

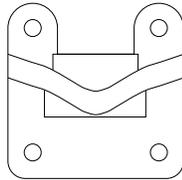
- PARTS INCLUDED:**
- V-cam Bearings
 - Cam Rollers
 - Bottom Bearings
 - Doors
 - Jambguards
 - #8 x 1/2" Screws
 - 1/4"-20 x 2" Bolts
 - 3/8"-16 x 7/8" Bolts
 - #8 x 3/4" Screws
 - Lock Washers
 - Jamb Nuts

- TOOLS NEEDED:**
- Marker / Center Punch
 - Drill with 5/16", 5/32", & 3/8" Bits
 - 3/8" - 16 Thread Tap
 - Adjustable Wrenches
 - Flat-head Screwdriver
 - Step Stool or Ladder
 - Tape Measure
 - Utility Knife

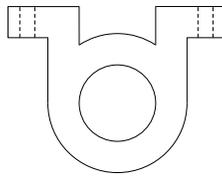
KIT CONTENTS

All quantities shown for single door only. For bi-parting applications, multiply all quantities by 2.

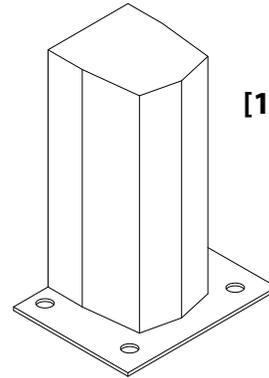
[1] V-Cam Top Bearing



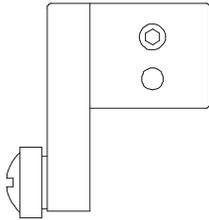
[1] Bottom Bearing



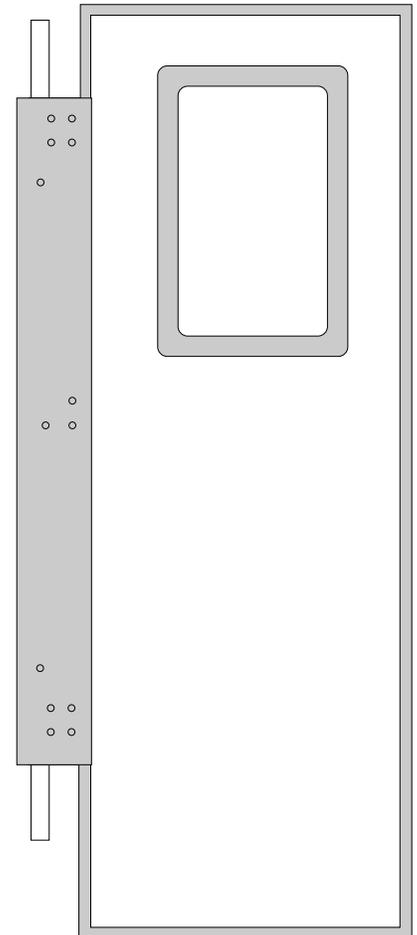
[1] Jamb Guard



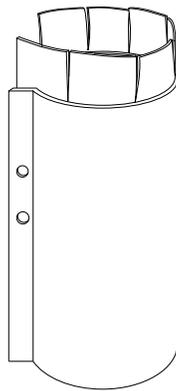
[1] Cam Roller



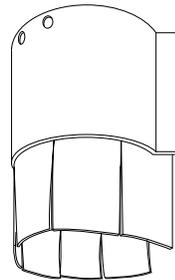
[1] Door Panel



[1] Bottom Hinge Cover



[1] Top Hinge Cover

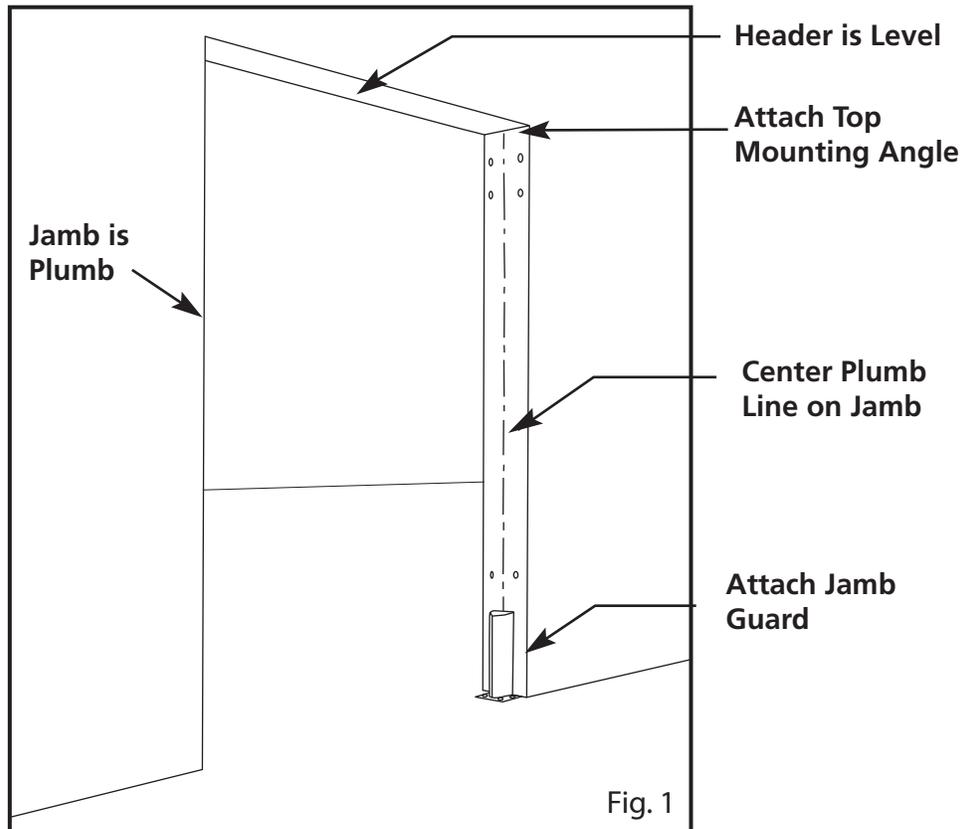


- [4] #8 x 1/2" Screws
- [10] #8 x 3/4" Screws
- [6] 3/8"-16 x 7/8" Bolts
- [1] 1/4"-20 x 2" Bolt
- [2] Jamb Nuts
- [6] Lock Washers

IMPORTANT:

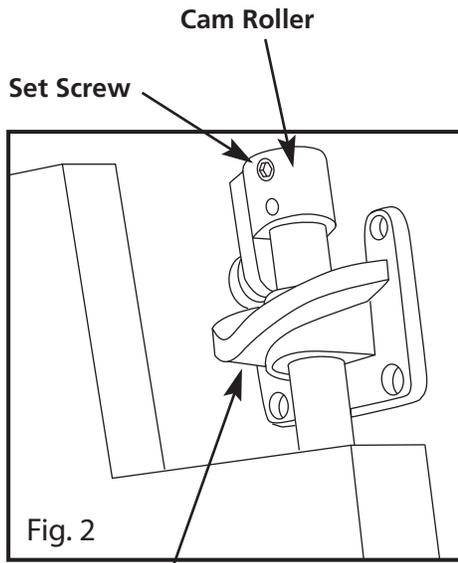
Top pilot holes for V-Cam bearing should be drilled 2" from top of door frame

Pilot holes for lower bearing should be drilled 13.25" from floor.

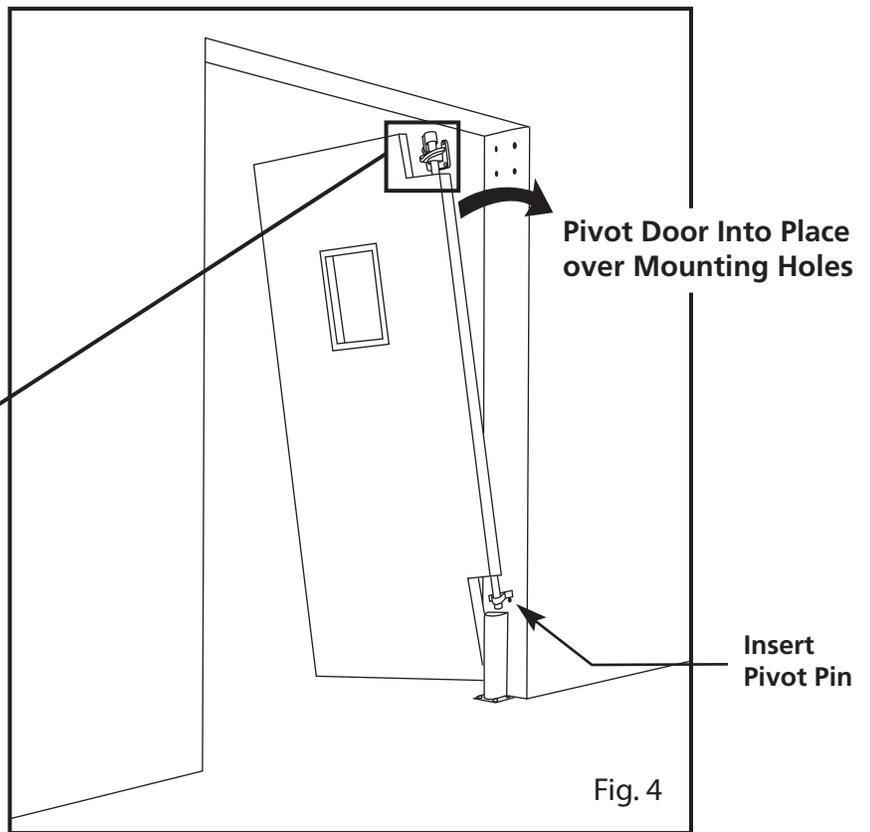


Step 1 Doorway Preparation

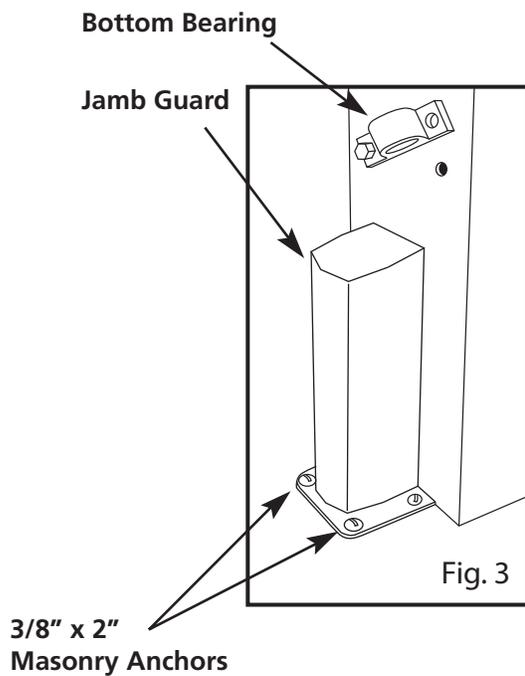
- 1.1 Inspect. If carton or doors are damaged from shipping (bent shaft, etc.), note of carrier delivery ticket and contact factory if needed.
- 1.2 Make sure door opening is square and plumb (measure diagonals). This is important for proper operation and appearance of doors.
- 1.3 Match size of door opening to size on packing slip.
- 1.4 Mark center plumb line on jamb (Fig. 1). This line will be used to locate the mounting holes.
- 1.5 Install Jambguards. Center Jambguards using vertical centerline. Use Jambguards as template to mark and drill 3/8" X 2" deep holes into concrete floor. Use 3/8" X 2" masonry anchors to secure Jambguards (provided by others).
- 1.6 Use the dimensions on Figures 5 & 6 to locate the 4 mounting holes for the top cam bearing (Fig. 5) and the 2 mounting holes for the bottom bearing (Fig. 6). Mark these locations with a center punch.
- 1.7 At each mounting hole location drill a 5/16" hole and tap for 3/8" -16 bolts.
- 1.8 If jambs are wood or hollow metal over wood, fasten using 1 1/2" wood lags (provided by others). Hollow metal frames without wood roughblocks should have 1/4" steel reinforcements welded over mounting locations.



V-Cam Bearing



Step 2 Door Installation



- 2.1 Attach the bottom bearing to the jamb with one 3/8"-16 x 7/8" bolt and lock washer, hand tighten (Fig. 3).
- 2.2 Make sure the top V-cam is placed on the top shaft and the cam roller is attached to the top shaft (Fig. 2). The cam roller should be securely attached to the shaft with the allen head set screw that is already installed in the cam roller.
- 2.3 Rotate the bottom bearing slightly around the bolt installed in Step 2.1. Remove tape and place the bottom shaft of the door into the bottom bearing (Fig. 4). Raise the door in the opening and insert the other bolt into the bottom bearing and hand tighten.
- 2.4 Attach the top cam bearing to the jamb with four 3/8"-16 x 7/8" bolts and lock washers, hand tighten.
- 2.5 Allow the full weight of the door to hang on the hinge and then tighten the mounting bolts on both the top V-cam and the bottom bearing with a wrench or socket.

Step 3 Adjustments and Final Assembly

- 3.1 Check the door for correct vertical position by making sure that the door seals against the top of the jamb and also at the floor in the closed position. If the door has been installed too high or too low, slightly loosen the setscrew in the cam roller. Move the cam roller lower or higher on the shaft to position the door so that a full seal is attained, then retighten the setscrew at the new position.
- 3.2 Check the door for correct centering in the closed position by making sure the door is perfectly parallel with the wall when it is in the closed position. If the door does not center in the closed position, slightly loosen the setscrew in the cam roller. Rotate the cam roller on the shaft to position the door so that it will center properly (make sure to mark the vertical position of the cam roller on the shaft so that the vertical alignment will not be altered), then retighten the setscrew at the new position.
- 3.3 Check doors to make sure they swing free both ways with minimal effort and that they return to center each time. If the doors do not swing freely or return to center, the shaft is misaligned in either the top cam bearing or the bottom bearing or both. Check the door opening for square and plumb. Check the centerline on the jamb. The top cam bearing and the bottom bearing have oversized mounting holes that can be utilized to accommodate for out of square or out of plumb door openings.
- 3.4 Attach header channel to center of top jamb with screws provided. Leave the header seal inserted in the header channel during installation.
- 3.5 After all the alignment adjustments have been made, the cam roller is ready for permanent attachment to the top shaft. Make sure the setscrew is securely attached to the top shaft. Using the 1/4" hole that is directly under the setscrew on the cam roller, drill a 1/4" diameter hole through the shaft and through the other side of the cam roller. Attach the cam roller to the top shaft with the 1/4"x20 x 2" bolt and jamb nut.
- 3.6 Install the top hinge covers (the top hinge covers have two small aluminum installation brackets riveted to the colored plastic). Place the top hinge cover over the top cam bearing in the top corner of the door. Using the holes in the installation brackets as a guide, mark the hole locations on the top jamb and drill a 5/32" hole at each location. Attach the top hinge covers using the #8x1/2" slot-head screws.
- 3.7 Install the bottom hinge covers (the bottom hinge covers have 2 slots punched along each edge of the colored plastic). Place the bottom hinge covers over the bottom bearing and attach them using the #8x1/2" screws and the holes that are pre-drilled into the sides of the bottom bearing.

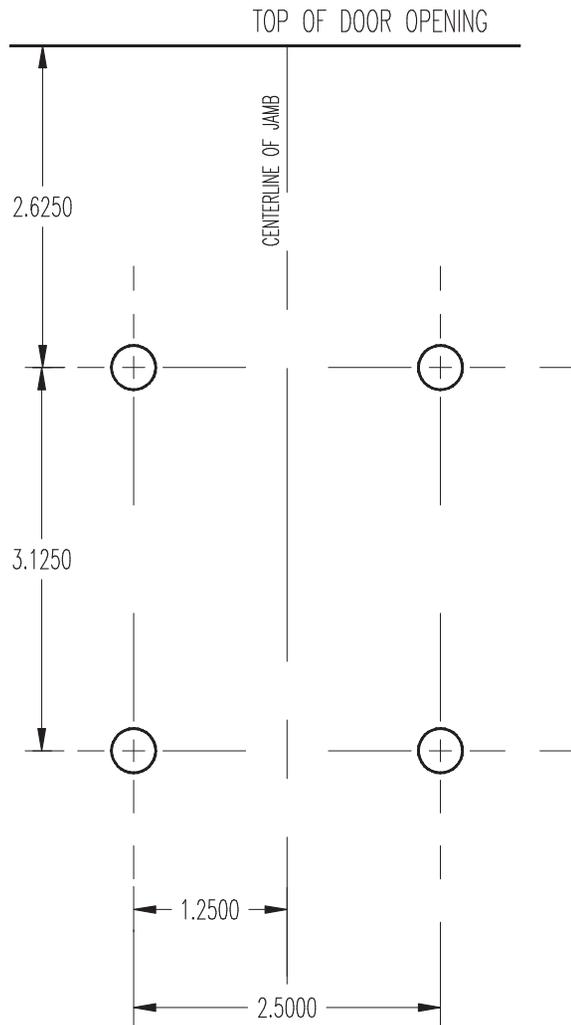


CONTACT AN ALECO REPRESENTATIVE FOR FURTHER ASSISTANCE

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THIS IS NOT A TEMPLATE

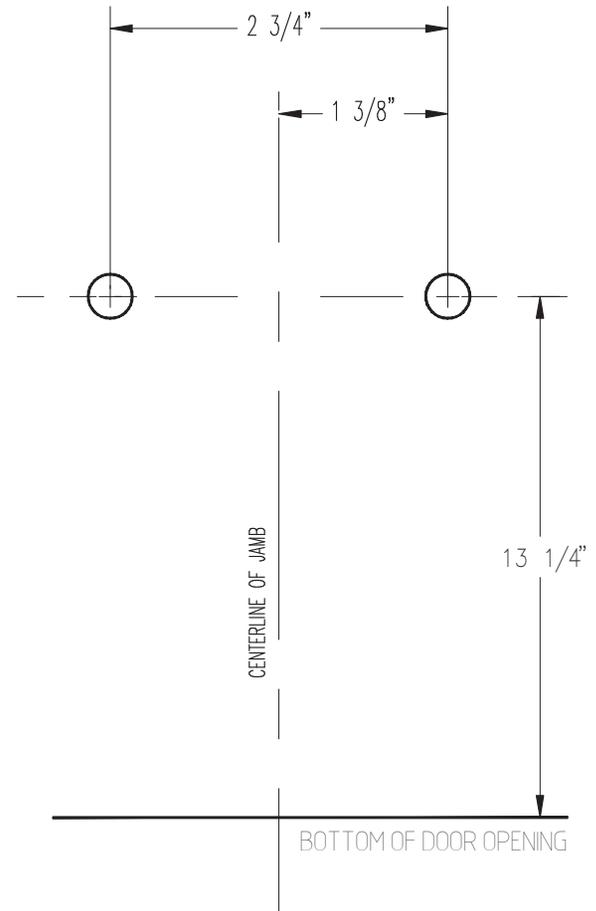


TOP V-CAM BEARING

FIG. 5

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BOTTOM BEARING

FIG. 6

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