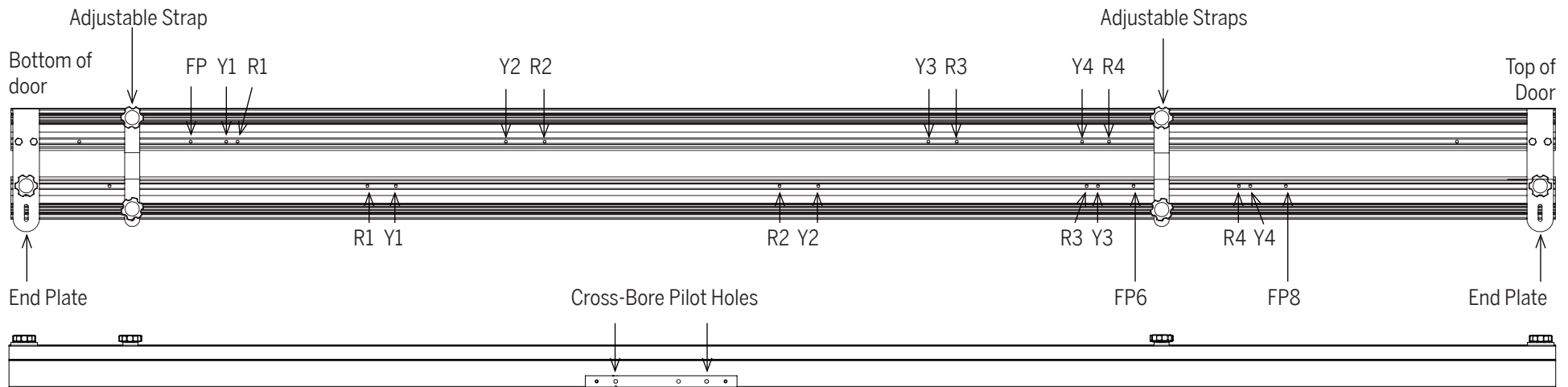


The Trilennium RS Template is for fabricating the 3000, 3020, and 3070 Trilennium Locksets. The Template is designed for 6/8 and 8/0 door panels, and can accommodate a panel thickness range of 1-3/4" and 2-1/4".

## Over View

Sleeved pins should only be used in the FP,FP6 or FP8 locations for 3000 Series or 3020 Series 1" Locks.



## Parts Included

- (4) 1/4 -20 Flat Head Socket Cap Screws
- (2) End Straps, two holes and one slot
- (2) Adjustment Straps, single hole and single slot
- (6) 1/4-20 Flower Topped Screws
- (4) 1/4-20 Barrel Bolts
- (6) 3/16" Quick Release Pins
- (2) Sleeved Pin Assemblies, use with 3000 and 3020 locks
- (2) Standard Pin Assemblies, use with 3070 locks
- (1) Router Table Guide Assembly
- (2) Drill Guides
- (4) 10-32 Flat Head Screws (for Drill Guides)
- (1) Outside Rail
- (1) Inside Rail
- 13/16" x 5" Router Bit (Endura Item # TC-TEMP-RTBIT-100)
- 9" Magnum Bolt
- Deadbolt Actuator Wrench
- Lock Actuator Wrench
- Instructional DVD

## Parts Required

- Porter Cable Router #7538 or #7539
- 1"x 2-1/2" Router Bit for 3000 Series Installation
- 5/8"x 2-1/2" Router Bit for 3070 Series Installation. (Endura Item# TC-TEMP-RTBIT-088)
- 1/2" Drill Bit
- 1/4" Drill bit (Min. 4" length)
- 2-1/8" Holesaw with 1/4" pilot for Eclipse, Pinnacle, Eclipse Entry Grip or Rocky Mountain Hardware.
- 1-11/16" Holesaw with 1/4" Pilot for Horizon and Emtek Hardware.

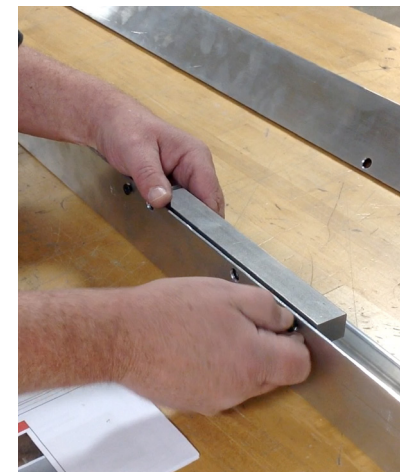
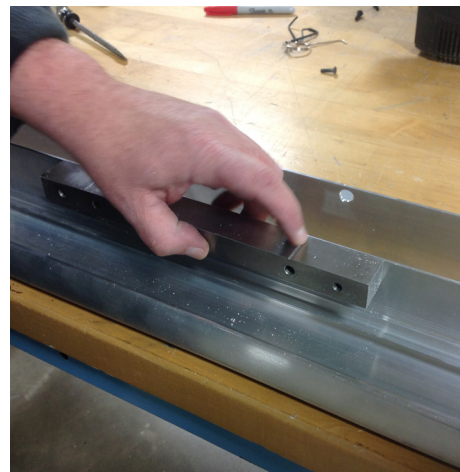
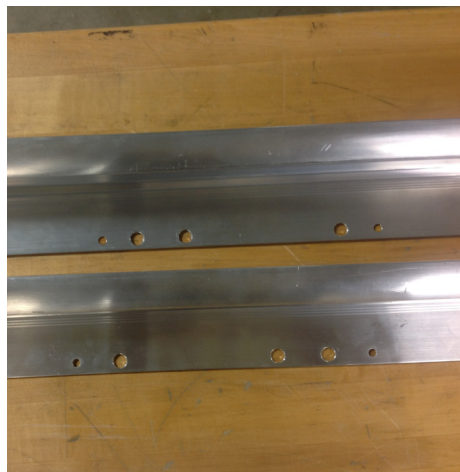


## RS TEMPLATE ASSEMBLY & SET UP INSTRUCTIONS



### 1 Assemble the Template Rail Assemblies

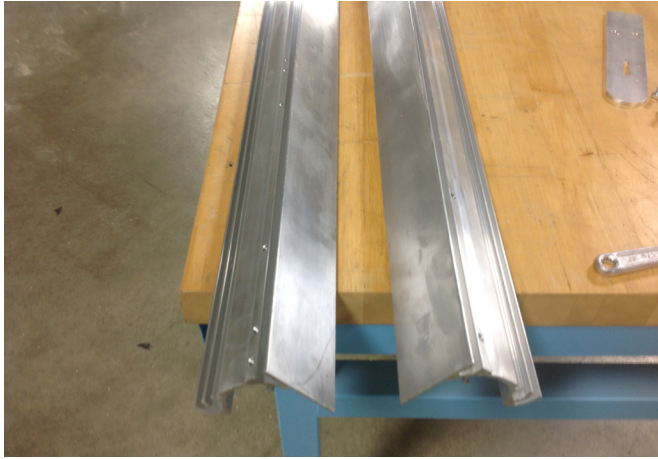
- Align the drill guide holes with the holes in the front rail and securely fasten with the 10-32 Phillips head screws provided. Note: Make sure the "V" notch is towards the bottom side of the inside rail. (SEE OVERVIEW Page 1)
- Repeat for the backside rail.





## 2. Template Rail Assembly

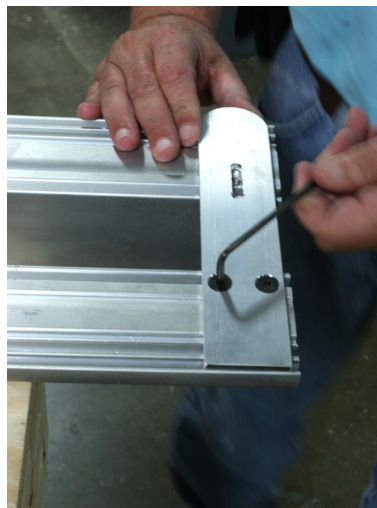
- a. Place the rails on a flat surface with the flat surface of each rail back to back.



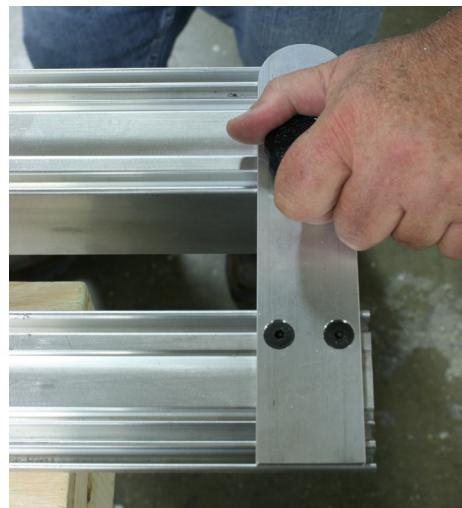
- b. Load two Barrel Bolts into each rail in the radial pocket which runs the length of the rail. Push them in at least 3" from the end of the rail. Make sure the tapped hole is visible in the slot. These will be used later.



- c. Place the End Strap over the Back Rail and align the two holes with the hole on the rail. Secure the End strap with the 1/4-20 Flat Head Socket Cap Screws using an Allen Wrench.



- d. Align the ends of the Front and Back Rail, then secure the End Strap to the Inside Rail via the Flower topped Rosette screw through the slot in the strap.



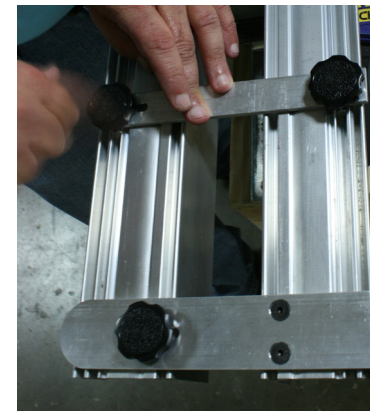
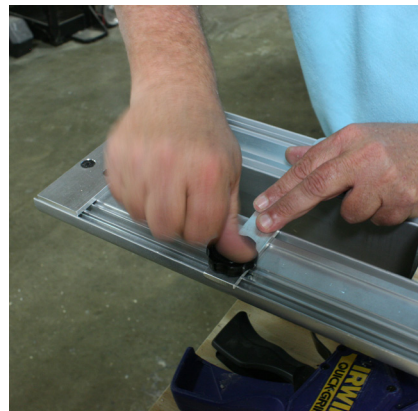
- e. Repeat Steps c and d at the opposite end of the template.





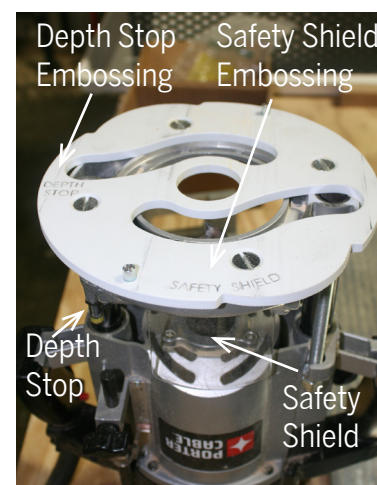
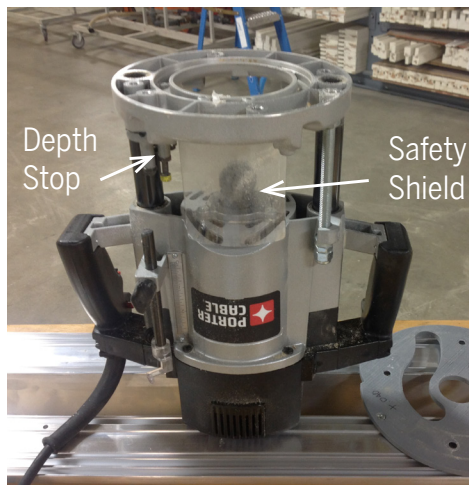
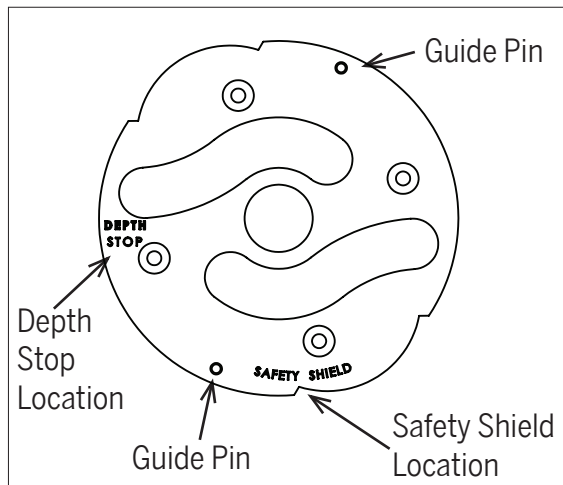
## 3. Adjustment Strap Assembly

- Locate the Barrel Nuts and make sure the tapped holes are visible in the slot.
- On the Back Rail align the hole in the Adjustment Strap with the tapped hole in the Barrel Nut.
- Lightly attach the Adjustment Strap with the Flower Head Screw so the Barrel Nut can slide in the Back Rail.
- Align the Barrel Nut in the Inside Rail with the slot in the Adjustment Strap and lightly secure with the Flower Head Screw.
- Repeat for the 2nd Adjustment Strap



## 4. Mounting the Router Table Guide to the Router

- Remove the original router base plate (retain screws).
- Align the router's Depth Stop and Safety Shield with the corresponding embossed markings on the Router Table Guide.
- Secure router to the guide with the original router base screws.



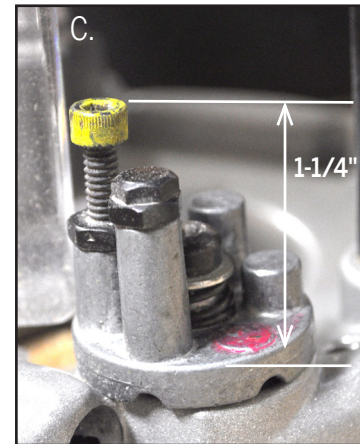
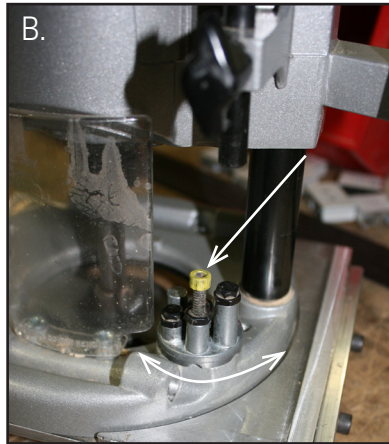
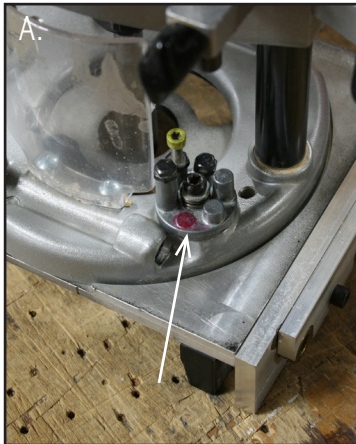
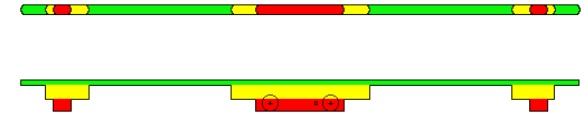


## 5. Initail Router Set-Up

### 1. Router Turret Set up (for use with the 13/16" router bit.)

Setting Red Position and Yellow Position

- Set router turret to lowest stop and mark stop head in red.
- Rotate router turret to the 2nd from tallest stop position.
- Remove the original screw (retain nut) provided.
- Install the supplied 10-24x1" cap head screw with the original provided nut. Mark head yellow.
- Adjust yellow router stop turret height to 1- 1/4" above the red position, then lock in place.



### 2. Vertical Height Set Up



- Move and lock stop nuts at maximum height.





## RS TEMPLATE OPERATION INSTRUCTIONS



The Trilennium RS Template is for fabricating the 3000, 3020, and 3070 Trilennium Locksets. The Template is designed for 6/8 and 8/0 door panels and can accommodate a panel thickness range of 1-3/4" and 2-1/4".

### 1. Determine Handle Location

Mark the desired lever bore location. Using a square, transfer the mark to the face of the panel roughly 3-1/2" off the panel edge to ensure it is hidden by the trim after installation is complete.

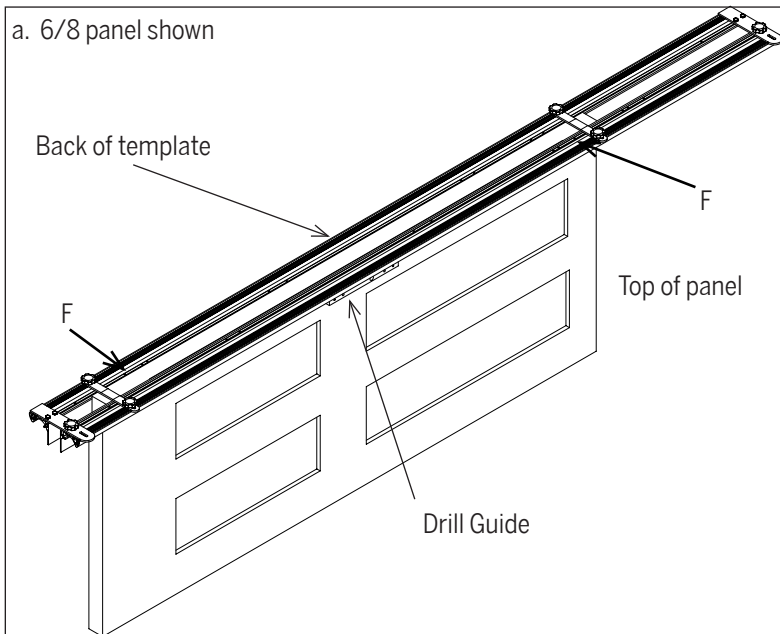




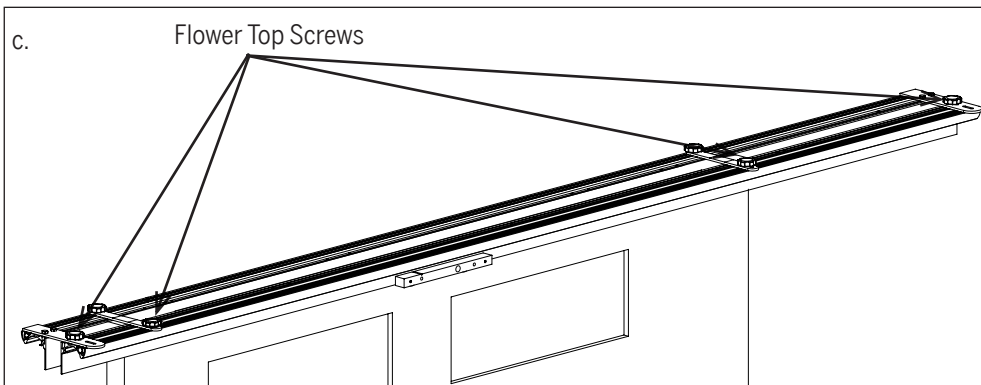
## 2. Align and Attach Template to Panel

- a. With top of panel to the right, place template over panel edge.
- Make sure adjustable straps are positioned approximately 1" outside the "F" and "F" (for 6/8 panels) or the "FF" (for 8/0 panels) hole locations. The adjustable straps will rest on the panel edge.

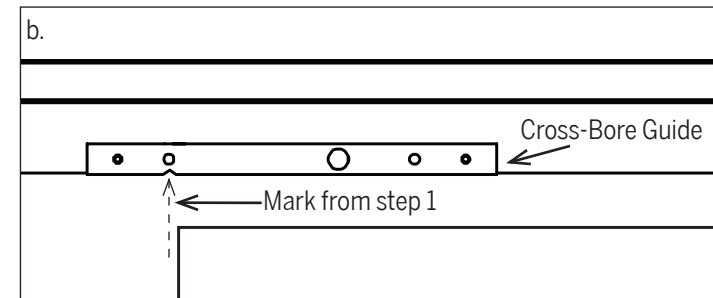
a. 6/8 panel shown



- c. Compress template against panel and tighten flower top screws to secure end plates and adjustable straps snugly in place.



- b. Align "v" notch on the Cross-bore guide with lever bore mark made on panel in step 1.

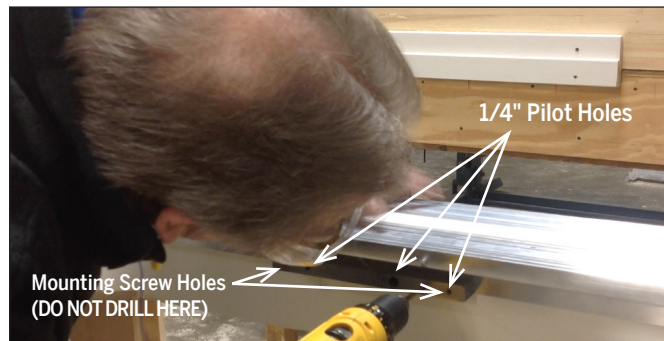


- d. Clamp template to panel at each end.  
(Make sure the rails are secure to the panel, and recheck Handle Location.)



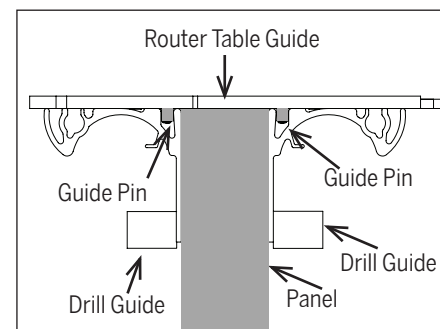
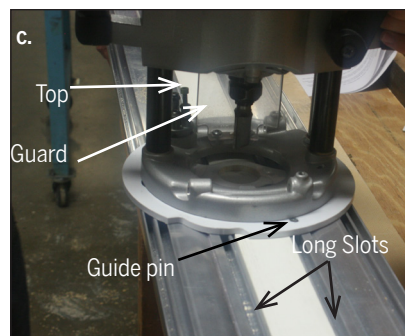
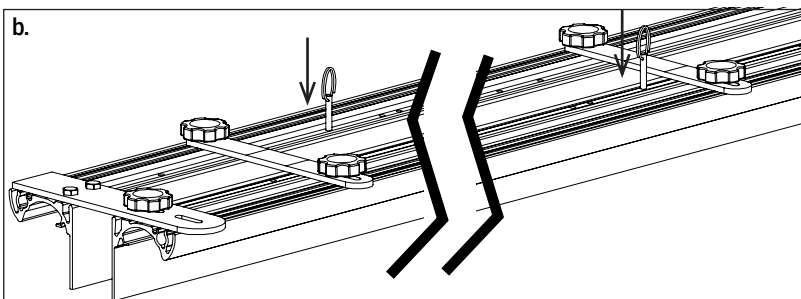
### 3. Drill Cross-Bore Pilot Holes

- a. Using a 1/4" bit, drill the 3 center holes and approximately half way through the panel.
  - Be sure to use the though holes and not the outermost mounting holes for the guide.
- b. Repeat from the other side of the panel so the holes meet.

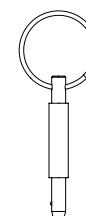


### 4. Route for Faceplate

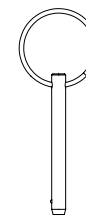
- a. Set router plunge stop depth to 1/2" and insert the appropriate bit. (Use Magnum bolt to check depth)
  - i. Use a 1" bit for 3000 and 3020 locksets
  - ii. Use a .890" bit for the 3070 lockset
- b. Insert appropriate stop pins into template at the "F" and "F" (for 6/8 panels) or "FF" (for 8/0 panels) hole locations
  - i. Use sleeved stop pins for 3000 and 3020 locksets. (see drawing to right)
  - ii. Use standard stop pins for 3070 locksets. (see drawing to right)
- c. Place router onto panel and engage with template. The guard on the router should be facing the top of the panel with the guide pins on the table inserted into the long slots on the template closest to the panel.
- d. Make several shallow passes with the router until reaching the desired depth. Make sure to run the router up against the stop pins with each pass.
- e. Blow out any excess debris.



#### Faceplate Stop Pin Assemblies



**Sleeved Pin**  
3000/3020 Locks



**Standard Pin**  
3070 Locks







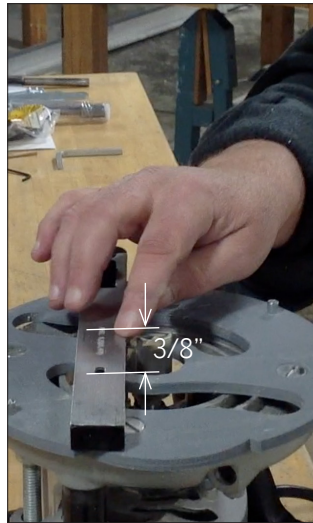
## 5. Test Faceplate Route.

- Insert lock face down in faceplate route made in step 4 to check for proper depth and fit.
- Repeat step 4 if route is not deep enough.
- Unplug Router



## 6. Route 2" Box Pockets

-  Be sure to unplug router when exchanging bits.
- Install 13/18" router bit. Be sure the router is fully extended. Leave 3/8" to 1/2" of the bit projected above the Router Table Guide (Use the Magnum Bolt for a depth reference). Plunge the router to a 2" depth (or slightly more, this is for the clearance pockets). Set the yellow position depth stop.
- Insert stop pins into both Y1, both Y2, and in either both Y3 (for 6/8 panels) or both Y4 for (8/0 panels) hole locations. (SEE OVERVIEW)
-  Do not use Sleeved pins for this step.
- Orient router on template and make several shallow passes between the pair of Y1 stop pins until reaching the desired depth. Make sure to run the router up against the stop pins with each pass.
- Repeat step "c" between the pair of Y2 stops and between the pair of Y3 or Y4 stops.
- Blow out any excess debris.

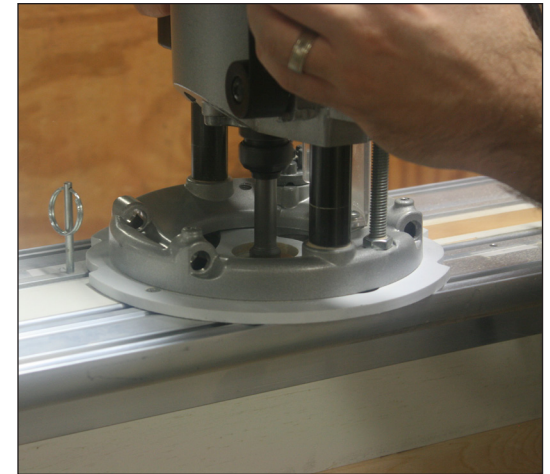


## 7. Route 3-1/4" box Pockets.

- Turn the router dept stop to the red position for 3-1/4" depth.
- Remove the stop pins from all Y Hole locations.
- Insert stop pins into both R1, both R2, and either R3 (for 6/8 panels) or R4 (for 8/0 panels) hole locations. (SEE OVER-VIEW)

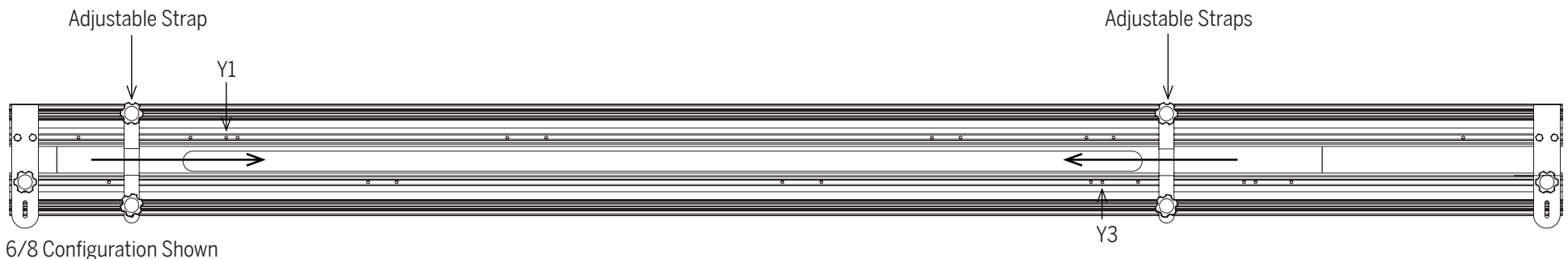
**⚠** Do not use Sleeved pins for this step.

- Orient router on template and make several shallow passes between the pair of R1 stop pins until reaching the desired depth. Make sure to run the router up against the stop pins with each pass.
- Repeat step "d" between the pair of R2 stops and between the pair of R3 or R4 stops.
- Blow out any excess debris



## 8. Route for 3020 Shoot Bolts (Skip this step for 3000 and 3070 Locksets)

- Remove all stop pins from the template.
- Loosen adjustable straps, slide them inward past the Y1 hole locations and re-tighten.
- Install the 1" bit and set the plunge stop to 1/2".
- Orient the router on the template and make several shallow passes from the adjustable strap to the end of the panel until reaching the desired depth.
- Repeat step "d" at the other end of the panel.





## 9. Check completed fabrication with lock

- Clean out all debris from routed channels and pockets.
- Place lock face up into routed channel.
- Ensure lock faceplate is flush with the panel stile.



## 10. Drill Cross-Bore

- Remove template from panel
- Using a 1/2" drill bit, drill approximately half way through the 1/4" center hole.
- Repeat step "b" on the other side of the panel.
- Using the two remaining 1/4" holes from step "3a" as guide, cut the handle and deadbolt cross-bores into one side of the panel using the appropriate size hole-saw (See Below).
- Repeat step "d" on the other side of the panel.

- ⚠ a. To prevent splintering, be sure not to go through both sides of the panel.

Hole Saw Sizes:

2-1/8" - Eclipse, Pinnacle, Eclipse Entry Grip, Rocky Mountain Hardware

1-11/16" - Horizon and Emtek Hardware





## 11. Install lock into panel

- Fit lock into route in panel.
- Pilot the mounting screw holes using a VIX bit.
- Attach using screws provided.



## 12. Check Deadbolt and Latch Functions.

Using the Deadbolt Actuator Lever and Lock Actuator Wrench, verify Lock and Handle Operation

- Insert Lock Actuator Wrench into interior actuator hub and rotate it to withdraw the latches. All three latches should withdraw into the edge of the door completely. Release Lock Actuator Wrench, and ensure the latches return to their original position (approximately ½" projection).
- Insert Lock Actuator Wrench into exterior actuator hub and rotate it to withdraw the latches. All three latches should withdraw into the edge of the door completely. Release Lock Actuator Wrench, and ensure the latches return to their original position (approximately ½" projection).
- Insert Deadbolt Actuator wrench into deadbolt thumb-turn slot and operate 90°. Latch bolts should extend into dead-bolted position and be about 1" long. Push on the end of the three bolts to ensure that they remain extended.

### Note

If you push on the end of the activated deadbolts and they can be depressed, or the exterior lever will open the door, the system is not locked. If either of these occur, remove the lock from the edge of the door and repeat steps #1, #2 and #3 with the lock out of the door. Once confirmed that it locks properly outside the door, but not when installed, the cause is typically a fabrication issue from:

- Not enough clearance allowed for the drive bars to move 1" vertically,
- Sawdust left in the fabrication,
- Pockets off-center twisting the lock mechanism to the side

- With the lock in the deadbolted position still, insert Lock Actuator Wrench into exterior actuator hub and attempt to rotate the actuator hub. The exterior actuator hub should not turn, and latch bolts should remain in dead-bolted position.
- Insert Lock Actuator Wrench into interior actuator hub and rotate, the Lever Actuator Hub downward. It should turn and the latch bolts should fully retract.