Installation Instructions

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PE80 Series - Electric Latch Retraction (56-) Exit Devices

With Optional:

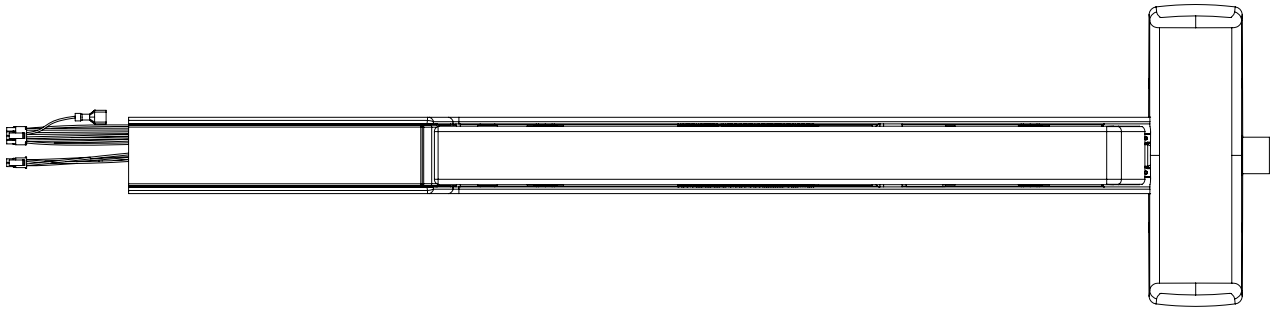
53- Prefix (Latch Monitor Switch)

54- Prefix (Exit Trim Lever Monitor Switch)

55- Prefix (Request to Exit - Push Bar Signal Switch)

P773 NE, P774 NE, P775 NE, P776 NE (Electromechanical Exit Trim, Narrow)

P773 WE, P774 WE, P775 WE, P776 WE (Electromechanical Exit Trim, Wide)



⚠ 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.

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For additional wire connections and operation instructions:

55- Refer to instruction sheet A8299 for wire connections.

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PE80 Series Electric Latch Retraction (56-) Exit Devices

with optional connections

Installation Instructions

1 Overview

a Description

The Sargent 56- prefix ELR works with PE80 Series exit devices to provide remote-controlled latch retraction. It is compatible with the following prefixes/options:

- 53 - Latchbolt Monitor Switch: The latch monitor provides tamper resistant latch monitoring. The monitor switch is activated when there is physical movement of the latch.
- 55 - Signal Switch (Request to Exit): This signal switch monitors the touch bar position. Touch bar monitoring can be used to detect egress, sound an alarm, send a signal to a remote location, or de-energize an electromagnetic lock.
- P773-P776/NE/WE Electromechanical Exit Trim (Fail Safe/Fail Secure)
- 54- Outside Exit Trim Lever Monitor Switch
- Operating Temp: -40°C to 66°C (-40°F to 150.8°F)

Note: The 56- is also compatible with 16-, HK-, and 12- mechanical configurations.

b Functions

The 56- ELR can be configured to work in either of two mode:

- Power Mode - (See Section 2): The device is not energized when locked. When electrified, the push rail and latch(es) will retract and remain in the retracted position until power is removed. Power is typically applied through a relay triggered by an access control device.
- Timer Mode - (See Section 3): The device is always energized and retraction is triggered by a momentary or maintain switch. In TIMER MODE:
  - When the timer circuit is closed using a **momentary** switch, the device retracts, remains retracted for a set duration, and releases. The duration of the retraction is set through an onboard timer setting.
  - When the timer circuit is closed using a **maintain** switch, the device retracts. The device releases when the contact is opened.



Caution: Disconnect all input power before servicing. Installer must be a trained and experienced service person. Wiring must comply with applicable local electrical codes, ordinances and regulations. Cylinder (16-) or "hex-key" (HK-) mechanical dogging cannot be used on fire rated doors.

c Installation Notes

- The 56- ELR rail works only with Sargent PE80 Series exit devices.
- Always perform mechanical installation using the appropriate installation instructions, prior to electrical wiring.
- If used in conjunction with PE80 Series 56- Motor Kit or PE80 Series 56- Rail Kit, consult the factory prior to using these instructions.
- Earth Ground: Required for electrostatic discharge (ESD) protection, unless already grounded through the metal door and frame.

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1 Overview, continued

d Hinge Requirements

Application	Without Timer		With Timer	
	Wires	Recommended Hinge	Wires	Recommended Hinge
56-	3 wires	QC8	5 wires	QC12
53- 56-	5 wires	QC8	7 wires	QC12
55- 56-	6 wires	QC8	8 wires	QC12
53- 55- 56-	8 wires	QC8	10 wires	QC12
ET-56-	5 wires	QC12	7 wires	QC12
ET-53- 56-	7 wires	QC12	9 wires	QC12
ET-55- 56-	8 wires	QC12	10 wires	QC12
ET-53- 55- 56-	10 wires	QC12	12 wires	QC12

e Wire Gauge Chart

Total One-Way Length of Wire Run (ft)	Load Current @ 24VDC							
	1/4A	1/2A	3/4A	*1A	1-1/4A	1-1/2A	2A	3A
100	24	20	18	18	16	16	14	12
150	22	18	16	16	14	14	12	10
200	20	18	16	14	14	12	12	10
250	18	16	14	14	12	12	12	10
300	18	16	14	12	12	12	10	—
400	18	14	12	12	10	10	—	—
500	16	14	12	10	10	—	—	—
750	14	12	10	10	—	—	—	—
1,000	14	10	10	—	—	—	—	—
1,500	12	10	—	—	—	—	—	—

Note: When calculating voltage drop, use 1A as the recommended current draw for the 56- ELR.

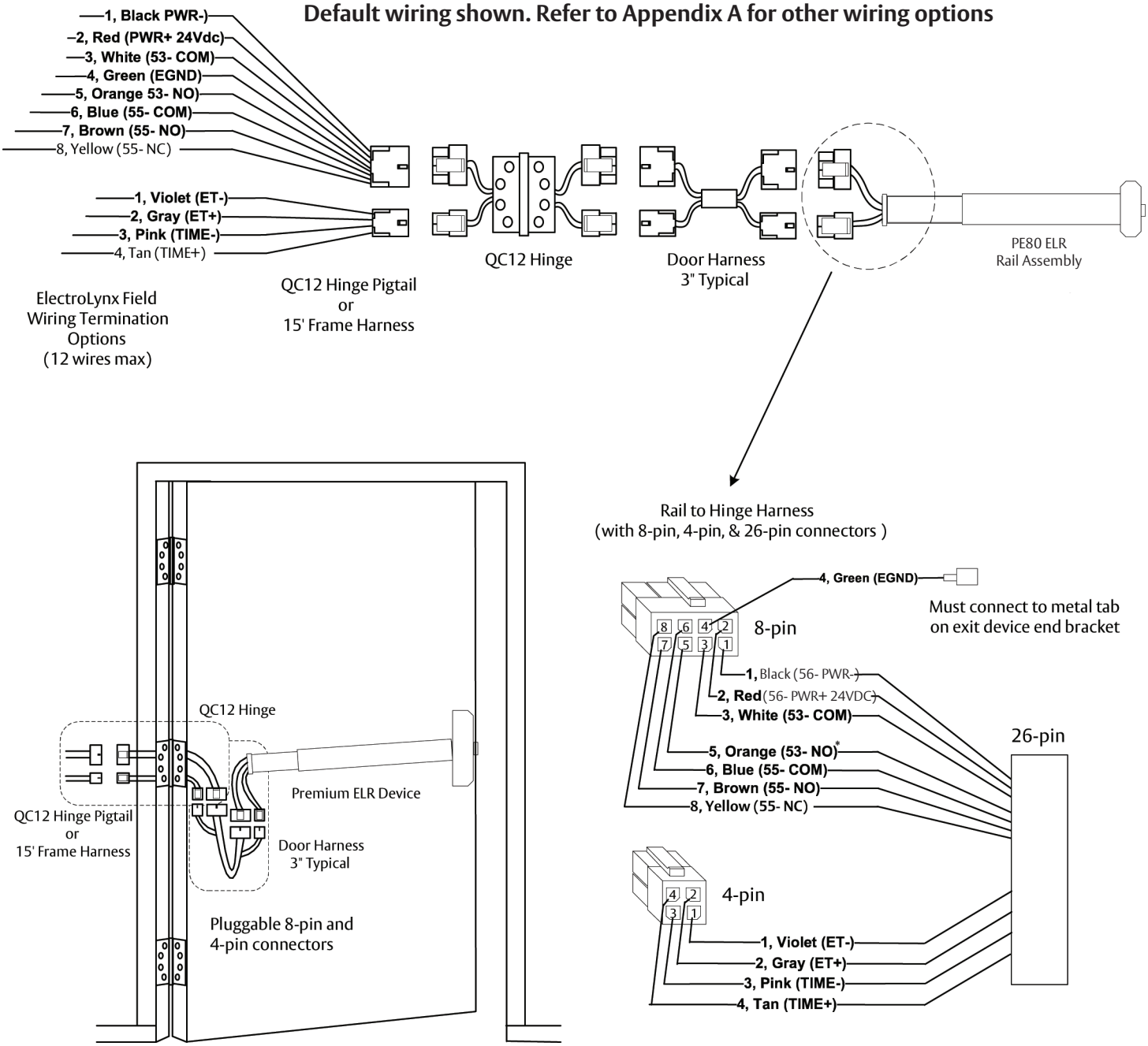
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1 Overview, continued

f Wire Locations and Positions

ElectroLynx System Default Wiring Options for 56-
QC12 Hinge (12 wires)
Pluggable 8-pin & 4-pin connectors
Default wiring shown. Refer to Appendix A for other wiring options



*If 53-NC contact is required, refer to Appendix A-Wiring re-configuration section.

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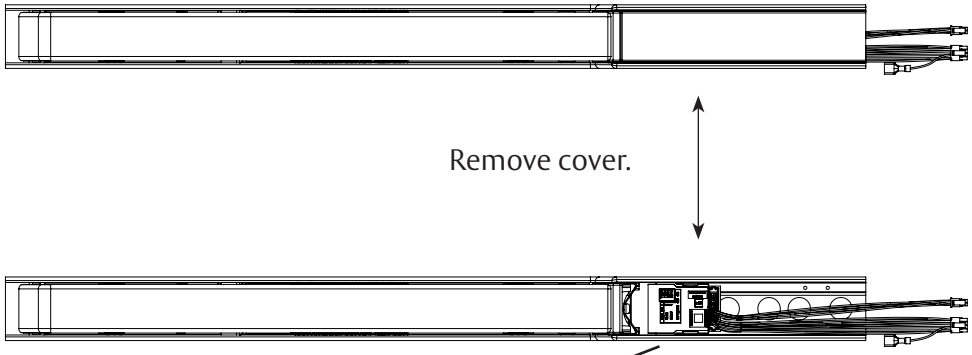
1 Overview, continued

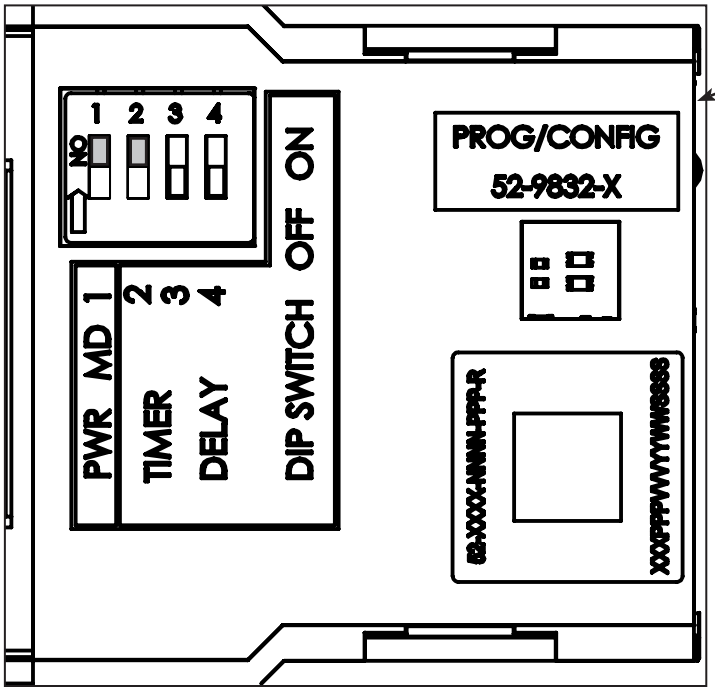
g DIP Switch Settings (4 Position Slide Type)

Factory default ship settings for the DIP Switch are shown below.

Default Setting: **POWER MODE** set to **ON**.

Note: Timer Delay settings are inactive with Power Mode ON. If Timer Mode is desired, refer to Timer Mode, Section 3 for Timer Mode Configuration.





PCBA Module

Note: DIP Switch settings can be changed using a small flat blade screwdriver with the PCBA Module left in the rail assembly.

Dip Switch	Default Factory Settings
1. PWR/TMR	ON = Power Mode
2. DLY1	ON
3. DLY2	OFF
4. DLY3	OFF

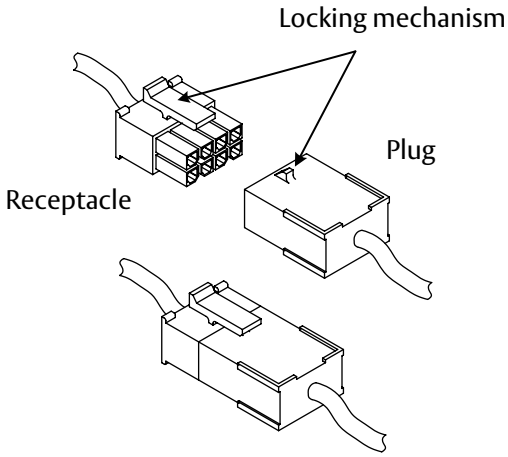
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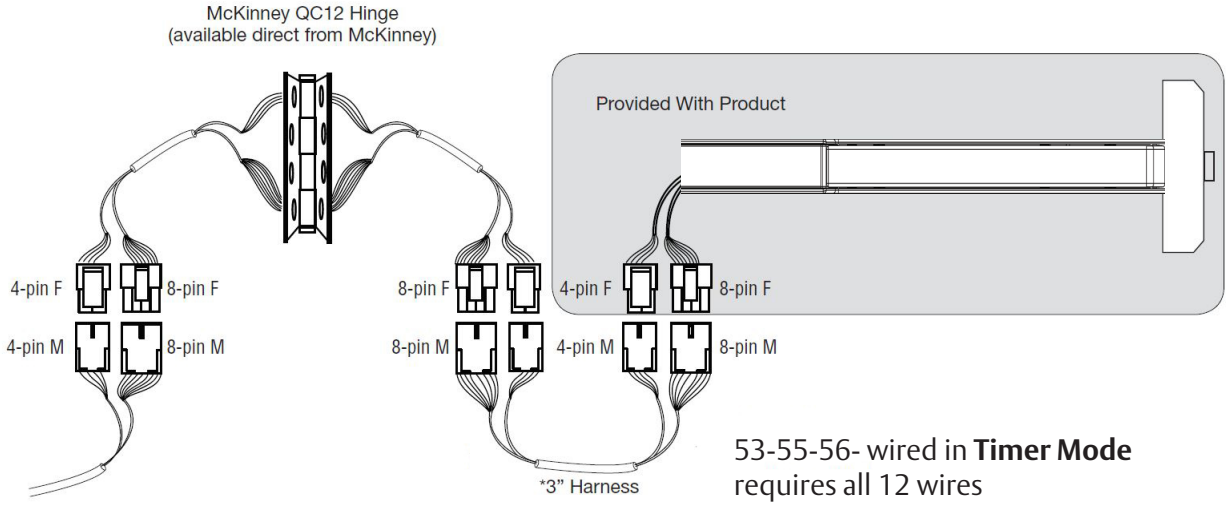
1 Overview, continued

h ElectroLynx Wiring System

Important: ElectroLynx connectors plug and lock together in only one way. DO NOT force connectors together.



Typical ElectroLynx Wiring Harness Connections



53-55-56- wired in **Timer Mode** requires all 12 wires

Note: The three inch harness is not included with the product, door, or hinge, and must be ordered separately. (Part number available in **Power Mode** Wiring section)

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2 Power Mode Wiring

In this configuration, the device is not energized when locked. When energized with a 24 volt input, the push rail and latch(es) will retract and remain in the retracted position until power is removed. Power is typically applied through a relay triggered by an access control device.
For installations using the onboard timer circuit, refer to Section 3: **Timer Mode**.

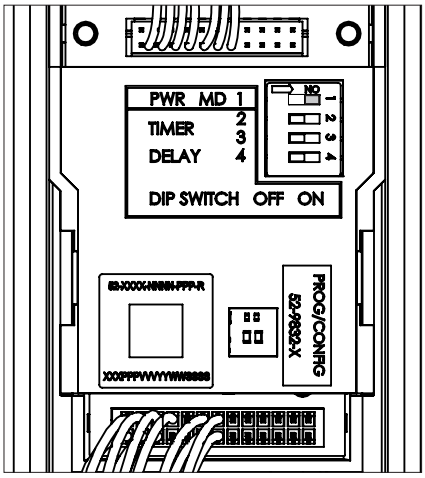
a Installation Instructions

How it works: Rail retracts when power is applied and releases when power is removed.

1. Mount PE80- Series exit device using mechanical installation instruction sheet(s) provided.

Note: Ensure proper mechanical function before attempting electrical retraction:

- Verify the push rail can be fully depressed and the latch is fully retracted.
- On vertical rod exit devices, verify the latchbolts do not enter hold-back-position until the push rail is fully depressed.
- Adjust device mechanically, as required, before applying power.



DIP Switch Setting for Power Mode Installation
Figure 1

2. Connect the ElectroLynx harness in the door - see ElectroLynx **Power Mode** Wiring Figure 4 on page 11.

a. Plug the 8-pin ElectroLynx connector from the rail into the 3" ElectroLynx harness or splice into non-ElectroLynx harness (Figure 5 on page 12 Non-ElectroLynx **Power Mode** Wiring).

b. Feed the 3" harness through the 1" hole in the door and secure the rail to the door using the mounting bracket and two supplied screws. (See Figure 2 on page 10 Power Mode Installation.)

c. Plug P5 connector into the end bracket metal tab and then tuck wires into rail, end bracket are, and into 1" diameter in door. Then install end bracket cover. (See Figure 3 on page 10)

Note: Do not install the end cap until electrical operation is verified in order to confirm LED signalling. Do not discard the end cap and hardware.

3. Ensure DIP switch **(position 1 is ON)** enables **Power Mode** (See Figure 1).
4. Connect the ElectroLynx harness to the hinge and secure the electric hinge to door.

Notes: Make sure no wires are pinched or damaged in the process. Refer to detailed wiring instructions under **Power Mode** wiring.

5. Apply 24V according to 56- input requirements (See page 11):
   Confirm that the LED is blinking, that the system fully unlocks, and that all bolts clear the strikes.
   Troubleshoot the device if issues are observed using the steps out lined at the end of the **Power Mode** section.
6. Store excess wiring under end cap and assemble with provided screws. Avoid pinching wires.

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2 Power Mode Wiring, continued

a Installation Instructions, continued

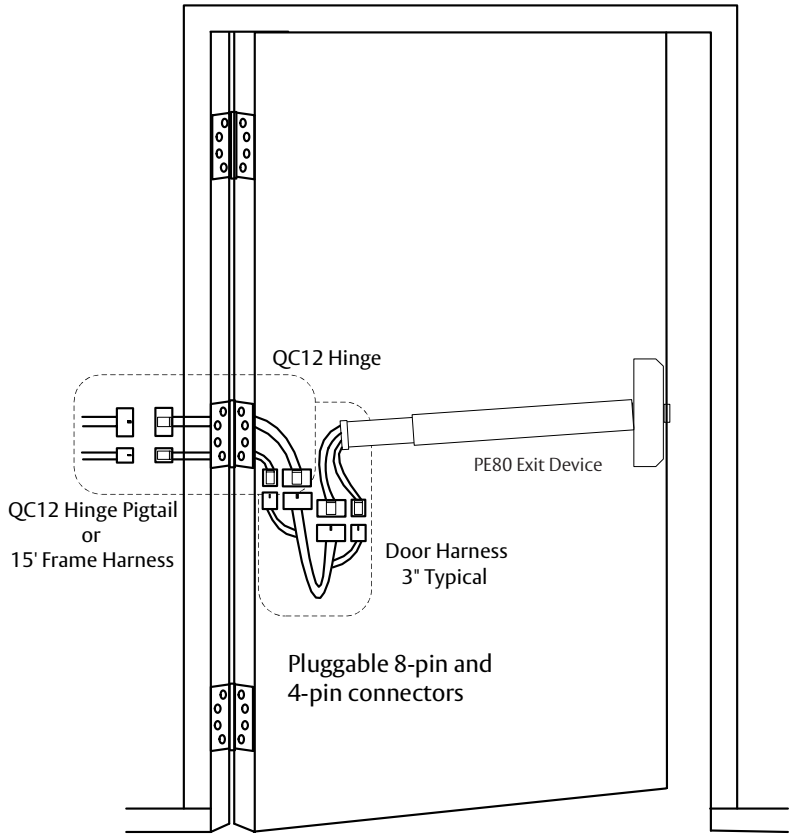


Figure 2 Power Mode Installation

55-, 56- PE80 Series Rail with 8-pin & 4-pin Connectors

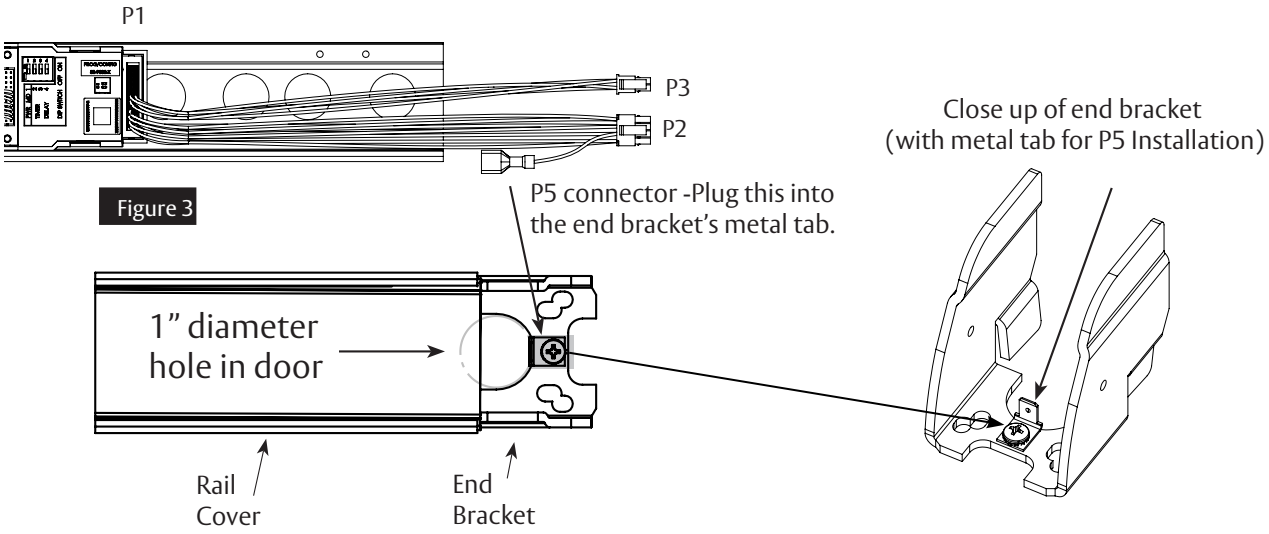


Figure 3

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2 Power Mode Wiring, continued

56-Input Requirements

Switches	55-REX	53-Latch Bolt
Contact Rating (Resistive)	300mA max @30VDC	300mA max @30VDC

Voltage: 24VDC

- Filtered and regulated power supply
- Motor operating current: 750mA
- Motor hold current: 300mA

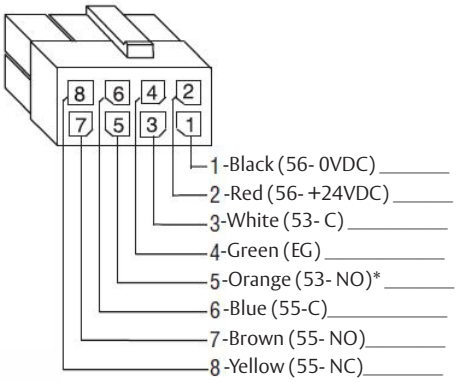
Note: Earth Ground is required for Electrostatic Discharge (ESD) protection unless the metal door and frame are already earth grounded; otherwise, earth ground wiring is required at pin 4. (seeFigure 7 ElectroLynx Power Mode Wiring).

b ElectroLynx Opening Installation

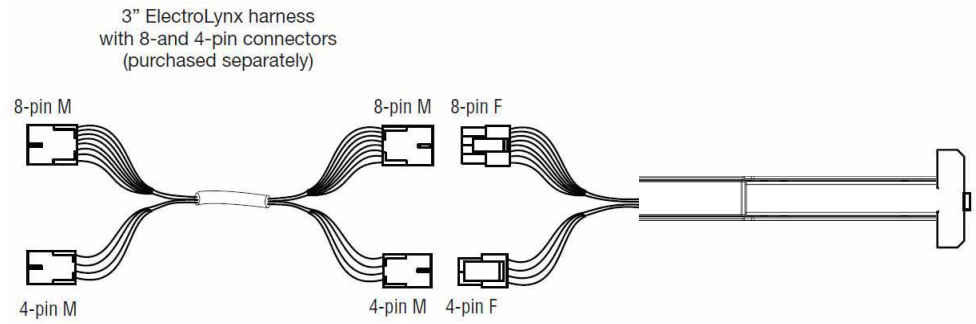
Plug ElectroLynx connectors (from exit device) to the harness, then harness to the hinge and then to pigtail, which is connected to the access control system.

- 56- exit device
- 3" ElectroLynx connector harness (not supplied with 56- device)
- McKinney QC ElectroLynx hinge (type of hinge depends on the application)
- ElectroLynx door

*If 53-NC contact is required, refer to Appendix A-Wiring re-configuration section.



3" ElectroLynx Harness with 8-pin Connector (purchased separately)



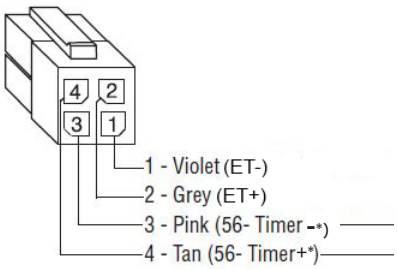


Figure 4 ElectroLynx Power Mode Wiring

* Pink and Tan not used in Power Mode

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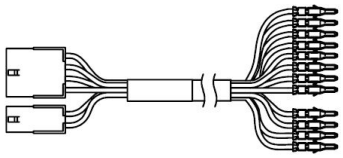
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2 Power Mode Wiring, continued

c ElectroLynx Opening Installation

Standard door with standard electric hinge: Molex® connectors with flying leads can be purchased separately.

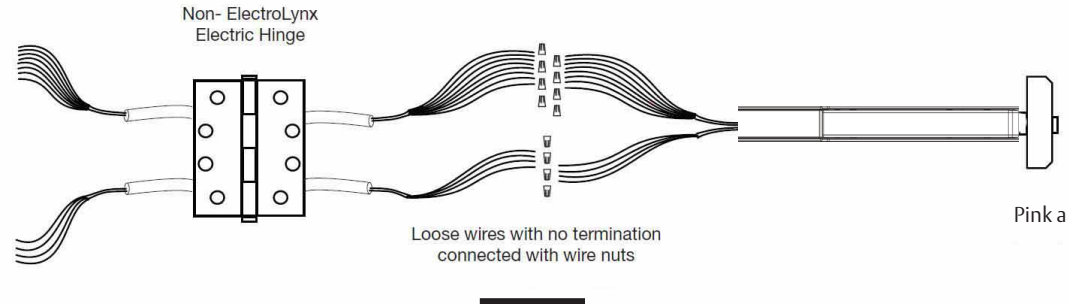
	MOLEX BOTH ENDS	MOLEX TO PINS
3 INCH	QC-C003	QC-C003P
6 INCH	QC-C006	QC-C006P
12 INCH	QC-C012	QC-C012P



Molex with 12-pin Connector Pinned

To identify part numbers and order harness(es), visit the McKinney website, www.mckinneyhinge.com, and search the catalog for ElectroLynx.

If Molex pinned connectors are not available, remove the ElectroLynx connector from the 56- Exit Device and wire nut the 56- wires to the wires from the electric hinge (color coordinating wire colors is recommended).



1 -Black (56- 0VDC) _____
2 -Red (56- +24VDC) _____
3 -White (53- C) _____
4 -Green (EG) _____
5 -Orange (53- NO)* _____
6 -Blue (55-C)_____
7 -Brown (55- NO)_____
8 -Yellow (55- NC)_____
9 -Violet (ET -)_____
10 -Grey (ET +)_____

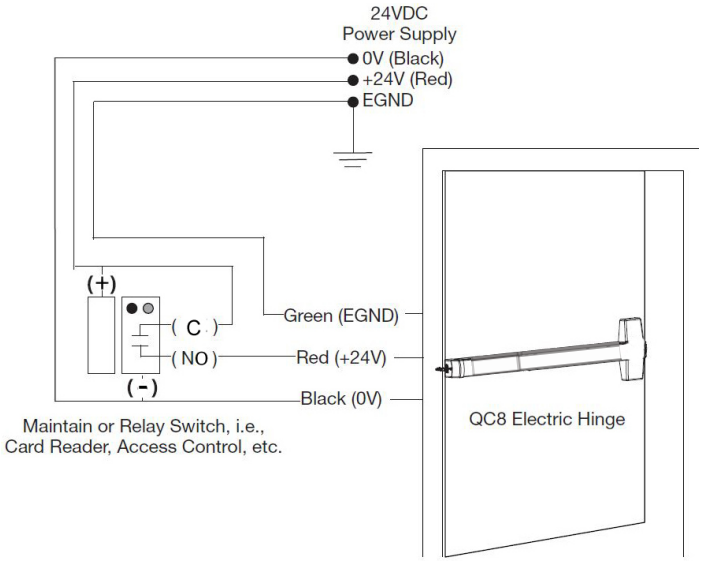
Pink and Tan are not used in Power Mode

Figure 5 Non-ElectroLynx Power Mode Wiring

d Typical Wiring

For use when wiring in **Power Mode.**

- Onboard timer will not function in POWER MODE. Add external time delay if necessary.
- The switch is wired between the power supply and the load. Do not cycle the power supply.



56- PE80 Series Exit Device Typical **Power Mode** Wiring

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2 Power Mode Wiring, continued

e LED Signalling Chart

Signal	Cause	Troubleshoooting
Dark / Unlit	Controller microprocessor is not active	Confirm connections and incoming power
Steady/Flashing	Normal operation	Check that POWER MODE switch is set
Solid Light	Input voltage is dropping out of operating range	Check wire run and power supply output
2 Flashes Followed by Pause	Retractor sensor,mechanical or hall board problem	Call 800-810- 9473 for assistance
3 Flashes Followed by Pause		

f Troubleshooting

Prior to electrical troubleshooting, confirm that the mechanical system properly functions; i.e., that the push bar fully retracts all latches and the door opens freely. Refer to applicable Sargent PE80 Series Exit Device product instruction sheet to correct mechanical installation issues.

Important: ALWAYS disconnect power before making any mechanical adjustments to the system.

The push rail does not move when 24V input is applied:

- Check inputs to confirm proper voltage and wiring orientation (See Figure 1 on page 9: ElectroLynx **Power Mode** Installation).
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

Note: When configured in **Power Mode**, power is released to lock the device - LED will not blink when power is released.

- Confirm DIP switch position 3 is set to ON. Dip Switch 1 is power mode.

The push rail does not fully retract or push rail retracts completely and holds but does not open door:

- Verify mechanical installation and correct as necessary:
  — Is excessive force required to depress the push bar?
  — Are latches fully clearing the strikes when mechanically cycled?

The push rail retracts and unlocks electrically but does not relock:

- Physically disconnect power from rail and confirm that input is off.
- Check for mechanical interference (e.g., warped door, lack of shims, misalignment of rail, etc.).
- Was a PE80 Series motor kit installed? Verify the rail assembly.
- Is the ELR installed?

Rail behaves abnormally (multiple cycles, clicking, delayed retraction, etc.):

- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

Note: When configured in **Power Mode**, power is released to lock the device - LED will not blink when power is released.

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2 Power Mode Wiring, continued

f Troubleshooting, continued

For applications using automatic operator(s): Door(s) fail to unlock before doors begin to open:

- Adjust timing of operator to allow 850ms for the rail to fully retract.

53- switch wiring: The design requires normally open functionality and the circuit is normally closed (or vice versa):

- 53-C NO contact is default, if NC contact is required refer to Appendix A Wiring Re-configuration section.

For additional installation assistance, please contact 1-800-810-9473. When calling, please provide the following information to improve our service (provide what you can):

- Your name and contact number
- Sargent PE80 Series Exit Device product type (e.g. 55- 56- PE8810)
- Location and identification of the affected opening (e.g., site, building, and door number)
- Sargent order number (located on product box), if available
- Power supply manufacturer and rated output (i.e., voltage and current)
- Method of operation (e.g., **Power Mode**)
- The number of devices connected to the power supply
- Symptoms of problem (i.e., observed behavior)

3 Timer Mode

In this configuration, the device is always energized with a 24 volt input, and a timer circuit is opened or closed to control rail retraction. A momentary or maintain switch is typically used to perform this operation. For installations where the power input is cycled to retract the device, refer to Section 2: Power Mode.

a Installation Instructions

How it works: Rail retracts when timer input circuit is closed.

1. Mount PE80 Series exit device using mechanical installation instruction sheet(s) provided.

Note: Ensure proper mechanical function before attempting electrical retraction:

- Verify the push rail can be fully depressed and the latch is fully retracted.
- On vertical rod exit devices, verify that the latchbolts do not enter hold-back position until the push rail is fully depressed.
- Adjust device mechanically, as required, before applying power.

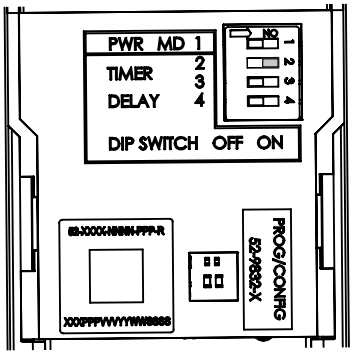
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3 Timer Mode, continued

2. Ensure DIP Switch switch (position 1 is OFF for Timer Mode) disables **Power Mode** (Figure 6).

3. Connect the ElectroLynx harness in the door (Figure 9 ElectroLynx **Timer Mode** Installation):

—Plug the 8-pin and 4-pin ElectroLynx connectors from the rail into the 3" ElectroLynx harness or splice into a non-ElectroLynx harness (Figure 8).
—Feed the 3" harness through the 1" hole in the door and secure the rail to the door using the mounting bracket and two supplied screws (Figure 7 **Timer Mode** Installation).



DIP Switch Setting for Timer Mode Installation

Figure 6

1. OFF = Timer Mode
2. ON
3. OFF
4. OFF

Dip Switch: 2,3,4
Timer Delay
Setting = 5 seconds

Note: Do not install the end cap until electrical operation is verified in order to confirm LED signaling. Do not discard end cap and hardware.

56-Input Requirements

Switches	55-REX	53-Latch Bolt
Contact Rating (Resistive)	300mA max @30VDC	300mA max @30VDC

Voltage: 24VDC
- Filtered and regulated power supply
- Motor operating current: 750mA
- Motor hold current: 300mA

Note: Earth Ground should always be connected on pin 4. (Figure 10 ElectroLynx **Timer Mode** Wiring).

Dip Switch Settings

Time	2	3	4
0 Sec	OFF	OFF	OFF
2 Sec	OFF	OFF	ON
3 Sec	OFF	ON	OFF
4 Sec	OFF	ON	ON
5 Sec	ON	OFF	OFF
10 Sec	ON	OFF	ON
15 Sec	ON	ON	OFF
20 Sec	ON	ON	ON

ELR Timer Mode

Dip switches 2, 3, 4 are used to configure the timer delay in timer mode.
Timer Delay Settings = 5 seconds

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3 Timer Mode, continued

a Installation Instructions, continued

4. Connect the ElectroLynx harness to the hinge:

—Plug the door harness's 8 pin and 4-pin connectors into the hinge's ElectroLynx connector.
—Secure the electric hinge to the door.

Note: Make sure no wires are pinched or damaged in the process. Refer to detailed wiring instructions under **Timer Mode** wiring.

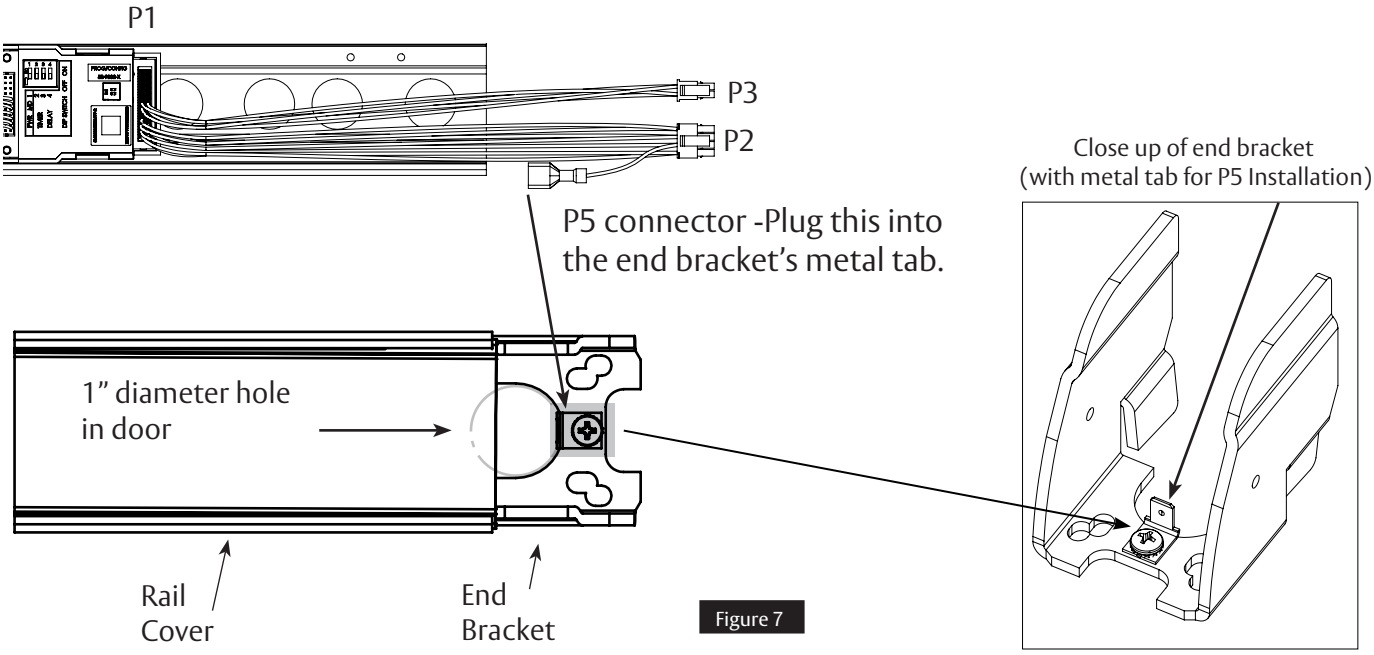


Figure 7

5. Plug P5 connector into the end bracket metal tab and then tuck wires into rail, end bracket are, and into 1" diameter in door. Then install end bracket cover.

6. Apply 24V according to 56- input requirements:
   - Confirm that the LED is blinking and close the timer input circuit to retract the device. When the system retracts electrically, confirm that it fully unlocks and that all bolts clear the strikes. Troubleshoot the device if issues are observed using the steps outlined at the end of the **Timer Mode** section.

7. Store excess wiring under end cap and assemble with provided screws. Avoid pinching wires.

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3 Timer Mode, continued

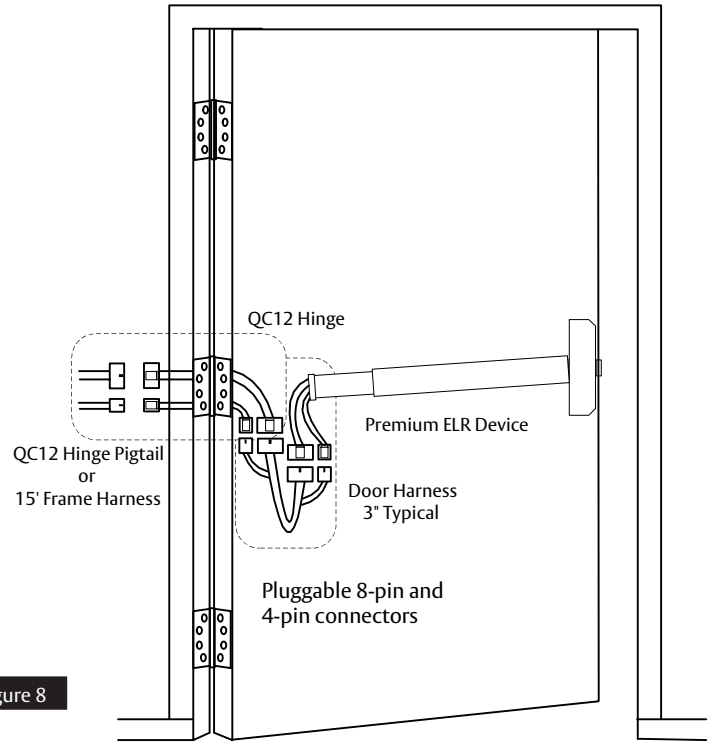


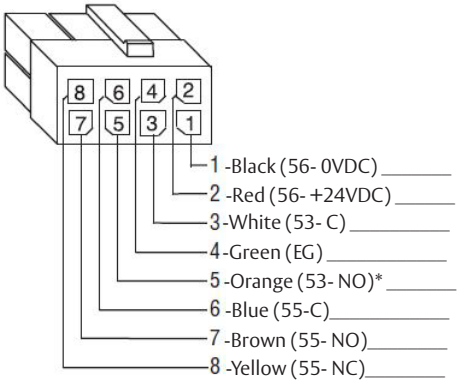
Figure 8

b ElectroLynx Opening Installation

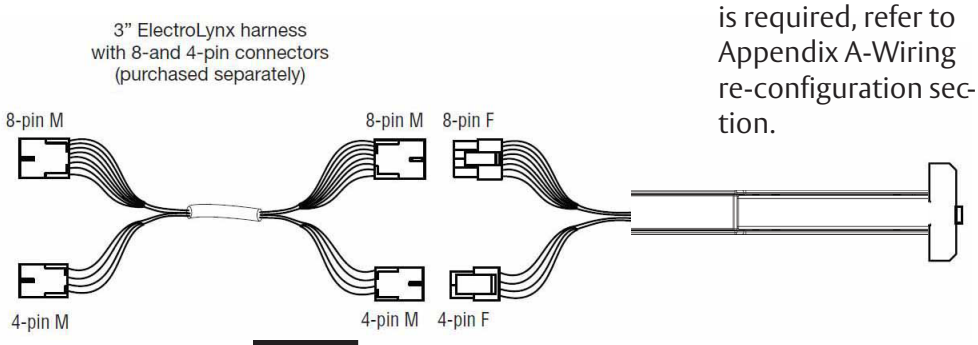
This is the simplest installation method, requiring the installer to plug the EleTroLynx connectors from the exit device to the harness to the hinge and then to the pigtail, which is connected to the access control system.

Requirements

- 56- exit device
- 3" ElectroLynx connector harness (not supplied with 56- device)
- McKinney QC ElectroLynx hinge (type of hinge depends on application)
- ElectroLynx door



*If 53-NC contact is required, refer to Appendix A-Wiring re-configuration section.



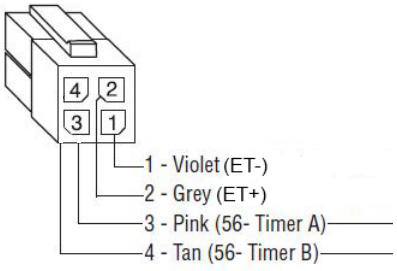


Figure 9 ElectroLynx Timer Mode Installation

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3 Timer Mode, continued

c Non-ElectroLynx Opening Installation

Standard door with standard electric hinge: Remove the ElectroLynx connector from the 56- Exit Device and wire nut the 56- wires to the wires from the electric hinge (color coordinating wire colors is recommended).

	MOLEX BOTH ENDS	MOLEX TO PIN OUT
3 INCH	QC-C003	QC-C003P
6 INCH	QC-C006	QC-C006P
12 INCH	QC-C012	QC-C012P

To identify part numbers and order harness(es), visit the McKinney website, www.mckinneyhinge.com, and search the catalog for ElectroLynx.

1 -Black (56- 0VDC) _____
2 -Red (56- +24VDC) _____
3 -White (53- C) _____
4 -Green (EG) _____
5 -Orange (53- NO)* _____
6 -Blue (55-C)_____
7 -Brown (55- NO)_____
8 -Yellow (55- NC)_____

*If 53-NC contact is required, refer to Appendix A-Wiring re-configuration section.

Non-ElectroLynx **Timer Mode** Connection 56- Wires with ElectroLynx Connector Removed

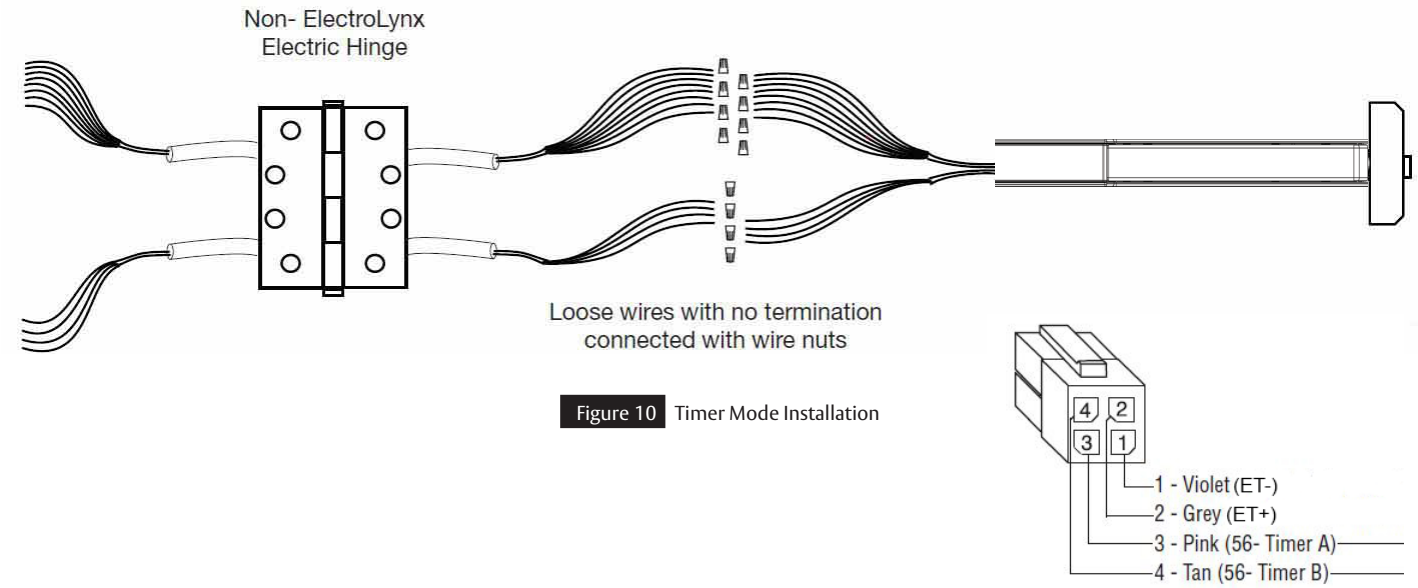


Figure 10 Timer Mode Installation

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3 Timer Mode, continued

d Typical Wiring

For use when wiring in **Timer Mode** (using the onboard timer). If more than 20 seconds timed delay is necessary, an external timer delay relay is required (not provided).

Note: 24V supply is constant in **Timer Mode**. Refer to settings in Section 3-G Configuration Instructions DIP Switch Settings (for 53- and timer duration).

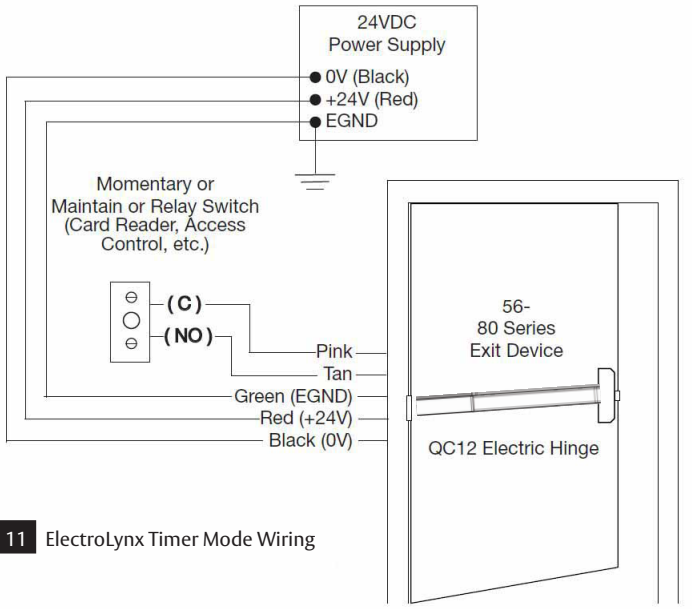


Figure 11 ElectroLynx Timer Mode Wiring

e Timer Mode Adjustment (Onboard Timer)

How it works: The 24 volt input is always energized and the system retracts when the timer input circuit is closed.

- When the timer circuit is closed utilizing a momentary switch, the device retracts, remains retracted for a set duration, and releases. The duration of the retraction is set using an onboard timer setting (0 - 20 second timer adjustment).
- The countdown begins when the rail is first retracted.
- When the timer circuit is closed using a maintain switch, the device retracts.
- The device releases when the circuit is re-opened.

Notes:

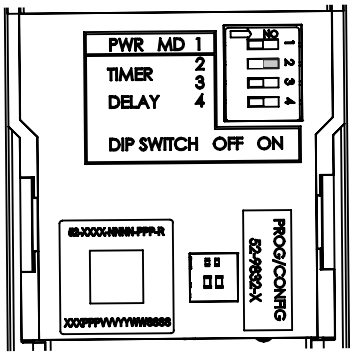
- 24V supply is constant in **Timer Mode**. The duration of retraction is determined by whichever is longer: the maintain switch closure or the onboard timer delay.
- If more than 20 seconds delay is necessary (exceeding the maximum setting), an external timer delay relay is required (not provided).
- Refer to settings in Section 3-g (Fig. 18-20) for DIP Switch timer delay settings.

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3 Timer Mode, continued

f Configuration Instructions DIP Switch Settings (for 53- and timer duration)

For 56- applications using the optional 53- latchbolt monitor switch (53-56-).



1. OFF = Timer Mode
2. ON
3. OFF
4. OFF

Dip Switch: 2,3,4
Timer Delay
Setting = 5 seconds

Dip Switch Settings

Time	2	3	4
0 Sec	OFF	OFF	OFF
2 Sec	OFF	OFF	ON
3 Sec	OFF	ON	OFF
4 Sec	OFF	ON	ON
5 Sec	ON	OFF	OFF
10 Sec	ON	OFF	ON
15 Sec	ON	ON	OFF
20 Sec	ON	ON	ON

ELR Timer Mode

Dip switch 2, 3, 4 are used to configure the timer delay in timer mode.
Timer Delay Settings = 5 seconds

g LED Signaling Chart

Signal	Cause	Troubleshoooting
Dark / Unlit	Controller microprocessor is not active	Confirm connections and incoming power
Steady/Flashing	Normal operation	Check that TIMER MODE switch is set
Solid Light	Input voltage is dropping out of operating range	Check wire run and power supply output
2 Flashes Followed by Pause	Retractor sensor, mechanical , or hall board problem	Call 800-810- 9473 for assistance

h Timer Mode Troubleshooting

Prior to electrical troubleshooting, confirm that the mechanical system properly functions; i.e., that the push bar fully retracts all latches and the door opens freely. Refer to applicable Sargent PE80 Series Exit Device product instruction sheet to correct mechanical installation issues.

Important: ALWAYS disconnect power before making any mechanical adjustments to the system.

The push rail does not move when 24V input is applied:

- Check inputs to confirm proper voltage and wiring orientation. When configured for **Timer Mode**, 24V must be applied and the timer circuit must be closed to cycle the device
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

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3 Timer Mode, continued

h Timer Mode Troubleshooting, continued

The onboard timer duration adjustment is not working:
- Remove power when making adjustments to timer delay settings (DIP Switches).
- When a momentary signal is applied to the timer circuit, the circuit must be reopened for the timer to function.

The push rail does not fully retract or push rail retracts completely and holds but does not open door:
- Verify mechanical installation and correct as necessary:
  - — Is excessive force required to depress the push bar?
  - — Are latches fully clearing the strikes when mechanically cycled?

The push rail retracts and unlocks electrically but does not relock:
- Confirm that the **Timer Mode** contact is opened (the rail will remain depressed until the contact is opened and the delay has expired).
- Physically disconnect power from rail (while electrically retracted) to verify if the issue is mechanical.
- Check for mechanical interference (e.g., warped door, lack of shims, misalignment of rail, etc.).
- Was a motor kit (M56) installed? Verify the rail assembly is connected correctly.

Rail behaves abnormally (multiple cycles, clicking, delayed retraction, etc.):
- If a momentary contact is applied to the timer circuit, adjust the onboard timer to a longer duration.
- Remove end cap from rail and confirm that LED is blinking steadily when power is applied. If not, refer to LED signaling.

For applications using automatic operator(s): Door(s) fail to unlock before doors begin to open:
- Adjust timing of operator to allow 850ms for the rail to fully retract.
- If a momentary contact is applied to the timer circuit, adjust the onboard timer to a longer duration to prevent the device from locking prior to operator actuation.

53- switch wiring - Design requires normally open functionality and circuit is normally closed (or vice versa):
- 53-C, NO contact is default, if NC contact is required refer to Wiring Re-configuration section.

For additional installation assistance, please contact 1-800-810- 9473. When calling, please provide the following information to improve our service (provide what you can):

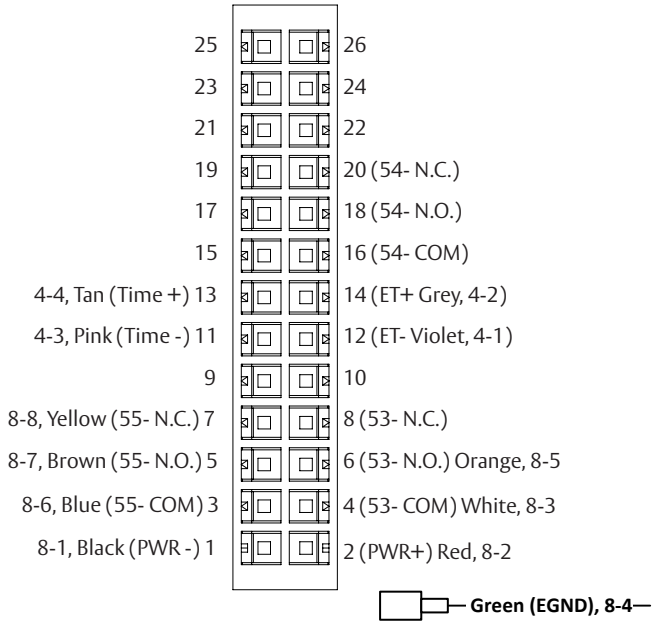
- Your name and contact number.
- Sargent PE80 Series Exit Device product type (e.g. 55- 56- PE8810).
- Location and identification of the affected opening (e.g., site, building, and door number).
- Sargent order number (located on product box), if available.
- Power supply manufacturer and rated output (i.e., voltage and current).
- Method of operation (e.g., **Timer Mode**).
- The number of devices connected to the power supply.
- Symptoms of problem (i.e., observed behavior).

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4 Appendix A: Harness Wiring Reconfiguration

PE Series Exits MELR
PCBA to QC12 Hinge Side Harness
26-pin connector to 8 & 4-pin ELynx connectors



12 + 4 = 16 total wiring selections

PE Series Exits MELR
ElectroLynx QC12
Factory Default Ship Configuration

26-1	**PWR-**	**Black**	**8-1**
26-2	**PWR+ (24VDC)**	**Red**	**8-2**
26-4	**53- COM**	**White**	**8-3**
Quick Conn	**EGND**	**Green**	**8-4**
26-6	**53- N.O.**	**Orange**	**8-5**
26-3	**55- COM**	**Blue**	**8-6**
26-5	**55- N.O.**	**Brown**	**8-7**
26-7	**55- N.C.**	**Yellow**	**8-8**
26-12	**ET-**	**Violet**	**4-1**
26-14	**ET+**	**Gray**	**4-2**
26-11	**TIME- (Timer A)**	**Pink**	**4-3**
26-13	**TIME+ (Timer B)**	**Tan**	**4-4**
26-8	**53- N.C.**	**No wire**	
26-16	**54- COM**	**No wire**	
26-18	**54- N.O.**	**No wire**	
26-20	**54- N.C.**	**No wire**	

LEGEND – PE Series Exits ELR (56-)
53- Latch Monitor Switch (Form C) in Chassis
55- Push Bar Switch (Form C) in Rail
EGND Earth Ground connection to metal rail, required

Power Mode Retracts push bar/latch when 24VDC power is applied, releases when power is removed
Timer Mode Device is powered, a momentary closure from external switch across Time+ to Time- retracts push bar/latch for dip switch setting of 0 to 20sec, or remains retracted until switch is opened then push bar/latch releases after (0-20sec)

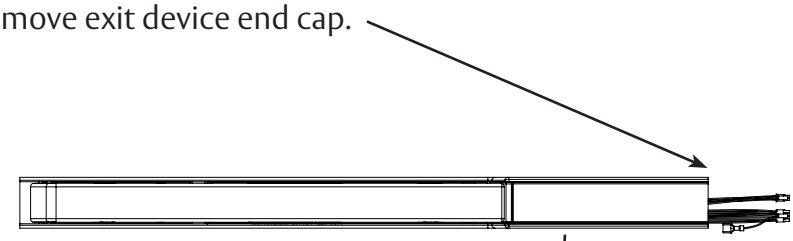
ET Electrified Exit Trim (Fail Safe or Fail Secure) Ecoflex 10 to 28VDC
54- ET Outside Lever Monitor Switch (Form C)
Type: 12/24VDC, Continuous Duty

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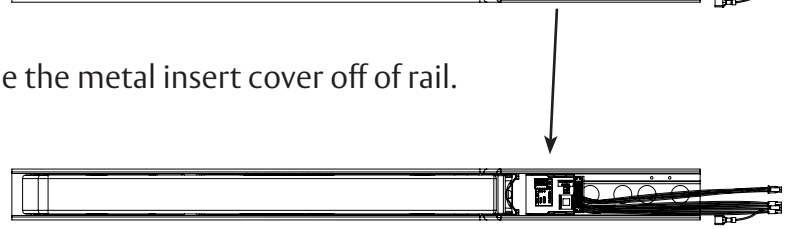
4 Appendix A: Harness Wiring Reconfiguration, continued

a Wire Configuration

1. Remove exit device end cap.

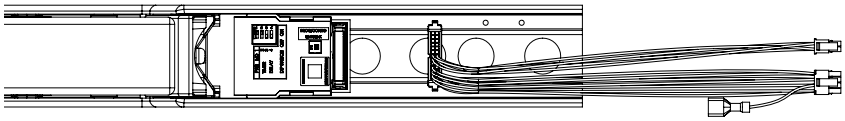


2. Slide the metal insert cover off of rail.



NOTE: Wire lengths are not to scale

3. Unplug the harness 26-pin connector from mating PCBA 26-pin connector.



The factory ships the rail to hinge side harness with 12 default wires terminated from the 26-pin connector to 8-pin & 4-pin connectors.
There are a total of 16 wiring choices (4 additional wiring choices):

- 53- N.C.
- 54- COM
- 54- N.O.
- 54- N.C.

See page 22 for wire table.

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4 Appendix A: Harness Wiring Reconfiguration

b If the 53- N.C. contact is required instead of 53- N.O. (26-6, Orange wire):

1. Use small tool with pointed tip and position it at orange wire on 26 pin connector position 6, as shown in Figure 12 .
2. Lift up plastic lance, as shown in Figure 12, slowly pull orange crimped terminal/wire assembly out of connector.
3. Refer to Figure 13 and install crimped terminal/orange wire assembly into the new 53- N.C. location 26-8 (26 pin connector position 8) .

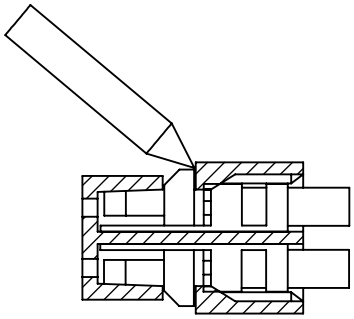


Figure 12

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4 Appendix A: Harness Wiring Reconfiguration, continued

C Inserting crimped contact/wire assembly into new connector position.

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.

Insert female pins into male housing

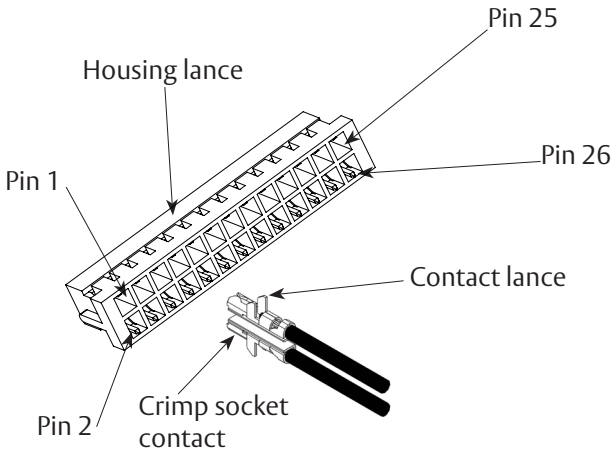
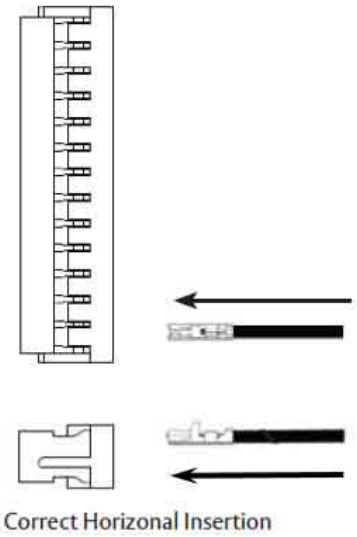
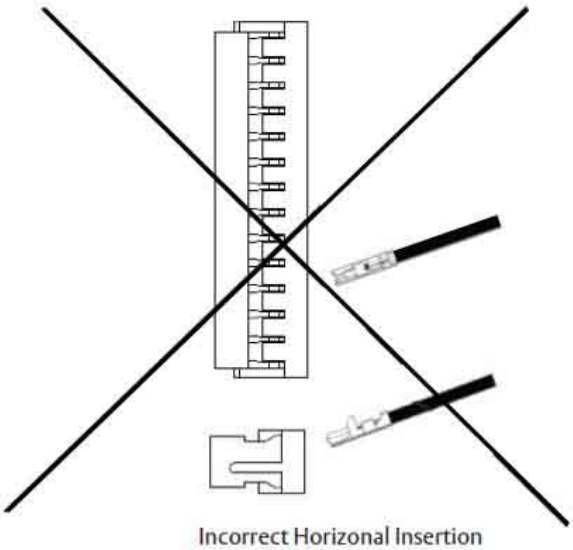


Figure 13

Do not tilt crimped terminals during insertion.



Correct Horizonal Insertion



Incorrect Horizonal Insertion

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4 Appendix A: Harness Wiring Reconfiguration, continued

d Inserting crimped contact/wire assembly into new connector position.

If the 54- COM and 54- N.O. (or 54- N.C.) contact is required for your application, select 2 of the 12 wires that are not being used.

Example: *If Timer A (pink wire 26-11), and Timer B (tan wire 26-13) aren't being used, move wire assemblies to 54- COM (pink wire to 26-16) and tan wire to 26-18 for 54- N.O. (or tan wire to 26-20 for 54- N.C.).*

1. Use small tool with pointed tip to remove pink and tan crimped terminal/wire assemblies from 26 pin connector positions 26-11 and 26-13, as shown in Figure 14.
2. Lift up plastic lance, as shown in Figure 14, slowly pull pink and tan crimped terminal/wire assemblies out of connector.
3. Refer to Figure 15 and install crimped contact/wire assemblies into the new locations.
4. Insert pink wire into 26-16 (54- COM).
5. Insert tan wire into 26-18 for (54- N.O.), or 26-20 for (54- N.C.) .

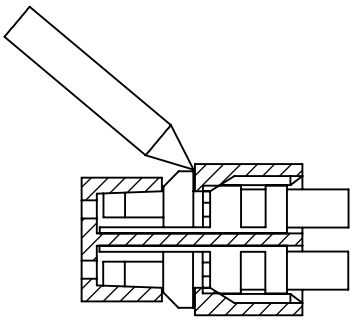


Figure 14

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4 Appendix A: Harness Wiring Reconfiguration, continued

d Inserting crimped contact/wire assembly into new connector position, 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.

Insert female pins into male housing

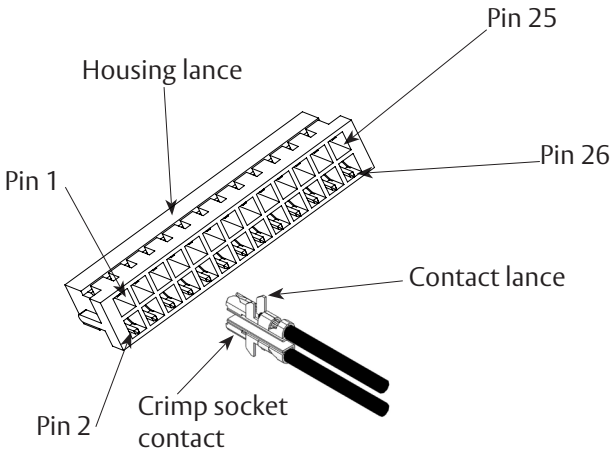
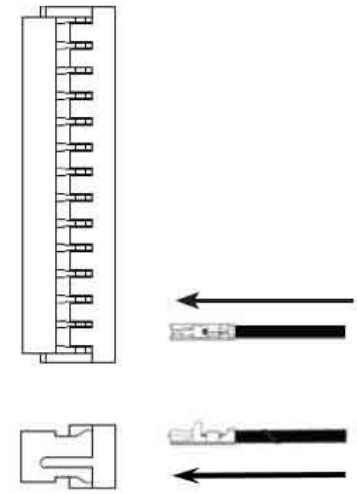
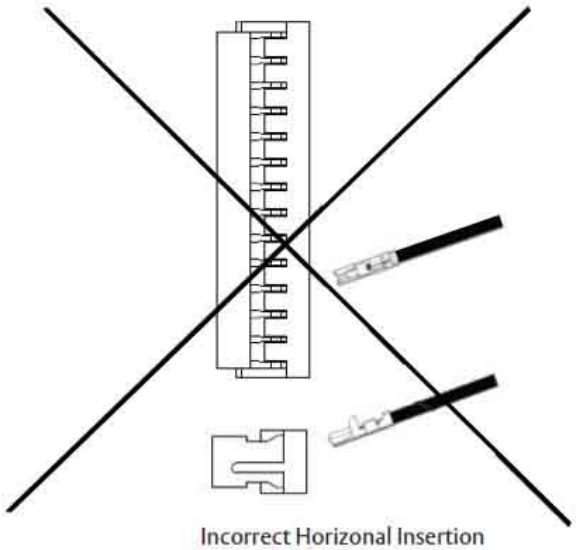


Figure 15

Do not tilt crimped terminals during insertion.



Correct Horizonal Insertion



Incorrect Horizonal Insertion

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