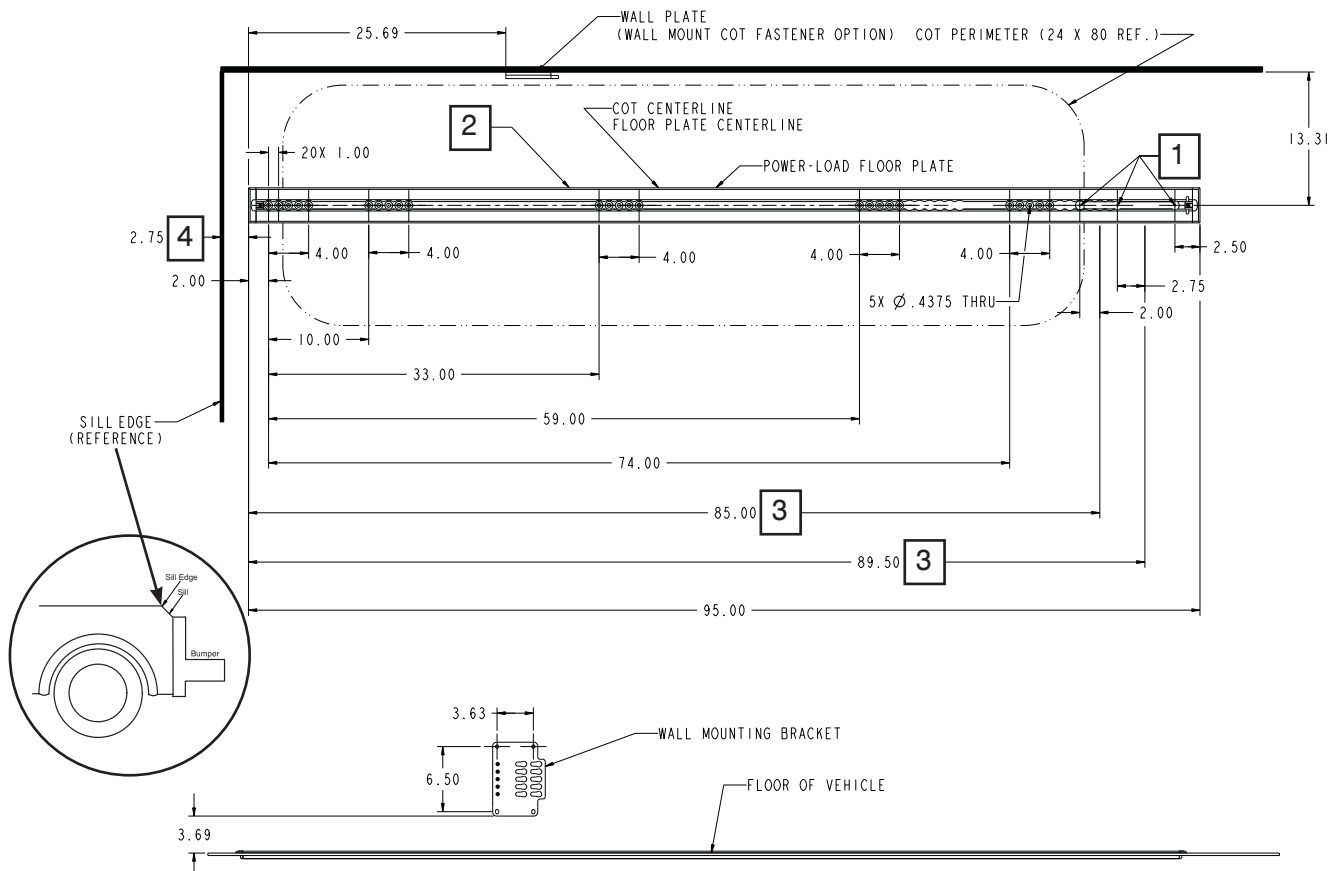
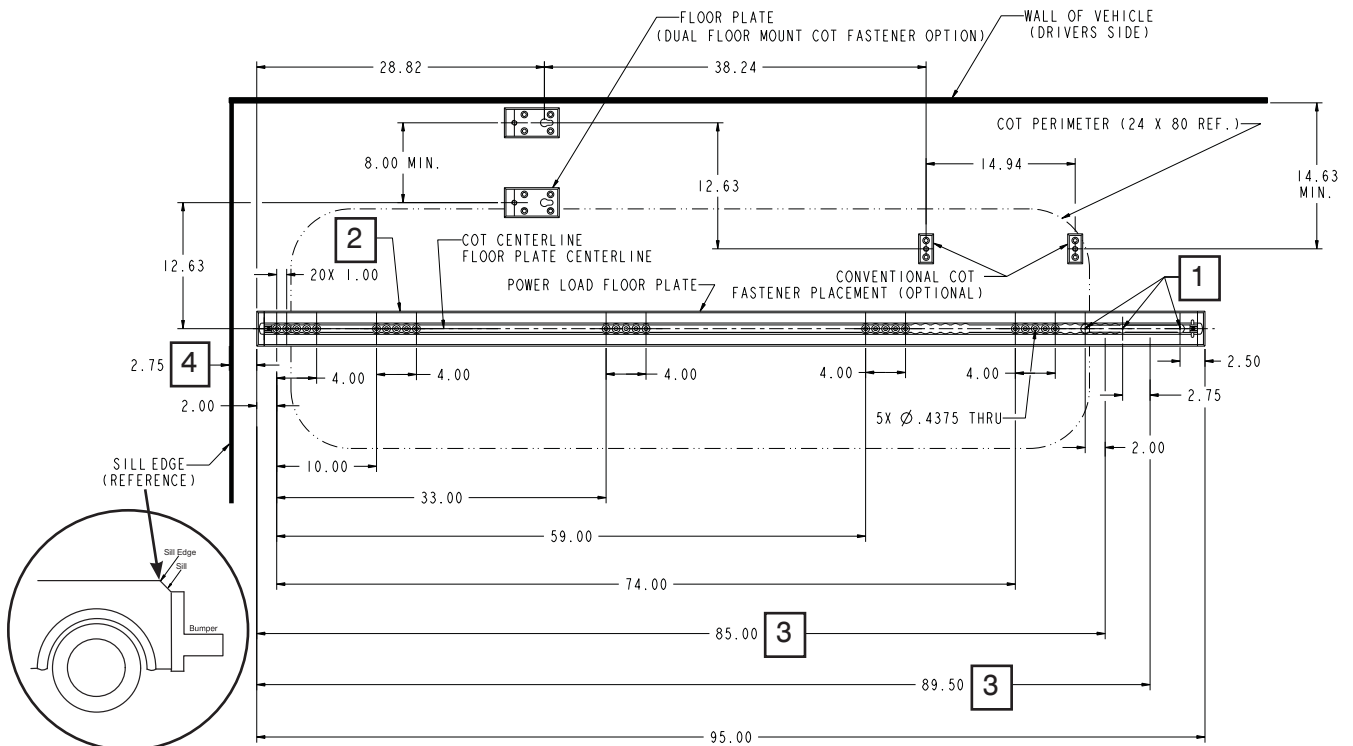


# Floor Plate Installation Guidelines



**Figure 8: Power-LOAD Floor Plate with Standard Wall Mount Cot Fastener Wall Plate (Optional)**



**Figure 9: Power-LOAD Floor Plate with Dual Standard Floor Mount Cot Fastener Floor Plates (Optional)**

# Installation Guide

---

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR)

### Floor Plate Assembly Kit Components (6390-001-055)

- (6) Flat Head Cap Screw (p/n 0001-194-000)
- (4) Sub Anchor Attachment Bracket Retainer (p/n 6390-001-110)
- (1) Rubber Grommet (p/n 0037-247-000)
- (1) Anchor to Vehicle Cable (p/n 6390-001-135)
- (1) Wire Protection Loom (p/n 6390-001-153)
- (1) Drain Tube (p/n 6390-001-170)
- (6) P-Style Clamp (p/n 6390-001-202)
- (2) Set Screw (p/n 0021-197-000)
- (5) Floor Plate Attachment Bracket (p/n 6390-001-108)
- (2) Floor Plate End Cap (p/n 6390-001-111)
- (1) Power-LOAD Safety Hook (p/n 6390-001-148)
- (2) Floor Plate Cover, Short (p/n 6390-001-166)
- (1) Floor Plate Drain Tube (p/n 6390-001-183)

### Tools Required:

- Pencil
- Router
- Drill
- Tape Measure
- 1/2" Drive 7/32" Hex
- Face Mask
- Saw
- 1/2" to 1" Router Bit
- 1/2" Drill Bit
- 9/16" Drill Bit
- 1/4" Allen Wrench
- Extension Cord
- 5/32" Allen Wrench
- Shop Vacuum
- Silicone Sealant
- 1/2" Drive Torque Wrench (ft-lb)
- Safety Glasses
- Rubber Hammer

### Procedure:

**Note:** You must install the optional wheel guide (6390-027-000) for Type II ambulances (see [page 34](#)).

1. Center the floor plate based on your desired distance from the vehicle patient compartment walls (see Figure 7 on [page 19](#) or Figures 8 or 9 on [page 20](#)). Use a pencil to mark the center location for the entire length of the floor plate.
2. Identify the mounting location relative to the distance from the door sill. Start at the location where the door sill first drops off as shown in Figure 7 on [page 19](#) or Figures 8 or 9 on [page 20](#) and measure 2-3/4 in (7 cm) inwards. Use a pencil to mark the location along the width of the vehicle patient compartment.
3. Lay the floor plate on the floor and note the three electrical inlet locations in the center towards the head end of the vehicle patient compartment.

**Note:** The floor plate can be cut in front of the third or second power inlet hole to better fit the vehicle patient compartment (see Figure 7 on [page 19](#) or Figures 8 or 9 on [page 20](#)).

---

### WARNING

To avoid the risk of personal injury or equipment damage, properly secure the item that you are cutting and be aware of the area around your cutting location. Always wear appropriate eye protection while operating a saw.

---

4. If the floor plate is too long for the vehicle patient compartment, use a saw to cut the floor plate at the head end of the vehicle patient compartment only.
5. Using a 5/32" Allen wrench, install the set screw (0021-197-000) to attach the floor plate end cap (6390-001-111) on one end. Repeat on the opposite end.
6. Using the line that was marked in step 1, measure 1-5/16 in (3.3 cm) on either side. Use a pencil to mark a reference line on each side of the center line.
7. Using the floor plate as a template, line up the sides with the lines (marked in step 6) and the front with the door threshold line (marked in step 2). Securely hold the floor plate in place and use a pencil to trace the shape of the floor plate onto the vehicle patient compartment floor.
8. Remove the floor plate.

**Note:** If you are installing multiple Power-LOAD systems, you can make a template to expedite installation. You can then trace the template instead of the floor plate in steps 6 and 7.

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# Installation Guide

---

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR) (CONTINUED)

---

### WARNING

During installation, always wear safety glasses and a face mask while operating a router.

---

- Using a router and 1/2" to 1" router bit, router out the floor by following the lines marked onto the floor in step 7.

**Note:** Set the router bit depth by using the floor plate as a depth gauge to 1/2 in (1.3 cm). Use a firm stance when using the router to avoid damaging the floor.

- Using a shop vacuum, clean the floor plate channel in the vehicle patient compartment floor and verify that the area is straight and free of burrs. Completely clean the vehicle patient compartment to remove any material that was removed from the floor.
  - Using a drill and a 1/2" drill bit, drill a 1/2 in (1.3 cm) hole through the floor plate and floor at the selected location of the electrical inlet (see Figure 7 on [page 19](#) or Figures 8 or 9 on [page 20](#)). Using a router and 1/2" to 1" router bit, router a 1 in (2.54 cm) diameter hole 1/4 in (.635 cm) below the floor plate cutout.
- 

### WARNING

To avoid the risk of personal injury or vehicle damage, be aware of items around and below the electrical inlet during floor plate installation.

---

- Using the silicone sealant, seal the floor plate inside the channel that was made in the floor and then firmly set the floor plate down into the channel.
- 

### WARNING

Ensure that all gaps to the exterior of the vehicle are sealed to prevent exhaust fumes from entering the vehicle patient compartment.

---

**Note:** Make sure that you clean up any silicone that may have seeped out.

- Using a tape measure, identify which one of the five mounting holes in each of the five hole patterns lines up with a supporting structure in all five locations on the vehicle patient compartment. If none of the five mounting holes in any one hole pattern lines up with a supporting structure, you may need to create a support structure for that location, such as a plate or bracket.
- Using a pencil, mark the best mounting hole locations.

**Note:** You need to evaluate which mounting hole will be used based on the five mounting location options. Consider any restrictions due to clearances with any vehicle component.

- Using a drill and a 9/16" drill bit, drill the mounting bolt holes through the floor plate and the floor (as marked in step 13).

**Note:** Consider all restrictions before and while drilling the holes to avoid causing damage to the vehicle patient compartment.

- Install the appropriate length 3/8-16 UNC flat head cap screws, ASTM-F835 or SAE grade 8 with a flat washer, lock washer, and nut.
- Using a torque wrench with a 7/32" hex, tighten the floor plate bolts equally in four different steps starting at the middle mounting bolt and working outward. Torque each bolt to 40 ft-lb.
- Select an unused bolt location to drill a 7/16" in (1.1 cm) hole for drainage as close to the foot end as possible.

**Note:** For better drainage, select a location near the foot end of the vehicle patient compartment, but do not select one of the first four bolt locations closest to the foot end.

[Return To Table of Contents](#)

# Installation Guide

---

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR) (CONTINUED)

19. Using a drill and a 9/16" drill bit, drill the drain hole through the floor plate and the floor (as selected in step 18).
20. Press the drain tube (6390-001-170) onto the drain from the underside of the vehicle.
21. Route the drain tube under the vehicle away from the exhaust system ensuring that the open end of the tube is lower than the drain for proper drainage.

---

### **WARNING**

To prevent exhaust fumes from entering the vehicle patient compartment, route the drain tube under the vehicle away from the exhaust system.

---

22. Insert the floor plate drain tube (6390-001-183) into the hole drilled in step 19.
23. Using a 1/4" Allen wrench, turn the drain a quarter turn to lock the drain in place.
24. Secure the drain tube to the vehicle using appropriate tie downs (not supplied).
25. Cut off the excess drain tube.
26. Insert the supplied rubber grommet (0037-247-000) into the floor plate at the electrical input location.
27. Identify the power source from which to route the anchor to vehicle cable in the vehicle (Electrical requirements: 12.8V-15.6V DC, 15A breaker, 2 conductor 10 AWG cable).

**Note:** To prevent draining the vehicle batteries, wire Power-LOAD so that power is only supplied to Power-LOAD when the vehicle ignition is on or the shore line is plugged in.

---

### **WARNING**

To ensure performance and prevent power hazards, connect Power-LOAD to a 12.8V-15.6V DC vehicle circuit that is on a 15A breaker. Do not connect Power-LOAD to a 24V DC vehicle circuit.

---

28. Install the supplied anchor to vehicle cable (6390-001-135) through the floor plate. Start under the vehicle at the floor plate by pushing through enough slack (approximately 6 in (15 cm)) to insert the anchor to vehicle cable into the Power-LOAD anchor.

---

### **WARNING**

To avoid the risk of personal injury or vehicle damage, be aware of items around and below the anchor to vehicle cable during floor plate installation.

---

29. Insert the anchor to vehicle cable into the supplied wire protection loom (6390-001-153).
30. Using a drill, pilot the holes that are required to mount the supplied six p-clamps (6390-001-202) and 1/4" screws (not supplied) to the vehicle patient compartment. Start at the floor plate side and work toward the power source.
31. Trim the anchor to vehicle cable and wire protection loom as required for hook up to the power source.
32. Connect the anchor to vehicle cable to the vehicle power source by using a 15 Amp mechanical breaker in-line at the power source.
33. At the floor plate and the power source anchor to vehicle cable locations, use silicone to seal the wire protection loom at the grommet.

---

### **WARNING**

Ensure that all gaps to the exterior of the vehicle are sealed to prevent exhaust fumes from entering the vehicle patient compartment.

---

# Installation Guide

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR) (CONTINUED)

### Install the Anchor Assembly

34. Insert a floor plate attachment bracket (6390-001-108) at the foot end of the vehicle patient compartment to install the safety hook (6390-001-148) (Figure 10). Line the notches with the tabs to insert, then slide the bracket into the floor plate assembly.

### WARNING

Failure to install the safety hook can cause injury to the patient or operator. Install and use the safety hook as described in this manual.

35. Using a 5/32" Allen wrench, install two flat head cap screws (0001-194-000) to secure the safety hook to the floor plate assembly (Figure 11).

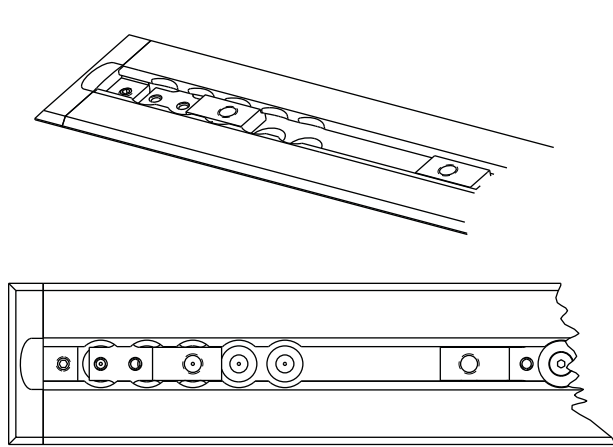


Figure 10: Insert Floor Plate Attachment Bracket

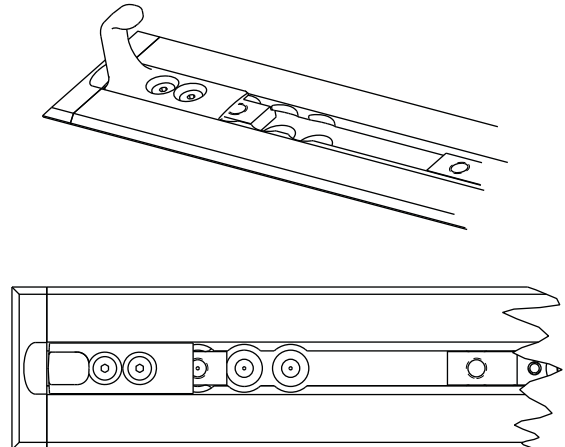


Figure 11: Secure Safety Hook

36. Lift the vehicle bumper to the raised position (if equipped).
37. Measure from the end of the floor plate to the end of the bumper to determine how far you can move the anchor in towards the head end (Figure 12).

**Note:** If the distance measured is less than 18 in (46 cm), you can shift Power-LOAD in closer to the head end of the vehicle patient compartment by the difference of 18 in (46 cm) and the measured distance.



Figure 12: Measure for Anchor Installation

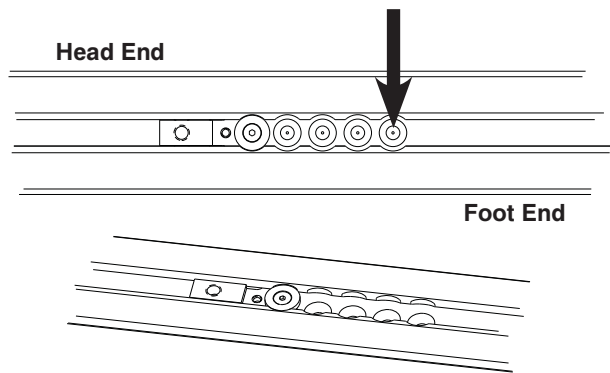
# Installation Guide

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR) (CONTINUED)

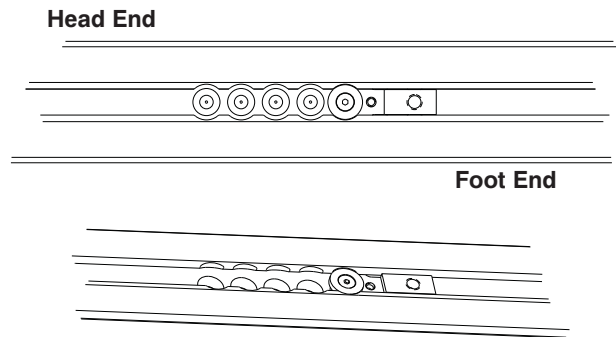
38. Locate the first floor plate attachment bracket (Figure 13) location (near the foot end). This location provides the most wheel clearance.

**Notes:**

- To shift the cot closer to the head end of the vehicle patient compartment, select another location.
- Make sure that the location is not further from the first location than the value calculated in step 37 on [page 24](#). Leave enough room for the cot base to clear the vehicle bumper.
- Each successive location shifts the cot one inch toward the head end.
- Flipping the bracket as shown in Figure 14 moves the mounting location an additional two inches toward the head end.
- Figure 13 shows the location for the most wheel clearance from the bumper. Figure 14 shows the location for the least wheel clearance from the bumper and represents a 6 in (15.2 cm) shift in from the first location. Select the location that provides the appropriate wheel clearance for your setup. For example the distance from the end of the bumper to the end of the floor plate is 14 in (36 cm). This means that you can move the anchor in by 4 in (18 in - 14 in) (10 cm (46 cm - 36 cm) from the first position as indicated by the arrow in Figure 13.



**Figure 13: Most Wheel Clearance**



**Figure 14: Flipping the Bracket Example**

39. Using a 5/32" Allen wrench, install a flat head cap screw (0001-194-000) to the sub anchor attachment bracket retainer (6390-001-110) to secure the floor plate attachment bracket (6390-001-108).
40. Repeat steps 38-39 for three other locations in the floor plate assembly.

**Note:** The position of these three floor plate attachment brackets must match the location selected in step 38.

41. Connect the red wire to the red wire and the black wire to the black wire to connect the anchor assembly to the power source through the floor plate assembly at the head end.

# Installation Guide

## INSTALLING THE FLOOR PLATE (WITH A WOOD FLOOR) (CONTINUED)

42. Carefully place the anchor assembly (A) on top of the floor plate assembly (B) as shown in Figure 15, laying the excess wire into the floor plate channel. Align the four holes with the floor plate attachment brackets.

### CAUTION

When installing the anchor assembly, ensure that the wires rest inside of the floor plate assembly channel and are not pinched by the anchor assembly.

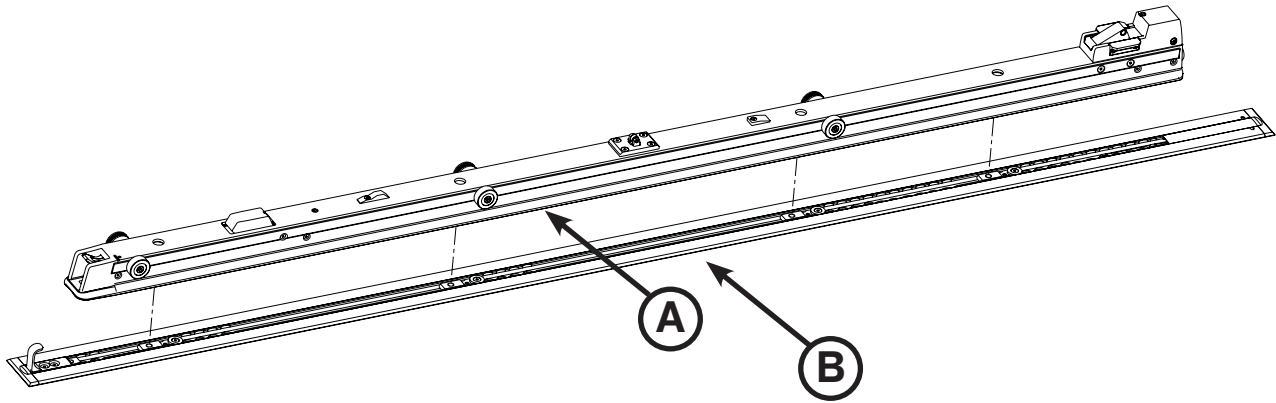


Figure 15: Anchor Assembly and Floor Plate Assembly

43. Measure the exposed “channel” at the head end and the foot end of the floor plate to customize the floor plate covers.

### WARNING

To avoid the risk of personal injury or equipment damage, properly secure the item that you are cutting and be aware of the area around your cutting location. Always wear appropriate eye protection while operating a saw.

44. Using a saw, cut the two floor plate covers (6390-001-166) (A) to fit the measured length on both ends (Figure 16). The floor plate cover does not fit over the floor plate attachment bracket.

**Note:** If the anchor is assembled over the foot end or head end of the floor plate, then no floor plate cover is needed on that end.

45. Using a rubber hammer, snap each floor plate cover into the floor plate (hook side first).

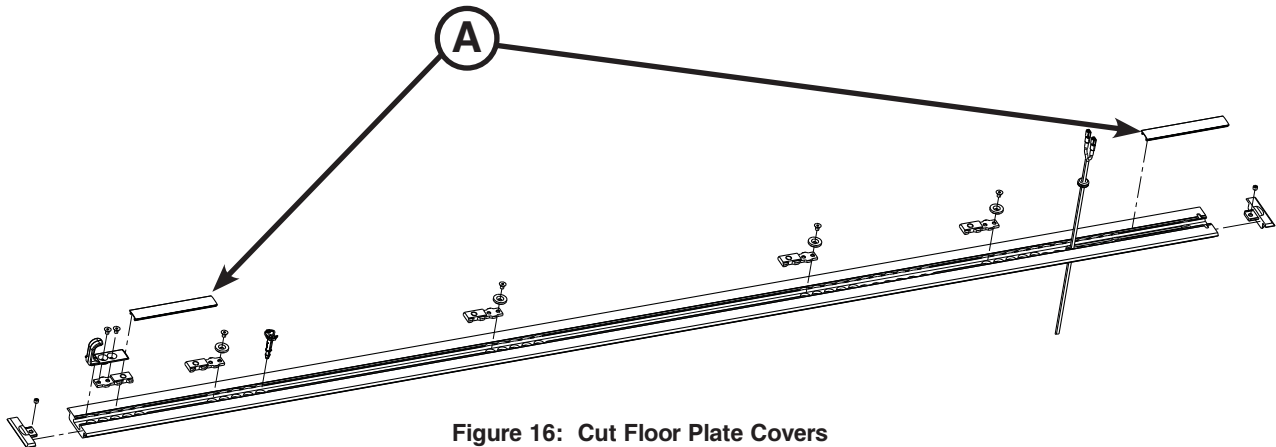


Figure 16: Cut Floor Plate Covers

# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM

### Power-LOAD Assembly Kit Components (6390-001-054)

- (1) Socket Head Cap Screw (p/n 0004-658-000)
- (6) Button Head Cap Screw (0004-665-000)
- (4) Anchor Mounting Post (p/n 6390-001-150)
- (1) Transfer Trim, HE, Right (p/n 6390-001-211)
- (2) Dead Stop Bumper (p/n 6390-001-243)
- (2) Dead Stop Block, Threaded (p/n 6390-001-246)
- (4) Socket Head Cap Screw (p/n 0004-662-000)
- (1) Trolley Magnet Activator (p/n 6390-001-106)
- (1) Transfer Trim, HE, Left (p/n 6390-001-210)
- (1) Transfer Wear Pad, Foot End (p/n 6390-001-225)
- (2) Dead Stop Block, Thru Hole (p/n 6390-001-244)

### Tools Required:

- 3/8" Allen Wrench
- T25 Torx Driver
- 1/2" Drive Torque Wrench (ft-lb)
- 5/32" Allen Wrench
- 3/16" Allen Wrench

### Procedure:

1. Using a 3/8" Allen wrench, install the four supplied anchor mounting posts (6390-001-150) (C) into the four holes in the anchor assembly as shown in Figure 17.

**Note:** Do not fully tighten the bolts until all four bolts are aligned and started.

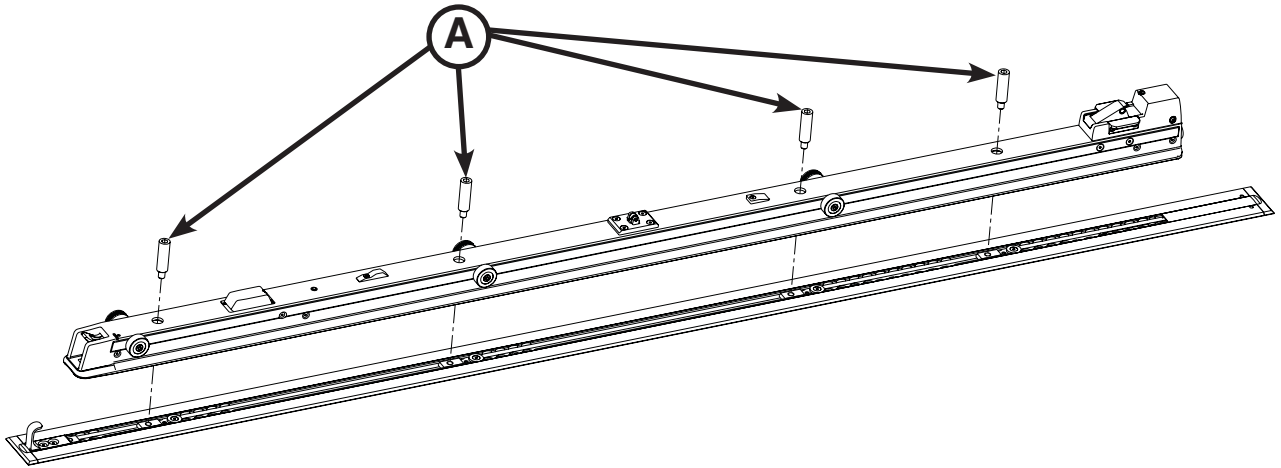


Figure 17: Install Anchor Mounting Posts

2. Using a torque wrench, tighten each bolt to 60±10 ft-lb.



# Installation Guide

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## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

### Install the Transfer Assembly

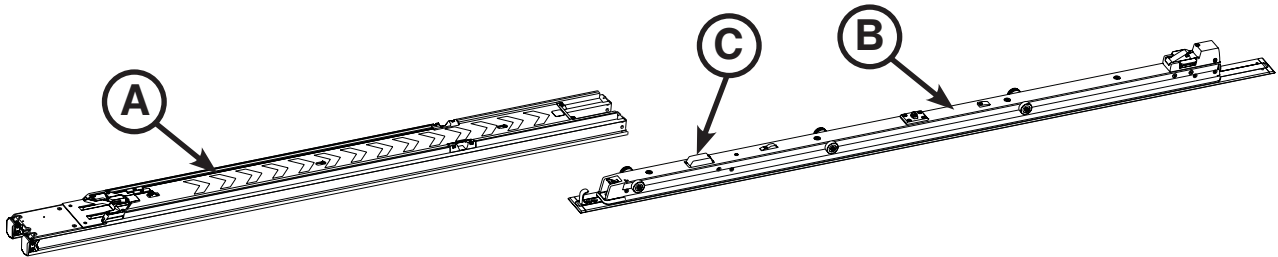
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 **WARNING**

To avoid the risk of injury, two installers are required when lifting and positioning the transfer assembly.

---

3. Position the transfer assembly (A), so the open end is facing the anchor assembly (B) as shown in Figure 18.



**Figure 18: Install Transfer Assembly**

4. Installer 1 (Foot End) - Lift the transfer assembly.

---

 **CAUTION**

When installing the transfer assembly, slowly slide the transfer assembly to avoid breaking the cot inductive charge housing (C) (as shown in Figure 18).

---

5. Installer 2 (Head End) - Slide and center the open end of the transfer assembly over the rollers in the anchor assembly.

**Note:** You may notice slight resistance while rolling over the second set of rollers; push past the resistance.

---

 **WARNING**

To avoid the risk of injury, keep hands and fingers clear of all moving mechanisms.

---

# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

### Install the Trolley Assembly

- Using a 5/32" Allen wrench, install the supplied socket head cap screw (0004-658-000) (A) to secure the supplied trolley magnet activator (6390-0001-106) (B) as shown in Figure 19.
- Using a T25 Torx driver, install four supplied button head cap screws (0004-665-000) (C) to attach the supplied foot end transfer wear pad (6390-001-225) (D) to the transfer assembly as shown in Figure 19.

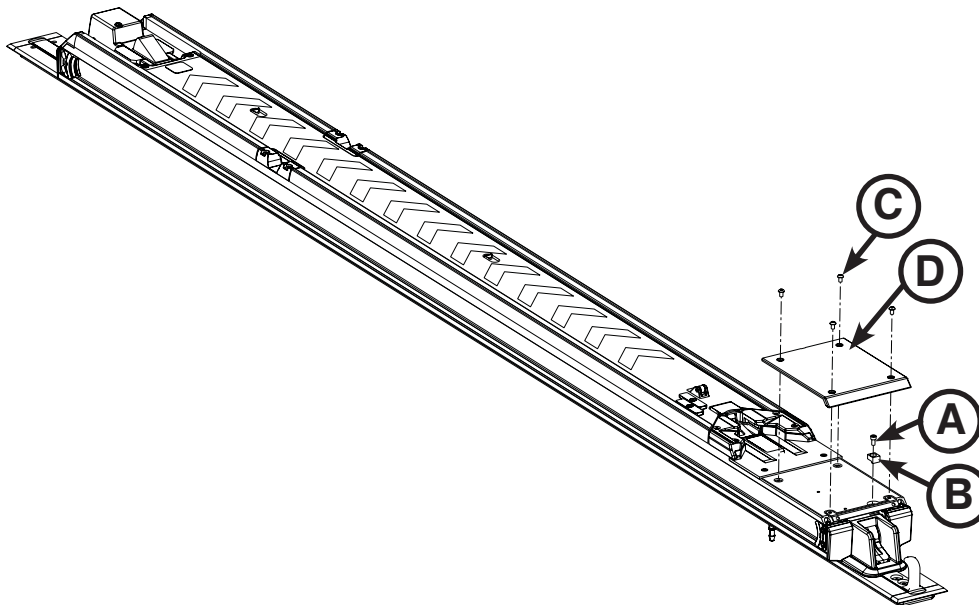


Figure 19: Attach the Foot End Transfer Wear Pad

### WARNING

To avoid the risk of injury, two installers are required when lifting and positioning the trolley assembly.

- Carefully lift the trolley assembly by its arm and wing. Do not lift the trolley by the red manual cot release handles. Lift only where indicated. Installer 1, position hands at A1 and A2. Installer 2, position hands at B1 and B2 as shown in Figure 20.

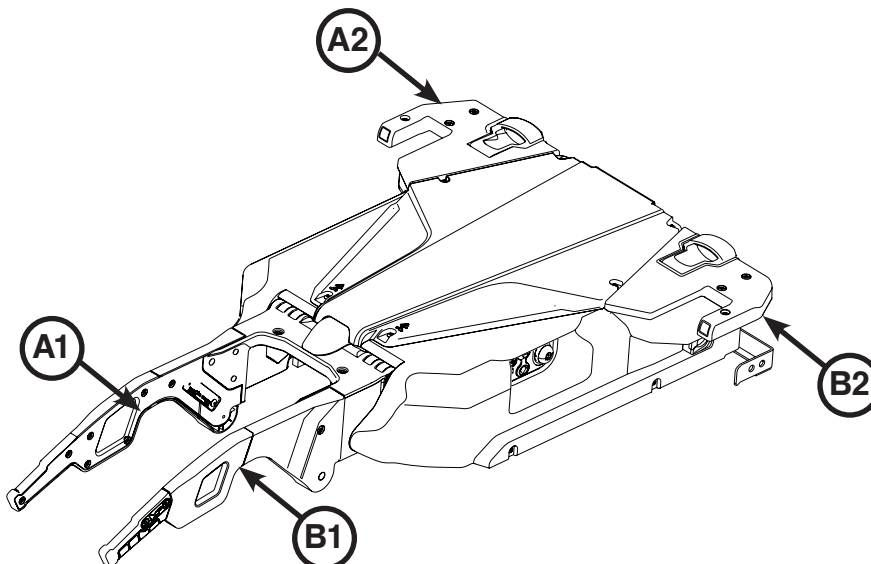


Figure 20: Trolley Assembly

# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

9. Position the trolley assembly (A) between the transfer assembly (B) and head end of the anchor assembly (C) on the floor as shown in Figure 21.
10. Installer 1 (Foot End) - Slide the rollers of the trolley assembly into the side channel of the transfer assembly.
11. Installer 2 (Head End) - Lift the trolley assembly to align the second set of rollers and slide the rollers until the trolley is near the middle of the transfer.
12. Slide the black release (closest to the foot end) (D) of the transfer assembly to unlock as shown in Figure 21.

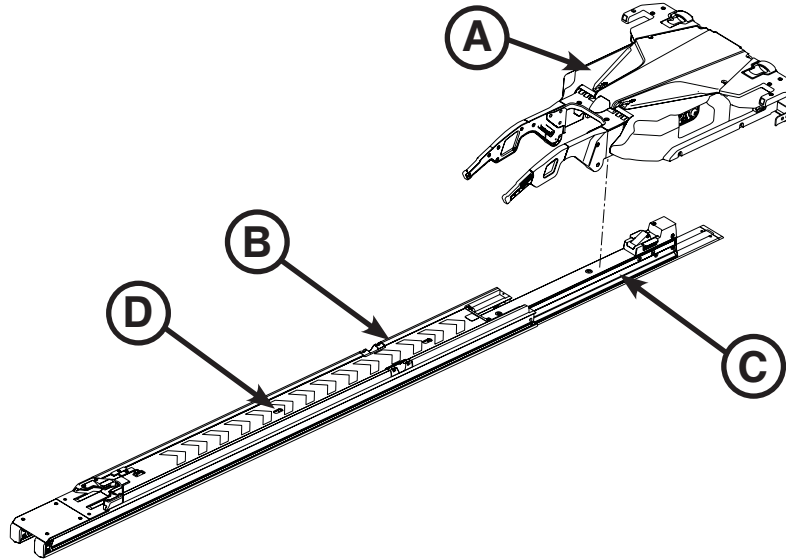


Figure 21: Position the Trolley Assembly

13. Carefully push the transfer assembly forward toward the head end until it locks into position as shown in Figure 22.

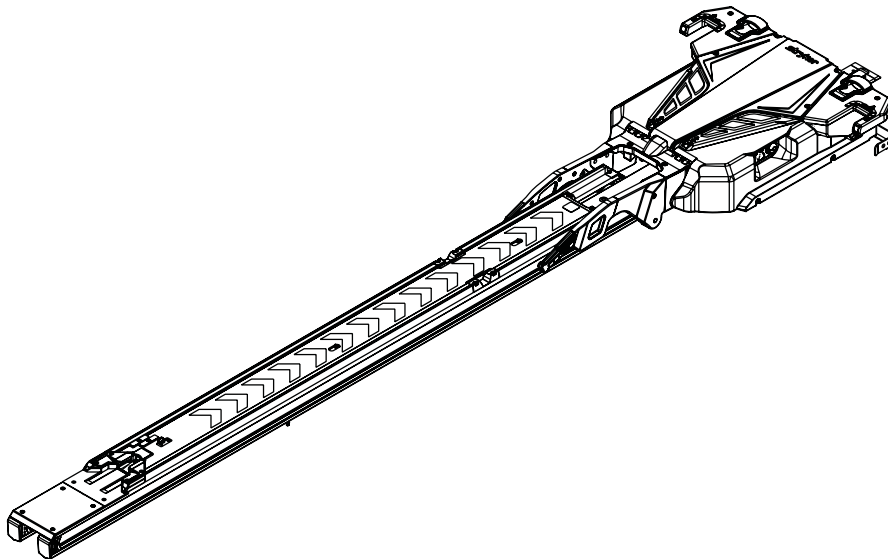


Figure 22: Locked Trolley Assembly

# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

14. Assemble the bumper block by aligning the supplied dead stop block (6390-001-244) (with through holes) (A) with the supplied dead stop bumper (6390-001-243) (B) and the supplied inner dead stop block (6390-001-246) (with threaded holes) (C) as shown in Figure 23.

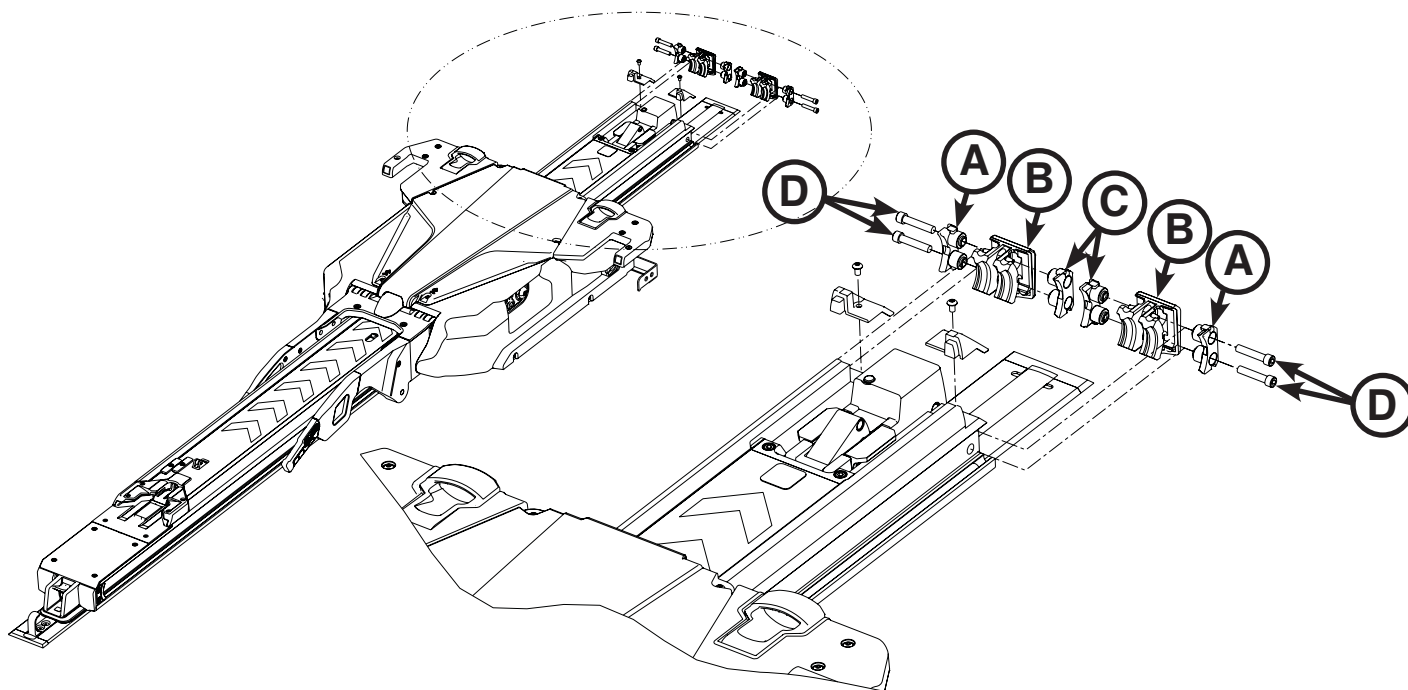


Figure 23: Assemble Bumper Block

15. Slide the assembled dead stop bumper into the end of the transfer assembly.

**Note:** Position the dead stop bumper, so that the hump (A) is on the bottom as shown in Figure 24.

16. Repeat steps 14-15 to assemble and install the second dead stop bumper.
17. Using a 3/16" Allen wrench, install the four supplied socket head cap screws (0004-662-000) (two for each side) (D) into the transfer assembly as shown in Figure 23.

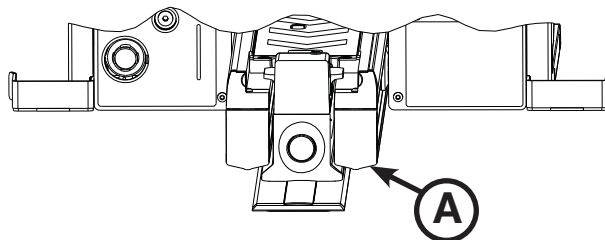


Figure 24: Dead Stop Bumper Hump

# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

- Using a T25 Torx driver, install the two supplied button head cap screws (0004-665-000) (A) to attach the supplied patient left transfer head end trim (6390-001-210) and supplied patient right transfer head end trim (6390-001-211) (B) to the transfer assembly as shown in Figure 25.

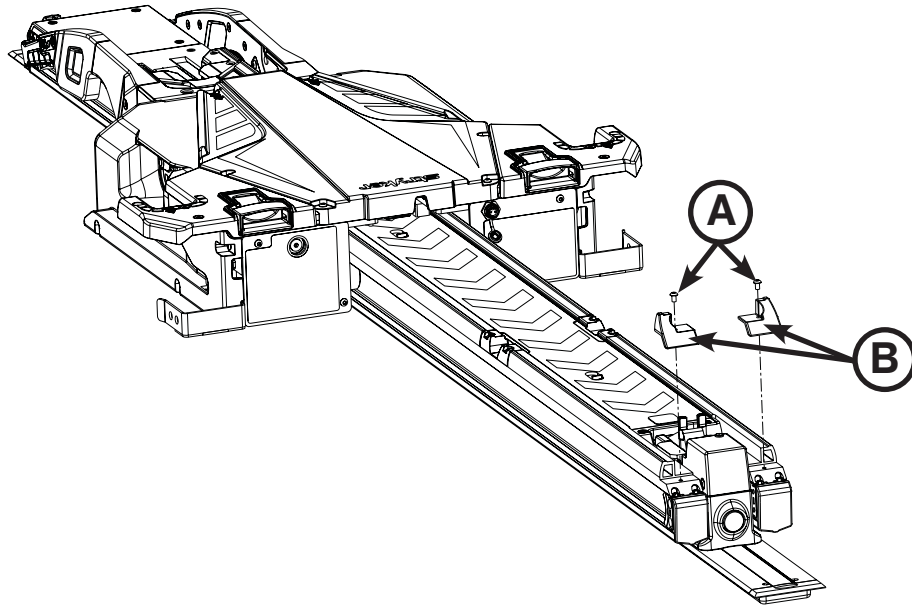


Figure 25: Attach Head End Trim

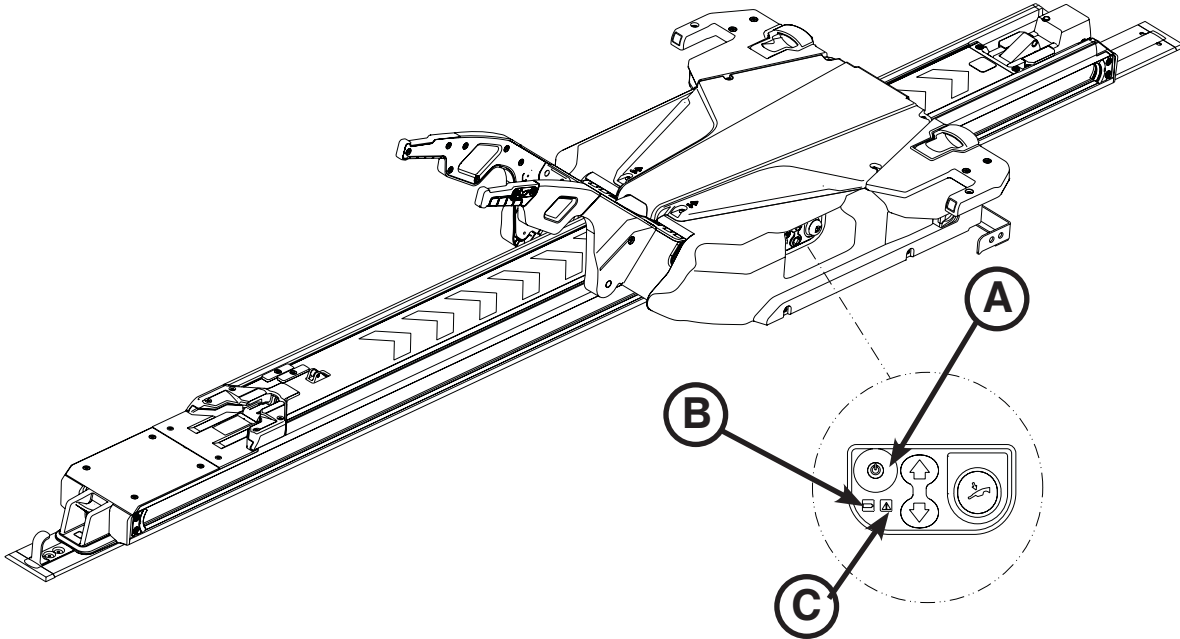
# Installation Guide

## INSTALLING THE POWER-LOAD SYSTEM (CONTINUED)

19. Press the main power button (A), as shown in Figure 26, on the patient left side of the trolley assembly to turn power on to the unit.

**Notes:**

- If you wired Power-LOAD into a circuit with a switch, make sure that the switch is turned on.
- When pressing the main power button, a green battery power LED (B) also turns on to indicate that the Power-LOAD system is on. If the trolley battery is low, a flashing amber error LED (C) may also appear.



**Figure 26: Power-LOAD Control Panel**

20. Raise the lifting arms and manually push the trolley into the head end of the vehicle patient compartment to charge the battery.

**Note:** The battery power LED (B) flashes green when charging.

21. Affix the operation labels (6390-001-498 and 6390-001-499) to the door or wall where it is visible to Power-LOAD operators. See “Powered Operations Instructions” on [page 46](#) and “Manual Operations Instructions” on [page 47](#) for label details.

**Note:** Ensure that you apply the label to a smooth surface or the supplied sheet metal plate (6390-001-467) that you can screw or rivet into the vehicle.

22. Complete the installation checklist on [page 38](#).

# Installation Guide

## INSTALLING THE OPTIONAL WHEEL GUIDE

### Optional Wheel Guide Kit Components (6390-027-000)

- (2) Flat Head Cap Screw (p/n 0001-195-000)
- (1) Wheel Guide Assembly (p/n 6390-001-017)
- (5) Wheel Turner Support (p/n 6390-001-174)
- (1) Wheel Kicker Rail (p/n 6390-001-176)
- (1) Wheel Turner Nut (p/n 6390-001-191)
- (2) Pan Head Machine Screw (p/n 0023-296-000)
- (5) Spacer (p/n 6390-001-173)
- (2) Wheel Kicker Rail Bumper (p/n 6390-001-175)
- (1) Wheel Turner Cap (p/n 6390-001-178)
- (4) Wheel Cover (p/n 6390-001-206)

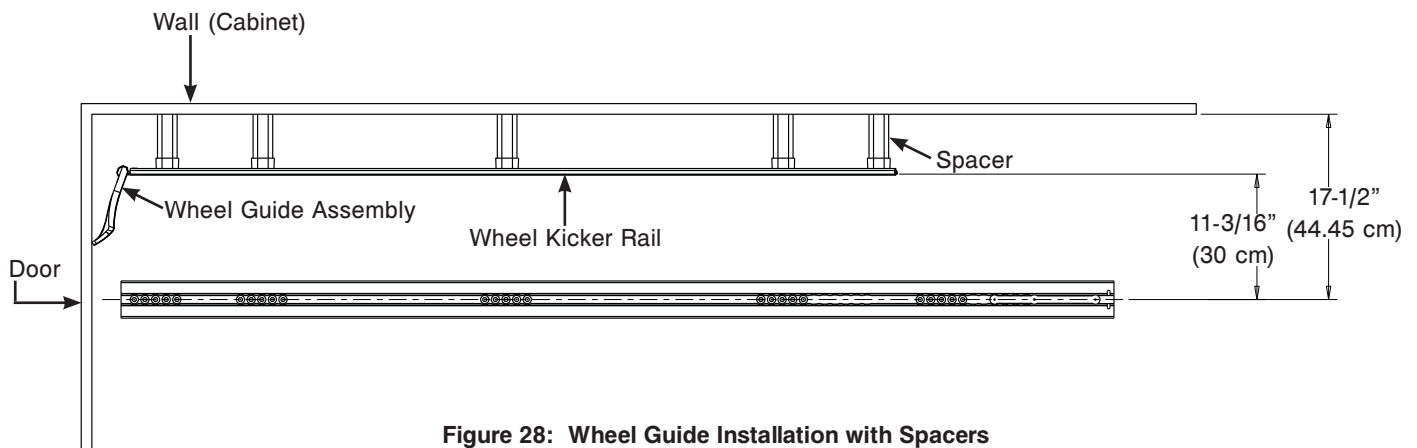
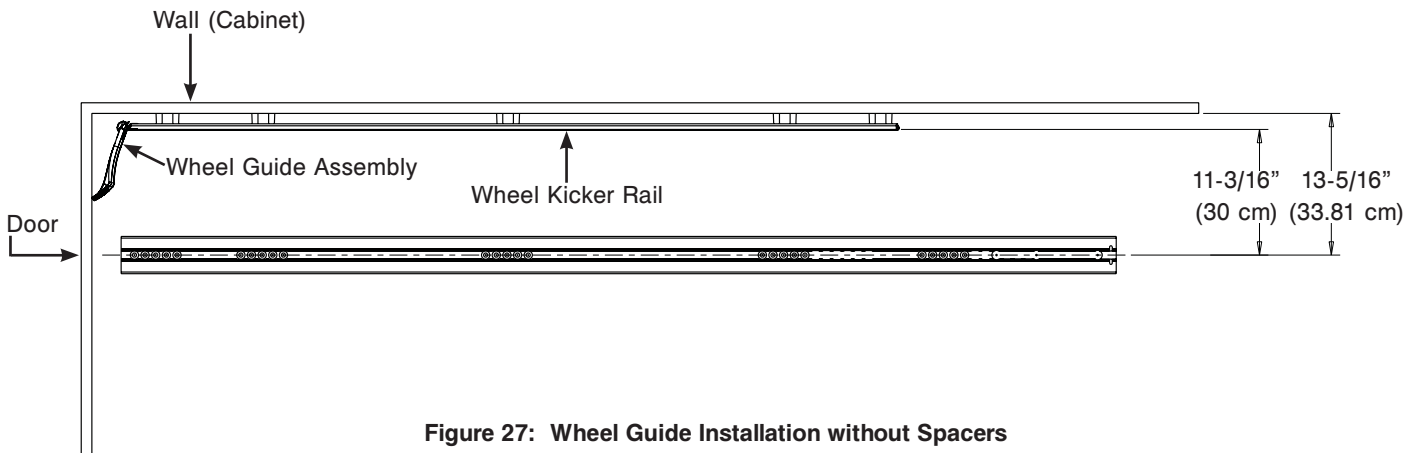
### Tools Required:

- Tape Measure
- Drill
- 3/8" Drive Ratchet
- 5/32" Allen Wrench
- Saw (or equivalent)
- 1/4" Drill Bit
- 7/16" Combination Wrench
- Pencil
- 7/16" Socket
- T25 Torx Driver

### Procedure:

**Note:** While installing the wheel guide, see [page 35](#) for component assembly detail.

1. Using a tape measure, measure from the center line of the floor plate to the wall (cabinet) on the driver's side of the vehicle patient compartment (reference Figure 27 and Figure 28).



# Installation Guide

## INSTALLING THE OPTIONAL WHEEL GUIDE (CONTINUED)

- Using the measurement from step 1, determine if you will need to install the spacers (6390-001-173) (D) for the wheel guide assembly.

Measurement from the Center Line (Floor Plate)	Action Required
Greater than 17-1/2 in (44.45 cm) from the wall	The optional wheel guide is not required.
13-5/16 in (33.81 cm) to 17-1/2 in (44.45 cm)	Spacers (6390-001-173) (D) are required. Subtract 13-5/16 in (33.81 cm) from the measurement in step 1 to determine the size of each spacer. Use a saw (or equivalent) to cut each spacer to fit.
Exactly 17-1/2 in (44.45 cm)	Spacers (6390-001-173) (D) are required, but they do not need to be cut to fit.
Exactly 13-5/16 in (33.81 cm)	Spacers (6390-001-173) (D) are NOT required. Discard all five spacers.

### WARNING

To avoid the risk of personal injury or equipment damage, properly secure the item that you are cutting and be aware of the area around your cutting location. Always wear appropriate eye protection while operating a saw.

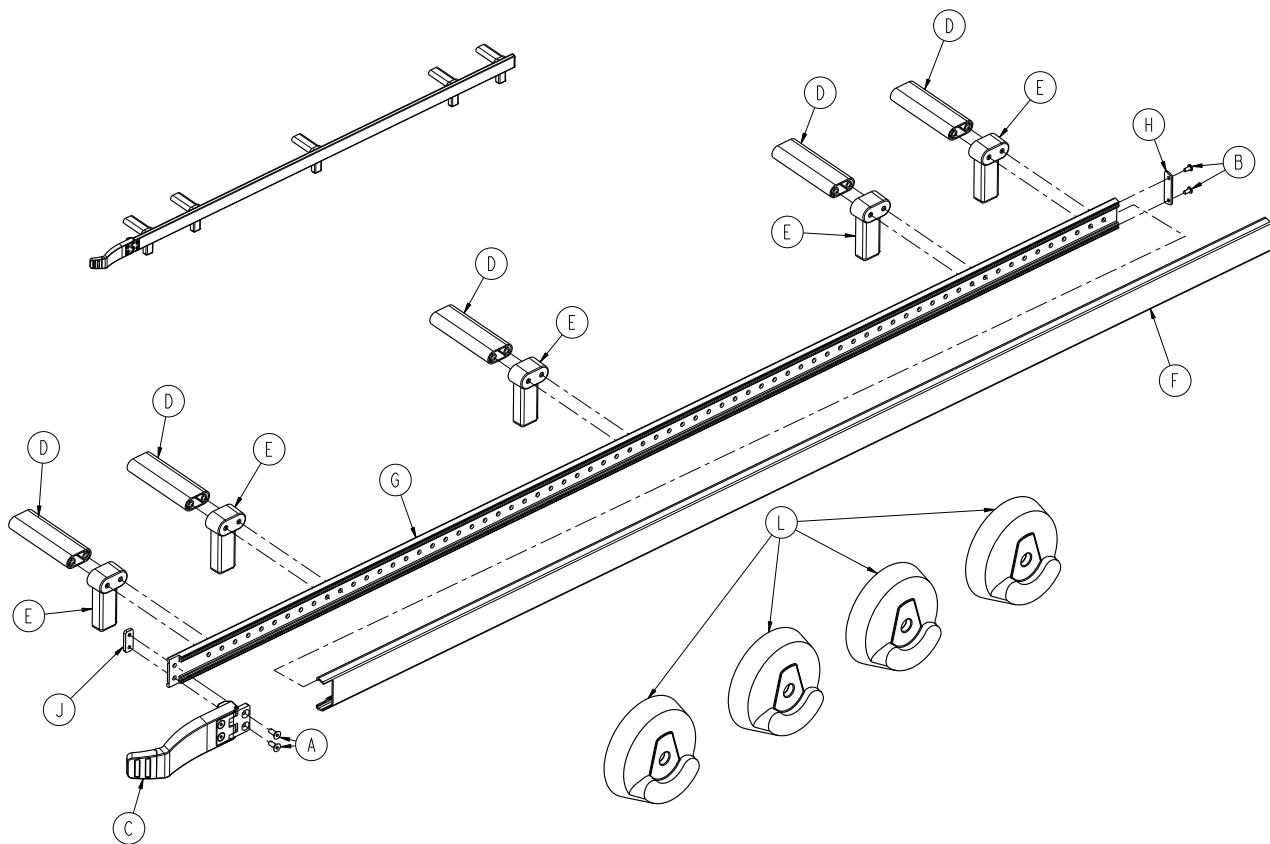


Figure 29: Optional Wheel Guide Kit Components - 6390-027-000



# Installation Guide

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## INSTALLING THE OPTIONAL WHEEL GUIDE (CONTINUED)

3. With the vehicle door closed, align the wheel kicker rail (6390-001-176) (G) against the wall (cabinet).
4. Using a tape measure, measure 1-1/2 in (3.81 cm) from the foot end of the wheel kicker rail and the door panel.
5. Using a pencil, make a small mark on the wall (cabinet) noting the location of the back of the wheel guide rail.
6. With the assistance of someone else, place all five wheel turner supports (6390-001-174) (E) in the approximate mounting locations.
7. Set the wheel kicker rail on top of the wheel turner supports by referencing the mark made in step 5 for location of the wheel kicker rail.

### Notes:

- Ensure that the holes in the wheel kicker rail align with the open areas in the vehicle patient compartment for adequate wheel kicker rail support.
  - Each hole is spaced 1 in (2.54 cm) apart for multiple installation options.
  - Space all five wheel turner supports as evenly as possible. Install all five wheel turner supports.
8. Using a pencil, mark each of the holes in the five areas where a wheel turner support will be located on the wall (cabinet) as shown in Figure 29.

**Note:** Make sure that the wheel kicker rail does not move during this process or holes could be made in the wrong position.

9. Remove the wheel kicker rail and wheel turner supports.
10. Using a drill and a 1/4" drill bit, drill each of the marked hole locations (marked in step 8) into the wall (cabinet).

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### CAUTION

To avoid the risk of vehicle damage, be aware of items around your selected drill hole locations during installation.

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11. Select the appropriate length 1/4-20 hex head cap screws, ASTM-F835 or SAE grade 8 (not supplied), for your wheel kicker rail installation.
12. Using a 7/16" socket with a 3/8" drive ratchet and a 7/16" combination wrench, install the screws (selected in step 11) to secure the wheel kicker rail to the wheel turner support through the spacer (6390-001-173) (D), if required, then to the wall of the vehicle patient compartment as shown in "Figure 27: Wheel Guide Installation without Spacers" on [page 34](#) or "Figure 28: Wheel Guide Installation with Spacers" on [page 34](#).
13. Using a T25 Torx driver, install the two pan head machine screws (0023-296-000) (B) to secure the wheel turner cap (6390-001-178) (H) to the head end of the wheel kicker rail.
14. Slide the wheel kicker rail bumper (6390-001-175) (F) over the wheel kicker rail from the foot end of the vehicle patient compartment to the head end.
15. Using a 5/32" Allen wrench, install the two flat head cap screws (0001-195-000) (A) through the wheel guide assembly (6390-001-017) (C) hinge and the wheel kicker rail to the wheel turner nut (6390-001-191) (J) as shown in "Figure 29: Optional Wheel Guide Kit Components - 6390-027-000" on [page 35](#).
16. Install the four wheel covers (6390-001-206) (L) to the patient right side of the cot that is to be used with the wheel guide assembly. See "Installing Cot Wheel Covers" on [page 37](#).

# Installation Guide

## INSTALLING COT WHEEL COVERS

### Tools Required:

- 5/8" Socket
- 3/8" Drive Ratchet
- 11/16" Combination Wrench

### Procedure:

1. Tilt the cot onto its head end.

**Note:** Make sure that the head section is extended and locked.

2. Using a 5/8" socket with 3/8" drive ratchet and a 11/16" combination wrench, remove the hex head cap screw (A) and nut (B) that secure the wheel (C) to the caster horn (Figure 30) on the patient right side at the foot end of the cot that is to be used with the installed wheel guide assembly. Save the screw and nut for reinstallation.
3. Remove the two bushings (D) from the wheel (Figure 30). Discard both bushings.
4. Align two wheel covers (6390-001-206) around the wheel, so that the wheel covers match on both sides (Figure 31).
5. Using a 5/8" socket with a 3/8" drive ratchet and a 11/16" combination wrench, install the hex head cap screw (A) and nut (B) to secure the wheel (C) with the wheel covers (D) to the caster horn (Figure 31).

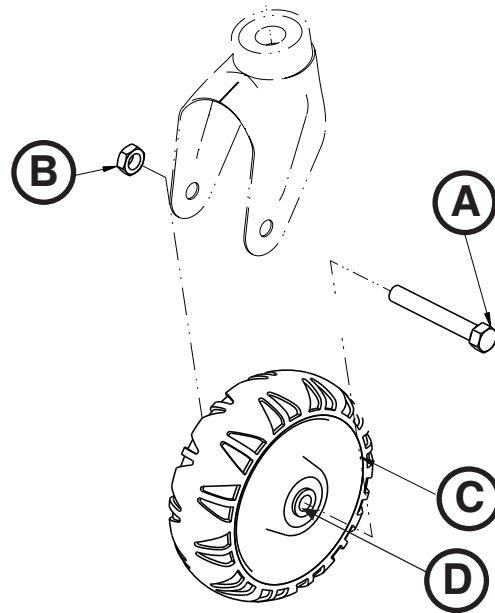


Figure 30: Cot Wheel without Wheel Covers

**Note:** Pay attention to the orientation of the wheel covers during installation. Do not overtighten the nut.

6. Tilt the cot onto its foot end.
7. Repeat steps 2-5 on the patient right side at the foot end of the cot.
8. Ensure that both wheels roll smoothly.

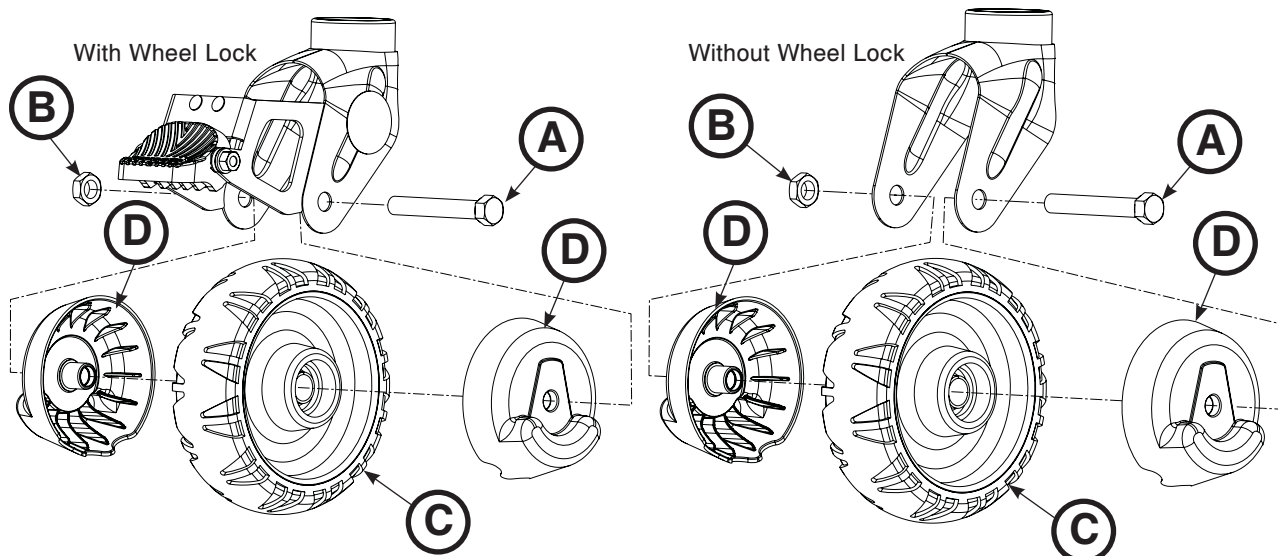


Figure 31: Cot Wheels with Wheel Covers

# Installation Guide

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## POWER-LOAD INSTALLATION CHECKLIST

**Note:** Allow the battery to charge for 20 minutes prior to starting the Power-LOAD functional check. The battery power LED should flash green while charging.

Before starting the Power-LOAD functional check, ensure that the:

- Check is performed with a Power-LOAD compatible Power-PRO cot (model 6500, 6506, 6510, 6516)
- Power-LOAD is locked at the foot end of the vehicle with the lifting arms down (see “Extending Power-LOAD from the Vehicle without a Cot” on [page 50](#))
- Power is turned on
- LEDs on the trolley assembly wings flash red

**Note:** When pressing the main power button, the battery power LED also illuminates to indicate that the Power-LOAD system is on. If the trolley battery is low, a flashing amber error LED may appear.

**Note:** Check both the upper and lower cot switches on the cot when checking the cot button functionality.

- \_\_\_\_\_ 1. Lift the vehicle bumper to the raised position (if equipped).
- \_\_\_\_\_ 2. Lock the Power-LOAD compatible cot into Power-LOAD.
- \_\_\_\_\_ 3. Check that both cot load wheel pins are locked into Power-LOAD (latches).
- \_\_\_\_\_ 4. Check that LEDs change from flashing red to solid green.
- \_\_\_\_\_ 5. Press and hold the retract (-) button on the cot control switch to fully retract the cot undercarriage.
- \_\_\_\_\_ 6. Push the cot into the vehicle patient compartment until it locks at the head end of the vehicle patient compartment. Ensure that the arms lower until the cot wheels are on the vehicle patient compartment floor and the cot foot end locks into the fastener.
- \_\_\_\_\_ 7. Ensure that the cot is locked into Power-LOAD by firmly pulling on the foot end of the cot.
- \_\_\_\_\_ 8. Press and hold the extend (+) button on the cot control switch to verify that the cot does not extend in the vehicle. The cot legs should not attempt to lift in transport position.  
**Note:** Pressing the retract (-) button on the cot control switch will allow motion in some conditions.
- \_\_\_\_\_ 9. Press and hold the release lever at the foot end of the Power-LOAD system and pull to remove the cot from the vehicle patient compartment. Ensure that the lifting arms raise the cot until the cot wheels are off the vehicle patient compartment floor.
- \_\_\_\_\_ 10. Ensure that the head end lock LED indicators are solid green. Press and hold the extend (+) button on the cot control switch to extend the cot undercarriage to the set load height with the cot wheels on the ground and the cot is no longer supported by the Power-LOAD lifting arms. **Note:** The lifting arms should remain in the full down position after the cot is released from Power-LOAD.
- \_\_\_\_\_ 11. Press the up (↑) button on the Power-LOAD control panel to raise the arms and cot to the highest position.  
**Note:** The cot legs do not retract.
- \_\_\_\_\_ 12. Press the down (↓) button on the Power-LOAD control panel to lower the arms and cot.
- \_\_\_\_\_ 13. Press the red release button on the cot control switch to release the cot from Power-LOAD. The head end lock LED indicators will flash red.
- \_\_\_\_\_ 14. Lock the cot into Power-LOAD again.
- \_\_\_\_\_ 15. Press the up (↑) button on the Power-LOAD control panel to lift the cot up to the highest position.  
**Note:** The cot legs do not retract.
- \_\_\_\_\_ 16. Press the manual release button on the Power-LOAD control panel to lower the cot. Continue holding the button until the lifting arms are clear of the cot.
- \_\_\_\_\_ 17. Lift one of the two red manual cot release handles at the head end of the trolley to unlock the cot.
- \_\_\_\_\_ 18. Roll the cot away from Power-LOAD.
- \_\_\_\_\_ 19. Raise the lifting arms and push the trolley into the vehicle patient compartment to the transport position until the arms are far enough in to not interfere with the vehicle doors. With the trolley at the head end, allow the arms to lower.

# Installation Guide

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## POWER-LOAD INSTALLATION CHECKLIST (CONTINUED)

- \_\_\_\_\_ 20. Load the Power-LOAD compatible cot without using the LOAD functions to simulate manual loading of cots into the vehicle patient compartment. Ensure that the cot locks into place. See “Loading a Cot into a Vehicle Manually (Power-LOAD Power Loss or System Error)” on [page 61](#).
- \_\_\_\_\_ 21. Press and hold the release lever at the foot end of the Power-LOAD system and pull to remove the cot from the vehicle patient compartment.  
**Note:** Only the cot will unlock. The trolley should remain at the head end of Power-LOAD.
- \_\_\_\_\_ 22. To unlock the trolley, raise the lifting arms and press the manual trolley release button at the head end of the Power-LOAD system. Slide the trolley only a few inches toward the foot end.
- \_\_\_\_\_ 23. Slide the manual lock override closest to the foot end on the transfer and push the transfer out toward the foot end. Ensure that the transfer can be unlocked. See “Figure 21: Position the Trolley Assembly” on [page 30](#).
- \_\_\_\_\_ 24. Fully extend Power-LOAD out of the vehicle patient compartment.
- \_\_\_\_\_ 25. Slide the manual lock override closest to the head end on the transfer and push the transfer in toward the head end. Ensure that the transfer can be unlocked. See “Figure 18: Install Transfer Assembly” on [page 28](#).
- \_\_\_\_\_ 26. Visually inspect the head end transfer bumpers to ensure that they are installed flush with no signs of misalignment or improper installation.
- \_\_\_\_\_ 27. Visually check that all bolts and screws are properly tightened with no signs of protruding or missing fasteners.
- \_\_\_\_\_ 28. Push on the head end pawl and use the foot end release lever to activate the head end pin to ensure that they move freely and do not bind upon letting go.
- \_\_\_\_\_ 29. For Type II ambulances, verify that the optional wheel guide assembly (6390-027-000) is installed. Mark N/A if this is not a Type II ambulance.

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 **CAUTION**

The manual overrides allow the Power-LOAD system to move freely.

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**Note:** If Power-LOAD will not be in use for a week or more, press the main power button to turn the unit off and avoid draining the battery.

Power-LOAD Serial Number: \_\_\_\_\_

Installed by: \_\_\_\_\_ Date: \_\_\_\_\_

Inspected by: \_\_\_\_\_ Date: \_\_\_\_\_