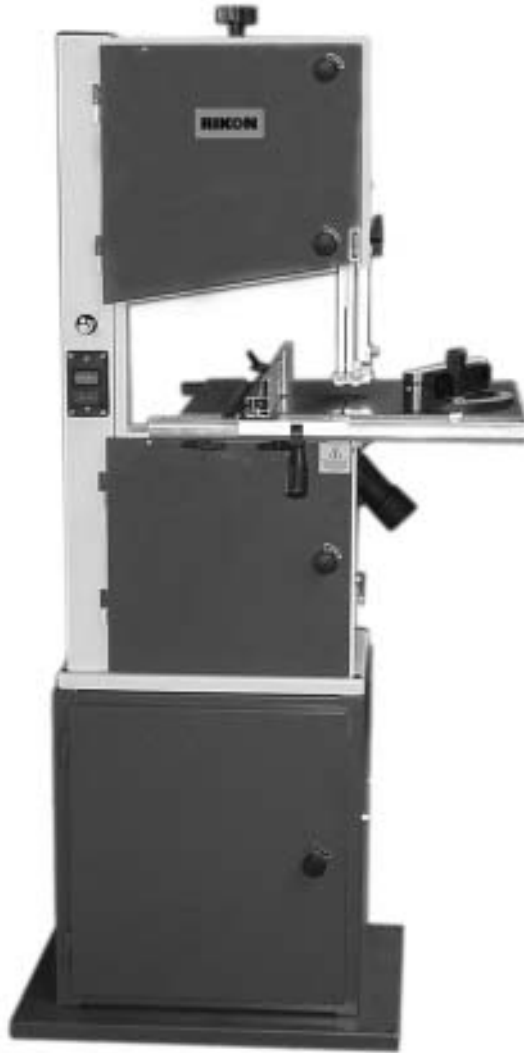


14" Woodworking Bandsaw

Model: 10-320

RIKON POWER TOOLS



Shown with Optional Miter Gauge and Fence

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

Parts List

Key No.	Part No.	Description	Key No.	Part No.	Description
1	1-CLP17GB894D1B	Circlip ring 17x1	57	1-WSH8GB97D1Z	Flat washer 8mm
2	1-BRG80203GB278D	Ball bearing 80203	58	1-LOC5/16Z	Hex. l nut 5/16"x18, self locking
3a	1-JL21022001A	Upper wheel assembly	59	1-WSH6GB97D1Z	Flat washer 6mm
4	1-JL20021006	Upper bearing shaft	60	1-JL22042003	Bearing mount cylinder w/cap
5	1-JL20021005A050W	Wheel carrier bracket	61	1-JL21031003	Bush
6	1-WSH16GB93Z	Spring washer M16	64	1-JL22042004	Bearing mount cylinder
7	1-M16GB6171Z	Hexagonal nut M16x15	65	1-M8GB6177Z	Flange nut M8
8a	1-JL20021009	Blade tension indicator	69	1-JL21013000-049W	Door-lower assembly
8b	1-JL21020004-014T	Indicator, scale	70	1-M4GB889Z	Hex. nut M4, self locking
8c	1-JL21021010A	Spring, scale	71	1-WSH4GB97D1Z	Flat washer 4mm
9	1-JL20021004	Star lock w/o cap Rd10	72	1-JL20010006-050W	Saw blade guard
10	1-JL20021002	Cylindrical pin 11x100	73	1-M4X12GB818Z	Hexagonal screw M4x12
11	1-JL20021001B050W	Tension bracket	74	1-HY56	Power switch
12a	1-JL20061101/2-001S	Knurled knob	75	1-M8X100GB14Z	Carriage bolt M8X100
13	1-M6GB6172Z	Saddle washer	76	1-JL20010004	Brush
14	1-JL20010011-001S	Lock housing	77	1-JL20010003	Spacer bush M8x50
15	1-JL20010013-001S	Nylon washer	78a	1-JL21023000A	Lower wheel assembly
16	1-JL20010012	Hexagonal nut M22x1.5	79	1-BRG80101GB278	Grooved ball bearing 80101
17	1-JL20010009	Tongue lock	80	1-JL20014002A	Tension wheel
18	1-WSH6GB93Z	Serrated lock washer 6mm	81	1-CLP12GB894D1B	Circlip ring 12x1
19	1-M6GB889Z	Hex nut M6	83	1-JL20014001	Sliding shaft
20	1-JL20010008	Leaf spring	85	1-JL20020004	Hexagonal nut M20x1.5
21	1-JL21012000B049W	Door-upper assembly	86	1-JL21020002A	Lower bearing shaft
23	1-JL21010001A-001S	Top plug	87	1-JL20020002	Poly-v-belt
24	1-JL21025001-001S	Blade tension knob	88	1-JL20070001	Motor belt pulley
25	1-JL21021200A	Blade tensioner	90	1-M6X16GB5781Z	Hexagonal screw M6x16
27	1-M8X16GB5781Z	Hex. head screw M8x16	91	1-WSH6GB93Z	Spring washer 6mm
28	1-JL20024001/2-001S	Blade tracking knob	92	1-JL20010015	Set collar 10mm
29	1-JL20010016-001S	Wing nut M8	94	1-WSH10GB97D1Z	Disc washer 20x10.2x0.8
31	1-JL20021100A050W	Tension bracket frame	95	1-JL21015100	Crank
32	1-M8GB6177Z	Flange nut M8	96	1-JL20010007-001S	Saction connector Rd 100
33	1-JL21011000C050W	Frame-Bandsaw	96a	1-JL21010019	2.5"Dust port
35	1-ST4D8X22GB845Z	Pan head tapping screw	96b	1-M6X10GB5781Z	Cylinder HD screw M6x10
37	1-JL20041003	Plate	100	1-M6GB6170Z	Hexagonal flat nut M6
38	1-M8X20GB14Z	Carriage bolt 5/16"x18x7/8	101	1-JL20015001-001S	Crank handle
39	1-JL20041004	Bolt guide	102	1-M6X55GB65Z	Cap screw M6x55
40	1-M6X16GB5781Z	Hexagonal bolt M6x16	103	1-H8012614/1-UL1506012	Motor 1HP 120V-60HZ
42	1-JL20010005	Guide bracket	104	1-JL20040001	Pin guide set
43	1-WSH6GB862D2Z	Lock washer 6mm	105	1-JL21043001	Lower guide support
44	1-M6GB6170Z	Hexagonal nut M6	118	1-M8X50GB14Z	Carriage bolt M8x50
45	1-JL21041001B	Saw blade guide assembly	119	1-JL21031001D001G	Table
46	1-JL20041002-001S	Slide	120	1-JL20031002-001S	Table insert
48	1-M5X20GB70Z	Guide adjusting screw	121a	1-6X50GB70Z	Hex socket screw M6x50
49	1-BRG80018GB278	Grooved ball bearing	130	1-JL20010016-001S	Wing nut M8
50	1-WSH6GB97D1Z	Flat washer M6	134	1-JL20030002	Glide piece
51	1-JL21042001	3-roller guide block	135	1-JL20032001	Table trunnion upper
53	1-JL22041004	Bolt guide, small	136	1-WSH8GB862D2Z	Lock washer 8mm
54	1-M8X10GB80B	Screw socket set M8x10	137	1-M8X16GB5781Z	Hexagonal screw M8x20
55	1-JL22042002	Guide shaft	140	1-JL20030001A	Table trunnion lower
56	1-JL21042002	Upper guide mount	200a	1-JL21022002A	Bandsaw tire 350x2.5x24

How-To's for all Band Saw Blades

Choosing the Correct Blade Width

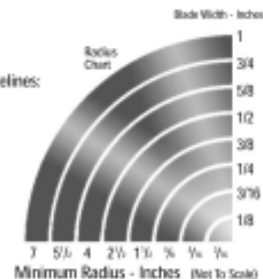
Blade width is measured from the tips of the teeth to the back edge of the blade as shown above. The instructions for the particular machine being used should be followed when selecting blade width.



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"

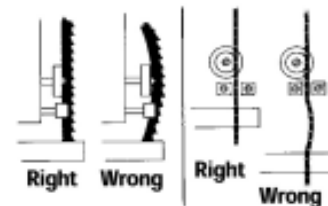
It is important to know the SFM for the various speed settings of your band saw, so that you can select the proper speed for cutting wood or other materials. Check the operator's manual of your band saw to determine the SFM or use the following procedure:

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 and right 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. Gullet 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

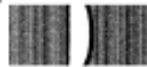
5. Premature Blade Breakage

- 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 cut.
- 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.
- Increase feed pressure.
- Use a coarser pitch.

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.





5-Year Limited Warranty

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

This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs, alterations, lack of maintenance or normal wear and tear. Under no circumstances will Seller be liable for incidental or consequential damages resulting from defective products. All other warranties, expressed or implied, whether of merchantability, fitness for purpose, or otherwise are expressly disclaimed by Seller. This 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
16 Progress Rd.
Billerica, MA. 01821

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.

RIKON **POWER TOOLS**

For more information:
16 Progress Rd.
Billerica, MA. 01821

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www.rikontools.com