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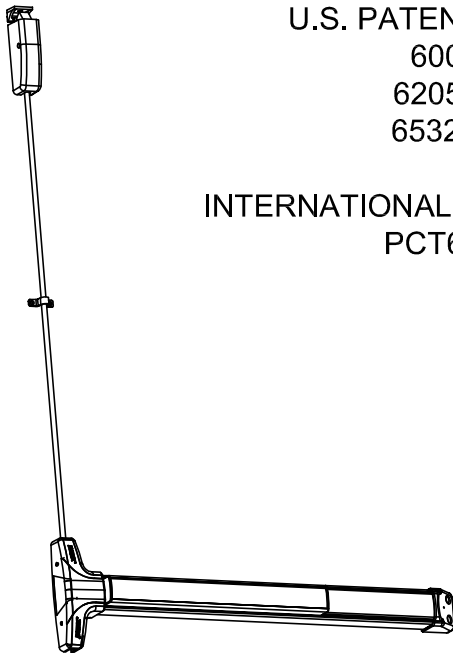
**INSTALLATION INSTRUCTIONS FOR VALUE SERIES®  
SURFACE VERTICAL ROD V50/V51/FV50/FV51 & "W" (Weatherized) SERIES**

FV50 / V50 / FV51 / V51  
Dwg# 103550

**U.S. PATENT NUMBERS:**

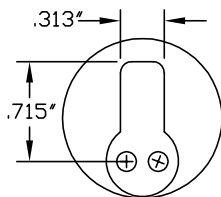
6009732  
6205825B1  
6532777B2

**INTERNATIONAL PATENT NUMBER:**  
PCT6009732



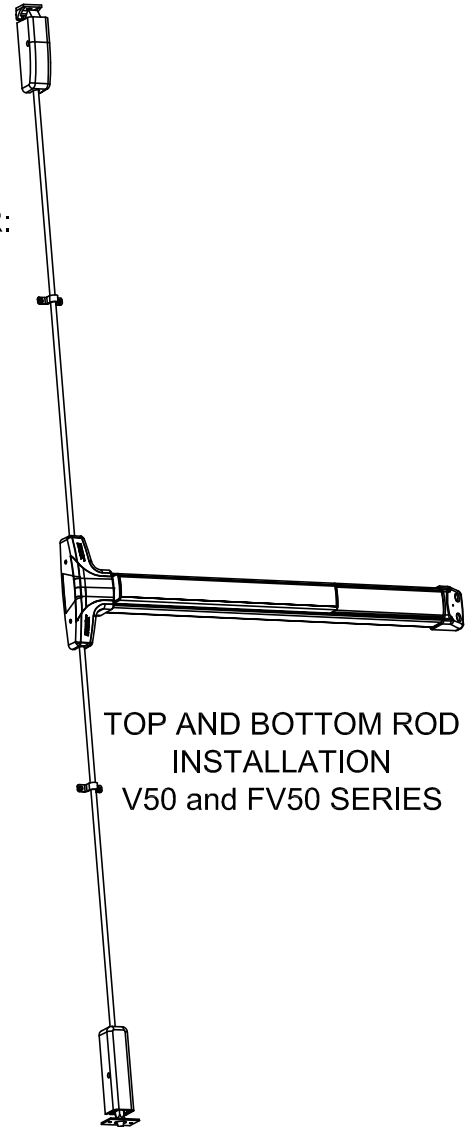
**TRO - TOP ROD ONLY INSTALLATION  
V51 and FV51 SERIES**

\* Narrow Stile door, use "NS" option



Mortise cylinder not included with device.  
Standard Yale type cam required.

See last page  
for  
Optional  
Accessories

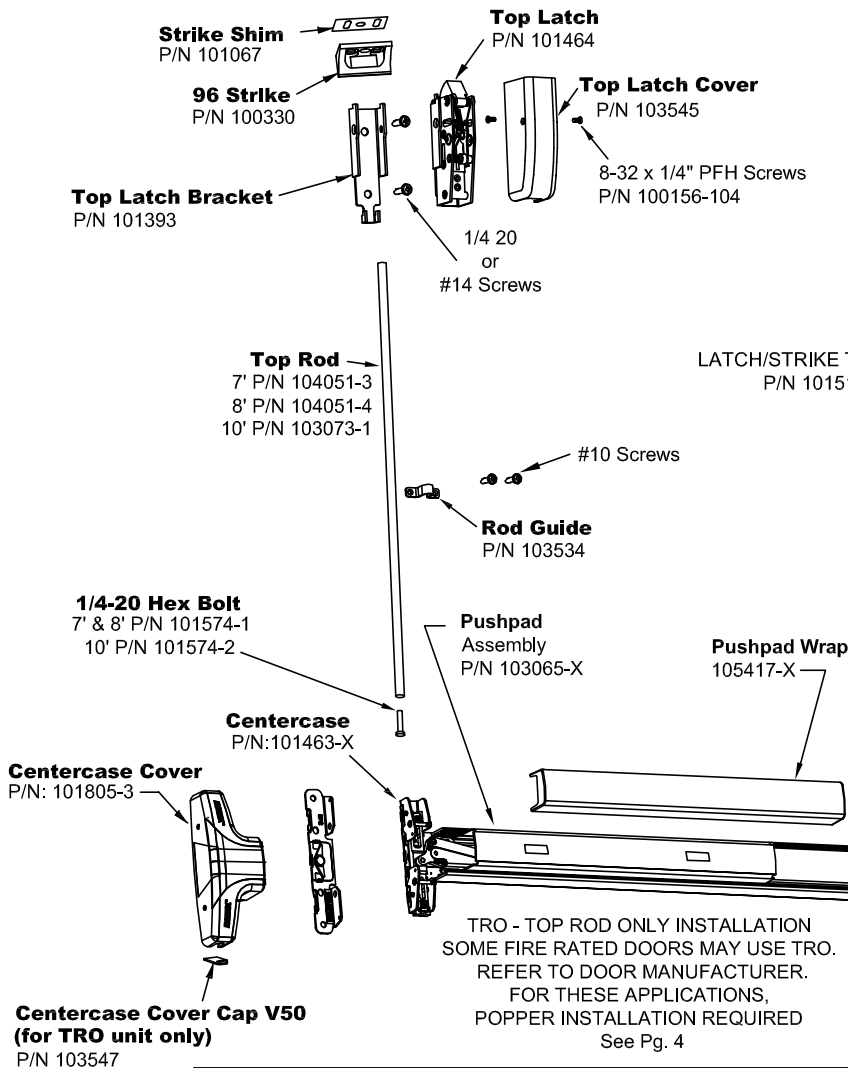


**TOP AND BOTTOM ROD  
INSTALLATION  
V50 and FV50 SERIES**

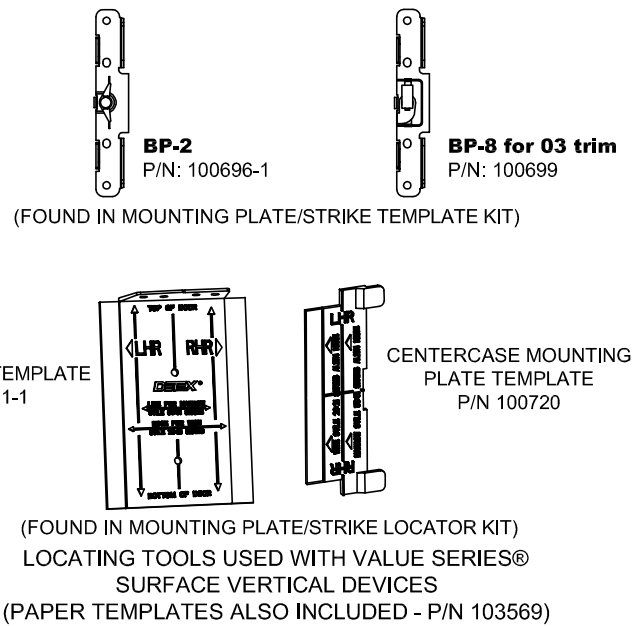
**Owner's Copy**

**VALUE SERIES® SURFACE VERTICAL  
ROD INSTALLATION**

**TOP LATCH / COVER KIT**  
P/N 104071



**Mounting plate Subassembly**



**Endcap Bracket**

P/N 101844-1

**Endcap Bracket w/ 9V battery holder**

P/N 101844

**Endcap**

P/N 101822

**Fillerplate SubAssembly (Electrified Models)**

P/N: 104358-X

**Hex Nut**

P/N: 100783

**9V Battery**

P/N: PP-5567

**Fillerplate Subassembly (EX x LD)**

P/N: 104357-1 (3-0)  
P/N: 104357-3 (4-0)

**Fillerplate SubAssembly (EX x HD)**

P/N: 104355-1 (3-0)  
P/N: 104355-3 (4-0)

**Hex Key**

P/N: 100450

**Fillerplate SubAssembly (EX x CD)**

P/N: 104356-1 (3-0)  
P/N: 104356-3 (4-0)

**Hex Nut**

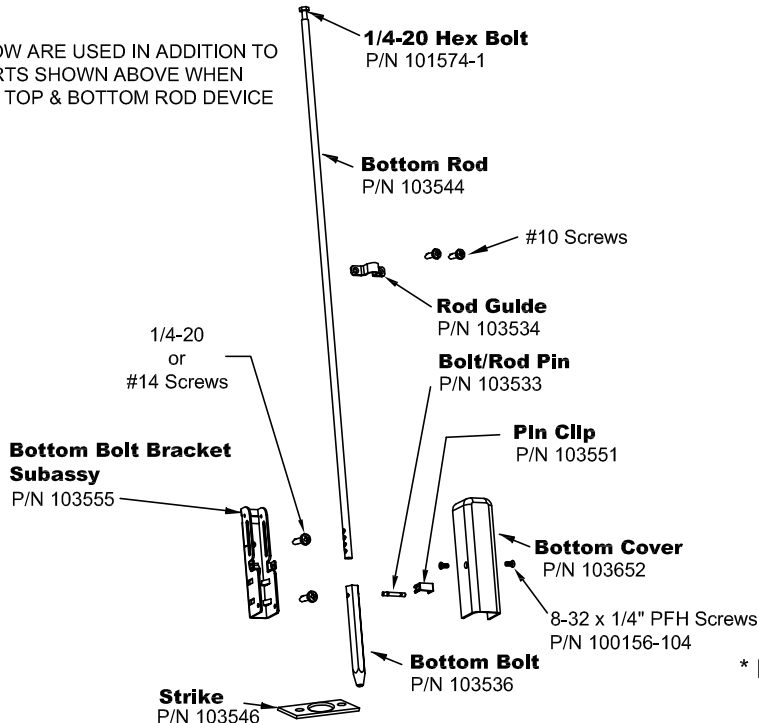
P/N: 100783



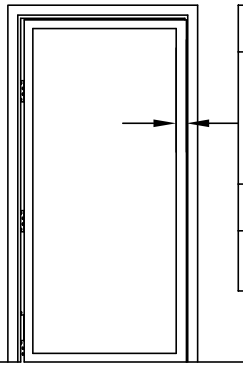
**NS Spacer (1 5/8)** P/N: 101825-1

\* Note: Parts listed above will vary according to product configuration.  
See Optional Accessories page

PARTS BELOW ARE USED IN ADDITION TO TRO PARTS SHOWN ABOVE WHEN INSTALLING TOP & BOTTOM ROD DEVICE



# !!!CHECK BEFORE STARTING!!!



## Wide Stile (Surface Strike)

Minimum door stile 3-1/2" (89 mm).  
Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.

## Narrow Stile

Minimum door stile 2" (51mm)

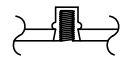
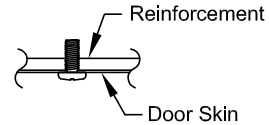
Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

Unreinforced Doors: Use Sex Nuts and Bolts

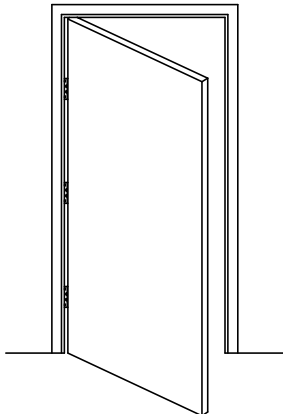
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)

Fasteners for unreinforced openings are not supplied by Detex.

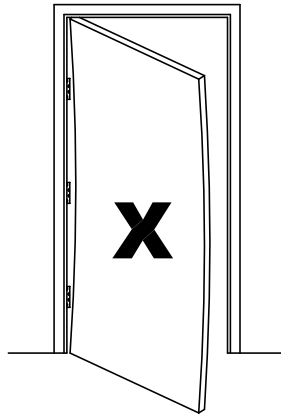
Reinforced door or frame engages at least (3) screw threads.



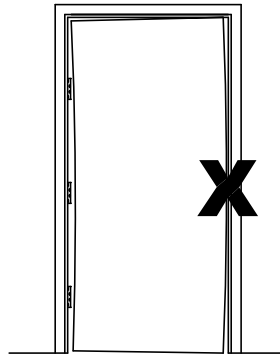
Blind Rivet Nut



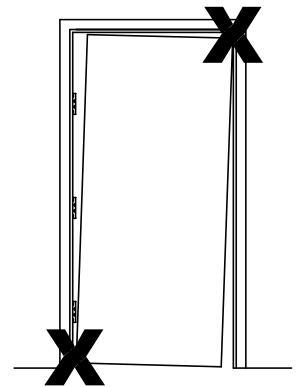
Door Must Swing Freely



Door Must Not be Warped



Door Must Not Bind



Door Must Not Sag

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

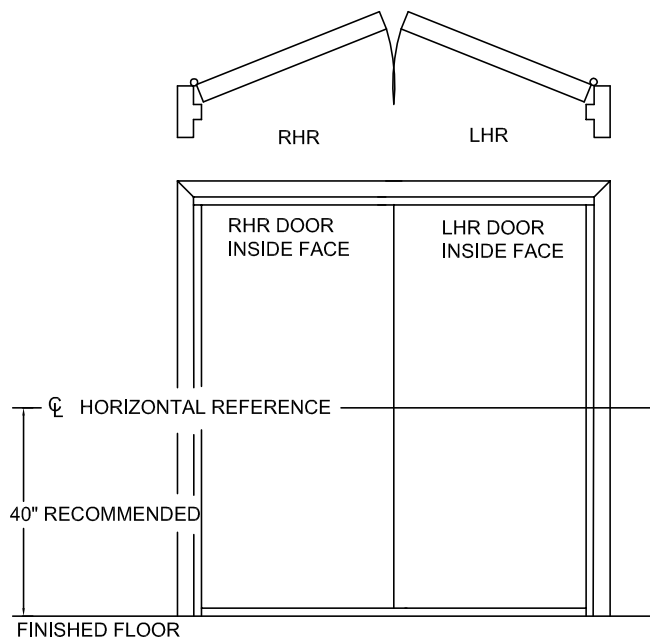
1000mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 48" DEVICE

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

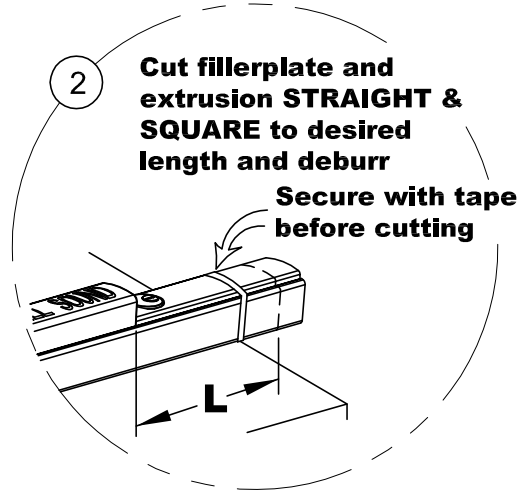
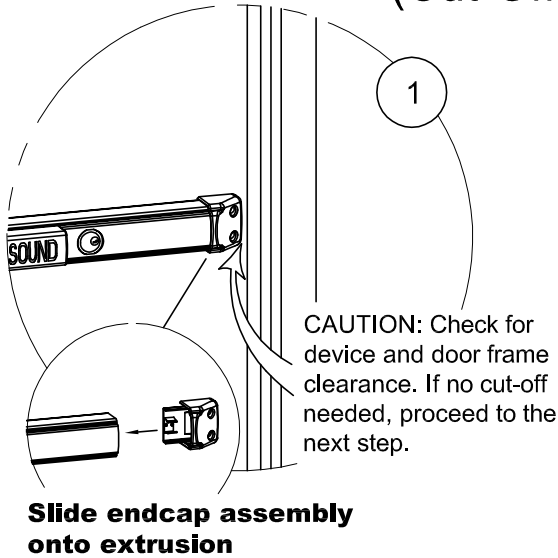
NO MODIFICATION OF ANY KIND, OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS ARE PERMITTED.

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.



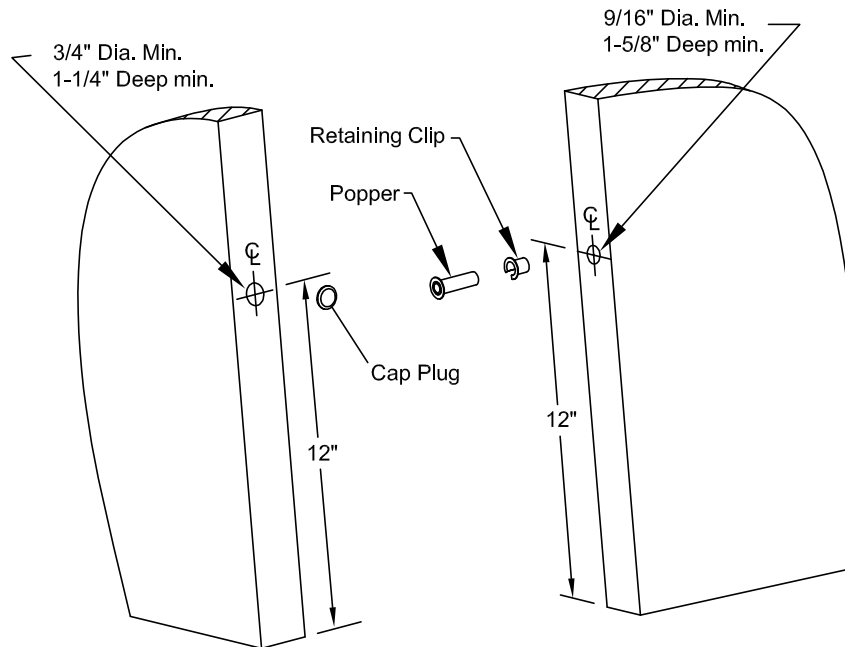
## CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)



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

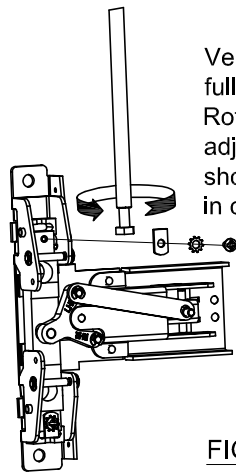
## FIRE RATED TOP ROD ONLY (TRO) DOORS

A door locking popper 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.**



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

## TOP ROD ADJUSTMENT



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.

Lock Bolt head firmly in place in Carriage with plate, starwasher and screw. (As shown in detail)

FIG. 1

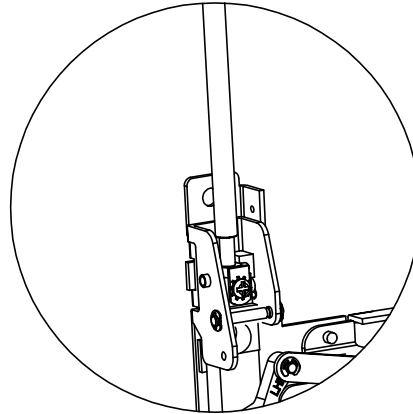


FIG. 1 - Detail

## 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.

**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, 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 1).  
Check centercase, verify that the 1/4-20 x 1/4" screws have been installed.

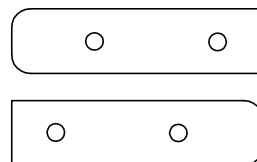
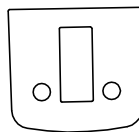
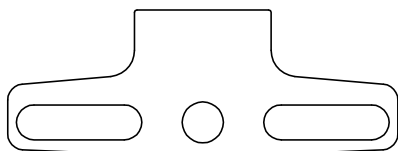
## Optional Accessories

### Glass Bead Kit

Catalog No: GB17 through GB21

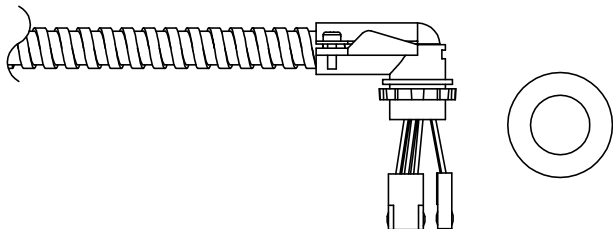


#1/4-20 X 1-1/2" Self Drilling  
screws Included



### Flex Conduit Kit

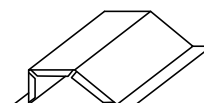
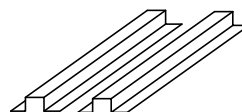
Catalog No: FCV-3 Weatherized FCV-W-3  
FCV-10 FCV-W-10



### Rod Cover/Bottom Bolt Guard Kit

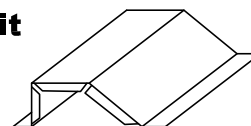
P/N:

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

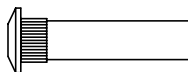


### Bottom Bolt Guard Kit

P/N: 103562



### Sex Nut



The #10-32 kit is available in (4) finishes:

Catalog No: SN2 Brushed Brass BHMA 606 Finish  
Catalog No: SN2 Oil Rubbed Bronze BHMA 613 Finish  
Catalog No: SN2 Brushed Chrome BHMA 626 Finish  
Catalog No: SN2 Stainless Steel BHMA 630 Finish

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

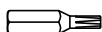
### Tamper Kit

(Security Kit)

Catalog No: SSK3



Security Screws



Security Pin TORX®  
Bits provided

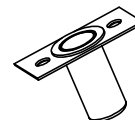
### Wood Door Screw Kit

Part No: 103991



### Dustproof Strike Kit

Part No: 101562-X



### Key Stop Kit

(Momentary Shunt)

Catalog No: KS

