



# SOMMERFELD'S TOOLS

## For Wood

### SOMMERFELD's The 3-In-1 Pocket Cutter Instructions

All die-cast aluminum construction -  
No plastic parts!

**P**ocket Hole Joinery has been in the woodworking industry for over 20 years. Pocket hole joints are amazingly fast, incredibly strong and have hundreds of applications. The 3-in-1 Pocket Cutter from Sommerfeld's goes back to the basics - back to heavy duty construction - back to simple functionality!



3/4" Stock

1-1/2" Stock

Portable Use

#### Face Frame Joints

Face Frame joints are among the most common applications of the pocket-hole joint, and they are an excellent way to get accustomed to your Pocket Cutter. If this is your first experience with pocket holes, this is an ideal place to start. We'll start with a joint in common  $\frac{3}{4}$ " stock. Be sure to make a joint in scrap material first to be certain that you understand the system. This setup will create strong joints incredibly fast as shown in pictures below.



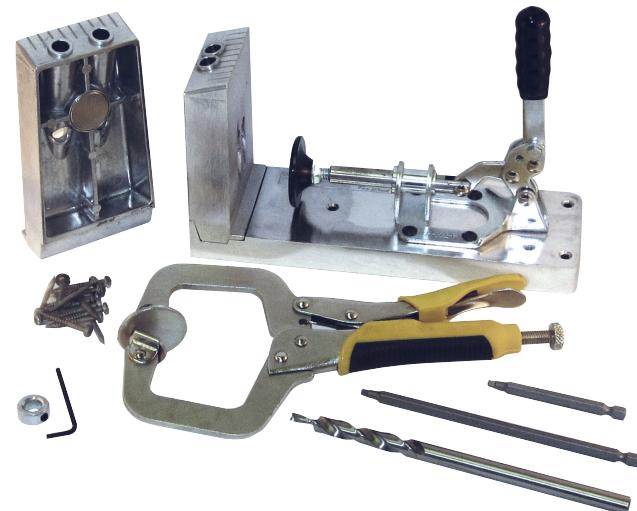
#### STEP #1

Attach the shorter  $\frac{3}{4}$ " upright to your jig by screwing it from the underside.



#### STEP #2

Insert the Step Drill Bit into one of the drill guides and set the Depth Stop Collar so that the tip of the bit will stop about  $\frac{1}{8}$ " above the Base. Remove the bit from the jig and tighten your collar there. **See Fig. 1**



#### STEP #3

Clamp your work piece vertically in the jig, so the two drill guides are centered on the stock. The threaded tip of the Toggle Clamp should be adjusted so that the clamp holds your work piece firmly. Take some time to get familiar with the correct clamping pressure. **See Fig. 2**

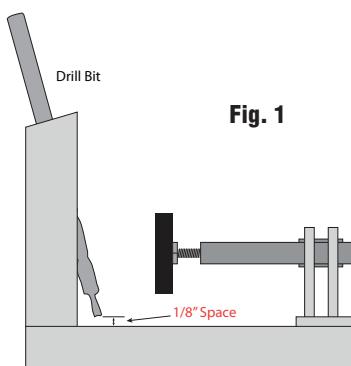


Fig. 1



Fig. 2

#### STEP #4

Drill both holes. For best results, allow the bit to come to full speed within the drill guide before drilling the work piece. Drill the hole until the Depth Stop reaches the top of the drill guide; keep the bit spinning while you withdraw it from the wood.

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**STEP #5**

Remove the stock from the jig and position it at right angles to the other work piece. Use the face clamp to hold the 2 pieces together. Place the larger plate of the clamp against the front face of your joint; this will keep the faces perfectly flush. **See Fig. 3**

**STEP #6**

Drive self-tapping pocket-hole screws into each hole, using the Driver Bit and your adjustable-clutch driver. Adjust the torque so you can drive screws without stripping the heads. The work pieces may separate slightly as you drive the screws, but they should pull tight as you set the screws. If they separate by more than about 1/8", you may wish to apply greater pressure with the clamp.

**Fig. 3****Mitered Joints**

Pocket-hole joints are an ideal way to assemble picture frames and other mitered projects. These instructions assume you will use 3/4" thick stock.

- 1) Attach the shorter 3/4" upright to your jig.
- 2) Cut the miters on all work pieces.
- 3) Clamp your work piece in the jig. If the stock is more than 2-1/2" wide, you can use the two drill guides just as you would for a face frame joint. For narrower material, you can still drill two holes, but you will need to shift the stock between drilling the first

and second holes, so that neither pocket will be exposed on the edge of your frame.

- 4) Drill both holes.
- 5) Clamp each joint with your Face Clamp or C-Clamp and drive the screws.

**2 x 4" Material**

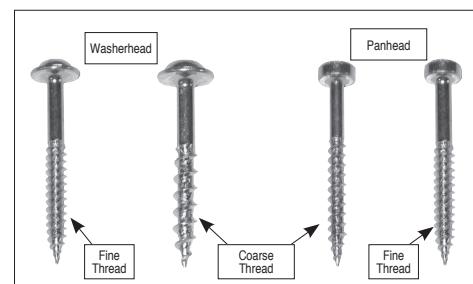
Remove the smaller upright guide from your jig and attach the longer 1-1/2" upright for working with thicker material using it the same way you would with the smaller material.

**Using Jig Portably**

To use the setup portably, clamp stock to the short or tall drill guide. Keep stock in place by attaching face clamp to the magnetic backside of jig. You are then ready to drill holes.

**Screw Selection**

For best results use only self-tapping pocket hole screws with Pan Head or Washer Heads. We have a variety of screws available for various applications. In general, use 1" screws for 1/2" stock, 1-1/4" or 1-1/2" screws for 3/4" stock.

**Two thread types:**

- **Fine Thread:** used exclusively in harder woods such as Ash, Oak, Maple, Walnut, Hickory, Cherry, Mahogany or Birch.
- **Coarse Thread:** used in softer woods such as Pine, Cedar, Fir, Spruce, Basswood, Butternut, Poplar, Aspen, Plywood, Melamine, MDF or Particle Board.

**Two Lengths:**

We only offer two lengths - 1-1/4" and 1-1/2", because of the unique adjustability of the 3-In-1 Pocket Cutter. We recommend the 1-1/2" length for face frames.

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