

Small Piece Miter Gauge

I make a lot of small picture frames for gifts. But there's a couple challenges: mitering the small pieces accurately and holding them safely. So I've made a jig designed to help with this. It's nothing more than a shallow box attached to a miter gauge runner.

The runner rides in the miter gauge slots for accuracy, as you can see in the photo. And the workpiece can be clamped to either side of the jig so your hands are always out of the way.



The Jig – To make the jig, cut four pieces of stock for the sides. Rabbet joints at the ends of two of the pieces help align them during glue-up, as shown in the main drawing. (Note: Size the pieces for the box so it clears the blade once it's attached to the runner, as illustrated in the detail at right).

Add Bottom – To strengthen the sides of the box, I glued a piece of $\frac{1}{4}$ " hard-board to the bottom. Finally, glue and screw the box to a wood runner. Note: To cut accurate miters with this jig, it's critical to make sure the box is square and sits at a 45° angle to the blade. (I used a plastic triangle to set the position of the box.)

Shop Tip: The workpiece may shift when making the cut even when it's clamped. To prevent this, you may want to attach self-adhesive sandpaper to the sides of the box.

