MICROJIG BLADEMATCH™

BladeMatch® Arbor Shims

Table saw calibration tools for extreme precision and accurate cuts.

AS-6

1 Introduction

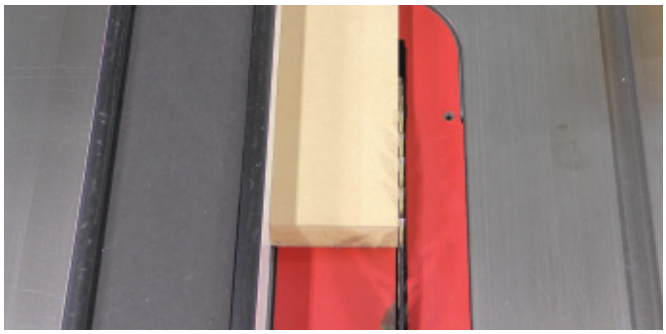
- Simplify table saw setup. No more adjusting the riving knife or rip fence scale for standard blades.
- Without Arbor Shims. Thin kerf blades are further from the fence than full kerf.
- With Arbor Shims. Every standard blade is set to the same cut line.

⚠ **Warning!** BLADEMATCH Arbor Shims are designed for use with a standard 5/8" arbor, **left-tilt** table saws. Be sure to read and understand the instructions for your table saw before use. Your saw must be set up and adjusted according to the manual with the rip fence parallel to the blade. Saw blades must not be thinner than the riving knife or splitter. For **right-tilt** table saw instructions contact support@microjig.com.

2 Installation

STEP 1 Establish "Zero" position for the cut line.

a. Install your thickest blade in the table saw with no shims or stabilizers between the carbide tooth and arbor. This is your 'zero' blade.
b. Set the rip fence to a common measurement just beyond the throat plate. On most saws this will be about 3" (75mm).
c. Rip a piece of MDF to width using this blade and rip fence setting. Keep this setup part.
d. DO NOT MOVE THE RIP FENCE FOR THE REST OF THE SETUP PROCESS.



STEP 2 Install Second Blade

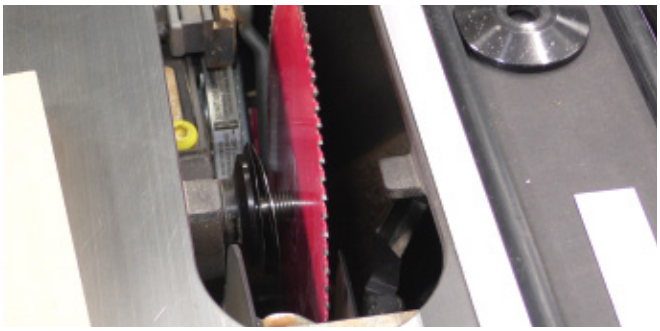
a. Unplug the saw.
b. Remove the throat plate and saw blade from the table saw.
c. Install another blade in the saw with no shims or stabilizers between the blade and the arbor.
d. Reset the throat plate and slide the MDF setup part between the rip fence and blade.
e. There should be a gap between the blade and the setup part.
f. The gap may be small between two full kerf blades or wider between a full and thin kerf blade.
g. **Note:** If there is no gap, the blade is the same as the 'zero' blade and needs no shims.

STEP 3 Measure the Gap

a. Use the Arbor Shims to measure the gap between the setup part and the blade.
b. Try different combinations of shims to "feel" for the right fit.
c. The shims should drag slightly between the carbide tooth and the MDF from Step 1 without flexing the blade away from the setup part.
d. The Arbor Shim set can measure from 0.003" to 0.045" in 0.001" increments.

STEP 4 Shim the Blade

a. Remove the throat plate and blade.
b. Mark the blade body just outside the arbor diameter with the gap measurement (e.g 0.009") you just found.
c. Re-install the blade with the proper shims between the arbor and the blade.
d. Note: There may be more than one combination of shims to make up the gap. For example; 0.009" can be made up of 0.003" and 0.006" shims or 0.004" and 0.005" shims.
e. Re-install the throat plate.



STEP 5 Check the Shims

a. Slide the setup part between the rip fence and blade. It should lightly contact the rip fence and the blade without flexing the blade.
b. If the fit is not correct, go back to **Step 3** and repeat the process.
c. If the fit is correct, repeat **Steps 2** through 5 for any other blades you may have.
d. Once all blades are measured and checked, remove the throat plate and blade.

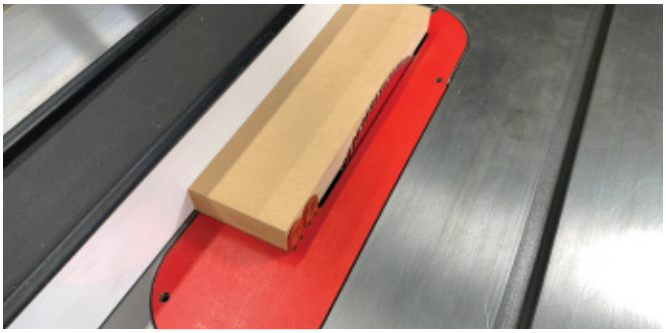
All your blades are now set so they all cut at the same distance from your rip fence.

STEP 6 Set the Riving Knife

a. Every Riving knife will be adjustable side to side to accommodate different blades. Check the manual for the proper method to adjust your saw.
b. Loosen the riving knife bracket so it can be moved side to side.
c. Install the 'zero' blade with no shims or stabilizers between the blade and arbor.
d. Lay a straight edge along the rip fence side of the blade so that it is lightly touching one tooth at the front and back of the blade.
e. Reset the riving knife until it aligns with the blade and straight edge.
f. Gently tighten the riving knife bracket being careful not to move the riving knife.
g. Re-install the throat plate and verify the alignment of the riving knife.

STEP 7 Setting MJ Splitters

a. If you do not have a riving knife on your saw, the arbor shims are fully compatible with our MJ Splitters.
b. MJ Splitters are designed to adjust side to side to fit different blades, but using the arbor shims, one setup will work for all blades.
c. If you only use only full kerf blades or only thin kerf blades, your current MJ Splitter throat plate setup will likely be usable, just align the front splitter with the right side of the kerf. The rear splitter should be set to the left of your narrowest blade, the one that uses the most shims.

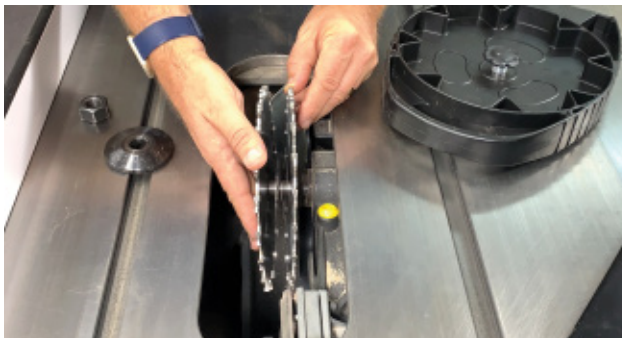


STEP 8 Calibrate the Rip Fence Scale

a. Use an accurate steel rule to set the rip fence at a known distance from the the right side of the blade teeth.
b. Without moving the rip fence, adjust the cursor on fence head to the same measurement in Step 8-a.
c. All your table saw cuts with your standard blades can now be made using just the rip fence scale, rip and crosscut.
d. Using one scale for all cut means more consistent measurements for better fitting parts.

STEP 9 Using Arbor Shims with Stacked Dado Sets

a. Shims are regularly used with stacked dado sets to adjust the exact fit as needed and Arbor Shims are excellent for this purpose.
b. When adjusting the fit of your dado stack, arbor shims allow for incremental adjustments of 0.001" at a time, from 0.003" to 0.045"
c. The clear markings on the Arbor Shims make it easy to choose the shims you want



Notes:

- Arbor Shims do not work with ultra-thin saw blades.
- Arbor Shims do not work with stabilizing plates between the arbor and the blade.
- Arbor Shims will work with stabilizing plates on the blade side away from the arbor.
- The rip fence calibration may not work when bevel cutting on some saws.

Work Safer. Work Smarter.®

Watch the Instructional Video:
microjig.com/bladematch-video