

INSTALLATION INSTRUCTIONS

CRL JACKSON 2086 CONCEALED VERTICAL ROD PANIC EXIT DEVICE



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TOOLS REQUIRED

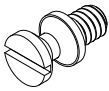
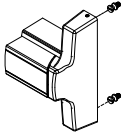
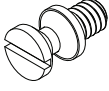
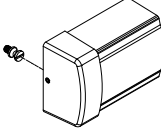

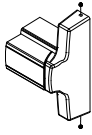

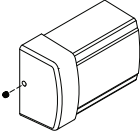
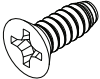
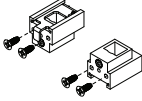
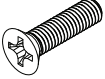
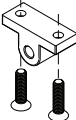
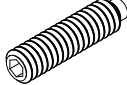
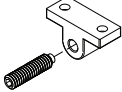

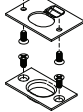

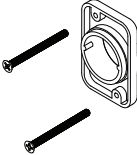

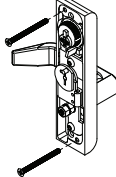
Drill Bits: 1/8", 9/32", 5/16", 7/32", 5/8", 11/16", 1-3/8"	Framing Square
Taps: 1/4-20, 10-32, 8-32	Masking Tape
Tape Measure	Center Punch
Saw Horses	Flat Metal File
Cordless Drill	Round Metal File
Phillips Head Screw Driver	Jigsaw with Metal Cutting Blade
	Straight Edge

NOTE: Any modifications, other than those specified in this document, could result in this product's failure to meet UL safety ratings and void the manufacturer's warranties.


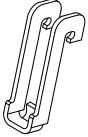
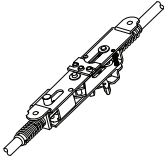
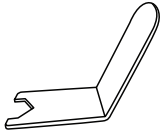

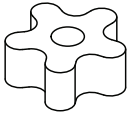
The rapidly changing technology within the architectural aluminum products industry demands that U.S. Aluminum reserve the right to revise, discontinue or change any product line, specification or electronic media without prior written notice.

NOTE: Dimensions in parentheses () are millimeters unless otherwise noted.

PARTS IDENTIFICATION

		FASTENERS PROVIDED			USED WITH
CALL OUT	QTY.	FASTENER	FASTENER DESCRIPTION	PART	PART NUMBER AND DESCRIPTION
(A)	2		1/4"-20 x 1/4" Shoulder Stud Screws		302617 and 302619 Active Head Assembly
(A)	1		1/4"-20 x 1/4" Shoulder Stud Screw		301266 Base End Cap Package
(B)	2		1/4"-20 x 5/16" Set Screw		302617 and 302619 Active Head Assembly
(B)	1		1/4"-20 x 5/16" Set Screw		301266 Base End Cap Package
(C)	4		#10 x 1/2" FH Self Tapping Screw		30934 Top Bolt Guide 30320 Bottom Bolt Guide Assembly
(D)	2		#10-32 x 3/4" FH Machine Screw		30824 Trip Bracket Package
(E)	1		1/4"-20 x 1" Adjustment SScrew		30824 Trip Bracket Package
(F)	4		#10-32 x 3/8" FH Machine Screw		301084 Top and Bottom Strike Package
(G)	2		#8-32 x 2" FH Machine Screw		30821J Optional Mortise Cylinder Mounting Pad
(H)	2		#10-32 x 2-1/8" FHMS		8500LV01 and 8500LV02 Optional Exterior Trim with Lever Assembly

PARTS IDENTIFICATION

PARTS LIST			
CALL OUT	PART	PART NO.	DESCRIPTION
I		DL2170	Optional 1" Single Mortise Cylinder
J		30799	Actuator Link included in 2086 Active Head Assembly Hardware Package 302607
K		30915J	Rod and Case Assembly - 7/0
L		30PBAW	Bolt Guide Adjustment Wrench
M		301347 301348	Optional 12" and 24" Top Rod Extender
N		301552PKG	Rod Silencers (12 Pkg.)

DOOR PREPARATION

REMOVE DOOR AND PREPARE PER TEMPLATE

1. Place the door horizontally on the stands interior side up.
2. Mark the stile centerlines 1-1/8" (28.6) from the inside edge. (Fig. 1)
3. Mark the corresponding layouts on to the stile using the vertical centerlines at the specified height. (Fig. 2)

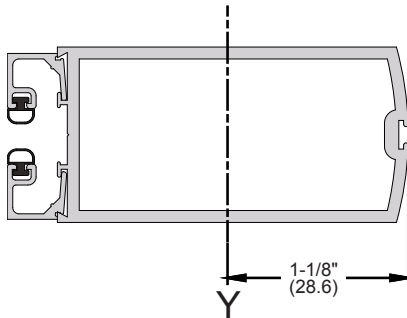


FIG. 1

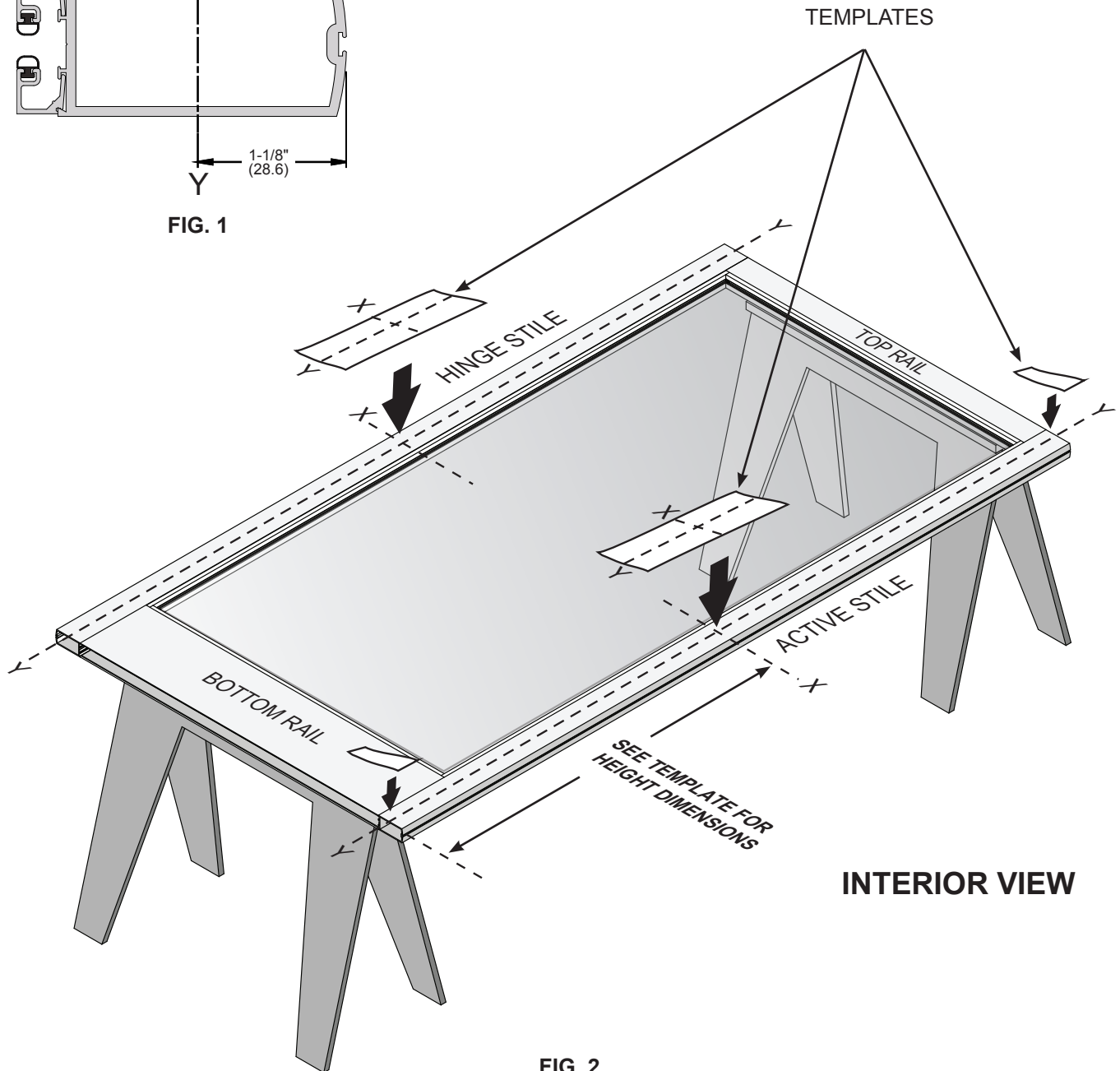


FIG. 2

NOT TO SCALE

DOOR PREPARATION – LAYOUT SELECTION

2086 EXIT DEVICE INSTALLATION - ACTIVE STILE

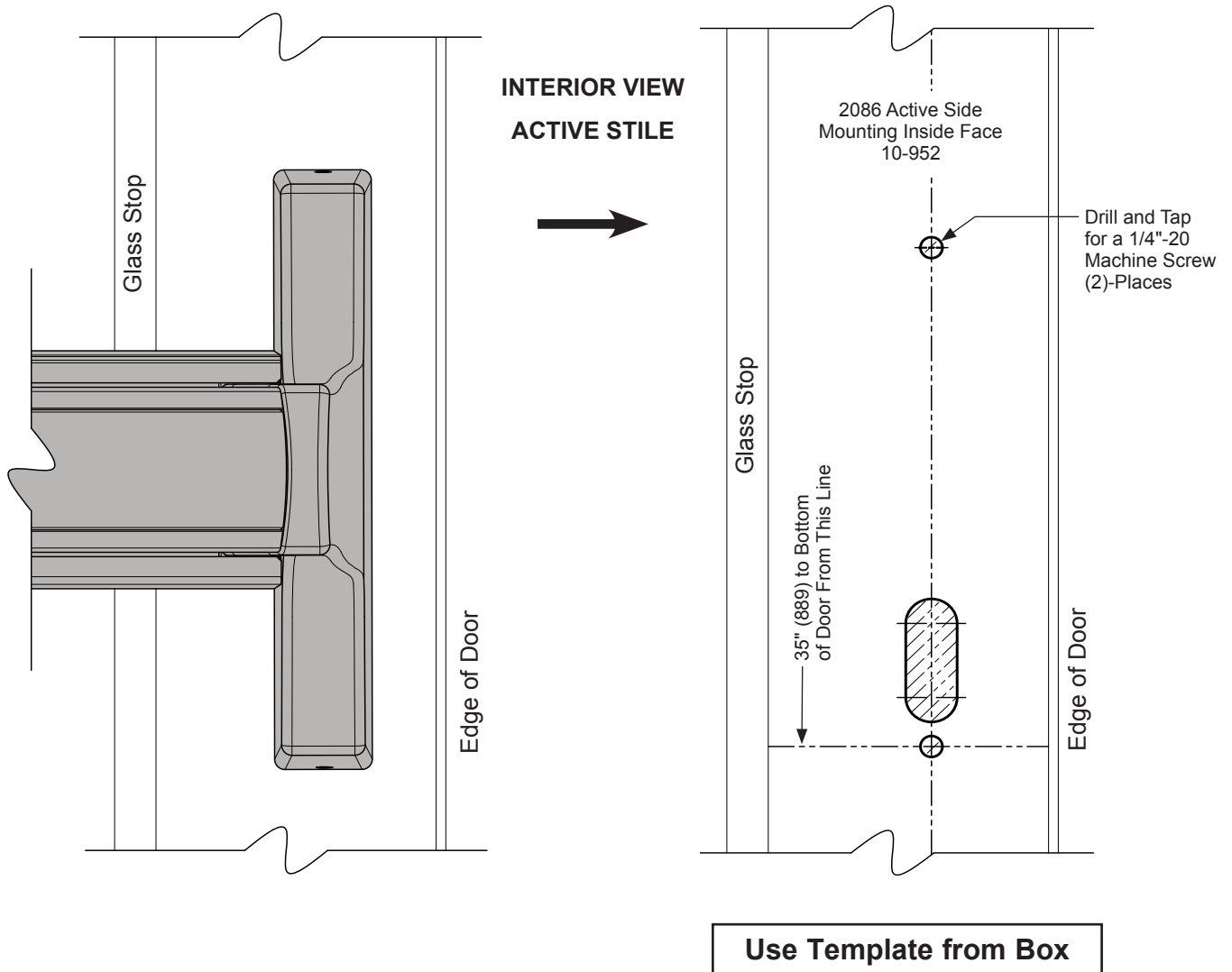


FIG. 3

NOT TO SCALE

DOOR PREPARATION – LAYOUT SELECTION

2086 EXIT DEVICE INSTALLATION - INACTIVE STILE

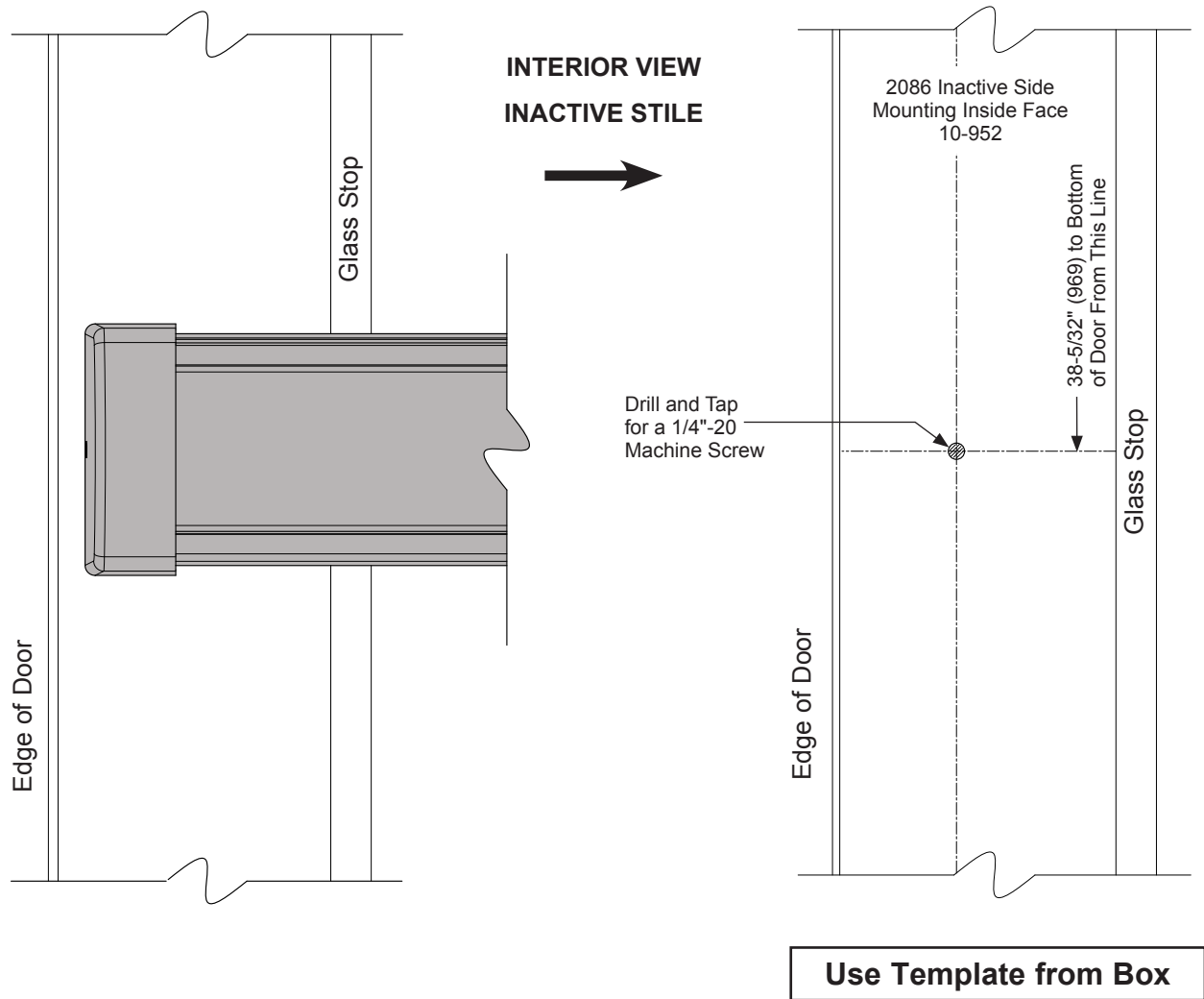


FIG. 4

NOT TO SCALE

DOOR PREPARATION – LAYOUT SELECTION

2086 EXIT DEVICE INSTALLATION WITH LOCK CYLINDER AND MOUNTING PAD

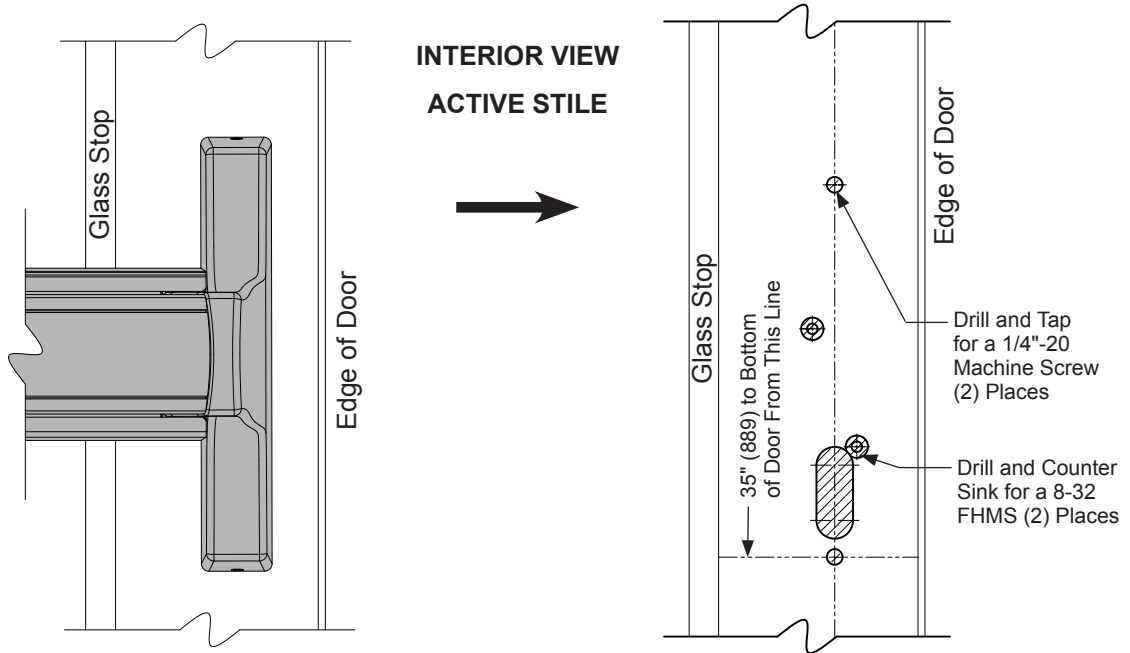


FIG. 5

Use Template from Box

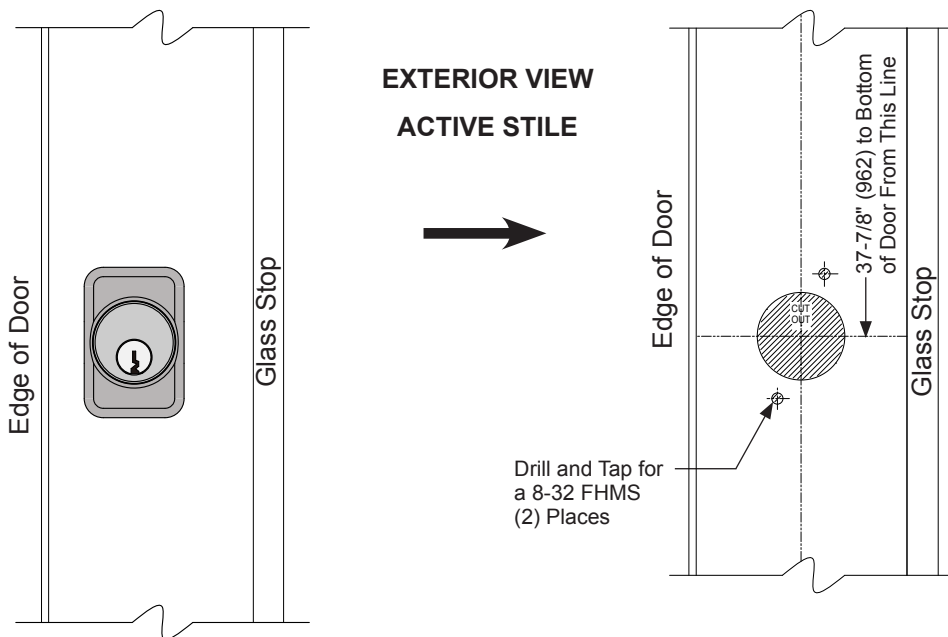


FIG. 6

Use Template from Box

NOT TO SCALE

DOOR PREPARATION – LAYOUT SELECTION

2086 EXIT DEVICE INSTALLATION WITH EXTERIOR LOCKING LEVER TRIM

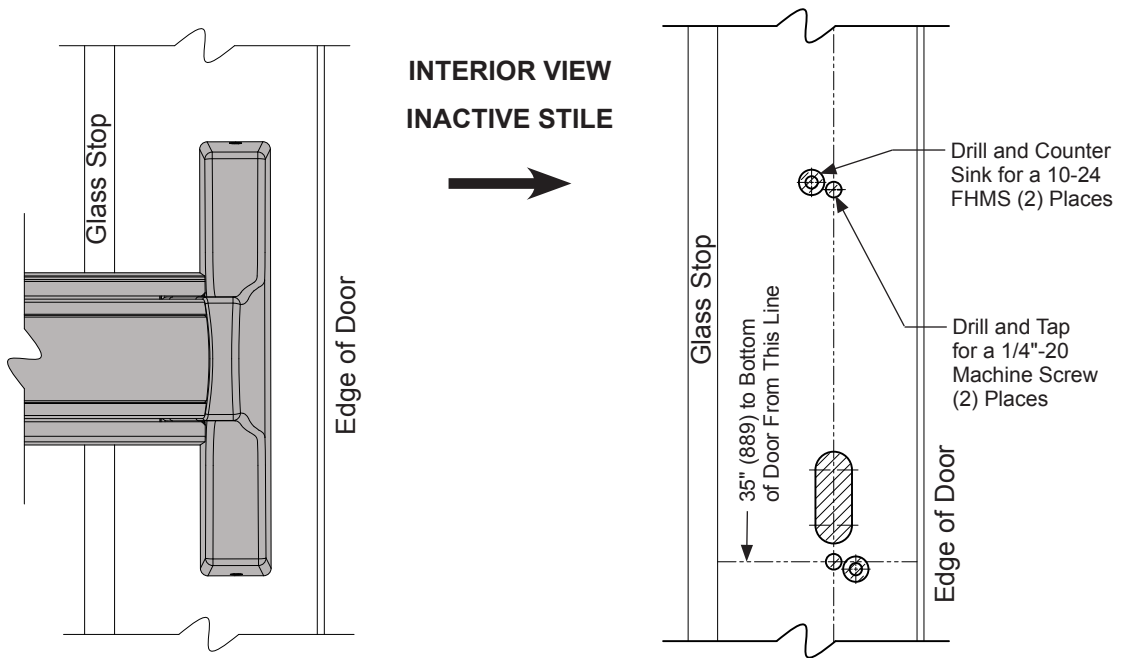


FIG. 7

Use Template from Box

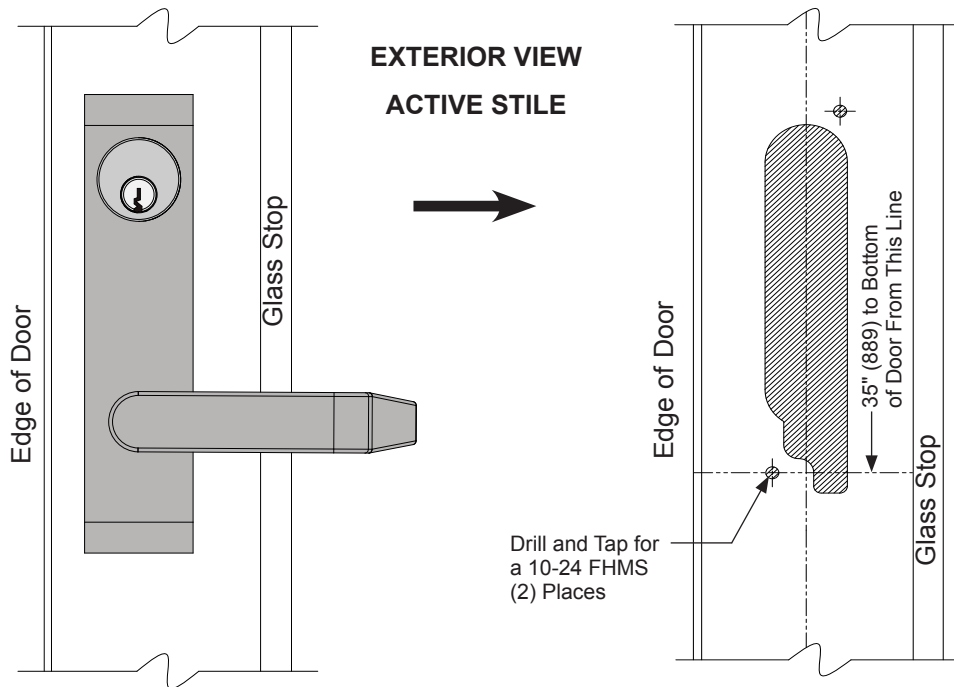


FIG. 8

Use Template from Box

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

INSERT ROD AND CASE

1. Insert the panic device rod and case assembly into active stile (Fig. 9).
2. Align actuator pin through the slotted cut-out on interior face of stile, fastening with (A) (2) 1/4"-20 x 1/4" shoulder stud screws. (Fig. 10)
3. Adjust the bottom and top bolts, to extend 1/2" past the top and bottom stiles.
4. Install the top bolt guide assembly using (C) (2) #10 x 1/2" FH self threading screws at the top of the active door stile. The (2) holes face the interior side.
5. Install the bottom bolt guide assembly using (C) (2) #10 x 1/2" FH self threading screws at the bottom of the active door stile. The (2) holes face the interior side of stile.
6. Attach (A) (1) 1/4"-20 x 1/4" shoulder stud screw on the Inactive Stile. (Fig. 10)

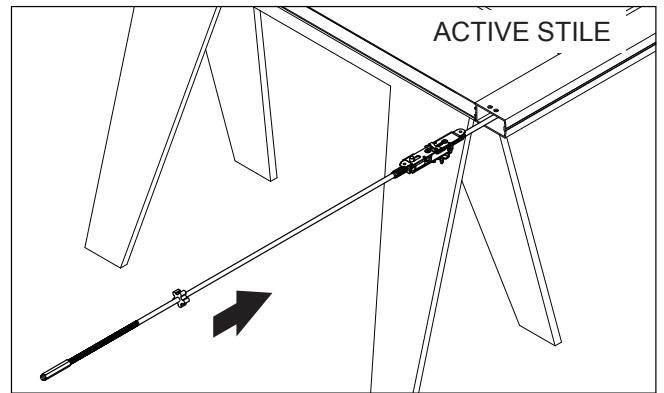


FIG. 9

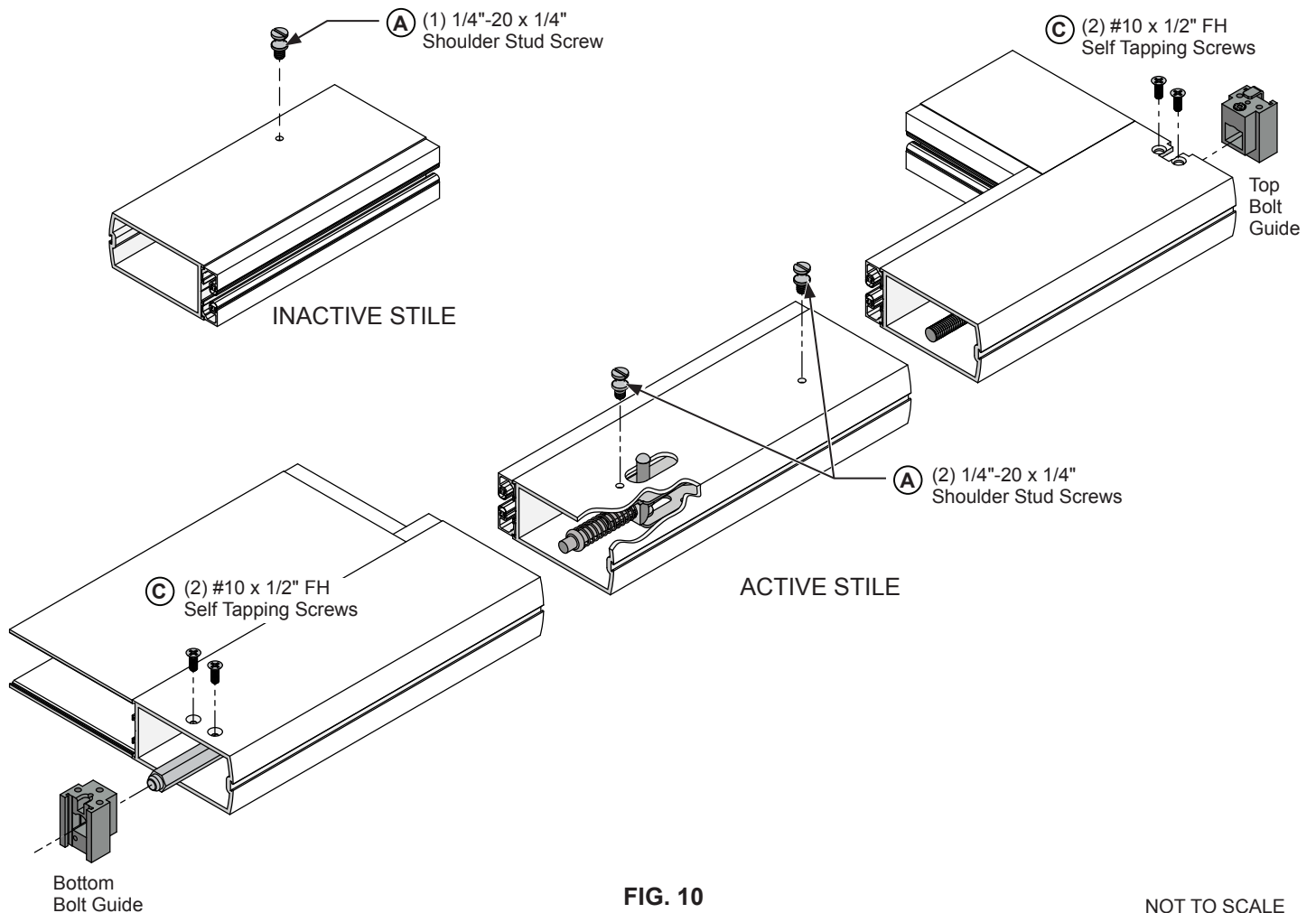


FIG. 10

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

INSTALL OPTIONAL MORTISE CYLINDER LOCK AND MOUNTING PAD

NOTE: Lock and Mounting Pad must be installed before attaching exit device.

1. Attach the Mortise Cylinder Lock to the Mounting Pad and secure it with the Lock Ring, using **(F)** (2) #8 x 2" Flat head screws provided.

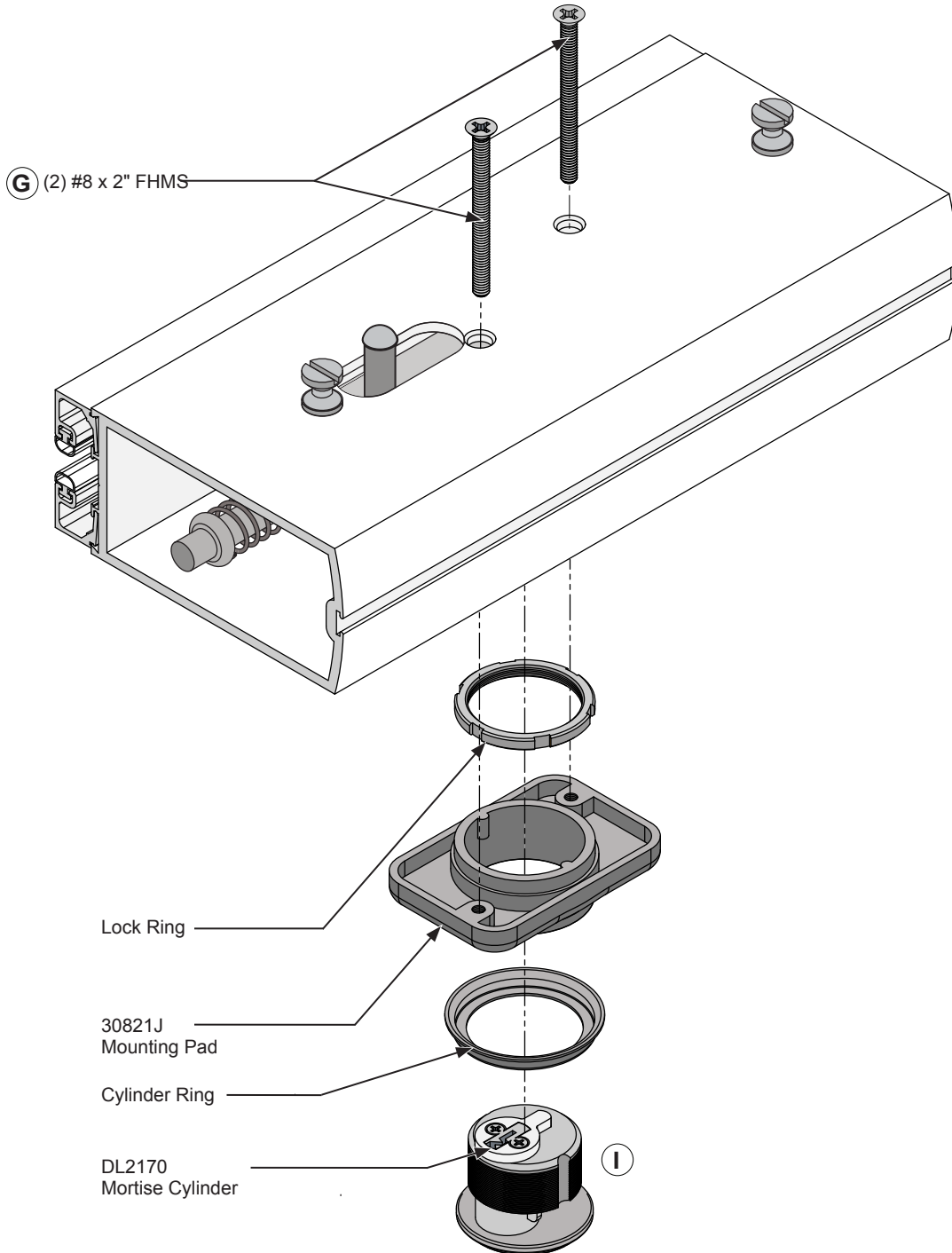


FIG. 12

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

INSTALL OPTIONAL LOCKING LEVER EXTERIOR TRIM

NOTE: Exterior trim must be installed before attaching exit device.

1. Attach the exterior trim to the active stile with (H) (2) #10 x 2-1/8" FHMS

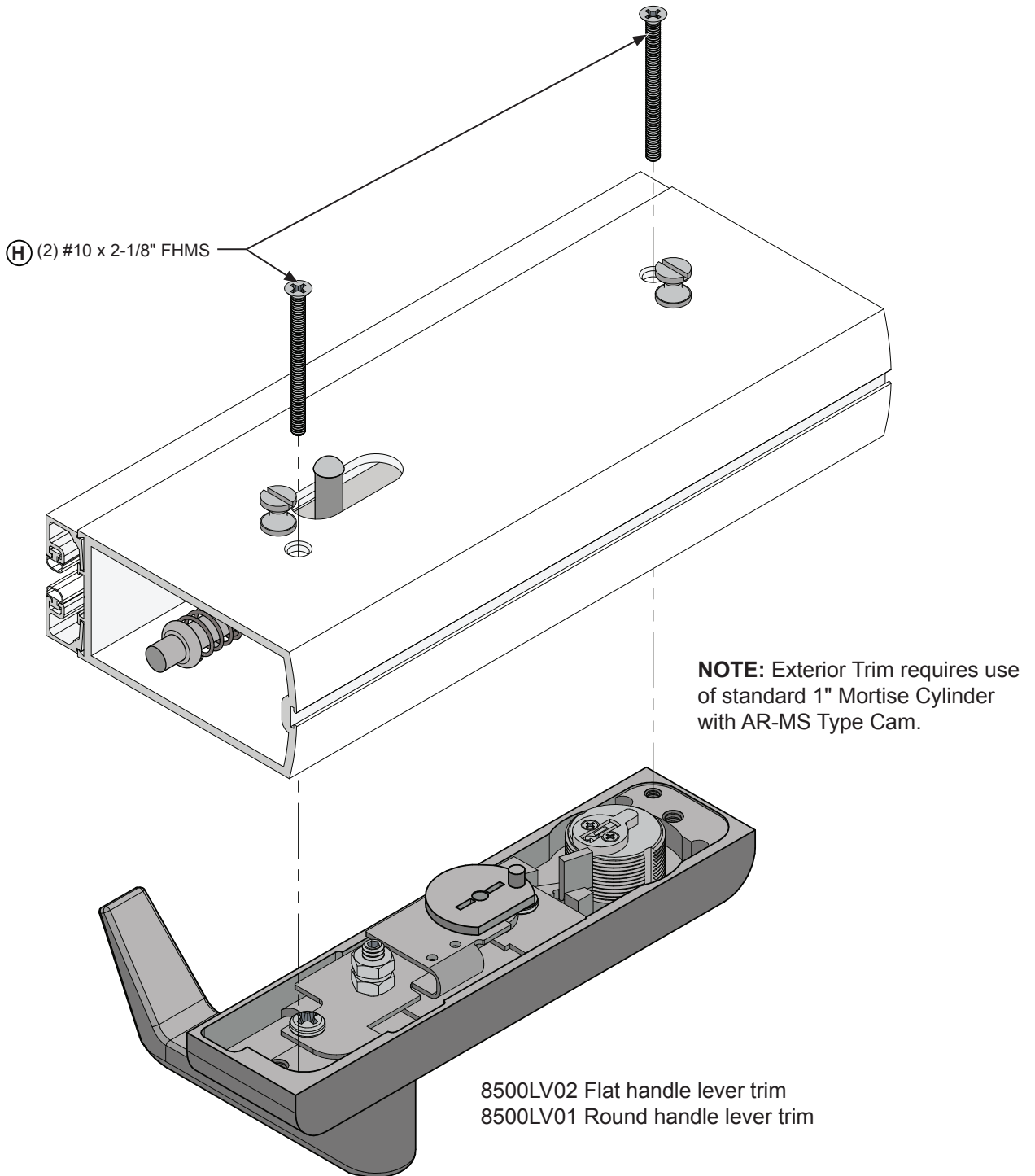


FIG. 13

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

INSTALL 2086 EXIT DEVICE

1. Install the exit device on the door stiles assuring the actuator link engages the actuator pin. (Fig. 14)
2. Tighten (B) (3) set screws on each side of the door stiles. (Fig. 15)

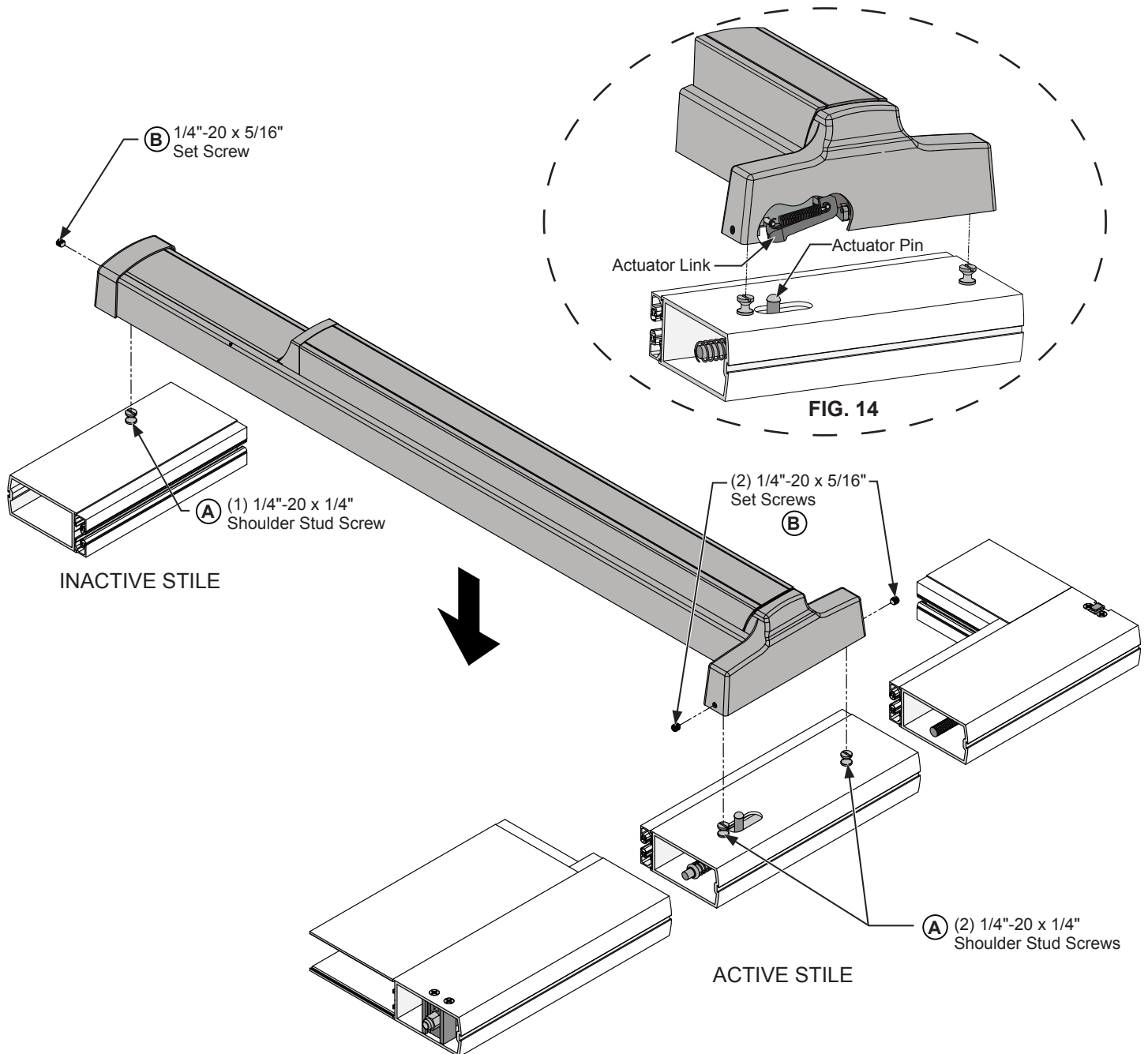


FIG. 15

NOT TO SCALE

DOOR HARDWARE INSTALLATION (CONTINUED)

OPERATIONS CHECK AND DOGGING INSTRUCTIONS

OPERATIONS CHECK:

1. Depress the push bar to assure free movement of the rod and case assembly. Both upper and bottom bolts should activate to the open position. The upper bolt should drop into the open position (**Fig. 22**).
2. The bottom bolt should fully retract. If the bolts fail to operate as described, review the actuator link and actuator pin and make sure the actuator link engages the actuator pin (**Fig. 14**).

DOGGING INSTRUCTIONS:

TO DOG Fully depress and hold the Touch Bar, push the Dogging Pin in and release the Touch Bar (**Fig. 16**).

TO UNDOG Push Dogging Pin in, Touch Bar will release.

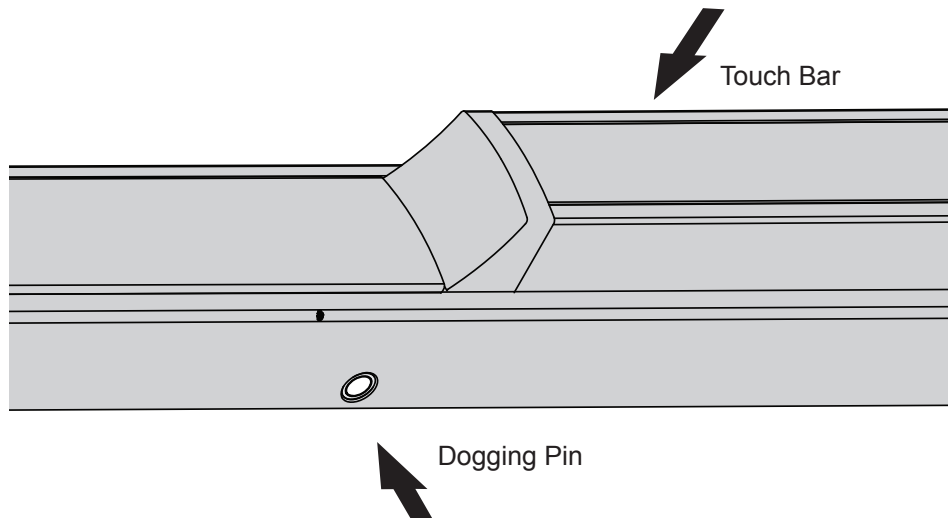


FIG. 16

NOT TO SCALE

FRAME PREPARATION

RE-ATTACH DOOR TO FRAME

1. Make sure that the panic exit device is in the dogged position. Both the upper and bottom latches must clear the frame. Re-attach the door to the frame (**Fig. 17**).
2. With the door in place and in the closed position, mark the center line locations on the header and threshold of both the upper and bottom latches.
3. Finish the header and threshold preparation using the layout drawings on page 17.

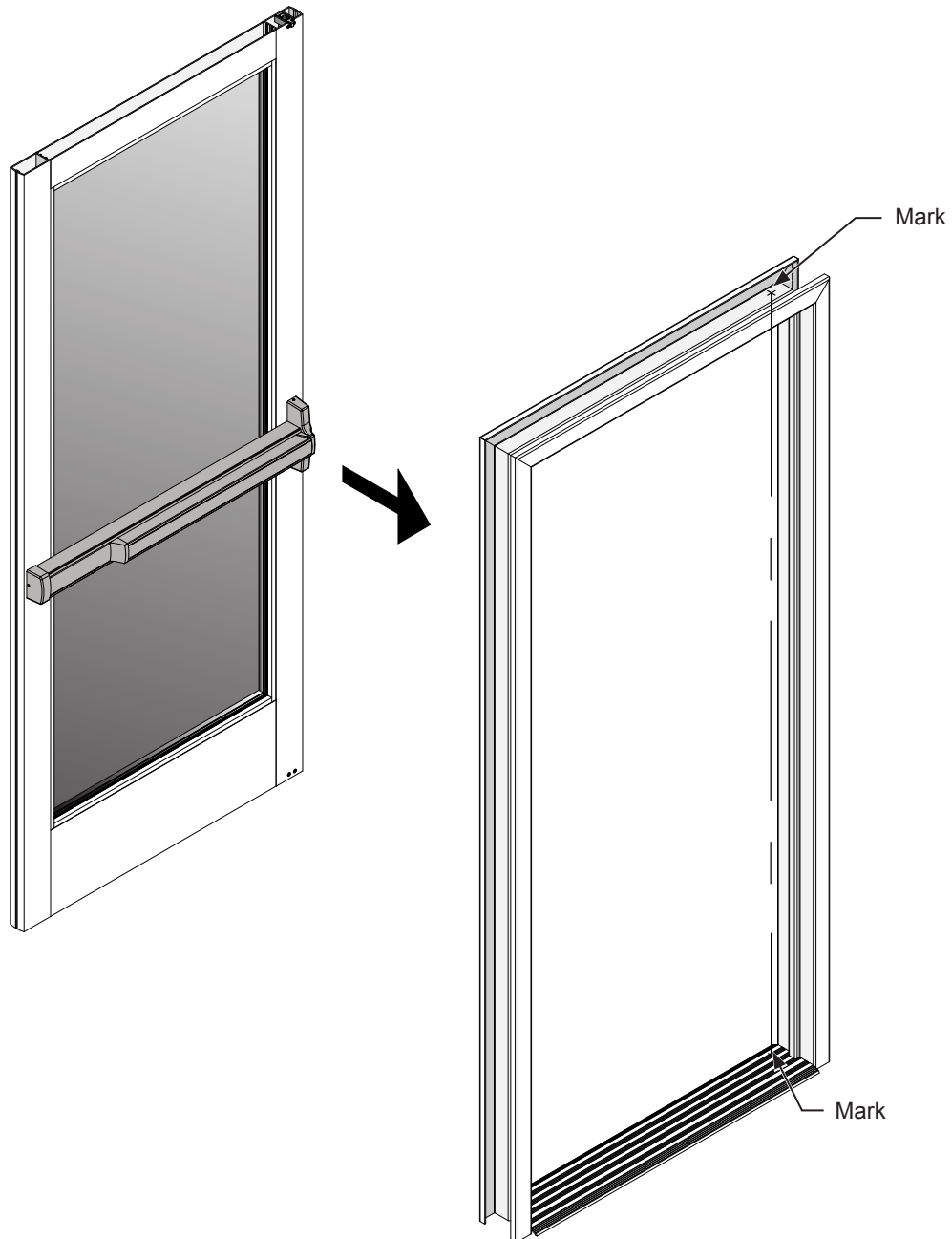


FIG. 17

NOT TO SCALE

FRAME PREPARATION (CONTINUED)

ATTACH UPPER STRIKE

1. Drill and tap for (F) (2) 10-32 x 3/8" FHMS on the mark made in step 2 of the frame preparation on page 16. Attach the upper strike to header using (F) (2) 10-32 x 3/8" FHMS (Fig. 18). If the header does not have a door stop attach the trip bracket provided to the header using (D) (2) 10-32 x 3/4" FHMS (Fig. 20).

ATTACH BOTTOM STRIKE

1. Cut out a 1" long x 13/16 wide hole and Drill and tap for (F) (2) 10-32 x 3/8" FHMS on the mark made in step 2 of the frame preparation on page 16. Attach the bottom strike centering on the mark (Fig. 19).

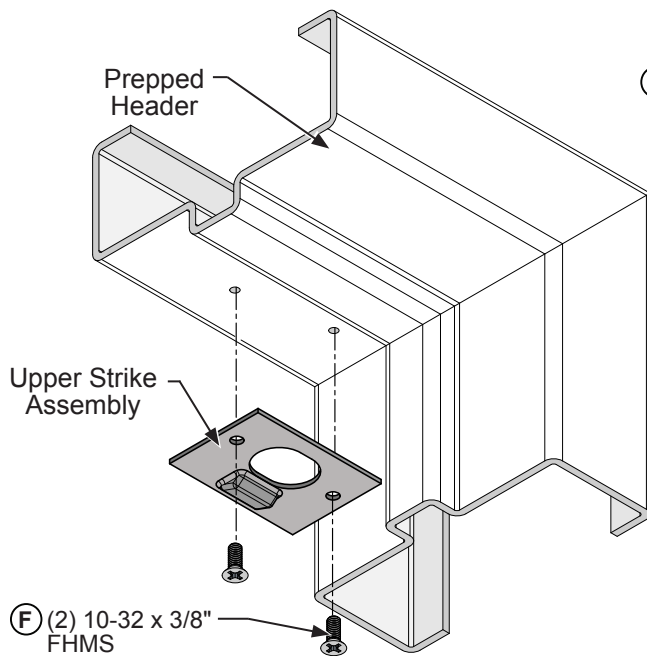


FIG. 18

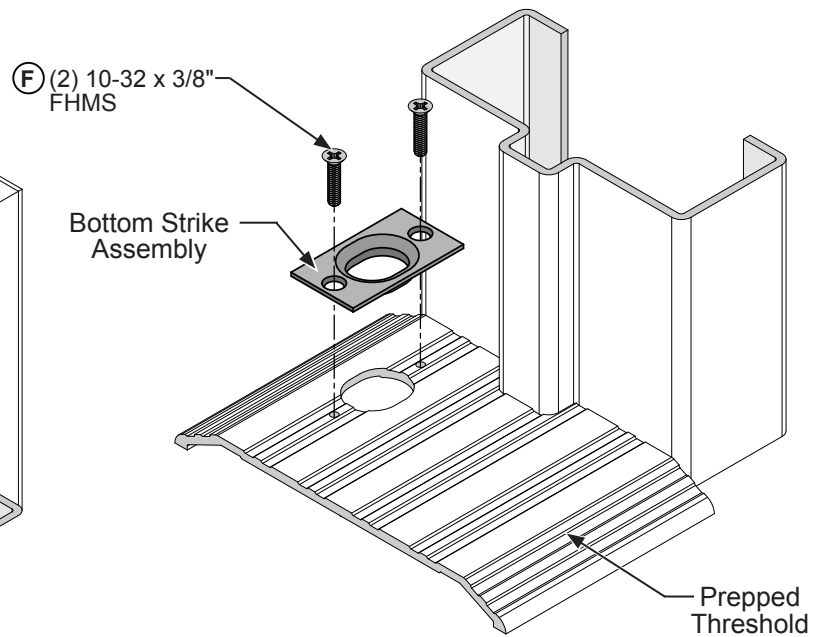


FIG. 19

NOTE: Upper Strike Assembly must be used for proper operation of panic device.

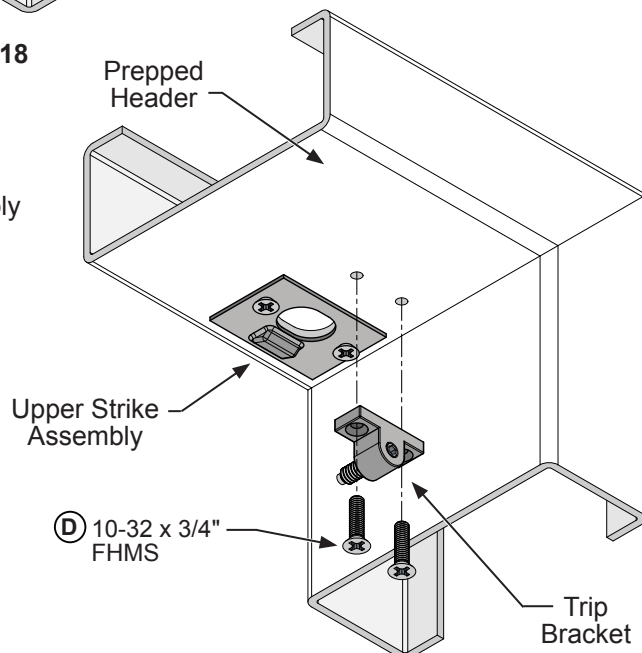


FIG. 20

NOT TO SCALE

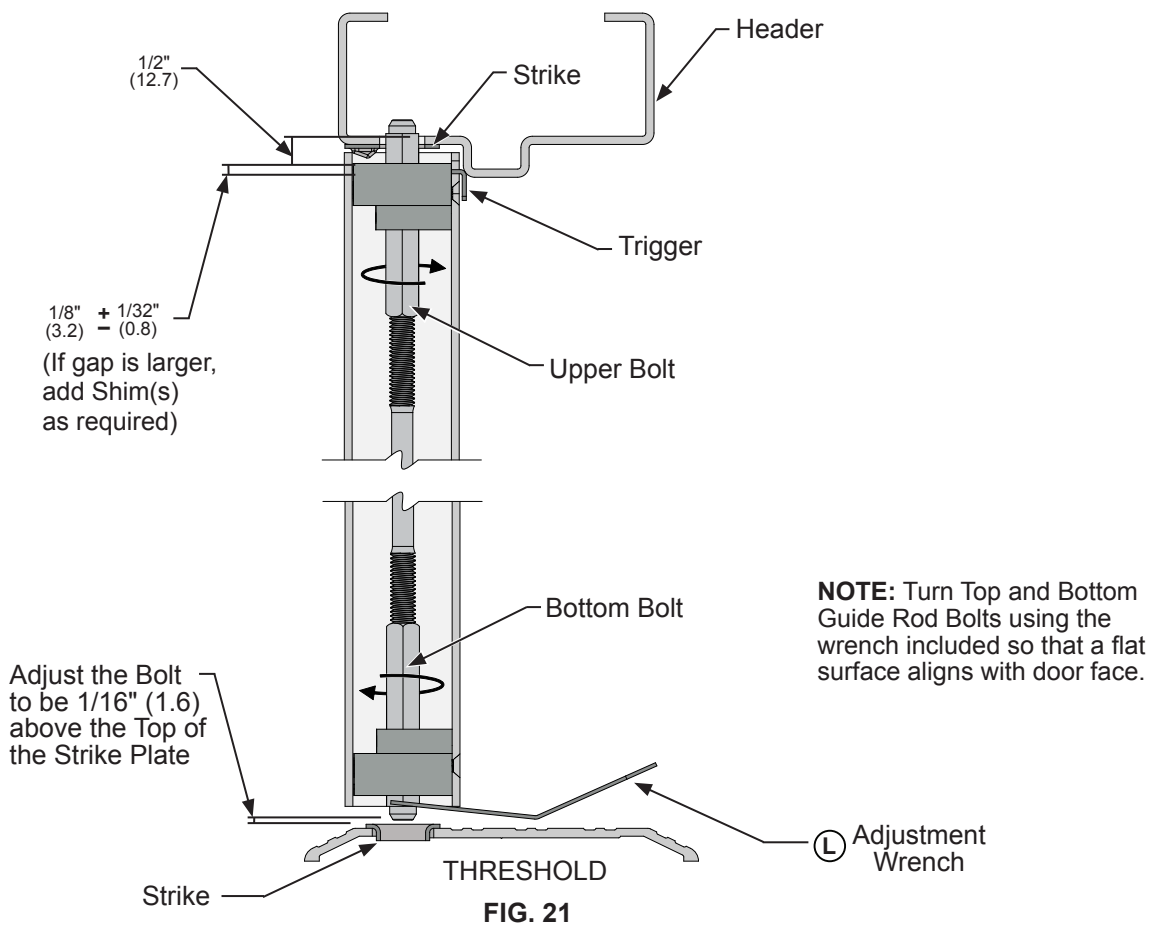
DOOR HARDWARE ADJUSTMENTS

UPPER BOLT:

1. The door must be in the closed position and the push bar must be in the un-dogged position to complete the following adjustments.
2. Depress the push bar, The bottom and upper rods will retract. With the rods in this position adjust the bottom bolt using the adjustment wrench (L) included. Adjust the upper bolt 1/16" to 1/8" (1.6 to 3.2) gap from the header. When the panic is in the released position the upper rod will extend 1/2" (12.7) into the header as shown in (Fig. 21).

BOTTOM BOLT:

1. The door must be in the closed position and the push bar must be in the un-dogged position to complete the following adjustments.
2. Depress the push bar, The bottom and upper rods will retract. With the rods in this position adjust the bottom bolt using the adjustment wrench (L) included as shown in (Fig. 21).



MANUAL CHECK:

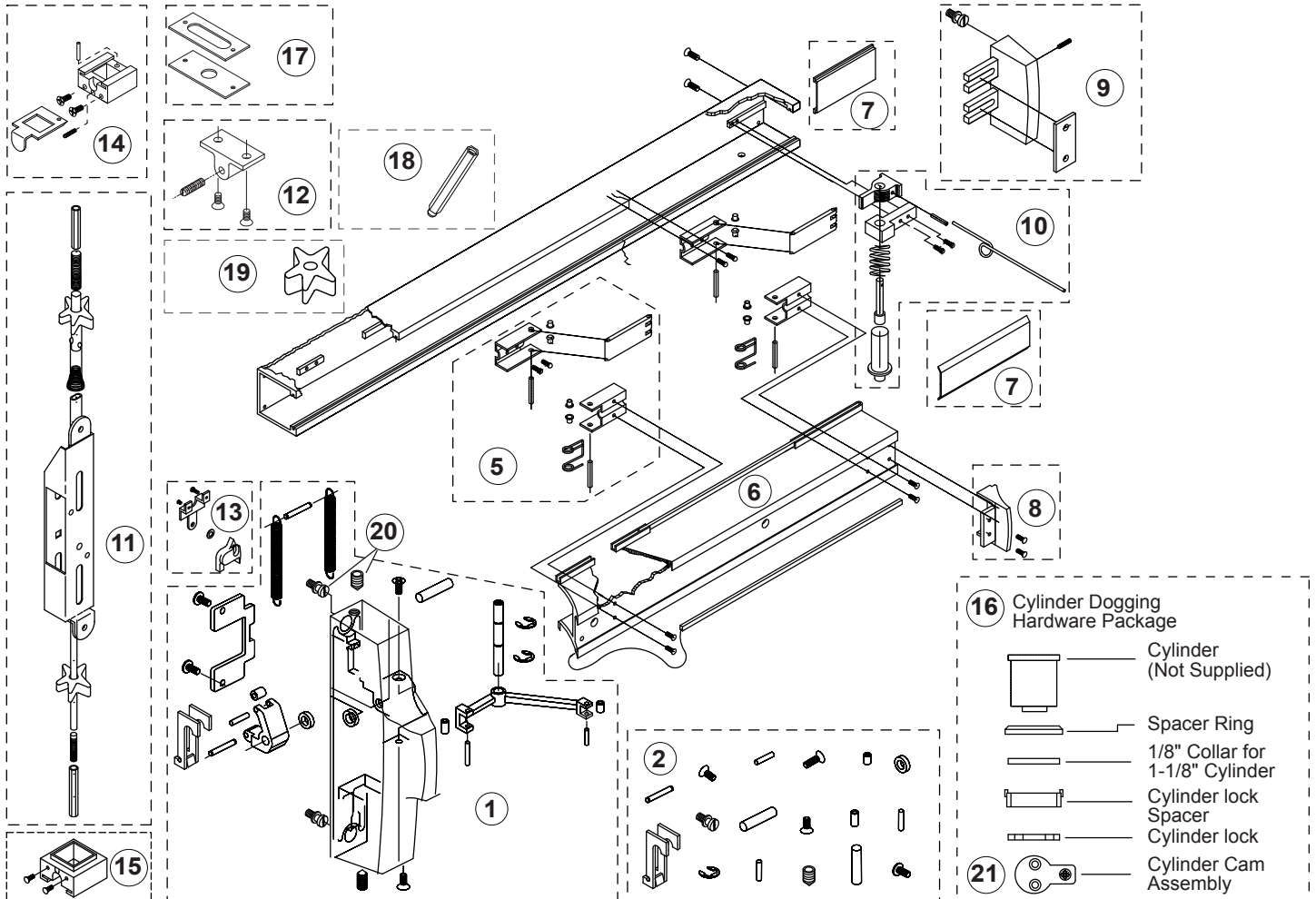
Release the dogging mechanism. The rods will then extend into the locked position.

OPERATIONS CHECK:

Depress the push bar. The bottom bolt should retract to the bottom edge of the door stile. The upper bolt will return to the open position.

****Important:** If the upper bolt returns to the open position with the push bar being partially depressed, or if the upper bolt does not go to the open position when the push bar is fully depressed repeat the dogging procedure and the adjustment steps on page 18. The upper and lower bolts might need to be adjusted again (Fig. 21).

PACKAGED PARTS AVAILABLE



Assem. No.	Part No.	Description	Assem. No.	Part No.	Description
1	302617	LHRB - Active Head Assembly	13	30916	Rod and Case Hardware Package
Not shown	302619	RHRB - Active Head Assembly	14	30934	Top Bolt Guide Assembly
2	302607	Head Assembly Hardware Package	15	30320	Bottom Bolt Guide Assembly
5	301064	Control Arm Hardware Package	16	302671	Cylinder Dogging Package
6	302480PKG	Push-Pad Package	17	301084	Strike Package - Top and Bottom
7	301063	Base Cover Plate Package	18	30763P	Top and Bottom Bolts (1 Ea.)
8	301265	Push-Pad End Cap Package	19	301552PKG	Rod Silencers (12 Pkg.)
9	301266	Base End Cap Package	20	30SBPKG	Mounting Shoulder Bolt and Set Screw Pkg. (12 Ea.)
10	302467	LHRB - Dogging Assembly	21	302572	Cylinder Dogging Cam
Not shown	302462	RHRB - Dogging Assembly	Not shown	30PBAW	Bolt Guide Adjustment Wrench
11	30915J	Standard Rod and Case Assembly - 7/0	Not shown	301347	Top Rod Extension - 12"
12	30824	Trip Bracket Package	Not shown	301348	Top Rod Extension - 24"