

Box Joint Bit

Item #7860

Making A Safety Sled

To aid in the use of Box Joint Bit #7860, a simple safety sled will help prevent tear-out and will also speed bit height adjustment. To make the sled you will need the following:

- A small piece of 1/4" plywood, masonite, or phenolic plastic (approximately 6" wide by 14" long).
- Some scrap wood, preferably hardwood, to make the backer blocks (3/4" x 2" x 13").
- \triangleright Four (4) #6 x 3/4" wood screws

Cut your base to 6" wide by 14" long. Mark lines 90 degrees from the edge at 2" from each end of the base to use as a mounting guide for the backer blocks. Drill mounting holes approximately 2-3/8" in from the ends of the base and approximately 1-1/4" in from the edge of the base. Countersink the holes on the bottom side of the base to accept the heads of the mounting screws. Cut two backer blocks to approx 6" in length and secure, with 3/4" dimension against base, using #6 wood screws, making sure backer blocks do not overhang base. Make sure head screws are recessed so that they do not scratch your tabletop.



The sled has two ends on it so that there will be support after the bit has cut through to prevent tear-out. Use one end always at the first bit height set-up and then reposition the bit height and use the opposite end of the sled for that second cut position.

Making the Box Joint

To make the first cut, adjust the bit height so that the bottom one of the 5/32" slot cutters is at the height of the sled top. Set your fence so that the cutters are protruding the same amount as the thickness of your stock. Mark the top edges of all 4 pieces to keep them oriented properly. Run the first piece of stock through the bit. Turn your stock to the other end and run it through, keeping orientation mark the same. If your stock wants to slide along the backorder block, apply adhesive backed sandpaper to the face of the block to help hold the stock in place. After running both ends of the first piece, run the piece that will be across from it on the assembly. To run the other two pieces, first turn the sled around and, using one of the pieces already cut as a guide, adjust the bit height so that the slot cutters are at the same height as the fingers on the cut piece (measure with cut piece positioned on the sled). Cut both pieces the same as above at the new bit height. When you are done, the 4 pieces should form a box with interlocking corners and all pieces should line up at the same height. The next time you go to use the bit, adjust the bit height to match the profile cut on the backer blocks.

