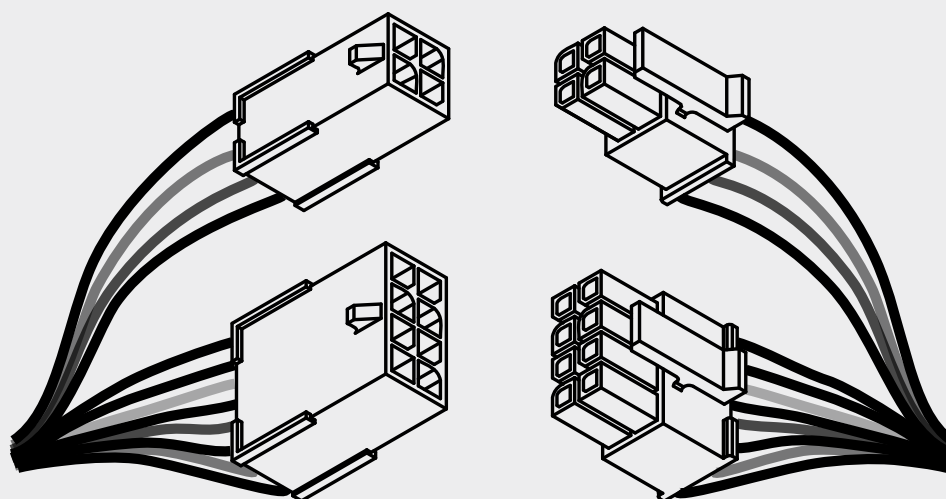


Allegion Connect

Technical Manual



**This manual covers the Allegion Connect products in multiple brands.
See the table of contents to locate the desired brand information.**

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Overview

Electrified Hardware

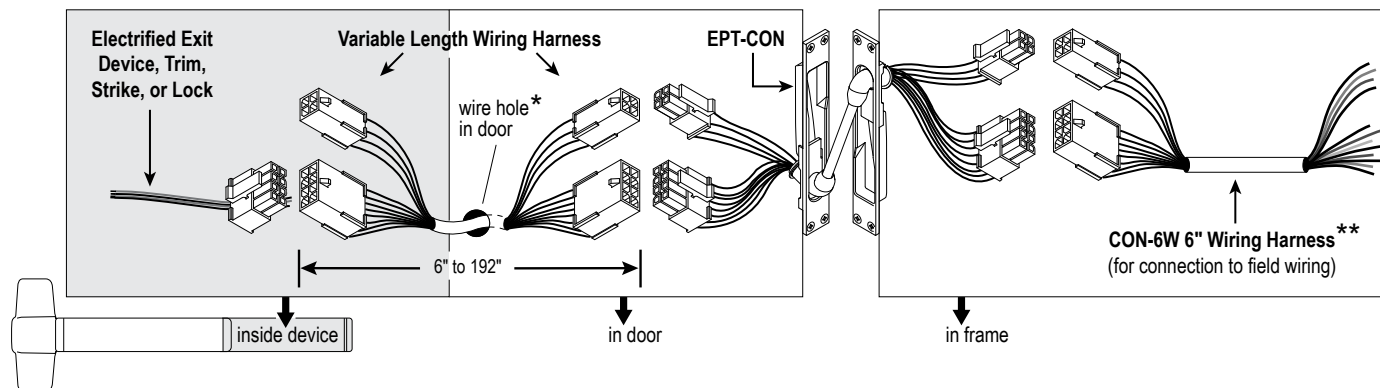
The electrified exit device, lock, trim, or strike is supplied with the Allegion Connect 8 pin and/or 4 pin connectors. In some cases an adapter is supplied and is shown in greater detail on the application pages of this manual. There are limitations regarding what Allegion Connect products can be combined. Consult factory for combinations not shown in this manual.

EPT or Hinge

The EPT or electrified hinge is supplied with Allegion Connect 8 pin and 4 pin connectors, or 8 pin connector only. See related product page.

Variable Length Wiring Harnesses

The 20 gauge wiring harnesses have Allegion Connect 8 pin and 4 pin connectors on each end, or can be ordered with the connectors on one end only. One wiring assembly is used to connect the electrified hardware to the EPT/hinge, and a 6" CON-6W wiring harness can be used to route from the EPT/hinge to field wiring.



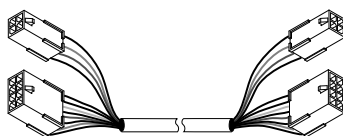
* Standard wiring hole may need to be enlarged slightly to fit connector through door surface.

Wiring Harnesses

Variable Length Harness

with connectors on both ends
(for use with Hollow Metal Doors)

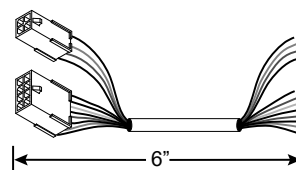
INTERNAL PART #	PART #	TOTAL LENGTH
106190	CON-6	6
106191	CON-12	12
106192	CON-26	26
106193	CON-32	32
106194	CON-38	38
106195	CON-44	44
106196	CON-50	50
106197	CON-192	192



6" Harness**

6" with connectors on one end only
(for connection to field wiring)

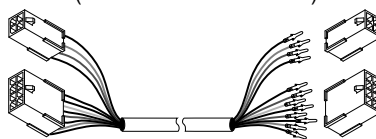
INTERNAL PART #	PART #	TOTAL LENGTH
106210	CON-6W	6



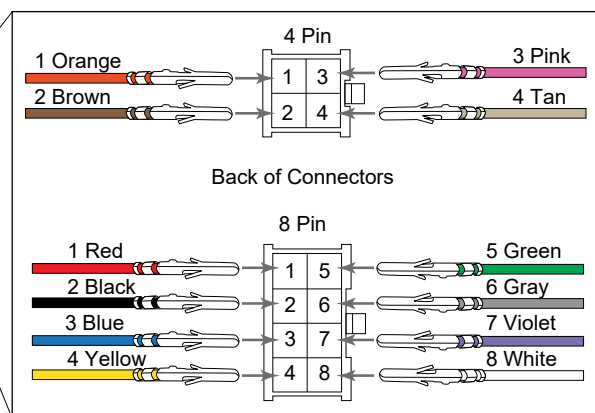
Variable Length Harness

with connectors on one end, crimped pins and loose connectors on other end
(for use with Wood Doors)

INTERNAL PART #	PART #	TOTAL LENGTH
106201	CON-6P	6
106202	CON-12P	12
106203	CON-26P	26
106204	CON-32P	32
106205	CON-38P	38
106206	CON-44P	44
106207	CON-50P	50
106208	CON-192P	192



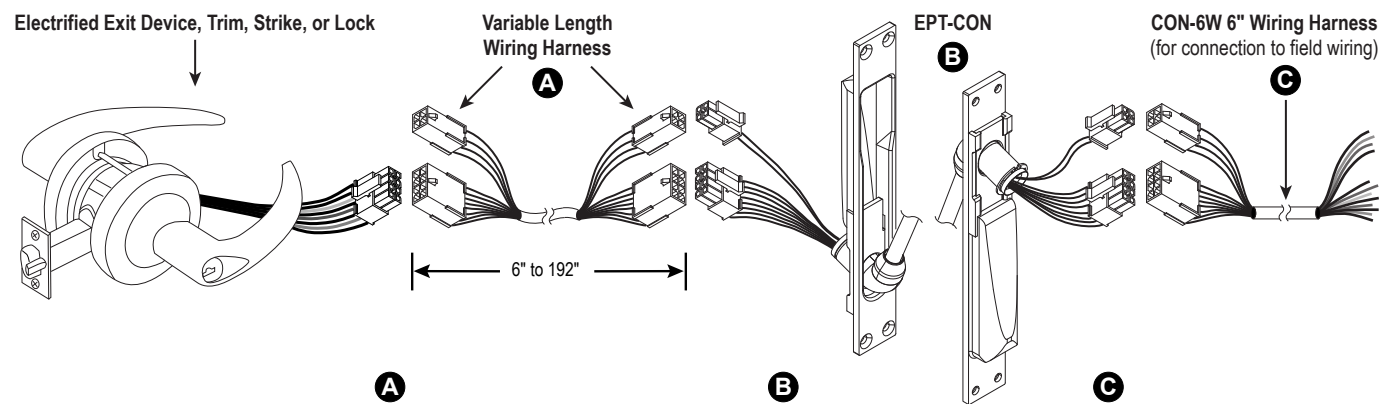
For use in tight fit applications such as routing through conduit or through a door.



** Stripped leads of CON-6W connect to field wiring. Field wiring from frame to power supply must be appropriate gauge (Variable Length Harnesses have 20 gauge wire and are not acceptable). Refer to wire gauge specifications in instructions for the particular electrified hardware.

Electric Power Transfer: EPT-10

See page 3 for system overview and wiring harness usage.

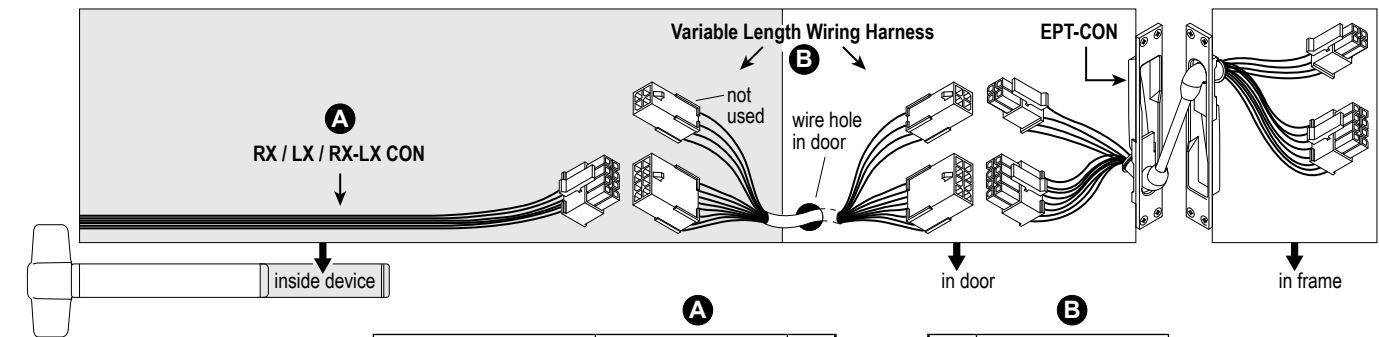


WIRE COLOR	PIN		PIN	EPT WIRE COLORS		PIN	WIRE COLOR
Orange	1	→	1	Orange	→	1	Orange
Brown	2	→	2	Brown	→	2	Brown
Pink	3	→	3		→	3	Pink
Tan	4	→	4		→	4	Tan
Red	1	→	1	Red	→	1	Red
Black	2	→	2	Black	→	2	Black
Blue	3	→	3	Blue	→	3	Blue
Yellow	4	→	4	Yellow	→	4	Yellow
Green	5	→	5	Green	→	5	Green
Gray	6	→	6	Gray	→	6	Gray
Violet	7	→	7	Violet	→	7	Violet
White	8	→	8	White	→	8	White

NOTE: Field wiring from frame to power supply must be appropriate gauge. Refer to wire gauge specifications in instructions for the particular hardware.

RX/LX/RX-LX Exit Device

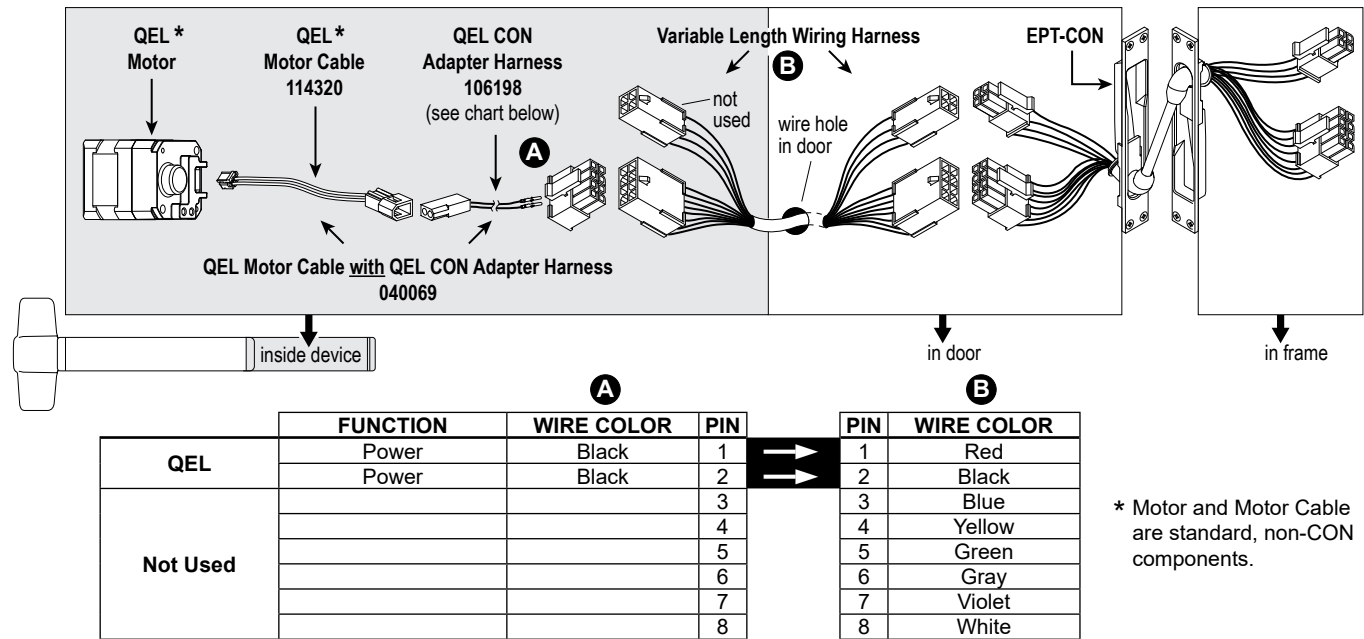
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



	FUNCTION	WIRE COLOR	PIN		PIN	WIRE COLOR
Not Used			1	→	1	Red
			2		2	Black
RX/ RX-LC	Normally Open (NO)	Blue	3		3	Blue
	Normally Closed (NC)	Yellow	4		4	Yellow
LX LX-LC	Common (C)	Red or Green	5		5	Green
	Normally Open (NO)	Gray	6		6	Gray
	Normally Closed (NC)	Violet	7		7	Violet
	Common (C)	White or Black	8		8	White

QEL Exit Device

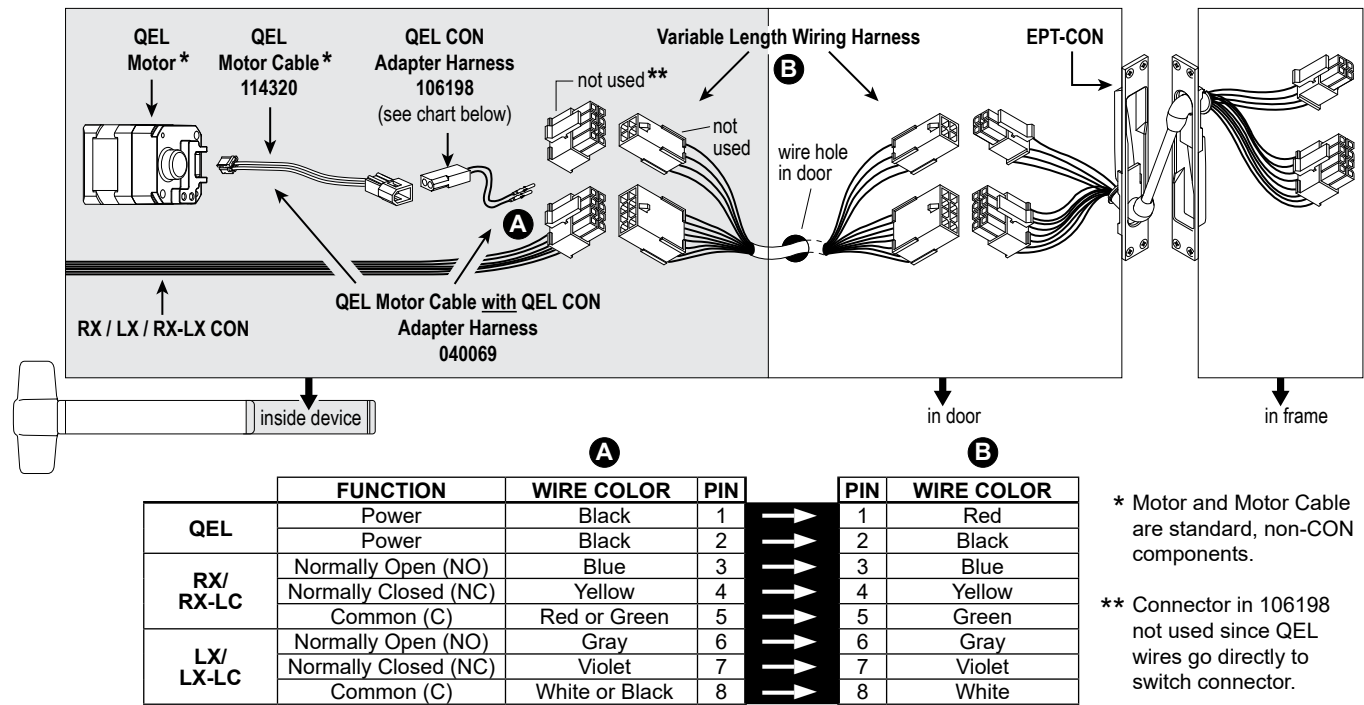
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard QEL devices is not furnished or required for CON applications.

QEL/(RX/LX/RX-LX) Exit Device

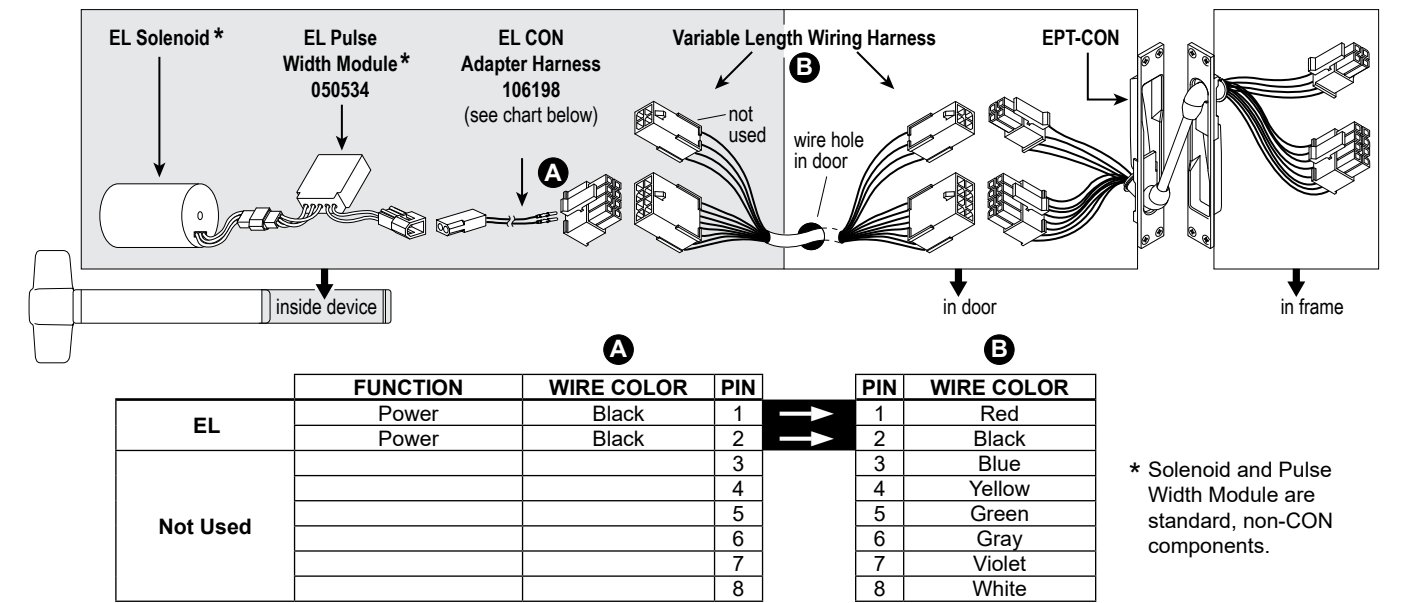
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard QEL devices is not furnished or required for CON applications.

EL Exit Device

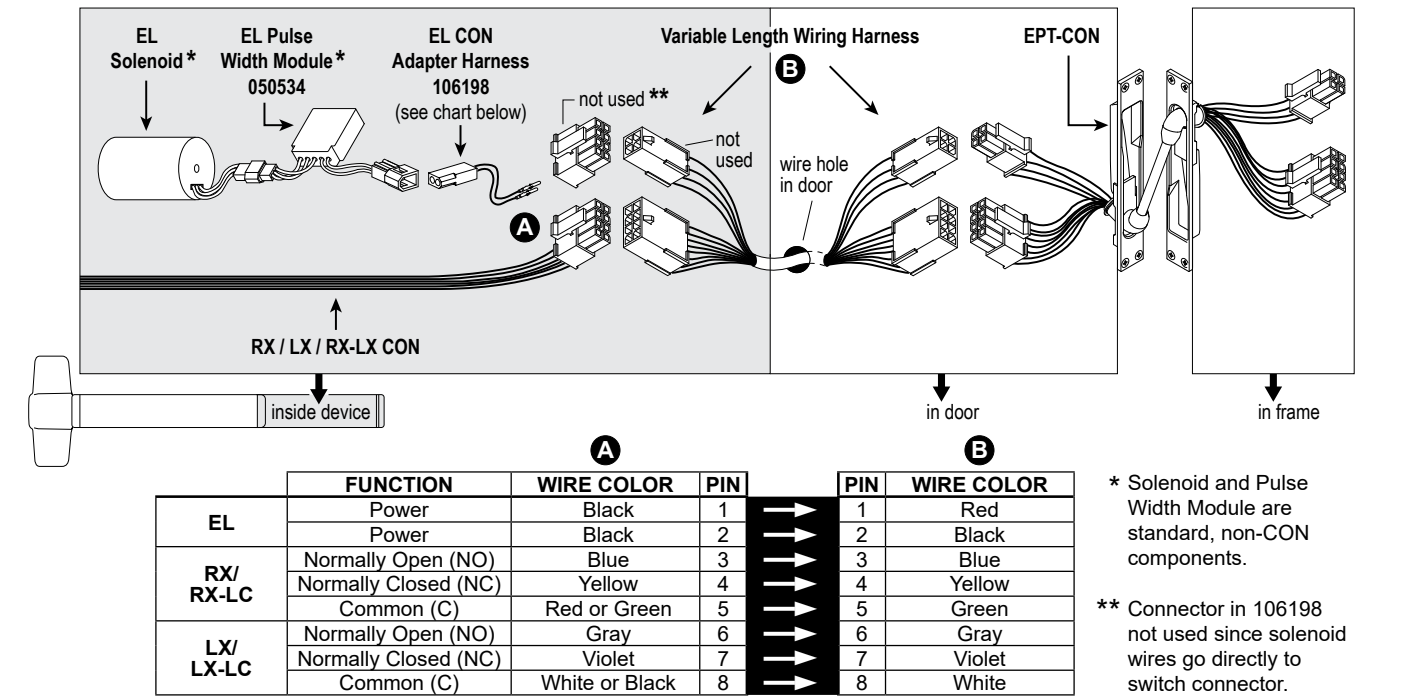
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard EL devices is not furnished or required for CON applications.

EL/(RX/LX/RX-LX) Exit Device

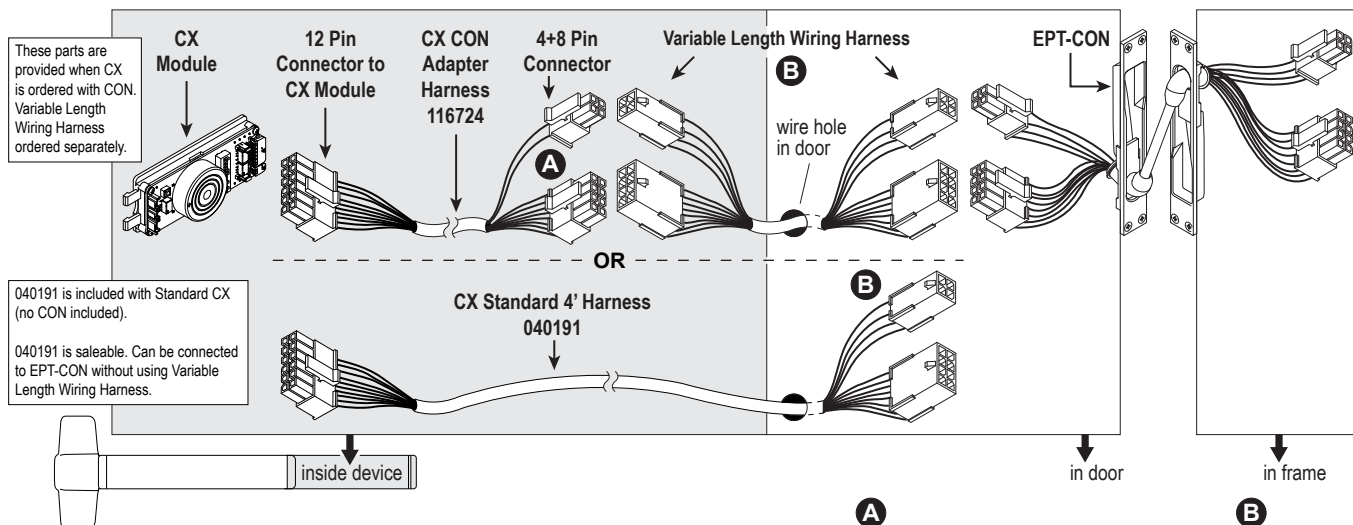
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard EL devices is not furnished or required for CON applications.

CX (Chexit) Motor-Driven Exit Device

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.

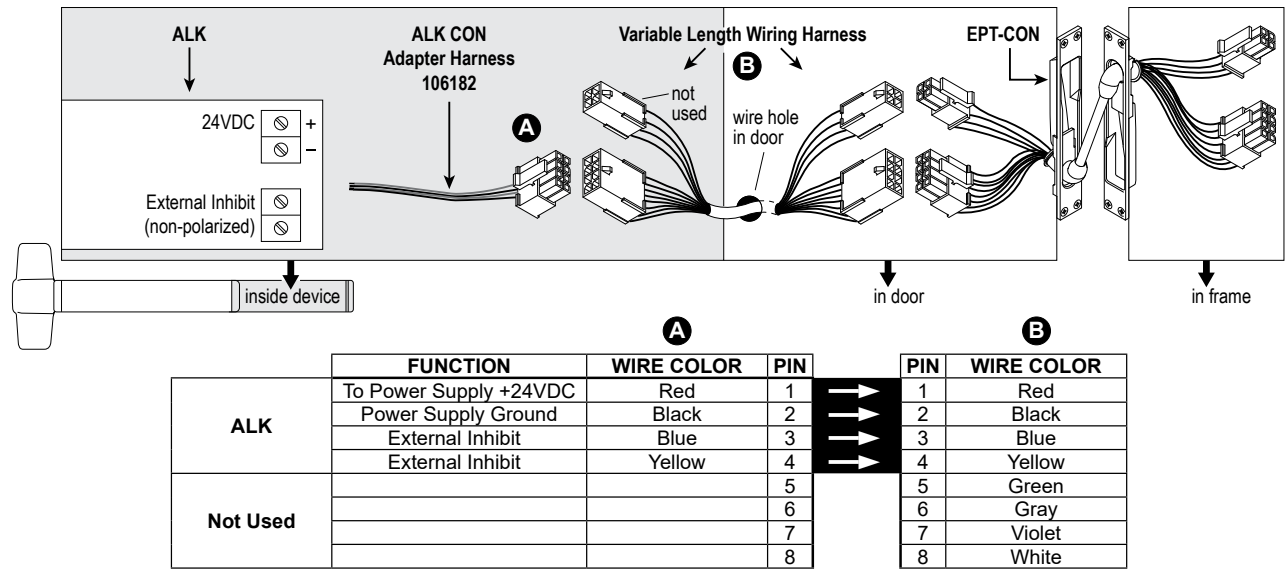


FUNCTION		WIRE COLOR		PIN		PIN	WIRE COLOR
Door Position Switch Input	DPS	Orange		1	→	1	Orange
Alarm Relay Output	NO/NC	Brown		2	→	2	Brown
Unused Wires		Pink		3	→	3	Pink
Unused Wires		Tan		4	→	4	Tan

Power Supply +24V Input	24VDC	Red		1	→	1	Red
Power Supply Ground	GND	Black		2	→	2	Black
Alarm Relay Output	COM	Blue		3	→	3	Blue
Fire Alarm Input	FA	Yellow		4	→	4	Yellow
Inhibit Input	INH	Green		5	→	5	Green
Gang Input/Output	GNG	Gray		6	→	6	Gray
Secure Relay Output	NO/NC	Violet		7	→	7	Violet
Secure Relay Output	COM	White		8	→	8	White

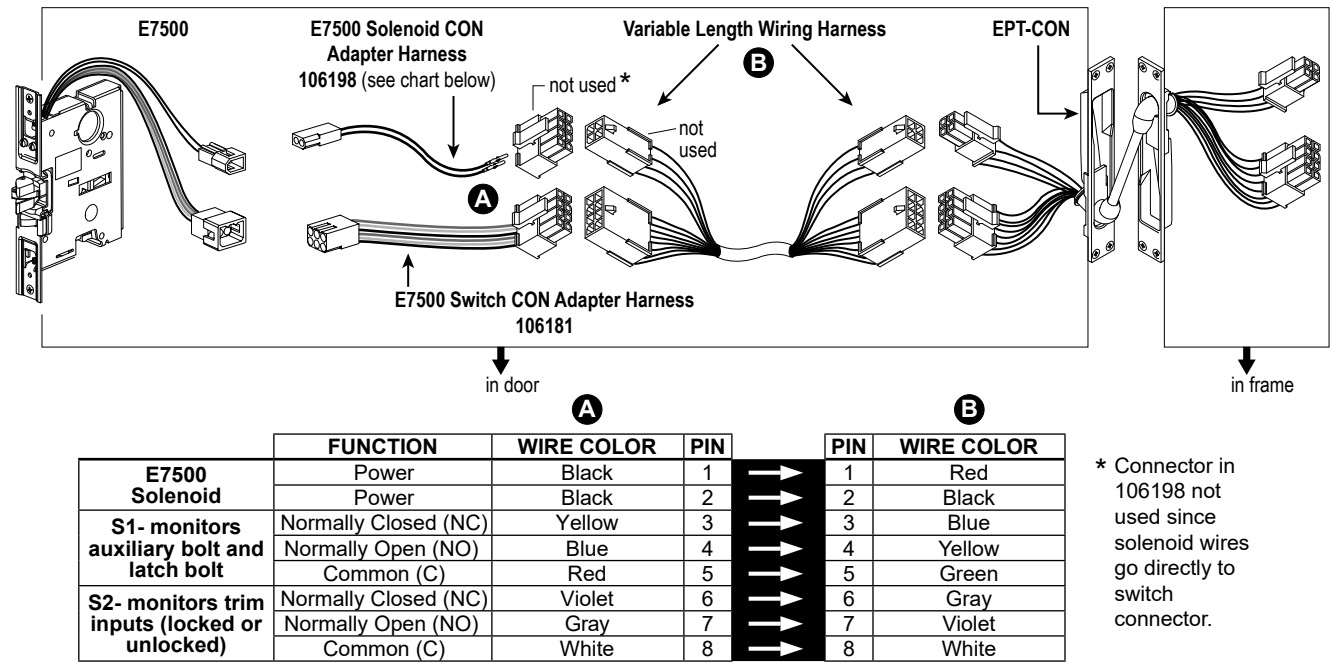
ALK Exit Device

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



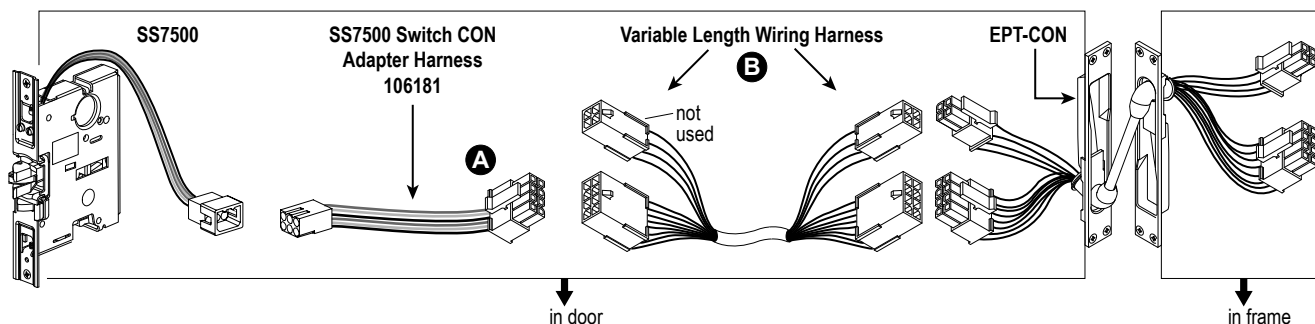
E7500 Mortise Lock

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



SS7500 Mortise Lock

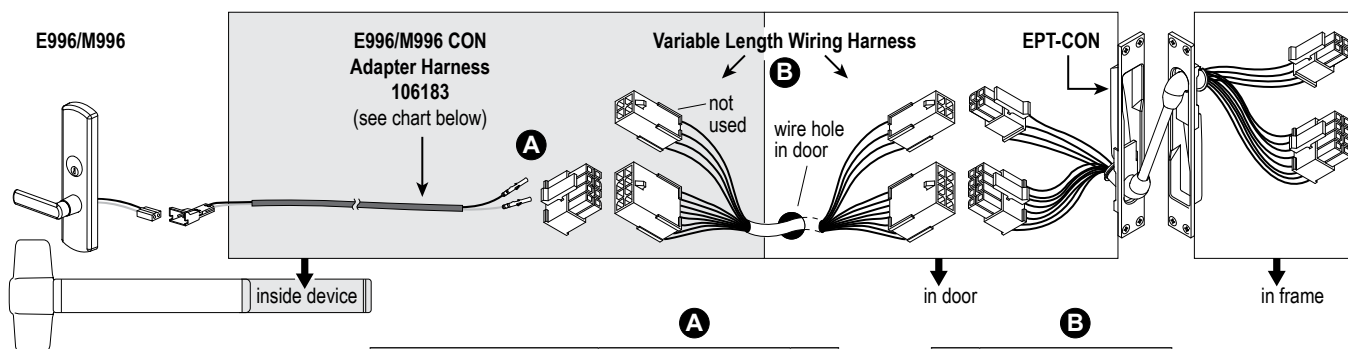
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



				A	B
	FUNCTION	WIRE COLOR	PIN		PIN WIRE COLOR
Not Used			1		1 Red
			2		2 Black
			3		3 Blue
S1- monitors auxiliary bolt and latch bolt	Normally Closed (NC)	Yellow	3	→	4 Yellow
	Normally Open (NO)	Blue	4	→	5 Green
	Common (C)	Red	5	→	6 Gray
S2- monitors trim inputs (locked or unlocked)	Normally Closed (NC)	Violet	6	→	7 Violet
	Normally Open (NO)	Gray	7	→	8 White
	Common (C)	White	8	→	

E996/M996 Trim

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.

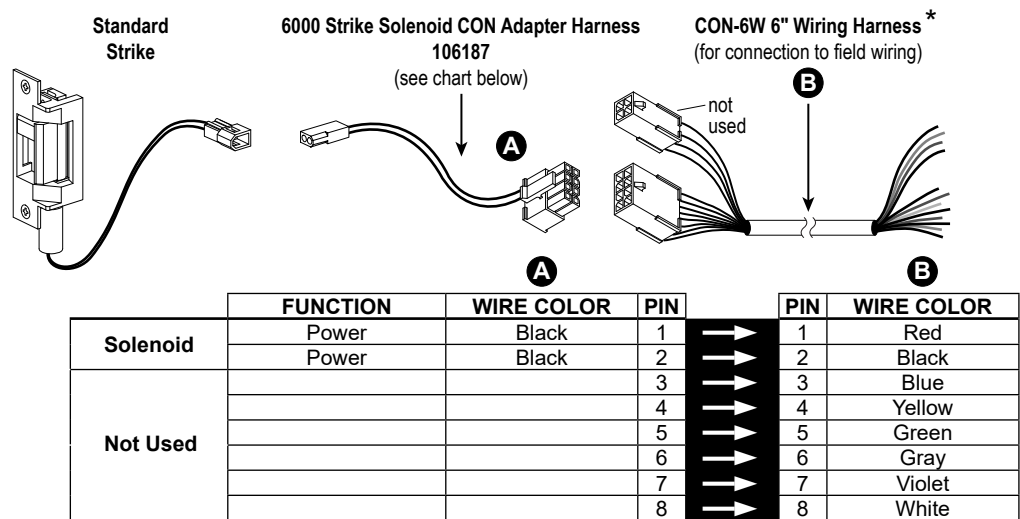


				A	B
	FUNCTION	WIRE COLOR	PIN		PIN WIRE COLOR
E996/M996	Power	Red or White	1	→	1 Red
	Power	Black	2	→	2 Black
Not Used			3		3 Blue
			4		4 Yellow
			5		5 Green
			6		6 Gray
			7		7 Violet
			8		8 White

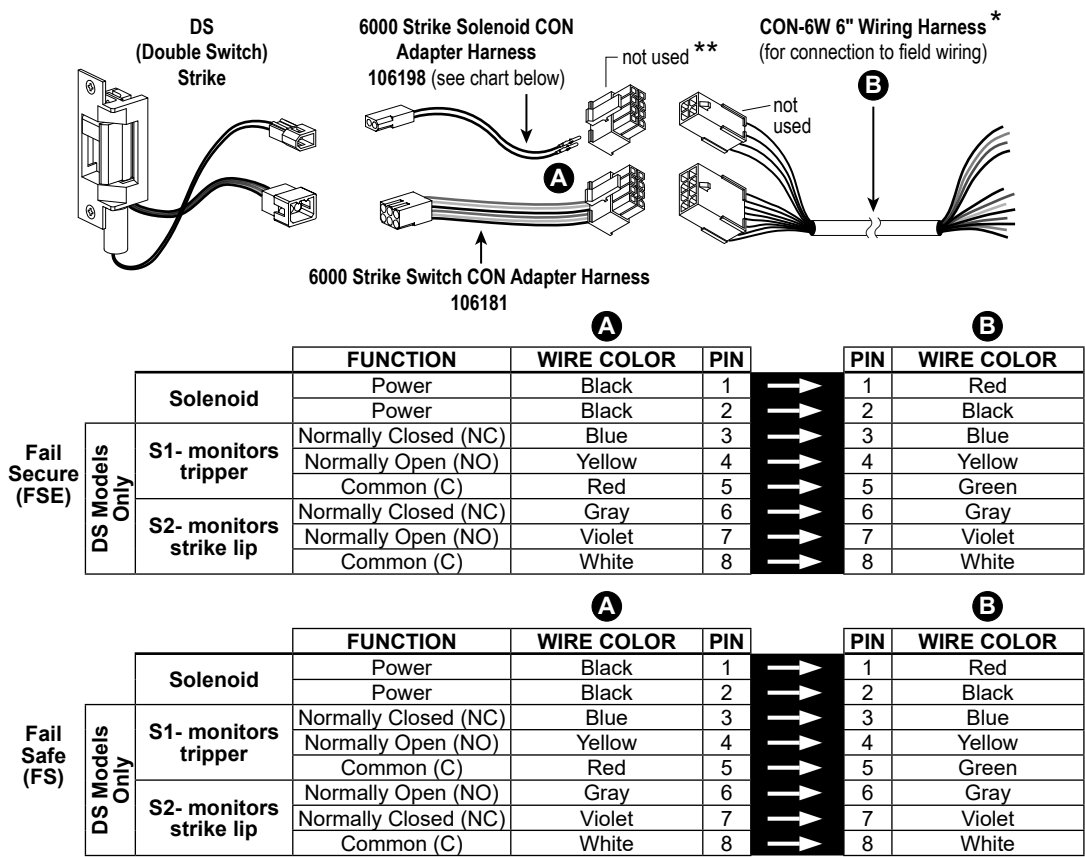
NOTE: The Cable.10038 that is furnished with standard E996/M996 trim is not furnished or required for CON applications.

6100/6200 Series Electric Strikes

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



* 6" harness is for single door application. For double door application, specify variable length harness to connect electric strike to power transfer.

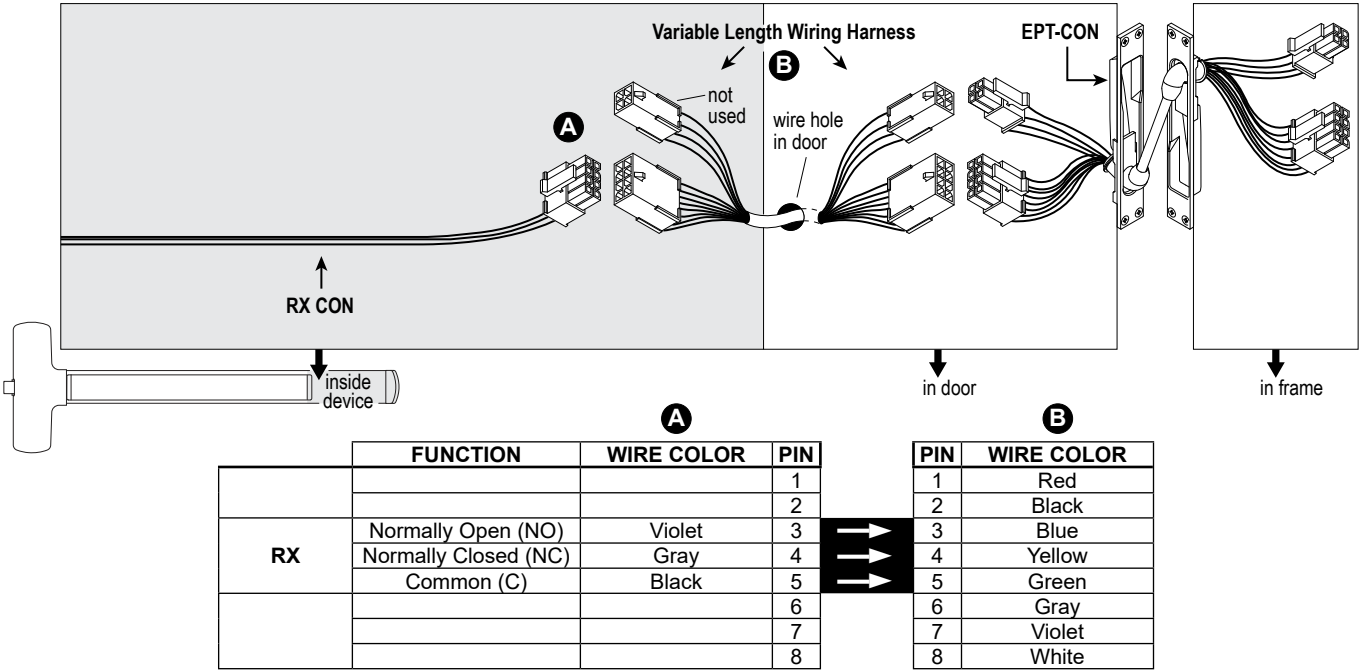


* 6" harness is for single door application. For double door application, specify variable length harness to connect electric strike to power transfer.

** Connector in 106198 not used since solenoid wires go directly to switch connector.

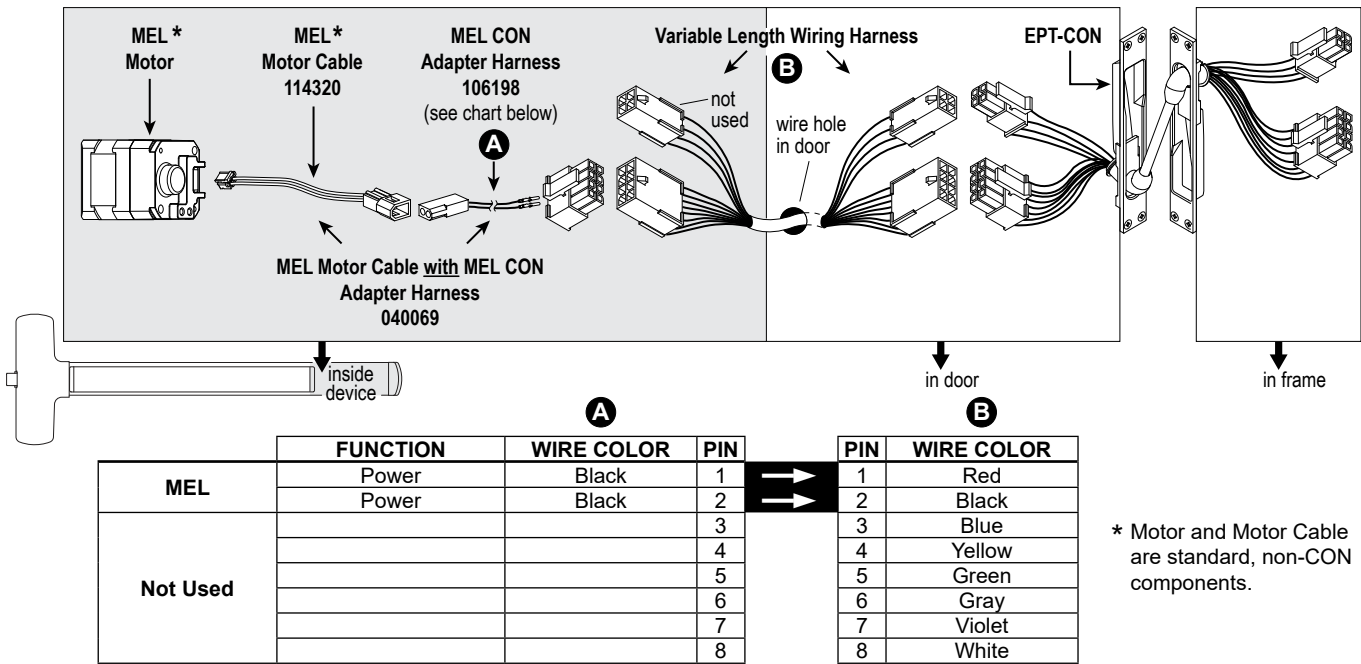
RX Exit Device

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



MEL Exit Device

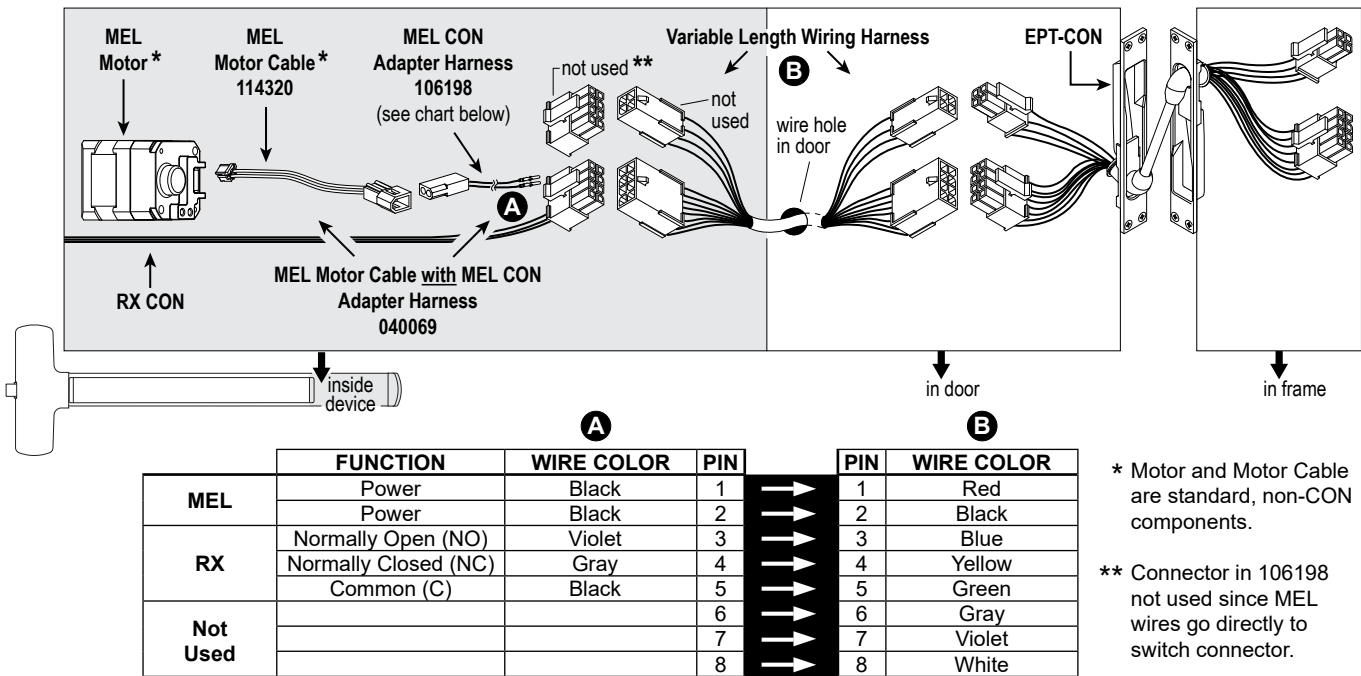
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard EL devices is not furnished or required for CON applications.

MEL/RX Exit Device

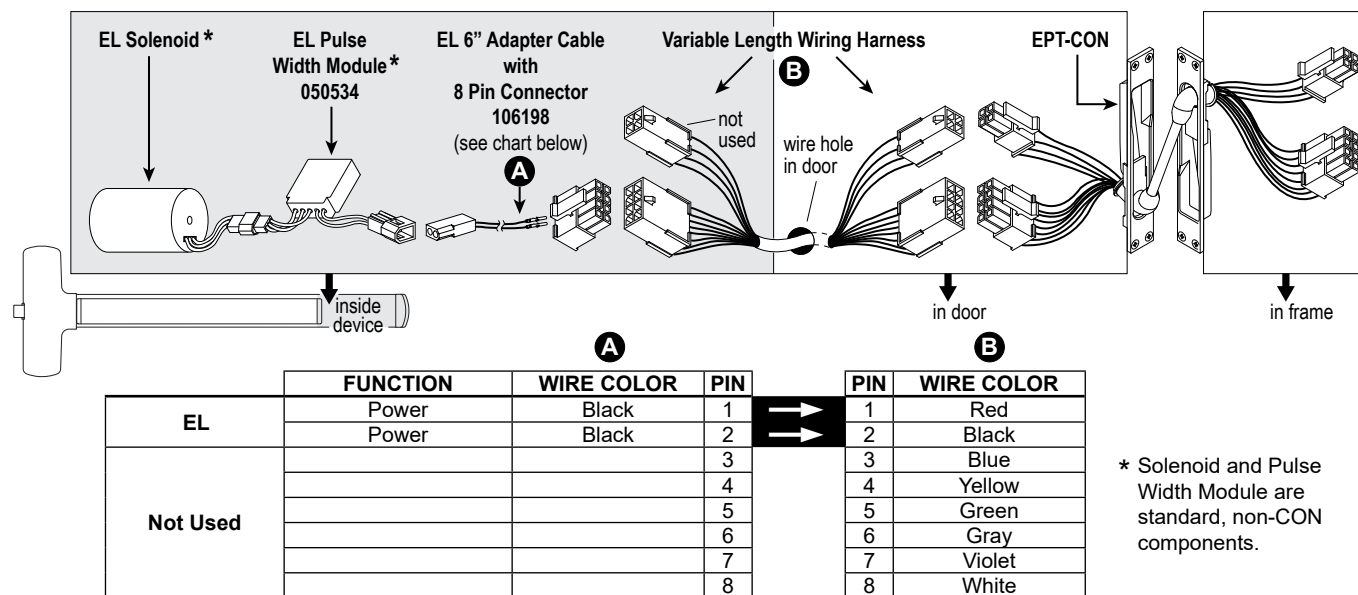
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (47269206) that is furnished with standard MEL devices is not furnished or required for CON applications.

EL Exit Device

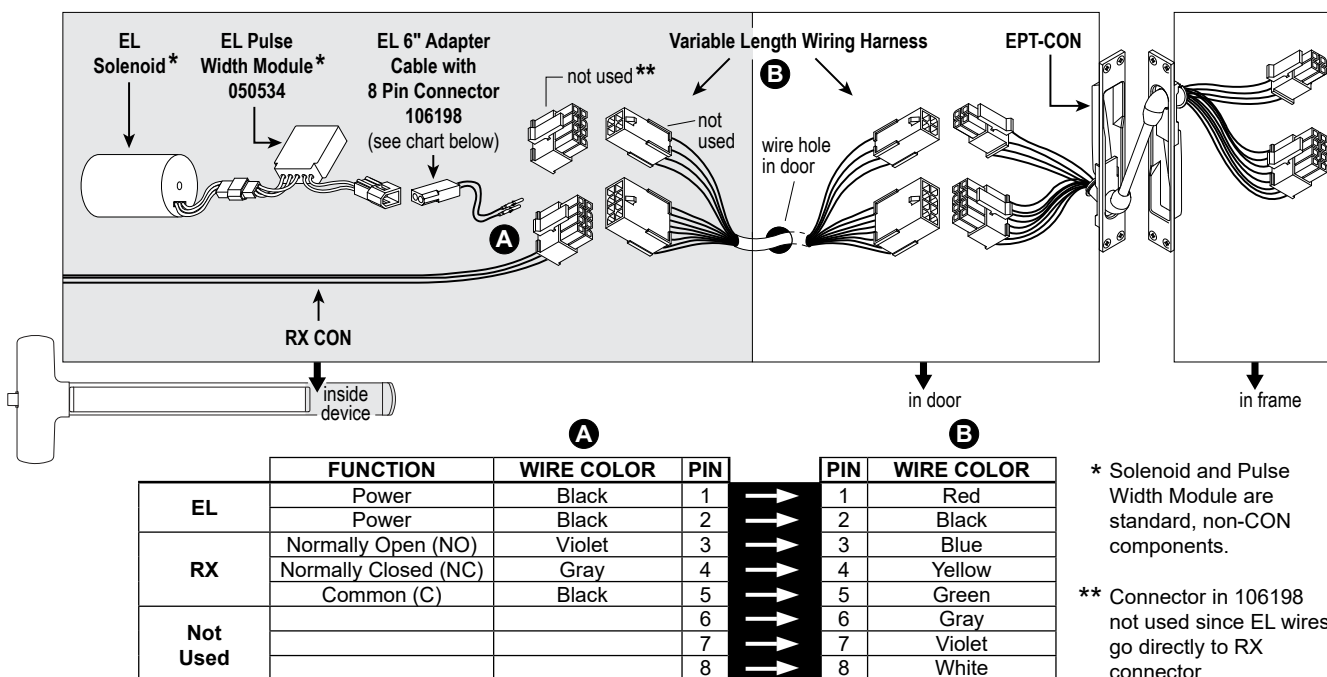
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard EL devices is not furnished or required for CON applications.

EL/RX Exit Device

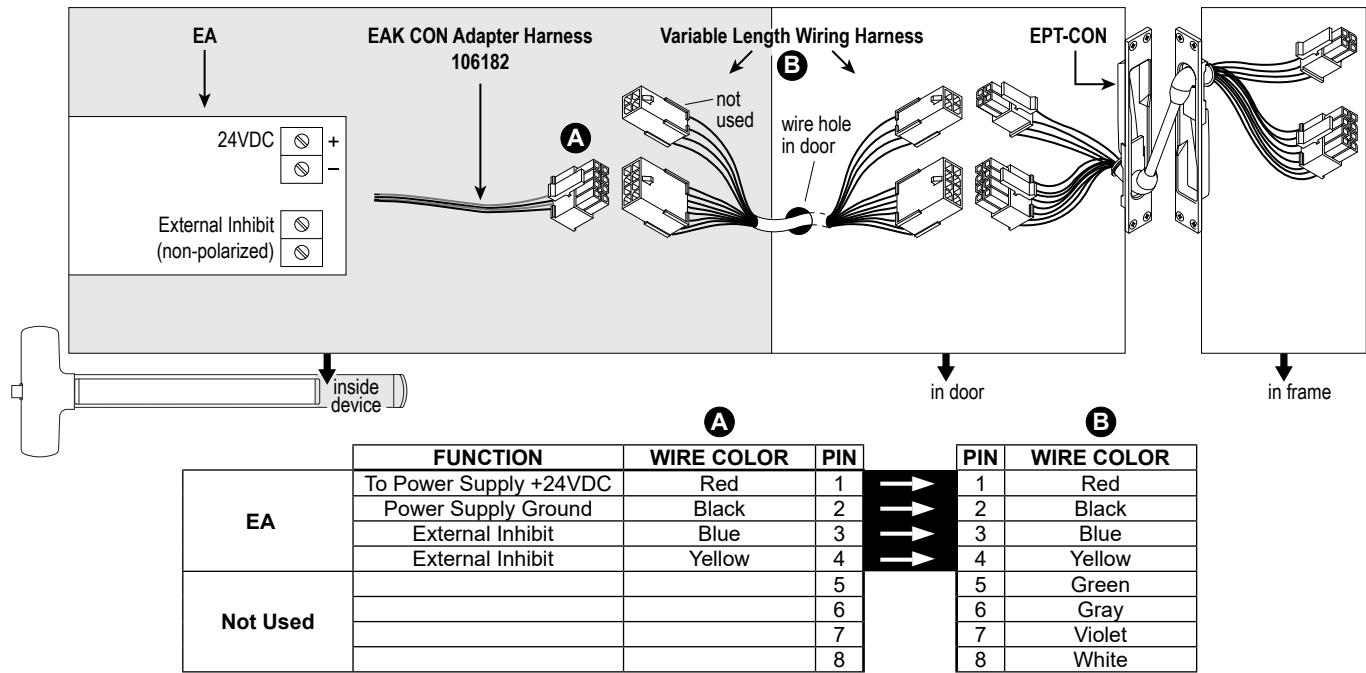
See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



NOTE: The 6' cable (110388) that is furnished with standard EL devices is not furnished or required for CON applications.

EA (Exit Alarm) Exit Device

See page 3 for system overview and wiring harness usage. Colors shown below at wiring harness should remain consistent throughout the EPT or hinge and harness outside of frame.



T-Series Electrified Locks (T851/T881)

Electrical Specifications:

- Fail Safe/Fail Secure
- .65 AMP @ 12 VDC
- .32 AMP @ 24 VDC

T851 Storeroom Fail Safe:

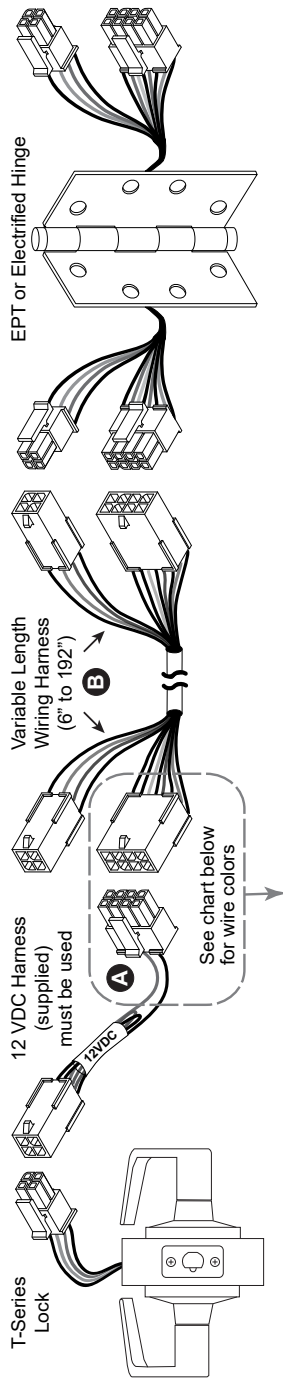
Deadlocking latch bolt operated by lever from either side, except when outer lever is electrically locked. When outer lever is locked (inoperable), latch bolt retracted by key in cylinder outside. Inside lever is always free.

T881 Storeroom Fail Secure:

Deadlocking latch bolt operated by lever inside at all times. Outside lever is inoperable until electrically unlocked, then latch bolt is operable from either side. When outside lever is inoperable, latch bolt retracted by key in cylinder outside.

T851/T881 (12 VDC)

12 VDC Configuration Shown

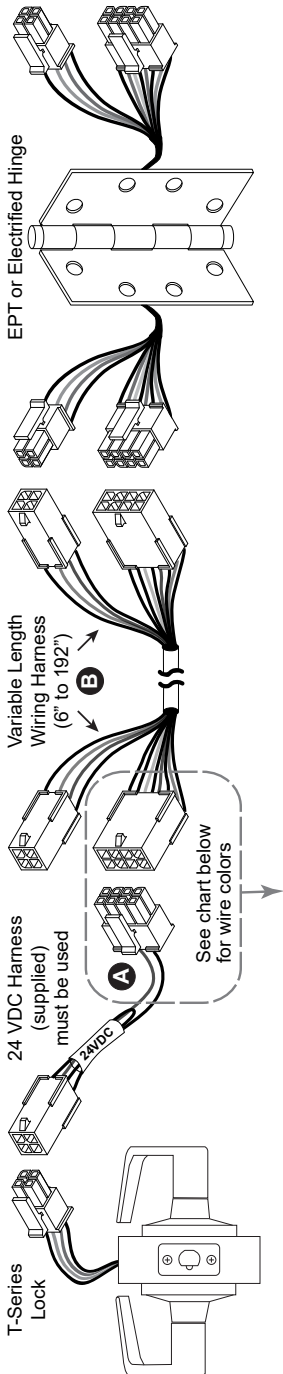


Power Only - T851, T881

PURPOSE	FUNCTION	Lock Connector		Harness Connector	
		WIRE COLOR	PIN	WIRE COLOR	PIN
EL / EU	Power	Red	1	Red	1
	Power	Black	2	Black	2
Not Used			3	Blue	3
			4	Yellow	4
			5	Green	5
			6	Gray	6
			7	Violet	7
			8	White	8

T851/T881 (24 VDC)

24 VDC Configuration Shown



Power Only - T851, T881

PURPOSE	FUNCTION	Lock Connector		Harness Connector	
		WIRE COLOR	PIN	WIRE COLOR	PIN
EL / EU	Power	Red	1	Red	1
	Power	Black	2	Black	2
Not Used			3	Blue	3
			4	Yellow	4
			5	Green	5
			6	Gray	6
			7	Violet	7
			8	White	8

MA-Series Electrified Lock

Electrical Specifications:

- Fail Safe/Fail Secure
- .65 AMP @ 12 VDC
- .32 AMP @ 24 VDC

MA851 Storeroom Fail Safe/Electrified EL:

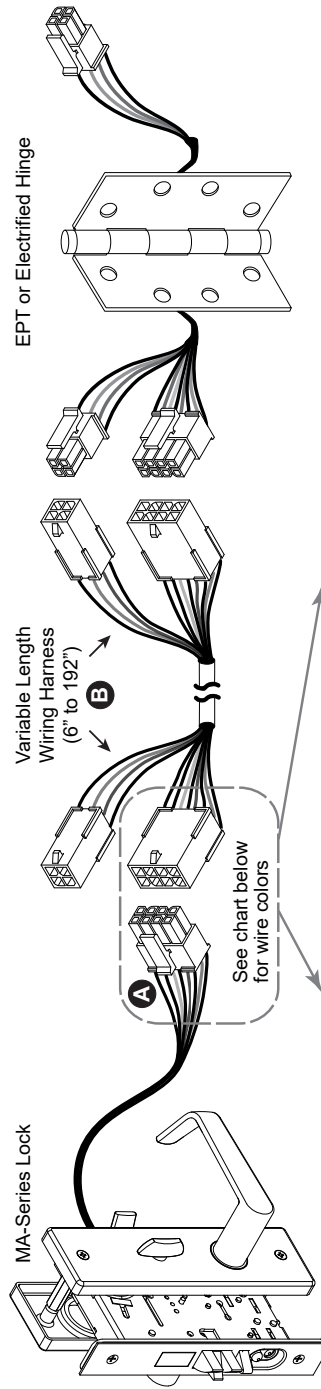
Latch bolt operated by knob/lever from either side except when outer knob/lever is electrically locked. When outer knob/lever is locked, latch bolt retracted by key in cylinder outside. Deadlocking latch. Inside knob/lever always free for immediate egress. Specify 12 or 24 VDC.

MA881 Storeroom Fail Secure/Electrified EU:

Latch bolt operated by knob/lever from inside except when outer knob/lever is electrically unlocked, then latch bolt from either side. When locked, key in cylinder outside retracts latch bolt. Deadlocking latch. Inside knob/lever always free for immediate egress. Specify 12 or 24 VDC.

MA851/MA881 (12 and 24 VDC)

- 12 VDC Configuration (2 Black Power Wires)
- 24 VDC Configuration (2 White Power Wires)



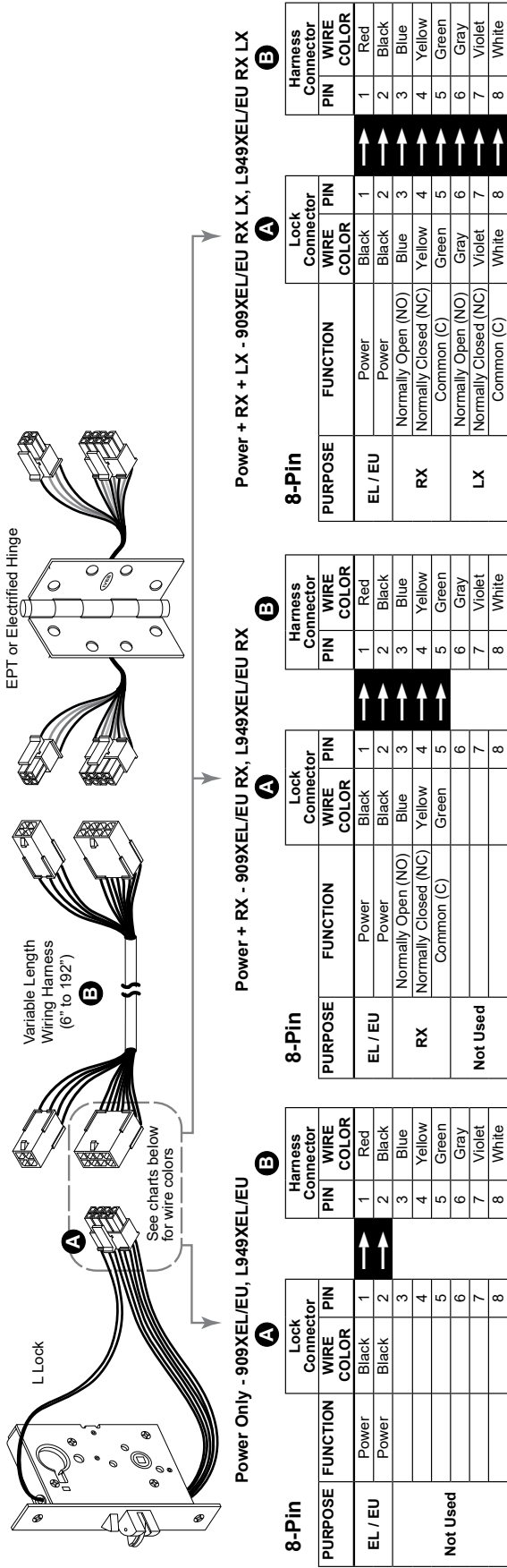
Power Only - MA851, MA881

Lock Connector			Harness Connector		
PURPOSE	FUNCTION	WIRE COLOR	PIN	WIRE COLOR	
EL / EU	Power	Black/White	1	Red	
	Power	Black/White	2	Black	
Not Used			3	Blue	
			4	Yellow	
			5	Green	
			6	Gray	
			7	Violet	
			8	White	

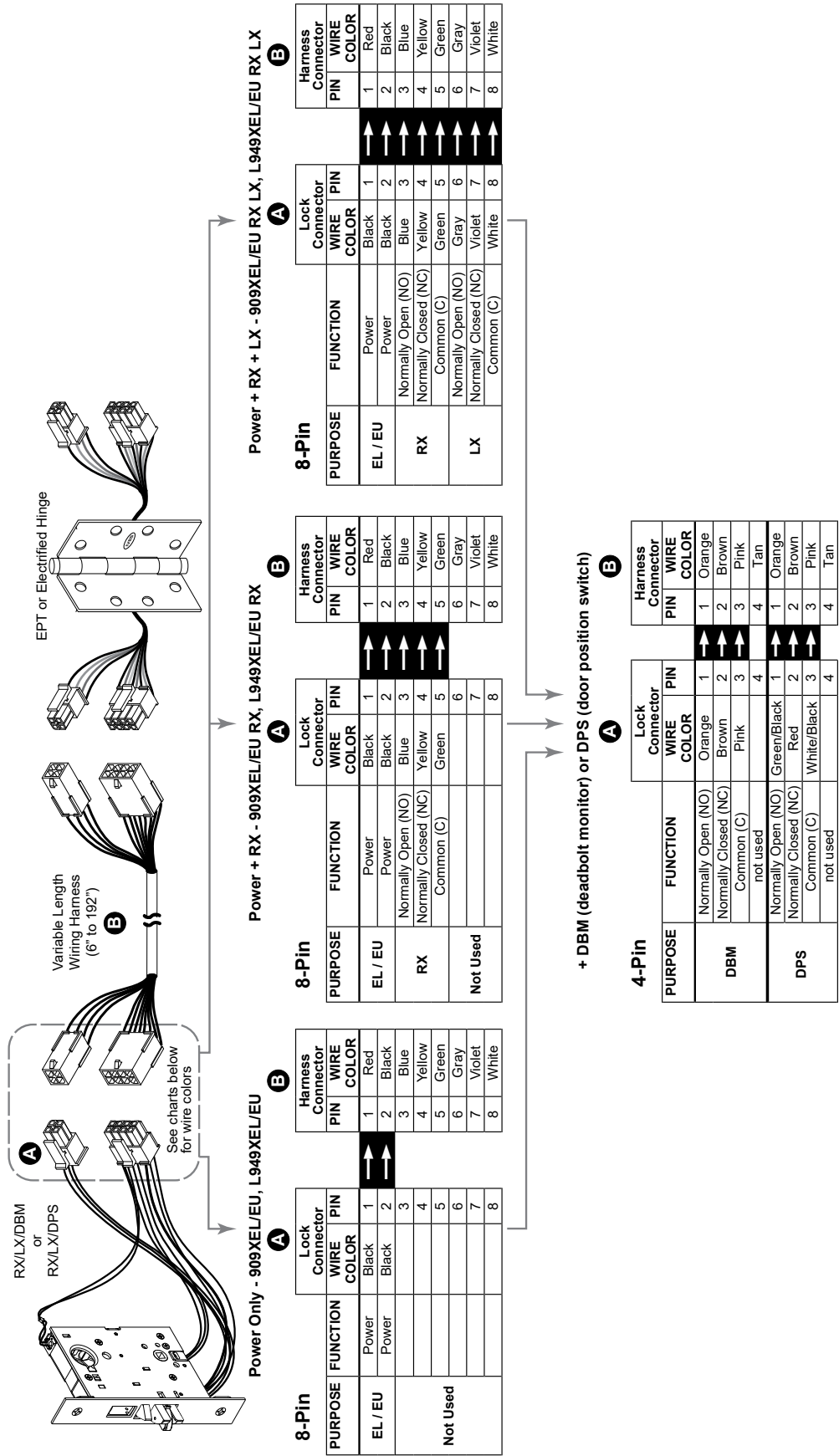
MA851-RX, MA881-RX

Lock Connector			Harness Connector		
PURPOSE	FUNCTION	WIRE COLOR	PIN	WIRE COLOR	
EL / EU	Power	Black/White	1	Red	
Not Used	Power	Black/White	2	Black	
			3	Blue	
Not Used	Common	Orange	4	Yellow	
	RX Switch NO	Green	5	Green	
Not Used			6	Gray	
			7	Violet	
			8	White	

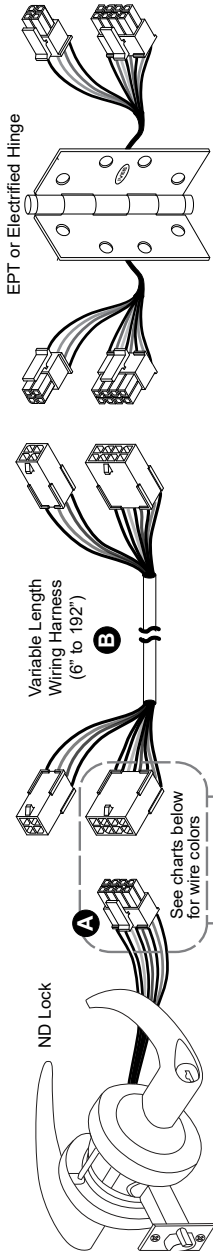
L Series Locks (8-pin connector)



L Series Locks (8-pin + 4-pin connector)



ND Series Locks



Power Only - 12EL/EU, 80EL/EU, 96EL/EU

PURPOSE	FUNCTION	Lock Connector		Harness Connector	
		WIRE COLOR	PIN	PIN	WIRE COLOR
EL / EU	Power	Black	1	1	Red
	Power	Red	2	2	Black
Not Used			3	3	Blue
			4	4	Yellow
			5	5	Green
			6	6	Gray
			7	7	Violet
			8	8	White

Power + RX - 12EL/EU RX, 80EL/EU RX, 96EL/EU RX

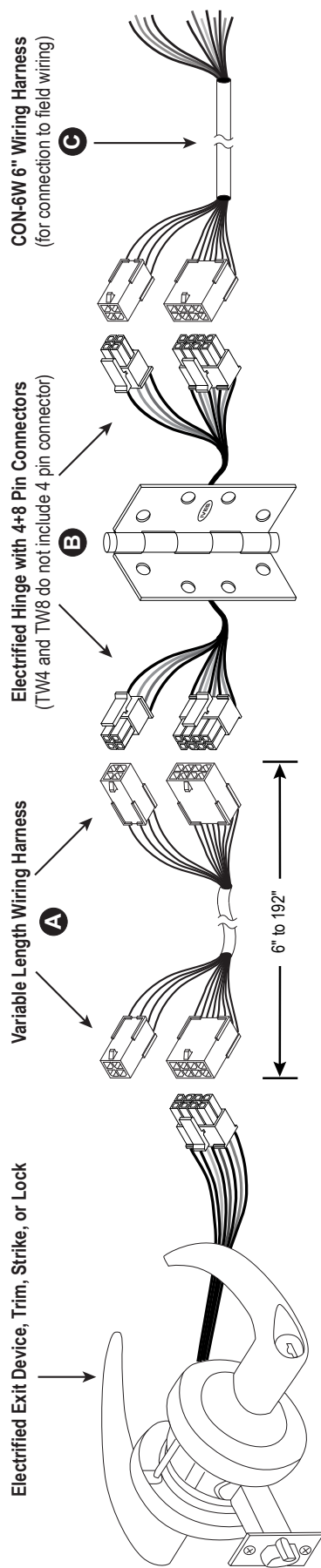
PURPOSE	FUNCTION	Lock Connector		Harness Connector	
		WIRE COLOR	PIN	PIN	WIRE COLOR
EL / EU	Power	Black	1	1	Red
	Power	Red	2	2	Black
RX	Normally Open (NO)	Violet	3	3	Blue
	Normally Closed (NC)	Gray	4	4	Yellow
	Common (C)	White	5	5	Green
			6	6	Gray
Not Used			7	7	Violet
			8	8	White

RX Only - 10 RX, 12 RX, 80 RX, 96 RX

PURPOSE	FUNCTION	Lock Connector		Harness Connector	
		WIRE COLOR	PIN	PIN	WIRE COLOR
Not Used			1	1	Red
			2	2	Black
RX	Normally Open (NO)	Violet	3	3	Blue
	Normally Closed (NC)	Gray	4	4	Yellow
	Common (C)	White	5	5	Green
			6	6	Gray
Not Used			7	7	Violet
			8	8	White

3CB1/5BB1 TW/TWM Architectural Hinge

The TW4 MON, TW8 MON, and TW12 Electrified Hinges are supplied with Allegion Connect 8 pin and 4 pin connectors. The TW4 and TW8 Electrified Hinges are supplied with Allegion Connect 8 pin connectors.

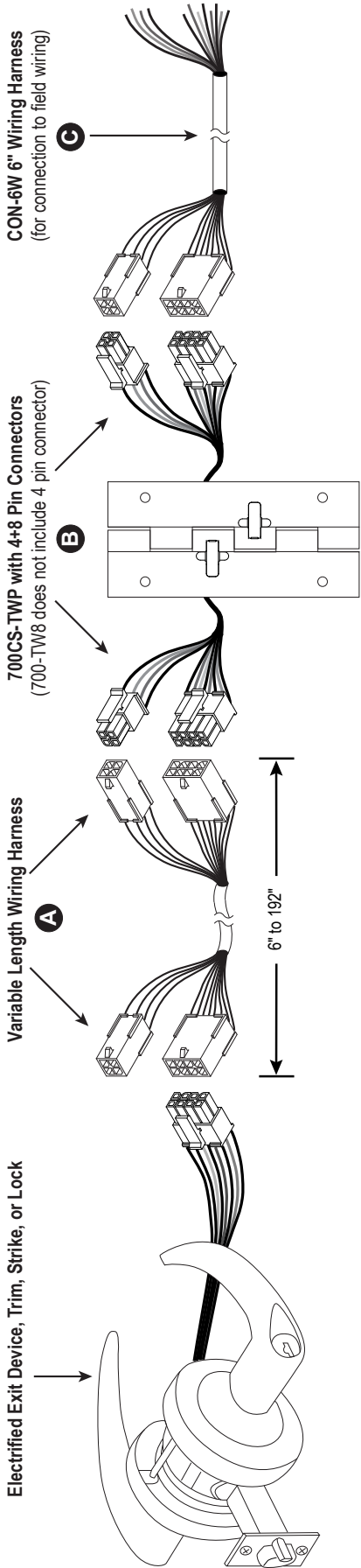


A		B		B		B		B		C	
WIRE COLOR	PIN	TW4 HINGE WIRE COLORS	TW4 MON HINGE WIRE COLORS	TW8 HINGE WIRE COLORS	TW8 MON HINGE WIRE COLORS	TW12 HINGE WIRE COLORS	PIN	PIN	WIRE COLOR		
Orange	1	↑	Green		Green	Orange	1	↑	Orange		
Brown	2	↑	Black		Black	Brown	2	↑	Brown		
Pink	3	↑	White		White	Pink	3	↑	Pink		
Tan	4	↑				Tan	4	↑	Tan		
Red	1	↑	Red	Red	Red	Red	1	↑	Red		
Black	2	↑	Yellow	Yellow	Yellow	Yellow	2	↑	Black		
Blue	3	↑	Violet	Violet	Violet	Violet	3	↑	Blue		
Yellow	4	↑	Gray	Gray	Gray	Gray	4	↑	Yellow		
Green	5	↑		White / Red	White / Red	White / Red	5	↑	Green		
Gray	6	↑		White / Yellow	White / Yellow	White / Yellow	6	↑	Gray		
Violet	7	↑		White / Violet	White / Violet	White / Violet	7	↑	Violet		
White	8	↑		White / Gray	White / Gray	White / Gray	8	↑	White		

NOTE: Field wiring from frame to power supply must be appropriate gauge. Refer to wire gauge specifications in instructions for the particular hardware.

700-TW8/700CS-TWP Continuous Hinge

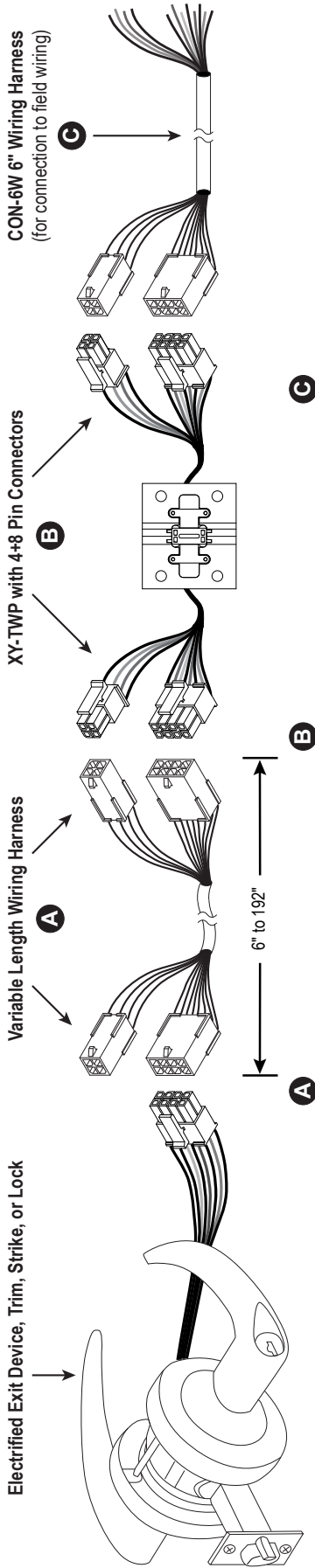
The 700-TW8 is supplied with Allegion Connect 8 pin connectors. The 700CS-TWP is supplied with Allegion Connect 8 pin and 4 pin connectors.



700CS-TWP	WIRE COLOR	PIN	700-TW8 WIRE COLORS	700CS-TWP WIRE COLORS	PIN	PIN	WIRE COLOR
700-TW8	Orange	1	↑	Orange	1	↑	Orange
	Brown	2	↑	Brown	2	↑	Brown
	Pink	3	↑	Red with Yellow Stripe	3	↑	Pink
	Tan	4	↑	Black with Yellow Stripe	4	↑	Tan
	Red	1	↑	Red	1	↑	Red
	Black	2	↑	Black	2	↑	Black
	Blue	3	↑	Blue	3	↑	Blue
	Yellow	4	↑	Yellow	4	↑	Yellow
700CS-TWP	Green	5	↑	Green	5	↑	Green
	Gray	6	↑	Gray	6	↑	Gray
	Violet	7	↑	Violet	7	↑	Violet
	White	8	↑	White	8	↑	White

NOTE: Field wiring from frame to power supply must be appropriate gauge. Refer to wire gauge specifications in instructions for the particular hardware.

112XY/224XY-TWP Continuous Hinge

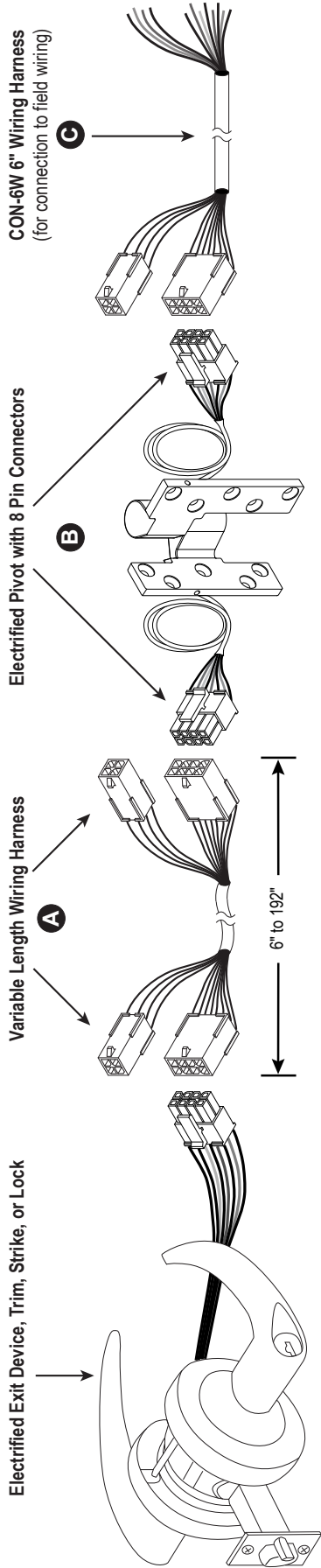


WIRE COLOR	PIN	XY-TWP WIRE COLORS	PIN	WIRE COLOR	PIN
Red	1	Orange	1	Red	1
Black	2	Brown	2	Black	2
Blue	3	Red with Yellow Stripe	3	Blue	3
Yellow	4	Black with Yellow Stripe	4	Yellow	4
				Green	5
				Gray	6
				Violet	7
				White	8
Red	1	Red	1	Red	1
Black	2	Black	2	Black	2
Blue	3	Blue	3	Blue	3
Yellow	4	Yellow	4	Yellow	4
Green	5	Green	5	Green	5
Gray	6	Gray	6	Gray	6
Violet	7	Violet	7	Violet	7
White	8	White	8	White	8

NOTE: Field wiring from frame to power supply must be appropriate gauge. Refer to wire gauge specifications in instructions for the particular hardware.

Intermediate and Pocket Pivots

The TW4 and TW8 Electrified Pivots are supplied with Allegion Connect 8 pin connectors.



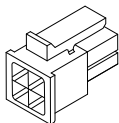
A		B		B		C	
WIRE COLOR	PIN	PIN	TW4 PIVOT WIRE COLORS	TW8 PIVOT WIRE COLORS	PIN	PIN	WIRE COLOR
Orange	1	1			1	1	Orange
Brown	2	2			2	2	Brown
Pink	3	3			3	3	Pink
Tan	4	4			4	4	Tan
Red	1	1	Red	Red	1	1	Red
Black	2	2	Yellow	Yellow	2	2	Black
Blue	3	3	Violet	Violet	3	3	Blue
Yellow	4	4	Gray	Gray	4	4	Yellow
Green	5	5	-	White / Red	5	5	Green
Gray	6	6	-	White / Yellow	6	6	Gray
Violet	7	7	-	White / Violet	7	7	Violet
White	8	8	-	White / Gray	8	8	White

NOTE: Field wiring from frame to power supply must be appropriate gauge. Refer to wire gauge specifications in instructions for the particular hardware.

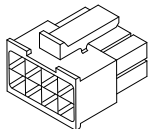
NOTE: Applies for 7215/7226/7227 PT INT, 7215F/7226F/7227F PT INT, 7230F/7237F PT INT, E91105F.

Connector Kit

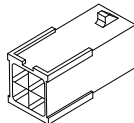
Included in Kit (CON-KIT 050823):



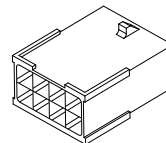
4-pin Male Connectors
(Qty. 10)



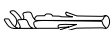
8-pin Male Connectors
(Qty. 10)



4-pin Female Connectors
(Qty. 10)



8-pin Female Connectors
(Qty. 10)



Female Terminals (Qty. 100)
compatible with 20-24 gauge wires



Extraction Tool
See next page for instructions



Male Terminals (Qty. 100)
compatible with 20-24 gauge wires

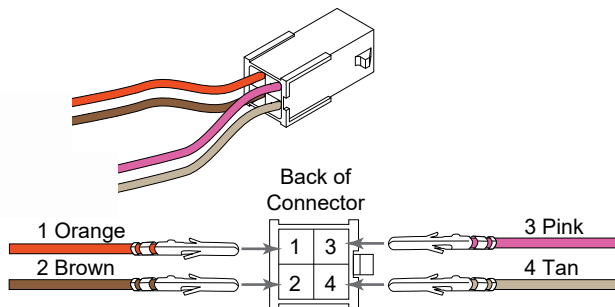
Not Included in Kit:

Crimping Tool

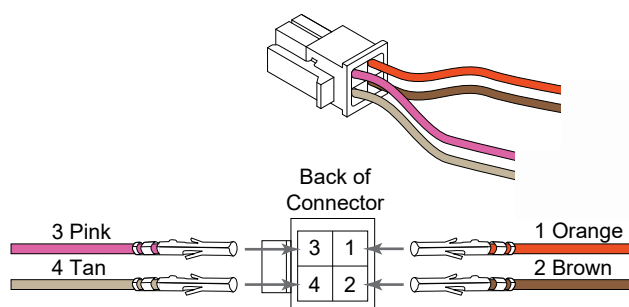
Can be purchased elsewhere (Molex part number 63819-0000)
This will be required to install terminals on loose wires

Wire Color to Pin Alignment

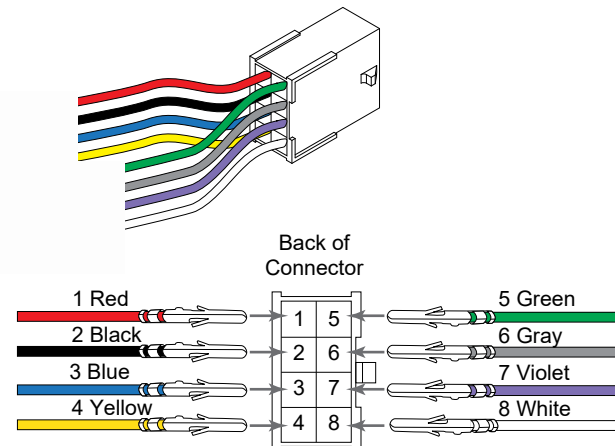
4 Pin Female



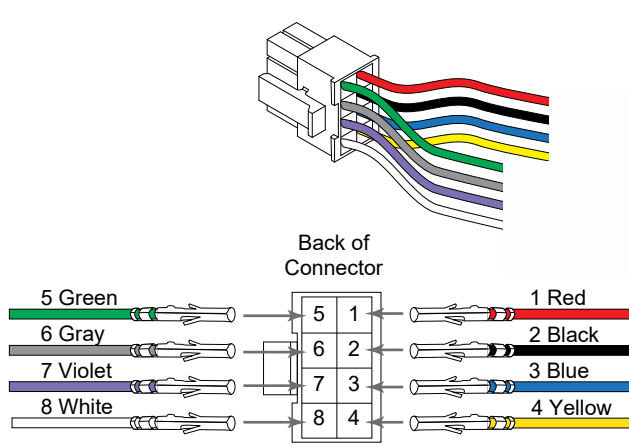
4 Pin Male



8 Pin Female

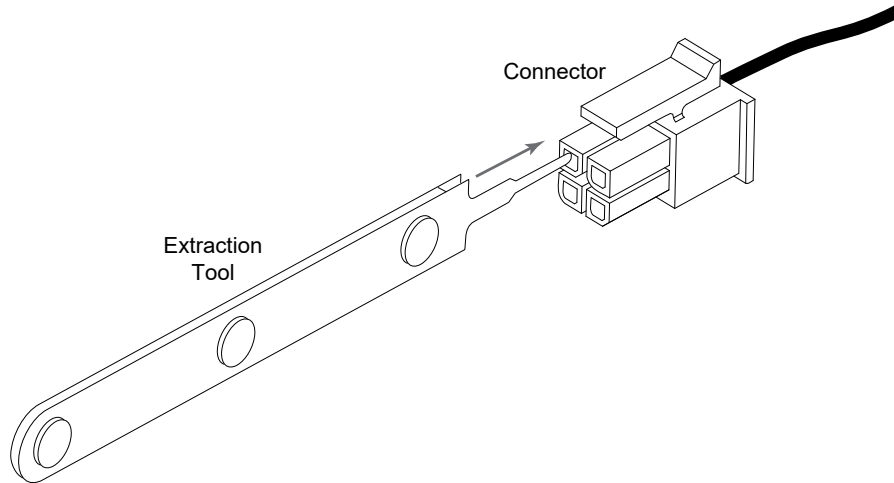


8 Pin Male



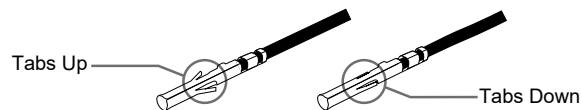
Extraction Tool Instructions

- 1 Insert extractor tool tip into front of connector on either side of the terminal until it stops.



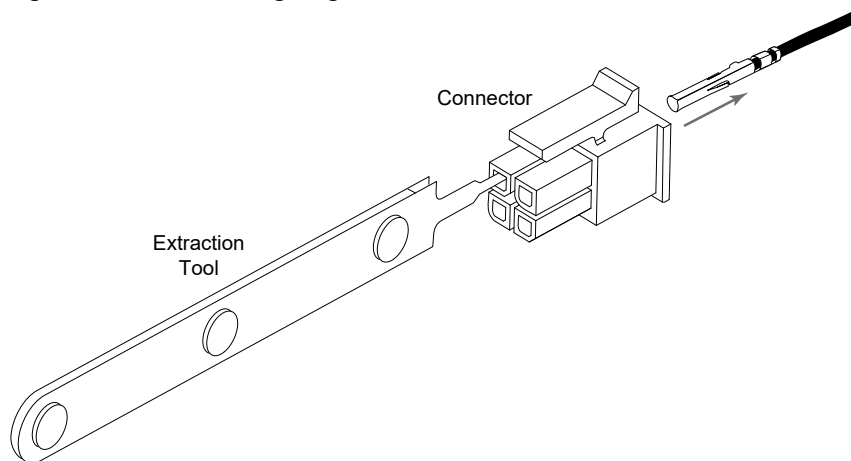
- 2 Rotate tool clockwise then counter-clockwise approximately 25° to 30° in each direction, once or twice.

- 3 Repeat steps 1 and 2 on the opposite side of terminal until tabs are bent down.



- 4 Pull wire out of back of connector housing.

NOTE: Removal damages the terminal locking tangs. The terminal is not reusable.



About Allegion

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises 27 global brands, including strategic brands CISA®, Interflex®, LCN®, Schlage® and Von Duprin®.

For more, visit www.allegion.com.

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