



C-Series

Service manual

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INTRODUCTION

The *Proxess C-Series Service Manual* contains important information to assist you in maintaining your C-Series Lock.

CERTIFICATIONS AND STANDARDS

ANSI/BHMA A156.25 (Indoor/Outdoor)

ANSI/BHMA A156.2 Grade 1

UL 294

ULC S319 PDR

UL10C Positive Pressure Rated

UL10B Neutral Pressure Rated

FCC Part 15

ADA Compliant

RoHS

Industry Canada (IC)

ETSI EN 300 330-1

ETSI EN 301 489-1

ETSI EN 301 489-3

CENELEC EN 61000-6-3

IEC61000-4-2 ESD Immunity

CENELEC EN 50130-4

DOCUMENTATION PACKAGE

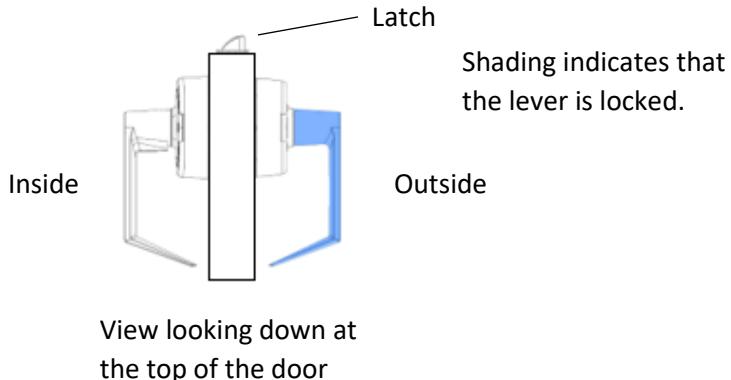
Document Title	Doc. No.
Cylindrical Installation Manual	PXM1001
User Manual	PXM1002
Software Manual	PXM1003

TECHNICAL SUPPORT

- Your first source for technical answers is this C Series Service Manual.
- If you are not able to find an answer to your question in this manual, contact your local Proxess Representative.
- If you do not know your local Proxess Representative, contact the Customer Service Department at Proxess – 303-317-6656.

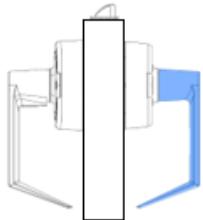
FUNCTIONS AND PARTS LISTS

LOCK FUNCTIONS



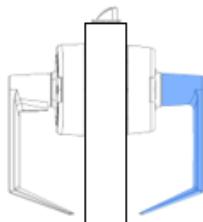
FUNCTION DESCRIPTIONS

All locks are supplied in Construction Mode as a default and are meant to be reprogrammed at customer site prior to installation.



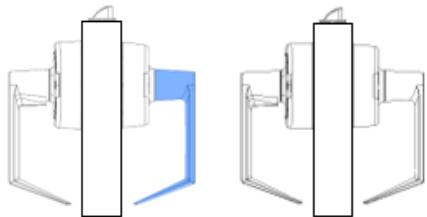
CC – Construction Mode: Factory default setting. Upon first programming of the lock, the lock will switch to *Program Lock Function*. A system ID (GUID) will be set by the factory allowing all credentials assigned to the site system access until the lock is reprogrammed.

Inside lever is always unlocked for single action egress.



ST – Standard: Lock is normally in the locked state. Upon presentation of a valid credential, lock will momentarily unlock to allow entry then revert to the normally locked state.

Inside lever is always unlocked for single action egress.



XC – Emergency Classroom: (Presentation of a valid credential will unlock the lock for a user-selectable period of time. This function will support unlock schedules and toggle to allow locking and unlocking when presented with a valid credential. Furthermore, a BLE (Bluetooth) interface is supplied on the interior trim of the lock. The BLE interface is paired with an active fob which enables a teacher or user to place a lock in lockdown state from a distance up to 100 feet directly from the fob.

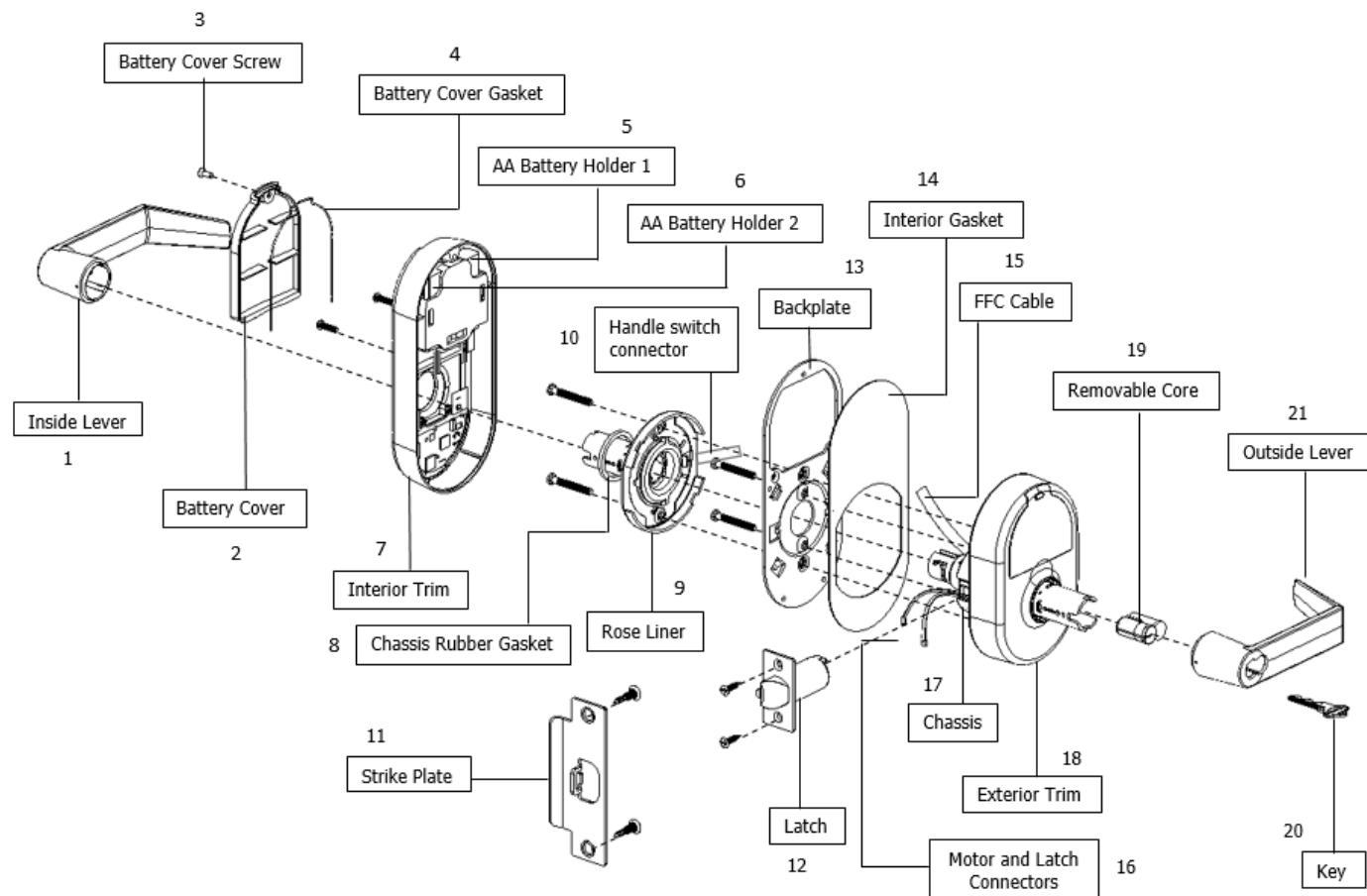
An emergency override credential allows designated administrators or emergency personnel access when exterior lever is in locked position.

Inside lever is always unlocked for single action egress.

PART AND PARTS LISTS

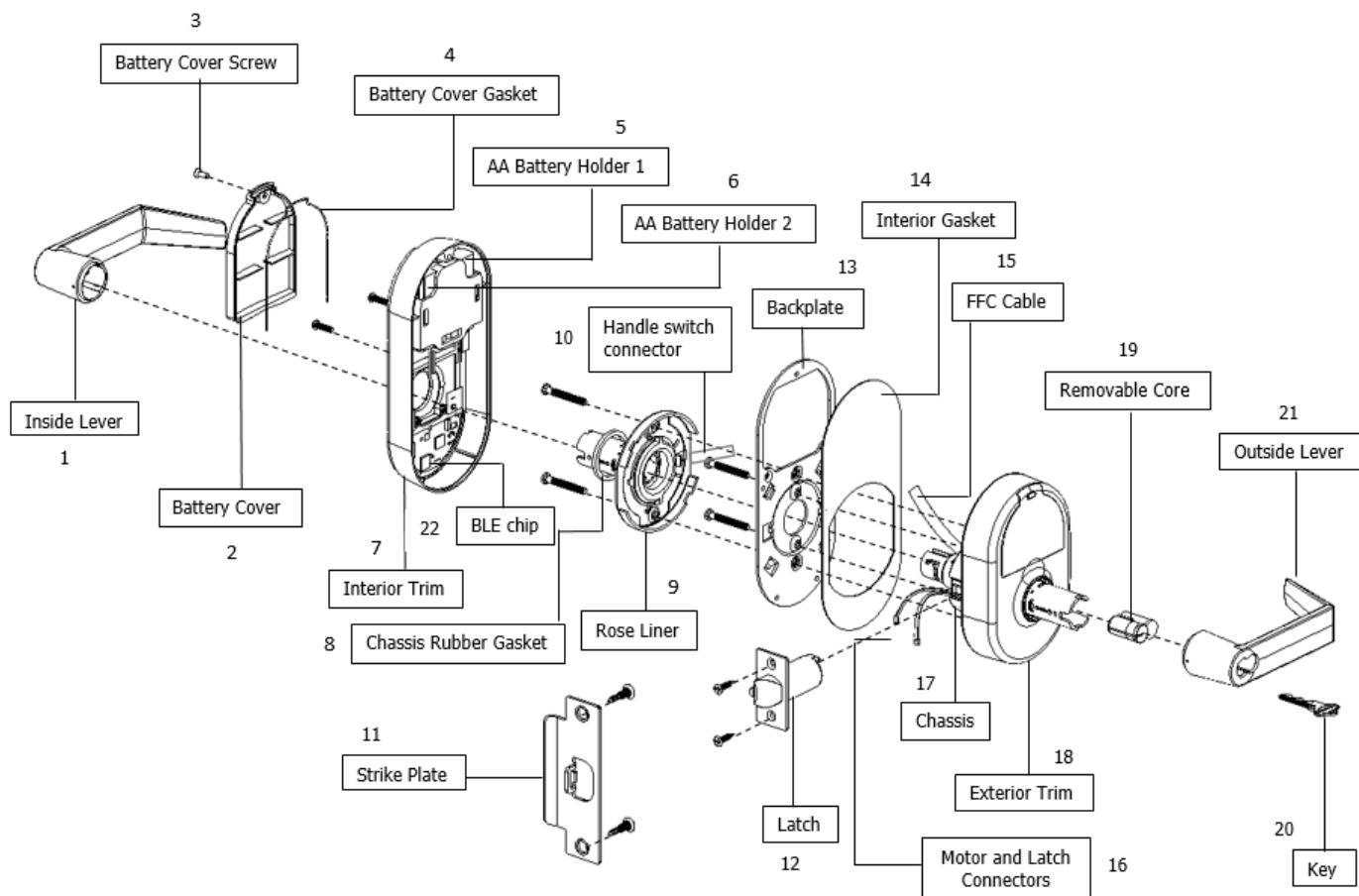
ST FUNCTION CHASSIS - STANDARD

Item	Part No.	Item	Part.No
1	PX10110001	12	PX10120005
2	PX10110003	13	PX10110010
3	PX10110004	14	PX10110011
4	PX10110005	15	PX10110013
5	PX10110006	16	PX10110014
6	PX10110007	17	PX10120001
7	PX10110002	18	PX10100002
8	PX10110008	19	PX10100003
9	PX10110016	20	PX10100004
10	PX10110012	21	PX10100001
11	PX10120002		



XC FUNCTION CHASSIS - EMERGENCY CLASSROOM

Item	Part No.	Item	Part.No
1	PX10110001	12	PX10120005
2	PX10110003	13	PX10110010
3	PX10110004	14	PX10110011
4	PX10110005	15	PX10110013
5	PX10110006	16	PX10110014
6	PX10110007	17	PX10120001
7	PX10110002	18	PX10100002
8	PX10110008	19	PX10100003
9	PX10110016	20	PX10100004
10	PX10110012	21	PX10100001
11	PX10120002	22	PX10110015



TRIM PARTS

LATCH BACKSETS



B1

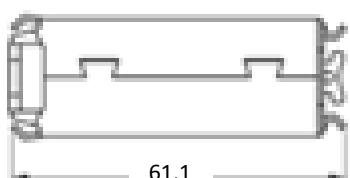


B2

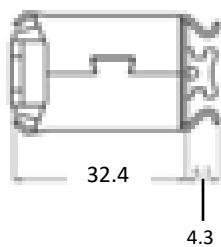
Item	Part. No.	Description
B1	PX10120006	Standard 2 $\frac{3}{4}$ "
B2	PX10120007	2 $\frac{5}{8}$ "

LATCHES

Optional latch extensions



2 $\frac{3}{4}$ " (70mm) latch + 57mm extension tube for 5" (127mm) requirement



2 $\frac{5}{8}$ " (60mm) latch + 35mm extension tube for 3 $\frac{3}{4}$ " (95mm) requirement

STRIKE PLATES



S1



S2

Item	Part. No.	Description
S1	PX10120002	Standard 2 3/4" strike
S2	PX10120003	ANSI 4 7/8" strike

LEVERS



6



8



9

Item	Part. No.	Description
6	PX10120005A	Angled Return; (most common lever)
7	PX10120005C	Curved Return
9	PX10120005N	Curved No Return; (no lever return)

MAINTENANCE

TOOLS FOR MAINTENANCE



Lever Release Tool

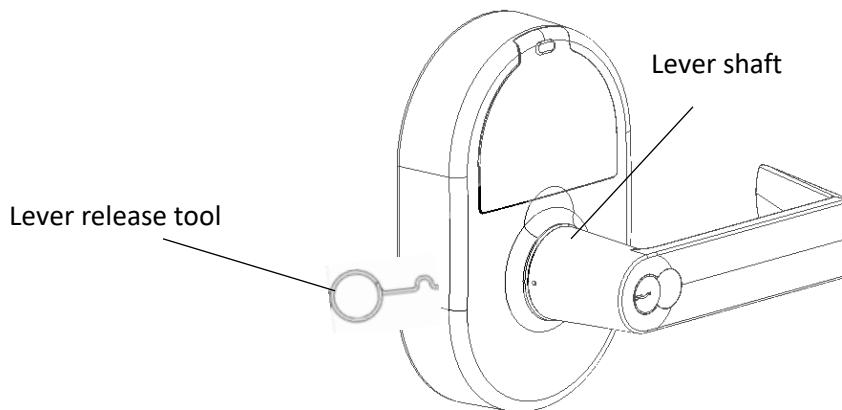


Philips Screwdriver, #2

REPLACING LEVERS

TO REMOVE THE LEVER:

1. If removing the exterior lever, first remove the removable core by inserting the control key and turning it 15 degrees clockwise, then pull out the removable core and key.
2. Insert the pin of the lever release tool into the small hole at the base of the shaft on the lever.
3. Push in and then slide the lever off the sleeve of the lever shaft.



TO REPLACE THE LEVER:

1. Position the lever so the handle points towards the door hinges.
2. Slide the lever onto the lock and push firmly until it is seated.
3. If replacing the exterior lever, reinstall the removable core by aligning the throw member (forked prongs) within the lock chassis and then sliding the core back in place. Turn the control key 15 degrees counterclockwise and remove the key.
4. Turn both levers to make sure they retract the latch if the door is unlocked.

TROUBLESHOOTING

TROUBLESHOOTING HARDWARE

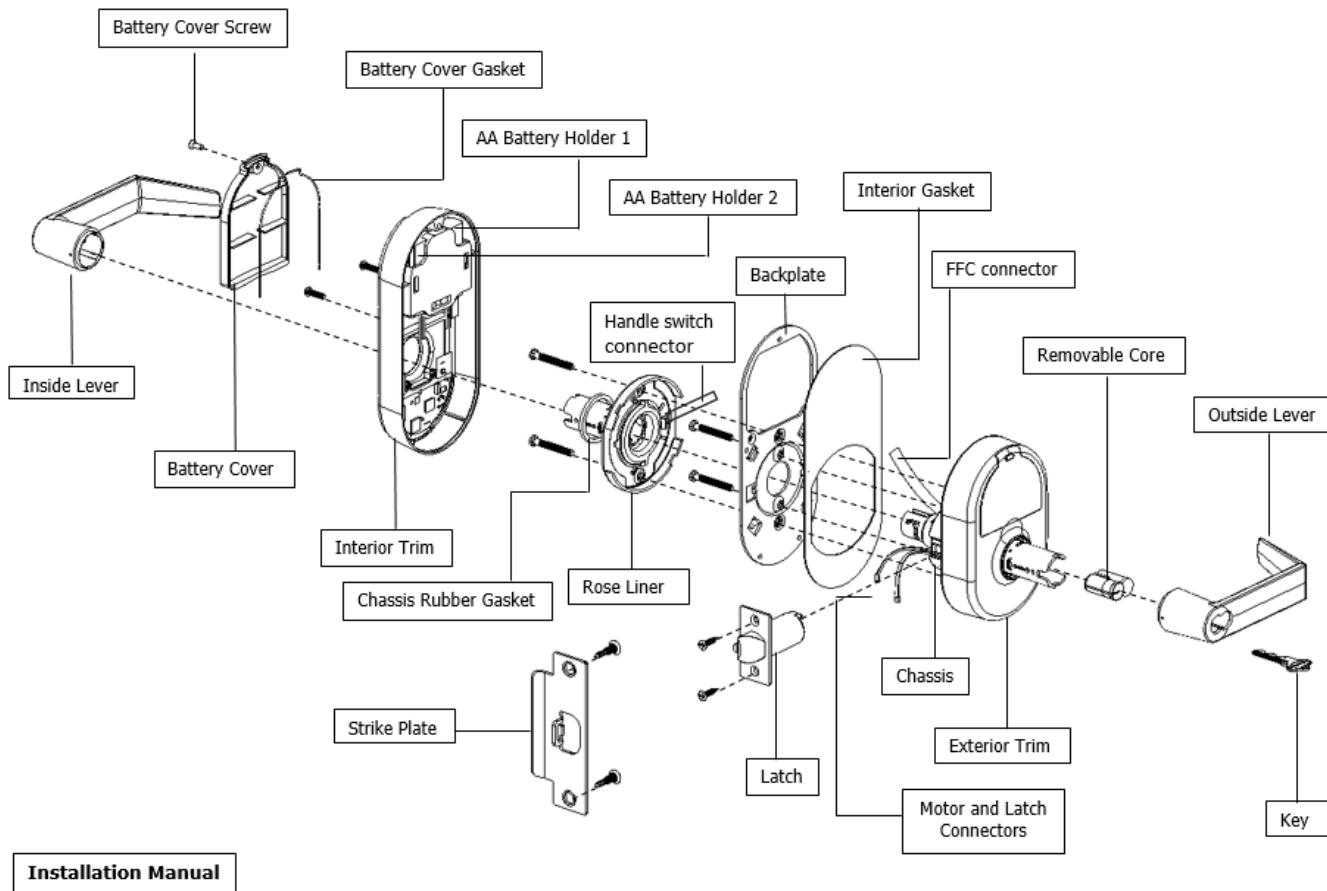
The following table illustrates possible causes and solutions for common problems after installing the lock hardware.

Problem	Possible Reason	Solution
LED does not blink on exterior when presenting a credential	Batteries were replaced and the lock was not synchronized with the MPD	Synchronize the lock with the MPD and try the credential again
	Batteries are dead and need to be replaced	Replace the batteries, synchronize the lock with the MPD and try the credential again
	The 10 pin connector FFC cable was not connected properly	Remove the interior trim and ensure that cable is seated correctly
MPD does not connect to the lock	Bluetooth is not enabled on the MPD	Enable Bluetooth in Settings
	Batteries are at low voltage	Replace the batteries and try the MPD again.
Lock does not go into Lock Down when programmed for Privacy	When configuring the door with the MPD “Set Door Closed” was not selected.	Close the door, connect the MPD, select “Set Door Closed”, try Lock Down again.
	The 4 pin connector FFC cable was not connected completely	Remove the interior trim and ensure that cable is seated correctly

INSTALLATION INSTRUCTIONS

The following pages contain the Installation Manual for the C-series Cylindrical Lock.

Cylindrical Wireless Lock



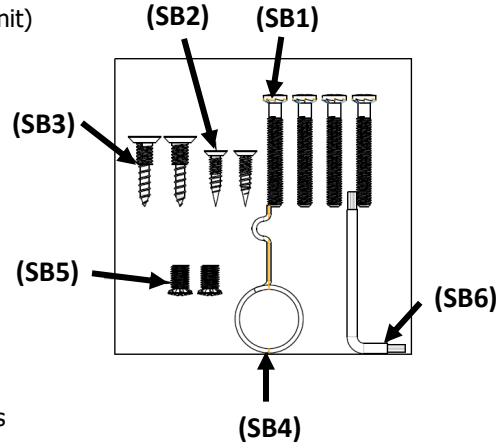
Installation Manual

A. CHECKLIST (4 each AA Batteries Included)

FOR DOOR AND FRAME PREPARATION INSTRUCTIONS, SEE APPENDIX A OR GO TO PROXESS.COM

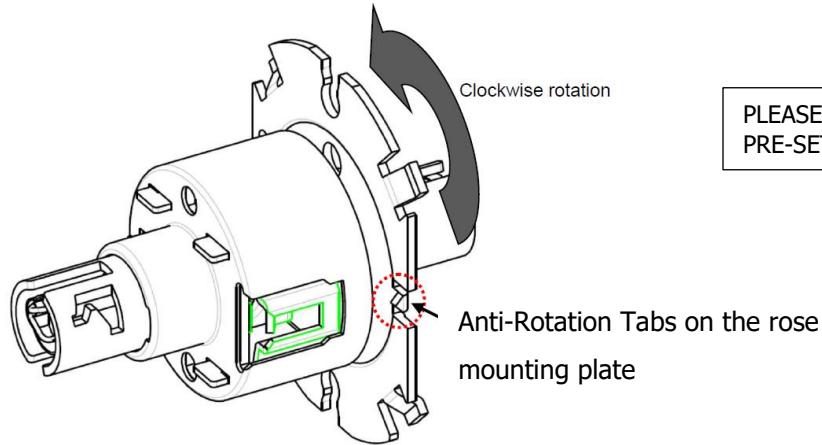
Parts List: Each Proxess C-Series lockset includes

- Exterior lock assembly (include housing, lever and cylinder drive unit)
- Interior lock assembly
- Installation Instructions
- Door Preparation Template
- Hardware box includes:
 - Electrified lock chassis assembly
 - Interior lever + Steel ring
 - Exterior rose/chassis mounting plate
 - Interior rose/chassis mounting plate
 - Latch bolt with deadlock
 - 2 Keys
 - ASA Strike
 - Screw Pack includes:
 - (SB1) Hager mounting screws M5 x 38mm x4pcs
 - (SB2) Flat head tapping screws #8x3/4" x2pcs
 - (SB3) Flat head tapping screws #12-24 x 18mm x2pcs
 - (SB4) Lever release tool
 - (SB5) Hager mounting screws M6 x 10mm x2pcs (optional)
 - (SB6) Trox wrench



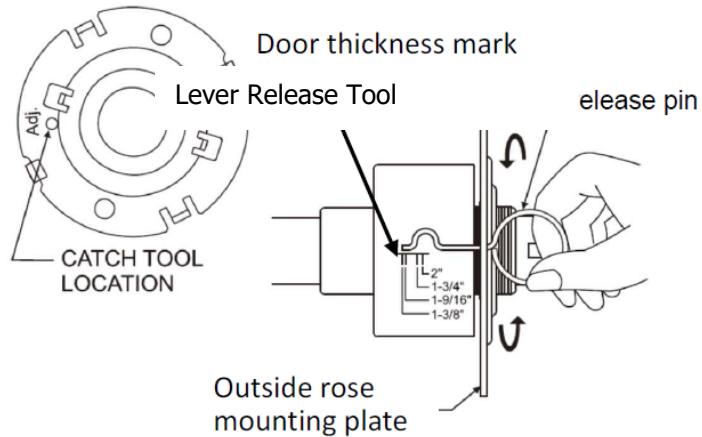
B. ADJUST FOR DOOR THICKNESS

Install exterior rose mounting plate onto the lock body by rotating it clockwise. Pay attention to the installation direction of mounting plate's anti-rotation tabs, they should be pointed toward the door.



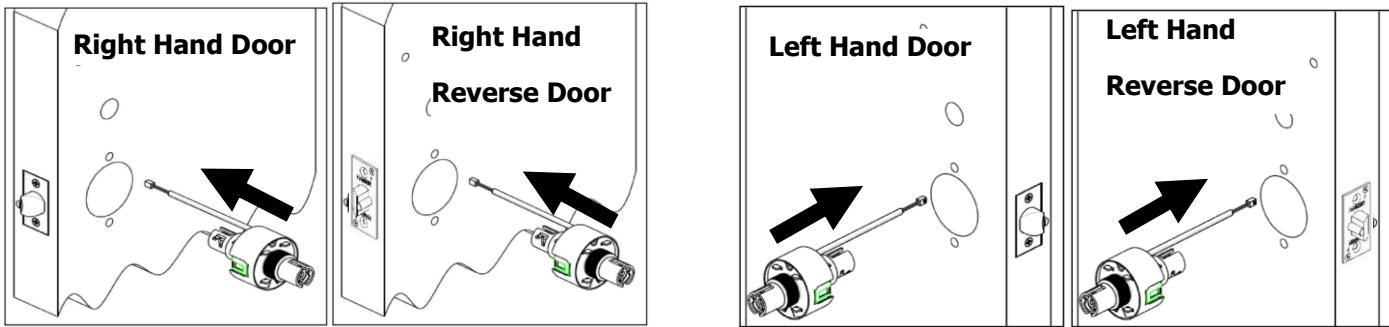
PLEASE NOTE THAT THE LOCK BODY COMES PRE-SET TO ACCOMMODATE A 1 3/4 INCH DOOR

1. Please follow the steps below:
 - a. Rotate exterior rose mounting plate toward cylindrical chassis.
 - b. Put the lever release tool into the allocated position of exterior rose mounting plate per the illustration below.
 - c. Rotate exterior rose mounting plate to door thickness by using the lever release tool.



C. LOCK HANDING

1. Determine the hand of your door. The product is set up for **Right Hand** by default.



STEP 1

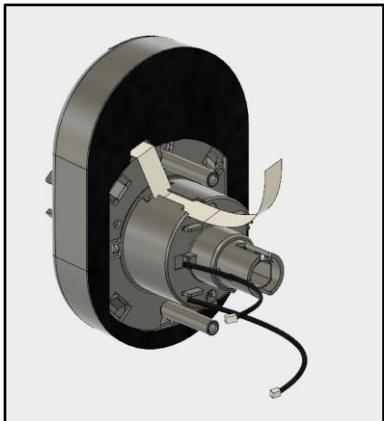
Install the latch in the door. The latch tube prongs should project into the chassis hole.

**STEP 2**

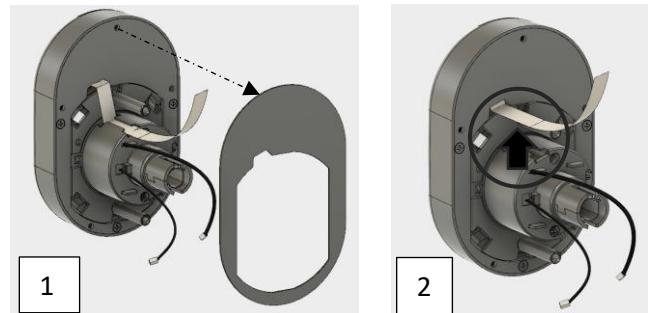
Install the strike plate, checking to make sure that the position of the deadlocking plunger is aligned against the strike plate.

**STEP 3**

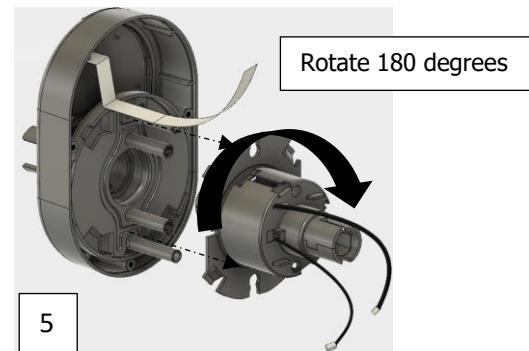
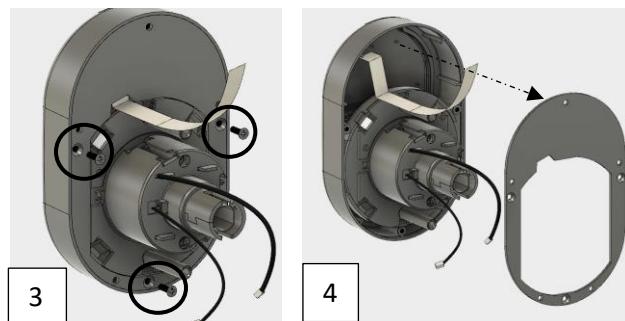
Ensure the cable from the exterior board is properly routed through the cylindrical lock chassis by first inserting one edge, then pressing the other into the cable slot.

**STEP 4**

To re-hand the lock chassis, begin by first removing the rubber gasket from the back of the lock, and removing the FFC cable from the cable slot.



Unscrew the backplate to remove the lock chassis and turn it 180 degrees to accommodate the hand of the door.

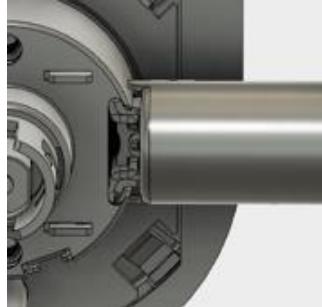
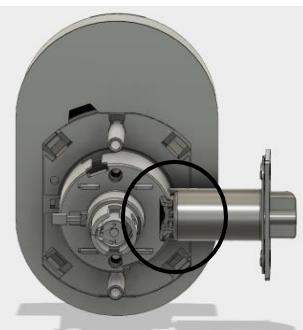
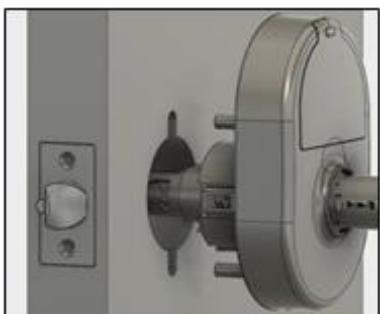


Replace the lock chassis and reroute the FFC cable into the cable slot. Screw on the backplate and replace the rubber gasket.



STEP 5

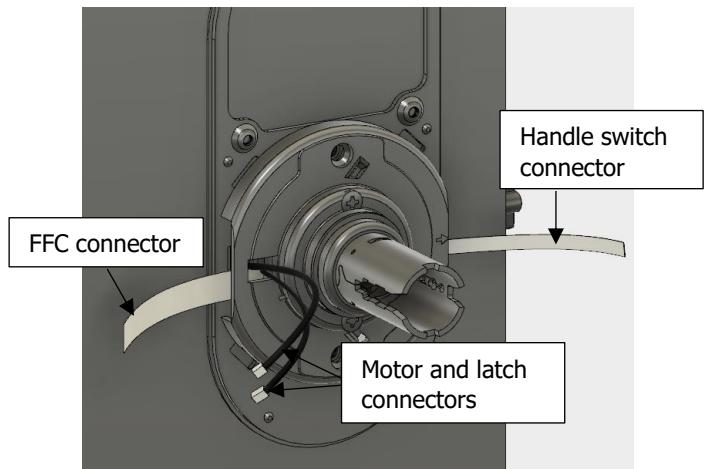
Slide the lock chassis through the chassis hole in the door, ensuring that the chassis engages the latch.

**STEP 6**

Place the back plate on the interior of the door with the upper and lower screws near the chassis. Wire the cable and wires as shown:

**STEP 7**

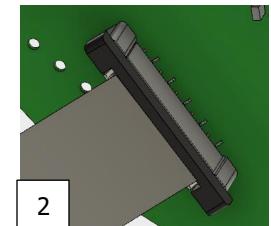
Disconnect the handle switch connector from the interior board.* Place the outside rose liner on the interior back plate and screw in. Ensure that both the handle switch connector and FFC connector sit in the side channels around the rose liner while the motor and latch connectors are fed through the rose liner.

*** TO CONNECT AND DISCONNECT THE 4 AND 10-PIN CONNECTORS**

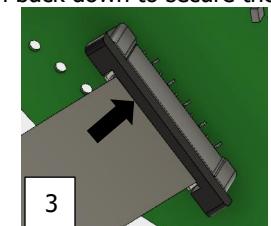
To connect the pin connectors (FFC and handle switch), begin by pushing up the black cowl.



Then insert the cable with the wires facing away from you and push until you hear a click.



Push the black cowl back down to secure the connector.



To disconnect the connectors, push up on the black cowl and pull out the cable.

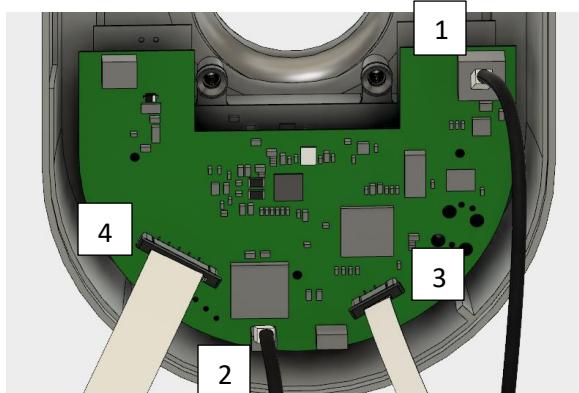
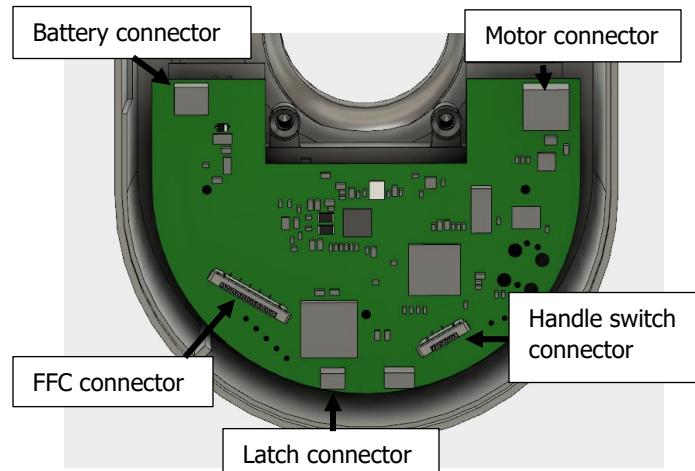
STEP 8

Slide the rubber gasket over the chassis sleeve.

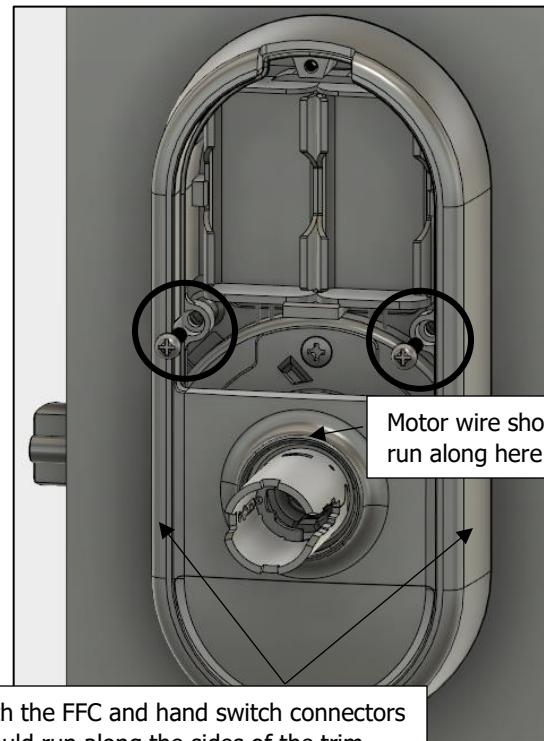
**STEP 9**

Connect the motor connector first, followed by the latch connector. Then connect the 4-pin handle switch connector. Connect the FFC cable last.

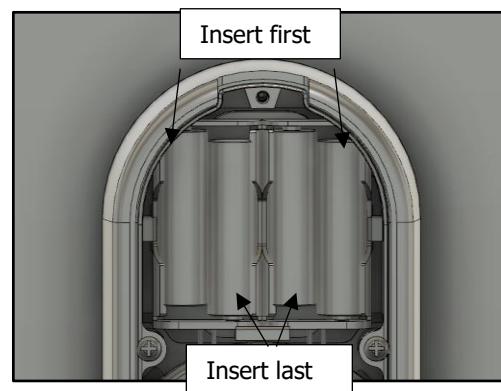
Note: The battery cable should already be pre-connected.

**STEP 10**

Place the motor wire on top of the handle assembly when installing the interior trim onto the back plate. Also ensure that the 10-pin FFC and 4-pin handle switch connectors run along the sides of the interior trim. Screw the interior trim onto the back plate using the two screws on the right and left of the battery hole.

**STEP 11**

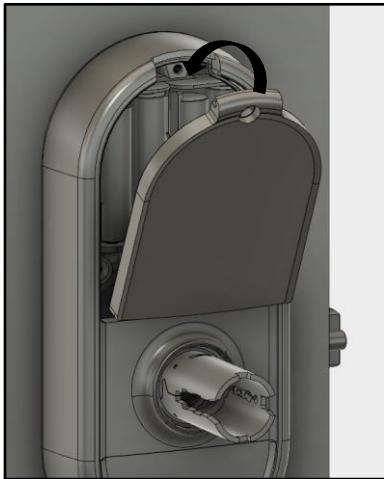
Install the four AA batteries, beginning with the outer two.



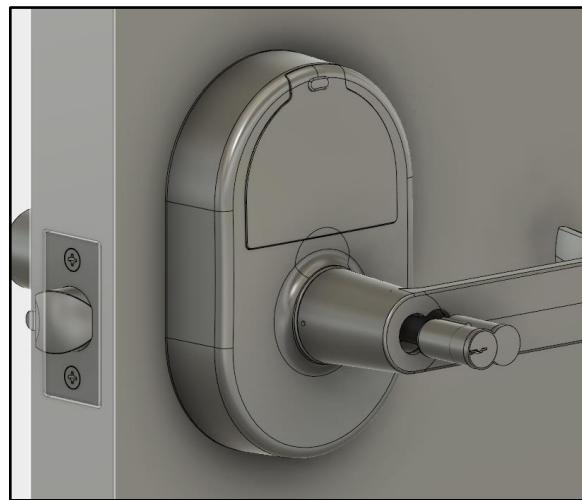
After the batteries are properly installed, the lock should beep once and the motor should run. The lock is then locked.

STEP 12

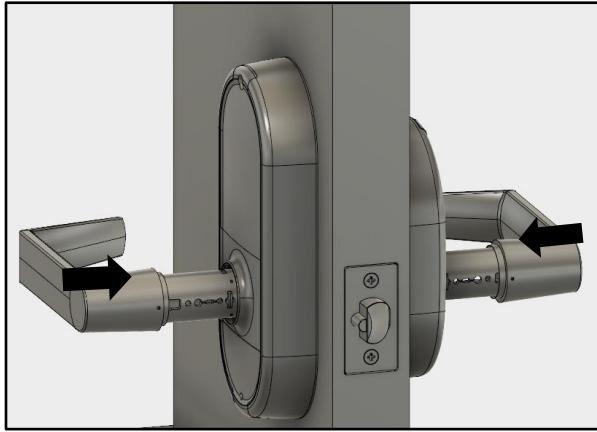
Screw the battery cover onto the trim.

**STEP 14**

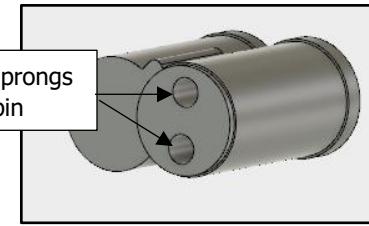
Install the removable core.

**STEP 13**

Install the levers onto the outside and inside of the door.



Align with prongs
of forked pin



Once the removable core is aligned with the forked pin in the lock, insert the control key and turn clockwise 15 degrees to retract the catch, then insert the core into the lever. Turn the control key back counterclockwise 15 degrees to engage the core and remove the key.

APPENDIX A: INSTRUCTIONS FOR DOOR AND FRAME PREPARATION OF CYLINDRICAL LOCK

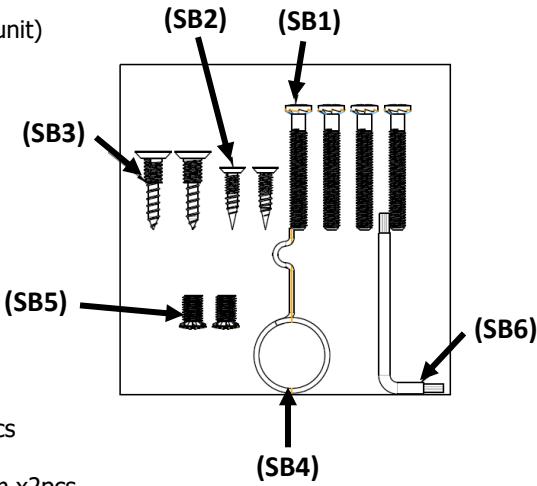
A. CHECKLIST (4 each AA Batteries Included)

Tools for Door Preparation

- Drill
- Drill Bits: Ø1" (Ø31/32" for drive in latch), Ø13/16", Ø3/8", Ø5/16"
- Hole Saw: Ø2-1/8"
- Phillips Screwdriver, #2
- Hammer
- Chisel

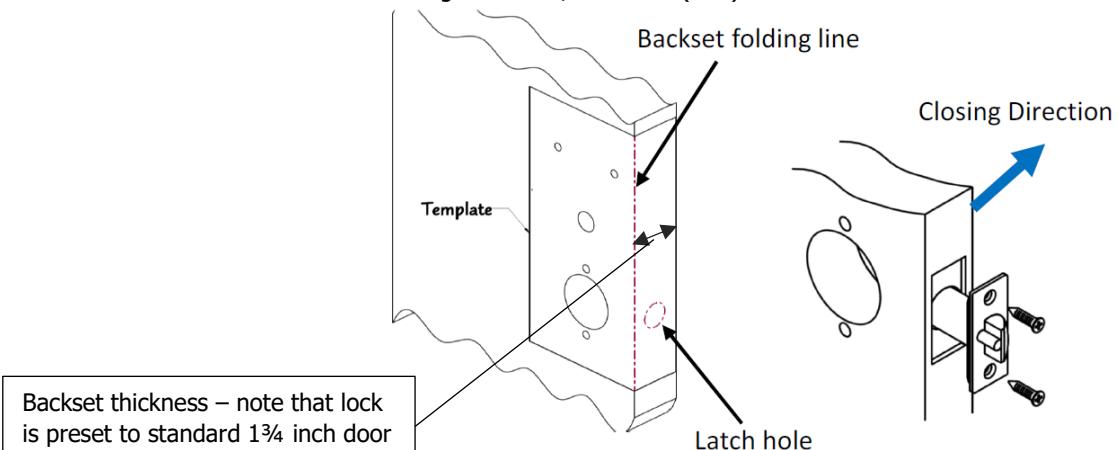
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 - Interior rose/chassis mounting plate
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 - 2 Keys
 - ASA Strike
 - Screw Pack includes:
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 - (SB2) Flat head tapping screws #8x3/4" x2pcs
 - (SB3) Flat head tapping screws #12-24 x 18mm x2pcs
 - (SB4) Lever release tool
 - (SB5) Hager mounting screws M6 x 10mm x2pcs (optional)
 - (SB6) Trox wrench



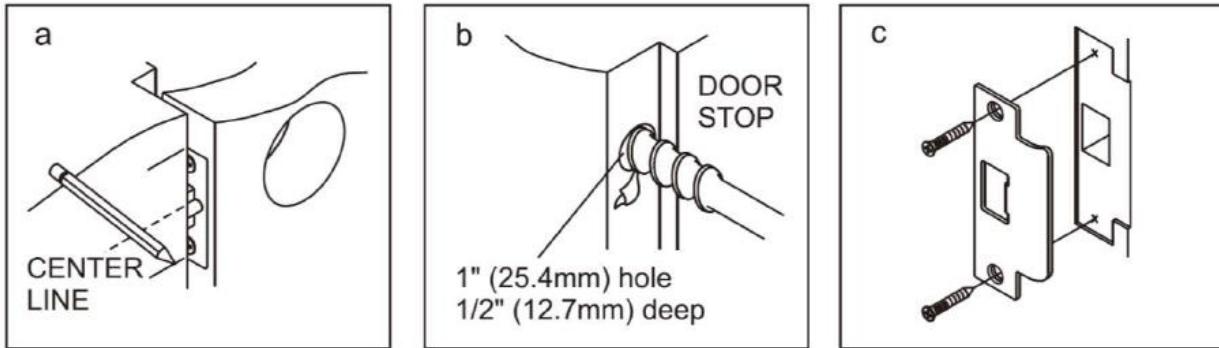
B. DOOR PREPARATION

1. Doors: Steel or Wood
2. Door thickness range: 1-3/8" (35mm) ~ 2" (51mm).
3. Match the Backset of your Proxess C-Series lockset to the corresponding installation (either 2-3/8" [60 mm] or 2-3/4" [70 mm] Backset).
4. Place the installation template onto door and mark holes. Drill the Ø2 1/8" (54 mm) first, then drill the two Ø5/16" (8mm) holes for lock chassis mounting followed by two Ø3/8" (9.5mm) holes for exterior Housing Assembly mounting. Drill the Ø13/16" (20 mm) hole for through wiring. Drill the Ø1" (25 mm) cross bore hole for the latch last.
5. Insert latch into Ø1" hole and hold it parallel to door face, mark outline and remove latch. Chisel 11/64" (4.3mm) deep or until faceplate is flush with the edge of the door. Insert latch into the Ø1" hole again, making certain that the latch bolt bevel faces direction of closing door (see section E for Lock Handing).
6. Secure the latch to the door using two #8x3/4" screws (SB2).

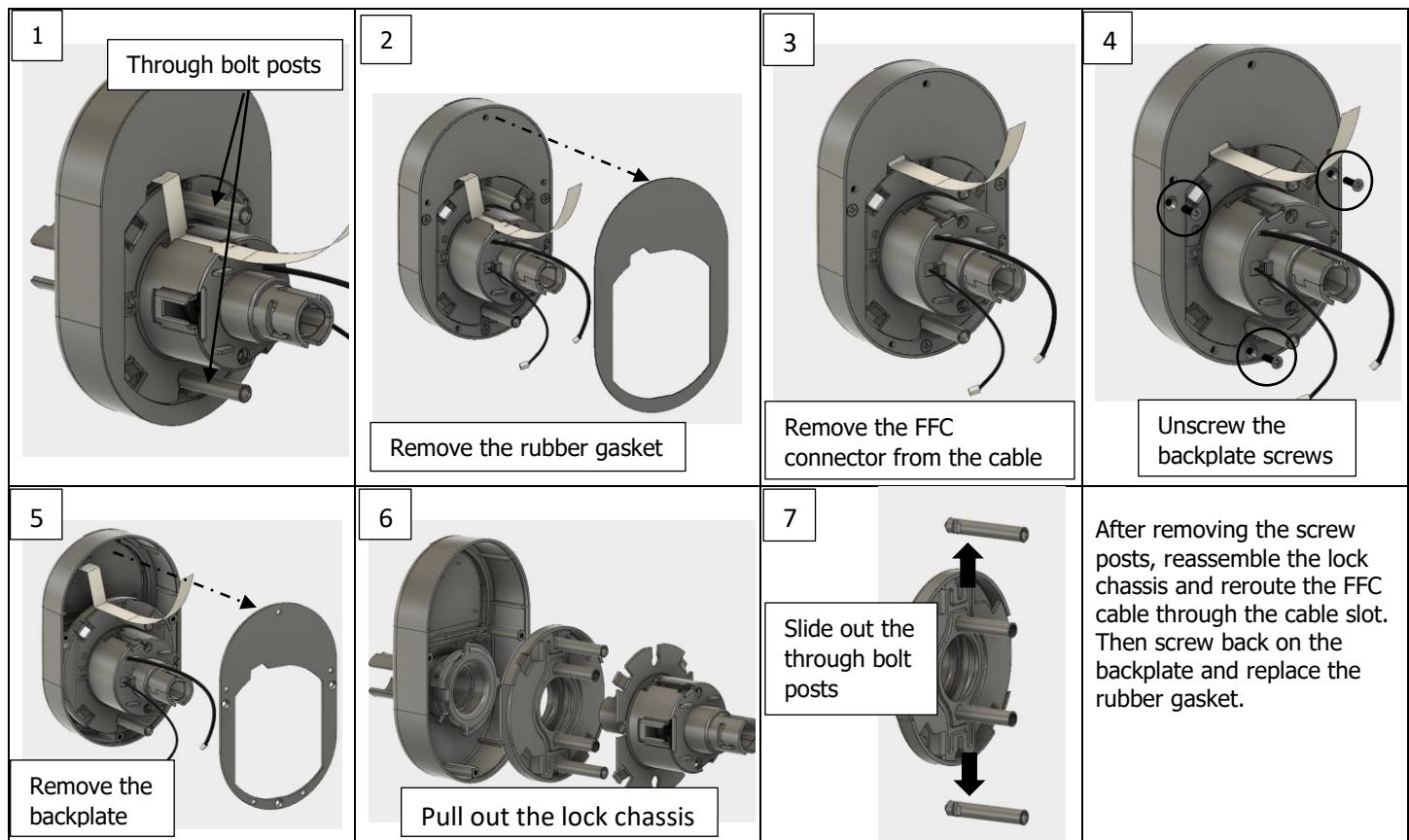


C. FRAME PREPARATION

1. Close the door and mark the horizontal line aligned to the strike.
2. Measure one half of door thickness from door stop to mark vertical center line of strike. Drill Ø1" (25 mm) hole, 1/2" (12.7 mm) deep at intersection of horizontal and vertical center lines.
3. Chisel out the jamb 3/32" (2.4mm) deep or until strike is flushed with jamb and then secure the strike to the jamb using two #12-24 x 1" screws (SB3).



Note that if you have an interior door that does not require a Grade 1 lock, the door does not need to be drilled out to accommodate the through bolt posts. Instead, you can change the lock to Grade 2 by simply removing the through bolt posts from the lock chassis and continuing with the installation.



FCC Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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 communication. 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.

FCC Caution:

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Industry Canada Statement

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that permitted for successful communication.

Industrie Canada Déclaration

Conformément à la réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante.

Industry Canada Radiation Exposure Statement

This Device complies with Industry Canada License-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.

Industrie Canada l'exposition aux radiations

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'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

UL Statements

- Outside lever is normally locked. Inside lever always allows egress.
- Unit shall not interfere with the operation of Panic Hardware.
- Wireless communications, Wi-Fi, Bluetooth, Door Position, and Request to Exit features are not part of UL Listed product.
- Tested to compliance with UL 294 5th Edition Class I.