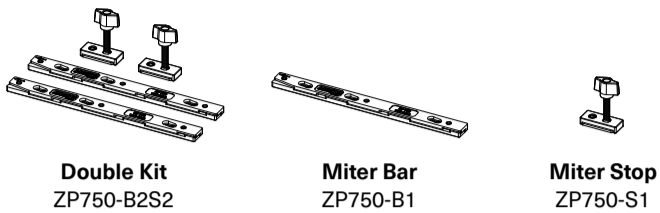


ZeroPlay® Miter Bar System User Manual

For creating precision shop-built sleds and jigs.



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.

Instructions

Make sure that your table saw is properly tuned and maintained before using the ZeroPlay™ System. It is important that the rip fence is exactly parallel with the blade. Perform all steps as accurately as possible.

Miter Bar adjusts from 0.72" to 0.78" (18.3mm–19.8mm) wide. Push the bottom bar away from the top bar to decrease width [Fig 1a]. Push the bars together to widen [Fig 1b].

Step 1 – Assemble Hardware

- Stack the Top Bar (B) on top of the Bottom Bar (A). The arrows should be facing upwards and in the same direction.
- Insert (3x) button head screws (C) through the counterbored slots in the Top Bar as shown below. Loosely secure both bars together using the hex key (D).
- Adjust the bars to the narrowest setting [Fig 1a] and lightly tighten the screws.

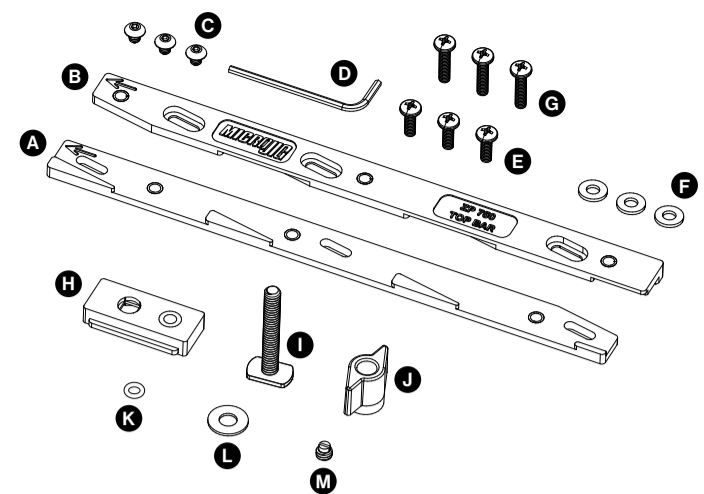
Miter Stop only

- Insert the nylon set screw (M) into the brass insert of the Miter Stop (H) with a small flathead screwdriver.

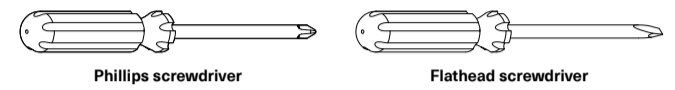
Parts List

#	Miter Bar Parts	Qty	Part #
A	Bottom Bar (with wedges)	1	ZP750-P1
B	Top Bar (with logo)	1	ZP750-P2
C	#8-32 x 3/16" button head screw	3	ZP-H1-EH
D	3/32" hex key	1	ZP-H2-EH
E	#8-32 x 1/2" pan head screw	3	ZP-H3-EH
F	#10 flat washer	3	ZP-H4-EH
G	#8-32 x 3/4" pan head screw	3	ZP750-H19-EH

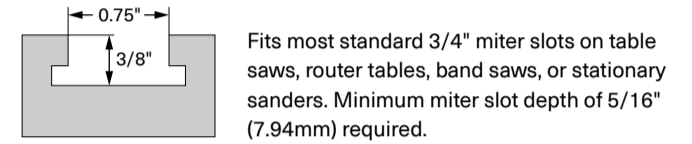
#	Miter Stop Parts	Qty	Part #
H	Miter Stop	1	ZP750-P3
I	1/4"-20 x 1-3/4" T-bolt	1	GR-H12-EH
J	1/4"-20 yellow wing knob	1	ZP-H6
K	5/16" OD O-ring	1	ZP-H7
L	1/4" x 1/2" flat washer	1	ZP-H8-EH
M	Nylon 1/4"-20 x 1/4" set screw	1	ZP-H9



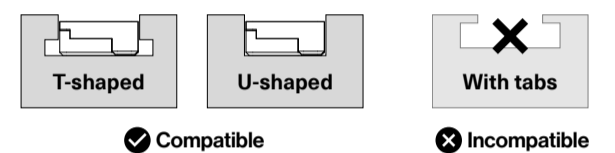
Required Tools (Not included)



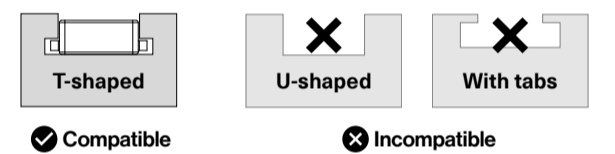
Compatibility



Miter Bar compatible miter slot types



Miter Stop compatible miter slot types



Step 2 – Mark & Drill Sled Base

Layout ZeroPlay® holes and other sled features before drilling or cutting.

- Draw a center line where the Miter Bar will be mounted to the sled.
- Mark a point for the first mounting hole ($\geq 1"$ from the top edge) and label it M1 (closest to the arrows). Mark two more mounting holes 4" (101.6mm) apart and label them M2 and M3 [Fig 2a].
- Starting from M1, mark three adjustment holes 1-1/16" (27mm), 3-5/16" (84.1mm), and 7-5/16" (185.7mm) backwards along the center line. Label them A1, A2, and A3 [Fig 2b].
- Drill 3/4" (19mm) through holes at A1, A2 and A3.
- Drill 1/2" (12mm) diameter counterbores 5/16" (8mm) deep at M1, M2, and M3. Then drill 1/4" (6mm) through holes at each mounting hole (M1, M2, M3) through the center of the counter bore [Fig 2c].

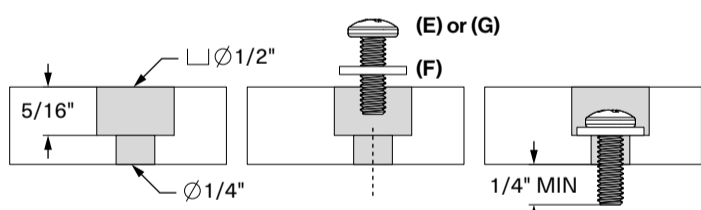


Fig 2c - Side view of mounting holes

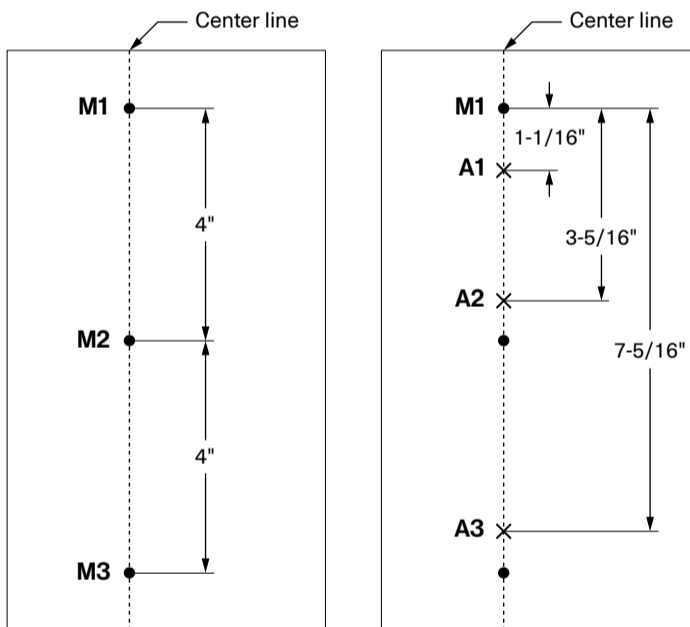


Fig 2a - Mounting hole locations

Fig 2b - Adjustment hole locations

Step 3 – Mount Miter Bar

- Using a philips screwdriver, attach the Miter Bar to the bottom of the sled using either:
 - For 1/2" thick sled bases: (3x) 1/2" pan head screws (E) OR
 - For 3/4" thick sled bases: (3x) 3/4" pan head screws (G)
 Insert the pan head screws with flat washers (F) through each mounting hole (M1, M2, M3) and tighten [Fig 3a].
- Each adjustment slot should be visible through the adjustment holes (A1, A2, A3) drilled in Step 2.4.
- Place the sled base on top of your table saw surface so the Miter Bar is set into one of the miter slots. Push the sled to the right so the Miter Bar is firmly against the inner wall of the miter slot [Fig 3b].
- Using the hex key (D), loosen the 3 button head screws in the Miter Bar through the adjustment holes [Fig 3c].

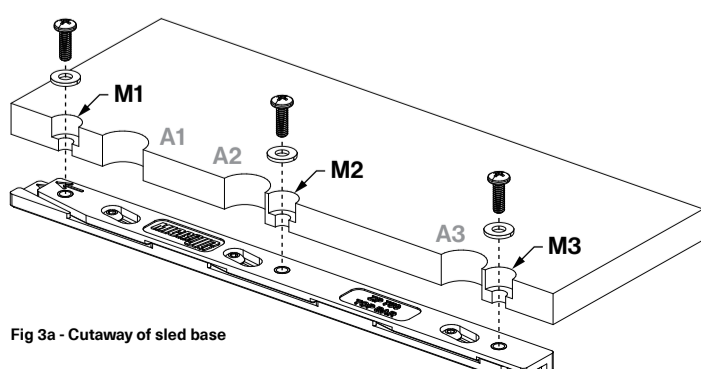


Fig 3a - Cutaway of sled base

- Use the hex key to gently slide one of the button head screws downwards so the Miter Bar expands to completely fill the miter slot. Then, tighten each button head screw [Fig 3d].
- Test the Miter Bar fit by sliding the sled along the miter slot. It should slide freely with no side-to-side play. Repeat the previous steps if the fit is too tight or too loose.

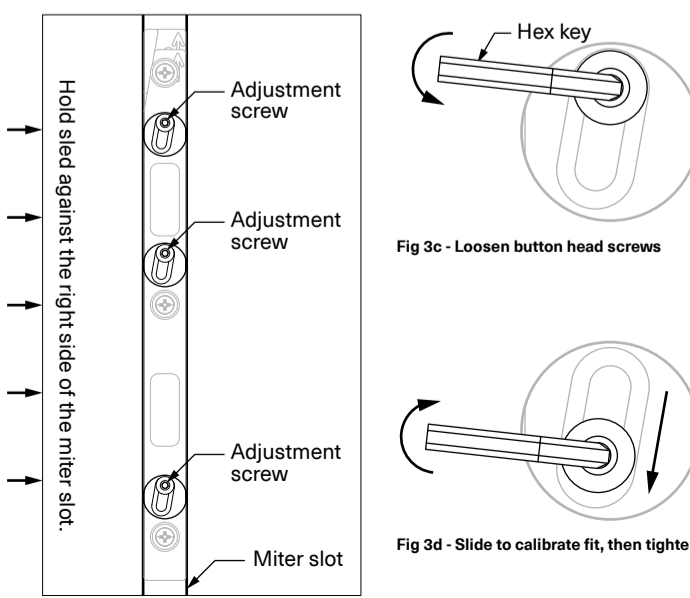


Fig 3b - Top view of assembled sled

Fig 3c - Loosen button head screws

Fig 3d - Slide to calibrate fit, then tighten

Step 4 – Square sled

- Move the rip fence so it touches the side of your sled base and lock the fence in place. The fence position should be close to or slightly past the saw blade [Fig 4a].
- Partially loosen the three mounting screws and push the sled base firmly against the rip fence. Make sure the sled is square (90°) to the rip fence and retighten each mounting screw [Fig 4b–4d].
- If the sled base is set slightly past the saw blade, cut the edge to create a zero-clearance fit.

TIP: Use two ZeroPlay™ Miter Bars inline (one in front of the other) for deep projects like panel cutting sleds, or in parallel (one in each miter slot) for wider bases like crosscut sleds.

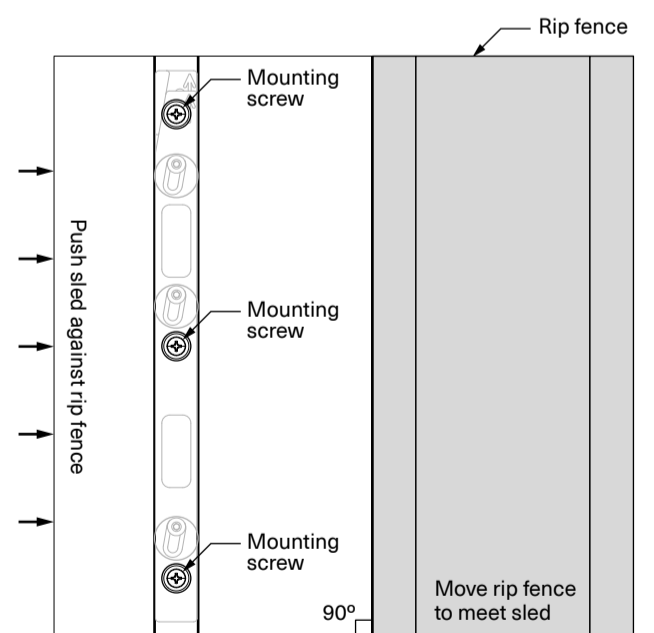


Fig 4a - Top view of sled and rip fence

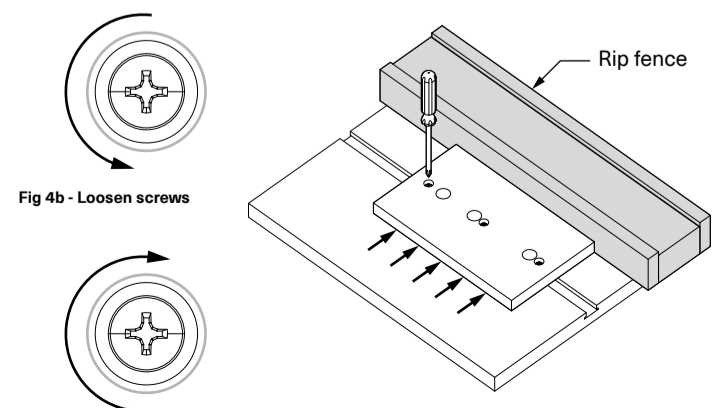


Fig 4b - Loosen screws

Fig 4c - Push sled against rip fence

Fig 4d - Tighten screws



Miter Bar Drill Guide

For use with the ZeroPlay™ Miter Bar System

Use center punch, nail, or pin to mark centers of all 6 holes (M1, M2, M3, A1, A2, and A3).

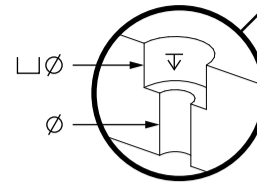
-OR-

Copy drawing at 1:1 scale to use as a template.

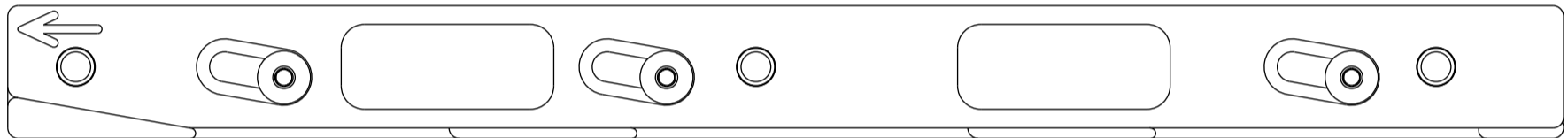
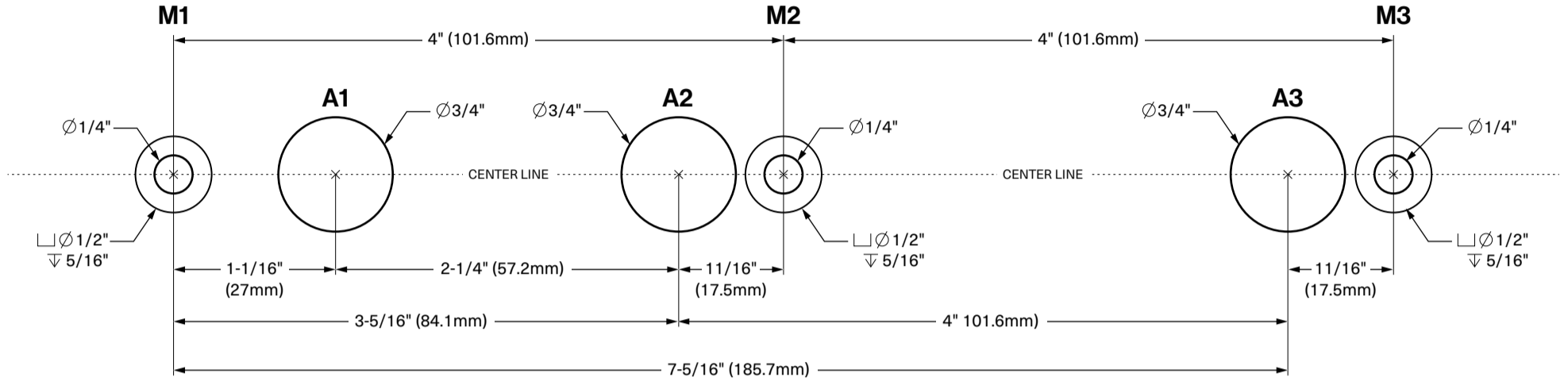
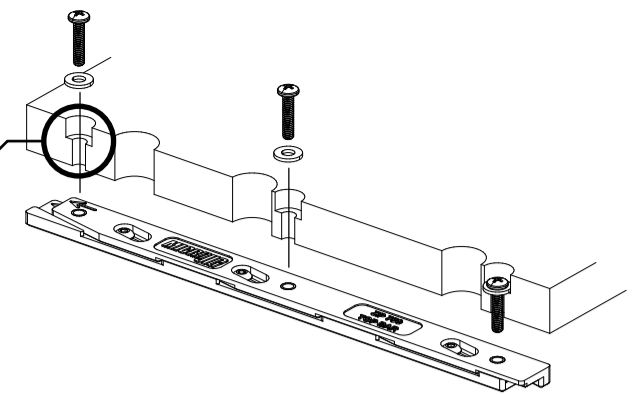
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SYMBOL	HOLE TYPE
∅	Through hole
⌊∅	Counterbore
∇	Depth



M1 close-up



ZeroPlay™ Miter Bar [top-down view]

