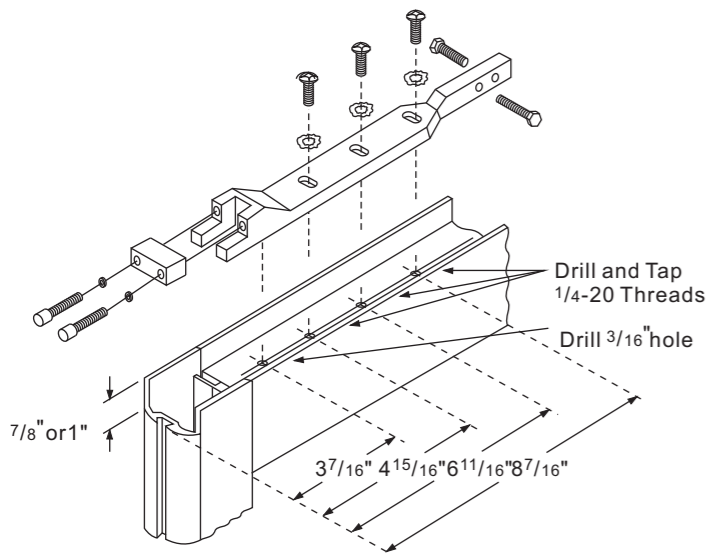


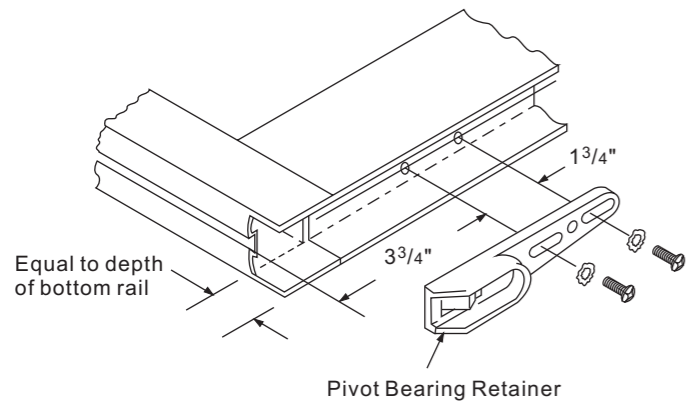
**END LOADING**



**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.

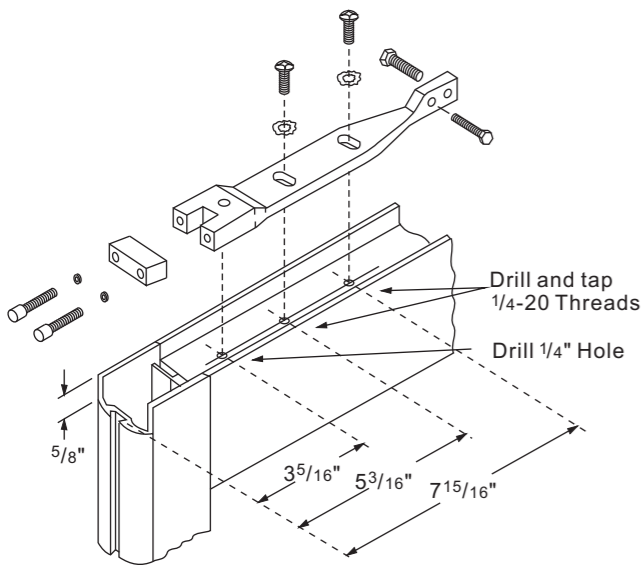
**BOTTOM DOR RAIL**  
 End Loading



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 center 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.

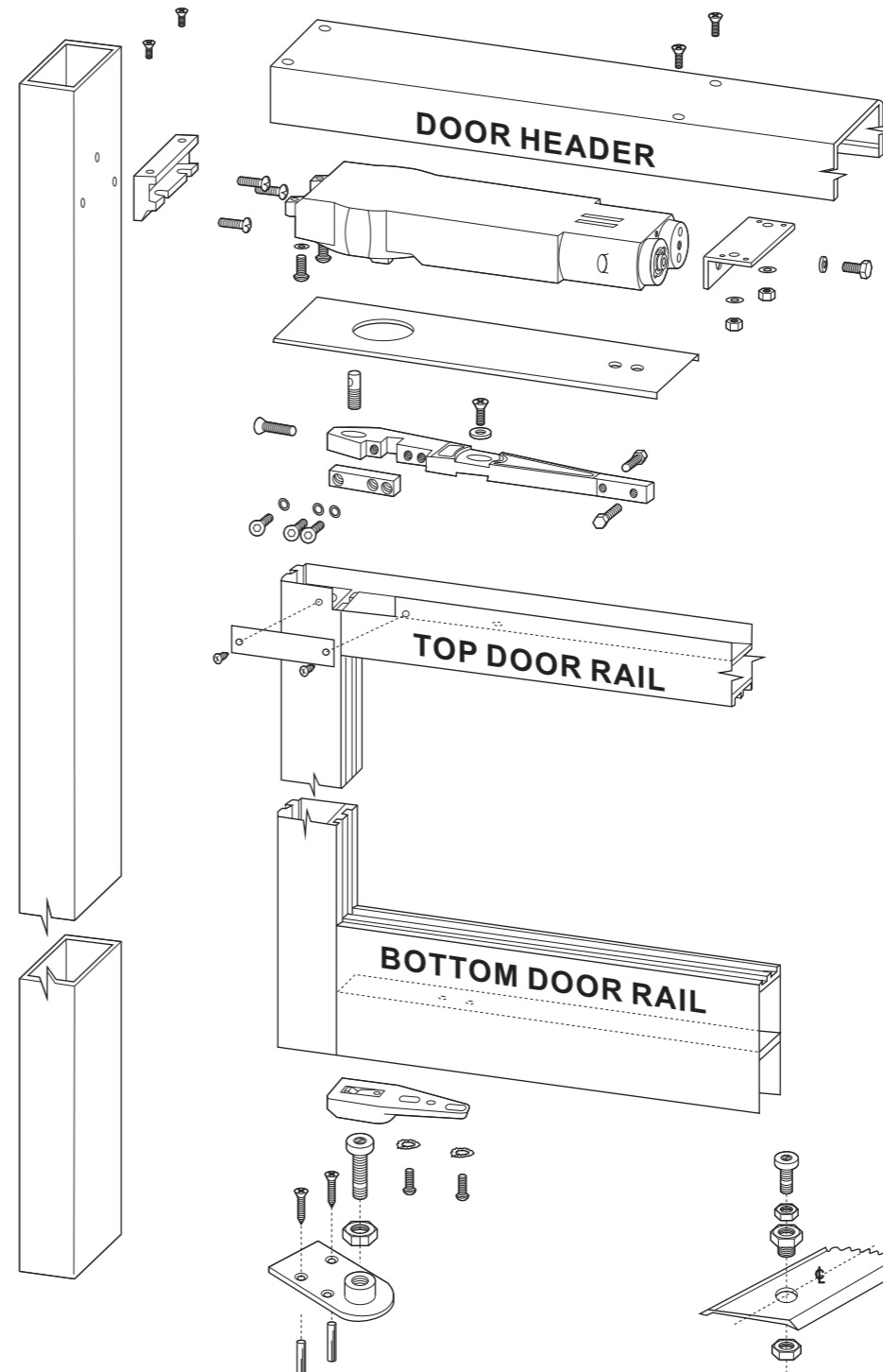
**TOP DOOR RAIL**

**"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.



**"ADJUSTABLE" POWER CONCEALED OVERHEAD DOOR CLOSER INSTALLATION INSTRUCTIONS**

- ◇ **CENTER-HUNG FOR DOUBLE OR SINGLE ACTION DOORS**
- ◇ **SIDE LOADING AND END LOADING INSTALLATION**
- ◇ **DUAL VALVES FOR LATCHING AND CLOSING SPEED ADJUSTMENT**
- ◇ **APPLICABLE ADA REQUIREMENT (EXTERIOR DOOR, OPTIONAL FOR INTERIOR DOOR IS AVAILABLE)**



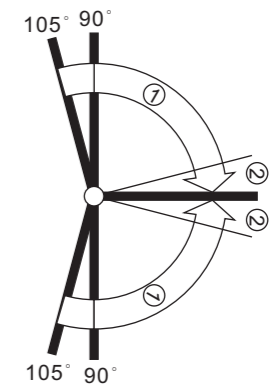
**IMPORTANT**

- NO responsibility can 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.

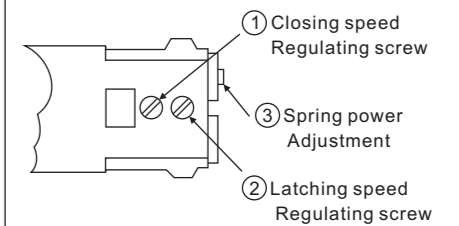
**PROPOSAL for DOOR CLEARANCE**

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 ✓
- ③ POWER ✓

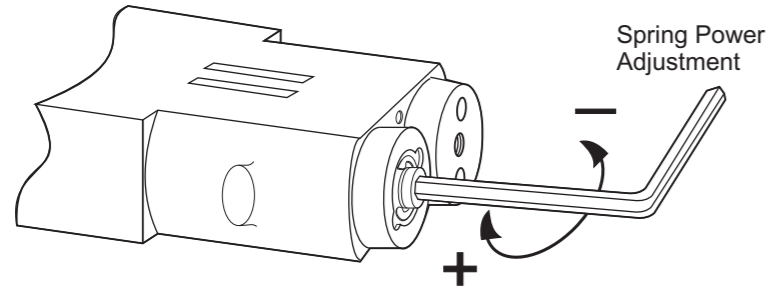
Speed adjustment



FASTER SLOWER

Max. 2 turns in either direction

### ③ spring power



**Spring power VS door size chart**

SIZE	NO. OF TURNS	DIRECTION	INTERIOR MAXIMUM WIDTH	EXTERIOR DOOR MAXIMUM WIDTH
1	0	FACTORY PRESET	30"	8 1/2" OPENING FORCE
2	3	CLOCKWISE (+)	34"	30"
3	9	CLOCKWISE (+)	38"	34"

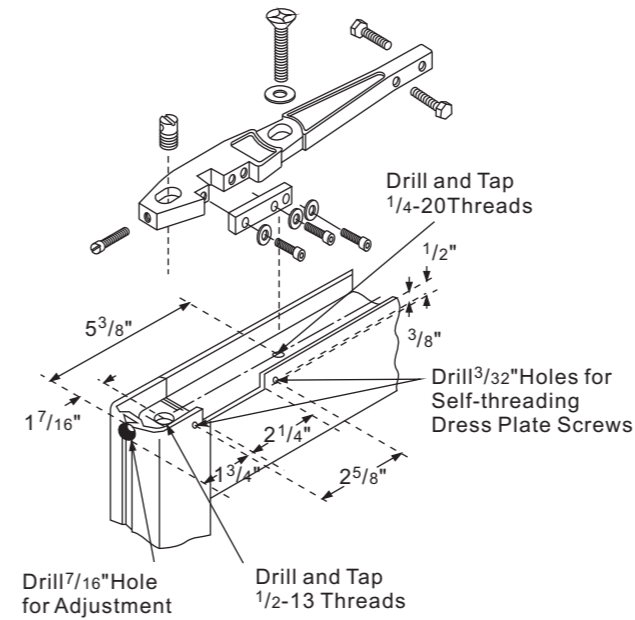
### SIDE LOADING

#### 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 arm center of the arm spindle retainer 2 5/8" from hinge edge of door (not including weatherstripping). Center arm in the top rail by adjusting the two 1/4-20 x 1" hex head cantering bolts. After installation of door, attach dress plate with self-threading screws.

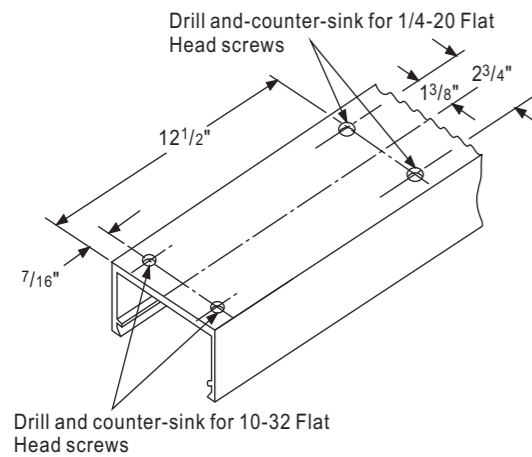
**NOTE:** before attaching dress plate, make certain the three 1/4-20 x 7/8" socket head clamp bar screws with lock washers are tightened securely.



### HEADERS & JAMBS

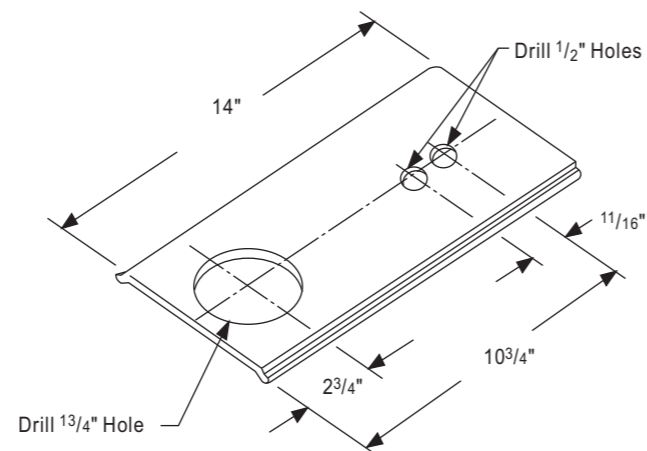
#### DOOR HEADER

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.

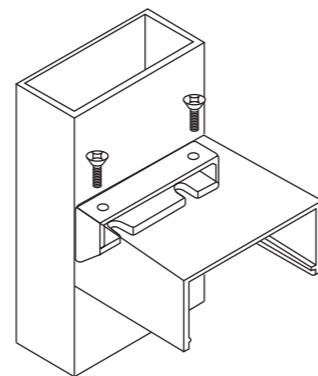
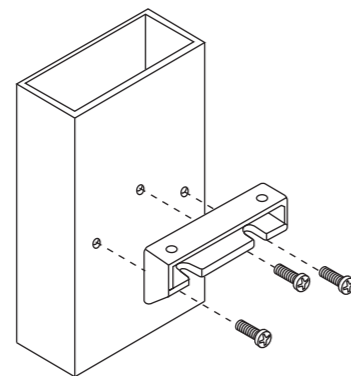
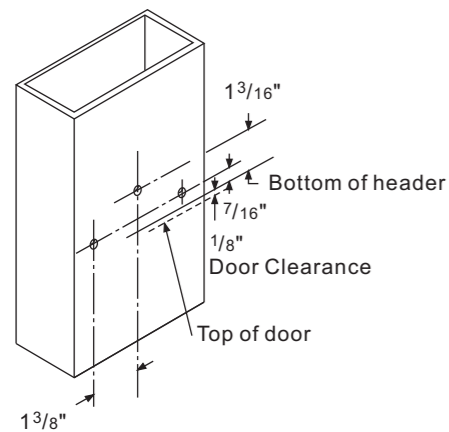


#### HINGE JAMB

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

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

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

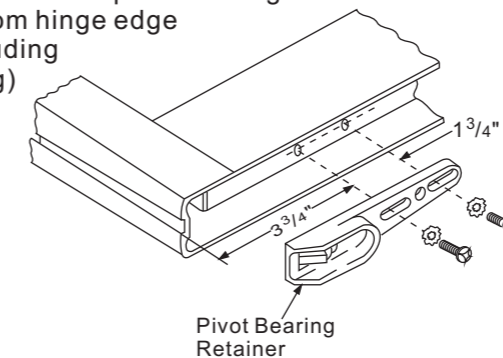


#### BOTTOM DOOR RAIL

Side Loading

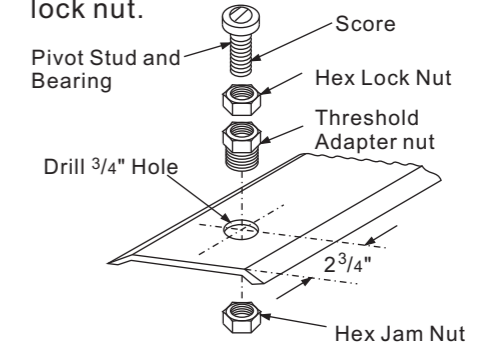
Drill and tap 1/4-20 holes in bottom rail of door as shown. Install pivot bearing retainer in bottom of door using two 1/4-20 x 5/8" pan head machine screws and lock washers.

Laterally adjust center of pivot bearing retainer 2 5/8" 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 with 1/2-20 hex lock nut as shown and adjust bearing height for proper door clearance and firmly tighten lock nut.



#### FLOOR MOUNT PIVOT

Center 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 x 1 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 center 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

