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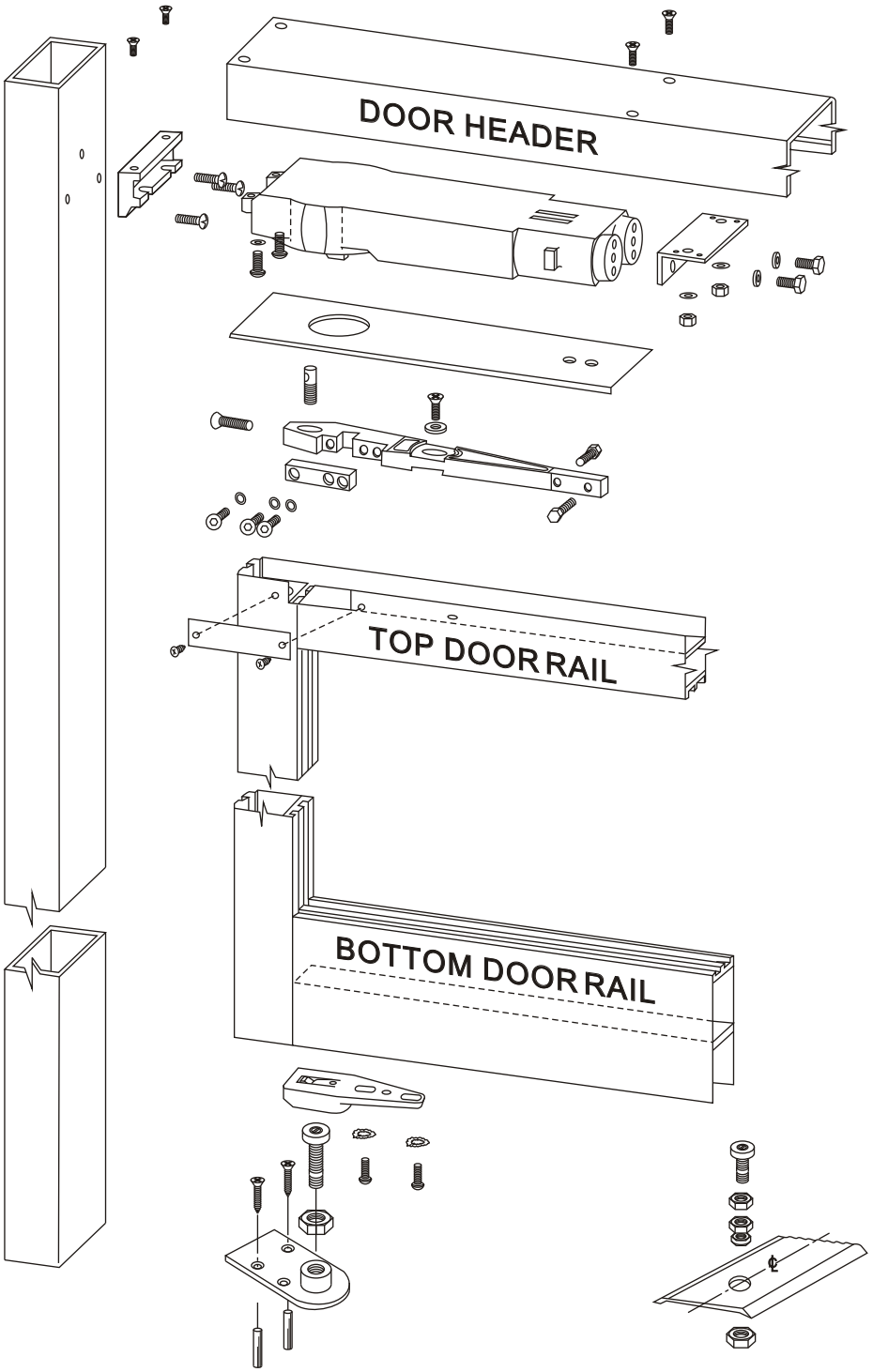
INSTALLATION INSTRUCTIONS FOR ALL CRL CONCEALED OVERHEAD DOOR CLOSERS

Complete closer kits include: Closer body, mounting clips, CK Type top arm assembly and adjustable dual purpose bottom pivot set.
Closer only kits include: Unit body and mounting clips.

- ◇ CENTER-HUNG FOR DOUBLE OR SINGLE ACTION DOORS
- ◇ SIDE LOADING AND END LOADING INSTALLATION
- ◇ DUAL VALVES FOR LATCHING AND CLOSING SPEED ADJUSTMENT



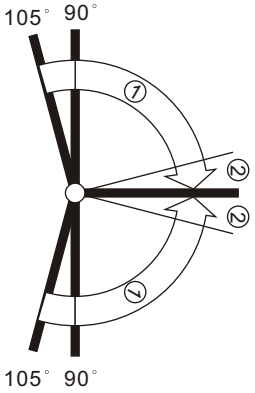
IMPORTANT

- NO responsibility con be accepted by the manufacturers if these installation instructions are disregarded
- After closer is installed into the DOOR HEADER, do not drill in this area for it may damage closer.

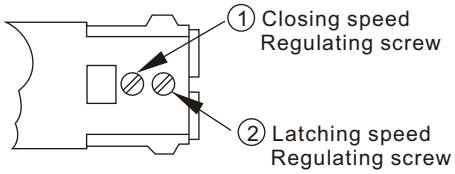
PROPOSAL for DOOR CLEARANCE

Both of door stile	1/8"(3mm)
top door rail	1/8"(3mm)
Bottom door rail	3/16"(4.8mm)

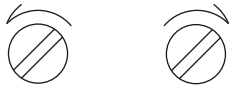
SPEED ADJUSTMENT



① CLOSING RANGE
② LATCHING RANGE



① CLOSING/ ② LATCHING
Speed adjustment



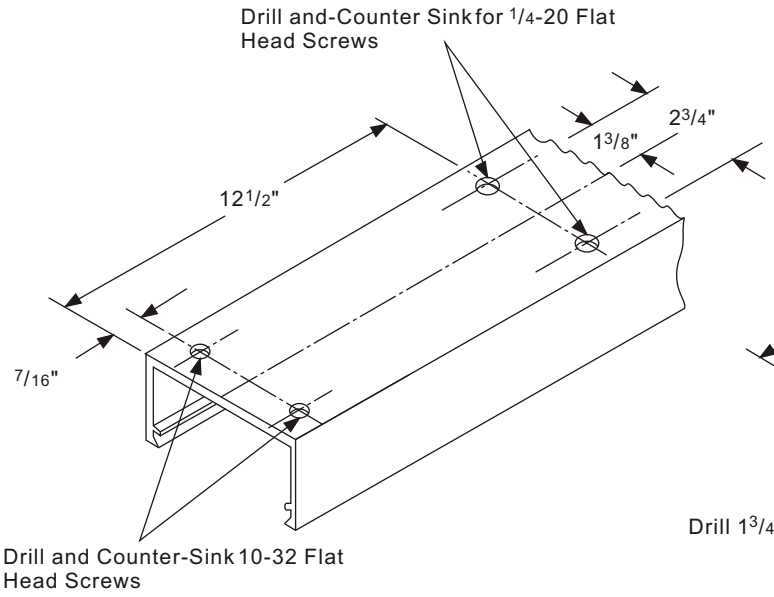
FASTER SLOWER

Max. 2 turns in either direction

HEADERS & JAMBS

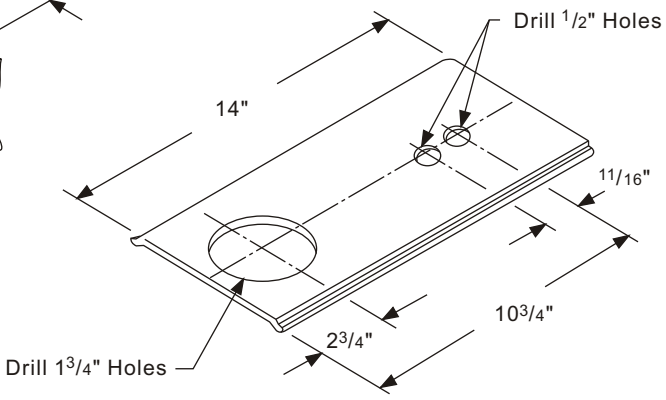
DOOR HEADER

Drill and counter-sink outside top surface for 10-32 x 7/16" and 1/4-20 x 1 1/4" flat head screws as shown.



COVER PLATE

Drill 1 3/4" hole as shown.
Drill 1/2" hole as shown.

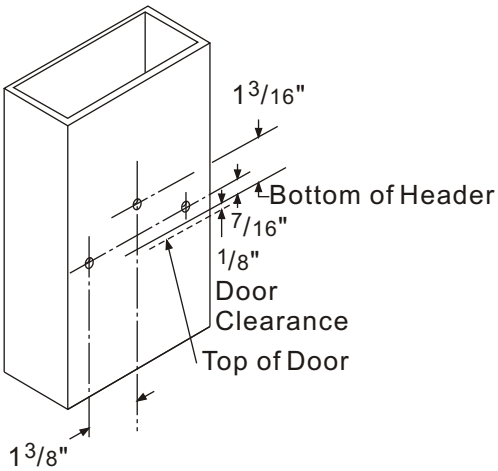


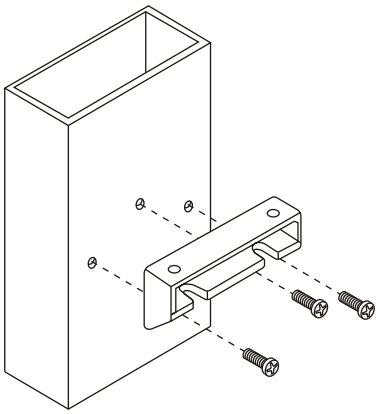
HINGE JAMB

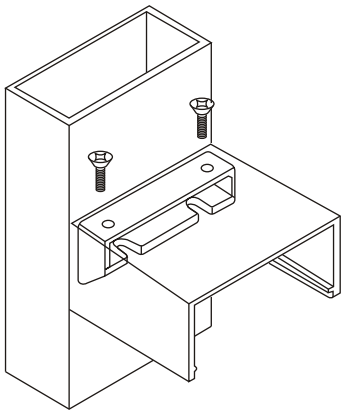
Drill holes for #10 pan head self-threading screws as shown.

Install anchor using #10 x 9/16" pan head self-threading screws.

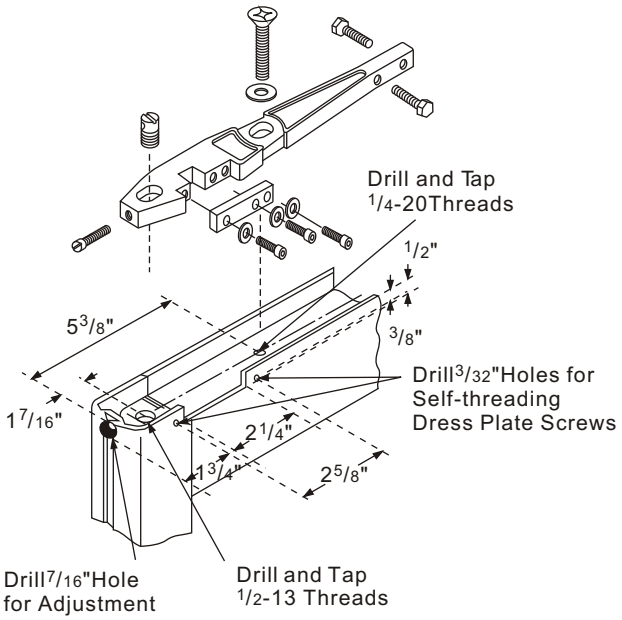
Moun door header on anchor using 10-32 x 7/16" flat head self-tapping screws.







SIDE LOADING

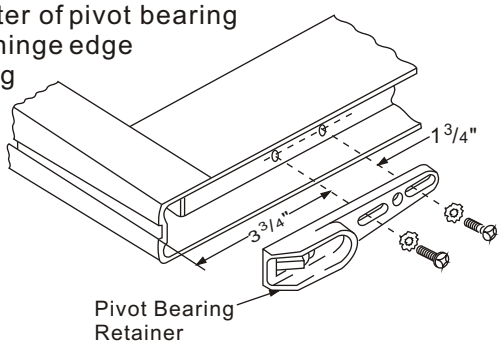


TOP DOOR RAIL

"S" Type Side Loading Arm
Drill or drill and tap holes in top of door as shown.
Make 2 1/4" x 1/2" cut-out in top of door as shown. Cut-out must be on the inside of the door.
Install arm using 1/4-20 x 1 1/4" flat head machine screw and 7/8" washer. Install 1/2-13 x 3/4" arm stud and 1/4-20 x 1 1/8" dome head arm adjustment screw. Laterally adjust canter of the arm spindle retainer 2 5/8" from hinge edge of door (not including weatherstripping). Canter arm in the top rail by adjusting the two 1/4-20 x 1" hex head cantering bolts. After installation of door, attach dress pate with self-threading screws.
NOTE: before attaching dress plate, make certain the three 1/4-20 x 7/8" socket head clamp bar screws with lock washers are tightened securely.

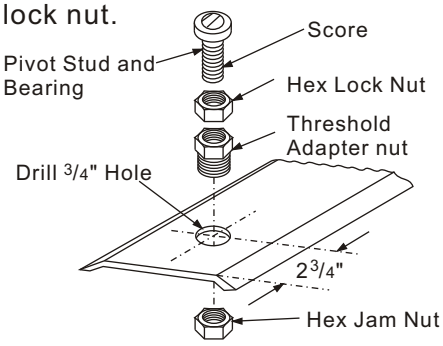
BOTTOM DOOR RAIL

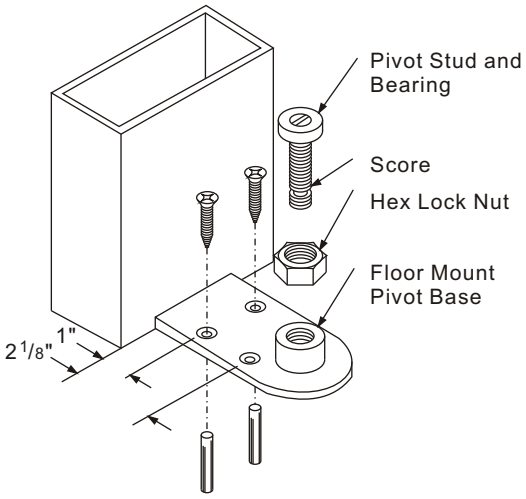
Side Loading
Drill and tap 1/4-20 holes in bottom rail of door as shown. Install pivot bearing retainer in bottom of door using two 1/4-20 x5/8" pan head machine screws and lock washers.
Laterally adjust canter of pivot bearing retainer 25/8" from hinge edge of door (not including weatherstripping) and tighten screws securely.



THRESHOLD MOUNT PIVOT

Drill hole in threshold as shown. Install threshold adapter nut from top and secure with 3/4-16 hex jam nut underneath. Install pivot stud and bearing wit 1/2-20 hex lock nut as shown and adjust bearing height for proper door clearance and firmly thghten lock nut.

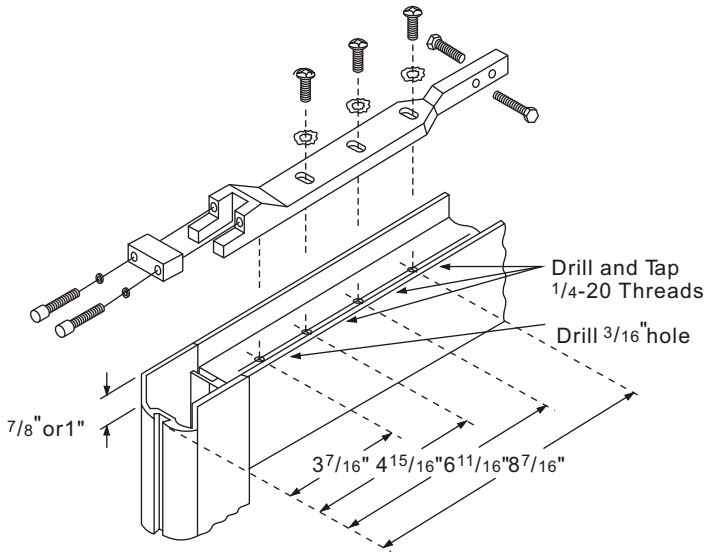




FLOOR MOUNT PIVOT

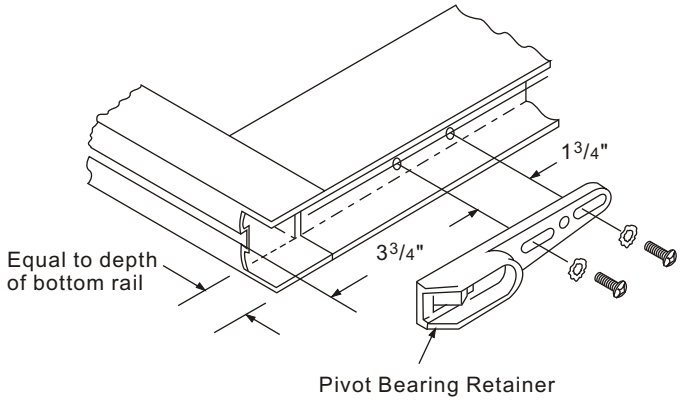
Canter pivot base against door jamb on hinge side. Mark and drill 1/4" holes 1 1/2" deep in floor for plastic expansion plugs. Mount base using #12 x 1 1/4" plastic expansion plugs and #12 x1 1/4" flat head wood screws.
Install pivot stud and bearing with 1/2-20 hex lock nut as shown, and adjust bearing height for proper door clearance and firmly tighten lock nut.
When using threshold, drill 1 1/4" hole for clearance of pivot base on canter line 2 3/4" from hinge end of threshold.
NOTE: When threshold is not used, pivot bearing stud must be shortened by sawing off at score 1/2" from bottom

END LOADING



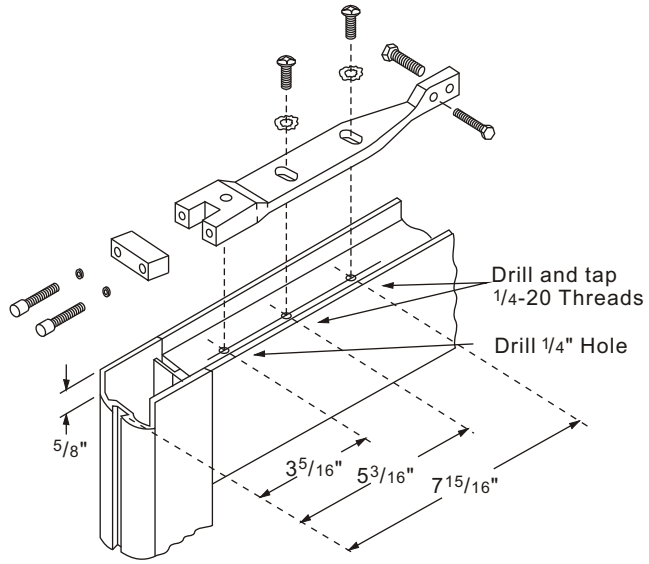
TOP DOOR RAIL

"A" Type End Loading Arm
Make A 1 "deep cut-out in hinge edge of door as shown.
"PT" Type End Loading Arm
Make a 7/8" deep cut-out in hinge edge door as shown.
Position arm in door by placing arm pin in 3/16" hold. Install arm using three 1/4-20 x 5/8" pan head machine screws and lock washers. Canter arm in the top rail by adjusting the two 1/4-20 x 1" hex head cantering bolts.
NOTE: After door is installed, the two 1/4-20 x 1" locket head clamp bar cap screws with lock washers must be tightened securely.



BOTTOM DOR RAIL
End Loading

Make cut out in hinge edge of door equal to depth of bottom rail as shown.
Drill and tap 1/4-20 holes in bottom rail of door as shown. Install pivot bearing retainer in bottom of door using two 1/4-20 x 5/8" pan head machine screws and lock washers.
Laterally adjust canter of pivot bearing retainer 2 5/8" (or 2 11/16") from hinge edge of door (not including weatherstripping) and tighten screws securely.
NOTE: For doors with 1" bottom rail depth, pivot bearing stud must be shortened by sawing off at score 1/2" from bottom.



TOP DOOR RAIL

"K" Type End Loading Arm
Make a 5/8" deep cut-out in hinge edge of door as shown.
Drill or drill and tap holes in top of door as shown.
Position arm in door by placing arm pin in 1/4" hole. Install arm by using two 1/4-20 x 5/8" pan head machine screws and lock washers. Canter arm in the top rail by adjusting the two 1/4 x 20 x 1" hex head cantering bolts.
NOTE: After door is installed, the two 1/4-20 x 1" socket head clamp bar cap screws with lock washers must be tightened securely.