

# Saflok Quantum<sup>®</sup> Pixel

## Installation Instructions

PK3693-T - 2019 - 02

EN

dormakaba 

# Saflok Quantum Pixel Installation Instructions

## IMPORTANT

All parts needed to install the Quantum Pixel lock are included with each unit. Please check to make sure all parts are accounted for before you begin the installation. Do not substitute any of the parts. The use of substitute parts will result in poor performance of the lock.

All information contained herein, including but not limited to product pricing and other intellectual property, is confidential and intended for the sole use of the addressee(s) so named. Any misuse of this confidential information contained herein may result in legal action by dormakaba USA Inc. and its parent company.

## Door and door frame preparation

### Tools required for this step

**Recommend doors prepped at factory for higher precision**

**Do not drill both STD and ADB Ø7/16 thumb turn holes. Drill only the hole that corresponds to the mortise purchased. Do not drill a Ø7/16 thumb turn hole for utility locks.**

- Drill
- Plunge Router
  - 1" Straight
  - 1-1/16" Straight
- Drill bits
  - 1/16" Reader
  - 7/16" Thumb Turn
  - 1/64" Mortise Mounting
- 2-1/8" Hole Saw
- Chisel
- Jigsaw
- 1:1 Door Prep Templates
- Optional Door Prep Jig P/N: FIXT-PIXEL (available for purchase)
  - Door prep jig only available for 1-3/8" [34.9mm] OR 1-3/4" [44.5mm] doors with standard centered lower mortise pocket and no rabbet.

# Door and door frame preparation

Figure 1 - Exploded Lock View

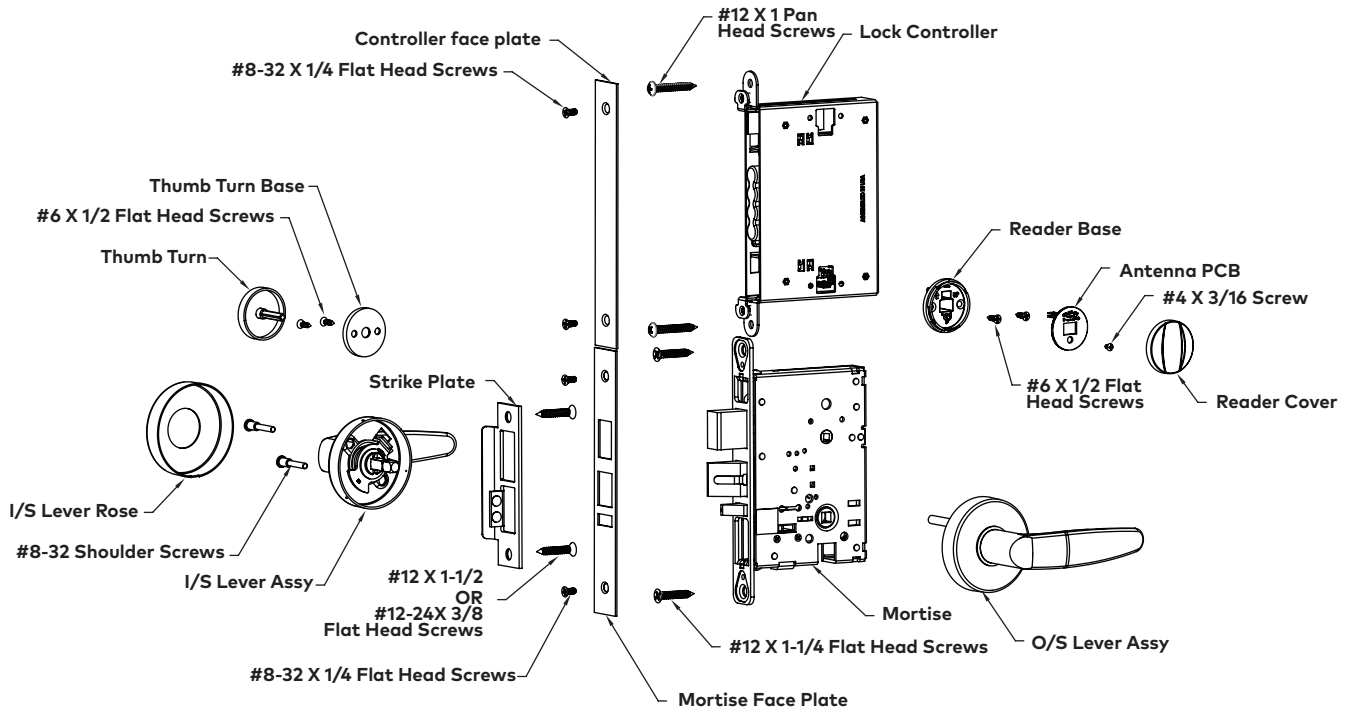
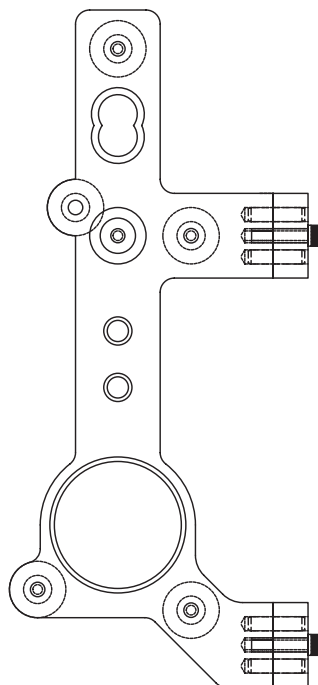
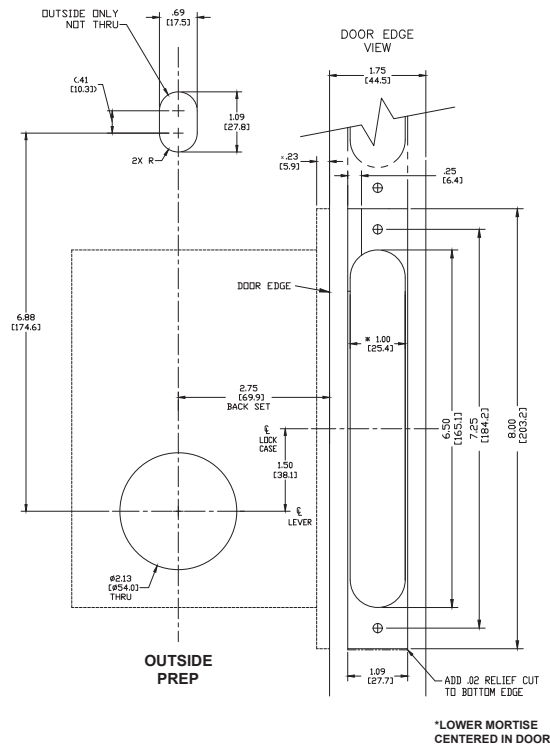


Figure 2 - Door preparation jig

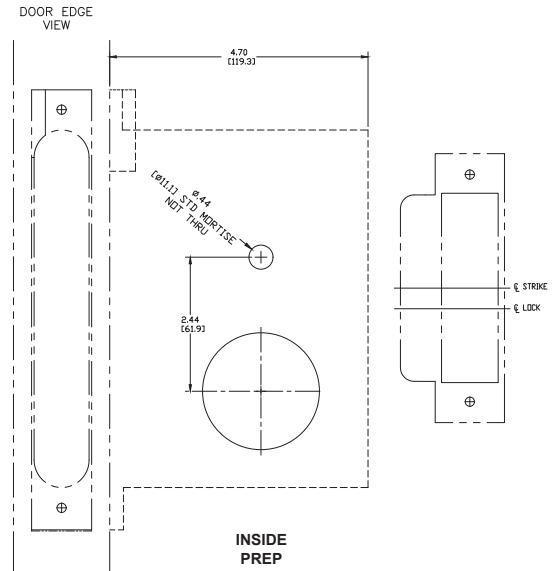


# Door and door frame preparation (continued)

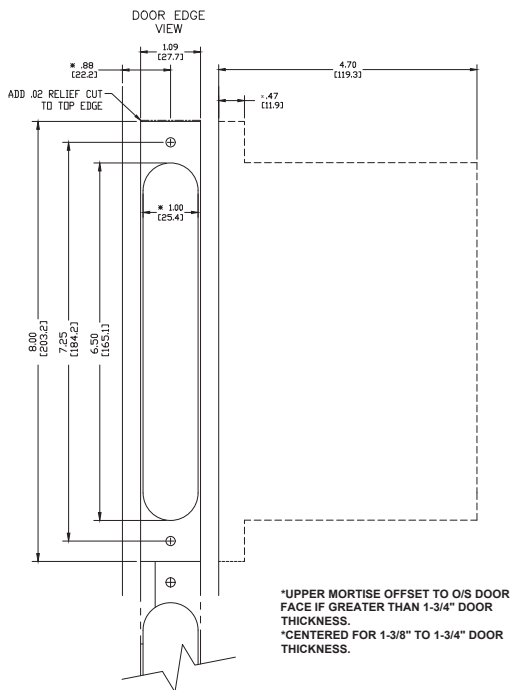
Figure 3 - Door preparation templates



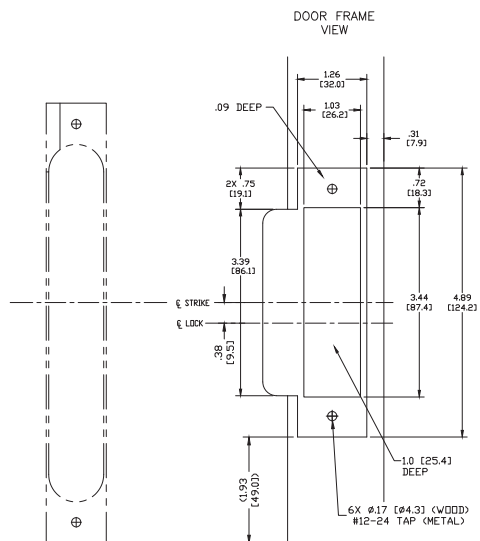
PAGE 1 - O/S TRIM & LOWER MORTISE



PAGE 2 - I/S TRIM



PAGE 3 - UPPER CONTROLLER MORTISE



PAGE 4 - STRIKE PREP

**\*NOT TO SCALE**

# Lock trim installation

## Tools Required for Installation

- Driver handle (P/N: 24190)
- #1 Philips bit
- #2 Philips bit
- #3 Philips bit
- T-15 tamper resistant torx bit (P/N: A39250)
- Spanner wrench for thumb turn (P/N: A32370)

## 1. Lower Mortise Installation

- a. Pre-Drill #12 screw pilot holes
- b. Slide mortise into lower pocket
- c. Route mortise cable harness along the side wire channel that connects the top and bottom mortise pockets (see figure #6 for wire channel location)
- d. Secure with included #12 flat head screws
- e. Ensure wire harness is free and not pinched

Figure 4 - Pixel Controller and Mortise Mounting

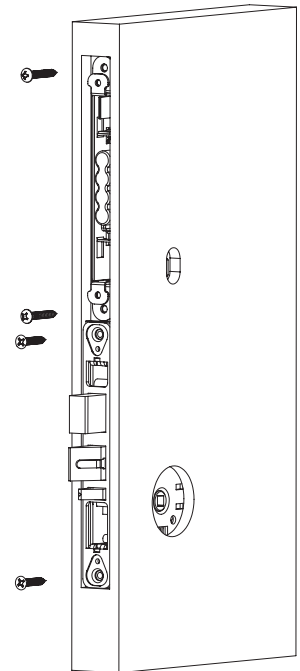
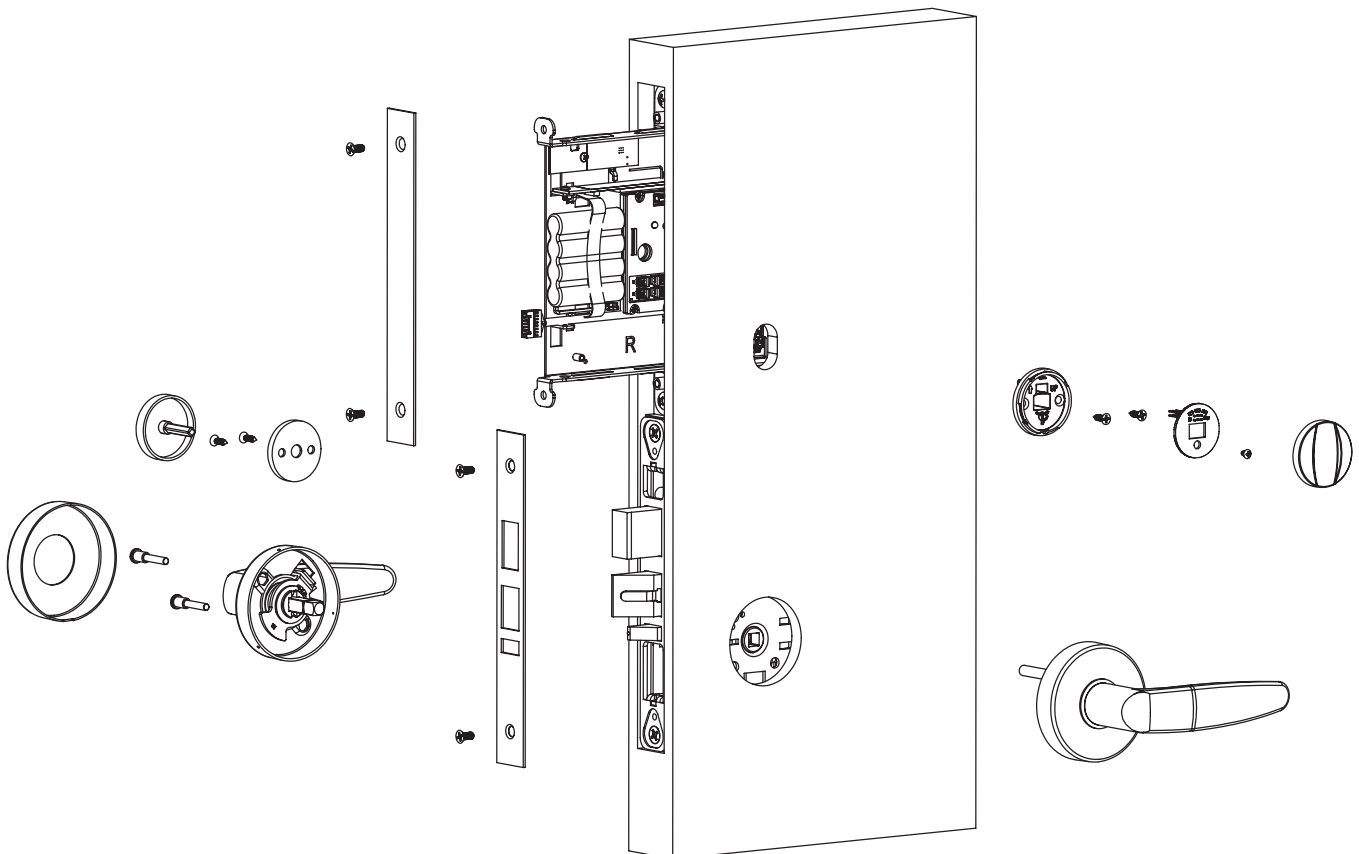


Figure 5 - Lock Exploded View with Mounted Controller and Mortise



# Lock trim installation (continued)

## 2. Controller Assembly Installation

- a. Lift controller to top of pocket and center horizontally to mark pilot hole locations based on case mounting holes
- b. Pre-Drill #12 screw pilot holes, ensure holes are centered for proper face plate alignment
- c. Slide tray out partially from controller to ensure tabs are not bent when securing #12 screws
- d. Lift and center assembly to ensure proper alignment
- e. Secure with included #12 pan head screws
- f. Slide the tray out partway to and ensure all connections are secure
  - \*Do not connect the battery at this point**
- g. Connect the harnesses from the mortise and controller together
  - \*Do not seat the slide tray in door at this point**

Figure 6 - Wire Channel in Door Edge

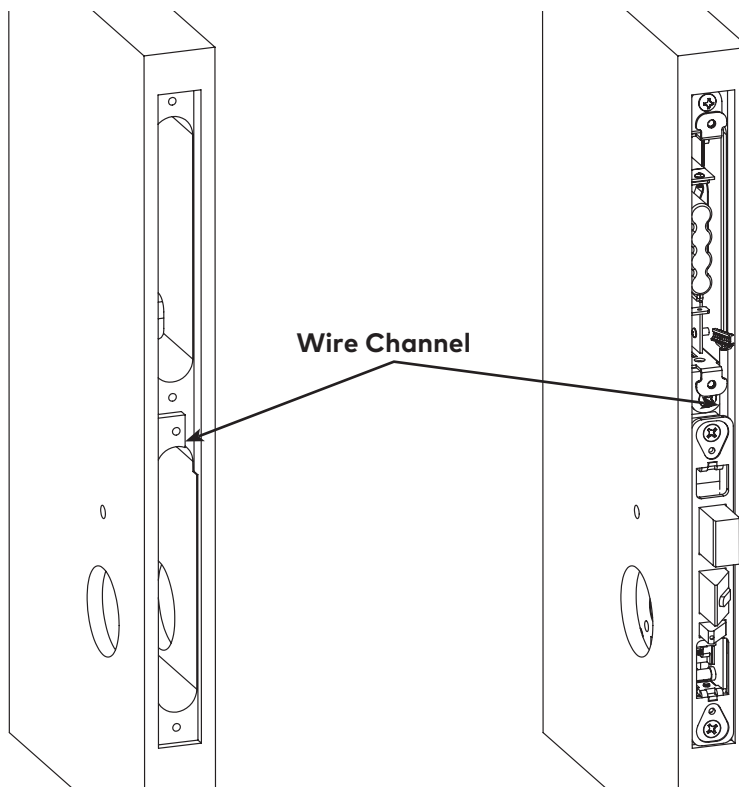
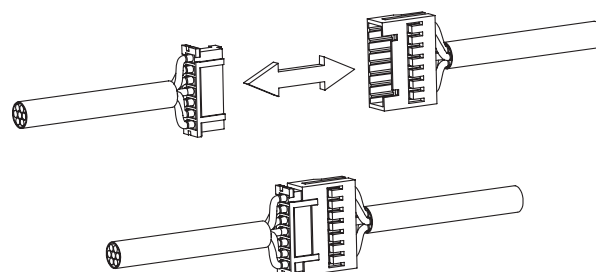


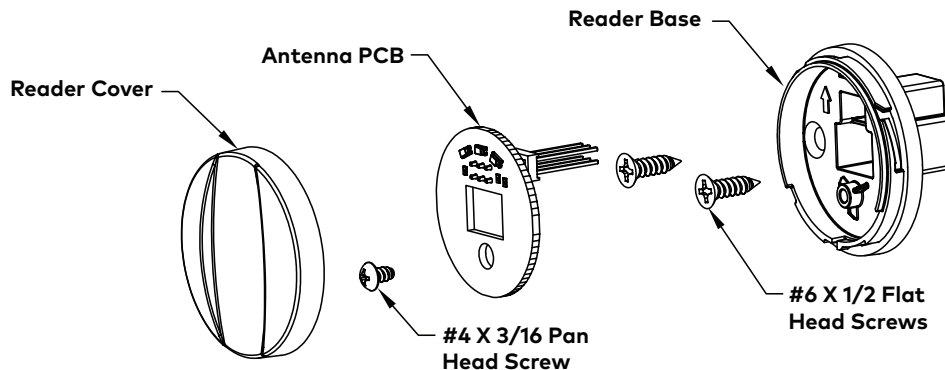
Figure 7 - Controller and Mortise Harness Connection



# Lock trim installation (continued)

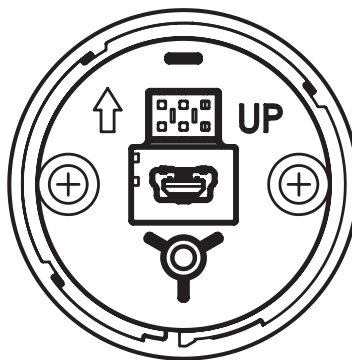
## 3. Reader Assembly Installation

Figure 8 - Exploded Reader Assembly



- Remove the antenna from the antenna base by removing the #4 mounting screw
- Align the reader base to the 6 pin antenna socket (inside controller assembly) with the orientation arrow facing up
- Ensure base is level and mounting holes are horizontal
- Mark hole centers using center punch to ensure alignment is maintained
- Drill small pilot hole with a **short depth** to aid in securing the screws  
**\*Short depth is required so that controller case is not drilled into and damaged**  
**\*\*Don't apply too much pressure when drilling to help maintain door integrity**
- Secure the reader base to the outside of the door using the included #6 flat head screws  
**\*Don't apply too much torque, but ensure base is fully seated against door**
- Plug the antenna into the 6 pin socket visible through the hole in the door

Figure 9 - Reader Base



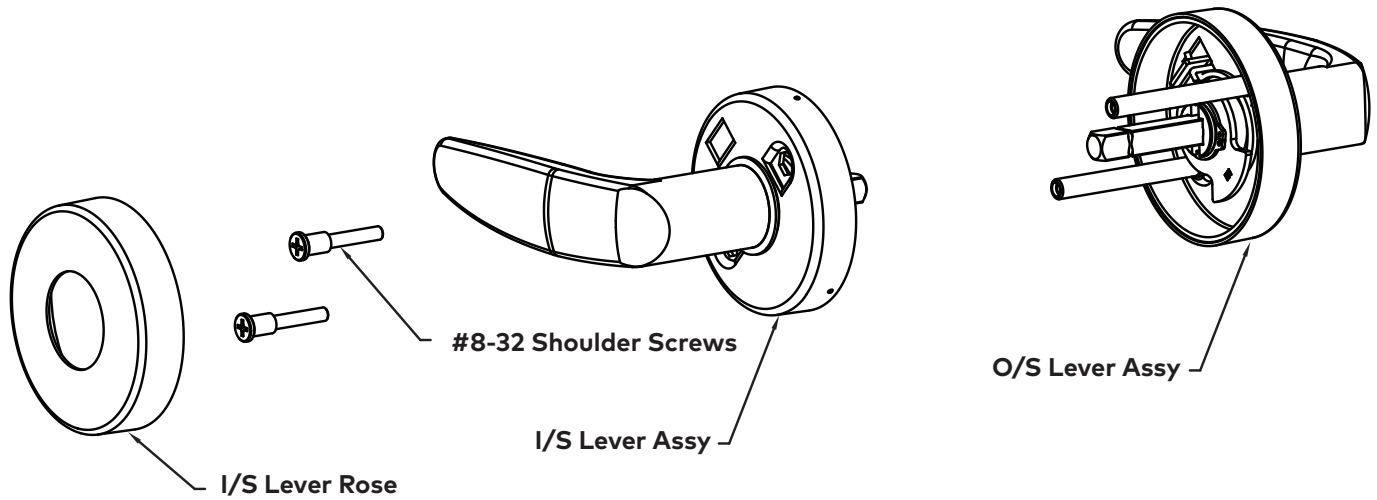
- Align pins in upper opening
  - Insert antenna PCB by sliding the pins carefully into the socket  
**\*Minimal force required if properly aligned**
- Secure the antenna to the base using the #4 pan head screw removed in step a

## 4. Initial lock power up

- Connect the battery to the PCB. Green LED should flash 4 times
- Present a valid keycard to the reader. Red and green LEDs will flash and motor will activate
- Seat the tray into the controller being careful to not pinch any wires

# Installing the lock trim (continued)

Figure 10 - Exploded Lever Set Assembly



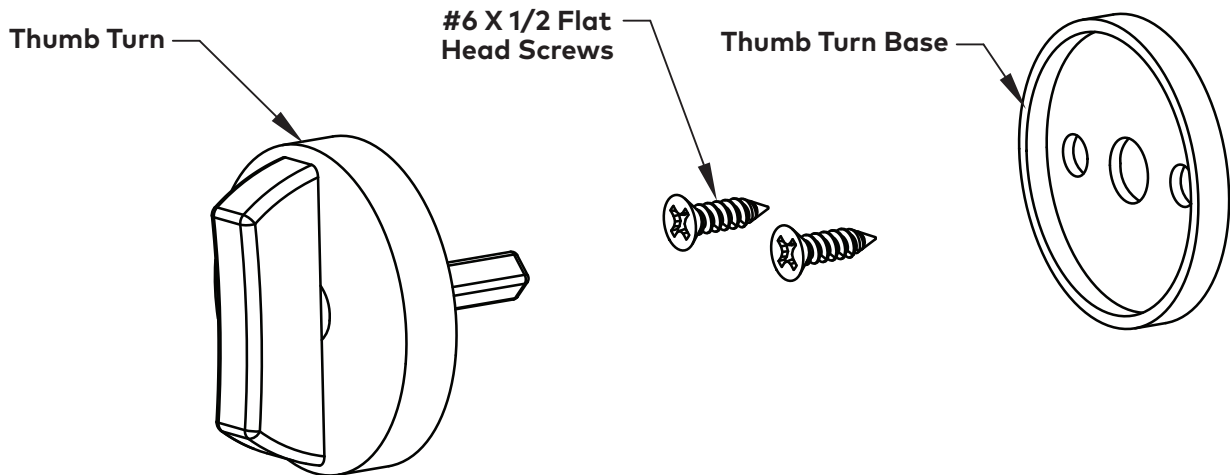
## 5. Lever Set Installation (If supplied by dormakaba)

- a. Place the outside lever rose assembly on the outside of the door
- b. Place the inside lever rose assembly on the inside of the door
- c. Secure to the outside rose assembly using the included shoulder screws
- d. Carefully slide the escutcheon over the lever and ensure removal notch is aligned below lever set for concealment



# Installing the lock trim (continued)

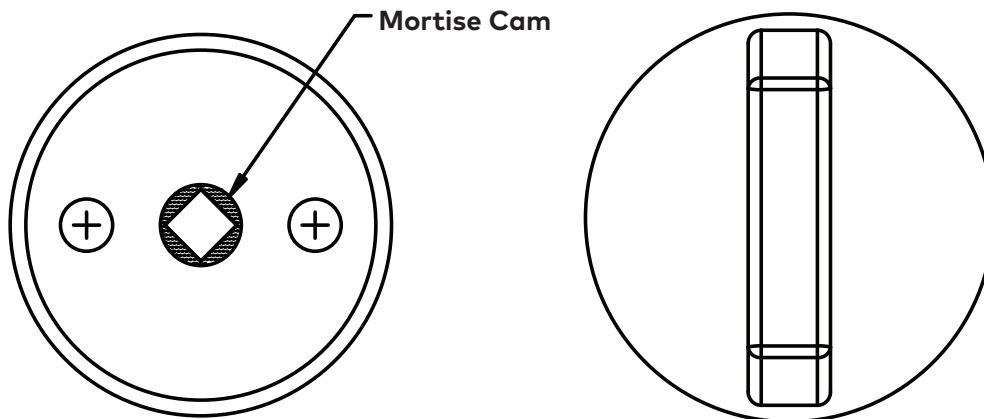
Figure 11 - Exploded Thumb Turn Assembly



## 6. Thumb Turn Installation (If supplied by dormakaba)

- Align base centered over the mortise cam (not hole in door)
- Mark hole centers using center punch to ensure alignment is maintained
- Drill small pilot hole with a short depth to aid in securing the screws
- Secure the base to the door with the included screws
- Align turn piece onto base so that it is at 12 and 6 o'clock (see figure #12)

Figure 12 - Thumb Turn Base Alignment



- Install the turn piece onto the base by screwing the collar on clockwise until tight; torque secure with spanner wrench
- Check the turn for smooth operation ensuring no drag or binding occurs  
**\*If binding occurs; verify base alignment with mortise cam**

## 7. Faceplate Installation

- Install lower mortise faceplate using #8 flat head screws
- Install upper controller assembly faceplate using #8 flat head screws  
**\*Ensure the controller harness does not become pinched when securing faceplates**

# Lock functionality testing

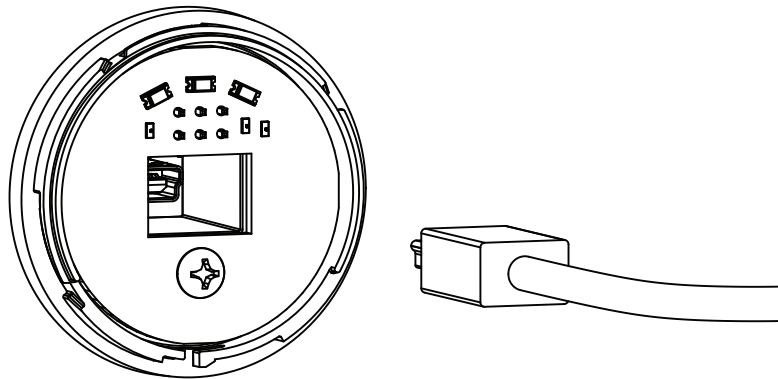
## 1. Initial Lock Test (Construction Mode)

- a. Present a valid opening key to the reader
- b. Ensure lock unlatches, lever turns freely, and lock re-latches

## 2. Lock Programming

- a. Use HH6 to program lock to desired room number (see figure #13 for USB programming port)

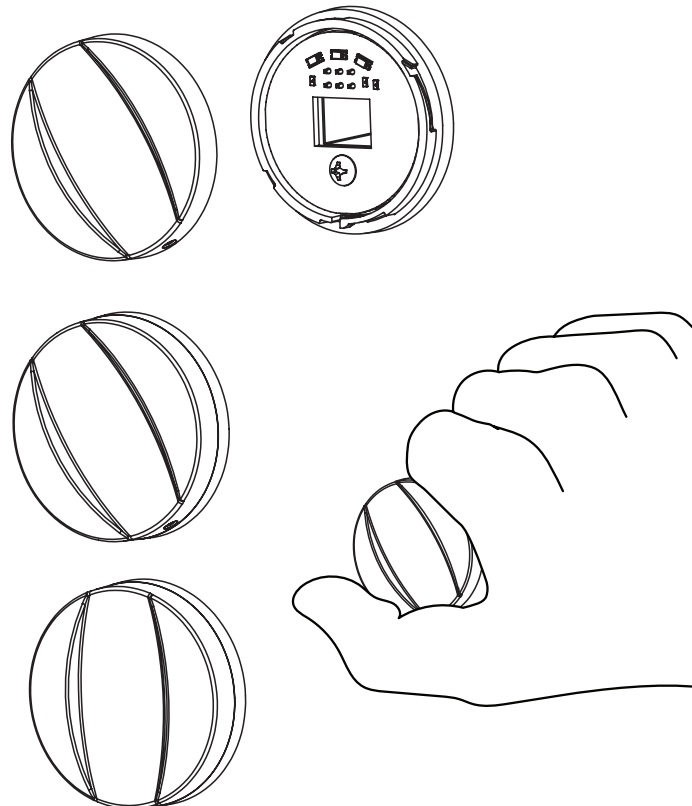
Figure 13 - USB Programming Cable Connection



## 3. Reader Cover Installation

- a. Locate release hole at 5:00 (see figure #14)
  - b. Place the lens onto the base and rotate clockwise to secure at 6:00
  - c. Ensure cover is secured (locking tab will click when fully seated)
- \*For ease of assembly and disassembly; wrap thumb around circumference of cover to get a good grip**

Figure 14 - Reader Cover Installation



# Removing the cover

## 4. Final Lock Test

- a. Present a valid opening key to reader
  - b. Ensure reader flashes the green LED 8 times
  - c. Ensure lock unlatches, lever turns freely, and lock re-latches
  - d. With door open; throw deadbolt and activate privacy
  - e. Present valid opening key to reader
  - f. Ensure reader flashes the yellow LED 12 times
  - g. Rotate inside lever to retract deadbolt and thumb turn
- \*Ensure I/S lever retracts smoothly**

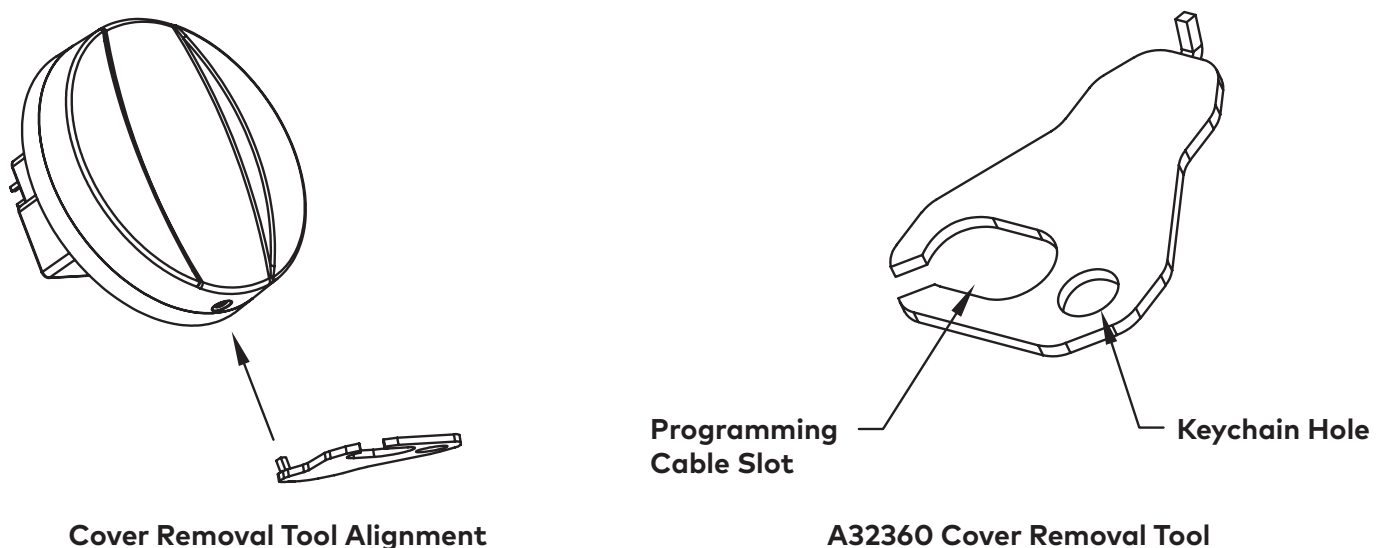
Refer to the table below for other LED feedback:

Lock Communication	Electronic Function Description
Red and green LEDs flash 9 times simultaneously	Time and date not set, use the Quantum LPI probe to reset
Yellow LED flashes 12 times	Dead bolt is thrown or switch cam is not properly aligned
Yellow LED flashes 2 times	Keycard not allowed OR keycard cancelled by new keycard
Red and green LEDs flash alternately 9 times	Low battery (contact the SAFLOK service department)
Yellow and red LEDs flash 2 times simultaneously	Bad keycard read or corrupted data (may require new keycard)

## 5. Reader Cover Removal

- a. Insert cover removal tool through release hole at bottom to unlock locking tab
  - b. Rotate cover counter-clockwise while maintaining upward pressure on locking tab
- \*A32360 Cover removal tool can be attached to HH6 programming cable or keychain**

Figure 15 - Cover Removal Tool Alignment



# Door Unit Inspection Criteria

## Appearance

- Finish is free of blemishes or scratches that would distract from lock appearance
- Lock body and under plate (if used) are mounted straight on the door
- Door scalp is mounted straight and flush with the door edge
- Jamb strike is mounted straight and is flush with the jamb face
- Correction of minor blemishes on the door jamb are the responsibility of the property's maintenance department

## Lock Function

- Knob or lever rotates and moves freely
- Lever is horizontal to floor when at rest position
- Dead bolt extends fully and retracts without binding (door open)
- Lock latch and dead bolt engage jamb strike plate freely
- Anti-pick latch when depressed (door open)
- Anti-pick latch is depressed when contact is made with the strike plate (door closed)

## Electronics/Keycards

- Present keycard in front of reader, and the yellow light flashes twice when incorrect keycard is used
- Green light flashes when the proper keycard is used
- Green light is flashing when the lever is operated
- Green light continues to flash for a five-second cycle
- Yellow light flashes 12 times when the dead bolt is extended and a guest/hotel keycard is used
- All keycards function to the specifications of the properties key design

## Door function

- Door closes and latches with little or no interference
- Dead bolt extends fully through the strike plate without interference (door closed)
- Spacing between door edge and inside door jamb does not exceed  $\frac{3}{16}$ " (door closed)

**Note:** If bumpers or other seals are added after strike plate installation and causes alignment and latch problems, it is the property's responsibility to correct this condition. This note generally applies to new construction or new door installation.

# FCC and IC Warnings

FCC Interference Statement (Part 15.105 (b)):

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

dormakaba USA Inc.  
Customer Services & Support  
Saflok: 1.800.999.6213 / + 1.248.837.3700

General information:  
[dormakaba.us](http://dormakaba.us)  
Online consumable orders:  
[www.saflokstore.com](http://www.saflokstore.com)  
To access all of our easy steps, please  
visit our support website:  
[www.dormakabalodgingsupport.com](http://www.dormakabalodgingsupport.com)