Proxess CX-Series Wireless Cylindrical Lock Owner's Manual

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Contents

INTRODUCTION

The Proxess CX-Series Service Manual contains important information to assist you in maintaining your Proxess Cylindrical Lockset

CERTIFICATIONS AND STANDARDS (CX 2.5 Currently, 3.0 Pending)

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

TECHNICAL SUPPORT

The first source for technical answers is this CX Series Service Manual. All documentation and training materials are also available on our website: **www.proxess.com**. If you are not able to find an answer in these resources, contact your local Proxess Representative. If you do not know your local Proxess Representative, contact the Customer Service Department at Proxess (303)-317-6656.

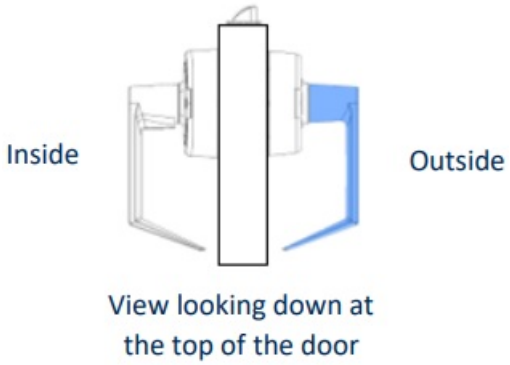
FUNCTIONS

CONSTRUCTION FUNCTION

All locks are supplied in Construction Function as a default and functions are meant to be reprogrammed at customer site prior to installation. There is one SKU (standard button) for all functions creating an inventory

advantage over standard mechanical locks.

Shading indicates that the lever is locked.



All lock functions (Entrance, Storeroom, Lockdown, etc) are easily programmed electronically.

CC – Construction Function: Factory default setting. In Construction Function, factory programmed construction credentials granted access at the lockset to allow for testing prior to site programming. Upon first programming of the lock, the lock will switch to Program Lock Function. A system ID will be set by the site system allowing all credentials assigned to the site system access until the lock is reprogrammed.

Inside lever is always unlocked for single action egress.

PROGRAMMABLE FUNCTIONS

Unlike standard locks, Proxess has just one SKU allowing any lock to be supplied and programmed into numerous lock “functions” similar to standard locking functions shown in the chart below.

Name	**Similar ANSI # Mech**	**Proxess Electronic Equivalent Function**
Entrance	F109	Enable toggle schedule and double present credential to outside rea der to lock/unlock door.
Storeroom	F86	A valid credential should provide momentary unlocking and allow entr y by that user, with the latch relocking in an administrator defined tim e (usually 5-8 seconds).

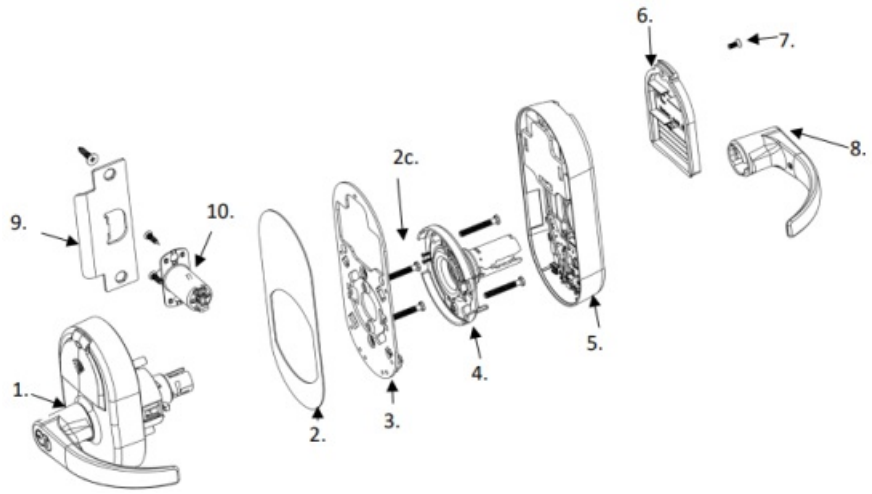
Office	F82	A valid credential should provide momentary unlocking and allow entry by that user, with the latch relocking in an administrator defined time (usually 5-8 seconds).
Classroom no Lockdown	F84	Press the security Button with “Button Toggle” enabled in the software. Enable toggle schedule and double present credential to outside reader to lock/unlock door.
Classroom w/Lockdown (Intruder)	F110	Press the security Button with “Button Toggle” enabled in the software. Enable toggle schedule and double present credential to outside reader to lock/unlock door.
Classroom w/Holdback	F85	Press the security Button with “Button Toggle” enabled in the software. Enable toggle schedule and double present credential to outside reader to lock/unlock door. (electronic equivalent to F84, because unlocked door allows free entry). There is no Holdback.
Canadian Function		Press the security Button with “Button Toggle” enabled in the software. Enable toggle schedule and double present credential to outside reader to lock/unlock door. Door does not unlock from shutting the door.
Patio	F77	Press the security Button with “Button Toggle” enabled in the software. Enable toggle schedule and double present credential to outside reader to lock/unlock door.

Secured Privacy		Press the security Button with “Button Toggle” enabled in the softwar e. Enable toggle schedule and double present credential to outside r eader to lock/unlock door.
Hotel Guest Room	F93	A valid credential should provide momentary unlocking and allow entr y by that user, with the latch relocking in an administrator defined tim e (no visual indicators).
Dormitory	F90	Press the security Button with “Button Toggle” enabled in the softwar e. Enable toggle schedule and double present credential to outside r eader to lock/unlock door.
Service Station	F92	Press the security Button with “Button Toggle” enabled in the softwar e. Enable toggle schedule and double present credential to outside r eader to lock/unlock door. Door does not unlock from shutting the door.
Exit Latch	F89	Mechanical lockset
Privacy	F76	Mechanical lockset
Passage	F75	Mechanical lockset

ANSI Not Listed (Double-keyed functions)- F80, F91

LOCK PARTS

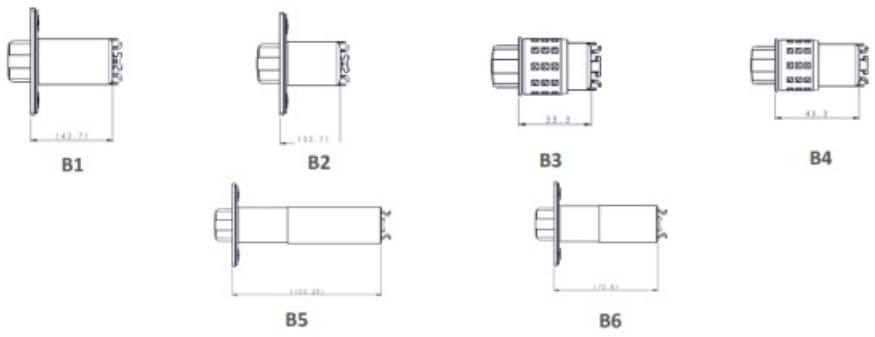
B FUNCTION CHASSIS – STANDARD



ITEM	PART NUMBER	DESCRIPTION
1		External Lock Assembly
2	C00-0019A	Interior Gasket
3	C00-0017A	Interior Backplate
4	C00-0015C	Interior Rose
5	C00-0007B	Interior Trim
6	C00-0005B	Battery Cover
7	C00-0038B	Battery Cover Screw (Standard or Security)
8	C00-0002A	Interior Lever
9	C02-0030A	Strike Plate
10	C00-0031A	Latch

TRIM PARTS

LATCH BACKSETS

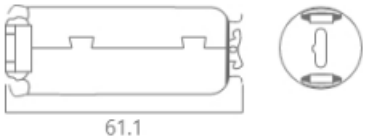


ITEM	PART NUMBER	DESCRIPTION
B1	C01-0030A	2 3/4″ **(Standard)**
B2	C02-0030A	2 3/8” Round Edge
B3*	C03-0030A	2 3/4” Drive-in & No Faceplate
B4*	C04-0030A	2 3/8” Drive-in
B5*	C05-0030A	5”
B6*	C06-0030A	3 3/4”

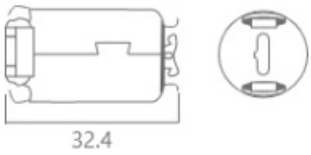
LATCH OPTIONS

LATCHES

Optional latch extensions



5” Backset (70mm) latch + 57mm extension tube for 5″ (127mm) requirement



3 ¾” Backset (60mm) latch + 35mm extension tube for 3¾” (95mm) requirement

LATCH PROTECTOR

Proxess offers a latch protector for added security when requested.

Simply add AX-NLP206PC to your next lock order or ask a Field Engineer about a Proxess approved option.

STRIKE PLATES

ITEM	PART NUMBER	DESCRIPTION
S1	C01-0030A	2 ¾” strike
S2	C02-0030A	ANSI 4 ⅞” strike **(Standard)**

LEVERS

ITEM	PART NUMBER	DESCRIPTION
6	C06-0001A	Angled Return
8	C08-0001A	Curved Return **(Standard)**
9	C09-0001A	Curved No Return; (no lever return)

MAINTENANCE

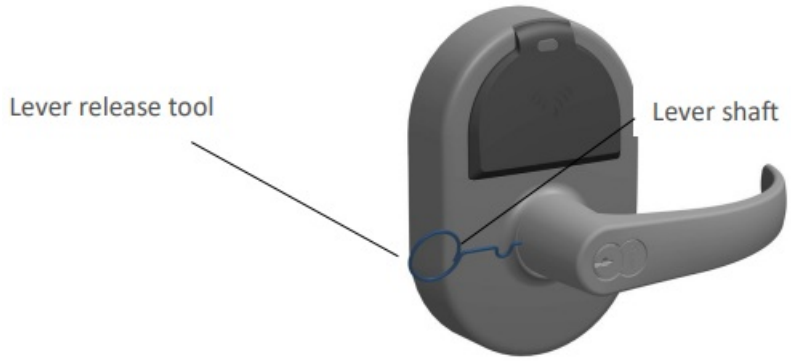
TOOLS FOR MAINTENANCE

Lockset can be quickly installed with only a Philips Screwdriver.

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. Line up the mechanism on the inside of the lock where the core was removed with a core turn knob tool.
3. Insert the pin of the lever release tool into the small hole at the base of the shaft on the lever.
4. Push in and then slide the lever off the sleeve of the lever shaft.



6-pin or 7-pin removeable cores allow for added security and painless re-key.

Proxess cores are stamped with your custom key code to make ordering simple and reliable.

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. If the lever does not easily seat, move the throw member with the core turn knob tool.
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.

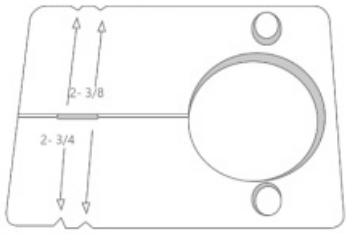
DOOR PREPARATION AND INSTALLATION

CYLINDRICAL INSTALLATION JIG KITS

Light-duty, small quantities: Home improvement stores such as Home Depot and Lowes sell inexpensive kits from Ryobi, Milwaukee and DeWalt.

Heavy-duty, industrial: Pro-Lock (“Killer Jig”) and Templaco (115-C3) offer kits.

THROUGH-BOLT DRILL JIG A00-0002A



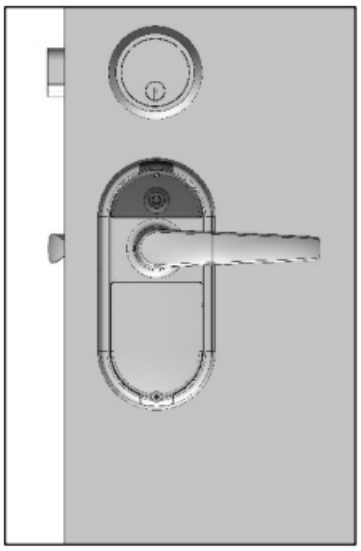
For retrofit doors that do not already have standard ADA lever holes, Proxess offers the A00-0002A jig to assist in drilling holes for added stability and security of the CX product.

NOTE: Removing the through bolt posts from the chassis will decrease the security of the lock, voiding ANSI Grade 1 rating of the lock.

DEADBOLT DOOR CONFIGURATION

To mount the Proxess cylindrical lockset on a door with a deadbolt installed, you will need to mount the internal housing (battery side) upside down. The backplate and rose plate are designed to accommodate this mounting.

STEP 1
Position the backplate on the interior of the door so that the large opening is underneath the chassis assembly.
STEP 2
Route the cable and wires through the oval holes in the backplate. Make sure to run all cables through the oval holes in both backplate and rose plate.
NOTE: Wire paths may differ according to handing.
STEP 3
Fasten to the door using the upper and lower screws nearest the chassis.



TROUBLESHOOTING

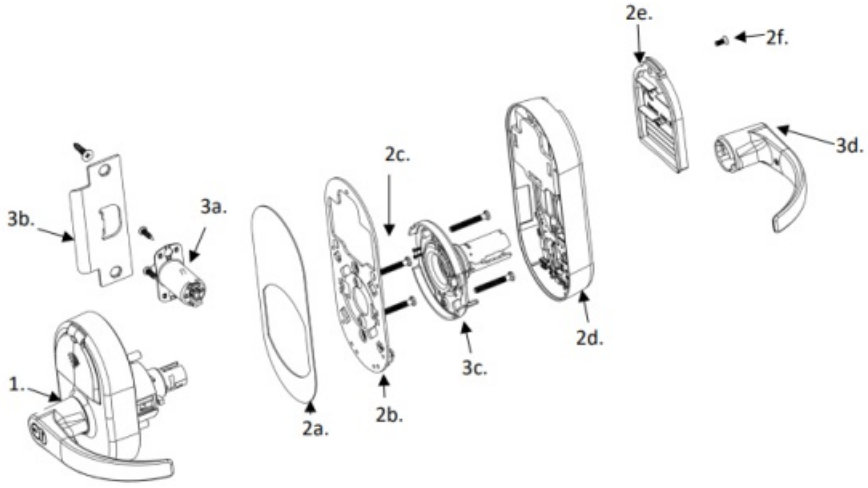
TROUBLESHOOTING HARDWARE

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

PROBLEM	CAUSE	SOLUTION
No beeps or blinks when the bat teries are installed	Improper plug connection	Check all wiring and connectors to make sure the connectors are secure, and the cable is not pinched
	Reversed battery or dead batte ries	Check the position of the batteries to ma ke sure they are seated correctly
	Pinched wires or damaged cab ling	Ensure the internal cabling is routed pro perly and cables have not been damaged during assembly
LED does not beep or blink on e xterior when credential is prese nted	Batteries are dead and need to be replaced	Replace the batteries, synchronized the l ock with the MPD and try the credential a gain
	Damaged or disconnected 6 pi n cable	Check both ends of the 6-pin cable for pr oper connection.
MPD does not connect to the lo ck	Bluetooth is not enabled on the MPD	Enable Bluetooth in Settings
	Improper Credential Permissio ns	Ensure the credential has appropriate ac cess to the door.
Red LED When credential is pre sented (Access Denied).	Lockset is in Lockdown	Have administrator take the lockset out o f lockdown, or program the necessary cr edential to have “Pass-Through” privileg es. (See software manual).

BEEP AND BLINK GUIDE	
Operation indicators (Usually non-repeating)	**Description**
3 Red Beep/Blinks	The lockset has been set to toggle unlocked.
3 Green Beep/Blinks	The lockset has been set to toggle locked.
Warning Indicators (Will continue until problem re solved)	**Description**
3 Red Blinks (No Beeping)	Battery Low
3 Amber Beep/Blinks	Battery Critical
3 Double-Red Beep/Blinks	Battery Critical
3 Double-Red Beep/Blinks	Lockset Not Synchronized
Start-Up Sequence Beep/Blinks	
If a problem with the lockset occurs, there may be a sequence of Beep/Blink indicators during start-up that will help to determine the problem. These will be 3 short Beep/Blinks followed by a series of longer Beep/Blinks. Pl ease note them and contact a Proxess customer service representative.	

CX-SERIES INSTALLATION INSTRUCTIONS

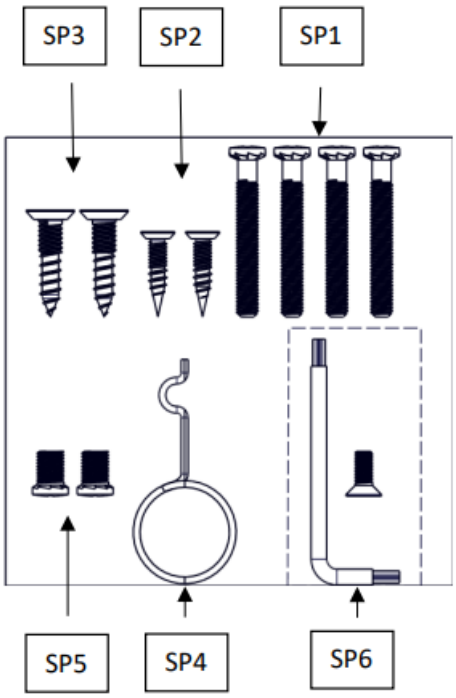


A. CHECKLIST (4 AA Batteries Included)

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

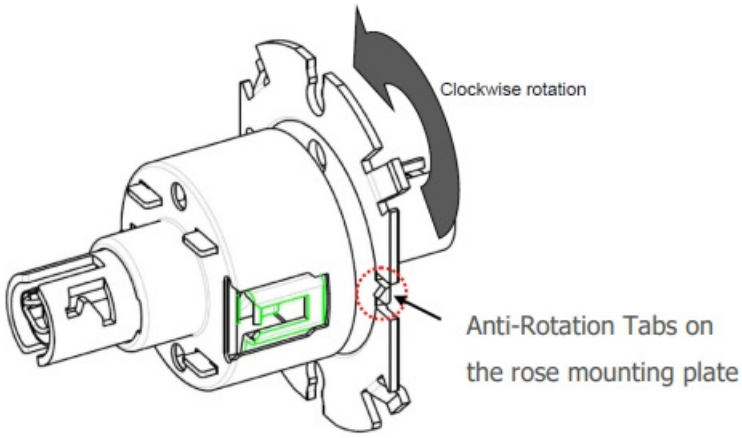
Parts List: Each Proxess CX-Series lockset includes

1. Exterior lock assembly
   1a. Exterior lever
   1b. Cylinder drive unit
   1c. Chassis, chassis plates, and through bolt posts
2. Interior lock assembly
   2a. Interior Gasket
   2b. Interior Backplate
   2c. Interior Backplate Screws
   2d. Interior Housing
   2e. Battery Cover
   2f. Battery Cover Standard Screw
3. Hardware box includes:
   3a. Latch
   3b. ASA Strike Plate
   3c. Interior Rose
   3d. Interior Lever
   3e. Screw Pack includes:
   i. (SP1) Hager mounting screws M5 x 38mm x4pcs
   ii. (SP2) Flat head tapping screws #8×3/4″ x2pcs
   iii. (SP3) Flat head tapping screws #12-24 x 18mm x2pcs
   iv. (SP4) Lever release tool
   v. (SP5) Hager mounting screws M6 x 10mm x2pcs (optional)
   vi. (SP6) Torx Wrench and Optional Torx Security Screw



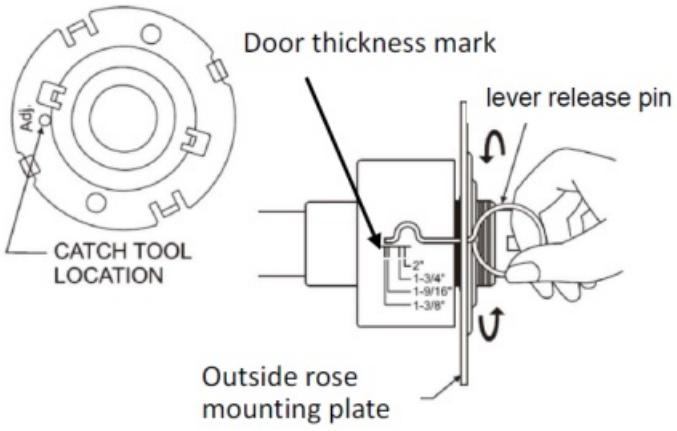
B. ADJUST FOR DOOR THICKNESS

Remove through bolt posts from chassis. Pull chassis and rose mounting plate from exterior lock assembly.



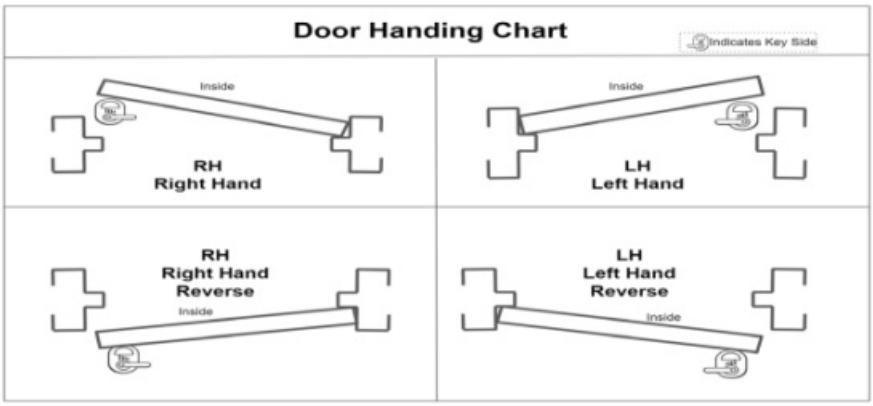
PLEASE NOTE THAT THE LOCK BODY COMES PRE-SET TO ACCOMMODATE A 1¾ INCH DOOR

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.



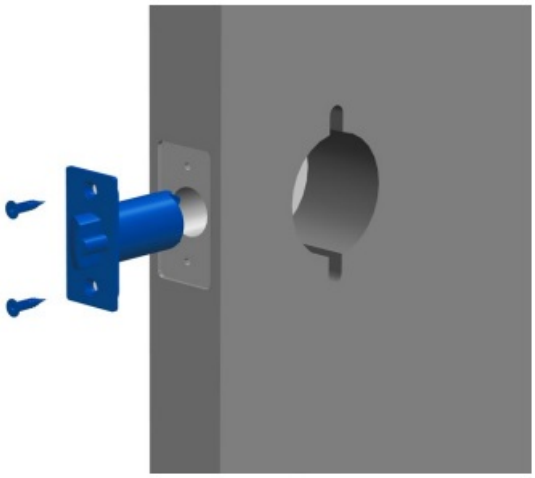
C. LOCK HANDING AND REHANDING (IF NECESSARY)

Determine the hand of your door. The product is set up for Right Hand (LHR) by default.



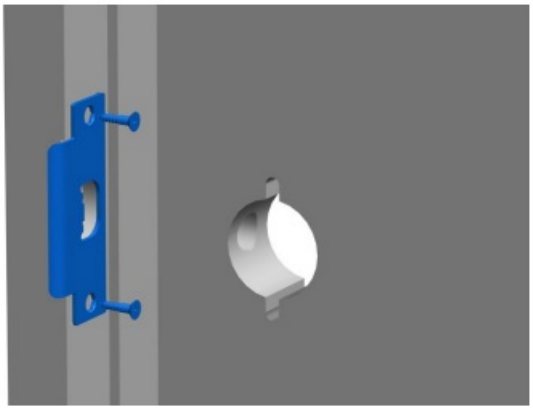
D. Hardware Installation Steps	
STEP 1	**STEP 4 (To Re-hand if Necessary)**

Install the latch in the door with the SP2 screws provid ed. The latch tube prongs should project into the chass is hole.



STEP 2

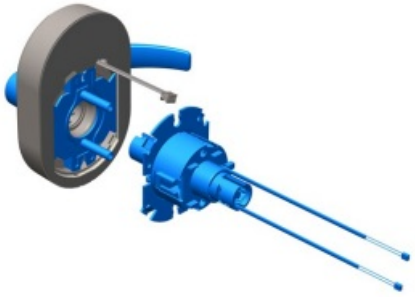
Install the strike plate with the SP3 screws provided, c hecking to make sure that the position of the deadlocki ng plunger is aligned against the strike plate. See App endix A for Door Preparation Instructions.



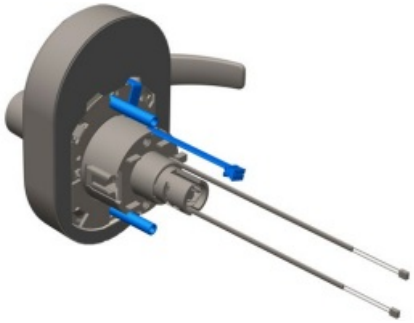
STEP 3

1. To re-hand the lock chassis, begin by removing b oth the through bolt posts and remove the lock chassis . You will not need to remove the exterior gasket or ba ckplate See arrows below.

2. Rotate both the internal mechanics and the chass is 180 degrees to accommodate the hand of the door.



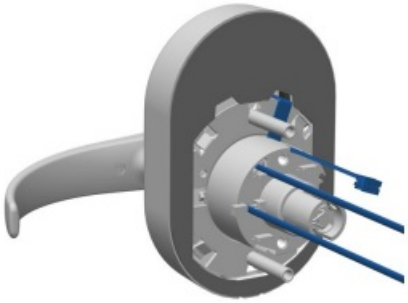
3. Replace through bolt posts and cable.



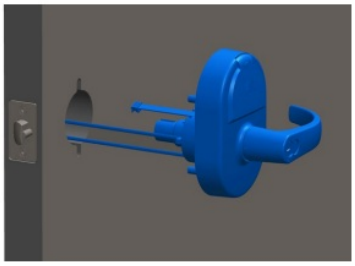
Re-handed lock chassis to accommodate left-handed (RHR) door

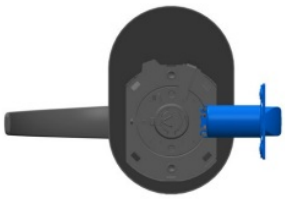
STEP 5

Ensure the cable from the exterior board is properly ro uted through the cylindrical lock chassis by first inserti ng one edge, then pressing the other into the cable slo t.



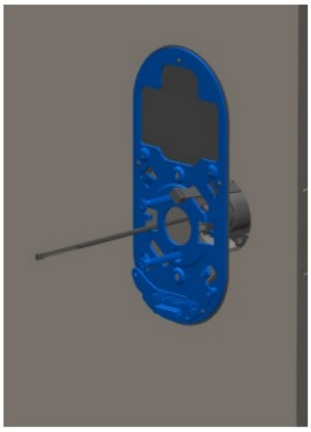
Slide the lock chassis through the chassis hole in the d oor, ensuring that the chassis engages the latch.





STEP 6

To install the backplate you will first need to remove th e battery cover from the internal housing, and then re move the 2 housing screws attaching the housing to th e back plate.
Place the back plate on the interior of the door with the upper and lower screws near the chassis. Route the c hassis cable through the square hole, and the exterior cable through the upper oval hole.



STEP 6B Deadbolt Configuration

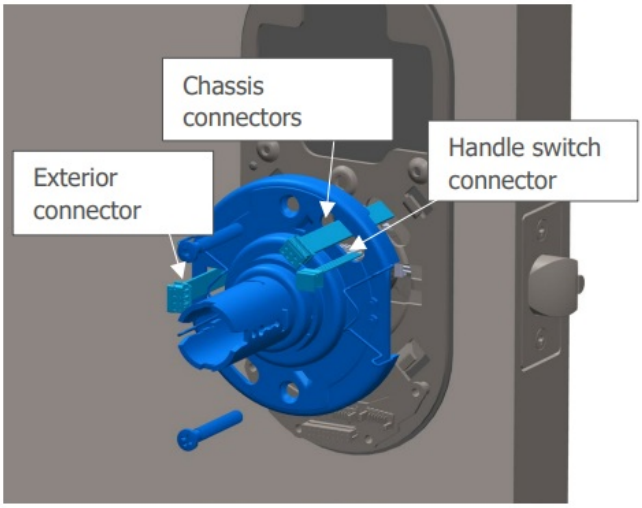
STEP 8

Connect the chassis, exterior, and handle switch cable s to the EZ connect board, leaving the exterior connect ion (6 pin rightmost connection) for the last connection. Ensure all cables are neatly tucked into the retaining cl ips on the rose plate.
RS-485 Option boards will have a 4th cable to connect to the EZ Connect board located on the left of the boar d.

For information about installing the Proxess Cylindrical Lockset with a deadbolt, see “Door Preparation and Installation” in the CX-Series Service Manual available at proxess.com.

STEP 7

Place the interior rose liner on the interior back plate and screw in. Route the chassis cable through the square hole in the rose liner, and the exterior and handle switch cables through the upper oval hole (the handle switch will route through the lower oval hole for other than default handing).



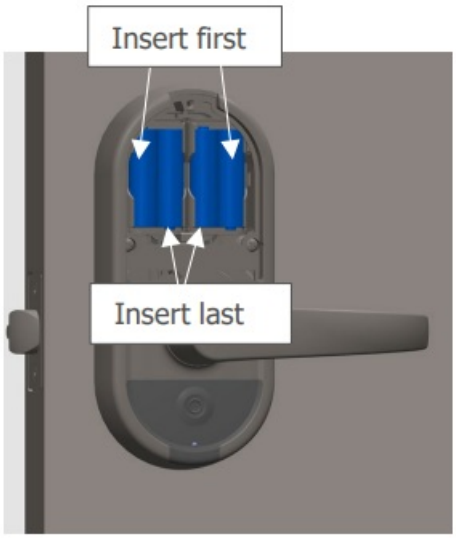
STEP 9

Install the interior trim onto the back plate. The boards will plug into one another when placed correctly. Screw the interior trim onto the back plate using the two screws on the right and left of the battery compartment.

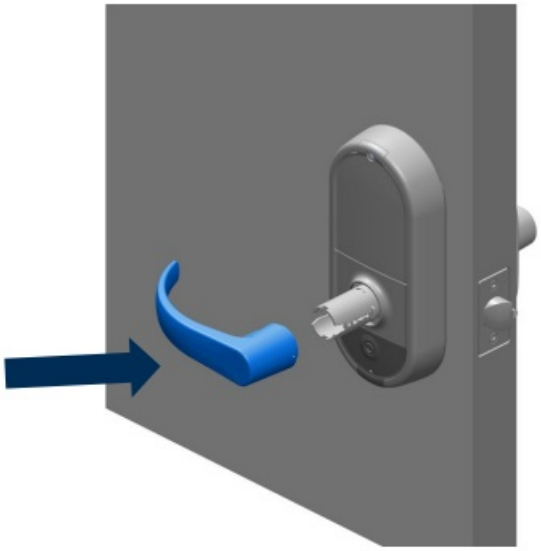
STEP 10

STEP 12

Install the four AA batteries, beginning with the outer t wo.
After the batteries are properly installed, the lock shoul d beep once and the motor will run. **The lock is then i n the locked position.**

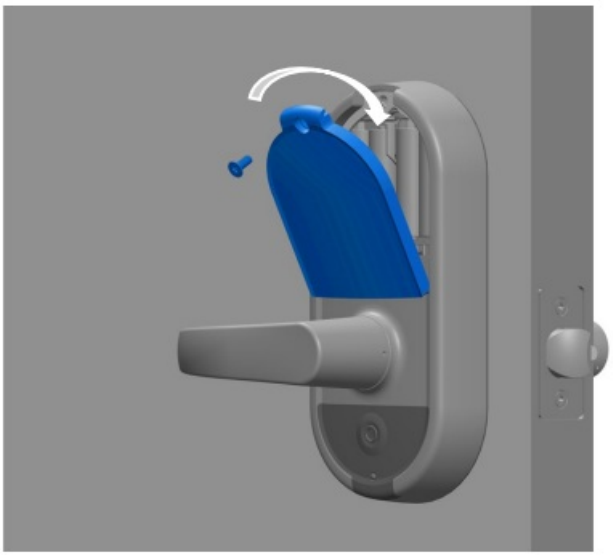


Install the levers onto the outside and inside of the doo r. See tips in CX-Series Service Manual for exterior ha ndle installation and removal prior to installation.



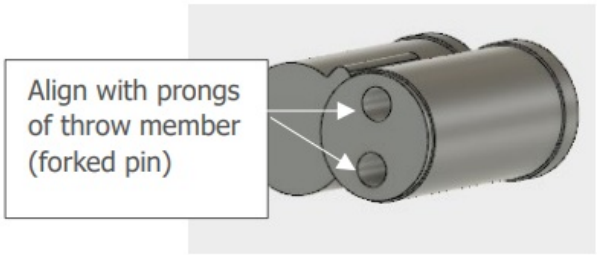
STEP 11

Screw the battery cover onto the trim.



STEP 13 (If Necessary)

Install the removable core.
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 locking lug, then insert the core i nto the lever. Turn the control key back counterclockwise 15 degrees to engage the core and r emove the key.



E. Now that the hardware is installed, see “Software Solutions” in this manual to locate your software r esources and begin programming.

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

A. CHECKLIST

Tools for Door Preparation

· Drill

· Drill Bits: 1” (31/32” for drive in latch), 5/16”

· Hole Saw: 2-1/8”

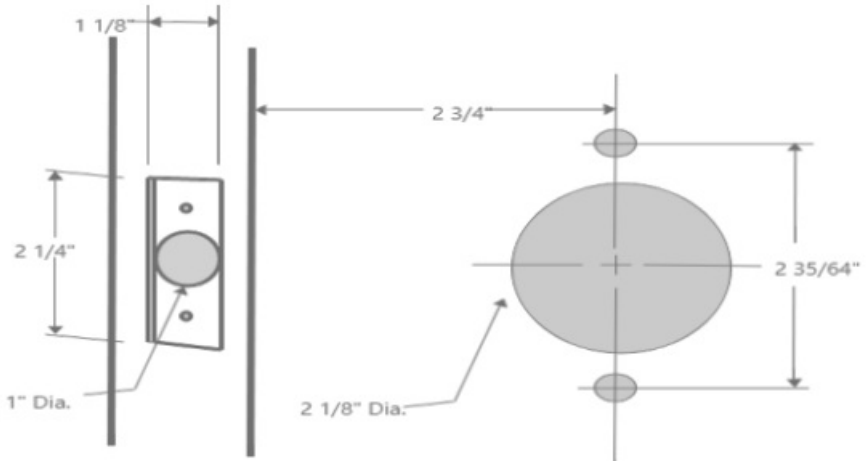
· Phillips Screwdriver, #2

· Hammer

· Chisel

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 CX-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 the door and mark holes. Drill the 2 1⁄8″ (54 mm) first, then drill the two 5/16″ (8mm) holes for lock chassis mounting. Drill the 1″ (25 mm) cross bore hole for the latch last.
5. Insert latch into 1″ hole and hold it parallel to door face, mark outline and remove latch. Chisel 11⁄64″ (4.3 mm) deep or until faceplate is flush with the edge of the door. Insert latch into the 1″ 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 #8×3/4″ screws (SP2).

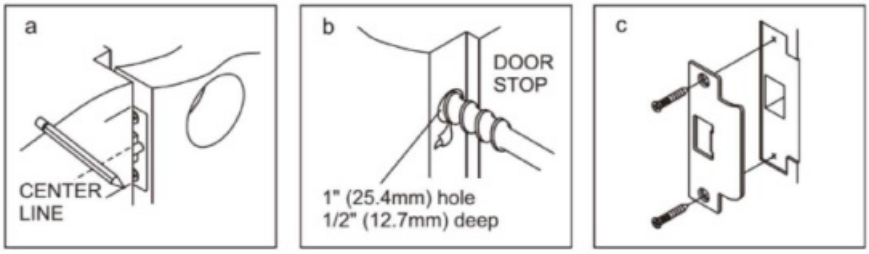


Backset thickness – note that lock is preset to standard 1¾ inch door

NOTE: Removing the through bolt posts from the chassis will decrease the security of the lock, voiding ANSI Grade 1 rating of the lock.

C. FRAME PREPARATION

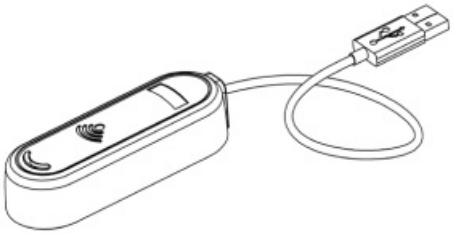
1. Close the door and mark the horizontal line aligned to the strike.
2. Measure one half of door thickness from door stop to mark vertical center line of strike. Drill 1″ (25 mm) hole, 1/2″ (12.7 mm) deep at intersection of horizontal and vertical center lines.
3. Chisel out the jamb 3/32″ (2.4mm) deep or until strike is flushed with jamb and then secure the strike to the ja mb using two #12-24 x 1” screws (SP3).



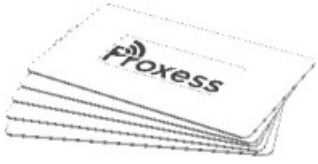
ADDITIONAL RESOURCES

SERVICE EQUIPMENT

ENR™
Enrollment Reader and Programmer
Proxess’ ENR™ makes the credential enrollment process intuitive and simple. Just place a credential on the desktop reader and a pop-up window automatically appears. From here you can create a new user, assign this card to an existing user, or view the details of an existing cardholder.



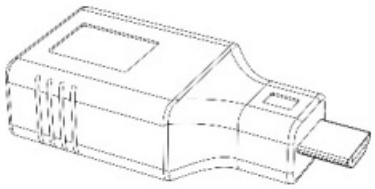
NX™ Smart Credentials
Network-on-Card Smart Credentials
Proxess systems utilize the most advanced and flexible credential technology in the industry, DESFire EV2, and add six layers of protection, encryption and mutual authentication, providing the most secure credentials in the industry.



MPD Mobile Programming Device
Android Mobile Phone with no SIM Card
The Mobile Programming Device is used with the Proxess LoxIQ™ software to build door groups, access profiles,

time schedules, and so much more. It can also be used to assign high security Network-on-Card credentials to personalized profiles with the Proxess Enrollment Reader and On-the-Go Converter. Proxess software is currently compatible with only Android devices. However, we are excited to develop software with IOS capabilities. Please check our website for the latest capabilities for Proxess products.

OTG On-the-Go Converter
The On-the-Go Converter is provided with the Mobile Programming Device and Enrollment Reader to assign credentials. Proxess offers OTG converters for both Micro USB and Type C devices.



For additional information about service equipment and Proxess products, please visit our website:
www.proxess.com

SOFTWARE SOLUTIONS FOR LOCKSET PROGRAMMING

LoxIQ™
LoxIQ™ is a software app created by Proxess, LLC. Instead of requiring all the expensive components of an access system (approx. $3k/dr), LoxIQ™ requires only the locks, a phone, and a programmer. Although the system has the capability of unlimited doors and users, it is typically implemented in smaller systems of 100 doors/users or less…Expandable to full server system software.

For more information about LoxIQ™, please visit our website:
loxiq_datasheet_4pg_06.indd (proxess.com)

ProxessIQ™
ProxessIQ™ is the scalable access control software, supporting Proxess intelligent wireless locksets and door controllers. A ProxessIQ™ system can begin with a single wire-free lockset and incrementally expand to an unlimited number of locations, doors and users.

For more information about ProxessIQ™, please visit our website:
ProxessIQ-Scalable-ACS.pdf.aspx

Proxess Sync™
The Proxess Sync™ mobile phone App synchronizes changes from the ProxessIQ™ software to locksets across the country. It is a simple to use configuration App, requiring just a click to perform the synchronizations. Strictly a performance App, it is secure and uncompromising. The App user simply clicks in Proxess Sync™ to have the changes securely made on the PC software executed at the lockset.

For more information about Proxess Sync™, please visit our website:
Proxess_ProxessSync.pd

FCC STATEMENT

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.

User Manual Notice required by Section 8.4 of ISED RSS-Gen Issue 5 Industry Canada Statement
This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licenceexempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC ID: 2AKUZPXH01
IC: 22335-PXH01

Product Marketing Name: CX- Series Cylindrical Lockset
Contains FCC ID: SH6MDBT50Q
Models (HVINS):

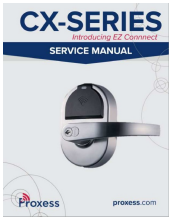
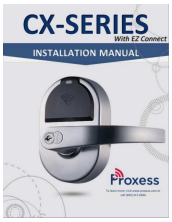
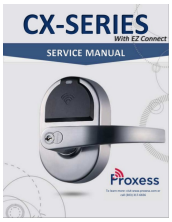
- PXH01-CX03-B (CX-Series Cylindrical Lockset)
- PXH01-CX03-DC (CX-Series Cylindrical Lockset)
- PXH01-MX02-B (MX-Series Mortise Lockset)
- PXH01-MX02-DC (MX-Series Mortise Lockset)

UL STATEMENT (Pending)

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.

Documents / Resources

	Proxess CX-Series Wireless Cylindrical Lock [pdf] Owner's Manual CX-Series, Wireless Cylindrical Lock
	proxess CX-Series Wireless Cylindrical Lock [pdf] Instruction Manual CX-Series Wireless Cylindrical Lock, CX-Series, Wireless Cylindrical Lock, Cylindrical Lock
	Proxess CX-Series Wireless Cylindrical Lock [pdf] Owner's Manual CX-Series Wireless Cylindrical Lock, CX-Series, Wireless Cylindrical Lock, Cylindrical Lock, Lock

References

- Proxess - Home
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