

Save This Manual For
Future Reference

SEARS

*owners
manual*

**MODEL NO.
113.236111**

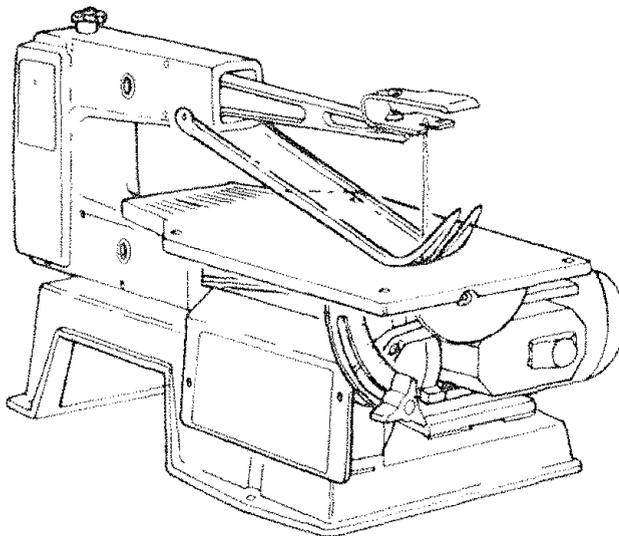
Serial
Number _____

Model and serial number may be found
attached to the underside of the
worktable.

You should record both model and
serial number in a safe place for future
use.

**FOR YOUR
SAFETY:**

Read ALL
INSTRUCTIONS
carefully.



SEARS / CRAFTSMAN

16 INCH SCROLL SAW

- *assembly*
- *operating*
- *repair parts*

Sold by SEARS, ROEBUCK AND CO., Chicago, IL. 60684 U.S.A.

FULL ONE YEAR WARRANTY ON CRAFTSMAN SCROLL SAW

If within one year from the date of purchase, this Craftsman Scroll Saw falls due to a defect in material or workmanship, Sears will repair it, free of charge.

WARRANTY SERVICE IS AVAILABLE BY SIMPLY RETURNING THE CRAFTSMAN SCROLL SAW TO THE NEAREST SEARS RETAIL/CATALOG STORE OR SERVICE CENTER/DEPARTMENT IN THE UNITED STATES.

THIS WARRANTY APPLIES ONLY WHILE THIS PRODUCT IS USED IN THE UNITED STATES.

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

SEARS, ROEBUCK AND CO., D/817 WA Hoffman Estates, IL 60195

safety instructions for scroll saw

Safety is a combination of common sense, staying alert and knowing how your scroll saw works. Read this manual to understand this saw.

BEFORE USING THE SAW

WARNING: To avoid mistakes that could cause serious, permanent injury, do not plug the saw in until the following steps are completed.

- Assembly and alignment. (See pages 8 - 12)
- Learn the use and function of the speed control ON-OFF knob, bevel lock knob, blade holders, blade support, hold down, tension knob, and blade guard. (See pages 13 - 14)
- Review and understand all safety instructions and operating procedures in this manual.
- Review of the maintenance methods for this saw. (See page 18)

Read the WARNING label, below, found on the base of the saw.

WHEN INSTALLING OR MOVING THE SAW

AVOID DANGEROUS ENVIRONMENT. Use the saw in a dry, indoor place protected from rain. Keep work area well lighted.

To avoid injury from unexpected saw movement:

- Turn saw off and unplug cord before moving the saw.

- Put the saw on a firm level surface where there is plenty of room for handling and properly supporting the workpiece
- Support the saw so the table is level and the saw does not rock.
- Bolt the saw to the work surface if it tends to slip, walk, or slide during operations like cutting long, heavy boards, or when using an auxiliary table.
- NEVER STAND ON TOOL. Serious injury could occur if the tool tips or you accidentally hit the cutting tool. Do not store anything above or near the tool where anyone might stand on the tool to reach them.

To avoid injury or death from electrical shock:

- GROUND THE SAW. This saw has an approved 3-conductor cord and a 3-prong grounding type plug. Use only 3-wire, grounded outlets rated 120 volts, 15 amperes (amps). The green conductor in the cord is the grounding wire. To avoid electrocution, NEVER connect the green wire to a live terminal.
- Make sure your fingers do not touch the plug's metal prongs when plugging or unplugging the saw.

BEFORE EACH USE:

Inspect your saw.

DISCONNECT THE SAW. To avoid injury from accidental starting, unplug the saw, turn the switch off and remove the switch key before changing the setup, removing covers, guards, or blade.

▲ WARNING

1. Read manual before using saw.
2. Wear safety goggles that meet ANSI Z87.1 Standards.
3. Be sure blade is installed with teeth pointing down.
4. Keep fingers away from the moving blade.
5. Do not remove jammed cutoff pieces until blade has stopped.
6. Maintain proper adjustment of blade tension.
7. Hold workpiece firmly against the table.
8. Turn power off and wait for blade to stop before adjusting or servicing.

 E138900

MOTOR: 1725 RPM, 1 PHASE, 120 VOLT, AC ONLY, 60 HZ, 2.0 AMPS

CHECK DAMAGED PARTS. Check for:

- Alignment of moving parts,
- Binding of moving parts,
- Broken parts,
- Stable mounting,
- Any other conditions that may affect the way the saw works.

If any part is missing, bent, or broken in any way, or any electrical parts don't work properly, turn the saw off and unplug the saw. REPLACE damaged, missing, or failed parts before using the saw again.

MAINTAIN TOOLS WITH CARE. Keep the saw clean for best and safest performance. Follow instructions for lubricating.

REMOVE ADJUSTING KEYS AND WRENCHES from tool before turning it on.

To avoid injury from jams, slips or thrown pieces:

- Choose the right size and style blade for the material and the type of cutting you plan to do.
- **USE ONLY RECOMMENDED ACCESSORIES.** (See page 19). Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to person.
- Make sure the blade teeth point downward, toward the table.
- Make sure the blade tension is properly adjusted.
- Make sure the bevel lock knob is tight and no parts have excessive play.
- To avoid accidental blade contact, minimize blade breakage and provide maximum blade support, always adjust the blade hold down and blade guard to just clear the workpiece.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

To avoid burns or other fire damage, never use the saw near flammable liquids, vapors or gases.

PLAN AHEAD TO PROTECT YOUR EYES, HANDS, FACE, EARS.

KNOW YOUR SAW. Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

To avoid injury from accidental contact with moving parts, don't do layout, assembly, or setup work on the saw while any parts are moving.

AVOID ACCIDENTAL STARTING. Make sure switch is "OFF" before plugging sander into a power outlet.

Plan your work.

- **USE THE RIGHT TOOL.** Don't force tool or attachment to do a job it was not designed to do.

- Use this scroll saw to cut only wood, wood like products, plastics and non-ferrous metals.

CAUTION: This saw is NOT designed for cutting ferrous metals like iron or steel. When cutting non-ferrous metals (brass, copper and aluminum, etc.), metal shavings can react with wood dust and start a fire. To avoid this:

- **Disconnect any type of dust collecting hose from the saw.**
- **Remove all traces of wood dust from on and around the saw.**
- **Remove all metal shavings from on or around the saw before sanding wood again.**

Dress for safety.



Any power saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using saw for hours at a time.
- For dusty operations, wear a dust mask along with the safety goggles.

Inspect your workpiece

Make sure there are no nails or foreign objects in the part of the workpiece to be cut.

Use extra caution with large, very small or awkward workpieces:

- Never use this tool to finish pieces too small to hold by hand.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- **NEVER** use another person as a substitute for a table extension, or as additional support for a workpiece, or to help feed, support or pull the workpiece.

safety instructions for scroll saw

- When cutting irregularly shaped workpieces, plan your work so it will not pinch the blade. A piece of molding, for example, must lay flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut.
- Properly support round material such as dowel rods, or tubing. They have a tendency to roll during a cut, causing the blade to "bite". To avoid this, always use a "V" block or clamp the work to the miter gauge.
- Cut only one workpiece at a time.
- Clear everything except the workpiece and related support devices off the table before turning the saw on.

Plan the way you will hold the workpiece from start to finish.

Do not hand hold pieces so small that your fingers will go under the blade guard. Use jigs or fixtures to hold the work and keep your hands away from the blade.

SECURE WORK. Use clamps to hold work when practical. It's often safer than using your hand, and frees both hands to operate the tool.

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into the blade.

DON'T OVERREACH. Keep good footing and balance. Keep your face and body to one side of the blade, out of line with a possible thrown piece if the blade should break.

WHENEVER SAW IS RUNNING

WARNING: Don't let familiarity (gained from frequent use of your scroll saw) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your cut, watch the saw while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting the problem.

KEEP CHILDREN AWAY. Keep all visitors a safe distance from the saw. Make sure bystanders are clear of the saw and workpiece.

DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Feed the workpiece into the saw blade only fast enough to let it cut without bogging down or binding.

Before freeing any jammed material:

- Turn switch "OFF."
- Remove switch key.
- Unplug the saw.
- Wait for all moving parts to stop.

When backing up the workpiece, the blade may bind in the kerf (cut). This is usually caused by sawdust clogging up the kerf. If this happens:

- Turn switch "OFF."
- Remove switch key.
- Unplug the saw.
- Wait for all moving parts to stop.
- With a flat blade screwdriver, turn the motor by hand while backing up the workpiece.

Before removing loose pieces from the table, turn saw off and wait for all moving parts to stop.

BEFORE LEAVING THE SAW:

Wait for all moving parts to stop.

MAKE WORKSHOP CHILD-PROOF. Unplug the saw. Lock the shop or on/off knob. Store the key away from children and others not qualified to use the tool.

motor specifications and electrical requirements

This machine is equipped with, a 1725 RPM motor. It is wired for operation on 120 volts, 60 Hz., alternating current.

For replacement motor, refer to parts list in this manual.

CONNECTING TO POWER SUPPLY OUTLET

If power cord is worn or cut, or damaged in any way, have it replaced immediately.

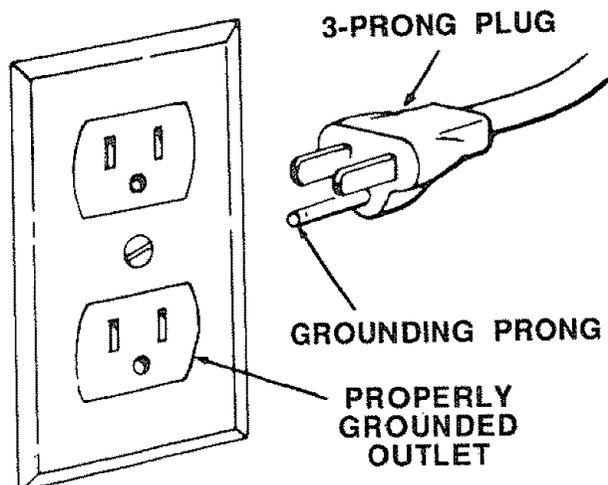
WARNING: If not properly grounded, this power tool can cause an electrical shock, particularly when used in damp locations close to plumbing. If an electrical shock occurs there is the potential of a secondary hazard, such as your hands contacting the saw blade.

If you are not sure that your outlet, as pictured below, is properly grounded, have it checked by a qualified electrician.

Your unit is for use on 120 volts, and has a plug that looks like the illustration below.

This power tool is equipped with a 3-conductor cord and grounding type plug which has a grounding prong, approved by Underwriters' Laboratories. The ground conductor has a green jacket and is attached to the tool housing at one end and to the ground prong in the attachment plug at the other end.

This plug requires a mating 3-conductor grounded type outlet as shown.

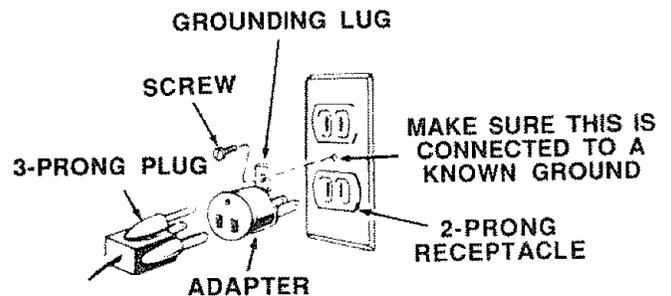


WARNING: Do not permit fingers to touch the terminals of plugs when installing or removing the plug to or from the outlet.

Plug power cord into a 120V properly grounded type outlet.

If the outlet you are planning to use for the power tool is of the 2 prong type, DO NOT REMOVE OR ALTER THE GROUNDING PRONG IN ANY MANNER. Use an adapter as shown below and always connect the grounding lug to known ground.

It is recommended that you have a qualified electrician replace the TWO prong outlet with a properly grounded THREE prong outlet.



An adapter as illustrated is available for connecting plugs to 2-prong receptacles.

WARNING: The green grounding lug extending from the adapter must be connected to a permanent ground such as to a properly grounded outlet box. Not all outlet boxes are properly grounded.

If you are not sure that your outlet box is properly grounded, have it checked by a qualified electrician.

NOTE: The adapter illustrated is for use only if you already have a properly grounded 2-prong receptacle.

The use of any extension cord will cause some loss of power.

Use only a single 3 wire extension cord with a 3-prong grounding type plug and 3-prong receptacle which accepts the tools plug for this 2 amp tool.

Length of the Conductor	Wire Sizes Required (American Wire Gauge Number) 120V Lines
up to 100 feet	No. 16

glossary of terms for woodworking

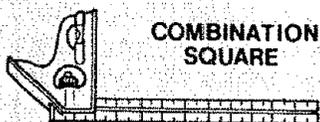
1. **Kerf** - the slot cut by the blade.
2. **Leading Edge** - the edge of the workpiece which is pushed into the blade first.
3. **Sawblade Path** - the area of the workpiece directly in line with and moving toward the sawblade edge.
4. **Bevel** - the ability to slant the table to make angle cuts. An angle cutting operation through the face of the board.
5. **Blade Tooth Set** - the distance that the edge of the sawblade tooth is bent (or set) outward from the side of the blade.
6. **Trailing Edge** - the workpiece edge last cut by the sawblade.
7. **Workpiece** - the item on which the cutting operation is being performed.

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unpacking and checking contents

TOOLS NEEDED



COMBINATION SQUARE



MEDIUM PHILLIPS SCREWDRIVER

WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understand the safety and operational instructions.

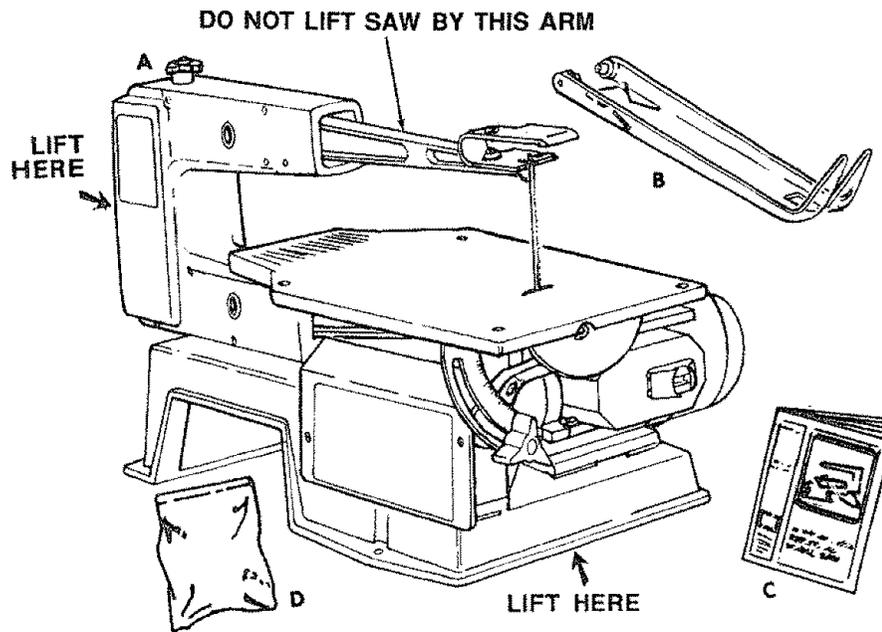
CAUTION: Never lift this saw by the arm which holds the blade or damage will occur to your saw.

Separate all parts from packaging materials and check each item with illustration and "Table of Loose Parts". Make certain all items are accounted for before discarding any packaging material.

If any parts are missing, do not attempt to assemble the Scroll Saw, plug in the power cord, or turn the switch on until the missing parts are obtained and installed correctly.

Table of Loose Parts		Qty.
A	16" Scroll Saw	1
B	Blade Guard	1
C	Owner's Manual	1
D	Loose Parts Bag containing:	
	Blade	1
	Re-Oil Caps	4
	Switch Key	1

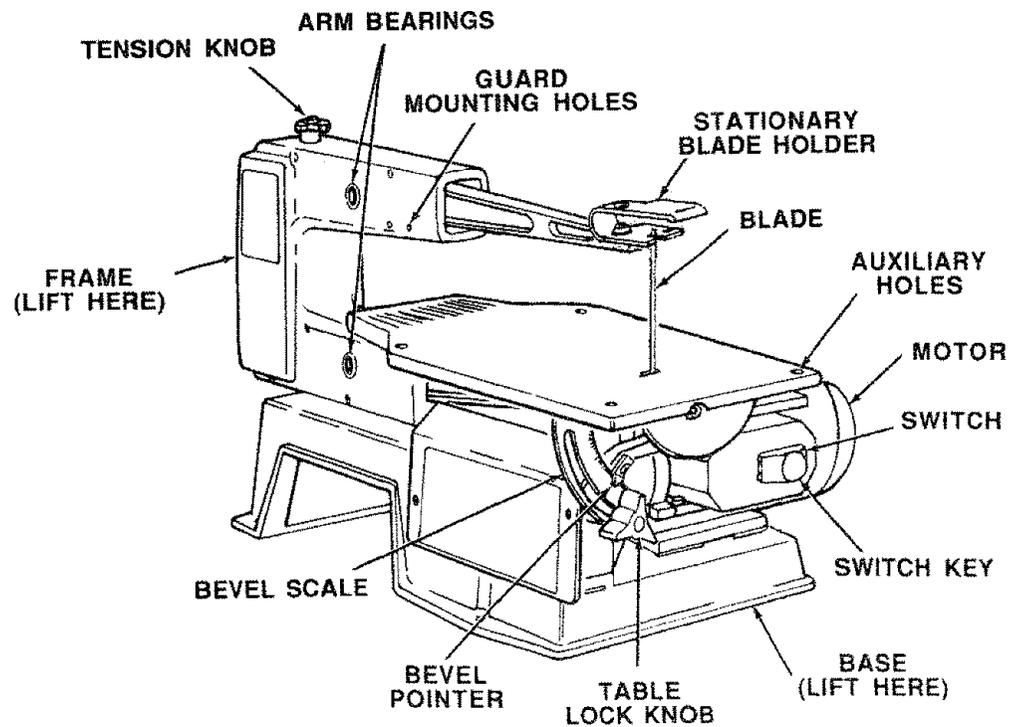
NOTE: Hardware to mount this scroll saw to a bench or leg set is **NOT** supplied. See mounting instructions for recommended hardware size.



assembly

WARNING: For your own safety, never connect plug to power source outlet until all assembly steps are complete, and you have read and understand the safety and operational instructions.

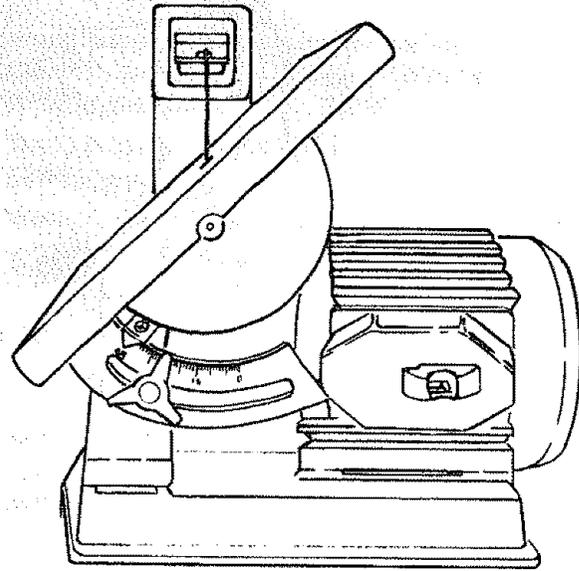
1. Lift the saw by the frame and base and place scroll saw on work bench.
2. Familiarize yourself with the controls and features of this scroll saw indicated in the illustration.



assembly

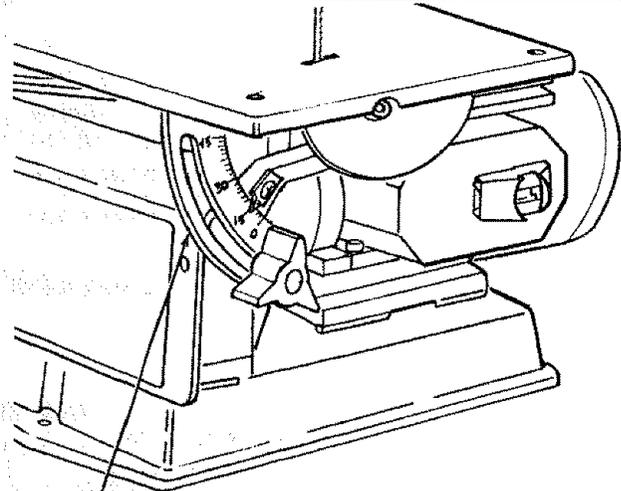
SETTING THE TABLE FOR HORIZONTAL OR BEVEL CUTTING

1. The scroll saw work table can be tilted to the left for bevel cutting up to 45° from the 0° or horizontal cutting position.



2. A bevel scale is provided under the work table as a convenient reference for setting the approximate table angle for bevel cutting.

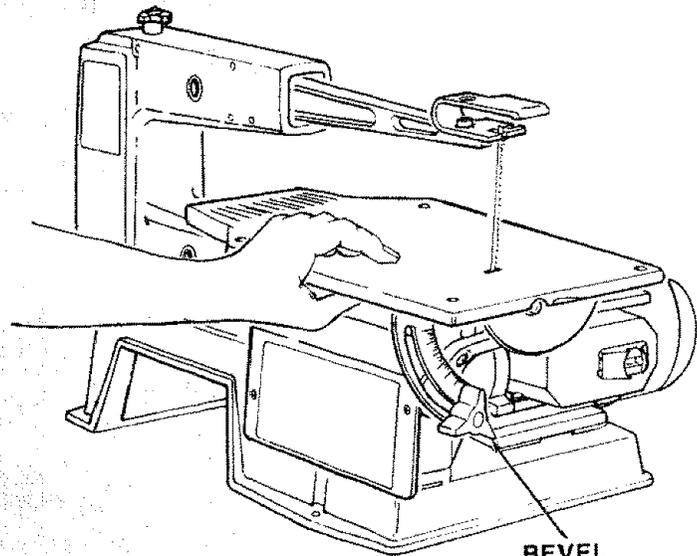
When greater precision is required, make practice cuts and adjust the table as necessary for your requirements.



BEVEL SCALE

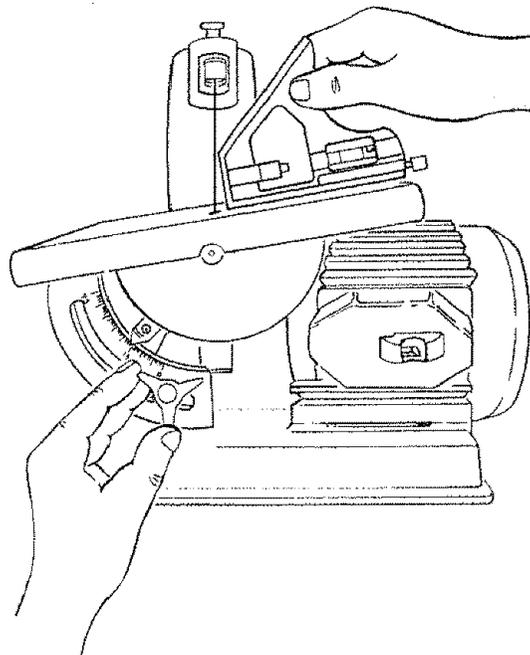
TO ALIGN THE BEVEL INDICATOR

1. Loosen the table bevel lock knob and move the table until it is approximately perpendicular, or at a right angle, to the blade.

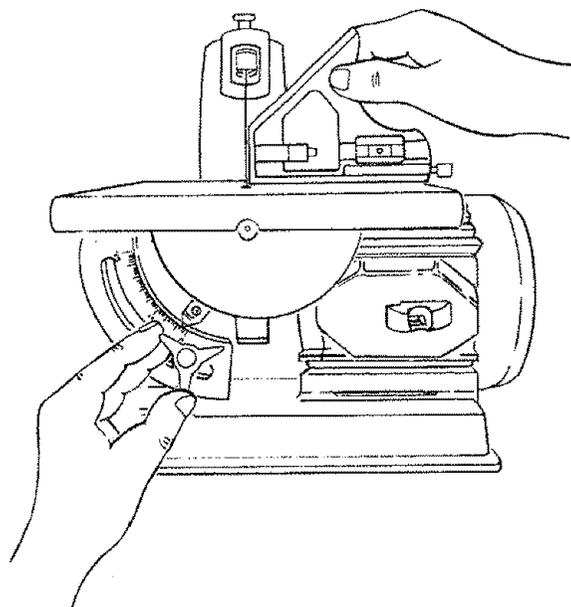


BEVEL
LOCK KNOB

2. Use a small square to set the table at 90° to the blade. If there is too much space between the square and the blade, the table must be adjusted.



3. When the space between the square and the blade is minimal, tighten the bevel lock knob. The table should now be approximately 90° to the blade.

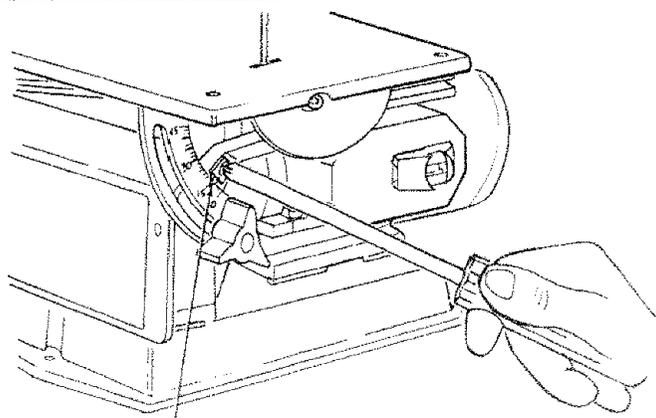


4. Loosen the screw holding the bevel scale pointer and adjust to 0°. Tighten screw.

Remember, the bevel scale is a convenient guide but should not be relied upon for precision.

Make practice cuts in scrap wood to determine if your angle settings are correct. Adjust the table as required.

NOTE: Avoid setting the edge of the table against top of motor which could cause noise when the saw is used.

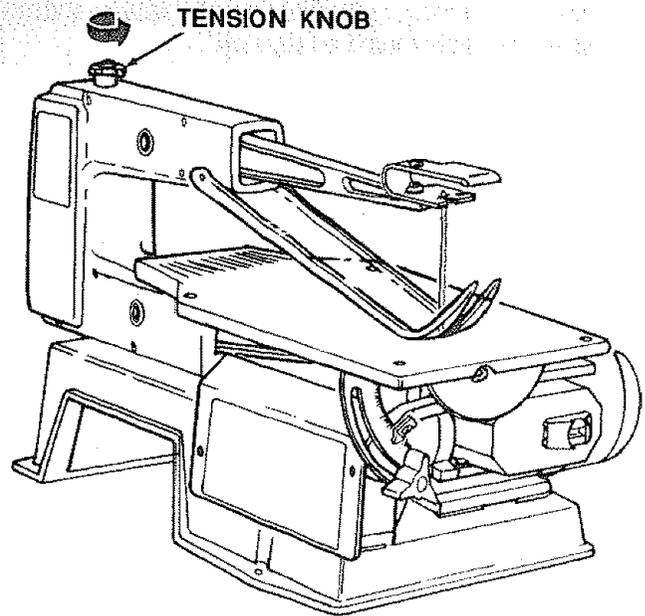


BEVEL POINTER

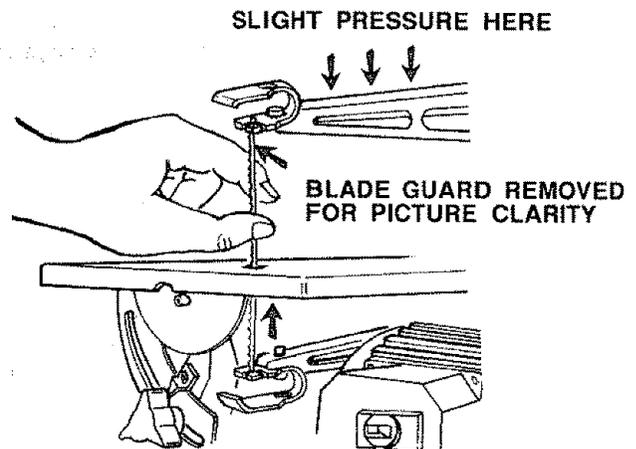
removing and installing blades

WARNING: To avoid injury from accidental starting, always turn switch "OFF" and remove switch key before removing or replacing the blade.

1. Loosen tension on blade by turning tension knob counterclockwise () about two full turns.

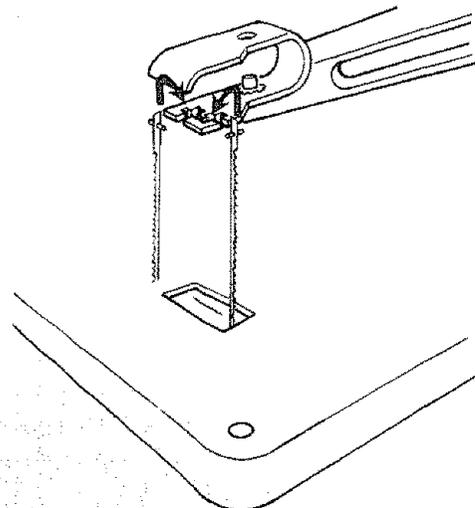


2. Remove blade by pulling forward on blade and then lifting the blade through the access hole in the table. Slight downward pressure against the upper arm may be helpful when removing blade from upper holder.



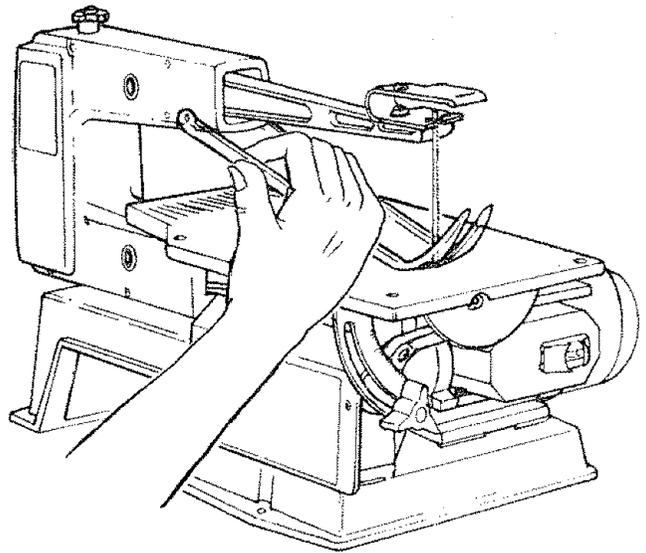
3. Look at the blade holders closely and notice the blade slots and pin recesses in the blade holder. The blade holder is made so you can position the blade for cutting from the front or one side of the saw.

Cutting from the side of the saw will be necessary when your workpiece exceeds 16 inches in length. For 0° bevel angle only.



4. Locate the blade guard and carefully install it onto the saw as shown.

Lightly spread apart the blade guard so pins will go into holes in frame.



5. In order to cut, and to avoid uncontrollable lifting of the workpiece, the teeth of the blades used on the scroll saw should always point downward when installed on the scroll saw.
6. Install the blade by inserting one end of the blade through the slot in the blade guard then the access hole in the table until you can hook the blade pin in the pin recess in the bottom blade holder. Slide the top blade pin into the pin recess of the top blade holder. You may need to press down lightly on the arm to install the blade.

NOTE: Use 5 inch long, pin end type blades only.

7. Carefully tighten the blade tension by turning the tension knob clockwise () just until you feel the slack in the blade is removed.

Double check to see that pins are properly located in the slots.

Then turn the tension knob an additional ONE full turn clockwise.

This amount of blade tension should do well for most cutting operations and blades.

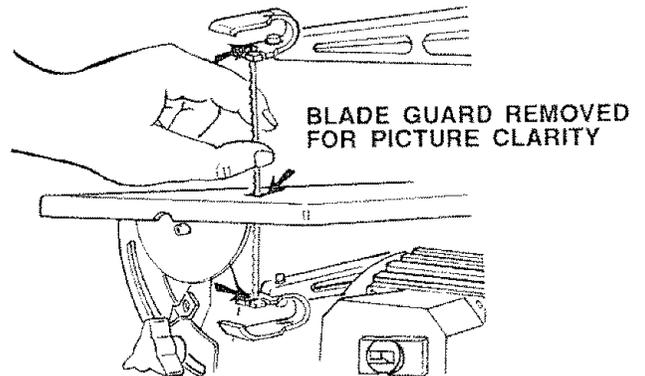
Before applying power, use screwdriver in slot at end of motor shaft to turn mechanism while checking that the blade is properly installed.

OVERTENSIONING OR UNDERTENSIONING of the blade will cause blades to break rapidly.

The thicker, harder and more abrasive the wood you are cutting, the more blades you will have to use.

Blade breakage is caused by the following:

- overtension or undertension
- over working the blade by going too fast
- twisting or bending the blade
- over use - blade life exhausted
- **OVER AGGRESSIVE FEEDING** of the workpiece into the blade.



mounting the scroll saw to a bench

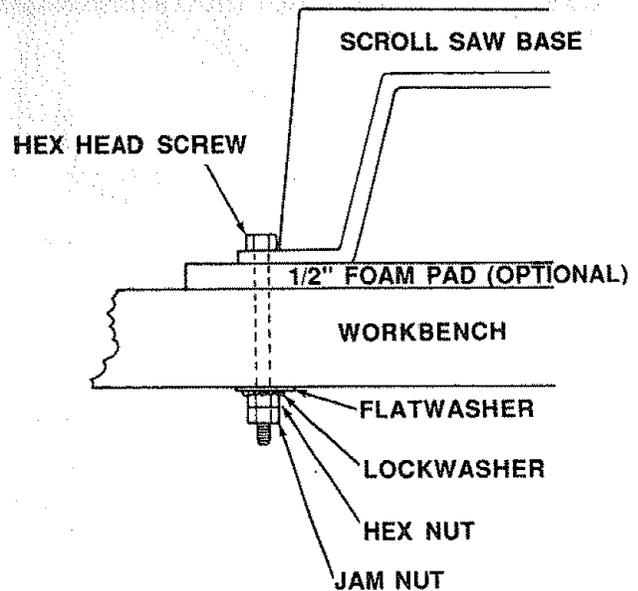
1. When mounting this saw to a workbench a solid wood bench is preferred over a plywood bench where noise and vibration will be more noticeable.
2. Hardware to mount this saw to a workbench is **NOT** supplied with the saw. However, we recommend the hardware used be no smaller than the following.

Description	Qty.
Hex Head Screws, 1/4-20 x length required	4
Flat Washers, 1/4 I.D.	4
Lockwashers, 1/4 I.D.	4
Hex Nuts, 1/4 20	8

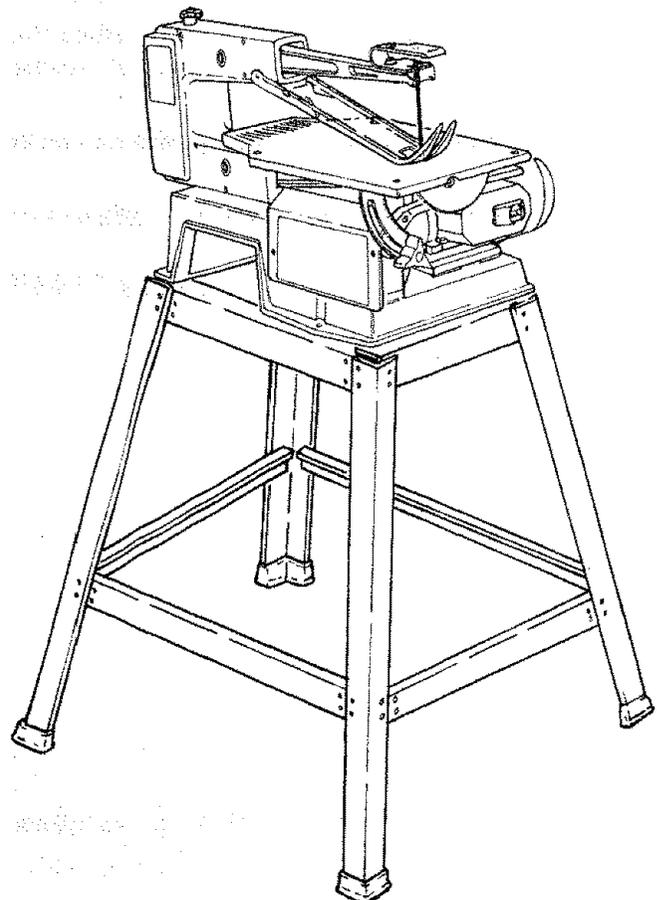
3. A soft foam pad to place between your scroll saw and workbench is **NOT** supplied with the saw. However, we highly recommend the use of such a pad to reduce noise and vibration.

Description	Qty.
Soft foam pad such as carpet padding, 24" x 12" x 1/2"	1

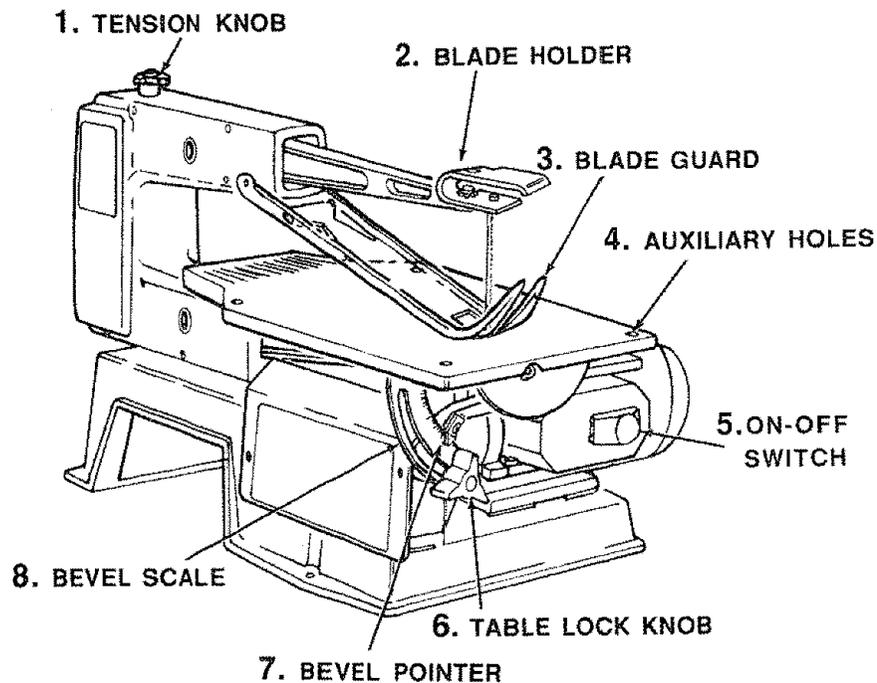
Do **NOT** overtighten mounting bolts - leave some cushion in the foam pad for absorbing noise and vibration.



4. If you prefer to mount your saw to a leg set, we recommend the leg set for bench top tools which is available through Sears Retail or Catalog Stores. The number of this leg set is 9-22244. This leg set is an **optional** accessory and instructions to mount the scroll saw to this leg set are included in the leg set package.



getting to know your scroll saw



1. **TENSION KNOB** . . . Tightening the knob (clockwise) will increase the tension on the blade. Loosening it (counterclockwise) will decrease the tension.
2. **BLADE HOLDER** . . . Retain and position the blade.
3. **BLADE GUARD** . . . Provides added control of workpiece by being directly against thickness of material. Protects hands from blade contact.
4. **AUXILIARY HOLES** . . . Allows you to easily attach an auxiliary work surface to the saw table.
5. **ON-OFF SWITCH** . . . The On-Off Switch has a locking feature. THIS FEATURE IS INTENDED TO

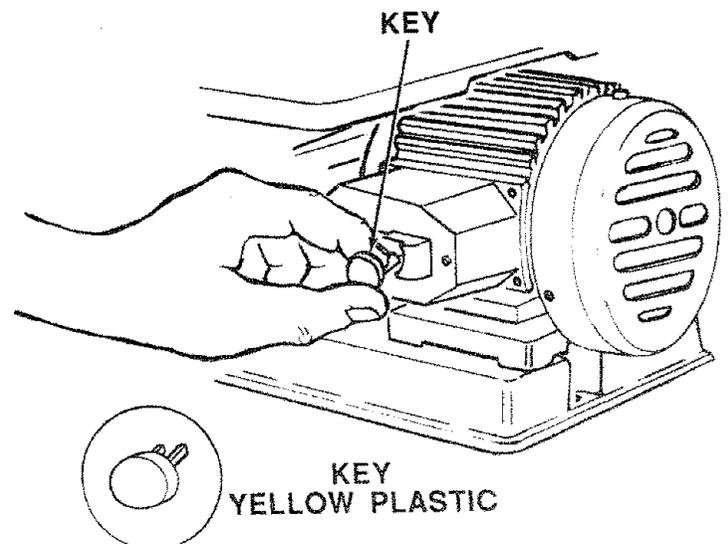
PREVENT UNAUTHORIZED AND POSSIBLY HAZARDOUS USE BY CHILDREN AND OTHERS.

6. **TABLE LOCK KNOB** . . . Loosening the knob allows table to be tilted up to 45° for bevel cutting. Tightening the knob locks the table in the position you have selected.
7. **BEVEL POINTER** . . . Indicates what angle you have selected on the bevel scale.
8. **BEVEL SCALE** . . . Use to set the approximate table angle for bevel cutting.

ON-OFF SWITCH

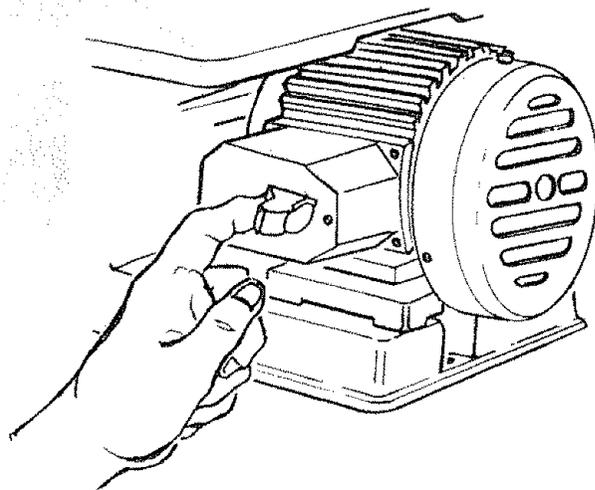
1. Insert Key into switch.

NOTE: Key is made of yellow plastic.



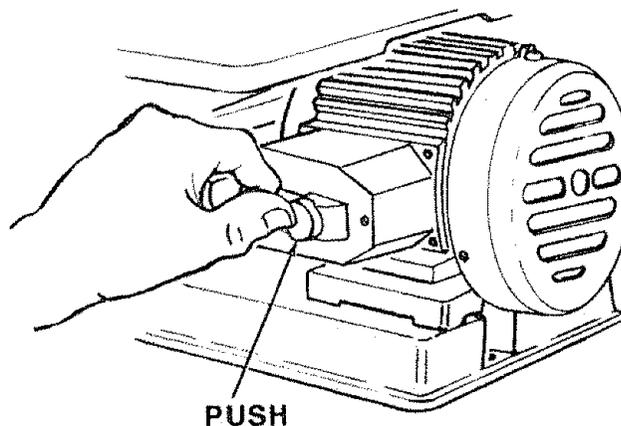
getting to know your scroll saw

2. To turn machine "ON", place finger under switch lever and pull end of switch out.



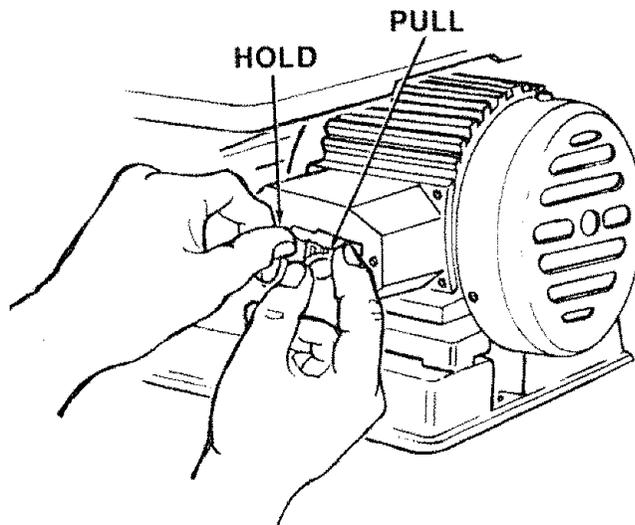
3. To turn machine "OFF", PUSH lever in.

Never leave the machine unattended until it has come to a complete stop.



4. To lock switch in "OFF" position, hold switch IN with one hand, REMOVE key with other hand.

WARNING: For your own safety, always lock the switch "OFF" when machine is not in use. Remove key and keep it in a safe place. Also, in the event of a power failure (all of your lights go out) turn switch off, remove the key and store it remote from the scroll saw. This will prevent the machine from starting up again when the power comes back on.



operation of your scroll saw

PLEASE, read and understand the following items about your scroll saw before attempting to use the saw.

1. The saw does not cut wood by itself. You allow the saw to cut wood by guiding the wood into the blade as it moves.
2. The blade teeth cut wood ONLY on the down stroke.
3. You must guide the wood into the blade slowly because the teeth of the blade are very small and they can only remove wood when they are on the down stroke.
4. There is a learning curve for each person who wants to use this saw. During that period of time, it is expected that some blades will break until you learn how to use the saw and receive the greatest benefit from the blades.
5. Best results are achieved when cutting wood less than one inch thick.
6. When cutting wood thicker than one inch the user must guide the wood very, very slowly into the blade and take extra care not to bend or twist the blade while cutting in order to maximize blade life.
7. Teeth on scroll saw blades wear out and as such must be replaced frequently for best cutting results. Scroll saw blades generally stay sharp for 1/2 hour to 2 hours of cutting.
8. To get accurate cuts, be prepared to compensate for

blades' tendency to follow the wood grain as you are cutting.

9. This scroll saw is intended to cut wood or wood products only.
10. When choosing a blade to use with your scroll saw, consider the following carefully.
 - Very fine, narrow blades should be used to scroll cut in thin wood 1/4 inch thick or less.
 - To cut wood over 1/4 inch thick, use wider blades.
 - Most blade packages state the size or thickness of wood which that blade is intended to cut, and the radius, size of curve, which can be cut with that blade.
 - Wider blades can't cut curves as tight or small as thinner blades.
 - Narrower blades work well only on thinner wood material.
11. This saw uses 5 inch long, pin end type blades only. See your Sears Catalog or Retail Store for accessory blades.
12. Blades wear faster when cutting plywood, which is very abrasive; when sawing wood which is thicker than the 3/4 inch blade stroke; and when sawing hardwood, or when side pressure is placed on the blade.

basic saw operations

BEFORE EACH USE:

Inspect your saw.

DISCONNECT THE SAW. To avoid injury from accidental starting, unplug the saw, turn the switch "OFF" and remove the switch key before changing the setup, removing covers, guards, or blade.

CHECK DAMAGED PARTS. Check for:

- alignment of moving parts,
- binding of moving parts,
- broken parts,
- stable mounting, and
- any other conditions that may affect the way the saw works.

If any part is missing, bent, or broken in any way, or any electrical parts don't work properly, turn the saw off and unplug the saw. **REPLACE** damaged, missing, or failed parts before using the saw again.

MAINTAIN TOOLS WITH CARE.

Keep the saw clean for best and safest performance. Follow instructions for lubricating.

REMOVE ADJUSTING KEYS AND WRENCHES from tool before turning it on.

To avoid injury from jams, slips or thrown pieces.

- Choose the right size and style blade for the material and the type of cutting you plan to do.
- **USE ONLY RECOMMENDED ACCESSORIES.** (See page 19). Consult this Owner's manual for recommended accessories. Follow the instructions that come with the accessories. The use of improper accessories may cause risk of injury to persons.
- Make sure the blade teeth point downward, toward the table.
- Make sure the blade tension is properly adjusted
- Make sure the bevel lock knob is tight and no parts have excessive play.
- To avoid accidental blade contact, minimize blade breakage and provide maximum blade support, always adjust the blade hold down and blade guard to just clear the workpiece.
- **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents. Floor must not be slippery.

basic saw operations

To avoid burns or other fire damage, never use the saw near flammable liquids, vapors or gases.

PLAN AHEAD TO PROTECT YOUR EYES, HANDS, FACE, EARS

KNOW YOUR SAW. Read and understand the owner's manual and labels affixed to the tool. Learn its application and limitations as well as the specific potential hazards peculiar to this tool.

To avoid injury from accidental contact with moving parts, don't do layout, assembly, or setup work on the saw while any parts are moving.

AVOID ACCIDENTAL STARTING. Make sure switch is "OFF" before plugging saw into a power outlet.

Plan your work.

- USE THE RIGHT TOOL. Don't force tool or attachment to do a job it was not designed to do.
- Use this scroll saw to cut only wood, wood like products, plastics and non-ferrous metals.

CAUTION: This saw is **NOT** designed for cutting ferrous metals like iron or steel. When cutting non-ferrous metals (brass, copper and aluminum, etc.), metal shavings can react with wood dust and start a fire. To avoid this:

- Disconnect any dust collecting hose from the saw.
- Remove all traces of wood dust from inside the saw.
- Remove all traces of metal dust from on or around the saw before sawing wood again.

Dress for safety.

Any power saw can throw foreign objects into the eyes. This can cause permanent eye damage. Wear safety goggles (not glasses) that comply with ANSI Z87.1 (shown on package). Everyday eyeglasses have only impact resistant lenses. They are not safety glasses. Safety goggles are available at Sears retail catalog stores. Glasses or goggles not in compliance with ANSI Z87.1 could seriously hurt you when they break.

- Do not wear loose clothing, gloves, neckties or jewelry (rings, wrist watches). They can get caught and draw you into moving parts.
- Wear nonslip footwear.
- Tie back long hair.
- Roll long sleeves above the elbow.
- Noise levels vary widely. To avoid possible hearing damage, wear ear plugs or muffs when using saw for hours at a time.
- For dusty operations, wear a dust mask along with the safety goggles.

Inspect your workpiece

Make sure there are no nails or foreign objects in the part of the workpiece to be cut.

Use extra caution with large, very small or awkward workpieces:

- Never use this tool to finish pieces too small to hold by hand.
- Use extra supports (tables, saw horses, blocks, etc.) for any workpieces large enough to tip when not held down to the table top.
- NEVER use another person as a substitute for a table extension, or as additional support for a workpiece or to help feed, support or pull the workpiece.
- When cutting irregularly shaped workpieces, plan your work so it will not pinch the blade. A piece of molding, for example, must lay flat or be held by a fixture or jig that will not let it twist, rock or slip while being cut.
- Properly support round material such as dowel rods, or tubing. They have a tendency to roll during a cut, causing the blade to "bite". To avoid this, always use a "V" block or clamp the work to the miter gauge.
- Cut only one workpiece at a time.
- Clear everything except the workpiece and related support devices off the table before turning the saw on.

Plan the way you will hold the workpiece from start to finish.

Do not hand hold pieces so small that your fingers will go under the blade guard. Use jigs or fixtures to hold the work and keep your hands away from the blade.

SECURE WORK. Use clamps to hold work when practical. It's often safer than using your hand, and frees both hands to operate the tool.

Avoid awkward operations and hand positions where a sudden slip could cause fingers or hand to move into the blade.

DON'T OVERREACH. Keep good footing and balance.

Keep your face and body to one side of blade, out of line with a possible thrown piece if the blade should break.

WHENEVER SAW IS RUNNING

WARNING: Don't let familiarity (gained from frequent use of your saw) cause a careless mistake. A careless fraction of a second is enough to cause a severe injury.

Before starting your cut, watch the saw while it runs. If it makes an unfamiliar noise or vibrates a lot, stop immediately. Turn the saw off. Unplug the saw. Do not restart until finding and correcting the problem.

KEEP CHILDREN AWAY. Keep all visitors a safe distance from the saw. Make sure bystanders are clear of the saw and workpiece.

DON'T FORCE TOOL. It will do the job better and safer at its designed rate. Feed the workpiece into the saw blade only fast enough to let it cut without bogging down or binding.

Before freeing any jammed material:

- Turn switch "OFF".
- Remove switch key.
- Unplug the saw.
- Wait for all moving parts to stop.

When backing up the workpiece, the blade may bind in the kerf (cut). This is usually caused by sawdust clogging up the kerf. If this happens:

- Turn switch "OFF".
- Remove switch key.
- Unplug saw.
- Wait for all moving parts to stop.
- With a flat blade screwdriver, turn the motor by hand while backing up the workpiece.

Before removing loose pieces from the table, turn saw off and wait for all moving parts to stop.

BEFORE LEAVING THE SAW:

Wait for all moving parts to stop.

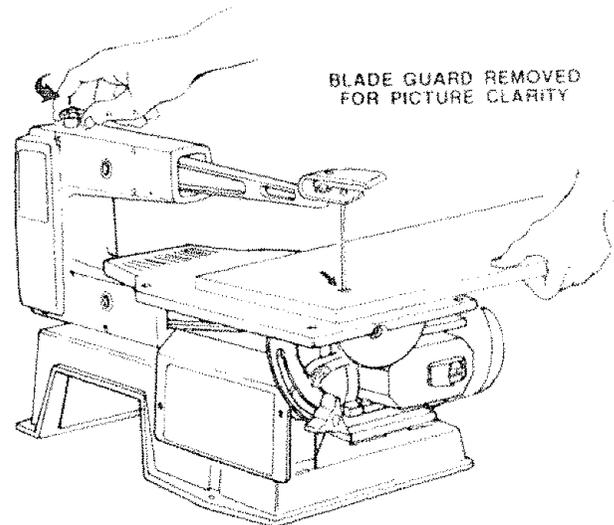
MAKE WORKSHOP CHILD-PROOF. Unplug the saw. Lock the shop or on/off knob. Store the key away from children and others not qualified to use the tool.

MAKING INTERIOR SCROLL CUTS

1. One of the features of this saw is that it can be used to make scroll cuts on the interior of a board without breaking or cutting into the outline or perimeter of the board.

WARNING: To avoid injury from accidental starting, always turn switch "OFF" and remove switch key before removing or replacing the blade.

2. To make interior cuts in a board, remove the scroll saw blade as explained in the Assembly section.
3. Drill a 1/4" hole in the board you will use to make interior cuts.
4. Place the board on the saw table with the hole in the board over the access hole in the table.
5. Install blade through hole in board and adjust blade tension.
6. When finished making the interior scroll cuts, simply remove the blade from the blade holders, as described in the Assembly section, and remove the board from the table.



basic saw operations

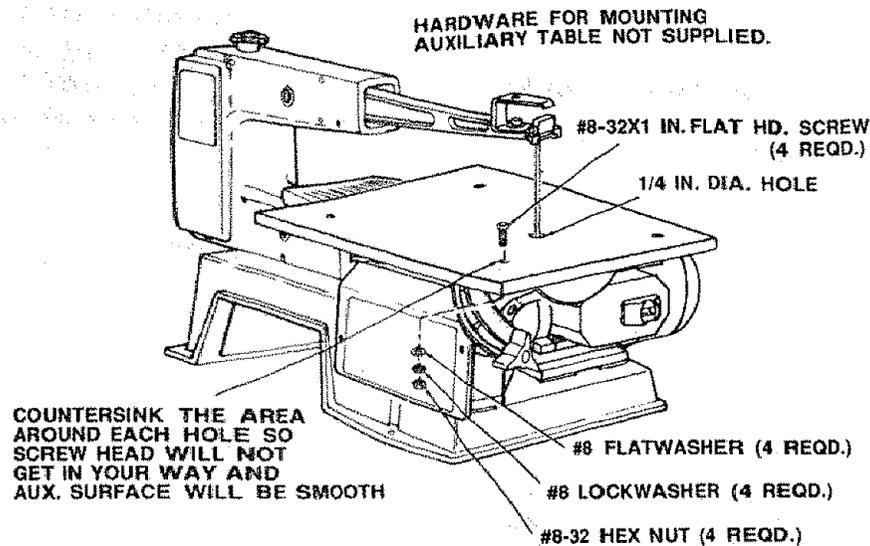
MOUNTING AN AUXILIARY WORK TABLE

1. Four holes are provided in the work table so you can easily attach an auxiliary work surface to the saw if your needs require.
2. Mounting an auxiliary table can allow you to build a larger support area to suit your project, and could render a smoother work surface, as your needs require and an auxiliary surface can give you more support close to the blade for special cutting needs like very small or detailed projects.

WARNING: To avoid tool tipping or support failure, auxiliary work surface should not exceed 24" x 12" x 1/4".

At least a 1/4" hole will be needed in the auxiliary surface to insert blades.

DRILL the hole for the blade first. Then MARK location of other holes.



maintenance

WARNING: For your own safety, turn switch "OFF", remove key and remove plug from power source outlet before maintaining or lubricating your saw.

GENERAL

An occasional coat of paste wax on the work table will allow the wood being cut to glide smoothly across the work surface.

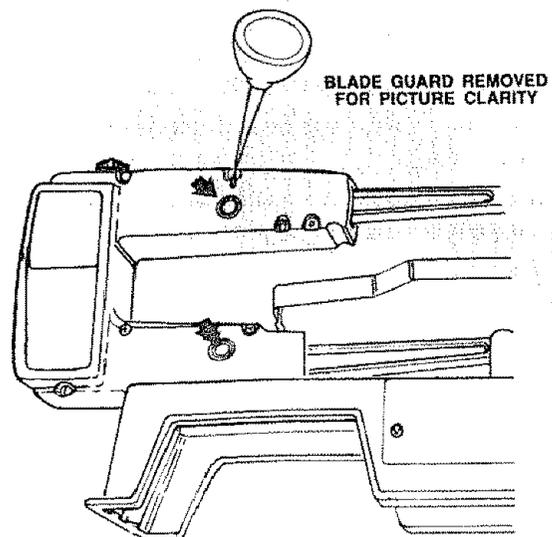
MOTOR

If the power cord is worn, cut, or damaged in any way, have it replaced immediately.

Do not attempt to oil the motor bearings or service the motor internal parts.

ARM BEARINGS

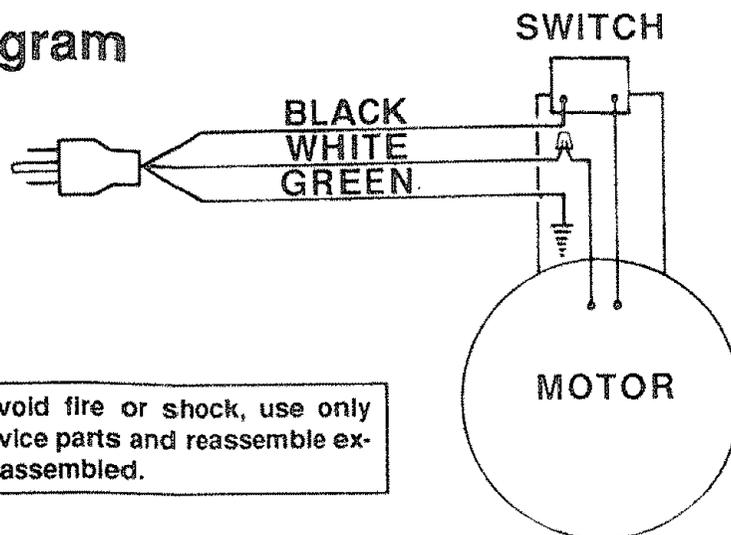
Lubricate the arm bearings after 10 hours of use. Re-oil after every 50 hours of use or whenever there is a squeak coming from the bearings. Four plastic bearing caps are provided with this saw. Add SAE 30 oil into each cap and then snap cap onto arm bearing. Leave caps on bearings for overnight and then remove and store caps for later use.



ALTERNATE METHOD OF OILING BEARINGS IF RE-OIL CAPS ARE LOST

1. Turn saw on its side.
2. Squirt a generous amount of SAE 30 oil around the shaft end and bronze bearing.
3. Let the oil soak in overnight in this condition.
4. Next day repeat the above procedure for the opposite side of the saw.

wiring diagram



WARNING: To avoid fire or shock, use only recommended service parts and reassemble exactly as originally assembled.

Sears recommends the following accessories

Item	Sears Number
Leg Set.....	9-22244
Blades.....	See Catalog - For 5" long, Pin end type blades

Sears may recommend other accessories not listed in manual. See your nearest Sears Store or Catalog Department for other accessories.

trouble shooting

WARNING: For your own safety, turn switch "OFF", remove key and remove plug from power source outlet before troubleshooting your scroll saw.

PROBLEM	PROBABLE CAUSE	REMEDY SUGGESTED
Breaking Blades	<ol style="list-style-type: none"> 1. Wrong tension 2. Over working blade. 3. Wrong blade application. 4. Twisting blade in wood. 	<ol style="list-style-type: none"> 1. Adjust blade tension 2. Reduce feed rate. 3. Use narrow blades for cutting thin wood, wide blades for thicker wood. 4. Avoid side pressure on blade.
Motor will not run.	<ol style="list-style-type: none"> 1. Defective cord or plug. 2. Defective motor. 	<ol style="list-style-type: none"> 1. Replace defective parts before using saw again. 2. Consult Sears Service. Any attempt to repair this motor may create a HAZARD unless repair is done by a qualified service technician. Repair service is available at your nearest Sears Store.
Vibration NOTE: There will always be some vibration present the saw is running because of the motor operation.	<ol style="list-style-type: none"> 1. Improper mounting of saw. 2. Unsuitable mounting surface. 3. Loose table or table resting against motor. 4. Loose motor mounting. 	<ol style="list-style-type: none"> 1. See mounting instructions in this manual for proper mounting technique. 2. The heavier your work bench is the less when vibration will occur. A plywood workbench will not be as good a work surface as the same size solid lumber. Use common sense in choosing a mounting surface. 3. Tighten table lock knob. 4. Tighten motor mounting screws.
Blade Runout-Blade not In-line with arm motion.	<ol style="list-style-type: none"> 1. Blade holders not aligned. 	<ol style="list-style-type: none"> 1. Loosen cap screws holding blade holders to arms. Adjust position of blade holders. Retighten holders.

repair parts

PARTS LIST FOR CRAFTSMAN 16-INCH MOTORIZED SCROLL SAW MODEL NO. 113.236111

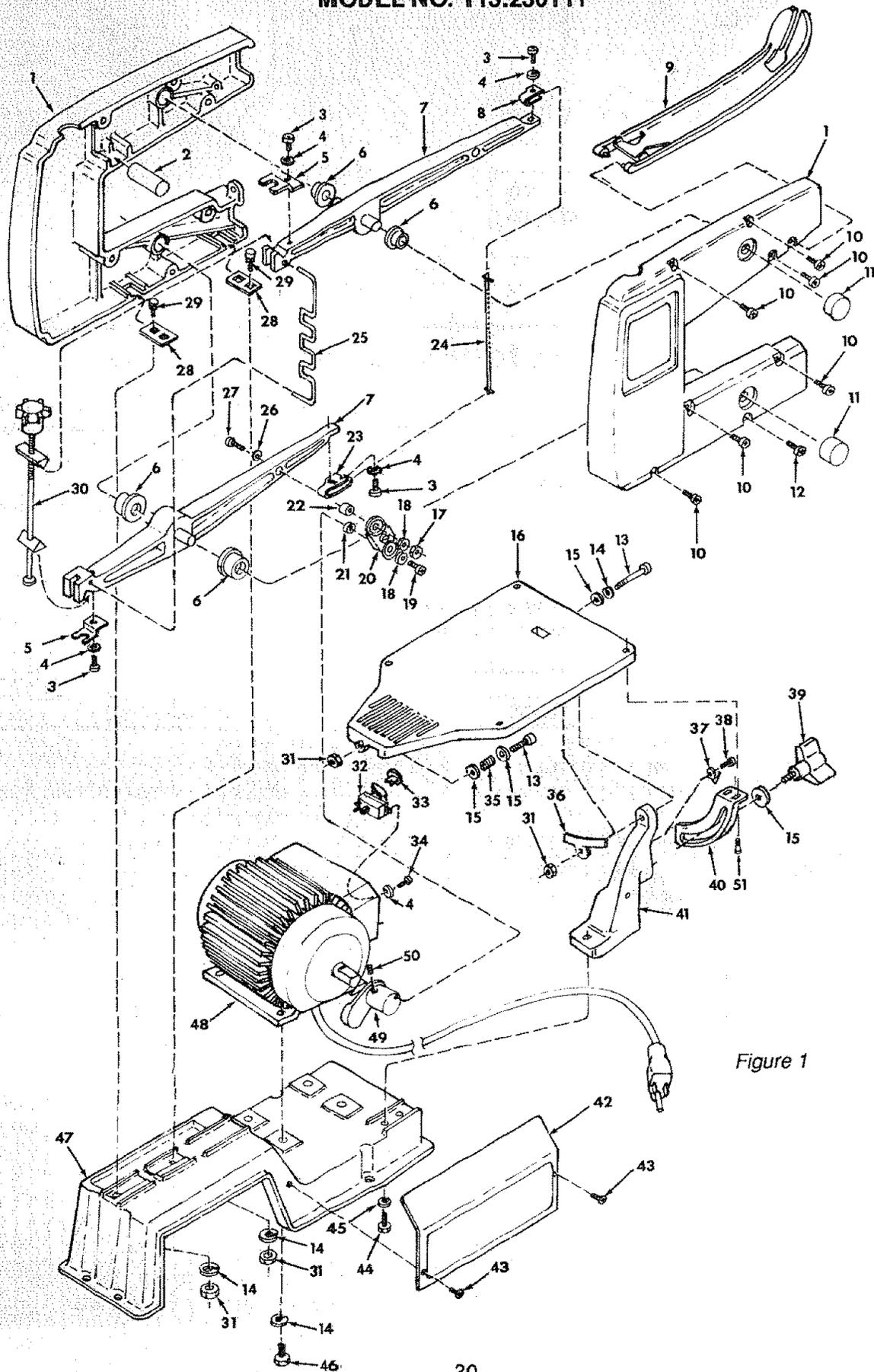


Figure 1

**PARTS LIST FOR CRAFTSMAN 16-INCH MOTORIZED SCROLL SAW
MODEL NO. 113.236111**

FIGURE 1

Key No.	Part No.	Description
1	816203-1	+ Housing, (Includes Key #6)
2	66043	Bumper
3	820378	Screw, Hex Soc. Cap M4 x 0.7-10
4	STD852004	* Lockwasher, Helical M4
5	66059	Retainer
6	66041	Bearing, Flanged
7	66068	Arm, Upper (Includes Key # 3 & 4)
8	66050	Holder, Upper Blade
9	66049	Guard, Blade
10	820376	Screw, Pan Hd. Ty "TT" M4 x 0.7-35
11	66046	Cap, Re-oil
12	820376-1	Screw, Pan Hd Ty "TT" M4 x 0.7-25
13	820380-1	Screw, Hex Soc. Cap M6 x 1.0-40
14	STD852006	* Lockwasher, Helical M6
15	46-58507-3	* Washer, M6 x 12 x 1.6
16	820399	Table
17	STD840508	* Nut, Hex M5 x 0.8
18	STD852005	* Lockwasher, Helical M5
19	820379-3	Screw, Hex Soc. Cap M5 x 0.8-20
20	66054	Link
21	66045	Bushing
22	66060	Spacer, Bearing
23	66051	Holder, Lower Blade
24	9-26877	† Blade
25	66061	Spring

Key No.	Part No.	Description
26	46-58624-3	* Washer, M5 x 9.8 x 1.0
27	820379-4	Screw, Hex Soc. Cap M5 x 0.8-25
28	66062	Retainer, Bolt
29	820377	Bolt, Carriage M6 x 1.0 -20
30	66042	Knob Assembly, Tension
31	STD840610	* Nut, Hex M6 x 1.0
32	62442	▲ Switch, Locking
33	9-22255	† Key, Switch
34	46-57529-3	* Screw, Pan Hd. M4 x 0.7-6
35	66063	Spring, Compression
36	66058	Spring, Anti-Rattle
37	66052	Indicator, Tilt
38	STD833012	* Screw, Pan Cr. M6 x 1-12
39	814091	Knob, M6 x 1.0
40	66044	Bracket, Tilt
41	816033-1	Support, Table
42	66057	Plate, Cover
43	820240-1	Screw, Pan Cr. M5 x 0.8-10
44	820381-2	Screw, Hex Hd. M8 x 1.25-20
45	STD852008	* Lockwasher, Helical M8
46	STD833020	* Screw, Hex Hd. M6 x 1.0-20
47	66040	Base (Includes Key #43)
48	66055	Motor (Includes Switch)
49	66047	Coupling, Eccentric (Includes Key #19 & 50)
50	820382	Screw, Hex Soc. Set Pt. M8 x 1.25-8
51	820257-2	Screw, Pan Hd Ty "TT" M5 x 0.8-10
—	SP5496	Owner's Manual (Not Illus.)

* Standard hardware item - May be purchased locally.

† Stock item - May be secured through the Hardware Department of most Sears Retail Stores or Catalog Order Houses.

+ **NOTE:** When ordering either the right or left housing, both housings will be shipped. Because of the precision drilling required, they must be replaced as matched parts.

▲ WARNING: This part is important to the safety of this tool. Do not replace with common parts.

SEARS

*owners
manual*

SERVICE

**MODEL NO.
113.236111**

**HOW TO ORDER
REPAIR PARTS**

16 INCH SCROLL SAW

Now that you have purchased your Scroll Saw, should a need ever exist for repair parts or service, simply contact any Sears Service Center and most Sears, Roebuck and Co. stores. Be sure to provide all pertinent facts when you call or visit.

The model number of your Scroll Saw will be found attached to the underside of the worktable.

**WHEN ORDERING REPAIR PARTS, ALWAYS GIVE
THE FOLLOWING INFORMATION:**

PART NUMBER	PART DESCRIPTION
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MODEL NUMBER 113.236111	NAME OF ITEM 16 Inch Scroll Saw
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All parts listed may be ordered from any Sears Service Center and most Sears stores. If the parts you need are not stocked locally, your order will be electronically transmitted to a Sears Repair Parts Distribution Center for handling.

Sold by SEARS, ROEBUCK AND CO., Chicago, IL 60684 U.S.A.