



**TRADEMARK
HARDWARE**

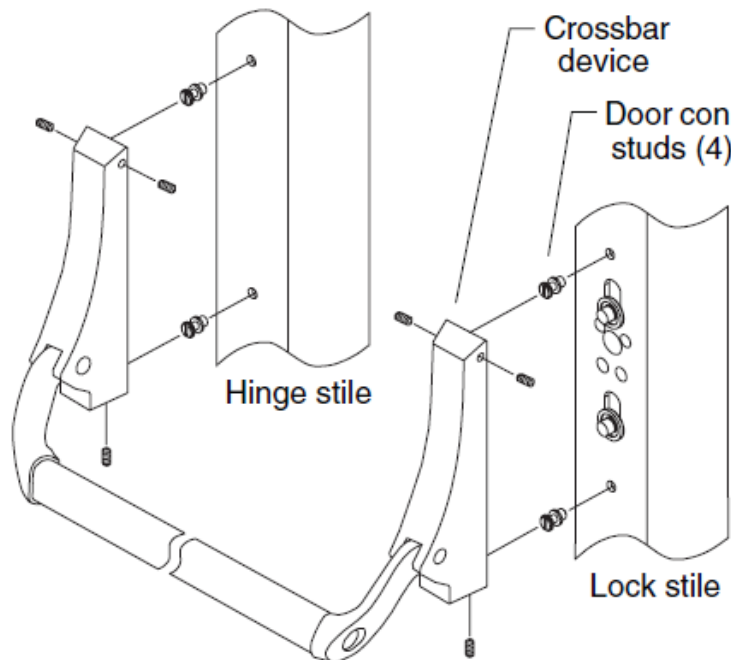
WORLD OF QUALITY HARDWARE
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INSTALLATION

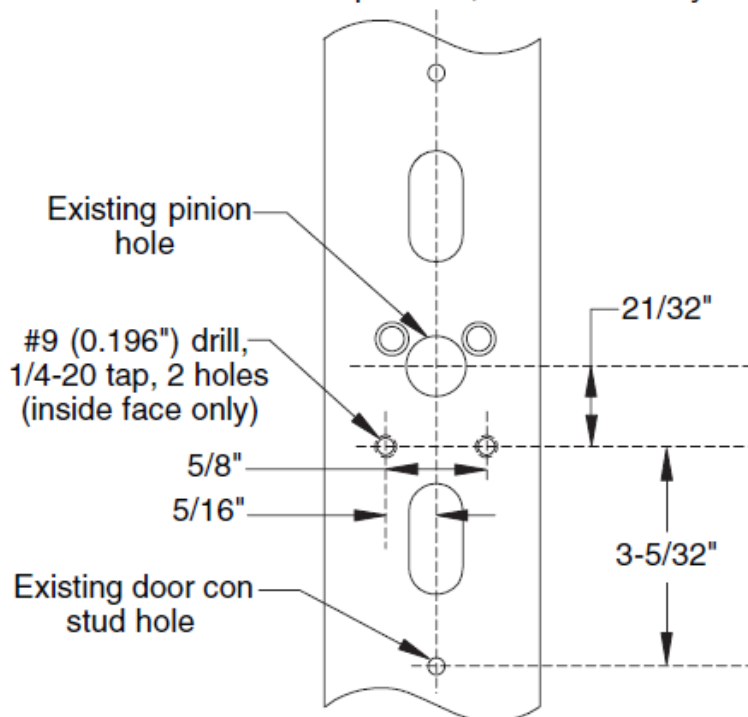
1990 RETROFIT INSTRUCTIONS

1. Remove crossbar device, door con studs, traveler, retractor, pinion, pinion bushing, rod bushings and rings from door.

Note: Pinion, pinion bushing, and retractor present on NL/HB devices only.



2. If non-standard door width, follow field sizing directions on page 12 to size device to appropriate length.
3. Using existing pinion or door con stud holes as a reference, locate the two 1/4-20 mounting holes on the lock stile. Drill and tap 1/4-20, inside face only.



SKU: 1690; 1690EO

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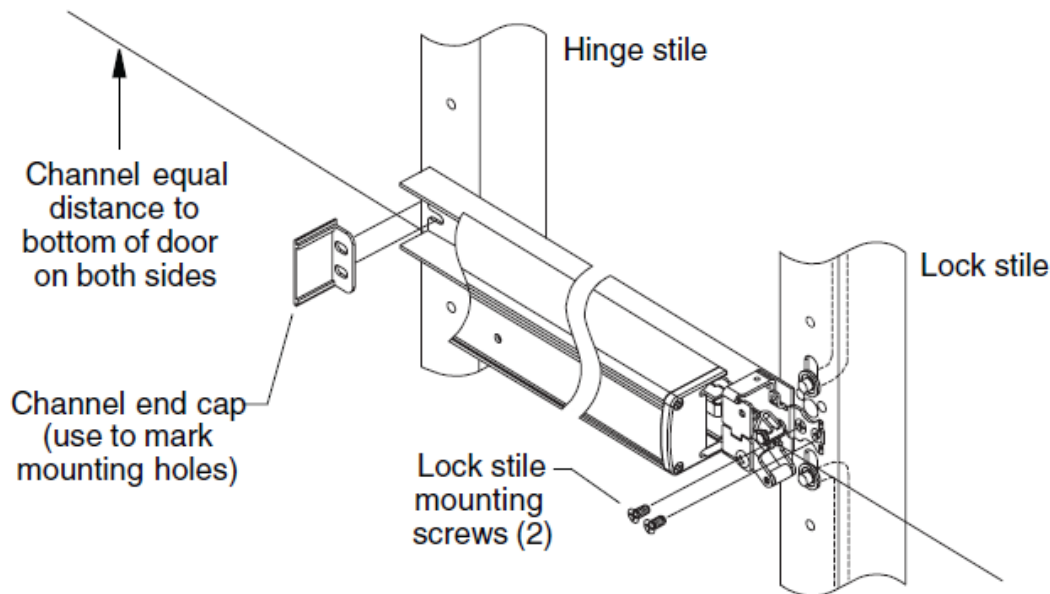


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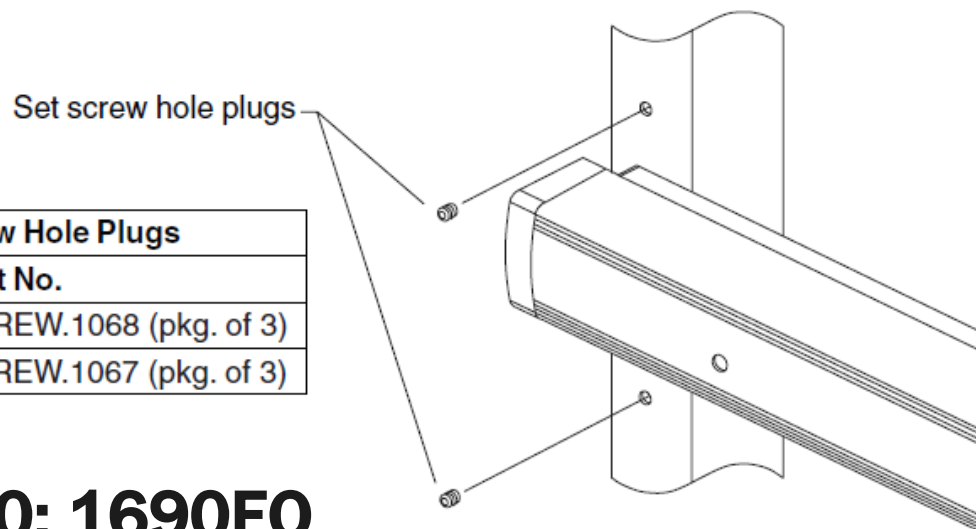
INSTALLATION

4. Install new rod bushings and retaining rings (refer to Step 1 on page 4 of instructions).
5. Mount the device to the lock stile using the supplied 1/4-20 undercut flat head screws.
6. Position the device horizontally on the door (same distance from bottom of door to bottom of channel on both stiles).
7. Position channel end cap in end of channel and use to mark locations for hinge mounting holes.



8. Remove the device from the door.
9. Drill and tap through two 1/4-20 mounting holes on hinge stile, inside face only.
10. Continue on with 1690 installation instructions.
11. When installation is complete, remove the 1/4-20 set screws from the old 1990 end cases and install them in the exposed 1990 door con stud holes on the hinge stile. The lock stile holes do not need to be filled. If the set screws in the 1990 end cases are unavailable or unusable, new set screws can be ordered as listed in the table below. New set screw hole plugs are factory supplied if retrofit is specified on the device order.

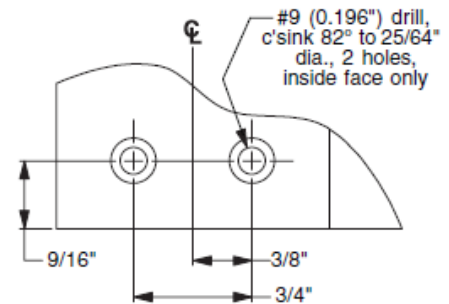
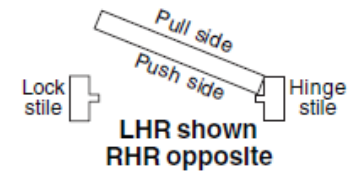
Set Screw Hole Plugs	
Finish	Part No.
US28	SCREW.1068 (pkg. of 3)
DC13/DC35	SCREW.1067 (pkg. of 3)



SKU: 1690; 1690EO

With Standard Rods and Latches

1690 Touchbar Concealed Vertical Rod Panic Device Door Preparation Template



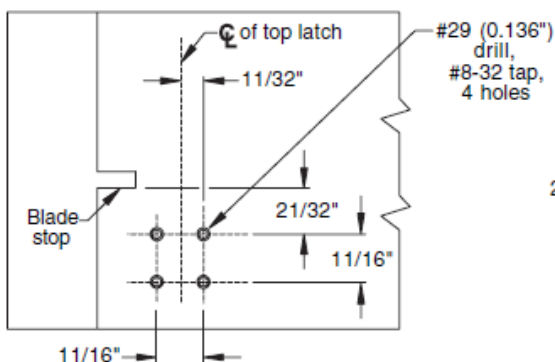
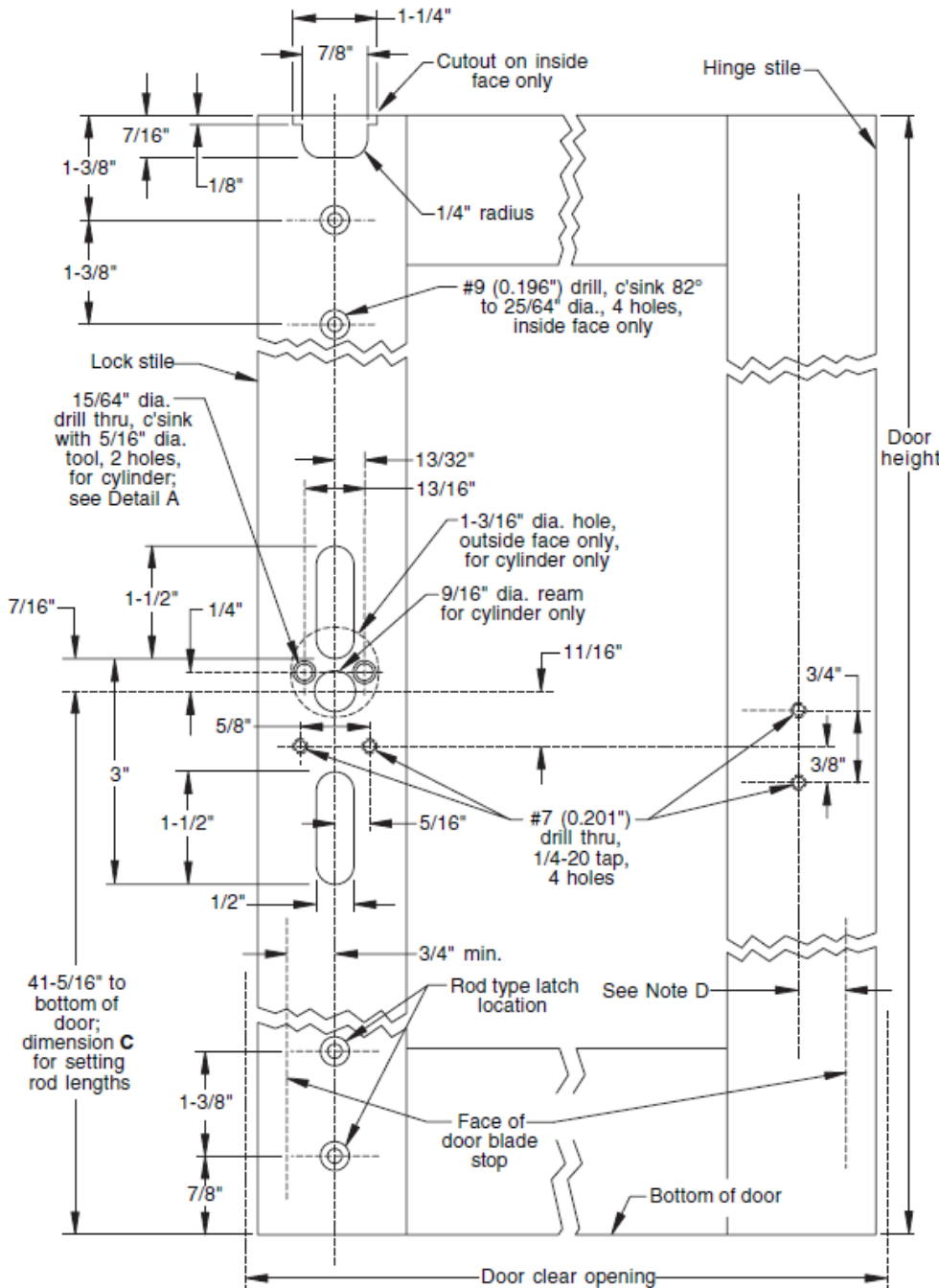
Hex Bottom Bolt Mounting Location

NOTES

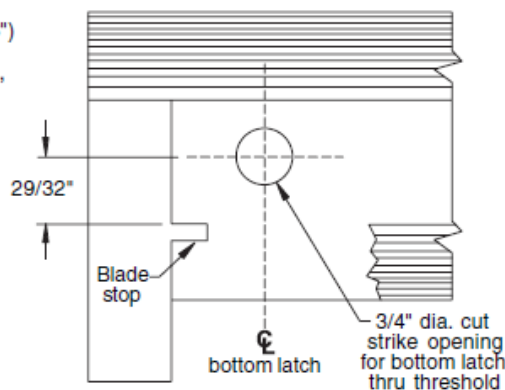
1. All holes inside face only except as noted.
2. All dimensions for 1-3/4" thick, 1/8" wall doors. Consult factory for others.

NOTE D

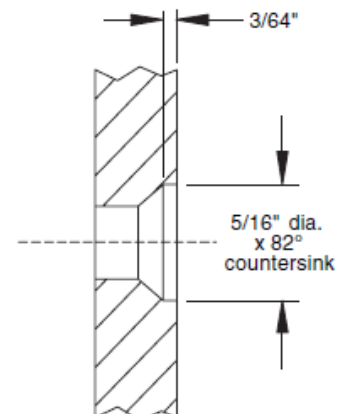
Dimensions from face of door blade stop to mounting hole center lines 3/4" minimum.



**Bottom Plan View, Head Jamb (looking up)
Showing Upper Strike Mounting Holes**



**Top Plan View, Rod Latch
Showing Strike Cutout in Threshold
for Round Latch**



**Detail A
(for cylinder)**