Latch eGenius // Runbook v1.1 August 2023

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Product Overview

Latch eGenius - webpage

Latch eGenius - <u>4" Installation guide</u>

Latch eGenius - 5.5" Installation guide

Latch eGenius - <u>4" Specification Guide</u>

Latch eGenius - 5.5" Specification Guide

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Best Practices and Field Notes

Best Practices

1. Inspect Mechanical Operation

a. Prior to service inspect hardware and how it functions: Is there friction or drag when operating existing hardware?

2. Inspect Door Frame

a. Inspect the door frame to confirm depth is appropriate for the deadbolt.

3. Consider Environmental Factors

a. Be mindful of any weather stripping or gaskets on the door or door frame that may produce added pressure when the door is closed.

4. Evaluate Door Prep

a. Double-check door prep to confirm all boreholes are level and centered.

5. Be Mindful of Beveled Doors

a. Take special care when working on a door with a door bevel.

6. Ensure Device Handing is Configured & Configured Properly

- a. Ensure that the mechanical handing configuration has been set properly according to the installation instructions.
- 7. Check and confirm the latch bolt position and handing have been selected correctly
 - Latch bolt hub orientation RH, LH, RHR, and LHR can be found on page 8 of the installation guide (Latch eGenius <u>4" Installation guide</u>, Latch eGenius <u>5.5"</u>
 <u>Installation guide</u>)
 - b. Outside lever handing (page 11 of the installation guide (Latch eGenius <u>4</u>" <u>Installation guide</u>, Latch eGenius <u>5.5</u>" <u>Installation guide</u>))
 - c. Battery tray handing (page 15 of the installation guide, (Latch eGenius <u>4"</u> <u>Installation guide</u>, Latch eGenius - <u>5.5" Installation guide</u>))

8. Do Not Torque or Over Tighten Set Screws

a. Do not over-tighten screws, particularly when working on a hollow door. Overtightening can warp the door, leading to misalignment.

9. Verify Device is Working as Intended Before Securing the Door

a. Test unlock and lock prior to closing and securing the door.

10. Bring Necessary Tools & Backup Latch Hardware

 a. If possible, always bring an additional Latch unit, along with hardware tools to ensure you're fully equipped to service the issue, regardless of described symptoms/issues.

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Field Notes

- 1. Confirm free and easy movement of the deadbolt in the opened position of the door.
- 2. Be mindful of weather stripping as we've seen weather stripping cause pressure that prevents the unit from successfully locking.
- 3. Any time a unit is power cycled either power is disconnected and/or batteries are removed or replaced the unit will require a manual door update using the consumer Latch App (instead of the Manager App) once it has rebooted.

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For Install and Service

1. Tools

Phillips #2 Screwdriver <u>iOS Mobile Device</u> <u>Qi Charger</u> Specific e-Genius tools included

2. Permissions (Confirm Access)

- a. Confirm user has the correct access permissions
- b. Latch Manager App (only available on iOS).
 - i. <u>Device Management Permissions</u>
 - ii. <u>Unit Unlock Access</u>
 - iii. Latch App (iOS and Android)
 - 1. Unit Unlock Access
 - 2. This is needed to perform a test unlock on the unit note PM will have to set this up.

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Onboarding

1. Add a device

- a. Once you have installed the Latch device, you need to add and save the device's information:
 - i. Open the Manager App
 - ii. Select the 'New Door' icon in the top right corner
 - iii. You'll then be prompted to scan the QR Code on the Latch Device
 - iv. Scan the QR Code on the back panel of the device on the inside of the door
 - v. Select the desired Portfolio & Property Information of the property you are installing in

2. Assign or create a door

- a. If you have pre-created a door in Latch Manager you can assign it by selecting 'Door Name'
- b. If you have not pre-created the door you'll need to create one. To do so:
 - i. Enter the door or apartment name.
 - ii. Select the door type. Learn more about door types.

3. Set-Up the device

- a. Requires at least 20% battery life on battery-powered devices.
- a. Select the latest firmware version
- b. You'll then be prompted to go through the Set-Up Process
- c. Select 'Start'
- d. The Latch Device should then start updating. (Note: The update can take 10-15 min, do not step away from the device or navigate out of the Manager app)
- e. Once successful, select 'Next'

4. Test unlock

- a. You will then be prompted to test unlock by tapping 'Tap to unlock'
- b. Check that the device is unlocked and the door opened
- c. Select 'Next'
- d. Select 'Finish'

5. Test lock

- a. Depending on the device and configuration, the door will re-lock after 5s (Latch R), 10s (Latch M, Latch C2, Latch R), or when the lens is tapped (Latch C)
- b. Make sure that the device re-locks as expected prior to closing and securing the door.

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Troubleshooting Workflow

1. Confirm User device is functioning properly

- a. Confirm that the device being used to interface with the Latch device
 - i. Is compatible with Latch (supported models here)
 - ii. Has strong and reliable cellular or WiFi service
 - 1. Without adequate cellular or wifi service to the user's device, Updates and Firmware Upgrades will fail
 - iii. Has Bluetooth enabled
 - iv. Isn't in a protective case that may interfere with the performance

2. Update and Firmware Upgrade

- a. Ensure the Latch device has been updated with the Latch App
- b. Ensure that the Latch Device has been upgraded to the latest version of the firmware

3. Issues with the Latch App or Latch Manager App

- a. Check for any updates that may be available for your Latch App (<u>iOS</u> and <u>Android</u>) and <u>Latch Manager App</u> (only available on iOS).
- b. Toggle the mobile device's Bluetooth settings off, and then back on.
- c. Power cycle mobile device.
 - i. If Android device, perform the Bluetooth cache clear and location services toggle.
- d. Log out of and back into the Latch app.
- e. Delete and reinstall the Latch app.
 - i. Ensure your phone's Bluetooth and the Latch App Bluetooth settings are both on

4. Check the Lens

- a. Do the LEDs on the lens light up when the lens is touched?
 - i. If not, follow the power troubleshooting steps below
- b. Are any LEDs lit continuously and/or pulsing
 - i. LED feedback instances
 - 1. Denial of Service (DoS):
 - a. The LED on the Latch Lens located in the "12 o'clock" position, when illuminated indicates that another device is connected to the lens over BLE. If the Latch device detects continuous attempts to connect via Bluetooth, it

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will automatically go into DoS mode after 50 failed attempts and BLE unlock will no longer be available.

- b. DoS mode is a feature that has been incorporated into the Latch Lens functionality to prevent unauthorized blocking of a Latch device via continuous Bluetooth connection attempts.
- c. Once a lock is put into DoS mode, it remains in that state for 5 minutes, or until the device is reset or a user successfully authenticates using either an NFC card or a passcode.
 - i. **NOTE:** For any Geneva device, the user only needs to touch the Lens to exit DoS mode.
- d. After 5 minutes of inactivity, the device will resume normal advertising in order to prevent inadvertently extended lockouts.

2. Rate Limiting Mode (RLM):

- a. Rate limiting mode is indicated by the digits 5 and 6 flashing on the Lens.
- b. 20 consecutive NFC or Passcode failures put the device into rate limiting mode (RLM). While in this state, the device will not accept those types of accesses for 5 minutes. After 5 minutes, SOS mode starts where NFC and passcodes will be allowed thrice before entering RLM mode again if they continue to fail.
- c. Successive RLM entries will increase the blocking access time by 5 minutes up to 25.
- d. In order to exit Rate Limiting Mode, simply enter a correct Door Code, use a valid keycard, or perform a BLE unlock via the Latch App. If one of the authentication attempts results in a successful unlock the lock moves into normal mode, if not it moves back into RLM mode.

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5. Check Power

- a. When a user touches the lens on the Latch device, the LEDs should light up with a numeric display.
- b. If the device is unresponsive the first thing to do is replace the batteries
 - i. Install batteries with the correct orientation.
 - ii. The new batteries should all be the same brand name.
 - 1. Duracell is recommended.

6. Check for broken hardware / environmental impacts

Check for overall damage to the device

- i. Are there any signs of force or any noticeable scratches, cracks, or breakage
- ii. Is there anything noticeable impacting the hardware
 - 1. Is the weather stripping unusually thick, requiring the user to manually push or pull the door closed and into the secure position to be able to engage the deadbolt?

7. Check Latch device functionality

- a. Does the device unlock when access is attempted?
 - i. Normal unlock sequence:
 - (Bluetooth) The user opens the app and clicks unlock (or the app automatically starts to unlock through proximity once the lock is open) OR (NFC) a Latch Keycard card is brought up to the lens OR (Doorcode) a code is input (a door update using may be needed for the keycard and door code unlocks to work).
 - 2. The center LEDs light up and then the circle of LEDs opens clockwise.
 - 3. The user should hear a momentary quiet whirring sound and be able to turn the lever to open the door for 10 seconds.

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RMA Process

Overview

In order to replace a defective device, receive a replacement unit, and return the defective unit to our QA team for evaluation, an RMA will need to be submitted through our RMA process.

Process Overview

- 1. Contact Latch Support with RMA details:
 - a. support@latch.com
 - b. +1 (888) 808-0670
- 2. Required Details
 - a. Device Serial
 - b. Associated Property Name
 - c. Associated Door Name
 - d. Issue Description / Symptoms
 - e. Troubleshooting Steps Attempted
 - f. Shipping Address (for a new device)
 - g. Shipping Contact Name
 - h. Shipping Contact Email
 - i. Shipping Contact Phone Number

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Advanced Technical Support Guide

Dead Bolt checklist

NOTE 1: NO POWER TOOLS: Over-torquing will damage the product. Screws should be hand-tight.

NOTE 2: During all stages of inspection and assembly: use the handle and thumb-turn to check for free and easy movement of the deadbolt. Binding, resistance, friction, and sluggishness around handles, thumb-turn, deadbolt, and latches is never acceptable and will lead to device failure.

- 1. Confirm free and easy movement of the deadbolt in the opened position of the door
 - a. If not free and easy motion, remove the cover and the battery tray and confirm the battery cables are not interfering with the deadbolt. Use the tailpiece to confirm free and easy motion.



- b. If not free and easy motion, loosen all screws on the backplate and the deadbolt faceplate.
- c. Hand-tighten the backplate screws. The deadbolt must be tightened AFTER the other backplate and battery screws are tightened. Use the tailpiece to confirm free and easy motion.

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d. If not free and easy motion, remove and replace the deadbolt.

Field troubleshooting

1. The strike plate must be from Townsteel, replace it if necessary

a. The size of the opening is larger than other manufacturers, using too small a size creates interference.

2. Is the gap between the door and the door frame uneven anywhere?

a. If yes: adjust the door to make it square and even, otherwise latch bolt and deadbolt may not enter the strike plate correctly.

3. Is the handing setting correct?

a. If no: remove the rear cover and re-hand the lock

4. Are gaps visible between the lock housing and the door surface?

- a. If yes: adjust the lock to remove them. Tighten in an X pattern to ensure even application of force
- b. If lock install holes are concave or misshapen: fix them before reassembling.
- 5. Is the deadbolt or latch bolt angled in the borehole? (Remove the front and rear assembly to check)
 - a. If yes: fix it, this could cause the front and rear assembly to not align with the deadbolt and latch bolt. If lock install holes are warped or misshapen: fix them before reassembling.

6. Verify screws on the battery and lock bracket are hand-tight. NO POWER TOOLS.

- a. The deadbolt and latch bolt must be tightened AFTER other lock screws
- 7. Confirm that the deadbolt does not touch the strike plate when extended and retracted
 - a. Symptom: Door movement when extending or retracting the lock
- 8. Confirm that the deadbolt is centered in the strike plate when fully extended
 - a. If strike plate modification is ABSOLUTELY required, make sure there is 3/32" (2.75mm) clearance to the strike plate on each side of the deadbolt.

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- 9. Confirm that the deadbolt extends fully with the door closed and open
 - a. If not: is it touching the back of the dust box?

10. Is the deadlatch plunger falling into the dust box?

a. If yes: adjust the strike so the plunger hits while the latch bolt falls into the dust box. Without this, the lock could be broken into using a credit card or pocket knife

11. Is the deadlatch plunger hitting the strike plate?

- a. If yes: adjust the strike so the plunger hits while the latch bolt falls into the dust box
- 12. Confirm free and easy movement of the latch bolt and deadbolt in the opened and closed position of the door
- 13. [PUSH on door] Confirm free and easy movement of the latch bolt and deadbolt

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14. [PULL on door] Confirm free and easy movement of the latch bolt and deadbolt

- **15. Test all lock functions.** All should be 'free and easy'. If not: something is binding up, loosen all assembly screws, and ensure the deadbolt/latch bolt are the last 4 screws to be tightened.
 - a. Exterior handle down
 - b. Exterior handle up
 - c. Interior handle down
 - d. Interior handle up (deadbolt should extend)
 - e. Interior deadbolt thumb-turn: Rotate right and left

16. Remove the battery tray and inspect the wires for pinching or damage

17. Are all cables fully seated, connected, and free of pinches and rips?

a. If not: fix it or replace the cable. If unresolved power could be intermittent and cause a lockout

18. Are the batteries oriented correctly?

a. If any are backward it will not supply enough voltage.

19. Batteries should be new, clean, and free of corrosion

a. Check + and - terminals (aka both sides)

20. Battery voltage should be at least 6.0 Volts

21. Unlock with Bluetooth

- a. Is there a faint click during unlock? If yes: verify cables are seated and not shorting
- b. Does the LED sequence play on the lens during unlocking? If no: verify cables are seated and not shorting

22. Unlock with a hard key

23. Upgrade firmware, update product