

14" Bandsaw



Operator's Manual

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

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	1.5 HP, TEFC
Motor Speed (no load).....	1,720 RPM
Volts	115 / 230 V
Amps, Hertz, Phase	14 / 7 A, 60 Hz, 1Ph
Blade Length	111" (2,819 mm)
Blade Width	3/16" - 3/4" (4.78 - 19 mm)
Blade Speed	2,950 / 1,445 ft/min (899.2 / 440.5 m/min)
Table Size (W x D)	21-1/2" x 15-3/4" (546 x 400 mm)
Table Tilt	Left -5°, Right 45°
Miter Gauge T-Slots (2)	3/4" x 3/8"
Maximum Cutting Width (throat)	13-5/8" (346 mm)
Maximum Cutting Depth (height)	13" (330 mm)
Table Height	39-1/2" (1,003 mm)
Fence Height	6" (152 mm)
Fence Length	18-3/4" (476 mm)
Dust Ports (1)	4" Diameter (100 mm)
Base Size (LxWxH)	21-5/8"x14-3/4"x19-11/16" (549x375x500 mm)
Overall Height	75" (1,905 mm)
Overall Size (LxWxH).....	30" x 25" x 75" (762 x 635 x 1,905 mm)
Net Weight	212 lbs (96.2 kg)

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 IS PRE-WIRED FOR 115V CIRCUITS, AND 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.

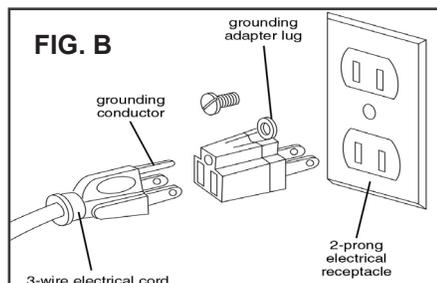
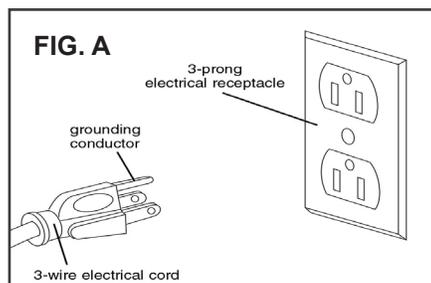
IMPROPER ELECTRICAL CONNECTION of the equipment grounding conductor can result in risk of electric shock. The conductor with the green insulation (with or without yellow stripes) is the equipment grounding conductor. **DO NOT** connect the equipment grounding conductor to a live terminal if repair or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

REPLACE A DAMAGED OR WORN CORD IMMEDIATELY.

This tool is intended for use on a circuit that has a 120 volt electrical receptacle. **FIGURE C** shows the type of the 220V, 3-wire electrical plug and electrical receptacle that has a grounding conductor that is required if the motor wiring is changed. See page 23.



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, and 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.

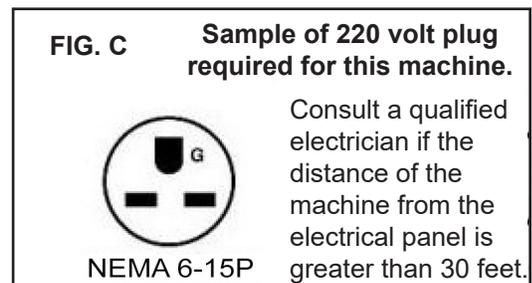
MINIMUM RECOMMENDED GAUGE FOR EXTENSION CORDS (AWG)

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 BAND SAWS

This machine is intended for the cutting of natural, solid woods, composite materials, plastics and non-ferrus metals. 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 band 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. If you are not familiar with the operation of the machine, obtain assistance from a qualified person.
3. Always wear approved, safety protective eye wear and hearing protection when operating this machine.
4. Always wear a dust mask and use adequate dust collection and proper ventilation.
5. Adjust the upper guides about 1/8" to 1/4" above the material being cut.
6. Check for proper blade size and type for the thickness and type of material being cut.
7. Make sure that the blade tension and blade tracking are properly adjusted.
8. Always keep hands and fingers away from the blade.
9. Make "relief" cuts before cutting curves to eliminate blade binding.
10. Always hold material firmly, resting flat on the table and feed it into the blade at a moderate speed.
11. Never attempt to saw stock that does not have a flat surface, unless a suitable support is used.
12. When cutting small work pieces, always use a push stick, holding jig or other device to keep your hands safely away from the blade. Use 'Zero Clearance Inserts' to prevent small pieces from becoming jammed in the table insert or lower blade guides.
13. Always allow the bandsaw blade to stop before removing scrap pieces from the table.
14. Do not remove jammed pieces from the saw until the machine and blade has stopped. Unplug the bandsaw from the power source, and then remove the jammed work piece.
15. Always turn off the machine if the material is to be backed out of an uncompleted cut.
16. Use extra supports (roller stands, saw horses, tables etc.) for any work pieces large enough to tip when not held down to the table top surface.
17. Always turn off and unplug the machine when changing blades or servicing the machine.
18. Release blade tension when the saw will not be used for a long period of time.
19. Remove material or debris from the work area. Keep work area neat and clean.

SAVE THESE INSTRUCTIONS.
Refer to them often.

California Proposition 65 Warning

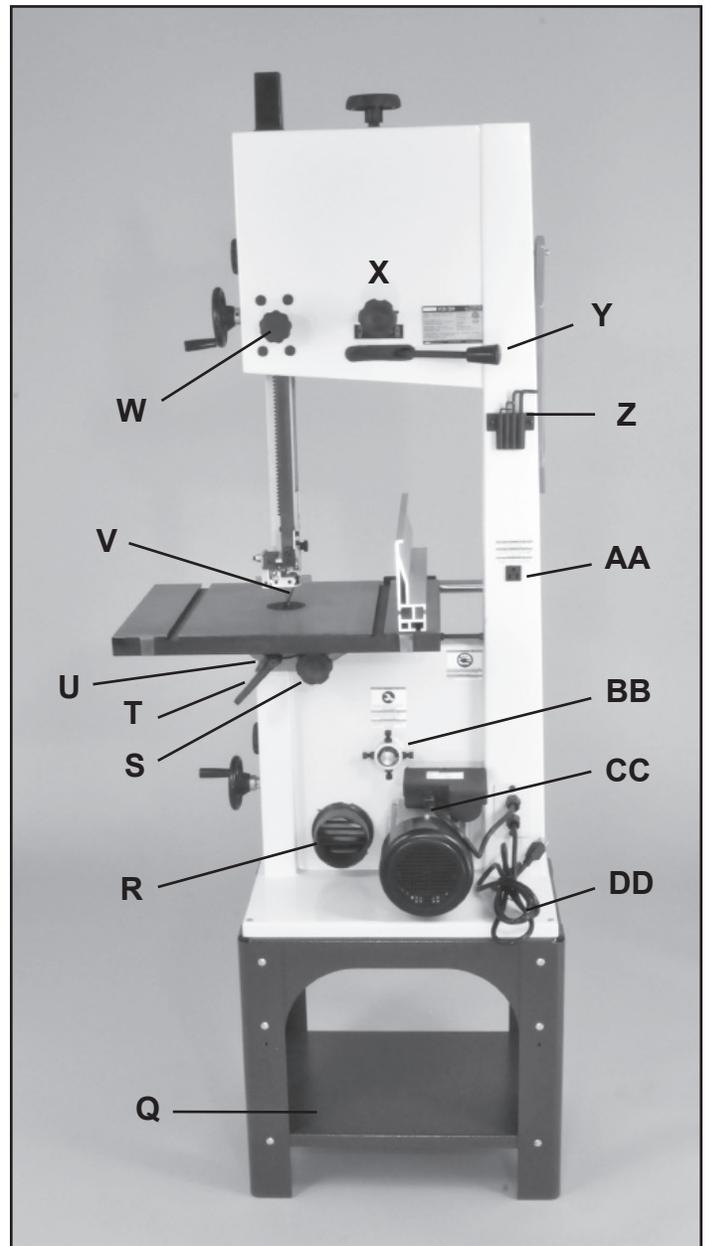
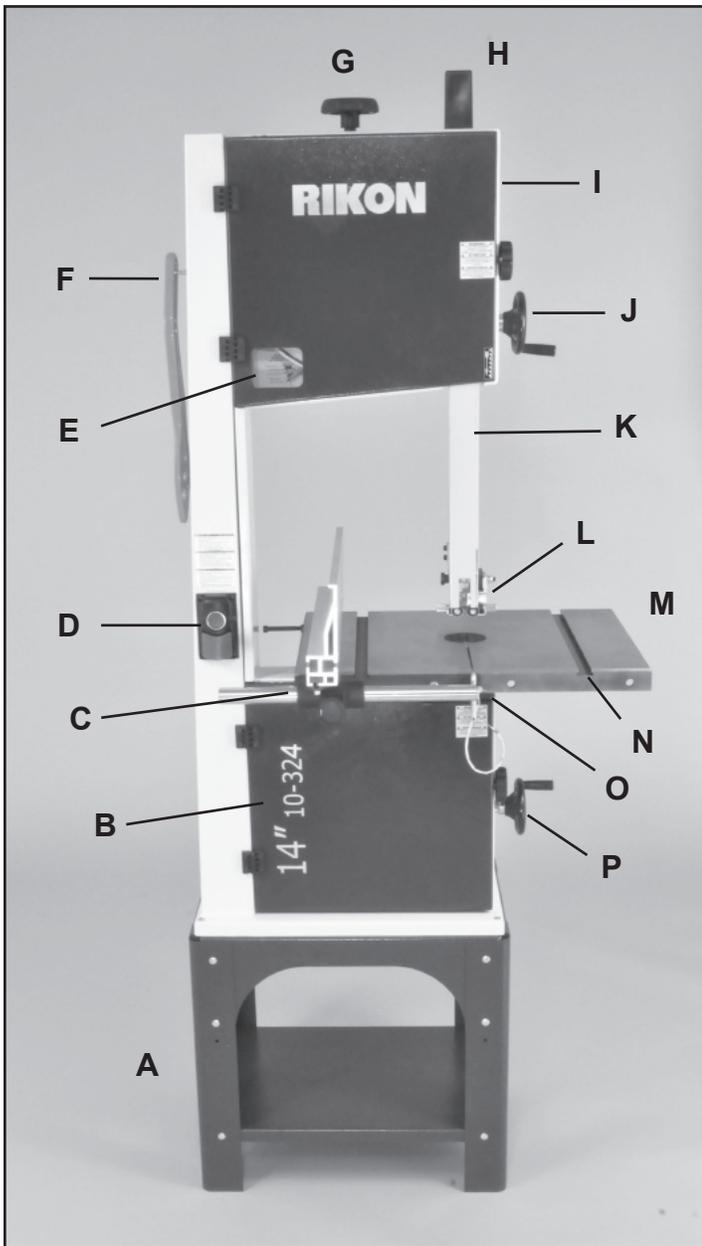
WARNING: Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. Your risk from exposure to these chemicals varies, depending on how often you do 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 detailed information about California Proposition 65 log onto rikontools.com.

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

GETTING TO KNOW YOUR MACHINE



- A. Stand
- B. Lower Door
- C. Rip Fence & Front Rail Assembly
- D. ON / OFF Switch
- E. Blade Tension Window
- F. Push Stick & Storage Hanger Bolt
- G. Blade Tension Handle
- H. Guide Post Cap
- I. Upper Door & Blade Tracking Window
- J. Blade Guard Adjustment Hand Wheel
- K. Blade Guard with Scale
- L. Upper Blade Guides
- M. Table with Round Blade Insert
- N. Miter Gauge T-Slots
- O. Lower Blade Guides and Guard

- P. Drive Belt Tension Hand Wheel
- Q. Storage Shelf
- R. 4" Dust Port
- S. Table Tilt Hand Wheel
- T. Table Locking Handle
- U. Trunnion with Angle Scale
- V. Bandsaw Blade
- W. Guide Post Lock Knob
- X. Blade Tracking Handle & Lock Lever
- Y. Quick Release Blade Tension Lever
- Z. Tool Holder
- AA. Electrical Outlet
- BB. Lower Wheel Shaft Fasteners
- CC. Motor
- DD. Power Cord

CONTENTS OF PACKAGE

Model 10-324 14" Bandsaw is shipped complete in one box.

Unpacking, Checking Contents & 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. With the help of another person, carefully lift the Bandsaw from the packaging and place it on a level floor.
4. 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.
5. Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean dry cloth. Be careful, as the pre-installed bandsaw blade has sharp teeth and may cause injury if touched.
6. Set packing material and shipping carton aside. Do not discard until the machine has been set up and is running properly.

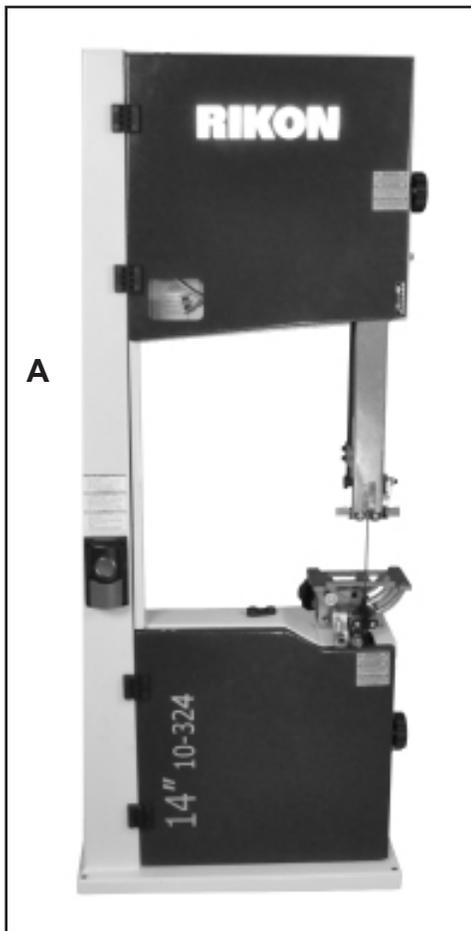
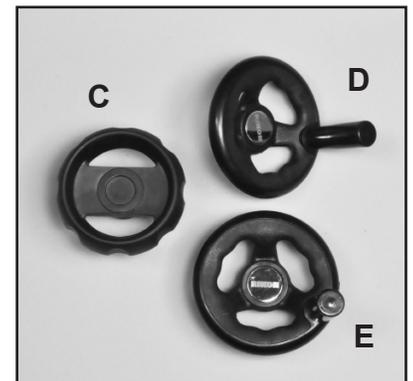


TABLE OF LOOSE PARTS

- A. Bandsaw Frame Assembly
- B. Base Stand Assembly - see page 10 for Parts List
- C. Blade Tension Hand Wheel
- D. Hand Wheel for Raising Blade Guard
- E. Hand Wheel for Tensioning the Drive Belt
- F. Manual and Warranty Card - not shown



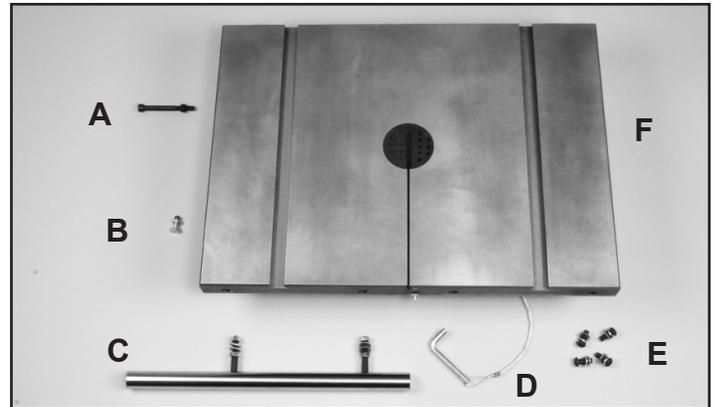
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CONTENTS OF PACKAGE

TABLE OF LOOSE PARTS continued

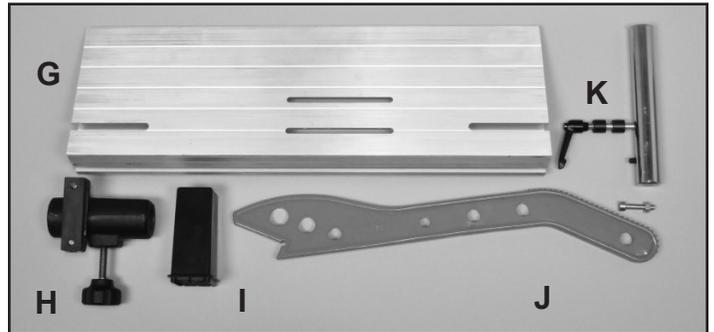
Table Assembly:

- A. Fence Support Bolt and Nut
- B. 90° Table Leveling Stop Bolt and Nut
- C. Rip Fence Front Rail and Hardware
- D. Table Leveling Pin and Lanyard
- E. Table Mounting Bolts and Washers
- F. Table with Blade Insert



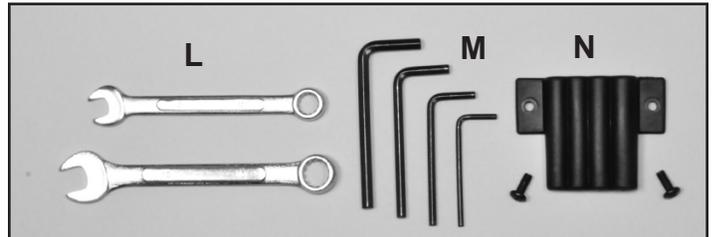
Rip Fence Assembly & Parts:

- G. Rip Fence
- H. Rip Fence Carrier Assembly
- I. Guide Post Cap
- J. Push Stick and Mounting Bolt and Nut
- K. Resaw Bar Assembly



Tools and Tool Holder:

- L. Wrenches: 10, 13 mm
- M. Hex Wrenches; 3, 4, 5, 6 mm
- N. Tool Holder and Mounting Screws



Additional Tools required - not supplied

- #2 Phillips Screwdriver

INSTALLATION

MOVING & INSTALLING THE BANDSAW

CAUTION The bandsaw is heavy - over 210 lbs! It is best to assemble the machine near the area where it will eventually reside.

When moving or positioning an assembled bandsaw, **DO NOT** use the table or upper blade guard assemblies as this may damage the machine. Move the bandsaw by grasping the support column and lower frame which are all welded together for rigidity. The bandsaw can also be moved by laying it down on the back/left side of the column so that the table assembly is not compromised. **DO NOT** install casters onto the stand's legs as this will make the bandsaw unstable. Use a universal mobile base (available separately from retailers) that set the saw inside the wider wheel base frame for moving stability.

1. Carefully remove the machine from the shipping carton. See above instructions on handling the saw.

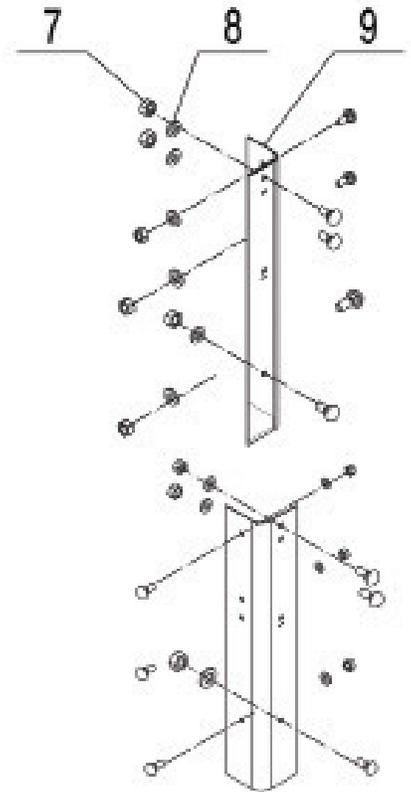
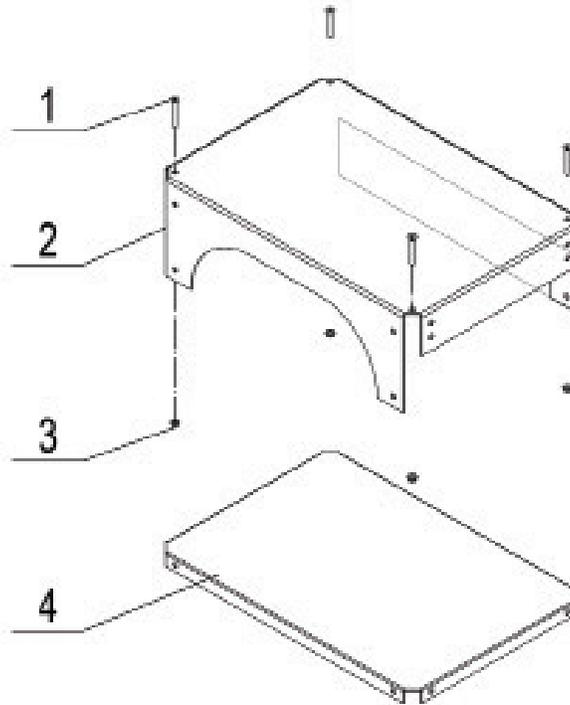
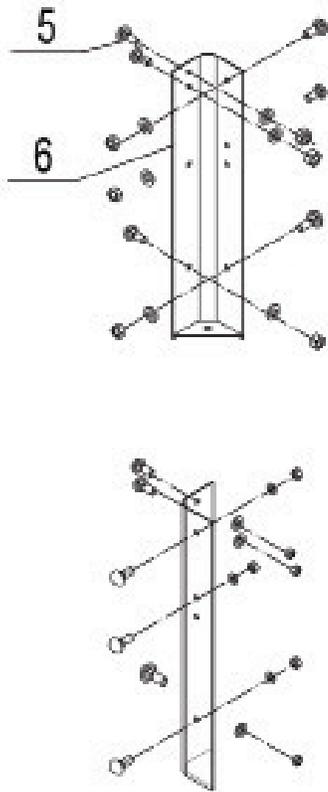
2. Position the machine on a solid, level foundation that is located in an area that has ample space in front, right side and in back of the bandsaw for cutting large or long material.

For best power and safety, the bandsaw should be plugged directly into a dedicated grounded electrical outlet that is within the supplied cord length of the machine. The use of an extension cord is not recommended.

3. Align the machine so that during use, the material being cut will not face aisles, doorways, or other work areas that bystanders may be in. Do not locate or use the machine in damp or wet conditions.

4. Once in place in your shop, level the machine with spacers, and secure it to the floor with lag screws (not supplied) using the 4 holes in the base stand legs. **DO NOT INSTALL CASTERS** on the stand using the 4 holes as damage to the stand's bolt-down pads will result.

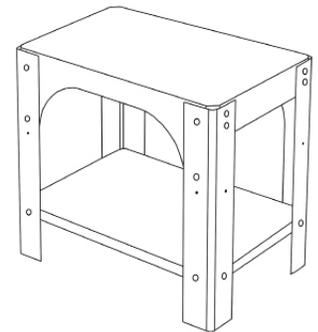
STAND ASSEMBLY



LINK TO 10-324
PRODUCT PAGE
AND
ASSEMBLY VIDEO



KEY #	DESCRIPTION	QTY	PART #
1I	Hex flat head bolt M6x50	4	1-M6X50GB70D3Z
2I	Upper frame	1	1-JMBS1404100001-076U
3I	Hex nut with flange	4	1-M6GB6177D1Z
4I	Shelf	1	1-JMBS1404100008-076U
5I	Carriage bolt M6x16	24	1-M6X16GB12Z
6I	Leg A - Right	2	1-JMBS1404100300-076U
7I	Hex nut M6	24	1-M6GB6170Z
8I	Flat washer	24	1-WSH6GB97D1Z
9I	Leg B - Left	2	1-JMBS1404100400-076U



1. Check the contents of the Stand against the parts list above, and lay out the parts for quick reference.
2. On a protected surface, lie the Upper Frame (#2) upside down so that the legs can be attached.
3. Attach the four Legs (6, 9) to the frame with the Carriage Bolts, Washers and Nuts (5, 8, 7).
Note that the pre-cut bolt holes differ from side to side. Do not fully tighten the nuts at this time.
4. Turn the Shelf (4) upside down, fit it inside of the four legs and fasten it in place. Hand tighten the nuts only.
5. The stand is now assembled and can be turned upright.
6. Mount the Bandsaw to the assembled Stand with the four flat head Hex Bolts (1).
This can be done in two ways; A) With assistance, lift the bandsaw and carefully position it in place on top of the stand. Securely fasten it to the stand with the four bolts.
B) If alone, lay the bandsaw down on its column onto 4"x4" wood blocks. Then also lay the stand on its side on wood blocks to match the bandsaw height and align the holes in the bandsaw base with those in the top of the stand. Laying the saw and stand on blocks will allow you space to install the four bolts. With the stand securely fastened to the bandsaw, tilt the saw upright off of the blocks.
7. With the bandsaw fastened onto the stand, any final shifting or leveling of the stand parts will be done automatically by the weight of the saw. The final tightening of all of the nuts on the stand can now be done.

ASSEMBLY

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

NOTE: Parts referenced throughout the manual refer to the different sheets and key numbers of the Parts Diagrams and Parts Lists on pages 28 to 40. Example: (#7A) refers to Part #7 on Sheet A.

TABLE ASSEMBLY

1. Remove the Table Leveling Pin (Part #4B) from the front of the table. This metal pin keeps the two sides of the table level at the slot area. Fig. 1.

2. Mount the table in place on the trunnion with the assistance of another person. The table is heavy! Do this from the rear of the machine, so that it is easier to fit the pre-installed blade through the slot in the table.

3. Attach the table to the trunnion with the four Hex Socket Cap Screws, Spring Washers and Washers (Parts #11B, 10B, 9B). Install two bolts to the right of the blade, hand tightened only. Fig. 2. Then tip the table to 45 degrees and install the two bolts to the left of the blade. Fig. 3. DO NOT fully tighten the bolts at this time. Return the table to the horizontal position.

NOTE: Before finally secured in position, the table can be slightly moved, left and right. Check to make sure that the table's miter gauge slot is parallel to the side of the saw blade. This will provide a true cut when ripping stock. Set a thin metal ruler against the side of the saw blade. Make sure that it is not touching the saw's teeth, which can angle the ruler. Measure the distance from one end of the ruler to the miter gauge slot. FIG. 4. Then measure the same distance from the other end of the ruler to the miter gauge slot. Compare these two measurements and angle the table as necessary until the distances are the same.

4. Once the table is aligned parallel to blade, tighten all four of the installed bolts to secure the table in place.

INSTALL THE 90° TABLE STOP

Thread the Hex Bolt (#8B) and Nut (#7B) to the bottom of the table in the pre-bored and tapped hole. See Fig. 12, page 13. Setting the table to 90° to the blade will be done later on pages 13 & 14.

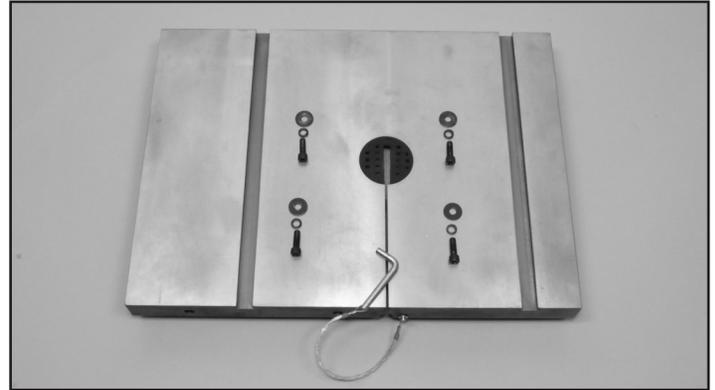


FIGURE 1

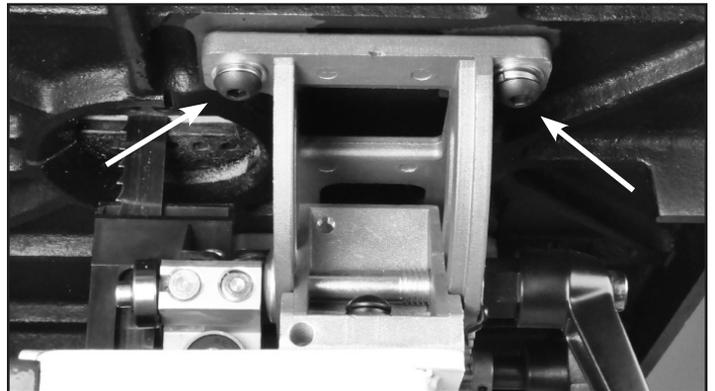


FIGURE 2

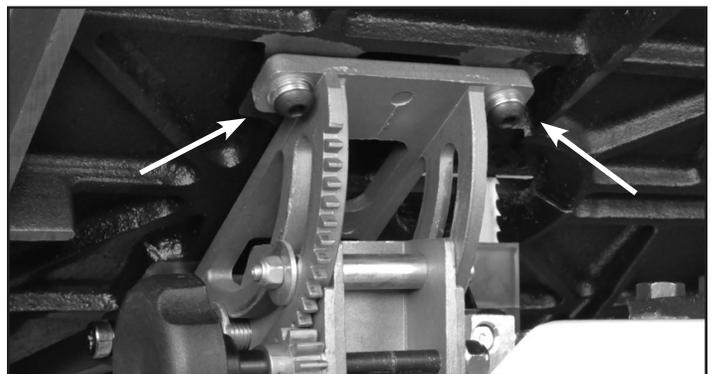


FIGURE 3

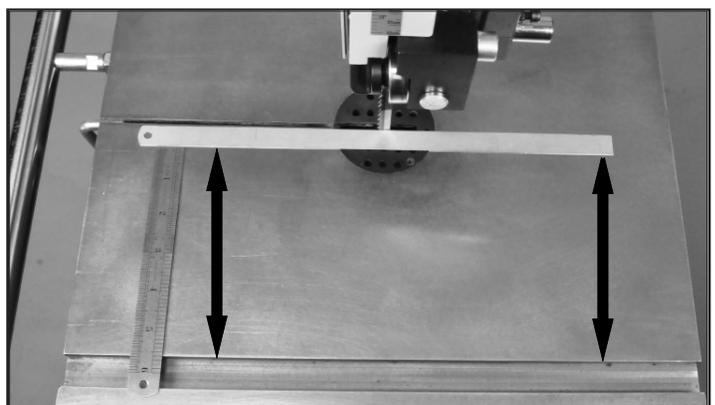


FIGURE 4

ASSEMBLY

INSTALL THE FENCE SUPPORT BOLT

On the rear, left corner lip of the table install the Fence Support Bolt and Nut (#32B) in the pre-bored and tapped hole. When the fence is moved to the far left on the front rail, the fence will be off of the table, but it will be supported in position on this bolt.



RIP FENCE ASSEMBLY

1. Mount the fence Guide Rail (#11F) onto the front table edge with the two fence bar Nuts and Washers (#15F, 16F) Fig. 5. Position the bar so that it is parallel with the table surface, and equal distance out from the front edge of the table when measured at both left and right front edges of the table.
2. Slide the Fence Carrier (#6F) and Fence Assembly onto the fence's guide rail. Fig. 6.
3. Lock the fence carrier in place on the rail by tightening the fence Lock Knob (#7F), which is located on the front of the carrier. Fig. 6, A.
4. Final adjustments to the fence are covered on pages 19 and 20. Information on the re-saw bar is on page 22.

INSTALL THE HAND WHEELS

1. Attach the Handwheel (#31D) to the upper right side of the saw frame with the 5mm hex wrench. This wheel raises and lowers the blade guard. Fig. 7, A.
3. Attach the Handwheel (#26E) to the lower right side of the frame with the 5mm hex wrench. This wheel adjusts the motor drive belt tension. Fig. 7, A.
4. Install the Blade Tension Handwheel (#1C) to the top of the saw frame. No tools are needed, as the metal shaft of the handwheel has two simple pins that engage the Blade Tension Rod (#2C). Fig. 7, B.

INSTALL THE TOOL HOLDER

1. Assemble the Tool Holder (#46A) to the column rear with two Phillips Screws (#45A). Fig. 8. Handy storage for the Hex Wrenches (3, 4, 5, 6mm).

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

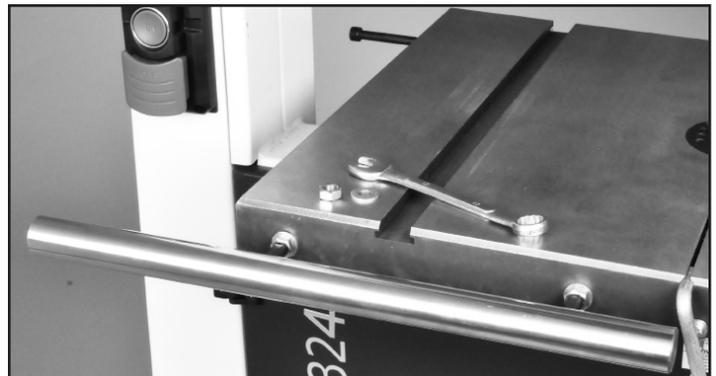


FIGURE 5

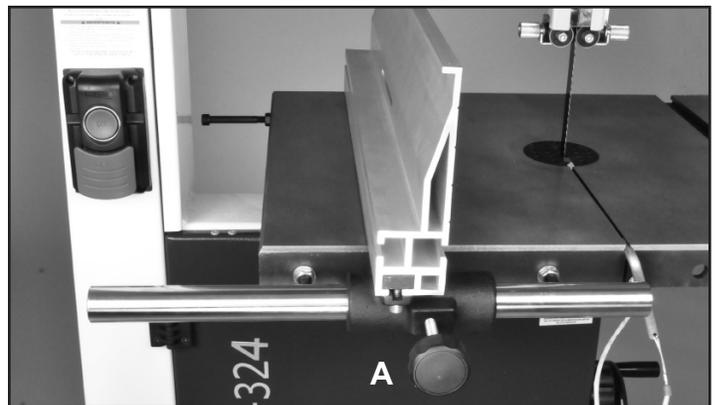


FIGURE 6



FIGURE 7

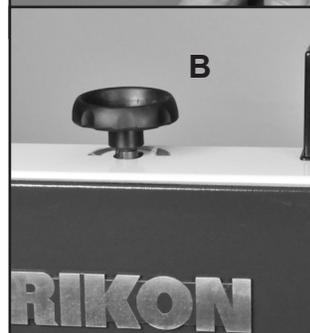


FIGURE 8



ASSEMBLY

INSTALL THE PUSH STICK HOLDER

1. Assemble the Push Stick Hanger Bolt and Nut (#50A, 51A) to the column's left side with a 5mm hex wrench. Handy storage for the push stick when not in use. FIG. 9.



FIGURE 9



FIGURE 10

INSTALL THE GUIDE POST CAP

1. Place Guide Post Cap (#1A) into the square hole on top of the upper frame. This cap protects the guide post assembly from shop dust or debris. Fig. 10.

ADJUSTMENTS

WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

TILTING THE TABLE

1. At the rear of the saw, loosen the Locking Handle (#27B) on the table trunnion by turning it counter-clockwise. Fig. 11, A.

2. Turn the Table Tilting Knob (#30B) to adjust the table to the desired angle. Fig. 11, B. Use the angle indicator scale that is cast into the trunnion bracket Support (#17B, C) to find the desired angle.

3. Retighten the locking handle to secure the table.

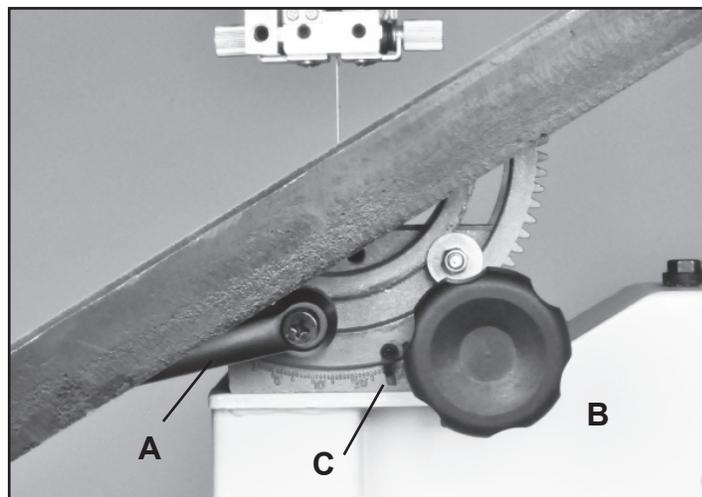


FIGURE 11

SETTING THE TABLE SQUARE TO THE SAW BLADE'S SIDE

The table may be set at 90° to the saw blade sides by adjusting the table stop Bolt (#8B) under the table. The table stop bolt rests on the top of the pivoting Stop Block (#33A). Fig. 12.

1. First loosen the bolt's Locking Nut (#7B) Fig. 12, A.

2. Set a square on the table and against the saw blade's flat side. Tilt the table until the table is set exactly 90° to the blade, then lock the table in position.

3. Adjust the bolt (Fig. 12, B), up or down, until it is in contact with the pivoting Table Angle Stop Block (#33A) Fig. 12, C. Retighten the locking nut making sure that the table angle setting is maintained.

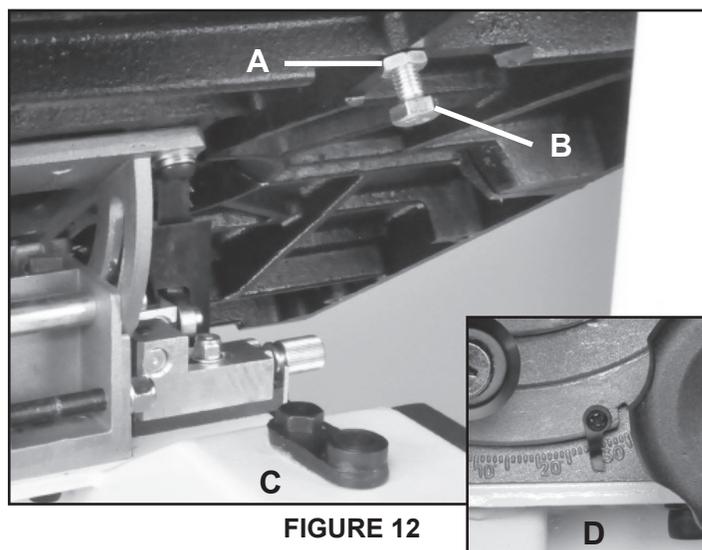


FIGURE 12

4. The angle indicator (#28B) on the trunnion, can be adjusted by loosening the Phillips head screw and moving the pointer into position. Fig. 12 D.

ADJUSTMENTS

SETTING THE TABLE SQUARE TO THE SAW BLADE'S BACK

While pre-set before shipping, if needed, the table may also be re-set at 90° to the back of the saw blade by adjusting the trunnion micro adjustment screws.

1. On the lower Trunnion Support (#17B), slightly loosen the two Hex Bolts (#22B, 25B) that hold the support to the bandsaw frame. Fig. 13, A.
2. Set a square on the table and against the saw blade's back, flat edge.
3. Using the 3mm hex wrench, turn the lower trunnion's micro adjusting hex screws (#23B) to adjust the table position. Fig. 13, B.
 - *Clockwise* will raise the trunnion & table.
 - *Counterclockwise* will lower the trunnion & table.
4. Check the table and blade angle for 90° and when achieved, re-tighten the bolts to secure the table in position.

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

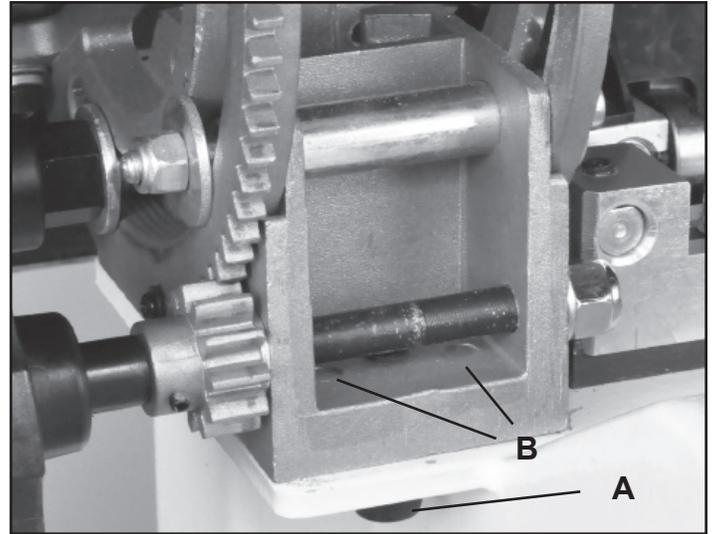


FIGURE 13

Photo of the micro adjusting screws shown with table angled for clarity.

TRACKING THE SAW BLADE

⚠ WARNING Unplug the bandsaw. A blade is installed at the factory. It is recommended to check the blade tracking prior to use. Make sure the upper and lower blade guides are adjusted away from the blade and the tension scale is set to correspond to the width of the blade you are using.

1. Open both doors. At the rear of the machine, loosen the Lock Lever (#22C, FIG. 14, A) by turning it counterclockwise.
2. Turn the Blade Tracking Handle (#23C, Fig. 14,B) clockwise or counterclockwise, while at the same time carefully turning the Upper Wheel (#24E) by hand. Fig. 15. Check the tracking of the blade on the wheel through the side window (Fig. 14, C). Make at least three rotations of the wheel or until the blade tracks centered on the wheel.
3. Once the blade runs centered, tighten the lock lever and close the doors. For tracking of the blade on the Lower Wheel (#13E), see page 26 for instructions. **NOTE:** the lower wheel has been pre-set at the factory and any changes made to this wheel should be after thorough reading and understanding of the instructions. Failure to do so could damage the machine.

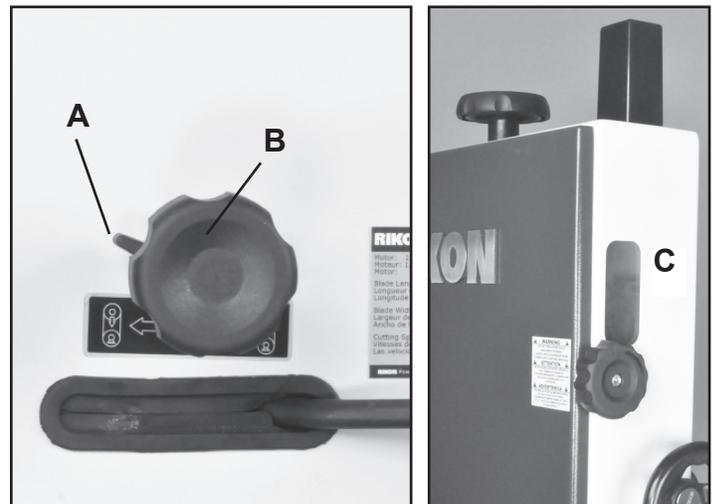


FIGURE 14



FIGURE 15

ADJUSTMENTS

ADJUSTING THE BLADE TENSION

1. **CAUTION** Always tension the blade with the Quick Release Lever (#17C) in the "ON" position. Failure to do so could result in lack of blade tension or tension failure. Figure 16.

NOTE: Release / turn 'OFF' the Tension Lever only to change the blade, or to prolong the life of the blade when the saw is not in use for extended periods.

2. To adjust the blade tension, turn the Blade Tension Handwheel (#1D, Fig. 17) on the top of the saw. To tighten the tension of the blade, turn the hand wheel clockwise. Tension the blade until the Tension Indicator Arrow (#16A, Fig. 19) corresponds to the width of blade you are using. View the indicator Arrow through the top door's front window. Fig.18.

NOTE: The blade tension scale may read differently due to different blade specifications from manufacturers - steel thickness, material, or variations in the welded blade length. It may be necessary to adjust the tension arrow up/down one size on blade tension scale to match your blade. Note the blade setting for the next time the same blade is used.

General Rule for blade tension: With the saw unplugged and the blade guard up, the saw blade should deflect about 1/4" when pressed with a finger to the side of the blade.

See page 16 for information on 'Adjusting the Blade Tension Stop' for tensioning blades that are welded a bit longer than the specified 111" length.

NOTE: Excessive counterclockwise turning of the Blade Tension Handwheel to release blade tension may unscrew the threaded Blade Tension Rod (#2C) from its tapped Block (#13C, Fig. 19, C). If this occurs, blade tensioning is impossible as the handwheel will just freely turn. The Rod must be re-threaded into the Block to resume blade tensioning.

ADJUSTING THE BLADE TENSION INDICATOR

The Blade Tension Indicator Arrow (#16A, Fig. 19, A) should be checked and adjusted the first time the saw is set up and run, and whenever a new blade is installed.

The blade tension indicator should be adjusted for blades made from thicker steel, if over cut or undercut in length, or made by different manufacturers.

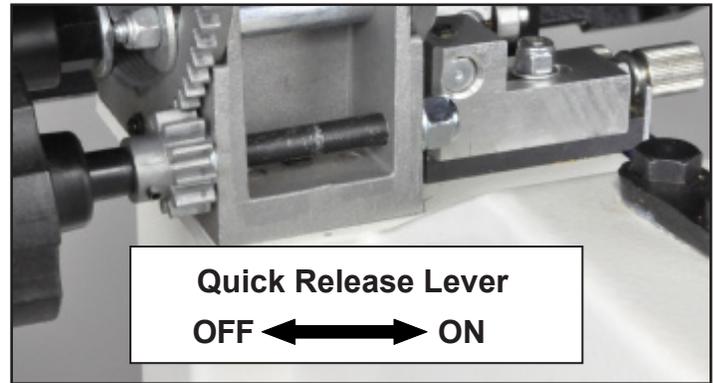


FIGURE 16



FIGURE 17



FIGURE 18

WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

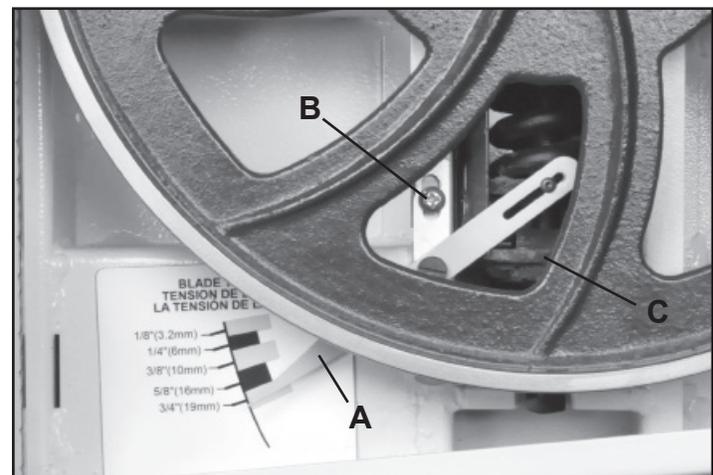


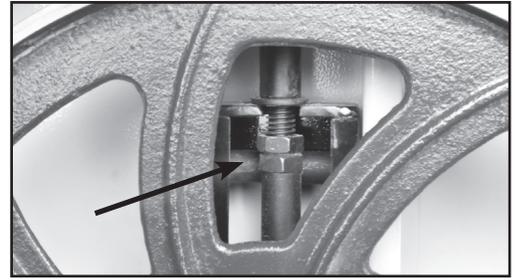
FIGURE 19

1. With moderate tension on the blade, loosen the Indicator Plate's adjusting Screw (#14A) with a Phillips head screw driver (Fig. 19, B).
2. Adjust the blade indicator up/down as needed and then tighten the plate's adjusting screw.

ADJUSTMENTS

ADJUSTING THE BLADE TENSION STOP

If you can not set full tension on a new blade, the blade is most likely welded a bit longer than the standard 111" length, and so just beyond the pre-set tensioning range of the saw. To fix this, behind the top bandsaw wheel is the threaded Blade Tension Rod (#2C). Loosen the Nuts (#3C) and screw them upward about 1/4", then retighten. This will increase the blade tensioning range of the saw for your new blade.



CHANGING THE BANDSAW BLADE

⚠ WARNING Unplug the machine from the electrical supply. This ensures that the Bandsaw will not accidentally turn on if the ON/OFF switch is bumped.

1. Open the top and bottom wheel doors.
2. Release the blade tension by moving the Quick Release Lever (#17C) from right to left. Fig. 20.
3. Open the Hinged Door (#11D) on the blade guard by loosening the Locking Handle (#14D). Fig. 21, A.
4. Remove the saw blade from the top wheel then feed it through the upper blade guides (B), slot in the table (C), lower blade guides & lower blade guard (D), out of the slot in the column of the machine (E), off of the bottom wheel, and then around the front rail (F).

⚠ CAUTION Be careful not to cut yourself on the sharp saw teeth. Wear gloves for protection.

5. When installing the new blade, reverse the steps 1-4 above. Ensure that the blade teeth are pointing downwards and towards you at the position where the blade passes through the table.
6. Center the blade on both wheels.
7. Re-tension the new blade by moving the quick release lever back to the ON position, Fig. 20, and check the blade tracking. The blade should run in the center of the wheels. Refer to "Tracking the Saw Blade" on page 14 for more details.
8. Reset the blade guides as described in the section "Adjusting the Blade Guides" on pages 17 and 18.
9. Reset the blade tension as described in the section "Adjusting the Blade Tension" on page 15.
10. Close the hinged door on the blade guard and tighten the locking handle to keep the door closed.
11. Close and lock both the wheel doors before reconnecting the power supply.

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.



FIGURE 20

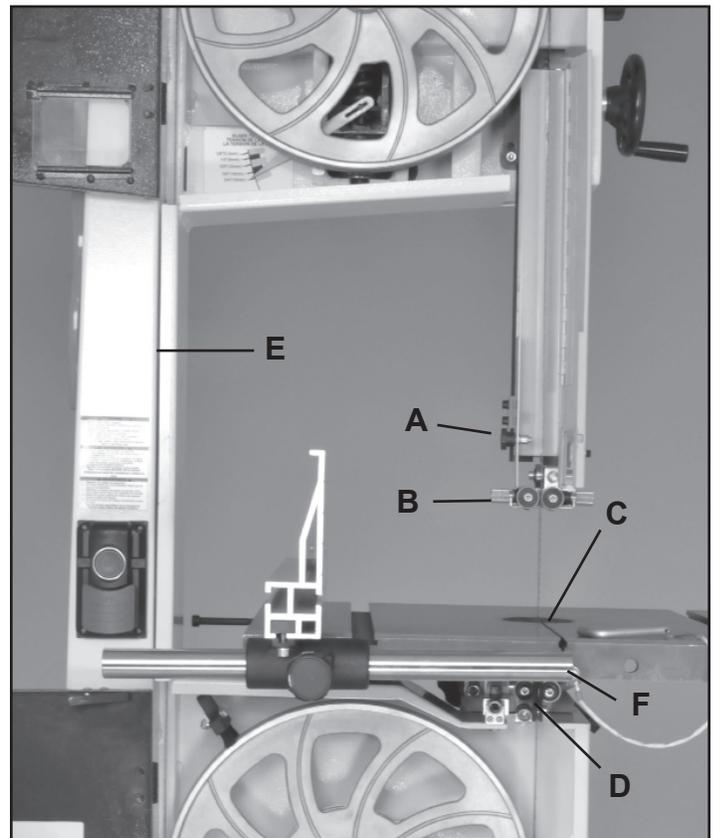


FIGURE 21

ADJUSTMENTS

ADJUSTING THE BLADE GUIDES

The 10-324 Bandsaw features industrial, ball bearing blade guides for controlling the side-to-side and rear movement of the blade. With the bandsaw blade properly centered on the drive wheels, the guide bearings can then be set. To adjust the blade guides:

Upper Guides:

1. Position the right and left guides relatively close to the blade. First, loosen their front locking Hex Cap Screws (#5G, Fig 22, A) with the 4mm hex wrench. To move the guides towards or away from the blade, turn the knurled, micro-adjusting Knobs (#6G, B).
2. The front of the guides should be approximately $1/16''$ behind the gullets of the saw blade (Fig. 23 inset). If they need to be moved forward or backwards, loosen the Lock Nut (#23D, Fig. 23, C) and move the upper guide's Support Block (#15G, D) until the guides are properly positioned behind the blade gullets. Re-tighten the lock nut when done. Fig. 23. Lock the guides in place. Fig. 22.
3. Set both side bearing guides to within $1/32''$ of the saw blade - about the same thickness of a business card (Fig. 22). Do not set the bearing guides too close, or touching the sides of the blade, as this will adversely affect the life of the blade and bearings.
4. Adjust the rear bearing guide (Fig. 24, E) to be just clear of the back of the saw blade. Loosen the rear guide's locking Hex Cap Screw (#5G, F) and move the rear guide towards the blade by turning the rear, knurled micro-adjusting Knob (G) that pushes the end of the guide's Long Shaft (#19G). When the correct adjustment is made, lock the guide in place by tightening the hex cap screw. Fig. 24.

Lower Guides:

Adjusting the ball bearing guides that are below the table is similar to the steps taken for the upper guides.

1. First, loosen the lower support Lock Nut (#1H, Fig. 25, A). Then move the blade Guide Block (#19H, B) with the micro-adjusting Knob (#5H, C) until both side bearing guides are approximately $1/16''$ behind the gullets of the bandsaw blade. Fig. 23, inset. When set, tighten the lock nut (A). Fig. 25.

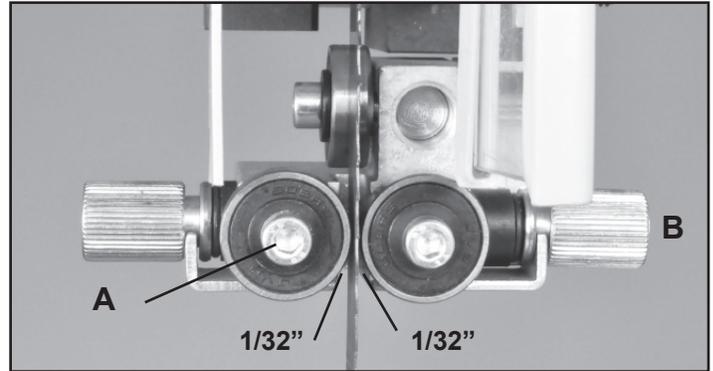


FIGURE 22

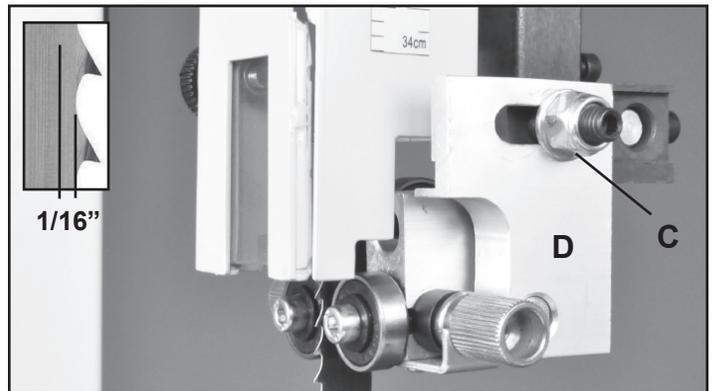


FIGURE 23

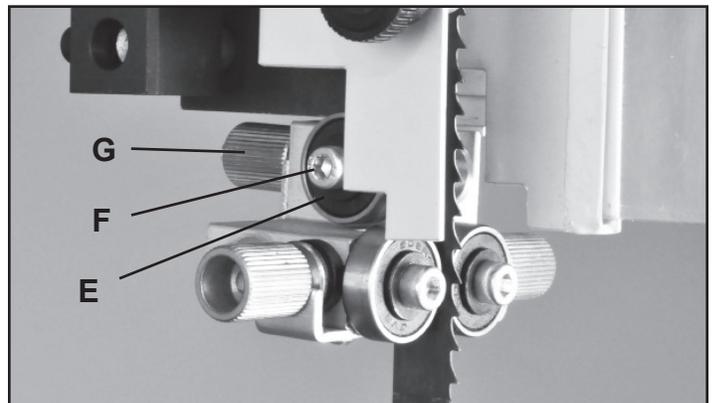


FIGURE 24

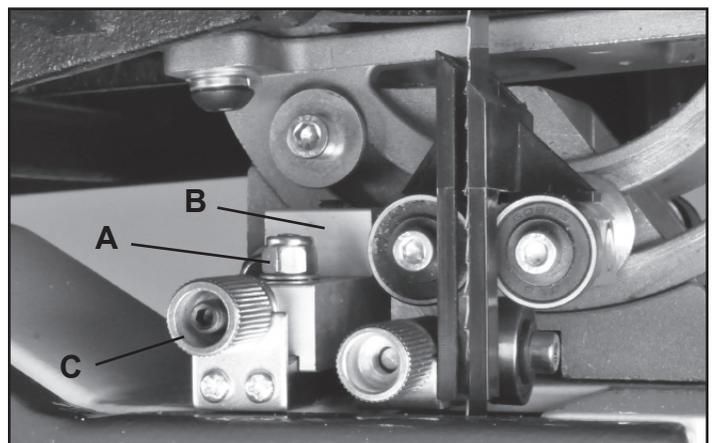


FIGURE 25

CONTINUED ON PAGE 18

ADJUSTMENTS

ADJUSTING THE BLADE GUIDES - continued

Lower Guides - continued:

2. Set both side bearing guides to within 1/16" of the saw blade - about the same thickness of a business card. Do not set the bearing guides too close, or touch the sides of the blade, as this will adversely affect the life of the saw blade and bearings.

3. First, loosen their front locking Hex Cap Screws (#11H, Fig 26, D) with the 4mm hex wrench. To move the guides towards or away from the blade, use the hex wrench as the handle to slide the bearings in place. Once set, secure the Cap Screws.

4. Adjust the rear bearing guide to be just clear of the back of the saw blade. Loosen the rear guide's Hex Cap Screw (Fig. 27, E), and move the rear guide towards the blade by turning the lower, front micro-adjustment Knob (F). When the correct adjustment is made, lock the guide in place by tightening the hex cap screw (E).

NOTE: If the rear guide will not adjust close to the rear of the blade (possible issue with thin blades), the position of the blade on the wheel can be adjusted, or the lower Plate (#23H) can be moved. There is a second position hole in the plate for the Hex Bolt (#8H). Unscrew the bolt and reposition it thru the plate's other hole. This will re-adjust the guide's travel distance.

ADJUSTING THE BLADE GUIDE & GUARD

NOTE: Before cutting, set the upper guide bearings approximately 1/4" above the top surface of the work piece. This will give the best blade control. Fig. 28.

1. Loosen the Guidepost Lock Knob (#1D, Fig. 30A) and turn the Guidepost Handle (#31D, Fig. 29, B) to raise or lower the guide post/upper blade guide assembly to the desired height.

A measurement scale has been supplied on the right side of the guide post for quick reference on the height of the guide bearings above the table surface.

2. When the guide bearings are in proper position, re-tighten the guidepost lock knob.

NOTE: The guide post is pre-set at the factory to aligned vertical with the bandsaw blade. If the guide post setting ever needs slight adjustment:

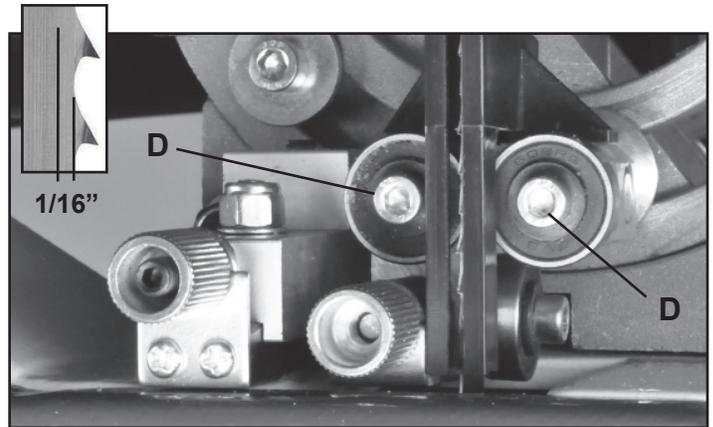


FIGURE 26

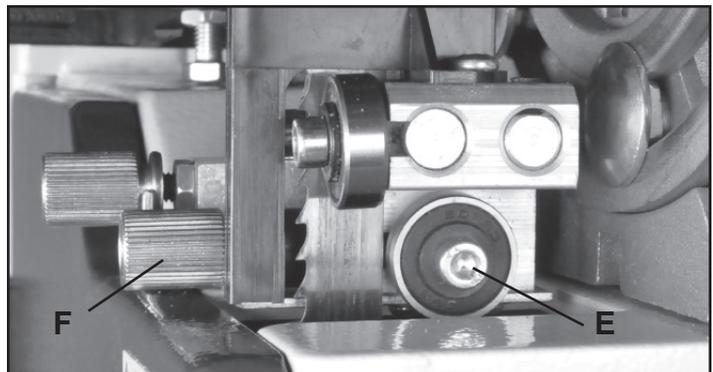


FIGURE 27

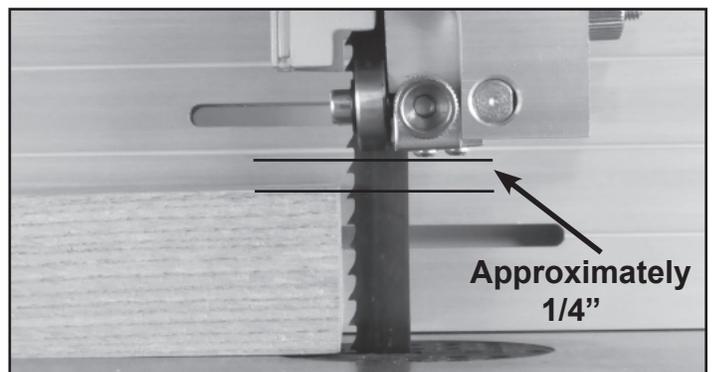


FIGURE 28

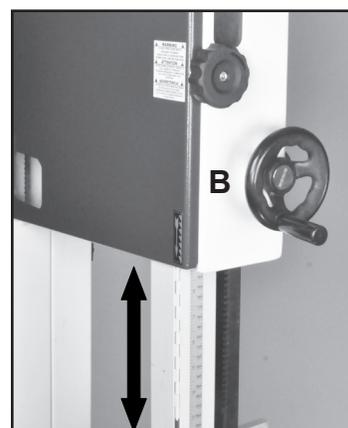


FIGURE 29

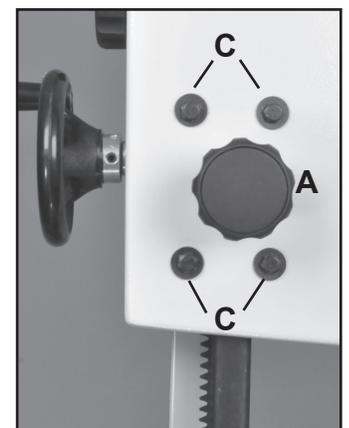


FIGURE 30

CONTINUED ON PAGE 19

ADJUSTMENTS

ADJUSTING THE BLADE GUARD - continued

3. Open the top door and lower the blade guard all the way down to the table to access the Guide Bracket (#4D). Fig. 31.
4. Loosen the four Hex Bolts (#2D) located at the rear of the top frame. Fig. 30, C. This will allow the guide post to be shifted/angled a bit left or right to correct any positioning issues.
5. There are also four Set Screws (#5D) set in the rear of the guide bracket near the corners. If the guard post needs to be angled slightly towards the front or back of the table, or even twisted on an angle, make the adjustment with these screws. Fig. 31.
 - Advancing the top two set screws will angle the post towards the rear of the table.
 - Advancing the bottom two set screws will angle the post towards the front of the table.
 - Setting the two left or right screws will angle the post to the right or left.
6. When the post is adjusted vertical, tighten the four hex bolts that were loosened in step 4.

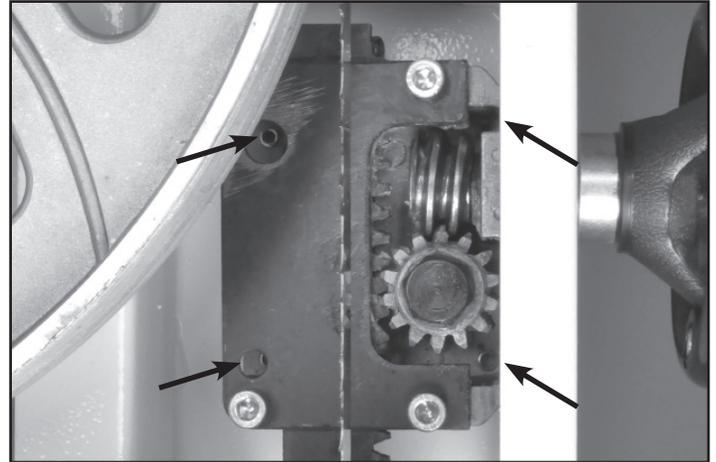


FIGURE 31

ADJUSTING THE RIP FENCE FOR DRIFT

The 10-324 Bandsaw can be adjusted to eliminate 'drift' - bringing the fence back to being parallel to the blade - by two methods. To adjust the fence for drift:

Method 1. Loosen the two Hex Screws (#10F) which hold the Rip Fence (#1F) to the Fence Carrier (#6F). Adjust the fence so that it is parallel to the blade/miter gauge slots, then re-tighten the hex screws.

Method 2. Loosen the Fence Rail Nuts (#16F, Fig. 32 C) so that the fence rail can be adjusted in or out from the table edge. This will position the fence left or right, as needed, to align it parallel to the blade and miter saw slots in the table. Once the fence is set, tighten the fasteners. Fig. 32, A.

ADJUSTING THE FENCE 90° TO THE TABLE

Check that the fence is 90 degrees to the table using a square. If adjustments are required, loosen the Fence Rail Nuts (#16F, Fig. 32, C) and raise or lower either side of the fence's Guide Rail until the fence is 90 degree to the table. Once set at 90 degrees, fully tighten the fence bar nuts. Fig. 32, B & 33.

See page 12 for the guide rail installation process.

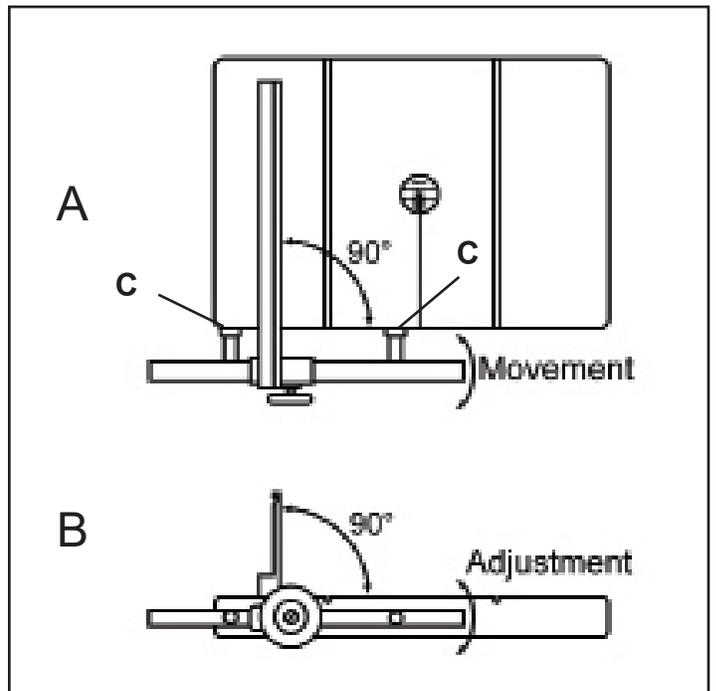


FIGURE 32

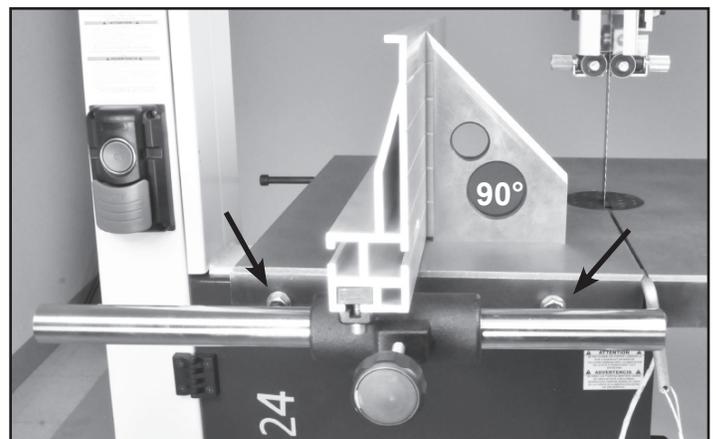


FIGURE 33

ADJUSTMENTS

ADJUSTING THE FENCE TO THE TABLE

Check that the fence is lying flat, or parallel to the table surface. The gap between the table and the bottom of the fence should be equal along the whole length of the fence. If a slight adjustment is necessary, loosen the Fence Rail Nuts (#16F) so that the fence rail can be adjusted up or down from the table surface. This will position the fence up or down as needed to align it parallel to the table surface. Once the fence is set, tighten the fence rail nuts. Fig. 34, A.

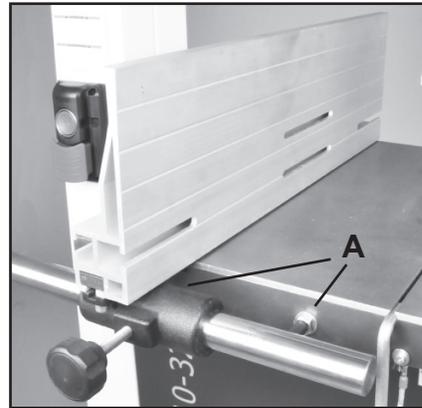


FIGURE 34

⚠ WARNING
THE MACHINE
MUST NOT BE
PLUGGED IN AND
THE POWER SWITCH
MUST BE IN THE
OFF POSITION UNTIL
ALL ADJUSTMENTS
ARE COMPLETE.

ADJUSTING THE FENCE ON THE CARRIER

The fence can be changed from a vertical position to a horizontal position, or from its mounting on the left side of the blade to the right with simple adjustments of the carrier's hardware and front rail.

To change the fence from vertical to horizontal:

1. Loosen the two Hex Screws (#10F, Fig. 35, A) which hold the Rip Fence (#1F, B) to the Fence Carrier (#6F, C). Slide the fence forward to remove it from the carrier's Sliding Block (#5F, Fig. 35, D).
2. Turn the fence down to its horizontal position and slide it back onto the carrier. The bottom of the fence is slotted to mount on the sliding block. Fig. 36.
3. Once in place, retighten the two hex screws to secure the fence in position on the carrier. Check the fence for drift, and make corrections if needed per instructions on page 19.

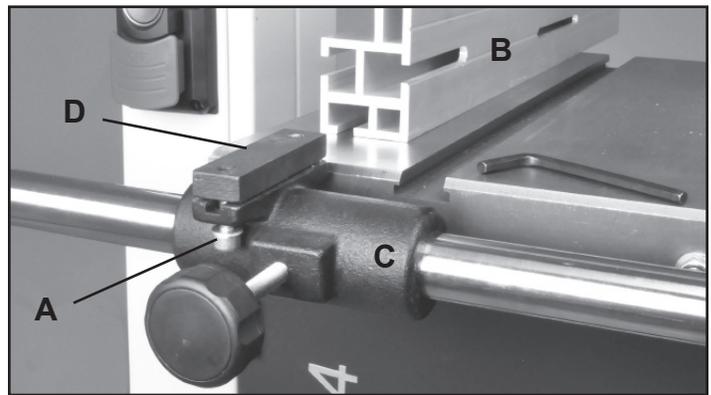


FIGURE 35

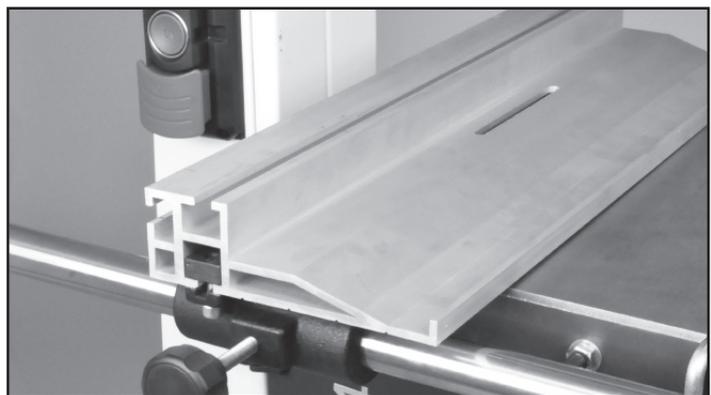


FIGURE 36

To change the fence from the left side of the blade to the right side of the blade:

1. Remove the fence carrier with fence from the front rail.
2. Unscrew and remove the front fence Guide Rail (#11F) from the front lip of the table. Flip the rail over 180° end-to-end and re-attach it to the right side of the table front edge, through the two pre-bored holes to the right of the blade slot in the table. Fig. 37. Mount the fence guide rail with the two fence bar Nuts and Washers (#15F, 16F). Position the bar so that it is parallel with the table surface, and equal distance out from the front edge of the table when measured at both left and right front edges of the table.

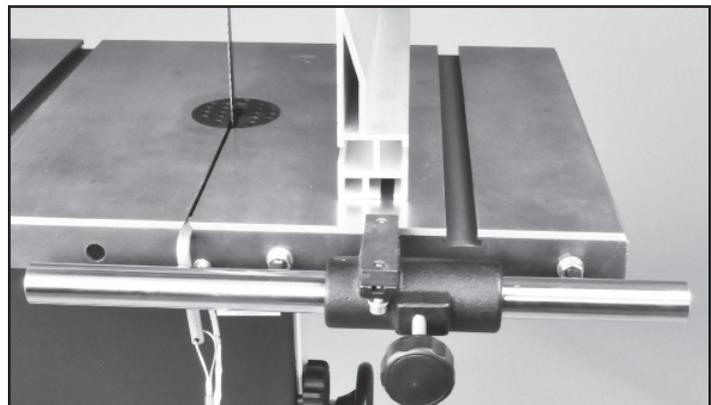


FIGURE 37

ADJUSTMENTS

3. Mount the Fence Carrier (#6F) back onto the front rail. The fence now needs to be repositioned for use on the right side of the blade.

4. Loosen the two Hex Screws (#10F, Fig. 35, A) which hold the Rip Fence (#1F) to the Fence Carrier (#6F). Slide the fence forward to remove it from the carrier's Sliding Block (#5F).

5. Turn the fence around 180° end-to-end and slide it back onto the sliding block. Fig. 37. Once in place, retighten the two hex screws to secure the fence in position on the carrier. Fig. 38.

6. Check the fence for drift, and make corrections if needed per instructions on page 19.

CHANGING THE BLADE SPEED

This Bandsaw has two blade speeds, high speed (2950 ft/min) and low speed (1445 ft/min). **NOTE:** The bandsaw is shipped in the high speed mode.

The lower wheel has two integral “multi-vee” form pulleys, and the motor shaft has a twin multi-vee form pulley. The “multi-vee” belt passes around the wheel pulley and the motor pulley. The belt tension is released and applied by using the Handwheel (#26E) Fig. 39, A.

For the **HIGH SPEED** (2950 ft/min), the belt should be installed on the rear pulley of both the motor and the wheel, as shown in Fig. 40.

The high speed setting is the standard for all around sawing needs of woods and composites.

For the **LOW SPEED** (1445 ft/min), the belt should be installed on the front pulley of both the motor and wheel, as shown in Fig. 40.

The low speed setting is best for cutting extra hard material - wood, plastics, and non-ferrous metals. The correct blade type is necessary for clean, effective cutting action in these materials.

ADJUSTING THE DRIVE BELT TENSION

To adjust the belt tension turn the lower Handwheel (#26E, Fig. 39, A) until there is about 3/8" to 1/2" deflection in the “multi-vee” drive belt. **DO NOT** over tension the belt as this can put excessive, damaging pressure on the belt, pulleys and motor. Fig. 41.

SEE PAGE 25 FOR INSTRUCTIONS ON CHANGING THE DRIVE BELT.

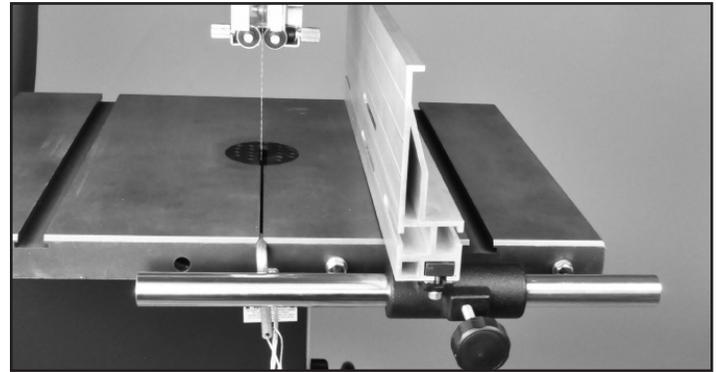


FIGURE 38



FIGURE 39

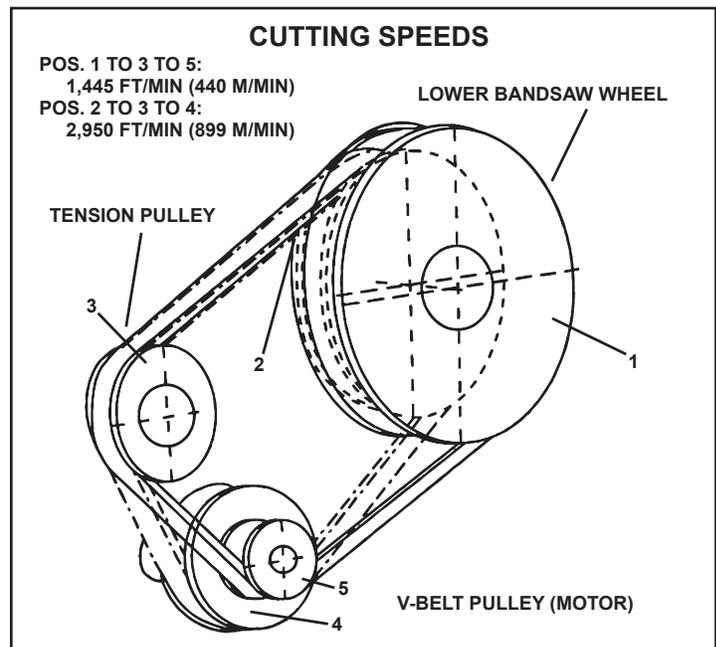


FIGURE 40

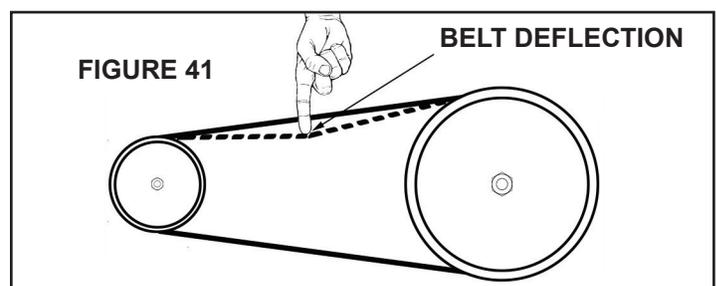


FIGURE 41

BELT DEFLECTION

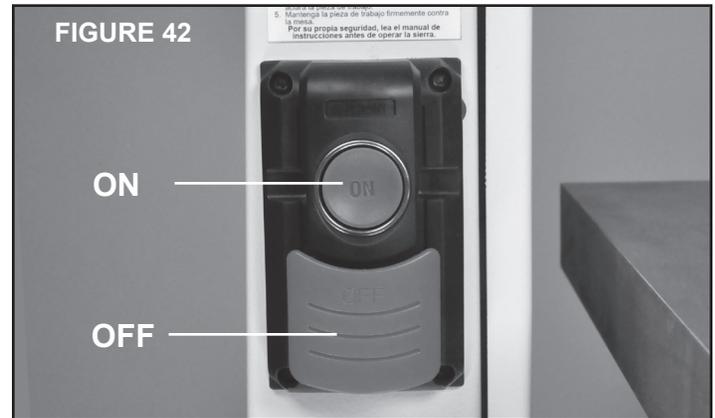
ADJUSTMENTS

ON/OFF SWITCH

To operate the saw, Press the top, round “ON” button in to its full depth to turn the saw on. There should be a ‘click’ to indicate the ‘on’ contact is made.

Once work is finished, hit the bottom red safety paddle switch to turn the saw OFF. Fig. 42.

If the saw is not to be used for an extended length of time, unplug the saw from the power supply and release the tension on the blade.



OPERATION

BASIC OPERATION

The blade cuts on a continuous down-stroke. Never start the saw with the workpiece in contact with the blade. With both hands, firmly hold the workpiece down on the table, and feed it slowly towards the blade, putting only light pressure on it, and keeping your hands away from the blade.

Keep your hands and fingers away from the blade. Use a push stick whenever working close to the blade.

For best results, the blade must be sharp. A dull blade will not cut correctly, especially when straight cutting, and causes excess pressure to be applied on the rear guide bearings.

Select the right blade for the job, depending on the thickness of the wood and the cut to be made. The thinner and harder the wood, the finer the teeth of the blade should be. Use a fine tooth blade for cutting sharp curves. See page 41 for more information on blades.

The machine is especially suited for cutting curves, but will also make straight cuts. When cutting, follow the design marked out by pushing and turning the workpiece evenly into the blade.

Do not attempt to turn the workpiece without pushing it, as this may cause the workpiece to get stuck, or bend the blade. For straight cuts, use the fence provided to feed the workpiece along the blade slowly and in a straight line. Use the re-saw bar for thick or difficult woods. Use a miter gauge for cross-cut or angle cutting.

See page 6 for more operation information.

RE-SAWING

A re-saw guide bar is supplied to help correct any blade wandering during certain re-sawing operations.

For re-sawing, attach the re-saw bar to the slot on the fence. Position the re-saw bar so that it is aligned with the front of the blade. Draw a reference line down the workpiece. Use the bar as a pivot point, angling the wood left or right while against the bar, to follow the line through the cut. Fig. 43.

Note: The re-saw bar is not needed for all re-saw operations. Proper blade tension and selection, as well as proper guide set up, will allow re-sawing flat stock against the fence without the use of the re-saw bar.

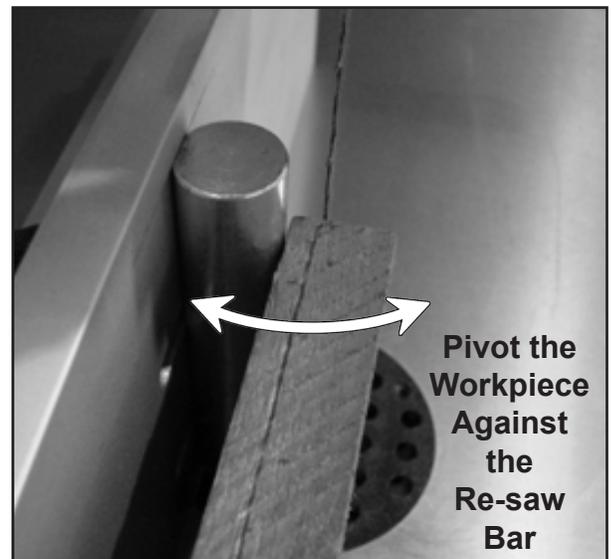


FIGURE 43

MAINTENANCE

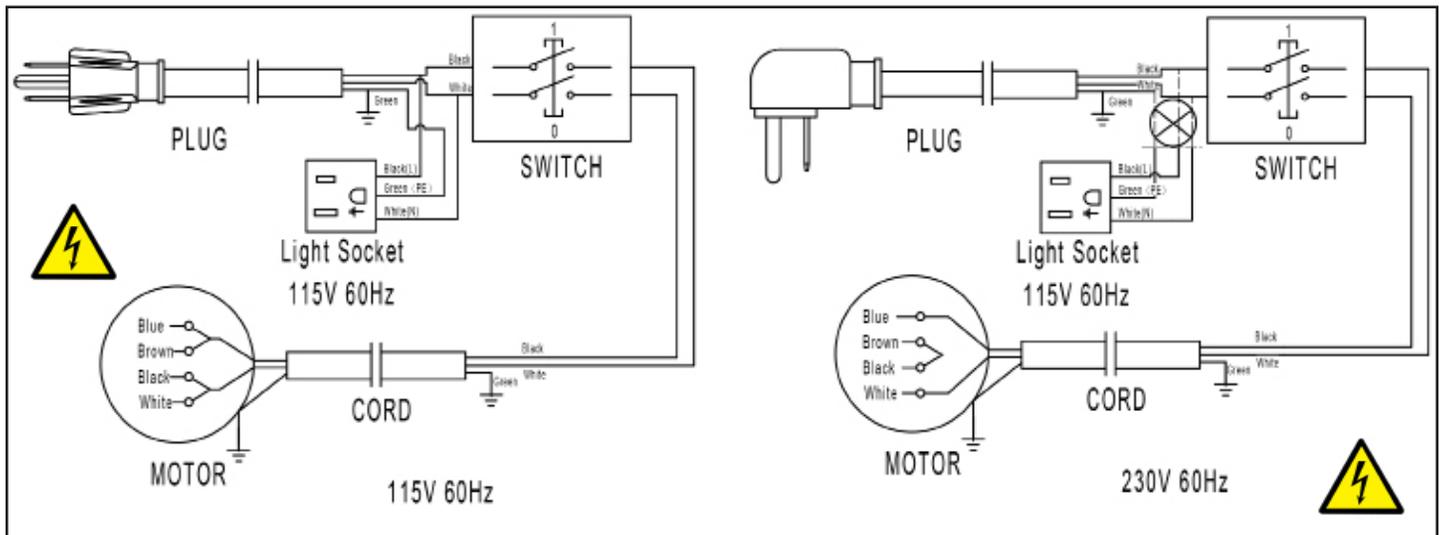
CAUTION BEFORE CLEANING OR CARRYING OUT MAINTENANCE WORK, DISCONNECT THE MACHINE FROM THE POWER SOURCE (WALL SOCKET). NEVER USE WATER OR OTHER LIQUIDS TO CLEAN THE MACHINE. USE A BENCH BRUSH. DO NOT USE COMPRESSED AIR NEAR BEARINGS. REGULAR MAINTENANCE OF THE MACHINE WILL PREVENT UNNECESSARY PROBLEMS.

1. Keep the table clean to ensure accurate cutting.
2. Keep the outside of the machine clean to ensure accurate operation of all moving parts and prevent excessive wear.
3. Keep the ventilation slots of the motor clean to prevent it from overheating.
4. Keep the inside of the machine (near the saw blade, etc.) clean to prevent accumulation of dust. Use dust collection, if possible.
5. To prolong the life of the blade, when the bandsaw is not in use for extended periods, release the blade tension. Before reusing the bandsaw, ensure that the blade is re-tensioned and tracking is checked.
6. Keep the guide bearings free of dust, and clean the guide bearing assemblies frequently.

WIRING DIAGRAM

WARNING: 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.

As received from the factory, your bandsaw is ready to run at 115V operation. It can be switch to 230V according to the schematic and instructions below. Note the warning for disabling the electrical outlet.



For 115V wiring; connect the black & white motor terminal wires to the black switch wire lead, and connect the blue & brown terminal wires to the white switch wire lead. Disregard the wires that lead to the capacitor.

For 230V wiring; tie the black & brown terminals together, connect the white motor terminal wire to the black switch wire lead, and connect the blue motor terminal wire to the white switch wire lead. Disregard the wires that lead to the capacitor.

WARNING: For 220V wiring, DISCONNECT the wires leading to the Power Outlet to make it inoperable. This plug is for 115V wiring only.

TROUBLESHOOTING



WARNING

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

TROUBLE	PROBABLE CAUSE	REMEDY
The machine does not work when switched on.	<ol style="list-style-type: none"> 1. No power supply. 2. Defective switch. 	<p>Check the cable for breakage. Contact your local dealer for repair parts.</p>
The blade does not move with the motor running.	<ol style="list-style-type: none"> 1. The quick release lever or blade tension handwheel has not been tightened. 2. The blade has come off one of the wheels. 3. The saw blade has broken. 4. The drive belt has snapped. 	<p>Switch off the motor, tighten the quick release lever or blade tension handwheel. Open the hinged door and check. Replace the blade. Replace the belt.</p>
The blade does not cut in a straight line.	<ol style="list-style-type: none"> 1. Fence for cutting not used. 2. Too fast feed rate. 3. The blade teeth are dull or damaged. 4. Blade guides not suitably adjusted. 	<p>Use a fence. Put light pressure on the workpiece & make sure the blade does not bend. Use a new blade. Adjust the blade guides (see the section on pages 17 and 18).</p>
The blade does not cut, or cuts very slowly.	<ol style="list-style-type: none"> 1. The teeth are dull, caused by cutting hard material or long use. 2. The blade was mounted in the wrong direction. 	<p>Replace the blade, use a 6 T.P.I. blade for wood and soft materials. Use a 14 T.P.I. blade for harder materials. A 14 T.P.I. blade always cuts slower due to the finer teeth. Install the blade correctly.</p>
Sawdust builds up inside the machine.	<ol style="list-style-type: none"> 1. This is normal 	<p>Clean the machine regularly. Open the hinged door and remove the sawdust with a vacuum cleaner. Attach a dust collection system.</p>
Sawdust inside the motor housing.	<ol style="list-style-type: none"> 1. Excessive dust build-up on the machine exterior components. 	<p>Clean the ventilating slots of the motor with a vacuum cleaner. From time to time remove the sawdust to prevent it from being drawn into the housing</p>
The machine does not cut at 45° or 90° angles.	<ol style="list-style-type: none"> 1. The table is not at right angles to the blade. 2. The blade is dull or too much pressure was put on the workpiece. 	<p>Adjust the table. Replace the blade or put less pressure on the workpiece.</p>
The blade cannot be properly positioned on the band wheels.	<ol style="list-style-type: none"> 1. The wheels are not aligned. 2. The blade tracking knob hasn't been properly adjusted. 3. Inferior blade. 	<p>Contact Technical Support @ 877-884-5167 or techsupport@rikontools.com. Adjust the knob (see pages 14, 26 and 27). Replace the blade.</p>

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

TROUBLESHOOTING

⚠ WARNING THE MACHINE MUST NOT BE PLUGGED IN AND THE POWER SWITCH MUST BE IN THE OFF POSITION UNTIL ALL ADJUSTMENTS ARE COMPLETE.

CHANGING THE MOTOR DRIVE BELT

Before changing the belt, make sure that the bandsaw is unplugged from the power source. To change the drive belt:

1. Release the tension on the bandsaw blade and move the blade off of the lower wheel, or take the blade totally off from the saw. See page 16.
2. Remove the tension from the drive belt by turning the belt tensioning Handwheel (#26E). Take the old belt off of the wheel and pulleys.
3. Take the Lower Wheel (#13E) off of the saw. Remove the Allen Screw, Spring Washer and Flat Washer (#22, 23, 21E) in the middle of the lower wheel. Carefully pull the wheel off the shaft (#15E).
4. Install the new belt and reverse the process outlined above. Tension the drive belt until there is 3/8" to 1/2" of deflection. See page 21.

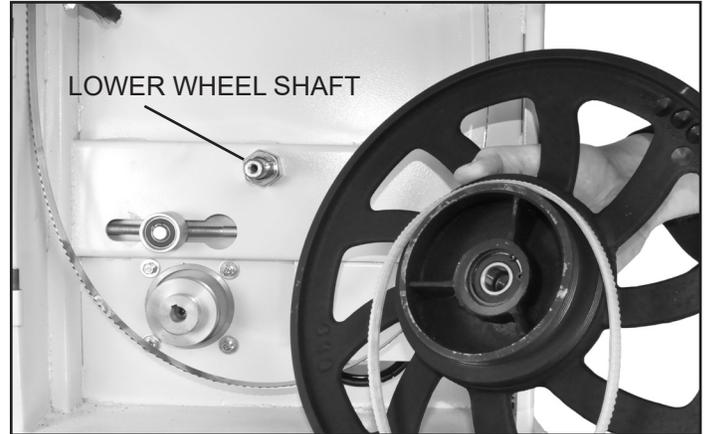


FIGURE 44



FIGURE 45

LEVELING THE TABLE INSERT

The table insert has an innovative built in micro-adjustment feature. This adjustment can be used if the table insert sits too high or too low in the table seat. If the insert is resting above the table, turn the micro-screws with a hex "L" wrench counter clockwise to lower the insert. If the insert is sitting below the table, turn the micro-screws clockwise to raise the insert level with the table.

Caution: Having the insert below the top of the table could cause the workpiece to get stuck on the lip of the table seat, particularly on the back area of the table seat in back of the blade.

CHANGING BANDSAW TIRES

Use a putty knife to get underneath the tire and pull it up and away from the wheel. Work the putty knife all the way around the wheel to loosen the tire. Then, use the putty knife as leverage to flip the tire over and off of the wheel. Clean the inside of the groove, removing any dirt, debris or cement with lacquer thinner.

Soak the replacement tire in warm water to make it more flexible. Dry the tire, and while it is still warm, lay it on top of the wheel. Start by setting the tire into the wheel groove at the top of the wheel. Using a putty knife, work the new tire around the wheel, making sure not to slice the tire. If rubber cement is to be used as a binder, make sure to distribute it evenly. Having high spots between the wheel and the tire will cause a vibration and effect blade tracking.

TROUBLESHOOTING

LOWER WHEEL ADJUSTMENTS

The following instructions will correct common blade issues related to the lower wheel's alignment in relation to the upper wheel. These adjustments will correct the blade position on the lower wheel and blade oscillation (wobble). These are critical adjustments which affect the performance and accuracy of the bandsaw.

CAUTION PLEASE READ AND UNDERSTAND THESE STEPS THOROUGHLY BEFORE MAKING ANY ADJUSTMENTS. FAILURE TO DO SO COULD DAMAGE THE MACHINE.

Please contact a tech support representative if you have questions before attempting these adjustments. RIKON Tech Support 877-884-5167 techsupport@rikontools.com

Release the blade tension completely before making any lower wheel adjustments. Pressure must be released on the lower wheel to allow proper adjustments and to avoid damaging the machine.

If the blade is not running true, or it is not running on center of the lower wheel but is correct on the upper wheel, then an adjustment to the wheel hub on the rear of the bandsaw is required.

The numbers shown on the rear hub photo represent the positions on a clock face.

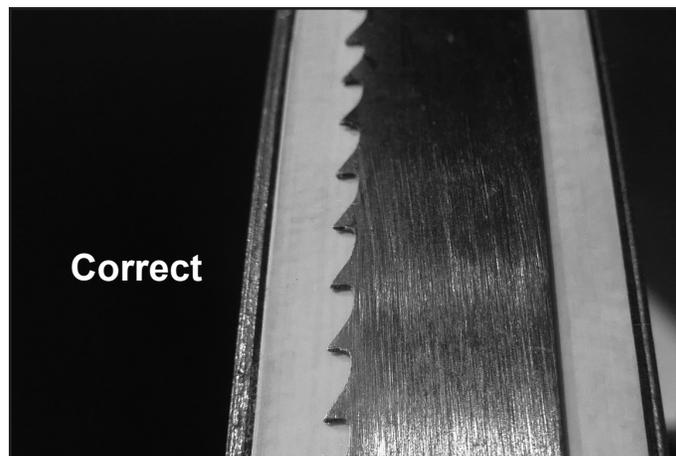
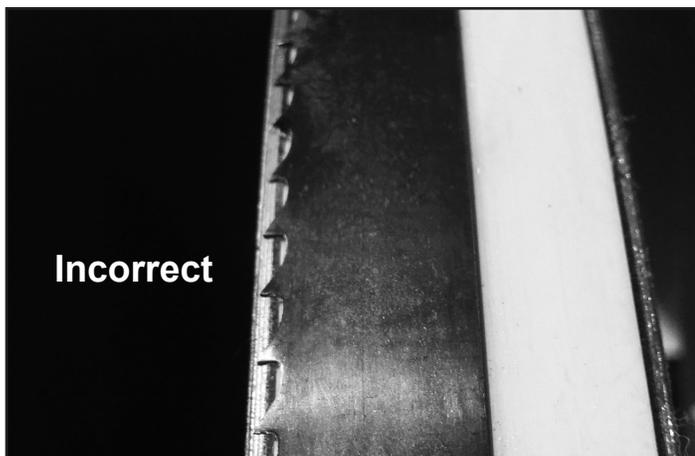
NOTE: To help identify the extent of rotation on a bolt, mark a black dot on the edge of the bolt as a visual indicator.

If a blade is tracking forward on the lower wheel toward the door, follow these correction steps:

- 1.) De-tension the saw blade.
- 2.) Loosen 9 o'clock shaft bolt to take pressure off the shaft.
- 3.) Loosen 12 o'clock shaft bolt one half rotation.
- 4.) Tighten the 6 o'clock shaft bolt until the shaft touches the 12 o'clock adjusting bolt.
- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Repeat if further adjustment is necessary.



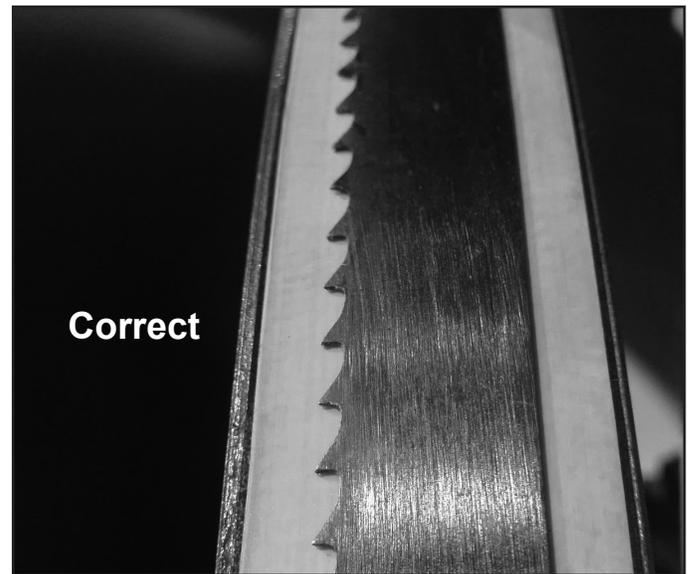
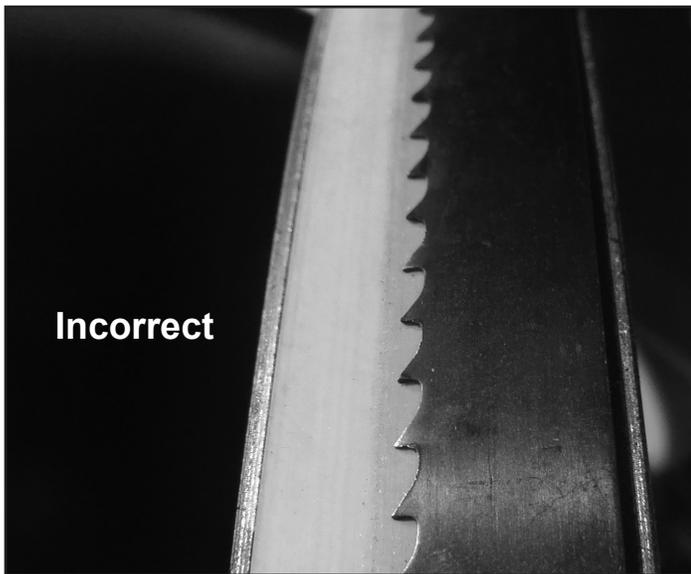
CONTINUED ON PAGE 27



TROUBLESHOOTING

If a blade is tracking on the rear of the lower wheel, away from the door, follow these steps:

- 1.) De-tension the saw blade.
- 2.) Loosen 9 o'clock shaft bolt to take pressure off the shaft.
- 3.) Loosen 6 o'clock shaft bolt one half rotation.
- 4.) Tighten the 12 o'clock shaft bolt until the shaft touches the 6 o'clock adjusting bolt.
- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Repeat if further adjustment is necessary.

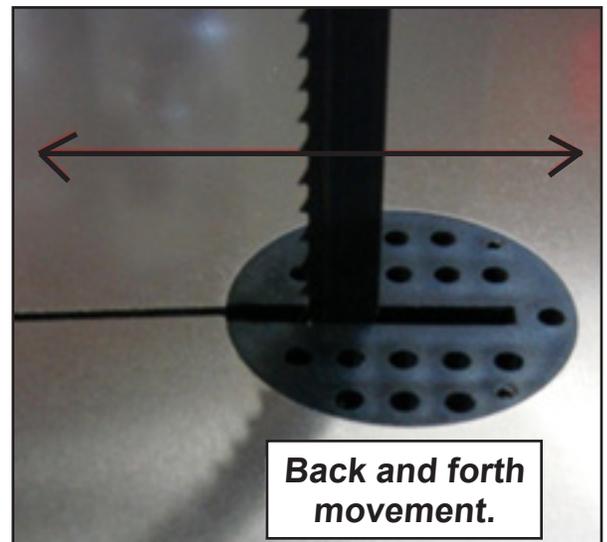


If a blade is moving back and forth (wobbling) follow these steps:

First, check the bandsaw blade to insure that it has been welded correctly, so that the blade's back is in proper alignment - flat (if it is laid down on a table surface).

If the blade is welded true, then adjustment to the wheel hub on the rear of the bandsaw is required.

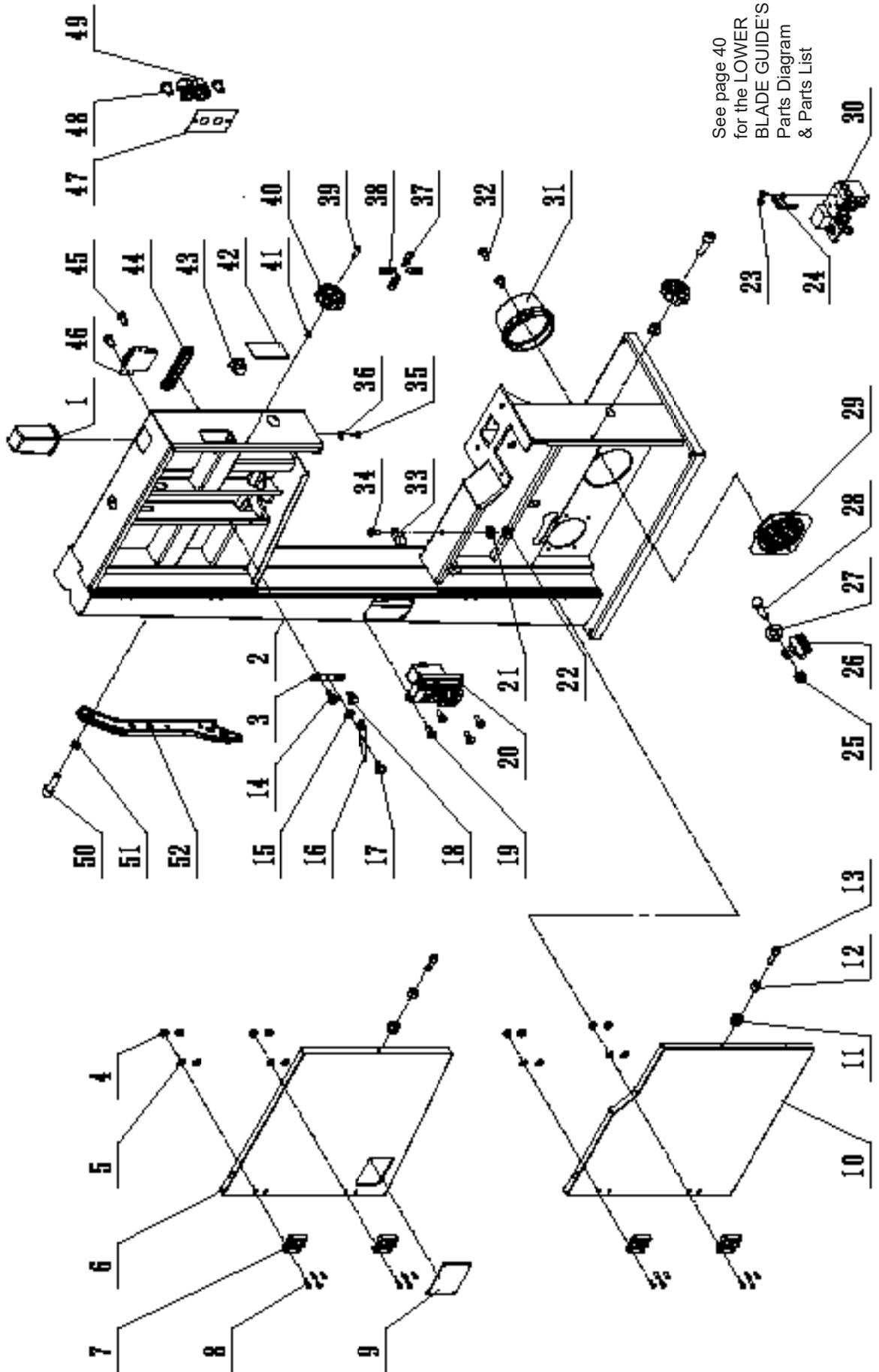
- 1.) De-tension the saw blade.
- 2.) Loosen 6 o'clock shaft bolt to take pressure off of the shaft.
- 3.) Loosen 9 o'clock shaft bolt one half rotation.
- 4.) Tighten the 3 o'clock shaft bolt until the shaft touches the 9 o'clock adjusting bolt.
- 5.) Lock all three shaft bolts.
- 6.) Re-tension the saw blade and set the upper wheel to plumb by adjusting the tracking knob. Spin the upper wheel by hand and track the blade.
- 7.) Start the bandsaw and check blade movement.
- 8.) If movement has diminished then continue with the adjustment.
- 9.) If movement is worse, reverse the adjustments in steps 3 and 4.



PARTS DIAGRAM

FRAME ASSEMBLY SHEET A

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

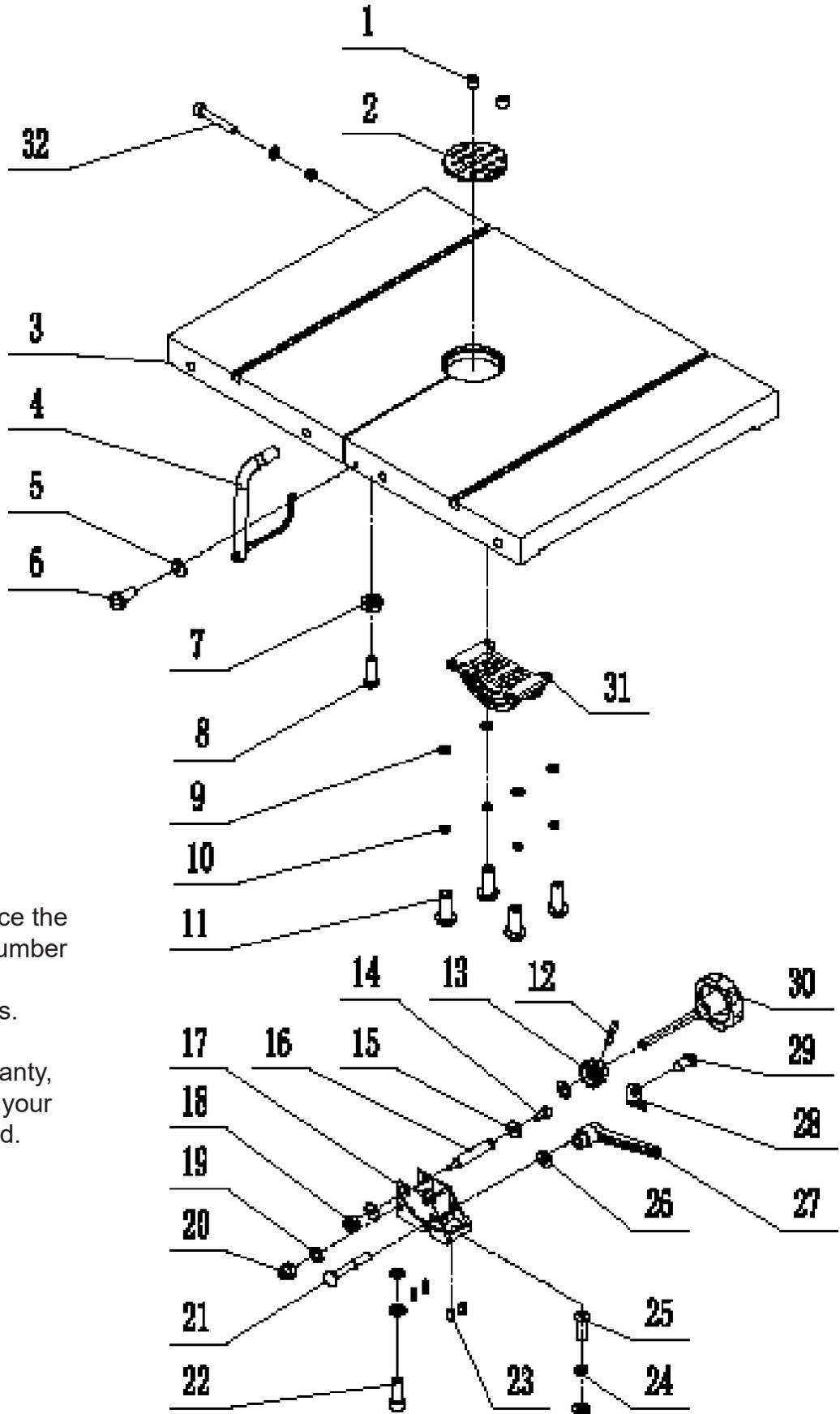


PARTS LIST

KEY NO.	DESCRIPTION	QTY.	PART NO.	KEY NO.	DESCRIPTION	QTY.	PART NO.
1A	Guide post cap	1	1-JL28010003-001S	27A	Washer	1	1-WSH6GB96Z
2A	Frame	1	1-JMBS1404011000-117U	28A	Hex bolt M6x25	1	1-M6X25GB5783Z
3A	Indicator adjustment plate	1	1-JL27010005	29A	Dust port grille	1	1-JL20010019-001S
4A	Hex nut M6	8	1-M4GB6170B	30A	Lower guide assembly	1	1-JL21043000D
5A	Lock washer	8	1-WSH4GB862D2B	31A	Dust port 4"	1	1-JL20010007-001S
6A	Upper wheel cover	1	1-JMBS1404010200-076U	32A	Tapping screw	2	1-ST3D5X9D5GB845B
7A	Hinge	4	1-JMBS1404010400	33A	Table angle block assembly	1	1-JL21010014
8A	Hex socket screw M4x16	16	1-M4X16GB70D3B	34A	Quick stop bolt	1	1-JL26010015
9A	Clear window	1	1-JXBS1804010004A	35A	Pan head screw M4x10	1	1-M4X10GB818B
10A	Lower wheel cover	1	1-JMBS1404010002-076U	36A	Pointer	1	1-JMBS1403011026-076U
11A	Nylon nut M6-1.0	2	1-M6GB889Z	37A	Carriage bolt M8x25	4	1-M8X25GB5783B
12A	Bushing	2	1-JL26010007	38A	Hex nut M6	4	1-M8GB6170B
13A	Carriage bolt M6x20	2	1-M6X20GB70D1Z	39A	Carriage bolt M6x20	2	1-M6X20GB70D1Z
14A	Screw M5x10	1	1-M5X10GB818Z	40A	Star knob	2	1-JL26010006-001S
15A	Washer	1	1-WSH5GB97D1Z	41A	Nylon nut M6-1.0	2	1-M6GB889Z
16A	Pointer	1	1-JL27010004-114X	42A	Clear window	1	1-JMBS1404010001
17A	Special screw	1	1-JL26010010	43A	Plug seat	1	1-DB-F-M
18A	Fixed bolt	1	1-JL27010019	44A	Rubber cover	1	1-JL28010005-001S
19A	Pan head screw M4x10	4	1-M4X10GB823B	45A	Pan head screw M5x10	2	1-M5X10GB818B
20A	ON/OFF Switch	1	1-HY56-6	46A	Tool holder	1	1-JL26090001
21A	Washer	1	1-WSH8GB97D1B	47A	Strain relief plate	1	1-JL26010011-117U
22A	Nylon nut M8	1	1-M8GB889B	48A	Hex socket screw M6x10	2	1-M6X10GB70D2B
23A	Pan head screw M4x6	2	1-M4X6GB818Z	49A	Strain relief	2	1-JL91046100
24A	Lower blade guard	1	1-JL20043006B	50A	Hex bolt M6X30	1	1-M6X30GB70D1B
25A	Nylon nut M6-1.0	1	1-M6GB889Z	51A	Hex nut M6	1	1-M6GB6170B
26A	Brush	1	1-JL26010003	52A	Push stick	1	1-JL81100003-146S

PARTS DIAGRAM

TABLE ASSEMBLY SHEET B



NOTE: Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

PARTS LIST

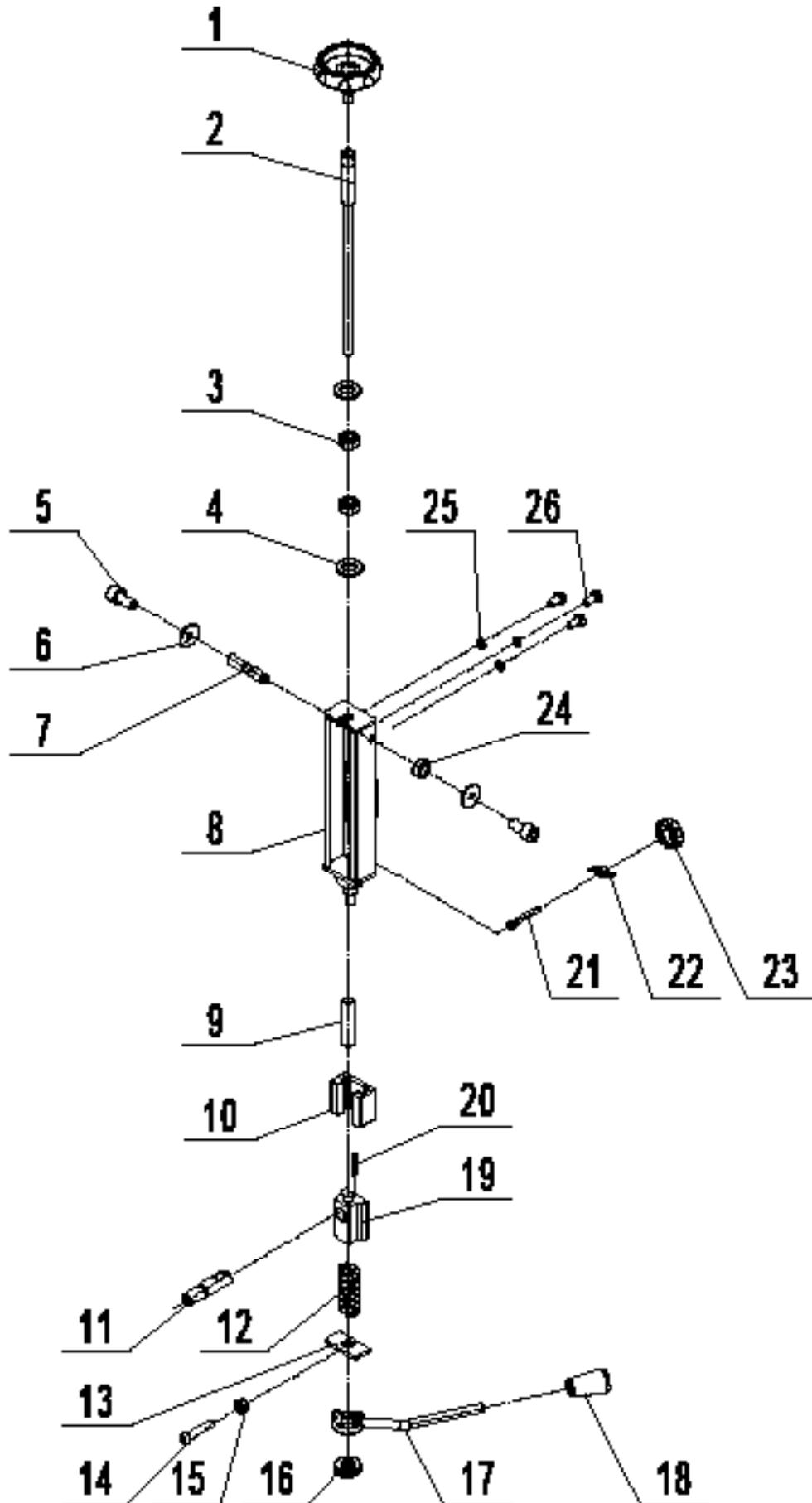
TABLE ASSEMBLY SHEET B

KEY NO.	DESCRIPTION	QTY.	PART NO.
1B	Set screw M6x4	2	1-M6X4GB77B
2B	Table insert	1	1-JL26050008A-001S
3B	Table	1	1-JMBS1404030001-001L
4B	Table alignment pin & lanyard	1	1-JMBS1404030002
5B	Washer	1	1-WSH4GB96Z
6B	Pan head screw M4x10	1	1-M4X10GB818Z
7B	Hex nut M8	2	1-M8GB6170B
8B	Hex bolt M8x25	1	1-M8X25GB5783B
9B	Washer	5	1-WSH8GB97D1B
10B	Spring washer	4	1-WSH8GB93B
11B	Hex socket screw M8x20	4	1-M8X20GB70D2B
12B	Roll pin 3x18	1	1-PIN3X18GB879B
13B	Gear	1	1-JL28070003
14B	Hex socket cap screw M6x12	2	1-M6X12GB70D1Z
15B	Washer	2	1-WSH6GB5287Z
16B	Guide shaft	1	1-JL28070008B
17B	Support	1	1-JL27050004C
18B	Self-locking nut	1	1-M6GB889D1Z
19B	Washer	4	1-WSH8GB97D1Z
20B	Self-locking nut M8	1	1-M8GB889Z
21B	Square neck bolt M12x80	1	1-M12X80GB801Z
22B	Hex bolt M8x25	1	1-M8X25GB70Z
23B	Hex screw	4	1-M6X12GB77Z
24B	Spring washer	2	1-WSH8GB93Z
25B	Hex bolt M8x25	1	1-M8X25GB70D2Z
26B	Washer	1	1-WSH12GB97D1Z
27B	Lock handle	1	1-KTSB-1-A-M12X95
28B	Indicator	1	1-JL26050005A
29B	Tapping screw	1	1-ST2D9X6D5GB845B
30B	Table tilting knob	1	1-JL26050006-001S
31B	Lower table trunnion	1	1-JL27050002A
32B	Hex bolt M8x80	1	1-M8X80GB70B

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

PARTS DIAGRAM

BLADE TENSION & TRACKING ASSEMBLY SHEET C



PARTS LIST

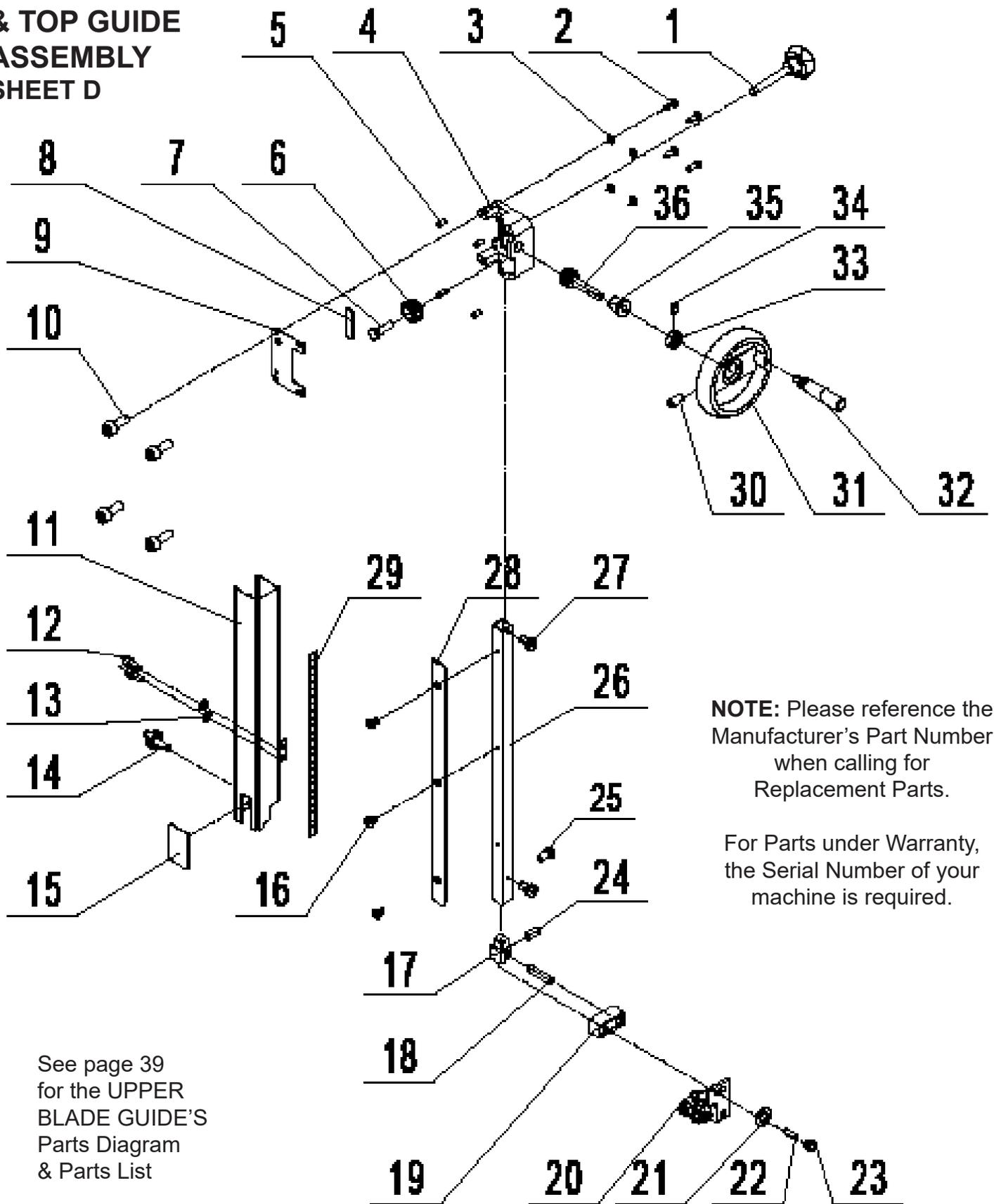
BLADE TENSION & TRACKING ASSEMBLY - SHEET C

KEY NO.	DESCRIPTION	QTY.	PART NO.
1C	Blade tension handwheel	1	1-JL21025000A001S
2C	Blade tension rod	1	1-JL28032000A
3C	Special hex nut	2	1-JL28030003
4C	Washer	2	1-WSH12GB97D1Z
5C	Hex socket screw M6x12	2	1-M6X12GB70D1Z
6C	Washer	2	1-WSH6GB5287Z
7C	Upper shaft	1	1-JL28030008
8C	Slide bracket	1	1-JL28031000
9C	Tube	1	1-JL28030001
10C	Sliding Rail	1	1-JL28030010
11C	Upper wheel shaft	1	1-JL28030004
12C	Spring	1	1-JL27030011A
13C	Block	1	1-JMBS1404040001
14C	Hex socket screw M3x16	1	1-M3X16GB70D2B
15C	Hex nut M6	1	1-M3GB6170B
16C	Thrust bearing	1	1-BRG51104GB301
17C	Quick release lever handle	1	1-JL28033000
18C	Quick release rod	1	1-1904011
19C	Upper wheel shaft hinge	1	1-JL28030007
20C	Roll pin 5x35	1	1-PIN5X35GB879D1B
21C	Quick stop bolt	1	1-JL28030005
22C	Wing nut	1	1-JL20010016A-001S
23C	Blade tracking handle	1	1-JL26040015A-001S
24C	Washer	1	1-JL28030009
25C	Spring washer	3	1-WSH6GB93B
26C	Hex Bolt	3	1-M6X12GB5781B

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

PARTS DIAGRAM

BLADE GUARD & TOP GUIDE ASSEMBLY SHEET D



NOTE: Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

See page 39 for the UPPER BLADE GUIDE'S Parts Diagram & Parts List

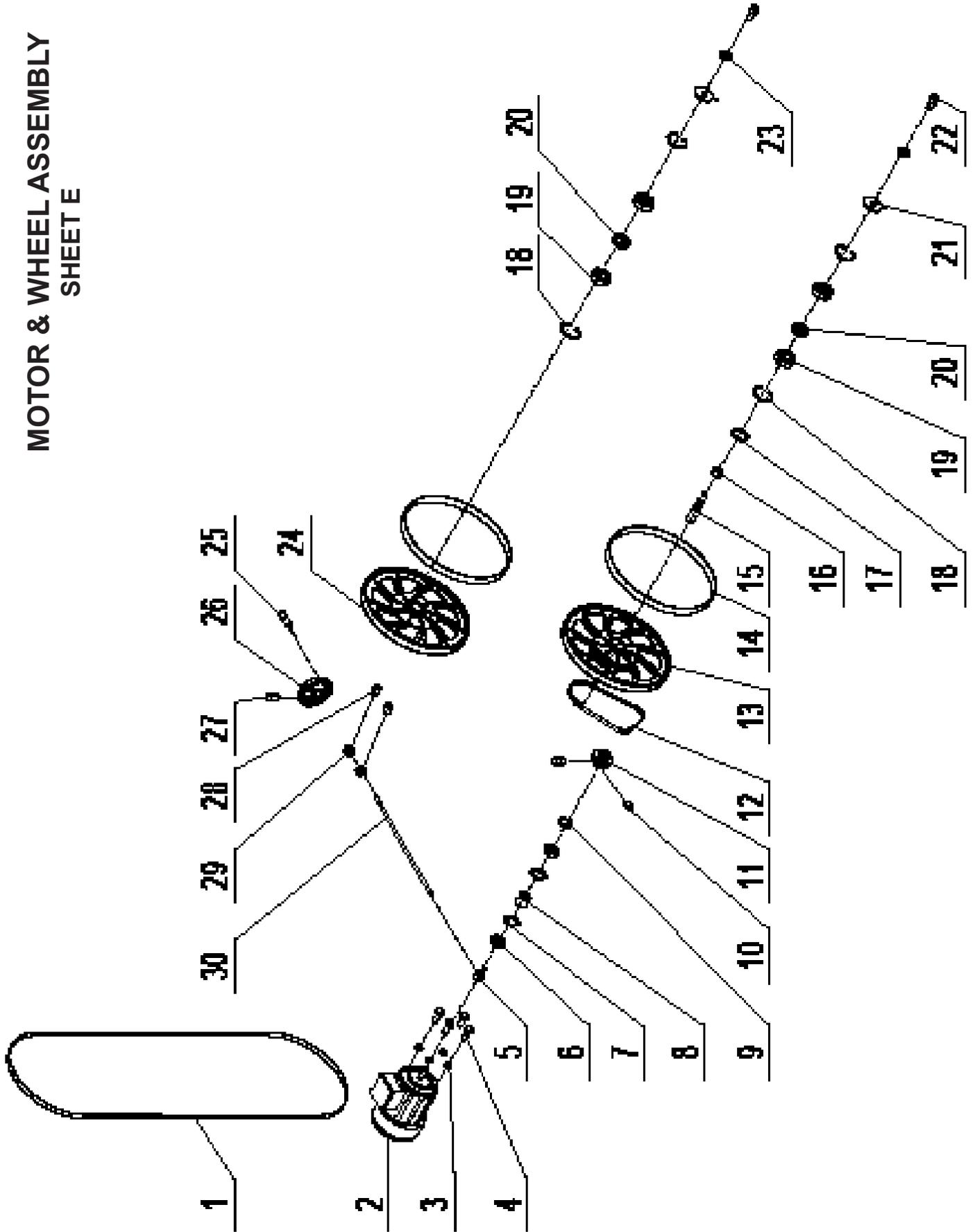
PARTS LIST

BLADE GUARD & TOP GUIDE ASSEMBLY - SHEET D

KEY NO.	DESCRIPTION	QTY.	PART NO.
1D	Locking handle	1	1-JL82240011-001S
2D	Hex bolt M6x16	4	1-M6X16GB5783B
3D	Washer	4	1-WSH6GB96B
4D	Guide bracket	1	1-JL27040006
5D	Set screw M6x12	4	1-M6X12GB77B
6D	Gear	1	1-1501006
7D	Fixed bolt	1	1-JL26040006
8D	Fixed plate	1	1-JL26040007
9D	Guide bracket cover	1	1-JL27040002A
10D	Hex socket screw M6x16	4	1-M6X16GB70Z
11D	Hinged door	1	1-JMBS1404050110-114X
12D	Carriage bolt M5x12	2	1-M5X12GB70B
13D	Washer	2	1-WSH5GB97D1B
14D	Locking handle	1	1-JMBS1403050004-001S
15D	Clear window	1	1-JMBS1404050001
16D	Hex socket screw M5x8	3	1-M5X8GB819B
17D	Upper guide support block	1	1-JL28040005
18D	Adjustment bar	1	1-JL28040009
19D	Sliding bracket	1	1-JL28040011
20D	New upper guide assembly	1	1-JL21042000D
21D	Washer	1	1-WSH8GB97D1Z
22D	Set screw M8x35	1	1-M8X35GB77B
23D	Nylon lock nut M8	1	1-M8GB889D1Z
24D	Set screw M6x10	2	1-M6X10GB77B
25D	Screw M5x25	1	1-M5X25GB70D1B
26D	Guide post	1	1-JL28040002A
27D	Pan head screw M5x8	2	1-M5X8GB818B
28D	Rack	1	1-JL28040001A
29D	Ruler	1	1-JMBS1401050003
30D	Set Screw M6x12	1	1-M6X12GB77B
31D	Crank handwheel	1	1-SGSL-D100-d10
32D	Handwheel handle	1	1-JL26020014B-001S
33D	Set collar	1	1-JL20010015
34D	Set screw M5x8	1	1-M5X8GB71B
35D	Bushing	1	1-JL27040003
36D	Worm cylinder	1	1-JL27040004

PARTS DIAGRAM

MOTOR & WHEEL ASSEMBLY SHEET E



PARTS LIST

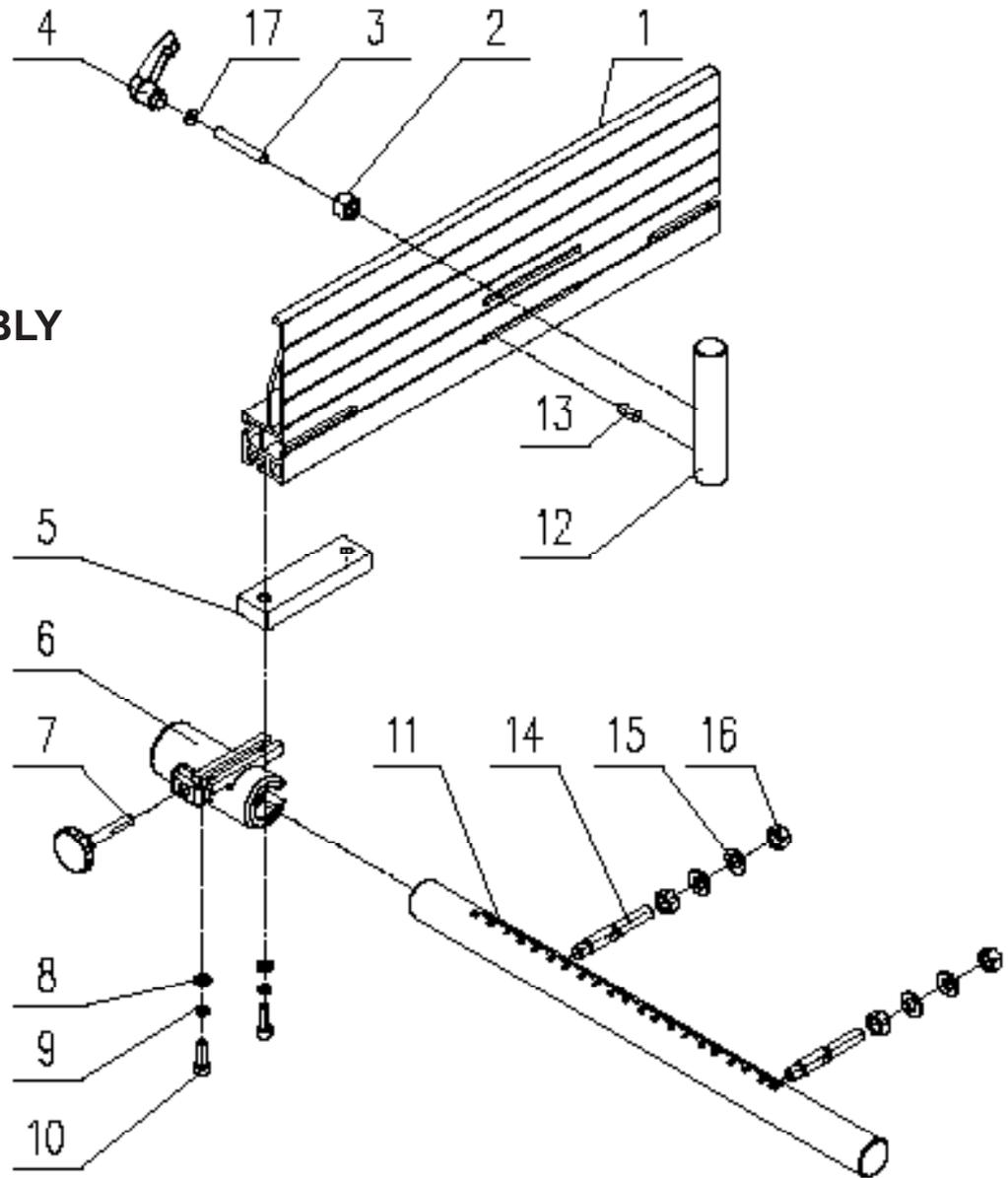
KEY NO.	DESCRIPTION	QTY.	PART NO.
1E	Bandsaw blade	1	1-JL28020001C
2E	Motor	1	2-YYH806114
3E	Spring washer	4	1-WSH6GB93Z
4E	Hex bolt M6x20	4	1-M6X16GB5783Z
5E	Sliding shaft	1	1-JL20014001
6E	Bearing	2	1-BRG6203-2RSGB276
7E	Retainer ring	2	1-CLP28GB893D1B
8E	Tension wheel	1	1-JL20014002
9E	Retaining spring	1	1-CLP12GB894D1B
10E	Hex socket screw M6x8	2	1-M6X8GB80B
11E	Motor pulley	1	1-JL20070001
12E	Multi-Vee belt	1	1-JL20020002
13E	Lower bandsaw wheel	1	1-JL21023002C
14E	Tire	2	1-JL21022002B
15E	Lower wheel shaft	1	1-JL28020002A
16E	Hex nut	1	1-JL20020004
17E	Retaining ring 17	1	1-CLP17GB894D1B
18E	Retaining ring 40	4	1-CLP40GB893D1B
19E	Bearing	4	1-BRG6203-2RSGB276
20E	Tube	2	1-JL28020004
21E	Washer	2	1-WSH8GB5287Z
22E	Hex screw M8x16	2	1-M8X16GB70Z
23E	Spring washer	2	1-WSH8GB93Z
24E	Upper bandsaw wheel	1	1-JL21022001A
25E	Handwheel handle	1	1-JL26020014B-001S
26E	Crank handwheel	1	1-SGSL-D100-d10
27E	Set screw M8x35	1	1-M6X8GB77B
28E	Set screw M5x8	2	1-M5X8GB71Z
29E	Set collar	2	1-CLP10GB884Z
30E	Crank	1	1-JL28020003A

NOTE: Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

PARTS DIAGRAM & PARTS LIST

FENCE ASSEMBLY SHEET F



KEY

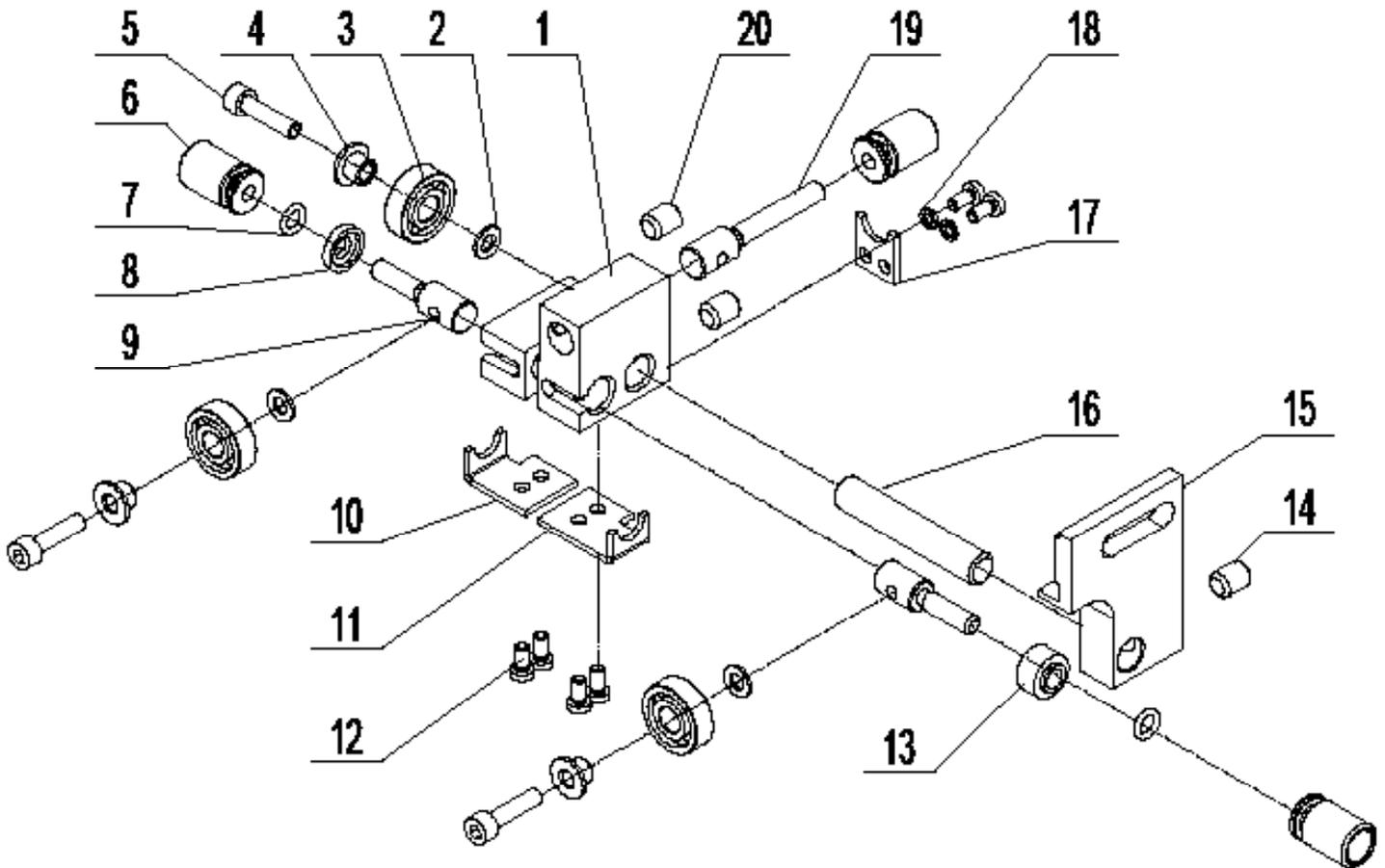
KEY NO.	DESCRIPTION	QTY.	PART NO.
1F	Fence	1	1-JMBS1404060001
2F	Tube	1	1-JL93010018
3F	Bolt	1	1-JMBS1403061002
4F	Lock handle	1	1-KTSB-1-A-M6X50
5F	Sliding block	1	1-JMBS1404060003
6F	Rip fence carrier	1	1-JMBS1601060003
7F	Locking handle knob	1	1-JL28060017
8F	Washer	2	1-WSH6GB97D1Z
9F	Spring washer	2	1-WSH6GB93Z
10F	Hex socket screw M6x25	2	1-M6X25GB70Z
11F	Front guide rail	1	1-JMBS1404060002
12F	Re-saw bar	1	1-JMBS1403061001
13F	Screw	1	1-JL26061003
14F	Support shaft	2	1-JL28060005
15F	Nut M8	4	1-M8GB6170Z
16F	Flat washer	4	1-WSH8GB97D1Z
17F	Flat washer	1	1-WSH6GB97D1B

NOTE: Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

PARTS DIAGRAM & PARTS LIST

UPPER BLADE GUARD ASSEMBLY SHEET G

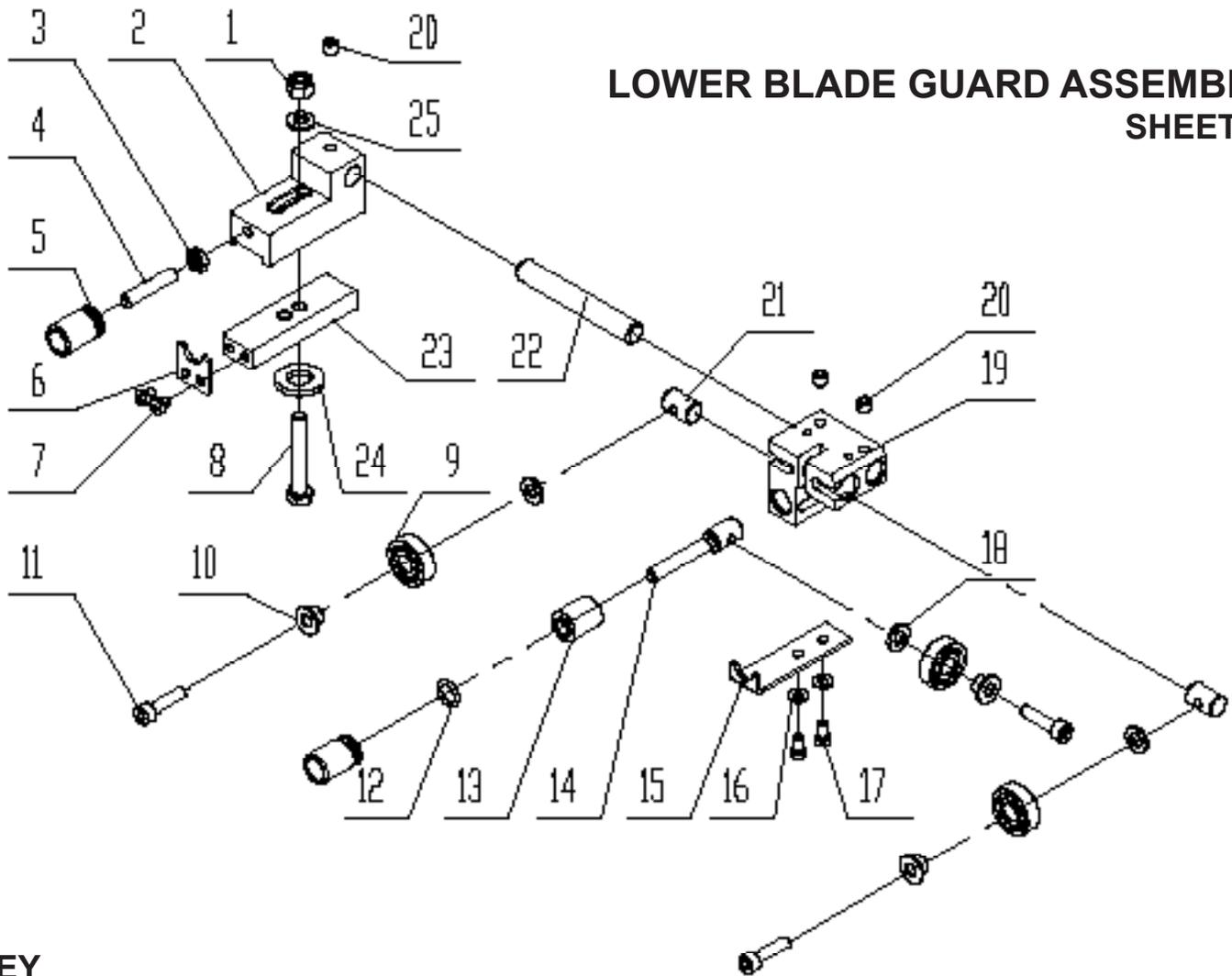


KEY NO.

KEY NO.	DESCRIPTION	QTY.	PART NO.
1G	Upper blade guide block	1	1-JL21042001C
2G	Flat washer	3	1-WSH5GB97D1Z
3G	Bearing	3	1-BRG608-2RSGB276
4G	Bearing housing	3	1-JL20042002
5G	Hex socket cap screw M5x20	3	1-M5X20GB70D1Z
6G	Knob	3	1-JL21042005
7G	Rubber seal	3	1-SLG9X1D8GB3452D1
8G	Short tube	2	1-JL21042010
9G	Long bolt	2	1-JL21042008
10G	Mounting plate	1	1-JL21042007
11G	Mounting plate	1	1-JL21042003
12G	Pan head screw M4x8	6	1-M4X8GB823Z
13G	Long tube	1	1-JL21042009
14G	Set screw M8x10	1	1-M8X10GB77B
15G	Support for upper blade guide	1	1-JL21042002
16G	Shaft	1	1-JL22042002
17G	Mounting plate	1	1-JL21042004
18G	Spring washer	2	1-WSH4GB93B
19G	Long bolt	1	1-JL21043006
20G	Screw M6x10	2	1-M6X10GB80B

PARTS DIAGRAM & PARTS LIST

LOWER BLADE GUARD ASSEMBLY SHEET H



KEY

NO.	DESCRIPTION	QTY.	PART NO.
1H	Lock nut M6	1	1-M6GB889D1Z
2H	Support for the lower blade guide	1	1-JL21043001C
3H	Hex thin nut	1	1-M6GB6172D1Z
4H	Set screw M6x30	1	1-M6X30GB77B
5H	Knob	2	1-JL21042005
6H	Mounting plate	1	1-JL21043003
7H	Pan head screw M4X5	2	1-M4X5GB823Z
8H	Hex bolt M6X40	1	1-M6X40GB5781Z
9H	Bearing	3	1-BRG608-2RSGB276
10H	Bearing housing	3	1-JL20042002
11H	Hex socket cap screw M5X20	3	1-M5X20GB70D1Z
12H	Rubber seal	1	1-SLG9X1D8GB3452D1
13H	Long tube	1	1-JL21043007
14H	Long bolt	1	1-JL21043006
15H	Mounting plate	1	1-JL21043002
16H	Flat washer	2	1-WSH4GB97D1Z
17H	Pan head screw M4X8	2	1-M4X8GB823Z
18H	Flat washer	3	1-WSH5GB97D1Z
19H	Lower blade guide block	1	1-JL21043004B
20H	Screw M6X6	3	1-M6X6GB80B
21H	Adjusting shaft	2	1-JL22042004
22H	Shaft	1	1-JL22043002
23H	Plate	1	1-JL21040001
24H	Washer	1	1-WSH6GB96Z
25H	Flat washer	1	1-WSH6GB97D1Z

NOTE: Please reference the Manufacturer's Part Number when calling for Replacement Parts.

For Parts under Warranty, the Serial Number of your machine is required.

How-To's for all Band Saw Blades

Choosing the Correct Blade Width

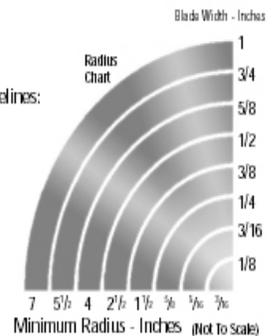
Blade width is measured from the tips of the teeth to the back edge of the blade as shown above. The instructions for the particular machine being used should be followed when selecting blade width.



If no such instructions are provided, blade width should be determined with the following guidelines:

For Cut-Off Sawing, the blade should be as wide as the machine will allow. The wider the band is, the straighter the cut will be. Faster feeding can be achieved.

For Contour Sawing, the blade should be as wide as the machine allows, but still narrow enough so that it can cut the desired shape (radius). Minimum dimensions for different cutting radii are shown on the chart to the right.



How To Choose The Correct Number Of Teeth Per Inch (TPI)

The number of teeth per inch (TPI) is important in obtaining the finish desired and the proper feed rate. A coarse tooth blade (2, 3 TPI) should be used for resawing wood and cutting thicker stock up to 8". A fine toothed blade (18 to 32 TPI) should be used for thinner metals and plastics under 1/4". For general cutting of 3/4" wood 4 TPI will provide a fast cut and 14 TPI will cut slow, but leave a smoother finish.

TPI	Minimum Material Thickness
32	3/32"
24	1/8"
18	5/32"
14	1/4"
10	5/16"
8	3/8"
6	1/2"
4	3/4"
3	1"
2	1-1/2"

It is important to know the SFM for the various speed settings of your band saw, so that you can select the proper speed for cutting wood or other materials. Check the operator's manual of your band saw to determine the SFM or use the following procedure:

1. Determine the RPM: check the operator's manual or clock the revolutions per minute of the wheels with a tachometer or revolution counter.
2. Measure the diameter of the drive wheel in inches and multiply by .262 to obtain the wheel circumference. The RPM times circumference equals the surface speed of the blade.
 $RPM \times \text{diameter in inches} \times .262 = SFM.$

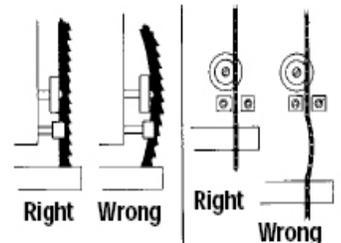
When Selecting TPI remember:

- More TPI give a smoother but slower cut
- Fewer TPI allow a faster cut with a slightly rougher finish
- At least three teeth must be in the workpiece—the chart to the right will help you decide.

Note: Spring Steel Wood Cutting Band Saw Blades should never be operated at surface speeds above 3000 SFM. Carbon Hard Edge Flexible Back Band Saw Blades may be run up to 8000 SFM.

Installing your Band Saw Blade

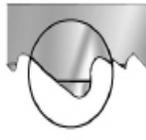
1. Unplug the saw, then loosen the tension on the upper wheel. With all the blade guides backed off, slip the new blade around the wheels and then tension it.
2. When you have tensioned the blade enough to keep it on the wheels, track it by turning the upper wheel with one hand while adjusting the tilt of the wheel's axis with the other hand. The blade should ride in the middle of the rim. **Never track the blade with the motor running and the cover open.**
3. Next, adjust the blade guides; first the thrust bearings: upper and lower, then the left hand side guides.
4. Use a square to make sure you are not pushing the blade out of line and place a piece of white paper between the blade guide and the blade to allow for clearance.



Diagnosing Problems

1. Premature and Excessive Tooth Wear

- Feed pressure too light, increase it.
- Lower band velocity.
- Improper tooth selection, use a finer pitch.
- Improper break-in with new band. Velocity and feeding should be reduced the first few cuts.
- Teeth are running the wrong direction.
- Be sure teeth are pointing in proper direction.
- Incorrect saw guide insert size for the band, allowing them to strike teeth



2. Blade Vibration

- Increase or decrease band velocity.
- Teeth too coarse for workpiece.
- Material not securely held.
- Increase tension of band.
- Increase feed pressure.

3. Gullets Loading

- Teeth too fine for workpiece - use a coarser pitch.
- Decrease band velocity.

4. Band Stalls in Work

- Feed pressure too great - decrease feed.
- Teeth too coarse, use finer tooth blade

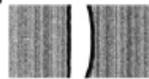
5. Premature Blade Breakage

- Thickness of blade too heavy for diameter of wheels and speed of machine
- Increase or decrease velocity
- Check wheels for defects
- Teeth too coarse for workpiece - use a finer pitch
- Decrease blade tension - decrease feeding force
- Brittle weld - increase annealing period, decreasing heat gradually
- Check for proper adjustment of band guides, saw guides, saw guide inserts, and back-up bearings.



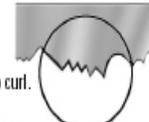
6. Blade Making Belly-Shaped Cuts

- Increase tension.
- Adjust guides closer to workpiece.
- Teeth too fine - use a coarse pitch.
- Decrease feed force.
- Teeth dull.



7. Tooth Stripping

- Teeth too coarse for workpiece.
- Material not securely held.
- Too much feed pressure - reduce for good chip curl.
- Band velocity too low - increase speed.



8. Band Develops a Negative Camber

- Band is riding on saw guide backup bearing too heavily. Adjust band for alignment on top and bottom wheels.
- Check band wheel alignment.



9. Blade Not Running True Against Saw Guide Backup Bearing

- If clicking noise against saw guide backup bearing, remove burr on band.
- Check band wheel alignment.
- Check saw guide backup bearing for wear, replace if necessary
- Weld not in proper alignment. Reweld blade straight and true.

10. Cutting Rate Too Slow

- Increase band velocity.
- Use a coarser pitch.
- Increase feed pressure.

11. Blade Leading In Cut

- Reduce feed pressure or rate.
- Check adjustments and wear of saw guides or rollers.
- Lack of band tension.
- Tooth set damage.



12. Premature Loss of Set

- Improper width selection - check chart for correct width for radius cutting.
- Reduce band velocity.

13. Band Develops Positive Camber

- Decrease force.
- Use a coarser pitch to increase tooth penetration.
- Adjust saw guides closer to work.



14. Band Develops Twist

- Wrong width for radius being cut - choose a narrower blade.
- Binding in cut - decrease feed pressure.
- Decrease band tension.
- Adjust saw guides further from workpiece.



15. Finished Cut Surface Too Rough

- Improper tooth selection - choose a finer pitch.
- Increase band velocity.
- Decrease feed rate.



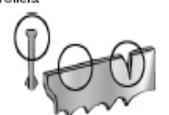
16. Band Scoring (side wear or grooving)

- Check for wear on saw guide inserts.
- Too much pressure on saw guide inserts.
- Check alignment of saw guides - be sure they are square to front vise. Replace or clean guides.

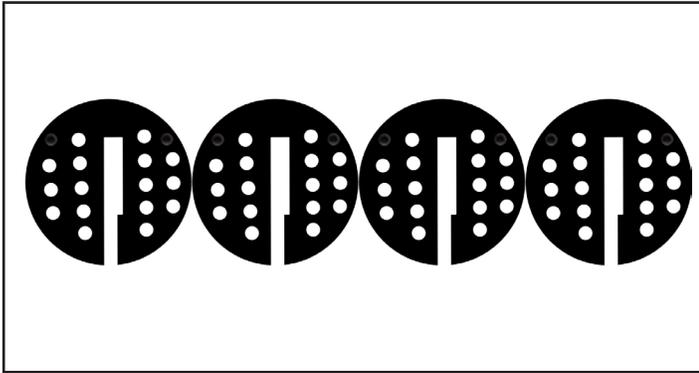


17. Burring or Mushrooming of Blade Back Edge

- Increase tension and adjust guides.
- Check contact between blade and back edge rollers.
- Reduce feed pressure.
- Use coarser pitch blade.
- Use finishing stone.

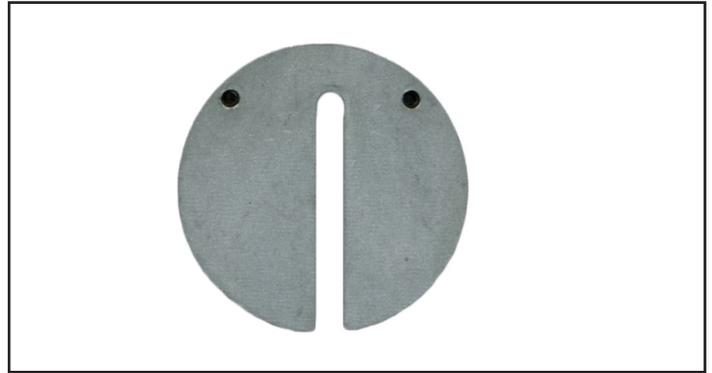


ACCESSORIES



C10-391 TABLE INSERTS - PACK of 4

Replacement plastic inserts with with central slot for positioning the bandsaw blade, and rear threaded holes for hex screw levelers.



C10-395 ALUMINIUM TABLE INSERT

Replacement cast aluminium insert with central slot for positioning the bandsaw blade. Provides solid support and includes rear table levelling screws.



C10-392 ZERO CLEARANCE INSERTS - PK 4

Pack of four plastic inserts with table leveling screws. Inserts have no slot and require user to cut their own on installation. This minimizes the slot width so debris or thin cut wood strips will not catch or fall into the thin slot. Ideal for use when cutting small pieces on the bandsaw for inlay, shims, puzzles, etc.



13-912 'T' SLOT MITER GAUGE

Fits 3/4" x 3/8" miter slots. Handy scale for up to 60° left and right angle settings, includes adjustable 9" aluminium fence extension and push handle.



C10-109 GUIDE BEARINGS - PACK of 4

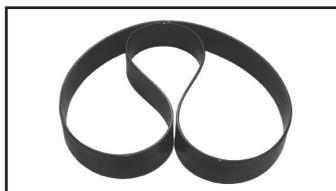


BAND SAW BLADES

For a complete line of 111" band saw blades, contact your local RIKON Distributor, or visit the RIKON website at www.rikontools.com.



C10-995 DRIVE BELT



C10-425 RUBBER WHEEL TIRE

[LINK TO RIKON WEBSITE](http://www.rikontools.com)





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techsupport@rikontools.com**

