

CHAPTER 12

Hardware



C-3099 MITER JIG

Coffman has developed the C-3099 Miter Jig to simplify the marking and cutting of fittings. The same principles of geometry used with a pitch block have been combined with a jig that cradles the fitting for a plumb, square cut. The Coffman Miter Jig provides the fastest, easiest, and most accurate fitting cut available.

1. Position the miter jig on a miter saw with the indexing mark on the front of the jig aligned with the saw blade.
2. To determine the correct cut on a starting fitting, use your stair's rise and run dimensions and the chart on the front of the jig to determine your stair angle. (See Chart 13-3 for a more complete listing of rise and run combinations.)
3. All starting fittings are produced with a part called an easing (See Photo 7-8). The joint formed at the attachment of this easing will be used as the point of reference when cutting the fitting. Simply align the joint to the angle on the jig that matches the angle of your stair and make your cut. An example rise and run of 7-1/2" x 10" would result in a stair angle of 36.9°.
4. To cut the lower easing of gooseneck fittings with Coffman's C-3099 Miter Jig, you must subtract the angle of the stair from 90°. In our example of a 7-1/2" rise and 10" run, $90^\circ - 36.9^\circ = 53.1^\circ$. (The lower number in each box in Chart 13-3 will automatically give you this angle.) For one-rise goosenecks, align the joint of the easing to the proper angle and make your cut. For two-rise goosenecks, use one edge of the loose easing as the reference point.



C-3008
SURE-TITE™
NEWEL FASTENING SYSTEM

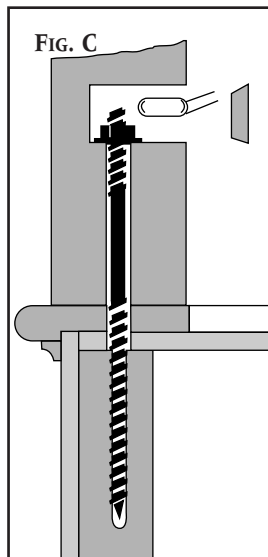
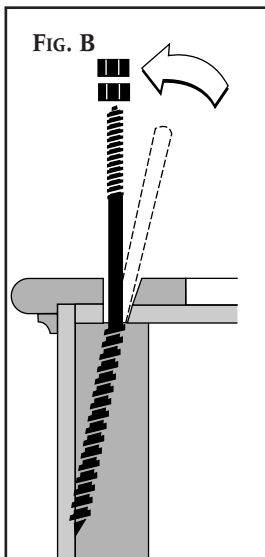
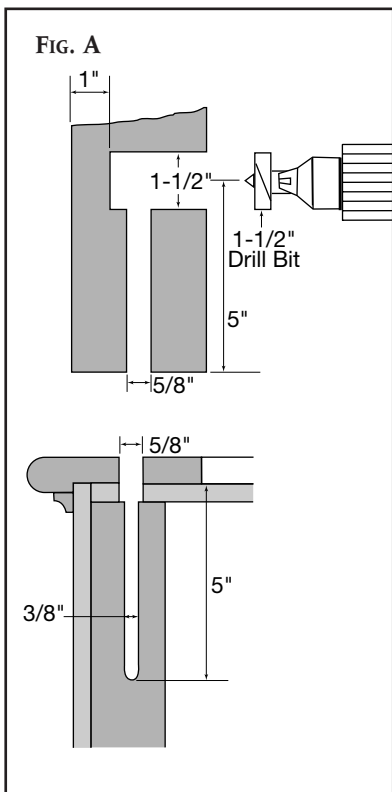
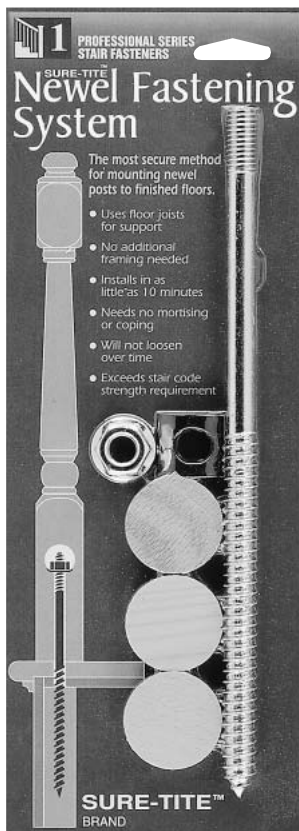
Tools Required - Drill bits: 3/8", 5/8", 1-1/2". 3/4" Box-end wrench

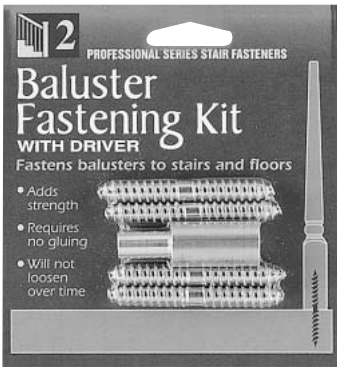
Step 1. Cut post to length. Locate center of post on floor, and predrill all holes (Fig. A). Important: When drilling post, drill 1-1/2" hole first. Lag must be installed into solid blocking.

Step 2. Screw lag into floor and bend top plumb. Two nuts may be used to create a temporary bolt head (Fig. B).

Step 3. Place post over lag. From 1-1/2" access hole, insert curved washer and nut. Torque down hard, using a 3/4" box-end wrench. Plumb post if necessary by cutting bottom at a slight angle and reapplying. Stress post in all directions and retighten with torque. Glue hole, tap in plug, and sand flat (Fig. C).

Contents: 1 lag bolt 10-3/4" long, 1 washer, 1 nut, 3 plugs





C-3201 BALUSTER FASTENING KIT/DRIVER

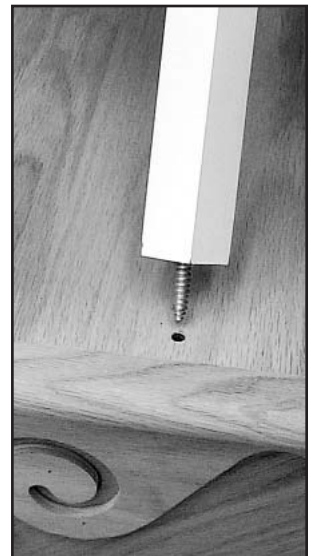
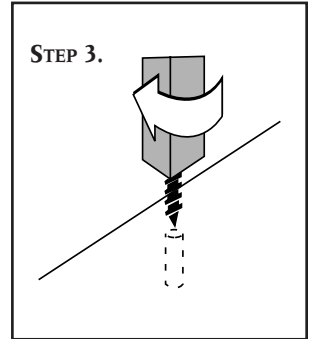
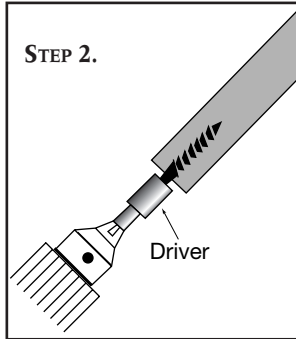
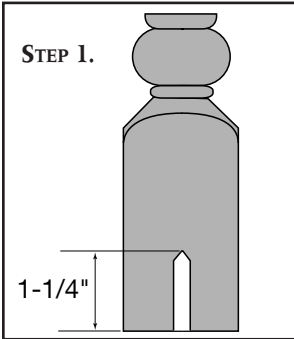
Tools Required - Drill bits: 9/32". Reversible drill

Step 1. Trim baluster to length and predrill a 9/32" x 1-1/4" hole in bottom.

Step 2. Secure driver into a reversible drill. Drive fasteners 1-1/4" into each baluster.

Step 3. Predrill tread or floor with 9/32" bit and install baluster by gripping at bottom and twisting into place.

Contents: 1 driver, 4 baluster fasteners 2-1/2" long. Fasteners also sold separately.



C-3301 RAIL & POST FASTENER

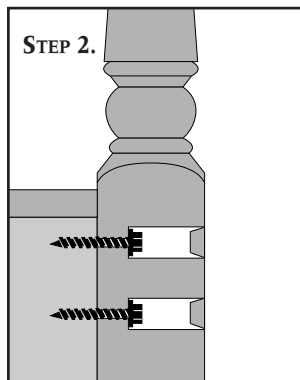
*Tools Required - Socket wrench,
Drill Bits: 1/4", 7/16", 1"*

Step 1. Predrill parts as shown.

Step 2. Secure bolt, using
socket wrench.

Step 3. Glue hole, tap in plug,
and sand flat.

Contents: 1 lag bolt 3" long,
1 washer, 2 plugs



C-3302 RAIL-BOLT FASTENER

(carded)

C-3001 RAIL BOLT

(uncarded)

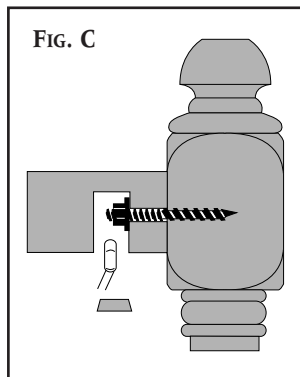
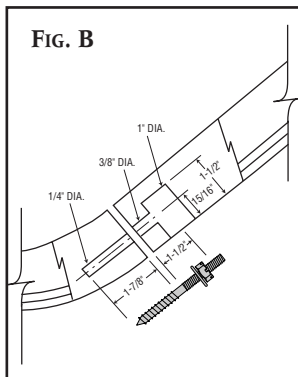
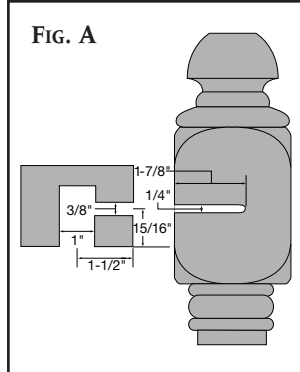
*Tools Required - Drill bits: 1/4",
3/8", 1", 1/2" Box-end wrench*

Step 1. After trimming rail
to length, drill all holes.
Begin with 1" hole in rail
(Fig. A or B).

Step 2. Using a C-3901
Rail-Bolt Wrench or Vise Grips,
mount bolt into 1/4" hole.

Step 3. Apply glue and join
parts. From 1" access hole,
insert curved washer and nut.
Torque down, using box-end
wrench. Glue hole, tap in
plug, and sand flat (Fig. C).

Contents: 1 fastener 3-1/2"
long, 1 washer, 1 nut,
2 plugs (*No plugs in C-3001*)



C-3505 L-BRACKET POST FASTENER

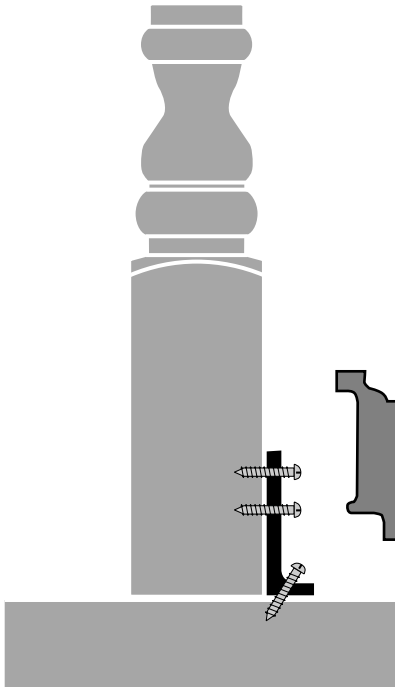
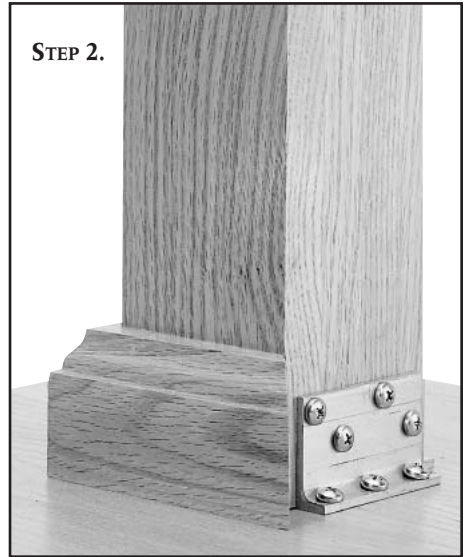
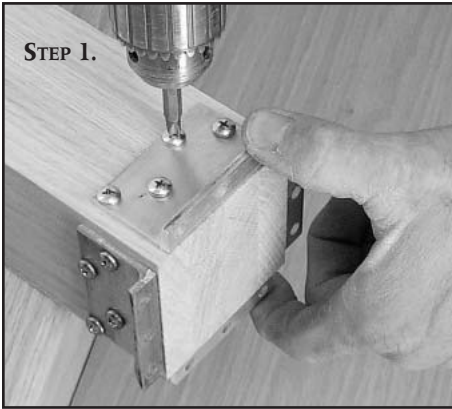


The Coffman C-3505 L-Bracket Post Fastener consists of four metal brackets, wood screws, and mitered wood trim pieces.

Step 1. Align the brackets flush with the bottom of the newel and screw into the face of the newel.

Step 2. Place newel into correct position and install screws at an angle into the mounting surface.

Step 3. Finish by gluing and nailing the premitered trim pieces around the brackets.

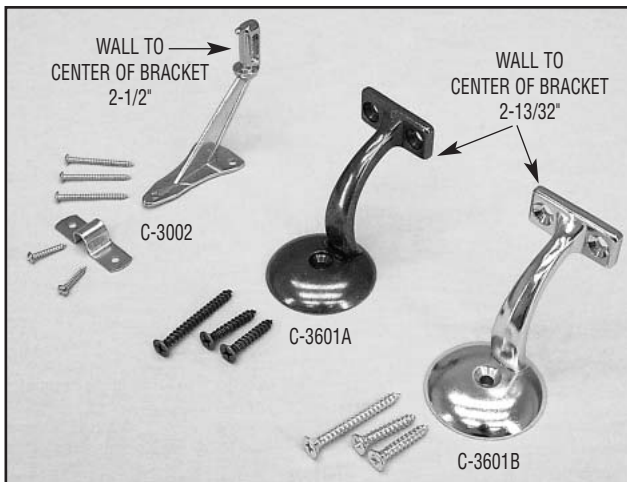


**C-3002
WALL RAIL BRACKET
BRIGHT BRASS**

**C-3601-A
HEAVY DUTY
WALL RAIL BRACKET
ANTIQUE BRASS**

**C-3601-B
HEAVY DUTY
WALL RAIL BRACKET
BRIGHT BRASS**

See *Chapter 7*,
Pages 27-28 for full
installation instructions.



**C-3901
RAIL-BOLT WRENCH**

Step 1. Once all the holes have been drilled, use the Coffman C-3901 Rail-Bolt Wrench to insert the rail bolt 2" into the 1/4" diameter hole in the rail, post, or fitting (Fig. A).

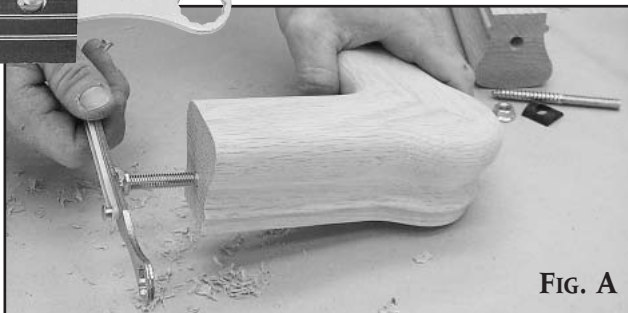


FIG. A

Step 2. Glue rail and fitting. With the washer on the rail bolt, place the nut on the magnetic pin and apply rubber band (Fig. B).

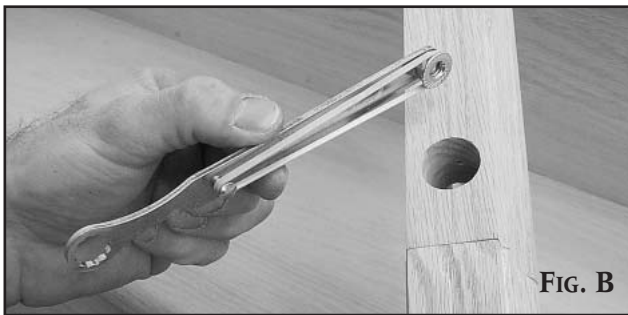


FIG. B

Step 3. Press firmly against the end of the rail bolt and pull down on the rubber band to start the nut (Fig. C).

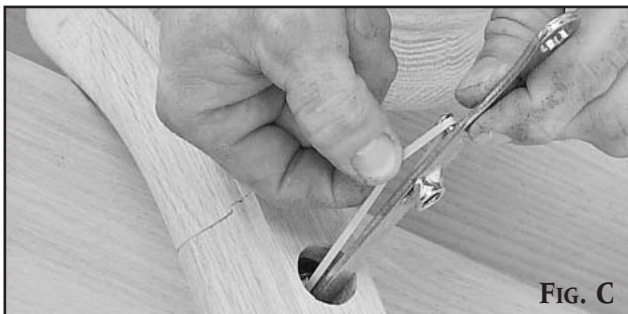


FIG. C

Step 4. The 1/2" boxed-end of the wrench can then be used to securely tighten the nut.