

## Band saw alignment:

1. Check wheels for parallelism
  - a. Remove table
  - b. Install a larger width blade and tension it to bring the saw to stressed condition
  - c. Lay on a straightedge across wheels, adjust tracking adjustment until wheels are coplanar/ parallel using the tracking adjustment
  - d. Check to see if wheels are parallel
    - i. If they are not, determine which blade needs brought forward and measure the amount. Then remove it
    - ii. On some saws, only one wheel comes off easily (top wheel on Deltas, and lower wheel on most others). On these saws, there are often shims that can be removed behind this wheel.
    - iii. Shims available at McMaster Carr, Iturra design, and good hardware stores. Ask for machine bushings and measure up the clearances you need.
2. Parallelism checked, go back and track and tension the blade again for the next step
  - a. Start with the blade under little to no tension. Rotate the wheels by hand, adjusting tracking until blade sits near the center of the wheels.
  - b. Tighten blade tension while turning wheels, readjusting tension and tracking alternatively.
3. Reinstall the table and check the blade for square
  - a. Raise the blade guard to allow access
  - b. Check the side to side square, adjusting the 90 degree stop until it is square
  - c. Check front to rear square, using shims to make adjustments. Remove the table for easier access to make adjustments. Trial and error to get it right
4. Now that the table is square front to rear, check the blade guide post for square to table. Important to keep guide bearing adjustments when raising and lowering guide post.
  - a. To adjust a 14" saw, you shim the column between the upper and lower castings.
  - b. On larger saws, you can add or remove shims behind the guide post mounts.
5. Round the back of the blade using a stone
  - a. Protects the guide bearings
  - b. Extends blade life by helping prevent cracking of the blade
  - c. Refines the weld so blade joint passes the rear bearing or bushing smoothly
6. Adjust the guides
  - a. Back off the thrust bearings and side guides
  - b. Adjust the tracking if necessary to bring the blade to the center of the wheels first by rotating wheels by hand and then by running the motor
  - c. With saw turned off, bring thrust bearings up to blade, then back them off so they don't touch the blade as you rotate it by hand. If you want to measure, .015" is the number or 4 thicknesses of a dollar bill

- d. Bring side guides forward until they are just behind the blade gullets
  - e. Adjust the side guides so they do not touch the blade as it is rotated by hand. If you want to measure, .004" is your number or a dollar bills thickness
7. Set blade tension
- a. Use the tension guide on your saw. Studies show they are close enough, despite the sales pitch of aftermarket parts sellers. For a dull blade, or especially thick work piece, adjust tension slightly higher. Follow recommendations of specialty resaw blade manufacturers, as some are low tension blades
8. Prepare to resaw or use the fence as a guide
- a. On piece of scrap, scribe a line parallel to the edge of the piece
  - b. Pull back the fence and cut along the line until equilibrium is reached and the blade follows the line easily
  - c. Hold the piece in place and shut down the saw
  - d. Mark a line on the table along the edge of the piece
  - e. Adjust the fence to parallel with that line
  - f. Note: This adjustment needs to be made *each time the blade is changed*

Reference: <http://americanwoodworker.com/blogs/tools/archive/2010/03/15/tune-your-bandsaw.aspx>

Notes: Iturra designs sells shim kits spring kits, etc. for 14" saws mostly.

Grab a catalog here:

<http://hotfile.com/dl/58454728/2e65e76/iturra.design.catalogue.2010.pdf.html>

Iturra design

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