



Subject: P0052 Bed Locator Installation Instructions

Tools required:

| | |
|---------------------------|-------------------------|
| Standard drill | 1/4" diameter drill bit |
| Phillips head screwdriver | Screwdriver |
| 5/16" hex nut driver | Tape measure |
| 4' (122 cm) level | Power screwdriver |
| As-built drawings | Stud finder |
| Safety glasses | Broom |
| Dustpan | Pencil |
| Level | |

Parts required:

| | | |
|-----|---------|---|
| (1) | 131617 | Installation guide bracket |
| (1) | 149814 | Bag assembly, Bed Locator |
| (4) | 50590 | Screw, #6-20, oval, cross head, recessed |
| (1) | P005270 | Flatwall Headwall System interconnect (for units installed with the Flatwall Headwall System only) |

149814, Bag assembly, Bed Locator, includes these items:

| | | |
|-----|----------|---|
| (6) | 16114 | Screw, #6-32 x 1/2", phillips, flat head, zinc-plated zinc-plated, full thread |
| (6) | 29591 | Screw, #8, self-drilling |
| (4) | 5294502 | Screw, #6 x 3/8", type B, truss head |
| (9) | 5314301 | Screw, #12—self-drilling, hex head |
| (6) | 55408 | Grommet edging, 2" |
| (6) | 55409 | Grommet edging, 3" |
| (3) | 55691PL | Face ring, wall box |
| (2) | 50854-03 | Screw |
| (2) | 57185 | Wall anchor |
| (2) | 55138 | Screw (for wall anchor) |
| (8) | 16115 | Screw (installed on assembled bed locator) |
| (4) | 50590 | Screw (installed on assembled bed locator) |

P005270, Flatwall Headwall System interconnect, includes these items:

| | | |
|-----|--------|--|
| (1) | 55217 | Bag assembly, interconnect |
| (1) | 149457 | Raceway cover, Flatwall Headwall System interconnect |
| (1) | 149456 | Backplate, Flatwall Headwall System interconnect |



55217, Bag assembly, interconnect, includes these items:

- | | | |
|-----|---------|--------------------------------------|
| (1) | 12483 | Lockwasher, #8, dish-type |
| (1) | 15389 | Washer, 16 gauge, unplated |
| (1) | 15384 | Toggle snap, 3/16", zinc-plated |
| (1) | 50167 | Screw, #10-24 x 3", round/cross head |
| (5) | 5294502 | Screw, #6 x 3/8", type B, truss head |

Introduction

These instructions are for the installation of the P0052B Locator on standard, fire-rated, or seismic-rated dry wall and with these products:

- Flatwall Headwall System (P670E)
- ImageBuilders®¹ Cabinet Headwall Collection (P796)



CAUTION:

Except when mounted to cabinetry (minimum 3/4 inch thick plywood or particleboard core), wall-mounted bed locators shall be mounted to walls that are constructed of 5/8 inch minimum dry wall on 20 Gage minimum steel studs that are center-spaced to a maximum of 16 inches.

The bed locator must be installed in accordance with all applicable state and local codes (Note: The decorative plastic cover has a Smoke Index rating between 500 and 632), and the latest editions of the following:

- US - NFPA 70, *National Electrical Code*®² (NEC) and NFPA 99, *Health Care Facilities*.
- Canada - Canadian Standards Association (CSA):
CSA C22.1 and C22.2, Parts - 1 and 2 of the *Canadian Electrical Code*
CSA Z32, *Electrical Safety and Essential Electrical Systems in Health Care Facilities*
CSA Z318.0, *Commissioning of Health Care Facilities*

Radiated and Conducted Emissions (EMC): The P0052B3 Medical Headboard with LED lighting (see Figure-8) is powered by a factory installed 12 VDC, 500 Milli-Amp fuse limited, Hill-Rom 149425 Power Supply Unit (Rated Input: 120/240 VAC, 2 Amps, 50/60 Hz). When connected and used in accordance with Hill-Rom instructions, the Hill-Rom P0052B3 Medical Headboard with 149425 Power Supply Unit is compliant to the Class-A requirements of Part-15 in Title-47 of the US Code of Federal Regulations (47CFR-15), and the Industry Canada ICES/NMB-003 standard. The following legal notices are therefore provided as follows:

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

1. ImageBuilders® is a trademark of Hill-Rom Services, Inc.

2. National Electrical Code® is a registered trademark of National Fire Protection Association, Inc.

This Class-A digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

NOTE:

Changes or modifications to equipment not expressly approved in writing by Hill-Rom could void the user's authority to operate the equipment.

Setup

1. Before you start the installation, refer to the as-built drawings to determine the correct location for the bed locator.
2. Make sure the facility's power has been run to the installation site and the wall boxes, where applicable, have been installed in the wall or center cabinet of the ImageBuilders® Cabinet Headwall Collection.
3. Unpack the contents of the shipping container.
4. Read all of these installation instructions, and make sure the instructions match your hardware and as-built drawings.



SHOCK HAZARD:

Failure to turn off all power sources to the installation site during the installation could cause personal injury or equipment damage.

5. Turn off all power to the installation site.

NOTE:

The installation site is likely to have more than one grounded power source: normal power and emergency power.

Determine the Wall and Construction Type



WARNING:

The installation method differs for each wall and construction type. Failure to install the bed locator according to the applicable wall and construction type could cause the bed locator to collapse. Injury or equipment damage could occur.

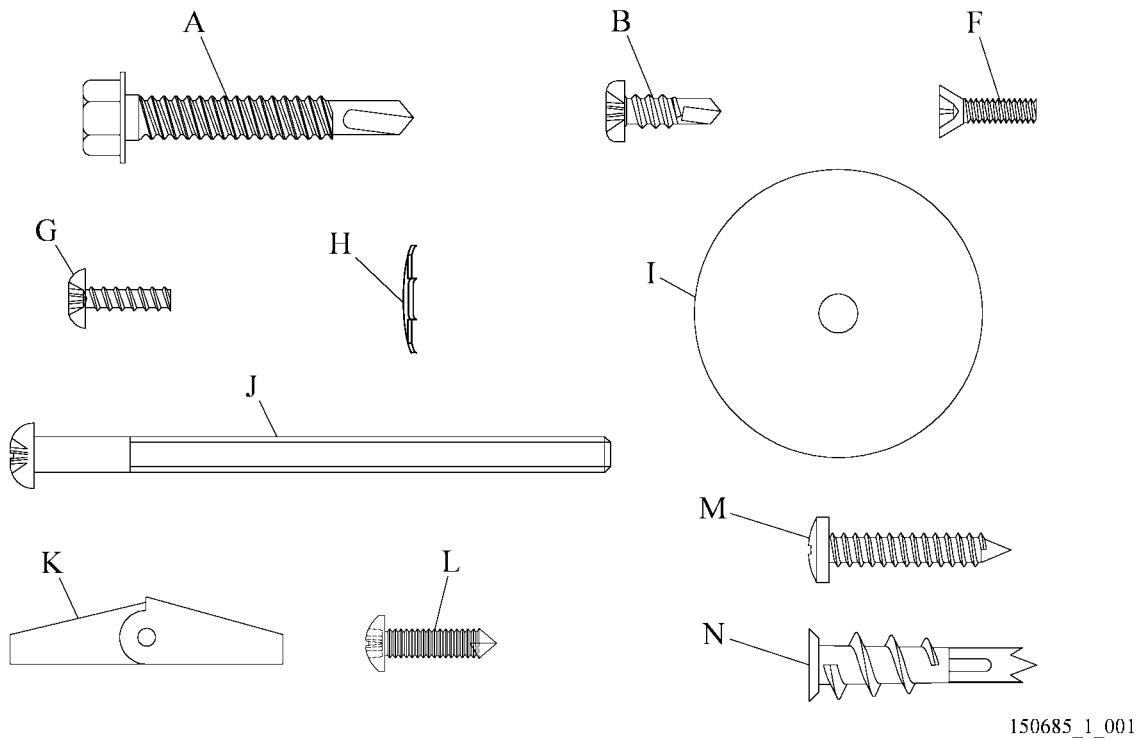
1. Refer to the local or state building codes, and determine the wall type and construction type:
 - **Seismic** walls are constructed to prevent damage from an earthquake.
 - **Fire-rated** walls are constructed to prevent the spread of fire.
2. Do **one** of these:

- For **seismic** walls, install wall backing plates according to the Office of Statewide Health, Planning, and Development (OSHPD)-approved drawings and the as-built drawings, and then go to “Hardware Requirements” on page 6.
- For **fire-rated, non-seismic** walls, make sure the walls are constructed with at least 20-gauge steel studs on 16" (41 cm) centers and covered with a minimum of 5/8" (16 mm) dry wall, and then go to “Hardware Requirements” on page 6.
- To install the bed locator with a Flatwall Headwall System, go to “Hardware Requirements” on page 6.
- To install the bed locator on the ImageBuilders® Cabinet Headwall Collection, go to “Hardware Requirements” on page 6.

Hardware Requirements

1. Remove the necessary hardware from the bag assembly (see figure 1 on page 6):
 - For **seismic-rated** or **fire-rated** dry wall hardware, refer to table 1 on page 6.
 - For the **ImageBuilders® Cabinet Headwall Collection** hardware, refer to table 2 on page 7.

Figure 1. Hardware



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Table 1. Seismic-Rated and Fire-Rated Dry Wall Hardware

| Item | Part Number | Description |
|------|-------------|---|
| A | 5314301 | Screw, #12, self-drilling, hex head |
| B | 29591 | Screw, #8, self-drilling |
| F | 16114 | Screw, #6-32 x 1/2", phillips, flat head, zinc-plated |
| G | 5294502 | Screw, #6 x 3/8", type B, truss head |
| H | 12483 | Lockwasher, #8 dish-type |
| I | 15389 | Washer, 16 gauge, unplated |



| Item | Part Number | Description |
|------|-------------|--------------------------------------|
| J | 50167 | Screw, #10-24 x 3", round/cross head |
| K | 15384 | Toggle snap, 3/16", zinc-plated |
| L | 50854-03 | Screw, #8 x 5/8", pan head |
| M | 55138 | Screw, pan head |
| N | 57185 | Anchor, screw |

Table 2. ImageBuilders® Cabinet Headwall Collection

| Item | Part Number | Description |
|------|-------------|---|
| A | 5314301 | Screw, #12, self-drilling, hex head |
| B | 29591 | Screw, #8, self-drilling |
| F | 16114 | Screw, #6-32 x 1/2", phillips, flat head, zinc-plated |
| L | 50854-03 | Screw, #8 x 5/8", pan head |

- 2. If you install the bed locator with a **Flatwall Headwall System**, get the hardware from the interconnect module (P005270).

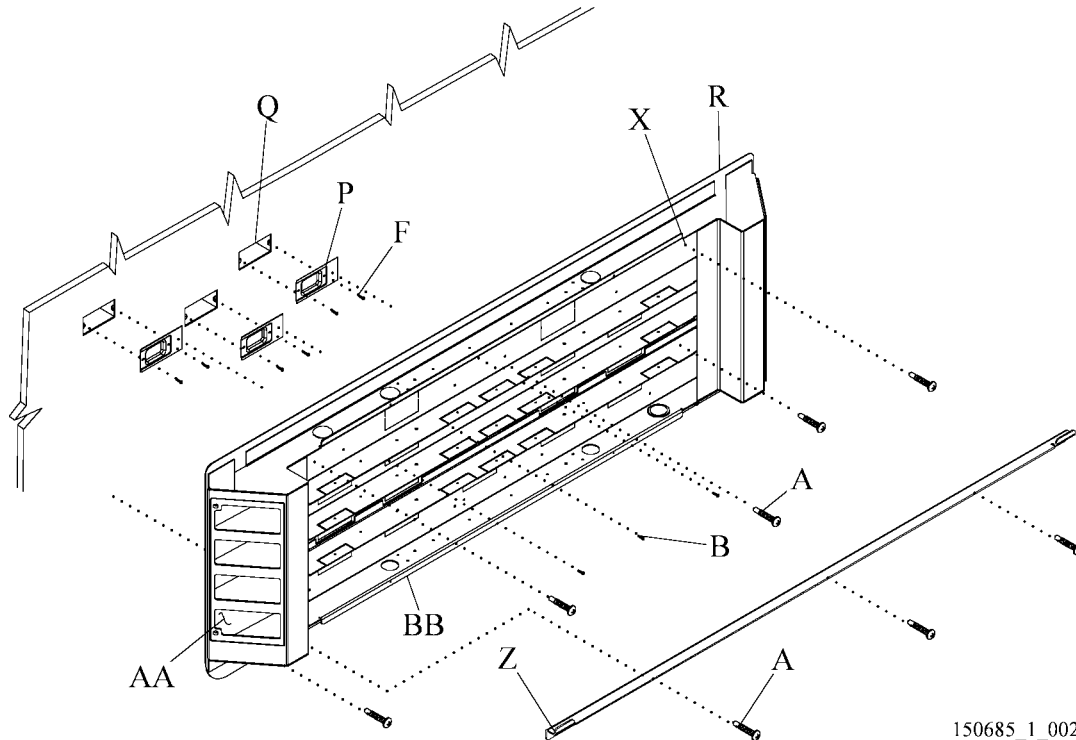
Which Instructions to Use

- 1. Do **one** of these:
 - If you install the bed locator on a wall as a **stand-alone unit**, go to “Install the Bed Locator as a Stand-Alone Unit” on page 8.
 - If you install the bed locator **with** the **Flatwall Headwall System**, go to “Install the Bed Locator with the Flatwall Headwall System” on page 13.
 - If you install the bed locator on the **ImageBuilders® Cabinet Headwall Collection**, go to “Install the Bed Locator on the ImageBuilders® Cabinet Headwall Collection” on page 18.
 - If you install the **Medical Headboard** as a stand alone unit, go to “Install the Medical Headboard as a Stand-Alone Unit” on page 24.

Install the Bed Locator as a Stand-Alone Unit

1. Install the flat head screws (F) to attach the face rings (P) on the line voltage and low voltage wall boxes (Q) (see figure 2 on page 8).

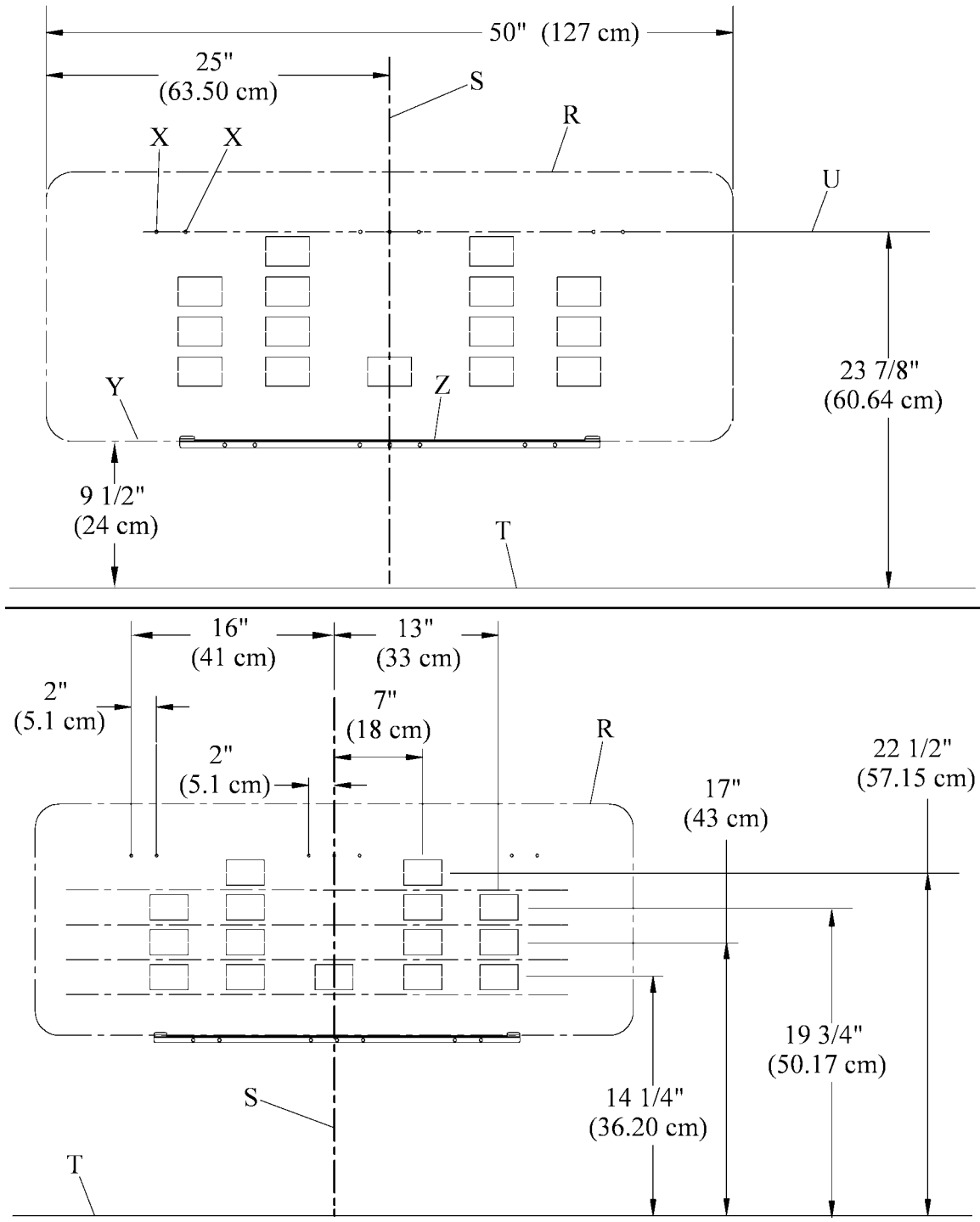
Figure 2. Backplate Assembly and Installation Guide Bracket



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2. Remove the knockouts from the backplate assembly (R) that align with the wall boxes (Q).
3. Install the grommet edging around each removed knockout.
4. Make a mark to show the bed centerline (S) (see figure 3 on page 9):
 - a. Refer to the as-built drawings, and determine the bed centerline (S) as it relates to the backplate assembly (R).
 - b. If a finished floor has **not** been installed, make a mark to show the location of the intended finished floor line (T).
 - c. Make a plumb vertical bed centerline (S) on the wall 25" (64 cm) up from the floor line (T).
 - d. The bottom edge of the locator will be 9 1/2" (24.13 cm) from the floor line.

Figure 3. Bed Locator—Typical Installation Dimensions



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5. Measure 23 7/8" (60.64 cm) from the floor line (T) up the wall, and make a mark to show the location on the bed centerline (S).
6. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the horizontal centerline (U) of the mounting holes.
7. Measure 9 1/2" (24.13 cm) from the floor line (T) up the wall, and make a mark to show its location on the bed centerline (S).
8. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the top horizontal centerline (Y) of the installation guide bracket (Z).
9. Align the installation guide bracket (Z) with the centerlines (S) and (Y).



WARNING:

Failure to wear eye protection could cause eye injury.

10. Put on safety glasses.
11. Install three #12 self-drilling screws (A) at a location free from obstruction to attach the installation guide bracket (Z) to the wall (see figure 2 on page 8).



WARNING:

The installation method differs for each wall and construction type. Failure to install the bed locator according to the applicable wall and construction type could cause the bed locator to collapse. Injury or equipment damage could occur.

12. Go to "Fire-Rated Dry Wall Installation" on page 11.

Fire-Rated Dry Wall Installation



WARNING:

Do not leave the backplate assembly unattended in the installation guide bracket and not attached to the wall. The backplate assembly could fall and cause injury or equipment damage.

1. Remove the face plate, plastic cover and front plate from the backplate assembly.
2. Put the backplate assembly (R) in the installation guide bracket (Z) (see figure 2 on page 8).
3. Align the backplate assembly (R) with the centerlines (S) and (U) (see figure 3 on page 9) and wall boxes (Q) (see figure 2 on page 8).



WARNING:

Failure to wear eye protection could cause eye injury.

4. Put on safety glasses.
5. Do one of these:
 - If the wall has a metal backplate, choose three knockouts to create holes near the left edge, center, and right edge of the backplate assembly.
 - If the wall has studs, choose three knockouts or create holes that align with studs near the left edge, center, and right edge of the backplate assembly.



WARNING:

Make sure the self-drilling screws go through the wall stud or backing plate. Failure to do so could cause injury or equipment damage.

6. At the mounting holes (X), install three #12 self-drilling screws (A) at a location free from obstruction to attach the backplate assembly (R) to the wall studs or backing plate.
7. Find the wall studs that are furthest from the sides of the bed centerline (S) and still within the area of the backplate assembly (R) (see figure 3 on page 9).
8. At the wall studs, drill two 1/4" diameter holes in the lower flange (BB) of the backplate, below the lowest raceway of the backplate assembly (R) (see figure 2 on page 8).



WARNING:

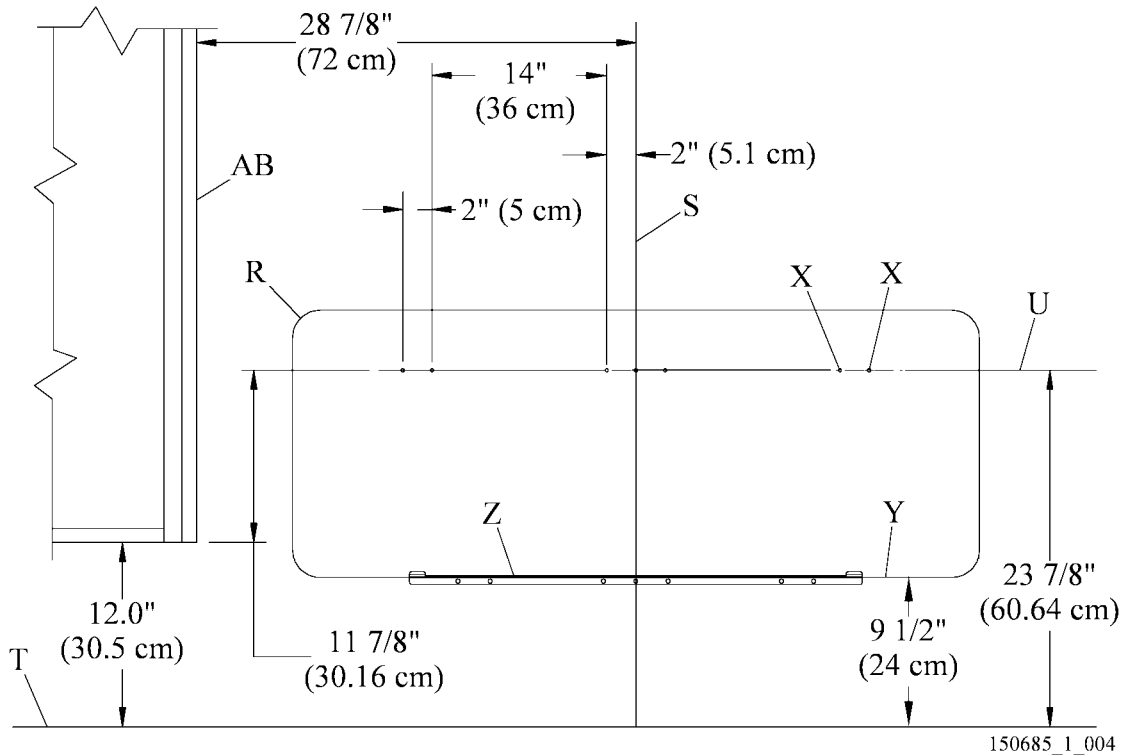
Make sure the self-drilling screws go through the wall stud or backing plate. Failure to do so could cause injury or equipment damage.

9. Install two #12 self-drilling screws (A) at a location free from obstruction to attach the lower flange (BB) to the wall studs or backing plate.
10. Install the #8 self-drilling screws (B) to attach the backplate assembly (R) to the face rings (P).
11. Go to “Final Steps” on page 21.

Install the Bed Locator with the Flatwall Headwall System

1. Mark the bed centerline (S) (see figure 4 on page 13):

Figure 4. Typical Installation Dimensions



- a. If a finished floor has **not** been installed, make a mark to show the location of the intended finished floor line (T).
 - b. Make a plumb vertical bed centerline (S) on the wall 25" (64 cm) up from the floor line (T).
2. Measure 23 7/8" (60.64 cm) from the floor line (T) up the wall, and make a mark to show its location on the bed centerline (S).
 3. At the mark on the bed centerline (S), make a plumb line from the side of the headwall system (AB) at least 47" (119 cm) across the wall to show the horizontal centerline (U) of the mounting holes (X).
 4. Measure 9 1/2" (24.13 cm) from the floor line (T) up the wall, and make a mark to show the location on the bed centerline (S).
 5. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the top horizontal centerline (Y) of the installation guide bracket (Z).

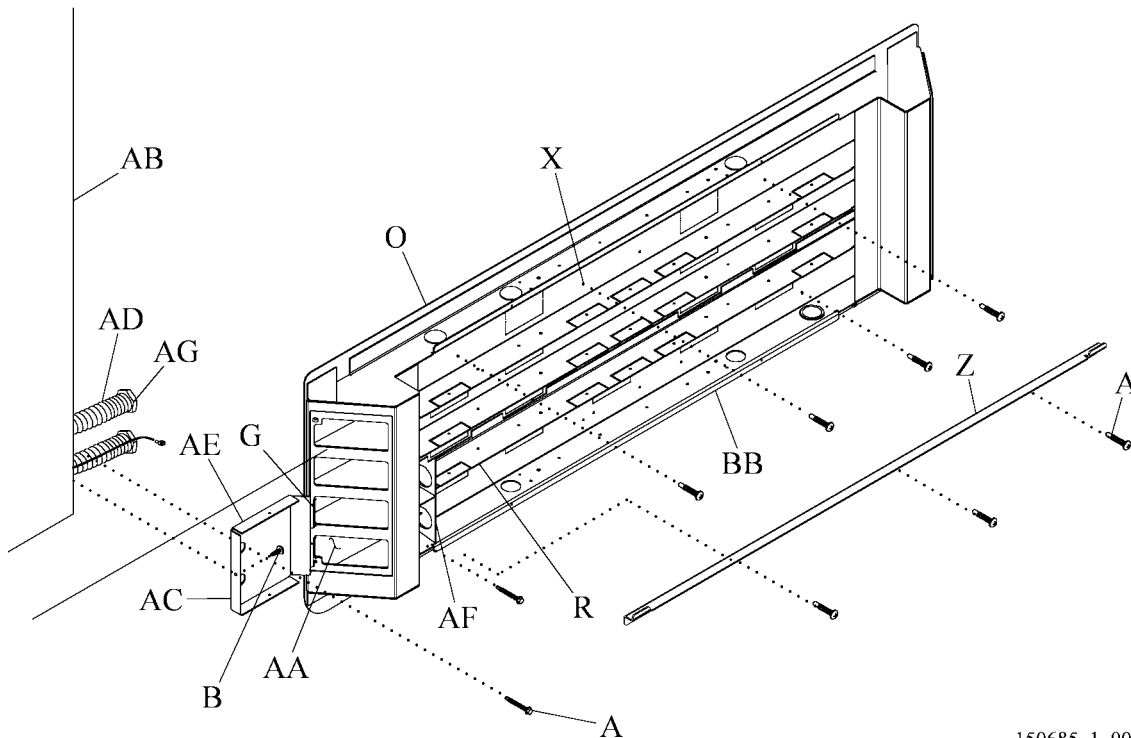


WARNING:

Failure to wear eye protection could cause eye injury.

6. Put on safety glasses.
7. Align the installation guide bracket (Z) with the lines (S) and (Y).
8. Install three #12 self-drilling screws (A) at a location free from obstruction to attach the installation guide bracket (Z) to the wall (see figure 5 on page 14).

Figure 5. Headwall System Interconnect



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9. Remove the face plate, plastic cover and front plate from the backplate assembly.
10. Use two #6 x 3/8" long truss head screws (G) to install the interconnect backplate (AC) into the applicable bed locator device opening.



WARNING:

The installation method differs for each wall and construction type. Failure to install the bed locator according to the applicable wall and construction type could cause the bed locator to collapse. Injury or equipment damage could occur.

11. To install on **seismic-rated** and **fire-rated** dry wall, go to step 12.

**WARNING:**

Do not leave the backplate assembly unattended in the installation guide bracket and not attached to the wall. The backplate assembly could fall and cause injury or equipment damage.

12. Put the backplate assembly (R) in the installation guide bracket (Z) (see figure 5 on page 14).
13. Slide the backplate assembly (R) flush with the headwall assembly (AB).
14. Make sure the raceway backplate (AC) is against the headwall system (AB).

**WARNING:**

In accordance with National Fire Protection Association (NFPA) 70, *National Electrical Code*¹ (NEC), do **not** mix different services, such as critical power, low voltage, or normal power, in the same raceway section of the backplate assembly. Injury or equipment damage could occur.

15. Pull the wiring and conduit (AD) from the headwall system (AB) through the side of the backplate assembly (O) (see figure 5 on page 14). Do **not** mix different services in the same raceway level of the backplate assembly (R).
16. Do one of these:
 - If the wall has a metal backplate, choose three knockouts to create holes near the left edge, center, and right edge of the backplate assembly.
 - If the wall has studs, choose three knockouts or create holes that align with studs near the left edge, center, and right edge of the backplate assembly.

**WARNING:**

Make sure the self-drilling screws go through the wall stud or backing plate. Failure to do so could cause injury or equipment damage.

17. At the mounting holes (X), install three #12 self-drilling screws (A) at a location free from obstruction to attach the backplate assembly (R) to the wall studs or backing plate.
18. Find the wall studs that are furthest from the bed centerline (S) and within the area of the backplate assembly (R) (see figure 4 on page 13).
19. At the wall studs, drill two 1/4" diameter holes in the lower flange (BB) of the backplate, below the lowest raceway of the backplate assembly (R) at a location free from obstruction (see figure 5 on page 14).

1. National Electrical Code[®] is a registered trademark of National Fire Protection Association, Inc.



WARNING:

Make sure the self-drilling screws go through the wall stud or backing plate. Failure to do so could cause injury or equipment damage.

20. Install two #12 self-drilling screws (A) to attach the lower flange (BB) to the wall studs or backing plate at a location free from obstruction.



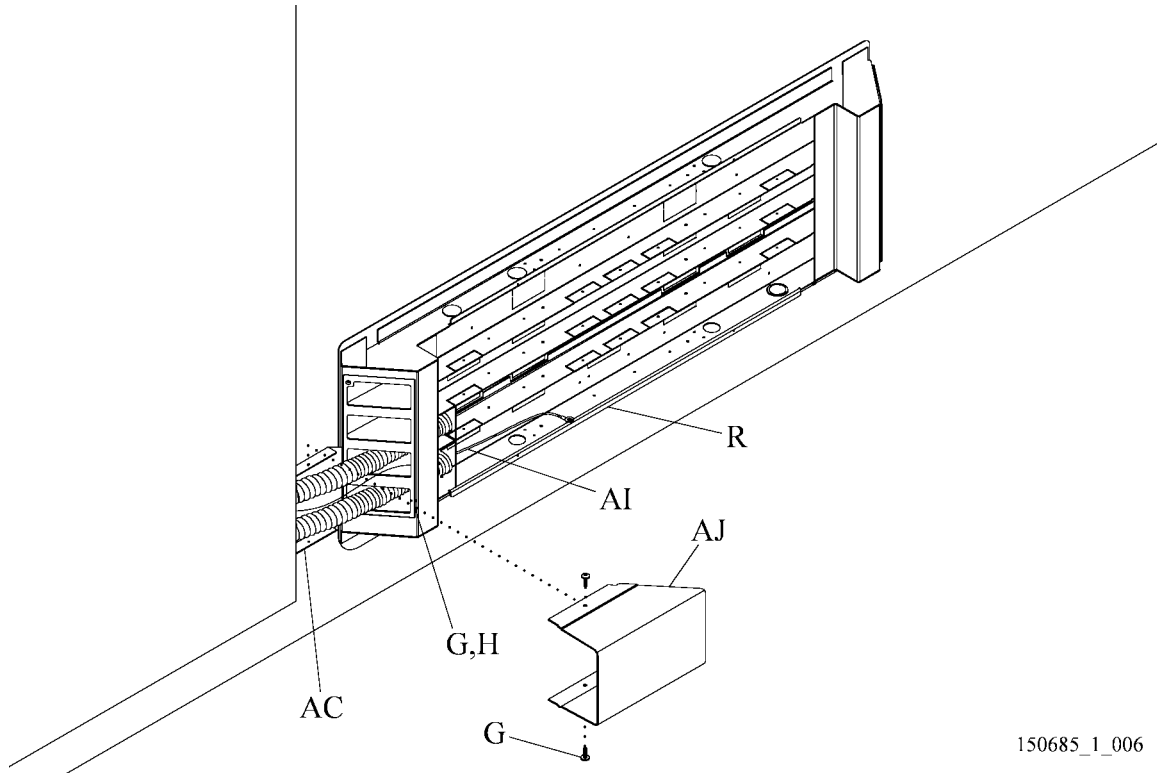
WARNING:

Make sure the self-drilling screws go through the wall stud or backing plate. Failure to do so could cause injury or equipment damage.

21. On **seismic-rated** or **fire-rated** dry wall, at a location free from obstruction, Install the two #12 self-drilling screws (A) to attach the backplate (AC) to the wall stud or backing plate.
22. Install one screw (B) to attach the backplate (AC) to the headwall system (AB).
23. Remove the conduit connector brackets (AF) from the backplate assembly (R).
24. Tighten the locknuts (AG) on the ends of headwall system conduit (AD) to attach them to the conduit connector brackets (AF).
25. Install the conduit connector brackets (AF) on the backplate assembly (R).

26. Install a truss head screw (G) and lockwasher (H) to attach the ground wires (AI) to the backplate assembly (R) (see figure 6 on page 17).

Figure 6. Conduit



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27. Install the two truss head screws (G) to attach the raceway cover (AJ) to the backplate (AC).
28. Go to “Final Steps” on page 21.

Install the Bed Locator on the ImageBuilders® Cabinet Headwall Collection

1. Find the openings in the front of the center cabinet (AK) (see figure 7 on page 19).
2. Halfway between the two rows of openings, make a vertical plumb line to show the bed centerline (S).
3. Remove the knockouts from the backplate assembly (R) that align with the junction boxes (AL) in the center cabinet (AK).



SHOCK HAZARD:

Make sure no electrical power is supplied to the facility wiring. Injury or equipment damage could occur.

4. Make sure no electrical power is supplied to the facility wiring. If necessary, tag out and lock out the power to the circuits in the center cabinet (AK).
5. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the horizontal centerline (Y) of the installation guide bracket (Z).
6. Align the installation guide bracket (Z) with the centerlines (S) and (Y).
7. Install three #12 self-drilling screws (A) at a location free from obstruction to attach the installation guide bracket (Z) to the center cabinet (AK).
8. Remove the face plate, plastic cover and front plate from the backplate assembly.

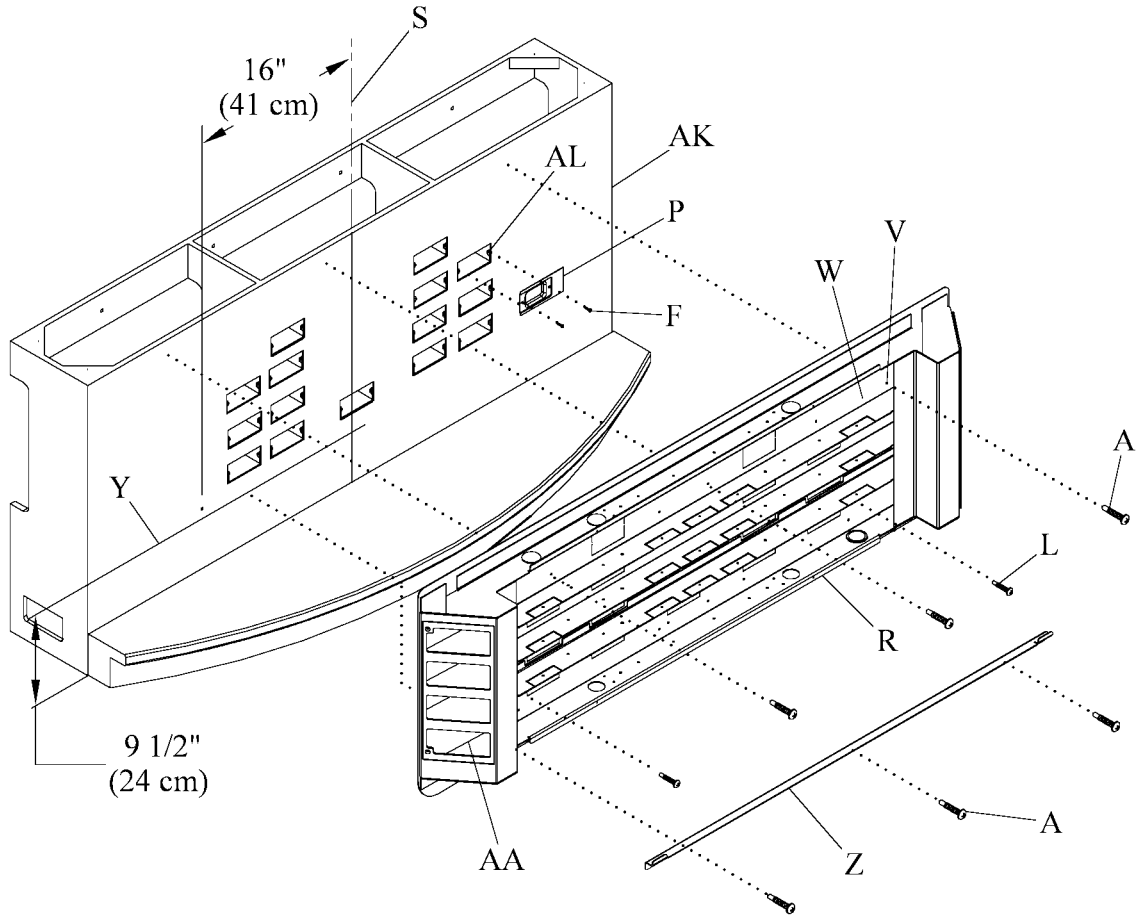


WARNING:

Do not leave the backplate assembly unattended in the installation guide bracket and not attached to the center cabinet. The backplate assembly could fall and cause injury or equipment damage.

9. Install the flat head screws (F) to attach the necessary face rings (P) to the junction boxes (AL).
10. Install the grommet edging around each removed knockout.
11. At the mounting holes (V) and/or (W), remove the knockout.
12. Put the backplate assembly (R) in the installation guide bracket (Z).
13. Align the backplate assembly (R) with the centerline (S).
14. Install three #12 self-drill screws (A) through knockouts (W) or (V) to attach bed locator to center cabinet.

Figure 7. Center Cabinet



150685_1_007

15. Measure 16" (41 cm) from the bed centerline (S) on each side of the center cabinet (AK), and make marks to show the location of the lowest raceway (AA) of the backplate assembly (R).
16. At the marks, drill a 3/16" hole through the back of the backplate assembly (R) at a location free from obstruction.
17. Install two #8 pan head screws (L) to attach the lowest raceway (AA) to the center cabinet (AK).
18. Go to "Final Steps" on page 21.

Final Steps

1. Refer to the as-built drawings, and determine the bed locator's internal wiring configuration and hook-up information.



WARNING:

Failure to connect the electrical wiring correctly could cause injury or equipment damage.

2. Have the **electrical contractor** connect all the wiring from the wall boxes (Q) to the backplate assembly (R) according to the applicable state and local codes, and these (see figure 2 on page 8):
 - NFPA 70, *National Electrical Code*¹ (NEC)
 - CSA 22.1, *Canadian Electrical Code—Safety Standard for Electrical Installations*
 - CSA Z318.0, *Commissioning of Health Care Facilities*
3. Do one of these:
 - For the **Bed Locator** cover, go to “Bed Locator cover” on page 21.
 - For the **Medical Headboard** cover, go to “Medical Headboard cover” on page 21.

Bed Locator cover

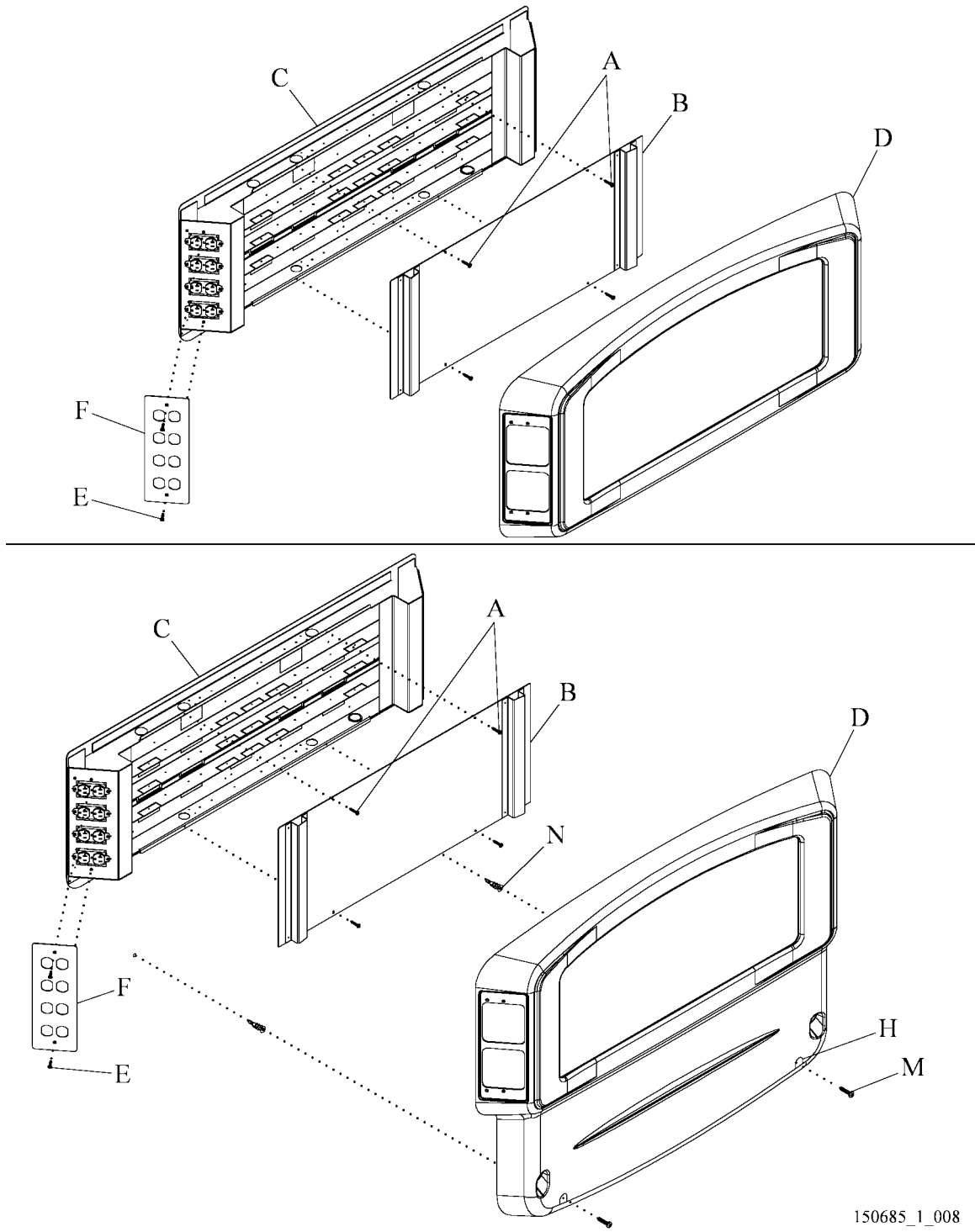
1. Install the screws (A) to attach the front panel (B) on the back plate assembly (C) (see figure 8 on page 22).
2. Install the plastic cover (D).
3. Install the screws (E) to attach the face plates (F) to the back plate assembly (C) through the plastic cover (D).

Medical Headboard cover

1. Install the screws (A) to attach the front panel (B) on the back plate assembly (C) (see figure 8 on page 22).
2. Install the plastic cover (D).
3. Mark the locations on the wall for wall anchors (N) using the holes (H) on the bottom edge of the plastic cover (D).

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Figure 8. Access Panel



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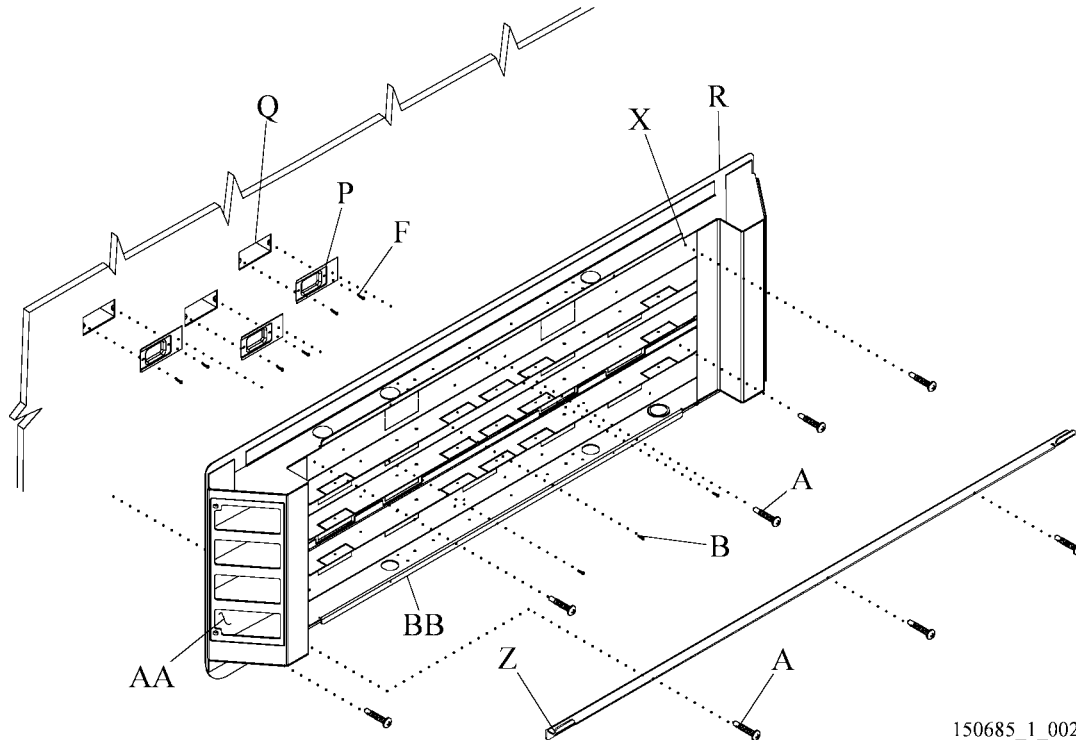


4. Remove the plastic cover (D).
5. Install the wall anchors (N) in the locations previously marked on the wall.
6. Install the plastic cover (D).
7. Install the screws (M) into the wall anchors (N) through the plastic cover (D)
8. Install the screws (E) to attach the face plates (F) to the back plate assembly (C) through the plastic cover (D).

Install the Medical Headboard as a Stand-Alone Unit

1. Install the flat head screws (F) to attach the face rings (P) on the line voltage and low voltage wall boxes (Q) (see figure 9 on page 24).

Figure 9. Backplate Assembly and Installation Guide Bracket



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2. Remove the knockouts from the backplate assembly (R) that align with the wall boxes (Q).
3. Install the grommet edging around each removed knockout.
4. Make a mark to show the bed centerline (S) (see figure 10 on page 25):
 - a. Refer to the as-built drawings, and determine the bed centerline (S) as it relates to the backplate assembly (R).
 - b. If a finished floor has **not** been installed, make a mark to show the location of the intended finished floor line (T).
 - c. Make a plumb vertical bed centerline (S) on the wall 25" (64 cm) up from the floor line (T).
 - d. The bottom edge of the locator will be 23" (58.42 cm) from the floor line.

5. Measure 37 3/8" (94.93 cm) from the floor line (T) up the wall, and make a mark to show the location on the bed centerline (S).
6. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the horizontal centerline (U) of the mounting holes.
7. Measure 23" (58.42 cm) for the Medical Headboard from the floor line (T) up the wall, and make a mark to show its location on the bed centerline (S).
8. Make a plumb line at least 20" (51 cm) on both sides of the mark to show the top horizontal centerline (Y) of the installation guide bracket (Z).
9. Align the installation guide bracket (Z) with the centerlines (S) and (Y).



WARNING:

Failure to wear eye protection could cause eye injury.

10. Put on safety glasses.
11. Install three #12 self-drilling screws (A) at a location free from obstruction to attach the installation guide bracket (Z) to the wall (see figure 2 on page 8).



WARNING:

The installation method differs for each wall and construction type. Failure to install the bed locator according to the applicable wall and construction type could cause the bed locator to collapse. Injury or equipment damage could occur.

12. Go to "Fire-Rated Dry Wall Installation" on page 11.