52	3550993000	Gear Set	1
53	5700030000	Needle Bearing	1
54	3700203000	Washer 1	1
55	3520058000	Pendulum Plate	1
56	3700224000	Counterweight A	2
57	3700225000	Counterweight	1

No	Part No	Part Name	QTY
58	3700226000	Washer	1
59	3700184000	Washer D	1
60	2820588000	Bearing Support Assembly	1
61	5700045000	Steel Ball	1
62	3120016000	Spring Tube	1
63	5620064000	Screw	2
64	3700227000	Washer	1
65	3550201000	Located Pin	1
66	2822593000	Roller Support Set	1
67	3400175000	Knob	1
68	5610079000	Thread Forming Screw	12
69	3123859000	Switch Actuator	1
70	3123858000	Lever	1
71	3660051000	Spring	1
72	3123855000	Link	1
73	2750897000	Rotor	1
74	3700164000	Square Nut	1
75	2740270000	Stator	1
76	5610024000	Tapping Screw	2
77	3120234000	Cord Anchorage	1
78	4960017000	Carbon Brush	2
79	2820587000	Brush Support Assembly	1
80	3660055000	Carbon brush Spring	2
81	4870043000	Switch	1
82	4890524000	PCB Assembly	1
83	4930004000	Connecter	1
84	3123861000	Left Indictor Cover	1
85	4540017000	Power Supply Indicator	1
86	3123860000	Right Indictor Cover	1
87	3320248000	Dust tube	1

No	Part No	Part Name	QTY
89	3124066000	Blade Storage	2
90	3421084000	Base Plate	1
91	3124065000	Base Plate Cover	1
93	3700236000	Clamp Washer	1
94	5620013000	Hexagon Socket Screw	1
95	3320602000	Right Housing Assembly	1
96	2822242000	Blowing Knob	1
97	3420339000	Right Alum Cover	1
98	3650099000	Wire Guard	1
100	3123507000	Transparent Cap	1
101	4360001000	LED	1
102	2780030000	Laser Set	1
103	4890523000	PCB Assembly	1
104	5700011000	Ball Bearing	1
105	5700004000	Ball Bearing	1

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