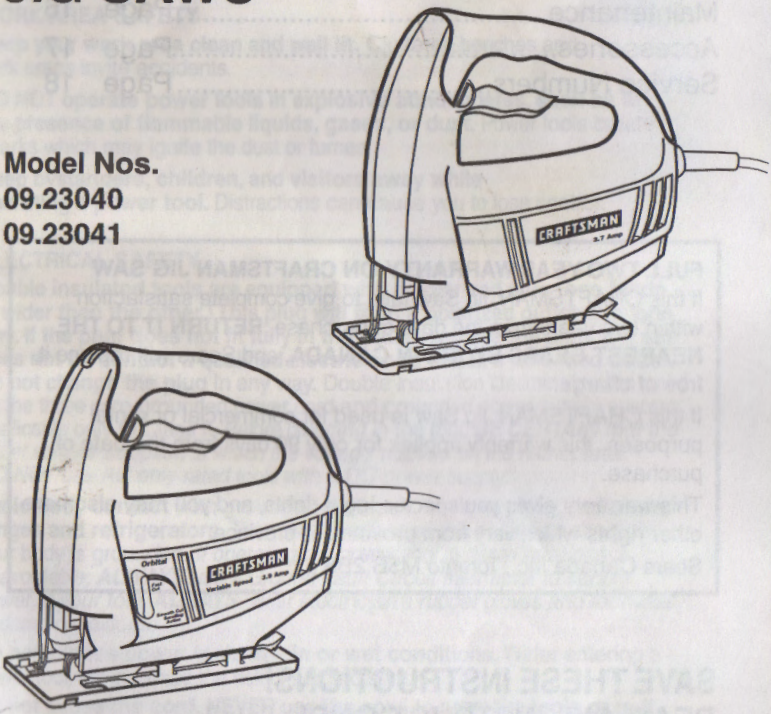
Owner's Manual

CRAFTSMAN®

JIG SAWS

Model Nos.
09.23040
09.23041



CAUTION: Read, understand and follow all Safety Rules and Operating Instructions in this manual before using this product.

- **SAFETY**
- **OPERATION**
- **MAINTENANCE**
- **FRANÇAIS**

Sears Canada Inc., Toronto M5B 2B8

12-3-03 2610921975

TABLE OF CONTENTS

FULL TWO YEAR WARRANTY ON CRAFTSMAN JIG SAW

If this CRAFTSMAN Jig Saw fails to give complete satisfaction within two years from the date of purchase, **RETURN IT TO THE NEAREST SEARS STORE IN CANADA,** and Sears will replace it, free of charge.

If this CRAFTSMAN Jig Saw is used for commercial or rental purposes, this warranty applies for only 90 days from the date of purchase.

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

Sears Canada Inc., Toronto M5B 2B8

SAVE THESE INSTRUCTIONS!
READ ALL INSTRUCTIONS!

SAFETY INSTRUCTIONS

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

SAVE THESE INSTRUCTIONS!

WORK AREA SAFETY

Keep your work area clean and well lit. Cluttered benches and 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 bystanders, children, and visitors away while operating a power tool. Distractions can cause you to lose control.

ELECTRICAL SAFETY

Double insulated tools are equipped with a polarized plug (one blade is wider than the other.) This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician to install a polarized outlet. Do not change the plug in any way. Double insulation ⧈eliminates the need for the three wire grounded power cord and grounded power supply system. Applicable only to Class II. *Before plugging in the tool,* ***BE CERTAIN*** *that the outlet voltage supplied is within the voltage marked on the nameplate.* ***DO NOT*** *use AC only rated tools with a DC power supply.*

Avoid body contact with grounded surfaces, such as pipes, radiators, ranges and refrigerators. There is an increased risk of electric shock if your body is grounded. *If operating the power tool in damp locations is unavoidable;* ***ALWAYS*** *use a Ground Fault Circuit Interrupter to supply power to your tool.* ***ALWAYS*** *wear electrician's rubber gloves and footwear in damp conditions.*

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 to carry the tools or pull the plug from an outlet. Keep cord away from heat, oil, sharp edges or moving parts. Replace damaged cords immediately. Damaged cords increase the risk of electric shock.

SAFETY INSTRUCTIONS cont.

ELECTRICAL SAFETY cont.

When operating a power tool outside, ALWAYS use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock. Refer to recommended size of extension cords in the Accessory section of this manual

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.

Dress properly. DO NOT wear loose clothing or jewelry. Contain long hair. Keep your hair, clothing, and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Keep handle dry, clean and free from oil and grease.

Avoid accidental starting. BE SURE switch is in the Off positipn before plugging in. Carrying tools with your finger on the switch or plugging in tools that have the switch On invites accidents.

Remove adjusting keys or wrenches before turning the tool On. A wrench or a key that is left attached to a rotating part of the tool may result in personal injury.

DO NOT overreach. Keep keep proper footing and balance at all times. Proper footing and balance enables better control of the tool in unexpected situations.

Use safety equipment. Always wear eye protection. Dust mask, non-skid safety shoes, hardhat, or hearing protection must be used for appropriate conditions.

SAFETY INSTRUCTIONS cont.

TOOL USE AND CARE SAFETY

Use clamps or other practical ways to secure and support the workpiece to a stable platform. Holding the work by hand or against your body is unstable and may lead to loss of control.

DO NOT force tool. Use the correct tool and blade for your application. The correct tool and blade will do the job better and safer at the rate for which it is designed.

DO NOT use tool if switch does not turn it On or Off. Any tool that cannot be controlled with the switch is dangerous and must be repaired.

Disconnect the plug from the power source before making any adjustments, changing accessories, or storing the tool. Such preventive safety measures reduce the risk of starting the tool accidentally.

Store idle tools out of reach of children and other untrained persons. Tools are dangerous in the hands of untrained users.

Maintain tools with care. Keep cutting tools sharp and clean. Properly maintained tools with sharp cutting edges are less likely to bind and are easier to control.

Check for misalignment or binding of moving parts, breakage of parts, and any other condition that may affect the tool's operation. If damaged, have the tool serviced before using. Many accidents are caused by poorly maintained tools.

Use only accessories that are recommended by the manufacturer for your model. Accessories that may be suitable for one tool may become hazardous when used on another tool.

SERVICE SAFETY

Tool service must be performed only by qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury. For example: internal wires misplaced or pinched; safety guard return spring may be improperly mounted.

When servicing a tool, use only identical replacement parts. Follow 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. Certain cleaning agents, such as gasoline, carbon tetrachloride, ammonia, ect. may damage plastic parts.

SAFETY INSTRUCTIONS cont.

SAFETY RULES FOR JIG SAWS

Hold tool by insulated gripping surfaces when performing an operation where the cutting tool may contact hidden wiring or its own cord. Contact with a "live" wire will make the exposed metal parts of the tool "live" and shock the operator. **DO NOT** drill, faster or break into existing walls or other blind areas where electrical wiring may exist. If this situation is unavoidable, disconnect all fuses or circuit breakers feeding this worksite.

NEVER leave the trigger "Locked-On". Before plugging the tool in, check that the trigger lock is "Off". Accidental start-ups could cause injury.

Be aware of the location and setting of the switch – "Lock-On" button. If the switch is locked "On" during the use, be ready for emergency situations to switch it "Off" by first pulling the trigger then immediately releasing it without pressing the "Lock-On" button.

Keep your hands away from the cutting area. DO NOT reach under the material being cut. The proximity of the blade to your hand is hidden from your sight.

Keep your hands from between the gear housing and saw blade clamp (plunger). The reciprocating blade clamp (plunger) can pinch your fingers.

DO NOT use dull or damaged blades. Bent blades can break easily, or cause kickback.

BEFORE starting to cut, turn tool "On" and allow the blade to come to full speed. Tool can chatter or vibrate if blade speed is tool slow at beginning of cut and possibly kickback.

ALWAYS wear safety glasses or eye protection when using this tool. Use a dust mask or respirator for applications which generate dust.

Secure material before cutting. Never hold it in your hands or across legs. Small or thin material may flex or vibrate with the blade and causing loss of control.

Make certain all adjusting screws (knobs) and the blade clamp are tight before making a cut. Loose adjusting screws and clamps can cause the tool or blade to slip and loss of control may result.

When removing the blade from the tool, avoid contact with skin and use proper protective gloves when grasping the blade or accessory. Accessories may be hot after prolonged use.

If your tool is equipped with a dust bag, empty it frequently and after completion of sawing. Spontaneous combustion may, in time, result from mixture of oil or water with the dust particles. Be extremely careful of disposal, materials in the fine particles may be explosive. Do Not throw contents on an open fire.

SAFETY INSTRUCTIONS cont.

ADDITIONAL SPECIFIC SAFETY RULES FOR SABRE SAWS cont.

⚠ **WARNING: Some dust created by power sanding, sawing, grinding, drilling and other construction activities contains chemicals known to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:**

- Lead from lead-based paints.
- Crystalline silica from bricks and cement and other masonry products.
- Arsenic and chromium from chemically-treated lumber.

Your risk from these exposures varies, depending upon how often you do this type of work. To reduce your exposure to these chemicals: Work in a well-ventilated area and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

The label on your tool may include the following symbols.

V	Volts
A	Amperes
Hz	Hertz
W	Watts
min	Minutes
~	Alternating current
⎓	Direct current
no	No-load speed
⧈	Class II construction
.../min	Revolutions or Strokes per minute
⏚	Earthing terminal
⚠	Alerts user to warning message
0	OFF position
1,2,3, I,II,III	Selector Settings for speed, torque or position settings. Higher number means greater speed
0◢	Infinitely Variable Selector Switch with Off (speed increases from 0 setting)
→	Action in the direction of arrow

IMPORTANT! READ ALL INSTRUCTIONS

DESCRIPTION

These sabre saws are designed to provide maximum cutting efficiency, plus increased user comfort and convenience in a wide variety of job applications.

Fig. 1 (Model No. 23040)

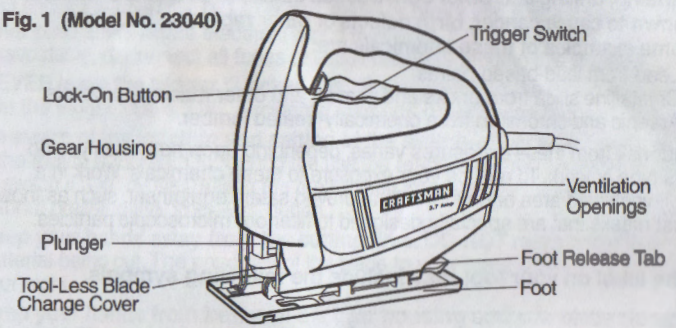
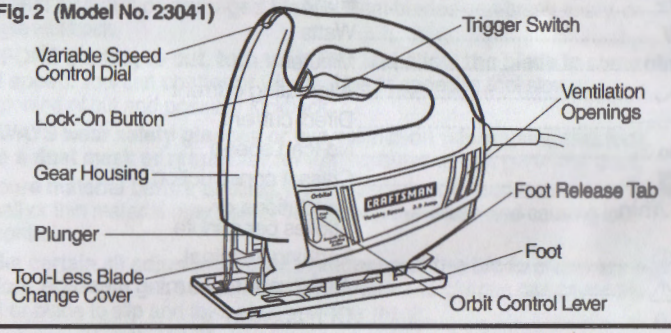


Fig. 2 (Model No. 23041)



Model No.	Blade Thicknesses	Blade Action	Stroke Length	Maximum Capacities		
				Wood	Aluminum	Steel
23040	Minimum .8mm Maximum 1.5mm	Standard	5/8-in.	2 in.	1/2-in.	1/4-in.
				Wood	Aluminum	Steel
23041	Minimum .8mm Maximum 1.5mm	Orbital	5/8-in.	2 in.	1/2-in.	1/4-in.

ASSEMBLY

ATTACHING THE BLADE

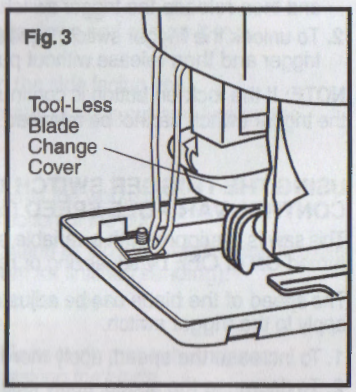
These saws are designed for use with both T or U-shank sabre saw blades.

⚠ **WARNING:** To prevent personal injury, **ALWAYS** disconnect the plug from power source **BEFORE** assembling parts, making adjustments or changing blades.

Tool-Less Blade Change Cover (Figure 3)

1. Lift tool-less blade change cover up using your index and middle fingers.
2. Insert blade to full depth with the teeth facing in the direction of the cut (See Fig. 3).
3. Release the tool-less blade change cover to secure the blade in place.

Fig. 3

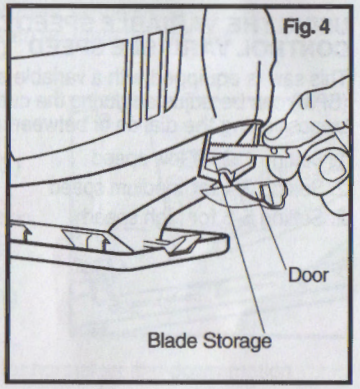


Blade Storage Compartment (Figure 4)

Your jig saw comes equipped with a blade storage compartment (on the backside of the saw See Fig. 4).

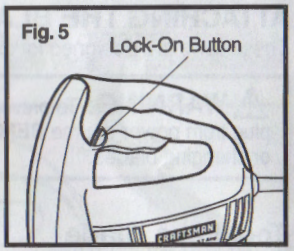
1. To open the door, pull the tab on the door downward towards the foot of the saw.
2. To close the door, lift door upward towards the tool. Be sure that the door is closed to prevent blades from falling out.

Fig. 4



OPERATION

USING THE LOCK-ON BUTTON (Figure 5)



The Lock-On button (see Fig. 5), located in the handle of your saw, allows you run your saw at maximum Stokes per Minute without squeezing the trigger switch.

1. To lock the trigger switch ON, squeeze the trigger switch, push the button in and then release the trigger switch.
2. To unlock the trigger switch, squeeze trigger and then release without pushing in button.

NOTE: If the lock-on button is continually being pushed, the trigger switch cannot be released.

USING THE TRIGGER SWITCH TO CONTROL VARIABLE SPEED (Model 23040 Only)

This saw is equipped with a variable speed trigger switch. The saw can be turned ON or OFF by squeezing or releasing the trigger switch.

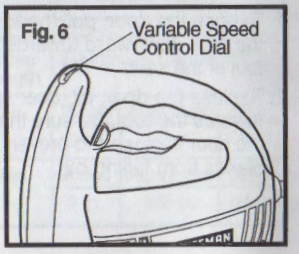
The speed of the blade can be adjusted by the pressure you apply to the trigger switch.

1. To increase the speed, apply more pressure to the trigger switch.
2. To decrease the speed, apply less pressure.

USING THE VARIABLE SPEED DIAL TO CONTROL VARIABLE SPEED (Model 23041 Only, Figure 6)

This saw is equipped with a variable speed dial. The blade speed (SPM) can be adjusted during the cutting operation by positioning the dial on or between any one of the six numbers:

1. Setting 1-2 for low speed
2. Setting 3-4 for medium speed
2. Setting 5-6 for high speed



OPERATION cont.

PLUNGER SPEED

The blade stroke rate can be adjusted by squeezing the trigger switch (model 23040) or setting the speed control dial (model 23041).

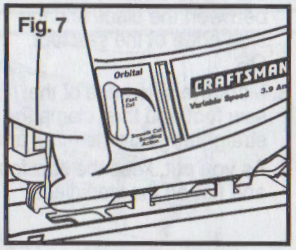
Your experience will determine the best results for a particular application. However, as a general rule, use slower speed for harder, denser materials and faster speed for soft materials.

GENERAL CUTTING TIPS

1. Place the best side of the material face down and secure it in a bench vise or clamp it down.
2. Draw your cutting lines or designs on the side facing you.
3. Place front edge of saw foot on the material to be cut and line up the blade with your cutting line.
4. Hold saw firmly and turn it on.
5. Press down (to keep saw foot flat against the workpiece) as you slowly push the saw in the direction of the cut.
6. Gradually buildup the blade speed, cutting as close to the line as possible (unless you want to leave enough room for finished sanding).
7. As you cut, you may need to reposition the vise or clamps to keep the workpiece stable.
8. **DO NOT** force the saw because the blade teeth may rub and wear without cutting which may result in breaking the blade.
9. **ALWAYS** let the saw do most of the work.
10. **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.

ORBITAL ACTION (Model 23041 only)

ORBITAL CONTROL LEVER (FIG.7)



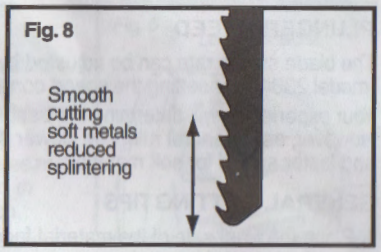
This saw has an orbital control lever (see Fig. 7) that regulates the orbital action.

To activate, turn the lever to fast cut. To deactivate, turn the orbital control lever to smooth cut. When minimal splintering is desired, we recommend using the smooth cut position.

1. Choose the smooth cutting position for normal up and down motion (see Fig. 8).

ORBITAL CONTROL LEVER cont.

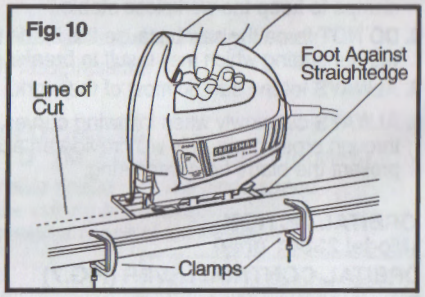
2. Choose the fast cutting position for maximum orbital action that will provide faster, more aggressive cutting in softer materials (see Fig. 9).



NOTE: In order to reach full orbital action, the blade **MUST BE FACING STRAIGHT FORWARD.** 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.

CUTTING WITH A STRAIGHTEDGE (FIG. 10)

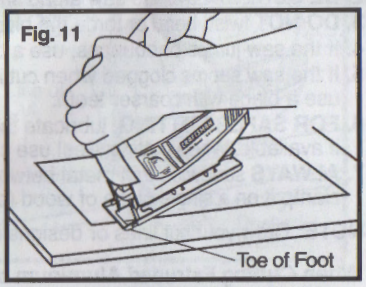
1. **ALWAYS** use a rough-cut blade, whenever possible.
2. Mark the line-of-cut, then position the straightedge parallel to cut line and at the same distance as between the blade and the side edge of the saw foot. **OR**
3. Mark the side edge of the saw foot and then clamp the straightedge on the mark and parallel to the cut.
4. As you cut, keep the saw foot edge flush against the straightedge and flat on the workpiece.



PLUNGE CUTTING (FIG. 11)

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

1. Draw lines for the opening.
2. Hold the saw firmly and tilt it forward so 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 very gradually lower the blade.
5. When the blade touches the workpiece, continue pressing down on the toe of the saw foot.
6. Slowly pivot the saw like a hinge until the blade cuts through and the foot rests flat on the workpiece.
7. Then begin sawing on the line-of-cut.

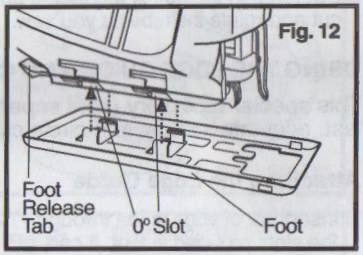


NOTE: We do not recommend using a scroll blade for plunge cutting.

IMPORTANT: DO NOT try to plunge cut into hard materials, such as steel.

TO MAKE SHARP CORNERS

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

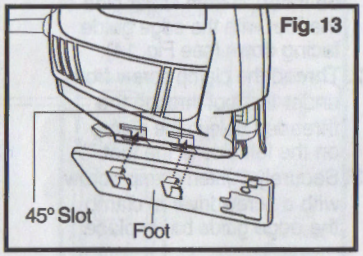


BEVEL OR ANGLE CUTTING

1. Disconnect cord from power source and remove blade.
2. The foot can be adjusted to cut at 0° or 45° only on the right side of the foot.

TO ADJUST FOOT TO 45°

1. Push down and hold tab on the back side of the foot.
2. Slide foot firmly towards front of tool and remove foot from 45° mark notched in base (See Fig. 12).
3. Align foot with 45° mark notched in base, then slide foot firmly towards back of tool and click into place using the tab (see Fig. 13).



METAL CUTTING

1. **ALWAYS** clamp the work down.
2. **BE SURE** to move the saw along smoothly and use slower speeds.
3. **DO NOT** twist, bend or force the blade.
4. If the saw jumps or bounces, use a blade with finer teeth.
5. If the saw seems clogged when cutting soft metal, use a blade with coarser teeth.
6. **FOR SAFER CUTTING,** lubricate the blade with a stick of cutting wax, if available. When cutting steel,use cutting oil to lubricate the blade.
7. **ALWAYS** sandwich thin metal between two pieces of wood or tightly clamp it on a single piece of wood (place wood on top of the metal).

NOTE: Draw your cut lines or designs on the top piece of wood.

When Cutting Extruded Aluminum or Angle Iron

1. **ALWAYS** clamp the work in a bench vise and saw close to the vise jaws.

When Sawing Tubing with a Diameter Larger Than the Depth of the Saw Blade

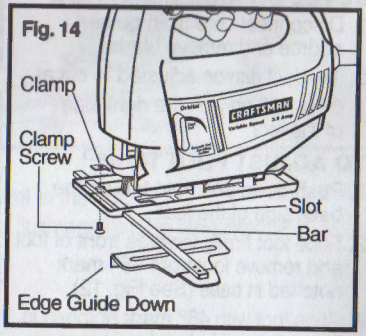
1. Cut through the wall of the tubing and then insert the blade into the cut and rotate the tube as you saw.

USING THE EDGE GUIDE AND CIRCLE-CUTTING GUIDE

This special accessory (sold separately) can be used for fast, accurate straight and circle cutting (see Fig. 14).

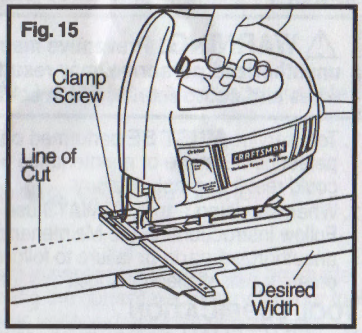
Attaching the Edge Guide

1. Insert bar of edge guide through the slots provided in foot. It can be inserted from either side of the foot with the edge guide facing down (see Fig. 14).
2. Thread the clamp screw from under the foot through the threaded hole in the clamp on the left side of the foot.
3. Securely tighten clamp screw with a screwdriver to clamp the edge guide bar in place.



Straight Cutting

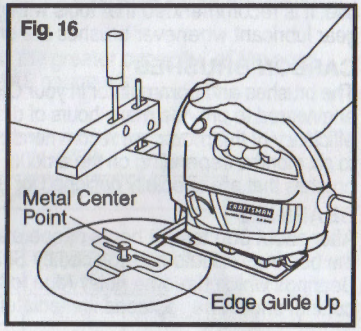
1. Once the edge guide is attached, measure from the edge of the workpiece to the line of cut.
2. Set edge guide to the same distance and then securely tighten the clamp screw (see Fig. 15).



Circle Cutting

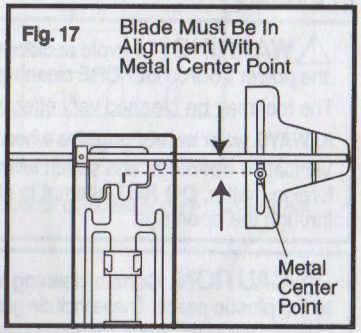
1. **BEFORE** attaching the edge guide, draw a circle and drill a hole in the center of the circle (see Fig. 16).
2. Drill or plunge cut near the edge of the circle.
3. Turn off saw and disconnect plug from the power source.
4. Attach edge guide to saw with the edge guide facing up.
5. Place the metal center point on the edge guide 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 saw blade (see Fig. 17).
6. Measure the distance from the selected hole to the blade; this distance is equal to the circle radius.
7. Insert plug into 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 the outside.



Cutting Tips

1. **ALWAYS** cut slowly so the blade will stay straight in the hole.
2. Place small wedges in the cut (see Fig. 17) to keep the inner circle from spreading when you near the end of the cut.



MAINTENANCE

SERVICE

⚠ WARNING: Preventive maintenance performed by unauthorized personnel may result in misplacing of internal wires and components, which could cause a serious hazard.

1. Tool service **MUST BE** performed only by Sears or other qualified repair personnel. Service or maintenance performed by unqualified personnel could result in a risk of injury.
2. When servicing a tool, **ALWAYS** use only identical replacement parts. Follow 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.

TOOL LUBRICATION

Your CRAFTSMAN Jig Saw has been properly lubricated and is ready to use. It is recommended that tools with gears be regreased with a special gear lubricant whenever brushes are changed.

CARBON BRUSHES

The brushes and commutator in your CRAFTSMAN Jig Saw have been engineered to provide many hours of dependable service. To maintain the peak efficiency of the motor, we recommend that you examine the brushes every two to six months depending on the amount of tool usage. Only use replacement brushes that are specially designed for use with your CRAFTSMAN Jig Saw.

BEARINGS

After about 300 to 400 hours of operation, or at every second brush change, the bearings should be replaced by Sears or other qualified repair personnel. Bearings which become noisy (due to heavy load or very abrasive material cutting) should be replaced immediately to avoid overheating or motor failure.

CLEANING

⚠ WARNING: To avoid accidents, ALWAYS disconnect the tool from the power source BEFORE cleaning or performing any maintenance.

The tool may be cleaned very effectively with compressed air.

ALWAYS wear safety goggles when cleaning tools with compressed air.

Ventilation openings and switch levers must be kept clean and free of foreign matter. **DO NOT** attempt to clean by inserting pointed objects through the openings.

⚠ CAUTION: Certain cleaning agents and solvents cause damage to the plastic parts. These include gasoline, carbon tetrachloride, chlorinated cleaning solvents, ammonia and household detergents that contain ammonia.

ACCESSORIES

The following recommended accessories are currently available at your local Sears Store.

BLADES

Sears has a large selection of both T or U-shank sabre saw blades that are ideal for all your cutting needs.

EXTENSION CORDS

Sears offers a large selection of extension cords that are ideal for all your cutting needs.

⚠ WARNING: If an extension cord is necessary, a cord with adequate size conductors that is capable of carrying the current necessary for your tool must be used. This will prevent excessive voltage drop, loss of power or overheating. Grounded tools must use 3-wire extension cords that have 3-prong plugs and receptacles.

NOTE: The smaller the gauge number, the greater capacity of the cord. 16 gauge wire has more capacity than 18 gauge wire.

Minimum Gauge for Extention Cords (AWG)				
Volts	Total Length of Cord in Feet			
120V	0 - 25 ft.	26 - 50 ft.	51 - 100 ft.	101 - 150 ft.
240V	0 - 50 ft.	51 - 100 ft.	101 - 200 ft.	201 - 300 ft.
Ampere Rating	AWG	AWG	AWG	AWG
More than 0 Not more than 6	18	16	16	14
More than 6 Not more than 10	18	16	14	12
More than 10 Not more than 12	18	16	14	12
More than 12 Not more than 16	14	12	Not Recommended	

⚠ WARNING: The use of attachments or accessories that are not recommened might be dangerous.