

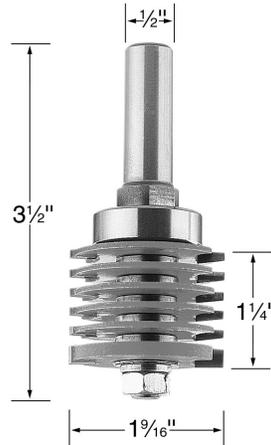
INSTRUCTIONS FOR C1682 ADJUSTABLE FINGER CUTTING BIT

Grizzly

Industrial, Inc.®

⚠ WARNING

- Failure to follow these guidelines will result in serious personal injury.
- ALWAYS WEAR ANSI APPROVED EYE AND EAR PROTECTION when using this cutter.
- These cutter should only be used with a shaper machine, never with a handheld router.
- Never feed lumber with the rotation of the cutter.
- Follow the safety guidelines set forth by the manufacturer of the Router.



⚠ CAUTION

These router bits have sharp edges. Use care while removing the waxy protective coating. Never turn on the router with the protective coating still on the bit.

Designed for convenient adjustment to create matching finger joints in stock thicknesses between $\frac{7}{16}$ " and $1\frac{3}{8}$ ", the Model C1682 Adjustable Finger Joint Bit features six cutting fingers and matching spacers that can be added or removed to best suit your needs.

Note: These instructions and drawings are intended for explanation and clarification purposes only as they relate to this particular router bit. Apply all safety rules and measures pertaining to router operations and your specific operation. Refer to the owner's manual supplied with your router and router table for specific warnings and instructions before proceeding with equipment operations.

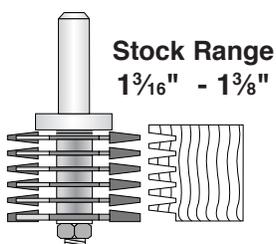
⚠ WARNING

- Unplug router before installing or adjusting cutter.
- Keep all guards and anti-kick-back devices in place.
- Double check bit to insure nut is tight and bit is tight and secure in router.
- Always inspect lumber and other wood materials for cracks, knots, or other imperfections that could cause lumber to kick or shatter while milling.

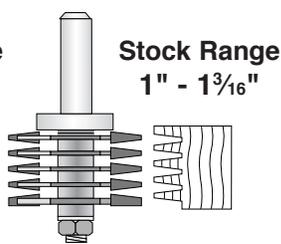
Step 1 – Stacking Finger Cutters

The Model C1682 features five double-beveled finger cutters and an edge cutter.

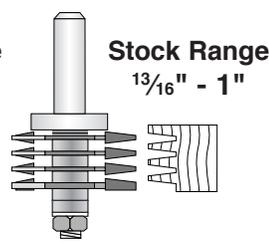
To adjust the router bit to suit your needs, remove the base nut and washer. Remove the end cutter and any fingers and spacers that aren't needed. Replace the end cutter (see below) and stack the leftover spacers between the end cutter and space for the end nut. **Be careful to orient the fingers and end cutter in the direction that the router turns!** Attach the washer and end nut. Tighten.



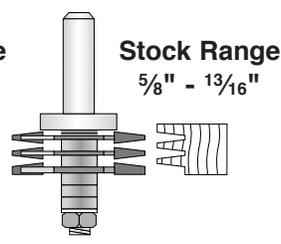
Five Fingers



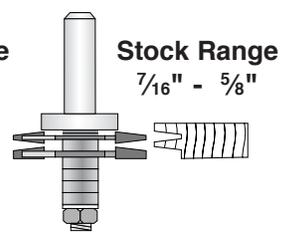
Four Fingers



Three Fingers



Two Fingers



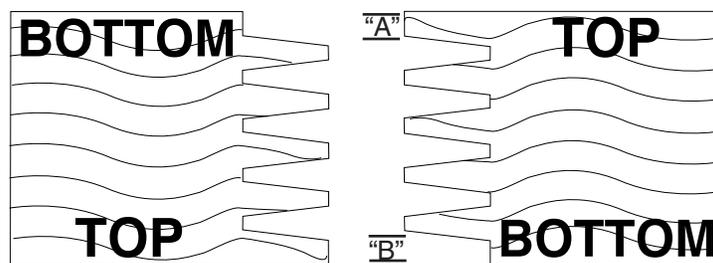
One Finger

Step 2 – Making Your Cut

The Model C1682 Adjustable Finger Cutting Bit is one of the few tools available that does what many consider to be the unthinkable in woodworking – creating end-to-end joints. Despite its size and cutting area, the Model C1682 is capable of being used in a hand-held router, as well as in a router table. We recommend, though, that the router used be rated at a minimum of 1½ horsepower and that a router table be used.

Once you have determined the thickness of the wood you choose to join – and have set up the router bit to match that thickness (as described on the previous page), the remainder of the process is quite simple. Set your router's baseplate so the router bit's guide bearing rides securely on the top edge of your cut (approximately 1/8" to 3/16" below the top edge of your stock material). For flush joints, the Finger Cutting Bit must be perfectly centered so the same amount of material is removed at the top and bottom of the material being milled. ("A" must equal "B", as shown in the illustration below.)

Once your router and bit are properly aligned to the stock you are milling, turn on the router and make your cut. Thicker materials may require multiple passes for best results.



Step 3 – Matching Your Joints

The primary purpose of the Model DC1682 router bit is to create extended lengths of paint-grade lumber by allowing the user to match and connect shorter lengths end-to-end. If handled carefully, clean, good-looking joints can be made, that will stand up well to inspection.

To match butt ends, inspect and pair end butts with care. It is unlikely that you will be able to match grains exactly, but a close match of color and grain width can be quite attractive.

Once you have paired your butt ends, make your first joint cut. To make the matching cut on your second piece of lumber, turn it over and make your cut from the bottom side. When you have completed your second cut, turn the second board back over (as shown in the illustration above) and check your materials for a proper fit. It is essential that the router height adjustment is locked securely – any variation between cuts will result in a mis-matched joint.

A well-matched and carefully glued finger joint is not only attractive, it actually provides a surface that is stronger than a single length of lumber. Take time to practice these joints on scrap materials before attempting serious projects. That time will be well spent.