

4500 Series Electric Exit Devices Request to Exit (RX) Installation Instruction Grade 1 I-ED00368

DEVICES COVERED IN THESE INSTRUCTIONS:

RX Request to Exit

ELECTRICAL SPECIFICATIONS

Note: SPDT mechanical switch Wiring Diagram

Yellow Wire:

(common)

Red Wire: (normally open) **Voltage** Current 125 VAC 3 AMP Grey Wire: (normally closed) Wire Gauge: #22 AWG **30 VDC** 2 AMP

INSTALLATION INSTRUCTIONS

Remove chassis cover from device. 1.

Separate pushbar and latch assembly from mechanism housing. 2.

Place switch assembly into device as shown below. Assembly fits over top of existing holes. 3.

Make sure switch arm is placed on outside of center link on the pushbar so that switch is pre-activated. 4. Use provided round head screws and lock washers to secure switch assembly to pushbar baseplate.

5.

6. Check for proper switch activation--when pushbar is fully depressed switch should activate.

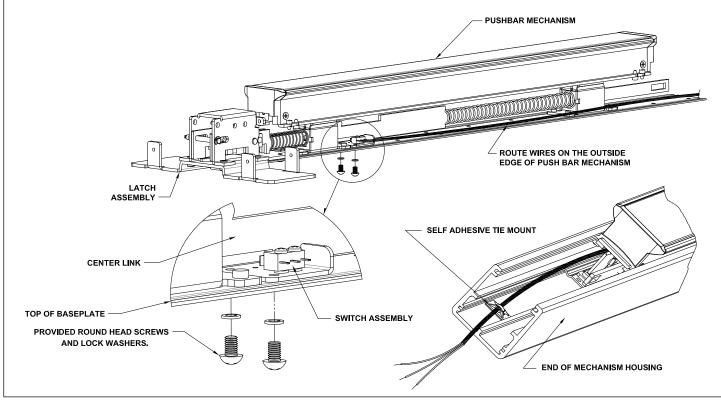
Run wires along outside edge of pushbar mechanism. 7.

Re-assemble mechanism housing onto pushbar mechanism. 8.

Secure self-adhesive tie mount holder to bottom of mechanism housing in end of device as shown below. 9.

Make sure color code for wires is used for proper hook-up of switch contacts. 10.

Note: See exit device instructions and template for door preparation.

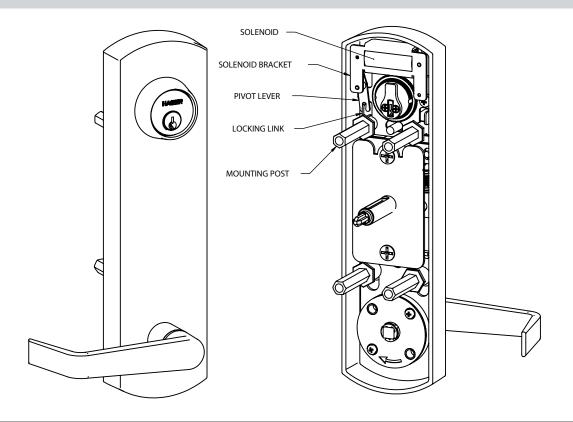


4500 Series Electric Lever Trim Electrical Supplemental Instructions Grade 1 1-ED00370

DEVICES COVERED IN THIS DOCUMENT:

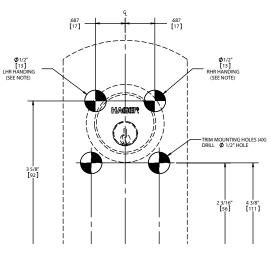
45ET-EL Cylinder Escutcheon Lever Trim - Fail Safe 45ET-EU Cylinder Escutcheon Lever Trim - Fail Secure

Note: For use with Hager 45ET Lever Trim on RIM and Surface Vertical Rod exit devices



1. PREPARE DOOR

- Follow exit device instructions and template to prepare door and frame for installation.
- B. Follow lever trim instructions and special electric version of the trim template (see document T-ED00372) to prepare door for installation.
 - i. The electric trim template identifies the location of a 1/2" diameter hole through the door for wire transfer to exit device side of door. The wires are then routed through the exit device, into the door raceway to power transfer device (electric hinge).
 - ii. The wire transfer hole is handed, so be sure to use the correct location.
- C. Door fabricator to provide a 3/8" diameter (minimum) raceway through door to allow insertion of electrical wires running between exit device and power transfer device (electric hinge). See "Wire Routing and Door Prep Instructions" for 4500 Series Electric Exit Devices, document I-ED00367.

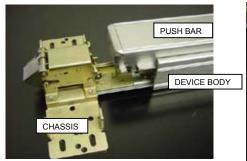


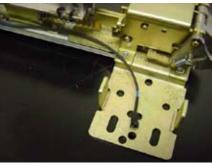


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2. PREPARE EXIT DEVICE

- A. Remove four (4) screws from chassis cover and remove.
- B. Separate chassis/push bar from device body by removing two (2) screws located on chassis.
- C. After chassis/push bar has been removed from device body, insert cable assembly along the side of push bar. Make sure that connector end is located on the chassis side.
- D. After cable assembly has been routed on the side of the push bar, re-install the device body and secure with the two (2) screws.



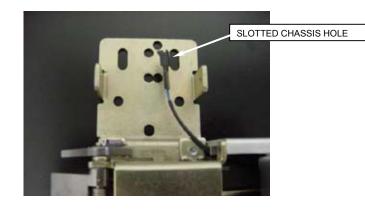




3. ROUTE CABLE

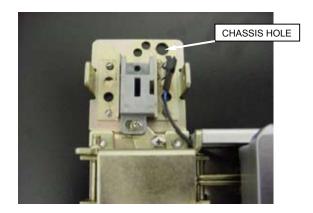
RIM Device

- A. Feed the connector on the trim control through the .500 diameter prep hole of door and through the slotted hole in RIM device chassis.
- B. Connect the cable assembly to the connector on the trim and finish mounting the devices per the manufacturers instructions.



Surface Vertical Rod Device

- A. Feed the connector on the trim control through the .500 diameter prep hole of door and through the hole in surface vertical rod chassis.
- B. Connect the cable assembly to the connector on the trim and finish mounting the devices per the manufacturers instructions.





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4. SECURE WIRES

A. After the exit device and trim is mounted, secure the wires in the back of exit device body with the self-adhesive ty-wrap mount and ty-wrap.



5. TERMINATE WIRE

A. Terminate wire connections with appropriate crimp splices or wire nuts.

NOTE: It is helpful to stagger terminations. This allows for easy insertion of wires through prep holes.



DEVICES COVERED IN THIS DOCUMENT:

Motorized Electric Latch Retraction (MLR) for 4500 and 4600 Exit Devices

2-649-5007 Motorized Electric Latch Retraction Kit

A. Electrical Input Requirements:

Filtered and Regulated Power Supply

Voltage: 24VDC ±10%

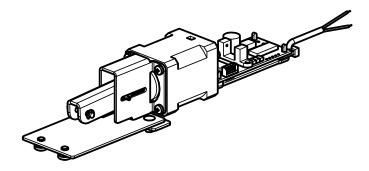
Current: 1A MAX Inrush, 400mA MAX Holding

Non-polarized leads

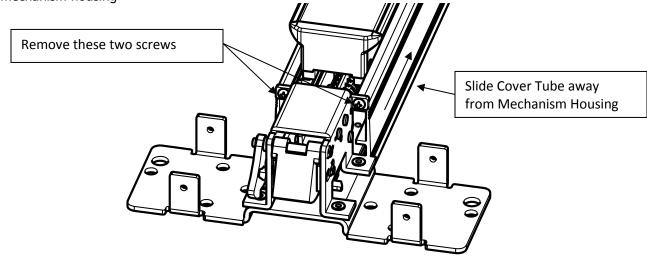
PROVIDES SIMULTANEOUS ELECTRIC LATCH RETRACTION AND DOGGING (PUSH BAR DEPRESSED)

DO NOT REMOVE ANY REGULATORY LABELS ADHERED TO THE DEVICE.

A 4500 or 4600 Exit Device for a 36" door with an MLR can be cut down a maximum of 2" (Minimum door width-34"). A 4500 or 4600 Exit Device for a 48" door with an MLR can be cut down a maximum of 8" (Minimum door width-40").

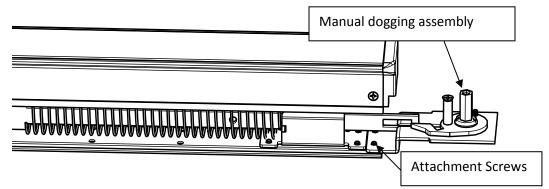


- B. Installation Instructions (For Kit only. For Mortorized ELR already installed in exit device skip to section C)
- 1. Remove the Exit Device Head Cover by removing the four screws.
- 2. Separate the mechanism housing from the cover tube. Remove the two screws shown and slide the cover tube away from the mechanism housing

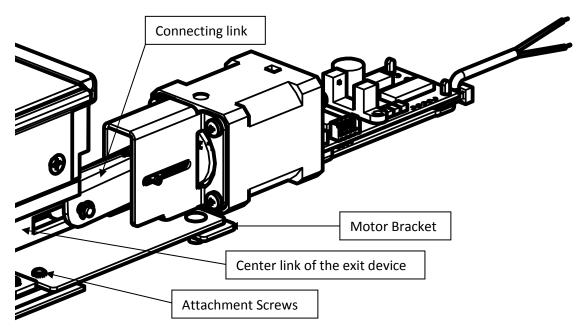




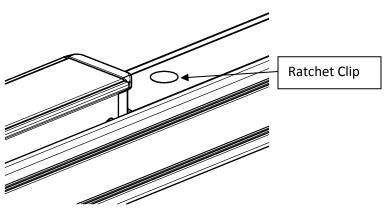
3. Remove the manual dogging assembly from the mechanism housing baseplate (if present) and discard.



4. Attach the mounting plate of MLR kit to the Mechanism Housing Assembly Baseplate using the supplied screws through the holes that secured the manual dogging assembly.



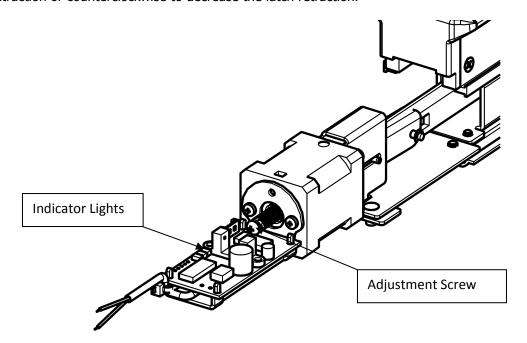
- 5. Attach the Connecting Link to the Center Link of the exit device using the supplied clevis pin and retaining rings.
- 6. Slide the Mechanism Housing back into the Cover Tube. Verify the flanges on the Motor Bracket slide into the same mounting grooves on the Cover Tube as the Mechanism Housing Assembly Baseplate.
- 7. Install the Ratchet Clip into the dogging hole of the Cover Plate.





Motorized Electric Latch Retraction Adjustment

- 1. Verify the device is properly adjusted for mechanical operation. Electric operation should not exceed the mechanical operation or there will be a high risk of damage to the device. **We suggest setting the latch retraction under electric operation at 1/16" less than the latch retraction under mechanical operation.**
- 2. Locate the adjustment screw in the rear of the motor assembly. Rotate the adjustment screw clockwise to increase the latch retraction or counterclockwise to decrease the latch retraction.





C. Onboard Indicator Light Assignments:

Maintain input power to the exit device and check the onboard indicator lights.

Remove input power before attempting a solution.

Green (Power)	Yellow (Sensor)	Red (Error)	Indication	Possible Solution
Off	Off	Off	No Power.	Connect the wiring between the power supply and the exit device
On	On	Off	Normal Operation. The push bar is retracted to the dogged position and dogged; The latch is retracted by default. The device is allowed two attempts	
On	Off	On	Error in operation. The push bar did not retract to the dogged position within 2 attempts.	Rotate the adjustment screw counterclockwise to decrease the latch retraction.
On	On	Blink	Error in operation. The push bar is retracted to the dogged position but not able to remain dogged. The device is allowed 5 attempts.	Rotate the adjustment screw counterclockwise to decrease the latch retraction.
On	On	On	Error in operation. Without power being removed, the push bar went from being dogged to unintentionally being extended and then the push bar did not retract to the dogged position within 2 attempts.	Cycle the input power.
On	Blink	On	Error in operation. The push bar did not extend from the dogged position when the power was last removed. The device will not attempt a retraction	Clear the jam condition manually and cycle the input power.