Quick-Start Guide
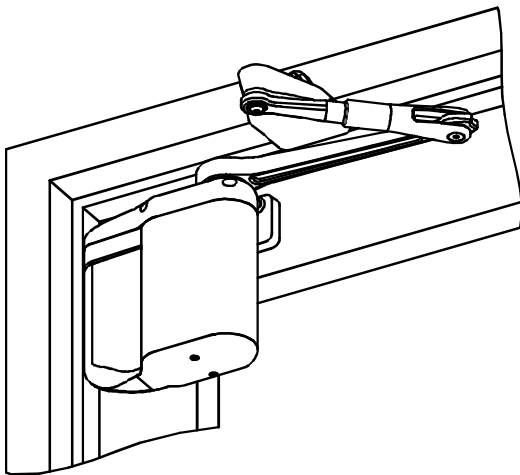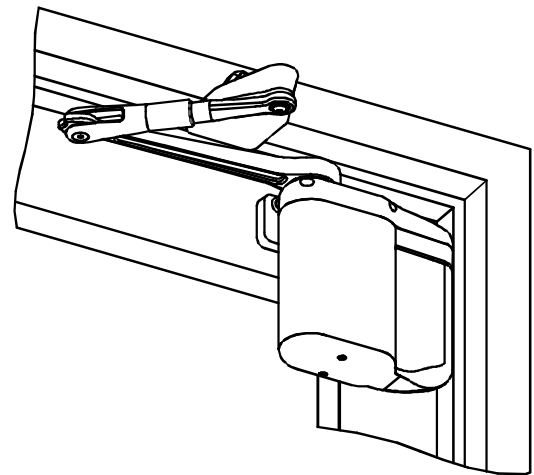
ada ez
WIRE FREE DOOR OPENER

ADA EZ Pro
Push-Side Operator Quick-Start Guide
700402
Rev. B, 10/30/12

PUSH-SIDE APPLICATION
(LEFT HAND DOOR SHOWN)

PUSH-SIDE APPLICATION
(RIGHT HAND DOOR SHOWN)

This manual provides quick-reference instructions for installing and operating the push-side ADA EZ swing door operator. Prior to performing these instructions thoroughly review the following information in document number 70002, "ADA EZ Pro Installation and Operating Instructions:"

- System Description
- Prerequisites
- Precautions
- Controls and indicators
- Installing the optional plug-in transformer
- Installing the pushbutton switches
- Linking the RF pushbuttons
- Troubleshooting recommendations

- Detailed operator programming instructions
- Replacing the battery pack fuse
- Customizing the operator settings
- Installing door decals
- Detailed closeout instructions
- Wiring
- Replacement parts
- Adjusting door spring tension

To obtain the latest manual and template revisions or to view installation and programming videos go to www.ADAEZ.com. For technical support call (877) 232-3987.

Quick-Start Guide

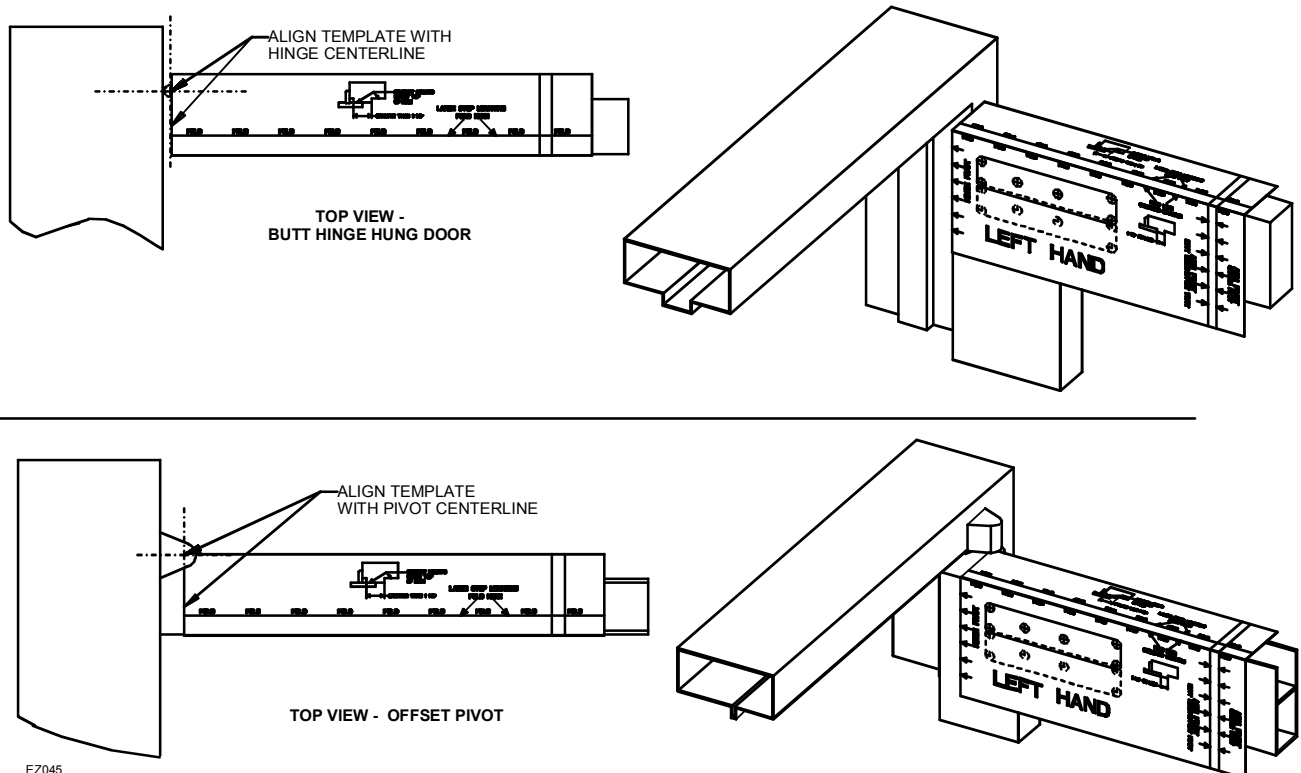## 1.1   Installing the Operator Mounting Template

1.1.1   If the door is an aluminum storefront door, EXAMINE the top rail and, when drilling the mounting holes, ENSURE the following:

- *Do not* drill into the top rail web

- *Do not* drill into the rail-to-stile tie rod(s)

- *Do not* drill into the rail-to-stile junction

1.1.2   Refer to Figure 1, and ALIGN the operator mounting template to the centerline of the butt hinge, center pivot, or offset pivot as applicable.

Figure 1. Installing the Operator Mounting Template

ALIGN TEMPLATE WITH
HINGE CENTERLINE

**TOP VIEW -
BUTT HINGE HUNG DOOR**

LEFT HAND

ALIGN TEMPLATE
WITH PIVOT CENTERLINE

**TOP VIEW - OFFSET PIVOT**

LEFT HAND

EZ045

1.2 Mounting the Door Arm Pivot Bracket

1.2.1 Refer to Figure 2, and DETERMINE the orientation of the door arm pivot bracket as necessary to ensure the following (as applicable):

- If the door is a typical installation, the vertical support will set flush against the face of the frame header.

- If the door is a large reveal installation, the bracket will mount to the underside of the frame header.

- The edge of the bracket will be between $^5/_8''$ (15.87 mm) and $1\,^1/_2''$ (38.1 mm) from the face of door.

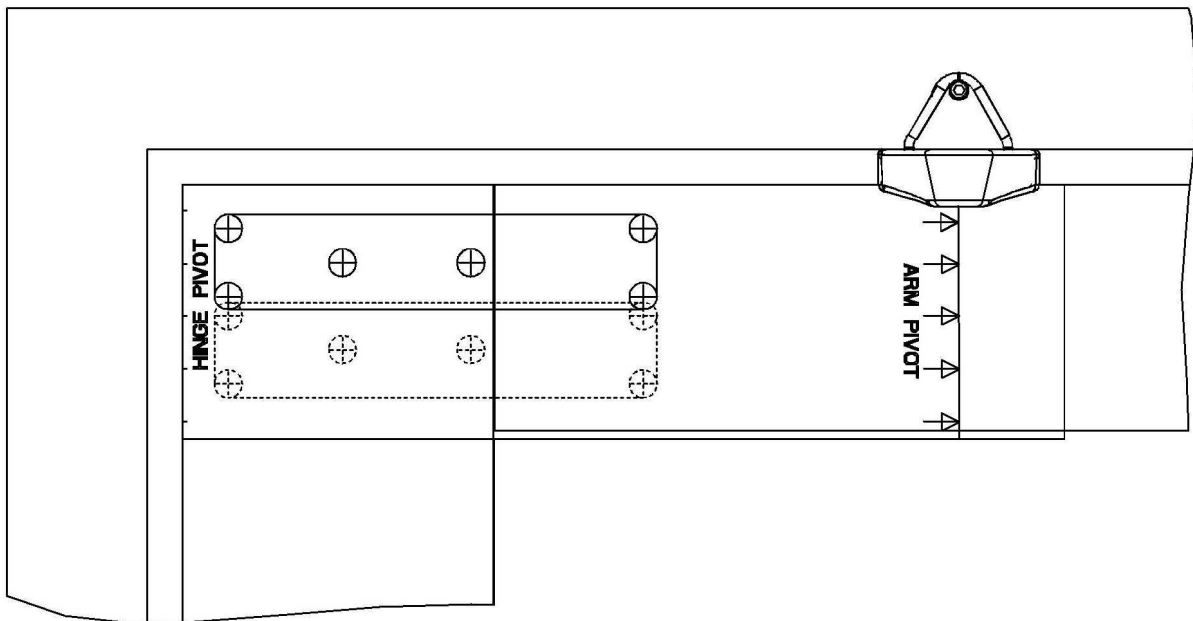**Figure 2. Mounting the Door Arm Pivot Bracket**
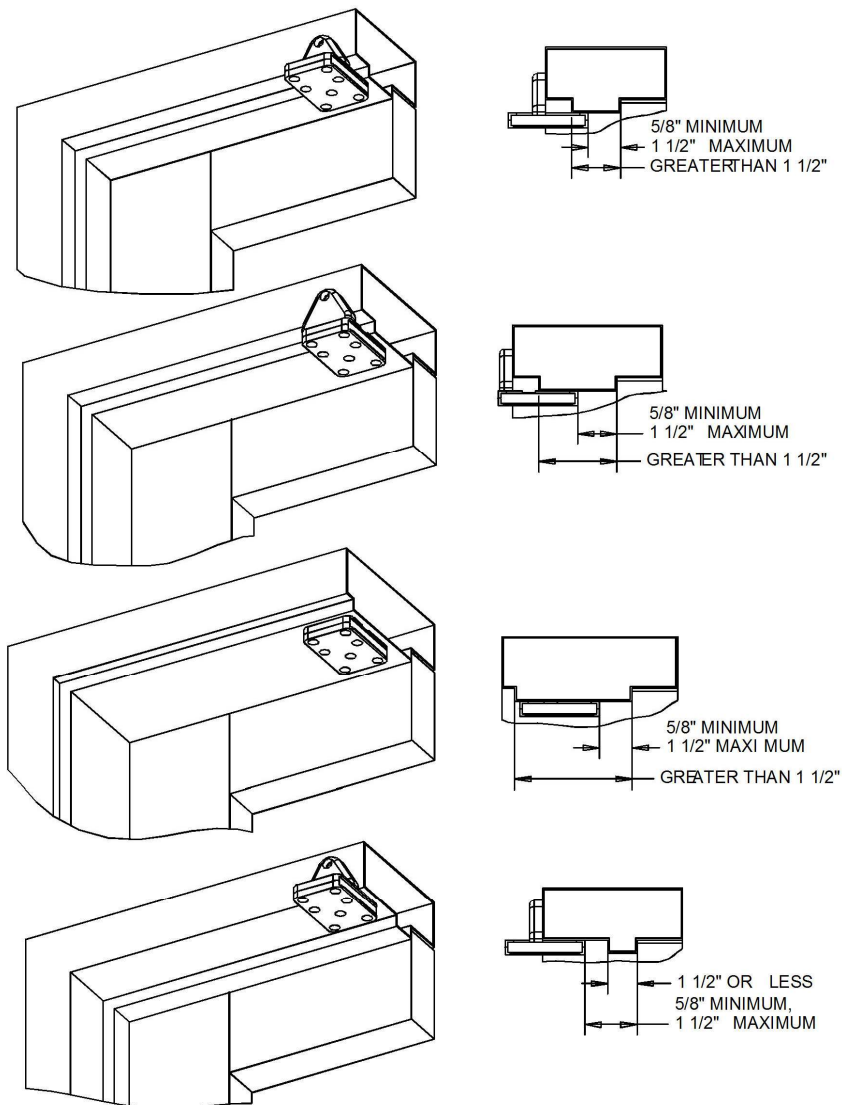
CAUTION

To ensure proper installation, the door arm pivot bracket must be fastened to the underside of the header frame and to the face of the header frame with *at least* three fasteners.

NOTE

When attempting to install the rivnuts to the underside of the door frame it may be necessary to remove the door stop.
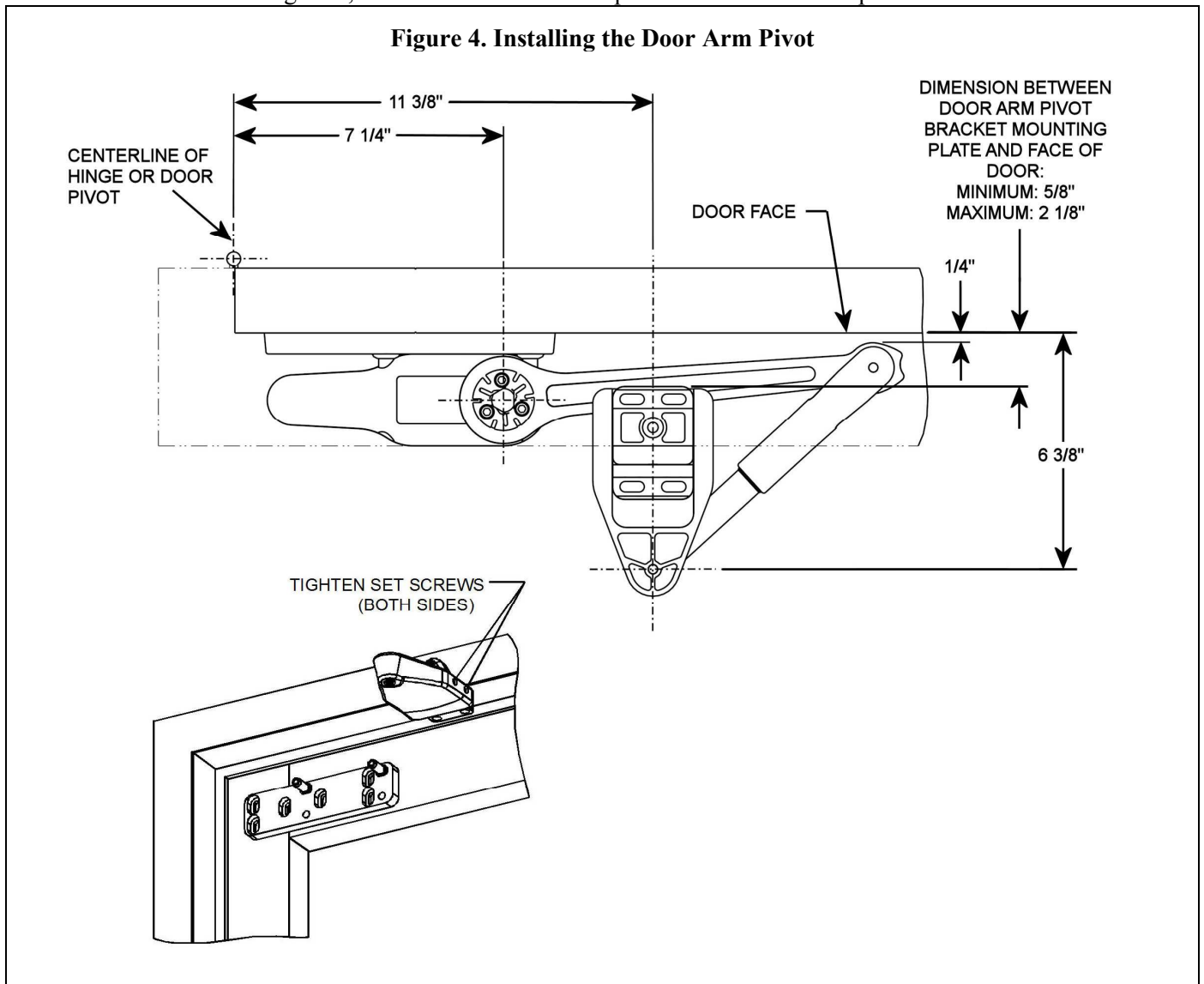
1.2.2   Refer to Figure 3 and, using a center punch, MARK the door arm pivot bracket hole locations.

1.2.3   If the door frame is aluminum and rivnuts must be installed, PERFORM the following:

    a.   Using a $^{25}/_{64}''$ drill, DRILL the door arm pivot bracket holes.

    b.   Using a rivnut tool, INSTALL the ¼-20 steel rivnuts.

    c.   INSTALL and TIGHTEN the three (minimum) ¾″ (19.05 mm) socket head capscrews securing the door arm pivot bracket to the underside and face of the frame header.

1.2.4   If the door frame is wood, PERFORM the following:

    a.   Using a $^{5}/_{32}''$ (3.97 mm) drill, DRILL the door arm pivot bracket pilot holes.

    b.   INSTALL and TIGHTEN the three #14 x 1 ¼″ wood screws (minimum) securing the door arm pivot bracket to the underside and face of the frame header.

Figure 3. Mounting the Door Arm Pivot Bracket

1.3 Installing the Door Arm Pivot

1.3.1 Refer to Figure 4, and SLIDE the door arm pivot over the door arm pivot bracket.

Figure 4. Installing the Door Arm Pivot

1.3.2 ENSURE that the dimension from the face of the door to the centerline of the door arm mounting hole is $6\,^{3}/_{8}''$ (161.92 mm).

1.3.3 TIGHTEN the four set screws securing the door arm pivot to the door arm pivot bracket.

1.4   Installing the Operator Mounting Bracket and Cover

1.4.1   Refer to Figure 5, and DETERMINE the proper operator mounting bracket location.

Figure 5. Determining the Operator Mounting Bracket Location

1 3/4"

MOUNTING POSTS

2 3/8"

1/2"

MOUNTING POSTS

1 1/8"
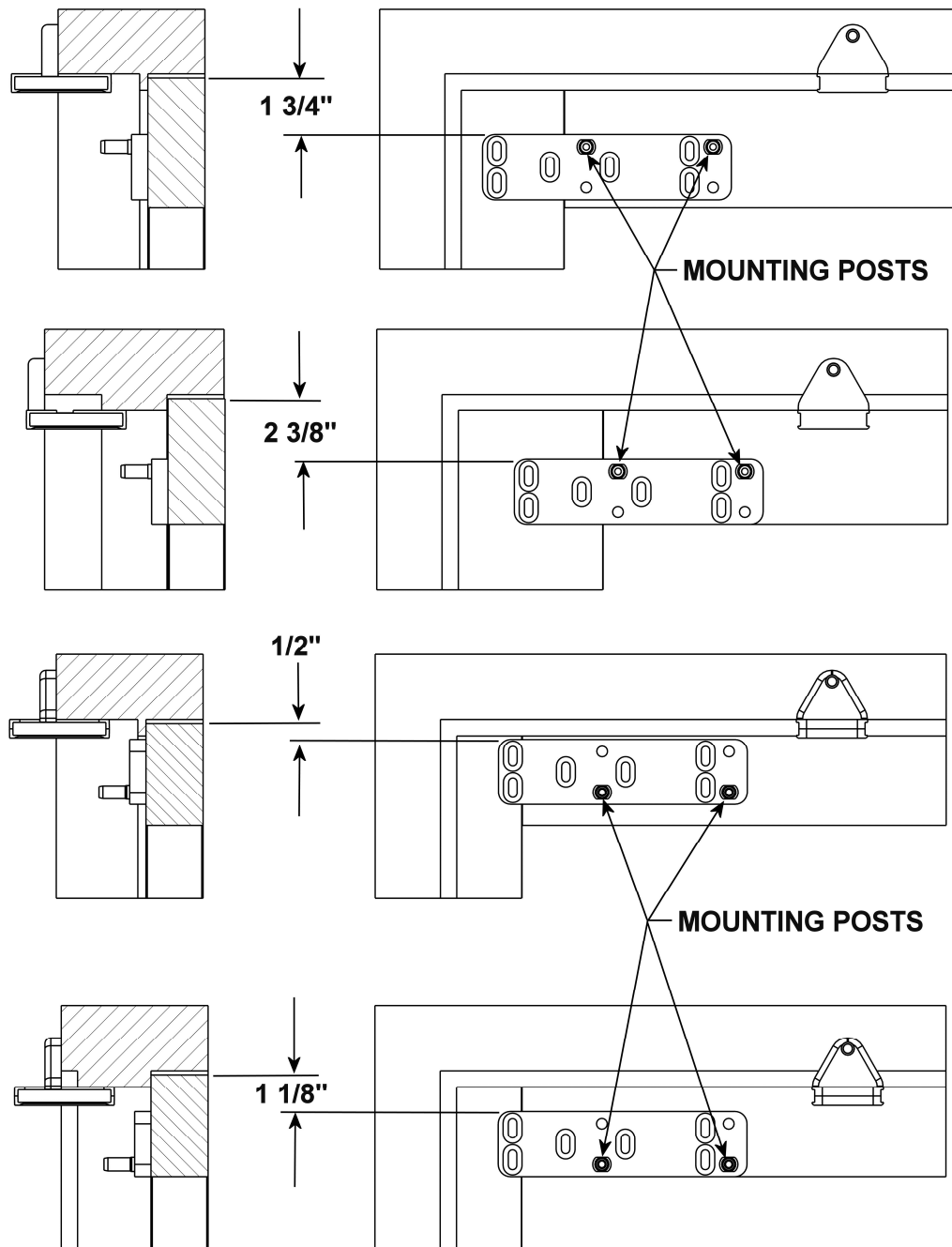
1.4.2   If the door frame is aluminum and rivnuts must be installed, PERFORM the following:

- Using a $^{25}/_{64}''$ (9.92 mm) drill, DRILL the operator mounting bracket holes.

1.4.3   Using a rivnut tool, INSTALL the ¼-20 steel rivnuts.

NOTE

Some door installations may require sex nut and bolt fasteners.

1.4.4   If the door frame is wood, PERFORM the following:

- Using a $^{5}/_{32}''$ (3.97 mm) drill, DRILL the operator mounting bracket holes.

1.4.5   INSTALL a washer onto each of the four (minimum) ¾″ (19.05 mm) socket head operator mounting bracket capscrews.

1.4.6   INSTALL, but do not TIGHTEN the socket head capscrews securing the operator mounting bracket to the door.

1.4.7   ADJUST the operator mounting bracket as follows:

- If the upper fold on the operator mounting template was used (large stop mounting), ADJUST the bracket so that there is $2\,^{3}/_{8}''$ (60.32 mm) space between the top of the bracket and the top of the door.

- If the lower fold on the operator mounting template was used (standard mounting), ADJUST the bracket so that there is 1¾″ (44.45mm) space between the top of the bracket and the top of the door.

- If the narrow stile door mounting location was used (solid line on operator mounting template), ADJUST the bracket so that there is $^{1}/_{2}''$ (12.7 mm) space between the top of the bracket and the top of the door.

1.4.8   TIGHTEN the socket head capscrews securing the operator mounting bracket to the door.


NOTE

The operator mounting bracket includes four threaded holes that accept the operator mounting pins. The lower set of two threaded holes is used when the operator is installed on a narrow-rail door. The upper set of two threaded holes is used when the operator is installed on a medium- or wide-rail door.

1.4.9   Refer to Figure 5 and PERFORM one of the following as applicable:

- If the operator is being mounted to a narrow rail door, TIGHTEN the operator mounting pins into the *lower* threaded holes in the mounting bracket using a $^{7}/_{16}''$ (11.112 mm) box wrench or large adjustable wrench.

- If the operator is being mounted to a wide or medium rail door, TIGHTEN the operator mounting pins into the *upper* threaded holes in the mounting bracket using a $^{7}/_{16}''$ (11.112 mm) box wrench or large adjustable wrench.

1.4.10   Refer to Figure 6, and INSTALL the operator mounting bracket cover over the operator mounting bracket.

1.4.11   REMOVE the two capscrews securing the operator bottom cover to the operator.

1.4.12   REMOVE the bottom cover from the operator.

1.4.13   SLIDE the battery pack from the operator and REMOVE the battery pack.

1.4.14   REMOVE the dress cover from the operator.

1.4.15   With the battery pack facing the jamb, POSITION the operator onto the operator mounting pins. ENSURE the operator does not slide off the mounting pins.

1.4.16   INSTALL and TIGHTEN the two ¼-20 X 1½″ socket head capscrews securing the operator to the operator mounting pins.

Figure 6. Installing Operator Mounting Bracket Cover
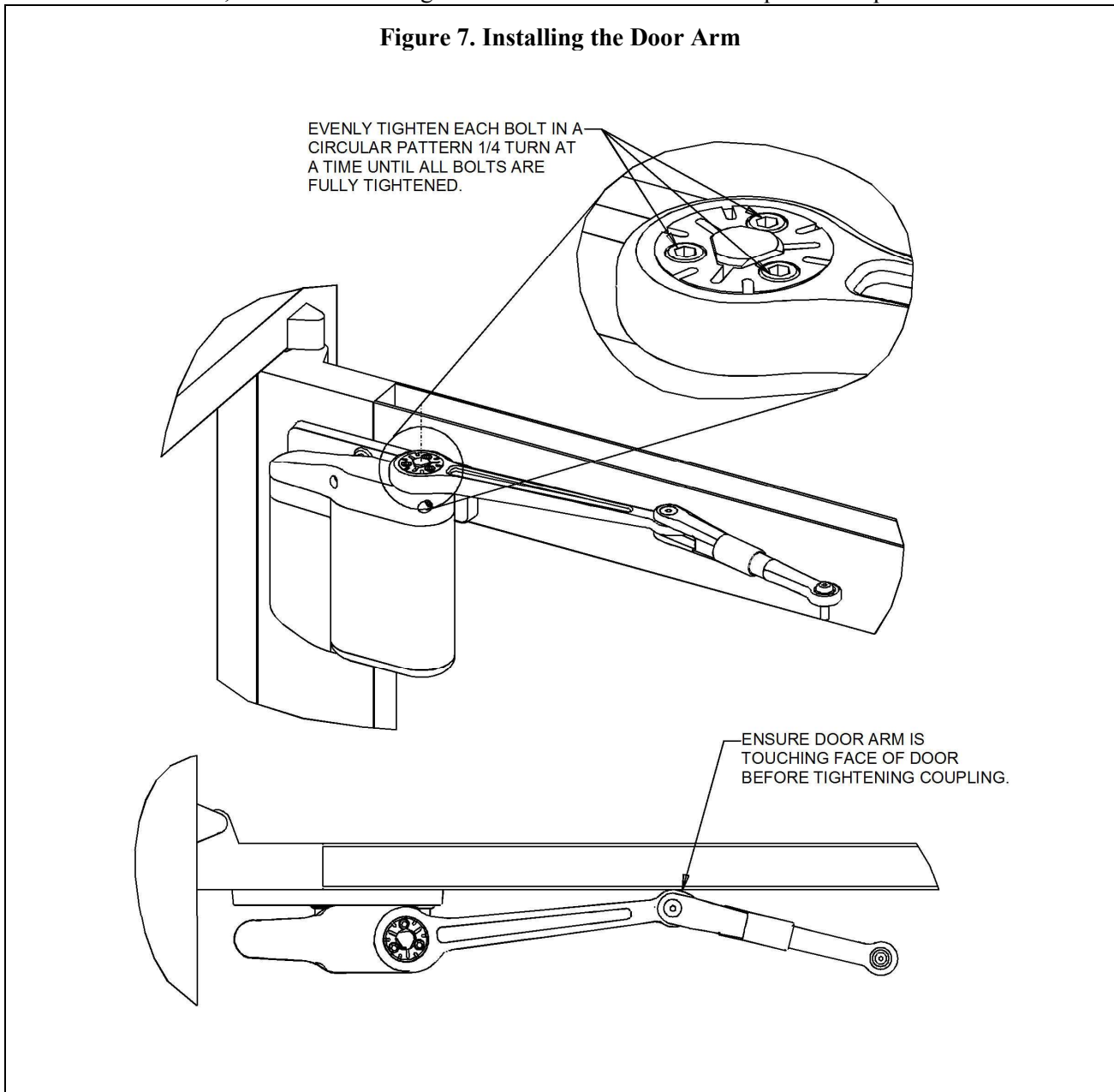

OPERATOR MOUNTING
BRACKET COVER

ARM PIVOT

EZ021
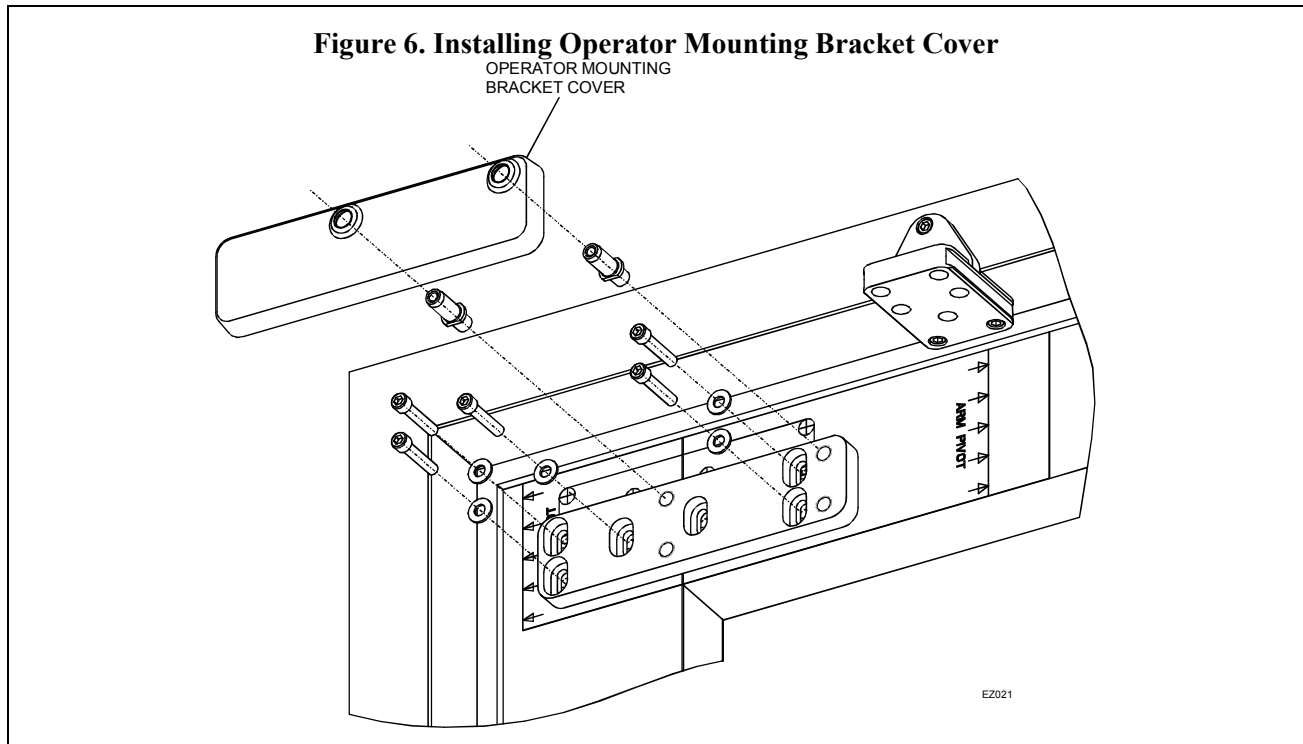
1.5   Installing the Door Arm

1.5.1   Refer to Figure 7, and, with the door arm coupling screws facing up and the door arm against the door rail, POSITION the larger end of the door arm onto the operator output shaft.

Figure 7. Installing the Door Arm

EVENLY TIGHTEN EACH BOLT IN A CIRCULAR PATTERN 1/4 TURN AT A TIME UNTIL ALL BOLTS ARE FULLY TIGHTENED.

ENSURE DOOR ARM IS TOUCHING FACE OF DOOR BEFORE TIGHTENING COUPLING.

CAUTION

The door arm coupling is a two-piece tapered coupling. In order to draw the coupling halves together evenly the three door arm coupling screws must be tightened evenly (one quarter turn at a time) until fully tight.

1.5.2   With the door arm touching the face of the door, TIGHTEN the door arm coupling screws evenly (one quarter turn at a time) until fully tight.

1.5.3 HOLD the elbow of the door arm against the face of the door, and THREAD the adjustable door arm end link into the door arm as necessary to align the end link mounting hole with the door arm pivot mounting hole.

1.5.4 If the door arm end link does not align with the door arm pivot mounting hole and there is no available travel on the threaded end link, PERFORM the following:

- LOOSEN the socket head capscrews securing the door arm pivot to the door arm pivot bracket.
- SLIDE the door arm pivot as necessary to align the door arm end link with the door arm pivot mounting hole.
- TIGHTEN the socket head capscrews securing the door arm pivot to the door arm pivot bracket.

NOTE

In order to apply a preload to the door, the door arm must be threaded into the door arm three revolutions.

1.5.5 THREAD the adjustable door arm end link into the door arm three revolutions.

1.5.6 INSTALL the washer provided onto the top of the door arm end link, and TIGHTEN the $^5/_{16}$ -18 X $^7/_8''$ button-head capscrew securing the door arm end link to the door arm pivot bracket.

1.5.7 CYCLE the door several times, and ENSURE that the door opens and closes smoothly.

1.5.8 SLIDE the dress cover onto the operator.

1.5.9 CONNECT the battery pack connector plug to the operator.

1.5.10 SLIDE the battery pack onto the operator, and ENSURE that the battery pack wires will not interfere with the operator cover.

1.6 Installing the Optional Plug-In Transformer

NOTE

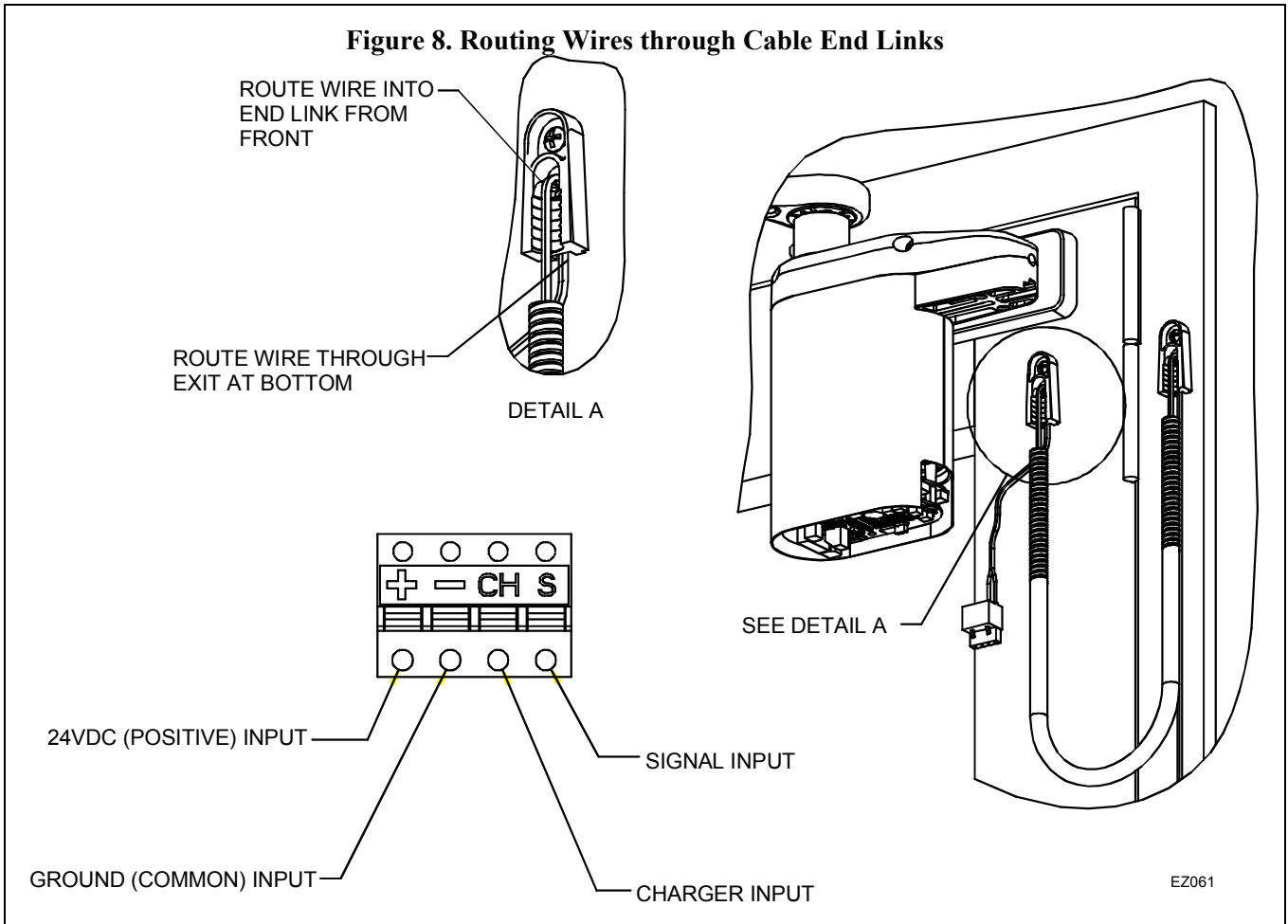If possible, the transformer wiring should be routed against the door trim molding.

1.6.1 ROUTE transformer wiring to a 110-VAC outlet, but do *not* plug transformer into the outlet.
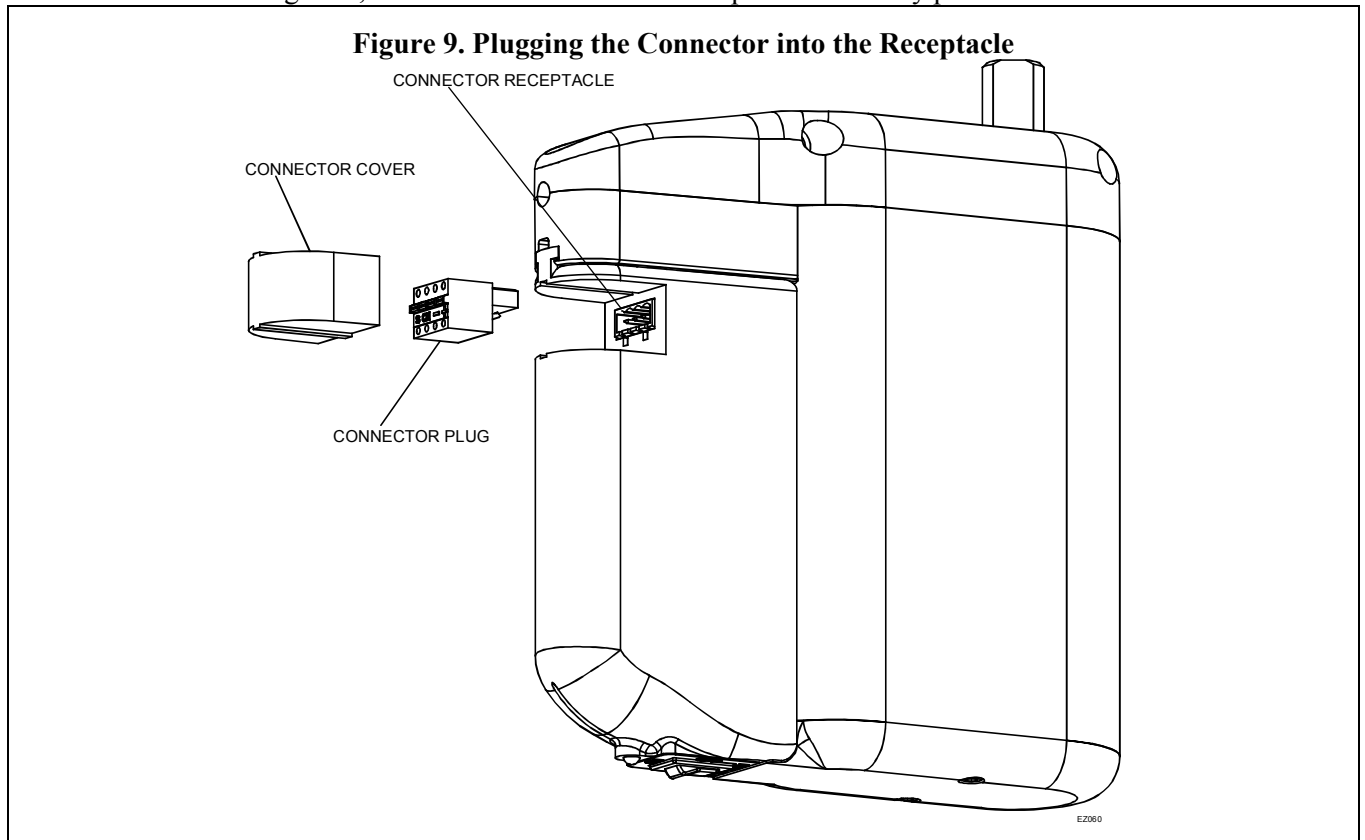
NOTE

An optional plug-in transformer is recommended in installations where the automatic door-opening feature will be used frequently. The optional plug-in transformer is REQUIRED for installations where Power Close and/or Push and Go features are enabled.

1.6.2 Refer To Figure 8, and ROUTE wires through armored cable end links. MOUNT the door cord end links as follows:

- MOUNT one end link in the area behind or next to the battery pack.
- MOUNT the other end link on or next to the door frame.

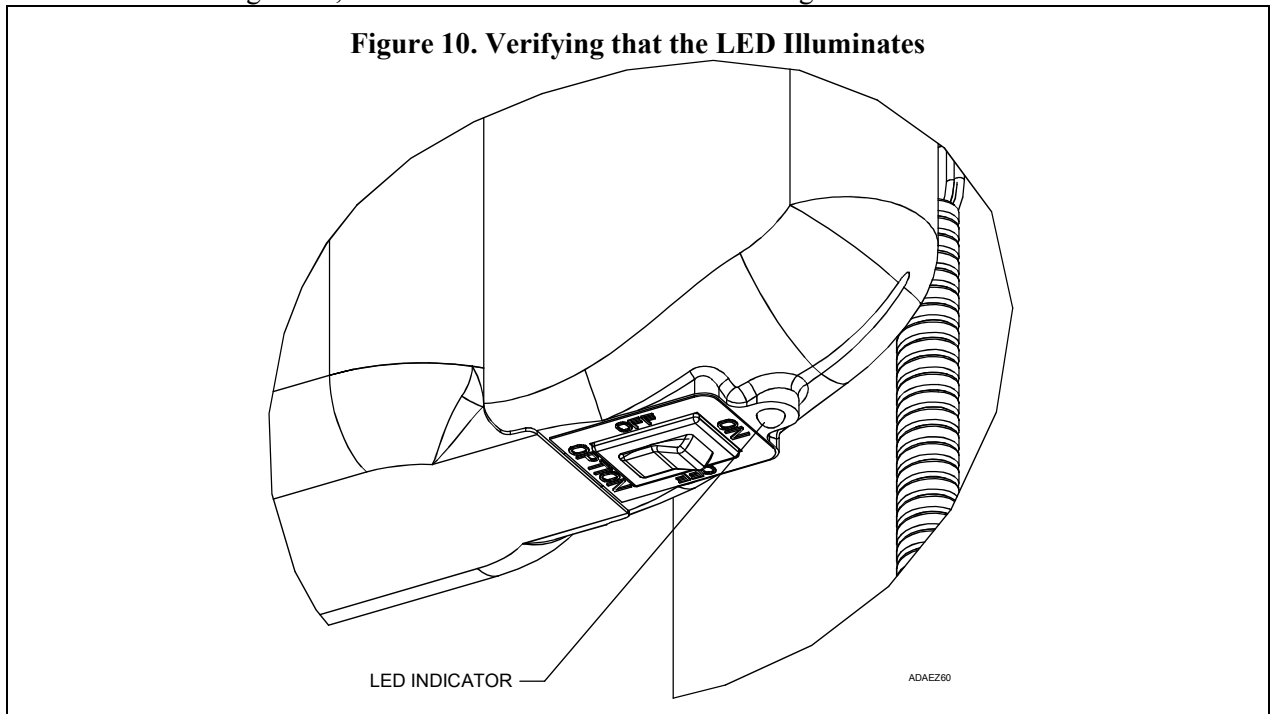**Figure 8. Routing Wires through Cable End Links**

ROUTE WIRE INTO END LINK FROM FRONT

ROUTE WIRE THROUGH EXIT AT BOTTOM

DETAIL A

SEE DETAIL A

CH S

24VDC (POSITIVE) INPUT

SIGNAL INPUT

GROUND (COMMON) INPUT

CHARGER INPUT

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1.6.3   Refer to Figure 9, and PLUG connector into receptacle on battery pack.

Figure 9. Plugging the Connector into the Receptacle

CONNECTOR RECEPTACLE

CONNECTOR COVER

CONNECTOR PLUG

EZ060

1.6.4   Refer to Figure 10, and VERIFY that the LED indicator lights GREEN.

Figure 10. Verifying that the LED Illuminates

LED INDICATOR
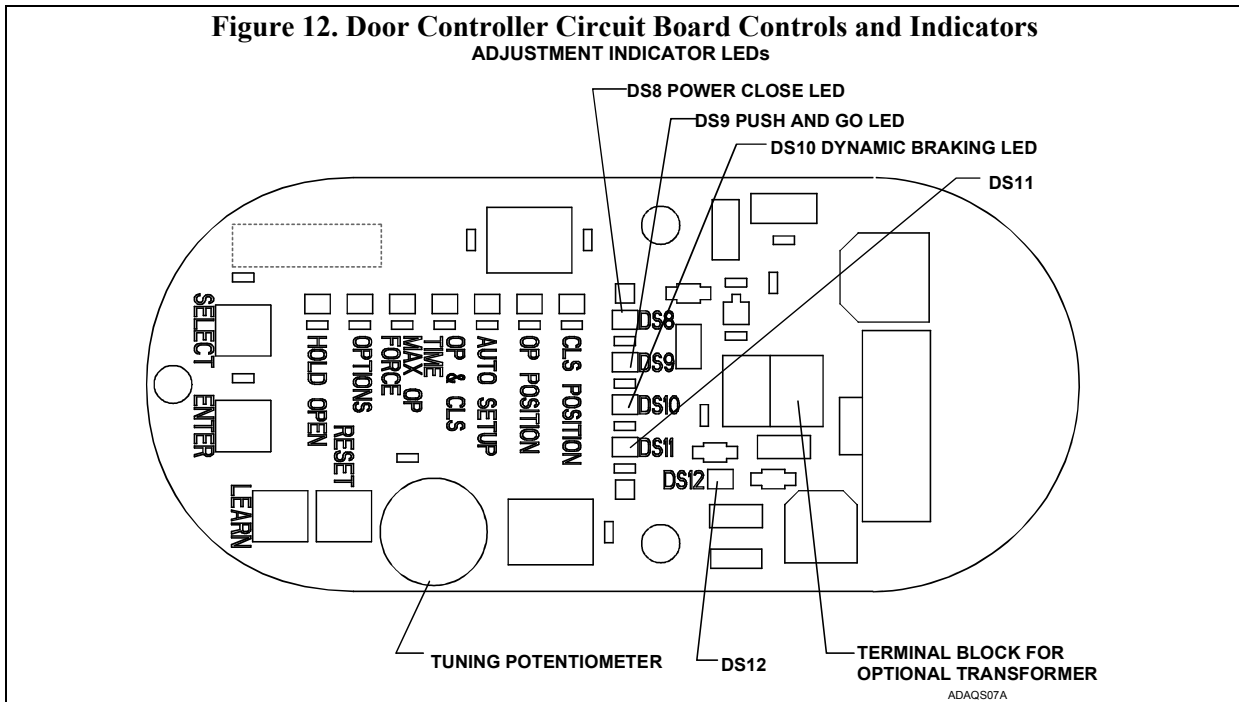
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1.6.5   Refer To Figure 11, and INSTALL receptacle cover onto battery pack.

Figure 11. Plugging the Receptacle Cover onto the Battery Pack
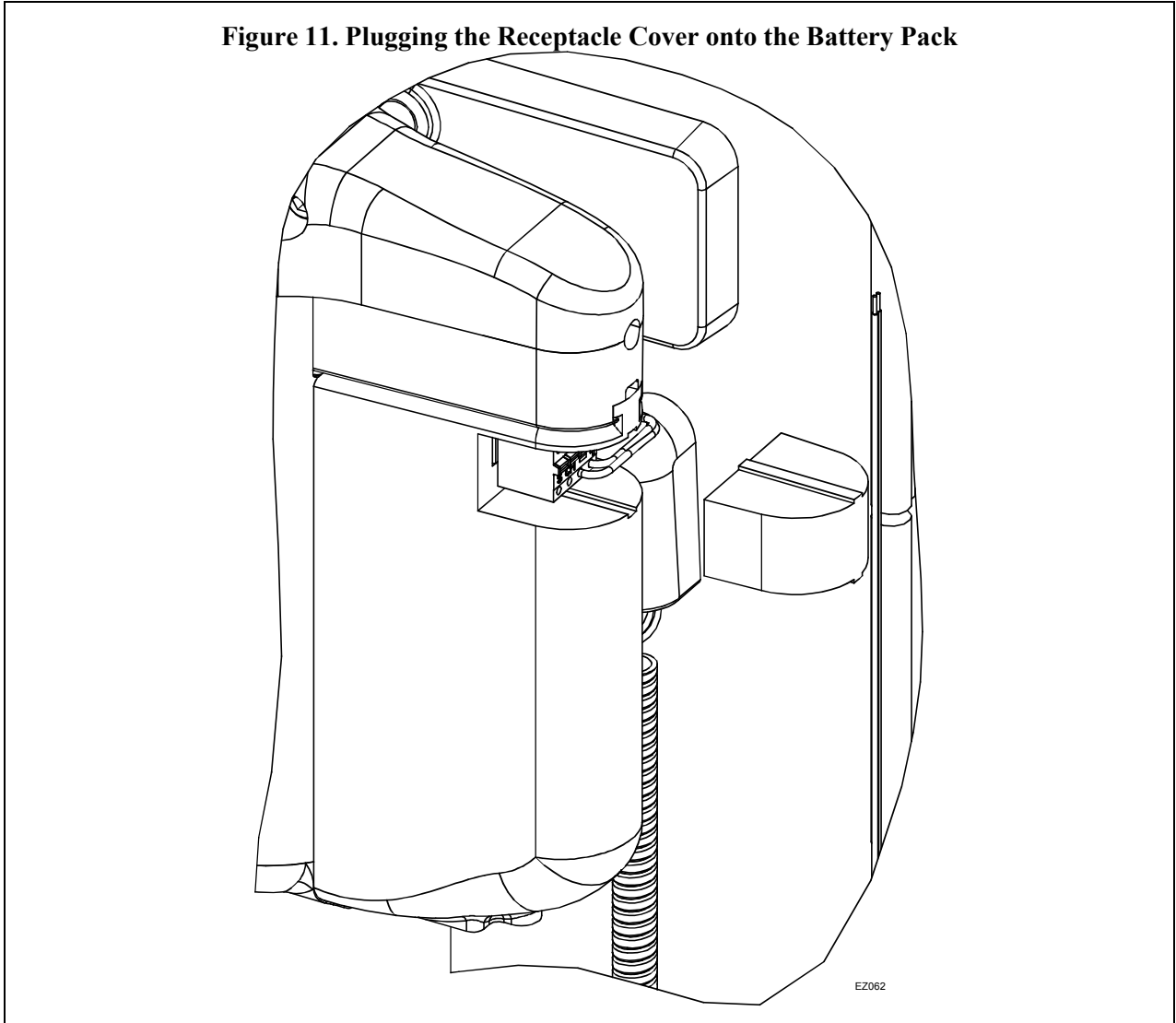
EZ062

1.7   Programming the Operator

Figure 12. Door Controller Circuit Board Controls and Indicators

1.7.1   Refer to Figure 12, and, at the base of the controller, PRESS and HOLD the "SELECT" and "ENTER" pushbuttons for three seconds. The following shall occur:

- The operator shall enter program mode.
- The four LEDs on the circuit board shall repeatedly flash green.
- The "CLS" position LED shall illuminate red and remain lit.

1.7.2   With the door in the closed position, PRESS the "ENTER" pushbutton. The following shall occur:

- The "CLS" position LED shall flash green.
- The "OP" (open) position LED shall illuminate red indicating that the operator is ready for input.
- The LED shall illuminate green once data has been stored for this parameter.

1.7.3   With the door in the closed position, PRESS the "ENTER" pushbutton.

1.7.4   OPEN the door to its fully open position.

1.7.5   With the door in the fully open position, PRESS the "ENTER" pushbutton. The following shall occur:

- The "OP" position LED shall flash green.
- The "AUTO SETUP" position LED shall illuminate red indicating that the operator is ready for input.
- The LED shall illuminate green once data has been stored for this parameter.

1.7.6   With the door in the fully closed position, PRESS the "ENTER" pushbutton. The following shall occur:

- The door shall open quickly and then close.

- The "AUTO SETUP" led shall illuminate green.

1.7.7   PRESS and HOLD the "ENTER" pushbutton for three seconds. The following shall occur:

- The "AUTO SETUP" led shall go out.

- The second LED (not labeled) shall flash green.

- The door shall be tuned.

1.7.8   To reset the controller, PERFORM the following:

a.   PRESS and HOLD the "RESET" pushbutton.

b.   PRESS and HOLD the "ENTER" pushbutton.

c.   RELEASE the "RESET" pushbutton.

1.7.9   If further door adjustments are necessary, refer to document number 70001, "ADA EZ Installation and Operating Instructions," and ADJUST as needed.

1.8   Initializing the Remote Control

1.8.1   To link an RF switch with a door controller, PERFORM the following:

a.   PRESS and HOLD the "LEARN" pushbutton on the controller until LEDs DS8 through DS11 flash green. The controller shall remain in the learn mode for 20 seconds or until the RF signal is received.

b.   PUSH the RF pushbutton. LED DS7 shall flash green indicating that the operator accepted this RF pushbutton.

c.   REPEAT steps 1.8.1.a. and 1.8.1.b. as necessary for up to eight ADA EZ transmitters.

1.8.2   To remove all RF pushbuttons from memory, PERFORM the following:

a.   While pressing and holding the "LEARN" pushbutton on the controller, PRESS and RELEASE the "RESET" pushbutton.