

16" VS Scroll Saw



Operator's Manual



Record the serial number and date of purchase in your manual for future reference.

The serial number can be found on the specification label on the rear of your machine.

Serial Number: _____ Date of purchase: _____

For technical support or parts questions, email techsupport@rikontools.com or call toll free at (877) 884-5167

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SPECIFICATIONS

Motor Amps, Volts, Hertz	1.2 A (1/8HP), 120 V, 60 Hz
Electronic Variable Speed (SPM)	550 - 1,650
Blade Length	5"
Cutting Height Maximum	2"
Stroke	19/32"
Throat Depth	15-3/4"
Table Size (WxD)	10-1/16" x 16-5/16"
Table Tilting	0° - 45° Left
Dust Port Diameter	1-3/8"
Maximum Sound Level (idle)	<76dB
Rotary Flex Shaft Speed (RPM)	3,300 - 10,000
Overall Size (HxWxD).....	14-15/16" x 12-9/16" x 29-3/4"
Base Size (approx.)	9" x 15-1/2"
Net Weight	26.4 lbs

SAVE THESE INSTRUCTIONS.

Refer to them often.

NOTE: The specifications, photographs, drawings and information in this manual represent the current model when the manual was prepared. Changes and improvements may be made at any time, with no obligation on the part of Rikon Power Tools, Inc. to modify previously delivered units. Reasonable care has been taken to ensure that the information in this manual is correct, to provide you with the guidelines for the proper safety, assembly and operation of this machine.

SAFETY INSTRUCTIONS

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. **The following instructions must be followed at all times.** Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

There are certain applications for which this tool was designed. We strongly recommend that this tool not be modified and/or used for any other application other than that for which it was designed. If you have any questions about its application, do not use the tool until you have contacted us and we have advised you.

SAFETY SYMBOLS



SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, or CAUTION. This symbol may be used in conjunction with other symbols or pictographs.



Indicates an imminently hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.



Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE: Shown without Safety Alert Symbol indicates a situation that may result in property damage.

GENERAL SAFETY

KNOW YOUR POWER TOOL. Read the owner's manual carefully. Learn the tool's applications, work capabilities, and its specific potential hazards.

BEFORE USING YOUR MACHINE

To avoid serious injury and damage to the tool, read and follow all of the Safety and Operating Instructions before operating the machine.

1. Some dust created by using power tools contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Some examples of these chemicals are:

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

Your risk from these exposures varies, depending on 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.

2. **READ** the entire Owner's Manual. **LEARN** how to use the tool for its intended applications.

3. **GROUND ALL TOOLS.** If the tool is supplied with a 3 prong plug, it must be plugged into a 3-contact electrical receptacle. The 3rd prong is used to ground the tool and provide protection against accidental electric shock. **DO NOT** remove the 3rd prong. See Grounding Instructions on the following pages.

4. **AVOID A DANGEROUS WORKING ENVIRONMENT.** **DO NOT** use electrical tools in a damp environment or expose them to rain.

5. **DO NOT** use electrical tools in the presence of flammable liquids or gasses.

6. **ALWAYS** keep the work area clean, well lit, and organized. **DO NOT** work in an environment with floor surfaces that are slippery from debris, grease, and wax.

7. **KEEP VISITORS AND CHILDREN AWAY. DO NOT** permit people to be in the immediate work area, especially when the electrical tool is operating.

8. **DO NOT FORCE THE TOOL** to perform an operation for which it was not designed. It will do a safer and higher quality job by only performing operations for which the tool was intended.

9. **WEAR PROPER CLOTHING. DO NOT** wear loose clothing, gloves, neckties, or jewelry. These items can get caught in the machine during operations and pull the operator into the moving parts. The user must wear a protective cover on their hair, if the hair is long, to prevent it from contacting any moving parts.

10. **CHILDPROOF THE WORKSHOP AREA** by removing switch keys, unplugging tools from the electrical receptacles, and using padlocks.

11. **ALWAYS UNPLUG THE TOOL FROM THE ELECTRICAL RECEPTACLE** when making adjustments, changing parts or performing any maintenance.

SAFETY INSTRUCTIONS

12. KEEP PROTECTIVE GUARDS IN PLACE AND IN WORKING ORDER.

13. AVOID ACCIDENTAL STARTING. Make sure that the power switch is in the “OFF” position before plugging in the power cord to the electrical receptacle.

14. REMOVE ALL MAINTENANCE TOOLS from the immediate area prior to turning “ON” the machine.

15. USE ONLY RECOMMENDED ACCESSORIES. Use of incorrect or improper accessories could cause serious injury to the operator and cause damage to the tool. If in doubt, check the instruction manual that comes with that particular accessory.

16. NEVER LEAVE A RUNNING TOOL UNATTENDED. Turn the power switch to the “OFF” position. **DO NOT** leave the tool until it has come to a complete stop.

17. DO NOT STAND ON A TOOL. Serious injury could result if the tool tips over, or you accidentally contact the tool.

18. DO NOT store anything above or near the tool where anyone might try to stand on the tool to reach it.

19. MAINTAIN YOUR BALANCE. DO NOT extend yourself over the tool. Wear oil resistant rubber soled shoes. Keep floor clear of debris, grease, and wax.

20. MAINTAIN TOOLS WITH CARE. Always keep tools clean and in good working order. Keep all blades and tool bits sharp, dress grinding wheels and change other abrasive accessories when worn.

21. EACH AND EVERY TIME, CHECK FOR DAMAGED PARTS PRIOR TO USING THE TOOL. Carefully check all guards to see that they operate properly, are not damaged, and perform their intended functions. Check for alignment, binding or breaking of moving parts. A guard or other part that is damaged should be immediately repaired or replaced.

22. DO NOT OPERATE TOOL WHILE TIRED, OR UNDER THE INFLUENCE OF DRUGS, MEDICATION OR ALCOHOL.

23. SECURE ALL WORK. Use clamps or jigs to secure the work piece. This is safer than attempting to hold the work piece with your hands.

24. STAY ALERT, WATCH WHAT YOU ARE DOING, AND USE COMMON SENSE WHEN OPERATING A POWER TOOL.

A moment of inattention while operating power tools may result in serious personal injury.

25. ALWAYS WEAR A DUST MASK TO PREVENT INHALING DANGEROUS DUST OR AIRBORNE PARTICLES, including wood dust, crystalline silica dust and asbestos dust. Direct particles away from face and body. Always operate tool in well ventilated area and provide for proper dust removal. Use dust collection system wherever possible. Exposure to the dust may cause serious and permanent respiratory or other injury, including silicosis (a serious lung disease), cancer, and death. Avoid breathing the dust, and avoid prolonged contact with dust. Allowing dust to get into your mouth or eyes, or lay on your skin may promote absorption of harmful material. Always use properly fitting NIOSH/OSHA approved respiratory protection appropriate for the dust exposure, and wash exposed areas with soap and water.

26. USE A PROPER EXTENSION CORD IN GOOD CONDITION. When using an extension cord, be sure to use one heavy enough to carry the current your product will draw. The table on the following page shows the correct size to use depending on cord length and nameplate amperage rating. If in doubt, use the next heavier gauge. The smaller the gauge number, the larger diameter of the extension cord. If in doubt of the proper size of an extension cord, use a shorter and thicker cord. An undersized cord will cause a drop in line voltage resulting in a loss of power and overheating.
USE ONLY A 3-WIRE EXTENSION CORD THAT HAS A 3-PRONG GROUNDING PLUG AND A 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL’S PLUG.

27. ADDITIONAL INFORMATION regarding the safe and proper operation of this product is available from:

- Power Tool Institute
1300 Summer Avenue
Cleveland, OH 44115-2851
www.powertoolinstitute.org
- National Safety Council
1121 Spring Lake Drive
Itasca, IL 60143-3201
www.nsc.org
- American National Standards Institute
25 West 43rd Street, 4th Floor
New York, NY 10036
www.ansi.org
- ANSI 01.1 Safety Requirements for Woodworking Machines and the U.S. Department of Labor regulations
www.osha.gov

28. SAVE THESE INSTRUCTIONS. Refer to them frequently and use them to instruct others.

SAFETY INSTRUCTIONS

ELECTRICAL SAFETY

⚠ WARNING: THIS TOOL MUST BE GROUNDED WHILE IN USE TO PROTECT THE OPERATOR FROM ELECTRIC SHOCK.

IN THE EVENT OF A MALFUNCTION OR BREAKDOWN, grounding provides the path of least resistance for electric current and reduces the risk of electric shock. This tool is equipped with an electric cord that has an equipment grounding conductor and requires a grounding plug (not included). The plug **MUST** be plugged into a matching electrical receptacle that is properly installed and grounded in accordance with **ALL** local codes and ordinances.

DO NOT MODIFY ANY PLUG. If it will not fit the electrical receptacle, have the proper electrical receptacle installed by a qualified electrician.

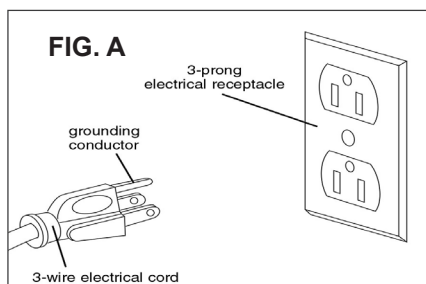
IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or replacement of the electric cord or plug is necessary.

CHECK with a qualified electrician or service personnel if you do not completely understand the grounding instructions, or if you are not sure the tool is properly grounded when installing or replacing a plug.

USE ONLY A 3-WIRE EXTENSION CORD THAT HAS THE PROPER TYPE OF A 3-PRONG GROUNDING PLUG THAT MATCHES THE MACHINE'S 3-PRONG PLUG AND ALSO THE 3-POLE RECEPTACLE THAT ACCEPTS THE TOOL'S PLUG. *

REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.

This tool is intended for use on a circuit that has an electrical receptacle as shown in **FIGURE A**. It shows a 3-wire electrical plug and electrical receptacle that has a grounding conductor. If a properly grounded electrical receptacle is not available, an adapter as shown in **FIGURE B** can be used to temporarily connect this plug to a 2-contact ungrounded receptacle. The adapter has a rigid lug extending from it that **MUST** be connected to a permanent earth ground, such as a properly grounded receptacle box. **THIS ADAPTER IS PROHIBITED IN CANADA.**



EXTENSION CORDS

⚠ WARNING: THE USE OF AN EXTENSION CORD WITH THIS MACHINE IS NOT RECOMMENDED. For best power and safety, plug the machine directly into a dedicated, grounded electrical outlet that is within the supplied cord length of the machine.

If an extension cord needs to be used, it should only be for a limited operation of the machine. The extension cord should be as short as possible in length, and have a minimum gauge size of 14AWG.

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

Use a proper extension cord. Only use cords listed by Underwriters Laboratories (UL). Other extension cords can cause a drop in line voltage, resulting in a loss of power and overheating of tool. When operating a power tool outdoors, use an outdoor extension cord marked "W-A" or "W". These cords are rated for outdoor use and reduce the risk of electric shock.

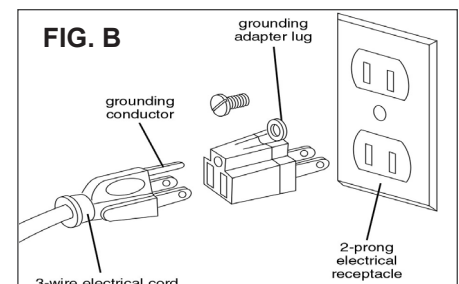
MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

120 VOLT OPERATION ONLY				
	25' LONG	50' LONG	100' LONG	150' LONG
0 to 6 Amps	18 AWG	16 AWG	16 AWG	14 AWG
6 to 10 Amps	18 AWG	16 AWG	14 AWG	12 AWG
10 to 12 Amps	16 AWG	16 AWG	14 AWG	12 AWG

⚠ WARNING: Keep the extension cord clear of the working area. Position the cord so that it will not get caught on lumber, tools or other obstructions while you are working with your power tool.

* Canadian electrical codes require extension cords to be certified SJT type or better.

** The use of an adapter in Canada is not acceptable.



SAFETY INSTRUCTIONS


SPECIFIC SAFETY INSTRUCTIONS FOR SCROLL SAWS

This machine is intended for the cutting of natural, solid woods, plywoods, composites, plastics and soft metals with the appropriate blades and safety precautions taken. The permissible workpiece dimensions must be observed (see Technical Specification). Any other use not as specified, including modification of the machine or use of parts not tested and approved by the equipment manufacturer can cause unforeseen damage, and invalidate the warranty.

ATTENTION: Use of this scroll saw still presents risks that cannot be eliminated by the manufacturer. Therefore, the user must be aware that wood working machines are dangerous if not used with care and all safety precautions are adhered to.

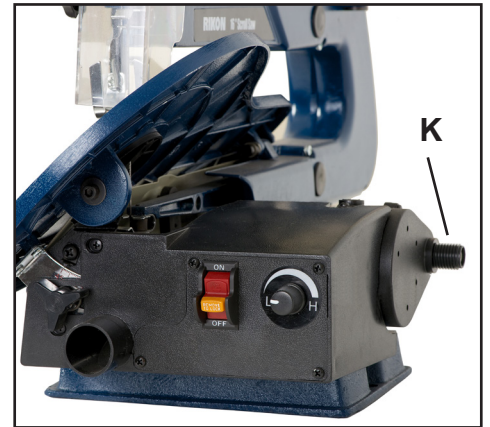
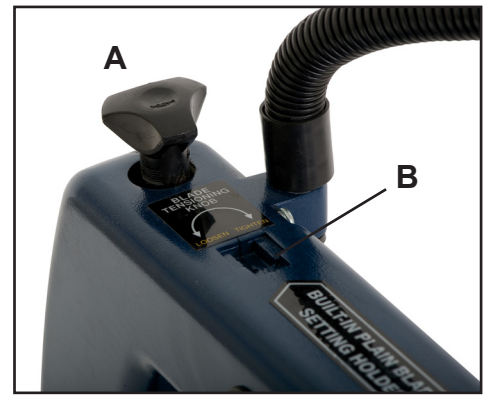
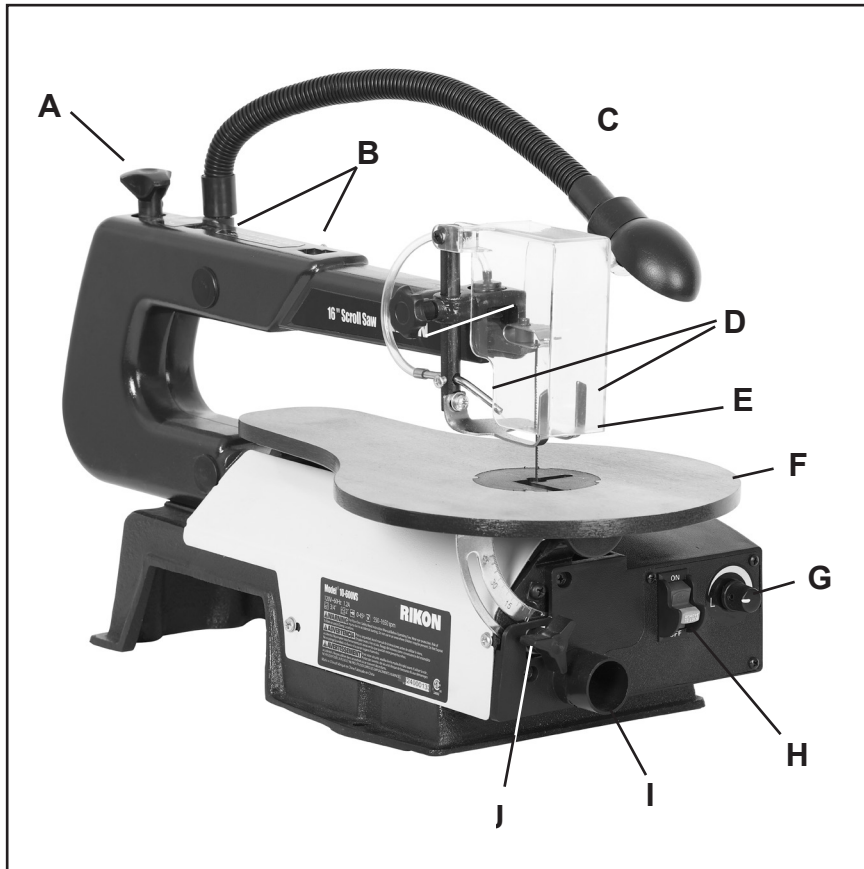
1. Do not operate this machine until you have read all of the following instructions.
2. Do not attempt to operate this machine until it is completely assembled.
3. Do not carry the saw by the upper, flexing arm, table assembly or light, as damage to the machine may result.
4. Do not turn ON this machine if any pieces are damaged, missing, out of alignment or binding. Repair any such issues immediately to prevent damage to the machine or the operator.
5. This machine is intended for inside use. Do not use in damp or wet locations. Saw must be properly grounded.
6. Secure the saw to the work bench or a stand with mounting hardware or clamps to prevent it from moving during use.
7. If you are not familiar with the operation of the machine, obtain assistance from a qualified person.
8. Always wear approved, safety protective eye wear and hearing protection when operating this machine.
9. Always wear a dust mask and use adequate dust collection and proper ventilation.
10. Do not wear loose clothing or jewelry when operating this machine. Keep long hair tied back.
11. Always make sure the power switch is in the OFF position prior to plugging in the machine.
12. Always make sure the power switch is in the OFF position and the machine is unplugged when doing any cleaning, assembly, setup operation, or when not in use.
13. Make sure all safety guards, hold downs and hardware are securely tightened before operating the machine.
14. Regularly check that the blade is locked tight in the blade holders and properly tensioned.
15. Always keep hands and fingers away from the blade to prevent injury.
16. Make sure there are no loose knots, nails, staples, dirt or foreign objects in the pieces to be cut.
17. The material hold-down foot must be properly set on the work piece at all times for safe and efficient cutting action.
18. Feed the work directly into the front of the blade. For sharp, curved cuts, advance the work slowly and let the blade cut the material path to prevent binding in the restricted area. Do not force stock into the blade. The saw will operate better and more safely when working at a proper rate for the material being cut.
19. Avoid awkward operations and hand positions where a sudden slip could cause fingers or a hand to move into the saw blade. Do not cut stock that does not have a flat, bottom surface unless a suitable support is used.
20. Do not clear a jammed work piece while the machine is running. Stop the machine, unplug it from the power source, and then remove the jammed work piece. Releasing the blade may be necessary to dislodge the work piece.
21. Replace dull blades immediately for proper cutting action, and as injury to the user, or the machine, may result.
22. Maintain tools with care. Keep cutting tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Keep handles dry-clean and free from oil and grease.
23. Remove material, tools or debris from the work area. Keep work area neat and clean.

This owner's manual is not a teaching aid and is intended to show assembly, adjustments, and general use.

 **WARNING:** Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Your risk from exposure to these chemicals varies, depending on how often you do this type of work. To reduce your exposure, work in a well-ventilated area and with approved safety equipment, such as dust masks that are specially designed to filter out microscopic particles.

For more information go to www.P65Warnings.ca.gov/wood.

GETTING TO KNOW YOUR MACHINE



A	Blade Tension Adjustment Knob	G	Variable Speed Dial
B	Pinless Blade Setting Gauge	H	On / Off Safety Switch
C	Adjustable Light	I	Dust Port
D	Work Piece Holder & Shavings Blower	J	Table Locking Knob & Angle Tilt Scale
E	Blade Guard	K	Flex Shaft Connection
F	Work Table		

CONTENTS OF PACKAGE

The model # 10-600VS 16" Scroll Saw is shipped complete in one box.

Unpacking and Clean-up

1. Carefully remove all contents from the shipping carton. Compare the contents with the list of contents to make sure that all of the items are accounted for, before discarding any packing material. Place parts on a protected surface for easy identification and assembly.

If any parts are missing or broken, please call RIKON Customer Service (877- 884-5167) as soon as possible for replacements. DO NOT turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.





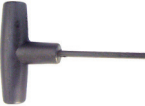
2. Report any shipping damage to your local distributor. Take photographs for any possible insurance claims.

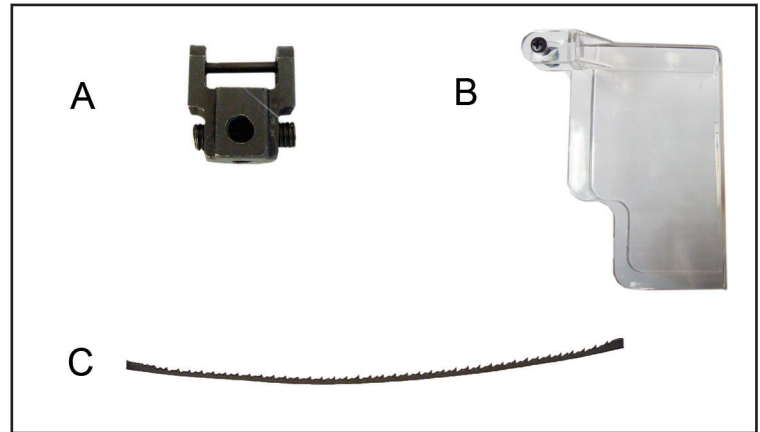
3. Clean all rust protected surfaces with ordinary house hold type grease or spot remover. Do not use; gasoline, paint thinner, mineral spirits, etc. These may damage painted surfaces. Wipe all parts thoroughly with a clean dry cloth.

4. Set packing material and shipping carton aside. Do not discard until the machine has been set up and is running properly.

CONTENTS OF PACKAGE

LIST OF LOOSE PARTS

Item	Description	Qty
A	Pinless Blade Holder	2
B	Safety Blade Guard	1
C	Pinless Blade	1
D		
	Hex Nut M5	2
	Washer 5 mm	1
	Lock Washer 5mm	1
	Screw M5x25	1
	L Wrench	1
	Scroll Saw Assembly (not shown)	1



When unpacking, check to make sure the following parts are included. If any parts are missing or broken, please call RIKON Customer Service (877- 884-5167) as soon as possible for replacements. **DO NOT** turn your machine ON if any of these items are missing. You may cause injury to yourself or damage to the machine.

See pages 14 and 15 for the Parts Diagram and Parts List

ASSEMBLY



WARNING

THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE 'OFF' POSITION UNTIL ASSEMBLY IS COMPLETE.

INSTALLATION

Setting the saw table and the angle scale. FIG. 1 & 2.

- Release the star knob (A) and bring the saw table (B) to a right angle (C) in relation to the saw blade.
 - Use a 90° angle gauge (not included) to measure the right angle between the blade and the bench. See Figure 2. The saw blade should be 90° to the angle.
 - Close the star knob again when the distance between the blade and the 90° angle is at a minimum. The bench should then be at 90° to the saw blade.
 - Release the lock screw and bring the angle gauge indicator to the zero position. Fasten the screw.
- Please note: the angle scale is a useful piece of supplementary equipment, but should not be used for precision work. Use scrap wood for saw tests, adjust the bench if necessary. **Note:** The table should not be on the motor block, this can cause undesirable noise.

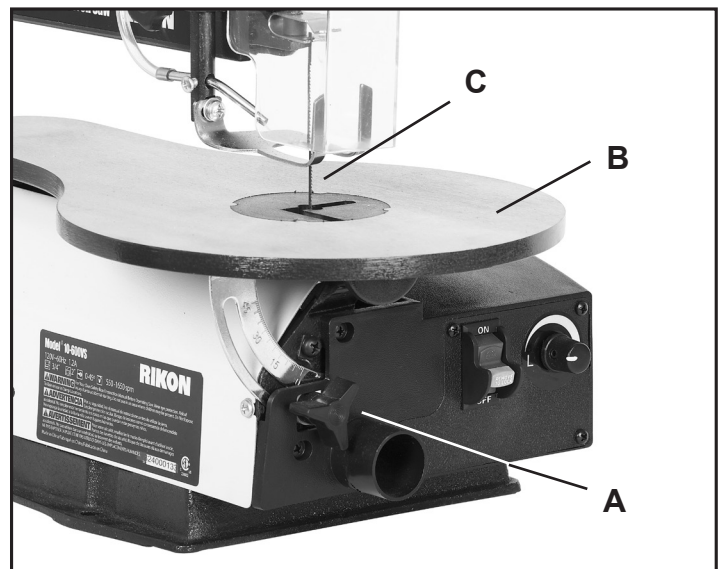


FIG. 1

ASSEMBLY

- The saw table can be tilted up to a 45 degree diagonal position, see Figure 2, or be left in the horizontal position for your sawing needs.
- You can read off the approximate degree of angle by using the angle scale located under the work bench. For more exact adjustment, use scrap wood for some saw tests and adjust the table angle, if necessary.

BLADE GUARD ASSEMBLY

Install the blade guard onto the drop foot fixing pole as shown in the Parts Diagram on page 14.

- Secure the guard in place with the screw, washers and nut provided with the guard.
- The safety guard can be rotated upward out of the way when changing blades. Never remove the safety blade guard when operating the saw.

ATTACH SHAVINGS BLOWER TUBE

- Install the loose end of the plastic tubing, that is pre-installed on the metal blower pipe, to the top of the bellow that is set on the front end of the top arm.
- The blower pipe can be adjusted towards the saw blade to blow dust and shavings away from your cut lines. The bellow and blower operate as soon as the machine starts to operate.

MOUNTING THE SAW TO A WORKBENCH

For safe operation of the scroll saw, the machine should be secured to a solid work surface or bench.

- A workbench made from solid wood is better than one made of plywood, as interfering vibrations and noise are more noticeable with plywood.
- The necessary tools and small parts for assembling the saw on a workbench are not supplied with the saw. However, use hardware similar to the following list as shown in Figure 3:

- | | |
|---------------------|-------------------|
| 1. Saw body | 5. Lock washer |
| 2. Foam rubber base | 6. Hexagonal nut |
| 3. Work bench | 7. Lock nut |
| 4. Flat washer | 8. Hexagonal bolt |

4 Hexagonal bolts (6mm) 1/4-20 x length depends on bench thickness

4 Flat seal (7mm) 9/32"

4 Washers (7mm) 9/32"

8 Hexagonal nuts (6 mm) 1/4-20

First of all, drill holes into the seating surface and then insert the screws.

- A foam rubber base for reduction of noise is not supplied with the saw either. However, we expressly recommend that you use such a base to keep vibration and noise to a minimum. Ideal size for the rubber base is about 400 x 240 mm (15-3/4" x 9-1/2").

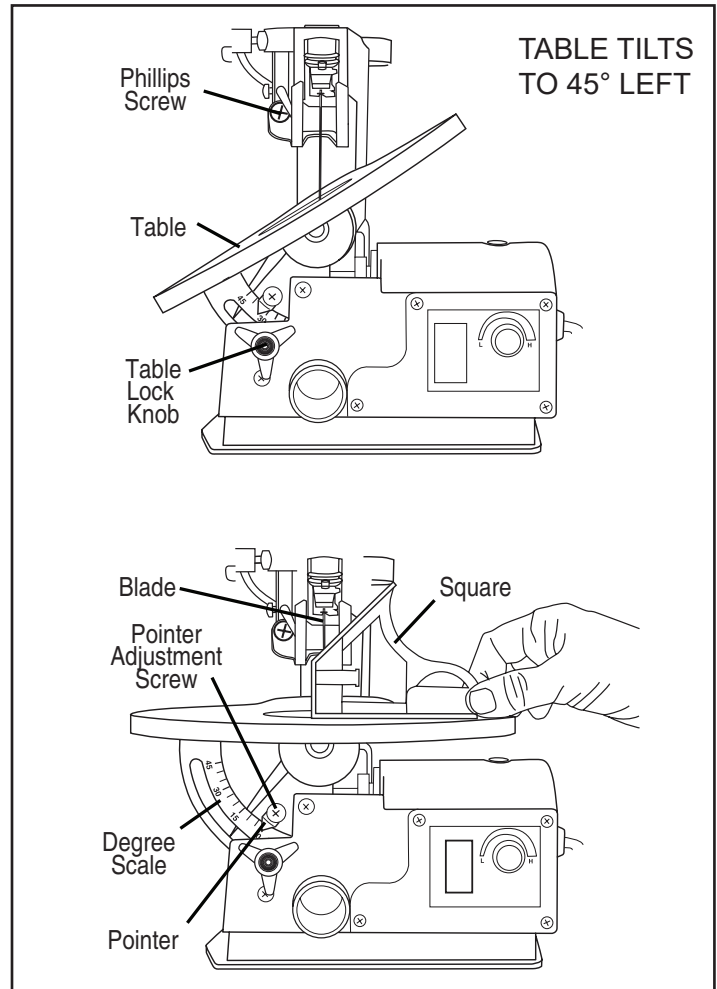


FIG. 2

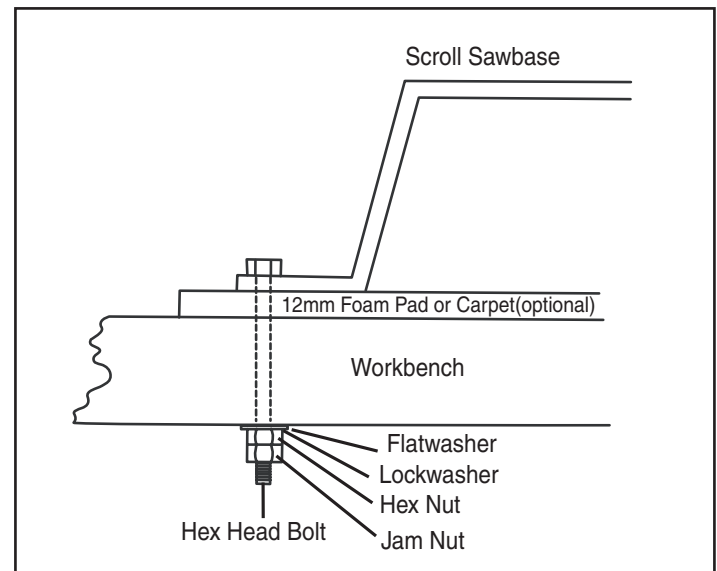


FIG. 3

OPERATION



WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE 'OFF' POSITION UNTIL ASSEMBLY IS COMPLETE.

CHANGING THE SAW BLADES

Warning: Switch off the saw and remove the power cord from power supply before installing saw blades in order to avoid injuries caused by unintentional activation of the saw.

Flat saw blades (pinless). Figure 4.

Use the pinless blade holders with flat end, pinless saw blades. The saw blade is fixed to the blade holder adapters with Allen screws.

- The top of the scroll saw arm is designed with two indentations for correctly positioning the blade holders apart for installing the blades with a hex wrench.

Mounting the blade onto the saw. Figure 6.

- Remove the center insert from the saw table.
- Put the saw-blade with the two adapters into the lower support, the other end into the upper support.
- Slightly press the upper saw arm down before hooking it in.
- Tighten the blade with the tightening knob at the rear of the saw by rotating it clockwise. Figure 5. Check the tightness of the blade. Keep on rotating the tightening knob clockwise until the blade is tight.
- Return the insert into the center of the table. The insert has a slit in it that the blade will slide through.

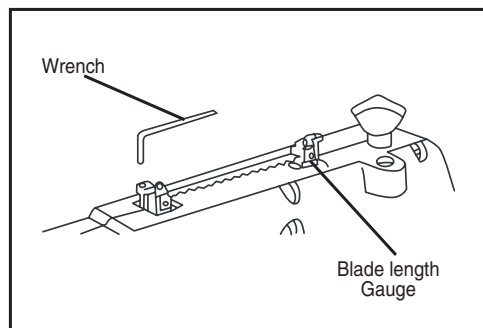
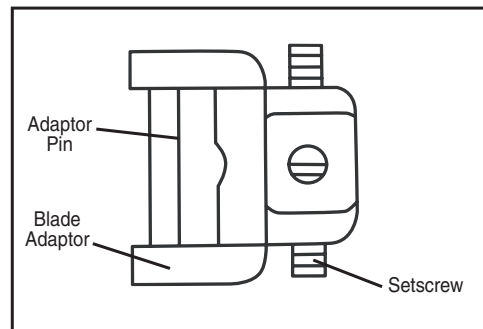


FIG. 4

BLADE TENSION KNOB

FIG. 5

Removing the blade from the saw:

- Extract the saw blade by removing the table's center insert, then loosening the tension knob screw.
- Slightly press the saw's upper arm down.
- Remove the saw blade from the saw's arm holders by pulling it forward out of the supports and through the access hole in the table.
- If not installing another blade, return the insert into the table so that it will not be lost while the saw is stored, or transported.

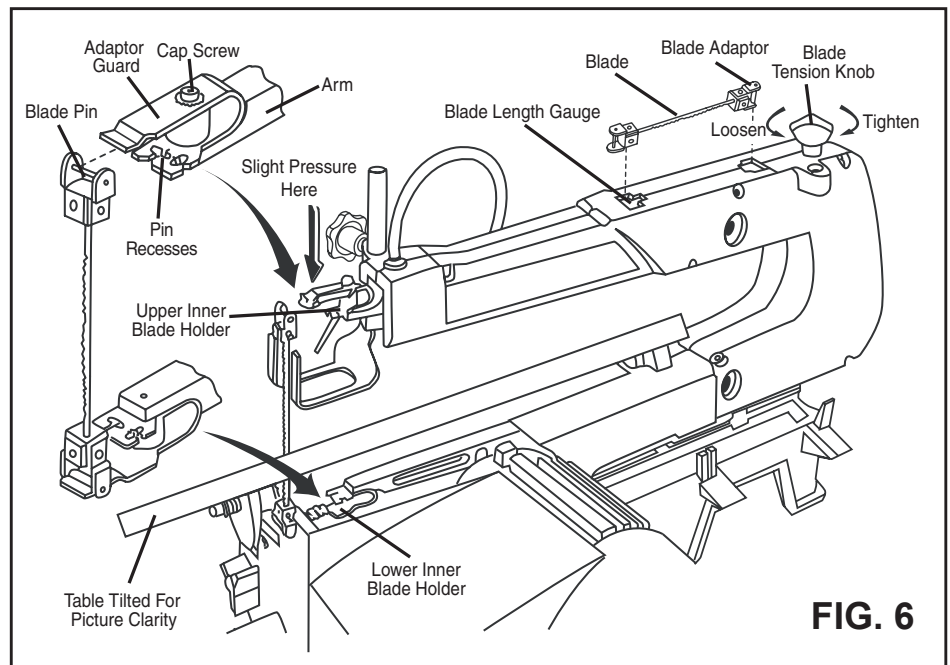


FIG. 6

OPERATION

Saw blades with pin ends

This type of scroll saw blade comes with pre-installed pins that extend out from the sides of the blade ends. No adapters are needed to install these type of blades onto a scroll saw. Their pins mount directly onto the saw's blade holders. See Figure 7.

Mounting saw blades with pin ends

- The center insert of the saw table can be left in place, or removed to install a pin end blade.
- If the table insert is left in place, simply lead one end of the saw blade through the hole in the table insert and attach the saw blade pins into the notches on the lower blade holder support. See Figure 6.
- Attach the top end of the saw blade to the saw's upper blade support. Figure 7.
- Before hooking the blade onto the upper blade holder support, slightly press the saw's upper arm down.
- Check the position of the blade pins on the supports.
- Tighten the blade by means of the tightening the saw's rear blade tensioning knob. Figure 5.

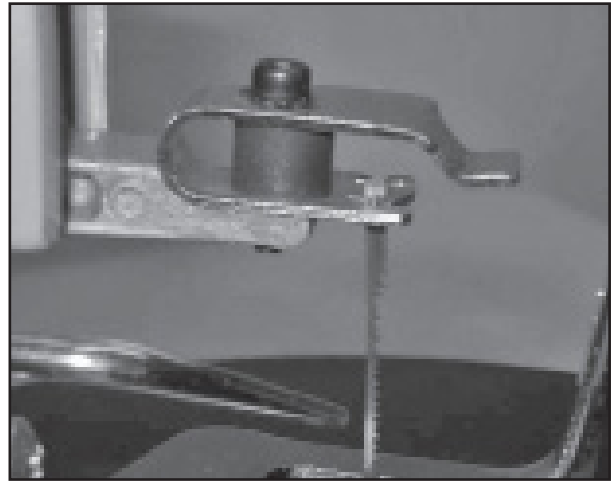


FIG. 7

Saw blade removal

- Extract the saw-blade by first releasing tension on the blade by unscrewing the blade tension knob.
- Slightly press the saw's upper arm down and remove the saw-blade from the upper and lower supports.

A scroll saw is fundamentally a “curve cutting tool” but which can also carry out straight and angled edge cuts.

Familiarize yourself with the following important points prior to commissioning the saw.

- The saw does not automatically cut wood. You must feed the wood against the saw blade manually.
- The cutting process occurs while the blade is moving.
- Feed the wood slowly against the saw blade as the saw blade teeth are small.
- Persons carrying out work with the saw require training. The saw blade may break easily during this training time while the operator is still unfamiliar with the saw.
- The saw is best suited for sheets of wood less than 25 mm (1”) thick.
- Feed the wood especially slowly against the blade and avoid abrupt curves to prevent the saw blade from breaking, if you wish to cut wood sheets thicker than 25 mm (1”).
- Saw blade teeth will get dull over time, saw blades must be replaced. Blade wear depends on type of wood and operator.
- Try and make sure that the saw blade follows the grain of the wood in order to obtain a clean cut.
- The saw speed must be reduced to minimum when cutting precious and non-ferrous metals.

WARNING: Switch off the saw and remove the cord from power supply before installing saw blades in order to avoid injuries caused by unintentional activation of the saw.

Inside cuts

This saw is suited to make inside cuts, or cuts not starting at the edge of the work piece.

Proceed as follows:

- Drill a 6mm (1/4”) hole in the work piece.
- Turn the blade tension knob to release the tension in the blade.
- Place the bored hole over the saw blade slot in the work table.
- Install the saw blade through the hole in the work piece and through the work blade slot, and fasten the blade to the holders.
- When you have completed the inside cut, remove the saw blade and then remove the work piece from the table.

For additional information on the proper use of your scroll saw, refer often to the Safety Instructions on pages 3 - 6.

OPERATION

Using the Variable Speed

By turning the variable speed knob, the saw's speed may be adjusted from a high speed of approximately 1,600 SPM (Strokes Per Minute) to a low speed of approximately 400 SPM. Test the cutting action on a scrap piece of wood like the material you will be final cutting to determine the correct speed for the material.

NOTE: the type of blade used (width & TPI) will also affect the cutting action and quality of the cut. So test different blades to determine the right one for your job.

- To increase the strokes per minute, turn the variable speed knob clockwise, or to the right.
- To decrease the strokes per minute, turn the variable speed knob counterclockwise or to the left.



FIG. 8

Attaching the Flexible Shaft (optional accessory)

The 10-600VS Scroll Saw features a drive shaft extending from its right side that can be used to operate a flex shaft. The shaft has a small chuck that holds rotary drills, burrs, stones and buffing wheels for detailed work on projects. See Figure 9.

To attach the flex shaft to the scroll saw:

- Remove protective cap from the threaded bushing on the scroll saw's drive shaft.
- Place the flexible shaft onto the threaded bushing.
- Clamp tool in the drill chuck 3.2mm (1/8") diameter.
- Firmly hold threaded shaft at the handle and switch on the speed control.
- Having finished the work, remove the flexible shaft and place the protective cap back in place on the threaded bushing of the saw.

ATTENTION: When working with the flexible shaft, cover the saw blade with the blade guard.



FIG. 9

MAINTENANCE

1. Before each use:

- Check the power cord and plug for any wear or damage.
- Check for any loose screws or hardware.
- Check the area to make sure it is clear of any misplaced tools, lumber, cleaning supplies, etc. that could hamper the safe operation of the machine.

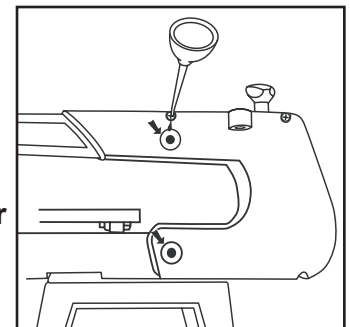
2. To avoid a build-up of wood dust, regularly clean all parts of the machine using a soft cloth, brush or compressed air. A general cleaning should be done after every use to avoid future problems and ensure the machine is in ready condition for the next time it is used. **WARNING:** If blowing sawdust, wear proper eye protection to prevent debris from blowing into eyes.

3. Check the saw blade before use to make sure that it is properly installed, tensioned and not dull. Clean and efficient cutting results from a properly set blade.

4. Lubricate the saw arms' bronze bearings every 50 hours:

- Turn the saw onto its side and remove the plastic caps from the upper and lower arms.
- Apply SAE 20 oil to the bronze bearings.
- Let the lubricant oil work in overnight.
- Clean up any oil residue, and reinstall the caps.
- Repeat the procedure the next day on the other side of the saw.

Do not lubricate the motor bearings or other internal parts of the scroll saw!



TROUBLESHOOTING



FOR YOUR OWN SAFETY, ALWAYS TURN OFF AND UNPLUG THE MACHINE BEFORE CARRYING OUT ANY TROUBLESHOOTING.

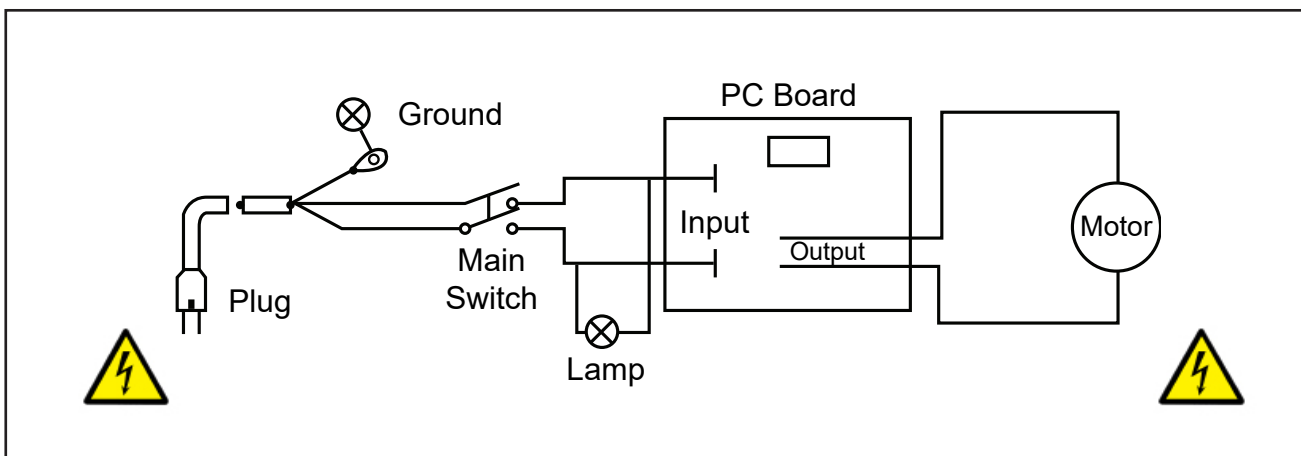
SYMPTOM	PROBABLE CAUSE	CORRECTIVE ACTION
Saw blades break	Tension incorrectly set	Set the correct tension
	Load too great	Feed the workpiece more slowly
	Incorrect saw blade variety	Use the correct saw blades
	Workpiece not fed straight	Avoid exerting side pressure
Motor does not function	Power extension cable faulty	Change faulty cable
	Saw incorrectly installed	Refer to the instructions in this manual.
Vibration NOTE: The saw vibrates slightly when the motor is running in normal operation.	Unsuitable underlay	The heavier the work bench, the less the vibration. A bench made from plywood always vibrates more than one made from solid wood. Select the work bench best suited to your working conditions.
	The work bench is not screwed down or is on the motor	Tighten the locking level
	The motor is not secured	Securely screw the motor in place
	Holder not aligned	Loosen the screw with which the holders are fastened to the arm. Align the holders so that they are perpendicular to each other retighten the screws.

For parts or technical questions contact: techsupport@rikontools.com or 877-884-5167.

WIRING DIAGRAM

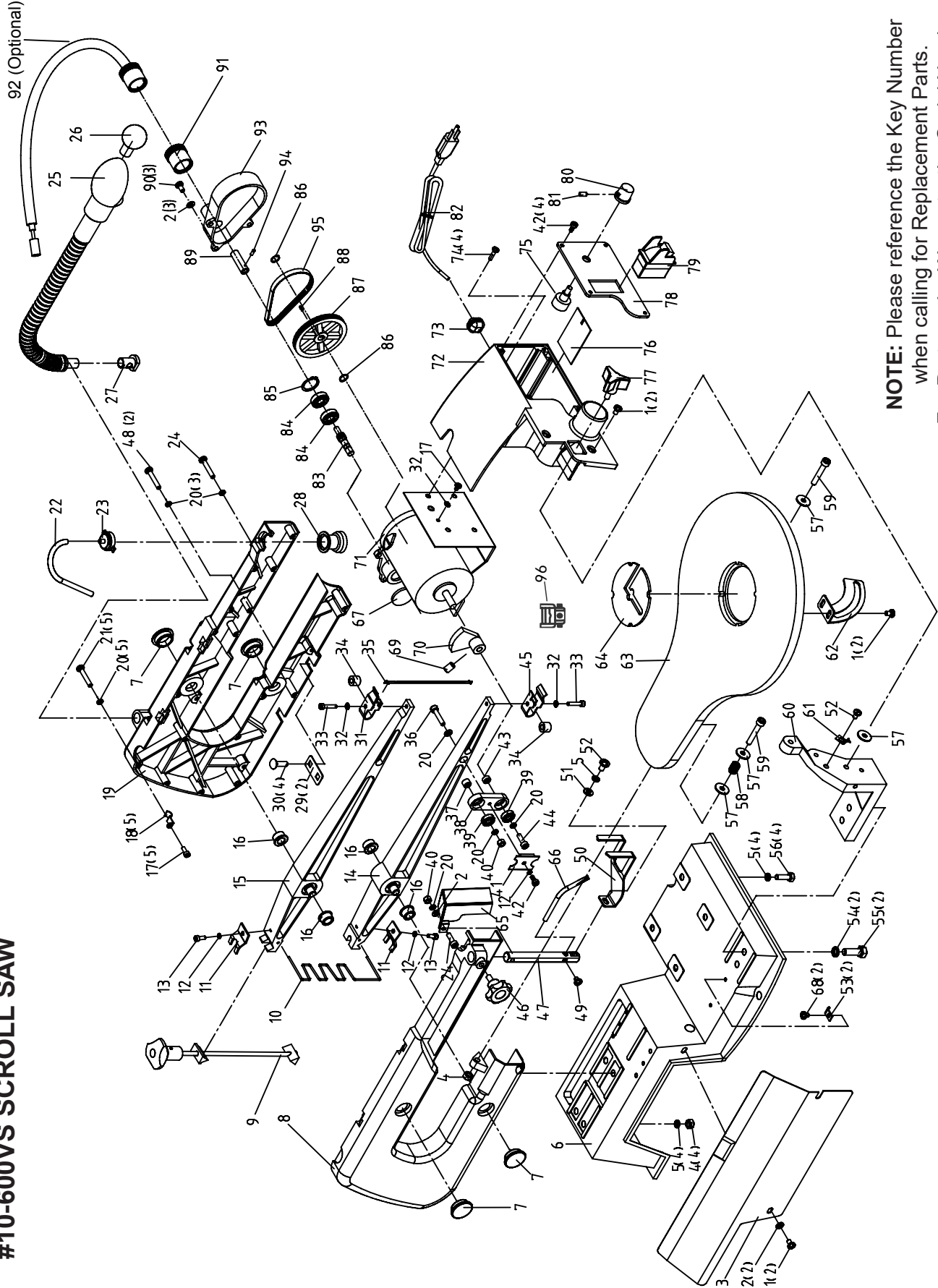


This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician. See page 5 for additional electrical information.



PARTS DIAGRAM

#10-600VS SCROLL SAW



NOTE: Please reference the Key Number when calling for Replacement Parts. For Parts under Warranty, the Serial Number of your machine is required.

PARTS LIST

Key Number	Description		QTY	Key Number	Description		QTY
1	Phillips Screw	M5x8	6	49	Phillips Screw	M5x6	1
2	Flat Washer	D5	6	50	Drop Foot		1
3	Side Cover		1	51	Flat Washer	D6	1
4	Hex Nut, Type I	M6	5	52	Phillips Screw	M6x10	2
5	Lock Washer	D6	9	53	Cord Fix Plate		2
6	Base		1	54	Lock Washer	D8	2
7	Oil Cap		4	55	Hex Socket Screw	M8x25	2
8	Left Arm Housing		1	56	Hex Bolt	M6x20	4
9	Tension Bolt Assembly		1	57	Big Flat Washer	D6	4
10	Spring		1	58	Press Spring		1
11	Pressure Plate		2	59	Hex Socket Screw	M6x35	2
12	Lock Washer	D4	3	60	Work Table Support		1
13	Hex Socket Screw	M4x10	2	61	Scale Indicator		1
14	Lower Arm		1	62	Bevel Scale		1
15	Upper Arm		1	63	Work Table		1
16	Arm Bearing		4	64	Throat Plate		1
17	Phillips Screw	M4x6	7	65	Saw Blade Cover		1
18	Cord Clip		5	66	Blower Pipe		1
19	Right Arm Housing		1	67	Dust Proof Cap		1
20	Lock Washer	D5	11	68	Phillips Screw	M4x8	2
21	Phillips Screw	M5x35	5	69	Hex Socket Screw	M8x12	1
22	Plastic Tubing		1	70	Eccentricity Pulley		1
23	Bellows Cap		1	71	DC Motor	90W	1
24	Phillips Screw	M5x28	2	72	Switch Box		1
25	Lamp Assembly		1	73	Strain Release		1
26	Light Bulb	120V/10W	1	74	Phillips Screw	M4x10	4
27	Lamp Fasten Nut		1	75	Variable Speed Switch		1
28	Bellow		1	76	Circuit Board	120V	1
29	Fixing Plate		2	77	Table Lock Knob		1
30	Carriage Bolt	M6x20	4	78	Switch Fixing Board		1
31	Upper Blade Support		1	79	Self-lock Switch		1
32	Star Washer	D4	2	80	Variable Speed Knob		1
33	Hex Socket Screw	M4x20	2	81	Hex Socket Screw	M5x6	1
34	Bushing		2	82	Power Cord		1
35	Saw Blade		1	83	Gear Shaft		1
36	Hex Socket Screw	M5x25	1	84	Bearing		2
37	Big Cushion		1	85	Spring Washer	D22	1
38	Eccentricity Connector Assy		1	86	Spring Washer	D8	4
39	Ball Bearing		2	87	Big Pulley Wheel		1
40	Hex Nut, Type I	M5	2	88	Key	3x8	1
41	Bracket		1	89	Shaft Connector Sleeve		1
42	Phillips Screw	ST4.2x9.5	5	90	Phillips Screw	M5x12	3
43	Small Cushion		1	91	Safety Screw Cap		1
44	Hex Socket Screw	M5x16	1	92	Flexible Shaft (Optional)		1
45	Lower Blade Support		1	93	Belt Cover		1
46	Drop Foot Lock Knob		1	94	Pin		1
47	Drop Foot Fixing Pole		1	95	Belt		1
48	Phillips Screw	M5x30	2	96	Pinless Blade Holder		2

RIKON

POWER TOOLS®

5-Year Limited Warranty

RIKON Power Tools Inc. ("Seller") warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of five (5) years from the date the product was purchased at retail. This warranty may not be transferred.

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This five-year warranty does not cover products used for commercial, industrial or educational purposes. The warranty term for these claims will be limited to a two-year period.

This limited warranty does not apply to accessory items such as blades, drill bits, sanding discs, grinding wheels, belts, guide bearings and other related items.

Seller shall in no event be liable for death, injuries to persons or property, or for incidental, contingent, special, or consequential damages arising from the use of our products.

To take advantage of this warranty, proof of purchase documentation must be provided which has the date of purchase and an explanation of the complaint.

The Seller reserves the right to effect at any time, without prior notice, those alterations to parts, fittings, and accessory equipment which they may deem necessary for any reason whatsoever.

To register your machine online, visit RIKON at www.rikontools.com/warranty

To take advantage of this warranty, or if you have any questions,
please contact us at 877-884-5167 or email warranty@rikontools.com

For more information:

**16 Progress Road
Billerica, MA 01821**

**877-884-5167 / 978-528-5380
techsupport@rikontools.com**