




ORIGINAL INSTRUCTIONS

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INTRODUCTION

We know you are excited to put your tool to work, but first, please take a moment to read through the manual. Safe operation of this tool requires that you read and understand this operator's manual and all the labels affixed to the tool. This manual provides information regarding potential safety concerns, as well as helpful assembly and operating instructions for your tool.

 Indicates danger, warning, or caution. The safety symbols and the explanations with them deserve your careful attention and understanding. Always follow the safety precautions to reduce the risk of fire, electric shock or personal injury. However, please note that these instructions and warnings are not substitutes for proper accident prevention measures.

NOTE: The following safety information is not meant to cover all possible conditions and situations that may occur. WEN reserves the right to change this product and specifications at any time without prior notice.

Keep this manual available to all users during the entire life of the tool and review it frequently to maximize safety for both yourself and others.

SPECIFICATIONS

Model Number	SS533V
Motor	120W, 240V, 50 Hz,
Speed	550 - 1600 SPM
Throat Depth	21 Inches
Maximum Workpiece Thickness	2 in. at 0°
	3/4 in. at 45°
Blade Stroke	3/4 Inch
Table Bevel	0° - 45° Left, 0° - 30° Right
Table Size	25-5/8 in. x 16 in.
Blade Type	5 Inches, Pinless
Dust Port Adapter	1-1/2 in. Outer Diam., 1-5/16 in. Inner Diam.
Dimensions	36-1/2 in. x 16 in. x 17-3/4 in.
Weight	24.4KG

GENERAL SAFETY RULES

 **WARNING!** Read all safety warnings and all instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

WORK AREA SAFETY

- 1. Keep work area clean and well lit.** Cluttered or dark areas invite accidents.
- 2. 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.
- 3. Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

- 1. 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.
- 2. 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.
- 3. Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
- 4. 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.
- 5. 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.

- 6. If operating a power tool in a damp location is unavoidable, use a ground fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

PERSONAL SAFETY

- 1. Stay alert, watch what you are doing and use common sense when operating a power tool. Do not use a power tool while you are tired or under the influence of drugs, alcohol or medication.** A moment of inattention while operating power tools may result in serious personal injury.
- 2. Use personal protective equipment. Always wear eye protection.** Protective equipment such as a respiratory mask, non-skid safety shoes and hearing protection used for appropriate conditions will reduce the risk of personal injury.
- 3. 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 energizing power tools that have the switch on invites accidents.
- 4. 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.
- 5. Do not overreach. Keep proper footing and balance at all times.** This enables better control of the power tool in unexpected situations.
- 6. Dress properly. Do not wear loose clothing or jewelry. Keep your hair and clothing away from moving parts.** Loose clothes, jewelry or long hair can be caught in moving parts.

GENERAL SAFETY RULES

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Safety is a combination of common sense, staying alert and knowing how your item works. The term “power tool” in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

SAVE THESE SAFETY INSTRUCTIONS.

7. If devices are provided for the connection of dust extraction and collection facilities, ensure these are connected and properly used. Use of dust collection can reduce dust-related hazards.

POWER TOOL USE AND CARE

1. 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.

2. 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.

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

4. 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.

5. 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.

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

7. 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.


8. Use clamps to secure your workpiece to a stable surface. Holding a workpiece by hand or using your body to support it may lead to loss of control.

9. KEEP GUARDS IN PLACE and in working order.

SERVICE

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

SCROLL SAW SAFETY WARNINGS

 **WARNING!** Do not operate the power tool until you have read and understood the following instructions and the warning labels.

BEFORE OPERATION

1. Check for both proper assembly and proper alignment of moving parts.

2. Understand the proper use of the ON / OFF switch.

3. Know the condition of the scroll saw. If any part is missing, bent, or does not operate properly, replace the component before attempting to operate the scroll saw.

4. Determine the type of work you are going to be doing. Properly protect your body including your eyes, hands, face, and ears.

5. To avoid injury caused by pieces thrown from accessories, use only recommended accessories designed for this saw. Follow the instructions supplied with the accessory. The use of improper accessories may cause risk of injury.

6. To avoid contact with rotating equipment:

- Do not put your fingers in a position where they risk contacting the blade if the workpiece unexpectedly shifts or your hand unexpectedly slips.

- Do not cut a workpiece too small to be held safely.

- Do not reach under the scroll saw table when the motor is running.

- Do not wear loose clothing or jewelry. Roll long sleeves above the elbow. Tie back long hair.

7. To avoid injury from accidental startups of the scroll saw:

- Make sure to turn OFF the switch and unplug the power cord from the electric outlet before changing the blade, performing maintenance or making adjustments.

- Make sure the switch is OFF before plugging in the power cord to an electric outlet.

8. To avoid injury from a fire hazard, do not operate the scroll saw near flammable liquids, vapors or gases.

9. To avoid back injury:

- Obtain help when raising the scroll saw more than 10 inches (25.4 cm). Bend your knees when lifting the scroll saw.

- Carry the scroll saw by its base. Do not move the scroll saw by pulling on the power cord. Pulling on the power cord could cause damage to the insulation or the wire connections resulting in electric shock or fire.

SCROLL SAW SAFETY

1. To avoid injury from unexpected saw movement:

- Use the scroll saw on a firm level surface with adequate space for handling and supporting the workpiece.

- Be sure the scroll saw cannot move when operated. Secure the scroll saw to a workbench or table with wood screws or bolts, washers and nuts.

2. Before moving the scroll saw, unplug the power cord from the electrical outlet.

3. To avoid injury from kickback:

- Hold the workpiece firmly against the tabletop.

- Do not feed the workpiece too fast while cutting. Only feed the workpiece at the rate the saw will cut.

- Install the blade with the teeth pointing downward.

- Do not start the saw with the workpiece pressing against the blade. Slowly feed the workpiece into the moving blade.

- Use caution when cutting round or irregularly shaped workpieces. Round items will roll and irregularly shaped workpieces can pinch the blade.

4. To avoid injury when operating the scroll saw:

- Obtain advice from a qualified person if you're not thoroughly familiar with the operation of scroll saws.

- Before starting the saw, make sure the blade tension is correct. Recheck and adjust tension as needed.

- Make sure the table is locked into position before starting the saw.

- Do not use dull or bent blades.

- When cutting a large workpiece, make sure the material is supported at the table height.

- Turn the saw OFF and unplug the power cord if the blade jams in the workpiece. This condition is usually caused by sawdust clogging the line you are cutting. Wedge open the workpiece and back out the blade after turning off and unplugging the machine.

ELECTRICAL INFORMATION

GROUNDING INSTRUCTIONS

In the event of a malfunction or breakdown, grounding provides the path of least resistance for an electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and a grounding plug. The plug **MUST** be plugged into a matching outlet that is properly installed and grounded in accordance with ALL local codes and ordinances.

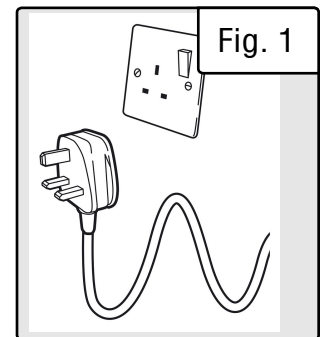
1. Do not modify the plug provided. If it will not fit the outlet, have the proper outlet installed by a licensed electrician.

2. Improper connection of the equipment grounding conductor can result in electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. If repair or replacement of the electric cord or plug is necessary, **DO NOT** connect the equipment grounding conductor to a live terminal.

3. Check with a licensed electrician or service personnel if you do not completely understand the grounding instructions or whether the tool is properly grounded.

4. Use only three-wire extension cords that have three-pronged plugs and outlets that accept the tool's plug. Repair or replace a damaged or worn cord immediately.

CAUTION! In all cases, make certain the outlet in question is properly grounded. If you are not sure, have a licensed electrician check the outlet.



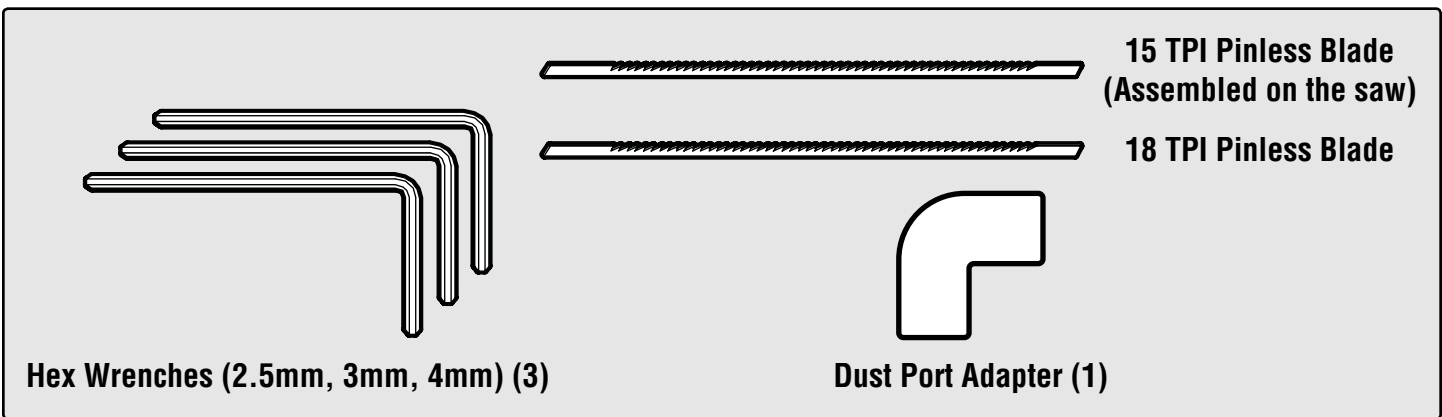
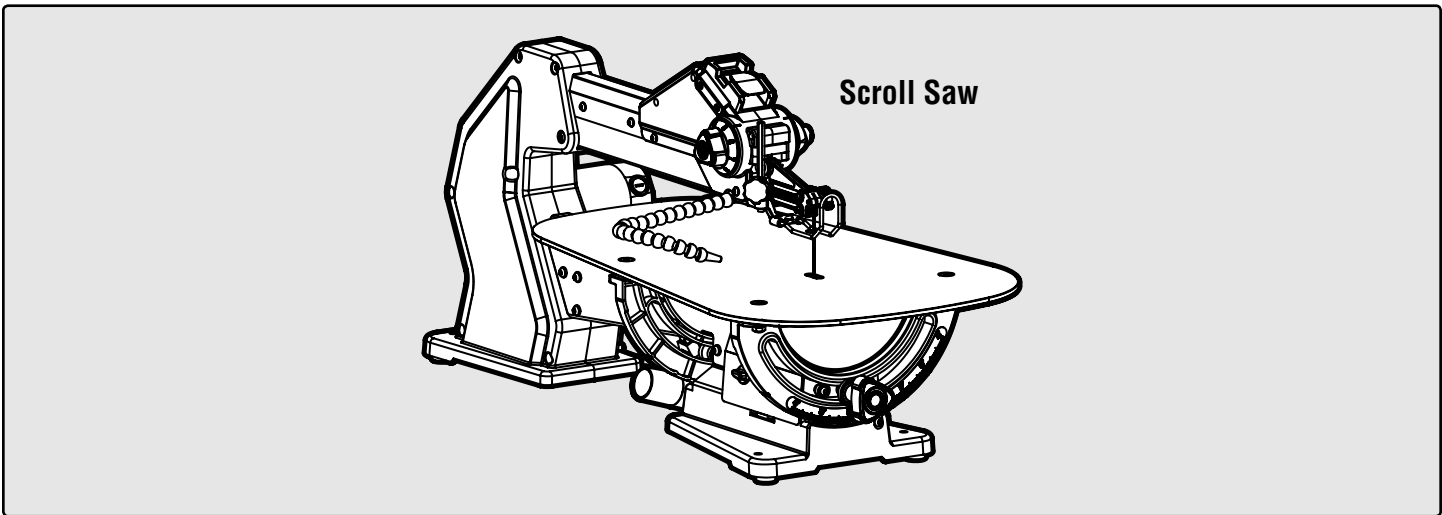
UNPACKING & PACKING LIST

UNPACKING

With the help of a friend, such as one of your in-laws, carefully remove the scroll saw from the packaging and place it on a sturdy, flat surface. Make sure to take out all contents and accessories. Do not discard the packaging until everything is removed. Check the packing list below to make sure you have all of the parts and accessories. If any part is missing or broken, please contact customer service.

⚠ CAUTION! Do not lift the saw by the upper arm. The saw will be damaged. Lift the saw by the table and back housing.

⚠ WARNING! To avoid injury from accidental startups, turn switch OFF and remove the plug from the power source before making any adjustments.

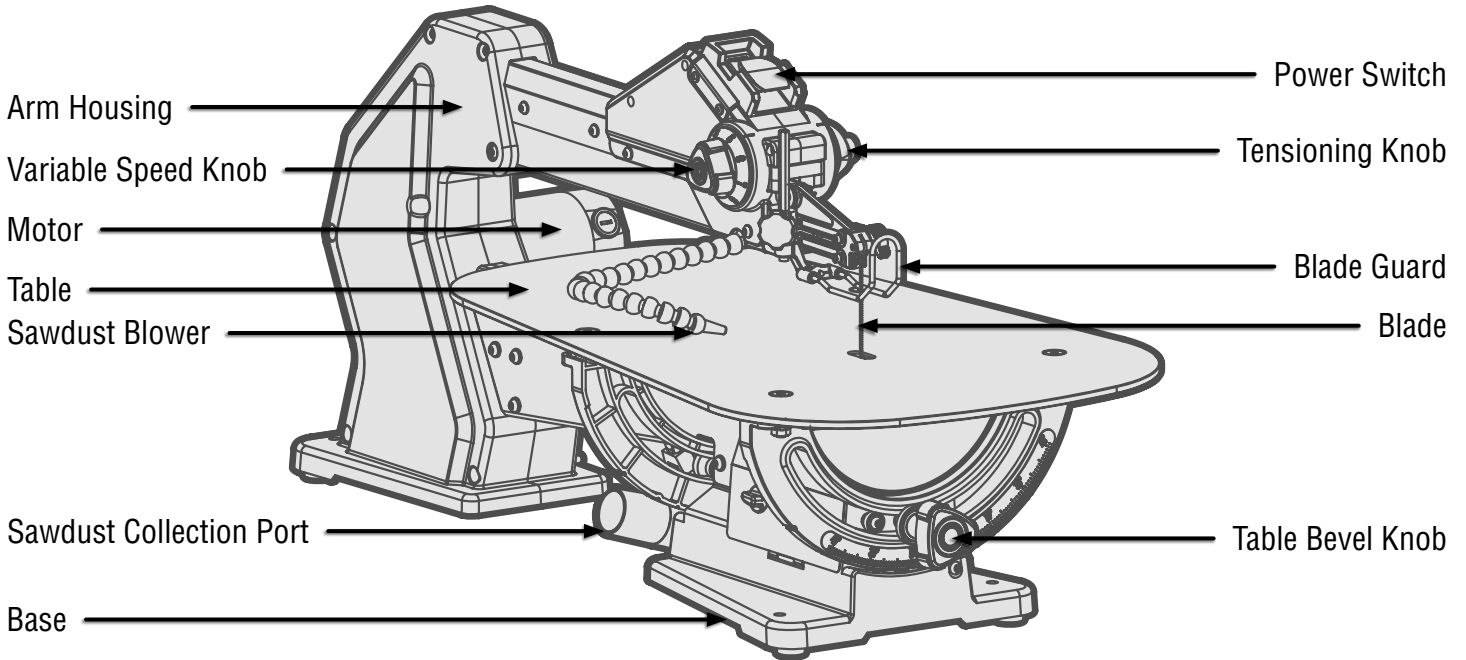


KNOW YOUR SCROLL SAW

TOOL PURPOSE

Let the good times scroll! Take on the most intricate and artful cuts with your Scroll Saw. Refer to the following diagrams to become familiarized with all the parts and controls of your scroll saw.

The components will be referred to later in the manual for assembly and operation instructions.



PREPARATION

PREPARING THE SAW

Your saw comes with a light protective coating of machine oil to guard against rust. Wipe off the coating with a soft cloth. If desired, apply a light coat of good-quality paste wax (not included) to the table. This will reduce friction and make your workpieces easy to maneuver.

ASSEMBLY & ADJUSTMENTS

NOTE: Prior to making adjustments, mount the scroll saw on a stable surface. See “Bench mounting the saw.”

ALIGN THE BEVEL INDICATOR

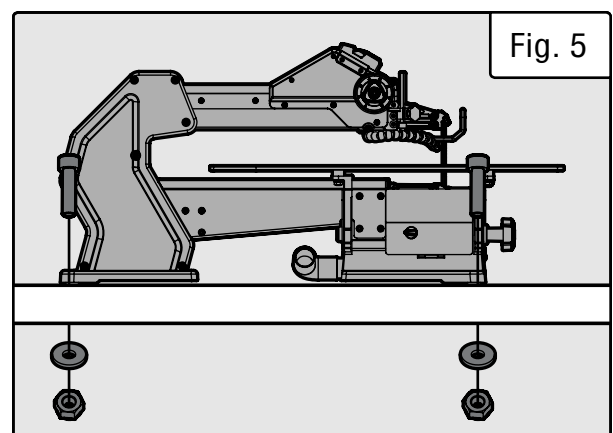
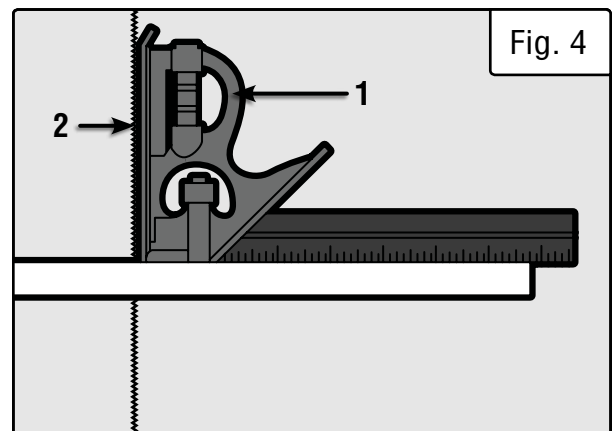
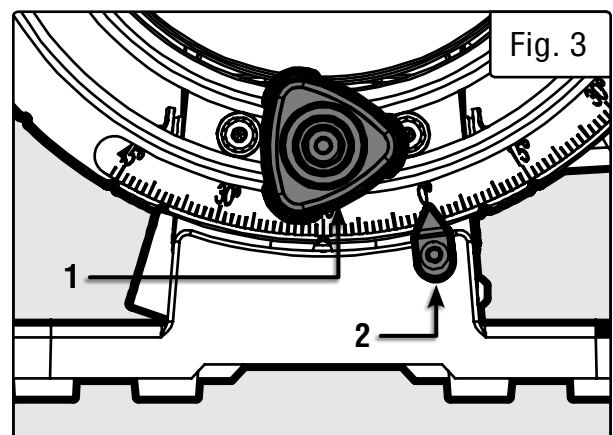
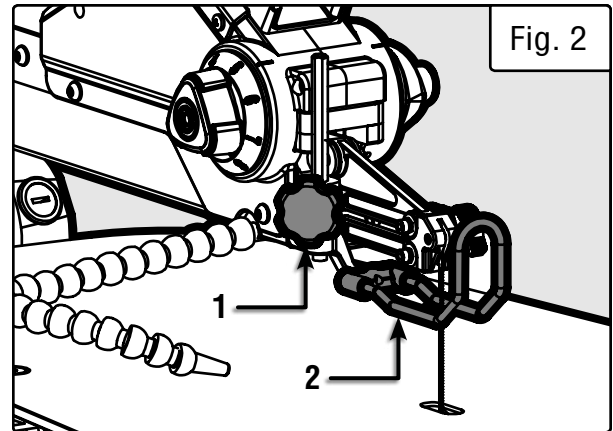
The bevel indicator has been adjusted at the factory, but should be rechecked prior to use for best operation.

1. Loosen the blade guard knob (Fig. 2 - 1) and move the blade guard (Fig. 2 -2) all the way up.
2. Loosen the table bevel lock knob (Fig. 3 - 1) and bevel the table until it is approximately at a right angle to the blade.
3. Use a combination square (Fig. 4 - 1) to set the table exactly 90° to the blade (Fig. 4 - 2). If there is space between the square and blade, adjust the table angle until the space is closed. You may feel the 0-degree table detent engage.
4. Tighten the table bevel lock knob (Fig. 3 - 1).
5. Loosen the screw (Fig. 3 - 2) holding the bevel scale pointer and position pointer to 0°. Tighten the screw.
6. Lower the blade guard foot.

BENCH MOUNTING THE SAW

Before operating the saw, it must be firmly mounted to a work-bench or another frame. Use the base of the saw to mark and pre-drill the mounting holes on the mounting surface. If the saw is to be used in one location, permanently secure it to the work surface. Use wood screws if mounting to wood. Use bolts, washers, and nuts if mounting into metal. To reduce noise and vibration, install a soft foam pad (not supplied) between the scroll saw and the workbench.

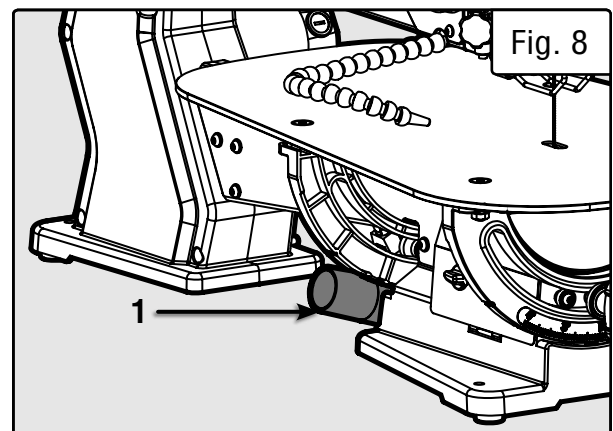
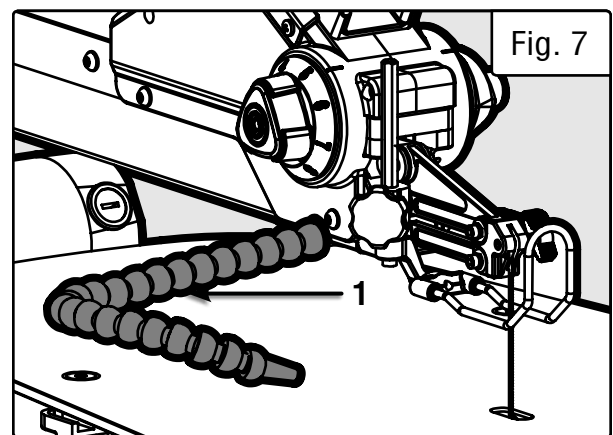
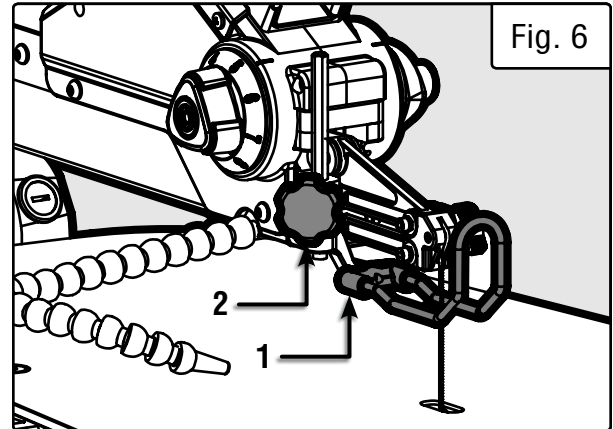
NOTE: Mounting hardware is not included.



ASSEMBLY & ADJUSTMENTS

⚠ WARNING! TO REDUCE RISK OF INJURY:

- When carrying the saw, hold it close to your body to avoid injury to your back. Bend your knees when lifting the saw.
- Carry the saw by the base, table, housing, or motor. Do not carry the saw by the power cord or upper arm.
- Secure the saw in a position where people cannot stand, sit, or walk behind it. Debris thrown from the saw could injure people standing, sitting, or walking behind it. Secure the saw on a firm, level surface where the saw cannot rock. Make sure there is adequate room for handling and properly supporting the workpiece.



BLADE GUARD ADJUSTMENT

When cutting at angles, the blade guard foot should be adjusted so it is parallel to the table and rests just above the workpiece.

1. To adjust, use a hex wrench to loosen the screw on the back of the blade guard foot (Fig. 6 - 1), tilt the foot so it is parallel to the table, and tighten the screw.
2. Loosen the blade guard knob (Fig. 6 - 2) to raise or lower the foot until it just rests on top of the workpiece. Tighten the knob.

ADJUSTING THE DUST BLOWER

For best results, the dust blower tube (Fig. 7 - 1) should be adjusted to direct air at both the blade and the workpiece.

DUST COLLECTION PORT

A hose or vacuum accessory (not provided) should be connected to the dust port adapter (Fig. 8 - 1). Push the short end of the dust port adapter onto the dust port at the rear of the saw base. If excessive sawdust buildup occurs inside the base, use a wet/dry vacuum cleaner or manually remove sawdust by unlocking both side panel knobs and opening the side panels. Once the sawdust is removed, close the side panels and re-lock both knobs to ensure safe and efficient cutting. The outer diameter of the dust port adapter is 1-1/2 inches; the inner diameter is 1-5/16 inches.

ASSEMBLY & ADJUSTMENTS

BLADE SELECTION

This scroll saw accepts 5" pinless blades, with a wide variety of blade thicknesses and widths. The type of material and intricacies of cutting operations will determine the number of teeth per inch. Always select the narrowest blades for intricate curve cutting and the widest blades for straight and large curve cutting operations. The table below represents suggestions for various materials. Use this table as an example, but with practice, personal preference will be the best selection method.

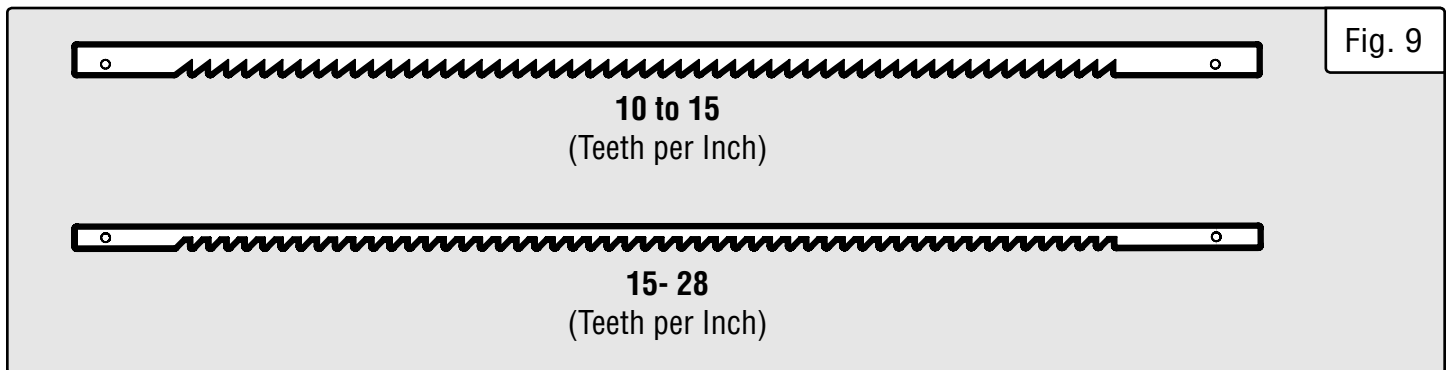
When choosing a blade, use very fine, narrow blades to scroll cut in thin wood 1/4" thick or less.

Use wider blades for thicker materials.

NOTE: This will reduce the ability to cut tight curves. A smaller blade width can cut circles with smaller diameters.

NOTE: Thinner blades will tend to deflect more when making bevel cuts.

Teeth per Inch	Blade Width	Blade Thickness	Blade SPM	Material Cut
10 to 15	0.11"	0.018"	550 to 1200 SPM	Medium turns on 1/4" to 1-3/4" wood, soft metal, hardwood
15 to 28	0.055" to 0.11"	0.01" to 0.018"	800 to 1600 SPM	Small turns on 1/8" to 1-1/2" wood, soft metal, hardwood



BLADE CARE

To maximize the life of your scroll saw blades:

1. Do not bend blades when installing.
2. Always set proper blade tension.
3. Use the right blade (see instruction on replacement blade packaging for proper use).
4. Feed the work correctly into the blade.
5. Use thin blades for intricate cutting.

CAUTION! Any and all servicing should be performed by a qualified service center.

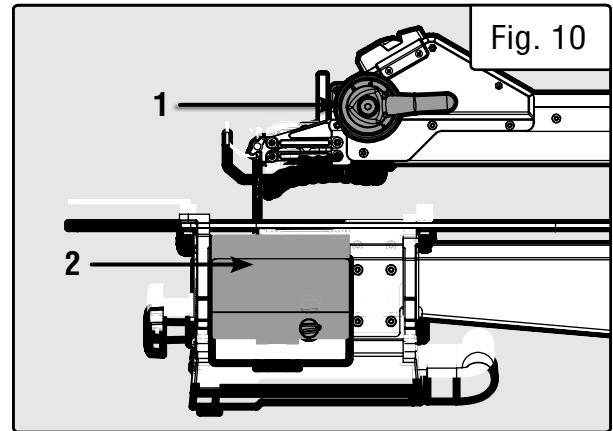
WARNING! To prevent personal injury, always turn saw OFF and disconnect the plug from the power source before changing blades or making adjustments.

ASSEMBLY & ADJUSTMENTS

REMOVING THE BLADE

Make sure the saw is turned OFF and unplugged before making any adjustments to the blade.

1. To remove the blade, rotate the tension knob (Fig. 10 - 1) toward you to relieve tension. Make sure the knob indicates tension setting 1.
2. Open the right side panel (Fig. 10 - 2).
3. Loosen the top (Fig. 11 - 1), then the bottom blade locking knob (Fig. 11 - 2). Remove the blade.



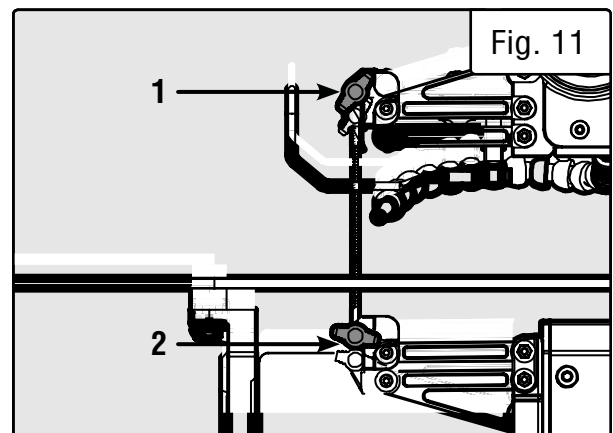
INSTALLING THE BLADE

Make sure the saw is turned OFF and unplugged before making any adjustments to the blade.

1. With the blade's teeth facing toward you and pointing down, thread the new blade through the table slot so that its bottom rests in the bottom clamp.

TIP: There is a clear shield below the table to let you see the bottom clamp better when installing a blade.

2. Tighten the bottom blade locking knob (Fig. 11 - 2). This locks the blade in place. Close the side panel (Fig. 10 - 2).
3. Insert the top of the blade into the top clamp. Tighten the top blade locking knob (Fig. 11 - 1).
4. Rotate the tension knob (Fig. 10 - 1) away from you to apply tension.



TIP: A properly-tensioned blade will make a high-C sound (C6, 1047 Hz) when plucked with a finger.

BLADE TIPS AND TRICKS

1. You may need to adjust the blade tension. New blades, especially thin ones, will stretch once installed, and may need more tension applied. Use the numbers on the tension knob as a rough guide. 1 represents no tension, 5 represents the most tension. Practice cutting scrap material with various blade thicknesses and types to get familiar with what settings give you the best results.
2. If you are breaking blades frequently, use a lower tension setting.
3. To prolong the life of your blade (and your scroll saw), reduce tension on the blade when you are not using the saw, or remove the blade altogether.

OPERATION

RECOMMENDATIONS FOR CUTTING

A scroll saw is basically a curve-cutting machine. It can also be used for straight cutting and beveling or angle cutting operations. Please read and understand the following directions before attempting to use the saw.

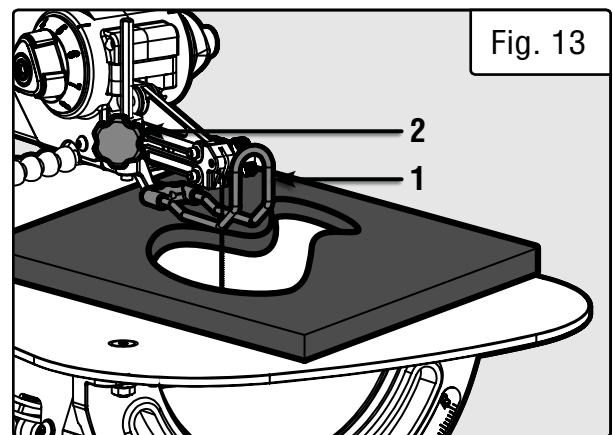
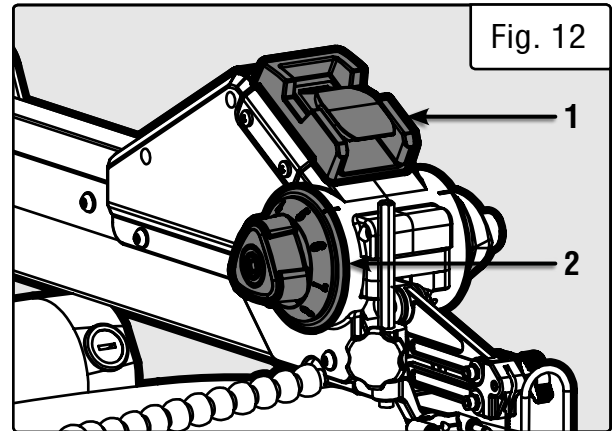
1. When feeding the workpiece into the blade, do not force it against the blade. This could cause blade deflection and poor cutting performance. Let the tool do the work.
2. The blade teeth cut material **ONLY** on the down stroke. Ensure the blade teeth point downwards.
3. Guide the wood into the blade slowly. Again, let the tool do the work.
4. There is a learning curve for each person using this saw. During that period, expect some blades to break as you get the hang of using the saw.
5. Best results are achieved when cutting wood one inch thick or less.
6. When cutting wood thicker than one inch, guide the wood 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 the blades must be replaced frequently for best cutting results. Scroll saw blades generally stay sharp for 1/2 hour to 2 hours of cutting, depending on the type of cut, wood species, etc.
8. To get accurate cuts, be prepared to compensate for the blade's tendency to follow the wood grain.
9. This scroll saw is primarily designed to cut wood or wood products. For cutting precious and non-ferrous metals, the variable control switch must be set at very slow speeds.
10. When choosing a blade, use very fine, narrow blades to scroll cut in thin wood 1/4" thick or less. Use wider blades for thicker materials. This, however, will reduce the ability to cut tight curves.
11. Blades wear down faster when cutting plywood or very abrasive particle board. Angle cutting in hardwoods also wears blades down faster.
12. Before cutting, adjust the blade guard to sit just above the workpiece. This will help you maintain better control over the workpiece.

OPERATION

POWER SWITCH & SPEED CONTROL KNOB

Always wait for the saw to come to a complete stop before restarting.

1. To turn the saw on, flip the ON/OFF switch (Fig. 12 - 1) to ON. When first starting the saw, it is best to move the speed control knob (Fig. 12 - 2) to the middle speed position.
2. Adjust the blade speed to the desired setting between 550 to 1600 strokes per minute (SPM). Turning the control knob away from you increases speed; turning it towards you reduces speed. Use the numbers on the knob as a reference. 1 represents the minimum speed; 8 represents the maximum.
3. To turn the saw off, flip the ON/OFF switch back to OFF.



⚠ WARNING! To avoid injury from accidental start-ups, always turn the switch OFF and unplug the scroll saw before moving the saw, replacing the blade, or making adjustments.

FREEHAND CUTTING

1. Lay out desired design, or secure design to the workpiece.
2. Raise the blade guard foot (Fig. 13 - 1) by loosening the height adjustment knob (Fig. 13 - 2).
3. Position the workpiece against the blade and place the blade guard foot just above the top surface of the workpiece.
4. Secure the blade guard foot (Fig. 13 - 1) by tightening the height adjustment knob (Fig. 13 - 2).
5. Remove the workpiece from the blade prior to turning the scroll saw ON.

⚠ CAUTION! Always make sure the blade is not in contact with the workpiece before turning the saw ON.

6. Slowly feed the workpiece into the blade while holding the workpiece securely against the table.

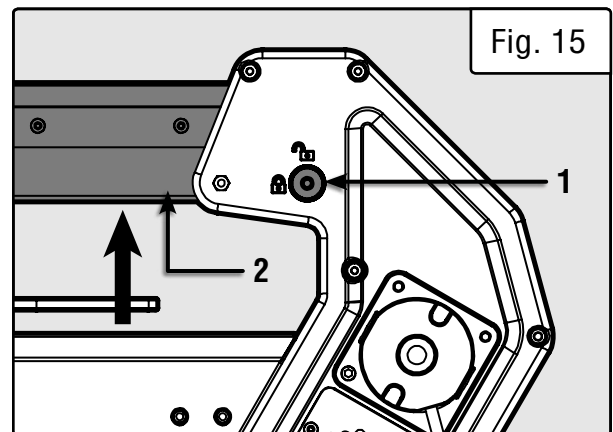
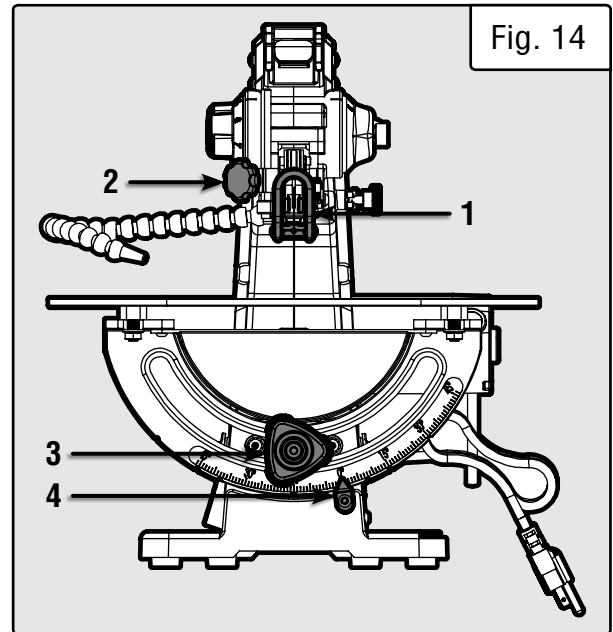
⚠ CAUTION! Do not force the leading edge of the workpiece into the blade. The blade will deflect, reducing accuracy of cut, and may break

7. When cutting is complete, move trailing edge of the workpiece beyond the blade guard foot. Turn the switch OFF.

OPERATION

ANGLE CUTTING (BEVELING)

1. Layout or secure design to workpiece.
 2. Loosen the height adjustment knob (Fig. 14 - 2), move the blade guard foot (Fig. 14 - 1) to the highest position, and retighten the knob.
 3. Tilt the table to the desired angle by loosening the table bevel lock knob (Fig. 14 - 3). Move the table to the proper angle using the degree scale and the pointer (Fig. 14 - 4).
- TIP:** The table has positive stops at 0, 22.5, 30, and 45 degrees.
4. Tighten the table bevel lock knob (Fig. 14 - 3).
 5. Loosen the blade guard screw, and tilt the blade guard (Fig. 14 - 1) to the same angle as the table. Retighten the blade guard screw. (See also Fig. 6 on p. 11.)
 6. Position the workpiece on the right side of the blade. Lower the blade guard foot against the surface by loosening the height adjustment knob. Retighten.
 7. Follow steps 5 to 7 under Freehand cutting.



INTERIOR CUTTING & FRETWORK

1. Lay out the design on the workpiece. Drill a 1/4" pilot hole in the workpiece.
2. Remove the blade. See "Blade removal and installation" on p. 13.

NOTE: If you are not changing blades, only remove the blade from the upper blade clamp. Leave it installed in the lower blade clamp. If you are changing blades, install the new blade in the lower blade clamp. Do not secure it in the upper blade clamp yet.


3. Pull the upper arm release knob (Fig. 15 - 1) outward, and turn it clockwise so the pin rests in the shallow groove.
4. Gently press up on the upper arm (Fig. 15 - 2) of the saw to raise it.
5. Place the workpiece on the saw table, threading the blade through the hole in the workpiece.
6. Lower the upper arm. Pull the upper arm release knob outward, and turn it back so it rests in the deep groove. This will lock the upper arm in place. Gently press up on the upper arm to make sure it is locked in place.
7. Secure the blade in the upper blade clamp, as directed in "Installing the Blade" on p. 13.
8. Follow steps 4 - 7 under "Freehand cutting" on p. 15.
9. When finished making the interior cuts, turn the scroll saw OFF and unplug it. Relieve blade tension and remove the blade from the upper blade clamp. Raise the upper arm and remove the workpiece. Lower the upper arm and lock it in place.

OPERATION

RIP OR STRAIGHT LINE CUTTING

You will need a straight edge and a clamp (not included).

1. Raise the blade guard foot (Fig. 16 - 1) by loosening the height adjustment knob (Fig. 16 - 2).
2. Measure from the tip of the blade to the desired distance. Position the straight edge parallel to the blade at that distance.
3. Clamp the straight edge to the table.
4. Recheck your measurements using the workpiece to be cut and make sure the straight edge is secure.
5. Position the workpiece against the blade and place the blade guard foot against the top surface of the workpiece.
6. Secure the blade guard foot in place by tightening the height adjustment knob.
7. Remove the workpiece from the blade prior to turning the scroll saw ON.

 **CAUTION!** In order to avoid uncontrollable lifting of the workpiece and reduce blade breakage, do not turn the switch on while the workpiece is against the blade.

8. Position the workpiece against the straight edge prior to touching the leading edge of the workpiece against the blade.
9. Slowly feed the workpiece into the blade, guiding the workpiece against the straight edge and pressing the workpiece down against the table.

 **CAUTION!** Do not force the leading edge of the workpiece into the blade. The blade will deflect, reducing the accuracy of the cut, and may even break.

10. When the cut is complete, move trailing edge of the workpiece beyond the blade guard foot. Turn the switch OFF.

MAINTENANCE

⚠ WARNING! Always turn the switch OFF and unplug the power cord from the outlet before maintaining or lubricating the scroll saw.

To ensure that the wood glides smoothly across the work surface, periodically apply a coat of paste wax (sold separately) to the surface of the worktable. If the power cord is worn out or damaged in any way, replace it immediately. Do not attempt to oil the motor bearings or service the motor's internal parts.

CARBON BRUSH REPLACEMENT

The wear on the carbon brushes depends on how frequently and how heavily the tool is used. To maintain maximum efficiency of the motor, we recommend inspecting the two carbon brushes every 60 hours of operation or when the tool stops working. New carbon brushes are available for purchase.

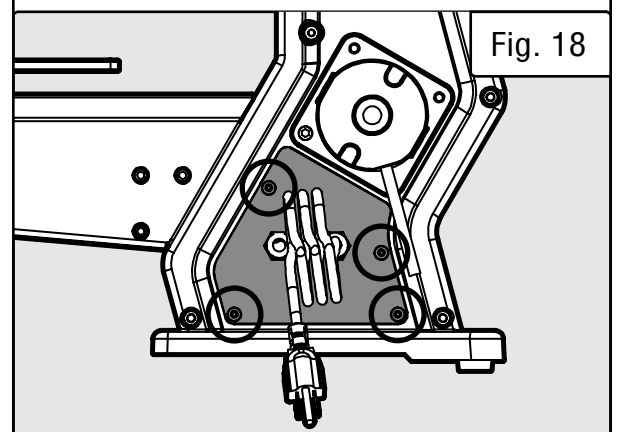
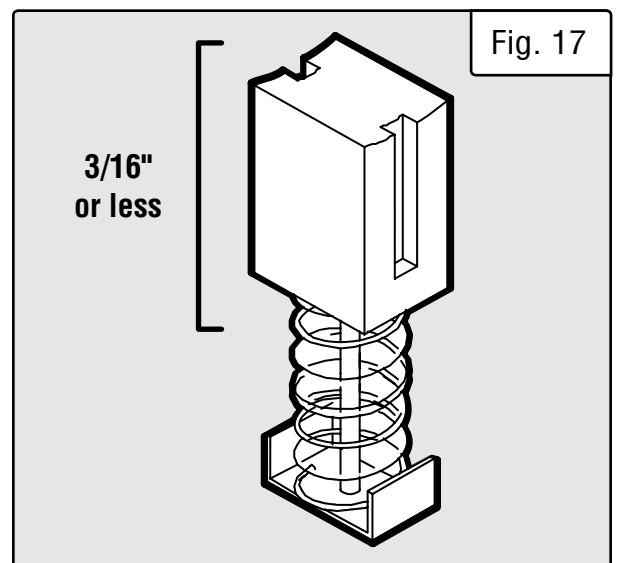
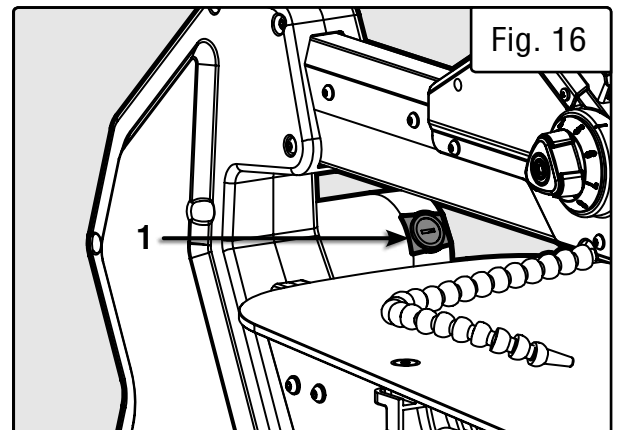
1. Unplug the saw. To access the carbon brushes, remove the carbon brush cover (Fig. 16 - 1) with a flat-head screwdriver (not included).
2. Carefully remove the old carbon brushes. Keep track of which orientation the old carbon brushes were in to prevent unnecessary wear if they will be reinstalled.
3. Measure the length of the brushes. Install the new set of carbon brushes if either carbon brush length is worn down to 3/16" or less. Reinstall the old carbon brushes (in their original orientation) if your brushes are not worn down to 3/16" or less. Both carbon brushes should be replaced at the same time (Fig. 17).
4. Replace the carbon brush cover.

NOTE: New carbon brushes tend to spark for a few minutes during the first use as they wear down.

OVERLOAD PROTECTION

Your scroll saw is equipped with a 5A fuse to protect the motor and electronics. If your scroll saw stops operating, turn off and unplug the saw. To check for a blown fuse:

1. Remove four screws from circuit board cover. Remove cover.
2. Gently slide the circuit board out.
3. Flip up the cover on the fuse compartment (black box on the right side of the board). See Fig. 18.
4. Remove fuse. Replace it with an identical 5A, 250V glass fuse, 5mm x 20mm.
5. Replace the fuse. Follow steps 1 – 3 in reverse to re-assemble the saw.



MAINTENANCE

 **WARNING!** Always turn the switch OFF and unplug the power cord from the outlet before maintaining or lubricating the scroll saw.

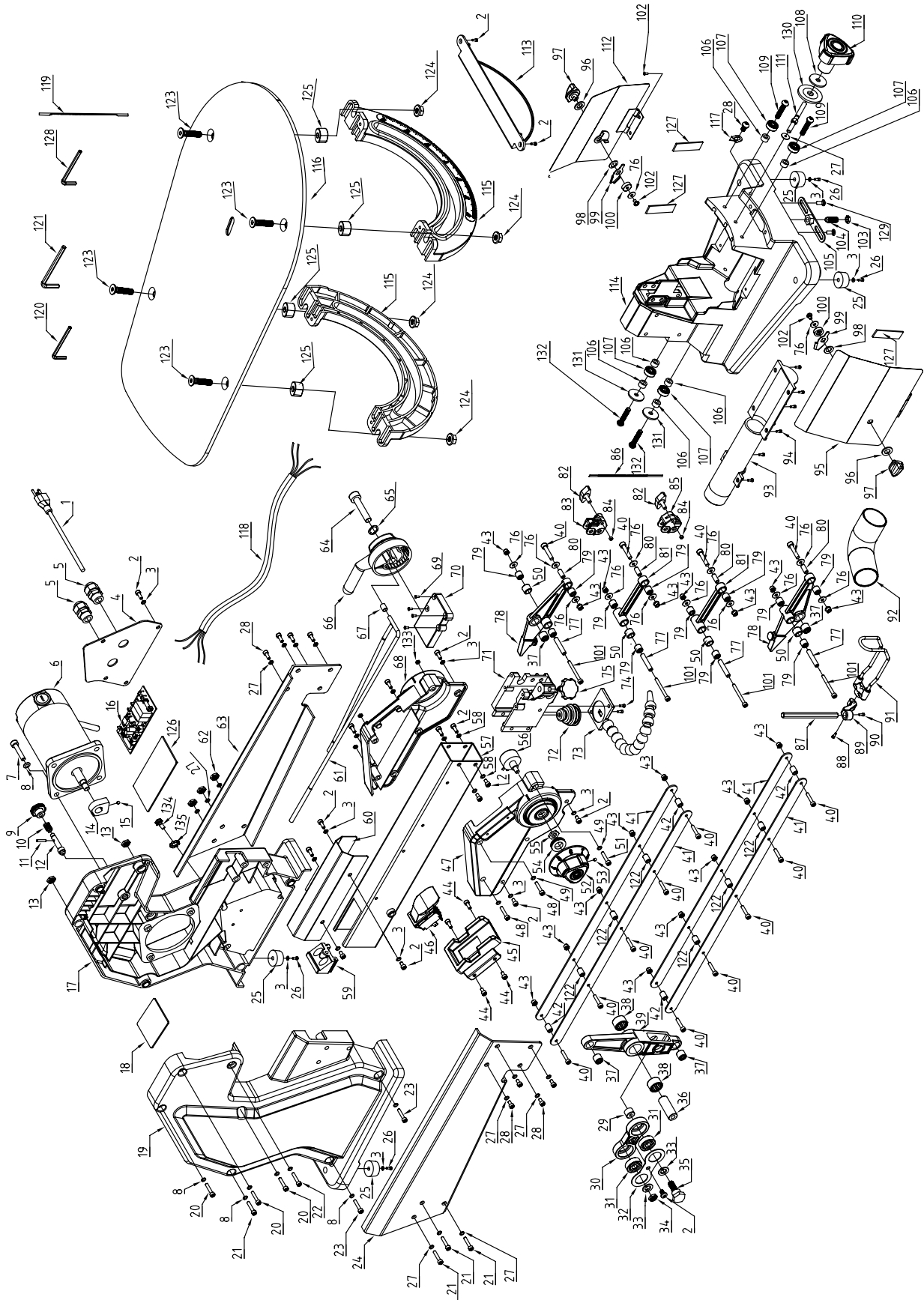
GENERAL MAINTENANCE

1. Clean your saw after each use. Wipe it down with a soft cloth. Clean any accumulated sawdust out of the base. Use low-pressure compressed air (not to exceed 25 PSI) to blow any sawdust out of the blade holders, blade bevel rails, etc.
2. If desired, apply a light coat of dry lubricant (such as PTFE) to the inside of the blade bevel rails. This will help the table bevel smoothly.
3. The motor bearings, interior bearings, and table bevel rail bearings are all sealed and require no additional lubrication.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	SOLUTION
Motor will not start.	1. Machine not plugged in.	1. Plug unit into power source.
	2. Incorrect size of extension cord.	2. Choose the proper size and length of extension cord.
	3. Worn carbon brushes.	3. Replace carbon brushes; see p. 18.
	4. Blown fuse on main PCB.	4. Replace fuse.
	5. Defective power switch, PCB, or motor.	5. Contact customer service
Variable speed does not work.	1. Defective potentiometer (LL2156-055).	1. Contact customer service
	2. Defective PCB.	2. Contact customer service
Dust collection ineffective.	1. Side panel open.	1. Make sure side panel is closed for optimum dust collection.
	2. Dust collection system not strong enough.	2. Use a stronger system, or reduce the length of the dust collection hose.
	3. Broken/blocked blower bellows or line.	3. Contact customer service a
Excessive vibration.	1. Machine speed set at a harmonic frequency of the saw.	1. Adjust speed up or down to see if issue is resolved.
	2. Machine not secured to work surface.	2. Secure machine to work surface.
	3. Incorrect blade tension.	3. Adjust blade tension (see p. 13).
	4. Hold-down foot not being used.	4. Adjust hold-down foot to slightly clear workpiece surface when cutting.
	5. Loose fastener.	5. Check machine for loose fasteners.
	6. Defective bearing.	6. Contact customer service
Blades keep breaking.	1. Blade tension set too high.	1. Reduce blade tension; see p. 13.
	2. Incorrect blade size.	2. Use a larger (thicker) blade more suitable for the job at hand.
	3. Incorrect blade tooth pitch.	3. Choose a blade with more or fewer teeth per inch (TPI); a minimum of 3 teeth should contact workpiece at all times.
	4. Excessive pressure on blade.	4. Reduce pressure on blade. Let the tool do the work.
Blade drift, or otherwise poor cuts.	1. Excessive pressure on blade.	1. Reduce pressure on blade. Let the tool do the work.
	2. Blade mounted upside-down.	2. Mount blade with teeth pointing down (towards work table).
Tension mechanism does not work.	1. Broken tension linkage or knob.	1. Contact customer service

EXPLODED VIEW & PARTS LIST



NOTE: Not all parts may be available for purchase. Parts and accessories that wear down over the course of normal use are not covered under the warranty.

EXPLODED VIEW & PARTS LIST

No.	Description	Qty.
1	Power Cord	1
2	Socket Head Pan Screw, M5x8	21
3	Flat Washer, 5mm	18
4	Circuit Board Cover	1
5	Power Cord Strain Relief	2
6	Motor	1
N.P.	Carbon Brush (set of 2)	1
7	Socket Head Cap Screw, M6x20	4
8	Lock Washer, 6mm	11
9	Arm Locking Knob	1
10	Arm Lock Spring	1
11	Spring Pin	1
12	Arm Lock	1
13	Nut, M6	7
14	Eccentric Wheel	1
15	Set Screw, M6x10	1
16	PCB	1
17	Right Rear Housing	1
18	Tension Plate	1
19	Left Rear Housing	1
20	Socket Head Pan Screw, M6x50	3
21	Socket Head Pan Screw, M6x70	4
22	Socket Head Pan Screw, M6x65	1
23	Socket Head Pan Screw, M6x80	2
24	Left Support Plate	1
25	Rubber Foot	4
26	Screw, M5x16	4
27	Flat Washer, 6mm	15
28	Socket Head Pan Screw, M6x12	9
29	Bushing	1
30	Connecting Rod	1

No.	Description	Qty.
31	Bearing, 628-2Z	2
32	Connecting Rod Cover Plate	1
33	Lock Washer, 8mm	2
34	Nut, M8	1
35	Crankshaft Bolt	1
36	Rocker Arm Shaft	1
37	Bearing, HK0810	4
38	Bearing, HK1412	2
39	Drive Rocker Arm	1
40	Screw, M4x20	14
41	Drive Linkage	4
42	Bearing Sleeve	4
43	Nut, M4	18
44	Self-tapping Screw, ST4.2x10	4
45	Switch Plate	1
46	Switch	1
47	Left Switch Housing	1
48	Screw, M4x50	2
49	Flat Washer, 4mm	3
50	Bearing Cushion	4
51	Screw, M4x40	1
52	Speed Knob	1
53	Screw, M5x8	1
54	Rubber Bushing	1
55	Potentiometer	1
56		
57	Arm	1
58	Lock Washer, 5mm	4
59	Tension Block	1
60	Arm Cover	1
61	Tension Rod	1
62	Nut, M6	3
63	Right Support Plate	1
64	Socket Head Cap Screw, M10x40	1
65	Wavy Washer, 10mm	1
66	Tension Knob	1

EXPLODED VIEW & PARTS LIST

No.	Description	Qty.
67	Tension Bushing	1
68	Right Switch Housing	1
69	Screw M4X20	4
70	Tension Rod Plate	1
71	Upper Housing	1
72	Bellows	1
73	Blower	1
74	Screw, M4x10	2
75	Blade Guard Locking Knob	1
76	Washer, 4mm	14
77	Bearing Sleeve A	4
78	Front Rocker Arm	2
79	Bearing, HK0609	12
80	Bearing Sleeve B	4
81	Front Pusher Arm	2
82	Blade Locking Knob	2
83	Upper Blade Clamp	1
84	Set Screw	2
85	Lower Blade Clamp	1
86	Blade, 15TPI, Pinless	1
87	Blade Guard Shaft	1
88	Screw, M5x20	1
89	Blade Guard Seat	1
90	Screw, M4x12	1
91	Blade Guard	1
92	Dust Port Adapter	1
93	Dust Port	1
94	Screw, M5x10	6
95	Left Panel Assembly	1
96	Flat Washer, 8mm	2
97	Side Panel Knob	2
98	Wavy Washer, 12.5mm	2
99	Door Latch	2
100	Guide Sleeve	2
101	Screw, M4x40	4
102	Screw, M4x12	6
103	Nut, M8	1

No.	Description	Qty.
104	Screw, M8x20	1
105	Positive Stop Positioning Plate	1
106	Bearing Spacer	6
107	Bearing, 606-2Z	4
108	Bearing Washer	1
109	Screw, M6x25	2
110	Bevel Locking Knob	1
111	Bevel Locking Knob Stud	1
112	Right Panel Assembly	1
113	Front Guard	1
114	Base	1
115	Table Bevel Rail	2
116	Table	1
117	Pointer	1
118	Wiring Harness	1
119	Blade, 18TPI, Pinless	1
120	Hex Wrench, 2.5mm	1
121	Hex Wrench, 4mm	1
122	Roller	6
123	Flat Hex Head Screw, M8x35	4
124	Nut, M8	4
125	Table Damper	4
126	Foam Pad	1
127	Panel Cushion	4
128	Hex Wrench, 3mm	1
129	Screw, M6x12	2
130	Front Rail Plastic Washer	1
131	Rear Rail Plastic Washer	2
132	Screw, M6x35	2
133	Nut, M4	3
134	Grounding Screw & Washer	1
135	Toothed Lock Washer	1

We Importer:

TOOLSAVE LTD

Unit C, Manders Ind. Est.,
Old Heath Road, Wolverhampton,
WV1 2RP.

Declare that the product:

Designation: PROFESSIONAL 20" SCROLL SAW

Model: SS533V

Complies with the following Directives:

Electromagnetic Compatibility Directive - **2004/108/EC**

Machine Directive - **2006/42/EC**

Restrictions of the use of Hazardous Substances in Electrical Equipment - **2011-65/EU**

Waste Electrical and Electronic Equipment - **2012/19/EU**

Standards & technical specifications referred to:

EN 61029-1:2009+A11

Authorized Technical File Holder: Bill Evans

18/08/2023

The Director



