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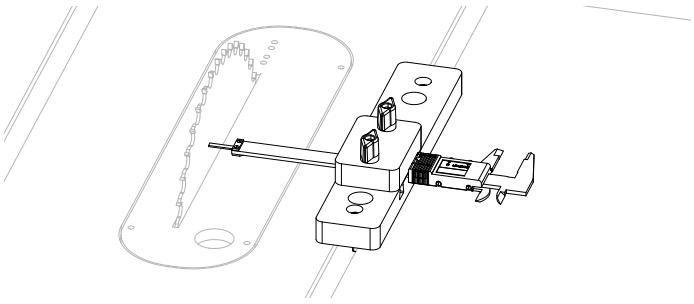
ZeroPlay® Miter Bar
Saw Setup Jig Plans

For setting and fine tuning your miter slot, saw blade, and rip fence.



⚠ WARNING

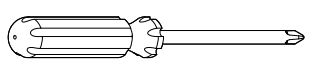
Always wear safety glasses and hearing protection. Follow all safety precautions and use best practices. Microjig assumes no liability for any products not sold and manufactured by Microjig.

Parts List

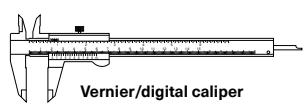
#	Saw Setup Jig Parts	Qty
A	Jig Base: 10" x 2" x 3/4" (250mm x 50mm x 18mm)	1
B	Clamp Plate: 3" x 2" x 3/4" (76mm x 50 x 18mm)	1
C	ZeroPlay™ Guide Bar	1
D	1.5" MatchFit™ Track Screws with wing knobs	2
E	360 Sled Kit (substitute for parts **C** + **D**)	1

Wood types: void-free plywood (e.g. Baltic birch), standard MDF, or seasoned solid wood.

Required Tools (Not included)



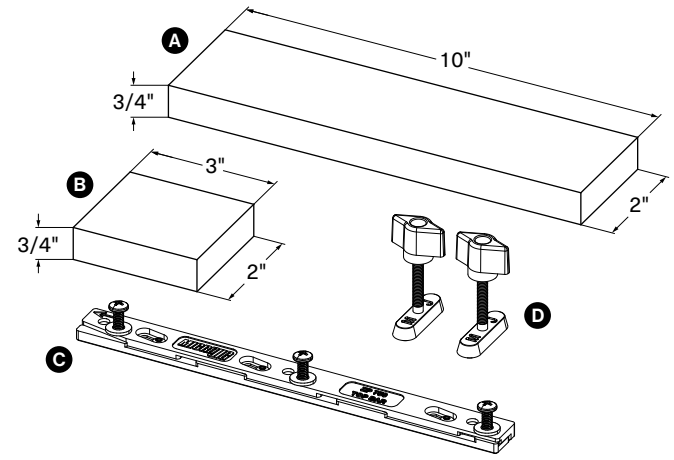
Phillips screwdriver



Vernier/digital caliper

To be safe and accurate, your saw must be set up correctly and as precisely as possible. This simple jig helps you set and fine tune your saw to get the best possible cuts from it.

The jig holds a digital or vernier caliper as it slides up and down the miter slot so you can measure the exact set up of your saw table and rip fence.



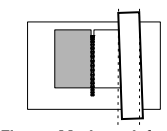


Fig 0a - Marks on left side

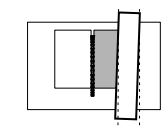


Fig 0b - Marks on right side

Tool marks or burning on ripped faces

Excess tool marks or burning on ripped faces means the fence is not parallel to the blade.

Marks are on the left side of the cut means the back of the fence is too far right [Fig 0a].

Marks are on the right side of the cut means the back of the fence is too far left [Fig 0b].

Instructions

Step 1 – Mark and drill holes

1.1 Draw a centerline down the 10" length of the Jig Base and mark it at 1" (25mm) and 9" (228mm) from the front edge. These will be the mounting holes M1 and M2. [Fig 1a].
NOTE: the center mounting hole is not used.

1.2 Make three more marks along this line at 2-1/16", 4- 5/16" and 8-5/16" (52mm, 110mm and 211mm) from the front. These will be the adjustment holes A1, A2, and A3 [Fig 1a].

1.3 Drill 1/2" (12mm) diameter counter bore holes, 5/16" (8mm) deep at M1 and M2 [Fig 1b].

1.4 Drill 1/4" (6mm) diameter holes through the center of the counter bores cut in the previous step [Fig 1b].

1.5 Drill 3/4" (19mm) diameter holes through the Jig Base at A1, A2, and A3 [Fig 1b].

1.6 Draw a center line along the 3" (76mm) length of the Clamp Plate and mark it 1/2" (13mm) in from each end [Fig 1c].

1.7 Drill 1/4" (6mm) through holes at these points. Ease the corners of the jig base and clamp plate if desired.

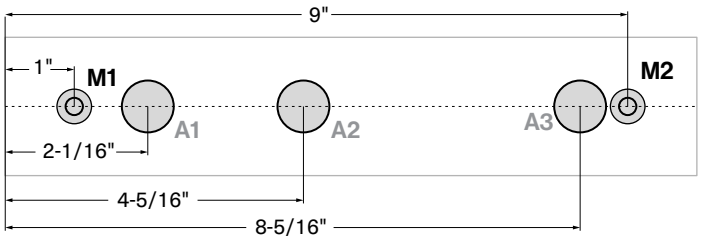


Fig 1a - Top view of Jig Base

Fig 1b - Section view of side of Jig Base

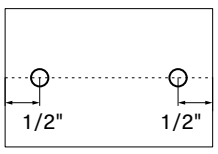


Fig 1c - Top view of Clamp Plate

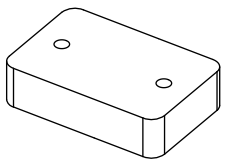


Fig 1d - Finished Clamp Plate

Step 2 – Cut Dovetail Tracks and dado on Jig Base

2.1 Mark the Jig Base 5-1/4" and 7-1/4" (70mm and 121mm) from the front edge. These are the Dovetail Track locations [Fig 2a].

2.2 Refer to the instructions included with the Dovetail Screws and cut Dovetail Tracks across the Jig Base centered on the lines [Fig 2c].

2.3 Mark the Jig Base 6-1/4" from the rear edge. Cut a dado at this line the same width as, and slightly shallower than, your caliper. [Fig 2c].

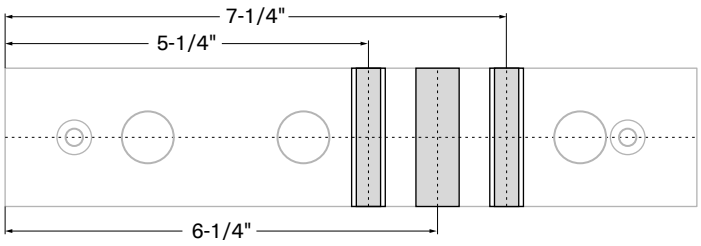


Fig 2a - Dovetail Track and dado locations

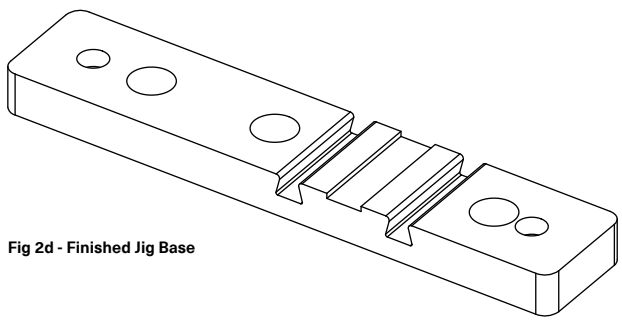


Fig 2d - Finished Jig Base

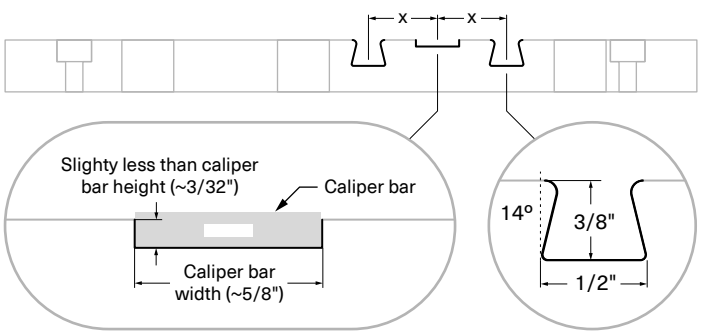


Fig 2c - Dado and Dovetail Track dimensions

Step 3 – Mount and square jig

Refer to Steps 3-4 of the Miter Bar user manual.
NOTE: This jig has only two mounting screws rather than three. The center mounting hole of the Miter Bar is not used.

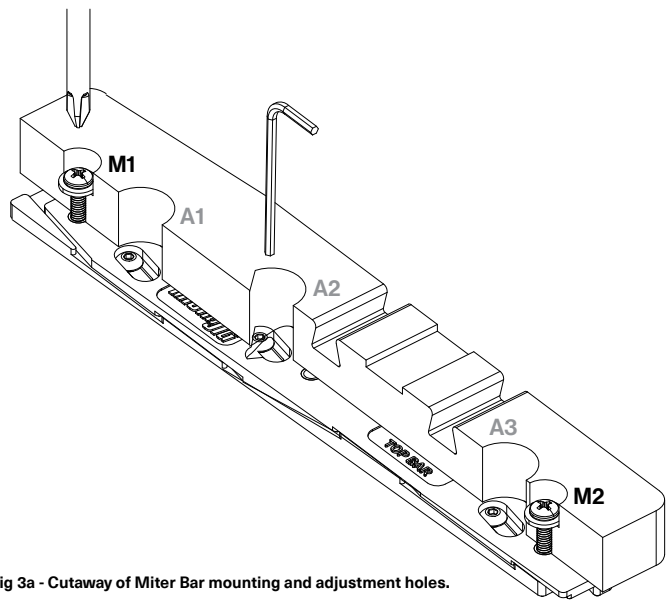


Fig 3a - Cutaway of Miter Bar mounting and adjustment holes.

Step 4 – Mount caliper

4.1 Slide a Dovetail Screw into each Dovetail Track in the Jig Base.

4.2 Set the caliper bar into the dado in the Jig Base. Position it with the depth rod towards the blade (it can be reversed as needed).

4.3 Slide the Clamp Plate over the screws so it rests on the caliper bar.

4.4 Use the knobs to loosely secure the caliper bar in place.

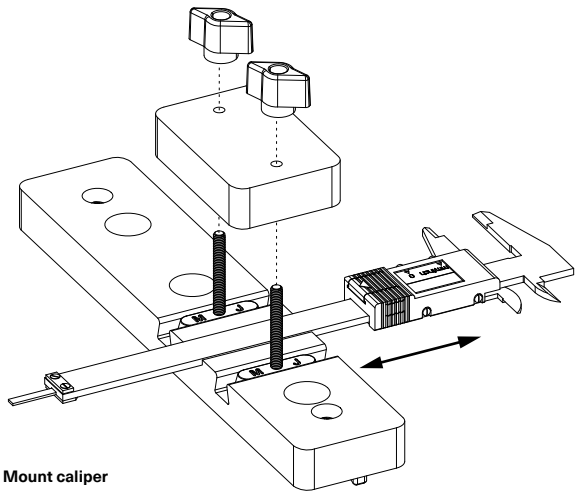


Fig 4a - Mount caliper

Step 5 – Adjust miter slot

5.1 Unplug the saw and raise the blade to full height. Mark the blade at the closest point to the front of the table [Fig 5a].

5.2 Adjust the caliper depth stop to touch the blade body (not the tooth) at this mark. Zero the caliper display [Fig 5b].

5.3 Rotate the blade until the mark is as far to the rear as possible. Slide the jig back along the miter slot and re-measure the distance to the mark. Both measurements should be the same [Fig 5c-5e].

5.4 If there is a difference front to back, adjust the miter slot so it is parallel to the blade. (refer to your saw's user manual).

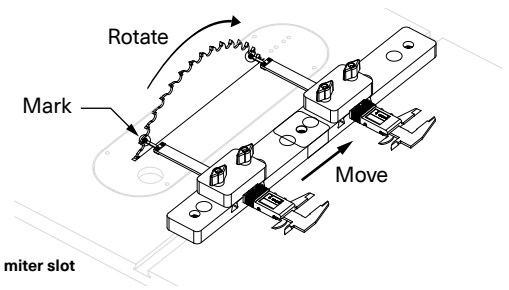


Fig 5a - Adjust miter slot

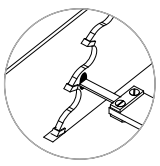


Fig 5b - Measure 1

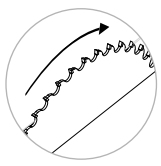


Fig 5c - Rotate blade

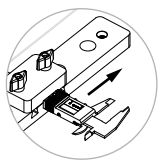


Fig 5d - Move jig

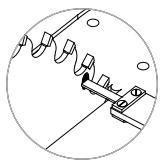


Fig 5e - Measure 2

Step 6 – Adjust rip fence

6.1 Flip the caliper so that the depth rod is toward the rip fence [Fig 6a].

6.2 Slide the jig as far foward as possible and measure the distance to the rip fence. Make sure the Miter Bar is fully engaged inside the miter slot. Zero the display on the caliper [Fig 6b].

6.3 Slide the jig as far backward as possible and measure the distance to the rip fence. Both measurements should be the same [Fig 6b].

6.4 If there is a difference front to back, adjust the rip fence so it is parallel to the miter slot. (refer to your saw's user manual).

NOTE: Not all rip fence faces are perfectly uniform from end to end. Check several points along the length of the rip fence to find any high spots. Measure at the highest spot both front and back.

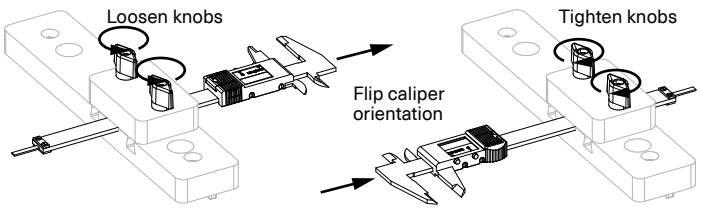


Fig 6a - Face caliper depth rod towards rip fence

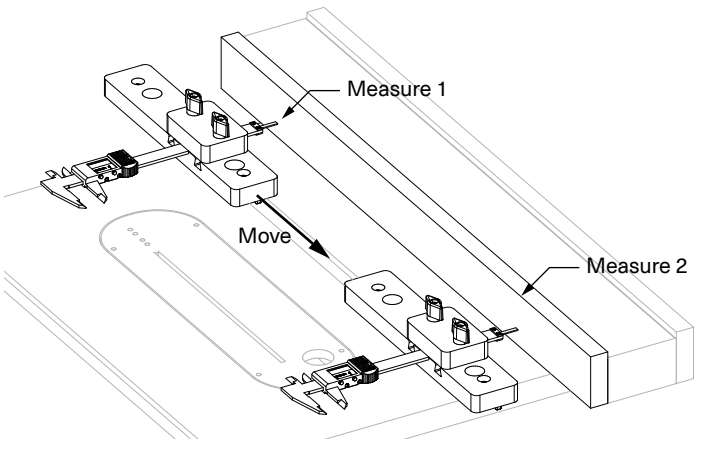


Fig 6b - Measure rip fence face