

14" Deluxe Woodworking Bandsaw

Model: 10-325

RIKON
POWER TOOLS



Owner's Manual

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

Serial number: _____

Date of purchase: _____

For more information:

www.rikontools.com or info@rikontools.com

For Parts or Questions:

techsupport@rikontools.com or 877-884-5167

Part #10-325M2

Presented by the Kansas City Woodworkers' Guild
<http://www.kcwoodworkersguild.org>












Operator Safety: Required Reading

IMPORTANT! Safety is the single most important consideration in the operation of this equipment. **The following instructions must be followed at all times.**

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.

General Safety Warnings

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

 ⚠ DANGER	ALWAYS GROUND ALL TOOLS. If your tool is equipped with a three-pronged plug, you must plug it into a three-hole electric receptacle. If you use an adapter to accommodate a two-pronged receptacle, you must attach the adapter plug to a known ground. Never remove the third prong of the plug.
	ALWAYS AVOID DANGEROUS ENVIRONMENTS. Never use power tools in damp or wet locations. Keep your work area well lighted and clear of clutter.
 ⚠ DANGER	ALWAYS REMOVE THE ADJUSTING KEYS AND WRENCHES FROM TOOLS AFTER USE. Form the habit of checking to see that keys and adjusting wrenches are removed from the tool before turning it on.
	ALWAYS KEEP YOUR WORK AREA CLEAN. Cluttered areas and benches invite accidents.
 ⚠ DANGER	ALWAYS KEEP VISITORS AWAY FROM RUNNING MACHINES. All visitors should be kept a safe distance from the work area.
	ALWAYS MAKE THE WORKSHOP CHILDPROOF. Childproof with padlocks, master switches, or by removing starter keys.
 ⚠ DANGER	NEVER OPERATE A TOOL WHILE UNDER THE INFLUENCE OF DRUGS, MEDICATION, OR ALCOHOL.
 ⚠ DANGER	ALWAYS WEAR PROPER APPAREL. Never wear loose clothing or jewelry that might get caught in moving parts. Rubber-soled footwear is recommended for the best footing.
 ⚠ DANGER	ALWAYS USE SAFETY GLASSES AND WEAR HEARING PROTECTION. Also use a face or dust mask if the cutting operation is dusty.
 ⚠ DANGER	NEVER OVERREACH. Keep your proper footing and balance at all times.
 ⚠ DANGER	NEVER STAND ON TOOLS. Serious injury could occur if the tool is tipped or if the cutting tool is accidentally contacted.

⚠ DANGER**ALWAYS DISCONNECT TOOLS.**

Disconnect tools before servicing and when changing accessories such as blades, bits, and cutters.

**ALWAYS AVOID ACCIDENTAL STARTING.**

Make sure switch is in "OFF" position before plugging in cord.

NEVER LEAVE TOOLS RUNNING UNATTENDED.**⚠ DANGER****ALWAYS CHECK FOR DAMAGED PARTS.**

Before initial or continual use of the tool, a guard or other part that is damaged should be checked to assure that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other damaged parts should immediately be properly repaired or replaced.



Special Safety Rules For Bandsaws

1. Always allow the Bandsaw blade to stop before removing scrap pieces from table.
2. Always keep hands and fingers away from the blade.
3. Never attempt to saw stock that does not have a flat surface, unless a suitable support is used.
4. Always hold material firmly and feed it into the blade at a moderate speed.
5. Always turn off the machine if the material is to be backed out of an uncompleted cut.
6. Adjust the upper guide about 1/8" above the material being cut.
7. Check for proper blade size and type for thickness and material being cut.
8. Make sure that the blade tension and blade tracking are properly adjusted.
9. Make "relief" cuts before cutting long curves.
10. Release blade tension when the saw will not be used for a long period of time.

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.

SAVE THESE INSTRUCTIONS.
Refer to them often.

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Specifications

Throat width	13-5/8" (346mm)
Max. cutting depth	13" (330 mm)
Blade length	111" (2819 mm)
Blade width	1/8" – 3/4"(3-19 mm)
Table size	16"x 20-1/2" (406 mm X521 mm)
Table tilt	Left-10° Right-45°
Blade speeds	1445 ft/min or 2950 ft/min
Motor	1.5 HP
Amps	14/7
Volts	115/230
Net weight	250 lbs

Contents of Package

Model 10-325 14" Deluxe Woodworking Bandsaw is shipped complete in one box.

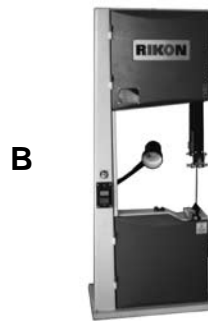
1. Unpacking and Checking Contents

- Separate all "loose parts" from packaging materials, the following components are included for the initial assemble and make sure all items are accounted for, before discarding any packaging material.
- With the help of another person, take the Bandsaw from the packing carton. Properly lift the Bandsaw off the packing carton and place on level floor.
- Remove protective oil that is applied to the table. Use any ordinary house hold type grease or spot remover.
- Apply a coat of paste wax to the table to prevent rust. Wipe all parts thoroughly with a clean dry cloth.

A. Guide Post Cap



B. Bandsaw Body



C. Cabinet Stand Box



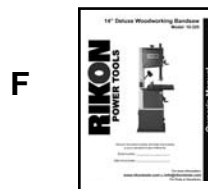
D. Crank Handwheels



E. Blade Tension Wheel



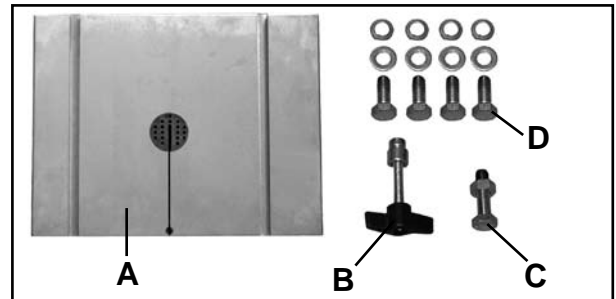
F. Manual



Contents of Package Cont.

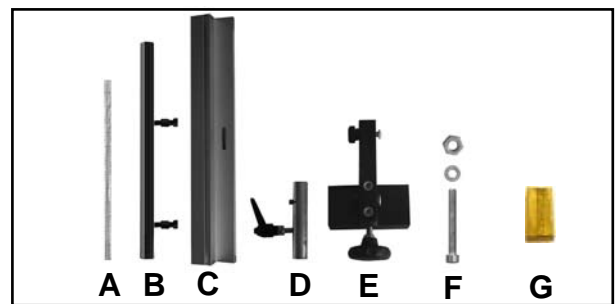
Table assembly:

- A. Table
- B. Table leveling nut and bolt
- C. Table stop safety bolt
- D. Table mounting bolts and washers



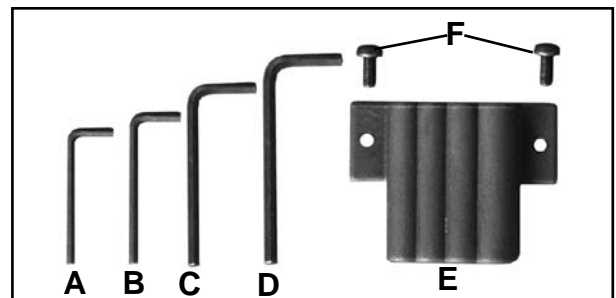
Rip fence assembly:

- A. Scale
- B. Fence bar
- C. Fence
- D. Resaw bar
- E. Fence carrier
- F. Fence support on left side of the table
- G. Lock shoe

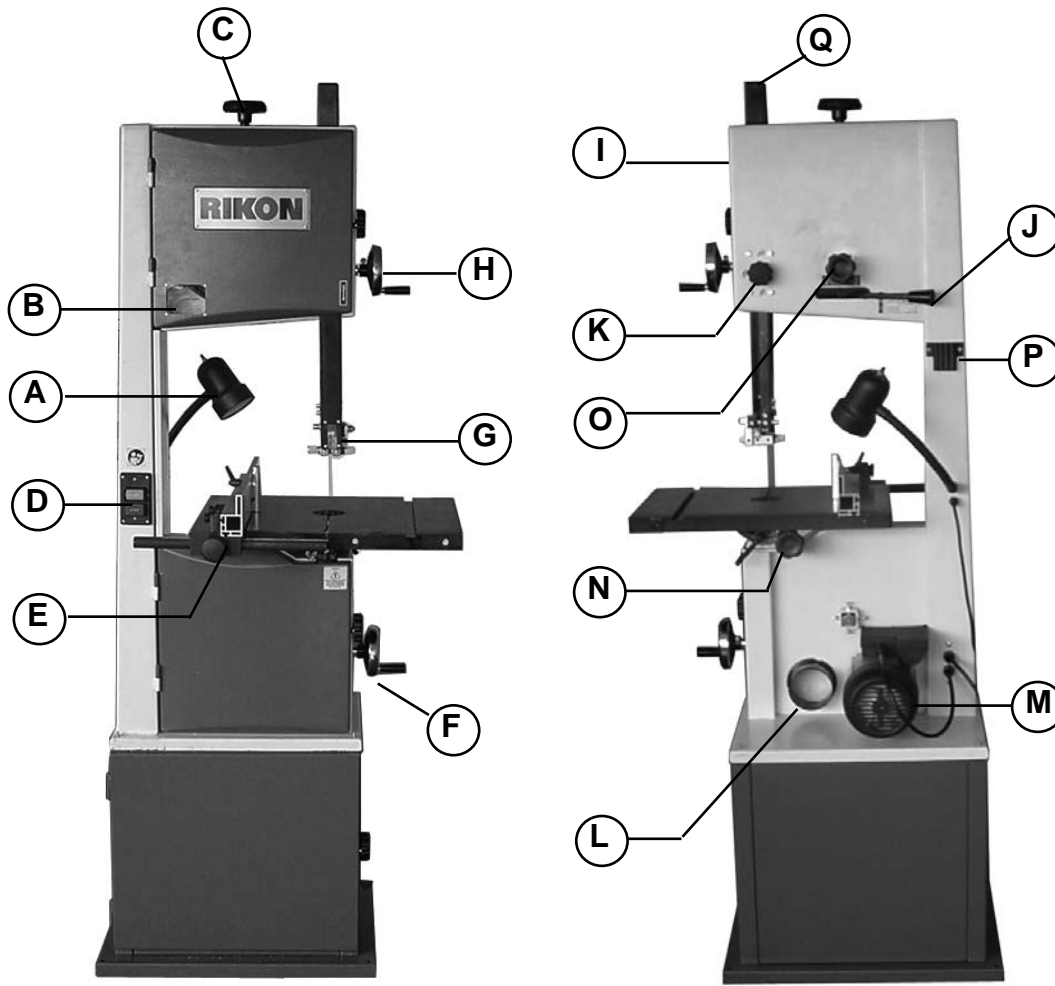


Tool holder assembly:

- A. L wrench 3MM
- B. L wrench 4MM
- C. L wrench 5MM
- D. L wrench 6MM
- E. Tool holder
- F. Tool Holder mounting screws



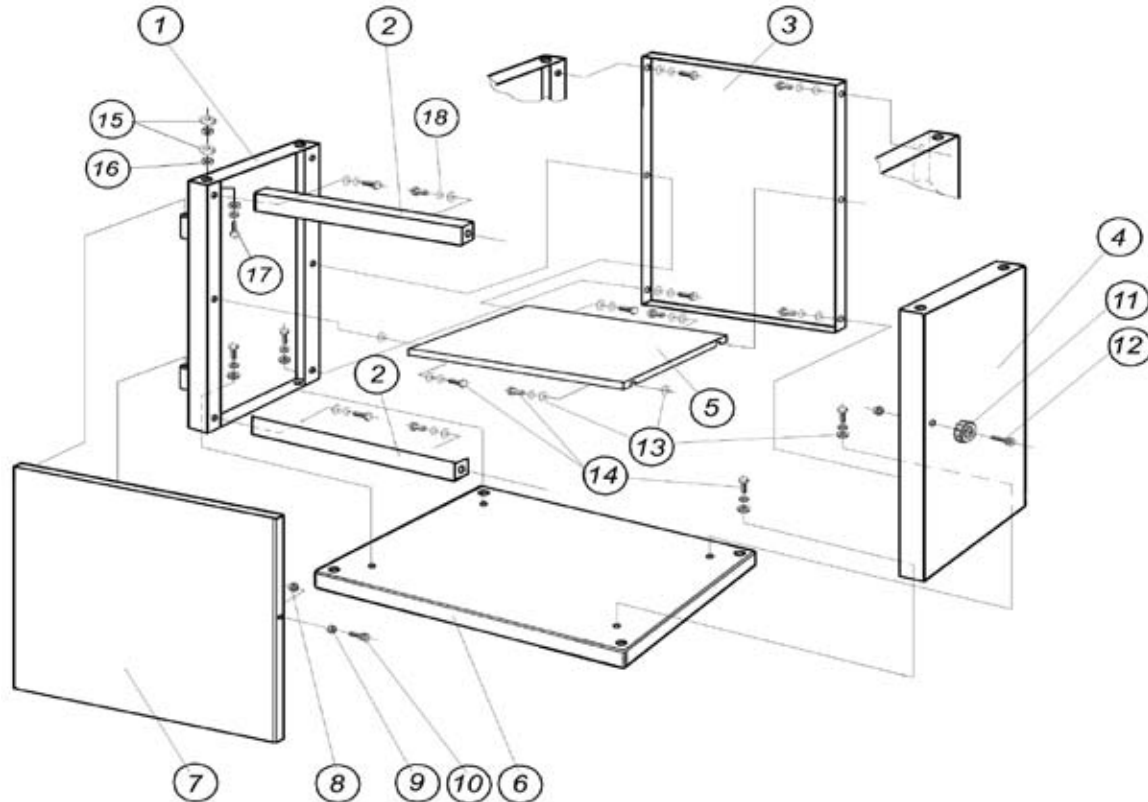
Getting to Know Your Bandsaw



- A. Light
- B. Tension Indicator Window
- C. Blade Tension Hand-wheel
- D. Switch
- E. Rip Fence
- F. Speed Hand-wheel
- G. Blade Guide
- H. Guide Post Hand-Wheel

- I. Blade Tracking Window
- J. Quick Release Lever
- K. Guide Post Lock Knob
- L. 4" Dust Port
- M. Motor
- N. Table Tilting Knob
- O. Blade Tracking Knob
- P. Tool holder
- Q. Guide post cap

Stand Assembly



Item#	Description	Qty	Item#	Description	Qty
10-325-1S	End panel (L.H.S.)	1	10-325-10S	Hex socket screw	1
10-325-2S	Front brace	2	10-325-11S	Star knob	1
10-325-3S	Back panel	1	10-325-12S	Hex socket screw	1
10-325-4S	End panel (R.H.S.)	1	10-325-13S	Washer M8	18
10-325-5S	Shelf panel	1	10-325-14S	Hex bolt M8x12	16
10-325-6S	Base panel	1	10-325-15S	Hex nut M6	8
10-325-7S	Door	1	10-325-16S	Washer 6mm	12
10-325-8S	Nylon nut M6-1.0	2	10-325-17S	Hex bolt M6x40mm	4
10-325-9S	Bushing	1	10-325-18S	Spring washer 8mm	16

1. Check contents against parts list. Leave all bolts finger tight until saw is placed on stand.
2. Install the star knob (11S) to the right end panel with the 6MM hex socket screw (12S) and nylon nut M6-1.0 (8S) as shown.
3. Install the left panel (1S), back panel (3S) and right panel (4S) onto the base panel (6S), using the M8x12 hex bolts (14S), 8MM spring washer(18S) and 8MM washers (13S). Make sure that the hinges in the left panel and the oval holes on both left and right panels are pointing upward.
4. Fasten the side panels to the back panel, using the M8x12 hex bolts (14S), 8MM spring washer (18S) and 8MM washers (13S).
5. Add three M8x12 hex bolts and washers to the front edge of each side panel, leave loose. Fasten the front bracing members (2S) on to the front of the left and right side panels. Next, install the shelf on the side panels.
6. Install the door (7S) on to the left end panel, and add the hex socket screw, bushing and nylon nut.
7. With assistance lift bandsaw and carefully position in place on top of stand.

Caution: To avoid back injury, get help lifting the bandsaw. Bend your knees, lift with your legs, not your back.

8. Mount bandsaw on the stand using four M6x40mm screws (17S), M6 washers (16S), and 6mm hex nuts (15S). Tighten stand bolts.

Assembly

The bandsaw is supplied partly assembled. Prior to use, the following items have to be assembled: working table, rip fence, hand-wheels, tool holder.

WARNING! To ensure sufficient upright stability and safety of this Bandsaw, you need to bolt the Bandsaw to the floor with M10 screws (not supplied). (Fig 1)

Assemble Working Table

Installing 90°stop: Thread screw (M8x25) and nut (M8) to the bottom of the table. (A-Fig.2) With the help of another person, lift the working table onto the trunnion. Mount the working table to the trunnion using the supplied (4) hex bolts, (4) lock washers and (4) washers (B-Fig.2). Install the two bolts to the right of the blade hand tight, then tip the table to 45 degrees and install the two bolts to the left of the blade. Adjust table parallel to blade and tighten bolts.

Installing Table Leveling Screw: Insert hex socket screw and washer through top of table. Place bushing and wing nut from under the table and tighten. (C-Fig. 2)

Fence Support Bolt: Install the fence support bolt in the left rear corner of the table. (D-Fig. 2)

Rip Fence Assembly

Mount the fence bar onto the table fixing with the two fence bar nuts.(A-Fig 3) Do not fully tighten yet as they may need to be adjusted later. The bar should be installed so that the longest amount of bar is on the left hand side allowing the fence to be attached. Place the brass lock shoe into the fence seat.(A-Fig 4) Position the fence assembly onto the fence bar(B-Fig 4). Lay the fence on to the table and lock by tightening the fence lock knob. (B-Fig 5)

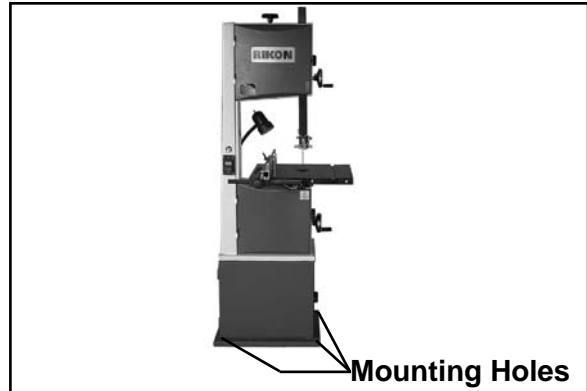


Figure 1

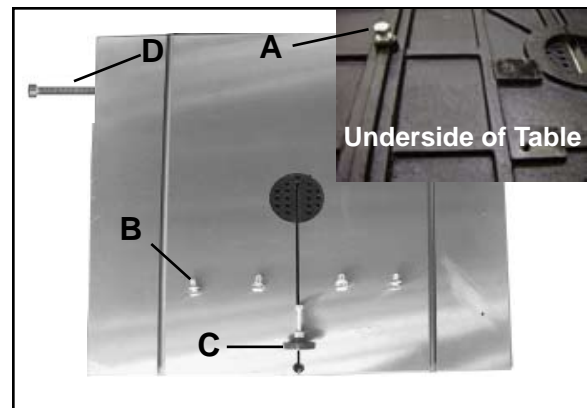


Figure 2

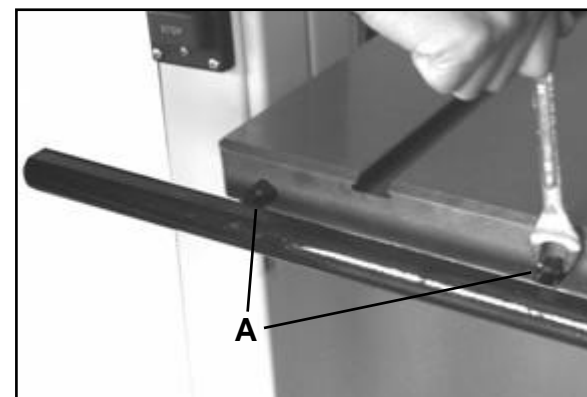


Figure 3

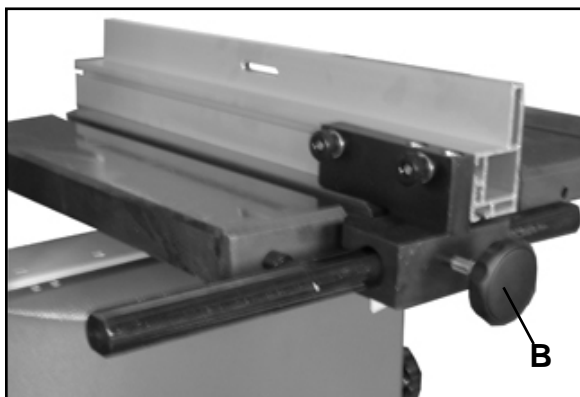


Figure 5

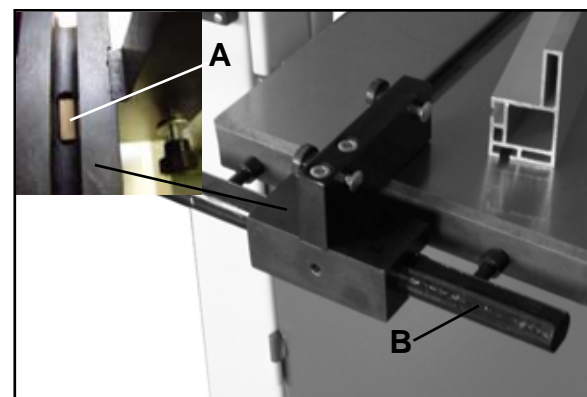


Figure 4

Installing the Tool Holder

Assemble the tool holder to the column of the bandsaw with two pan head screws. Locate the two pan head screws from the bag of loose parts. Mount the tool holder to the column and install a pan head screw in each hole, then tighten with a Phillips screw driver. (Fig. 6)

Assemble Hand-Wheels

Attach the crank handle (Fig. 7) to the rack and pinion shaft on the upper part of the bandsaw, using the 5mm “L” wrench provided.

Attach the second crank handle to the belt and speed control rod on the lower right side of the bandsaw, using the 5mm “L” wrench provided.

Place the (4) “L” wrenches (3mm, 4mm, 5mm and 6mm) in the tool holder on the rear column

Installing the Guide Post Cap

Place Guide Post Cap on top of the upper wheel cabinet to the right of the Blade Tension Hand-wheel.



Figure 6



Figure 7

Adjustment

Setting the Table Square to Saw Blade

The table may be set at 90° to the saw blade sides by adjusting the table stop screw under the table. The table stop screw rests on the top of the quick release adjustment stop. By first loosening the locking nut (A-Fig. 8) and then adjusting the screw (B-Fig. 8), the table can be set correctly. Retighten the locking nut (A-Fig. 8) making sure that the setting is maintained. The angle indicator under the table can be adjusted by loosening the Phillips head screw and moving the pointer into position. (C-Fig. 8)

The table may also be set at 90° to the back of the saw blade by adjusting the trunnion micro adjustment screws. (A-Fig. 8A) First, slightly loosen two hex. bolts part 184. Using the 3mm “L” wrench, turn the rear trunnion micro adjusting screws. (Clockwise will raise the trunnion; counterclockwise will lower the trunnion). Check table for 90° and tighten part 184.

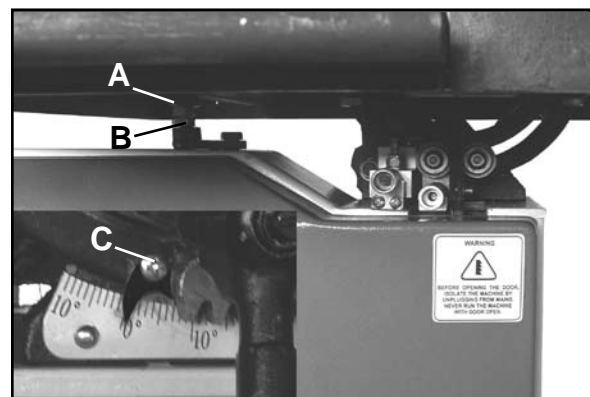


Figure 8

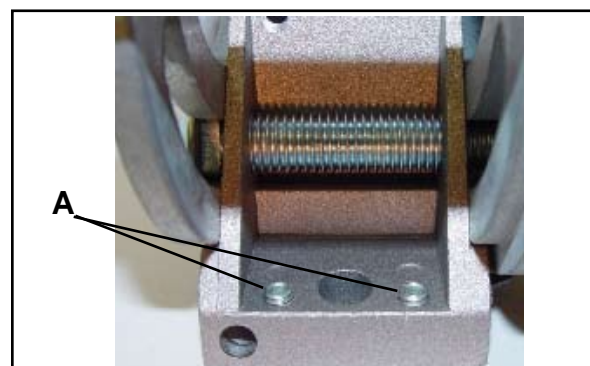


Figure 8A

Tilting the Table

Loosen the lock handle (A-Fig. 9) on the table trunnion. Turn the table tilting knob (B-Fig. 9) to adjust the table to the desired angle. Use the angle indicator scale on the trunnion bracket to find the desired angle. Retighten the lock handle to secure the table.

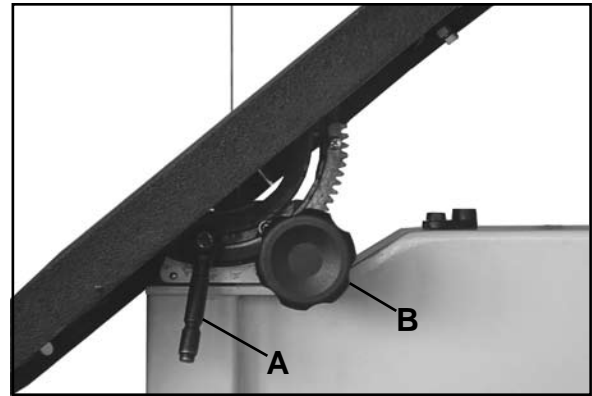


Figure 9

Tracking the Saw Blade

WARNING! Unplug the Bandsaw. First, 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.

Then loosen the lock lever (A-Fig. 10) by turning it counter clockwise and turn the blade tracking knob (B-Fig. 10) clockwise/counterclockwise while turning the upper wheel by hand at least three rotations until the blade tracks centered on the wheel. Finally, tighten the lock lever and close the doors.

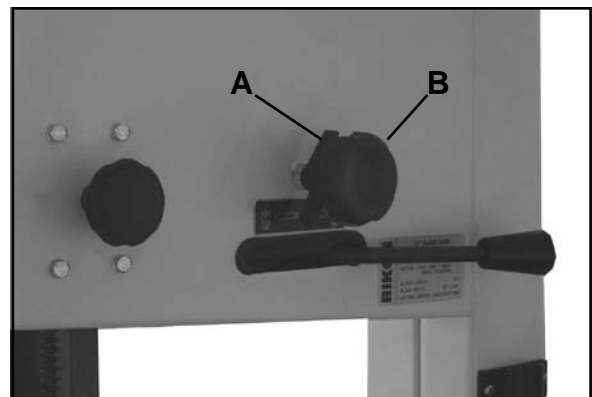


Figure 10

Adjusting the Blade Tension

To loosen the tension of the blade, turn the blade tension handwheel (A-Fig.11) counter clockwise. To tighten the tension of the blade, turn the blade tension handwheel clockwise.

Tension the blade until the tension reading corresponds to the width of blade you are using by viewing through the tension indicator window. (B-Fig.11)

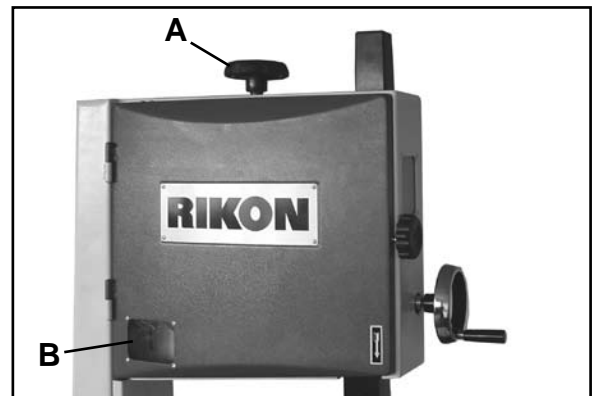


Figure 11

Adjusting the Blade Guides

Upper Guides:

a. To adjust the upper blade guides, first position the right and left roller guides relatively close to the blade by loosening the lock nut (A-Fig.12) and moving the guide carrier until both bearing guides are approximately 1/16" behind the gullets of the saw blade.

Adjustment Cont.

b. Set both bearing guides to within $1/32$ " of the saw blade by releasing the guide adjusting screws (B-Fig.12) on each side of the saw blade, then by turning the micro-adjusting knobs(C-Fig.12). Do not set the bearing guides too close as this will adversely affect the life of the saw blade.

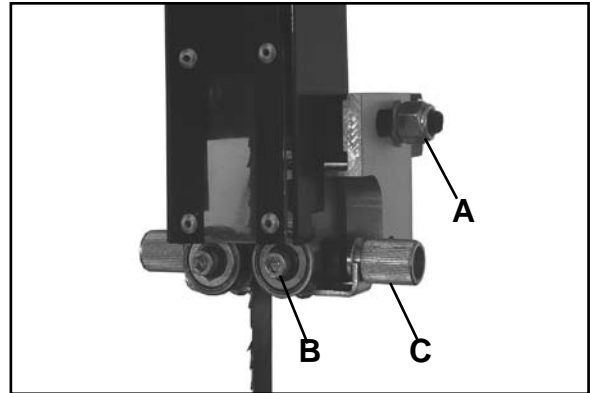


Figure 12

c. Adjust the rear bearing guide to be just clear of the back of the saw blade releasing the guide adjusting screw (A-Fig.13) and by turning the micro-adjusting knob (B-Fig.13).

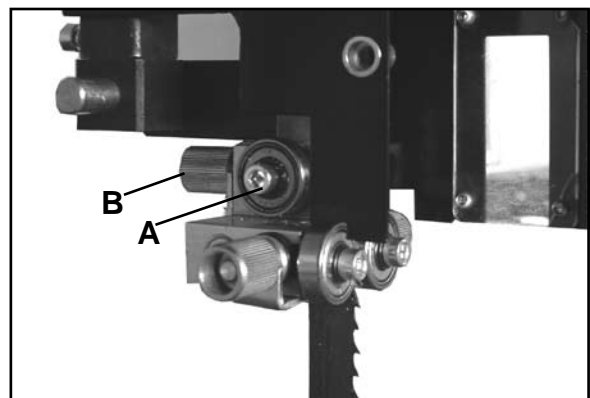


Figure 13

d. When the correct adjustment is reached, lock the bearing guide in position with the guide adjusting screw (A-Fig.13).

Lower Guides:

a. To adjust the lower blade guides, first loosen the lock nut (A-Fig.14) then move the guide carrier by the micro-adjusting knob (E-Fig.14) until both bearing guides are approximately $1/16$ " behind the gullets of the Bandsaw blade and tighten the lock nut (A-Fig.14).

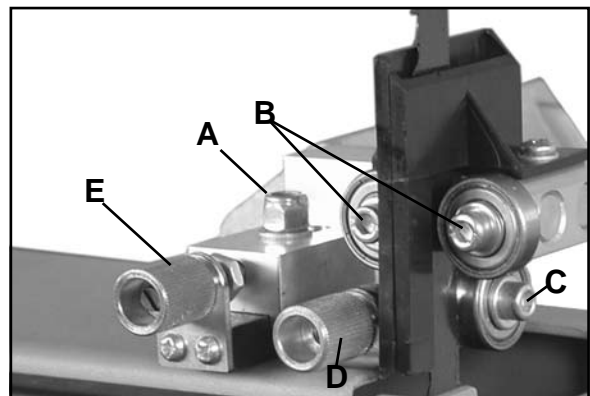


Figure 14

b. Next set the bearing guides to within $1/32$ " of the blade by releasing the guide adjusting screw (B-Fig. 14).

c. Adjust the thrust bearing to be just clear of the back of the blade by unlocking the guide adjusting screw (C-Fig.14), and turning the micro-adjusting knob (D-Fig.14).

d. When the correct adjustments are reached, lock the bearing guides in position with the guide adjusting screws (B&C-Fig.14).

Adjustment Cont.

Adjusting the Rip Fence/Drift

Align the fence assembly in or out until parallel with the side of the blade by turning the adjustment collars and the fence bolts accordingly (A-Fig.15). If the mounting bolts have been tightened, these will need loosened off before this adjustment can be made. The same adjustment can be made to compensate for blade drift.

Check that the fence is 90 degrees to the table using a suitable square. If no adjustment are needed fully tighten the fence bar nuts. If adjustment is required, raise or lower either side

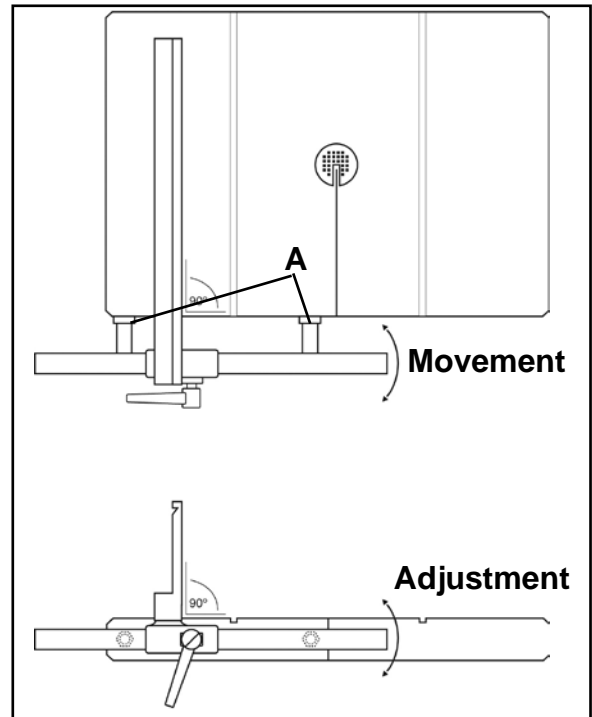


Figure 15

Adjusting the Rip Fence Guide Scale

Slide the rip fence against the blade along the rail and mark a zero position on the fence bar. Align the zero on the scale with the mark on the fence bar (Fig.16).



Figure 16

Cutting Height Adjustment

Loosen the guidepost lock knob (A-Fig.17) and turn the guidepost handwheel (B-Fig.17) to raise or lower the guide post/upper blade guide assembly to the desired height. Then tighten the guidepost lock knob. Note: The bottom edge of the guide bearings should be approximately 1/4" above the top surface of the work piece.

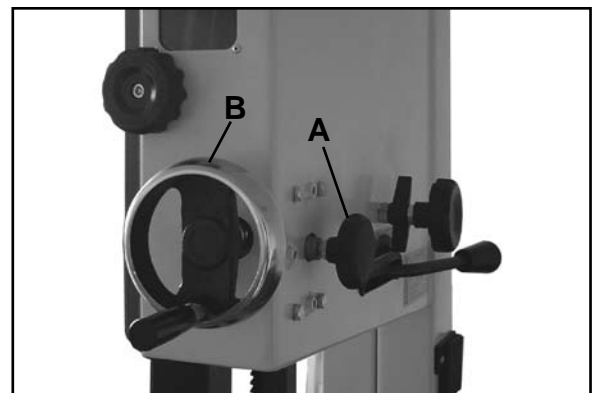


Figure 17

Changing the Blade Speed / Belt Tension

WARNING! Before changing the speed, always make sure the machine has been unplugged from the electrical supply.

This Bandsaw has two blade speeds, low speed (1445 ft/min) and high speed (2950 ft/min). 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 (A-Fig.18).

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.19.

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.20.

To properly adjust belt tension, turn hand-wheel (A-Fig. 18) until there is 1/2” deflection in the “multi-vee” belt.

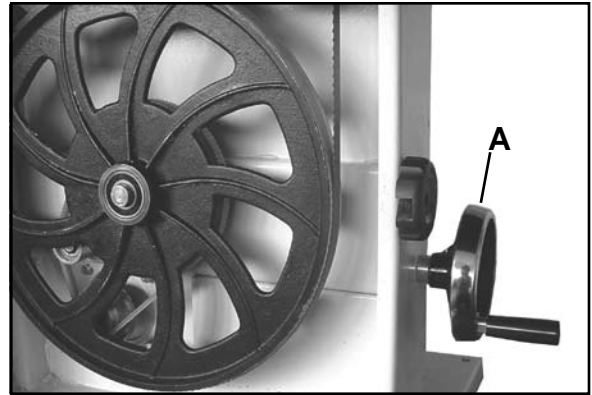


Figure 18



Figure 19



Figure 20

Replacing 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.

- a) Open the top and bottom wheel doors by turning the door locking knobs.
- b) Release the blade tension by moving the quick release lever (A-Fig.21) from right to left. Open the hinged door on the blade guard by loosening the hex screw. (A-Fig. 22 on page 15)
- c) Remove the saw blade by feeding it through the slot in the table, upper and lower blade guides and the slot in the spine of the machine, being careful not to cut yourself. Wear gloves for protection.
- d) When installing the new blade, ensure the blade teeth are pointing downwards and towards you at the position where the blade passes through the table.

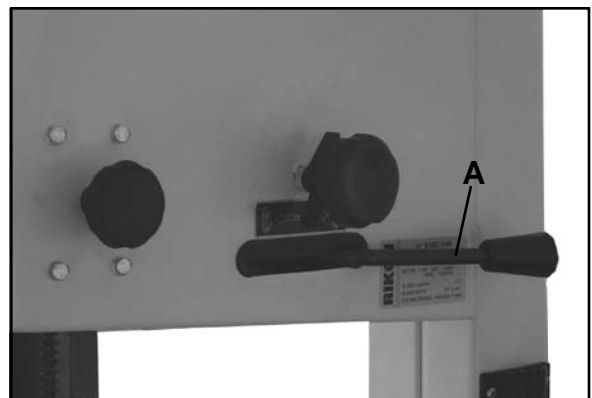


Figure 21

Replacing the Bandsaw Blade Cont.

- f) Re-tension the new blade by moving the quick release lever (A-Fig.21 on page 14) right to left and check the blade tracking. The blade should run in the center of the wheel. Refer to "Tracking the Saw Blade" on page 11 for more details.
- g) Reset the blade guides as described in the section "Adjusting the Blade Guides" on pages 11 and 12.
- h) Reset the blade tension as described in the section "Adjusting the Blade Tension" on page 11.
- i) Close the hinged door on the blade guard and tighten the hex screw. (A-Fig.22)
- j) Close and lock both the wheel doors before reconnecting the power supply.

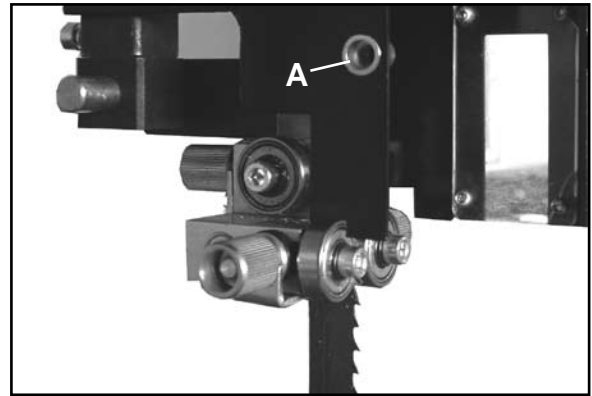


Figure 22

Re-sawing

Re-sawing

For re-sawing, attach the 3/4" x 3" post (A-Fig.23) to the slot on the fence. Position the re-saw bar so that it is aligned with the front of the blade. The re-saw bar helps to correct any blade wandering during re-sawing operations. To adjust for blade drift, refer to the section "Adjusting the Fence" on Page 13.

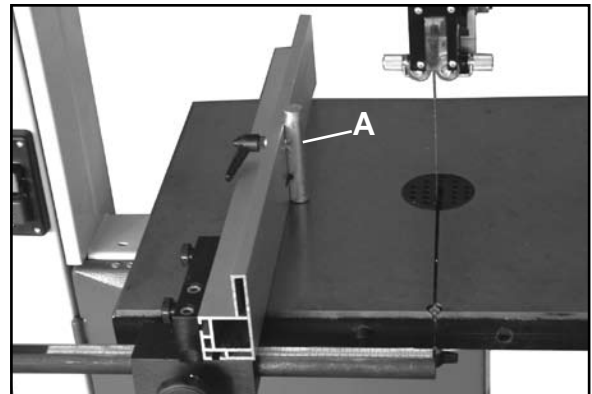


Figure 23

Operation

The blade cuts on a continuous down-stroke.

With both hands, firmly hold the workpiece down on the table, and feed it towards the blade slowly, keeping your hands away from 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.

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.

Do not attempt to turn workpiece without pushing it as this may cause the workpiece to get stuck, or the blade to bend.

For straight cuts, use the fence provided to feed the workpiece along the blade slowly and in a straight line.

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 BRUSH. REGULAR MAINTENANCE OF THE MACHINE WILL PREVENT UNNECESSARY PROBLEMS.

Keep the table clean to ensure accurate cutting.

Keep the outside of the machine clean to ensure accurate operation of all moving parts and prevent excessive wear.

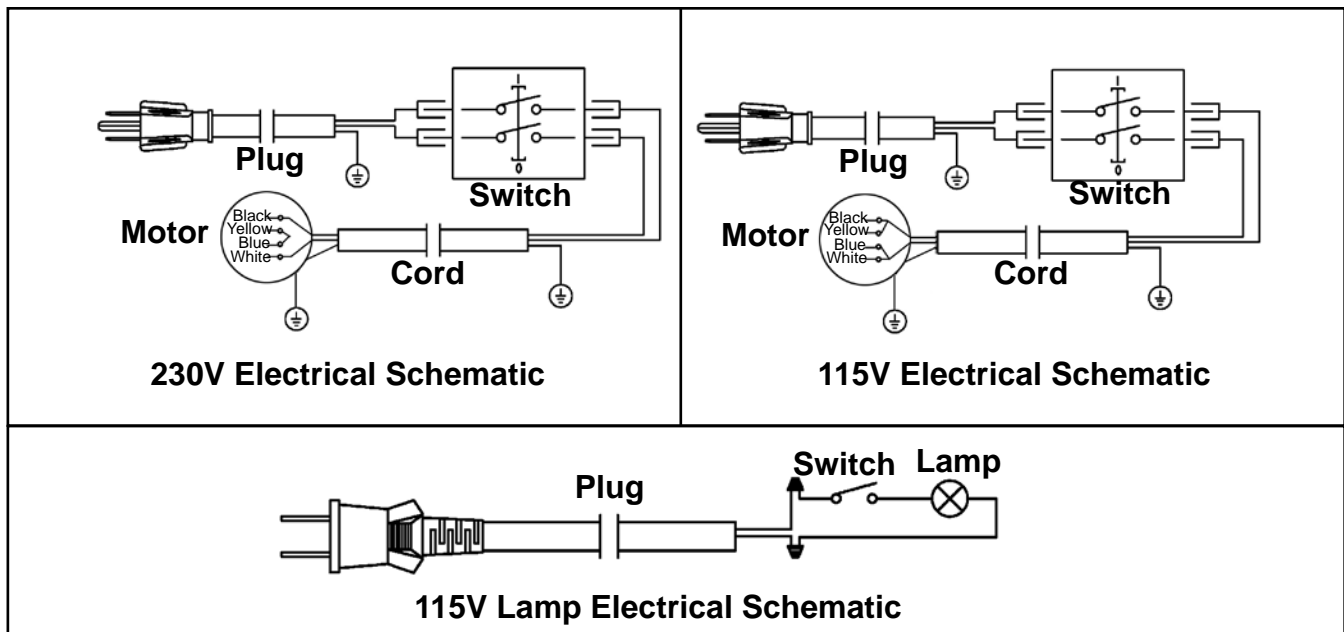
Keep the ventilation slots of the motor clean to prevent it from overheating.

Keep the inside (near the saw blade, etc.) clean to prevent accumulation of dust.

Wiring Diagram

WARNING! This machine must be grounded. Replacement of the power supply cable should only be done by a qualified electrician.

As received from the factory, your bandsaw is ready to run at 115V operation. It can be switch to 230V according to below schematic.



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 page 10).</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	<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 the section on page 11).</p>

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

Troubleshooting

Adjusting the Upper Blade Guide Bearings Parallel to the Blade

(Refer to page 19 parts diagram)

This step may not be necessary, it is factory preset. If adjustment is needed follow the steps below.

First slightly loosen part #137 (4 each) cap screw on rear of upper Bandsaw housing (see page 19 in parts diagram). This will allow you to adjust the micro adjustment screws on part #143 (Guide Bracket).

Next place a 3mm "L" wrench through one of the holes in part #139 (Guide Bracket Cover).

Turning clockwise on the left two holes will adjust the left bearings to the right. Turning clockwise on the right two holes will adjust the right bearings to the left. Check bearings for parallel.

Lastly tighten parts #137 (4) on back of Bandsaw. Repeat steps if the bearings are still not parallel.

Adjust Upper Bearings Which Will Not Track Close to the Blade

(Refer to page 19 parts diagram)

If the right or left upper bearings do not adjust to within 1/32" of the blade, the guide post (part #129) may need adjustment.

First slightly loosen parts #137 (4) on the back of the upper Bandsaw cabinet.

Next slide the upper guide post right or left until bearings are properly spaced on each side of blade. Tighten part #137 (4) on the back of the upper Bandsaw cabinet.

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 the 2.5mm "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.

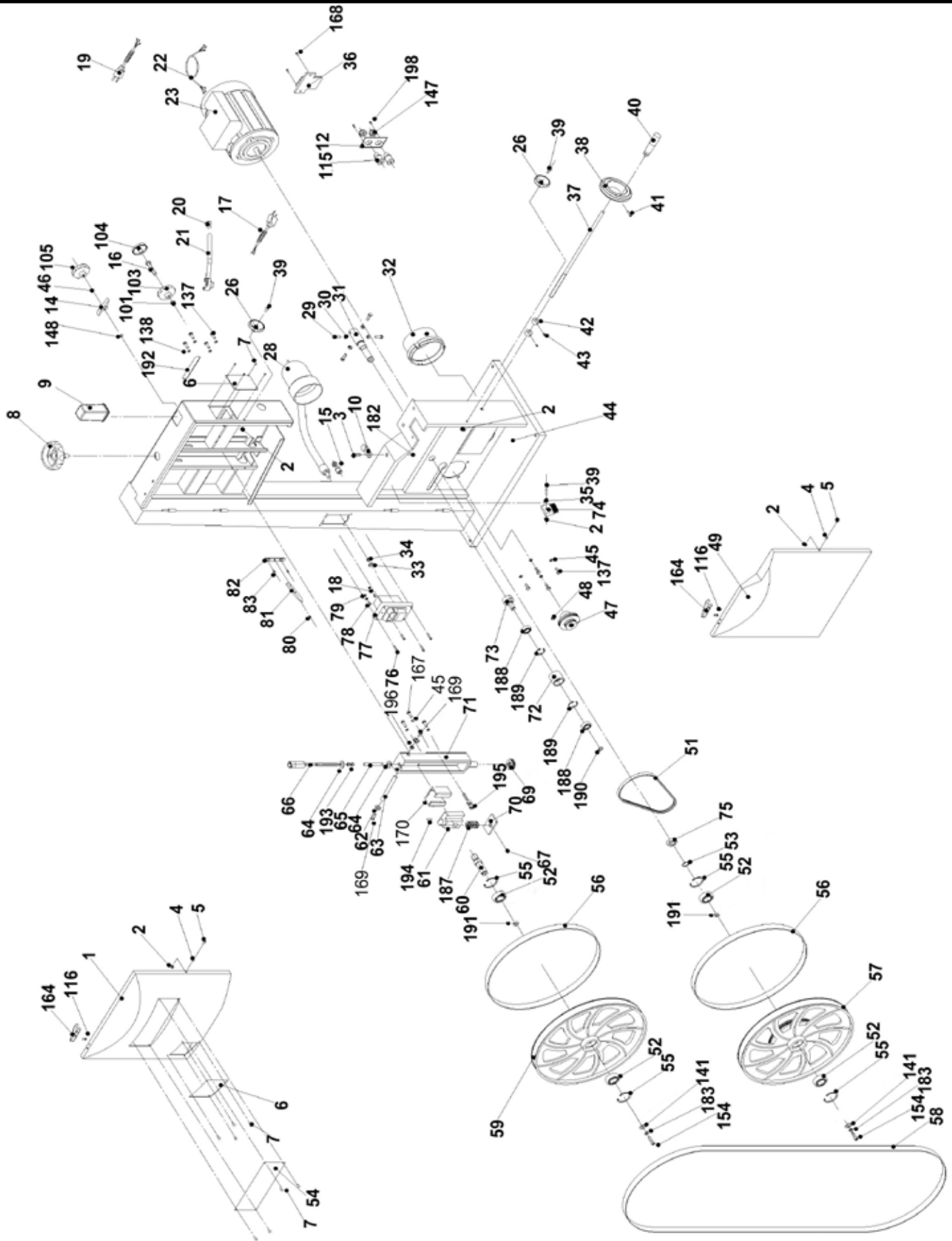
Caution: Having the insert below the top of the table could cause the workpiece to get stuck on

Changing Bandsaw Tire

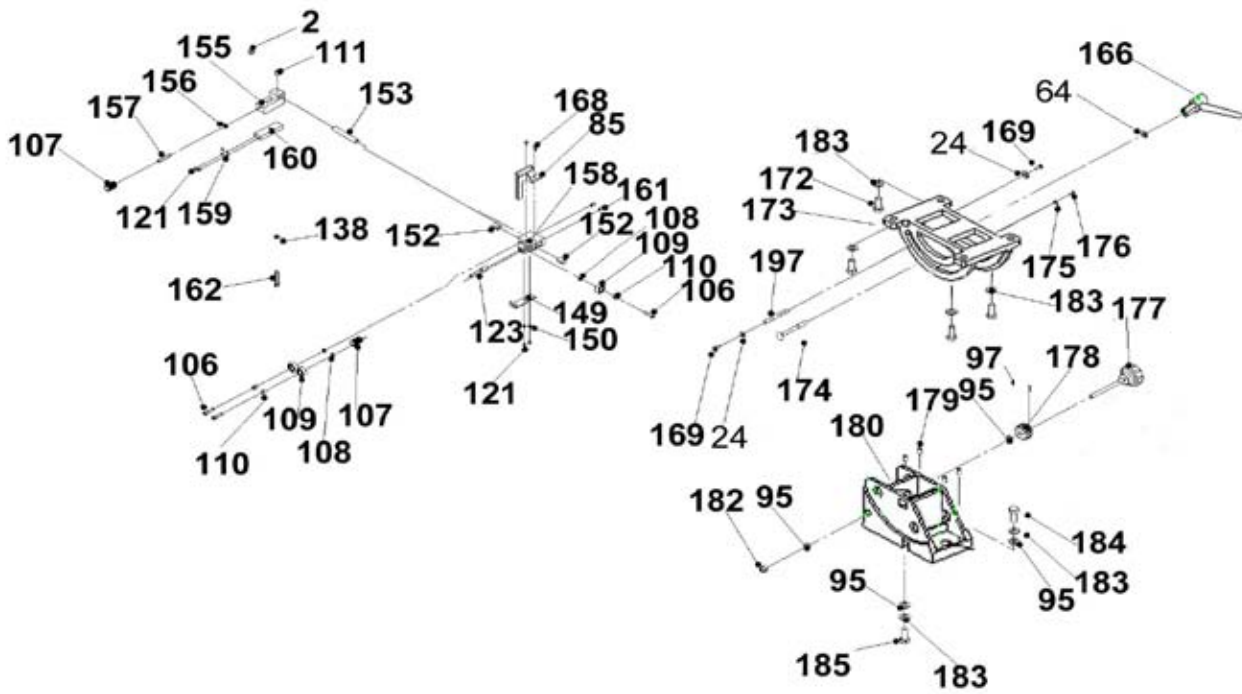
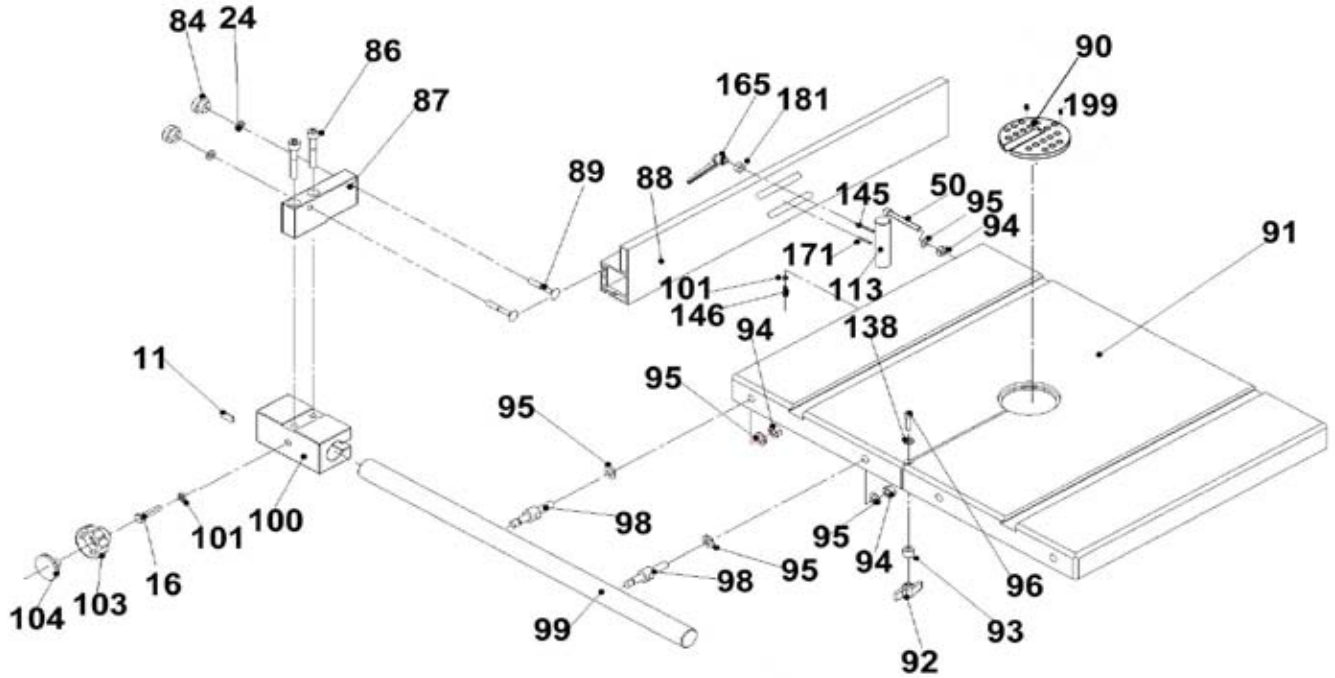
Use a putty knife to get underneath the tire and pull it up and away from the wheel. Work the putty knife all the way around the wheel to loosen the tire. Then, use the putty knife as leverage to flip the tire over and off of the wheel. Clean the inside of the groove, removing any dirt, debris or cement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

Soak the replacement tire in warm water to make it more flexible. Let tire dry and lay on top of 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, make sure

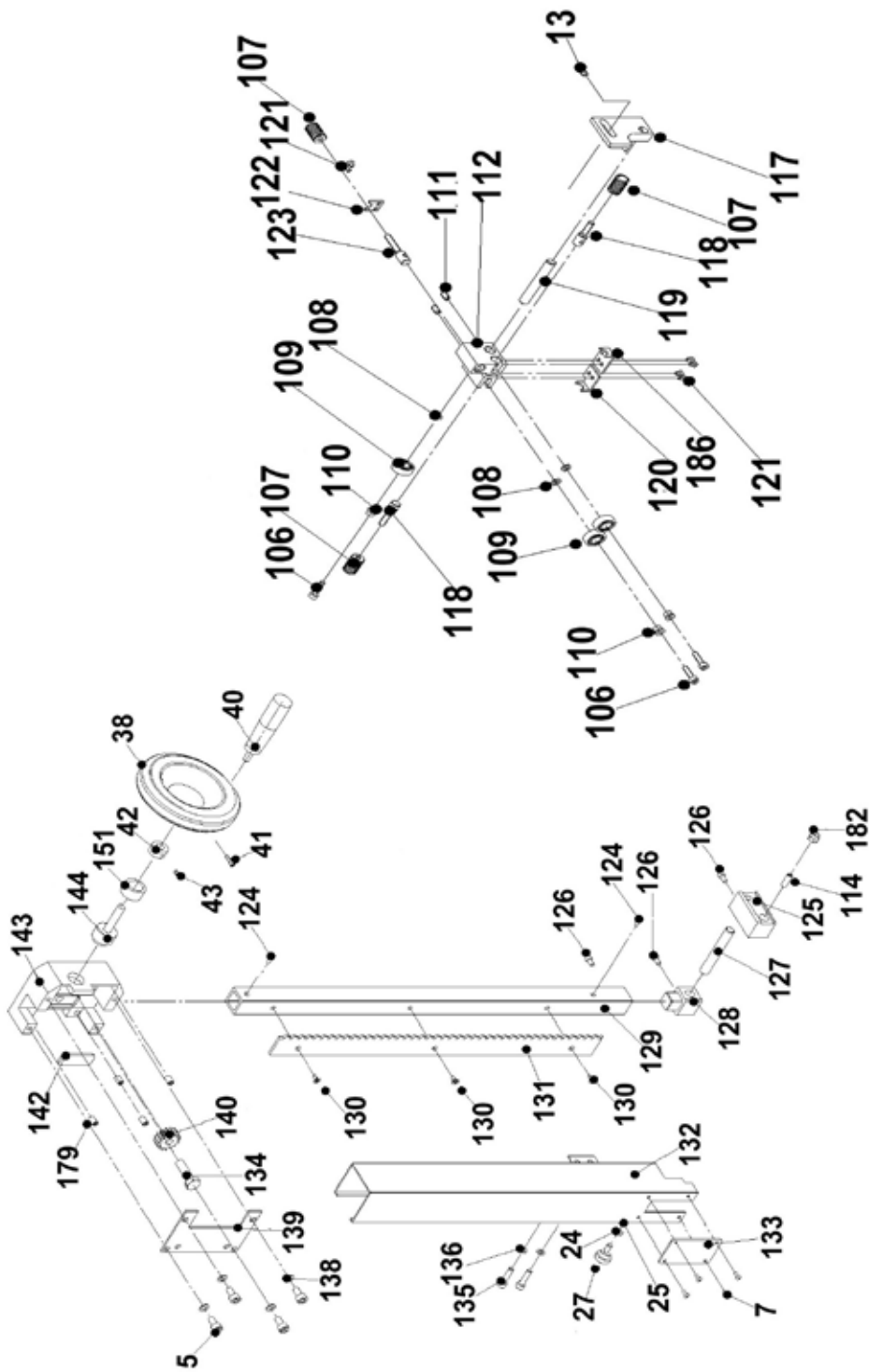
Parts Diagram



Parts Diagram Cont.



Parts Diagram Cont.



Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
1	1-JL28010001B-049W	Upper wheel cover	51	1-JL20020002	Multi-vee belt
2	1-M6GB889Z	Nylon nut M6-1.0	52	1-BRG180203GB278	Bearing 80203
3	1-JL26010015	Quick stopper	53	1-CLP17GB894D1B	Retaining ring 17
4	1-JL26010007	Bushing	54	1-RK28081001	Logo label
5	1-M6X16GB70Z	Hex socket screw M6x16	55	1-CLP40GB893D1B	Retaining ring 40
6	1-JL26010001	Clear window	56	1-JL21022002A-008S	Tire
7	1-RVT3X7GB12618A	Rivet	57	1-JL28023001-001G	Lower bandwheel
8	1-JL21025001A001S	Blade tension handwheel	58	1-JL28020001B	Blade
9	1-JL28010003-001S	Guide post cap	59	1-JL28022001-001G	Upper bandwheel
11	1-JL28060010	Lock shoe	60	1-JL28030004	Upper wheel shaft
12	1-JL26010011-050W	Strain relief plate	61	1-JL28030007	Upper wheel shaft hinge
13	1-M8X35GB77B	Set screw M8x35	62	1-WSH6GB5287Z	Washer
14	1-JL20010016A-001S	Wing nut	63	1-JL28030008	Upper shaft
15	1-JL21072101	Strain relief	64	1-WSH12GB97D1Z	Washer
16	1-M8X30GB5781Z	Hex. Bolt M8x30	65	1-JL28030001	Tube
17	1-U22182000	Plug	66	1-JL28032000A	Blade tensioner
18	1-WSH4GB97D1Z	Washer	67	1-PIN2X16GB879D2B	Pin roll 2x16
20	1-1904011	Quick release rod	69	1-BRG51104GB301	Thrust bearing
21	1-JL28033000	Quick release handle	70	1-JL28034000	Block
22	2-U13141200-747	Motor cable	71	1-JL28031000	Slide bracket
23	1-H8036604	Motor	72	1-JL20014002A	Tension wheel
24	1-WSH6GB96Z	Washer	73	1-JL20014001	Sliding shaft
25	1-M6X15GB/T17880D3Z	Special nut M6x15	74	1-JL26010003	Brush
26	1-JL26010006-001S	Star knob	75	1-JL20020004	Special Hex, nut
27	1-JL20061003-001S	Special bolt	76	1-M4X20GB818Z	Pan head screw M4x20
28	1-L350	Light	77	1-HY56	Switch
29	1-M6X20GB5783Z	Hex. Bolt M6x20	78	1-M4X8GB818Z	Pan head screw M4x8
30	1-M6GB6170Z	Hex. Nut M6	79	1-WSH4GB862D2Z	Lock washer
31	1-JL28020002A	Lower bandwheel shaft	80	1-JL26010010	Special screw
32	1-JL20010007-001S	Dust port 4"	81	1-JL27010004-002A	Blade tension indicator
33	1-M16X1.5GB6173Z	Hex. Nut M16x1.5	82	1-JL27010005	Indicator adjustment plate
34	1-WSH10GB861D1B	Lock washer	84	1-JL20061003-001S	Knob
35	1-WSH6GB96Z	Washer	85	1-JL20043006B	Lower blade guard
36	1-JL26090001	Tool holder	86	1-M8X45GB70Z	Hex. Socket screw M8x45
37	1-JL28020003A	Crank	87	1-JL28060004	Fence bracket
38	1-JL26020012A-001G	Crank handwheel	88	1-JL28060002A	Fence
39	1-M6X25GB5783Z	Carriage bolt M6x25	89	1-M6X35GB12Z	Carriage bolt M6x35
40	1-JL26020014-001S	Handwheel handle	90	1-JL26050008A-001S	Table insert
41	1-M6X20GB70Z	Hex. Socket screw M6x20	91	1-JL28070007-001G	Table
42	1-CLP10GB884Z	Set collar	92	1-JL22020002-001S	Wing nut
43	1-M5X8GB71Z	Set screw M5x8	93	1-JL21031003	Tube
44	1-JL28011000D-050W	Frame	94	1-M8GB6170Z	Hex. Nut M8
45	1-WSH6GB93Z	Spring washer	95	1-WSH8GB97D1Z	Washer
46	1-M10GB6170B	Hex. Nut M10	96	1-M6X50GB70Z	Hex. Socket screw M6x50
47	1-JL20070001	Motor pulley	97	1-PIN3X18GB879B	Pin roll 3x18
48	1-M6X8GB80B	Hex socket screw M6x8	98	1-JL28060005	Fence bar bolt
49	1-JL28010002-049W	Lower bandwheel cover	99	1-JL28060003A	Fence bar
50	1-M8X80GB70B	Hex. Socket screw M8x80			

Key No.	Part No.	Description	Key No.	Part No.	Description
100	1-JL28060009	Fence seat	150	1-WSH4GB97D1Z	Washer
101	1-M8GB6172Z	Hex. Nut M8	151	1-JL27040003	Bushing
102	1-M8X50GB5781Z	Hex. Bolt M8x50	152	1-JL22042004	Bearing mount cylinder
103	1-JL20024002-001S	Lock knob body	153	1-JL22043002	Lower guide shaft
104	1-JL20024001-001S	Lock knob cap	154	1-M8X16GB70Z	Hex screw M8x16
105	1-JL26040015A-001S	Blade tracking handle	155	1-JL21043001C	Lower guide mount
106	1-M5X20GB70Z	Hex. Socket screw M5x20	156	1-M6GB6170Z	Hex. Nut M6
107	1-JL21042005	Micro-adjusting knob	157	1-M6X35GB77Z	Set screw M6x35
108	1-WSH5GB97D1Z	Washer	158	1-JL21043004	Lower guide body
109	1-BRG608-2RSGB276	Bearing 80018	159	1-JL21043003	Micro-adjusting knob bracket/rear
110	1-JL20042002	Tube	160	1-JL21040001	Lower guide seat
111	1-M6x10GB80B	Set screw M6x10	161	1-M5X10GB80Z	Set screw M5x10
112	1-JL21042001C	Upper guide body	162	1-M6X35GB5781Z	Hex. Bolt M6x35
113	1-JL28061101	Re-saw bar	164	1-JL22010008	Leaf spring
114	1-M8X40GB77B	Set screw M8x40	165	1-JL46084000-001S	Lock handle
115	1-JL20072101	Strain relief	166	2-JL28071000	Lock handle
116	1-RVT4X8GB12618A	Rivet	167	1-M6X12GB5781B	Hex. bolt
117	1-JL21042002	Upper guide mount	168	1-M5X10GB818Z	Pan head screw M5x10
118	1-JL21042008	Bearing mount cylinder w/thread	169	1-M6X12GB70Z	Hex. socket screw M6x12
119	1-JL22043002A	Upper guide shaft	170	1-JL28030010	Sliding rail
120	1-JL21042007	Micro-adjusting knob bracket/left	171	1-JL26061003	Guide screw
121	1-M4X5GB823Z	Pan head screw M4x5	172	1-M8X20GB70B	Hex. socket screw M8x20
122	1-JL21042004	Micro-adjusting knob bracket/rear	173	1-JL27050002A	Upper table trunnion
123	1-JL21043006	Bearing mount cylinder w/thread	174	1-M12X80GB801Z	Carriage bolt M6x65
124	1-M5X6GB818Z	Screw M5x6	175	1-JL26050005A	Pointer
125	1-JL28040011	Sliding bracket	176	1-ST2D9X6D5GB845Z	Tapping screw
126	1-M5X12GB70Z	Hex. Socket screw M5x12	177	1-JL26050006-001S	Table tilting knob
127	1-JL28040009	Adjust bar	178	1-JL28070003	Gear
128	1-JL28040005	Upper guide support block	179	1-M6X12GB77Z	Set screw M6x12
129	1-JL28040002A	Guide post	180	1-JL27050004B	Lower table trunnion
130	1-M5X8GB819B	Screw M5x8	181	1-JL93010018	Tube
131	1-JL28040001A	Rack	182	1-M8GB889Z	Nylon nut M8
132	1-JL28041100	Hinged door	183	1-WSH8GB93Z	Spring washer
133	1-JL28041004	Clear window	184	1-M8X25GB70D2B	Hex. Bolt M8x25
134	1-JL26040006	Fixed bolt	185	1-M8X30GB70Z	Hex. bolt
135	1-M5x16GB70Z	Hex. Socket screw M5x16	186	1-JL21042003	Micro-adjusting knob bracket/ri.
136	1-WSH5GB97D1Z	Washer	187	1-JL27030011	Spring
137	1-M6X16GB5783Z	Hex bolt M6x16	188	1-BRG80101GB278	Bearing 80101
138	1-WSH6GB97D1Z	Washer	189	1-CLP12GB894D1B	Retaining spring
139	1-JL27040002A	Guide Bracket Cover	190	1-CLP28GB893D1B	Retaining ring
140	1-1501006	Gear	191	1-JL28020004	Tube
141	1-JL28030007	Washer	192	1-JL28010005-001S	Rubber cover
142	1-JL26040007	Fixed plate	193	1-JL28030003	Special Hex, nut
143	1-JL27040006	Guide bracket	194	1-PIN5X35GB879D1B	Pin roll 5x35
144	1-JL27040004	Worm cylinder	196	1-JL28030009	Washer
145	1-M6X40GB77B	Special screw	197	1-JL28070008A	Guide shaft
146	1-M8X25GB5781Z	Hex. Bolt M8x25	198	1-M6X8GB818Z	Pan head screw M6x8
147	1-JL20072102	Strain relief nut	199	1-M5X4GB80B	Set Screw
148	1-WSH10GB97D1Z	Washer			
149	1-JL21043002	Micro-adjusting knob bracket/rear			

How-To's for all Band Saw Blades

Choosing the Correct Blade Width

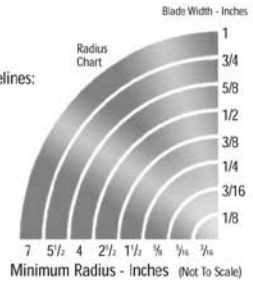
Blade width is measured from the tips of the teeth to the back edge of the blade as shown above. The instructions for the particular machine being used should be followed when selecting blade width.



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 at 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.

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.

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"

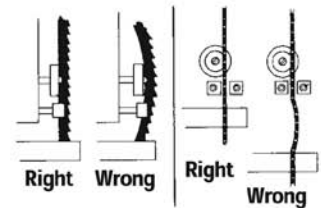
It is important to know the SFM for the various speed settings of your band saw, so that you can select the proper speed for cutting wood or other materials. Check the operator's manual of your band saw to determine the SFM or use the following procedure:

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 x diameter in inches x .262 = SFM.

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 had 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

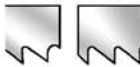
- Teeth too fine for workpiece - use a coarser pitch.
- Decrease band velocity.

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.



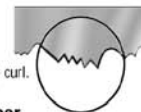
6. Blade Making Belly-Shaped Cuts

- 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.



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Warranty



2-Year Limited Warranty

RIKON Power Tools/Richen Enterprise, Inc. ("Seller") warrants to only the original retail consumer/purchaser of our products that each product be free from defects in materials and workmanship for a period of two (2) years from the date the product was purchased at retail. This warranty may not be transferred.

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

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

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

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

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

To take advantage of this warranty, please fill out the enclosed warranty card and send it to:
RIKON Warranty
110 Cummings Park
Woburn, MA 01801

The card must be entirely completed in order for it to be valid. If you have any questions please contact us at 877-884-5167 or warranty@rikontools.com.

Notes

Notes



**For more information:
110 Cummings Park
Woburn, MA 01801**

**877-884-5167/781-933-8400
techsupport@rikontools.com
www.rikontools.com**