



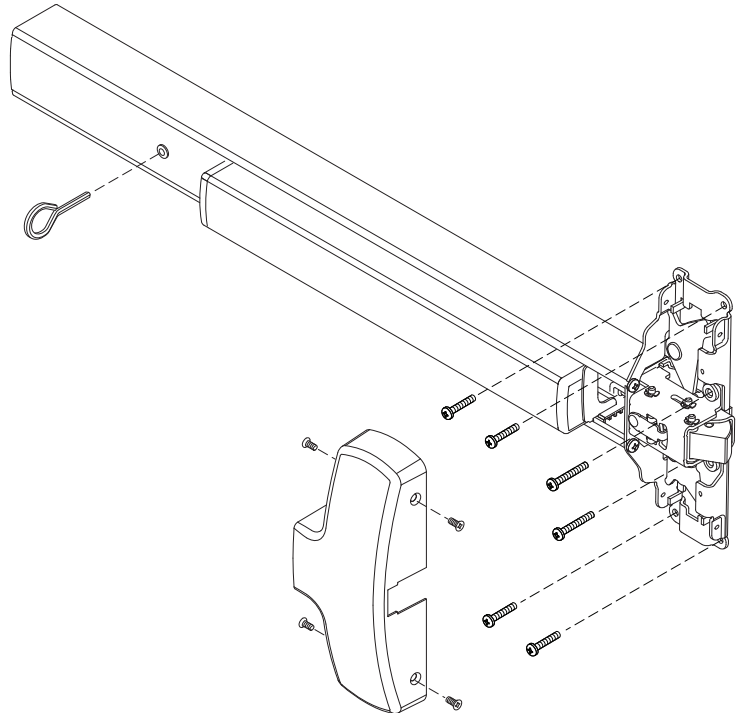
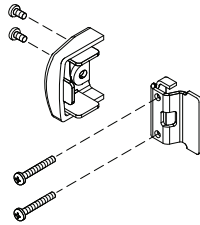
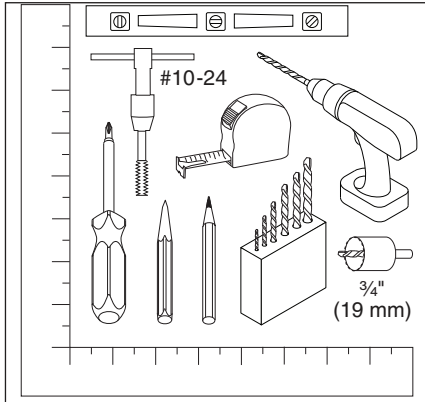
640005-00

# 25-R & F-25-R

**FALCON®**

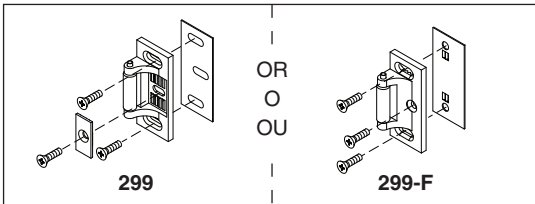
Rim Exit Device  
Dispositivo de salida con montura  
Appareil de sortie du rebord

Installation Instructions  
Instrucciones de Instalacion  
Notice d'Installation



## Dogging Key Llave de trinquete Cœillet vissé

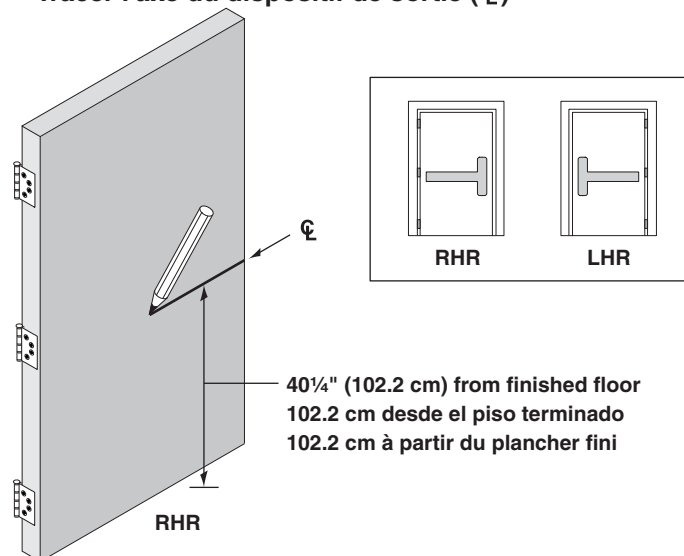
Use to lock down pushbar  
Utilicelo para asegurar hacia abajo la barra de empuje  
Utilisé pour verrouiller la barre antipanique



If sexbolts are in box, see Sexbolt Preparation on back page  
Si los pernos macho-hembra se encuentran en la caja, consulte preparación de pernos macho-hembra en la página posterior  
Si les colonnettes sont dans la boîte, voir la préparation de colonnettes au verso de la page

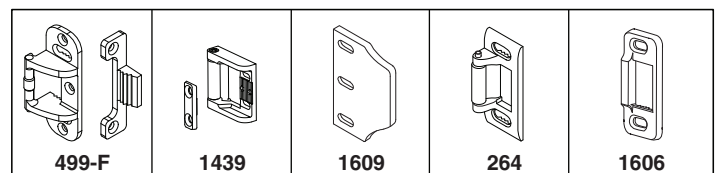
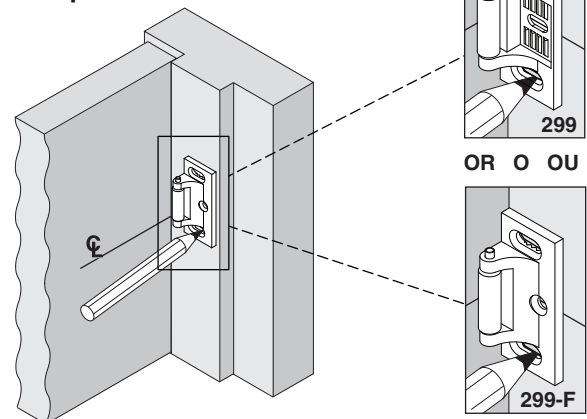
## 1 Draw Exit Device Centerline (☿)

Sacar la línea central del dispositivo de salida (☿)  
Tracer l'axe du dispositif de sortie (☿)



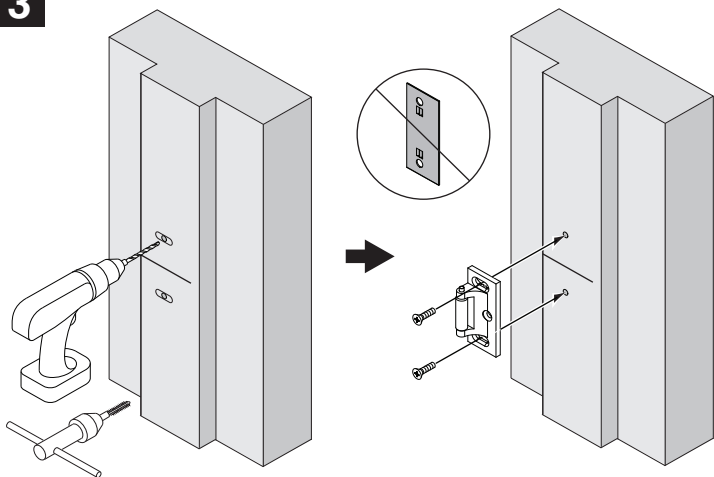
**2**

## Mark 2 Slots Marque 2 ranuras Marquer 2 fentes



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3

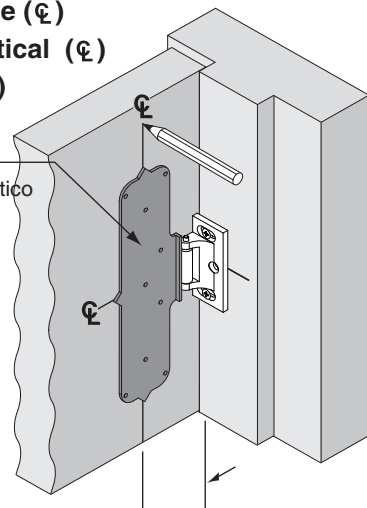


| Metal       | Metal                                   | Métal |
|-------------|-----------------------------------------|-------|
| #25         | #10-24                                  |       |
|             |                                         |       |
| OR O OU     |                                         |       |
| Wood        | Madera                                  | Bois  |
| 1/8" (3 mm) | 1" (25 mm) deep/profundidad/ profondeur |       |
|             |                                         |       |

4

**Draw Vertical Centerline (☿)**  
**Sacar línea central vertical (☿)**  
**Tracer l'axe vertical (☿)**

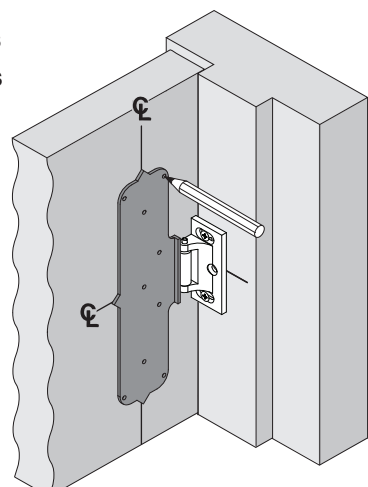
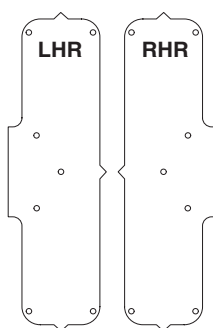
Center point on plastic template  
 Punto central en la plantilla de plástico  
 Placer la pointe de centrage sur le gabarit de plastique



☿ parallel with door edge  
 paralelo con el borde de la puerta  
 parallèlement au bord de la porte

5

**Mark 7 Holes**  
**Marque 7 orificios**  
**Marquer 7 orifices**



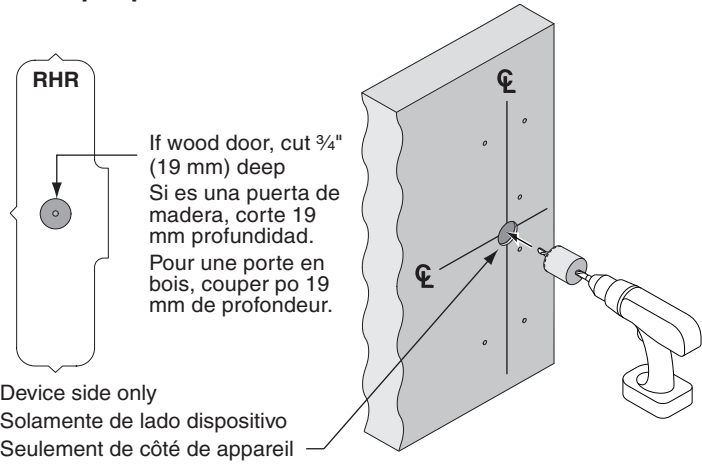
6

**If Using the NL-OP (Cylinder Only) Option, See Their Instructions**  
**Si utiliza la Opción NL-OP (sólo Cilindro), consulte las instrucciones**  
**Si vous utilisez l'option NL-OP (cylindre seulement), veuillez en consulter les instructions**

**Note:** NL-OP function does not require the 3/4" hole shown in step 7, skip to step 8  
**Nota:** La función NL-OP no requiere el agujero de 19mm que se muestra en el paso 7. Saltee hasta el paso 8  
**Note :** La fonction NL-OP ne nécessite pas le trou de 19mm po illustré à l'étape 7. Passez à l'étape 8

7

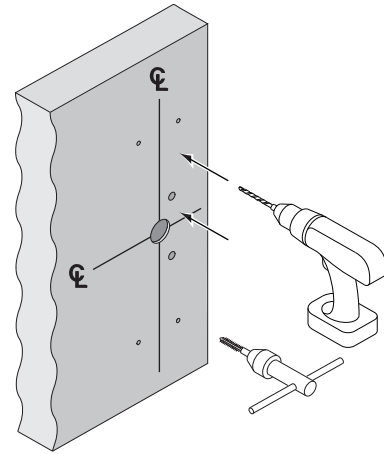
**Cut 3/4" (19 mm) Center Hole**  
**Corte 19 mm Orificio central**  
**Couper po 19 mm au centre**



8

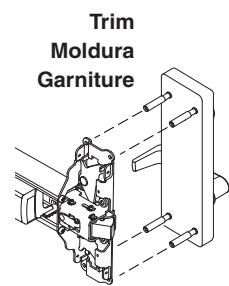
**Prepare 2 Holes**  
**Prepare 2 orificios**  
**Préparer 2 orifices**

| Metal                    | Metal  | Métal |
|--------------------------|--------|-------|
| #25                      |        |       |
| #10-24                   |        |       |
| OR O OU                  |        |       |
| Wood                     | Madera | Bois  |
| 1/8" (3 mm) X 1" (25 mm) |        |       |
|                          |        |       |



9

**If Installing Trim, Go To Trim Instructions**  
**Sin instala la moldura, Vaya a instrucciones de moldura**  
**Pour l'installation d'une garniture, voir les instructions de garniture**



10

**Prepare 4 Holes\***  
**Prepare 4 orificios\***  
**Préparer 4 orifices\***

**Metal Metal Métal**

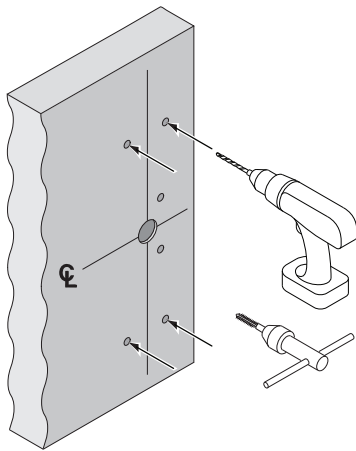
#25

#10-24

--- OR O OU ---

**Wood Madera Bois**

1/8" (3 mm) X 1" (25 mm)

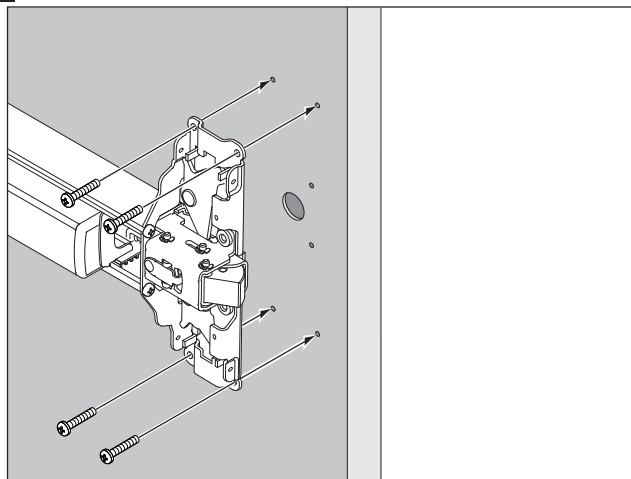


\*If using trim, holes may have been drilled already

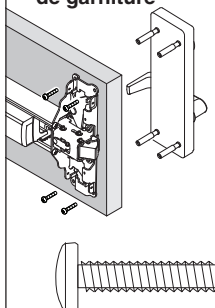
\*Si utiliza la moldura, los orificios ya tienen que estar perforados

\*Les orifices peuvent être déjà percés si vous utilisez une garniture

12

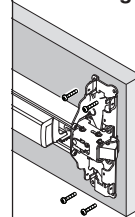


**Thru-bolting Trim**  
**Moldura apernada**  
**Vissage transversal**  
**de garniture**



OR  
O  
OU

**Surface Mount**  
**Montaje de la superficie**  
**Montage en surface**

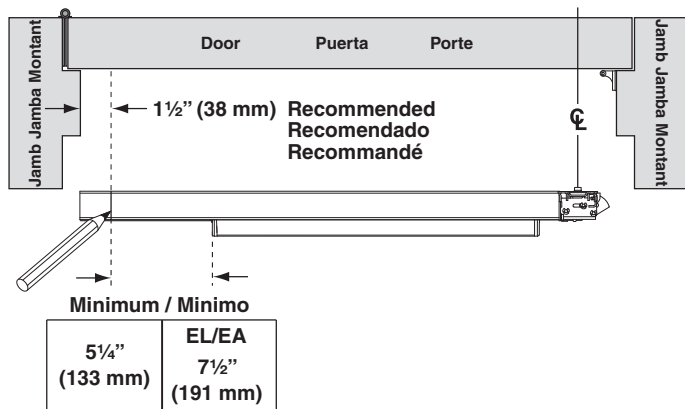


**Metal/Metal/Métal**

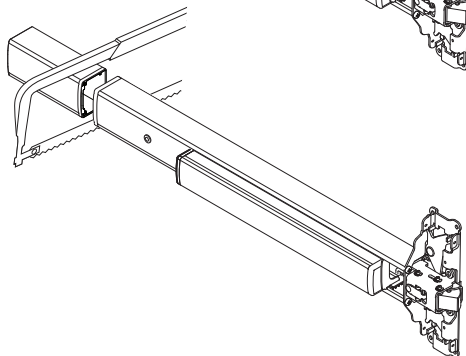
**Wood/Madera/Bois**

11

**If Necessary, Cut Device**  
**Si es necesario, corte el dispositivo**  
**Couper le dispositif si nécessaire**

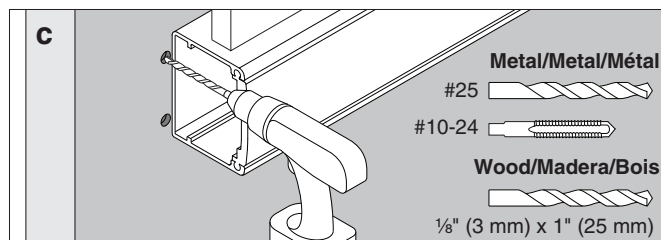
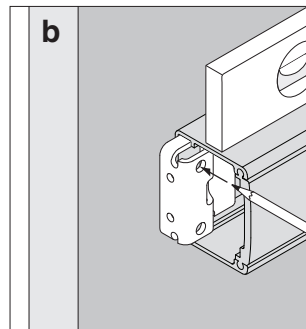
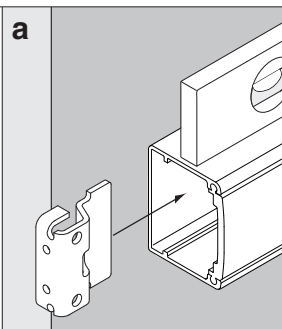


**Cover Plate Flush**  
**Alinee la placa de la cubierta**  
**Plaque-couvercle encastrée**

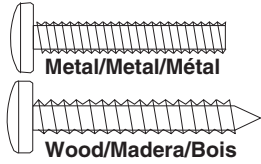
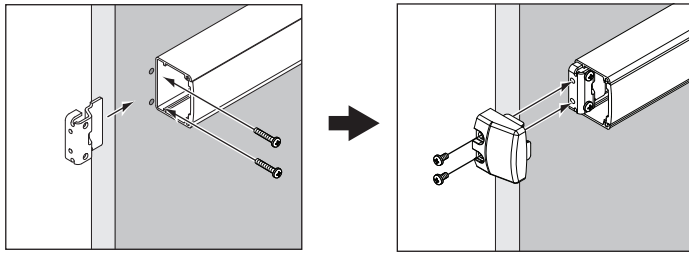


13

**Mark and Prepare 2 Holes**  
**Marque y prepare 2 orificios**  
**Marquer et préparer 2 orifices**



14



Metal/Metal/Métal

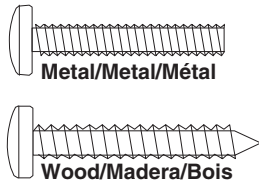
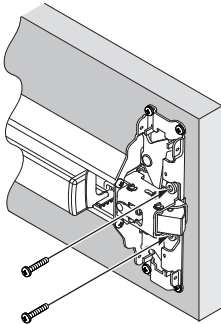
Wood/Madera/Bois

15

### Install Required Support Screws

Instale los tornillos de soporte que se requiere

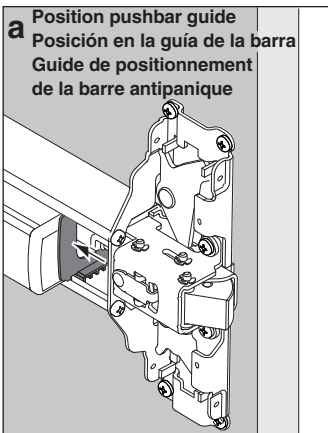
Installer les vis de support



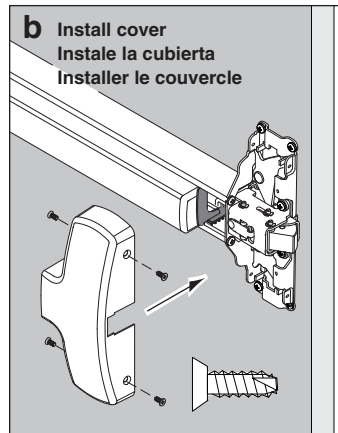
Metal/Metal/Métal

Wood/Madera/Bois

16



**a** Position pushbar guide  
Posición en la guía de la barra  
Guide de positionnement  
de la barre antipanique



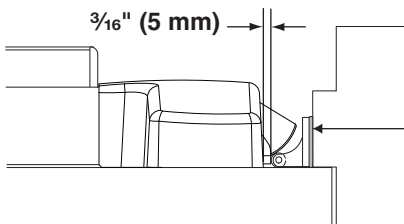
**b** Install cover  
Instale la cubierta  
Installer le couvercle

17

### Check Dimension

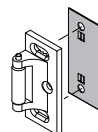
Verifique las Dimensiones

Vérifier la dimension



3/16" (5 mm)

Shim as needed  
Calce conforme  
sea necesario  
Caler au besoin

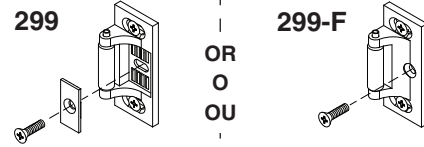


18

### Install Support Screw

Instale el tornillo de soporte

Installer la vis de support



299

299-F

OR  
O  
OU

Metal

Metal

Métal

#25

#10-24

Wood

Madera

Bois

1/8" (3 mm)

1" (25 mm)  
deep/profundidad/  
profondeur

### Sexbolt Perno macho-hembra Colonne Preparation Préparation Préparation



If sexbolts are in box, during steps 8, 10, & 13 prepare holes and install them as shown below



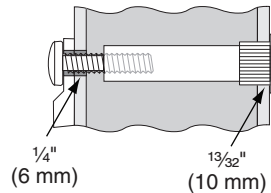
Si los pernos macho-hembra se encuentran en la caja, durante los pasos 8, 10 y 13 prepare los orificios

Si les colonnettes sont dans la boîte, préparer les orifices pendant les étapes 8, 10 et 13

Metal/Metal/Métal

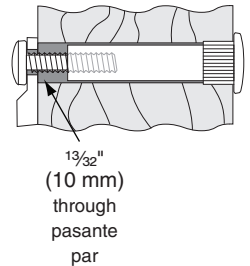
OR  
O  
OU

Wood/Madera/Bois

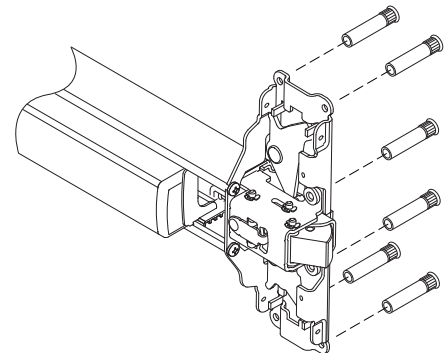
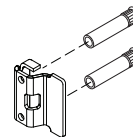


1/4" (6 mm)

13/32" (10 mm)



13/32" (10 mm)  
through  
pasante  
par



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640005-00 Rev. 01/14-c



941367-00

# MEL 24/25 Series

**FALCON®**

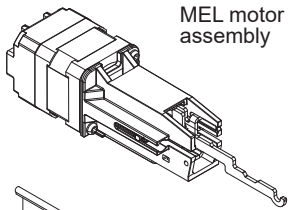
Motorized Electric Latch Retraction

Installation Instructions

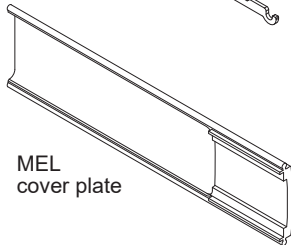


These instructions are for MEL conversion kits or MEL devices with preinstalled motors.

## Parts



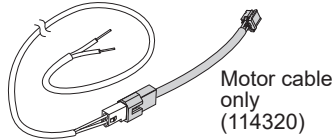
MEL motor assembly



MEL cover plate



Do not discard



Motor cable only  
(114320)

MEL 6' cable with motor cable  
(47269206)



MEL motor mounting  
4-20 x 1/4" FHP screws (qty 2)

### Allegion Connect accessories available to order

106198 MEL-CON adapter cable with 8-pin connector

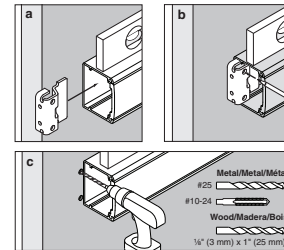
040069 MEL motor cable + MEL-CON adapter cable with 8-pin connector



If MEL is preinstalled in the device:

- A. Follow original device instruction up to the point where this end mounting bracket step has been completed.

### Mark and Prepare 2 Holes



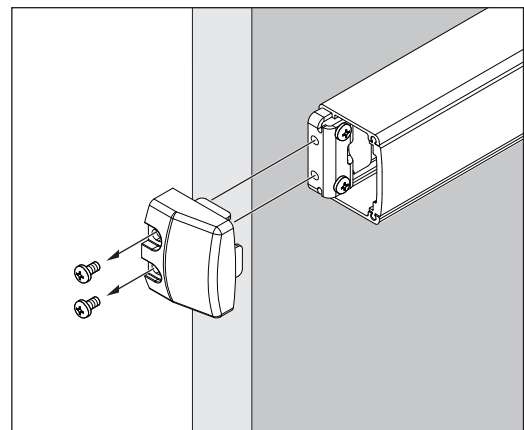
- B. Complete MEL wiring per steps 15-21 of this instruction.

- C. Return to original device instruction at point you left off, and complete installation.

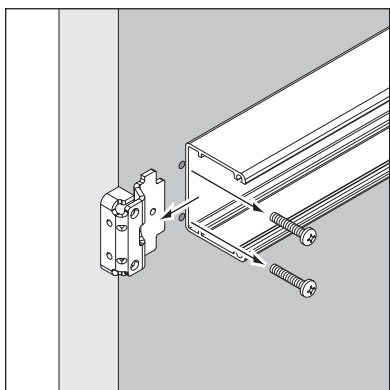


If installing the MEL conversion kit, follow the instruction steps as written.

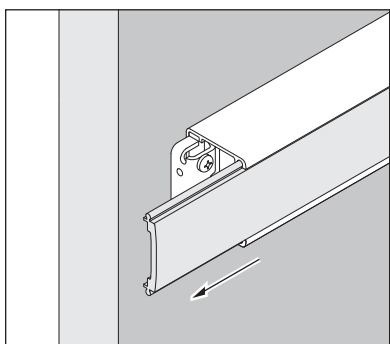
## 1 Remove end cap



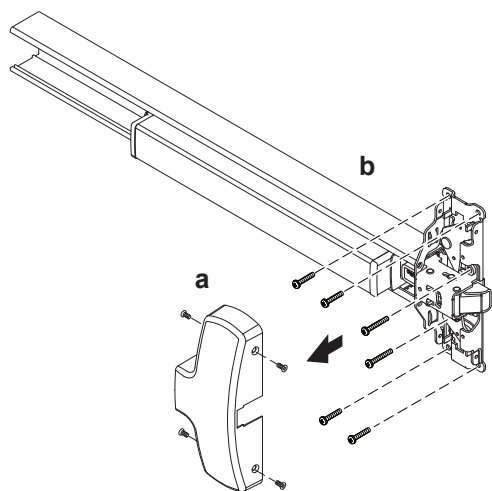
## 2 Remove device end mounting bracket from door



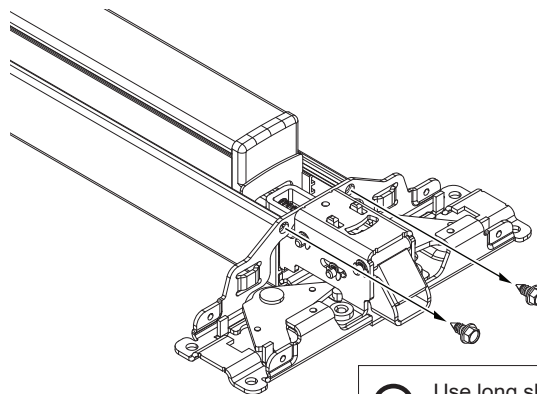
## 3 Slide back, remove and discard old cover plate



## 4 Remove center case cover and device from door



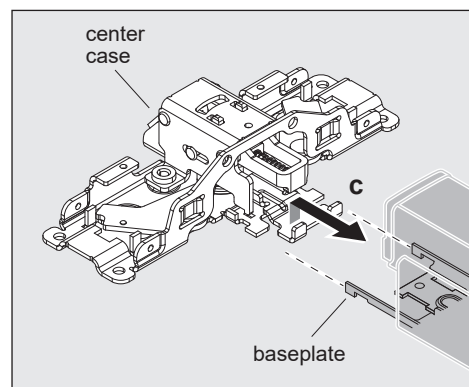
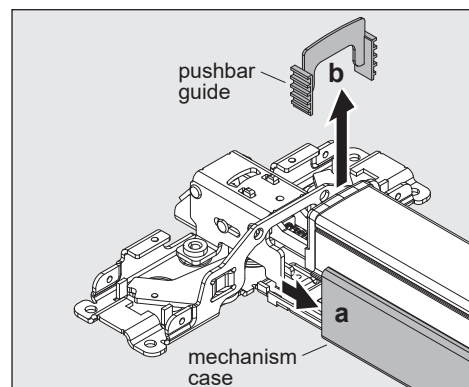
## 5 With device laying on a table or bench, remove the 2 screws that connect mechanism case to center case



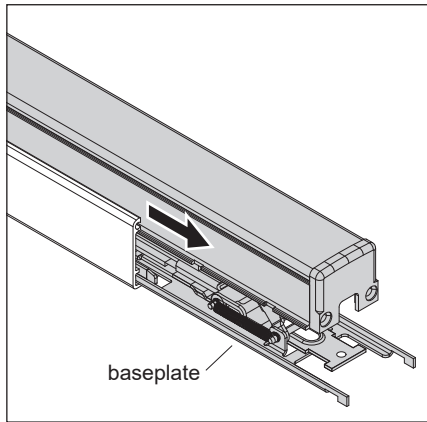
**i** Use long shank screwdriver.

## 6 Unhook baseplate from center case

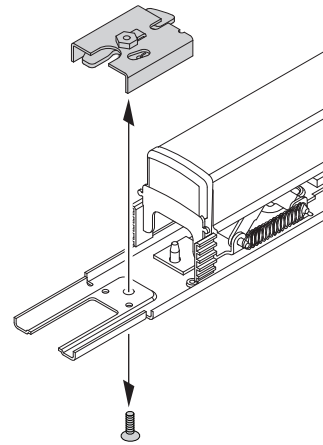
- Slide back mechanism case about 2" to access hooking parts.
- Push bar guides will come loose and will need to be reinstalled later.
- Unhook baseplate from center case.



**7** Slide baseplate out of mechanism case

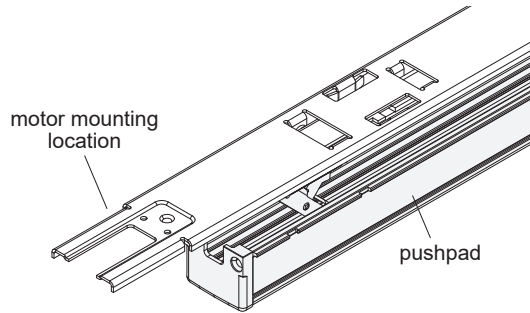


**8** Remove any existing dogging assembly

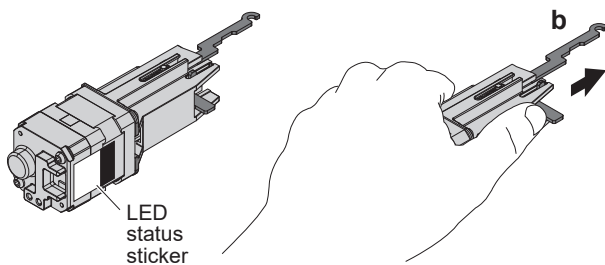


## 9 Secure motor assembly

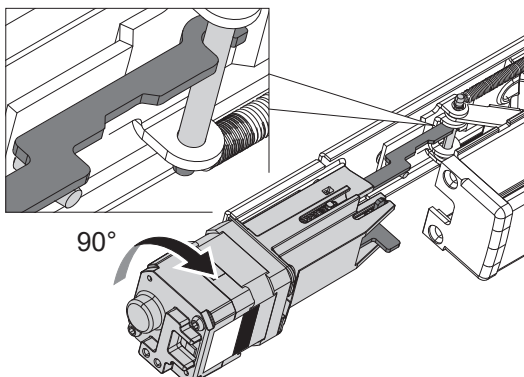
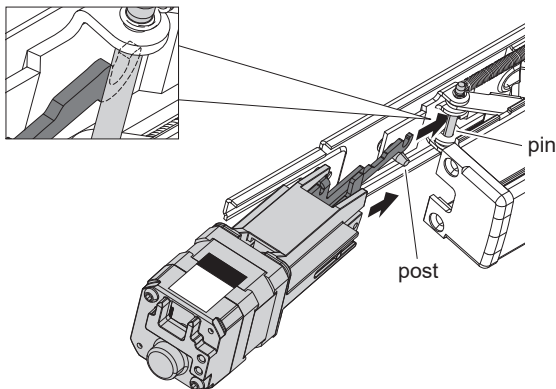
- a. Turn baseplate assembly upside down so pushpad is resting on a flat surface and motor mounting location is on the left.



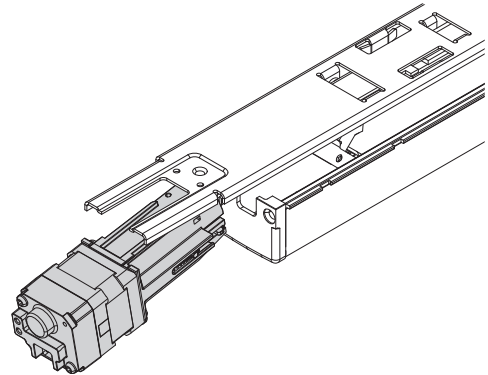
- b. Place motor in left hand with LED status sticker facing toward you. Gently extend silver hook arm outward (about 1/2") until you meet some resistance, then hold.



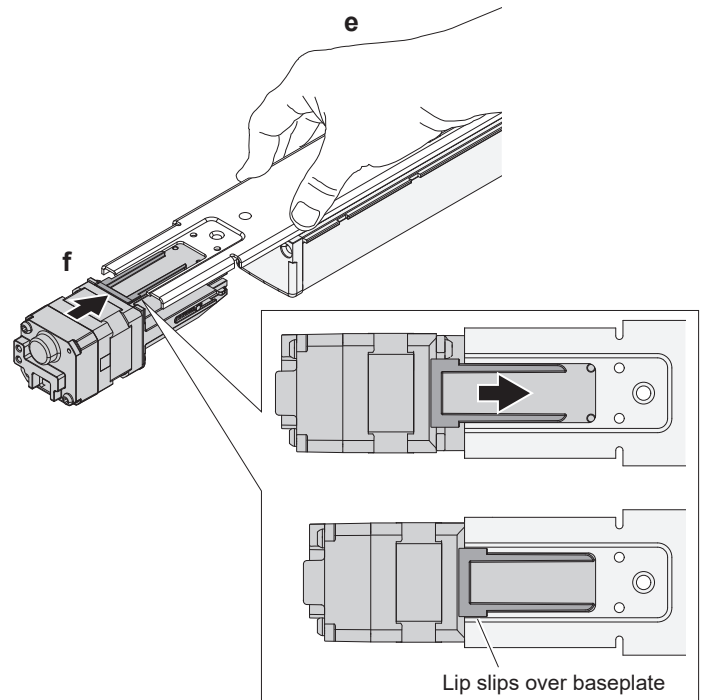
- c. While tilting baseplate assembly away from you slightly, move extended hook arm into position under baseplate. A post will be hanging down from baseplate; the hook arm should sit on the near side of that post. Rotate the motor assembly to hook the arm over the baseplate axle pin that is closest to the baseplate. Do not pull out on motor at this step.



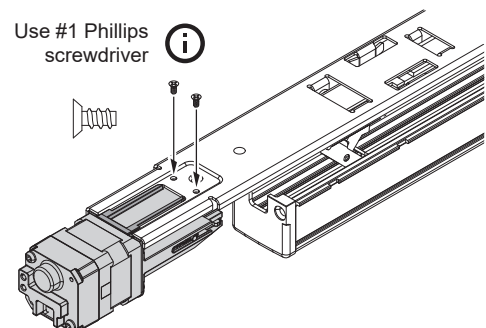
- d. Set motor on flat surface.



- e. Push down firmly on baseplate so it bottoms out against push pad.
- f. While depressing baseplate, lift up motor assembly and guide it along elongated baseplate slot until motor lip slips over baseplate.



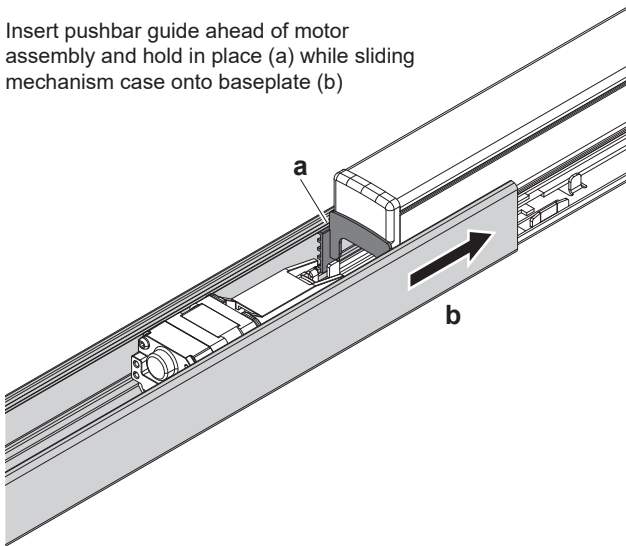
- g. Release baseplate. Secure motor assembly with 2 small self-tapping screws (provided).



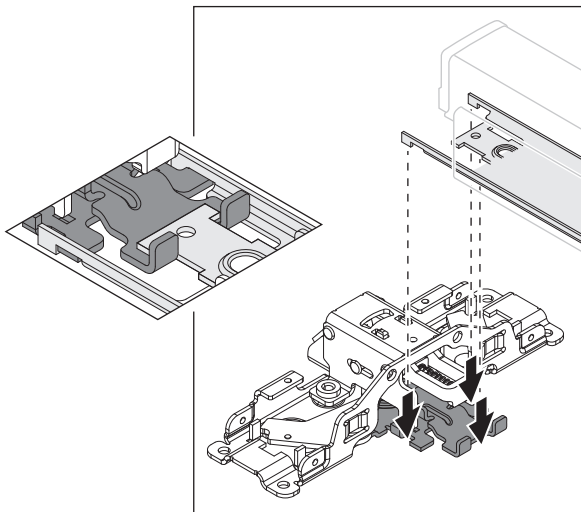
- h. Turn baseplate and motor assembly right side up.

## 10 Slide mechanism case onto baseplate

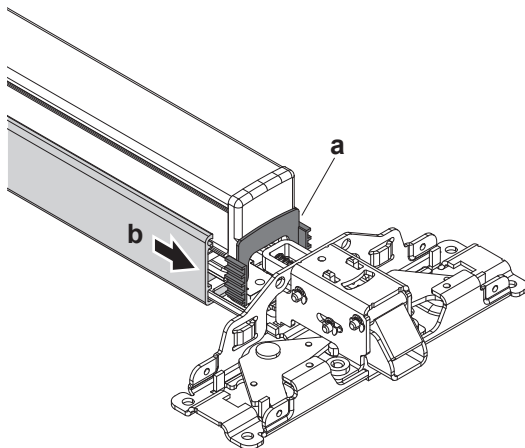
Insert pushbar guide ahead of motor assembly and hold in place (a) while sliding mechanism case onto baseplate (b)



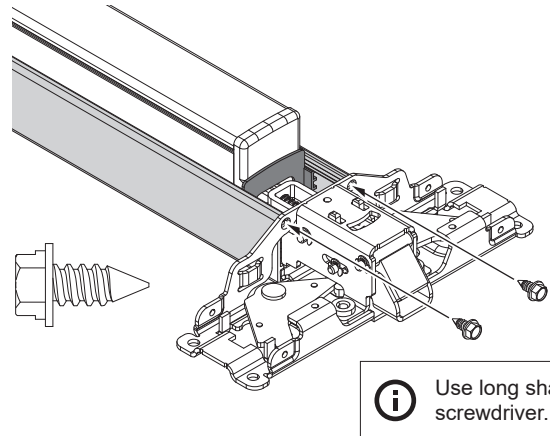
## 11 Reconnect center case to baseplate via hooking parts



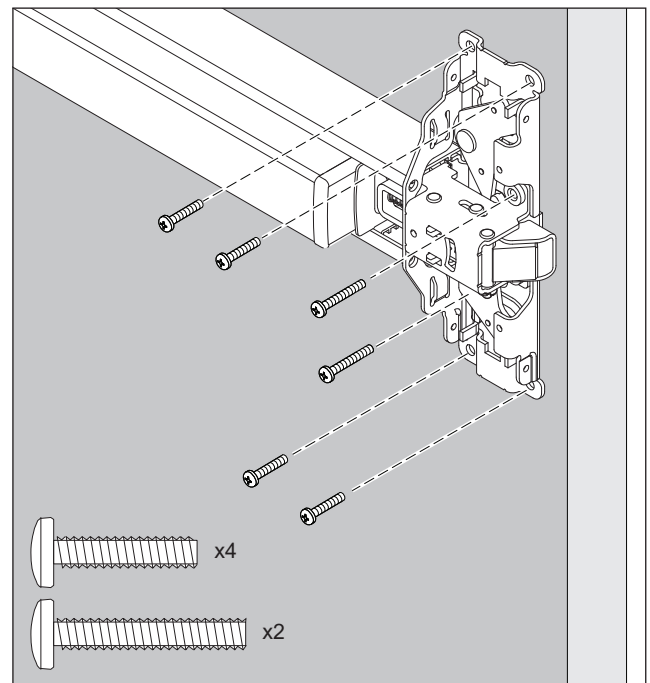
## 12 Insert remaining pushbar guide (nearest the center case) and slide mechanism case against center case



## 13 Reattach mechanism case to center case



## 14 Reattach device to door



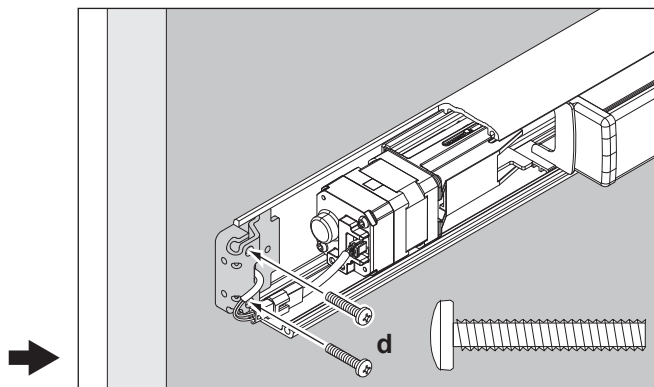
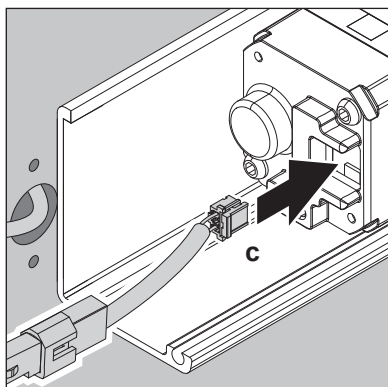
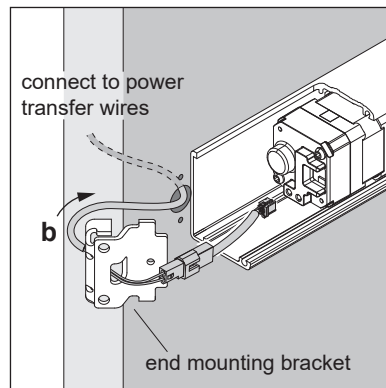
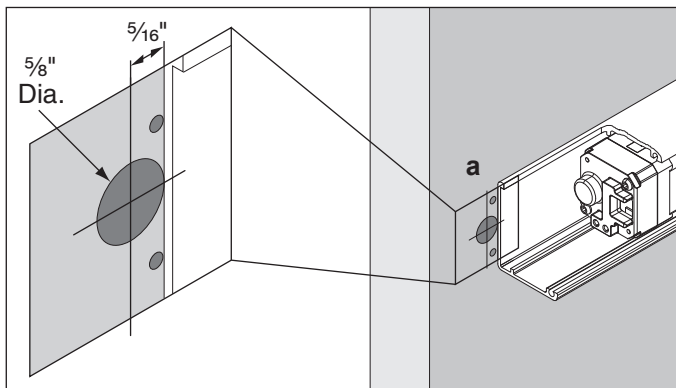
# 15 Complete wiring



If not wiring at this time, **DO NOT DISCARD CABLE!**

After installing device or conversion kit, if there is room, store the cable inside the mechanism case until the electrical wiring occurs. Otherwise, store the cable in a designated location.

- Drill wire access hole.
- Route furnished 6' MEL two-piece cable thru device end mounting bracket to connect MEL device to power transfer wires.
- Plug cable connector into MEL motor.
- Reinstall end mounting bracket.
- Refer to table below to route proper gauge wires (from electric hinge, EPT, or door loop) to PS900-Series power supply.



PS900-Series power supply with 900-Series option board(s) installed

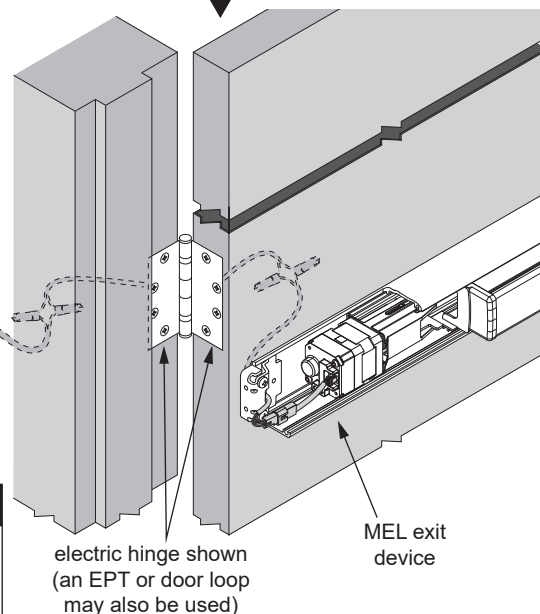
| MEL device used with EPT, Electric Hinge, or Door Loop |            |
|--------------------------------------------------------|------------|
| Distance (one way)                                     | Wire Gauge |
| 200'                                                   | 18AWG      |
| 320'                                                   | 16AWG      |
| 500'                                                   | 14AWG      |
| 800'                                                   | 12AWG      |

## MEL Electrical Load

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



Power wires to MEL are not polarized.



electric hinge shown (an EPT or door loop may also be used)

MEL exit device

## ⚠ WARNING

To avoid risk of electric shock, turn off AC power to power supply before installing or wiring option board.

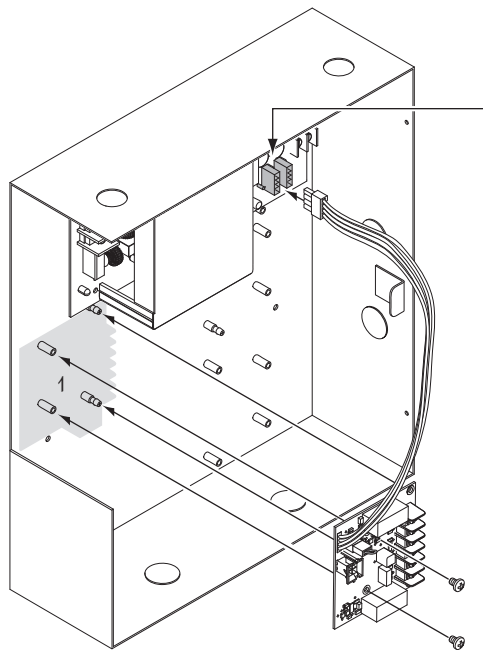
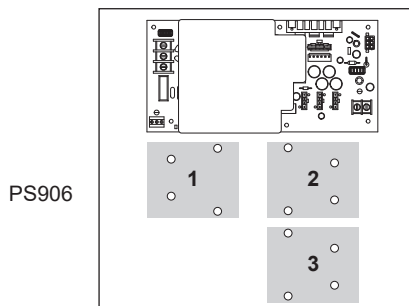
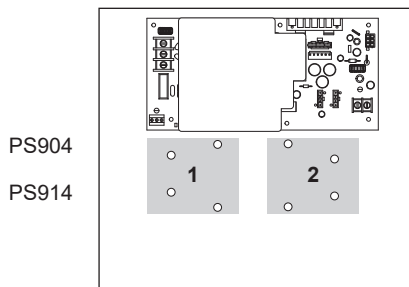
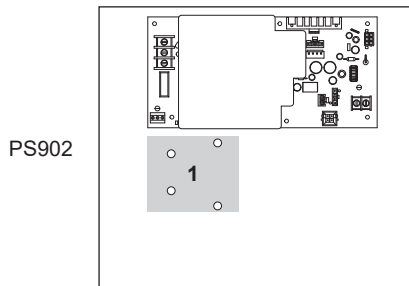
### 16 Confirm equipment compatibility

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

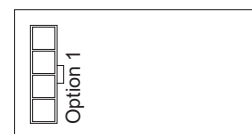
- PS900-Series power supplies - PS902, PS904, PS906, PS914
- 900-Series option boards - 900-2RS, 900-4R, 900-4RL

### 17 Install 900-2RS, 4R, or 4RL option board(s) into power supply

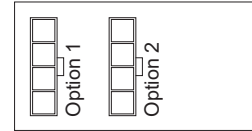
#### a Review Available 900 series Option Board Mounting Locations (Gray)



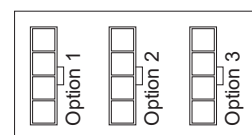
#### b Plug Option Board Cable into any Available Option Connector



PS902  
1 Board



PS904, 914  
2 Boards



PS906  
3 Boards

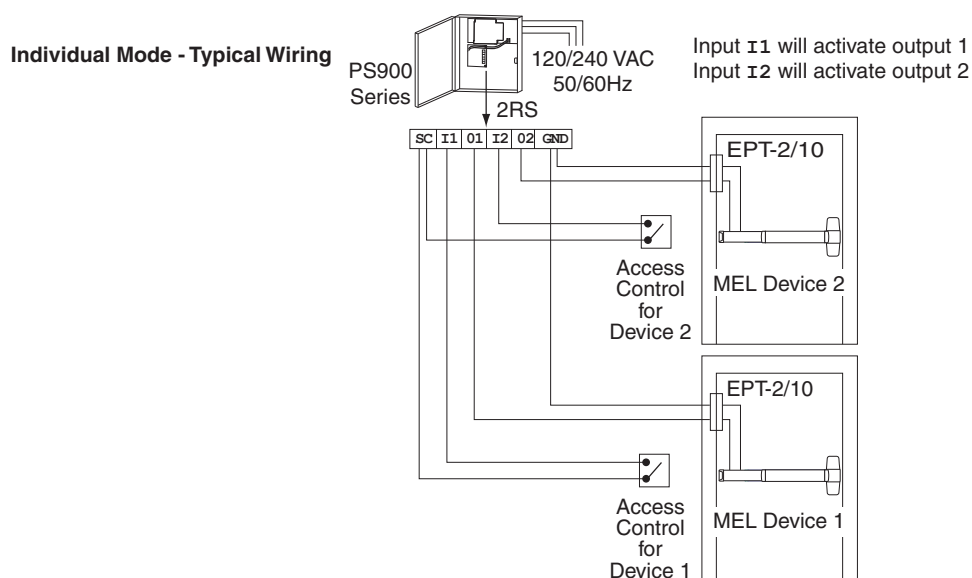
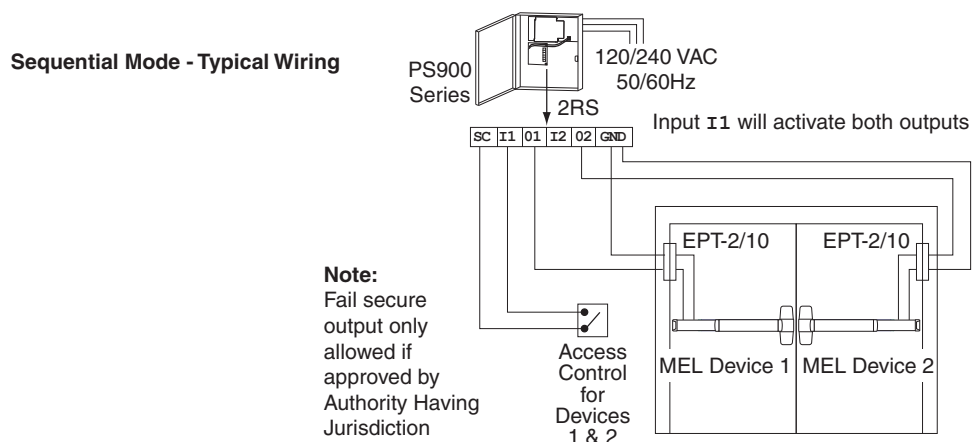
#### c Secure Board(s) with Screws

## ⚠ WARNING

Fire alarm (FA) option board required if MEL is installed in fire exit hardware.

- Notes:**
1. 24 VDC output setting required when MEL device connected.
  2. If installing board in location 2 or 3, rotate board 180°.
  3. Latchbolt retraction of (2) sequenced MEL devices requires more than 1 second to complete.
  4. When powering multiple components, verify that the amperage requirements of all components combined does not exceed the power supply output rating.

## 18 Connect input and output wires to option board (2RS shown)



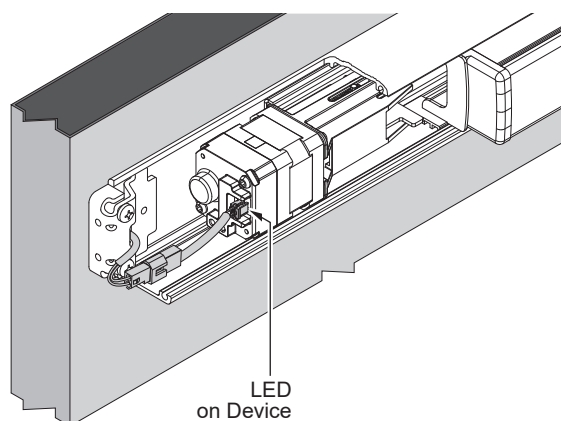
## 19 Check operation

- Activate each input and verify all MEL devices operate properly.
- If any device does not operate properly, see next page for troubleshooting.

## 20 If necessary, troubleshoot operation (LED is only visible with the mechanism case removed)

| Power at the MEL  | MEL Response                                                       | Condition/Solution                                                                                                                                                                                                                                                                                                                  |
|-------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 24 VDC            | LED - solid green<br>Latchbolt - retracted                         | <b>Operation normal, latch retracted immediately</b>                                                                                                                                                                                                                                                                                |
|                   | LED - solid red after latchbolt attempts to retract multiple times | <b>Latchbolt cannot fully retract mechanically</b><br>Remove power. Depress pushbar and make sure latchbolt retracts and extends fully. If necessary, disconnect any vertical rods or mortise lock from device center case, and reapply power. If motor holds, mechanical adjustments may be required per the device instructions.* |
|                   | LED - flashing green/red<br>Latchbolt - not retracted              | <b>Excessive tamper (while power applied, the pushpad was pulled out at least 3 times)</b><br>Wait 15 seconds and latchbolt will retract again OR remove and reapply power to clear condition.                                                                                                                                      |
| 24 VDC low        | LED - flashing green<br>Latchbolt - retracted                      | <b>Voltage low during latchbolt retraction (latchbolt retracts at reduced force)</b><br>Wire length is too long, wire gauge is too small, or power supply has poor regulation.                                                                                                                                                      |
| 29 VDC or greater | LED- flashing red<br>Latchbolt - will not retract                  | <b>Input voltage is too high for proper operation</b><br>Wrong power supply, power supply defective.                                                                                                                                                                                                                                |
| 13 VDC or lower   |                                                                    | <b>Input voltage is too low for proper operation</b><br>Wrong power supply, power supply defective or not set to the proper output voltage.<br>To set, remove AC power from power supply, change power supply setting from 12 to 24 VDC, then reapply AC power and verify proper operation.                                         |
| 0 VDC             | LED - off<br>Latchbolt - not retracted                             | <b>No input voltage</b><br>Problem with the power supply, control switch, or wiring.                                                                                                                                                                                                                                                |

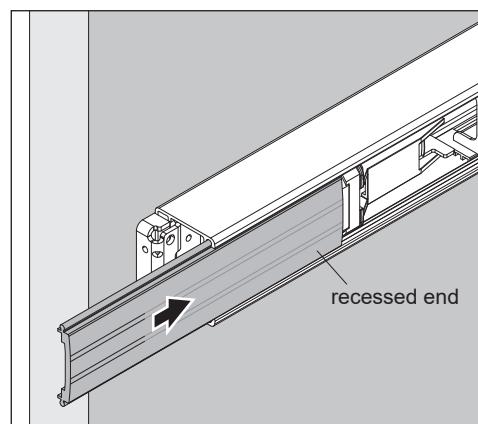
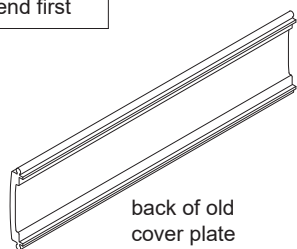
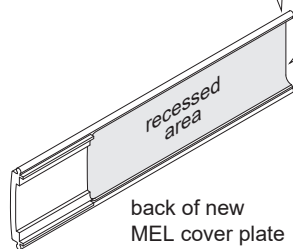
\*For information about adjusting exit devices, you can find their installation instructions in the support area at [www.allegion.com/us](http://www.allegion.com/us) or call Technical Services at 1-877-671-7011



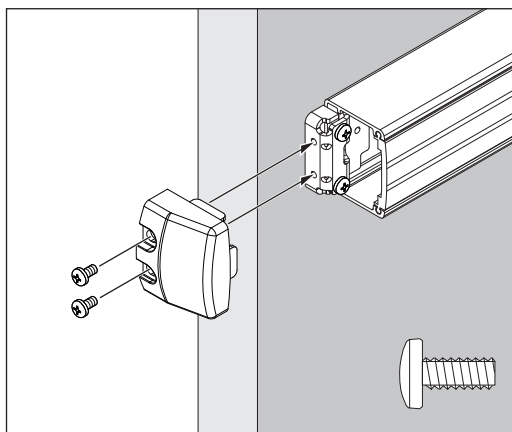
## 21 Install MEL cover plate

**i** Do **not** cut from recessed end of cover plate

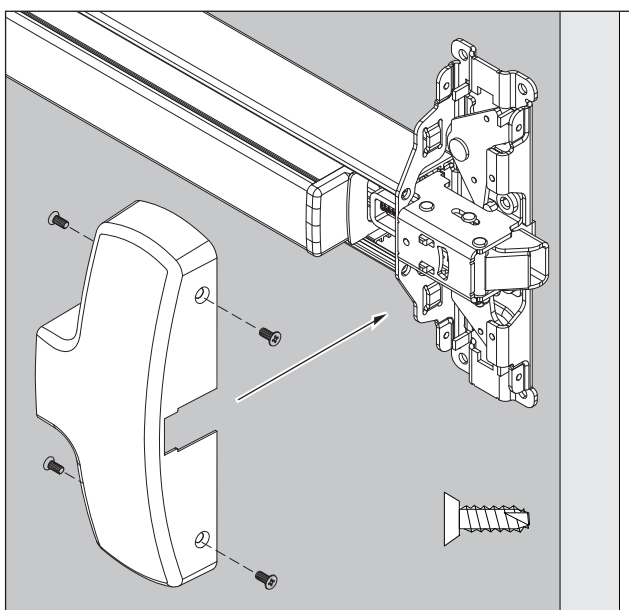
**i** Install this end first



## 22 Reinstall end cap



## 23 Reinstall center case cover



## Warnings and Cautions

Warnings look like this:



Warnings indicate potentially hazardous conditions, which if not avoided or corrected, may cause death or serious injury.

Cautions look like this:



Cautions indicate potentially hazardous conditions, which if not avoided or corrected, may cause minor or moderate injury. Cautions may also warn against unsafe practices.

Notices look like this:



Notices indicate a condition that may cause equipment or property damage only.

Directions look like this:



Directions identify a step that may or may not apply to your product configuration. It also may direct you to another part of the instruction.