



24908428

QEL 94/95 INPACT

VON DUPRIN®

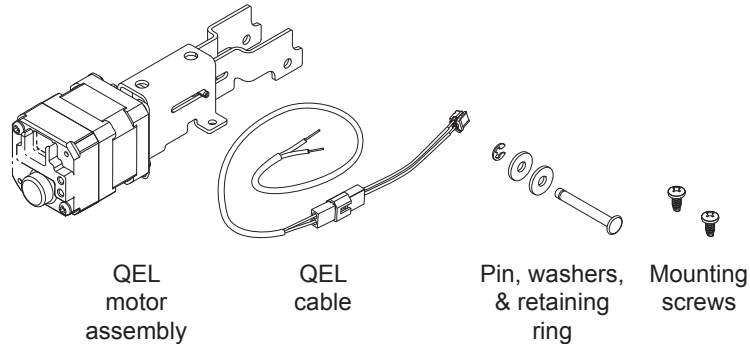
QEL Conversion Kit

Installation Instructions



1. This kit converts the following mechanical INPACT exit devices to quiet electric latch (QEL) retraction devices: 94/9547, and all 94/9575 series.
2. This kit can also be used for motor replacement on existing QEL INPACT devices.
3. Install according to instructions or device will not function and panic or fire label will be void.
4. The QEL wiring must be attached to the fire alarm system if installed on fire exit hardware.

Parts

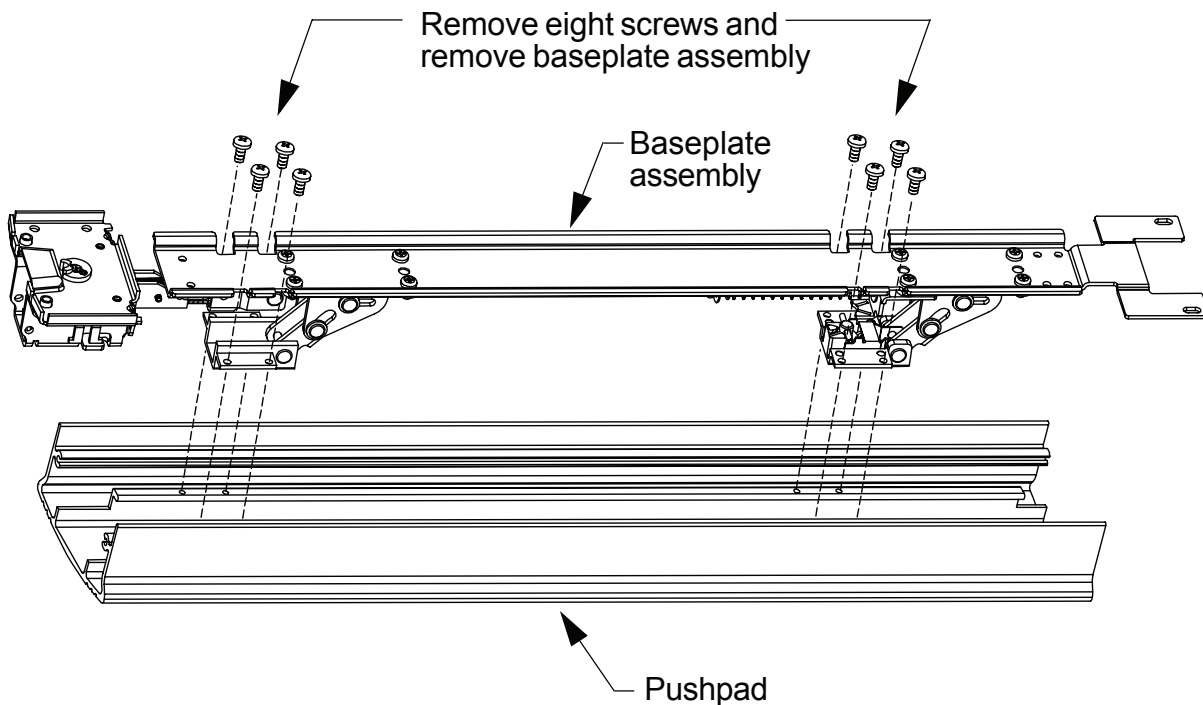


1 ⚠ Disconnect Power ⚠

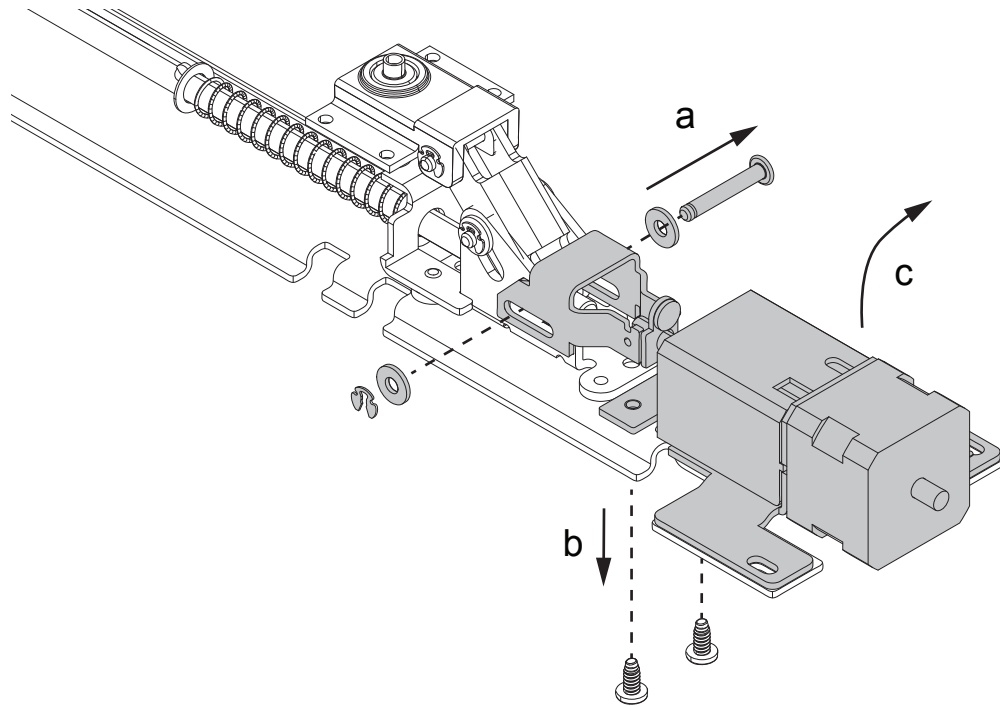
To avoid risk of shock, disconnect AC power from power supply before proceeding with this conversion. If using 900-BB Battery Backup option, unplug all four wires from battery terminals.

2 Remove device from door if installed (see device instructions).

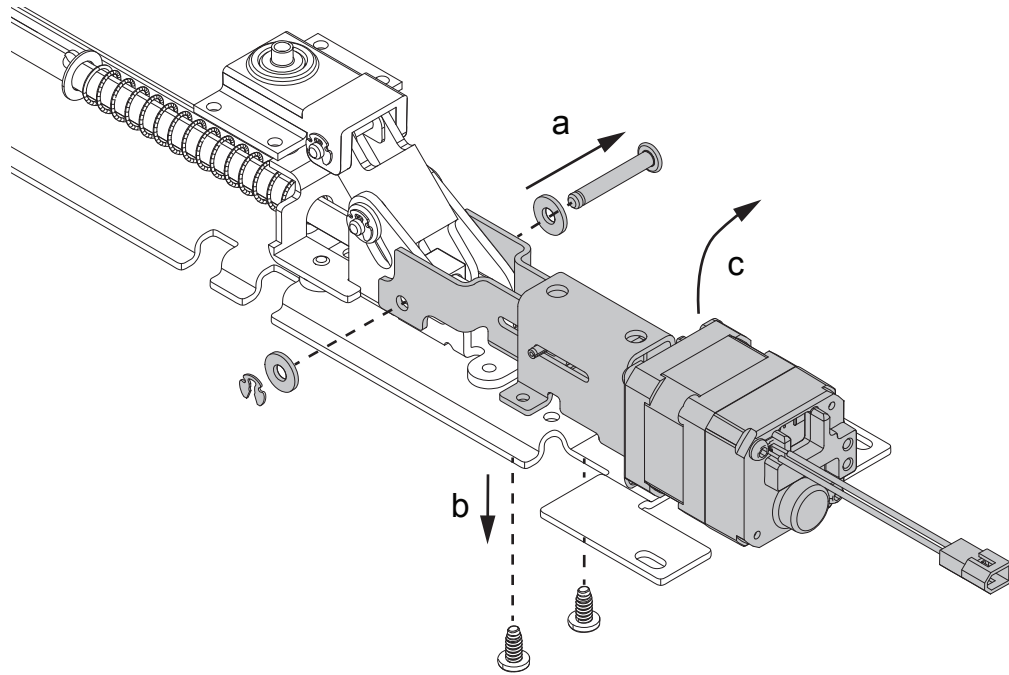
3 Remove baseplate assembly from pushpad.



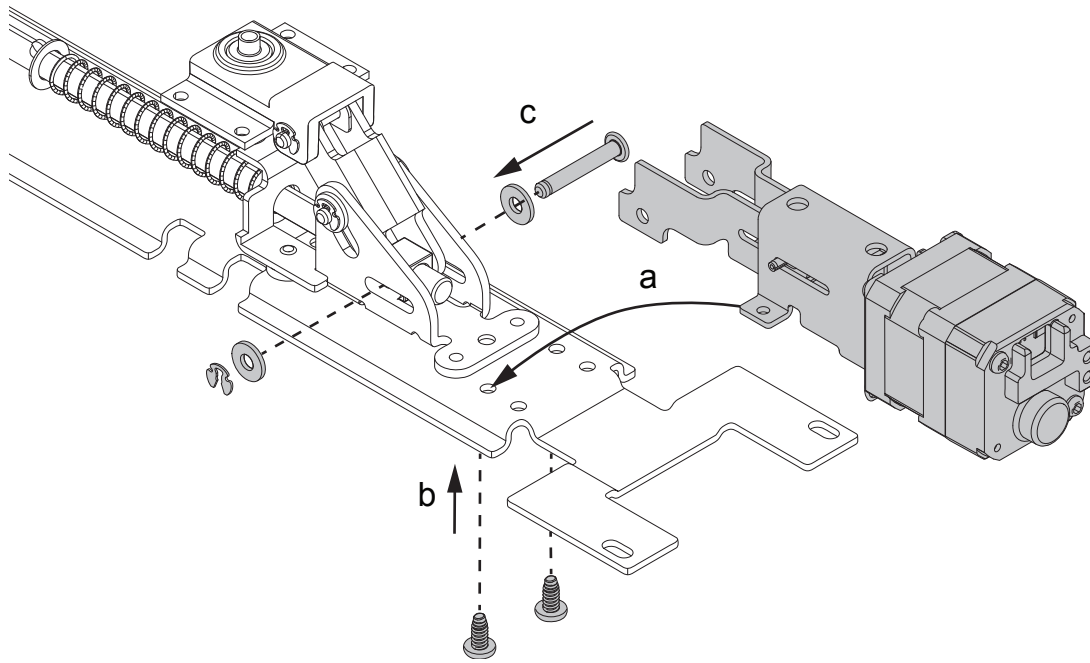
4 If old QEL motor (made prior to Dec. 2014) is present, remove as shown.



5 If replacing current QEL motor, remove as shown.



6 Install new QEL motor assembly and new pin, washers, retaining clip, and mounting screws as shown.



7 Reinstall Baseplate Assembly to Pushpad

8 Confirm Equipment Compatibility

The QEL is compatible with the following equipment (refer to individual instructions as needed):

- PS900-Series Power Supplies - PS902, PS904, PS906, PS914
- 900-Series Option Boards - 900-2RS, 900-4R, 900-4RL, 900-2Q
- PS873 Power Supply plus 871-2, 871-2Q, 873-4TD/AO Option Boards

9 Route Two Wires from QEL Exit Device to Power Supply

QEL Electrical Load

Voltage: 24 VDC
 Current: 1.0 A inrush (0.5 sec)
 0.14 A holding

PS900-Series Power Supply
with 900-Series Option
Board(s) installed

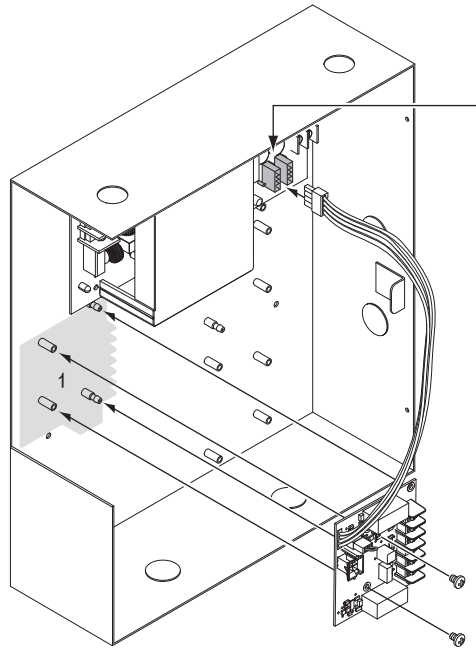
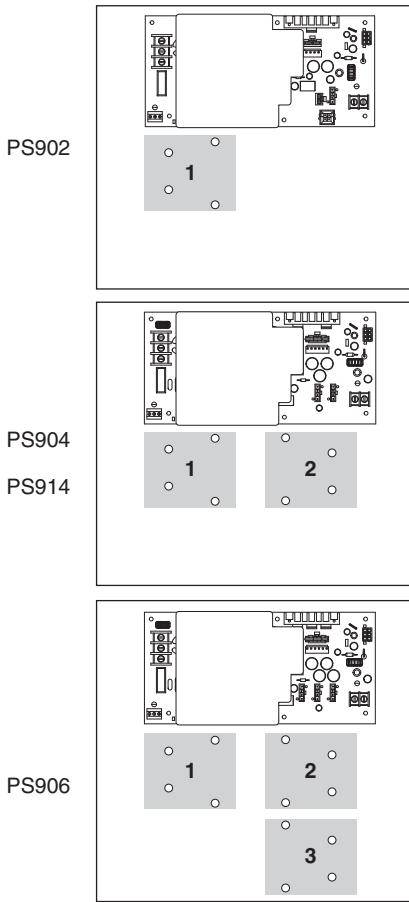
QEL device used with EPT,
Door Loop, or
Electric Hinge/Pivot

Distance (one way)	Wire Gauge
200'	18AWG
320'	16AWG
500'	14AWG
800'	12AWG

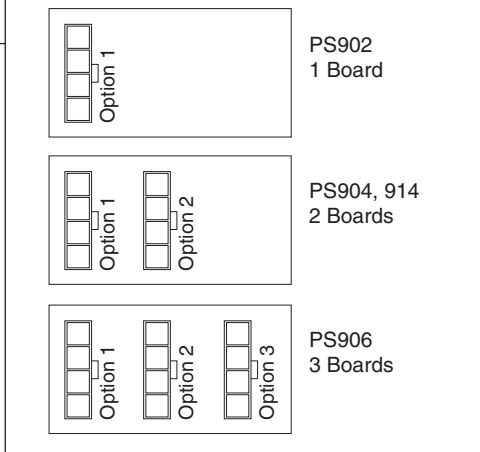
**Note: Power wires to QEL
are not polarized.**

10 Install 900-2Rs, 4RI, or 4R Option Board(s) into Power Supply

a Review Available 900 series Option Board Mounting Locations (Gray)



b Plug Option Board Cable into any Available Option Connector

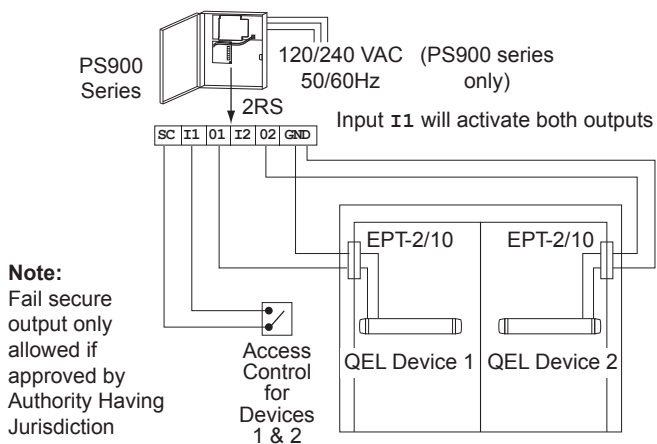


c Secure Board(s) with Screws

- Notes:**
1. 24VDC output setting required when QEL device connected
 2. If installing board in location 2 or 3, rotate board 180°
 3. The QEL is compatible with an existing 900-2Q board if currently installed.
 4. Latchbolt retraction of (2) sequenced QEL's requires more than 1 second to complete.
 5. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating.

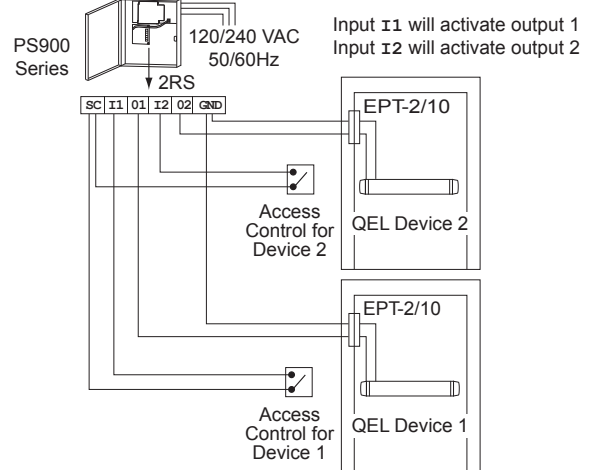
11 Connect Input and Output Wires to Option Board (2RS Shown)

Sequential Mode - Typical Wiring



Note:
Fail secure output only allowed if approved by Authority Having Jurisdiction

Individual Mode - Typical Wiring



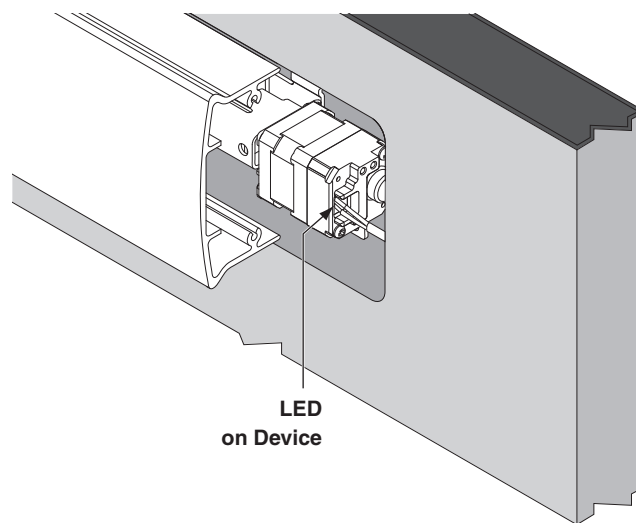
12 Check Operation

- A. Activate each input and verify all QEL devices operate properly.
- B. If any device does not operate properly, see step 13 for troubleshooting.

13 If Necessary, Troubleshoot Operation (LED is only visible with the mechanism cover removed)

Power at the QEL	QEL Response	Condition/Solution
24VDC	LED - Solid green Latchbolt - retracted	Operation normal, latch retracted immediately
	LED - Solid red after latchbolt attempts to retract multiple times	Latchbolt cannot fully retract mechanically Verify mechanical adjustment (on vertical rod or mortise lock devices if used). Remove and reapply input voltage to reset this condition.* See <i>Check Mechanical Operation</i> on page 6 as needed.**
	LED - Flashing green/red Latchbolt - not retracted	Excessive tamper (while power applied, the pushpad was pulled out at least 3 time) Wait 15 seconds and latchbolt will retract again OR remove and reapply power to clear condition
24VDC low	LED - Flashing green Latchbolt - retracted	Voltage low during latchbolt retraction (latchbolt retracts at reduced force) Wire length is too long, wire gauge is too small or power supply has poor regulation
29VDC or greater	LED- Flashing red Latchbolt - will not retract	Input voltage is too high for proper operation Wrong power supply, power supply defective.
13VDC or lower		Input voltage is too low for proper operation Wrong power supply, power supply defective or not set to the proper output voltage. To set, remove AC power from power supply, change power supply setting from 12 to 24VDC, then reapply AC power and verify proper operation.
0VDC	LED - off Latchbolt - not retracted	No input voltage Problem with the power supply, control switch or wiring
0VDC	LED - off Latchbolt - retracted	No input voltage Mechanical dogging is engaged

*For information about adjusting exit devices, you can find their installation instructions in the support area at www.allegion.com/us or call Technical Services at 1-877-671-7011

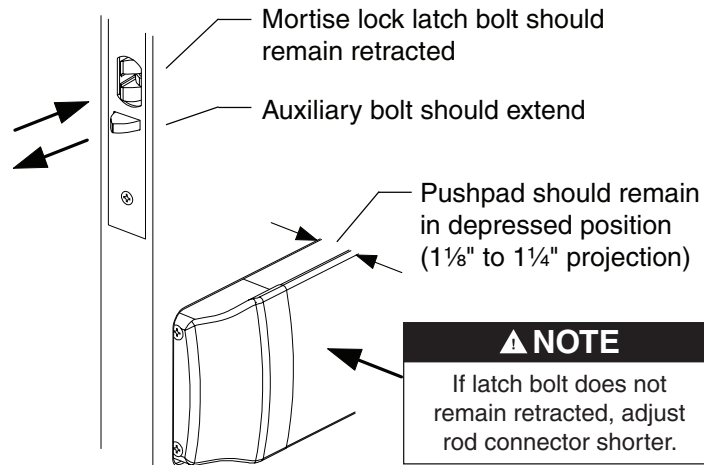


14 Test Mechanical Device Operation (QEL94/9547)

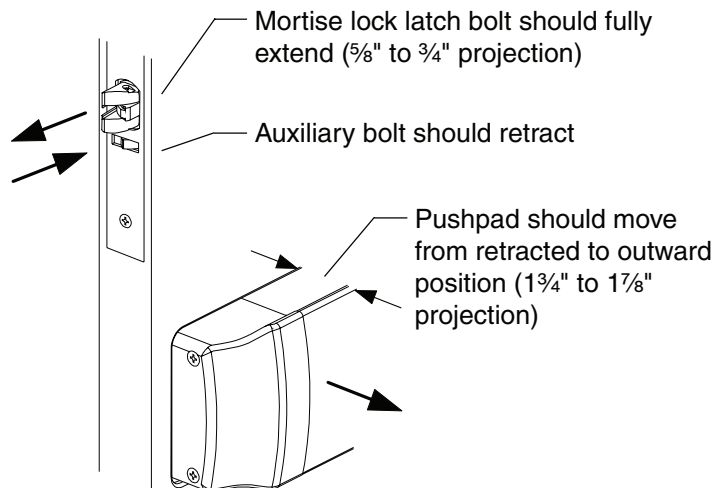
- 14a Fully depress pushpad and push door open.
- 14b Release pushpad. Latch bolts should remain retracted.
- 14c Close door. Latch bolts should fully extend ($5/8" \pm 1/16"$) and engage strikes.

15 Test Mechanical Device Operation (QEL94/9575)

- 15a Fully depress pushpad, push door open, and release pushpad.



- 15b Close door or press auxiliary bolt in.



Customer Service

1-877-671-7011 www.allegion.com/us



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Printed in U.S.A.
24908428 Rev. 11/15-b