# **INSTALLATION INSTRUCTIONS**

# CRL JACKSON 2085 CONCEALED VERTICAL ROD PANIC EXIT DEVICE





Phone: (800) 421-6144 • Fax: (866) 921-0531 crlaurence.com • usalum.com • crl-arch.com

# ORDER OF ASSEMBLY AND INSTALLATION

PARTS IDENTIFICATION
DOOR PREPARATION
LAYOUT SELECTION
DOOR HARDWARE INSTALLATION
INSERT ROD AND CASE
INSTALL OPTIONAL MORTISE CYLINDER LOCK AND MOUNTING PAD
INSTALL OPTIONAL EXTERIOR LOCKING LEVER TRIM
INSTALL 2085 EXIT DEVICE
OPERATIONS CHECK AND DOGGING INSTRUCTIONS
FRAME PREPARATION AND STRIKE INSTALLATION
DOOR HARDWARE ADJUSTMENTS - UPPER BOLT AND BOTTOM BOLT
MANUAL CHECK AND OPERATIONS CHECK
PACKAGE PARTS AVAILABLE

# **TOOLS REQUIRED**

Drill Bits: 1/8", 9/32", 5/16", 7/32",

5/8", 11/16", 1-3/8" Taps: 1/4-20, 10-32, 8-32

Tape Measure Saw Horses Cordless Drill

Phillips Head Screw Driver

Framing Square Masking Tape Center Punch Round Metal File Flat Metal File

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 C.R. Laurence/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.

**CRL** US ALUMINUM

# **PARTS IDENTIFICATION**

			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
©	4		#10 x 1/2" FH Self Tapping Screw		30320 Bottom Bolt Guide Assembly
(D)	2		#10-32 x 1/4" FH Machine Screw		301311 Top Latch Assembly
E	4		#10-32 x 3/8" Machine Screw		301345 Top and Bottom Strike Package
F	2	(1)	#8-32 x 2" FH Machine Screw		30821J Optional Mortise Cylinder Mounting Pad
G	2		#10-32 x 2-1/8" FHMS		8500LV01 and 8500LV02 Optional Exterior Trim with Lever Assembly

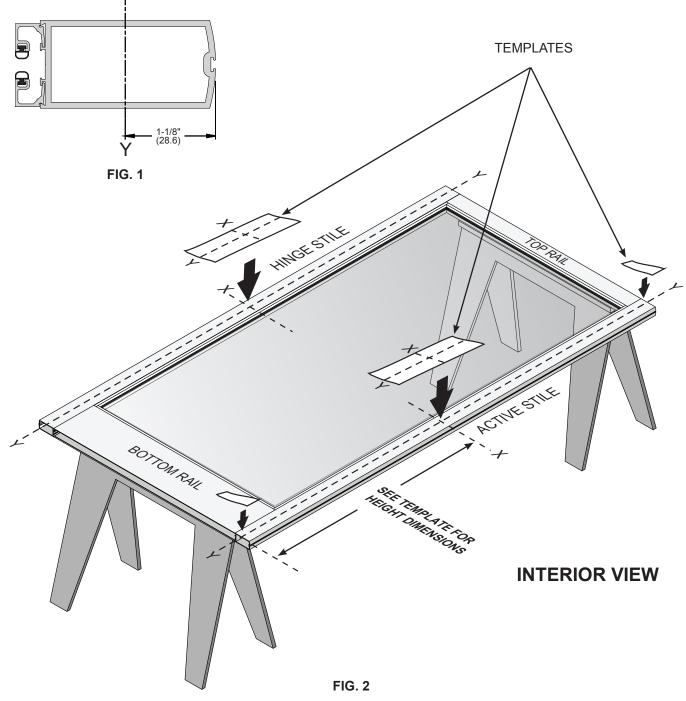
# PARTS IDENTIFICATION

	PARTS LIST									
CALL OUT	PART	PART NO.	DESCRIPTION							
H		DL2170	Optional 1" Single Mortise Cylinder							
		30799	Actuator Link included in 2085 Head Assembly Hardware Package 302607							
(F)		301287J	Rod and Case Assembly - 7/0							
K	5	30PBAW	Bolt Guide Adjustment Wrench							
L	A STATE OF THE STA	301347 301348	Optional 12" and 24" Top Rod Extender							
M		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)



NOT TO SCALE

05 USALUMINUM

## 2085 EXIT DEVICE INSTALLATION - ACTIVE STILE

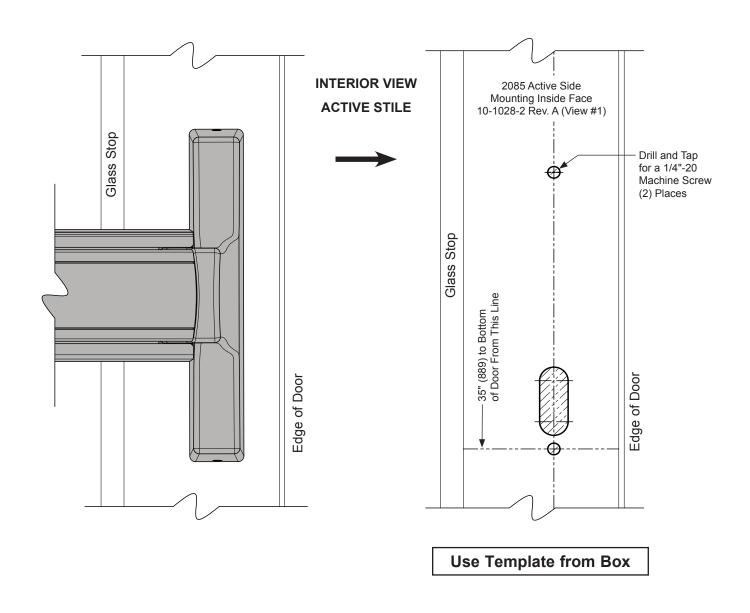


FIG. 3

NOT TO SCALE

## 2085 EXIT DEVICE INSTALLATION - INACTIVE STILE

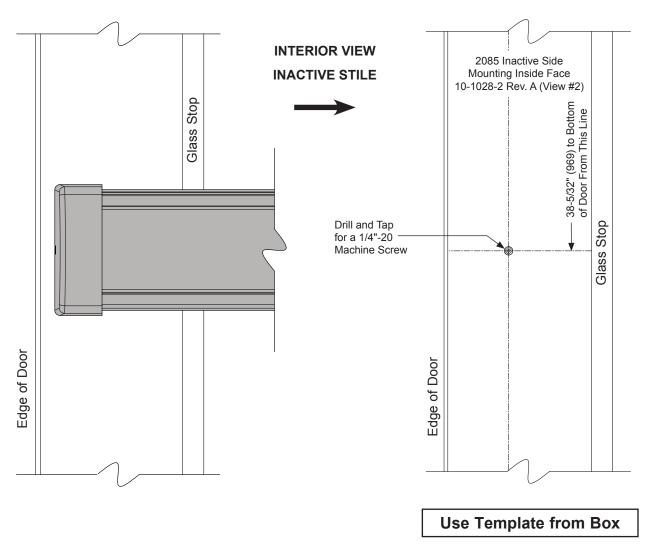
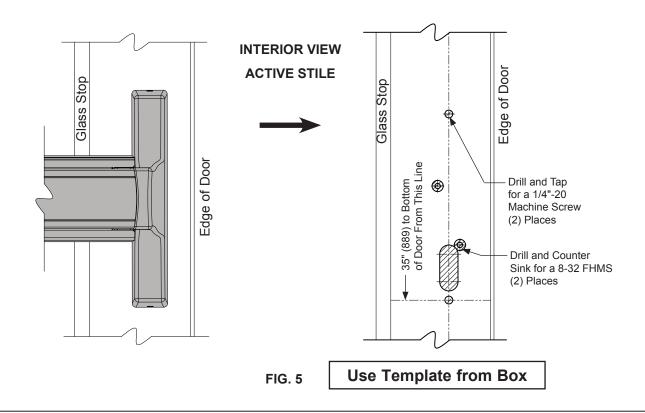
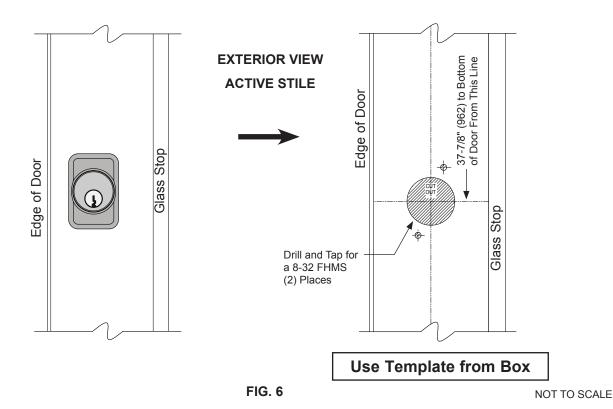


FIG. 4

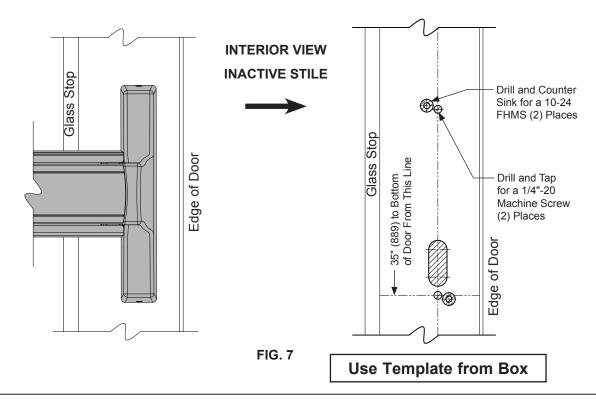
NOT TO SCALE

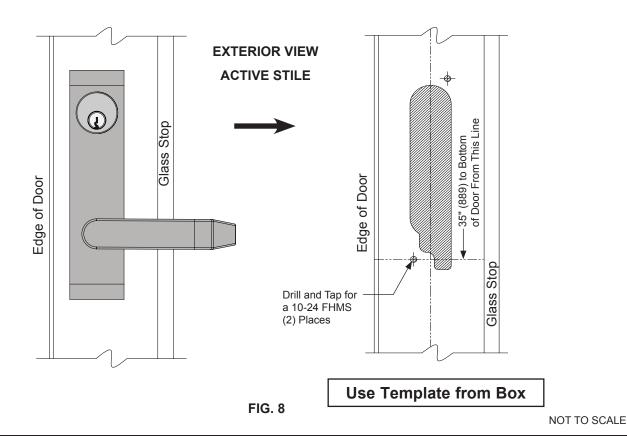
### 2085 EXIT DEVICE INSTALLATION WITH LOCK CYLINDER AND MOUNTING PAD





#### 2085 EXIT DEVICE INSTALLATION WITH EXTERIOR LOCKING LEVER TRIM





# 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 (2) (A) 1/4"-20 x 1/4" shoulder stud screws. (Fig. 10)
- Adjust the bottom and top bolts, to extend 1/2" past the bottom stile.
- 4. Install the top latch case assembly using (2) D#10 x 1/4" 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 (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 (1) (A) 1/4"-20 x 1/4" shoulder stud screw on the Inactive Stile. (Fig. 10)

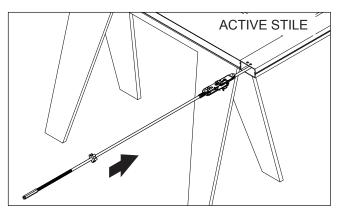


FIG. 9

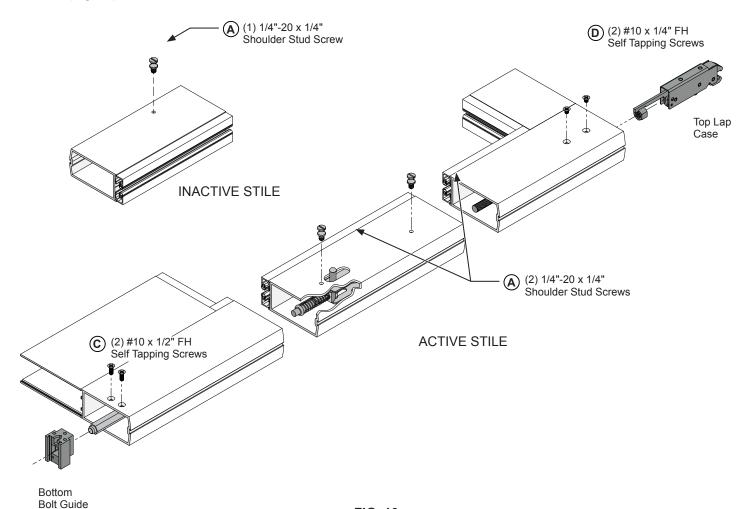


FIG. 10 NOT TO SCALE

# 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. 11)

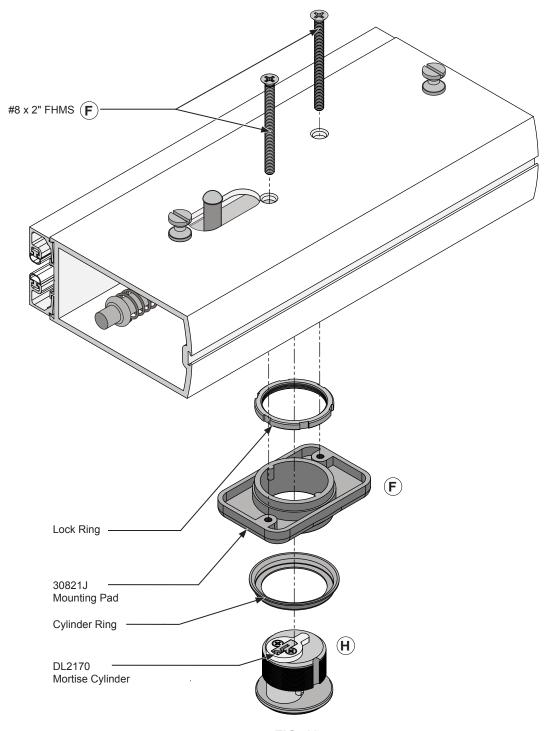


FIG. 11 NOT TO SCALE

# DOOR HARDWARE INSTALLATION (CONTINUED)

**INSTALL OPTIONAL EXTERIOR LOCKING LEVER TRIM** 

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

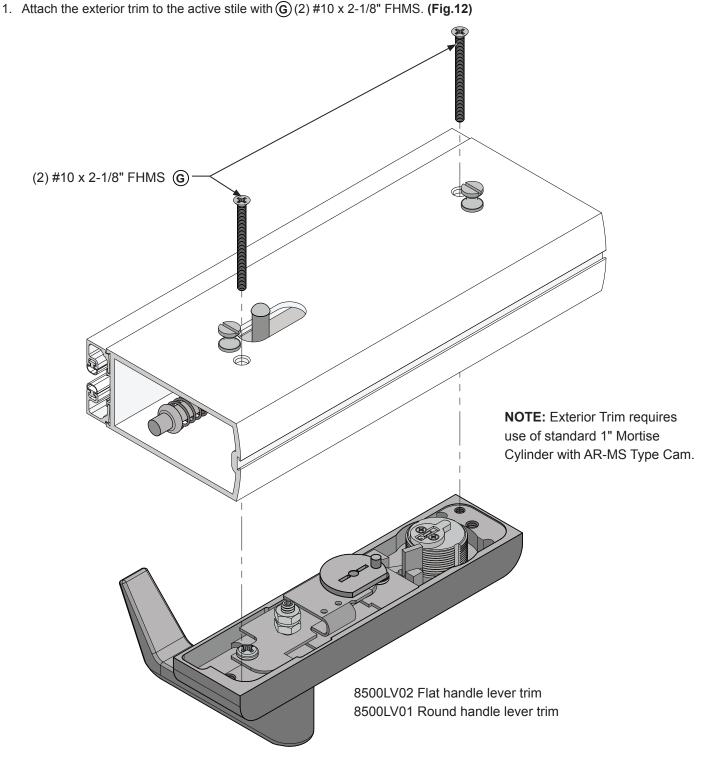
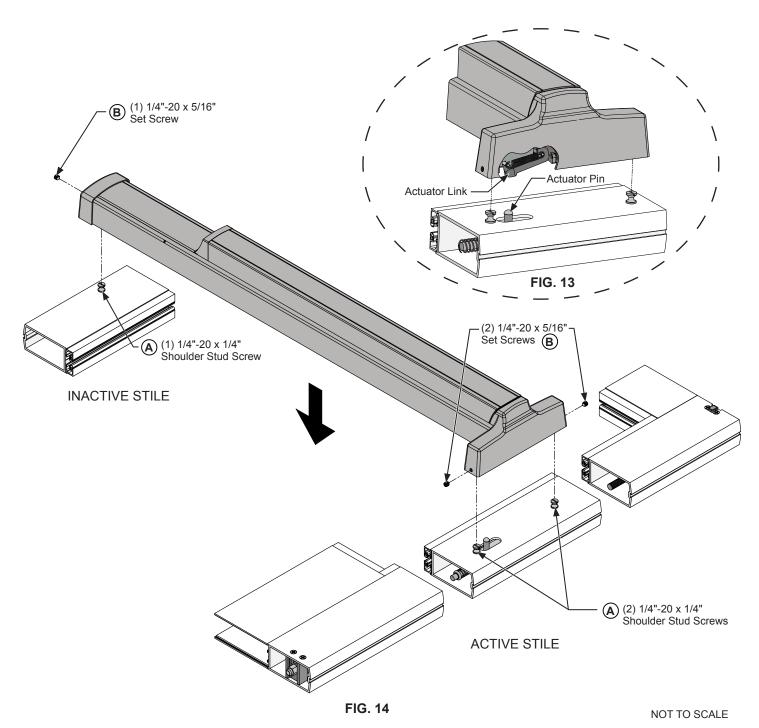


FIG. 12 NOT TO SCALE

# **DOOR HARDWARE INSTALLATION (CONTINUED)**

## **INSTALL 2085 EXIT DEVICE**

- 1. Install the exit device on the door stiles assuring the actuator link engages the actuator pin. (Fig. 13)
- 2. Tighten the (3) set screws (B) on each side of the door stiles. (Fig. 14)



# **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:**

<u>TO DOG</u> Fully depress and hold the Touch Bar, push the Dogging Pin In and Release the Touch Bar. (Fig. 15)

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

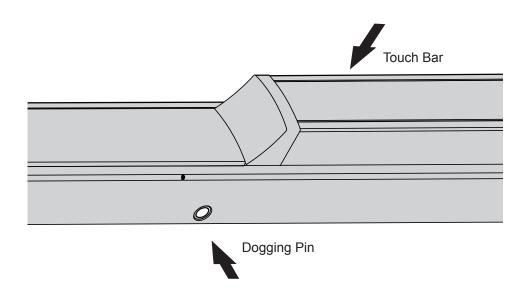


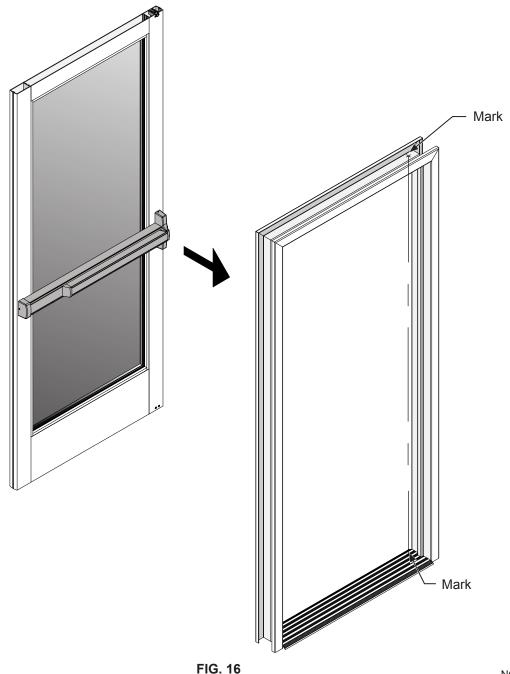
FIG. 15

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. 16)
- 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.



NOT TO SCALE

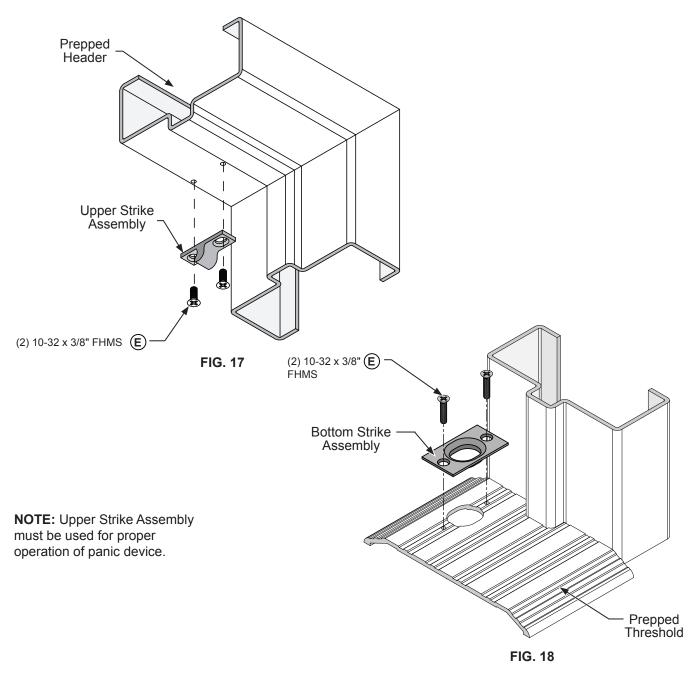
# FRAME PREPARATION (CONTINUED)

#### ATTACH UPPER STRIKE

1. Drill and tap for (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 (2) 10-32 x 3/8" FHMS. (Fig. 17)

#### ATTACH BOTTOM STRIKE

1. Cut out a 1" long x 13/16 wide hole and Drill and tap for (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. 18)



NOT TO SCALE

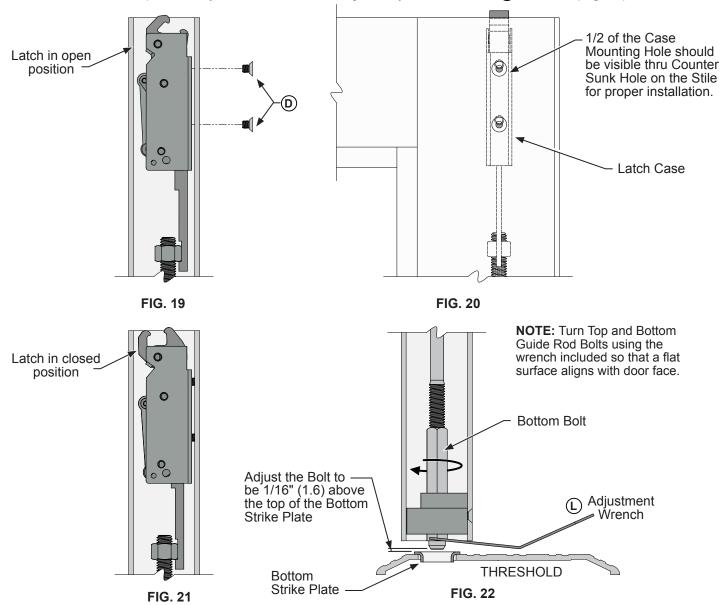
# DOOR HARDWARE ADJUSTMENTS

#### **UPPER BOLT:**

- 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. Remove the (2) ① 10-32 x 1/4" flat head machine screws at the top of the active door stile. Adjust the top latch into the open position. (Fig. 19) Rotate the top latch case until the mounting holes on the latch case are off center to the countersunk holes on the active stile. (Fig. 20) Re-attach and secure the latch case with the ② (2) 10-32 x 1/4" flat head machine screws.

#### **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. (Fig. 21)
- 2. Depress the push bar, The bottom rod will retract and the latch will move to the unlocked position. (Fig. 19) With the latch in this position adjust the bottom bolt using the adjustment wrench (L) included. (Fig. 22)



## DOOR HARDWARE INSTALLATION

#### **MANUAL CHECK:**

Release the dogging mechanism and manually position the upper latch to the locked position. (Fig. 21) The bottom bolt will extend.

#### **OPERATIONS CHECK:**

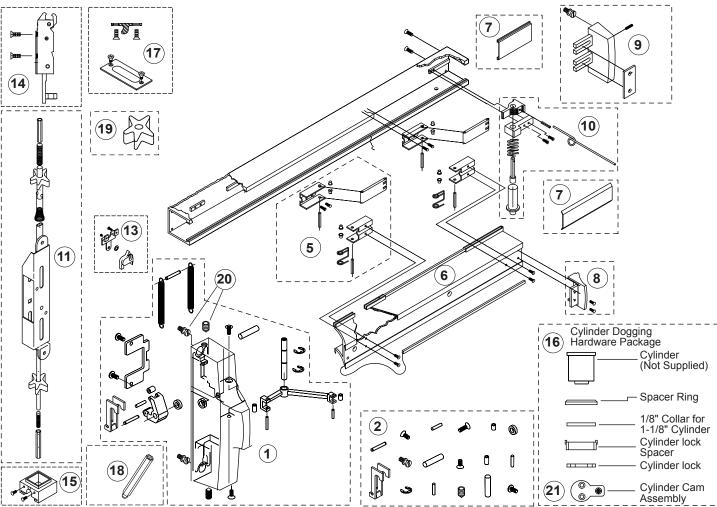
Depress the push bar. The bottom bolt should retract to the bottom edge of the door stile. The upper latch will return to the open position. (Fig. 19)

\*\*Important: If the upper latch returns to the open position with the push bar being partially depressed, or if the upper latch does not go to the open position when the push bar is fully depressed, repeat the dogging procedure and the adjustment steps on page 17. The upper and lower latch might need to be adjusted again. (Fig. 19)

NOT TO SCALE

**CRL** US ALUMINUM

# PACKAGED PARTS AVAILABLE



Assem. No.	Part No.	Description	Assem. No.	Part No.	Description
1	302617	LHRB - Active Head Assembly	14	301311PKG	2085 Top Latch Assembly
Not Shown	302619	RHRB - Active Head Assembly	15	30320	Bottom Bolt Guide Assembly
2	302607	Head Assembly Hardware Package	16	302671	Cylinder Dogging Hardware Pkg.
5	301064	Control Arm Hardware Package	17	301345	Strike Package - Top and Bottom
6	302480PKG	Push-Pad Package	18	30763P	Bottom Bolt (1 Ea.)
7	301063	Base Cover Plate Package	19	301552PKG	Rod Silencers (12 Pkg.)
8	301265	Push-Pad End Cap Package	20	30SBPKG	Mounting Shoulder Bolt and Set Screw Pkg. (12 Ea.)
9	301266	Base End Cap Package	Not Shown	30PBAW	Bolt Guide Adjustment Wrench (2 Pkg.)
10	302467	LHRB - Dogging Assembly	21	302572	Cylinder Dogging Cam
Not Shown	302462	RHRB - Dogging Assembly	Not Shown	301347	Top Rod Extension 12"
11	301287J	Standard Rod and Case Assembly - 7/0	Not Shown	301348	Top Rod Extension 24"
13	30916	Rod and Case Hardware Package			