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**INSTALLATION INSTRUCTIONS FOR DETEX VALUE SERIES® SVR V50 SERIES  
FV50 SERIES, "H" MODEL (HURRICANE), "W" MODEL (WEATHERIZED), V50NS (NARROW STILE)**

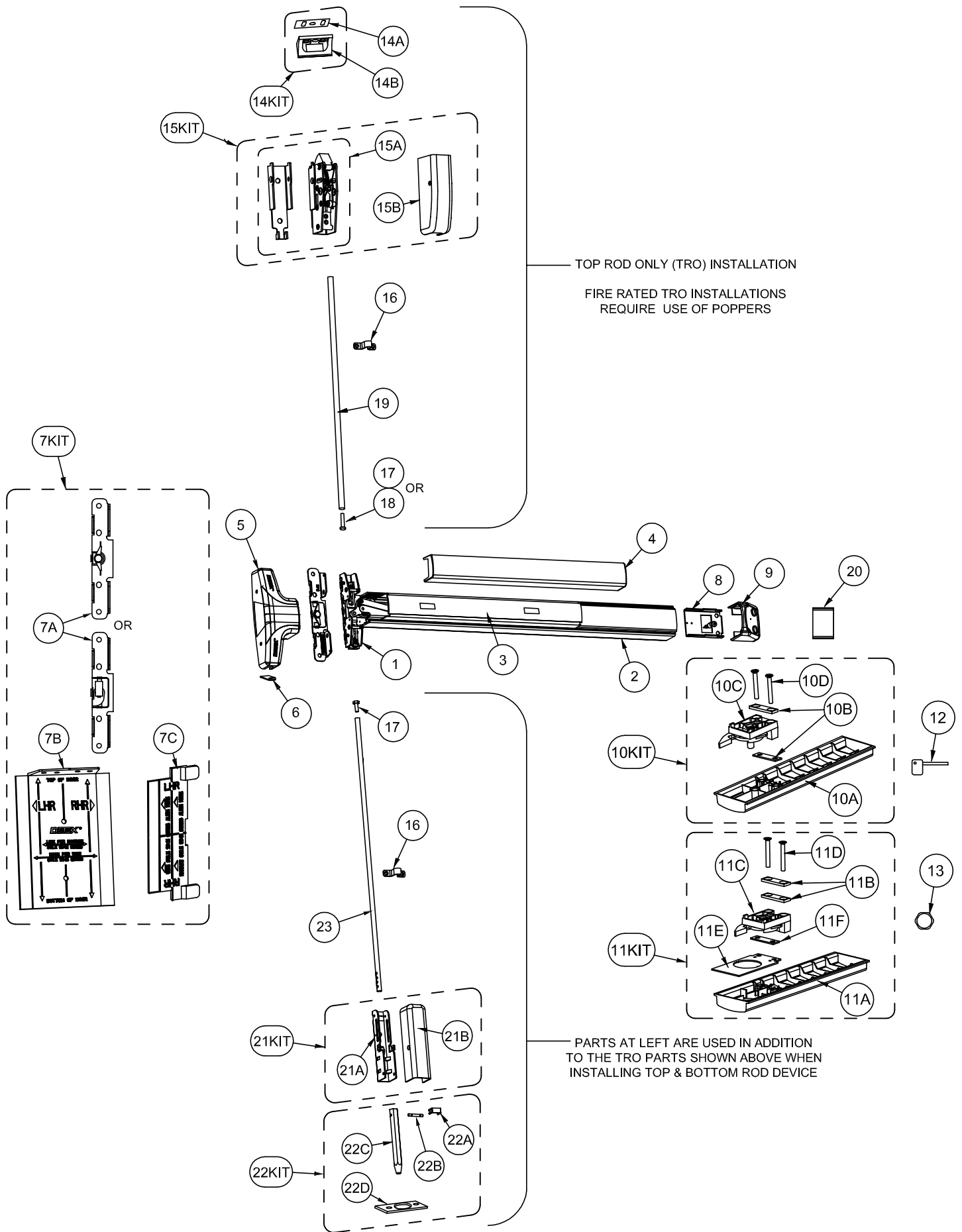
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Dwg #: 102890, 103550, 103560

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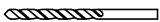
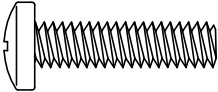



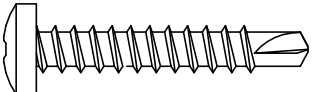
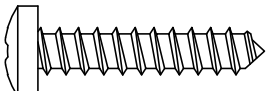

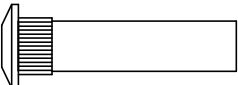
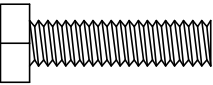

For device installation videos,  
scan code below or  
go to [detex.com](http://detex.com)





PARTS BREAKDOWN		
Item	Order Part #	Description
1	101463-9	Centercase, RHR, Narrow Stile, 50 Series
	101463-11	Centercase, LHR, Narrow Stile, 50 Series
2	106281	Baseplate Extrusion, 36", Silver
	106285	Baseplate Extrusion, 48", Silver
	106289	Baseplate Extrusion, 36", Black
	106290	Baseplate Extrusion, 48", Black
3	103065-1	Pushpad Subassembly, 36"
	103065-2	Pushpad Subassembly, 48"
4	105417-1	Pushpad Wrap, 36", Red (English Text)
	105417-2	Pushpad Wrap, 48", Red (English Text)
	105417-3	Pushpad Wrap, 36", Black
	105417-4	Pushpad Wrap, 48", Black
5	101805-3	Centercase Cover
6	103547	Centercase Cover Cap (for TRO device only)
7KIT	103806-15	Mounting Plate/Strike Locator Kit, Narrow Stile, 96, BP2 (includes 7A, 7B, 7C)
7A	100696-1	Mounting Plate, BP2, Narrow Stile
	100699	Mounting Plate, BP8 for 03 Trim, Narrow Stile
7B	101511-1	Strike Locator
7C	100720	Centercase Locator
8	101844-1	Endcap bracket w/o battery holder
	101844	Endcap bracket w/ battery holder
9	101822	Endcap
10KIT	101803-1	Fillerplate, Subassembly, S&R, Hex Dogging, HD, V50 series, 36" (includes 10A through 10D)
10A	101812-1	Fillerplate, HD, 36"
	101812-2	Fillerplate, HD, 48"
10B	100164	Spacer, dogging bracket, .120" thick
10C	102216-4	Die cast dogging assembly, Hex Dogging (HD)
10D	PP-5802-124	Screw, mach, 10-32 x 1-1/2" PFH
11KIT	102195-1	Fillerplate, Subassembly, S&R, Cylinder Dogging, CD, V50 series, 36" (includes 11A through 11F)
11A	102194-1	Fillerplate, CD, 36"
	102194-2	Fillerplate, CD, 48"
11B	100164	Spacer, dogging bracket
11C	102216-3	Die cast dogging assembly, Cylinder Dogging (CD)
11D	PP-5802-124	Screw, mach, 10-32 x 1-1/2" PFH
11E	102196	Bracket, fillerplate, CD, V50
11F	100938	Spacer, dogging bracket, .060" thick
12	100450	Hex Key (for Hex Dogging)
13	100783	Cylinder Nut (for Cylinder Dogging)
14KIT	100855-4	96 Strike Kit (includes 14A, 14B)
14A	101067	Strike Shim, Narrow
14B	100330	Strike, Non-roller, Narrow
15KIT	104071	Top Latch Assembly (includes 15A, 15B & cover screws)
15A	101464	Top Latch Assembly
15B	103545	Top Latch Cover
16	104073-1	Rod Guide Kit (1 guide with hardware)
	104073-2	Rod Guide Kit (2 guides with hardware)
	104073-3	Rod Guide Kit (3 guides with hardware)
17	101574-1	Bolt, 1/4-20 x 1"
18	101574-2	Bolt, 1/4-20 x 2"
19	104051-3	Top Rod (7' application)
	104051-4	Top Rod (8' application)
	103073-1	Top Rod (10' application)
20	101825-1	Narrow Stile Insert
21KIT	104070	Kit, Bottom Bracket/Cover (includes 21A, 21B & cover screws)
21A	103555	Bottom Bolt Bracket Subassembly
21B	103652-1	Cover, Bottom Latch
22KIT	104072	Kit, Bottom Bolt (includes 22A, 22B, 22C, 22D)
22A	103551	Bolt Clip
22B	103533	Pin, Bottom Bolt
22C	103536-1	Bottom Bolt
22D	103566	Strike, Bottom, with mounting hardware
23	103544	Bottom Rod

Your particular part or configuration may not be shown:  
Contact Detex technical support at 800-729-3839 (option 2)

<b>Hardware Table for BASIC device mounting.</b> <b>Additional hardware is provided per the device configuration in kit form and is addressed on the appropriate pages as required</b>		
	Fastener Part No	Drill Bit 
	P/N: 100980 1/4-20 x 1" PPH	#7 or 13/64"
	P/N: 101621-5 1/4-20 x 1/4" PPH	#7 or 13/64"
	P/N: 100156-104 8-32 x 1/4" PFHU	-----
	P/N: 100162-106 6-32 x 3/8" PFHU Stainless Steel	-----
	P/N: 100162-506 6-32 x 3/8" PFHU 316 Stainless Steel	
	P/N: 103276-65 #14 x 1-1/2" PPH SELF DRILLING	1/8 pilot hole recommended for self-drilling screws
	P/N: PP-5183-110 #14 x 1-1/4" PPH WOOD SCREW	-----
	P/N: PP-5067-25 #14 Lockwasher Zinc plated	
	P/N: 106364-25 #14 Lockwasher Stainless Steel	
	Optional Sex Nuts can be used for thru-bolting the device to the door. Catalog No: SN1 (quantity 2 per order)  NOTE: <b>HURRICANE</b> rated devices <b>MUST BE</b> thru-bolted using either sexnuts or outside mating trim	9/32" on interior door face  3/8" on exterior door face
	P/N: 101574-1 1/4-20 x 1" BOLT	
	P/N: 101574-2 1/4-20 x 2" BOLT	

### Tools Required:

Power Drill

Level

Combination Square

Safety Glasses

Pencil

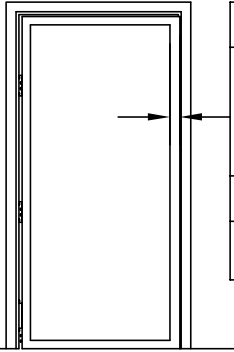
Tape Measure

Center Punch

3 /16" & 5 /32" Allen Wrenches

#2 and #3 Phillips Screw Drivers

# !!!CHECK BEFORE STARTING!!!



Wide Stile (Surface Strike)
Minimum door stile 4-1/2" (114 mm). Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile
Minimum door stile 2" (51mm)

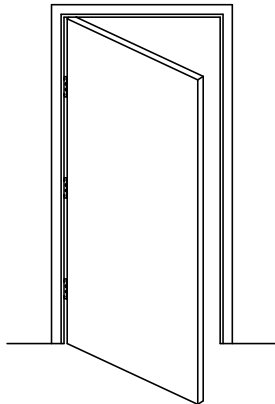
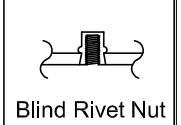
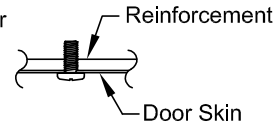
Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

Unreinforced Doors: Use Sex Nuts and Bolts

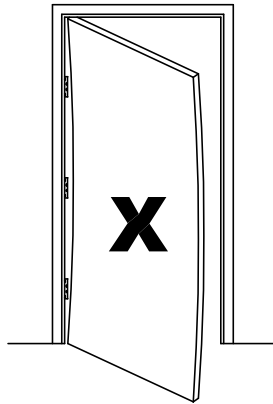
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)

Fasteners for unreinforced openings are not supplied by Detex.

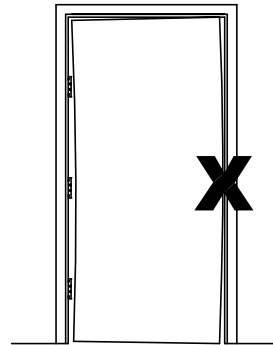
Reinforced door or frame engages at least (3) screw threads.



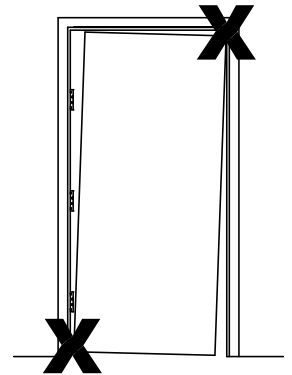
Door Must Swing Freely



Door Must Not be Warped



Door Must Not Bind



Door Must Not Sag

**NOTE:** 750mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 36" DEVICE

1000mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 48" DEVICE

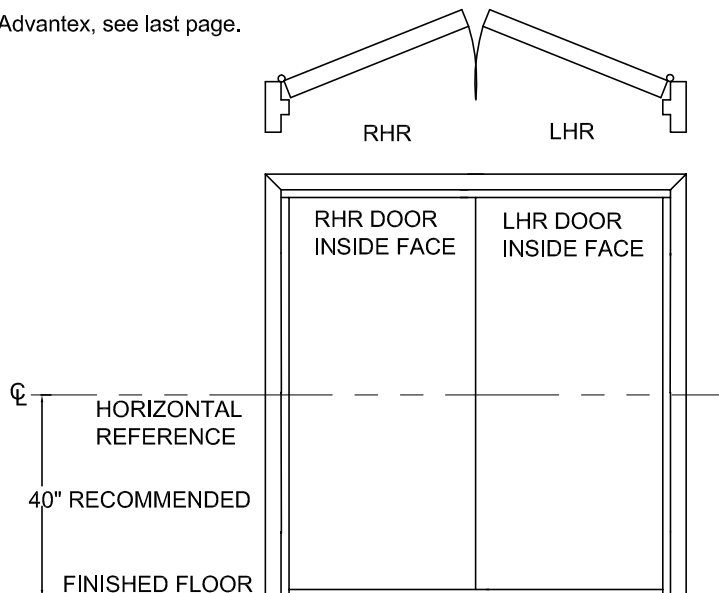
THE SAFETY FEATURES OF THIS PRODUCT ARE ESSENTIAL TO IT'S COMPLIANCE WITH EN 1125.

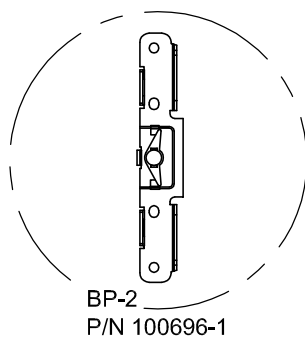
NO MODIFICATION OF ANY KIND, OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS ARE PERMITTED.

WHEN PLACING EXIT DEVICES ON EXISTING DOORS, DETEX OFFERS SVR REINFORCEMENT KIT #101063 TO STRENGTHEN THE TOP & BOTTOM BOLT INSTALLATION

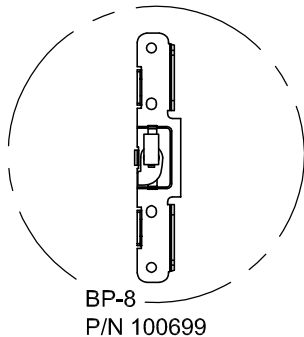
**NOTE:** LOCAL CODES MAY REQUIRE THROUGH BOLTING. SEX NUTS ARE **NOT** INCLUDED WITH THIS DEVICE. SEX NUTS CAN BE PURCHASED SEPARATELY.

Detex provides optional kits for Advantex, see last page.

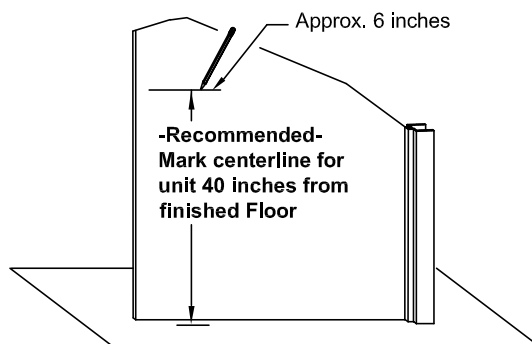




**MOUNTING PLATE FOR  
USE WITH LEVER TRIM**

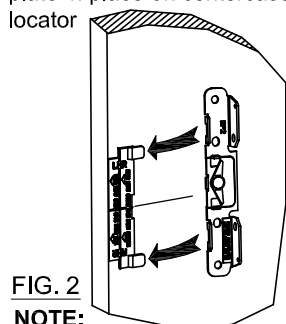


**MOUNTING PLATE FOR  
USE WITH 03 TRIM**



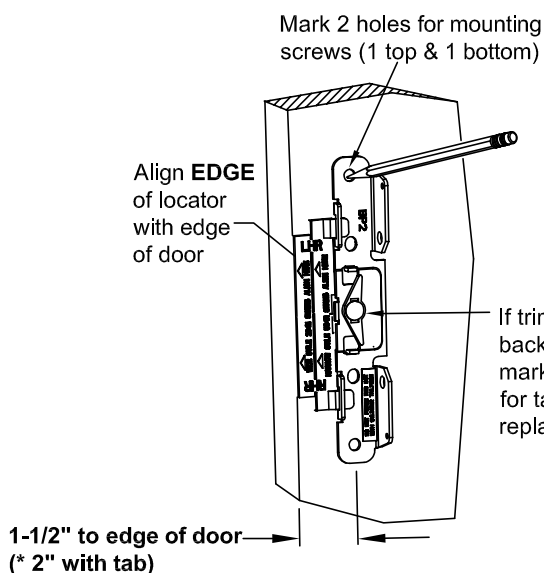
**FIG. 1**

Slide centercase mounting plate in place on centercase locator



**FIG. 2**

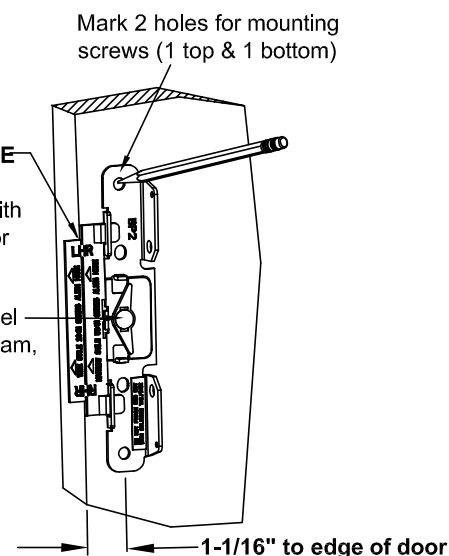
**NOTE:**  
Centercase mounting plate & locator packed in carton next to device



**FIG. 3A**

**WIDE STILE INSTALLATION**  
Typical Installation Min. Stile 3 1/2"

**OR**



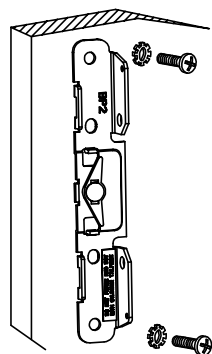
**FIG. 3B**

**NARROW STILE INSTALLATION (NS)**  
Aluminum Door Min. Stile 2"

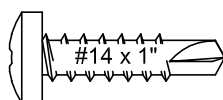
**NOTES:**

Plastic locators are provided with an extra 1/2" flap to allow better centering of the device on the stile or can be used when installing 1/2" Astragal to give equal backset from the door edge.

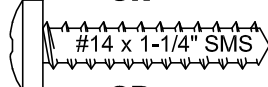
*IF OUTSIDE TRIM IS USED, REFER TO OUTSIDE TRIM INSTRUCTIONS NOW.*



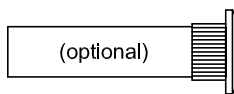
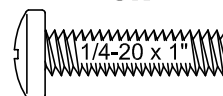
**FIG. 3C**



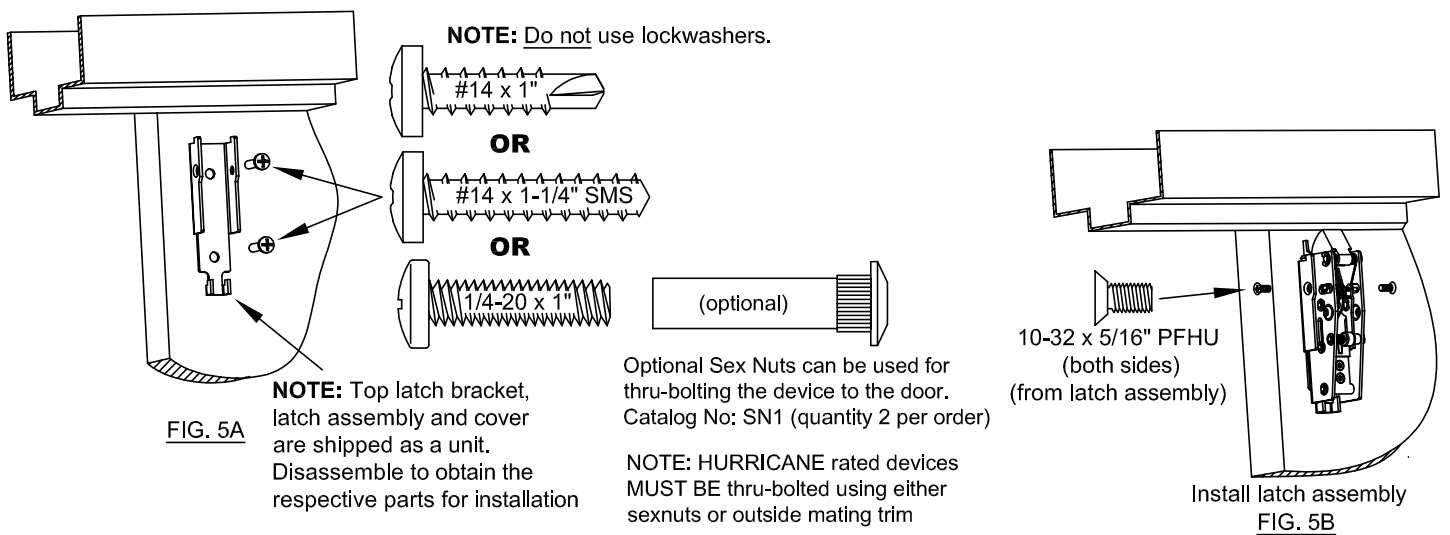
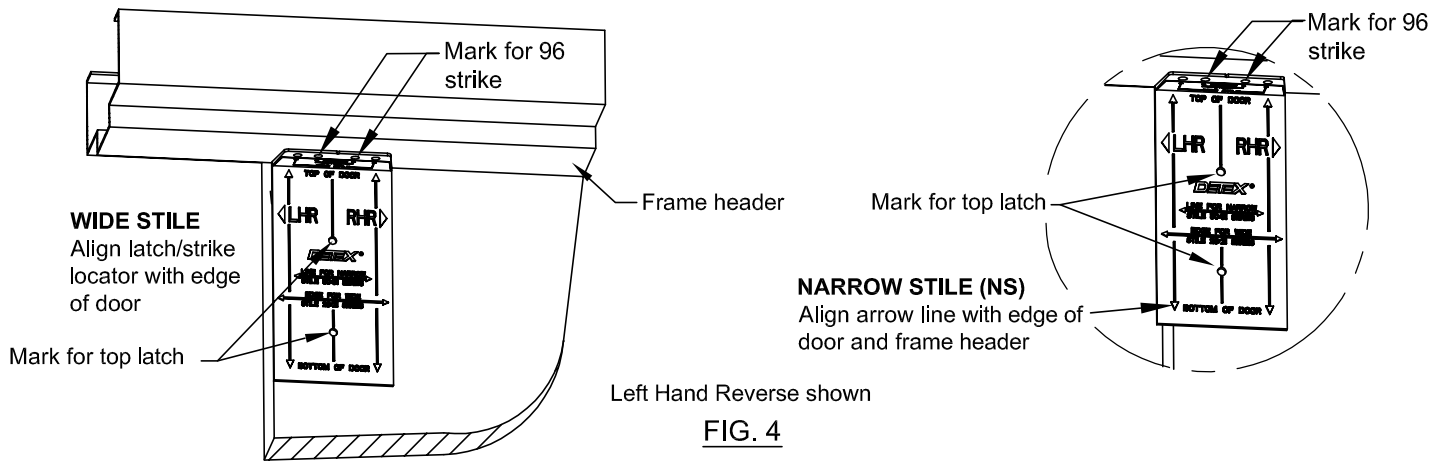
**OR**



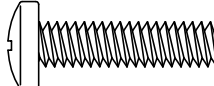
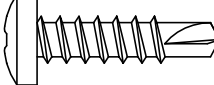

**OR**



Optional Sex Nuts can be used for thru-bolting the device to the door.  
Catalog No: SN1 (quantity 2 per order)

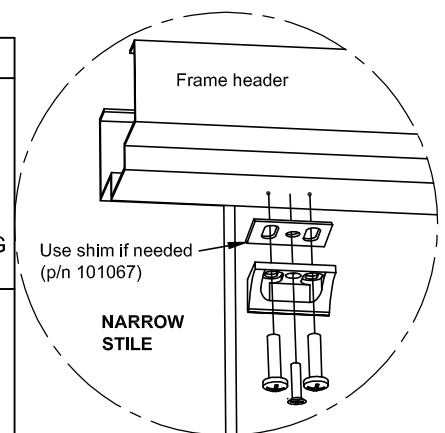


#### INSTALL TOP STRIKE

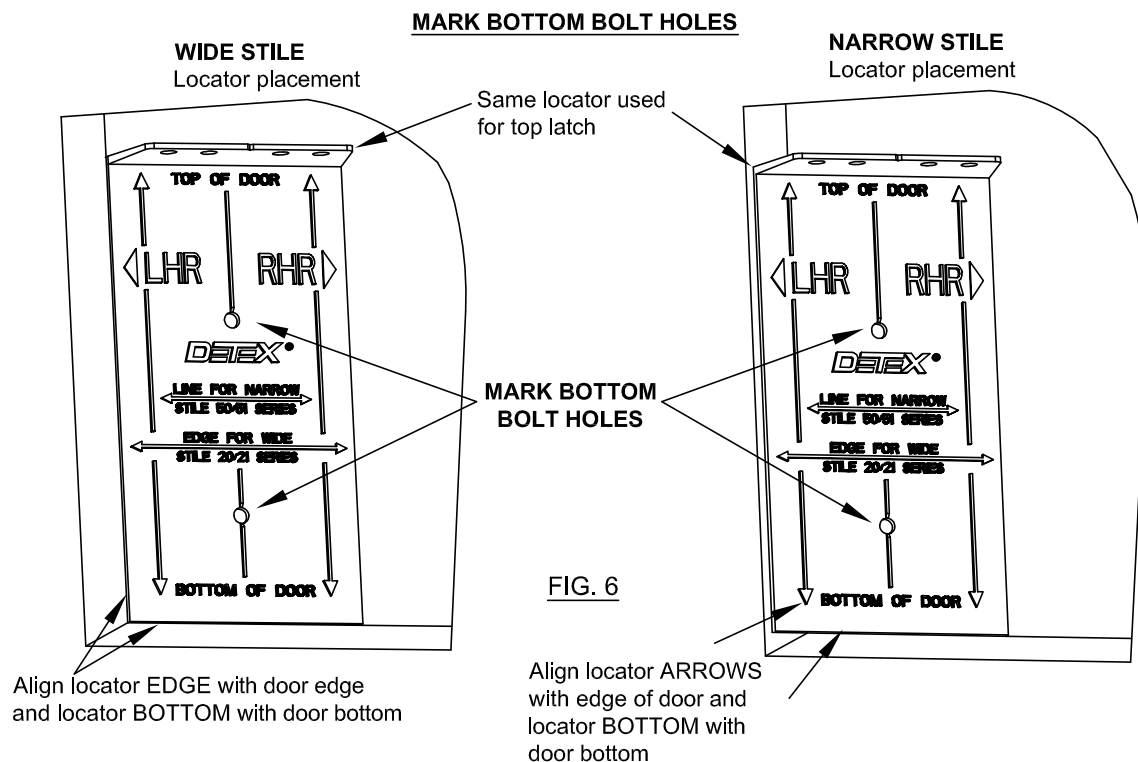
96 Strike Kit p/n 100855-4 hardware		
	P/N: 100980	For (2) outer holes
	1/4-20 x 1" PPH	
	P/N: 103276-63	
	#14 x 1" PPH SELF DRILLING	
	10-24 x 5/8" PFHUMS	For (1) inner hole
	#10 x 1" self-cutting PFHU	

Install inner screw **AFTER** final adjustment  
(See Pg. 13 Adjustment/Troubleshooting, Note #4)

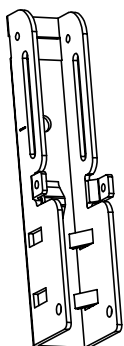
**FIG. 5C**



**NOTE: IF TRO DEVICE, SKIP THIS PAGE AND CONTINUE WITH INSTALLATION**

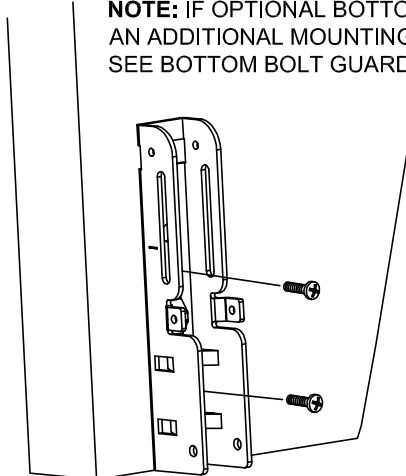


**NOTE:** BOTTOM BRACKET IS NON-HANDED AND MAY BE USED FOR RHR AND LHR APPLICATIONS

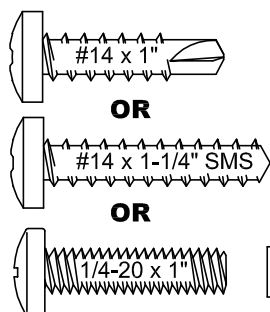


**FIG. 7A**

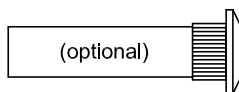
**NOTE:** IF OPTIONAL BOTTOM BOLT GUARD WILL BE USED, AN ADDITIONAL MOUNTING BRACKET IS REQUIRED. SEE BOTTOM BOLT GUARD INSTALLATION INSTRUCTIONS.



**FIG. 7B**



**NOTE:** Do not use lockwashers.



Optional Sex Nuts can be used for thru-bolting the device to the door. Catalog No: SN1 (quantity 2 per order)

**NOTE:** HURRICANE rated devices **MUST BE** thru-bolted using either sexnuts or outside mating trim



AFTER POSITIONING DEVICE AGAINST DOOR,  
 INSTALL 1/4-20 x 1/4" PPH SCREWS.  
**CAUTION: MUST INSTALL TO SECURE CENTERCASE**  
**NOTE: FAILURE TO INSTALL VOIDS WARRANTY**

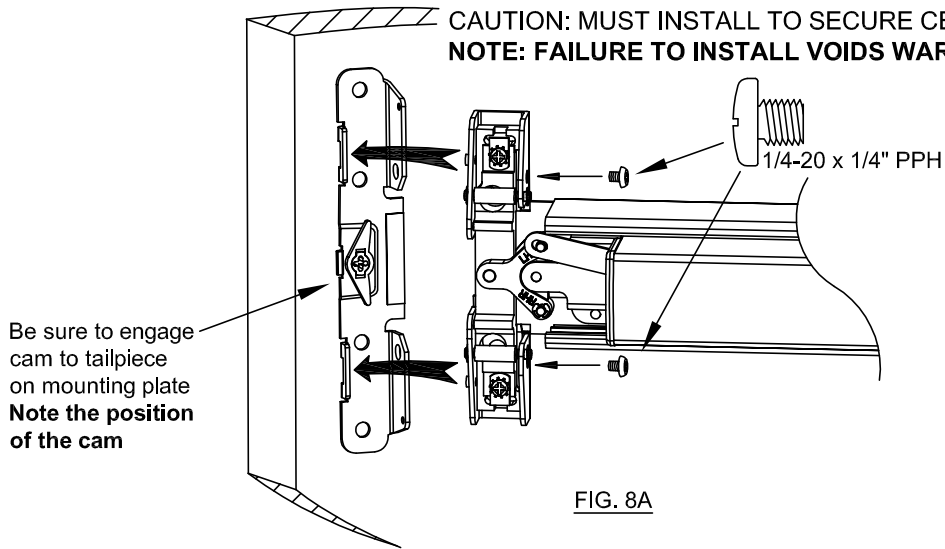


FIG. 8A

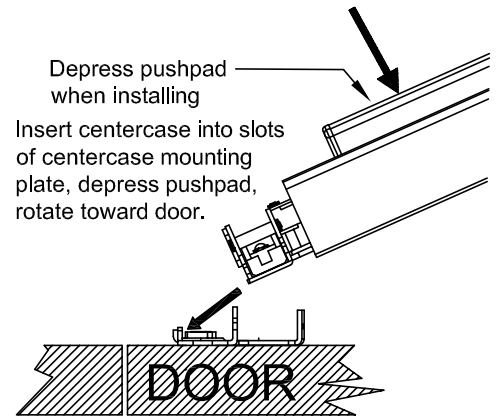
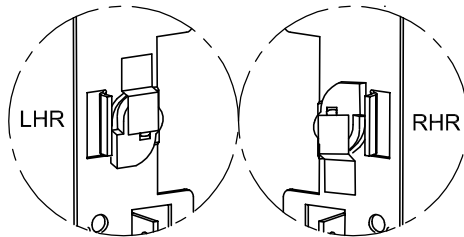


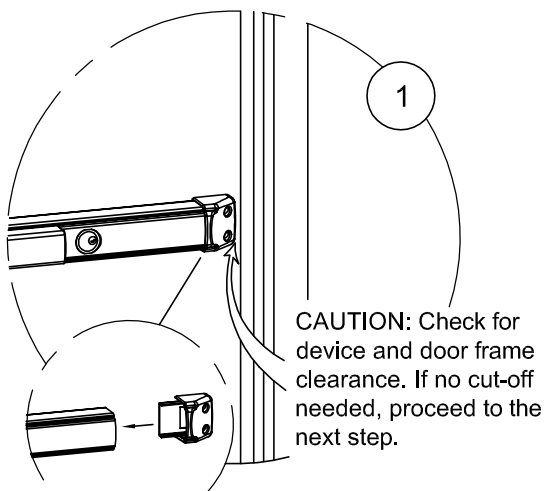
FIG. 8B



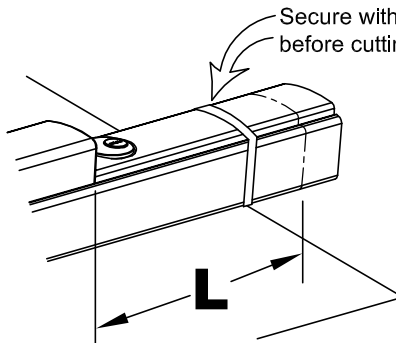
Be sure to engage  
 cam to tailpiece  
 on mounting plate  
**Note the position  
 of the cam**

FOR 03 FUNCTION ONLY

## CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)



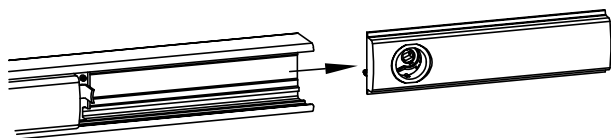
- 2 Cut fillerplate and extrusion  
 STRAIGHT & SQUARE to  
 desired length and deburr  
 Secure with tape  
 before cutting



Non-Electrified Minimum Fillerplate Length	
Type	Length (L)
LD	2-1/2"
HD/CD	3"

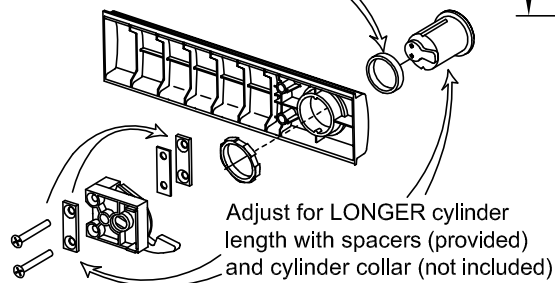
For further Cut-Down  
 information, see:  
[www.detex.com/cutdown](http://www.detex.com/cutdown)

## MORTISE CYLINDER INSTALLATION CD (Cylinder Dogging) (if required)

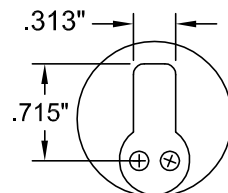


Slide / remove the fillerplate subassembly

1/4" collar (not supplied)  
required for 7 pin cylinder.  
(Detex p/n: ECL-1595)



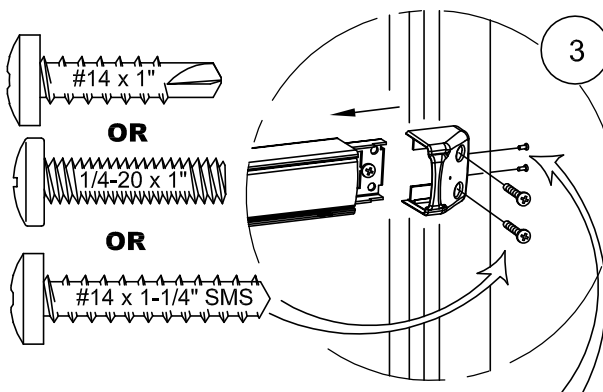
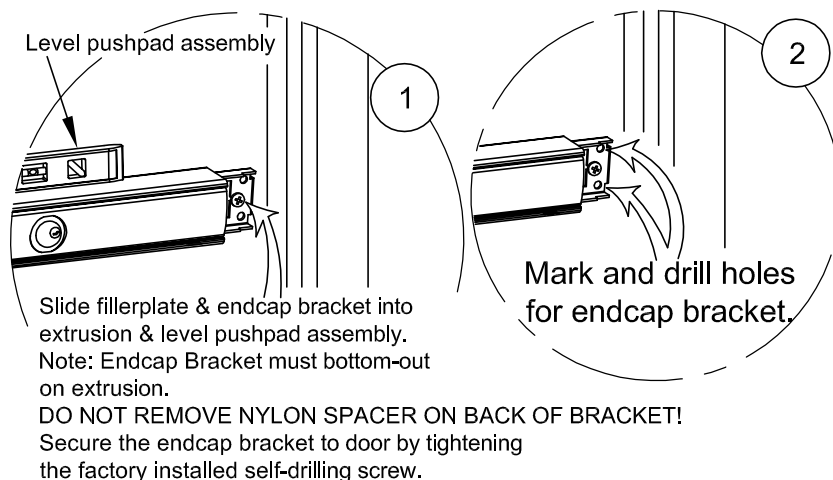
Adjust for LONGER cylinder  
length with spacers (provided)  
and cylinder collar (not included)



Mortise Cylinder  
with standard Yale  
cam required

Follow steps "a" through "g" for CD installations

- a. Remove endcap and endcap mounting bracket.
- b. Remove fillerplate.
- c. Remove and discard shipping insert and nut.  
Loosen (2) screws from dogging assembly.
- d. Install mortise cylinder (sold separately) with large hex nut provided.
- e. Trial fit dogging assembly. If cylinder is too short, remove spacers as necessary and reattach them under the (2) screw heads (see above).  
Fasten the (2) screws to the rest of the assembly.
- NOTE: The key should easily turn in both directions.
- f. Rotate key counterclockwise
- g. Assembly complete. Continue with Panic Hardware instruction.



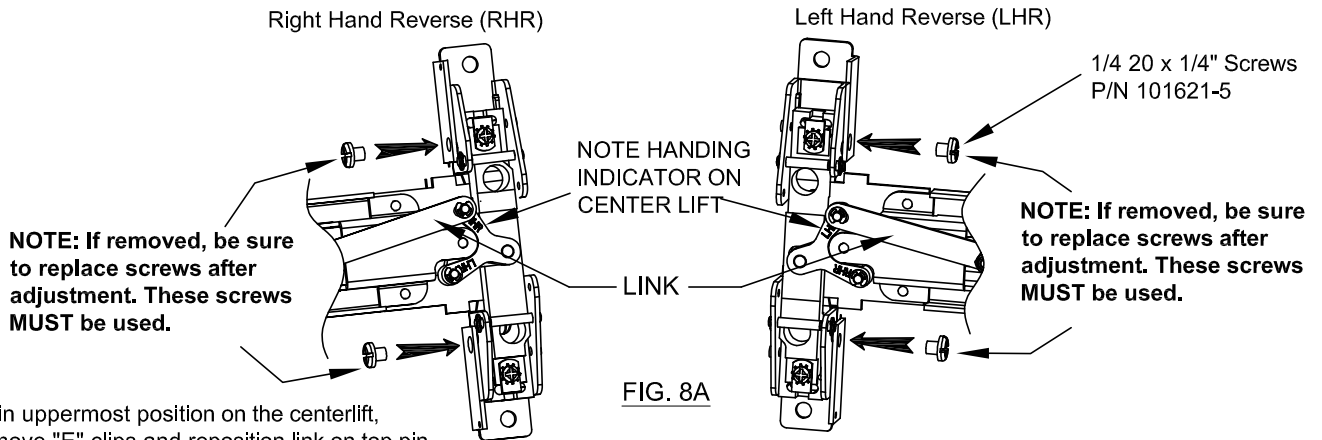
**IMPORTANT:**  
Install (2)  
6-32 FH screws  
for added security



6-32 x 3/8" PFHU

## CORRECT HANDING OF DEVICE

**NOTE:** LINK SHOULD ALWAYS BE IN TOP POSITION

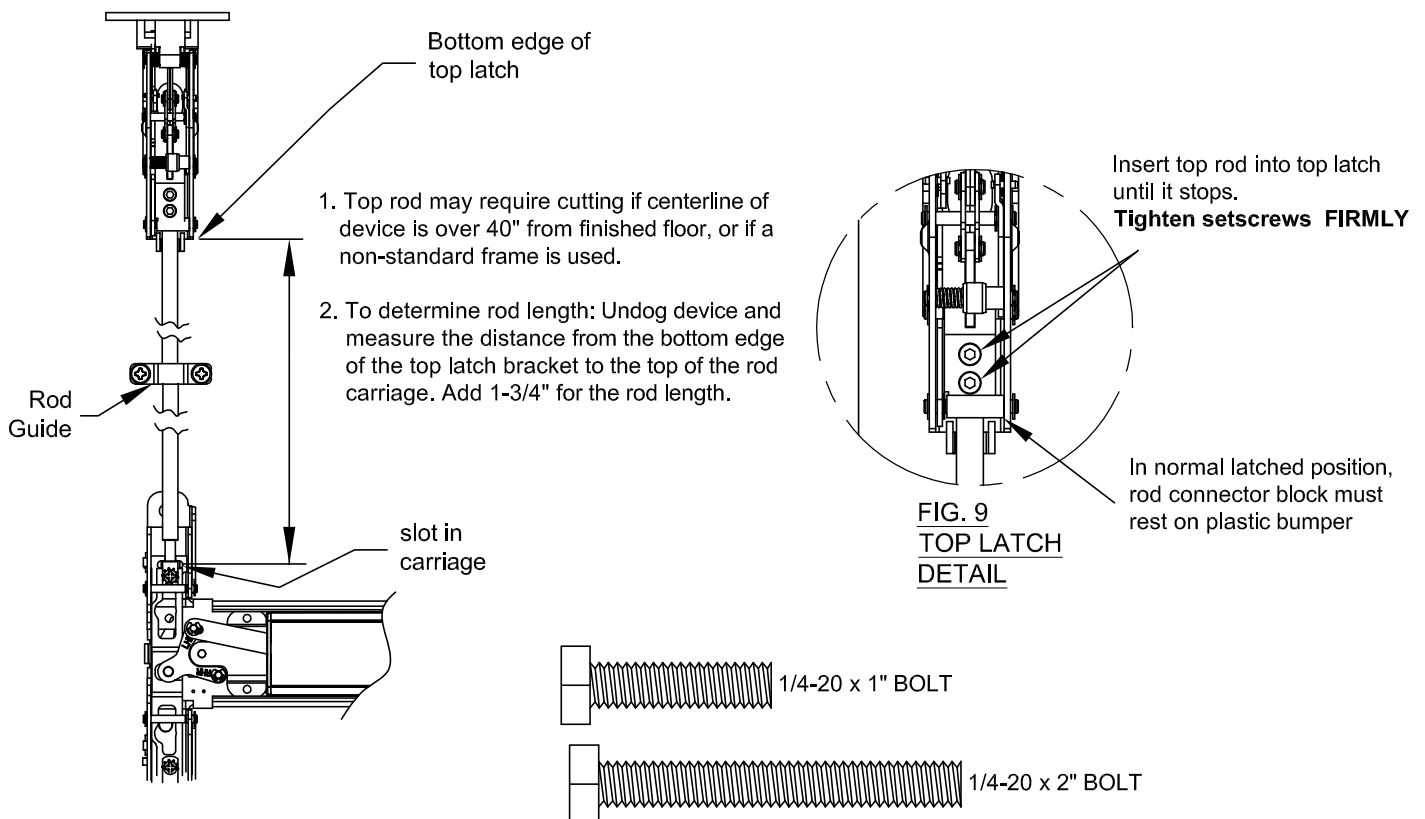


### NOTE:

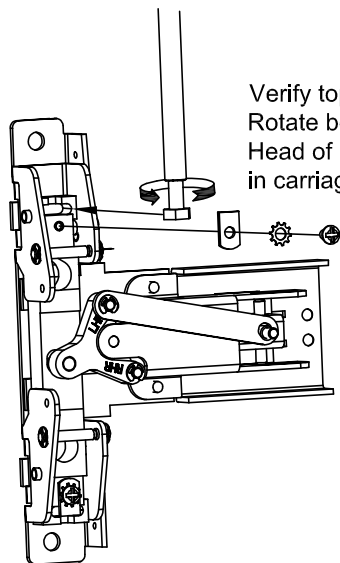
If link is not in uppermost position on the centerlift, carefully remove "E" clips and reposition link on top pin of the centerlift and replace "E" clips.  
(An additional "E" clip is provided on opposite link pin.)

Verify carriage moves up and down smoothly when pushpad is depressed and released.

## TOP ROD INSTALLATION

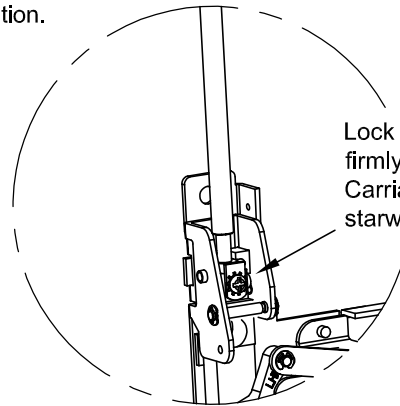


## TOP ROD INSTALLATION (CONT.)



Verify top latch bolt is in fully extended position.  
Rotate bolt for rod height adjustment.  
Head of bolt should drop freely into slot  
in carriage.

FIG. 10



Lock Bolt head  
firmly in place in  
Carriage with plate,  
starwasher and screw.

FIG. 10 - Detail

TOP ROD ONLY (TRO)  
ADJUSTMENT / TROUBLESHOOTING

### TOP LATCH TESTING AND ADJUSTMENT

1. Close the door. The holdback lever should engage the backside of the strike, allowing the latchbolt to extend. The device should latch securely and latchbolt should fully project into the strike cavity.
2. Press the pushpad. The latchbolt should retract fully and smoothly from the strike as the door opens.
3. Release the pushpad. The latchbolt should remain retracted until the door is closed.
4. Once the latchbolt operation has been evaluated, the strike should be checked and adjusted to allow the door to be held snug to the frame but allow free movement of the latchbolt during normal operation. When the appropriate position has been set, a third hole should be marked, drilled and tapped for a #10 machine or use a #10 self drilling screw. Lock the strike in position with this third screw. (See Fig. 5C)

**NOTE:** For centerline heights significantly higher or lower than the recommended 40", it may be necessary to use shorter or longer adjustment hexbolts in the rods to effect appropriate adjustment. For some door heights it may be necessary to cut the rod. Be sure to cut the **un-threaded** end. If this is done, we recommend rod covers be used to prevent exposed bolt threads.

### TROUBLESHOOTING

#### 1. Latchbolt does not completely relatch when closing the door

Loosen the strike screws and adjust the strike to allow the latchbolt to completely extend into the strike.  
Tighten the screws and add the third center screw to lock the strike in place.

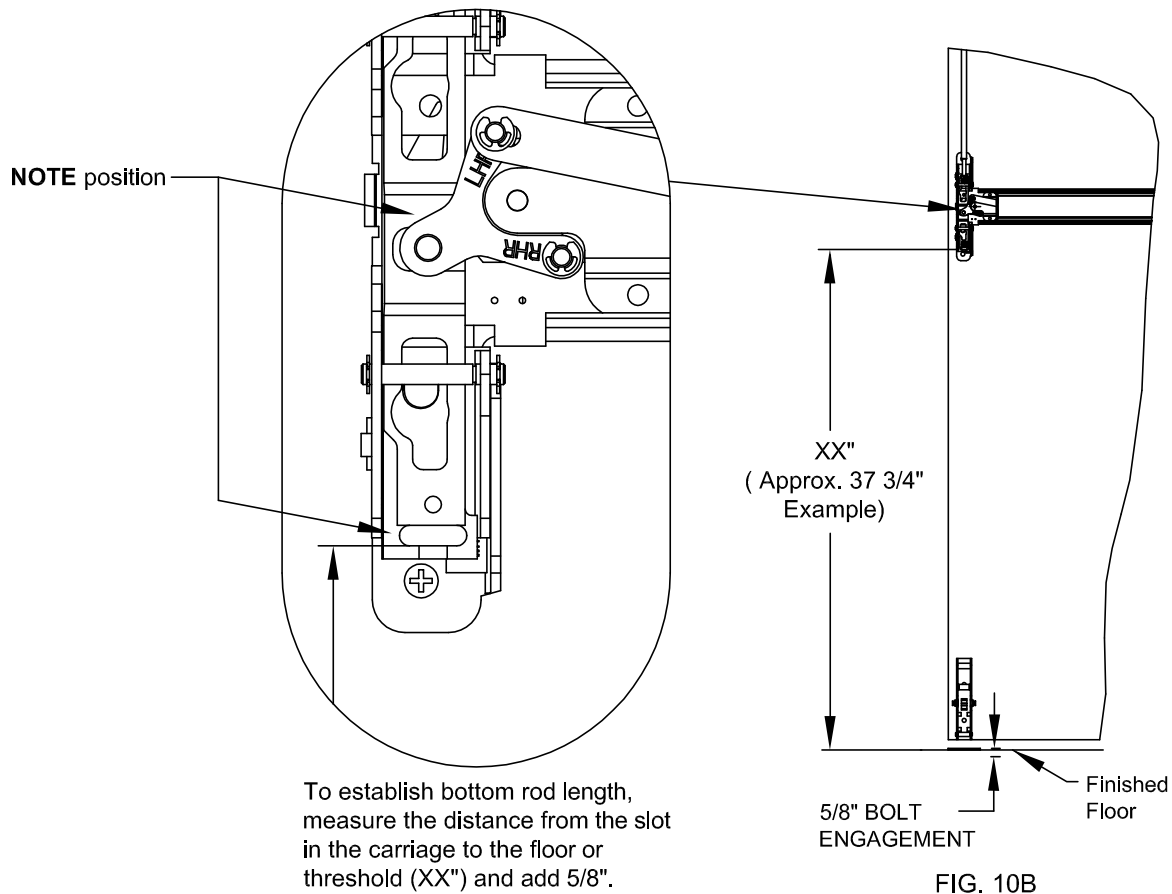
#### 2. Latchbolt fails to retract when pushpad is pushed

Check centercase assembly and verify that the link is attached to the **TOP** post of the centerlift assembly (see Fig. 8A), or shorten top rod by rotating bolt. Relock bolt into carriage.

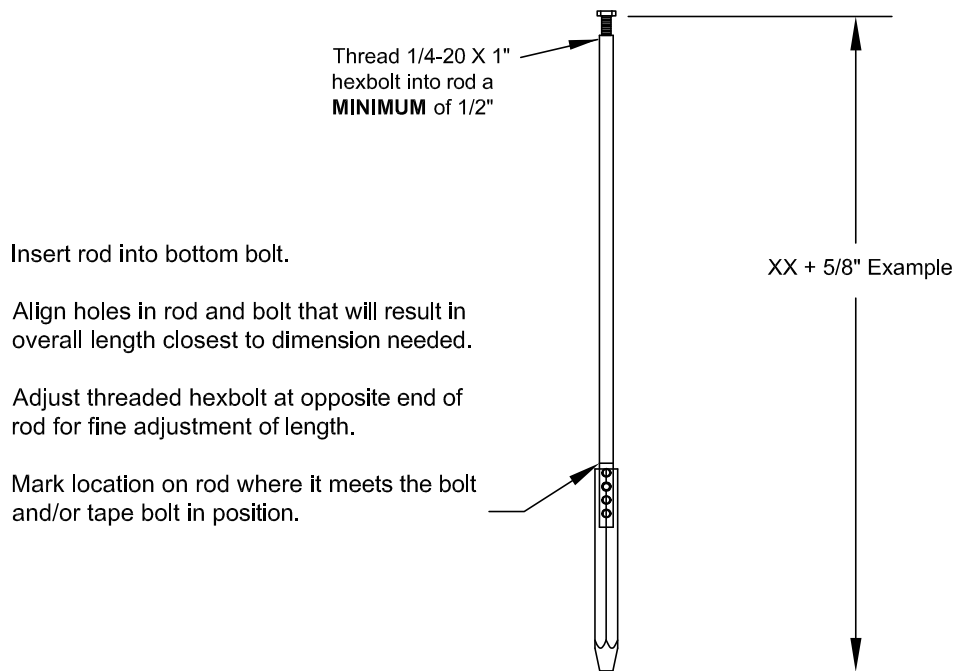
#### 3. Latchbolt is slow or does not completely extend when door closes.

Check rod adjustment (Fig 10).  
Check centercase, verify that the 1/4-20 x 1/4" screws have been installed (See Fig. 8A).

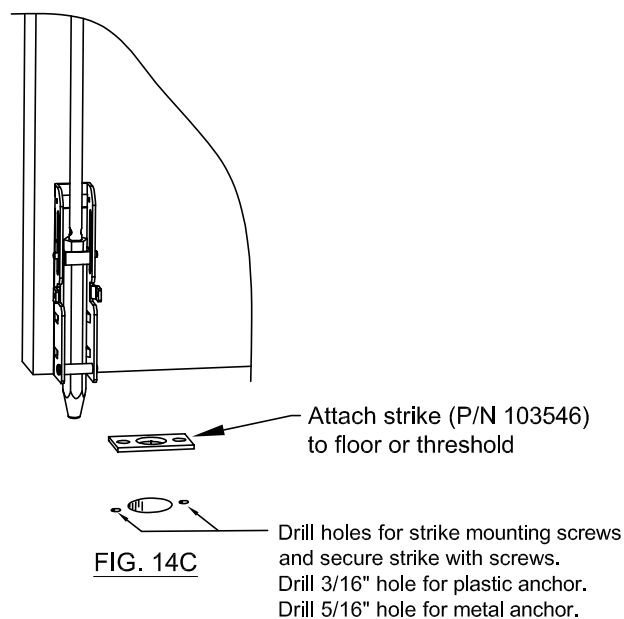
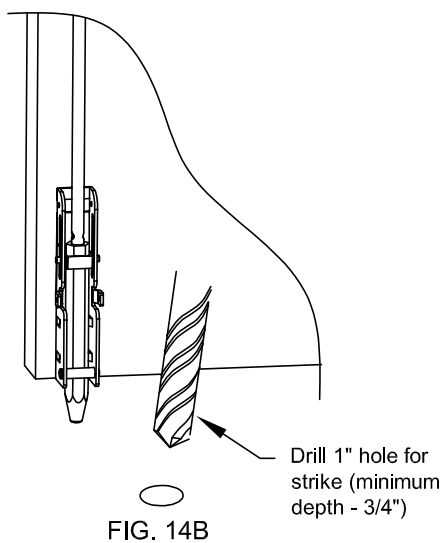
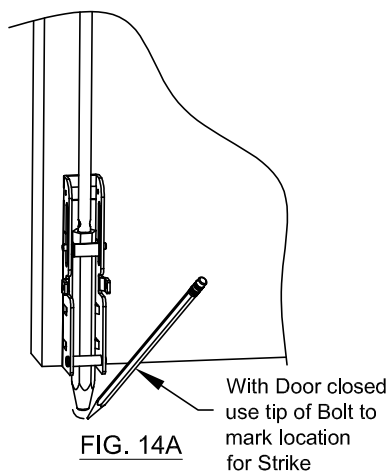
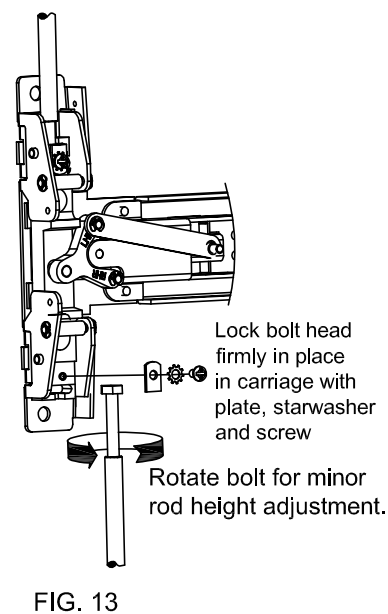
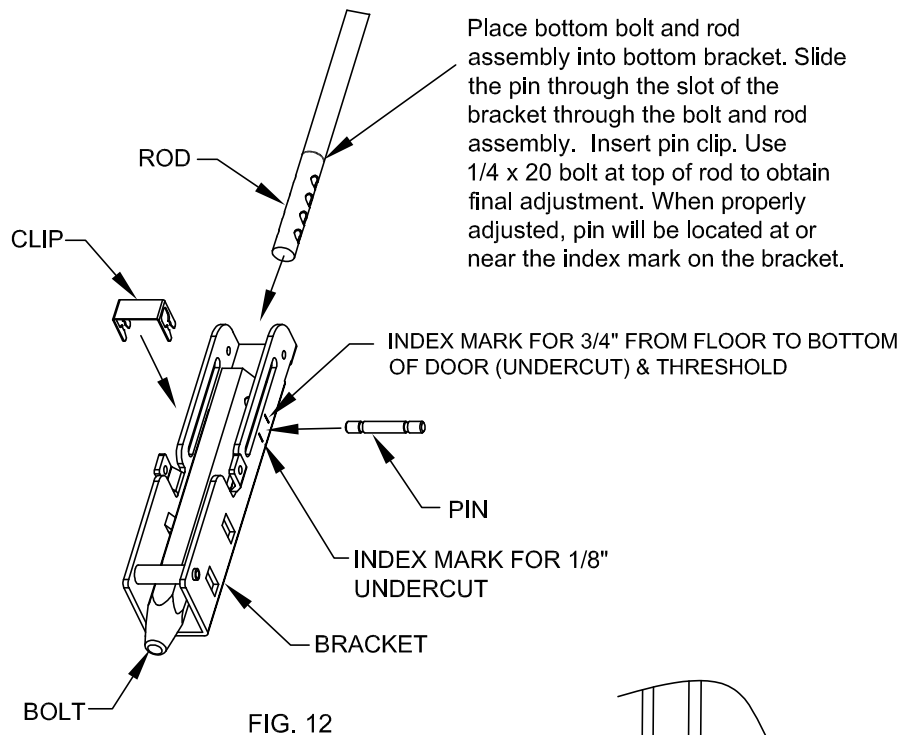
**NOTE: IF TRO DEVICE, SKIP THIS PAGE AND CONTINUE TO PAGE 15**



**FIG. 10B - Detail**



**FIG. 11**



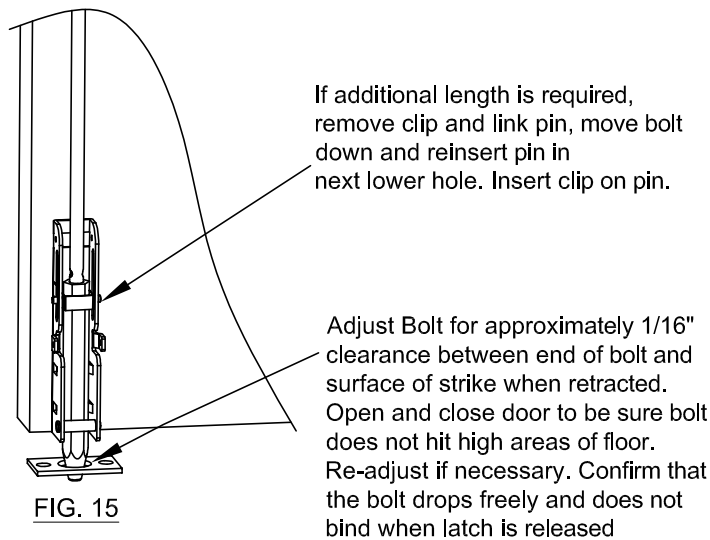


FIG. 15

#### BOTTOM LATCH Testing and Adjustment

##### Testing

1. Close the door; bolt should drop into the strike as the door moves into the fully closed position.
2. Press the pushpad and open the door. The bottom latch bolt should retract out of the strike and clear the strike by 1/16" to 1/8". Vertical travel of the bolt should be 3/4".
3. Release the pushpad; bolt should remain retracted until the door is closed.

##### Adjustment

##### 1. If bottom bolt drags the floor or hits edge of strike:

Loosen bolt retainer in the carriage assembly and pull bolt from carriage. Screw bolt onto bottom rod one or two turns and return it to the carriage. Test door to assure clearance and secure bolt in carriage by tightening bolt retaining plate.

## FIRE RATED TOP ROD ONLY (TRO) DOORS

A door locking popper (Detex p/n 101563) is required when a fire door utilizes a top latching mechanism only (TRO). The popper is designed to project a spring loaded bolt into the adjacent frame or door in the event of fire. Detex recommends installing the popper in the edge of the door 12" above the threshold or finished floor

**Holes for the popper and plug must be aligned with each other.**

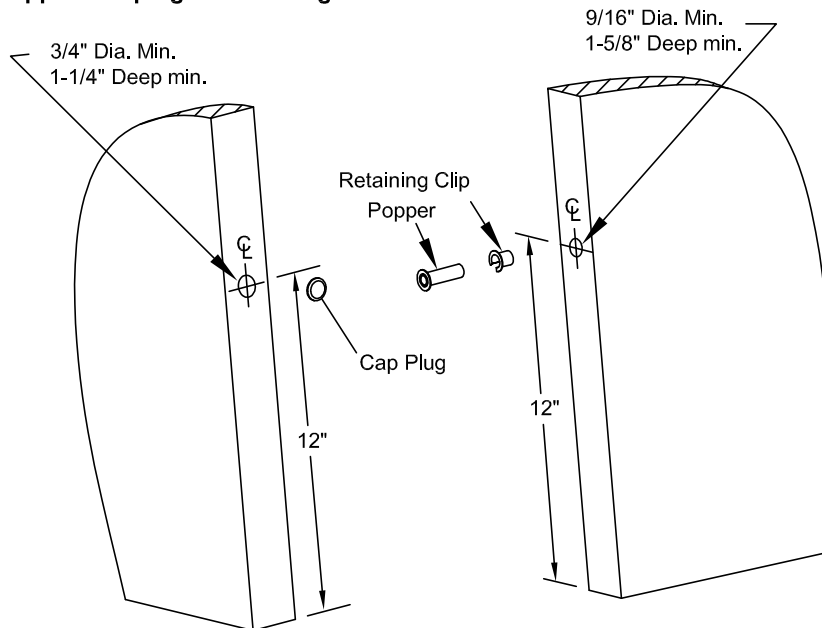
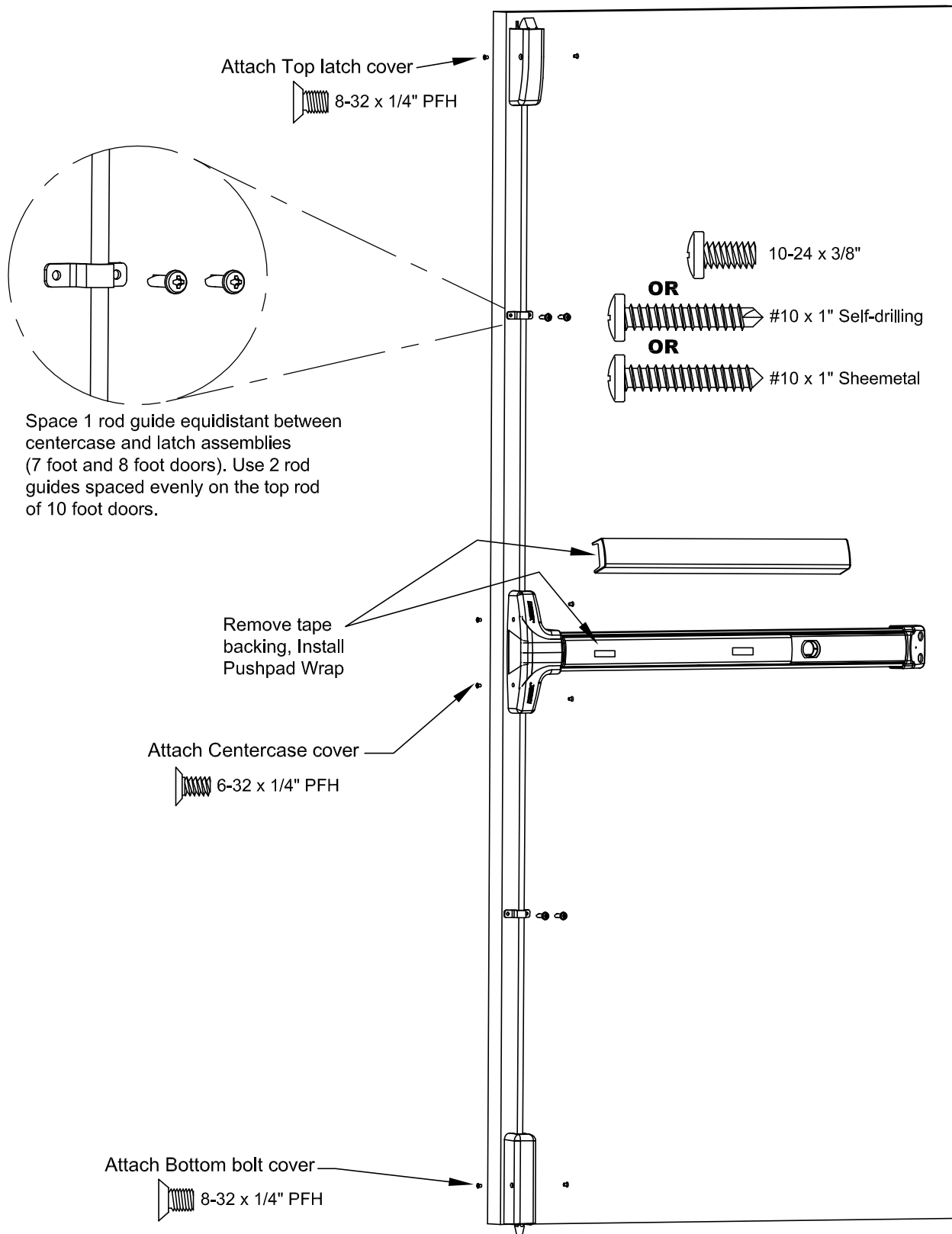


FIG. 16

**NOTE:** Door/Frame reinforcement is required where popper and cap plug are to be installed.

## STANDARD SURFACE VERTICAL INSTALLATION

1. If metal bottom bolt guard is to be used, do not attach the plastic bottom latch cover (refer to bottom bolt guard installation instructions.)
2. If rod covers are to be used, do not install rod guides (refer to rod cover installation instructions).

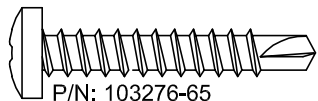




## Optional Accessories

### Glass Bead Kit

Catalog No: GB5 or GB6



P/N: 103276-65

#14 x 1-1/2" SELF DRILLING



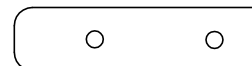
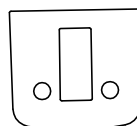
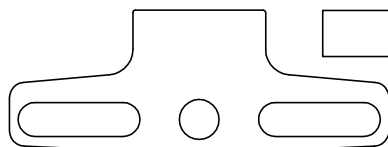
P/N: 103276-43

#10 x 1-1/2" SELF DRILLING



P/N: PP-5378-104

8-32 x 1/4" PPH



### Rod Cover/Bottom Bolt Guard Kit

P/N:

103558-1 V50x84xRCxBG

103558-2 V50x96xRCxBG

103558-3 V50x120xRCxBG

103558-4 V51x84xRC

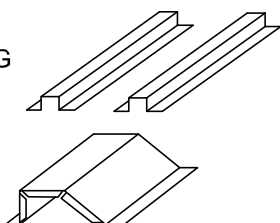
103558-5 V51x96xRC

103558-6 V51x120xRC

103558-7 V50x84xRC

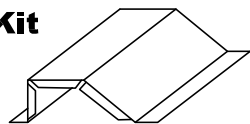
103558-8 V50x96xRC

103558-9 V50x120xRC



### Bottom Bolt Guard Kit

P/N: 103562



### Sex Nut (quantity 2 per kit)

The #1/4-20 kit is available in (4) finishes:

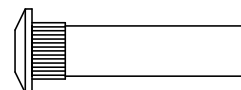
Catalog No: SN1 Brushed Brass BHMA 606 Finish

Catalog No: SN1 Oil Rubbed Bronze BHMA 613 Finish

Catalog No: SN1 Brushed Chrome BHMA 626 Finish

Catalog No: SN1 Stainless Steel BHMA 630 Finish

p/n: 101616-630

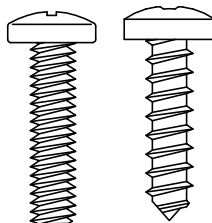
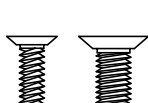


### Tamper Kit

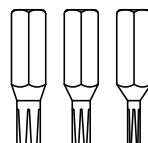
(Security Kit)

Catalog No: SSK3

p/n: 101233



Security Screws



Security Pin TORX®  
Bits provided

### Key Stop Kit

Catalog No: KS

p/n: 101867

Requires a .05 hex  
wrench (not  
included)

Dogging Lever Assembly  
(shown for reference ONLY)



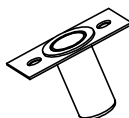
### Wood Door Screw Kit

Part No: 103991



### Dustproof Strike Kit

Part No: 101562-X



103123 Pg 17

### Cylinder nut socket kit

p/n: 103779

