



Electro Mechanical Door Lock Installation Manual

Manual revision: 1
Date: January 24, 2019

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Arlington Heights, IL 60005

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Electro Mechanical Door Lock Installation

WARNING: The installation of this device should only be performed by a professional elevator technician that has a full understanding of this device's operation and function.

Note: If there is any doubt regarding the installation procedures, please call the factory for assistance. We are available M-F 8:00 am to 5:00 pm Central Time.

WARNING: Failure to comply with all instructions and "WARNING"(s) can result in a safety system compromise. This, in turn, can result in serious injury or death.

Pre-Installation:

1. Fully read and understand all instructions and warnings.
2. Verify that the doorlock is the correct hand and voltage. Lock hand is determined by looking at the hoistway door from outside the hoistway. Door knob/latch on your left = LH lock.
 - **Note:** If you have the incorrect hand or voltage, order the correct lock.
3. The shoulder bolt mounted near the "closed" contacts is there to insure that the keeper is within its maximum down tolerance.

**WARNING: DO NOT REMOVE, MODIFY OR TAMPER WITH THIS SHOULDER BOLT.
WARNING: DO NOT MODIFY ANGLE OF CONTACTS.**

Installation:

- 1) The lock must be mounted on the knob/latch side of the door.
- 2) Determine lock height. The lock will accept a multi-conductor cable from the back or 1/2" conduit from the top.
- 3) The lock requires a flat mounting surface. Either shim lock mounting surface (jamb side) to be level with door stop trim or remove door stop trim as follows:
 - a) Wiring from the top: Remove 1 7/8" of stop trim from top jamb and 9 1/4" from side jamb.
 - b) Wiring from back: Remove 9 1/4" of stop trim from side jamb at the desired lock location.
- 4) From inside the hoistway, secure the template provided to the lock mounting surface and door.
- 5) Drill holes per the template instructions.

WARNING: DO NOT ATTEMPT TO INSTALL LOCK WITHOUT USING THE TEMPLATE.

- 6) Mount the door lock to the jamb using two #10 x 1 1/2" pan head screws
- 7) Mount the keeper to the door using the 8-32 sex bolts and the flat head screws
 - a) Cut 8-32 screws as necessary to accommodate door thickness
- 8) From the hoistway side, close the door and verify that you can release the latch manually.
 - a) Adjust the lock and or keeper as necessary

Electrical Wiring for EMDL04:

1. Connect wires to door lock.
 - a. Voltage to terminals 1 & 2
 - b. Door Safety Chain (in series) to terminals 3 & 4
2. Apply appropriate voltage to terminals 1 & 2 and check for proper solenoid operation.
3. Verify Keeper to latch engagement is according to Fig. 1
4. Check for continuity between terminals 3 & 4 when door is closed and solenoid is de-activated.
5. Verify an open circuit between terminals 3 & 4 when door is closed and solenoid is activated.
6. Verify an open circuit between terminals 3 & 4 when door is opened and solenoid is de-activated.

Electrical Wiring for EMDL06:

1. Connect wires to door lock.
 - a. Voltage to terminals 1 & 2
 - b. Door Close to terminals 3 & 4
 - c. Door Lock to terminal 5 & 6
2. Apply appropriate voltage to terminals 1 & 2 and check for proper solenoid operation.
3. Verify Keeper to latch engagement is according to Fig. 1
4. Check for continuity between terminals 3 and 4 when door is closed and verify open circuit when door is opened.
5. Check for continuity between terminals 5 and 6 when solenoid is deactivated and verify open circuit when solenoid is activated.

9) Drill two pilot holes in jamb and secure lock with two #10 x 1 1/2" pan head screws.

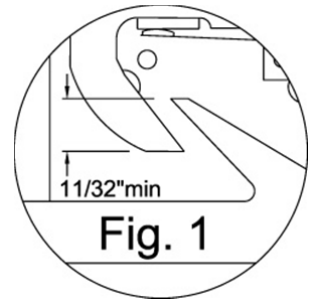
10) Install cover using 6-32 screw and verify proper operation.

*******WARNING: DO NOT MODIFY THE COVER TO ACCEPT THE KEEPER*******

Maintenance and Service:

No servicing is required, but regular inspection of the following is necessary to ensure trouble-free long-term operation:

- 1) Verify keeper to latch engagement. See figure 1 for minimum requirement.
- 2) Ensure lock base and keeper are securely mounted.
- 3) Check for debris and wear.
- 4) Check wire connections and voltage.

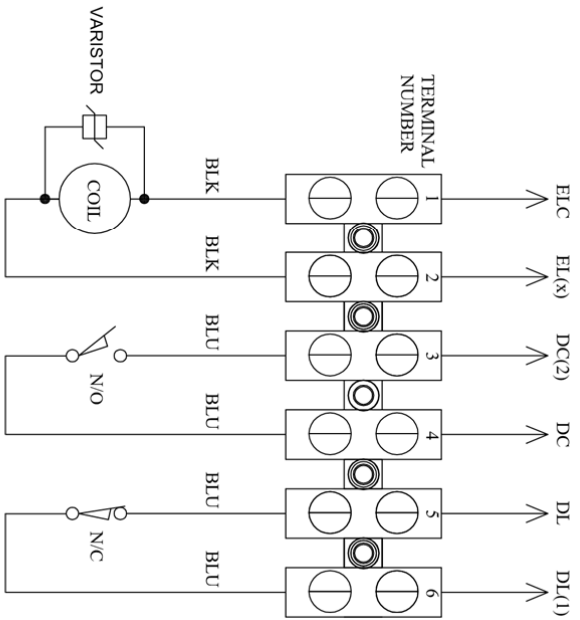
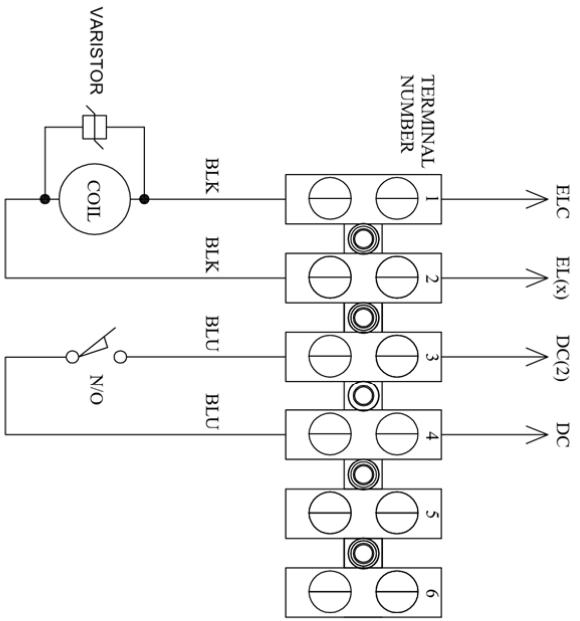


*****WARNING*****

All inspections, maintenance, repairs and replacements should be performed by elevator personnel only

EMD104

EMD106



- Note: Coil Specification:
1. Supply Voltage: 24VDC
 2. Resistance: 67.7 OHMS
 3. Power Consumption: 8.5W
 4. Current: 0.35A

- Legend:
1. ELC-Common Voltage
 2. EL(X) - Floor Lock
 3. DL,DL(1) - Door Lock Contact
 4. DC,DC(1) - Door Close Contact



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REVISIONS		DRAWING TITLE		PROJECT NAME	
REV.	DATE	DESCRIPTION	4 AND 6 POSITION DOOR LOCKS ELECTRICAL CONNECTION		ELECTRO MECHANICAL DOOR LOCKS

EMI Porta, Inc. 250 Hamilton Rd, Arlington Heights, IL 60005 Phone: 847-593-4900

3/4" Plate Kit Installation

WARNING: The installation of this device should only be performed by a professional elevator technician that has a full understanding of this device's operation and function.

Note: If there is any doubt regarding the installation procedures, please call the factory for assistance. We are available M-F 8:00 am to 5:00 pm Central Time.

WARNING: Failure to comply with all instructions and "WARNING"(s) can result in a safety system compromise. This, in turn, can result in serious injury or death.

Pre-Installation:

4. Fully read and understand all instructions and warnings.
5. This kit is to only be used with the Porta EMDL series
6. This kit is intended for 1 3/4" thick **solid core** hoistway doors
 - **If your door is less than 1 3/4" thick spacers must be added to the hall side of the door to make up the difference. 1/8" thick spacers (P.N.: EMDL750SP) are sold separately. The spacers are not hand dependant.**
7. These instructions are to be used in conjunction with the lock installation instructions.

Plate Kit Installation:

- 11) The lock must be mounted on the knob/latch side of the door.
- 12) Determine lock height. The lock will accept a multi-conductor cable from the back or 1/2" conduit from the top.
- 13) The lock requires a flat mounting surface. Remove 12-5/16" of door stop trim (jamb side) at the desired lock location.
- 14) From inside the hoistway, secure the template provided to the lock mounting surface and door.
- 15) Drill holes per the template instructions.

WARNING: DO NOT ATTEMPT TO INSTALL PLATE KIT WITHOUT USING THE TEMPLATE.

- 16) Mount plate and backing spacer to door
- 17) Trace inside line of backing spacer to door
- 18) Remove plate and backing spacer
- 19) Cut door along traced outline
- 20) Attach Keeper to Hoistway side of plate with two 10-32 x 7/16" flat head screws
- 21) Lock Keeper in place using two 10-32 acorn nuts
- 22) Mount plate and backing spacer to door
- 23) Mount the door lock to the jamb using two #10 x 1 1/2" pan head screws
- 24) From the hoistway side, close the door and verify that you can release the latch manually.
 - a) Adjust the lock and or keeper as necessary

*******WARNING: DO NOT MODIFY THE COVER TO ACCEPT THE KEEPER*******

- 25) Refer to "Porta Electric Door Lock Installation" instructions items 9-16 to complete the installation

*****WARNING*****

All inspections, maintenance, repairs and replacements should be performed by elevator personnel only.

*****WARNING*****



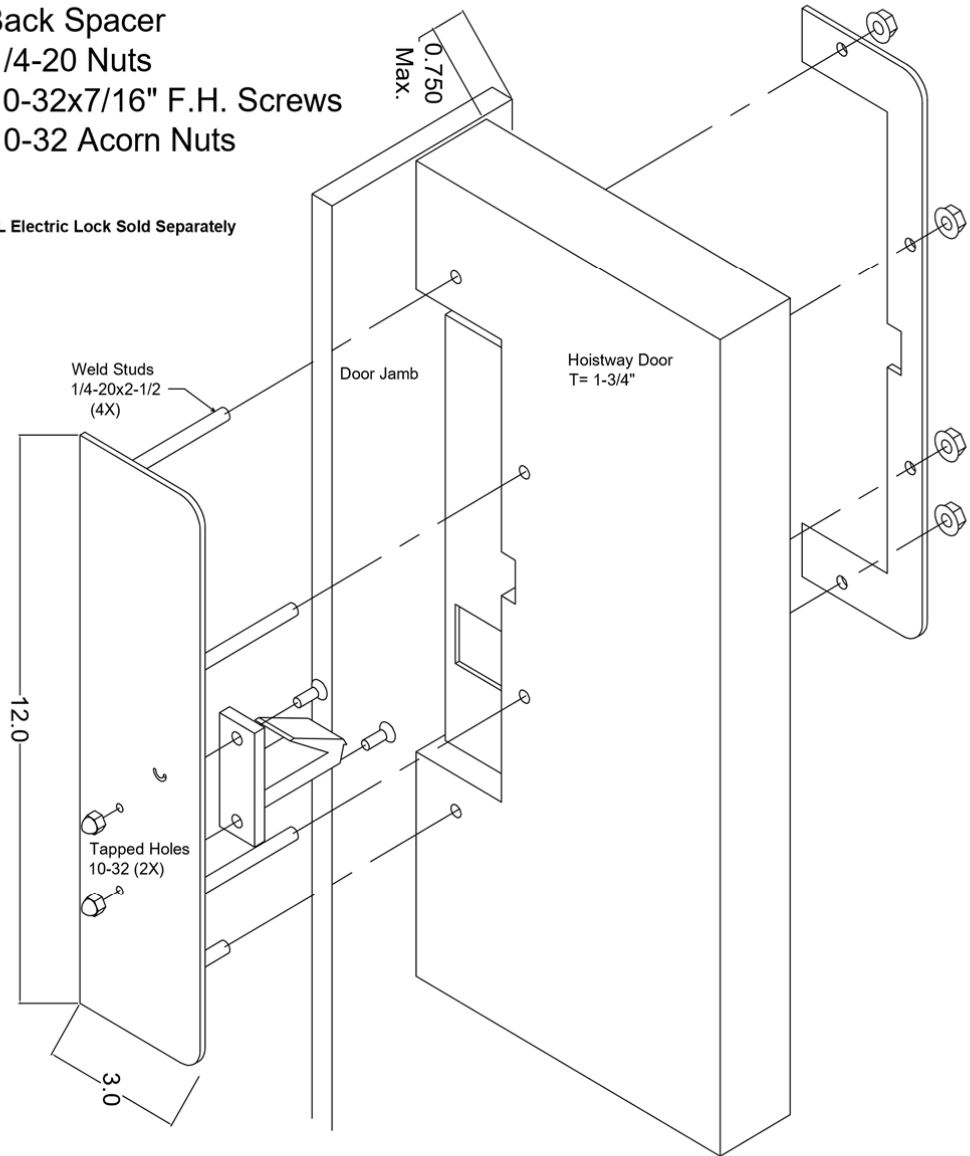
3/4" Set Back Plate Kit

EMDL L.H. Door Locks

Kit Contains:

- 1- Plate
- 1- Back Spacer
- 4- 1/4-20 Nuts
- 2- 10-32x7/16" F.H. Screws
- 2- 10-32 Acorn Nuts

EMDL Electric Lock Sold Separately



Note: If Hoistway Door is less than 1-3/4" thick additional 1/8" spacers are required on Hall side of plate. Additional spacers are sold separately. Part Number: EMDL750SP

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REV.	DATE	DESCRIPTION

REVISIONS

DRAWING TITLE

3/4" SET BACK PLATE KIT
EMDL L.H. DOOR LOCKS

PROJECT NAME

SET BACK PLATE

DESIGNED BY: TK
DATE: 17-DEC-2018

APPROVED BY: JB
DATE: 17-DEC-2018

PROJECT NO.: N/A

DRAWING NO.: EMDL-P-MM-001

REV. NO.	VER. NO.
0	0

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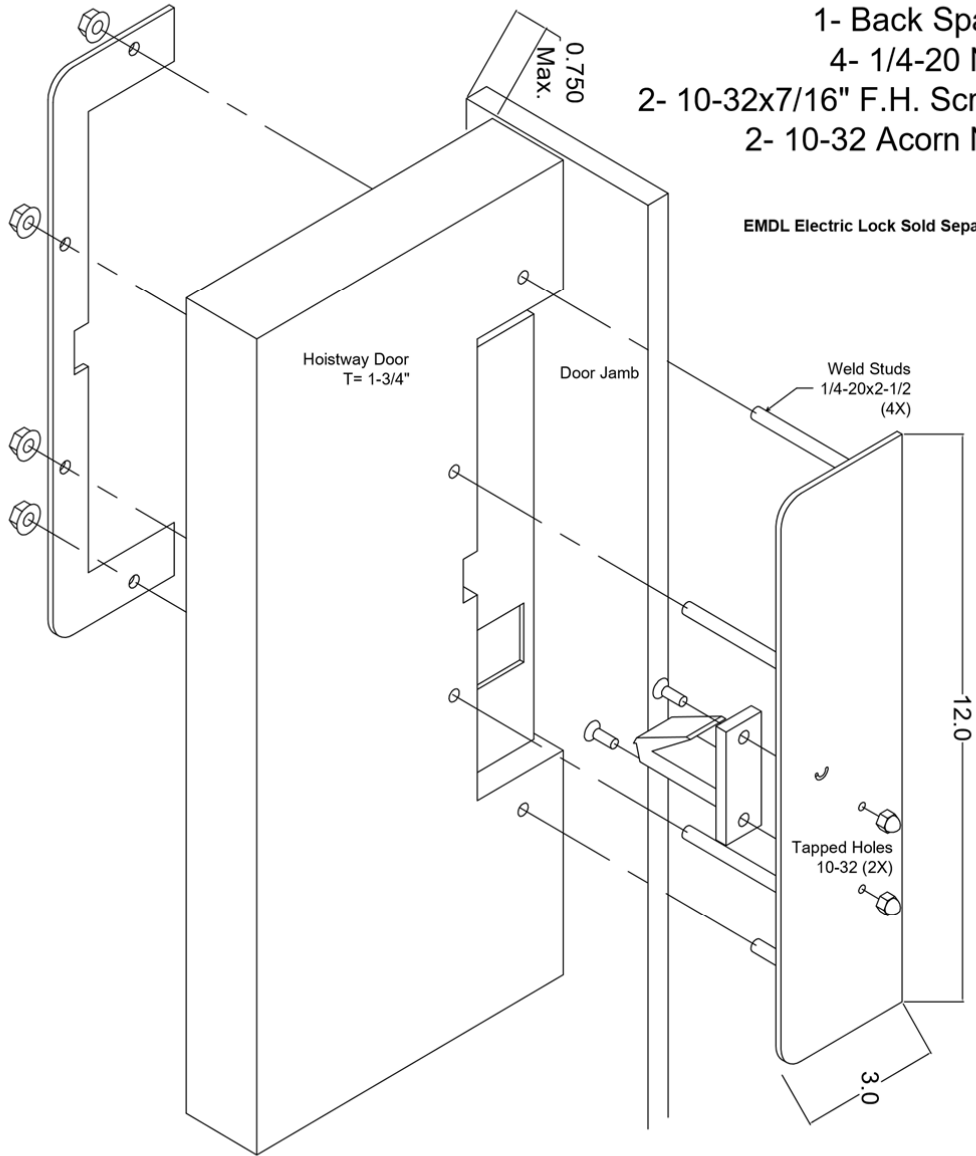
3/4" Set Back Plate Kit

EMDL R.H. Door Locks

Kit Contains:

- 1- Plate
- 1- Back Spacer
- 4- 1/4-20 Nuts
- 2- 10-32x7/16" F.H. Screws
- 2- 10-32 Acorn Nuts

EMDL Electric Lock Sold Separately



Note: If Hoistway Door is less than 1-3/4" thick additional 1/8" spacers are required on Hall side of plate. Additional spacers are sold separately. Part Number: EMDL750SP

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REV.	DATE	REVISIONS

DRAWING TITLE
 3/4" SET BACK PLATE KIT
 EMDL R.H. DOOR LOCKS

PROJECT NAME
 SET BACK PLATE

EMDI Porta, Inc. 250 Hamilton Rd, Arlington Heights, IL 60005

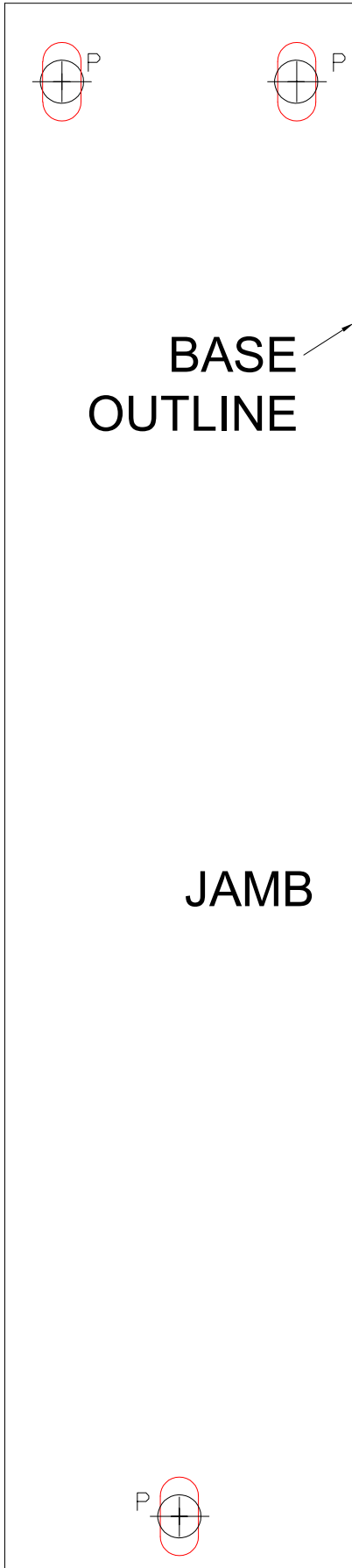
DATE: 17-DEC-2018
 DRAWN BY: TK
 CHECKED BY: JB

PROJECT NO.: N/A

DRAWING NO.: EMDL-P-MM-002

REV NO: 0
 VER NO: 0

CUT ON LINE (TOP OF LOCK)



BASE
OUTLINE

JAMB

FOLD ON LINE

TEMPLATE RIGHT HAND LOCK 2 5/8" SETBACK

1. Choose the correct template for your installation
2. Fold along the "FOLD LINE" so that the print side of the page touch
3. Working from inside the hoistway, close the door
4. Open the template to form a 90 degree angle (print to the inside)
5. Place the Folded corner of the template where the door meets the jamb

NOTE: The side of the template marked door should be touching the door

6. Securely tape the template in place
7. Mark all holes with a center punch

Drill holes in jamb as follows:

P = Pilot Hole

Recommended pilot drill sizes for #10 screws:

Softwood = 3/32"

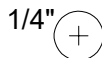
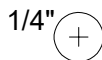
Hardwood = 7/64"

Metal = 5/32"



Drill holes in door as follows:

1. Drill a 1/8" pilot hole from hoistway side
2. Enlarge holes to 1/4" from hall side



DOOR

NOTE: FOR ALUMINUM BASE
W / MOLDED COVER & KEEPER
REVISED 5-05-14

CUT ON LINE

CUT ON LINE (TOP OF LOCK)

TEMPLATE LEFT HAND LOCK 2 5/8" SETBACK

1. Choose the correct template for your installation
2. Fold along the "FOLD LINE" so that the print side of the page touch
3. Working from inside the hoistway, close the door
4. Open the template to form a 90 degree angle (print to the inside)
5. Place the Folded corner of the template where the door meets the jamb

NOTE: The side of the template marked door should be touching the door

6. Securely tape the template in place
7. Mark all holes with a center punch

Drill holes in jamb as follows:

P = Pilot Hole

Recommended pilot drill sizes for #10 screws:

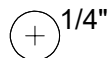
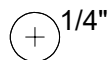
Softwood = 3/32"

Hardwood = 7/64"

Metal = 5/32"

Drill holes in door as follows:

1. Drill a 1/8" pilot hole from hoistway side
2. Enlarge holes to 1/4" from hall side



DOOR

NOTE: FOR ALUMINUM BASE
W / MOLDED COVER & KEEPER
REVISED 5-05-14

CUT ON LINE

FOLD ON LINE

