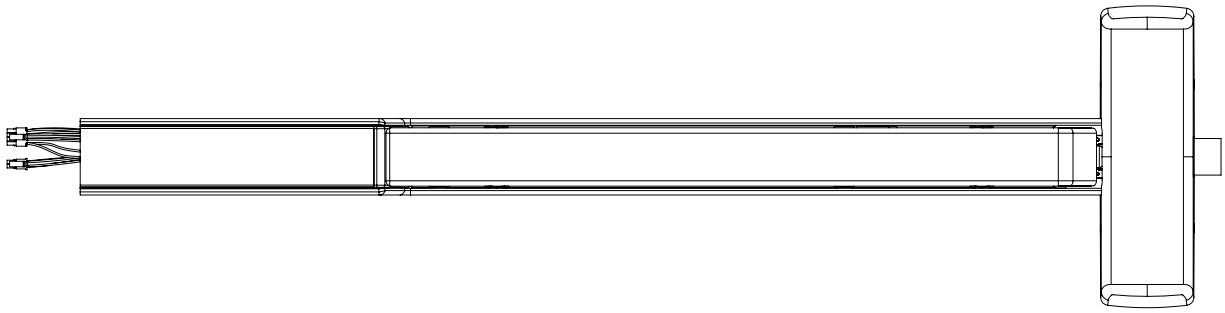
Installation Instructions

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PE80 Series Exit Devices

Electrical Wiring and Wire Routing for:

- 53- Prefix (Latch Monitor Switch)
- 54- Prefix (Exit Trim Lever Monitor Switch)
- 55- Prefix (Push Bar Signal Switch)
- 58- Prefix (Electric Dogging)
- P773, P774, P775, P776 (Electromechanical Exit Trim)
- PW773, PW774, PW775, PW776 (Electromechanical Wide Exit Trim)



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⚠ WARNING

This product can expose you to lead which is known to the state of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65warnings.ca.gov.

A8299-1 05/23

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8 54- Prefix (Trim Monitor Switch) - Exit Device to Frame Connection 18
9 55- Prefix Push Bar (Signal Switch) - Exit Device to Frame Connection 19
10 58- Prefix (Electric Dogging) - Exit Device to Frame Connection 20
11 P/PW773, P/PW774, P/PW775, P/PW776 (Electromechanical Exit Trim) - Exit Device to Frame Connection 21
12 Appendix A: Harness Wiring Reconfiguration 23

Note: The 55-, 53-, 58-, P/PW773, P/PW774, P/PW775, P/PW776, and 54- options are combined into this one instruction.

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PE80 Series Exit Devices

Electrified Exit Options

Installation Instructions

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1 Function

- The 55- prefix signal switch monitors the touch bar. When the rail is depressed or dogged, the switch is de-activated.
- The 53- prefix latchbolt monitor switch provides positive indication of latchbolt extension or retraction when the push rail is depressed, dogged or if the latch bolt itself is depressed.
- When the 58-PE80 series exit device is energized and the rail is depressed, it will continuously hold the push rail down and latch in an unlocked (dogged) position. When the device is de-energized (or power is interrupted), the latch will extend.
- P/PW773, P/PW774, P/PW775, P/PW776 Electromechanical Trims
- 54-prefix signal switch monitors the outside lever. When the lever is rotated, the switch is deactivated.

2 General Description

This instruction manual includes wiring instructions for all Premium Exit (PE80) Series Electrified Exits Options to ElectroLynx connector system. The correct wiring configuration must be selected depending on type and function of the product being installed. Refer to table of contents to select appropriate wiring instruction for product options being installed. Options/prefixes can be combined and wired together, as ordered.

3 Specifications

Electromechanical Exit Trim

Fail Safe Models:
P/PW773 without cylinder
P/PW775 with cylinder

Fail Secure Models:
P/PW774 without cylinder
P/PW776 with cylinder

Motor
Type: 12 or 24VDC, Intermittent or Continuous Duty
Current draw is 400mA inrush / 15mA continuous @12VDC / 24VDC

Caution: The DC voltage applied to the electromechanical exit trim must not exceed 30VDC. If the voltage exceeds 30VDC the motor may be damaged.

53-, 54-, and -55- switch contact rating: 1A max @ 30VDC

53- prefix (latch monitor switch)
54- prefix (exit trim lever monitor switch)
55- prefix (push bar signal monitor switch)
58- prefix (electric dogging) Electromagnet current: 200mA @ 24VDC

Caution: Disconnect all input power before beginning installation to prevent electrical shock and equipment damage. All wiring must comply with applicable local electrical codes, ordinances and regulations. Installer must be a trained, experienced service person.

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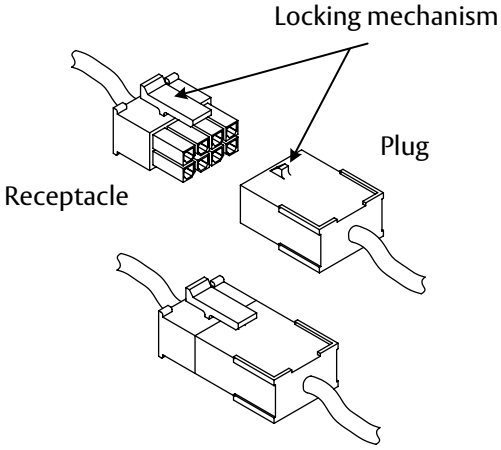
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4 ElectroLynx Connector System Notes

The system is designed to be installation friendly with quick connectors from the electric hinge through the door to the rail. The only wiring required is to the loose wires on the pigtail harness assembly on the frame side of the electric hinge.

Important: The plug and receptacle connectors are designed to mate and lock together as shown in the figure. Plug the connectors into each other with the locking mechanism aligned as indicated.

Do not force connectors on any other way.



These notes apply to all of the following devices concerning the installation and wiring to the ElectroLynx Connector System

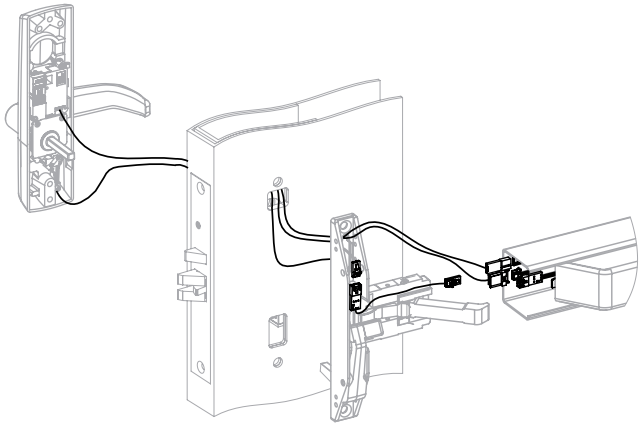
1. With new applications, a raceway harness with 8 and 4 pin connectors will be pre-installed inside door by ASSA ABLOY door manufacturer when specified during the ordering process. Raceway harness kits are also available for retrofit applications.
2. If door does not have a raceway harness with connectors, cut connectors off product, or consult factory for raceway retrofit kit.
3. Wiring to pigtail harness is per facility wiring requirement. The rail, raceway, electric hinge and pigtail connector terminations and wire colors all match.

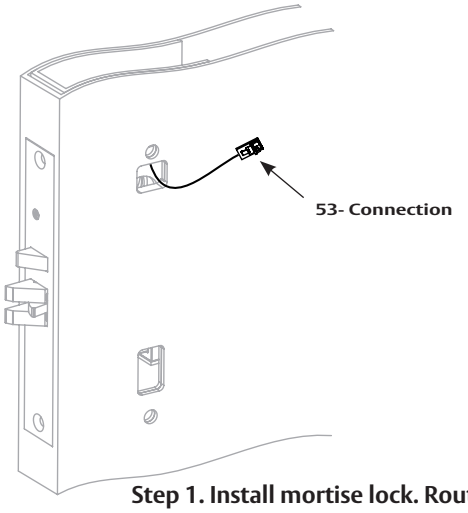
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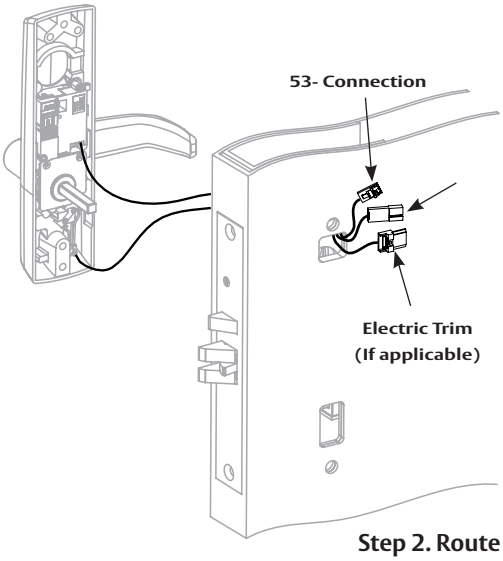
5 Wire Routing

8300 OVERVIEW

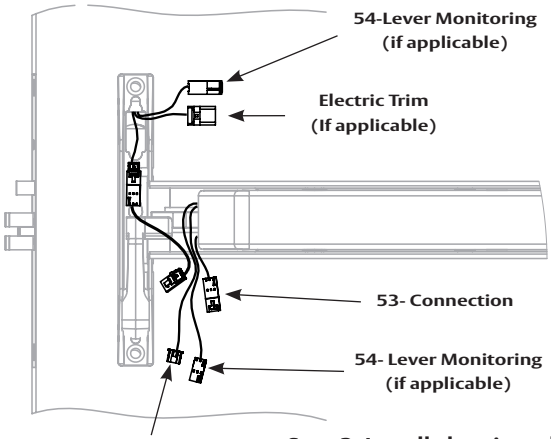




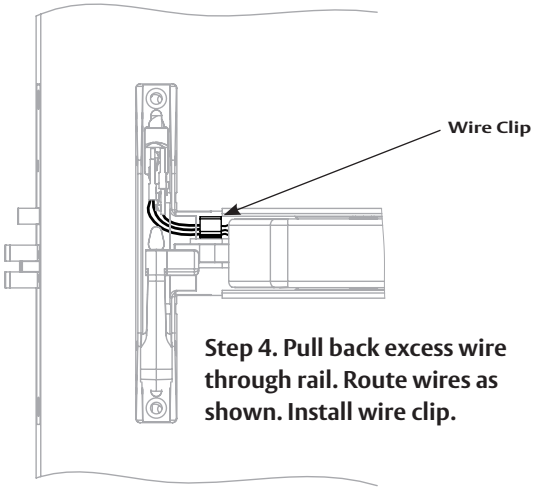
Step 1. Install mortise lock. Route wire as shown.



Step 2. Route trim wires as shown.



Step 3. Install chassis and rail. Make wire connections.

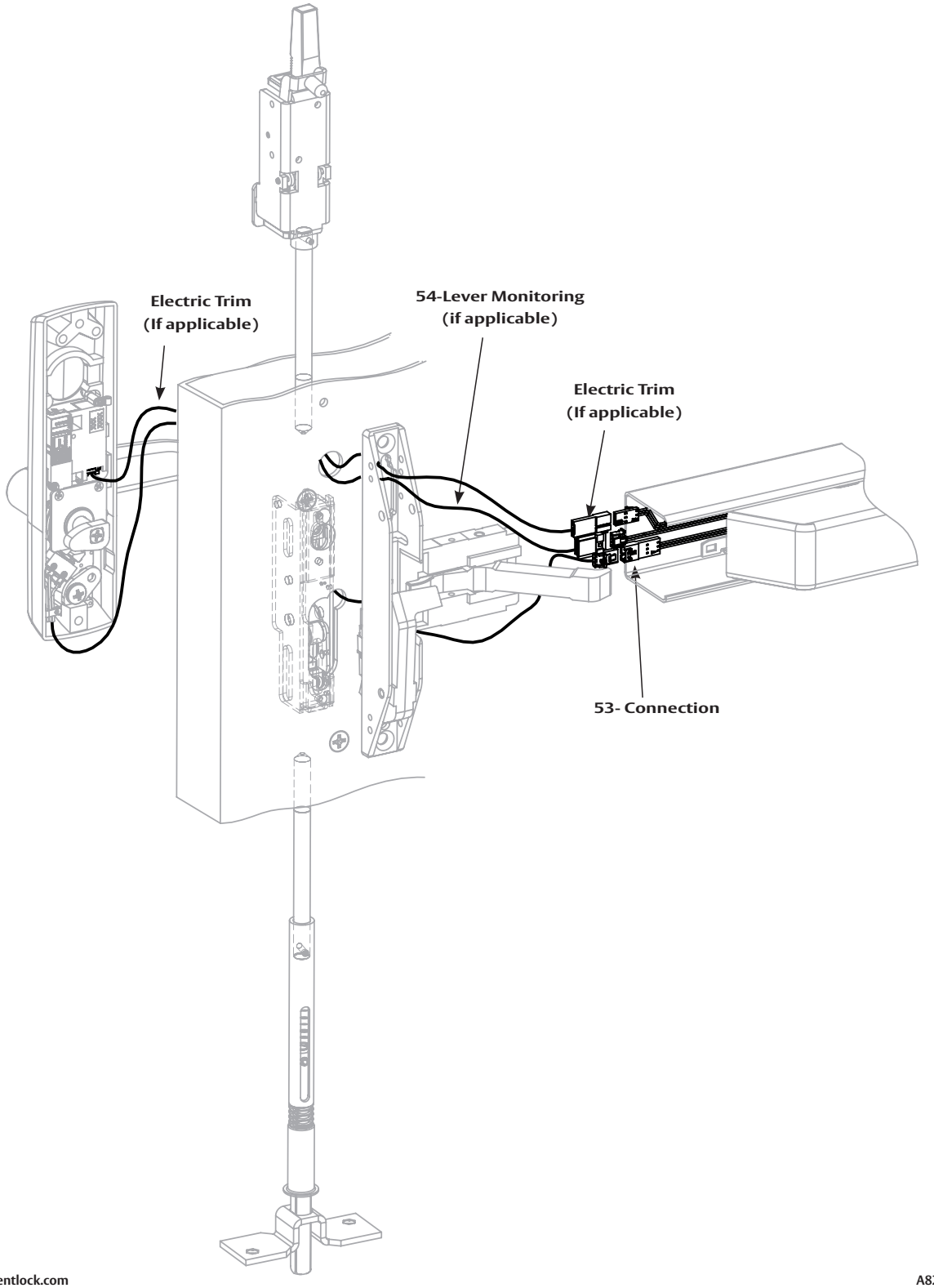


Step 4. Pull back excess wire through rail. Route wires as shown. Install wire clip.

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5 Wire Routing - continued

8400 OVERVIEW

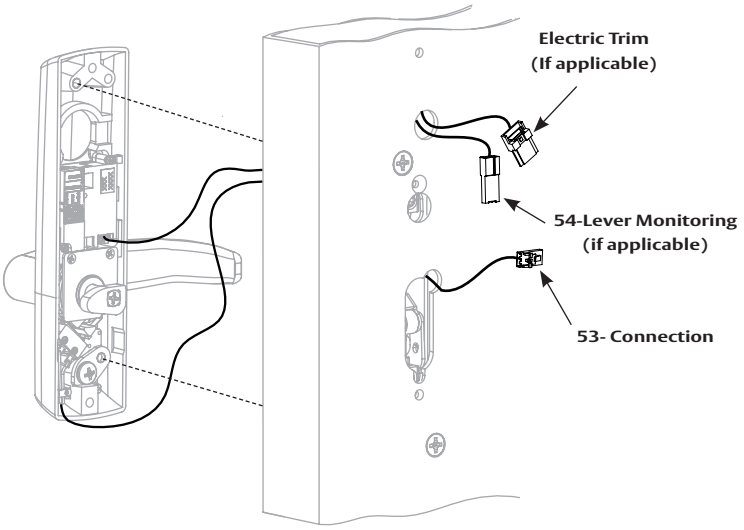


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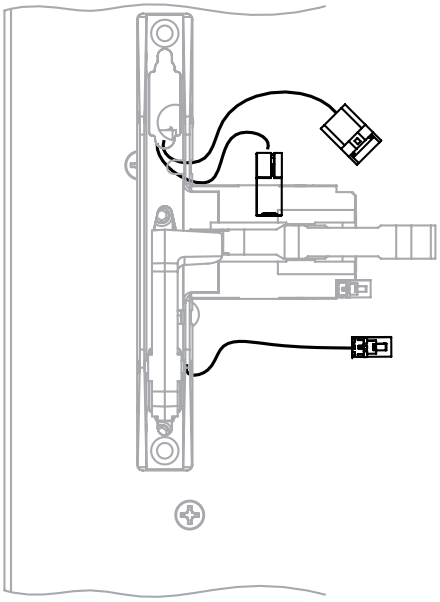
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5 Wire Routing - continued

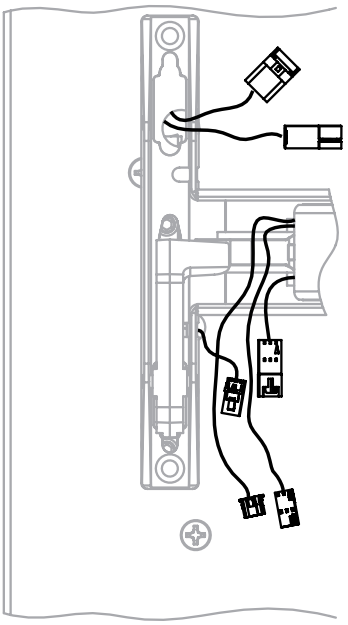
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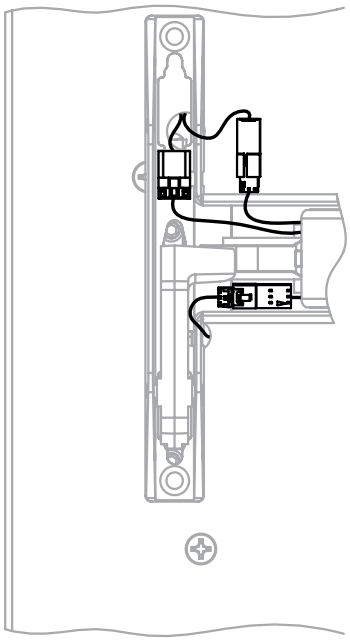
Step 1. Route wires as shown and secure trim to door.



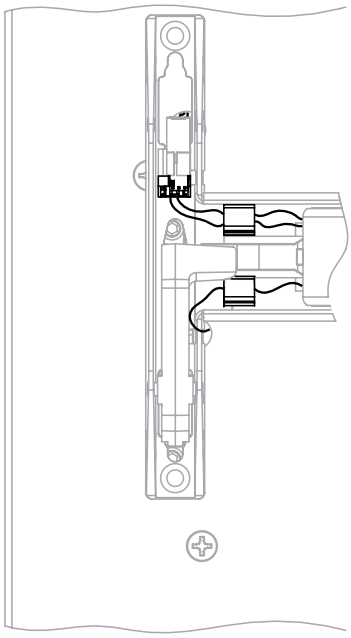
Step 2. Route wires through chassis as shown and secure chassis to door.



Step 3. Install rail.



Step 4. Make wire connections.



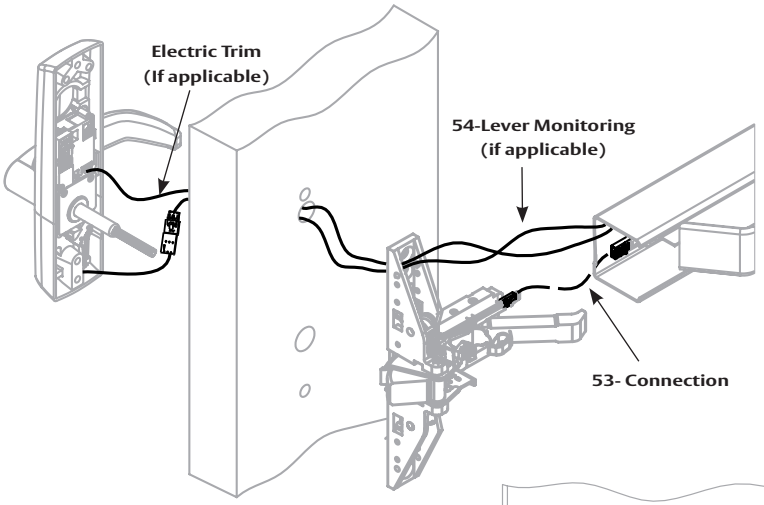
Step 5. Pull back excess wire through rail. Route wires as shown. Install wire clips.

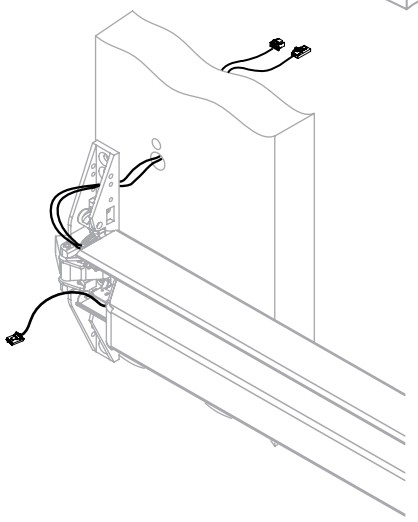
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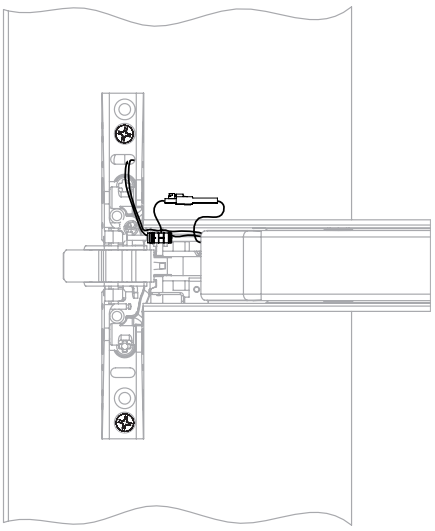
5 Wire Routing - continued

8500 OVERVIEW

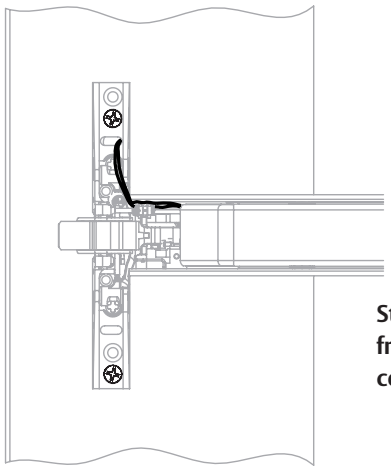




Step 1. Install chassis to rail. Route wires through door as shown.



Step 2. Secure trim. Make 53- connection.



Step 3. Pull additional wire slack through rail from insert end and tuck latch bolt monitor (53-) connection into chassis.

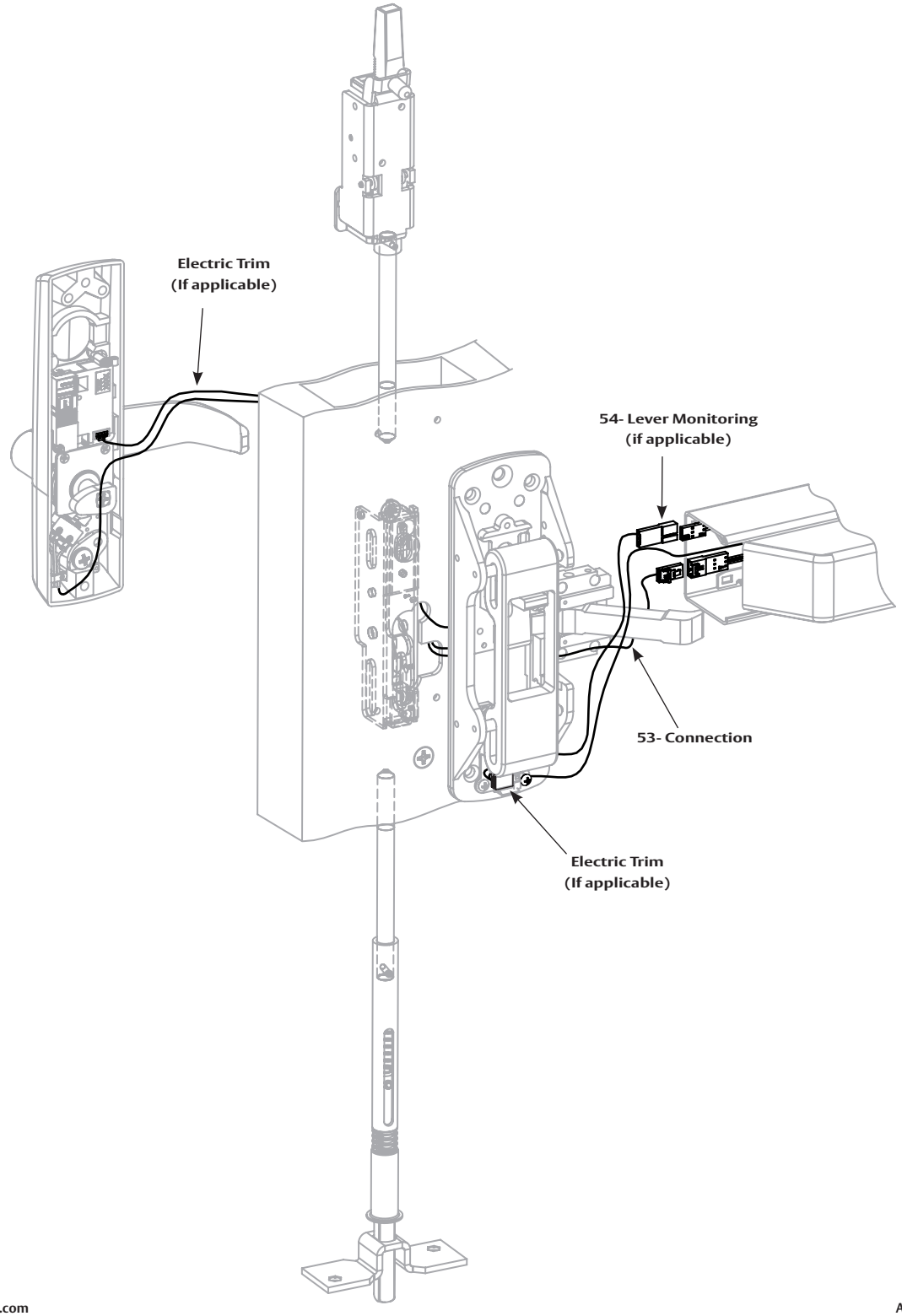
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5

Wire Routing - continued

8600 OVERVIEW

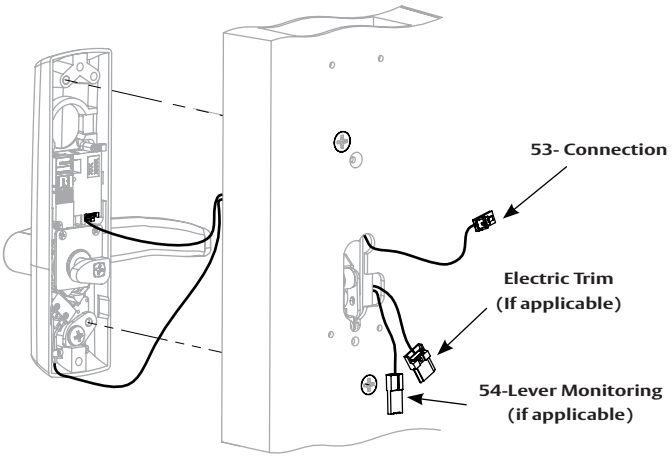


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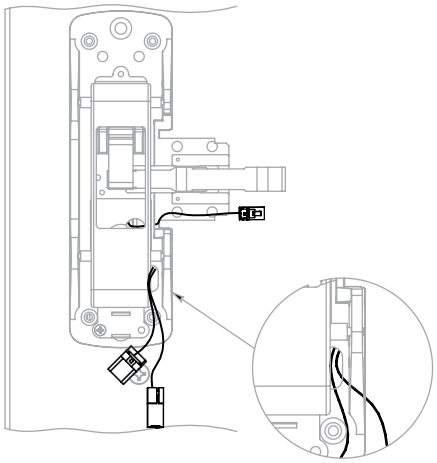
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5 Wire Routing - continued

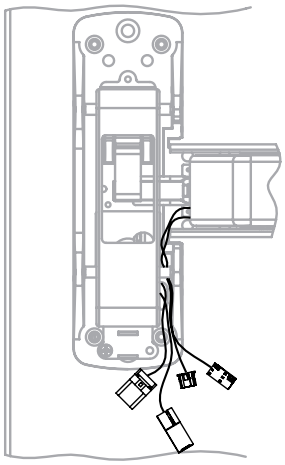
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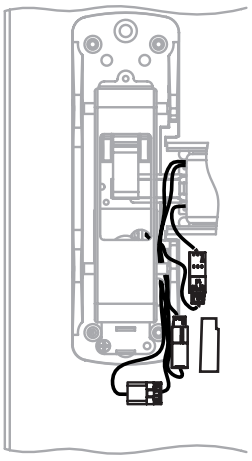
Step 1. Route wires as shown and secure trim to door.



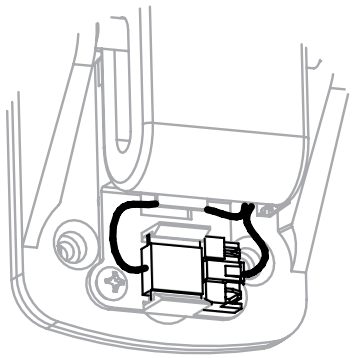
Step 2. Install chassis (Section 4) and route wires through chassis as shown.



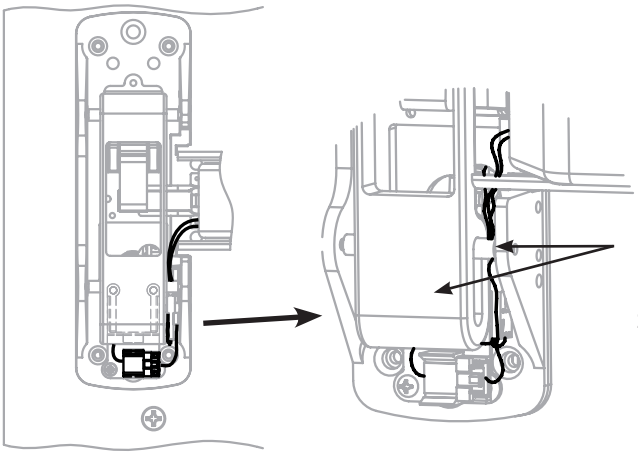
Step 3. Install rail.



Step 4. Make wire connections.



Step 5. Snap trim jumper to clip and route excess wire as shown.



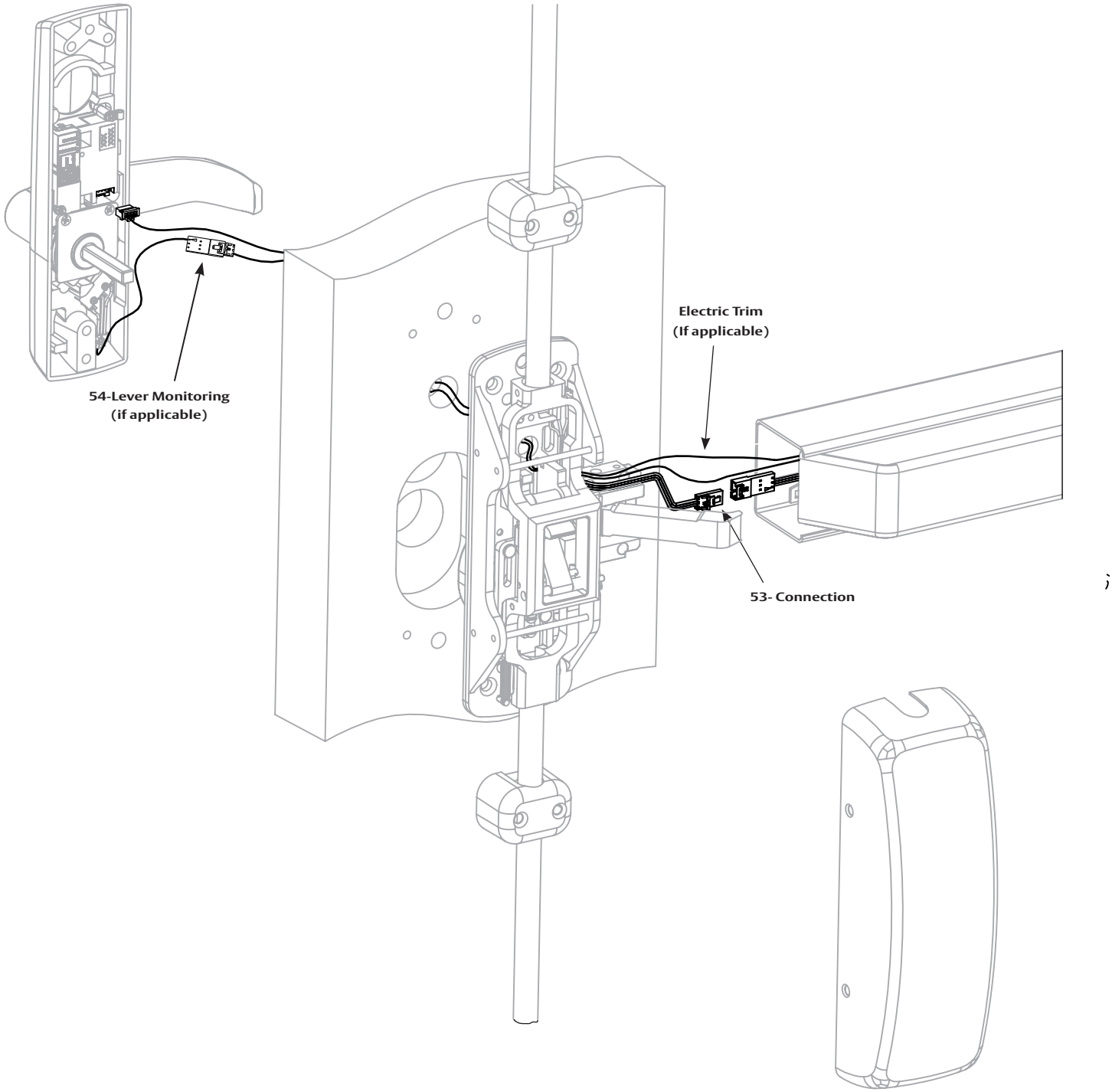
Step 6. Tuck wire connections along side of main slide. Pull back excess wire through rail.

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5 Wire Routing - continued

8700
OVERVIEW

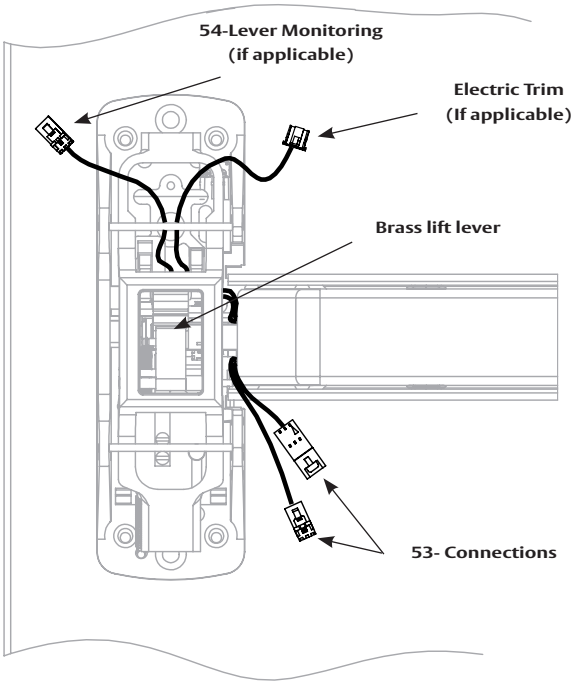


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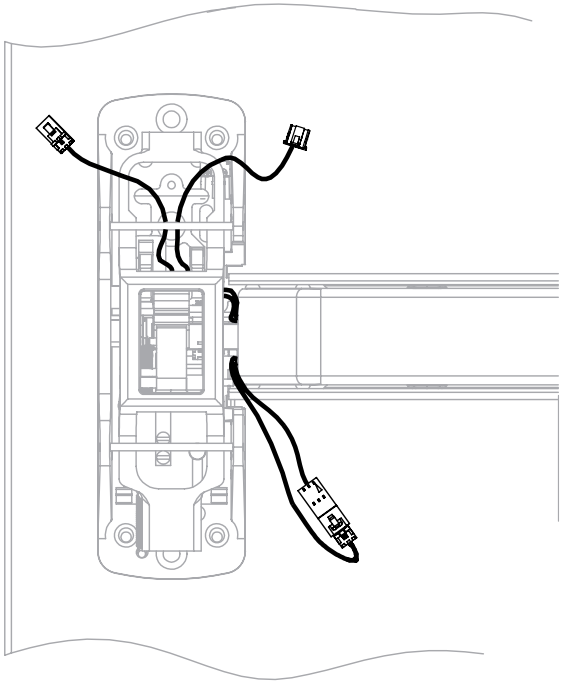
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5 Wire Routing - continued

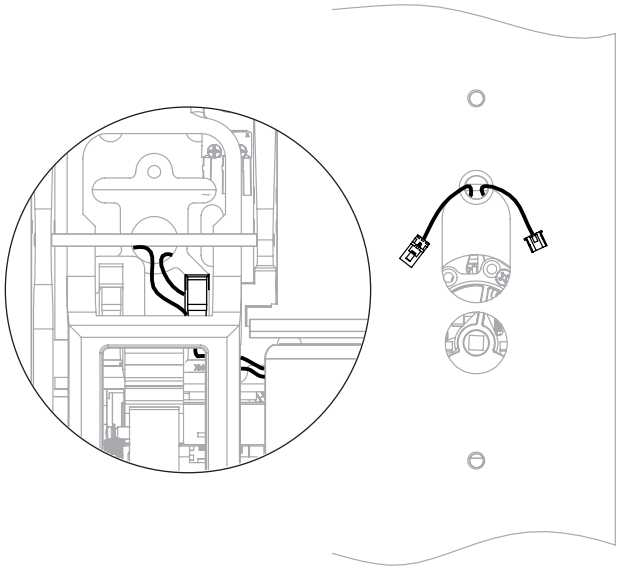
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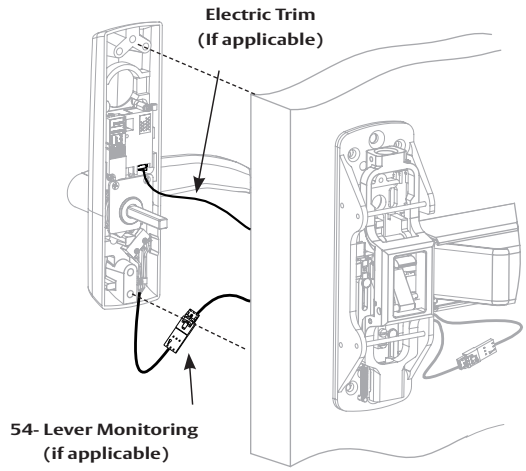
Step 1. Install chassis and rail. Route trim wires from rail under brass lift lever as shown.



Step 2. Make 53- connection.



Step 3. Route trim wires through chassis and door as shown.



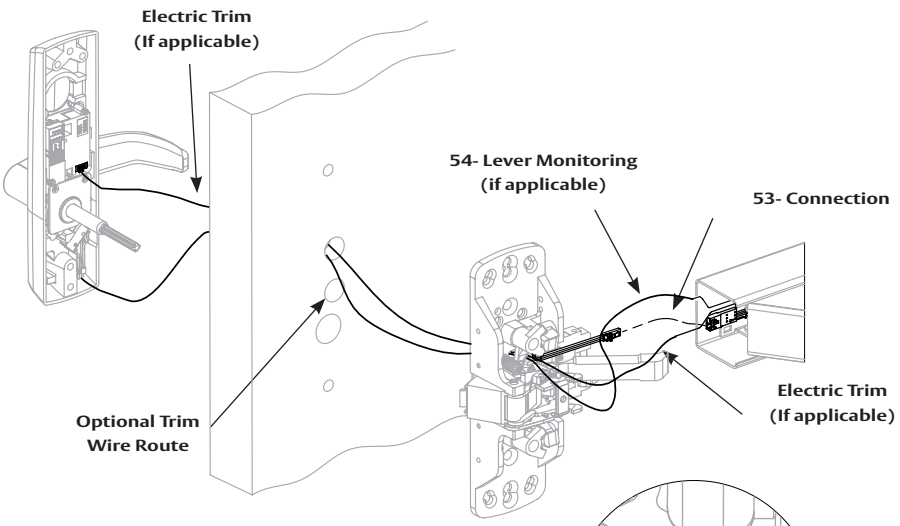
Step 4. Make trim wire connections and secure trim to door. Pull back excess wire through rail.

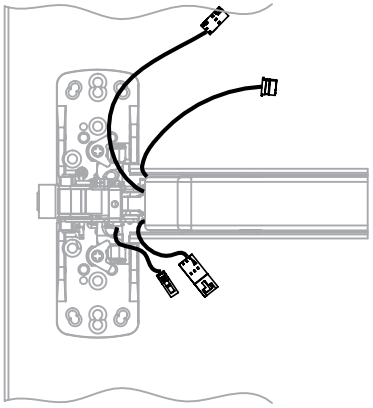
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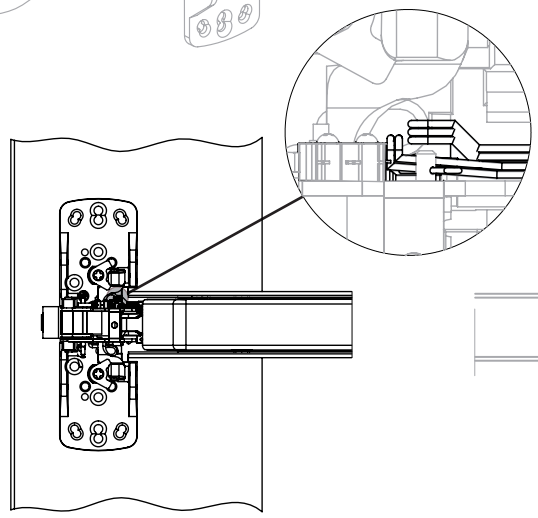
5 Wire Routing - continued

8800 OVERVIEW

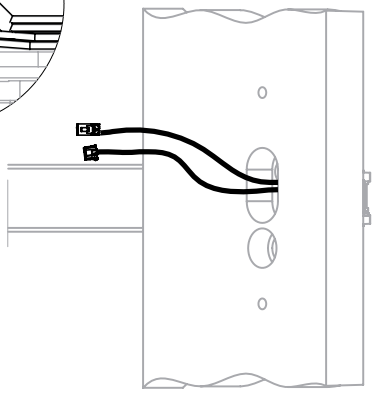




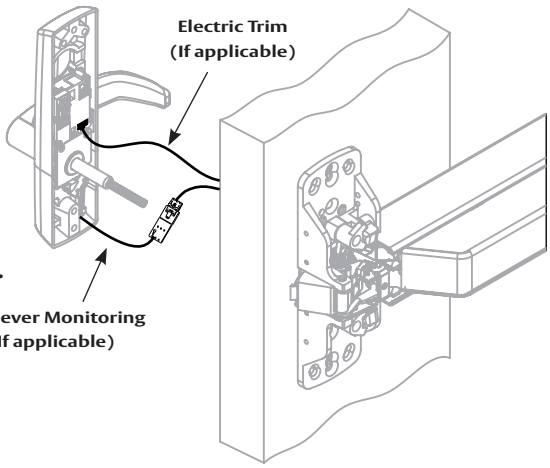
Step 1. Install chassis and rail.



Step 2. Route trim wires through chassis and door as shown above.



Step 2A. Additional view



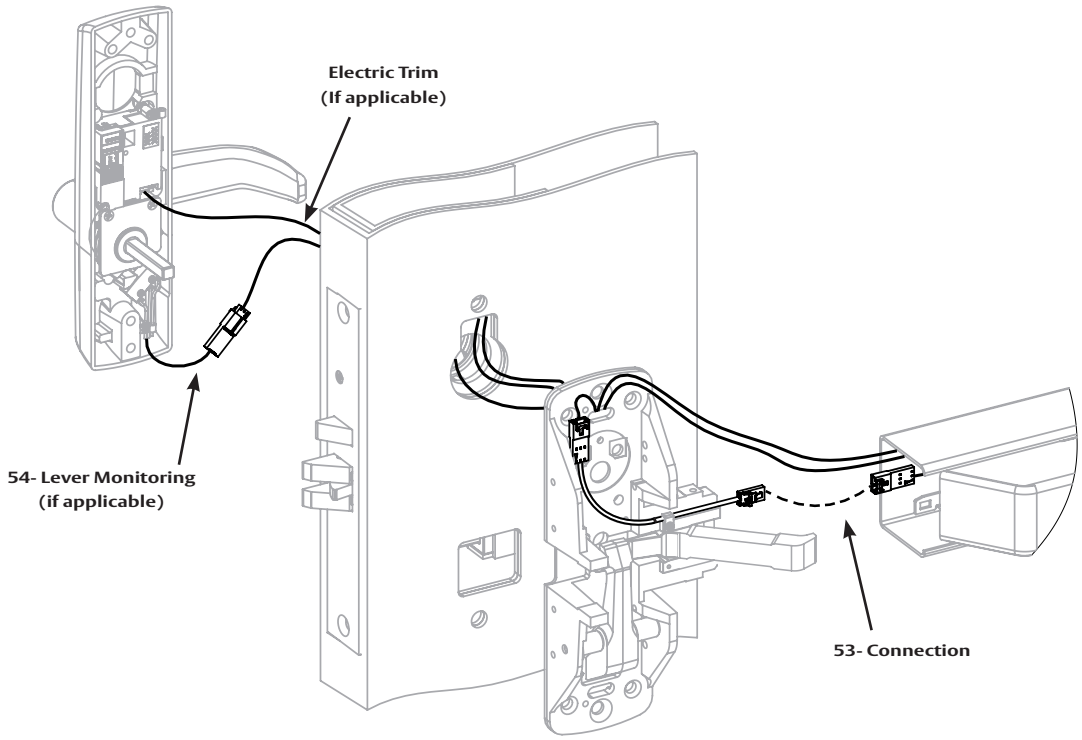
Step 3. Connect wires and secure trim to door.

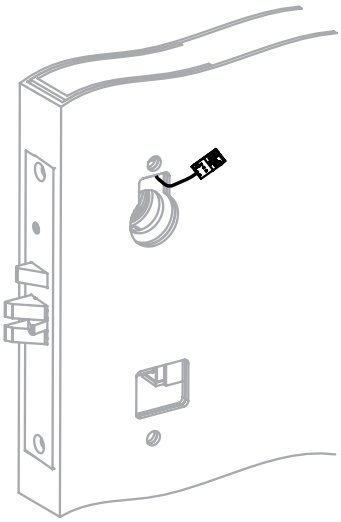
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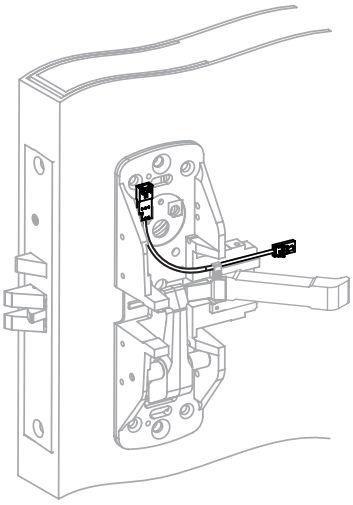
5 Wire Routing - continued

8900 OVERVIEW

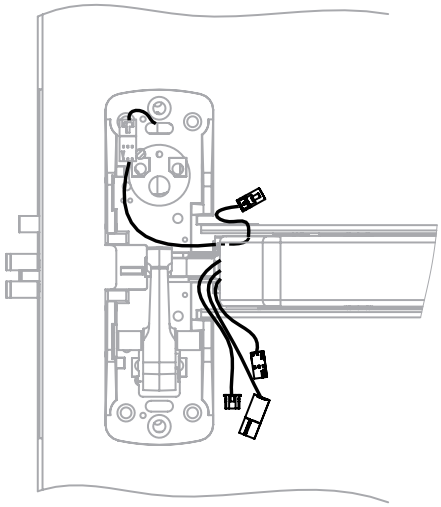




Step 1. Install mortise lock. Route wire as shown.



Step 2. Install chassis and connect 53- jumper at chassis.



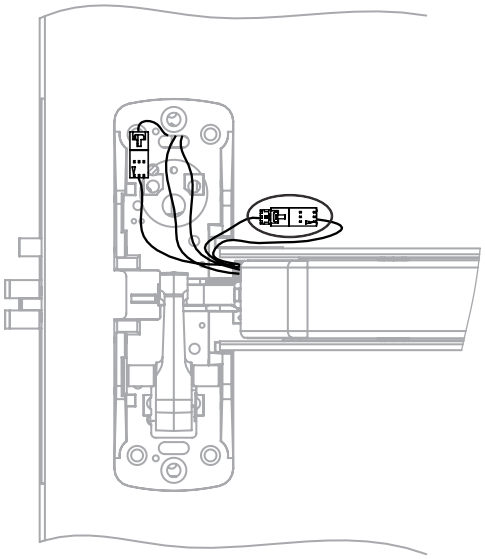
Step 3. Install rail to chassis.

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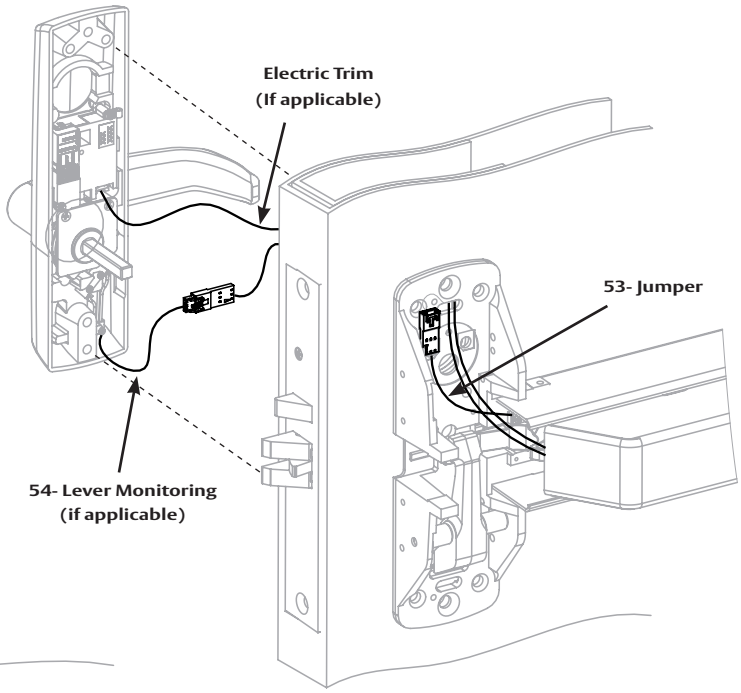
SARGENT
ASSA ABLOY

5 Wire Routing - 8900 continued

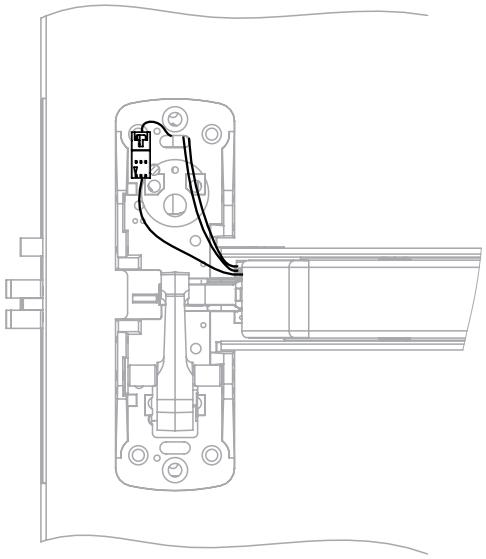
8900



Step 4. Make wire connections.



Step 5. Secure trim to door.



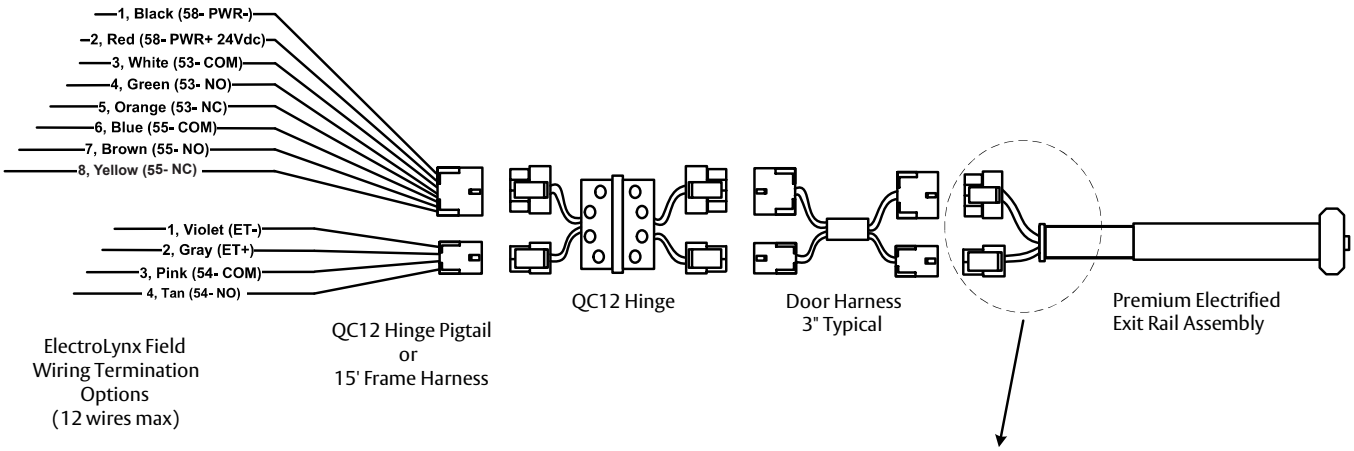
Step 6. Pull back excess wire through rail.

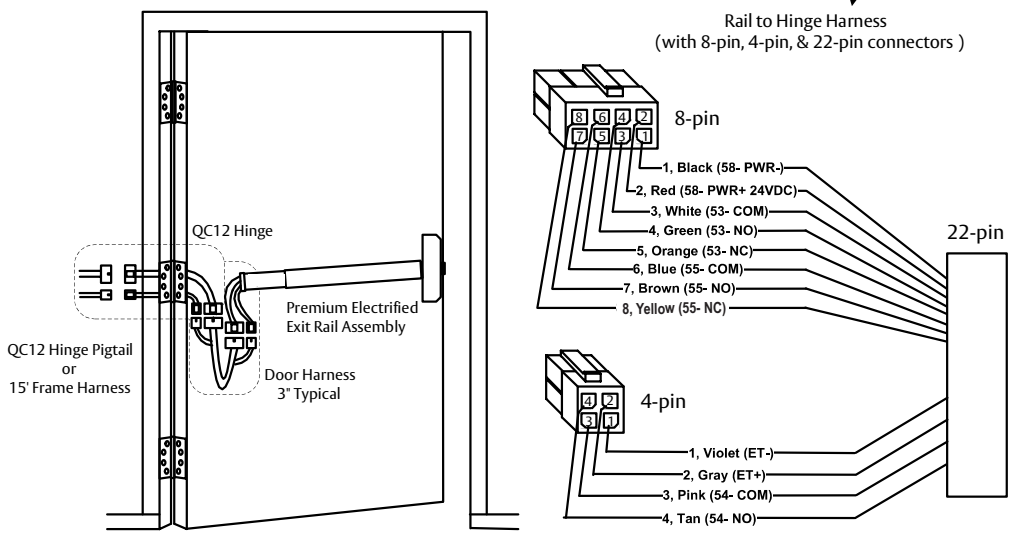
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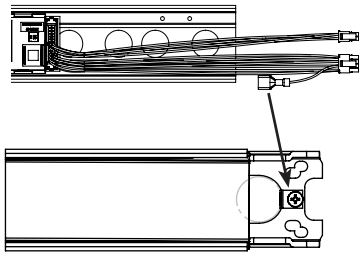
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6 PE80 Series Installation and Wiring Overview

ElectroLynx System Wiring Options
QC12 Hinge (12 wires)
Pluggable 8-pin & 4-pin connectors

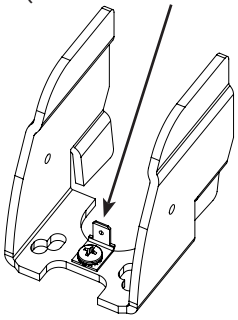






P5 connector (EGND) -Plug this into the end bracket's metal tab.

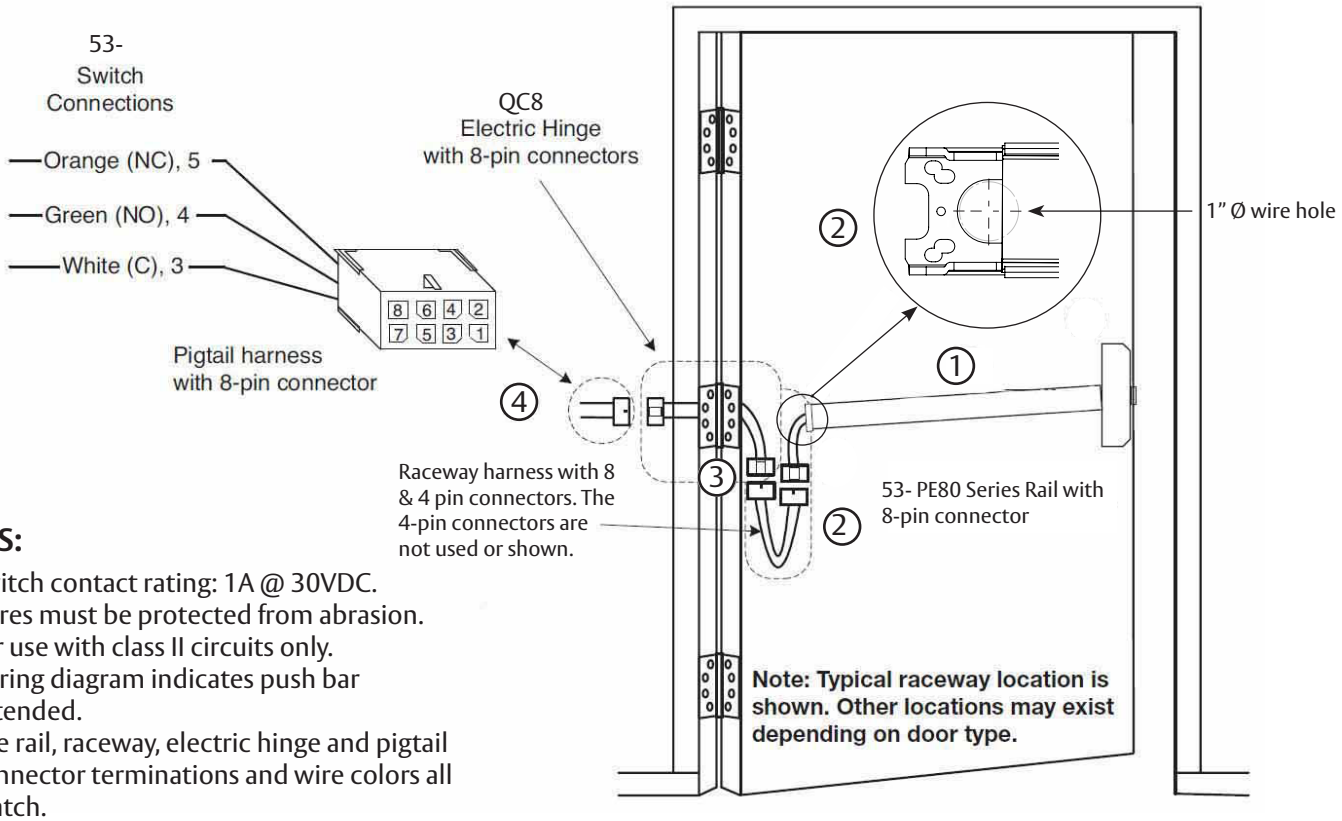
Close up of end bracket (with metal tab for P5 Installation)



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7 53-Prefix (Latch Monitor Switch) - Exit Device to Frame Connection



NOTES:

- Switch contact rating: 1A @ 30VDC.
- Wires must be protected from abrasion.
- For use with class II circuits only.
- Wiring diagram indicates push bar extended.
- The rail, raceway, electric hinge and pigtail connector terminations and wire colors all match.

Installation Instructions:

① Mount exit device per instruction sheet provided.

To insure trouble free operation, check that the push rail can be fully depressed. On vertical rod exit devices, check that the latch bolts do not go into hold back position until the push rail is fully depressed.

② Plug rail connector into raceway connector. Then feed through 1" hole in door. Install rail mounting bracket with two screws supplied. Install rail insert and end cap.

③ Plug raceway connector into electric hinge connector, then feed through door prep. Mount electric hinge to door.

④ Go to (A) if wiring now. Go to (B) if wiring is to be done later.

(A) Wire frame side wires to wires on pigtail harness as required using connectors allowed by local code. Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

(B) Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

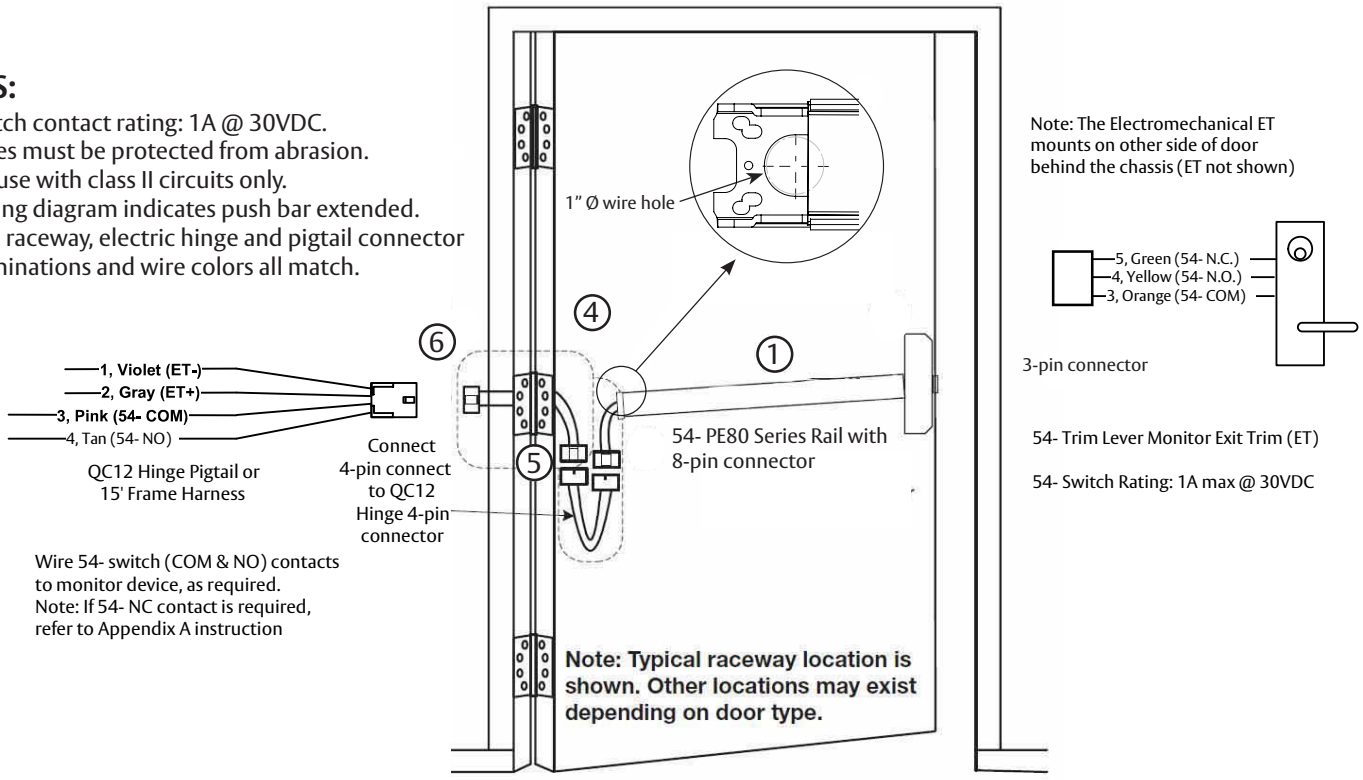
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8 54-Prefix (Trim Monitor Switch) - Exit Device to Frame Connection

NOTES:

- Switch contact rating: 1A @ 30VDC.
- Wires must be protected from abrasion.
- For use with class II circuits only.
- Wiring diagram indicates push bar extended.
- Rail, raceway, electric hinge and pigtail connector terminations and wire colors all match.



Installation Instructions:

① Mount exit device per instruction sheet provided.

2. From outside of door, route Electromechanical ET wire harness through chassis and door, then plug 3-pin connector into mating rail harness 3-pin connector.
3. Ensure wires are tucked in to avoid pinching wires by push bar or chassis mechanism.

④ Plug rail connector into raceway connector. Then feed through 1" hole in door. Install rail mounting bracket with two screws supplied. Install rail insert and end cap.

⑤ Plug raceway connector into electric hinge connector, then feed through door prep. Mount electric hinge to door.

⑥ Go to (A) if wiring now. Go to (B) if wiring is to be done later:

(A) Wire frame side wires to wires on pigtail harness as required using connectors allowed by local code. Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

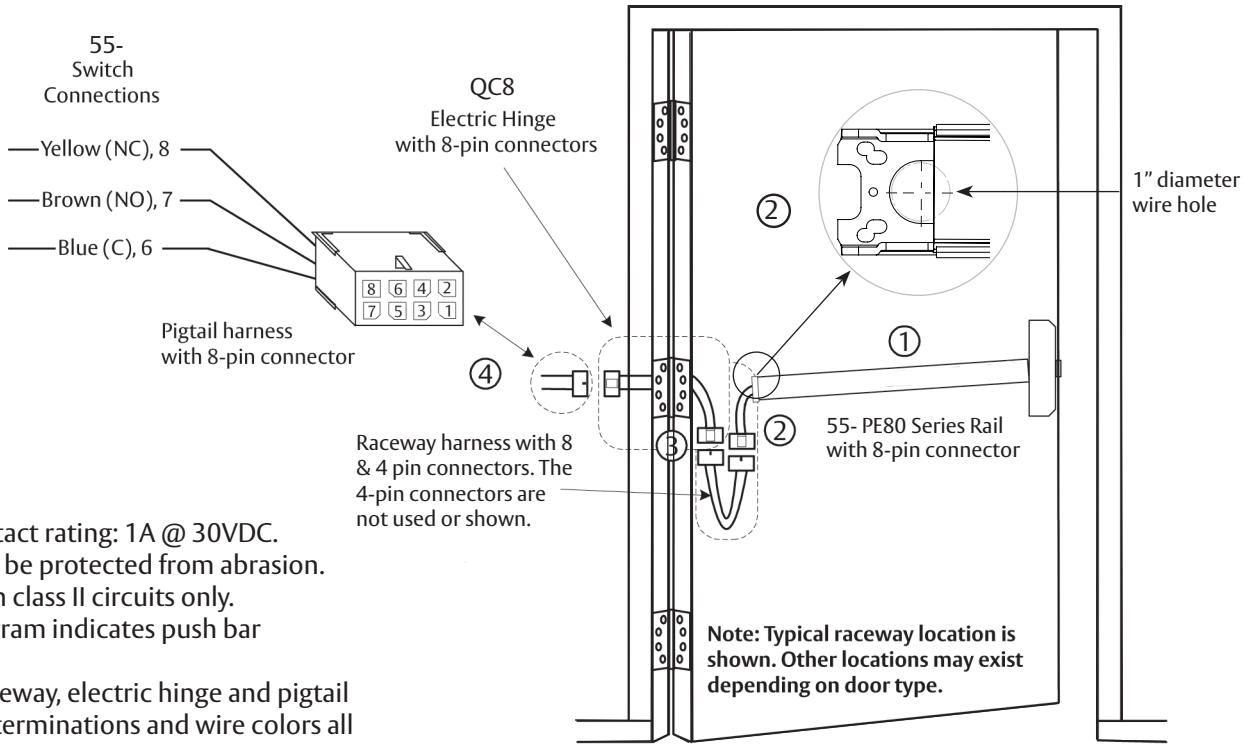
(B) Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

7. Test lock – 54-trim lever monitor switch monitors lever movement. Switch changes state when lever is rotated.

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9 55-Prefix Push Bar (Signal Switch) - Exit Device to Frame Connection

55- PE80 Series (Signal Switch) Installation and Wiring



NOTES:

- Switch contact rating: 1A @ 30VDC.
- Wires must be protected from abrasion.
- For use with class II circuits only.
- Wiring diagram indicates push bar extended.
- The rail, raceway, electric hinge and pigtail connector terminations and wire colors all match.

Installation Instructions:

① Mount exit device per instruction sheet provided.

To insure trouble free operation, check that the push rail can be fully depressed. On vertical rod exit devices, check that the latch bolts do not go into hold back position until the push rail is fully depressed.

② Plug rail connector into raceway connector. Then feed through 1" hole in door. Install rail mounting bracket with two screws supplied. Install rail insert and end cap.

③ Plug raceway connector into electric hinge connector, then feed through door prep. Mount electric hinge to door.

④ Go to (A) if wiring now. Go to (B) if wiring is to be done later.

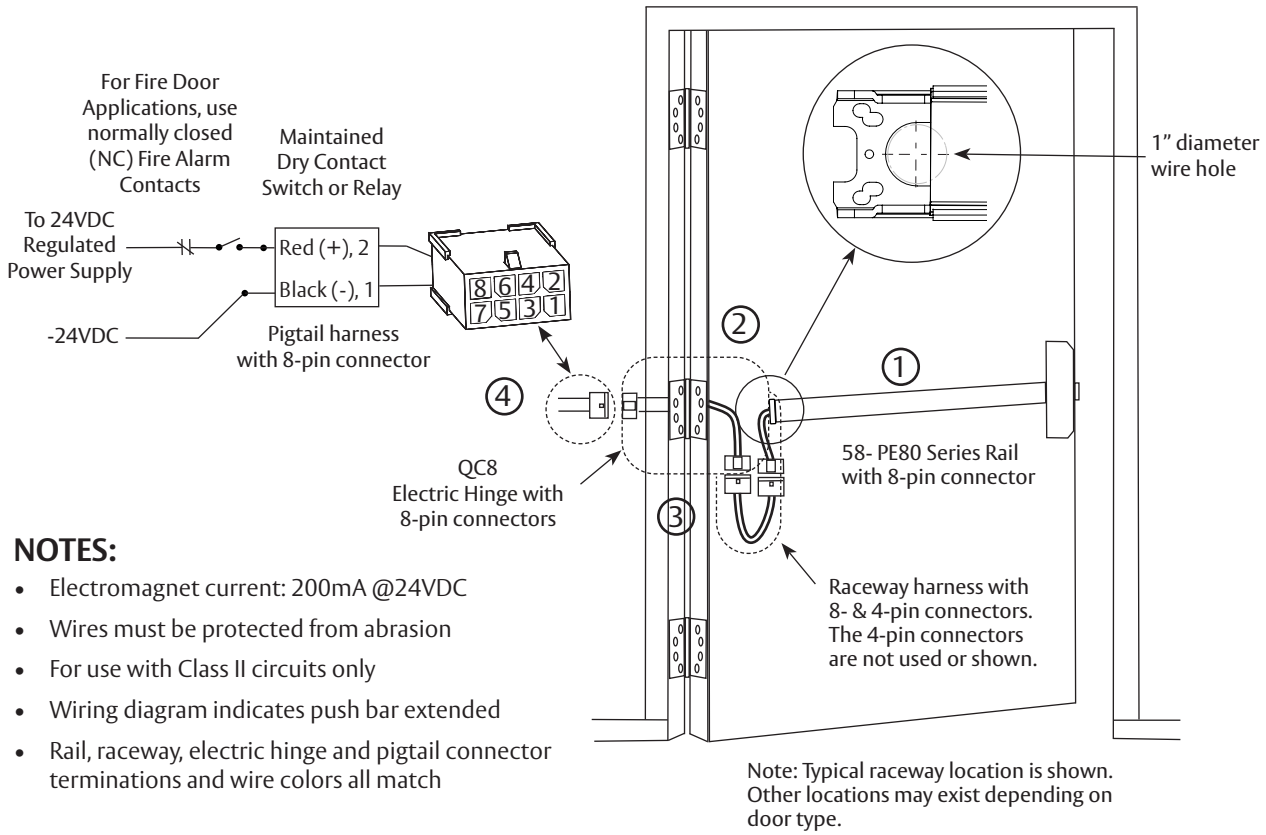
(A) Wire frame side wires to wires on pigtail harness as required using connectors allowed by local code. Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

(B) Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

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10 58-Prefix Electric Dogging - Exit Device to Frame Connection



Note: Typical raceway location is shown. Other locations may exist depending on door type.

NOTES:

- Electromagnet current: 200mA @24VDC
- Wires must be protected from abrasion
- For use with Class II circuits only
- Wiring diagram indicates push bar extended
- Rail, raceway, electric hinge and pigtail connector terminations and wire colors all match

Installation Instructions:

① Mount exit device per instruction sheet provided.

To insure trouble free operation, check that the push rail can be fully depressed. On vertical rod exit devices, check that the latch bolts do not go into hold back position until the push rail is fully depressed.

② Plug rail connector into raceway connector. Then feed through 1" hole in door. Install rail mounting bracket with two screws supplied. Install rail insert and end cap.

③ Plug raceway connector into electric hinge connector, then feed through door prep. Mount electric hinge to door.

④ Go to (A) if wiring now. Go to (B) if wiring is to be done later.

(A) Wire frame side wires to wires on pigtail harness as required using connectors allowed by local code. Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

(B) Plug pigtail harness connector into electric hinge connector. Feed harnesses through frame prep and mount electric hinge.

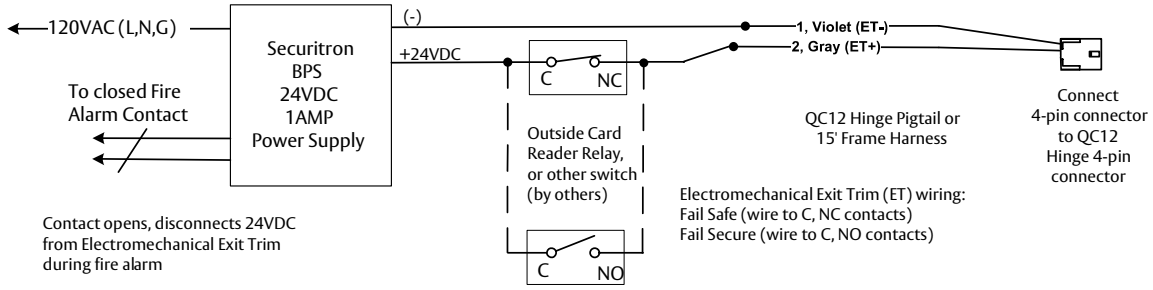
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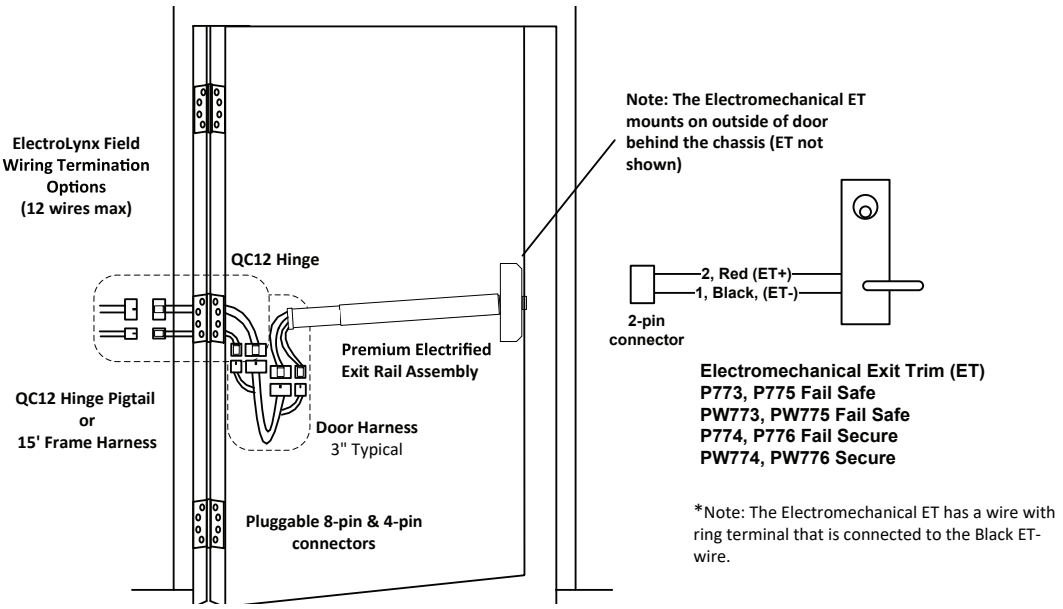
11 P/PW773, P/PW774, P/PW775, P/PW776 (Electromechanical Exit Trim) - Exit Device to Frame Connection

1. Mount exit device per instruction sheet provided.
2. From outside of door, route Electromechanical ET wire harness through chassis, then plug 2-pin connector into mating rail harness 2-pin connector. Ensure wires are tucked in to avoid pinching wires by push bar or chassis mechanism.
3. Wire to the QC12 Hinge pigtail harness 4-pin connector.
4. Ensure proper voltage is being applied to pigtail harness.
5. Plug pigtail harness 4-pin connector into QC12 hinge 4-pin connector.

Caution: The DC voltage applied must not exceed 30VDC. If the applied voltage exceeds 30VDC, the electromechincal trim motor may be damaged.

6. Test lock – Fail Secure unlocks with 24VDC power applied. Fail Safe locks with 24VDC power applied.

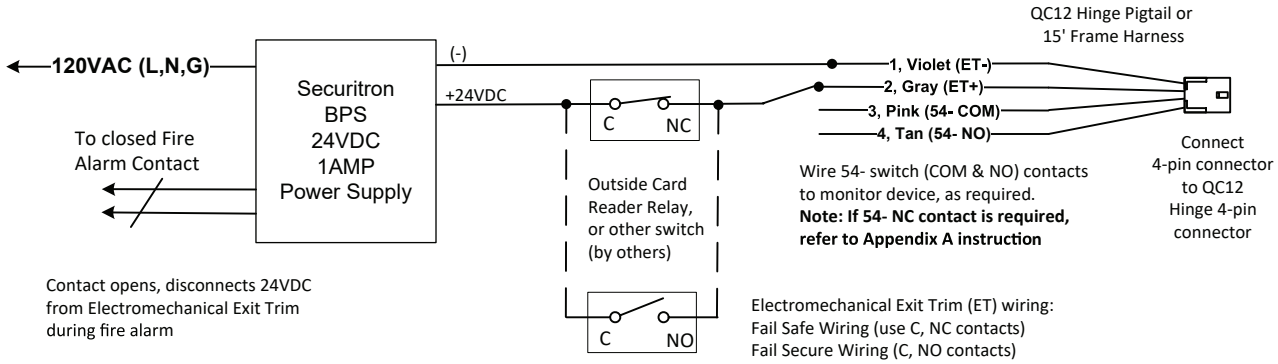


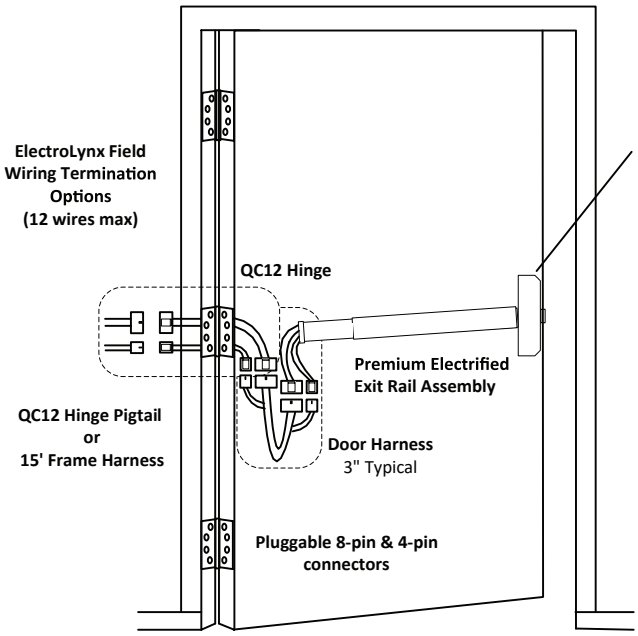


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11 54-, P/PW773, P/PW774, P/PW775, P/PW776 (Electromechanical Exit Trim), continued





Electromechanical Exit Trim (ET) with 54- Trim Lever Monitor switch
54- P773, P775 Fail Safe
54- PW773, PW775 Fail Safe
54- P774, P776 Fail Secure
54- PW774, PW776 Fail Secure

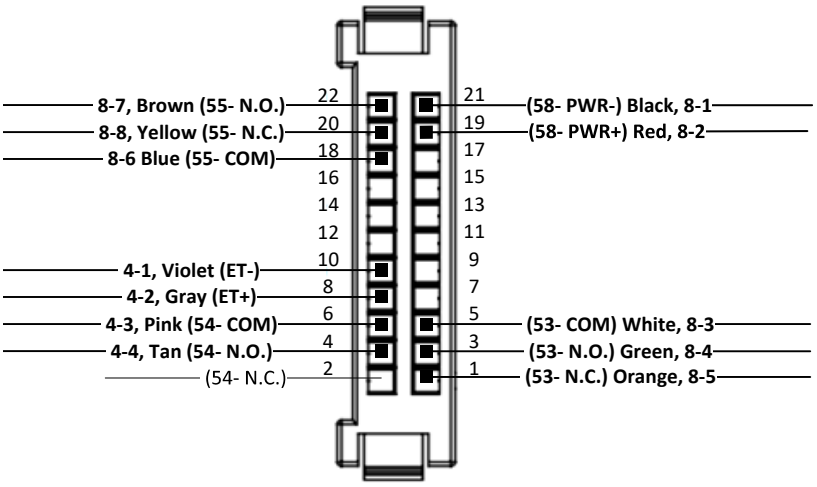
54- Switch Rating: 1A max @ 30VDC

*Note: The Electromechanical ET has a wire that ring that is connected to black ET- wire.

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12 Appendix A: Harness Wiring Reconfiguration

Premium Electrical Exits (NO PCBA)
Rail to QC12 Hinge Side Harness
22-pin connector to 8 & 4-pin ELynx connectors



12 + 1 = 13 total wiring selections

Premium Electrical Exits (NO PCBA)
ElectroLynx QC12
Factory Default Ship Configuration

22-21	58- PWR-	Black	8-1
22-19	58- PWR+ (24VDC	Red	8-2
22-5	53- COM	White	8-3
22-3	53- N.O.	Green	8-4
22-1	53- N.C.	Orange	8-5
22-18	55- COM	Blue	8-6
22-22	55- N.O.	Brown	8-7
22-20	55- N.C.	Yellow	8-8
22-10	ET-	Violet	4-1
22-8	ET+	Gray	4-2
22-6	54- COM	Pink	4-3
22-4	54- N.O.	Tan	4-4
22-2	54- N.C.	No wire	

LEGEND – Premium Exits Electrical Options, NO PCBA
53- Latch Monitor Switch (Form C) in Chassis, remote monitor, etc.
55- Push Bar Switch (Form C) – REX, de-energize external magnet, remote monitor, etc.
58- Electric Dogging (magnet in rail) - manually press push bar to dog rail when powered

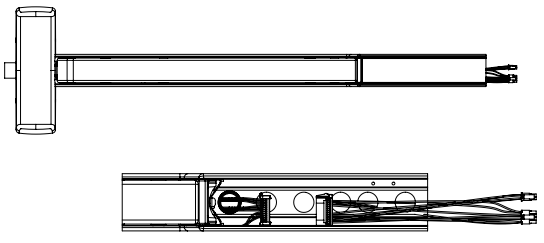
ET Electrified Exit Trim (Ecoflex motor 10 to 30VDC)
54- ET Lever Monitor Switch (Form C)

The factory ships the rail to hinge side harness with 12 default wires terminated from the 22-pin connector to 8-pin & 4-pin connectors.
There are a total of 13 wiring choices (with 1 additional wiring choice):

- 54- N.C.

Wire reconfiguration:

1. Remove exit device end cap.
2. Slide the metal insert cover off of rail.
3. Unplug the harness 22-pin connector from mating rail harness 22-pin connector.



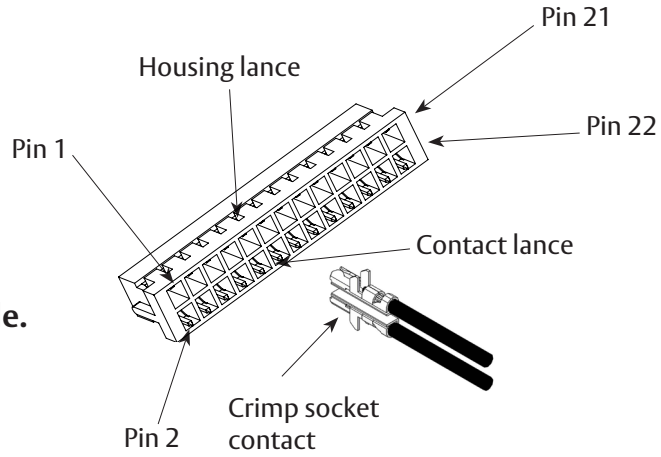
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13 Appendix A: Harness Wiring Reconfiguration, continued

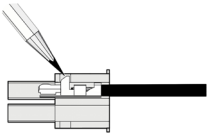
Follow correct Horizontal Insertion view when inserting crimped terminal/wire into socket (26-pin connector), as shown below. For re-pinning, please contact technical service at 1-800-727-5477.

See page 23 for wire table.

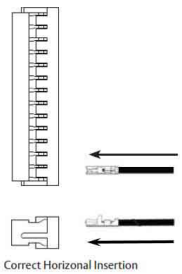


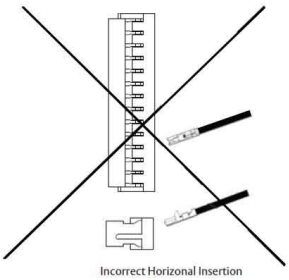
If the 54- NC (22-2) contact is required instead of 54- NO (22-4, Tan wire):

Remove crimped contact/tan wire assembly from 22 pin connector position 4 (22-4), using pointed tool to lift up plastic locking housing lance on connector, then slowly and carefully remove the contact/tan wire assembly from connector by hand.



Insert crimped contact/wire assembly into new connector position 22-2 (54- NC).
Be sure to follow correct Horizontal Insertion view when inserting crimped terminal/wire into socket (22-pin connector), as shown.
Plug in 22-pin mating harness connectors, re-install rail metal insert cover, complete hinge side facility wiring, then re-install end cap.


Correct Horizonal Insertion


Incorrect Horizonal Insertion

Do not tilt crimped terminals during insertion.

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