

Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
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INSTALLATION INSTRUCTIONS FOR 70/71 SERIES CVR WOOD DOOR CONCEALED

ADVANTEx®

Concealed Vertical Rod Exit Device
70 / F70 / 71 / F71 Series
for Medium to Wide Stile
Wood / Composite door applications
Drawing No. 105270

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For WARRANTY information,
scan code below or
go to www.detex.com/warranty



Owner's Copy

Should you have a Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

For device installation videos,
scan code below or
go to www.detex.com/videos



Device Parts Breakdown View

* Note:

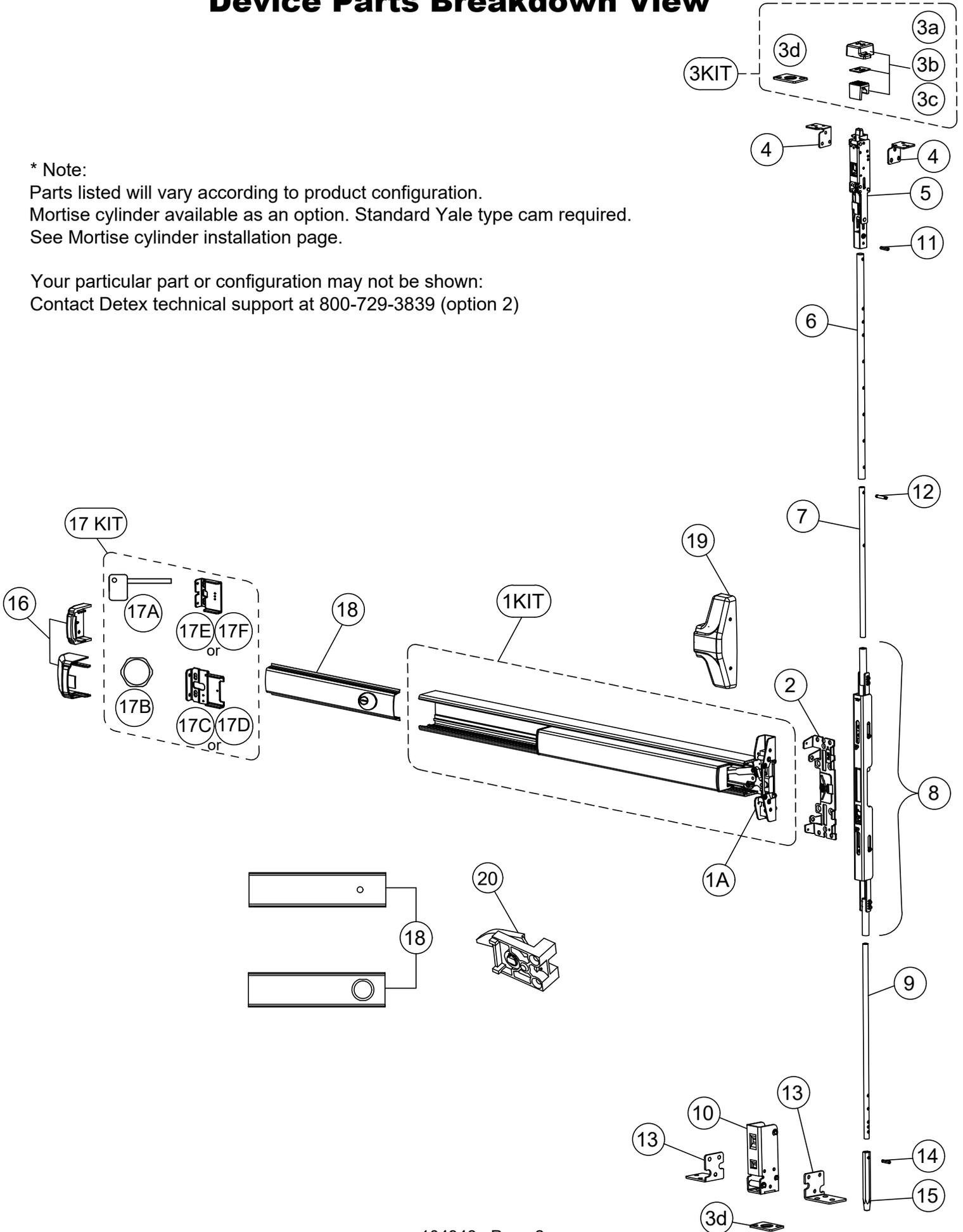
Parts listed will vary according to product configuration.

Mortise cylinder available as an option. Standard Yale type cam required.

See Mortise cylinder installation page.

Your particular part or configuration may not be shown:

Contact Detex technical support at 800-729-3839 (option 2)

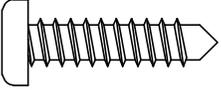
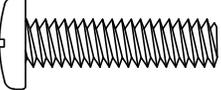
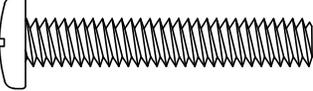
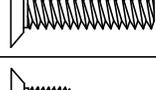


Device Parts Breakdown Part Numbers

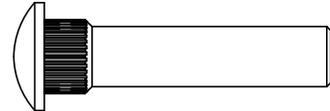
ITEM	PART #	DESCRIPTION
1KIT	105500-167	S&R 70 x STD1 x RHR Centercase/Pushpad Assy
	105500-168	S&R 70 x STD1 x LHR Centercase/Pushpad Assy
1A	104111-13	Centercase, CVR, Wide, RHR
	104111-14	Centercase, CVR, Wide, LHR
2	104171-1	Mounting plate, Wide, CVR, BP11 (Use with 08/09 lever trim)
	104171-2	Mounting plate, Wide, CVR, BP13 (Use with 03 trim)
3KIT	105257-1	Top/Bottom strike kit
3a	105235-1	CVR top strike pocket
3b	105246	CVR strike shim
3c	105236-1	CVR top strike insert
3d	105249	CVR Bottom strike (top and bottom rod device only)
4	105985-1	Top latch mounting bracket RHR
	105985-2	Top latch mounting bracket LHR
5	106340-1	Top latch (Panic)
	106340-2	Top latch (Fire)
6	104187	Outer top rod, 7' thru 8'
	105097	Outer top rod, 8'-1" thru 10'
7	104172-1	Inner top rod, 7' thru 8'
	104172-2	Inner top rod, 8'-1" thru 10'
8	105990-1	Center lift mechanism assembly, Top & Bottom
	105990-2	Center lift mechanism assembly, Top ONLY
9	105098	CVR bottom rod (top and bottom rod device only)
10	106330	Bottom bolt case assembly (top and bottom rod device only)
11	105296	Spring pin 3/16 x 13/16
12	103423	Spring pin 3/16 x 1/2
13	105982-1	Bottom bolt mounting bracket, RHR (top and bottom rod device only)
	105982-2	Bottom bolt mounting bracket, LHR (top and bottom rod device only)
14	101607	Spring pin 3/16 x 5/8 (top and bottom rod device only)
15	103536-1	Bottom bolt (top and bottom rod device only)
16	101642-9	Endcap, EC1 (ramped) Stainless Steel 630
	104304-9	Endcap, EC2 (flush) Stainless Steel 630
	104612-1	Endcap, EC2 (flush) Aluminum 628
17KIT	106431-1	Device Hardware Kit, HD, EC1 (not all components shown, includes Items 17A & 17C)
	106431-2	Device Hardware Kit, CD, EC1 (not all components shown, includes Items 17B & 17C)
	106431-3	Device Hardware Kit, EA, EC1 (not all components shown, includes Items 17B & 17D)
	106431-21	Device Hardware Kit, HD, EC2 (not all components shown, includes Items 17A & 17E)
	106431-22	Device Hardware Kit, CD, EC2 (not all components shown, includes Items 17B & 17E)
	106431-23	Device Hardware Kit, EA, EC2 (not all components shown, includes Items 17B & 17F)
17a	100450	Hex Key (for Hex Dogging)
17b	100783	Cylinder Nut (for Cylinder Dogging)
17c	100147	Endcap bracket for EC1 (ramped) endcap w/o battery holder
17d	101093	Endcap bracket for EC1 (ramped) endcap w/ battery holder
17e	104303	Endcap bracket for EC2 (flush) endcap w/o battery holder
17f	104636	Endcap bracket for EC2 (flush) endcap w/ battery holder
18	100860-54	Fillerplate Subassembly, S&R, Hex Dogging, HD, 630
	100860-49	Fillerplate Subassembly, S&R, Cylinder Dogging, CD, 630
19	102353-9	Centercase Cover, Stainless Steel, Wide 630
	104640-9	Centercase Cover, Aluminum, Wide, 628
20	102216-2	Hex Dogging Assembly
	102216	Cylinder Dogging Assembly

Hardware Table for BASIC device mounting. Additional hardware is provided per the device configuration in kit form and is addressed on the appropriate pages as required.

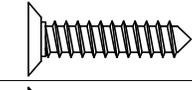
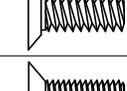
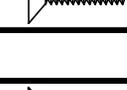
Device Mounting Hardware

	#14 x 1" PPHS P/N: PP-5183-108	Used to install backplate & endcap bracket to door. Drill Bit - 3/16 pilot hole x 1" deep
	1/4-20 x 1" PPH P/N: 100980	Used with sex bolts or lever trim (1-3/4 door). Drill Bit - #7 or 13/64"
	1/4-20 x 1-1/2" PPH P/N: 100954	ALTERNATE SCREW Used with sex bolts or lever trim (2" plus door) Drill Bit - #7 or 13/64"
	10-24 x 1/4" PPH P/N: PP-5304-104	Used to install device centercase to backplate
	10-24 x 3/4" PFH P/N: 100112-110	Used to install centerlift mechanism to backplate
	10-32 x 5/16" PFHU P/N: 101632-2	Used to install endcap to endcap bracket. (Multiple finishes included)
	6-32 x 3/8" PFHU P/N: 100162-106	Used to install centercase cover to backplate (Multiple finishes included)
	1/4" Lockwasher P/N: PP-5067-25	Lockwashers

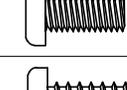
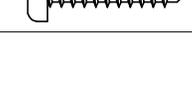
Sex nuts, if ordered. Sex nuts are used with screws in device hardware kit.

	1/4-20 x 1.60 Sex nut P/Ns: 105274-9 (Stainless Steel) 105274-2 (Brushed Brass) 105274-25 (Oil Rub Bronze)	Used to install backplate and endcap bracket to door If using sex nuts with TRIM: Drill 9/32 hole through interior door face. Drill 1/2 hole through exterior door face. If using sex nuts without TRIM: Drill 3/8 hole through exterior door face.
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Strike Mounting Hardware

	#10 x 1" PFHU P/N: 100109	Used to install bottom strike to floor. (Used with anchors, two styles of anchors included)
	10-24 x 1/2" PFHU P/N: 100112-108	Used to install bottom strike to floor (alternate)
	10-32 x 1/2" PFH P/N: PP-5802-308	Used to install top strike pocket to header and strike insert to top strike pocket

Latch Mounting Hardware

	10-24 x 5/16" PFH P/N: 100112-105	Used to install bracket to bottom assembly and top latch
	10-32 x 1/2" PPH P/N: 12403-1	Used to install top latch to top of door (For FIRE RATED)
	#10 x 3/4" PPHS P/N: PP-5183-66	Used to install bottom assembly to bottom of door & top latch to top of door (For NON-FIRE RATED)

Tools Required

Power Drill
Level
Screw Drivers

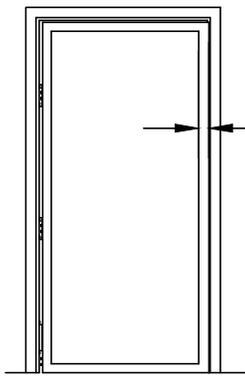
Hammer
Pencil
Center Punch

Drill Bit Set
Pliers

Safety Glasses
Tape Measure

Hack Saw (Chopsaw preferred)
Tap Wrench/ Hex Wrench - 5/64
Masonry Bits - 3/16", 5/16" & 1"

!!!CHECK BEFORE STARTING!!!



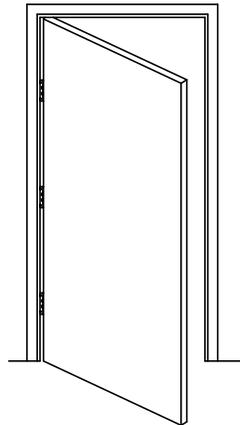
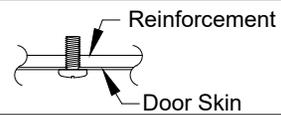
Stile width
5" minimum stile required

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

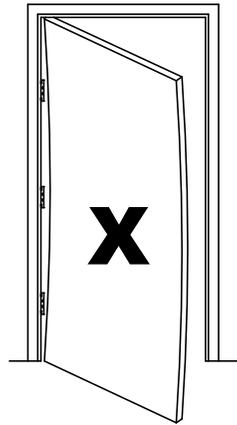
Unreinforced Doors: Use Sex Nuts and Bolts
Unreinforced Frames: Use Blind Rivet Nuts (see sketch).

Fasteners for unreinforced openings are not supplied by Detex.

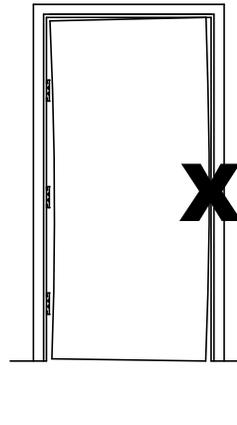
Reinforced door or frame engages at least (3) screw threads.



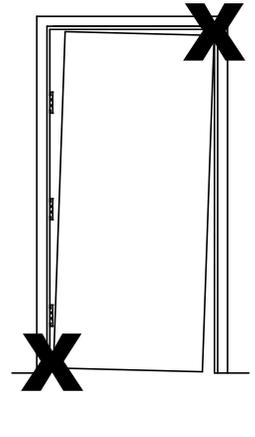
Door Must Swing Freely



Door Must Not be Warped



Door Must Not Bind



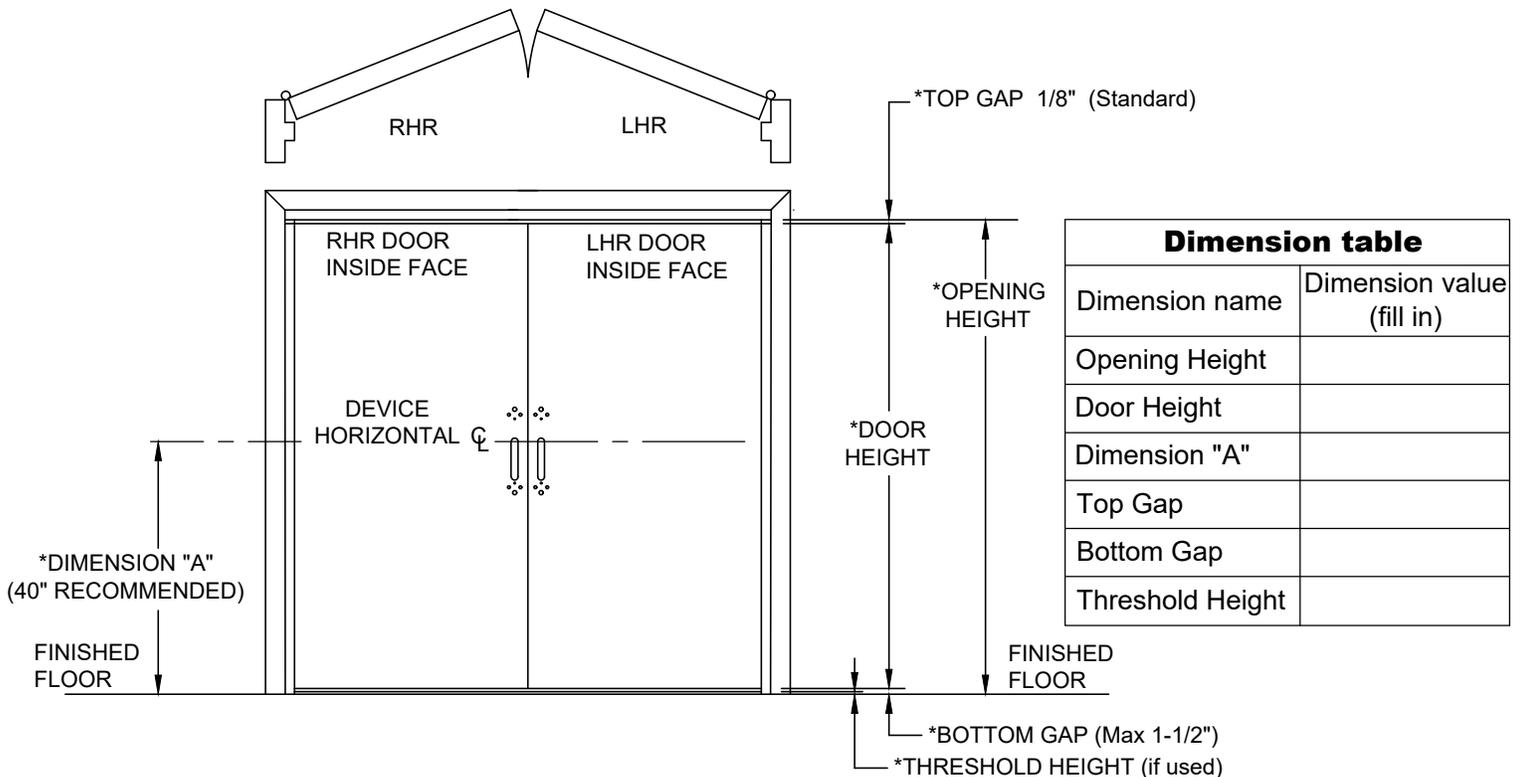
Door Must Not Sag

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

STEP 1: DOOR / OPENING MEASUREMENTS

Measure per figure below:

*These dimensions will be needed during rod length adjustment. Measure door before removing.



STEP 2: VERIFY DOOR & INSTALL WRAP

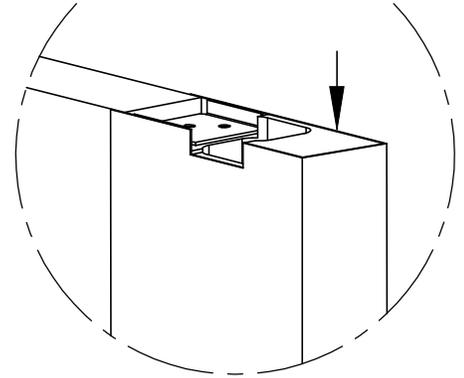
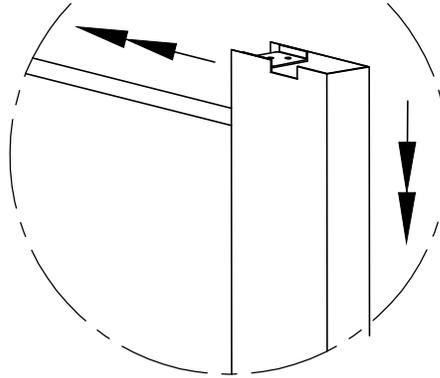
FOR F70 & F71 FIRE RATED APPLICATIONS ONLY. FOR NON-FIRE, SKIP TO STEP 3

WRAP PREP

(PREP door before installing wrap)

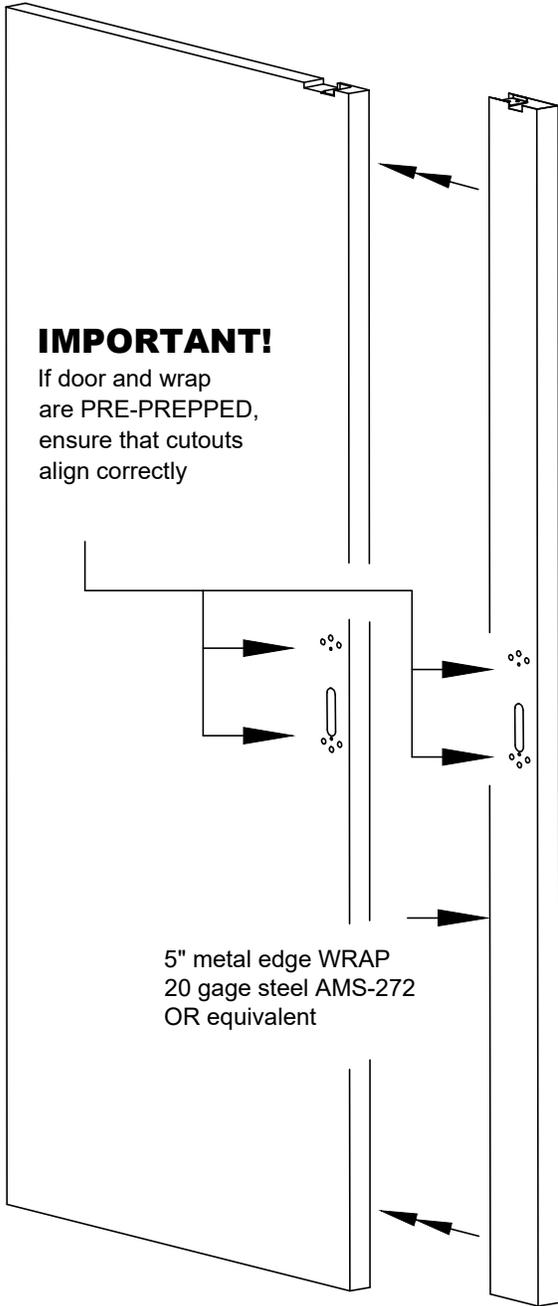
INSTALL wrap per manufacturer's instructions

A rubber mallet can be used for installing wrap.



IMPORTANT!

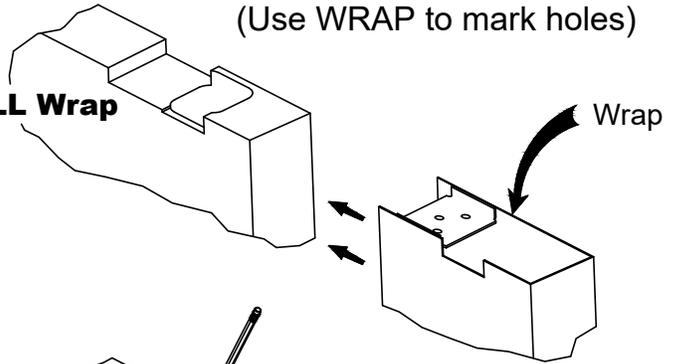
If door and wrap are PRE-PREPARED, ensure that cutouts align correctly



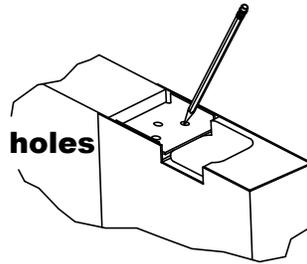
DOOR PREP

(Use WRAP to mark holes)

2a INSTALL Wrap

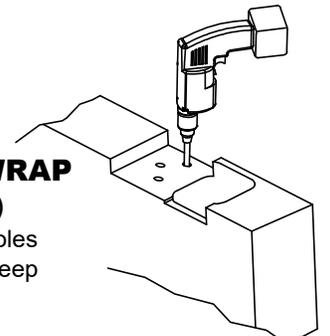


2b MARK 3 holes

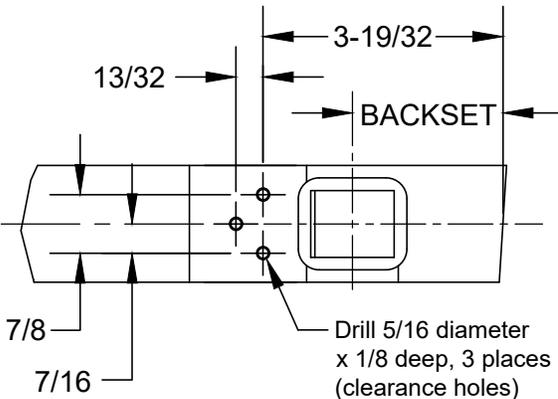
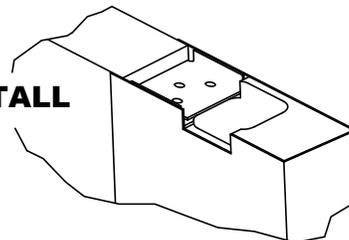


2c REMOVE WRAP & DRILL (3)

CLEARANCE holes
5/16 dia x 1/8 deep

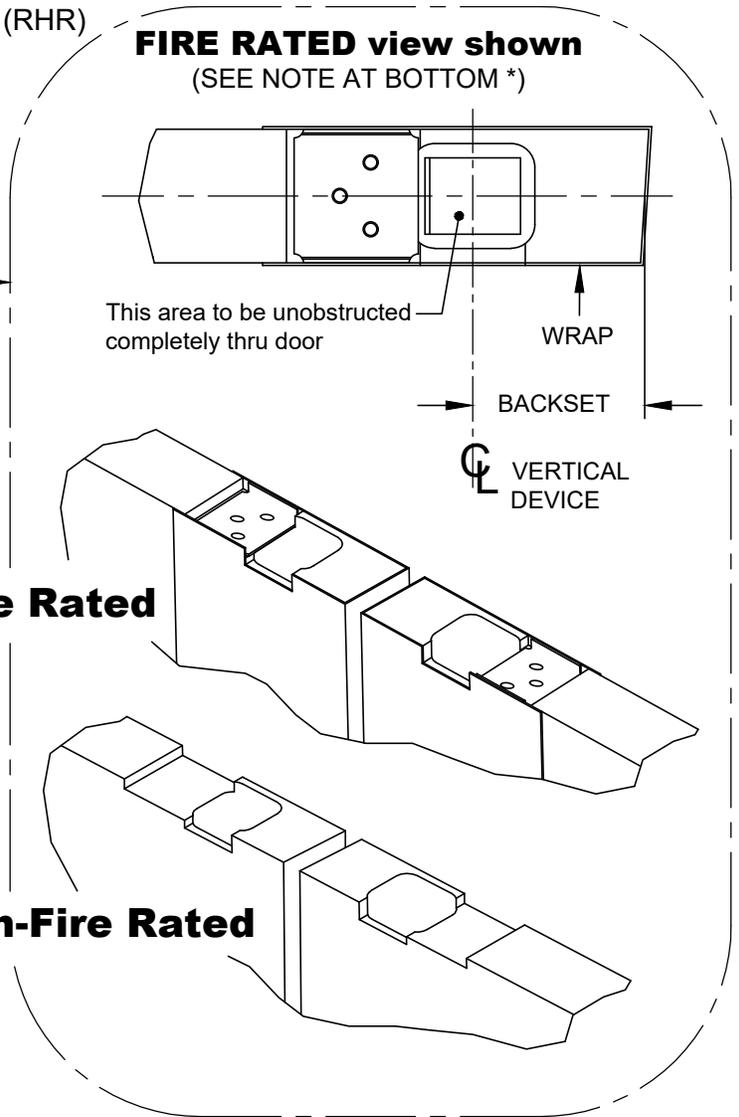
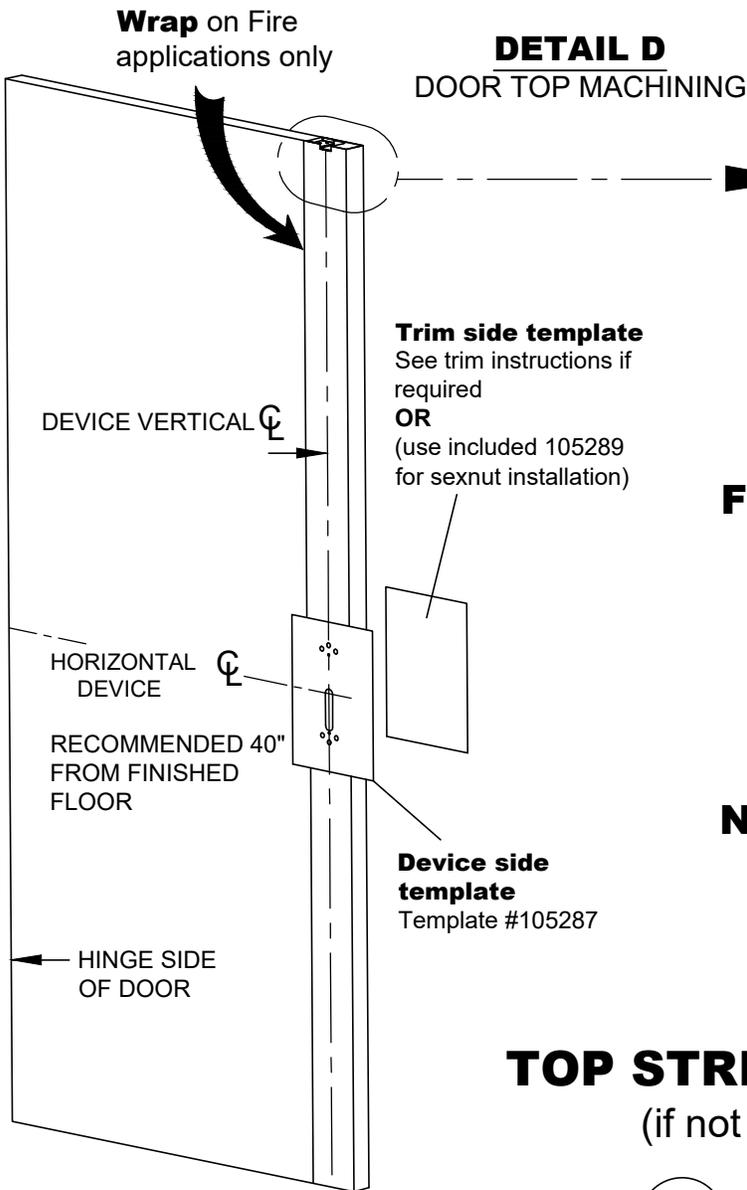


2d RE-INSTALL Wrap



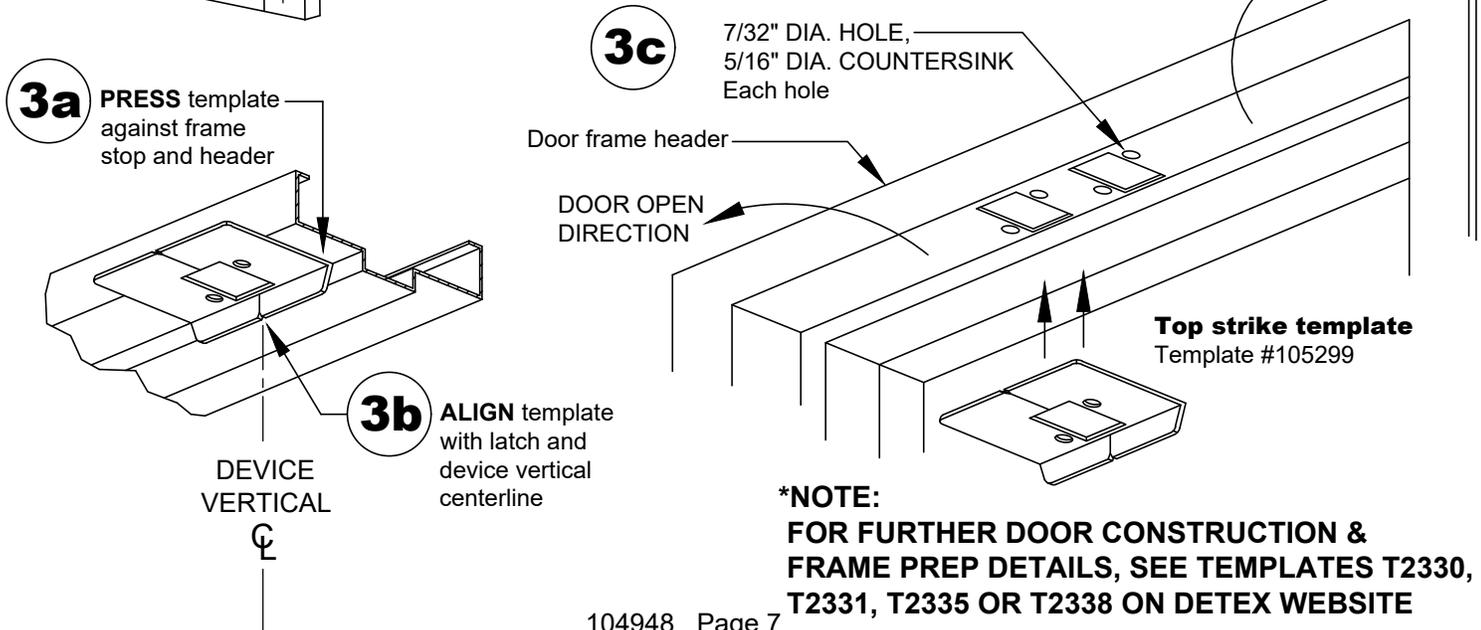
STEP 3: DOOR PREP for FIRE & NON-FIRE rated applications

Installation shown in this instruction is for right hand reverse (RHR)
Left hand reverse (LHR) will be opposite



TOP STRIKE FRAME PREP

(if not already prepped)



STEP 4: TOP ROD ASSEMBLY & INITIAL ADJUSTMENT

For 6'-8" (80") to 8'-0" (96") Door

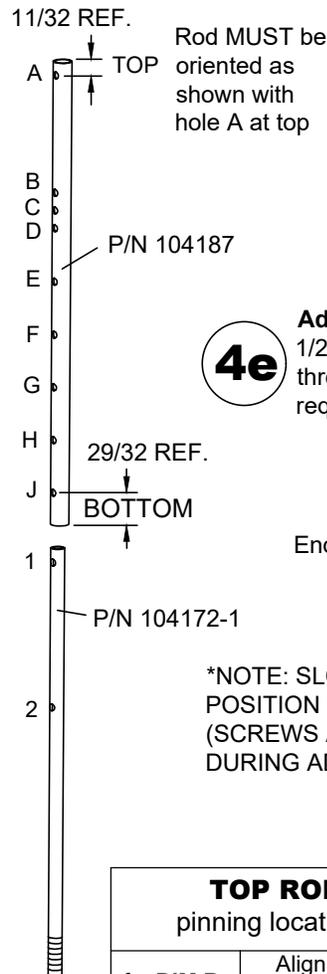
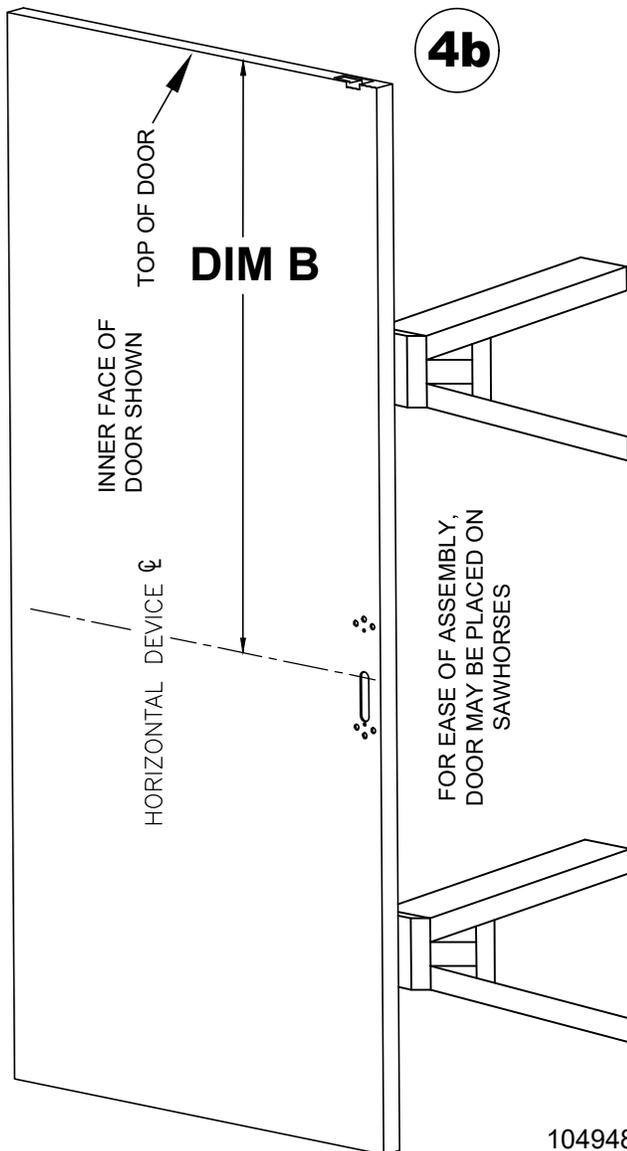
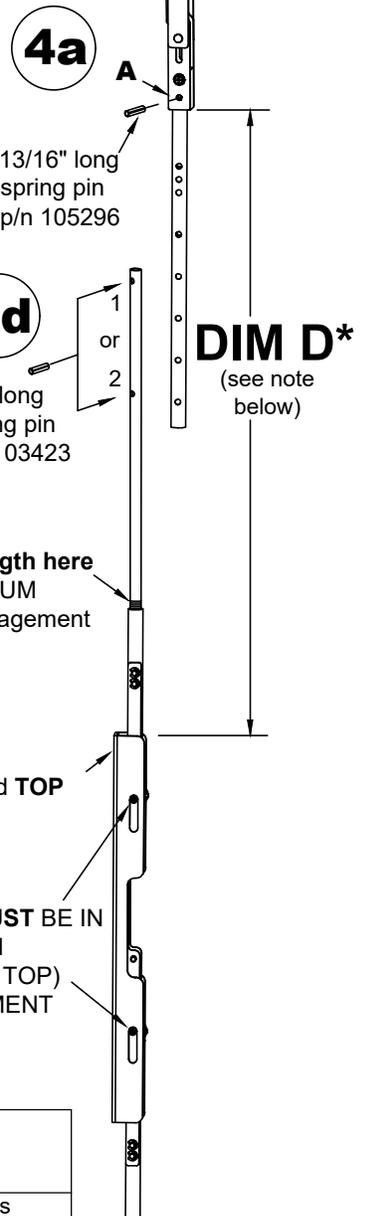
4a. Align hole A in rod 104187 with hole in top latch as shown at right & tap the 13/16" long pin into latch hole.

4b. Measure DIM B as shown below.

4c. Use chart to determine pinning location of rods 104187 & 104172-1.
Round DIM B to nearest value in chart.
If more than 3/4" different from one of these chart values, drill a .189 (#12 drill bit) diameter hole halfway between the 2 holes nearest to the measured DIM B and use this hole as pinning hole in next step.

4d. Insert 104172-1 rod into 104187 rod & line up appropriate pinning holes (from chart) on both rods and tap in the 1/2" long pin to secure.

4e. Calculate DIM D:
(DIM D = measured DIM B minus 15 7/8")
Thread the assembled rods/latch into the centerlift mechanism assembly as shown at right until DIM D is achieved (within 1/16").



TOP ROD pinning locations		
for DIM B dimension of:	Align rod holes	
	Rod p/n 104172-1 HOLE	Rod p/n 104187 HOLE
39-7/8"	2	B
40-7/8"	2	C
41-7/8"	2	D
43-7/8"	1	B
44-7/8"	1	C
45-7/8"	1	D
47-7/8"	1	E
49-7/8"	1	F
51-7/8"	1	G
53-7/8"	1	H
55-7/8"	1	J

Note: If the combination of holes used is 2B or 2C, cut off approximately 2" from the UNTHREADED end of rod 104172-1

STEP 4: TOP ROD ASSEMBLY & INITIAL ADJUSTMENT

For 8'-1" (97") to 10' (120") Door (Non-Fire Rated Applications Only)

4a. Align hole A in rod 105097 with hole in top latch as shown at right & tap the 13/16" long pin into latch hole.

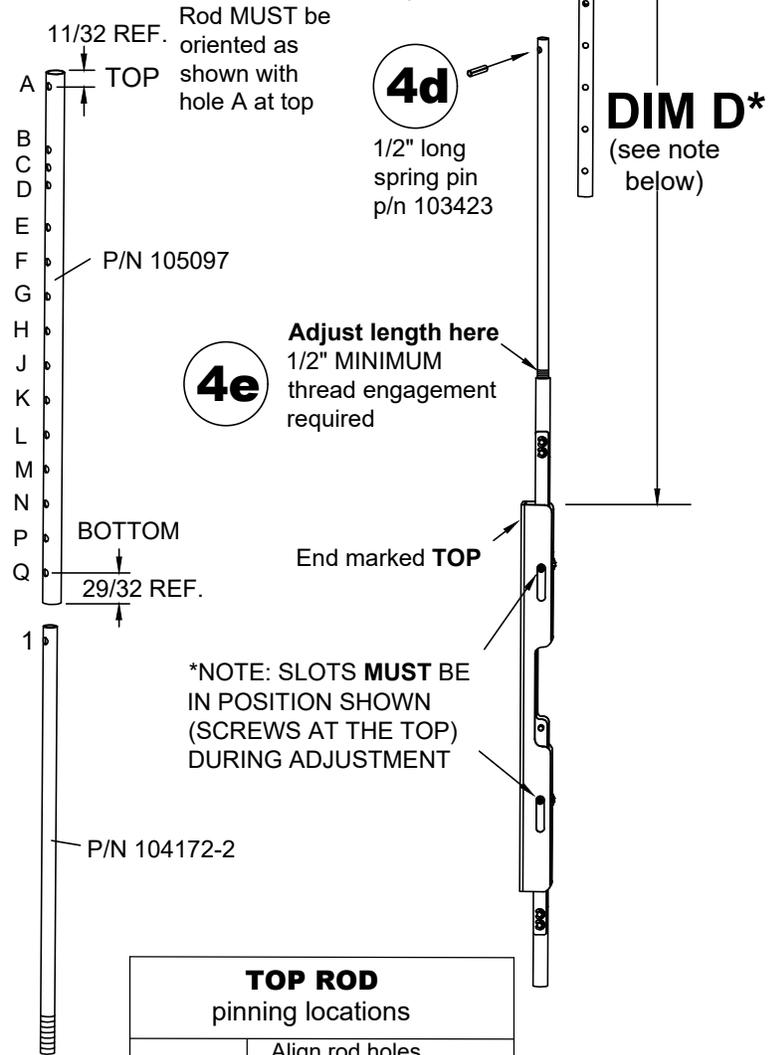
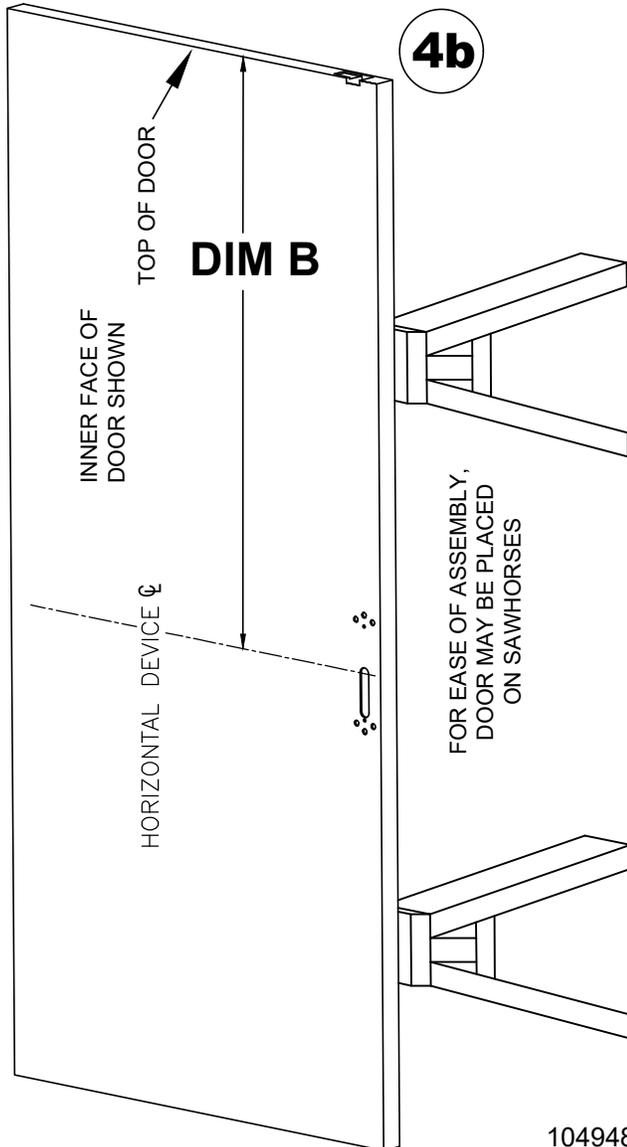
4b. Measure DIM B as shown below.

4c. Use chart to determine pinning location of rods 105097 & 104172-2.
Round DIM B to nearest value in chart.

If more than 3/4" different from one of these chart values, drill a .189 (#12 drill bit) diameter hole halfway between the 2 holes nearest to the measured DIM B and use this hole as pinning hole in next step.

4d. Insert 104172-2 rod into 105097 rod & line up appropriate pinning holes (from chart) on both rods and tap in the 1/2" long pin to secure.

4e. Calculate DIM D:
(DIM D = measured DIM B minus 15 7/8")
Thread the assembled rods/latch into the centerlift mechanism assembly as shown at right until DIM D is achieved (within 1/16").



TOP ROD pinning locations		
for DIM B dimension of:	Align rod holes	
	Rod p/n 104172-2 HOLE	Rod p/n 105097 HOLE
55-7/8"	1	B
56-7/8"	1	C
57-7/8"	1	D
59-7/8"	1	E
61-7/8"	1	F
63-7/8"	1	G
65-7/8"	1	H
67-7/8"	1	J
69-7/8"	1	K
71-7/8"	1	L
73-7/8"	1	M
75-7/8"	1	N
77-7/8"	1	P
79-7/8"	1	Q

STEP 5: BOTTOM ROD / LATCH ASSEMBLY & ADJUSTMENT

(Disregard if TRO device is being installed)

5a. Using **DIM A** as measured in step 1, use chart to determine pinning location.

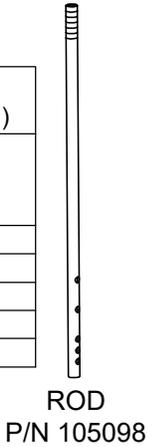
If **DIM A** is less than 37-1/4" from finished floor, a new pin hole must be drilled through 105098 rod. Subtract the centerline dimension from 38" and measure up this distance from hole V. Mark and drill .189 diameter hole (#12 drill).

If **DIM A** is more than 41-1/2", from floor, call customer service at 1-800-729-3839 for assistance.

5a

Align rod holes with bottom latch (round **DIM A** to nearest value shown)

DIM A (device ϕ at distance from floor)	Bottom Rod p/n: 105098 use HOLE
38"	V
39"	W
40"	X
40-3/8"	Y
40-3/4"	Z



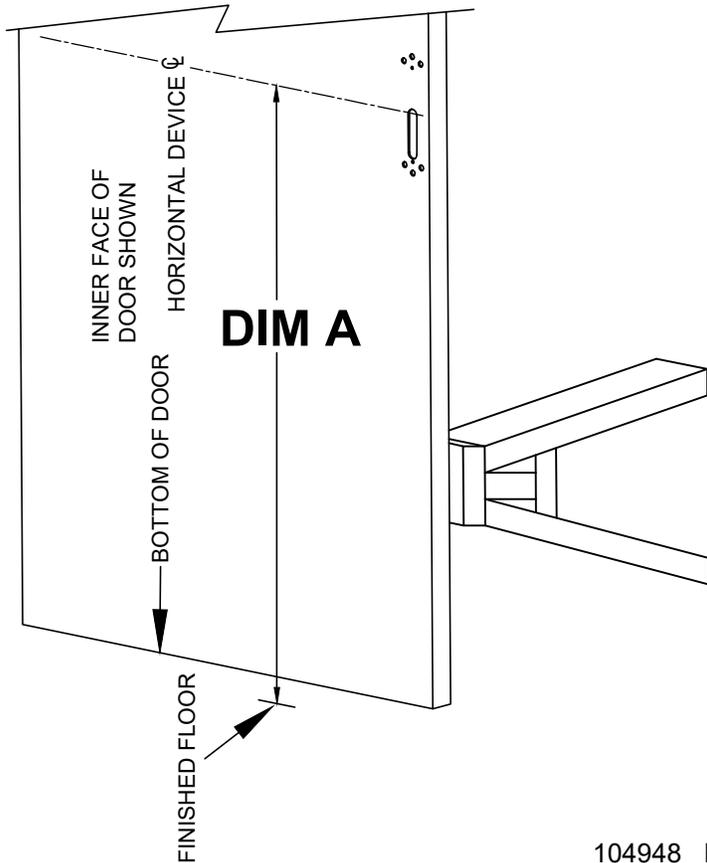
Note: If hole V or W is used (or if new hole is drilled closer to threaded end), trim off UNTHREADED end of rod as needed to allow rod to slide into bottom bolt far enough to pin.

5b. **DIM C** is the target length.
For no threshold or threshold 1/2" or less:
DIM C = measured DIM A minus 8".
For threshold greater than 1/2":
DIM C = measured DIM A minus 8" minus threshold height

The bottom bolt vertical travel from fully extended to fully retracted is approximately 9/16.

5c. Thread bottom rod into centerlift mechanism to achieve **DIM C** (within 1/16").

NOTE: SLOTS MUST BE IN POSITION SHOWN (SCREWS AT THE TOP) DURING ADJUSTMENT



BOTTOM ROD
p/n 105098

Adjust length here
1/2" MINIMUM
thread engagement
required

5c

SPRING PIN
p/n 101607

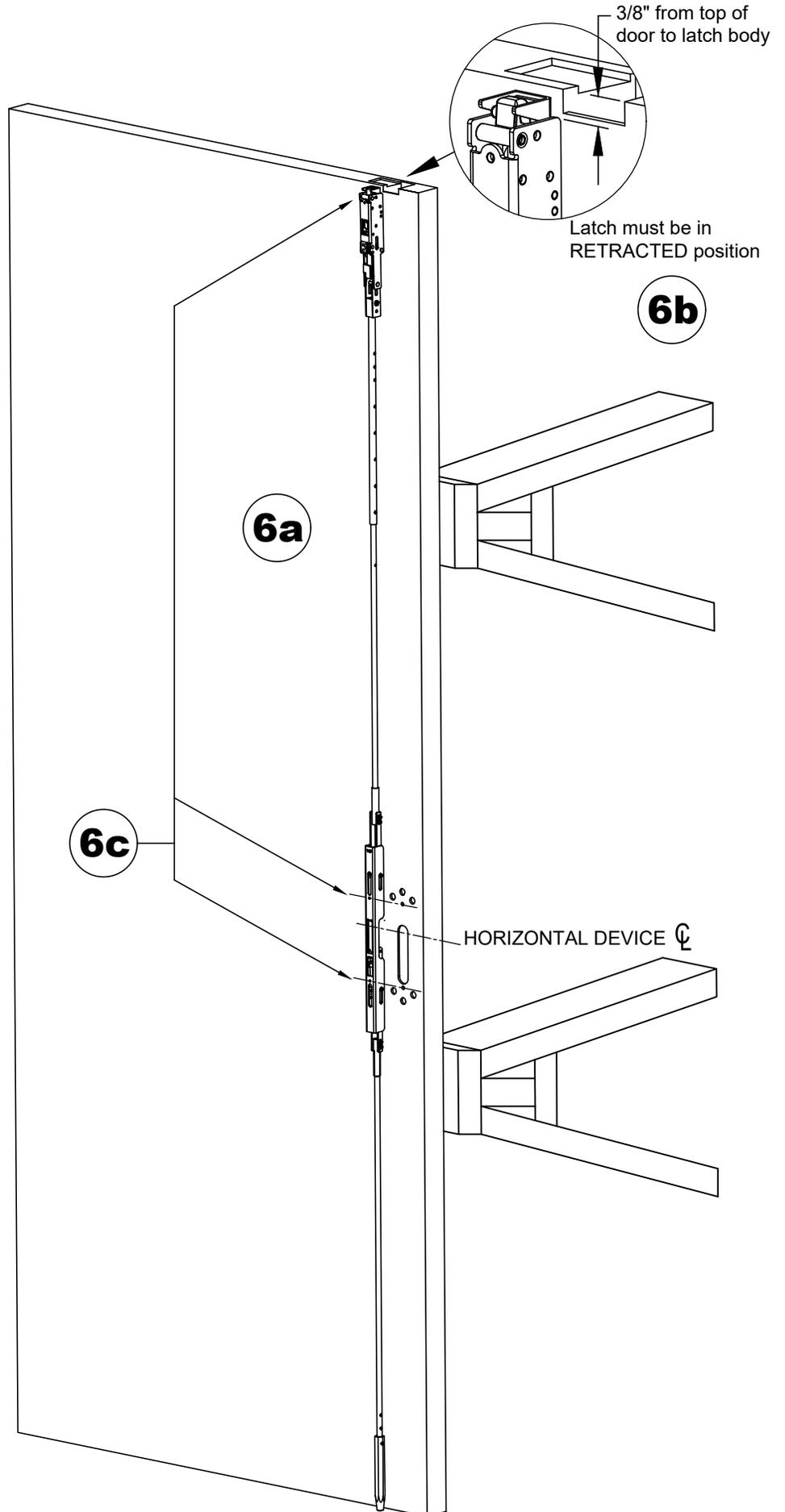
BOTTOM BOLT
p/n 103536-1

DIM C

5b

STEP 6: VISUAL ALIGNMENT CHECK:

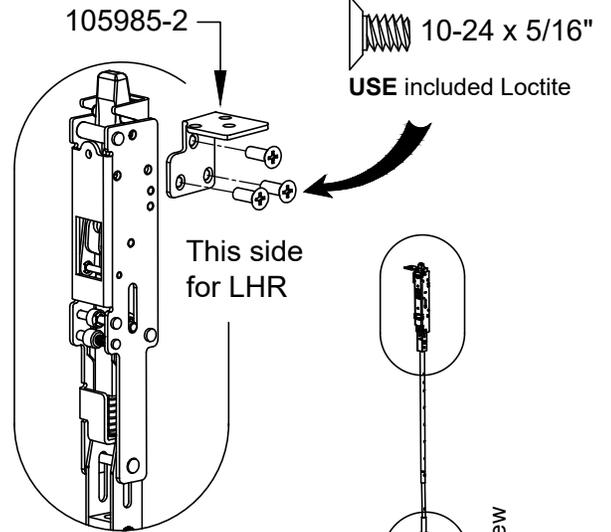
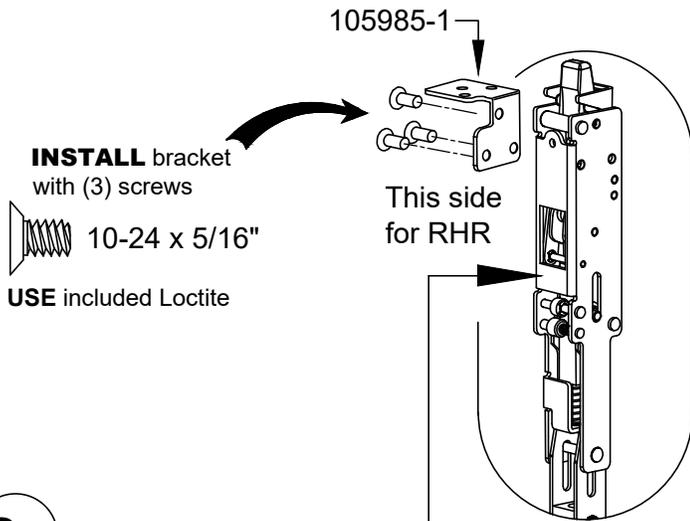
- 6a.** Lay internal latch components onto door for trial fit. Take care to protect door finish.
- 6b.** Ensure top latch is in retracted position. Hold top rod in place and push top latch case towards device  until latchbolt is fully retracted.
- 6c.** Mounting holes for centerlift should line up with mounting holes in door, and top and bottom latches should be in position shown. If not, go back to steps 3 & 4 and verify rod length dimensions.



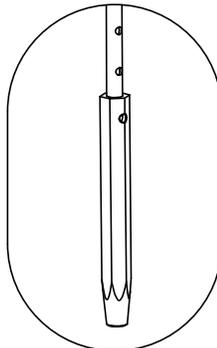
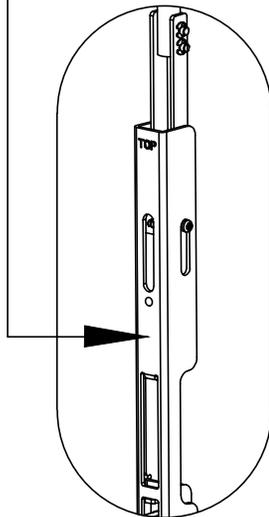
STEP 7: ATTACH TOP LATCH MOUNTING BRACKETS

7 **ATTACH** top latch brackets as shown below.
Three screws required for each bracket.

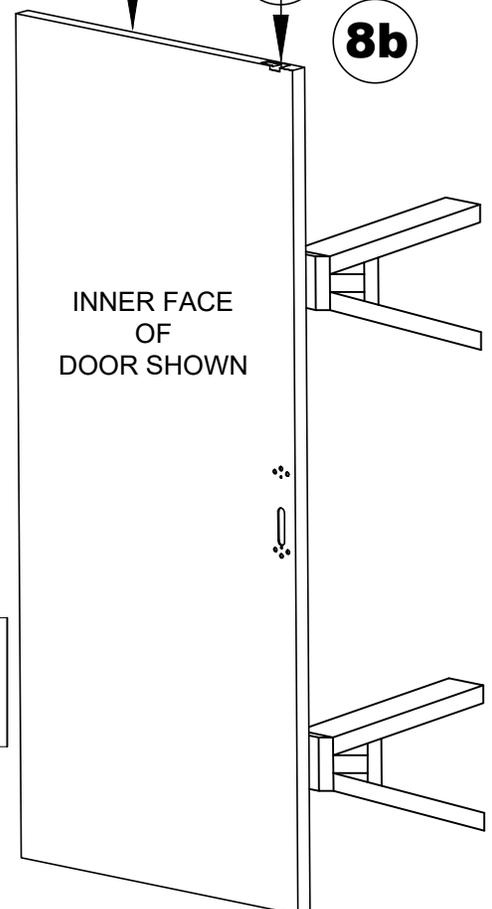
INSTALL bracket
with (3) screws



8a THESE 2 SURFACES
MUST BE ALIGNED
WHEN ASSEMBLED
AND FACING INNER
DOOR FACE



TOP OF DOOR



STEP 8: INSERT ROD / LATCH / CENTERLIFT ASSEMBLY INTO DOOR

8a. Align surfaces as shown above.

8b. Gently insert assembly through door top, taking care to maintain assembly orientation.

STEP 9: SECURE ROD / LATCH / CENTERLIFT ASSEMBLY TO DOOR

9a. Attach top latch to door with three screws (six for fire rated doors).

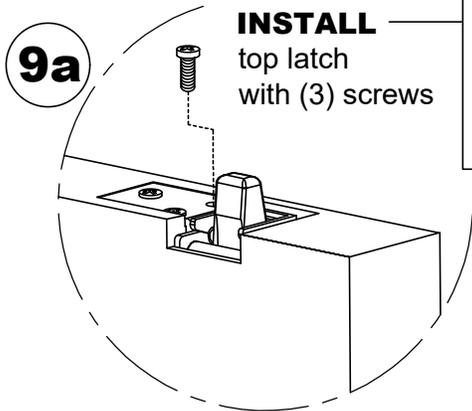
(Disregard steps 9b & 9c if TRO device is being installed)

9b. Attach bottom mounting bracket to bottom latch assembly with three screws.

9c. Attach bottom mounting bracket assembly to door with three screws.

9d. Attach back plate to centerlift mechanism with two screws - DO NOT OVERTIGHTEN.

Assembly hint: Assemble one screw loosely without backplate, then add second screw through backplate. Remove first screw, align backplate and then re-install first screw.

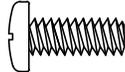


9a

INSTALL
top latch
with (3) screws

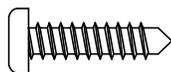
For FIRE RATED

Use 10-32 x 1/2" screws



For NON-FIRE RATED

Use #10 x 3/4" screws

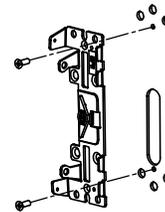


MARK & DRILL

#29 drill x 3/4 deep pilot hole
Install with (3) screws

9d

INSTALL backplate
with (2) screws

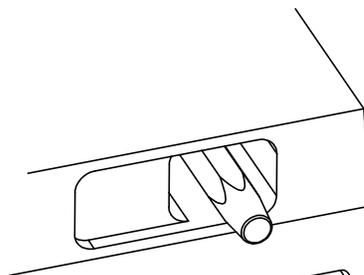
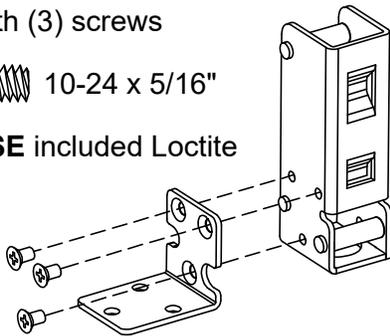


BACKPLATE
BP11 OR BP13

9b **INSTALL** bracket
with (3) screws



USE included Loctite



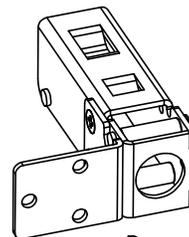
(VIEWED FROM BOTTOM EDGE OF DOOR)

Note: Bottom bracket may slide up on rod during assembly. It may be necessary to pull it towards bottom edge of door with a simple wire hook.

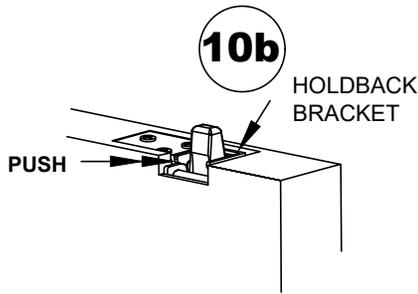
9c

MARK & DRILL
#29 drill x 3/4 deep
pilot hole

INSTALL bottom assembly
with (3) screws

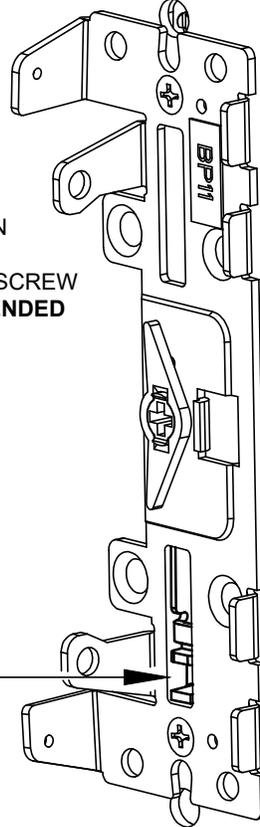


STEP 10: VERIFY CENTERLIFT MECHANISM OPERATION



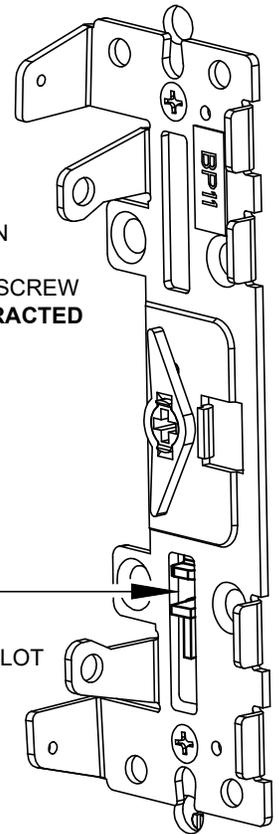
10b

CORRECT POSITIONING OF ACTIVATION SLOT AND ADJUSTMENT SCREW IN LATCH **EXTENDED** POSITION



10c

CORRECT POSITIONING OF ACTIVATION SLOT AND ADJUSTMENT SCREW IN LATCH **RETRACTED** POSITION



10a

ACTIVATION SLOT LATCH **EXTENDED** POSITION

10a

ACTIVATION SLOT LATCH **RETRACTED** POSITION

10a. Check current centerlift position using views shown.

10b. To extend latches, push and hold down on the holdback bracket to disengage the retraction feature, then use a screwdriver inserted into the activation slot to gently lower the slot to the extended position as shown.

10c. To retract latches, gently insert a screwdriver into the activation slot and raise the slot to the retracted position as shown.

TROUBLESHOOTING:

If latchbolt is fully extended while activation slot is not fully in the extended position, **then top rod is too short**. Go back to STEP 4 and correct.

If latchbolt is partially retracted while activation slot is fully in the extended position, **then top rod is too long**. In this case, latchbolt will be fully retracted before activation slot can travel fully to the retracted position. Go back to STEP 4 and correct.

10d. Bottom bolt drag check:

With top latch in retracted position, check to ensure that bottom bolt is not extending from bottom of door a distance greater than the bottom gap at finished floor (minus the threshold height if threshold is used).

If it is, **then bottom rod is too long**. Go back to STEP 5 and correct.

10e. Upon completion, retract latches before proceeding to Step 11.

STEP 11: HANG DOOR / ASSEMBLE DEVICE TO DOOR

11a INSTALL DOOR ONTO FRAME PER MANUFACTURER'S SPECIFICATIONS

11b Rehandling procedure *if required*

NOTE: LINK MUST ALWAYS BE IN TOP POSITION

HANDLING INDICATOR ON CENTERLIFT

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

Right Hand Reverse (RHR)

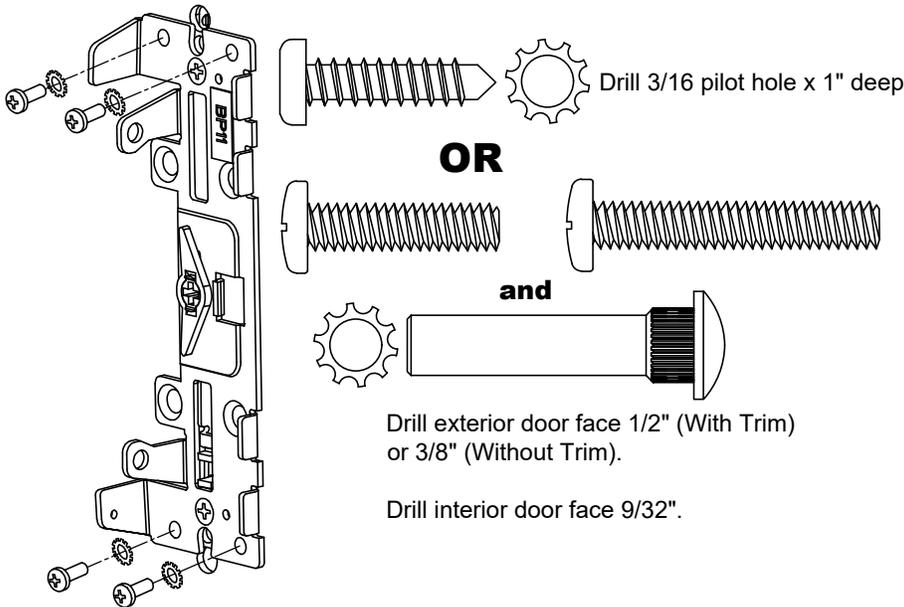
Left Hand Reverse (LHR)

LIFT PIN MUST BE ON BOTTOM
Remove setscrew then liftpin which screws out of the back.
MOVE LIFT PIN & SETSCREW TO BOTTOM POSITION ON CARRIAGE.

11c REFER TO TRIM INSTRUCTIONS AT THIS TIME, IF APPLICABLE

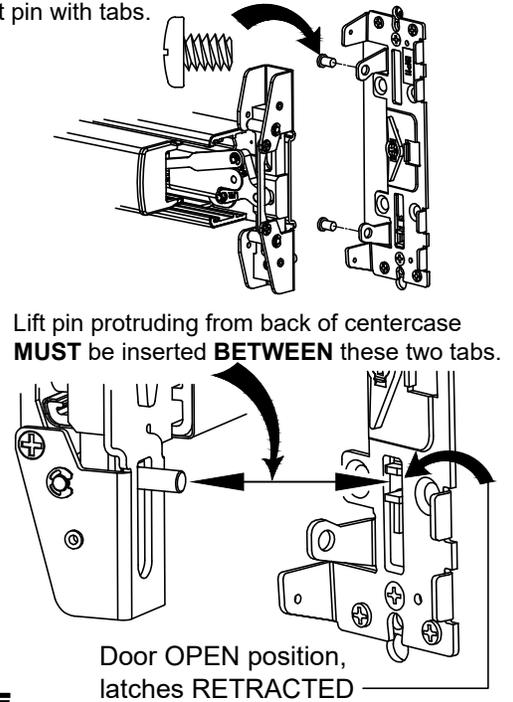
11d COMPLETE BACKPLATE MOUNTING

Install 4 screws or sexnuts and lockwashers



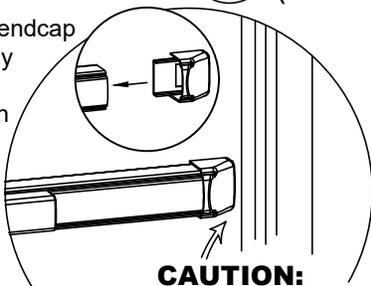
11e INSTALL DEVICE TO BACKPLATE

Install device to backplate & fasten with 2 screws. Depress pushpad appropriate amount to line up lift pin with tabs.



11f CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)

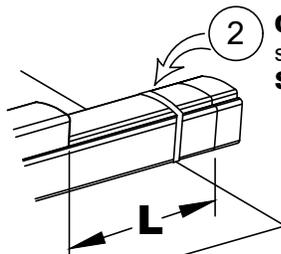
1 SLIDE endcap assembly onto extrusion



CAUTION:

Check for device and door frame clearance. If no cut-off needed, proceed to the next page.

2 CUT fillerplate and extrusion straight & square to desired length and deburr. **SECURE** with tape before cutting

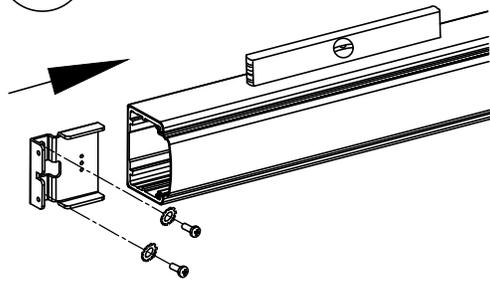


Minimum Fillerplate Length

Type	Length (L)
LD	2-1/2"
HD/CD	3"

For aluminum Advantex finish cutdown applications: After cutting, the baseplate extrusion can be reversed to place the cut end inside the head cover. To do so, loosen the setscrew inside the aluminum baseplate extrusion and slide extrusion out, reverse, & slide back in. Tighten setscrew.

11g INSTALL ENDCAP BRACKET



LEVEL device before installing endcap bracket

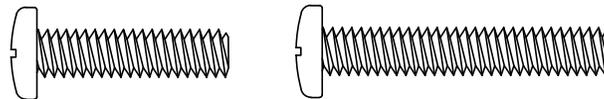
ENSURE that device does not require cutting (see Step 11g on next page).

TEST device function after installation of endcap is complete by depressing & releasing pushpad. Action should be smooth with full return of pushpad and latch travel.

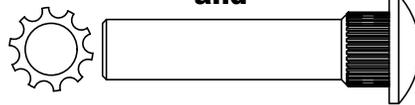
INSTALL bracket with (2) lockwashers & screws **OR** screws & sex bolts



OR



and



Drill exterior door face 1/2" (With Trim) or 3/8" (Without Trim).

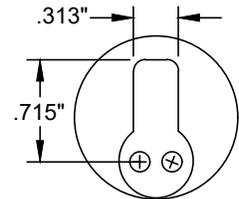
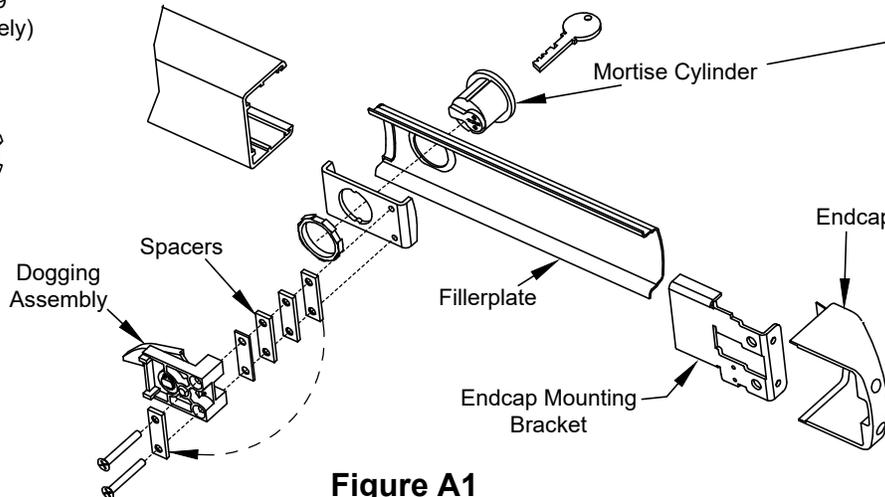
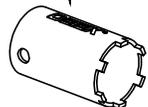
Drill interior door face 9/32".

11h

MORTISE CYLINDER INSTALLATION

CD (Cylinder Dogging) Cylinder Installation

Cylinder nut socket p/n 103779 (sold separately)



Mortise Cylinder with standard Yale cam required

Figure A1

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

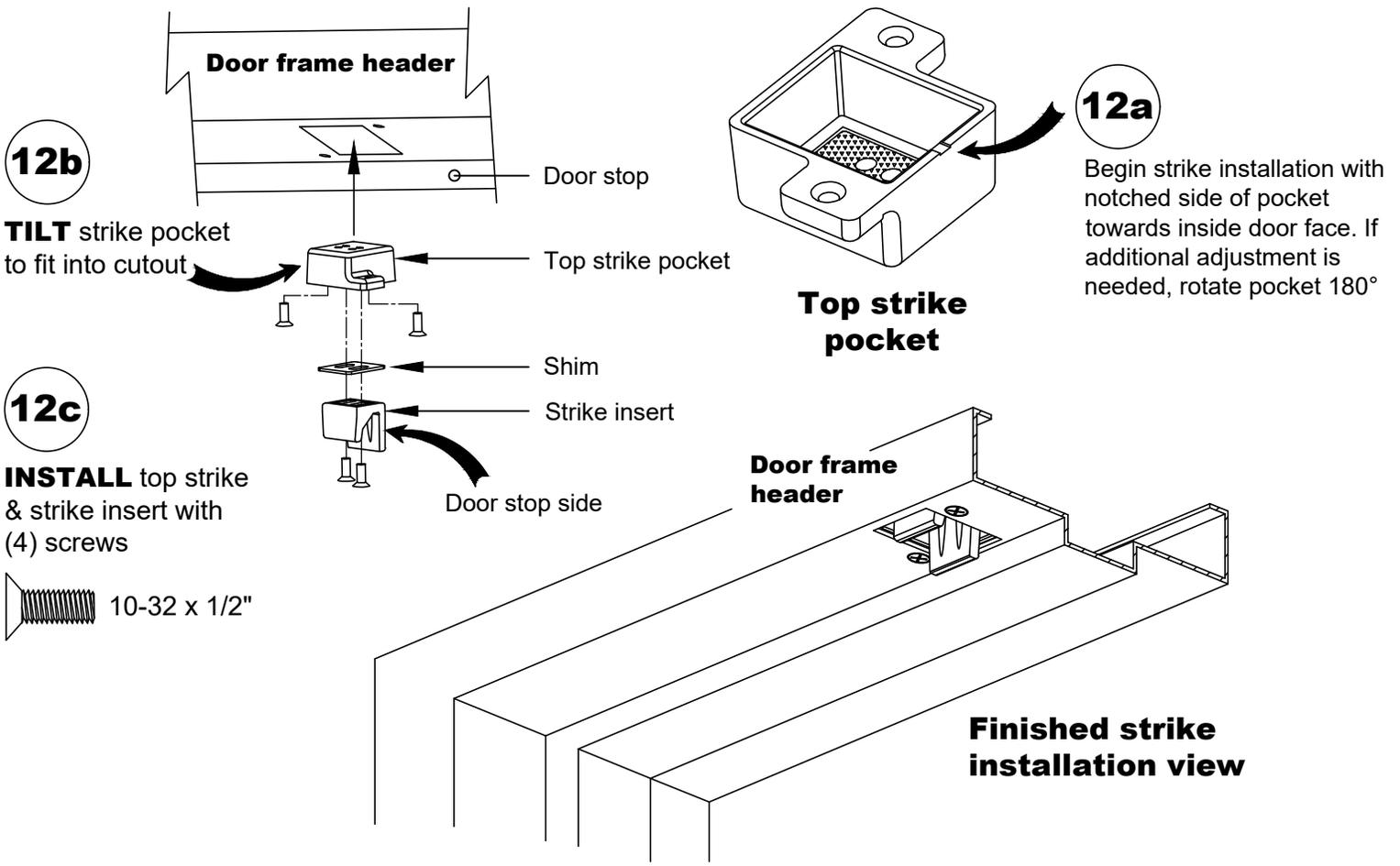
- Remove endcap and endcap mounting bracket.
- Remove fillerplate.
- Remove and discard shipping insert and nut. Loosen (2) screws from dogging assembly.
- Install mortise cylinder (sold separately) with large hex nut provided.
- Trial fit dogging assembly. If cylinder is too short, remove spacers as necessary and reattach them under the (2) screw heads. 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.

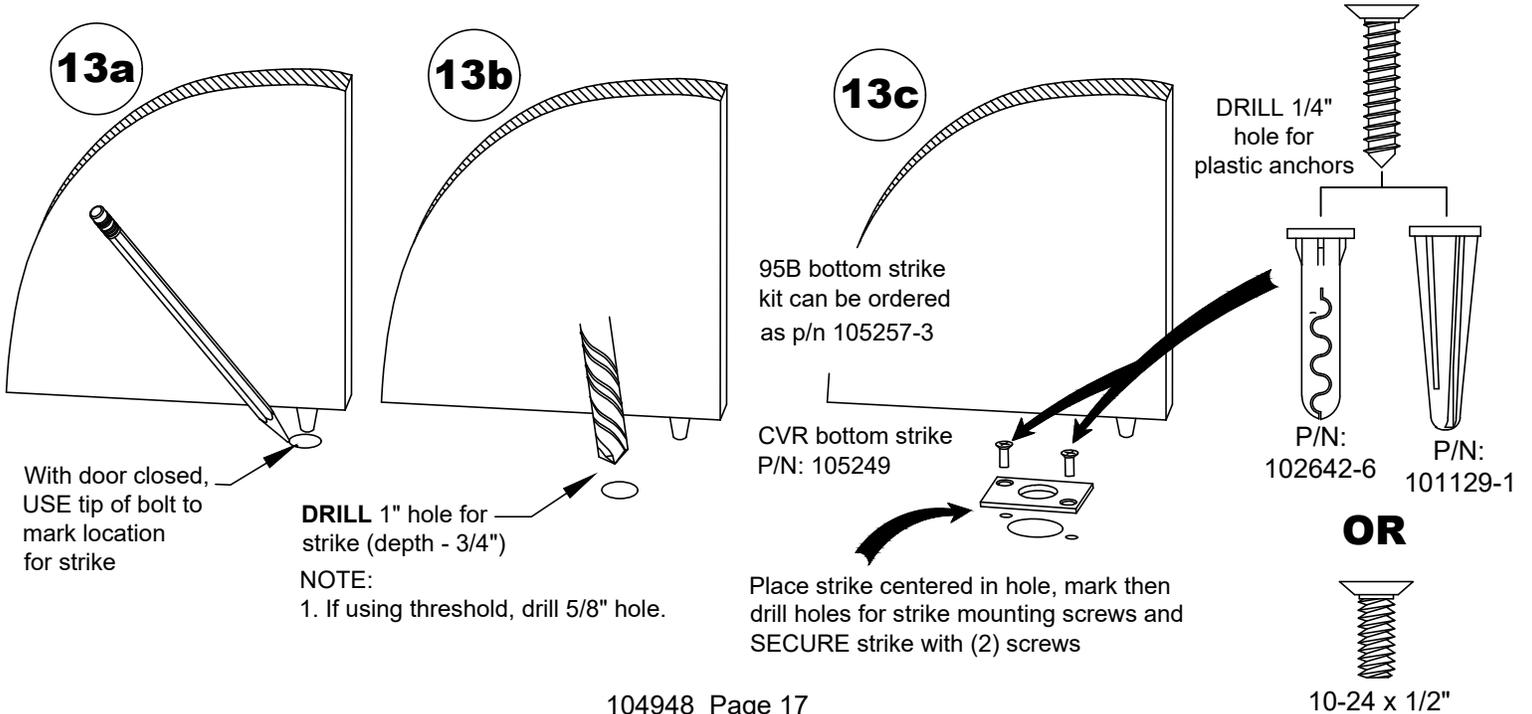
STEP 12: TOP STRIKE INSTALLATION



STEP 13: BOTTOM STRIKE INSTALLATION

(Disregard if TRO device is being installed)

BOTTOM STRIKE HOLE LOCATION & DRILLING



STEP 14: FINE LATCH ADJUSTMENT

- 14a.** Ensure that latches are fully retracted. Gently close door. Latches should extend when door is closed.
14b. Depress pushpad and open door. Top latch should clear top strike & bottom bolt should not drag. Latches should remain in retracted position with pushpad released.

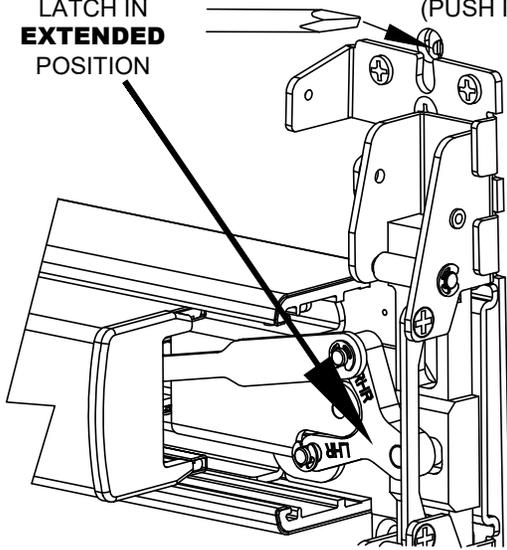
FINE LATCH ADJUSTMENT (if needed)

(± 3/8" adjustment possible on both top & bottom rods independently. See diagram below.)

- 14c.** Top strike fine adjustment: Adjust strike engagement by either retaining or removing shim. Adjust door tightness by moving insert to desired position. Note that strike pocket can be flipped around to achieve additional adjustment (see step 11).
14d: TOP LATCH ADJUSTMENT: With latches extended, turn CCW until the top latchbolt projection begins to visually decrease, then turn CW until latchbolt projects fully. Rotate CW one additional full turn.

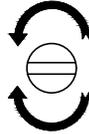
14d Top Adjustment

LATCH IN EXTENDED POSITION



TOP ADJUSTMENT SCREW EXPOSED
ADJUST with flat blade screwdriver (PUSH IN & TURN)

RETRACT BOLT (CCW)

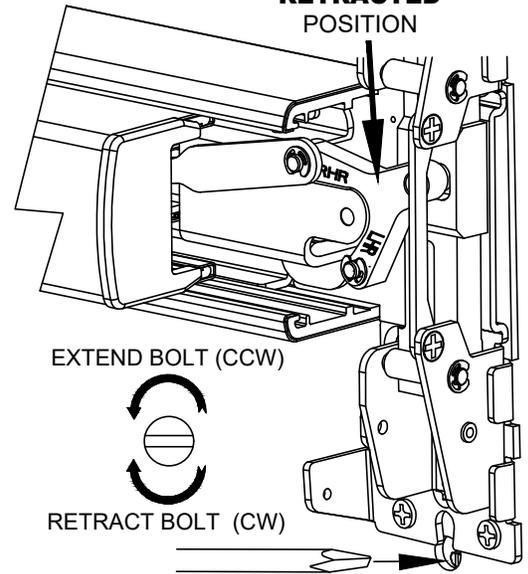


EXTEND BOLT (CW)

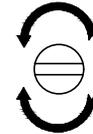
CAUTION:
 If turned too far CW,
 you will lose sight
 of adjustment screw

14e Bottom Adjustment

LATCH IN RETRACTED POSITION



EXTEND BOLT (CCW)



RETRACT BOLT (CW)

BOTTOM ADJUSTMENT SCREW EXPOSED
ADJUST with flat blade screwdriver (PUSH IN AND TURN)

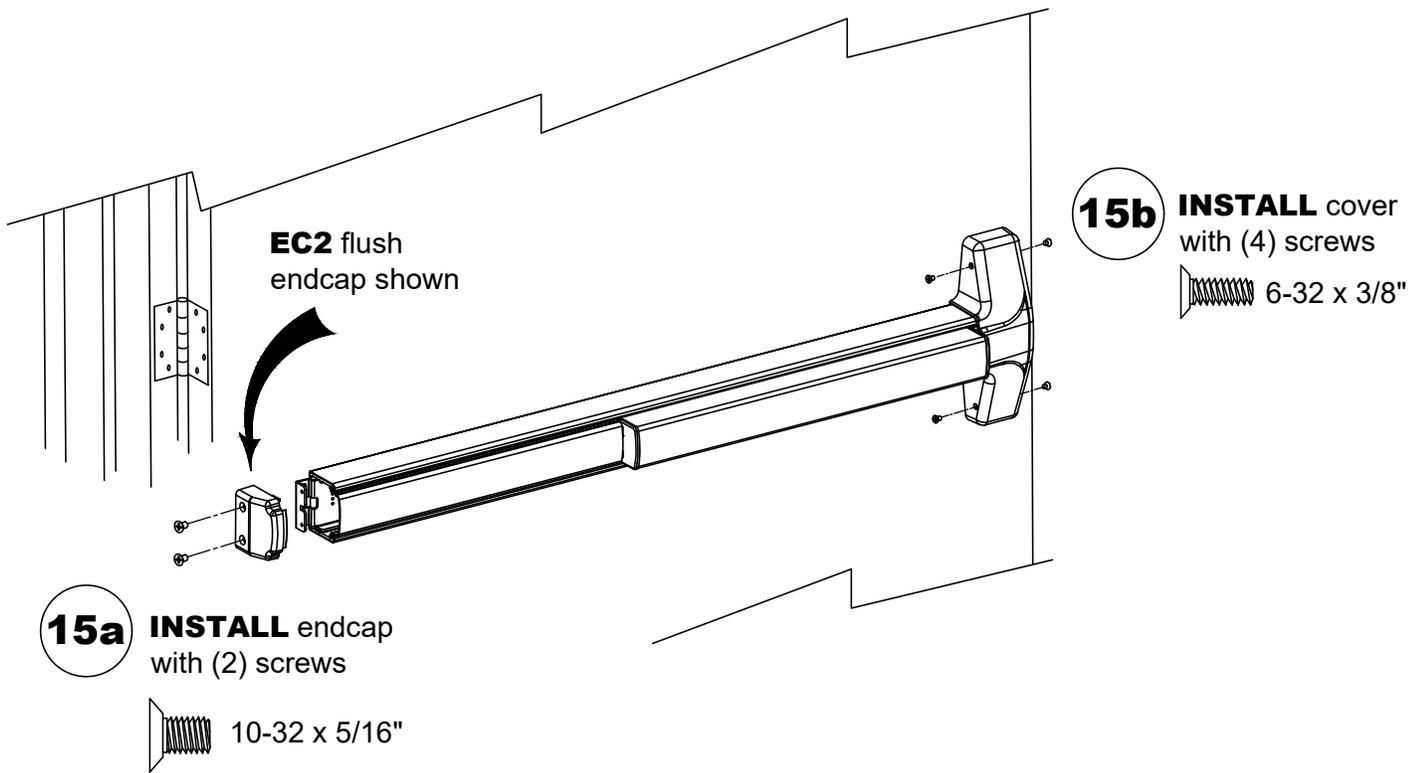
- 14e: BOTTOM LATCH ADJUSTMENT:** With pushpad depressed (retracted position), extend or retract bottom bolt to desired engagement and clearance.

- 14f.** Check device operation. Reference STEP 14a & 14b.

DEVICE OPERATION TROUBLESHOOTING

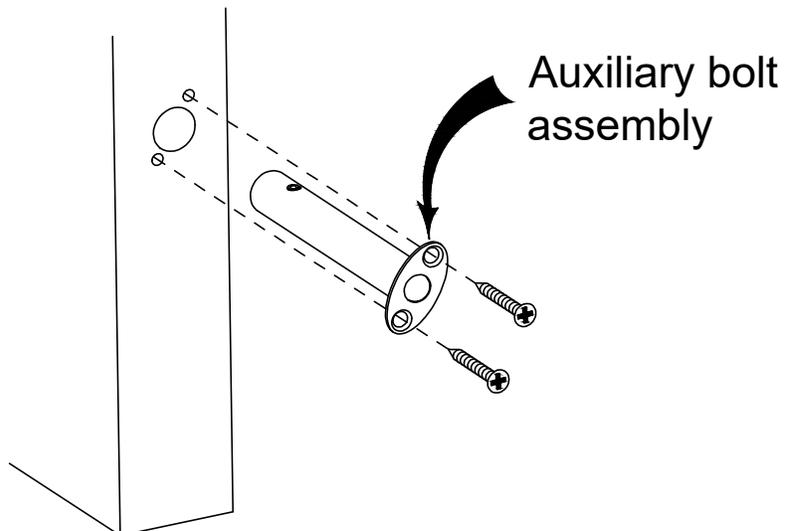
SYMPTOM	POSSIBLE CAUSE	SOLUTION
Device not latching when door closes	Bottom bolt is not properly aligned with bottom strike hole.	Modify bottom strike hole for fit.
	Top strike insert is not installed or not correctly aligned with the holdback.	Install and/or position strike insert per instructions.
	Through fasteners for trim (if applicable) are interfering with internal centerlift assembly.	Loosen and re-position through screws to clear.
	Rods improperly adjusted	Adjust rods per instructions. Remove device and re-install per instructions.
Latches release, but pushpad will not fully depress	Device centercase lift finger not inserted properly into centerlift assembly.	Remove device from backplate and re-install with lift finger correctly inserted.
	Top adjustment screw is adjusted too far in the retracted direction (CCW).	Rotate top adjustment screw in the extended direction (CW) per FINE LATCH ADJUSTMENT procedure.
Latches are not releasing when pushpad is fully depressed	Device centercase lift finger not inserted properly into centerlift assembly.	Remove device from backplate and re-install with lift finger correctly inserted.
	Top adjustment screw is adjusted too far in the extended direction (CW).	Rotate top adjustment screw in the retracted direction (CCW) per FINE LATCH ADJUSTMENT procedure.
	Bottom adjustment screw is adjusted too far in the extended direction (CCW).	Rotate bottom adjustment screw in the retracted direction (CW) per FINE LATCH ADJUSTMENT procedure.

STEP 15: COVER INSTALLATIONS



STEP 16: INSTALL AUXILIARY FIRE BOLT (F71 ONLY)

See Auxiliary Bolt instructions (p/n 104934) included with kit



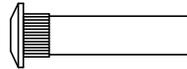
Optional Accessories

Sex Nut Kits

The #1/4-20 kits are available in 3 finishes:

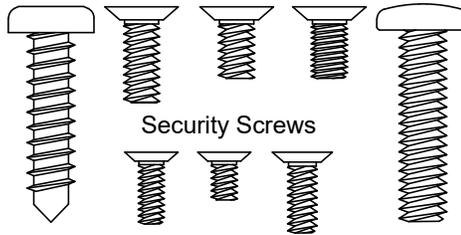
- Brushed Brass BHMA 606: p/n 105274-2
- Oil Rubbed Bronze BHMA 613: p/n 105274-25
- Stainless Steel BHMA 630: p/n 105274-9

Catalog No: **SN3** uses screws in hardware kit

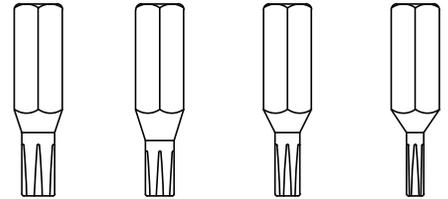


Tamper Kit (Security Kit)

Catalog # & Part #:
SSK5



Security Screws



Security Pin TORX® Bits provided

Cylinder nut socket p/n: 103779

