## IMPORTANT

1. This kit converts all 33A/35A and 98/99 series QEL panic and fire devices to ESL (Emergency Secure Lockdown) devices.
2. Installation on devices other than QEL will result in loss of function and will void listing(s).
3. Install according to instructions or device will not function and panic or fire label will be void.

## Tools

Required:


May also require:


## Installation Components

ESL Kit

Wire management bracket

## Parts

 ordered separately.Examples: B502-191 XQ11-947

Keyed cylinder


Cylinder with straight cam Back view



Unit requires a standard $1 \frac{114 " ~(32 m m) ~ m o r t i s e ~ c y l i n d e r ~ w i t h ~}{\text { n }}$ an inverted straight cam and compression ring and spring. Kit does not come with cylinder or thumbturn, must be

Schlage conventional cylinder: 20-001 1 ¼" XQ11-949
Schlage thumbturn cylinder: 09-904 1 1⁄4" B502-191 XQ11-947
Schlage ADA thumbturn cylinder: 09-904 1 ¼" XB11-720

Thumbturn cylinder


## NOTICE

If you are using a cylinder without an inverted straight cam, please refer to step $2 b$ to invert the cam.

## NOTICE

## ! CAUTION

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

## 2 Install thumbturn cylinder or optional key cylinder.

2a Remove and discard cylinder plug from key switch assembly. Keep key switch cable routed as shown.


2b Reverse cylinder cam position with key removed as shown (skip step if cam is already inverted.)


3 Remove end cap.
Keep these components for reuse after ESL installation.


4 Remove existing mechanism case cover.


5 Verify device and cover dimensions.
5a Verify the length of the mechanism case.
The mechanism case length should be at least 29.0" ( 736.6 mm ).

- Remove the center case cover.

- Measure the mechanism case.


5b Verify that the length of the ESL mech case cover matches the length of the old mech case cover.

If the length of the covers matches, discard the old cover and skip to step 6.

If the ESL cover length does not match the old cover, complete the following steps:

1. Use the old cover to determine the length for the new cover.
2. Mark the new cover on the end opposite the cylinder as shown.
3. Cut the new cover on the end opposite the cylinder to match the length of the old cover.
4. File down any rough edges.
5. Discard the old cover.



7 Install wire management bracket into mechanism case.
7a The wire management bracket ensures wires do not interfere with the moving parts of the key switch mechanism and must be installed for proper operation.


7b Place the bracket 1" ( 25 mm ) from the end of the mechanism case.


8a Verify that the security indicator is in the UNLOCKED position.

8b Verify that handing is correct for the security indicator. If the text is upside down, flip the indicator (see details at "Rehand Security Indicator (if necessary)" on page 6).

8c Slide the ESL assembly into the case approximately halfway.


## 9 Insert cable and connect ESL key switch to QEL assembly.

9a Feed the black cable with the large 2-pin connector into the mechanism case behind the wire management bracket.


9b Connect black cable with the large 2-pin connector to the QEL cable.


10a Slide the ESL assembly completely into the mechanism case.

10b Push the remainder of the long cable under the wire management bracket.

10c Route additional two signal wires through power transfer and into device (A).

10d Connect the two new wires to ESL signal wires (B).
10e Connect the 2-pin connectors (C).
(i) If necessary, trim the thru-door cable to fit beneath the wire management bracket.


## 11 Connect the thru-door cables.

Connect wires to power transfer. See ESL Typical Wiring Diagrams on page 7.


## 12 Replace the end cap and screws.



## 13 Reconnect power.

Reconnect AC power to power supply, or if using $900-\mathrm{BB}$ Battery Backup option, plug all four wires into battery terminals.

## 14 Test for proper operation.

14a With the device in the UNLOCKED position, test with card access system or credential the operation of the QEL. QEL should function normally.

14b Turn the key or thumbturn to the LOCKED position. Test with card access system or credential. Verify that QEL is no longer functional.

Rehand Security Indicator (if necessary)

1. Rotate key switch to the LOCKED position. Remove tumbler assembly from back side of cover plate.

2. Remove tumbler spring from assembly.

3. Reinstall tumbler spring on opposite side of assembly.

4. Reinstall tumbler assembly by snapping it into the clips on the back side of the cover plate.


Note: The spring must be installed on the side of the tumbler away from the key switch.

## ESL Typical Wiring Diagrams



## POINT TO POINT DIAGRAM SINGLE DOOR

NOTE:
*Use \#12 gauge wire up to 800' from EPT/Electric Hinge to PS902.
*Use \#14 gauge wire up to 500' from EPT/Electric hinge to PS902.
*Use \#16 gauge wire up to 320' from EPT/Electric hinge to PS902.
*Use \#18 gauge wire up to 200' from EPT/Electric hinge to PS902.
${ }^{* *}$ Additional wiring required, see manufacturer's installation instructions.
***To be monitored by Card Access System.
****900-4R: Set Zone 2 for dry contact output. See 900-4R installation instructions.


POINT TO POINT DIAGRAM DOUBLE DOOR
NOTE:
*Use \#12 gauge wire up to 800' from EPT/Electric Hinge to PS904.
*Use \#14 gauge wire up to 500' from EPT/Electric Hinge to PS904.
*Use \#16 gauge wire up to 320' from EPT/Electric Hinge to PS904.
*Use \#18 gauge wire up to 200' from EPT/Electric Hinge to PS904.
**Additional wiring required, see manufacturer's installation instructions.
***To be monitored by card access system.
****900-4R: board \#1: Set Zone $1 \& 2$ for dry contact outputs. Board \#2: Set Zone 2 \& 4 for dry contact outputs. See 900-4R installation instructions.


## RISER DIAGRAM SINGLE DOOR

Operation:

- Card access system to unlock the electric exit device to allow entry.
- Emergency local lockdown thumbturn on pushside of the exit device to interrupt the power \& extend the electric exit device latchbolt to secure the door from pullside \& send signal to card access system.
-When emergency lockdown is activated card access system no longer operates.
- Physical access via key override from pullside.
- Free egress at all times.



## RISER DIAGRAM DOUBLE DOOR

Operation:

- Card access system to unlock the electric exit devices to allow entry.
- Emergency local lockdown thumbturns on pushside of the exit devices to interrupt the power \& extend the electric exit device latch bolts to secure the doors from pullside \& send signal to card access system.
-When emergency lockdown is activated card access system no longer operates.
- Physical access via key override from pullside.
- Free egress at all times.


| Additional Notes: |
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| 1. None |
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