InTouch Critical Care Bed

Maintenance Manual

REF FL27 (2131/2141)
Version 6.0 with Wi-Fi/Isolibrium (2972) support surface

EN

2141-409-002 Rev AB.3 2024-08

Table of Contents

Warning/Caution/Note Definition

The words **WARNING**, **CAUTION**, and **NOTE** carry special meanings and should be carefully reviewed.

WARNING

Alerts the reader about a situation which, if not avoided, could result in death or serious injury. It may also describe potential serious adverse reactions and safety hazards.

CAUTION

Alerts the reader of a potentially hazardous situation which, if not avoided, may result in minor or moderate injury to the user or patient or damage to the product or other property. This includes special care necessary for the safe and effective use of the device and the care necessary to avoid damage to a device that may occur as a result of use or misuse.

Note - Provides special information to make maintenance easier or important instructions clearer.

Summary of safety precautions

Always read and strictly follow the warnings and cautions listed on this page. Service only by qualified personnel.

WARNING

- Do not clean, service, or perform maintenance while the product is in use.
- Always make sure that the patient is not on the product before you start bed calibration. In calibration mode, the software does not control the interferences between the mechanical parts of the bed. Mechanical damage could occur without supervision. Only qualified personnel should perform the calibration.
- Always refer all servicing to qualified personnel to avoid electrical shock.
- Do not perform diagnostic test with a patient or other weight on the support surface.

CAUTION

- Always raise the Gatch to the highest height before you run the press the Foot Down button to avoid the risk of product damage.
- Do not push the buttons above the Fowler, brakes, or driver or the actuators may activate.
- Always change the Wi-Fi configuration with the help of the hospital's IT department or appropriate maintenance personnel.
- Do not touch the support surface while you perform diagnostics test to avoid inaccurate diagnostic results.
- Always use electrostatic discharge (ESD) protective equipment before you open antistatic bags and service electronic parts.
- Do not place unprotected circuit boards on the floor.
- Do not remove the clevis pins.
- Always make sure that the 2 x 4 is perpendicular to the floor before you use a jack stand.
- Do not pinch cables when you secure the head end frame cover.
- Do not pinch the cable when you install the load cell.

Introduction for service

This manual assists you with the service of your Stryker product. Read this manual to service this product. This manual does not address the operation of this product. See the Operations Manual for operating and use instructions. To view your Operations Manual online, see https://techweb.stryker.com/.

Expected service life

InTouch has a 10 year expected service life under normal use conditions and with appropriate periodic maintenance.

Contact information

Contact Stryker Customer Service or Technical Support at: 1-800-327-0770.

Stryker Medical
3800 E. Centre Avenue
Portage, MI 49002
USA

To view your operations or maintenance manual online, see https://techweb.stryker.com/.

Have the serial number (A) of your Stryker product available when calling Stryker Customer Service or Technical Support. Include the serial number in all written communication.

Serial number location

You can find the serial number plate behind the patient right siderail near the foot end of the product.

Figure 1 – Serial number location

Specification label location

You can find the specification label behind the head end cover on the patient right side of the product.

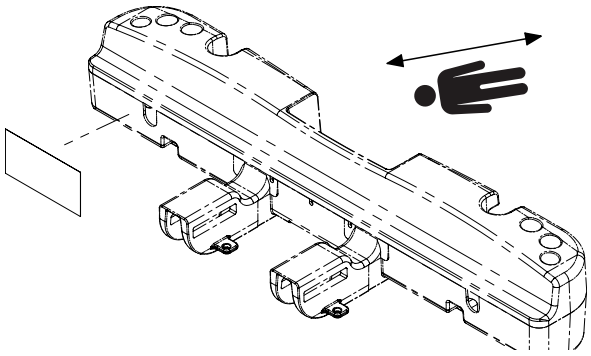


Figure 2 – Specification label location

Preventive maintenance

WARNING - Do not clean, service, or perform maintenance while the product is in use.

At a minimum, check all items listed during annual preventive maintenance for all Stryker Medical products. You may need to perform preventive maintenance checks more frequently based on your level of product usage.

Remove product from service before you perform preventive maintenance. Preventive maintenance should only be performed by trained or certified personnel.

Note

- Clean and disinfect the exterior of the support surface before inspection, if applicable.
- For **Isolibrium** preventive maintenance items, see the **Isolibrium** Operations Manual.

Inspect the following items:

_____ All welds and all fasteners are secure

_____ Tubing or sheet metal for bends or breaks

_____ Casters are free of debris

_____ Casters are secure and swivel

_____ Casters lock when you press down the brake pedal

_____ Manual and electric brakes apply and release

_____ Brake Not Set LED on the footboard and head end siderails when brakes are not engaged

_____ Locking steer caster applies and releases (Model 2131)

_____ Steer caster latches

_____ Fowler operates

_____ Litter up/down operates

_____ Trendelenburg operates

_____ IV pole is intact and operates - option

_____ Support surface cover after each use

_____ Support surface cover for rips or cracks

_____ Headboard, footboard, and siderail panels for cracks or splits

_____ All covers are not damaged and do not produce sharp edges

_____ Night light operates

_____ CPR release operates

_____ All siderail motion functionality

_____ Siderails move, latch, and stow

_____ Siderail switches operate (**iBed** Awareness option)

_____ **iBed** Awareness light bars on footboard and siderails operate (**iBed** Awareness option)

_____ All functions on head end siderails operate (including LEDs)

_____ All functions on footboard operate (buttons, touch screen display, and LEDs)

_____ Calibrate touch screen

_____ Calibrate product

_____ Scale and bed exit system operate

_____ Drive wheel operates (**Zoom** motorized drive, Model 2141, option)

_____ Motion release switches operate (**Zoom** motorized drive, Model 2141, option)

_____ Head end **Zoom** handle functionality operates (**Zoom** motorized drive, Model 2141, option)

_____ Batteries for replacement (in pairs every two years) (use only QDF9188 for battery replacement)

_____ Batteries for corrosion at the terminals, cracking, expanded or bulging at the sides, or can no longer maintain a full charge

_____ Nurse call functionality - option

_____ Lubricate where required

_____ Pendant for any physical damage

_____ Power cord not frayed

_____ Cables not worn or pinched

_____ All electrical connections tight

_____ All grounds secure to the frame

_____ Ground impedance not more than 100 mΩ (milliohms)

_____ Current leakage not more than 300 µA (microamps)

_____ Ground chains are clean, intact, and have at least two links touching the floor

_____ Enclosure is free from wear, tear, stresses, and mechanical damage

_____ No rust or corrosion of parts

_____ Labels for legibility, proper adherence, and integrity

_____ Apply relevant software patches

_____ **iBed** Wireless Module and IR Module intact and footboard icons display (**iBed** Wireless option)

Product serial number:
Completed by:
Date:

Accessing the configuration menu

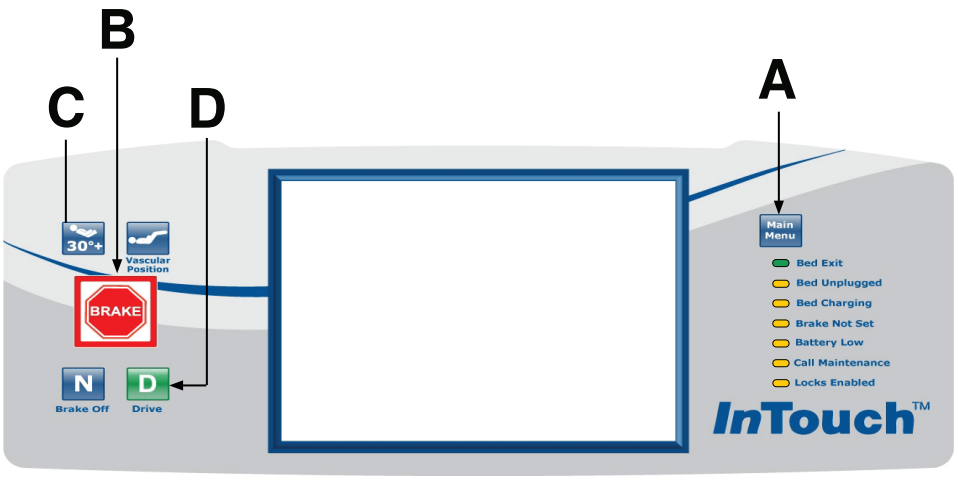


Figure 3 – Accessing the configuration menu

To access the configuration menu:

1. Unseat and reseat the footboard. Wait for the main control screen to display.
2. Push and hold the **Main Menu** button (A) located in the upper right corner of the footboard control panel (Figure 3). Continue to hold the **Main Menu** button while executing steps 3-5.
3. Push and hold the **Brake** button (B) for 5 seconds and then release (Figure 3).
4. Push the **HOB 30°+** button (C) once and release (Figure 3).
5. Push the **Drive** button (D) once and release (Figure 3).
6. Release the **Main Menu** button and the configuration screen will display (Figure 4).

The following configuration options are available in the configuration menu (Figure 4):

- Bed calibration
- Full diagnostic
- Touch screen calibration
- Wi-Fi configuration - option

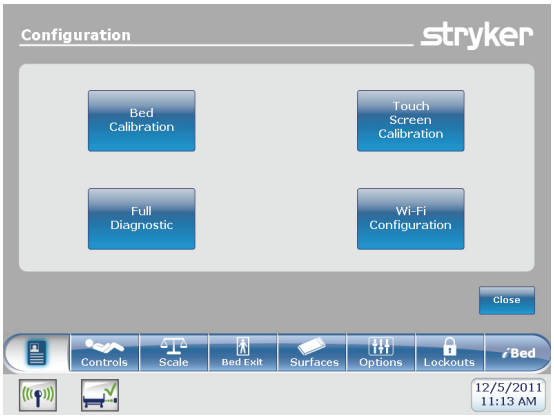


Figure 4 – Configuration menu

The configuration options are accessible from the configuration menu.

- See *Configuring the bed options* (page 22) to access.
- See *Configuring the serial number* (page 23) to access.

Calibrating the bed

WARNING - Always make sure that the patient is not on the product before you start bed calibration. In calibration mode, the software does not control the interferences between the mechanical parts of the bed. Mechanical damage could occur without supervision. Only qualified personnel should perform the calibration.

CAUTION - Always raise the Gatch to the highest height before you run the press the Foot Down button to avoid the risk of product damage.

Note - Place the product on a level surface without slopes or inclines before you enter the calibration mode.

To calibrate the bed:

1. Plug the power cord into a wall outlet.
2. Place the mattress onto the frame.
3. Press the **Bed Calibration** button on the Configuration Screen.
4. After you press the **Bed Calibration** button the bed calibration warning screen appears (Figure 5).

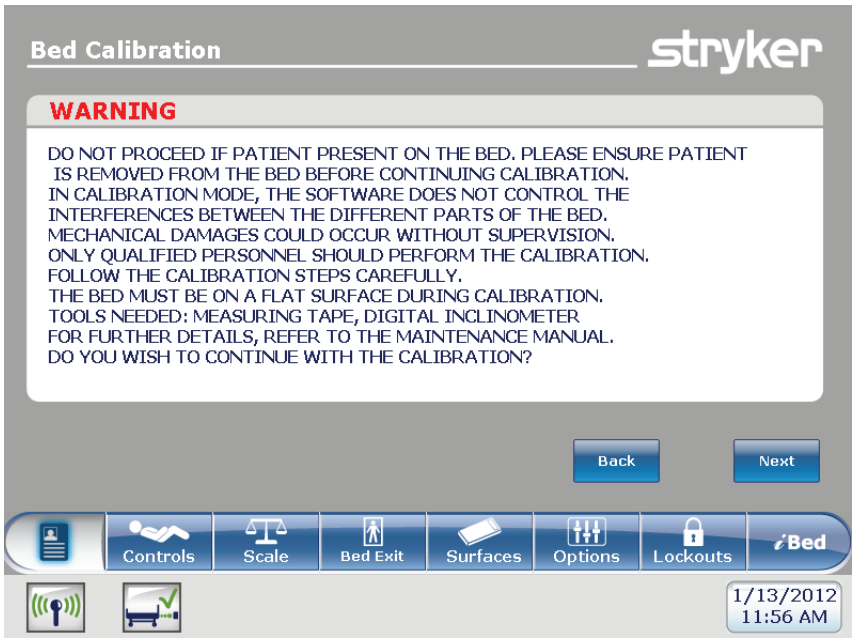


Figure 5 – Bed Calibration - Warning

5. Press **Next** to continue calibration (Figure 6).

Figure 6 – Bed calibration - step 1 of 6

6. Place the litter surface to a flat position. Press the **Foot Up** (E), **Fowler Down** (F), and **Gatch Down** (G) buttons simultaneously (Figure 7).

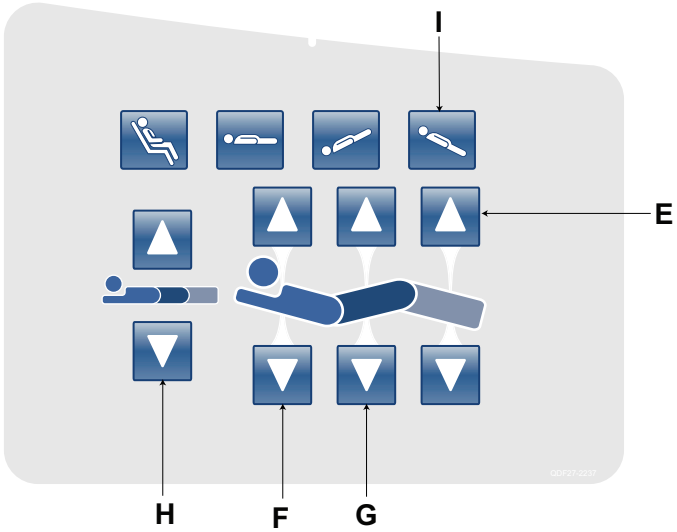


Figure 7 – Litter surface to flat and lowest position

7. Lower the bed to the lowest position. Press the **Bed Height Down (Head Lift Down)** (H) and **Reverse Trendelenburg (Foot Lift Down)** (I) buttons simultaneously (Figure 7).
8. Press the **Next** button when done. The Do Not Touch Bed screen appears (Figure 8).

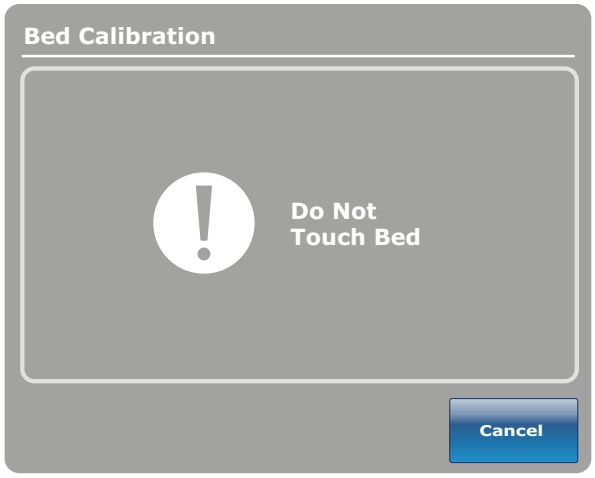


Figure 8 – Bed calibration - do not touch bed

9. When step 1 of the calibration procedure has completed, step 2 of the calibration procedure begins (Figure 9).

Figure 9 – Bed Calibration - step 2 of 6

10. Raise the bed height to 20 inches measuring from the top of the seat section to the floor. Press the **Bed Height Up (head lift up)** (J) and **Trendelenburg (foot lift up)** (K) buttons (Figure 10).

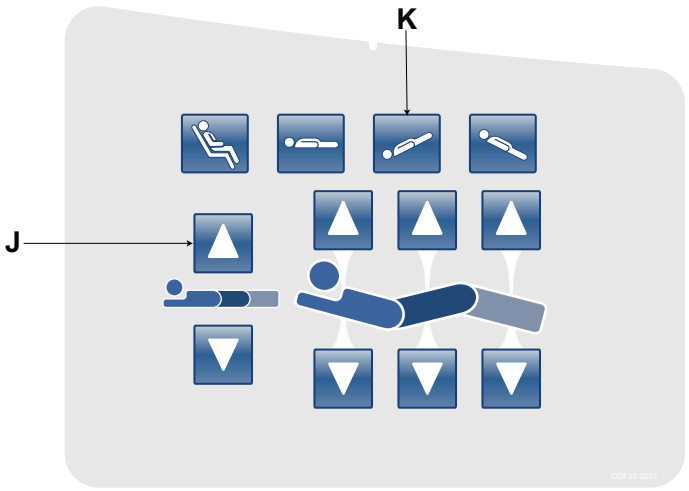


Figure 10 – Raise bed height

11. Stand on either side of the bed at the Fowler section, raise the foot siderail. Position the digital level/inclinometer on the bottom of the litter below the mattress retainer (Figure 11). Use the digital level/inclinometer to verify the bed is level (0.0 +/- 0.1).

Figure 11 – Placement of inclinometer

Note - Cycle power on the digital level/inclinometer before you place it on the bottom of the litter frame. Do not zero/calibrate the digital level/inclinometer.

12. Press the **Next** button when done. The Do Not Touch Bed screen appears (Figure 8).
13. When step 2 of the calibration procedure has completed, step 3 of the calibration procedure begins (Figure 12).

Figure 12 – Bed Calibration - step 3 of 6

14. To place the bed at +12 degrees Trendelenburg, press the **Trendelenburg (Foot Lift Up)** (L) button (Figure 13). Verify +12 degrees +/- 0.1 with the inclinometer you placed on the litter frame in step 11.

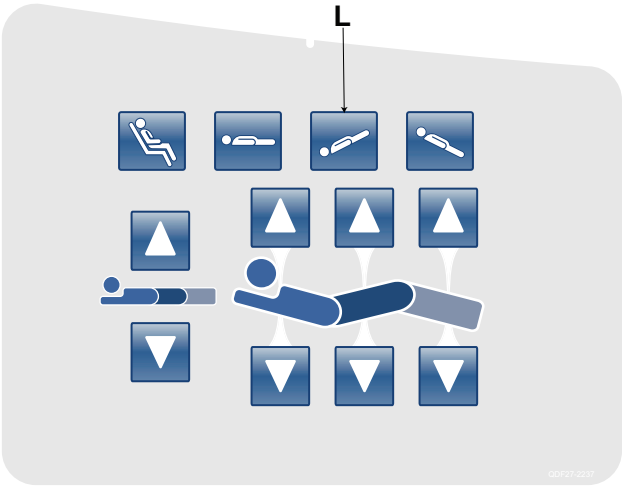


Figure 13 – Trendelenburg

15. Press the **Next** button when done.
16. The Do Not Touch Bed screen appears (Figure 8).
17. When step 3 of the calibration procedure has completed, step 4 of the calibration procedure begins (Figure 14).

Figure 14 – Bed Calibration - step 4 of 6

18. Level the bed back out to zero degrees. Push the **Reverse Trendelenburg** button until the litter is level while referencing the inclinometer.

    Note - Confirm inclinometer reads zero degrees.

19. To place the bed at -12 degrees Reverse Trendelenburg, press the **Bed Height Up (head lift up)** (M) button (Figure 15). Verify -12 degrees +/- 0.1 with the inclinometer you previously placed on the bottom of the litter frame in step 11.

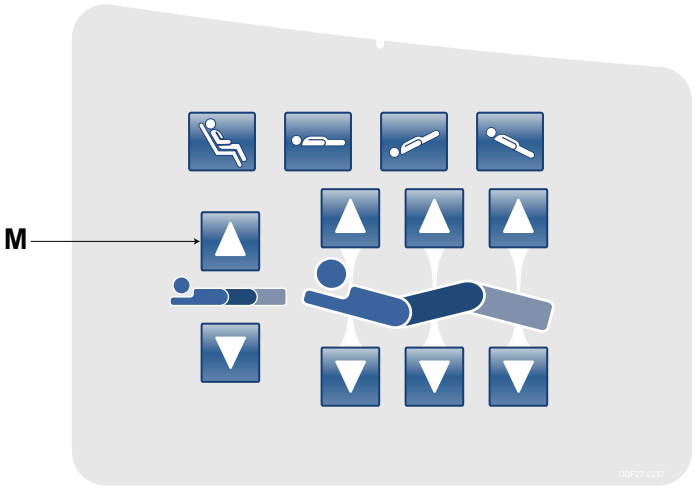


Figure 15 – Reverse Trendelenburg

20. Press the **Next** button when done.
21. The Do Not Touch Bed screen appears (Figure 8).
22. When step 4 of the calibration procedure has completed, step 5 of the calibration procedure begins (Figure 16).

Figure 16 – Bed Calibration - step 5 of 6

23. To place the bed at the highest height, press the **Trendelenburg (foot lift up)** (N) button and **Bed Height Up (head lift up)** (O) button simultaneously (Figure 17).

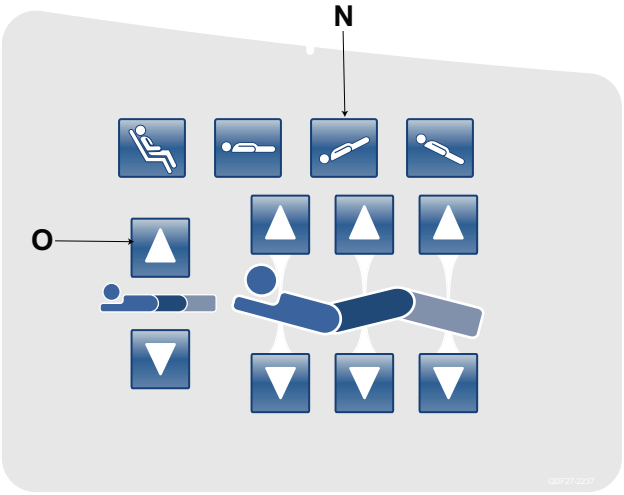


Figure 17 – Bed highest height

24. Press the **Fowler Up** (P) button until the Fowler reaches the highest height. Next press the **Gatch Up** (Q) button until the Gatch reaches its highest height. Last press the **Foot Up** (R) button until the foot section reaches its highest height (Figure 18). The foot section should be at a flat position.

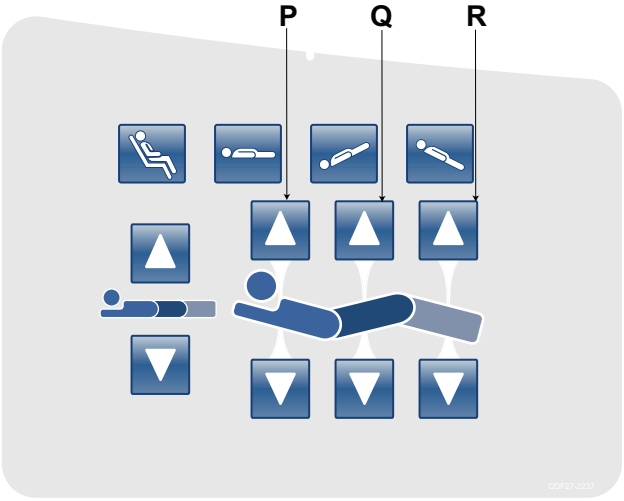


Figure 18 – Foot section flat

25. Press the **Next** button when done.
26. The Do Not Touch Bed screen appears (Figure 8).
27. When step 5 of the calibration procedure has completed, step 6 of the calibration procedure begins (Figure 19).

Figure 19 – Bed Calibration - step 6 of 6

28. To place the bed at the highest height, press the **Trendelenburg (foot lift up)** (S) button and **Bed Height Up (head lift up)** (T) button simultaneously (Figure 20).

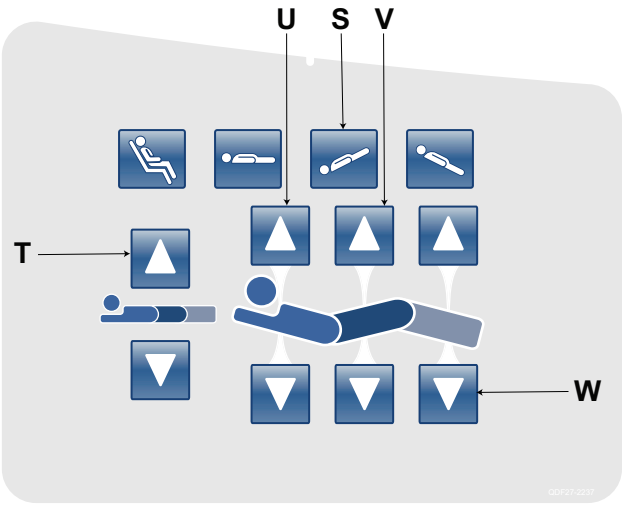


Figure 20 – Complete calibration

29. To place the Fowler and Gatch section of the bed at the highest height, press the **Fowler Up** (U) button then the **Gatch Up** (V) button (Figure 20).
30. To place the foot at the lowest position, push the **Foot Down** (W) button until limit is met (Figure 20).
31. The calibration procedure is completed screen appears (Figure 21).

Figure 21 – Calibration complete

32. Press the **Close** button to exit the Calibration Procedure Menu.
33. Use the CPR pedal to level the litter flat. Verify all display readings are zero degrees while the bed is at 33" (84 cm) (highest height). Lower the bed to 16" (41 cm) (lowest height) and verify the display readings maintain a constant reading of zero degrees with no fluctuations. When the bed reaches the lowest height at 16", verify the display readings are still at zero degrees.

    Note - If readings are not all zero, repeat steps 1-30 to recalibrate the bed.

Full diagnostic

From the Configuration Screen, press the **Full Diagnostic** button.

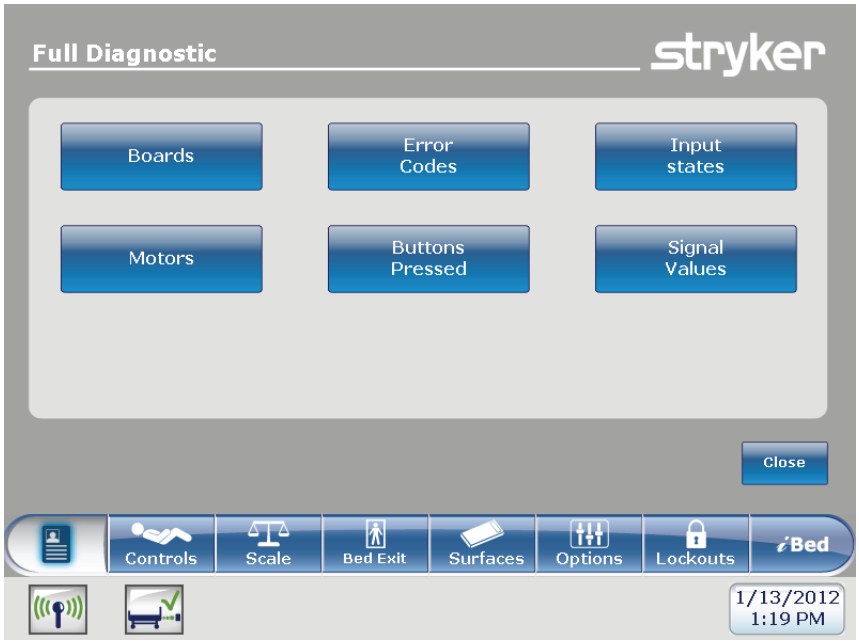


Figure 22 – Full diagnostic menu

The following items may be selected in the full diagnostic menu (Figure 22):

Buttons	Diagnostic
Boards	Provides information on the switch boards and the touch screen's software version (Figure 23).
Error codes	Provides information on errors which the CPU board has identified (Figure 24).
Input states	Provides information on the status of all switches and jumpers on the bed (Figure 25).
Motors	Provides information on what a motor is doing when a function button is pushed (Figure 26). **Note** - This requires assistance to press the buttons on the head siderails or at the head end control.
Buttons pressed	Provides information on when the CPU has detected a button being pressed (Figure 27). **Note** - This requires assistance to press the buttons on the head siderails or at the head end control.
Signal values	Provides information on CPU voltages, load cell values, and angle sensor values (Figure 28).

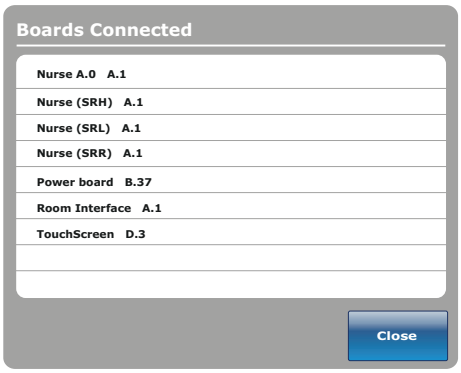


Figure 23 – Board

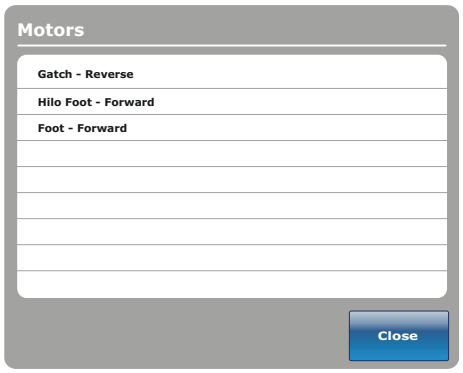


Figure 24 – Motors

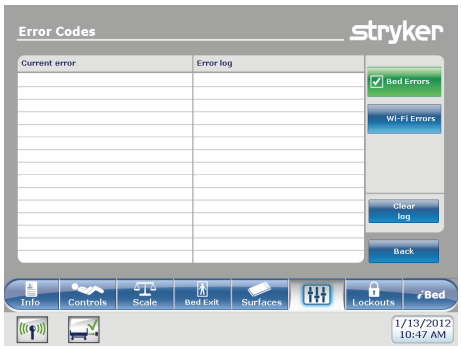


Figure 25 – Error codes

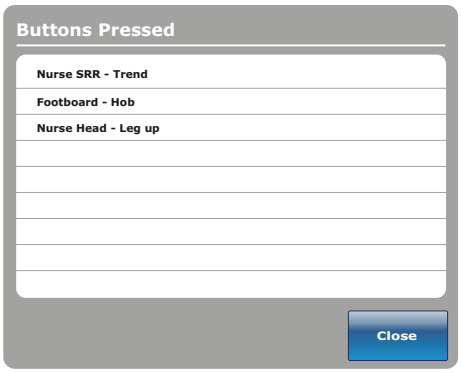


Figure 26 – Buttons pressed

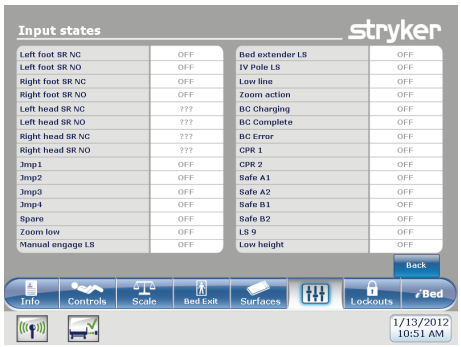


Figure 27 – Input states

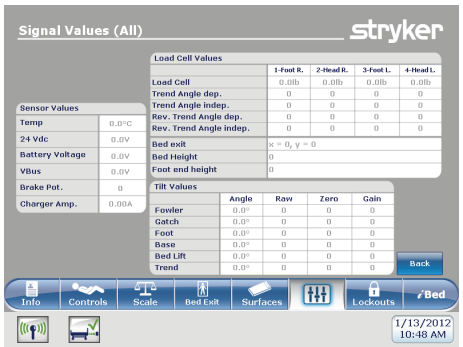


Figure 28 – Signal values

Calibrating the touch screen

CAUTION - Do not push the buttons above the Fowler, brakes, or driver or the actuators may activate.

Note - Always make sure that the patient is not on the product before you perform the Touch Screen Calibration.

To calibrate the touch screen:

1. From the Configuration Screen, press the **Touch Screen Calibration** button (Figure 29).

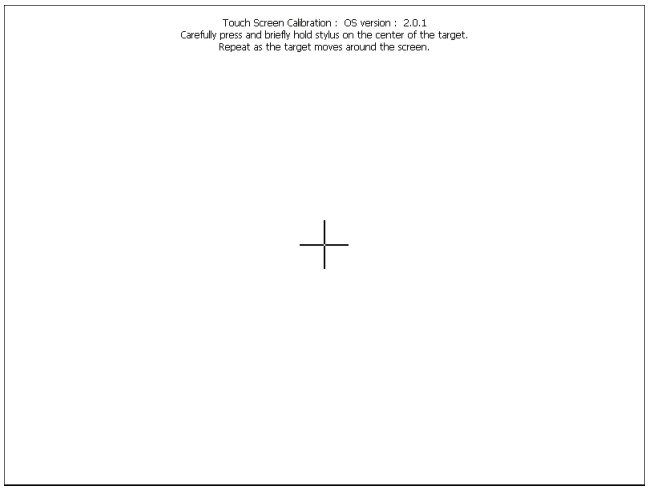


Figure 29 – Touch screen calibration - start

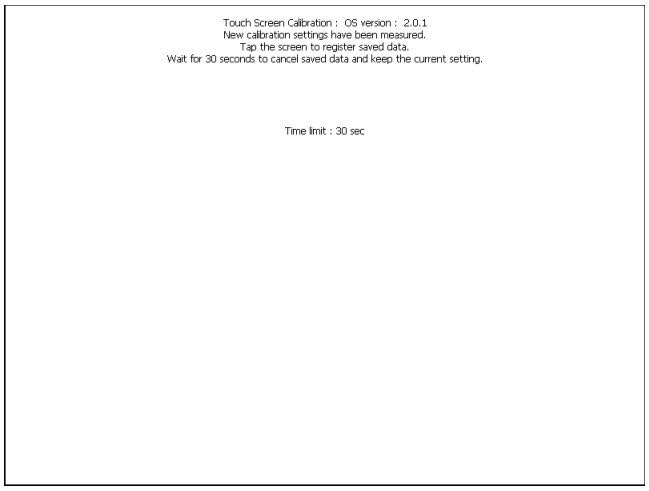


Figure 30 – Touch screen calibration - completed

Note - If the touch screen does not respond, push the **HOB 30°+**, **Brake**, and **Drive** buttons on the footboard simultaneously. This will open the touch screen calibration.

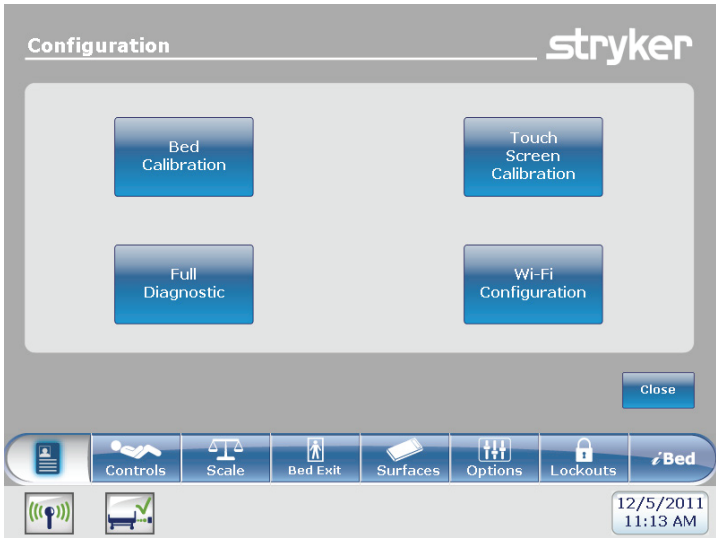
2. Press and hold a stylus or your finger on the center of the cross hair shown on the screen.
3. Repeat as the target moves around the screen. There will be five different locations to press: center, lower right, upper right, upper left, and lower left.
4. After you touch the last cross hair, the screen New calibration settings have been measured opens (Figure 30).
5. Tap the screen to register saved data.
6. If you do not want to save the new data, wait for 30 seconds to cancel saved data and keep the current setting.

Note - The touch screen calibration screen is a validation of the touch screen's calibration. When the user presses anywhere on the screen, the coordinates x and y are displayed on the lower part of the screen.

Configuring Wi-Fi - option

CAUTION - Always change the Wi-Fi configuration with the help of the hospital's IT department or appropriate maintenance personnel.

From the Configuration Screen, press the **Wi-Fi configuration** button to reset the wireless radio of the bed.



Configuring the bed options

See *Accessing the configuration menu* (page 9). Once in the configuration screen, follow the steps below to access the bed options screen.

To configure the bed options:

1. Press and hold the **HOB 30** button and the **BRAKE** button at the same time for 5 seconds, then release both buttons. The Bed Options screen will be displayed (Figure 31).

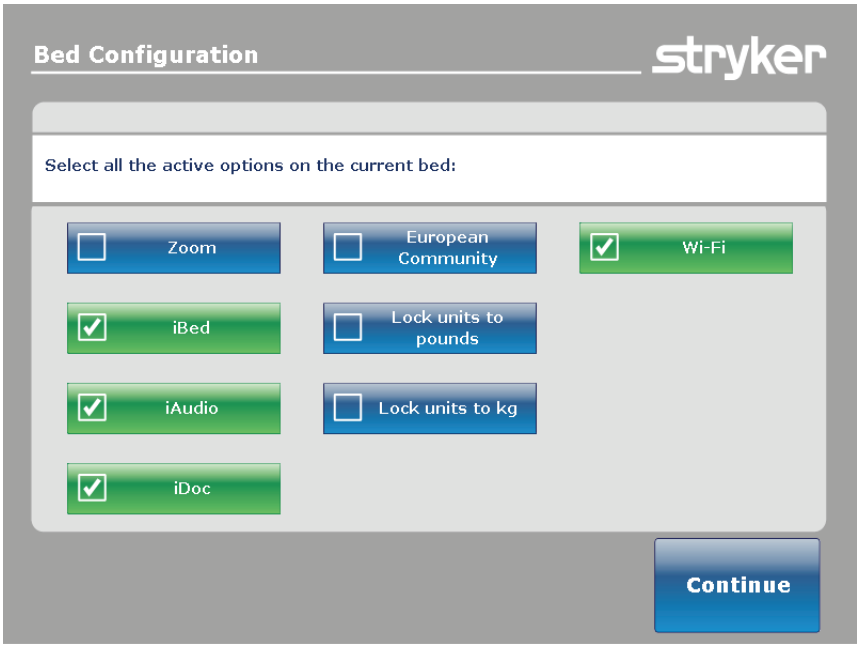


Figure 31 – Bed options screen

Note - When the European Community message window displays, push the **Close** button to close out of the message. That is not applicable in this configuration.

2. Select all of the options shown on the bed options screen that apply to the bed configuration.

   Note - The options selected are iBed, iAudio, iDoc and Wi-Fi (Figure 31). All of the options selected will turn green.

3. Press **Continue**. A confirmation screen displays to verify the options you selected (Figure 32).

   a. If the options on the confirmation screen do not match the options on the bed, press the **Back** button.

   b. If the options on the confirmation screen match the options on the bed, press the **OK** button.

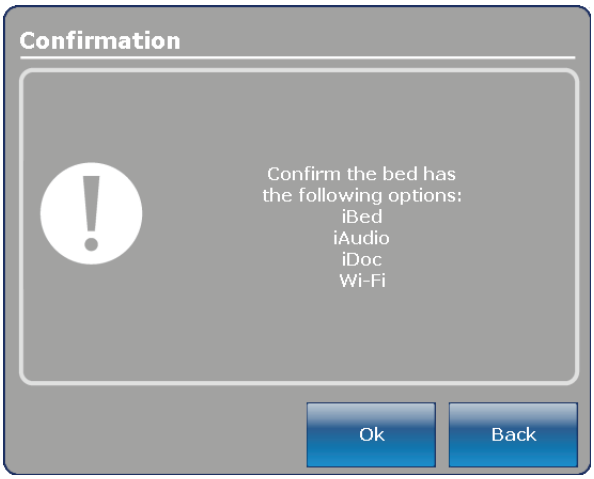


Figure 32 – Bed options confirmation screen

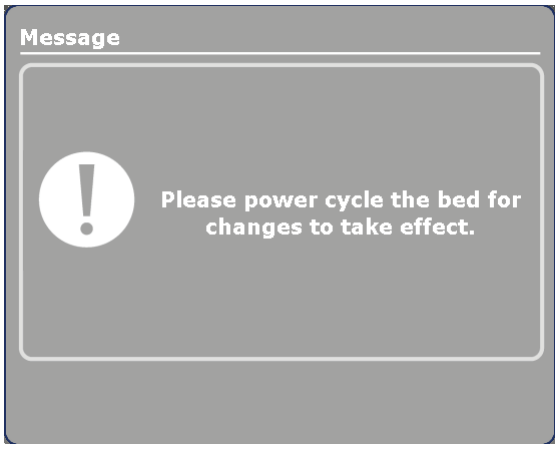


Figure 33 – Power cycle screen

4. The serial number will be saved and the serial number confirmation screen will be displayed. Press the **OK** button (Figure 32).
5. A power cycle screen displays (Figure 33).
6. To power cycle the bed, turn the battery disconnect switch off. Unplug the power cord from the wall outlet. Plug the power cord back into the wall outlet. Turn the battery disconnect switch on.
7. Test bed functionality before you return the product to service.

Configuring the serial number

See *Accessing the configuration menu* (page 9). Once in the configuration screen, follow the steps below to access the serial number screen.

To configure the serial number:

1. Press and hold the **HOB 30** button and the **Vascular Position** button at the same time for 5 seconds then release both buttons. The Bed Configuration - Serial Number screen will be displayed (Figure 34).
2. Enter or confirm the serial number of the bed (Figure 34).

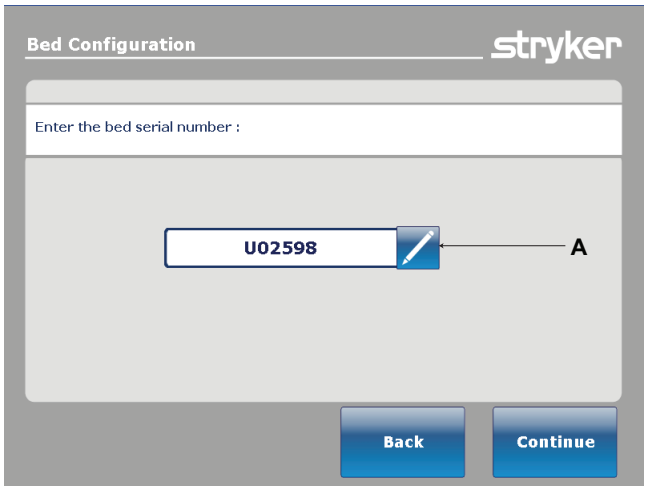


Figure 34 – Bed Configuration serial number screen

a. To enter the serial number:

b. Press the pencil icon (A) button (Figure 34). The Edit screen will be displayed.

c. Enter the serial number of the bed in the serial number field, then press the **OK** button. You will be returned to the serial number main screen.

d. Press the **Continue** button and proceed to step 3.

a. To confirm the serial number:

b. Review the serial number displayed in the serial number field.

c. If serial number is correct, press the **Back** button and proceed to step 6.

d. If the serial number is incorrect, press the pencil icon (A) button to open the Edit screen then enter the correct serial number.

e. Press the **OK** button and you will be returned to the serial number main screen.

f. Press the **Continue** button and proceed to step 3.

3. The serial number will be saved and the serial number confirmation screen will be displayed. Press the **OK** button (Figure 35).

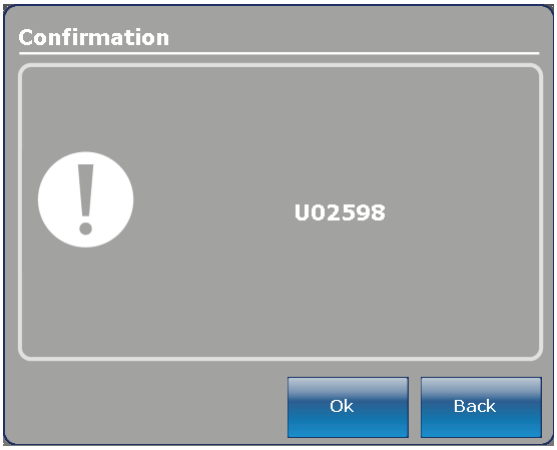


Figure 35 – Serial number confirmation screen

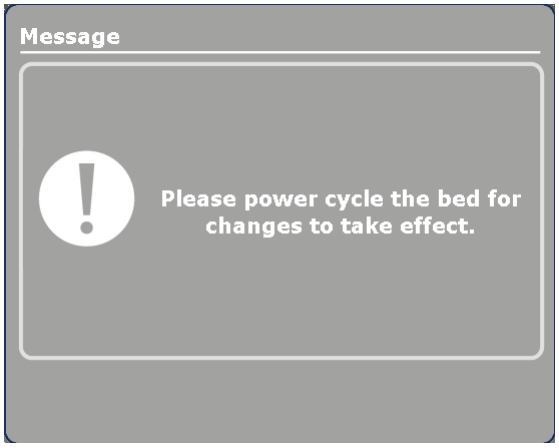


Figure 36 – Power cycle screen

4. A power cycle screen displays (Figure 36).
5. To power cycle the bed, turn the battery disconnect switch off. Unplug the power cord from the wall outlet. Plug the power cord back into the wall outlet. Turn the battery disconnect switch off.
6. Test bed functionality before you return the product to service.

Accessing the Isolibrium diagnostic menu

WARNING

- Always refer all servicing to qualified personnel to avoid electrical shock.
- Do not perform diagnostic test with a patient or other weight on the support surface.

CAUTION - Do not touch the support surface while you perform diagnostics test to avoid inaccurate diagnostic results.

Note - Make sure that you plug the support surface power cord into the **InTouch** auxiliary mattress outlet (A) and the integration cable to the mattress connector (B) (Figure 37).

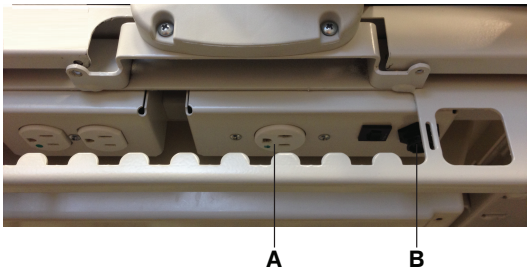


Figure 37 – InTouch auxiliary mattress outlet and integration cable

The service display and its functions are for use by authorized service personnel only to avoid the risk of product malfunction. The entry to this menu is through a key combination in the **Support Surface** menu.

To access the **Isolibrium** diagnostic menu:

1. Unplug the power cord from the wall outlet and turn the battery switch to **OFF** (0). Wait one minute.
2. Turn the battery switch to **ON** (|) and plug the power cord into a wall outlet.
3. Tap Support Surfaces.
4. Enter the following key combination within 5 minutes of the support surface connection (Figure 38):
   a. Lock (A) (lock is activated)
   b. Low Air Loss (B) (press and hold for a minimum of 5 seconds)
   c. Therapy History (C) (press and hold for a minimum of 5 seconds)

Figure 38 – Diagnostic entry combination

5. If you have entered into the diagnostics menu and need to exit, tap **X** (Figure 39).

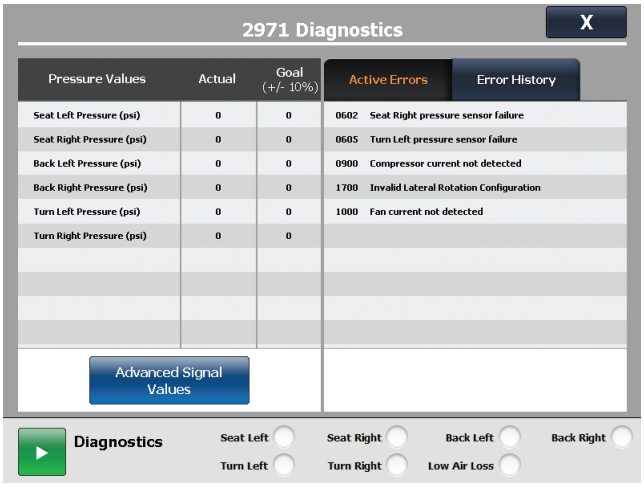


Figure 39 – Diagnostics main screen sample

Reviewing active Isolibrium errors

Note - For **Isolibrium** error codes, see ***Isolibrium*** *error code* (page 41).

Tap the **Active Errors** tab on the service Diagnostics screen (Figure 40).

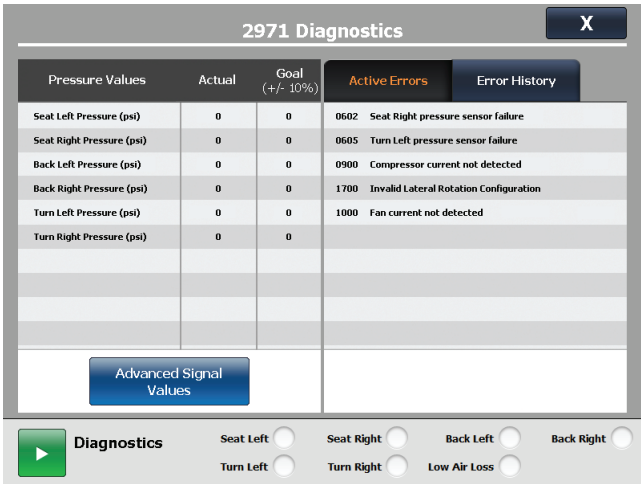


Figure 40 – Active Errors

To enter the **Active Errors** screen:

A list of the active errors are displayed (Figure 40). A maximum of five active errors are displayed simultaneously and are ordered by priority.

Reviewing and clearing Isolibrium error history

To enter the **Error History** screen:

1. Tap the **Error History** tab on the Diagnostics screen (Figure 41).

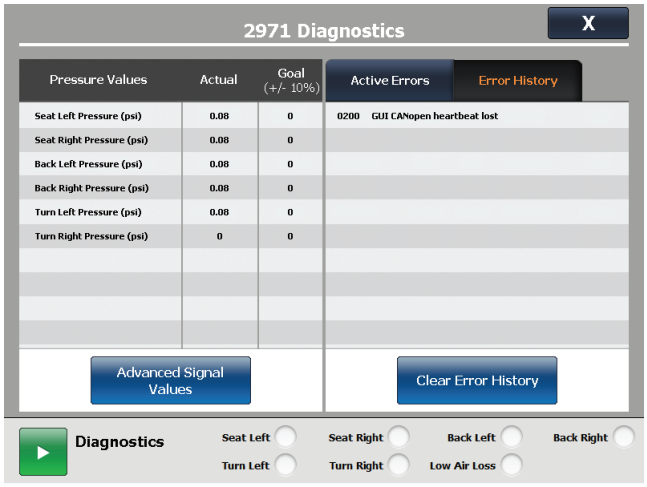


Figure 41 – Diagnostics screen

Note - A maximum of ten errors are listed in order from the oldest to the newest.

2. To clear the **Error History** screen, tap **Clear Error History** on the Diagnostics screen (Figure 41).

Note

- Always tap **Clear Error History** after troubleshooting is complete.
- If you clear the error history while there is an active error, the active error does not show in the **Error History** tab until the active error is fixed.

Viewing advanced signal values for Isolibrium

The Advanced Signal Values screen displays the complete list of signal values of the support surface. The screen displays the actual and goal pressure values. For other non-pressure signals, only the actual values are displayed.

To enter the **Advanced Signal Values** screen:

1. Tap **Advanced Signal Values** on the Diagnostics screen (Figure 42).

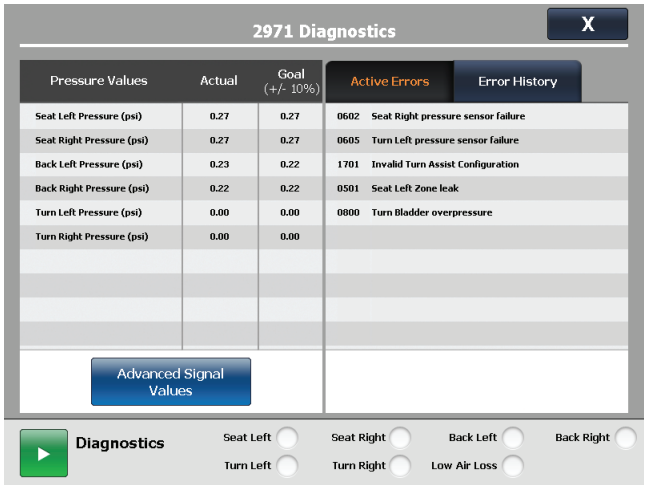
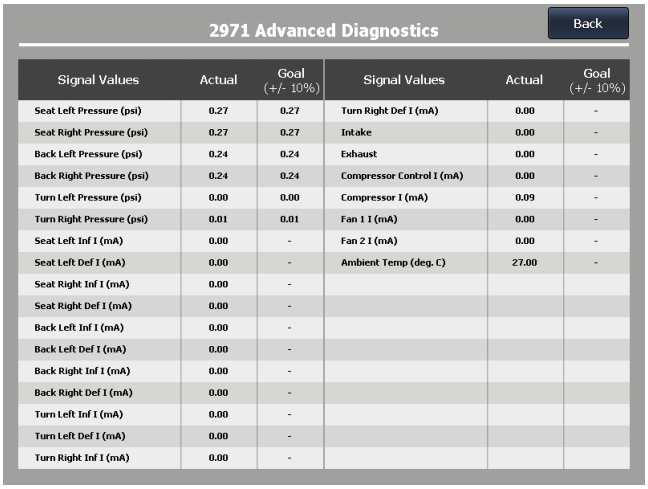


Figure 42 – Diagnostics main screen sample

2. To exit the **Advanced Signal Values** screen, tap **Back** to return to the Diagnostics screen (Figure 43).



Signal Values	Actual	Goal (+/- 10%)	Signal Values	Actual	Goal (+/- 10%)
Seat Left Pressure (psi)	0.27	0.27	Turn Right Def I (mA)	0.00	-
Seat Right Pressure (psi)	0.27	0.27	Intake	0.00	-
Back Left Pressure (psi)	0.24	0.24	Exhaust	0.00	-
Back Right Pressure (psi)	0.24	0.24	Compressor Control I (mA)	0.00	-
Turn Left Pressure (psi)	0.00	0.00	Compressor I (mA)	0.09	-
Turn Right Pressure (psi)	0.01	0.01	Fan 1 I (mA)	0.00	-
Seat Left Inf I (mA)	0.00	-	Fan 2 I (mA)	0.00	-
Seat Left Def I (mA)	0.00	-	Ambient Temp (deg. C)	27.00	-
Seat Right Inf I (mA)	0.00	-			
Seat Right Def I (mA)	0.00	-			
Back Left Inf I (mA)	0.00	-			
Back Left Def I (mA)	0.00	-			
Back Right Inf I (mA)	0.00	-			
Back Right Def I (mA)	0.00	-			
Turn Left Inf I (mA)	0.00	-			
Turn Left Def I (mA)	0.00	-			
Turn Right Inf I (mA)	0.00	-			

Figure 43 – Advanced Signal Values

Running a diagnostic test for Isolibrium

WARNING - Do not perform diagnostic test with a patient or other weight on the support surface.

CAUTION - Do not touch the support surface while you perform diagnostics test to avoid inaccurate diagnostic results.

Note

- The results of the test will not be displayed until all tests have been completed.
- No results will be displayed if the tests are canceled.
- Other diagnostic functions are disabled while the diagnostic test is running.

The diagnostic test runs seven tests at one time on the support surface. The diagnostic test take approximately 45 minutes to complete and include:

- Seat left
- Seat right
- Back left
- Back right
- Turn left
- Turn right
- Low air loss

To run diagnostics:

1. Tap **Start** on the lower portion of the Diagnostics screen (Figure 44).

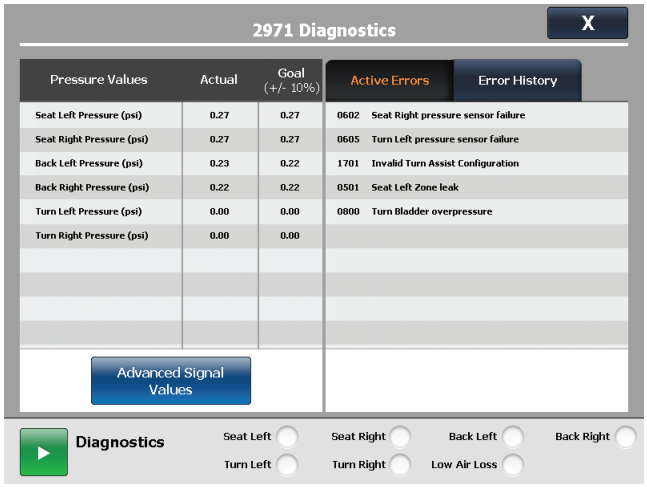


Figure 44 – Diagnostic main screen sample

Note - **Diagnostics running** appears to indicate that the diagnostic test is in progress.

2. To cancel diagnostics, tap **stop** on the lower portion of the Diagnostics screen (Figure 45).

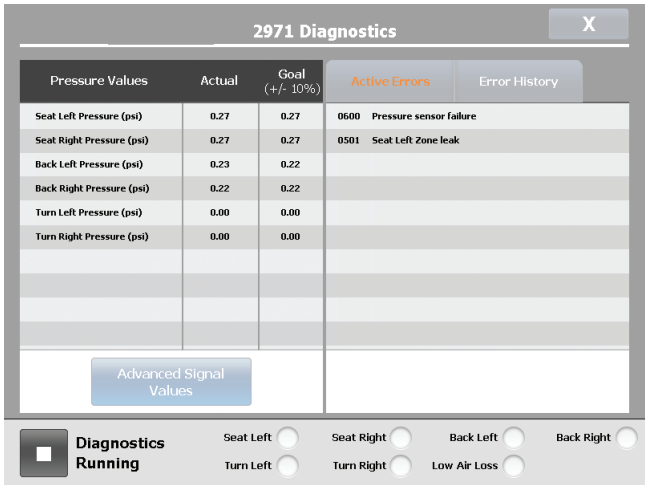


Figure 45 – Diagnostic running main screen sample

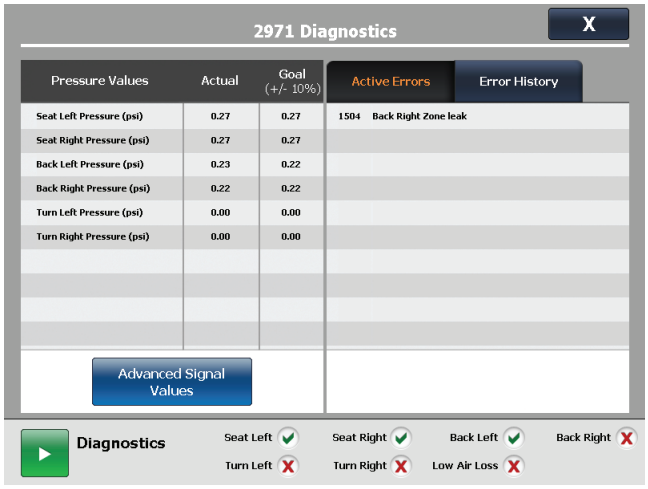


Figure 46 – Diagnostics test result sample

When the test is complete, the results of each test section is indicated by a red cross when there is a failure or a green check mark when successful (Figure 46).

Note - When a failure is first detected, all pressure tests that follow will be marked as a failure.

Troubleshooting

Note

- See the **Isolibrium** Maintenance Manual for troubleshooting of the support surface.
- If you need to recalibrate the bed, see *Calibrating the bed* (page 10).

Country voltage (CV) table	
Voltage	**Fuse**
100V	10 A
110V	10 A
120V	10 A
200V	10 A
220V	10 A
230V	10 A
240V	10 A

Problem/failure	Recommended action
No power to bed (On wall voltage 120VAC)	1. Verify power cord connections at the wall outlet and at product 1.1. Check your country voltage (CV) option at wall outlet 1.1.1. If your country voltage option is present, go to step 2 1.1.2. If your country voltage (CV) option is not present, contact hospital maintenance staff and try another outlet 2. Make sure that the product main power fuses are good (located in fuse drawer of inlet filter) 2.1. Check for continuity of each 10 A fuse 2.1.1. If each fuse (see CV table) has continuity, go to step 3 2.1.2. If either fuse (see CV table) does not have continuity, replace the fuse 3. Verify there is power at the transformer connection (J11) on the CPU/power board at the foot end 3.1. Check for 24 VAC at J11 between the blue and red wires 3.1.1. If 24 VAC is present, go to step 3.2 3.1.2. If 24 VAC is not present, check the 25 amp fuse in the fuse holder on the red wire from the transformer. If it does not have continuity, replace the fuse. 3.1.3. If 24 VAC is not present, check the power cable quick connection that goes into the transformer for (see CV table) VAC. If no voltage, follow the cable and repair or replace the component. 3.1.4. If (see CV table) VAC is present, replace the transformer assembly. 3.2. Check for 30 VAC at J11 between the yellow and orange wires 3.2.1. If 30 VAC is present, go to step 4 3.2.2. If 30 VAC is not present, check the power cable quick connection that goes into the transformer for (see CV table) VAC. If no voltage, follow the cable and repair or replace the component. 3.2.3. If (see CV table) VAC is present, replace the transformer assembly 4. Check fuse F1 on the CPU/power board 4.1. If fuse has continuity, replace CPU/power board 4.2. If fuse does not have continuity, replace the fuse (215008.P)

Problem/failure	Recommended action
No bed up motion - foot	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the Trendelenburg button 1.1.1. If the foot lift motor raises, recalibrate the bed 1) If recalibration does not work, replace the litter angle sensor and recalibrate 1.1.2. If the foot lift motor does not raise, check for 24 VDC at connector J6 while you press the Trendelenburg button (black lead to pin 1, red lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No bed up motion - head	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the bed up button 1.1.1. If the head lift motor raises, recalibrate the bed 1) If recalibration does not work, replace the litter angle sensor and recalibrate 1.1.2. If the head lift motor does not raise, check for 24 VDC at connector J4 while you press the Trendelenburg button (black lead to pin 1, red lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No Fowler up motion	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the Fowler up button 1.1.1. If the Fowler motor raises, recalibrate the bed 1) If recalibration does not work, replace the Fowler angle sensor and recalibrate 1.1.2. If the Fowler motor does not raise, check for 24 VDC at connector J5 while you press the Fowler up button (black lead to pin 1, red lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board

Problem/failure	Recommended action
No Fowler down motion	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the Fowler down button 1.1.1. If the Fowler motor lowers, recalibrate the bed 1) If recalibration does not work, replace the Fowler angle sensor and recalibrate 1.1.2. If the Fowler motor does not lower, check for 24 VDC at connector J5 while you press the Fowler down button (Red lead to pin 1, black lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No Gatch up motion	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the Gatch up button 1.1.1. If the Gatch motor raises, recalibrate the bed 1) If recalibration does not work, replace the Gatch angle sensor and recalibrate 1.1.2. If the Gatch motor does not raise, check for 24 VDC at connector J3 while you press the Gatch up button (Red lead to pin 1, black lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No Gatch down motion	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the Gatch down button 1.1.1. If the Gatch motor lowers, recalibrate the bed 1) If recalibration does not work, replace the Gatch angle sensor and recalibrate 1.1.2. If the Gatch motor does not lower, check for 24 VDC at connector J3 while you press the Gatch down button (black lead to pin 1, red lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board

Problem/failure	Recommended action
No foot up motion	1. Open the **Bed Calibration** menu 1.1. Using one of the head siderails, push the foot up button 1.1.1. If the foot motor raises, recalibrate the bed 1) If recalibration does not work, replace the foot angle sensor and recalibrate 1.1.2. If the foot motor does not raise, check for 24 VDC at connector J1 while you press the foot up button (Red lead to pin 1, black lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No foot down motion	1. Make sure that there is no debris in the foot end traction sockets. If debris is present, remove it and press the foot down button. If the foot motor does not lower, proceed to step 2. 2. Open the **Bed Calibration** menu 2.1. Using one of the head siderails, push the foot down button 2.1.1. If the foot motor lowers, recalibrate the bed 1) If recalibration does not work, replace the foot angle sensor and recalibrate 2.1.2. If the foot motor does not lower, check for 24 VDC at connector J1 while you press the foot down button (black lead to pin 1, red lead to pin 2) 1) If voltage is present, replace the motor 2) If voltage is not present, replace the CPU/power board
No Trendelenburg motion	1. Check the touch screen Trendelenburg angle display for accuracy of the level of the litter 1.1. If not accurate, recalibrate the bed 1.1.1. If recalibration does not work, replace the Trendelenburg angle sensor and recalibrate 1.1.2. If replacement of the Trendelenburg angle sensor did not resolve the problem, replace the CPU/power board

Problem/failure	Recommended action
No Reverse Trendelenburg motion	1. Check the touch screen Trendelenburg angle display for accuracy of the level of the litter 1.1. If not accurate, recalibrate the bed 1.1.1. If recalibration does not work, replace the Trendelenburg angle sensor and recalibrate 1.1.2. If replacement of the Trendelenburg angle sensor did not resolve the problem, replace the CPU/power board
No cardiac chair motion	1. Check the touch screen Fowler and foot section angle display for accuracy of the Fowler and foot section 1.1. If not accurate, recalibrate the bed 1.1.1. If recalibration does not work, replace the Fowler or foot section angle sensor and recalibrate 1.1.2. If replacement of the Fowler or foot section angle sensor did not resolve the problem, replace the CPU/power board
No HOB 30° motion	1. Check the touch screen Fowler angle display for accuracy of the Fowler 1.1. If not accurate, recalibrate the bed 1.1.1. If recalibration does not work, replace the Fowler angle sensor and recalibrate 1.1.2. If replacement of the Fowler angle sensor did not resolve the problem, replace the CPU/power board
No vascular motion	1. Check the touch screen Fowler, Gatch, foot, and Trendelenburg/reverse Trendelenburg angle display for accuracy 1.1. If not accurate, recalibrate the bed 1.1.1. If recalibration does not work, replace angle sensor of the section that is not accurate and recalibrate 1.1.2. If replacement of the angle sensor did not resolve the problem, replace the CPU/power board

Problem/failure	Recommended action
No electric brake motion	1. Verify the **Brake Not Set** LED is flashing and the **Brake Set** LED is off 1.1. If the **Brake Set** LED is on, check the manual brake position 1.1.1. If manual brake pedal is in the brake position, confirm that the bed does not move and go to step 2 1.1.2. If manual brake pedal is not in the brake position, check the switch on the patient left side in the middle below the base hood 2. If the brake motor does not lower when the brake button is pushed, check for 24 VDC at connector J7 while you press the brake button (black lead to pin 1, red lead to pin 2)

Scale troubleshooting

When the Scale system is unable to correctly weigh the patient weight due to a problem with the electronics, an error appears (Figure 47). It also appears when there is a problem with the Trendelenberg angle sensor. The value for the weight and the angle cannot be displayed.

When the weight exceeds 550 lb, Error Weight Overload appears (Figure 48). If the weight is less than 2 lb, the screen displays "0 lb."

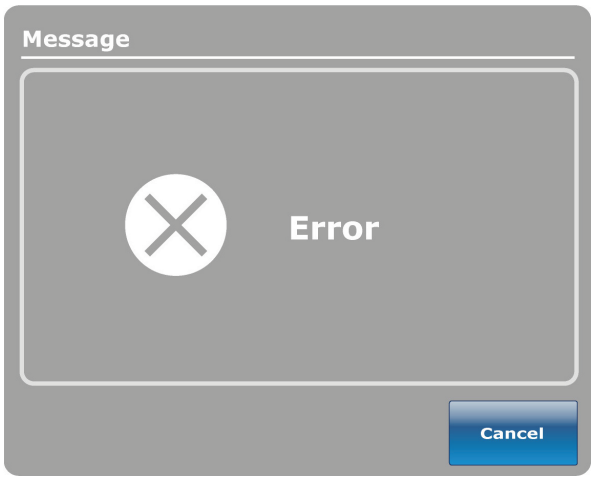


Figure 47 – Error

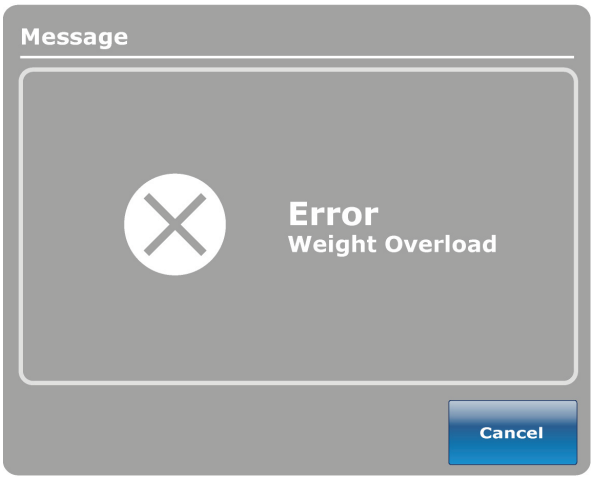


Figure 48 – Error Weight Overload

When the Trendelenburg or Reverse Trendelenburg angle is above 12^0 or below -12^0, Error Excessive Inclination appears (Figure 49).

When the scale system is unstable due to a problem with scale electronics or excessive patient movement, the weight reading is orange (Figure 50).

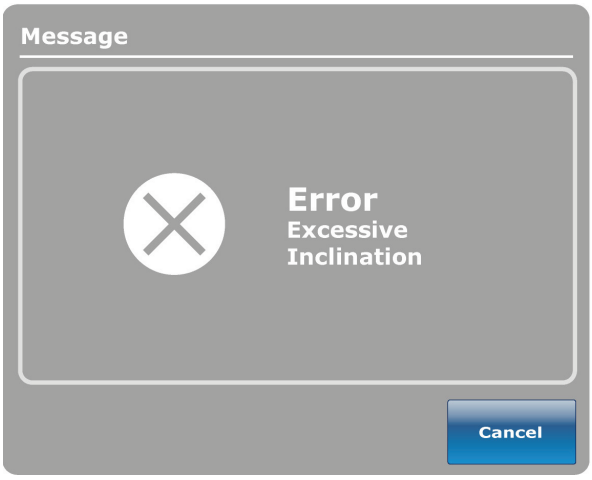


Figure 49 – Error Excessive Inclination

Figure 50 – Weight reading orange

Error table

There are two different CAN networks; each of the networks is divided into two connectors.

A safe error without command can be obtained when a bad connection is carried out on the Power Sensor Board when the control panel is defective (there is no message sent on the network when a button is pressed) or when the network is defective (short-circuit between the signals, open circuit or defective network circuit).

A command error without safe is obtained when a bad connection is done on the Power Sensor board, when the control panel is defective (a message is sent over the network but not the safe signal) or when the safe signal is defective (short-circuit panel or open circuit or safe circuit on the Power Sensor board is broken).

These errors can be present when a button is pressed, or at any time, and will cause the Call Maintenance LED to light up.

There is a LED on the Power Sensor Board (DS2 SAFE) which is active when there is at least one safe signal is active. There are also four LEDs on the Power Sensor board, which shows the activity of the network. Every time a message is sent on the network, the LEDs will flash. If the network is defective, the LEDs will remain on or remain off. If there is nothing connected to the network, the LEDs will remain on or off.

A safe error can be obtained if a command button is pressed without the Power Sensor Board receiving a safe signal or if a safe signal is received by the Power Sensor board without any command button pressed.

The control panel for the weighing scale of the Power Sensor board can also send errors to the micro-controller which will display them. An error of the weighing scale control panel will light on the Call Maintenance LED.

Touch screen error message

Touch screen error message name	Definition
ATD invalid values	Digital to analog converter is damaged, replace the Control Board.
Brake pot bad range	Verify if potentiometer is still in place.
Brake unable to elec ctl	Verify wiring to brake motor and limit switch for manual engage.
Brake pot disconnected or short	Verify wiring to potentiometer and replace potentiometer. Make sure that the potentiometer is still in place.
Brake motor time out	Verify wiring to brake motor.
Calibration error	Previous calibration step performed incorrectly, redo calibration procedure.
Cmd WO safe from nurse SRR	Right siderail outside board has a network communication error (Check network connections, dip-switch configuration of board or if a button is stuck).
Cmd WO safe from nurse SRL	Left siderail outside board has a network communication error (Check network connections, dip-switch configuration of board or if a button is stuck).
Cmd WO safe from nurse SRH	Head end board has a network communication error (Check network connections).
Cmd WO safe from pat pend R	Pendant control option has a network communication error (Check network connections).
Cmd WO safe from pat pend L	Pendant control option has a network communication error (Check network connections).

Touch screen error message name	Definition
Cmd WO safe from pat pend H	Pendant control option has a network communication error (Check network connections).
Cmd WO safe from TS	Touch screen has a network communication error (Check network connections).
Cmd WO safe from room	Communication board has a network communication error (Check network connections).
Cmd WO safe from room	Communication board has a network communication error (Check network connections).
GPIO failure init	Initialization of the PCA9555 (GPIO expansion chip) failed (Replace control board).
GPIO failure read	Reading from the PCA9555 (GPIO expansion chip) failed (Replace control board).
GPIO failure write	Writing to the PCA9555 (GPIO expansion chip) failed (Replace control board).
Limit switch head siderail right	Verify wiring to limit switch and replace limit switch.
Limit switch head siderail left	Verify wiring to limit switch and replace limit switch.
Limit switch foot siderail right	Verify wiring to limit switch and replace limit switch.
Limit switch foot siderail left	Verify wiring to limit switch and replace limit switch.
Foot right load cell over range	Foot right load cell or cabling is damaged (Replace load cell).
Head right cell over range	Head right load cell or cabling is damaged (Replace load cell).
Foot left load cell over range	Foot left load cell or cabling is damaged (Replace load cell).
Head left load cell over range	Head left load cell or cabling is damaged (Replace load cell).
Motor brake overheat	Brake motor has ran too long (Leave motor stationary for 54 minutes).
Motor brake overload	Brake motor is drawing too many AMPS (Remove restriction or replace motor).
Motor foot overheat	Foot motor has ran too long (Leave motor stationary for 54 minutes).
Motor foot overload	Foot motor is drawing too many AMPS (Remove restriction or replace motor).
Motor Gatch overheat	Gatch motor has ran too long (Leave motor stationary for 54 minutes).
Motor Gatch overload	Gatch motor is drawing too many AMPS (Remove restriction or replace motor).
Motor head overheat	Fowler motor has ran too long (Leave motor stationary for 54 minutes).
Motor head overload	Fowler motor is drawing too many AMPS (Remove restriction or replace motor).

Touch screen error message name	Definition
Motor HL foot overheat	Foot lift motor has ran too long (Leave motor stationary for 54 minutes).
Motor HL foot overload	Foot lift motor is drawing too many AMPS (Remove restriction or replace motor).
Motor HL head overheat	Head lift motor has ran too long (Leave motor stationary for 54 minutes).
Motor HL head overload	Head lift motor is drawing too many AMPS (Remove restriction or replace motor).
Motor **Zoom** overheat	**Zoom** motor has ran too long (Leave motor stationary for 54 minutes).
Motor **Zoom** overload	**Zoom** motor is drawing too many AMPS (Remove restriction or replace motor).
No error	Angle sensor failure or calibration issue.
One motor drive short	Short on drive motor detected.
Safe WO Cmd from A1	Network A1 has a wiring issue (Check cabling).
Safe WO Cmd from A2	Network A2 has a wiring issue (Check cabling).
Safe WO Cmd from B1	Network B1 has a wiring issue (Check cabling).
Safe WO Cmd from B2	Network B2 has a wiring issue (Check cabling).
Scale ADC Error	Scale chip not calibrated. DC Control Board needs to be replaced.
Scale chip failure	Control board is bad (Replace Control Board).
Tilt base over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.
Tilt error base	Angle sensor is damaged (Replace sensor).
Tilt error foot	Angle sensor is damaged (Replace sensor).
Tilt error Gatch	Angle sensor is damaged (Replace sensor).
Tilt error head	Angle sensor is damaged (Replace sensor).
Tilt error HiLo foot	Angle sensor is damaged (Replace sensor).
Tilt error Trendelenburg	Angle sensor is damaged (Replace sensor).
Tilt foot over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.
Tilt Gatch over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.
Tilt head over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.
Tilt HiLo foot over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.

Touch screen error message name	Definition
Tilt Trendelenburg over range	Verify if tilt sensor is still in place. Inspect for a damaged or improperly assembled tilt sensor or recalibrate bed.
Zoom time out for switch	Verify wiring to **Zoom** motor.

Wi-Fi/IR communication error

Wi-Fi/IR communication error	Definition
Wireless adaptor failure	Unable to detect or communicate with Wi-Fi radio. Check assembly or cabling of Wi-Fi card in footboard or replace Wi-Fi card or footboard.
DHCP Error: Unable to obtain IP Address	Bed is not able to connect to the wireless network. Check wireless network settings and Wi-Fi configuration of bed.
Unable to connect to network	Bed is not able to connect to the wireless network. Check wireless network settings and Wi-Fi configuration of bed.
Internal communication error	Internal software failure. Software corruption may have occurred. Re-upload software or replace footboard.
Wi-Fi settings corrupted	Reconfigure Wi-Fi settings in bed.
Bed serial number not available	Configure bed serial number.
Left IR module not detected	Unable to detect IR module. Check cabling or replace the IR module.
Right IR module not detected	Unable to detect IR module. Check cabling or replace the IR module.
IR interface board not detected	Unable to detect the room interface board. Check cabling or replace the Room interface board.

Isolibrium error code

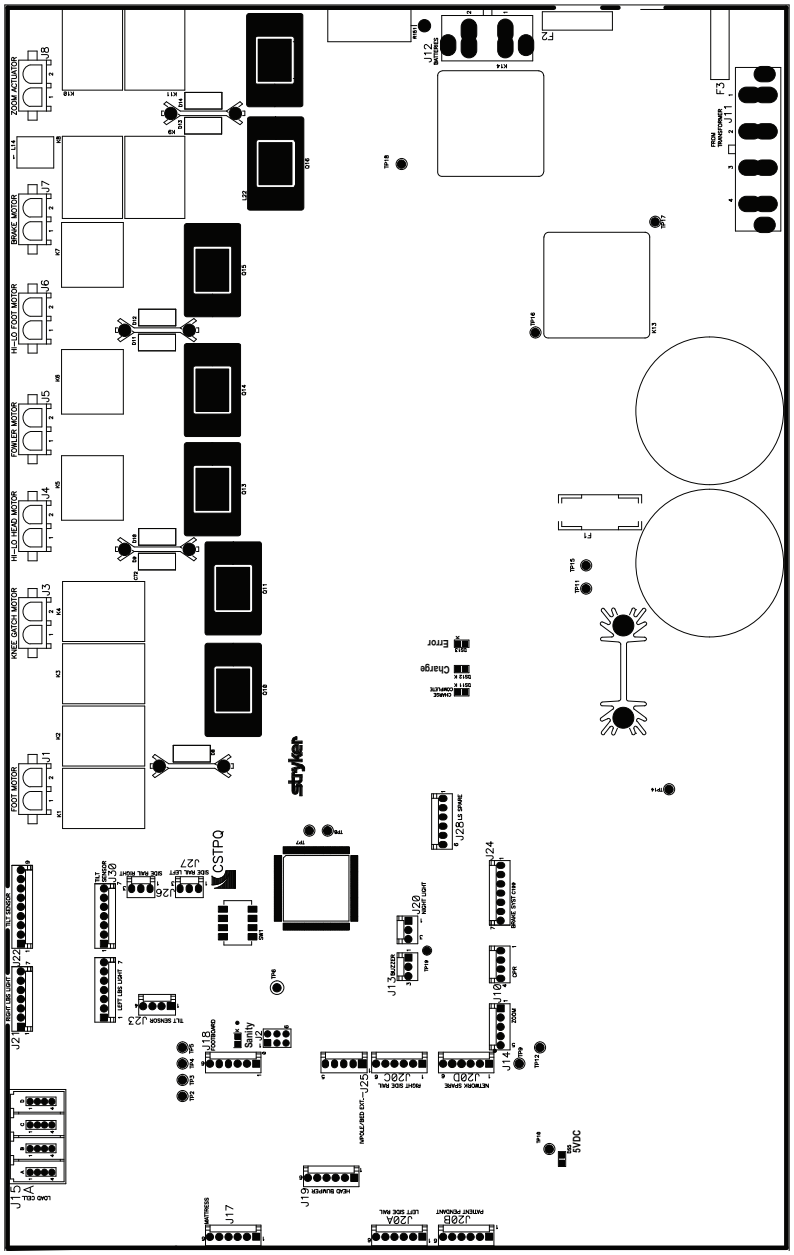
Isolibrium error code	Definition
100	Sensor board communication failure
101	Sensor board EEPROM corruption
102	Sensor board not calibrated
200	GUI CANopen heartbeat lost
400	EEPROM corruption
500	Ambient temperature sensor failure
501	Ambient temperature out of range
600	Pressure sensor failure
601	Seat left pressure sensor failure
602	Seat right pressure sensor failure
603	Back left pressure sensor failure

Isolibrium error code	Definition
604	Back right pressure sensor failure
605	Turn left pressure sensor failure
606	Turn right pressure sensor failure
700	Mattress zone overpressure
701	Seat left zone overpressure
702	Seat right zone overpressure
703	Back left zone overpressure
704	Back right zone overpressure
800	Turn bladder overpressure
801	Turn left bladder overpressure
802	Turn right bladder overpressure
900	Compressor current not detected
1000	Fan current not detected
1001	Fan 1 current not detected
1002	Fan 2 current not detected
1100	Valve not detected
1101	Seat left inflate valve not detected
1102	Seat left deflate valve not detected
1103	Seat right inflate valve not detected
1104	Seat right deflate valve not detected
1105	Back left inflate valve not detected
1106	Back left deflate valve not detected
1107	Back right inflate valve not detected
1108	Back right deflate valve not detected
1109	Turn left inflate valve not detected
1110	Turn left deflate valve not detected
1111	Turn right inflate valve not detected
1112	Turn right deflate valve not detected
1113	Intake valve not detected
1114	Exhaust valve not detected
1200	Compressor current when OFF
1300	Fan current when OFF
1301	Fan 1 current when OFF
1302	Fan 2 current when OFF
1400	Valve current when OFF

Isolibrium error code	Definition
1401	Seat left inflate valve current when OFF
1402	Seat left deflate valve current when OFF
1403	Seat right inflate valve current when OFF
1404	Seat right deflate valve current when OFF
1405	Back left inflate valve current when OFF
1406	Back left deflate valve current when OFF
1407	Back right inflate valve current when OFF
1408	Back right deflate valve current when OFF
1409	Turn left inflate valve current when OFF
1410	Turn left deflate valve current when OFF
1411	Turn right inflate valve current when OFF
1412	Turn right deflate valve current when OFF
1413	Intake valve current when OFF
1414	Exhaust valve current when OFF
1500	Mattress leak
1501	Seat left zone leak
1502	Seat right zone leak
1503	Back left zone leak
1504	Back right zone leak
1505	Turn left bladder leak
1506	Turn right bladder leak
1600	Mattress deflate timeout
1601	Seat left deflate timeout
1602	Seat right deflate timeout
1603	Back left deflate timeout
1604	Back right deflate timeout
1605	Turn left deflate timeout
1606	Turn right deflate timeout
1700	Reference voltage hardware failure
1800	Weight input out of range
1900	HOB angle out of range for Lateral Rotation
1901	HOB angle out of range for Turn Assist

Control board

QDF75-0440 (Reference only)



Fuse specification		
Location	Description	Amp
F1	30 VAC from transformer for the battery charger and the 5 VDC/12 VDC supply	10 Amp - 215008.P
F2	24 VDC from batteries for power supply	40 Amp - 142.6185.5402
F3	24 VAC from transformer for power supply	40 Amp - 142.6185.5402

Cable location	Voltage	Positive lead	Negative lead	Description
J11	24-31 VAC	Blue	Red	Stepped down voltage from transformer for power supply
J11	30-39 VAC	Yellow	Orange	Stepped down voltage from transformer for battery charger and power supply
J12	24-29 DC	Pin 1 - red	Pin 2 - black	Battery/charger
J1	24-28 VDC	Pin 1 - black	Pin 2 - brown	Foot actuator up
J1	24-28 VDC	Pin 2 - brown	Pin 1 - blue	Foot actuator down
J3	24-28 VDC	Pin 1- white	Pin 2 - black	Gatch actuator up
J3	24-28 VDC	Pin 2 - black	Pin 1 - white	Gatch actuator down
J6	24-28 VDC	Pin 2 - white	Pin 1 - black	Bed lift-foot up
J6	24-28 VDC	Pin 1 - black	Pin 2 - white	Bed lift-foot down
J4	24-28 VDC	Pin 2 - white	Pin 1 - black	Bed lift-head up
J4	24-28 VDC	Pin 1 - black	Pin 2 - white	Bed lift-head down
J5	24-28 VDC	Pin 2 - white	Pin 1 - black	Fowler actuator up
J5	24-28 VDC	Pin 1 - black	Pin 2 - white	Fowler actuator down
J7	24-28 VDC 24-28 VDC 24-28 VDC	Pin 1 - black Pin 1 - black Pin 1 - black	Pin 2 - white Pin 2 - white Pin 2 - white	Brake Brake off Drive
J8	Bed unplugged 25 VDC 25 VDC	 Pin 2 - white Pin 1 - black	 Pin 1 - black Pin 2 - white	**Zoom** drive actuator -Model 2141 only

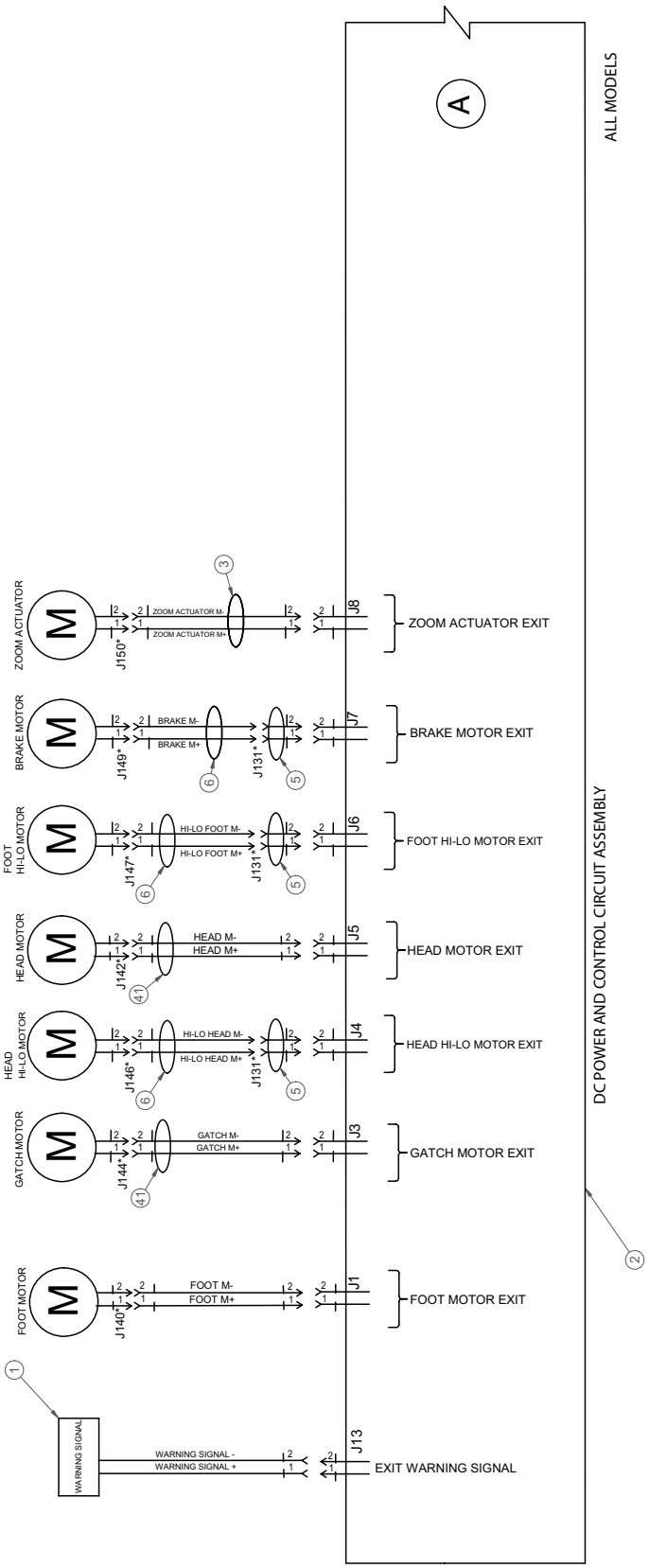
Replacement parts

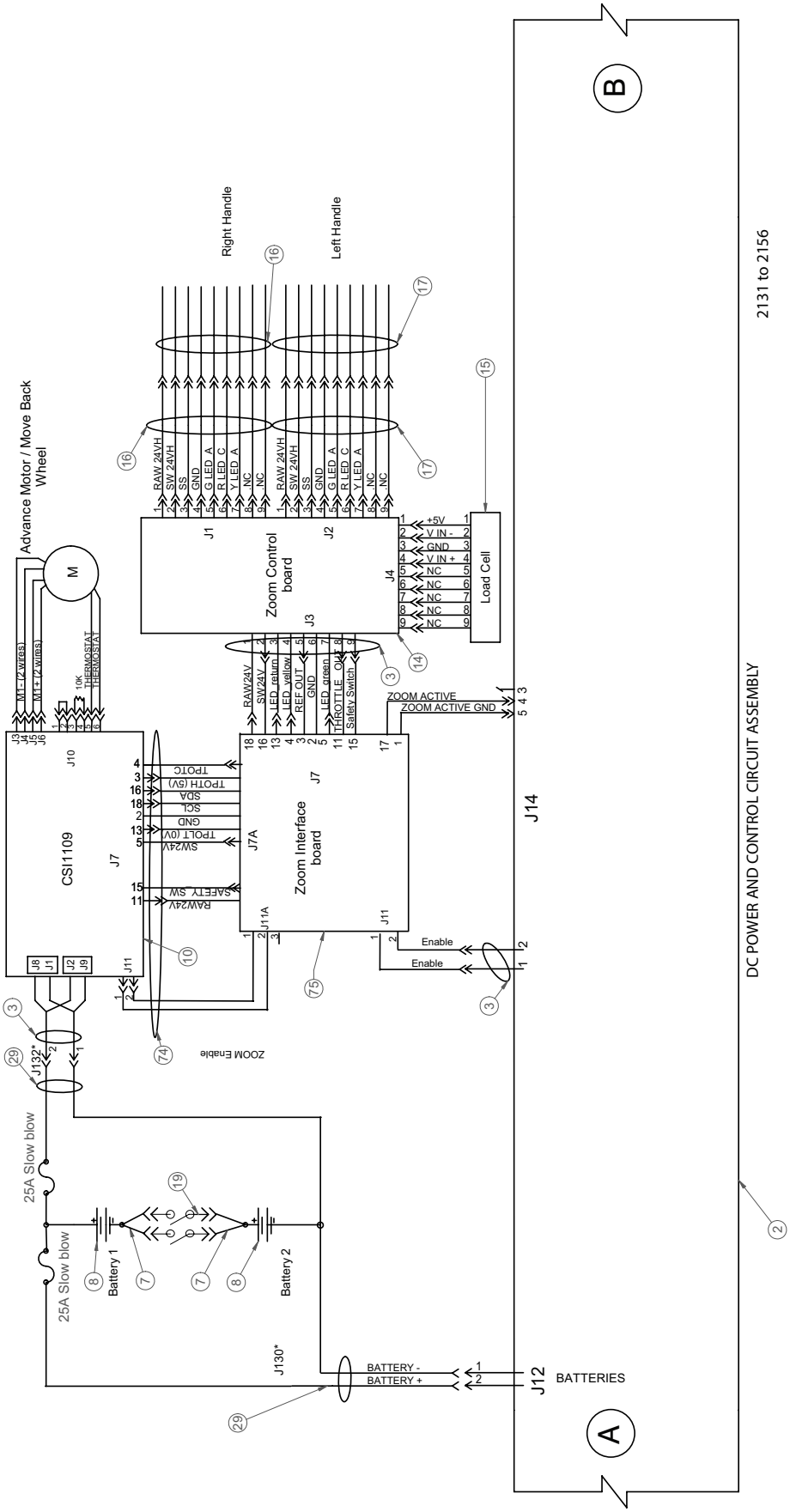
These parts are currently available for purchase. Call Stryker Customer Service: 1-800-327-0770 for availability and pricing.

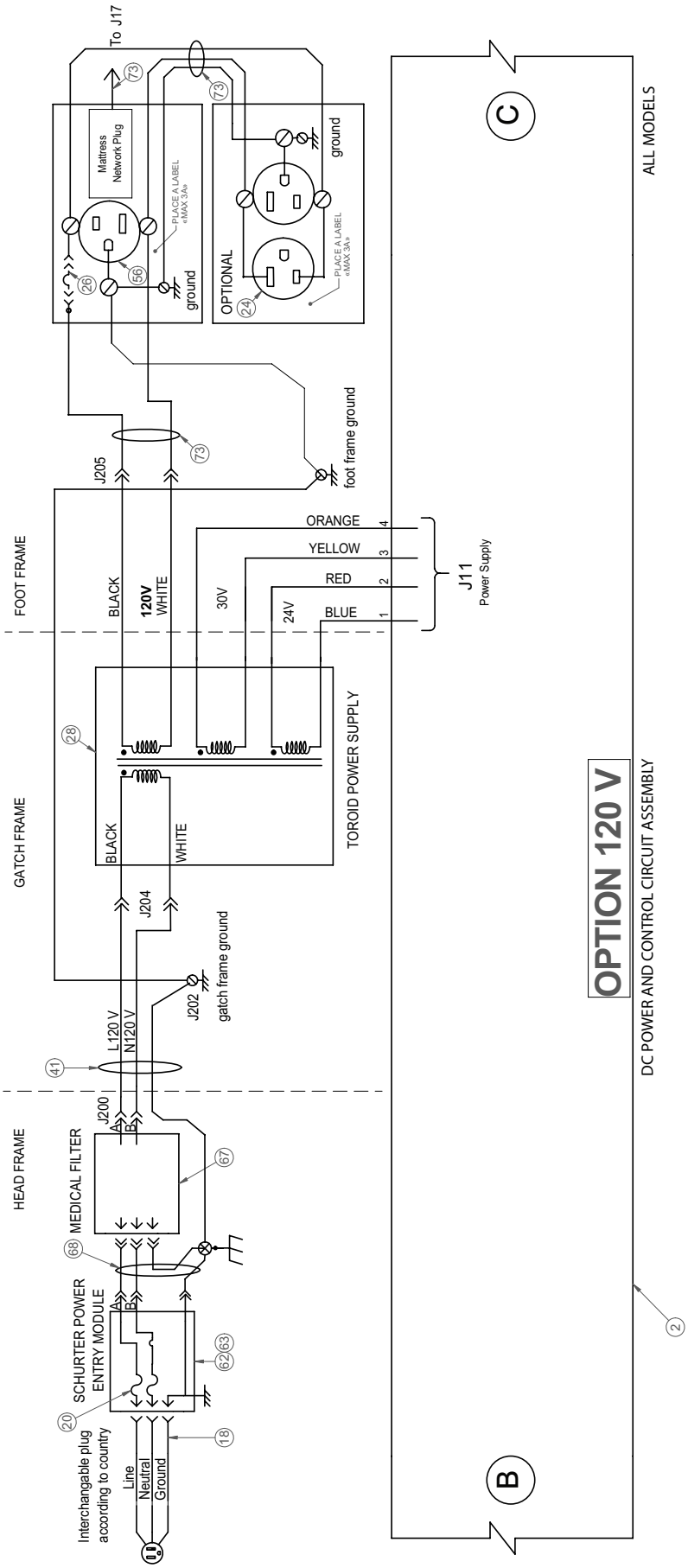
Name	Number
Actuator, brake	QDF27-1227
Actuator, foot	QDF27-1216
Actuator, Fowler	QDF27-1214
Actuator, Gatch	QDF27-1215
Actuator, lift, foot end	QDF27-1251
Actuator, lift, head end	QDF27-1252
Angle sensor, foot, Fowler, base, Gatch, lift	27-2477
Batteries (replace both at same time)	QDF9188
Board, CPU/power	QDF75-0440
Board, drive (Model 2141 **Zoom** only)	QDF27-1430
Board, headwall	QDF75-0270
Board, brake control	QDF27-1097
Board, footboard, function section/LEDs	QDF75-0010
Board, siderail, outside	QDF27-1099
Board, Wi-Fi	27-2775
Caster (Model 2141 - all four casters) (Model 2131 - both head end casters)	RD27-1970
Caster, steer (Model 2131 - both foot end casters)	RD27-1971
Footboard assembly, with **iBed** and audio	27-2824K
Footboard assembly, with **iBed** and Wi-Fi	27-2827K
Footboard assembly, with **iBed** and without audio	27-2826K
Footboard assembly, without **iBed**	27-2285K
Fuse, 8 A ceramic	QDF2120
Fuse, 10 A, main power	QDF8078
Fuse, 25 A cartridge	QDF2119
Headboard assembly	27-2583K
Load cell	QDF27-1372
Motor, drive (2141 **Zoom** only)	QDF27-1445
Motor, drive actuator (2141 **Zoom** only)	27-2593
Position sensor	QDF27-2024
Power cord	27-2782
Speaker, left siderail	QDF27-2175

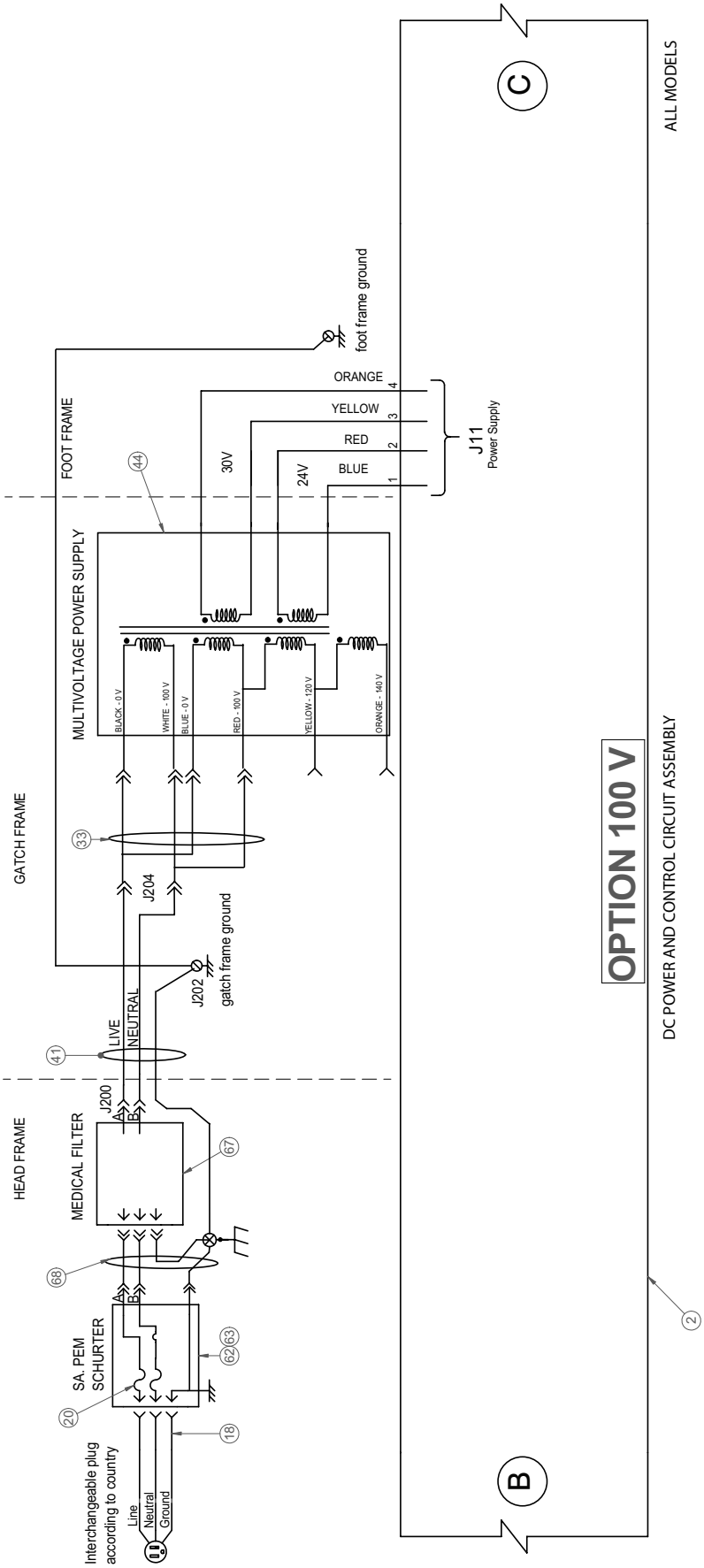
Name	Number
Speaker, right siderail	QDF27-2216
Touch screen, footboard	27-2757
Transformer (120VAC)	QDF27-2038

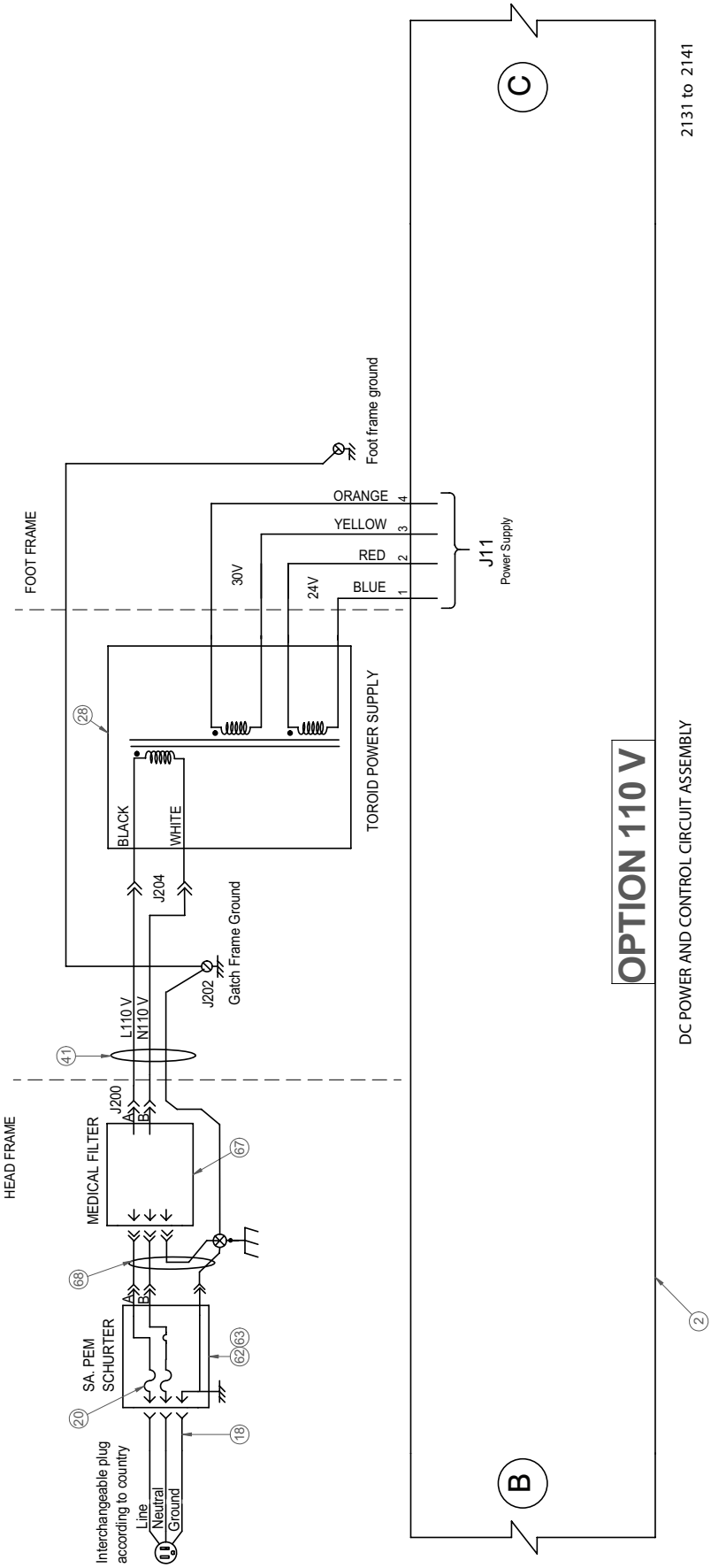
Electrical diagram

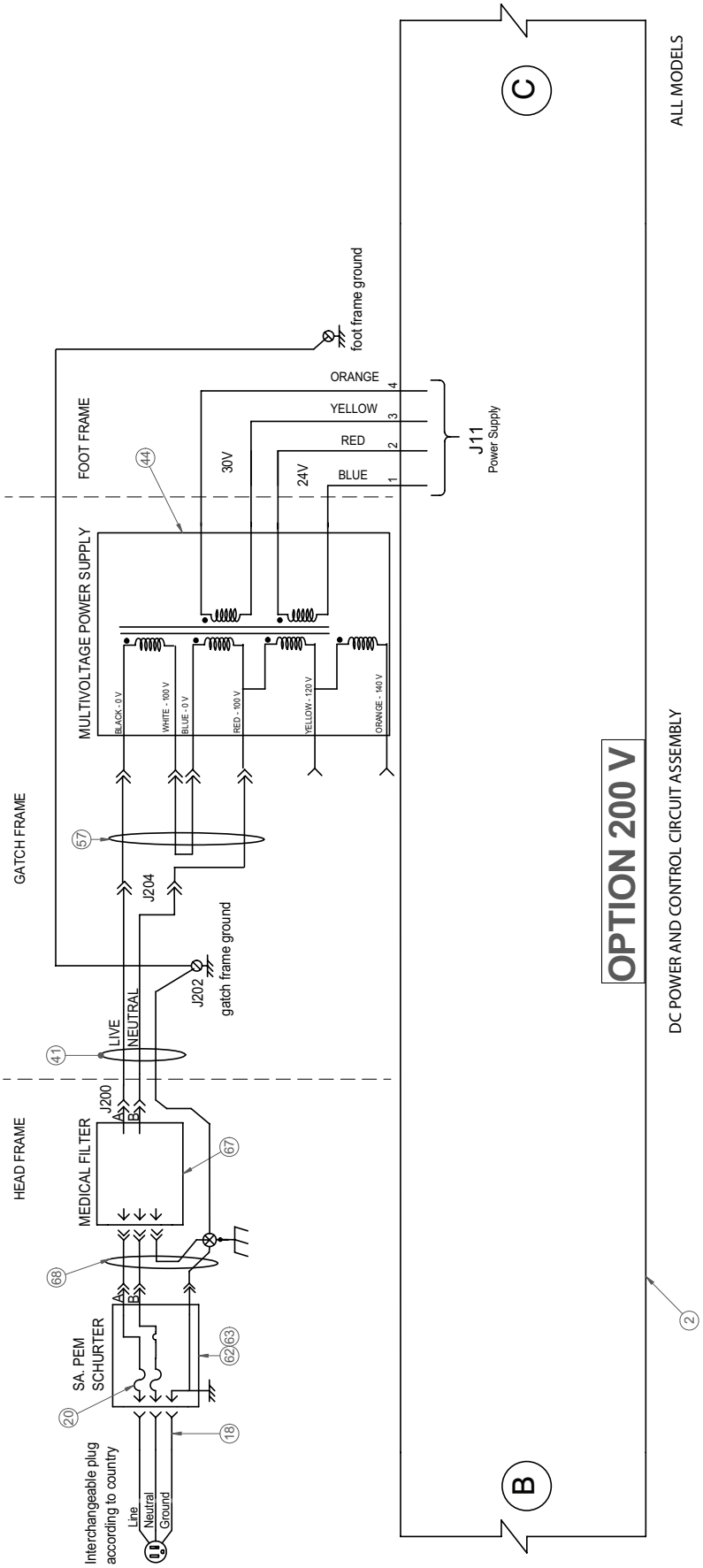


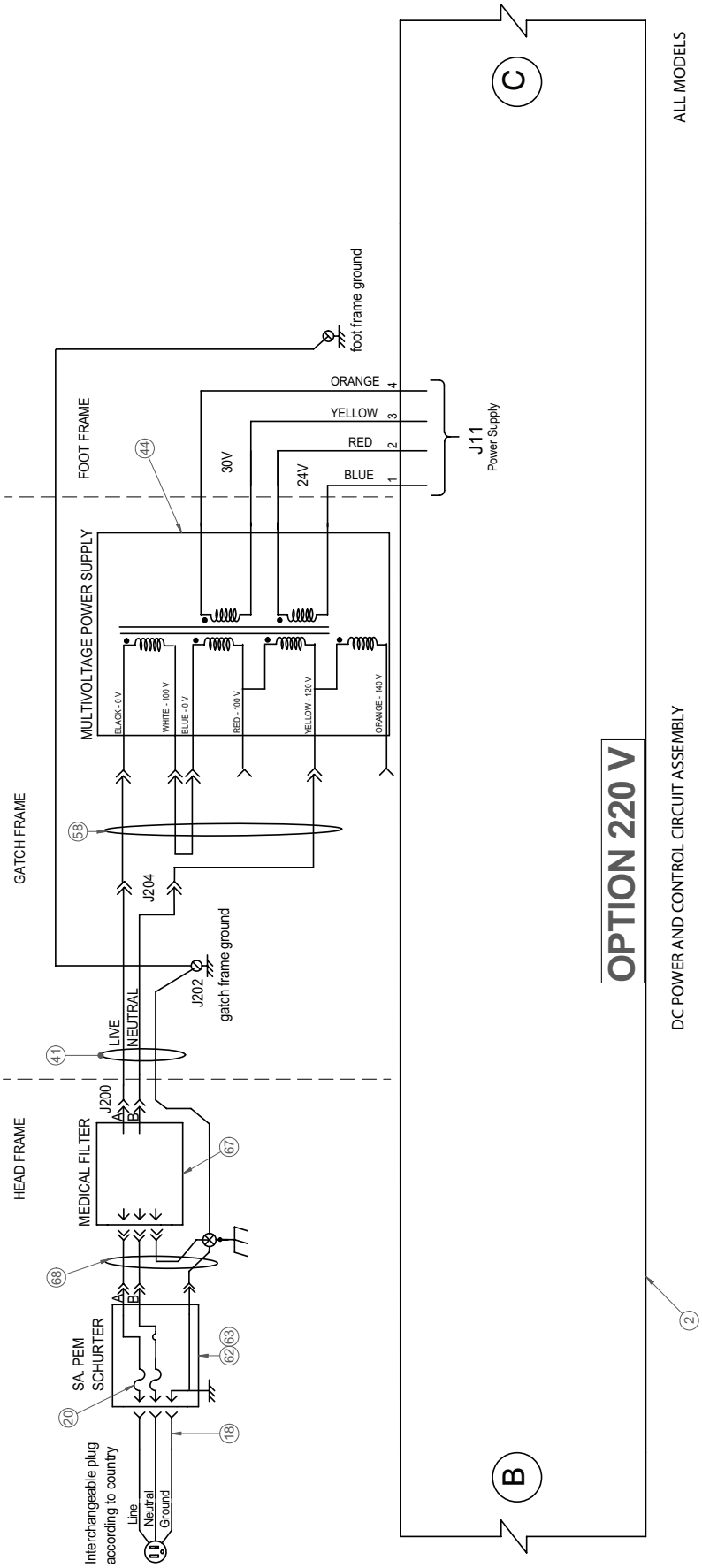

B
A
2131 to 2156
DC POWER AND CONTROL CIRCUIT ASSEMBLY
J14
J12
BATTERIES
BATTERY -
BATTERY +
J130*
J132*
25A Slow blow
25A Slow blow
Battery 1
Battery 2
Advance Motor / Move Back Wheel
M
M1- (2 wires)
M1+ (2 wires)
THERMOSTAT
THERMOSTAT
10K
CSI1109
J7
J10
J8
J1
J2
J9
J11
TPOTC
TPOTH (5V)
SDA
SCL
GND
TPOLT (0V)
SW24V
SAFETY_SW
RAW24V
ZOOM Enable
Zoom Interface board
J7A
J11A
RAW 24VH
SW 24VH
SS
GND
G LED A
R LED C
Y LED A
NC
Right Handle
Left Handle
Zoom Control board
J1
J2
J3
J4
+5V
V IN -
GND
V IN +
NC
Load Cell
RAW24V
SW24V
LED_return
LED_yellow
REF OUT
GND
LED_green
THROTTLE_OUT
Safety Switch
ZOOM ACTIVE
ZOOM ACTIVE GND
Enable
Enable

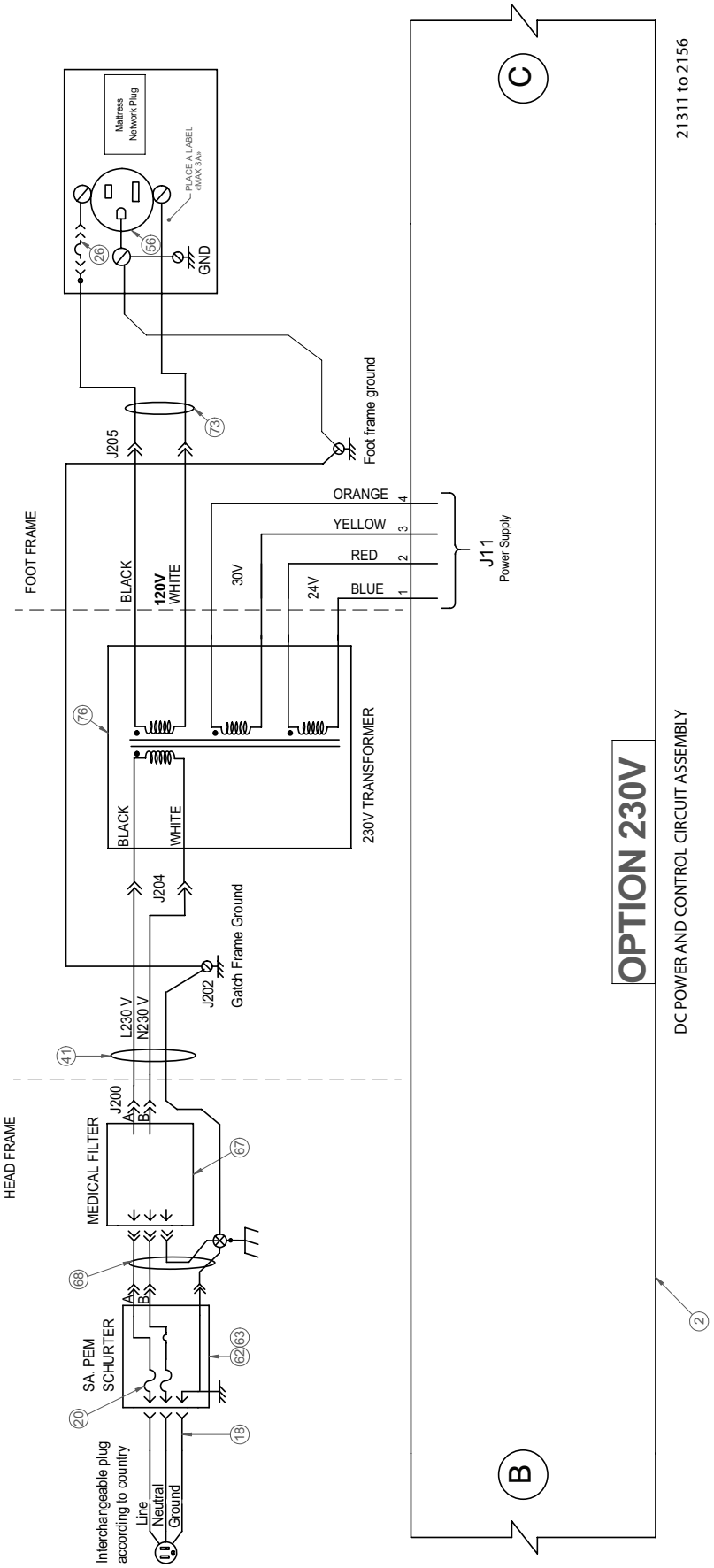

To J17
Mattress Network Plug
PLACE A LABEL «MAX 3A»
ground
OPTIONAL
ground
PLACE A LABEL «MAX 3A»
foot frame ground
J205
FOOT FRAME
BLACK
120V
WHITE
30V
24V
ORANGE
YELLOW
RED
BLUE
J11
Power Supply
GATCH FRAME
TOROID POWER SUPPLY
BLACK
WHITE
J204
gatch frame ground
J202
L120 V
N120 V
HEAD FRAME
MEDICAL FILTER
J200
SCHURTER POWER ENTRY MODULE
Interchangable plug according to country
Line
Neutral
Ground
OPTION 120 V
DC POWER AND CONTROL CIRCUIT ASSEMBLY
ALL MODELS

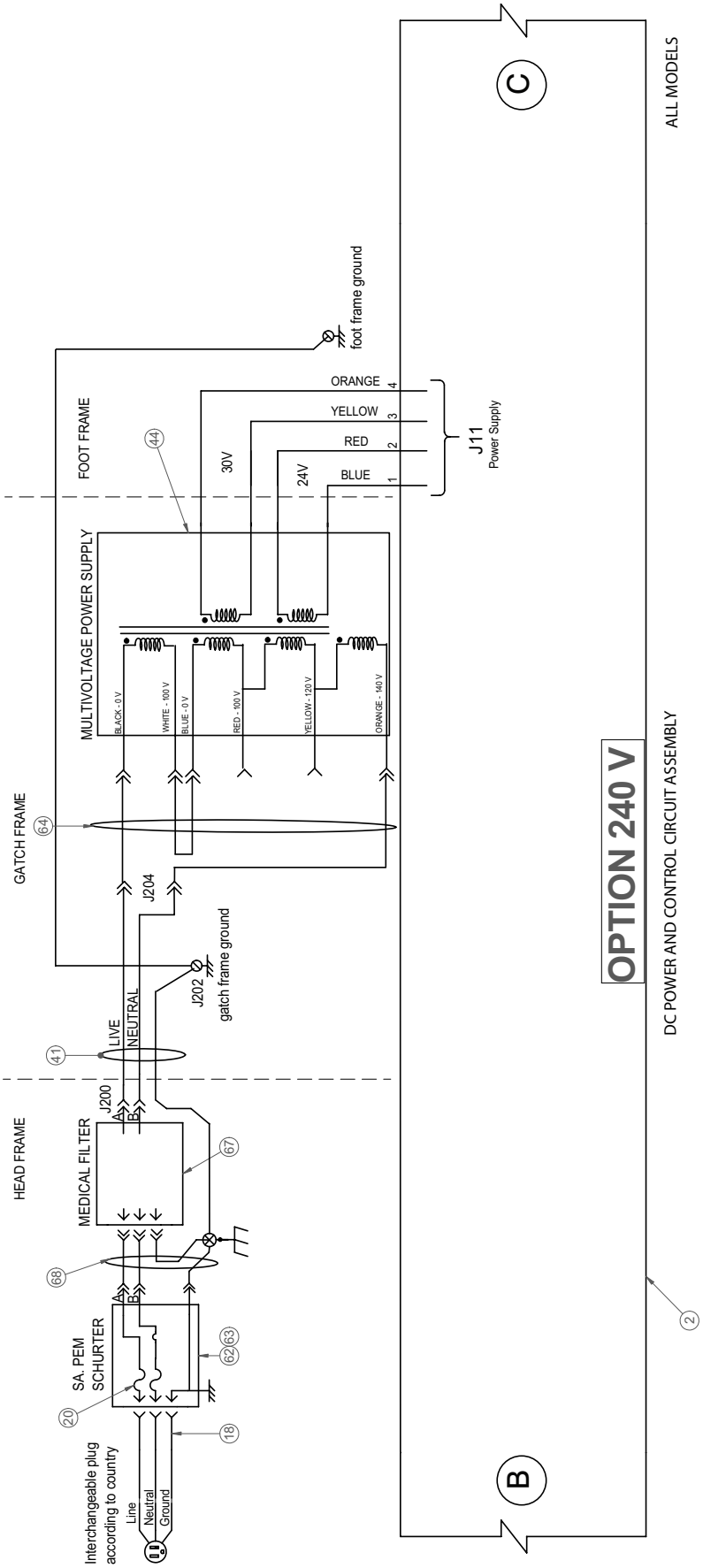

ALL MODELS
C
B
DC POWER AND CONTROL CIRCUIT ASSEMBLY
OPTION 100 V
foot frame ground
FOOT FRAME
ORANGE
YELLOW
RED
BLUE
4
3
2
1
J11
Power Supply
30V
24V
44
MULTIVOLTAGE POWER SUPPLY
BLACK - 0 V
WHITE - 100 V
BLUE - 0 V
RED - 100 V
YELLOW - 120 V
ORANGE - 140 V
GATCH FRAME
33
J204
J202
gatch frame ground
LIVE
NEUTRAL
41
HEAD FRAME
MEDICAL FILTER
J200
A
B
67
68
SA. PEM
SCHURTER
20
62
63
18
Interchangeable plug
according to country
Line
Neutral
Ground
2

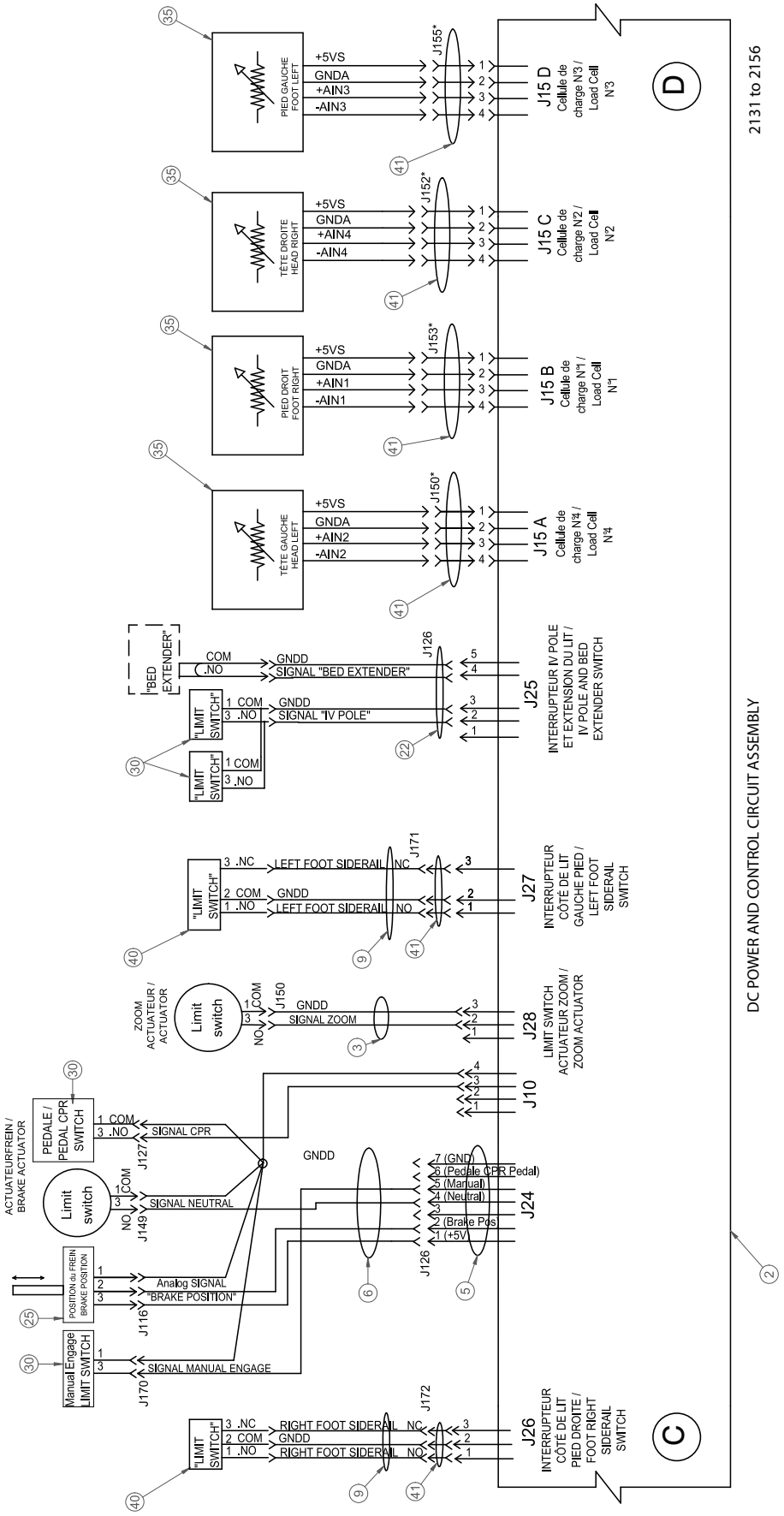

2131 to 2141
C
B
DC POWER AND CONTROL CIRCUIT ASSEMBLY
OPTION 110 V
Foot frame ground
ORANGE
YELLOW
RED
BLUE
4
3
2
1
J11
Power Supply
30V
24V
FOOT FRAME
TOROID POWER SUPPLY
BLACK
WHITE
28
J204
J202
Gatch Frame Ground
L110 V
N110 V
41
HEAD FRAME
J200
A
B
MEDICAL FILTER
67
68
SA. PEM
SCHURTER
20
62
63
18
Interchangeable plug
according to country
Line
Neutral
Ground
2

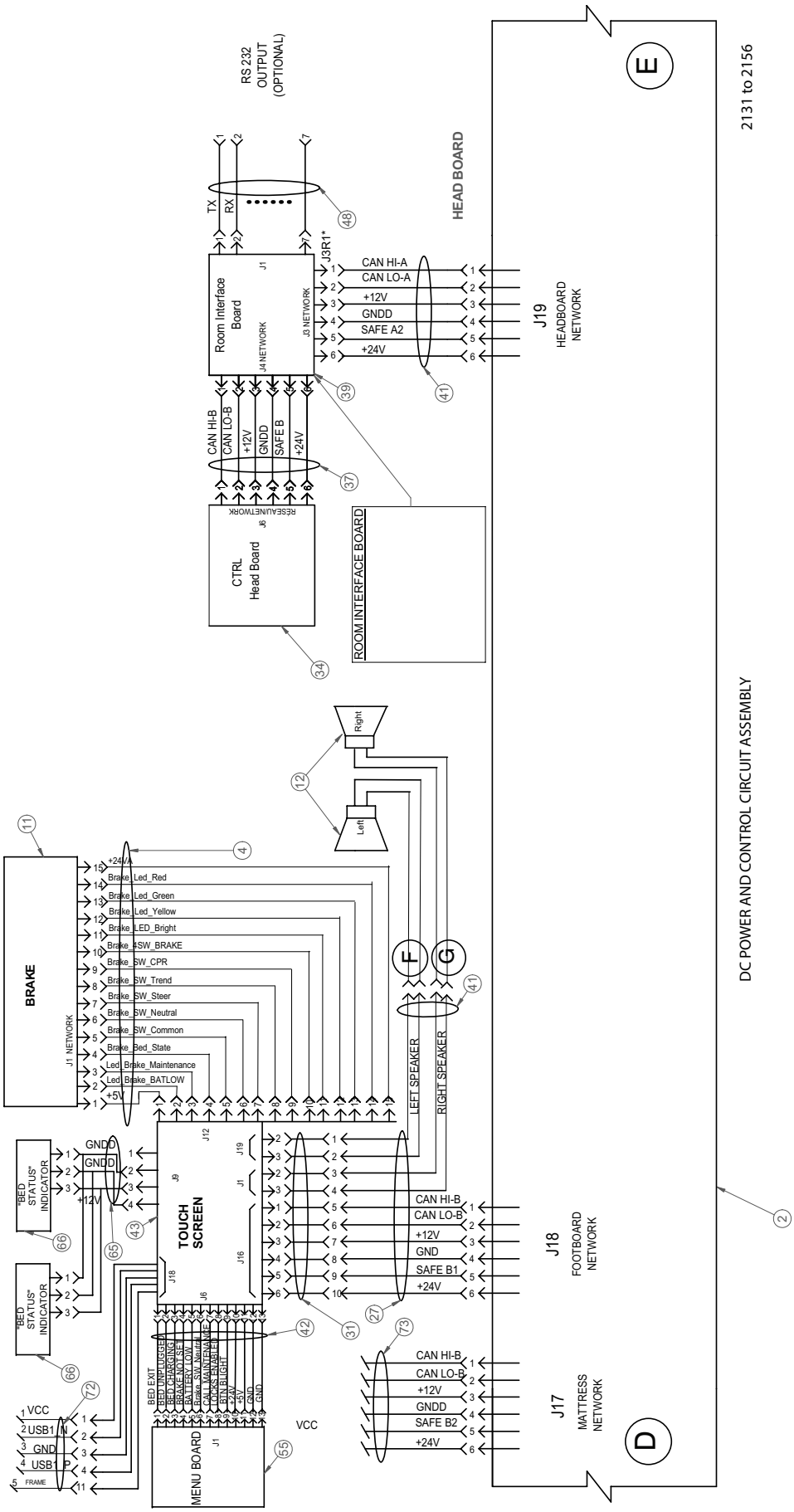

ALL MODELS
C
B
DC POWER AND CONTROL CIRCUIT ASSEMBLY
OPTION 200 V
2
foot frame ground
FOOT FRAME
ORANGE
YELLOW
RED
BLUE
4
3
2
1
J11
Power Supply
30V
24V
44
MULTIVOLTAGE POWER SUPPLY
BLACK - 0 V
WHITE - 100 V
BLUE - 0 V
RED - 100 V
YELLOW - 120 V
ORANGE - 140 V
GATCH FRAME
57
J204
J202
gatch frame ground
LIVE
NEUTRAL
41
HEAD FRAME
J200
A
B
MEDICAL FILTER
67
68
SA. PEM
SCHURTER
20
62
63
18
Interchangeable plug
according to country
Line
Neutral
Ground

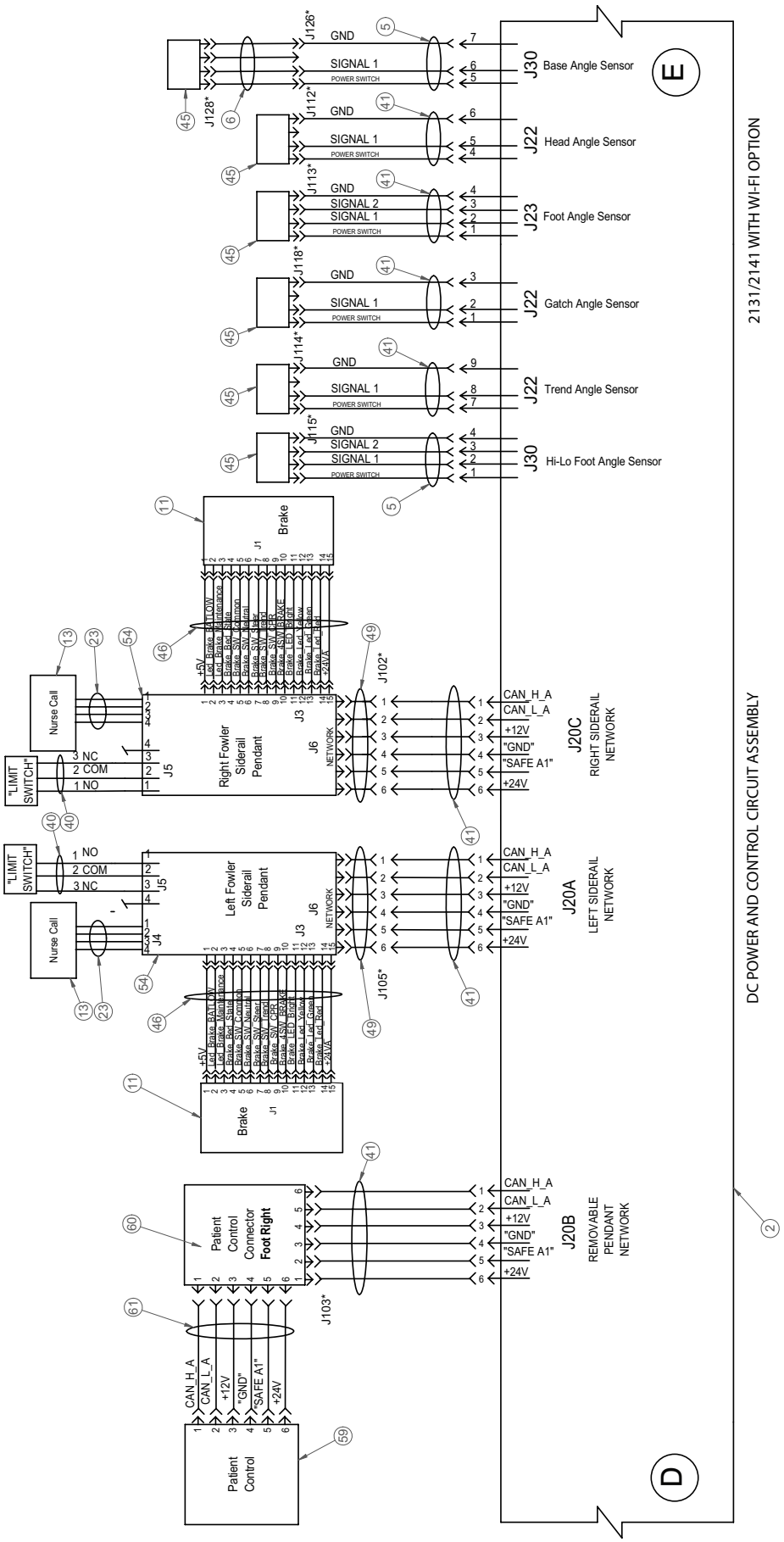

ALL MODELS
C
B
DC POWER AND CONTROL CIRCUIT ASSEMBLY
OPTION 220 V
foot frame ground
FOOT FRAME
ORANGE 4
YELLOW 3
RED 2
BLUE 1
J11
Power Supply
30V
24V
44
MULTIVOLTAGE POWER SUPPLY
BLACK - 0 V
WHITE - 100 V
BLUE - 0 V
RED - 100 V
YELLOW - 120 V
ORANGE - 140 V
GATCH FRAME
58
J204
J202
gatch frame ground
LIVE
NEUTRAL
41
HEAD FRAME
J200
MEDICAL FILTER
67
68
SA. PEM
SCHURTER
62
63
20
18
Interchangeable plug
according to country
Line
Neutral
Ground
2

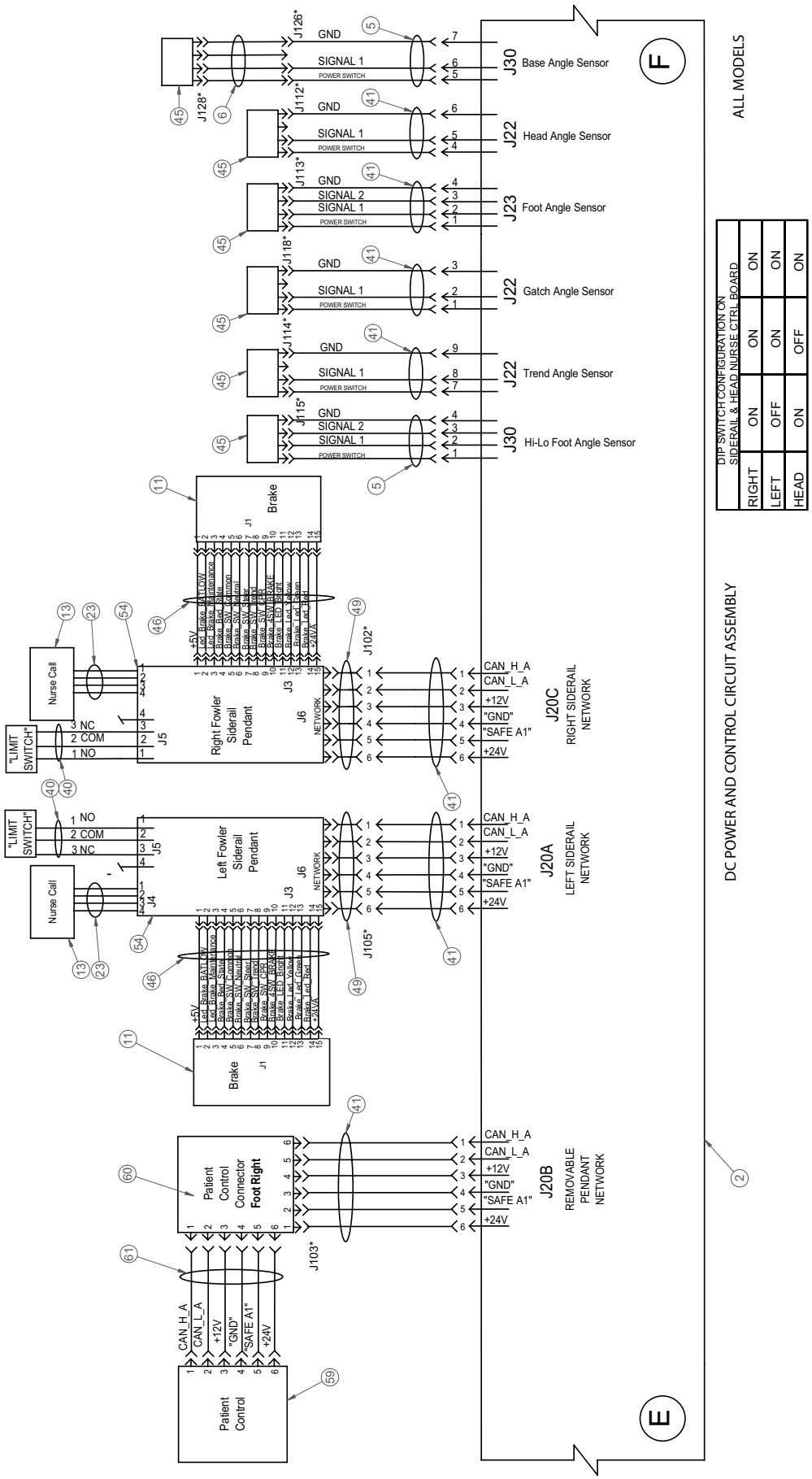

Mattress Network Plug
PLACE A LABEL «MAX 3A»
GND
26
56
73
J205
Foot frame ground
FOOT FRAME
BLACK
120V
WHITE
30V
24V
ORANGE
YELLOW
RED
BLUE
4
3
2
1
J11
Power Supply
76
230V TRANSFORMER
BLACK
WHITE
J204
Gatch Frame Ground
J202
L230 V
N230 V
41
HEAD FRAME
J200
A
B
MEDICAL FILTER
67
68
SA. PEM SCHURTER
20
62
63
18
Interchangeable plug according to country
Line
Neutral
Ground
C
B
OPTION 230V
DC POWER AND CONTROL CIRCUIT ASSEMBLY
21311 to 2156
2

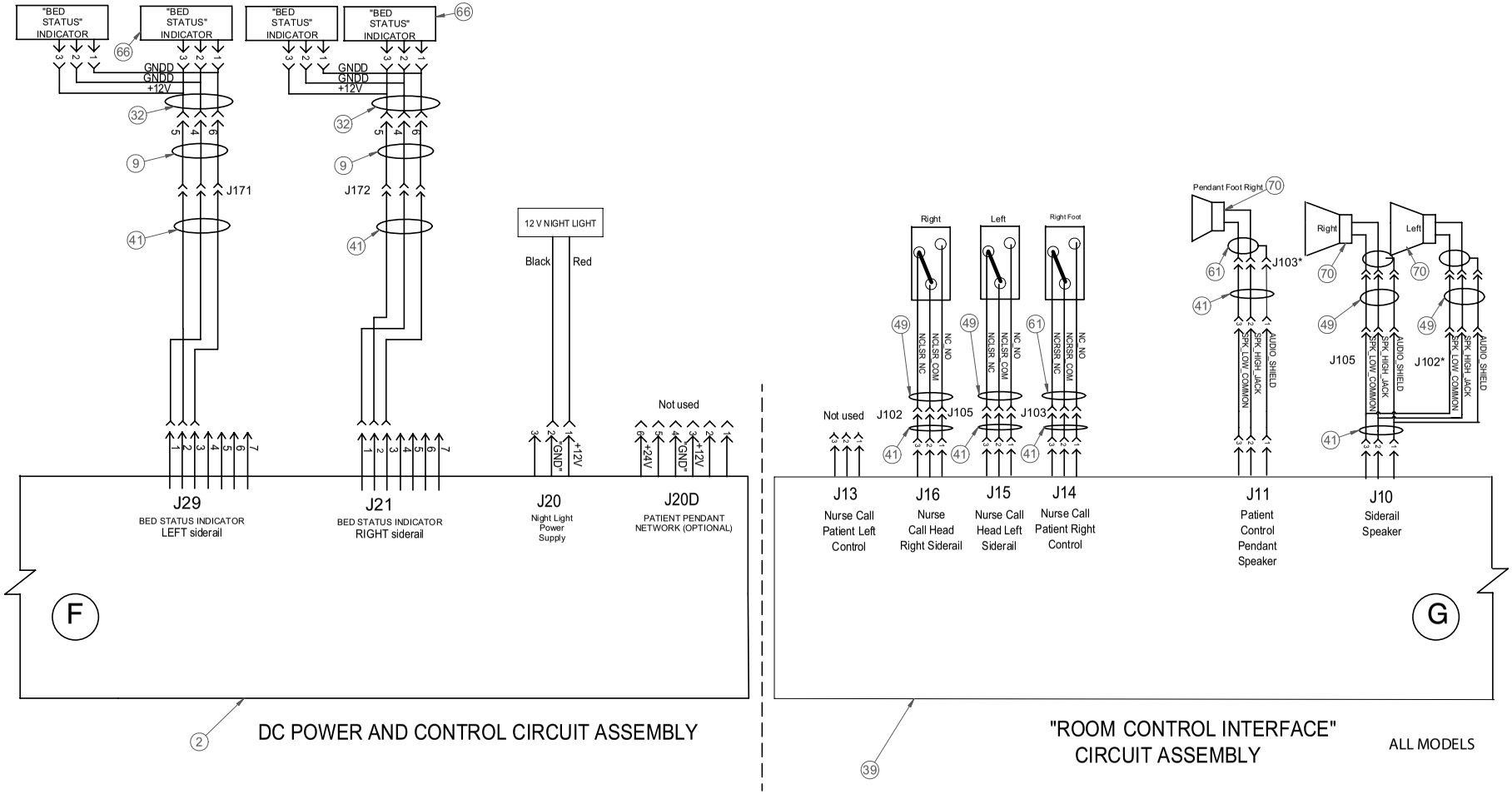

ALL MODELS
C
B
DC POWER AND CONTROL CIRCUIT ASSEMBLY
OPTION 240 V
foot frame ground
FOOT FRAME
ORANGE 4
YELLOW 3
RED 2
BLUE 1
J11
Power Supply
30V
24V
44
MULTIVOLTAGE POWER SUPPLY
BLACK - 0 V
WHITE - 100 V
BLUE - 0 V
RED - 100 V
YELLOW - 120 V
ORANGE - 140 V
GATCH FRAME
64
J204
J202
gatch frame ground
LIVE
NEUTRAL
41
HEAD FRAME
J200
A
B
MEDICAL FILTER
67
68
SA. PEM
SCHURTER
20
62
63
18
Interchangeable plug
according to country
Line
Neutral
Ground
2

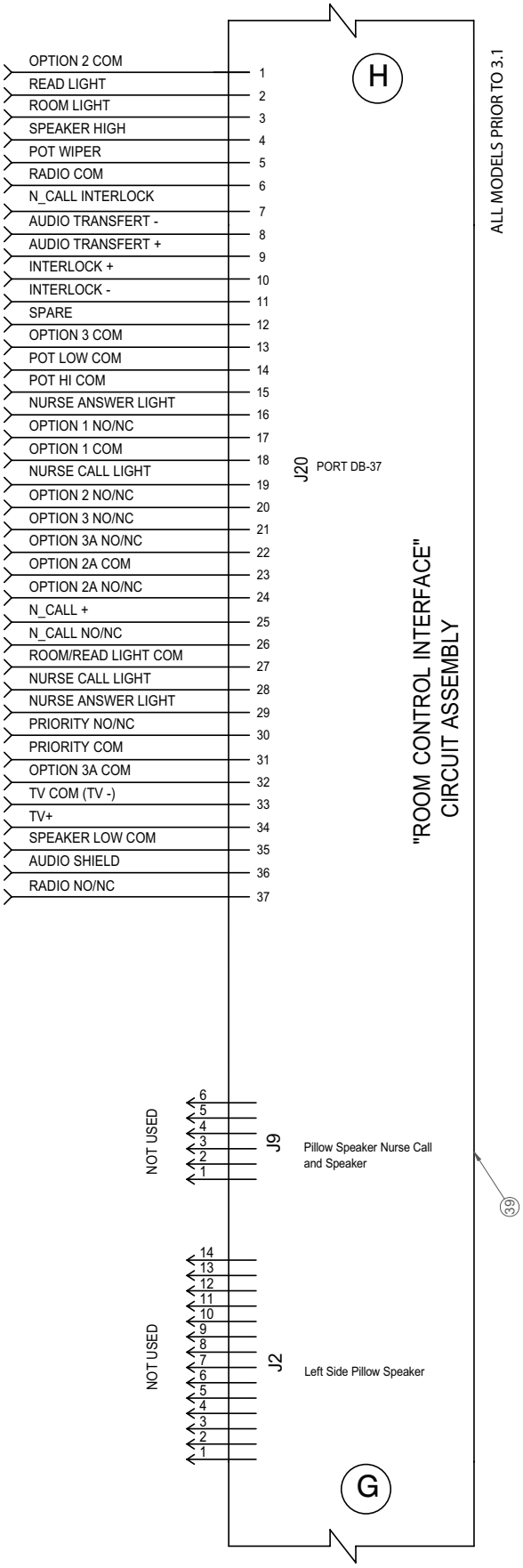

2131 to 2156
DC POWER AND CONTROL CIRCUIT ASSEMBLY
PIED GAUCHE FOOT LEFT
+5VS
GNDA
+AIN3
-AIN3
J155*
J15 D
Cellule de charge N°3 / Load Cell N°3
TÊTE DROITE HEAD RIGHT
+AIN4
-AIN4
J152*
J15 C
Cellule de charge N°2 / Load Cell N°2
PIED DROIT FOOT RIGHT
+AIN1
-AIN1
J153*
J15 B
Cellule de charge N°1 / Load Cell N°1
TÊTE GAUCHE HEAD LEFT
+AIN2
-AIN2
J150*
J15 A
Cellule de charge N°4 / Load Cell N°4
D
BED EXTENDER
COM
.NO
GNDD
SIGNAL "BED EXTENDER"
J126
"LIMIT SWITCH"
1 COM
3 .NO
SIGNAL "IV POLE"
J25
INTERRUPTEUR IV POLE ET EXTENSION DU LIT / IV POLE AND BED EXTENDER SWITCH
3 .NC
2 COM
1 .NO
LEFT FOOT SIDERAIL NC
LEFT FOOT SIDERAIL NO
J171
J27
INTERRUPTEUR CÔTÉ DE LIT GAUCHE PIED / LEFT FOOT SIDERAIL SWITCH
ZOOM ACTUATEUR / ACTUATOR
Limit switch
SIGNAL ZOOM
J150
J28
LIMIT SWITCH ACTUATEUR ZOOM / ZOOM ACTUATOR
ACTUATEUR FREIN / BRAKE ACTUATOR
PEDALE / PEDAL CPR SWITCH
SIGNAL CPR
J127
SIGNAL NEUTRAL
J149
POSITION du FREIN BRAKE POSITION
Analog SIGNAL "BRAKE POSITION"
J116
Manual Engage LIMIT SWITCH
SIGNAL MANUAL ENGAGE
J170
J10
GNDD
7 (GND)
6 (Pedale CPR Pedal)
5 (Manual)
4 (Neutral)
3
2 (Brake Pos
1 (+5V)
J24
J126
RIGHT FOOT SIDERAIL NC
RIGHT FOOT SIDERAIL NO
J172
J26
INTERRUPTEUR CÔTÉ DE LIT PIED DROITE / FOOT RIGHT SIDERAIL SWITCH
C

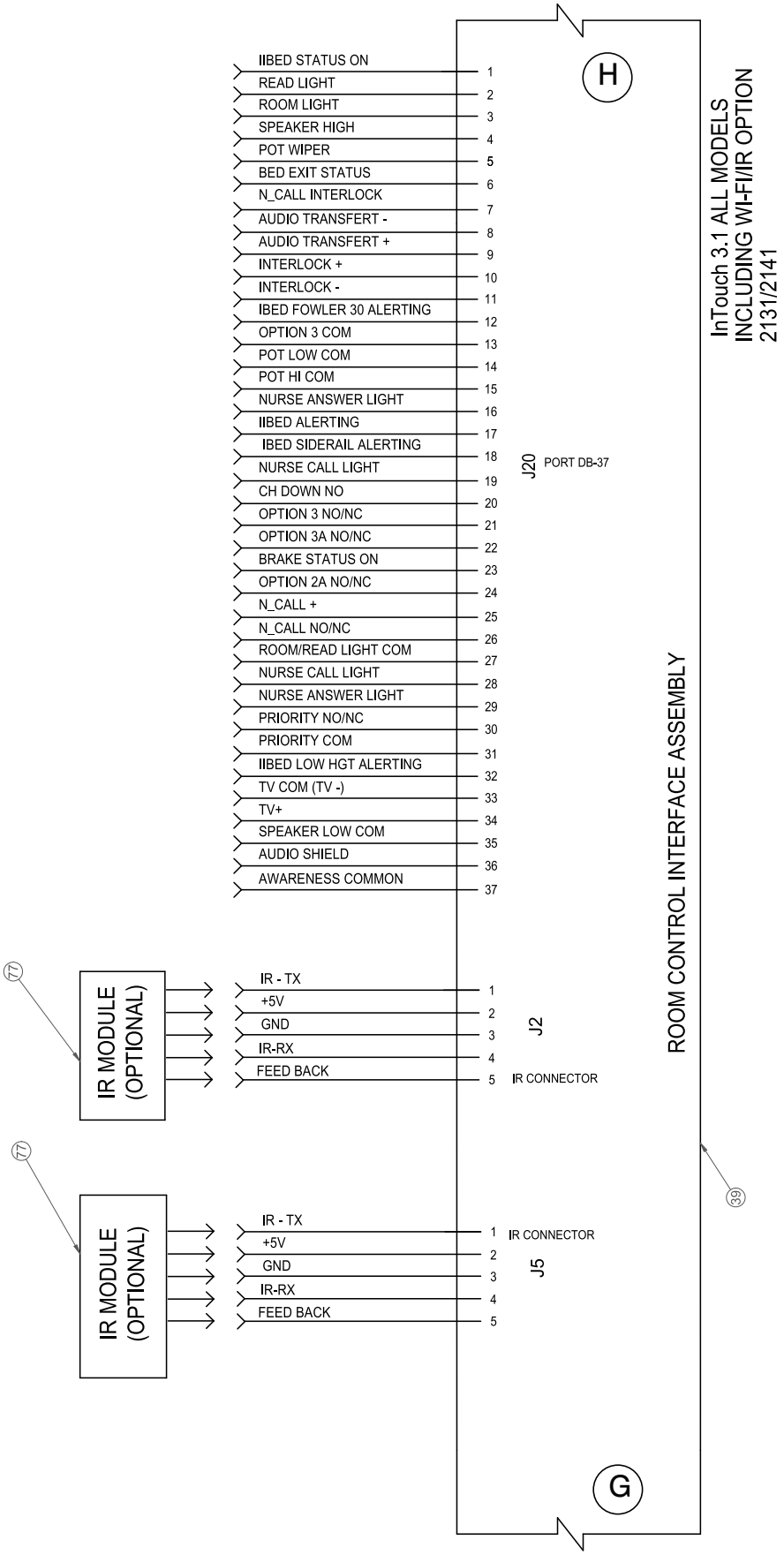

DC POWER AND CONTROL CIRCUIT ASSEMBLY
2131 to 2156
HEAD BOARD
RS 232 OUTPUT (OPTIONAL)
TX
RX
Room Interface Board
J3R1*
J3 NETWORK
J4 NETWORK
CAN HI-A
CAN LO-A
+12V
GNDD
SAFE A2
+24V
J19 HEADBOARD NETWORK
CAN HI-B
CAN LO-B
+12V
GNDD
SAFE B
+24V
CTRL Head Board
ROOM INTERFACE BOARD
Right
Left
BRAKE
J1 NETWORK
+24VA
Brake_Led_Red
Brake_Led_Green
Brake_Led_Yellow
Brake_LED_Bright
Brake_SW_BRAKE
Brake_SW_CPR
Brake_SW_Trend
Brake_SW_Steer
Brake_SW_Neutral
Brake_SW_Common
Brake_Bed_State
Led_Brake_Maintenance
Led_Brake_BATLOW
+5V
LEFT SPEAKER
RIGHT SPEAKER
"BED STATUS" INDICATOR
GNDD
+12V
TOUCH SCREEN
CAN HI-B
CAN LO-B
+12V
GND
SAFE B1
+24V
J18 FOOTBOARD NETWORK
VCC
USB1_N
GND
USB1_P
FRAME
MENU BOARD
CAN HI-B
CAN LO-B
+12V
GNDD
SAFE B2
+24V
J17 MATTRESS NETWORK

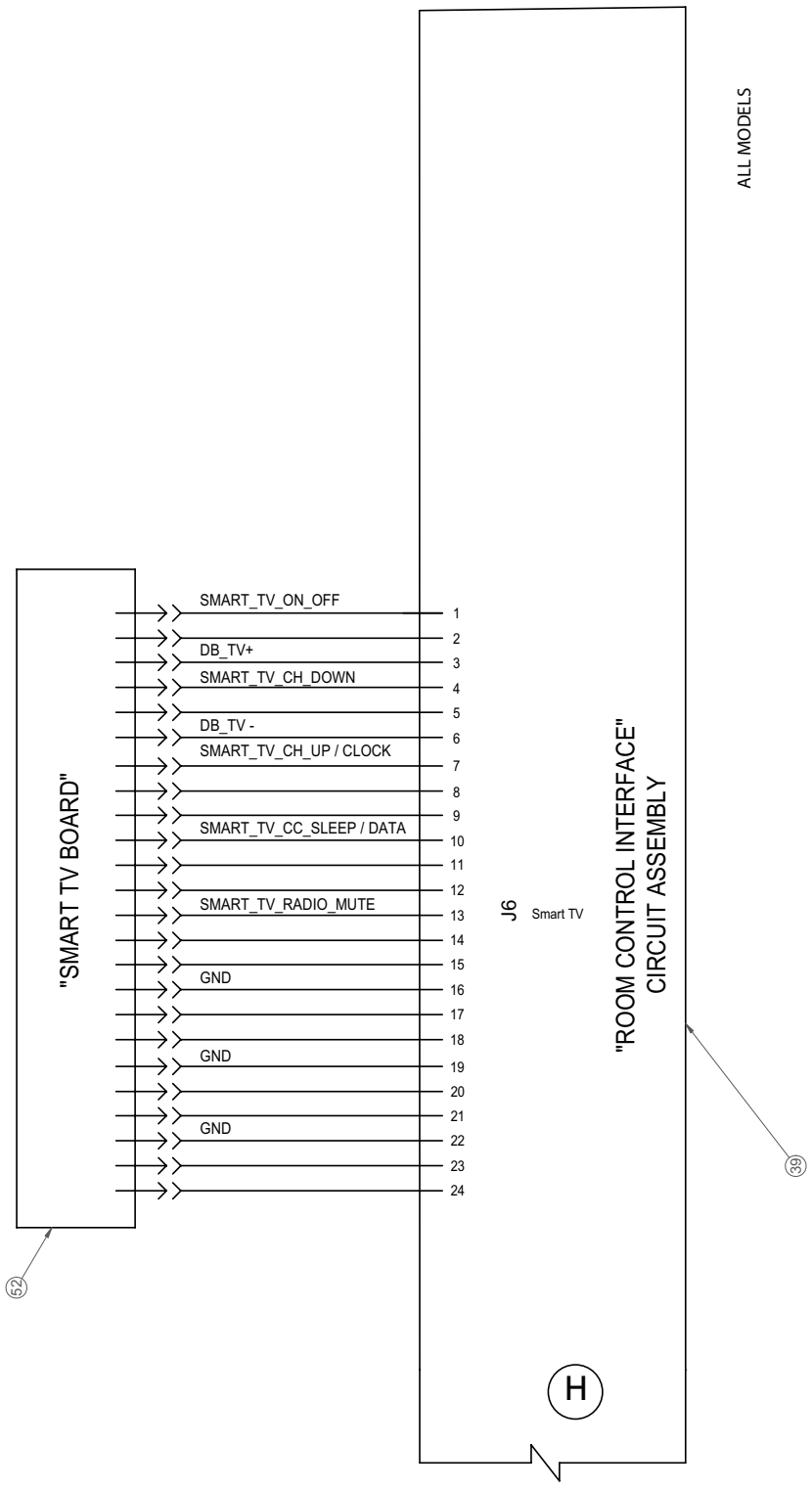

2131/2141 WITH WI-FI OPTION
DC POWER AND CONTROL CIRCUIT ASSEMBLY
E
D
J30 Base Angle Sensor
J22 Head Angle Sensor
J23 Foot Angle Sensor
J22 Gatch Angle Sensor
J22 Trend Angle Sensor
J30 Hi-Lo Foot Angle Sensor
GND
SIGNAL 1
SIGNAL 2
POWER SWITCH
Brake
Right Fowler Siderail Pendant
Left Fowler Siderail Pendant
Nurse Call
"LIMIT SWITCH"
3 NC
2 COM
1 NO
J20C RIGHT SIDERAIL NETWORK
J20A LEFT SIDERAIL NETWORK
J20B REMOVABLE PENDANT NETWORK
CAN_H_A
CAN_L_A
+12V
"GND"
"SAFE A1"
+24V
Patient Control Connector Foot Right
Patient Control


ALL MODELS
DIP SWITCH CONFIGURATION ON SIDERAIL & HEAD NURSE CTRL BOARD
RIGHT ON ON ON
LEFT OFF ON ON
HEAD ON OFF ON
DC POWER AND CONTROL CIRCUIT ASSEMBLY
J126*
GND
SIGNAL 1
POWER SWITCH
J30
Base Angle Sensor
J128*
J112*
J22
Head Angle Sensor
J113*
SIGNAL 2
J23
Foot Angle Sensor
J118*
Gatch Angle Sensor
J114*
Trend Angle Sensor
J115*
Hi-Lo Foot Angle Sensor
Brake
J1
Nurse Call
"LIMIT SWITCH"
NC
COM
NO
J5
J4
Right Fowler Siderail Pendant
Left Fowler Siderail Pendant
J6
NETWORK
J3
J102*
J105*
CAN_H_A
CAN_L_A
+12V
"GND"
"SAFE A1"
+24V
J20C
RIGHT SIDERAIL NETWORK
J20A
LEFT SIDERAIL NETWORK
Patient Control Connector Foot Right
J103*
J20B
REMOVABLE PENDANT NETWORK
Patient Control
F
E


"BED STATUS" INDICATOR
"BED STATUS" INDICATOR
"BED STATUS" INDICATOR
"BED STATUS" INDICATOR
66
GNDD
GNDD
+12V
32
9
J171
J172
41
12 V NIGHT LIGHT
Black
Red
Not used
+24V
GND*
+12V
J29
BED STATUS INDICATOR
LEFT siderail
J21
BED STATUS INDICATOR
RIGHT siderail
J20
Night Light Power Supply
J20D
PATIENT PENDANT NETWORK (OPTIONAL)
F
2
DC POWER AND CONTROL CIRCUIT ASSEMBLY
Right
Left
Right Foot
49
NC_NO
NCLSR_NC
NCLSR_COM
61
NCRSR_NC
NCRSR_COM
Not used
J102
J105
J103
J13
Nurse Call Patient Left Control
J16
Nurse Call Head Right Siderail
J15
Nurse Call Head Left Siderail
J14
Nurse Call Patient Right Control
Pendant Foot Right
70
J103*
AUDIO_SHIELD
SPK_HIGH_JACK
SPK_LOW_COMMON
J11
Patient Control Pendant Speaker
J105
J102*
J10
Siderail Speaker
G
39
"ROOM CONTROL INTERFACE" CIRCUIT ASSEMBLY
ALL MODELS


ALL MODELS PRIOR TO 3.1
H
OPTION 2 COM 1
READ LIGHT 2
ROOM LIGHT 3
SPEAKER HIGH 4
POT WIPER 5
RADIO COM 6
N_CALL INTERLOCK 7
AUDIO TRANSFERT - 8
AUDIO TRANSFERT + 9
INTERLOCK + 10
INTERLOCK - 11
SPARE 12
OPTION 3 COM 13
POT LOW COM 14
POT HI COM 15
NURSE ANSWER LIGHT 16
OPTION 1 NO/NC 17
OPTION 1 COM 18
NURSE CALL LIGHT 19
OPTION 2 NO/NC 20
OPTION 3 NO/NC 21
OPTION 3A NO/NC 22
OPTION 2A COM 23
OPTION 2A NO/NC 24
N_CALL + 25
N_CALL NO/NC 26
ROOM/READ LIGHT COM 27
NURSE CALL LIGHT 28
NURSE ANSWER LIGHT 29
PRIORITY NO/NC 30
PRIORITY COM 31
OPTION 3A COM 32
TV COM (TV -) 33
TV+ 34
SPEAKER LOW COM 35
AUDIO SHIELD 36
RADIO NO/NC 37
J20
PORT DB-37
"ROOM CONTROL INTERFACE"
CIRCUIT ASSEMBLY
NOT USED
6
5
4
3
2
1
J9
Pillow Speaker Nurse Call
and Speaker
39
NOT USED
14
13
12
11
10
9
8
7
6
5
4
3
2
1
J2
Left Side Pillow Speaker
G


InTouch 3.1 ALL MODELS
INCLUDING WI-FI/IR OPTION
2131/2141
ROOM CONTROL INTERFACE ASSEMBLY
H
G
IIBED STATUS ON 1
READ LIGHT 2
ROOM LIGHT 3
SPEAKER HIGH 4
POT WIPER 5
BED EXIT STATUS 6
N_CALL INTERLOCK 7
AUDIO TRANSFERT - 8
AUDIO TRANSFERT + 9
INTERLOCK + 10
INTERLOCK - 11
IBED FOWLER 30 ALERTING 12
OPTION 3 COM 13
POT LOW COM 14
POT HI COM 15
NURSE ANSWER LIGHT 16
IIBED ALERTING 17
IBED SIDERAIL ALERTING 18
NURSE CALL LIGHT 19
CH DOWN NO 20
OPTION 3 NO/NC 21
OPTION 3A NO/NC 22
BRAKE STATUS ON 23
OPTION 2A NO/NC 24
N_CALL + 25
N_CALL NO/NC 26
ROOM/READ LIGHT COM 27
NURSE CALL LIGHT 28
NURSE ANSWER LIGHT 29
PRIORITY NO/NC 30
PRIORITY COM 31
IIBED LOW HGT ALERTING 32
TV COM (TV -) 33
TV+ 34
SPEAKER LOW COM 35
AUDIO SHIELD 36
AWARENESS COMMON 37
J20
PORT DB-37
IR MODULE (OPTIONAL)
IR - TX 1
+5V 2
GND 3
IR-RX 4
FEED BACK 5
J2
IR CONNECTOR
IR MODULE (OPTIONAL)
IR - TX 1
+5V 2
GND 3
IR-RX 4
FEED BACK 5
J5
IR CONNECTOR
39



Item	Number	Name	Quantity
1	QDF5095	Sound alarm	1
2	QDF75-0440	DC power control	1
3	QDF27-1185	Number 3 harness	1
4	QDF27-2229	Footboard brake cable	1
5	QDF27-2181	Number 2 harness	1

Item	Number	Name	Quantity
6	QDF27-2182	Base structure extension	1
7	QDF27-1381	Battery switch cable	2
8	QDF9188	12V, 17.9 AH Battery	2
9	QDF27-1208	Limit switch siderail cable	2
10	QDF27-1430	CSI 1109 board	1
11	QDF27-1097	Brake/neutral/drive board	3
12	QDF27-2196	Speaker	2
13	QDF27-1429	Nurse call board	2
14	QDF75-0230	**Zoom** control board	1
15	QDF9136	Load cell handle	1
16	QDF9130	Right handle	1
17	QDF9131	Left handle	1
18	QDF8066	Power cord	2
19	QDF2087	Toggle switch	1
20	QDF8078	10A fuse	2
22	QDF27-1607	IV pole and bed extender cable	1
23	QDF27-1682	Nurse call board cable	2
24	QDF8024	120V auxiliary outlet	1
25	QDF27-2024	Linear position sensor	1
26	QDF9025	Breaker	1
27	QDF27-2214	Footboard control board cable	1
28	QDF27-2038	Toroid power supply	1
29	QDF27-1646	Battery cable	2
30	QDF9004	Micro-switch	2
31	QDF27-2232	Footboard cable	1
32	QDF27-1834	Footboard LBS cable	2
33	QDF27-1841	100V adaptor	1
35	QDF27-1372	Load cell	4
36	QDF21-1151	CAN head control board	3
37	QDF21-2895	12” network cable	2
39	QDF75-0270	CAN room interface board without GEN III	1
40	QDF27-1521	Siderail limit switch	2
41	QDF27-2213	Number 1 harness wire	1

Item	Number	Name	Quantity
42	QDF27-2230	Touch screen cable	2
43	QDF75-0290	Touch screen board	1
44	QDF27-2049	Multivoltage power supply	1
45	QDF75-0140	Angle sensor	6
46	QDF27-1156	Brake board cable	2
47	QDF27-2025	12V 3 LEDs night light	1
48	QDF27-2432	Serial interface connector cable	1
49	QDF27-2212	Head siderail cable	2
52	QDF2060	Smart TV board	1
53	QDF21-2901	Cable	2
54	QDF27-1099	Siderail and head nurse control board	3
55	QDF75-0010	Menu touch screen board	1
56	QDF9573	**XPRT** mattress plug	-
57	QDF27-1842	200V adaptor	1
58	QDF27-1843	220V adaptor	1
59	QDF27-1102	Patient pendant control	2
60	-	Patient pendant connector	1
61	QDF27-1525	Patient pendant cable	2
62	QDF9574	Schurter #4303.0001	1
63	QDF9575	Schurter #4303.2901	1
64	QDF27-1840	240V adaptor	1
65	QDF27-2253	LBS cable	1
66	QDF27-1562	Local bed status board	2
67	QDF9571	Medical filter	1
68	QDF27-1524	Filter and receptacle connector	1
69	QDF27-1681	Interior siderail cable	2
70	QDF27-1526	Speaker	4
72	QDF27-2231	USB cable	1
73	QDF27-1976	Auxiliary plug and mattress cable	1
74	QDF27-2542	**Zoom** interface board harness	1
75	QDF75-0240	**Zoom** interface board	1
76	QDF27-2658	230V transformer	1

Item	Number	Name	Quantity
77	QDF75-0310	IR module	2
78	QDF75-0630	Wi-Fi board	1
79	QDF27-2573	USB Y cable to interface board	1
80	QDF27-2594	Brake card to interface cable	1

Service

Protecting against electrostatic discharge (ESD)

CAUTION

- Always use electrostatic discharge (ESD) protective equipment before you open antistatic bags and service electronic parts.
- Do not place unprotected circuit boards on the floor.

Note - Always ship the circuit boards back to Stryker. Use the antistatic bag that the new board was originally shipped in.

The electronic circuits in the product are completely protected from static electricity damage when factory assembled. Always use adequate static protection when you service the electronic systems of the product. All service personnel must use static protection whenever they touch wires.

Sample antistatic protection equipment includes:

- Antistatic wrist strap
- Grounding plug
- Test lead with a banana plug on one end and an alligator clip on the other end

Make sure that you follow the ESD manufacturer's instructions for appropriate protection against static discharge.

Lift actuator replacement, head end, base

CAUTION

- Do not remove the clevis pins.
- Always make sure that the 2 x 4 is perpendicular to the floor before you use a jack stand.

Tools required:

- Needle nose pliers
- Diagonal pliers
- Jack stand (if needed)
- 2 x 4 (20" recommended)

Procedure:

1. Plug the power cord into a wall outlet.
2. Raise the head end siderails to the full up position.
3. Push down on the brake pedal to apply the brake.
4. Remove head end base cover. Pull up and out.
5. Remove center base cover. Pull up and out.
6. Using diagonal pliers, cut the zip tie that secures the actuator cable to the base frame.
7. Using needle nose pliers, remove the rue clips from the clevis pins that secure the actuator. Save the rue clips.
8. If the bed will lower, lower to the lowest position to support the litter by the base litter stop.
9. If the bed will not lower to the lowest position, use a jack stand and a 2 x 4 to take tension off of the actuator clevis pins. Place the jack stand and 2 x 4 between the bottom of the right side of the litter and the floor. Jack the bed up just enough to take the litter weight off of the base frame (Figure 51).

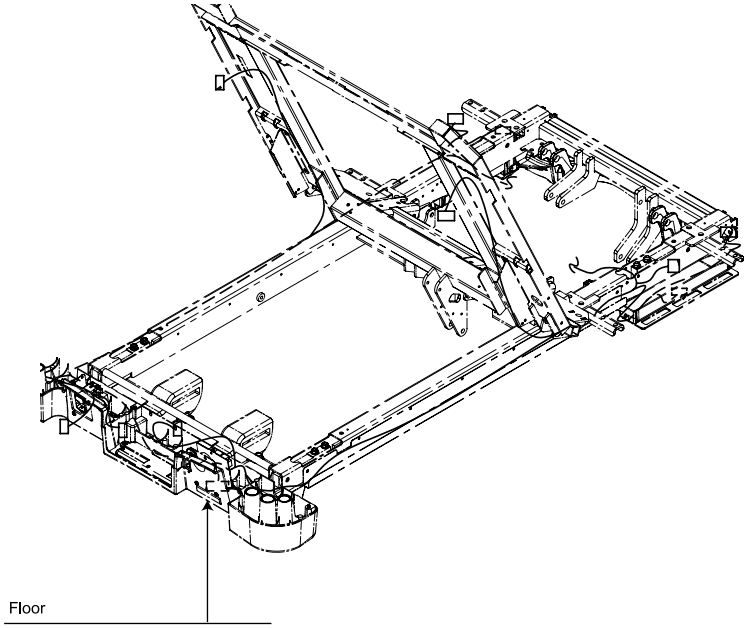


Figure 51 – Placement of the jack stand

10. Using the bed up/down controls, press the up or down button to remove tension on the clevis pins. Save the clevis pins.
11. Unplug the cable quick connect. Remove the actuator.
12. Reverse steps to reinstall.
13. Verify proper operation before you return the product to service.

Lift actuator replacement, foot end, base

CAUTION - Do not remove the clevis pins.

Tools required:

- Needle nose pliers
- Diagonal pliers

Procedure:

1. Plug the power cord into a wall outlet.
2. Raise head end siderails to the full up position.
3. Push down on the brake pedal to apply the brake.
4. Remove head end base cover. Pull the head end base cover up and out.
5. Remove center base cover. Pull the center base cover up and out.
6. Using diagonal pliers, cut the zip tie that secures the actuator cable to the base frame.
7. Using needle nose pliers, remove the rue clips from the clevis pins that secure the actuator. Save the rue clips.
8. Lower the bed to the lowest position to support the litter by the base litter stops.
9. Using the bed up/down controls, tap the up or down button to remove tension on the clevis pins.
10. Unplug the cable quick connect and remove the actuator. Discard the acutator.
11. Reverse steps to reinstall.
12. Verify proper operation before you return the product to service.

Fowler actuator replacement, litter

Tools required:

- Diagonal pliers
- Screwdriver
- #2 Phillips screwdriver
- 3/8" combination wrench
- Needle nose pliers

Procedure:

1. Plug the power cord into a wall outlet.
2. Raise bed to the full up position.
3. Raise head end siderails to the full up position.
4. Push down on the brake pedal to apply the brake.
5. Working from the right side of the bed, step on the CPR pedal to lower the Fowler to the lowest position.
6. Raise the Gatch to the full up position.
7. Remove the three center base hoods (head, center, foot), then remove the right base hood.
8. Using needle nose pliers, remove the two rue clips from the clevis pins that secure the actuator. Save the rue clips.
9. Using diagonal pliers, cut the zip ties that secure the CPR cable to the actuator and the litter frame. Also cut the zip ties that secure the actuator cable to the wire harness.
10. Unplug the actuator from the quick connect.
11. Holding the actuator with one hand remove the clevis pins from the actuator. Lower the actuator. Save the clevis pins.
12. Using a #2 Phillips screwdriver and a 3/8" combination wrench, remove the CPR cable retaining screw from the right CPR pedal. Save the screw.
13. Using a screwdriver, loosen the CPR cable retainer on the actuator just enough so it will move.
14. Slide the gray cable retainer lock toward the CPR cable retainer and unclip the CPR cable from the red actuator release activator.
15. Remove and discard the actuator.
16. Reverse steps to reinstall.

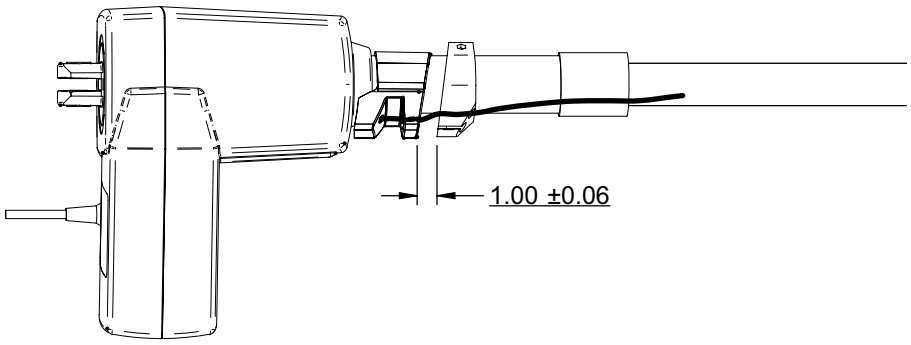


Figure 52 – Cable retainer lock set adjustment

Note - When you readjust the cable retainer lock set, set to 1.00 +/- 0.06 (Figure 52). When the actuator is back in place, using needle nose pliers, reattach the spring to the center of the clevis pin.

17. Verify proper operation before you return the product to service.

Gatch actuator replacement, litter

Tools required:

- Needle nose pliers

Procedure:

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Remove the mattress and set aside.
4. Raise bed to the full up position.
5. If the actuator will run, lower the Gatch down to take the tension off of the actuator mounting pins. If the actuator will not run, support the Gatch section to take tension off of the actuator mounting pins.
6. Unplug the actuator cable from the quick connect near the actuator.
7. Using needle nose pliers, remove the two rue clips from the clevis pins that secure the actuator in place. Save the rue clips.
8. Holding the actuator with one hand, remove the clevis pins that secure the actuator to the bed then remove the actuator. Save the clevis pins.
9. Discard the actuator.
10. Reverse steps to reinstall.

    Note - If the new actuator shaft does not line up with mounting holes, mount the base of the actuator then plug the actuator in and run it electrically in or out until lined up.

11. Verify proper operation before you return the product to service.

Foot actuator replacement, litter

Tools required:

- Needle nose pliers
- Diagonal pliers
- #2 Phillips screwdriver
- Jack stand

Procedure:

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Remove the mattress and set aside.
4. Using a jack stand, support the foot section by lowering the bed height down enough to take the tension off the actuator mounting pins. Place the jack stand between the floor and the underside of the foot frame (Figure 53).

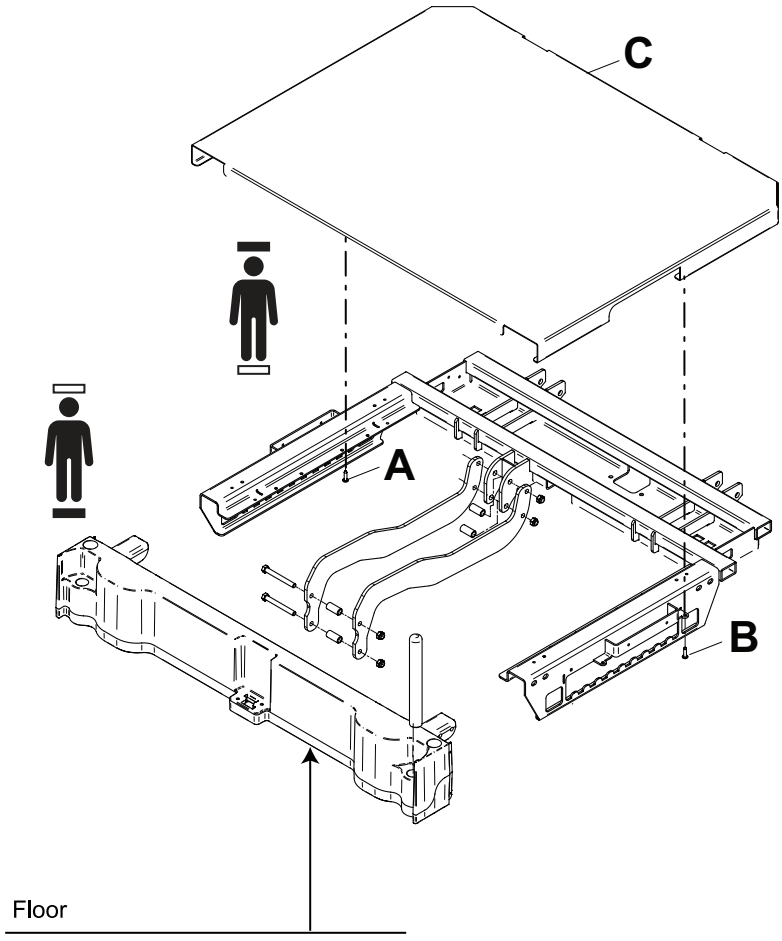


Figure 53 – Foot actuator

5. Using diagonal pliers, cut the zip ties that secure the actuator cable to the bed.
6. Remove the mattress assembly or fold back to expose the foot section.
7. Using a #2 Phillips screwdriver, remove the two screws (A and B) that secure the electrical cover (C) from the foot section (Figure 53). Save the cover and screws.

   Note - Use caution as the cover is large and heavy.
8. Unplug the actuator from J1 and feed cable down to actuator.
9. Using needle nose pliers, remove the two rue clips from the clevis pins that secure the actuator in place. Save the rue clips.
10. Holding the actuator with one hand, remove the clevis pins that secure the actuator to the bed then remove the actuator. Save the clevis pins.
11. Discard the actuator.
12. Reverse steps to reinstall.

    Note - If the new motor shaft does not line up with mounting holes, mount the base of the actuator then plug the actuator in and run it electrically in or out until lined up.
13. Verify proper operation before you return the product to service.

Actuator replacement, base Zoom drive, Model 2141 only

Tools required:

- Needle nose pliers

- Diagonal pliers
- Pry bar or 2 x 4

Procedure:

1. Plug the power cord into a wall outlet.
2. Position the bed height in the middle range.
3. Remove the center base cover then remove the **Zoom** drive actuator cover and set aside.
4. Using needle nose pliers, remove the two rue clips from the clevis pins that secure the actuator to the base frame. Save the rue clips.
5. Using diagonal pliers, cut the zip ties that secure the actuator cable, and then unplug the actuator from the quick connect.
6. Using a pry bar or a 2 x 4, pry up on the **Zoom** drive actuator frame and push the actuator clevis pins out. Save the clevis pins.
7. Remove and discard the actuator.
8. Reverse steps to reinstall.
9. Verify proper operation before you return the product to service.

CPU/power board replacement, litter

Tools required:

- #2 Phillips screwdriver
- 3/8" nut driver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Raise the product to the full upright position.
4. Remove the mattress assembly or fold back to expose the foot section.
5. Using a #2 Phillips screwdriver, remove the two screws (A and B) that secure the electrical cover (C) (Figure 54). Save the cover and screws.

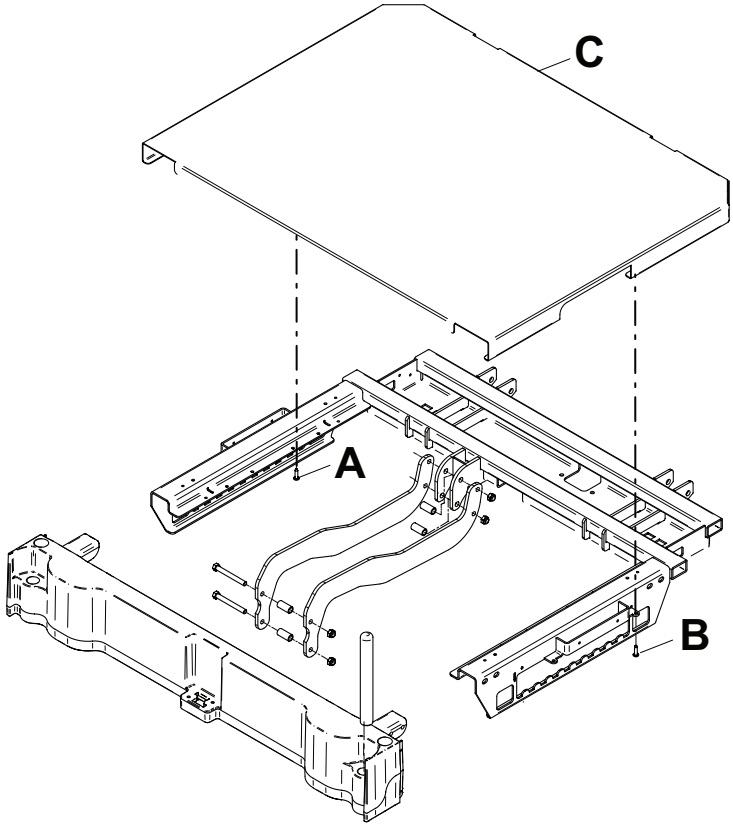


Figure 54 – Remove electrical cover

Note - Use caution as the cover is large and heavy.

6. Unplug the power cord from the wall outlet and turn battery switch **OFF** (0). The bed should now have no power.
7. Using an ESD system, ground yourself.
8. Unplug all cable connections from the CPU/Power board.
9. Using a 3/8" nut driver and a #2 Phillips screwdriver, unscrew the four screws (D) that secure the metal CPU/Power board mounting plate to the electrical tray (Figure 55). Save the screws.

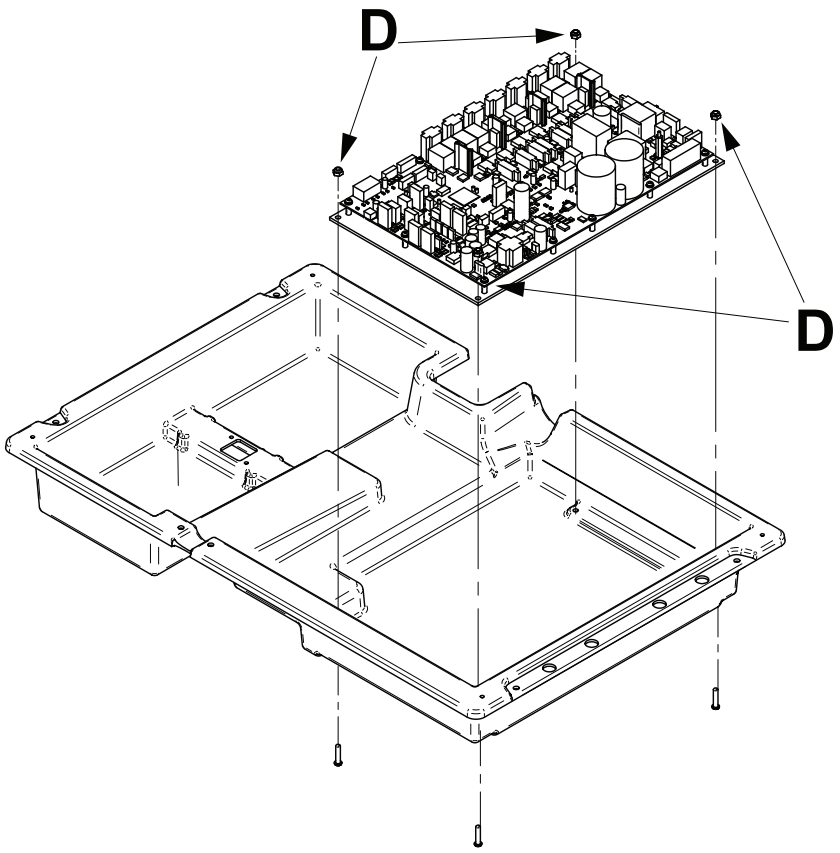


Figure 55 – CPU/Power board

10. Remove CPU/Power board and discard.
11. Reverse steps to reinstall.
12. Plug bed back into wall outlet and turn the battery switch back **ON** (|).
13. Configure bed options. See *Configuring the bed options* (page 22).
14. Configure the bed serial number. See *Configuring the serial number* (page 23).
15. Recalibrate the bed. See *Calibrating the bed* (page 10).
16. Verify proper operation before you return the product to service.

Load cell replacement, head end, litter

CAUTION - Do not pinch cables when you secure the head end frame cover.

Tools required:

- #2 Phillips screwdriver
- Needle nose pliers
- 3/8" drive ratchet
- 1/2" socket
- 1/2" combination wrench

Procedure:

1. Plug the power cord into a wall outlet.

2. Raise bed and Fowler to full up position, Gatch down and foot up.
3. Raise head end siderails.
4. Using a #2 Phillips screwdriver, remove the two screws (A) that secure the wire cover (B) to the upper frame (C) (Figure 56). Save the screws.

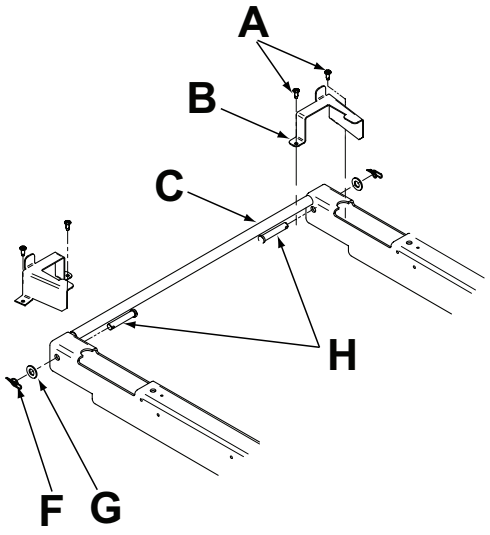


Figure 56 – Wire cover

5. Using a #2 Phillips screwdriver, remove the six screws (D) from the head frame cover (E) (Figure 57). Lift up on the head frame cover and lay it on the litter. Save the screws.

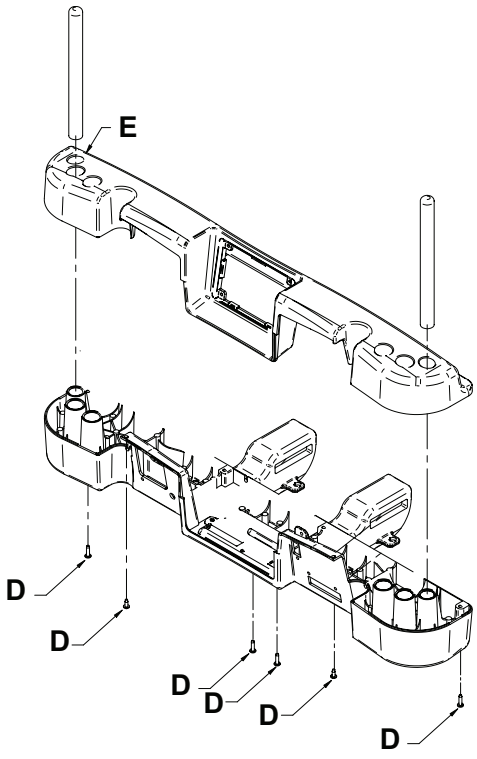


Figure 57 – Head frame cover

6. Unscrew the load cell connection and feed the connection back toward the cell.
7. Using needle nose pliers, remove the rue clip (F) and the flat washer (G) (Figure 56). Save the rue clip and flat washer.

8. Using one hand, grab the upper frame cross bar to remove tension on the litter then push the clevis pin out (H) (Figure 56).
9. Using a 3/8” drive ratchet with a 1/2" socket and a 1/2” combination wrench, remove the two bolts that secure the load cell. Remove and discard the load cell. Save the bolts.
10. Reverse steps to reinstall.
11. Recalibrate the bed. See *Calibrating the bed* (page 10).
12. Verify proper operation before you return the product to service.

Load cell replacement, foot end, litter

CAUTION - Do not pinch the cable when you install the load cell.

Tools required:

- #2 Phillips screwdriver
- Needle nose pliers
- Diagonal pliers
- 3/8" drive ratchet
- 1/2" shallow well socket
- 1/2" combination wrench
- Jack stand
- 2 x 4 (20” recommended)

Procedure:

1. Plug the power cord into a wall outlet.
2. Using the footboard display, raise bed to around 24" and Gatch to full up position.
3. Remove the mattress assembly.
4. Using a 1/2" combination wrench, remove the four bolts that secure the Gatch section cover. To remove the Gatch section cover lift up on the foot end and then push backward on the cover. Save the bolts.
5. Raise the foot end siderails to the full up position.
6. Using needle nose pliers, remove the rue clip and flat washer.
7. Remove the foot end base cover.
8. Using a #2 Phillips screwdriver, remove the four screws that secure the Foley bag bracket. Save the screws.
9. Using a jack stand and 2 x 4, take the tension off of the load cells and remove the clevis pins from both foot end load cells. Save the clevis pins.
10. Unscrew load cell cable connector.
11. Using diagonal pliers, cut the two cable ties that secure the main wire harness and the siderail cable located just behind the load cell.
12. Using a 3/8” drive ratchet and 1/2" shallow well socket, remove the two nuts and bolts that secure the load cell to the litter frame. Save the nuts and bolts.
13. To remove the load cell, pull back and up toward the middle of the bed while you feed the cable through the litter frame. Discard the load cell.
14. Reverse steps to reinstall.
15. Recalibrate the bed. See *Calibrating the bed* (page 10).
16. Verify proper operation before you return the product to service.

LCD display replacement, 6.0

Tools required:

- #2 Phillips screwdriver
- #2 Phillips short screwdriver
- Small slotted screwdriver
- Wire cutters
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Using an ESD system, ground yourself.
2. Remove the footboard assembly and place face down onto a nearby work surface.
3. Using a small slotted screwdriver, remove the fascia back foot control label (5) (Figure 58).

   Note - During install, replace with a new fascia back foot control label (QDF27-2756).

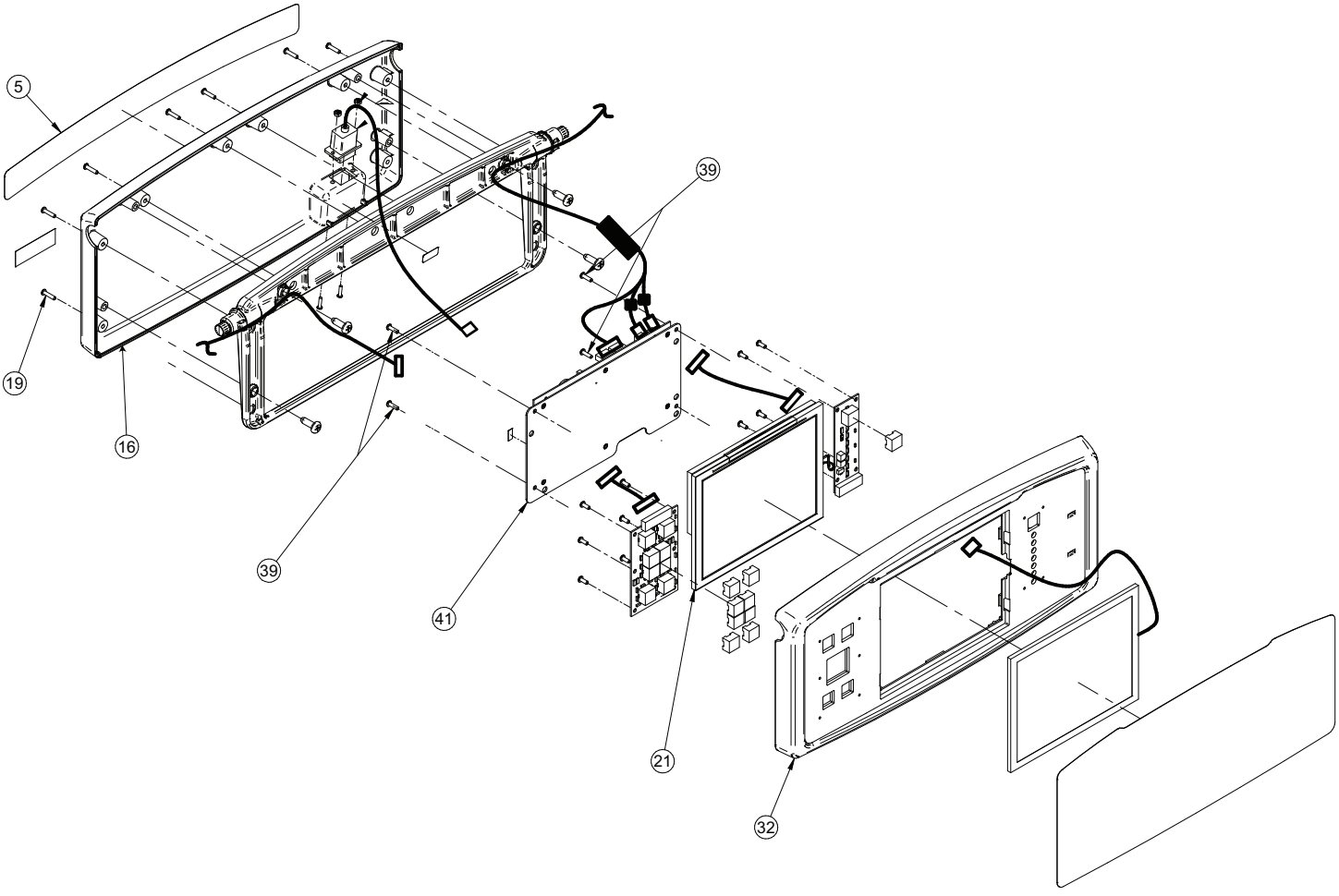


Figure 58 – Footboard assembly

4. Using a #2 Phillips screwdriver, remove the six screws (19) that secure the front nurse panel (32) to the rear footboard control (16) (Figure 58). Save the screws.
5. Pivot the front nurse panel up.

6. Using a #2 Phillips short screwdriver, remove the two screws (19) from the bottom of the front nurse panel (32) (Figure 58). Save the screws.
7. Hold the front nurse panel and rear footboard control together. Turn the footboard assembly over with the front nurse panel face up.
8. Open the two halves so the boards and cables are visible.
9. Using wire cutters, cut the four cable ties that secure the main cables around the edge of the board. Discard the cable ties.
10. Using wire cutters, cut the cable tie that secures the USB cable. Discard the cable tie.

    Note - During install, insert new cable ties to secure the cables removed in steps 9 and 10.
11. Disconnect the menu board cable from connector J6.
12. Disconnect the brake board cable from connector J12.
13. Disconnect the **iBed** Awareness LED cable from connector J9.
14. Disconnect the touch screen cable from connector J4 and the ribbon cable from J7.
15. Disconnect the footboard main cable from connectors J1, J19, and J17.
16. Disconnect the touch screen ribbon cable by unlocking the connector J3. Slide the ribbon cable out.
17. Using a #2 Phillips screwdriver, remove the four screws (39) that secure the touch board assembly (41) to the display housing (Figure 58). Save the screws.
18. Remove the touch board assembly from the display.
19. Using a small slotted screwdriver, separate the locking tabs from the LCD display (21). Remove and discard the display.
20. Reverse steps to install new LCD display.
21. Recalibrate the touch screen. See*Calibrating the touch screen* (page 20).
22. Verify proper operation before you return the product to service.

Brake control board replacement, 6.0

Tools required:

- #2 Phillips screwdriver
- #2 Phillips short screwdriver
- Small slotted screwdriver
- Wire cutters

Procedure:

1. Remove the footboard assembly and place face down onto a nearby work surface.
2. Using a small slotted screwdriver, remove the fascia back foot control label (5) (Figure 59).

   Note - During install, replace with a new fascia back foot control label (QDF27-2756).

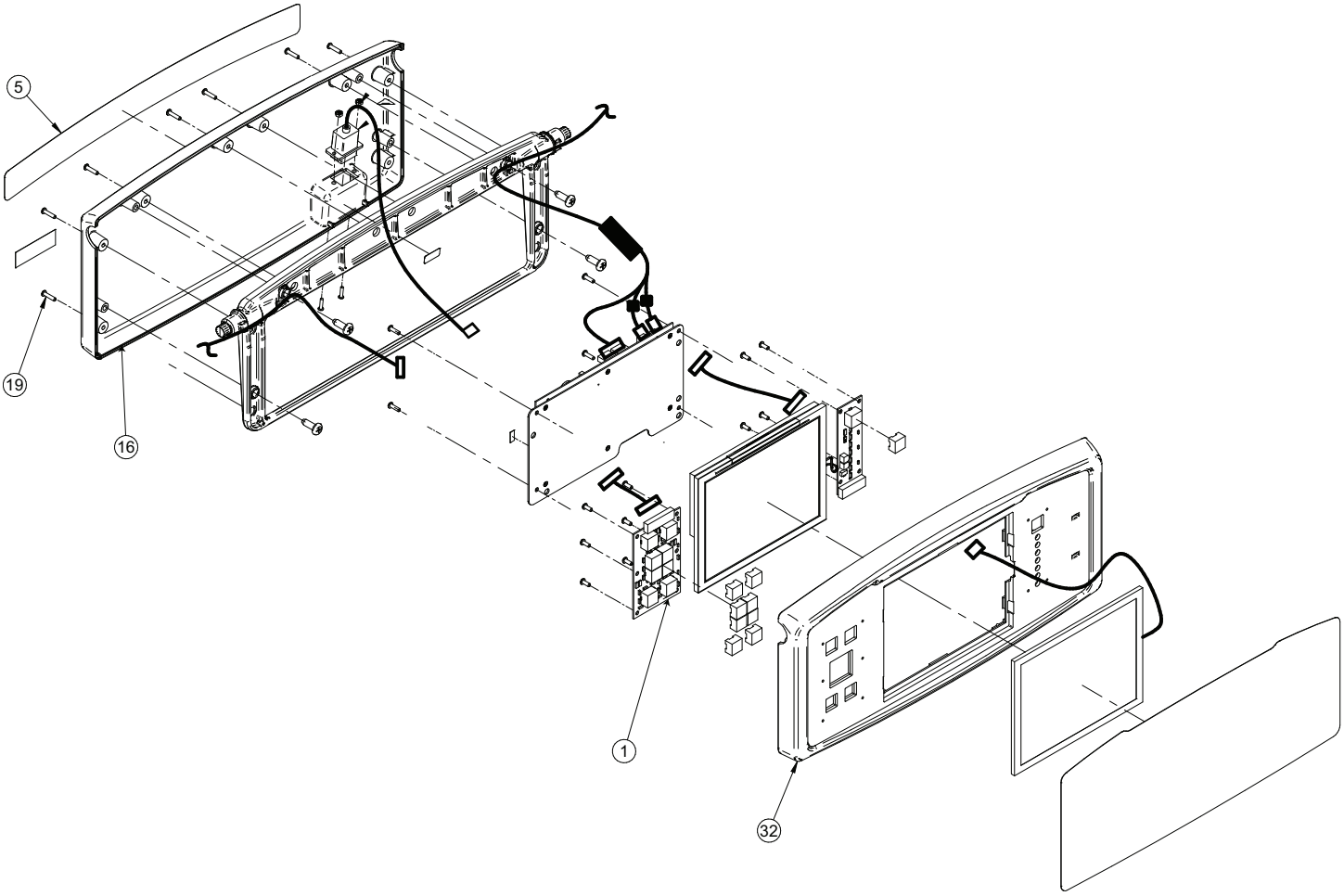


Figure 59 – Footboard assembly

3. Using a #2 Phillips screwdriver, remove the six screws (19) that secure the front nurse panel (32) to the rear footboard control (16) (Figure 59). Save the screws.
4. Pivot the front nurse panel up.
5. Using a #2 Phillips short screwdriver, remove the two screws (19) from the bottom of the front nurse panel (32). Save the screws.
6. Hold the front nurse panel and rear footboard control together. Turn the footboard assembly over with the front nurse panel face up.
7. Open the two halves so the boards and cables are visible.
8. Using wire cutters, cut the four cable ties that secure the main cables around the edge of the board. Discard the cable ties.
9. Using wire cutters, cut the cable tie that secures the USB cable. Discard the cable tie.

   Note - During install, insert new cable ties to secure the cables removed in steps 8 and 9.
10. Using a #2 Phillips screwdriver, remove six screws that secure the brake control board (1) to the foot nurse panel (32) (Figure 59). Save the screws.
11. Disconnect the brake control cable from the brake control board.
12. Remove and discard the brake control board.
13. Reverse steps to install the new brake control board.
14. Verify proper operation before you return the product to service.

Main menu board replacement, 6.0

Tools required:

- #2 Phillips screwdriver
- #2 Phillips short screwdriver
- Small slotted screwdriver
- Wire cutters

Procedure:

1. Remove the footboard assembly and place face down onto a nearby work surface.
2. Using a small slotted screwdriver, remove the fascia back foot control label (5) (Figure 60).

   Note - During install, replace with a new fascia back foot control label (QDF27-2756).

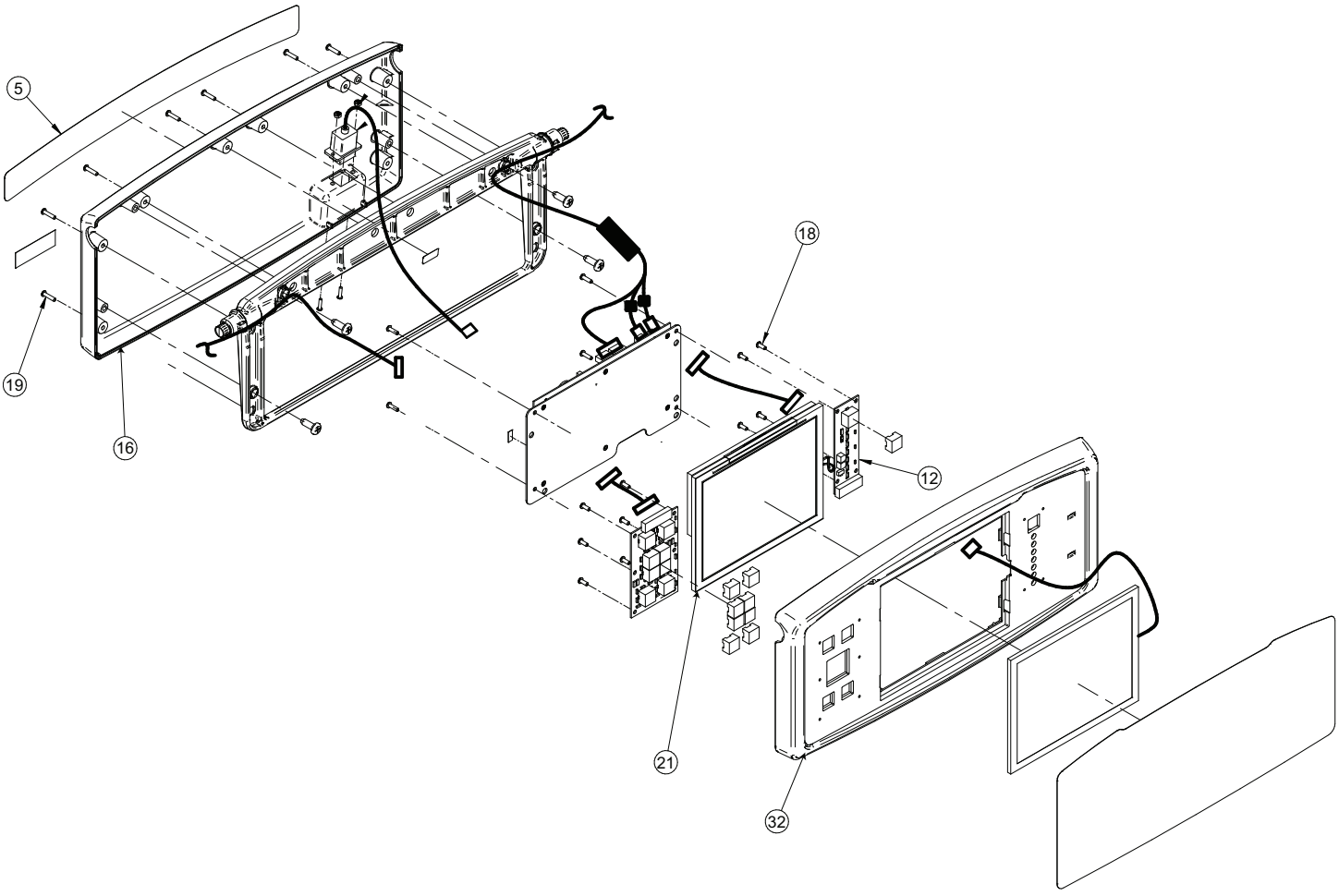


Figure 60 – Footboard assembly

3. Using a #2 Phillips screwdriver, remove the six screws (19) that secure the front nurse panel (32) to the rear footboard control (16) (Figure 60). Save the screws.
4. Pivot the front nurse panel up.
5. Using a #2 Phillips short screwdriver, remove the two screws (19) from the bottom of the front nurse panel (32) (Figure 60). Save the screws.
6. Hold the front nurse panel and rear footboard control together. Turn the footboard assembly over with the front nurse panel face up.
7. Open the two halves so the boards and cables are visible.

8. Using wire cutters, cut the four cable ties that secure the main cables around the edge of the board. Discard the cable ties.
9. Using wire cutters, cut the cable tie that secures the USB cable. Discard the cable tie.

   Note - During install, insert new cable ties to secure the cables removed in steps 8 and 9.
10. Turn the LCD display up (21) (Figure 60).
11. Using a #2 Phillips short screwdriver, remove the three screws that secure the display housing to the LCD display. Save the screws.
12. Remove the display housing and unplug the two cables from the main menu board (12). Set the display assembly on a bench.
13. Using a #2 Phillips screwdriver, remove the four screws (18) that secure the main menu board (12) to the front nurse panel (32) (Figure 60). Save the screws.
14. Unplug the cable from the main menu board.
15. Remove and discard the main menu board.
16. Reverse steps to install the new main menu board.
17. Verify proper operation before you return the product to service.

Touch screen replacement, 6.0

Tools required:

- #2 Phillips screwdriver
- #2 Phillips short screwdriver
- Small slotted screwdriver
- Wire cutters
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Using an ESD system, ground yourself.
2. Remove the footboard assembly and place face down onto a nearby work surface.
3. Using a small slotted screwdriver, remove the fascia back foot control label (5) (Figure 61).

   Note - During install, replace with a new fascia back foot control label (QDF27-2756).

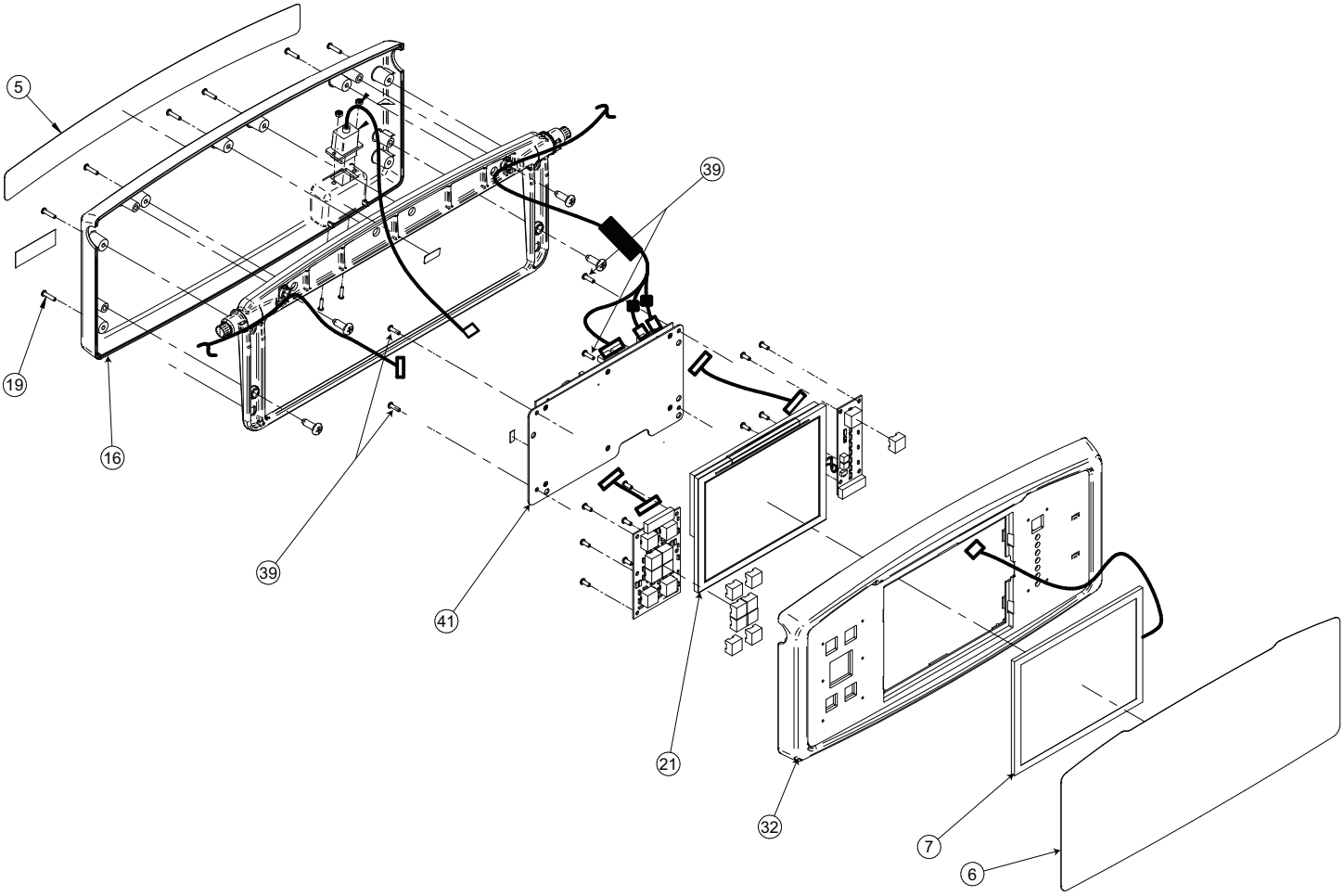


Figure 61 – Footboard assembly

4. Using a #2 Phillips screwdriver, remove the six screws (19) that secure the front nurse panel (32) to the rear footboard control (16) (Figure 61). Save the screws.
5. Pivot the front nurse panel up.
6. Using a #2 Phillips short screwdriver, remove the two screws (19) from the bottom of the front nurse panel (32) (Figure 61). Save the screws.
7. Hold the front nurse panel and rear footboard control together. Turn the footboard assembly over with the front nurse panel face up.
8. Open the two halves so the boards and cables are visible.
9. Using wire cutters, cut the four cable ties that secure the main cables around the edge of the board. Discard the cable ties.
10. Using wire cutters, cut the cable tie that secures the USB cable. Discard the cable tie.

    Note - During install, insert new cable ties to secure the cables removed in steps 9 and 10.

11. Disconnect the menu board cable from connector J6.
12. Disconnect the brake board cable from connector J12.
13. Disconnect the **iBed** Awareness LED cable from connector J9.
14. Disconnect the touch screen cable from connector J4 and the ribbon cable from J7.
15. Disconnect the footboard main cable from connectors J1, J19, and J17.
16. Disconnect the touch screen ribbon cable by unlocking the connector J3. Slide the ribbon cable out.

17. Using a #2 Phillips screwdriver, remove the four screws (39) that secure the touch board assembly (41) to the display housing (Figure 61). Save the screws.
18. Remove the touch board assembly from the display.
19. Using a small slotted screwdriver, separate the locking tabs from the LCD display (21). Remove and discard the display.
20. Using a small slotted screwdriver, remove the foot control overlay (6). Discard the foot control overlay. This will need to be replaced with the new overlay.
21. Using a small slotted screwdriver, remove the touch screen (7). Discard the touch screen.
22. Reverse steps to install the new touch screen.
23. Recalibrate the touch screen. See*Calibrating the touch screen* (page 20).
24. Verify proper operation before you return the product to service.

Touch board replacement, 6.0

Tools required:

- #2 Phillips screwdriver
- #2 Phillips short screwdriver
- Small slotted screwdriver
- Wire cutters

Procedure:

1. Remove the footboard assembly and place face down onto a nearby work surface.
2. Using a small slotted screwdriver, remove the fascia back foot control label (5) (Figure 62).

   Note - During install, replace with a new fascia back foot control label (QDF27-2756).

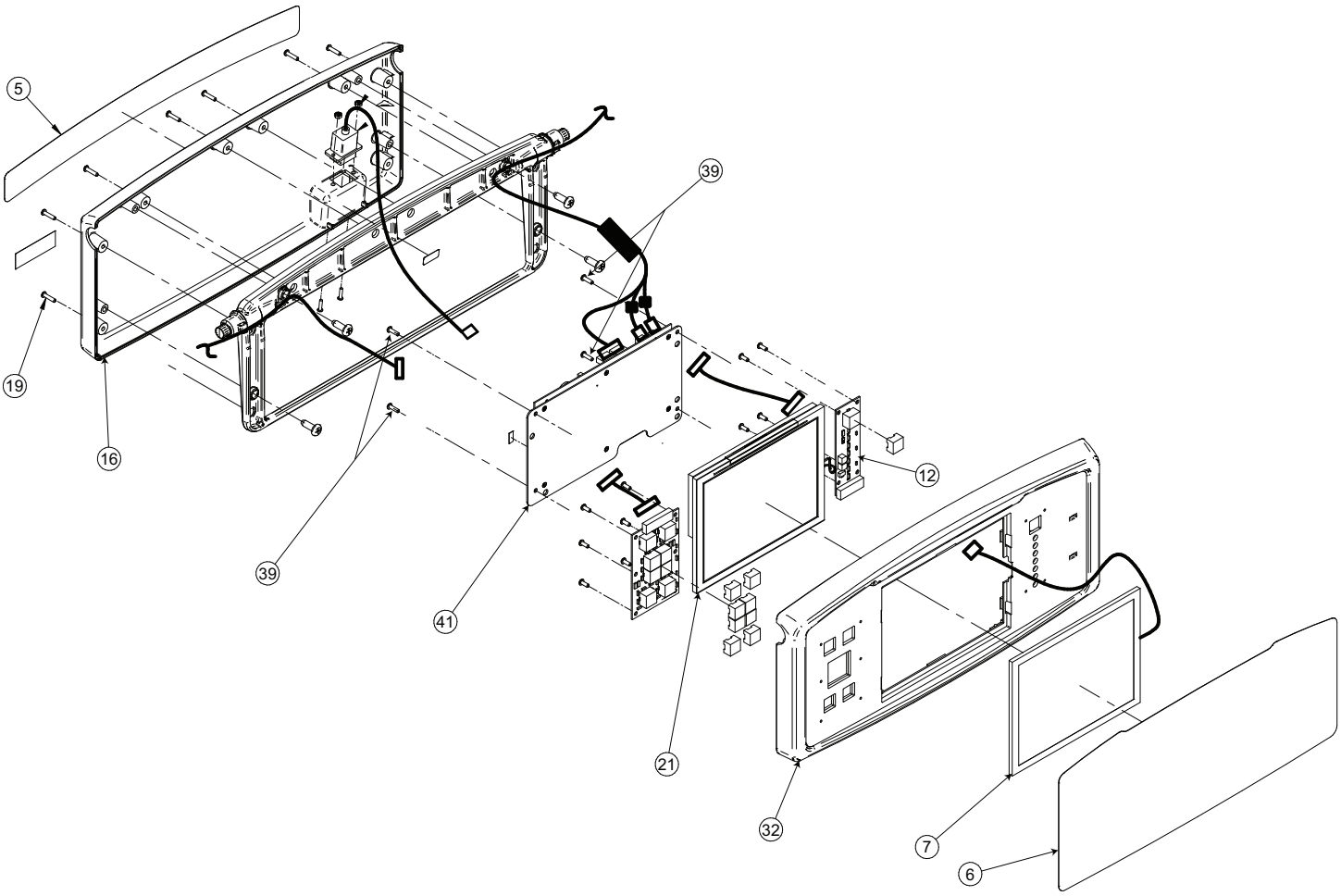


Figure 62 – Footboard assembly

3. Using a #2 Phillips screwdriver, remove the six screws (19) that secure the front nurse panel (32) to the rear footboard control (16) (Figure 62). Save the screws.
4. Pivot the front nurse panel up.
5. Using a #2 Phillips short screwdriver, remove the two screws (19) from the bottom of the front nurse panel (32) (Figure 62). Save the screws.
6. Hold the front nurse panel and rear footboard control together. Turn the footboard assembly over with the front nurse panel face up.
7. Open the two halves so the boards and cables are visible.
8. Using wire cutters, cut the four cable ties that secure the main cables around the edge of the board. Discard the cable ties.
9. Using wire cutters, cut the cable tie that secures the USB cable. Discard the cable tie.

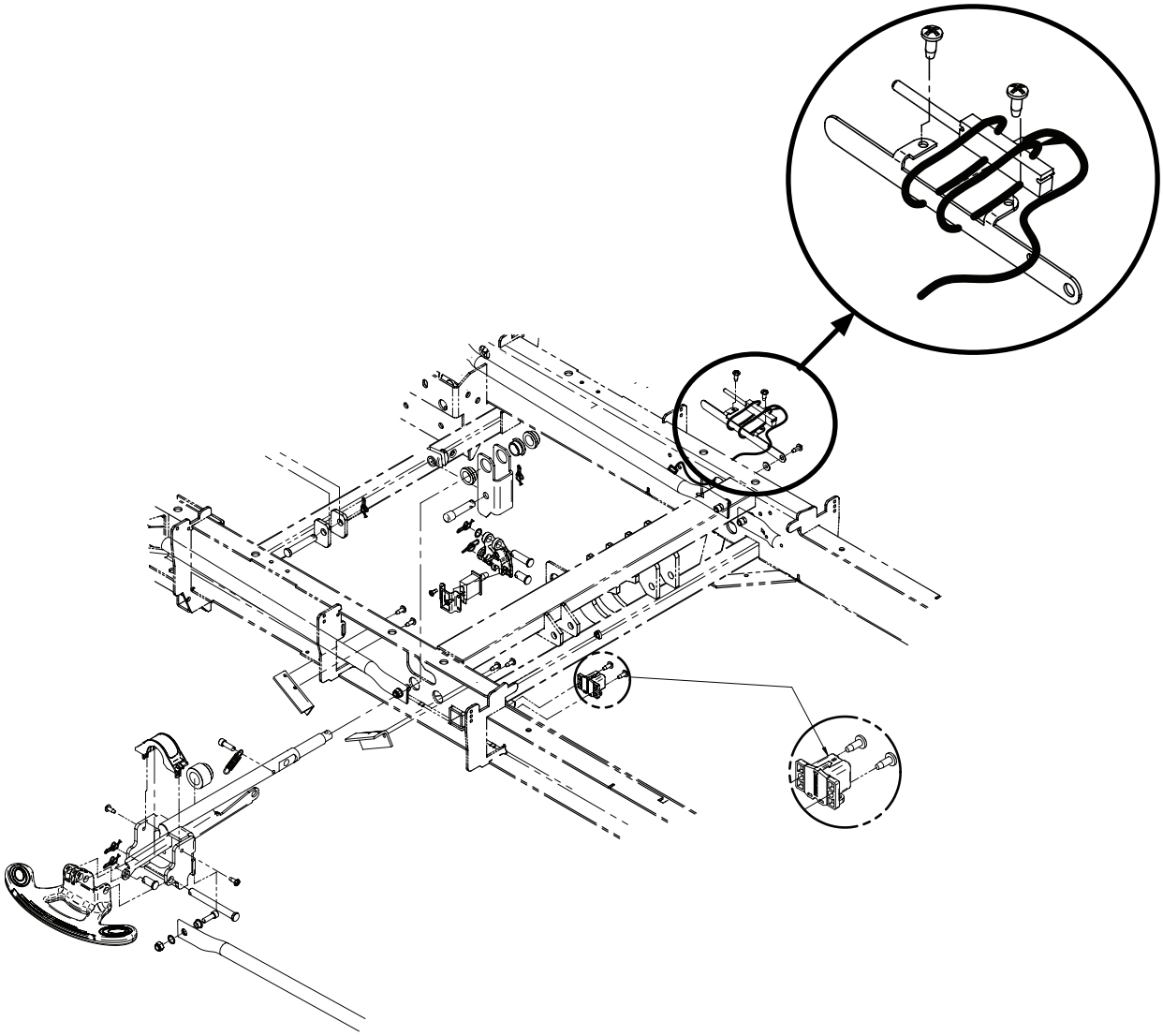
   Note - During install, insert new cable ties to secure the cables removed in steps 8 and 9.
10. Using #2 Phillips screwdriver, remove the four screws that secure the touch board (12) to the foot nurse panel (32) (Figure 62). Save the screws.
11. Remove and discard the touch board.
12. Reverse steps to install the new touch board.
13. Verify proper operation before you return the product to service.

Brake/neutral/drive potentiometer replacement - QDF27-2024

Tools required:

- Diagonal pliers

Procedure:



1. Plug the power cord into a wall outlet.
2. Raise the bed lift and patient's left siderails to the full up position.
3. Remove the base center covers (foot, center, and head).
4. Remove the patient's left base frame cover.
5. Using diagonal pliers, cut the two wire ties that secure the potentiometer to the potentiometer bracket.
6. Using diagonal pliers, cut the two wire ties that secure the potentiometer wires to the frame.
7. Remove the electrical tape that secures the quick connection together.
8. Reverse steps to reinstall.

   Note - Make sure that you install the new wire ties in the same location.
9. Recalibrate the bed. See *Calibrating the bed* (page 10).
10. Test all bed functionality.

11. Verify proper operation before you return the product to service.

Battery replacement, litter

Note - Batteries should always be replaced in pairs.

Tools required:

- #2 Phillips screwdriver
- 5/16” nut driver
- 5/16” combination wrench

Procedure:

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Raise the product to the full up position.
4. Remove the mattress assembly or fold back to expose the foot section.
5. Using a #2 Phillips screwdriver, remove the two screws (A and B) that secure the electrical cover (C) (Figure 63). Remove the cover. Save the screws.

   Note - Use caution as the cover is large and heavy.

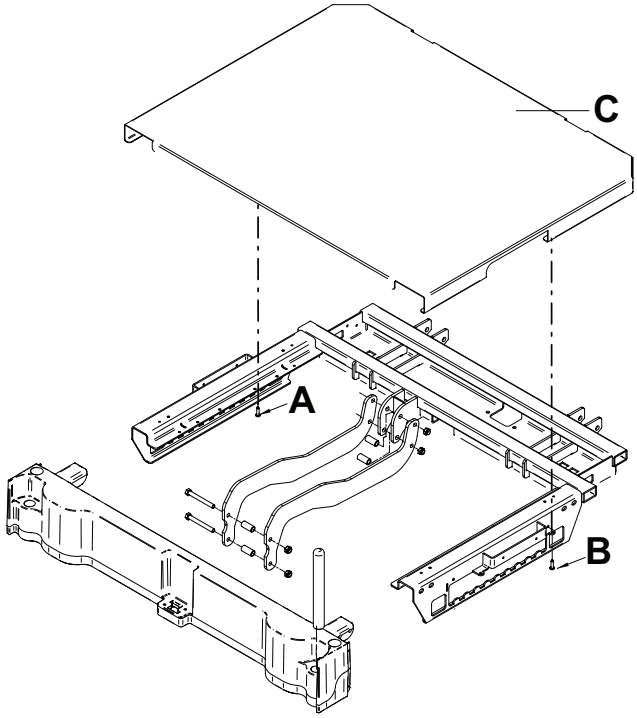


Figure 63 – Remove the cover

6. Unplug the power cord from the wall outlet and turn battery switch **OFF** (0). The bed should now have no power.
7. Unplug J12 connector from the CPU/Power board.
8. Lift up on both batteries and stand them upright (Figure 64).

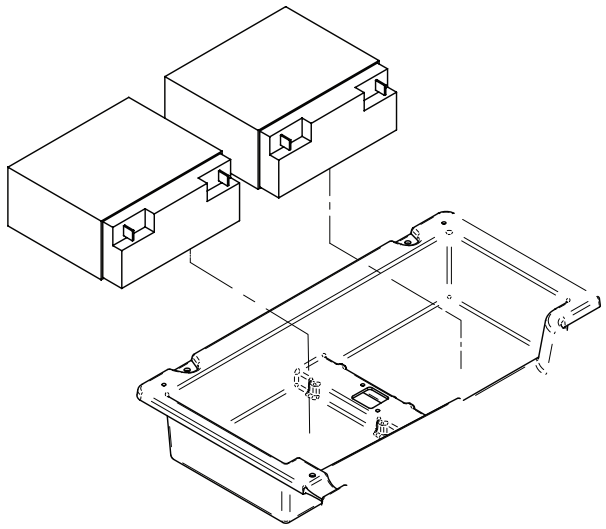


Figure 64 – Batteries

9. Using a 5/16" nut driver and a 5/16" combination wrench, unbolt the wires from the battery posts.
10. Reverse steps to reinstall.

    Note - Install the new battery upright with the information on the right side.
11. Verify proper operation before you return the product to service.

Angle sensor replacement, Fowler, litter

Tools required:

- #2 Phillips short screwdriver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Raise the product to the full up position and raise the patient left siderails (head end and foot end).
4. If Fowler actuator will run, raise Fowler up to approximately 20 degrees. If the Fowler actuator will not run, put the bed into calibration mode (*Calibrating the bed* (page 10)). Run the Fowler up to approximately 20 degrees.
5. Working from the left side of the bed, use a #2 Phillips short screwdriver to remove the two screws that secure the Fowler angle sensor (A) to the bottom of the Fowler frame (Figure 65). Save the screws.

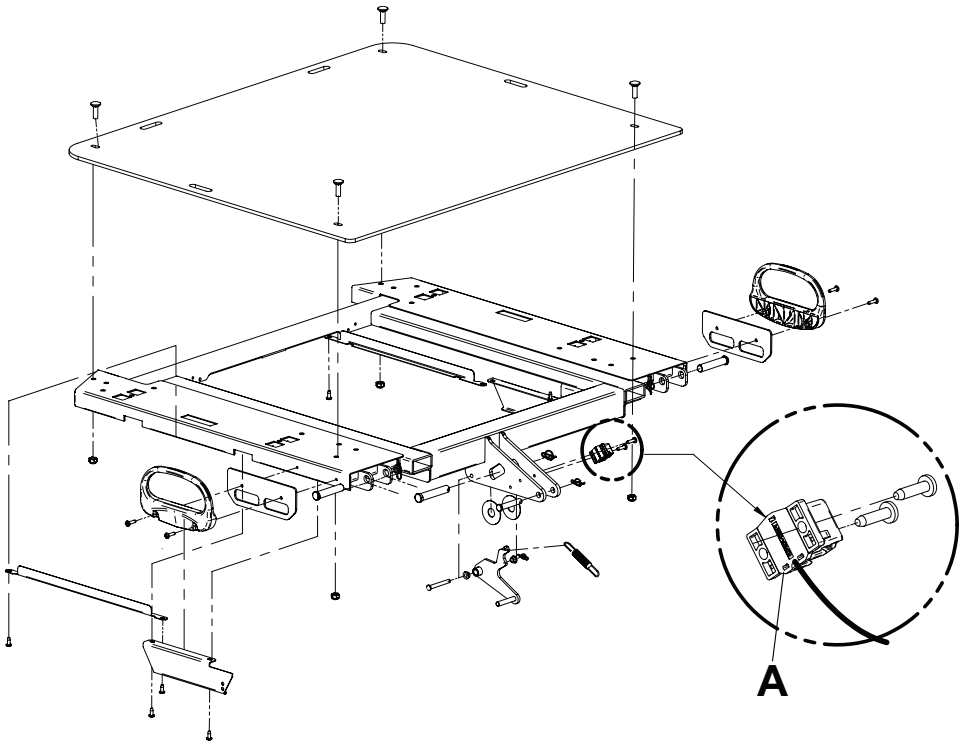


Figure 65 – Fowler angle sensor

6. Using an ESD system, ground yourself.
7. Unclip the three clips that secure the board cover on.
8. Unplug the cable from the board.
9. Reverse steps to reinstall.

   Note - Do not overtighten the two screws.
10. Recalibrate the bed. See*Calibrating the bed* (page 10).
11. Verify proper operation before you return the product to service.

Angle sensor replacement, Gatch, litter

Tools required:

- #2 Phillips short screwdriver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Raise the product to the full up position.
4. If the Gatch actuator will run, raise the Gatch up to approximately 20 degrees. If the Gatch actuator will not run, put the bed into calibration mode (*Calibrating the bed* (page 10)). Run the Gatch up to approximately 20 degrees.
5. Working from the bottom left side of the litter, under the Gatch section, use a #2 Phillips short screwdriver to remove the two screws (A) that secure the Gatch angle sensor (B) to the bottom of the Gatch frame (Figure 66). Save the screws.

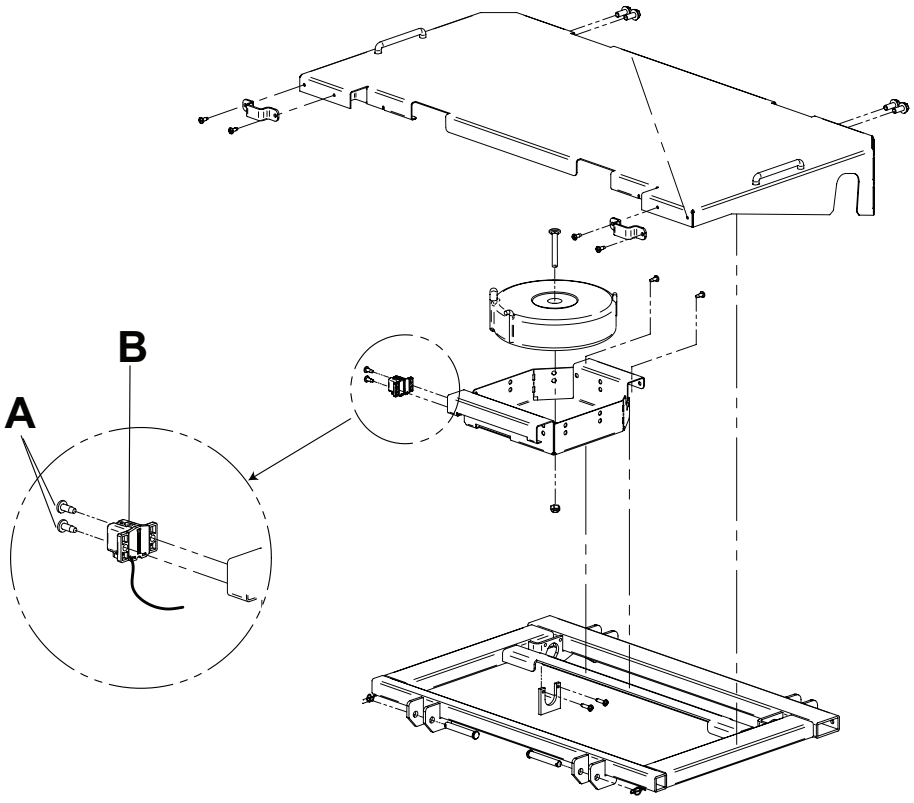


Figure 66 – Gatch angle sensor

6. Using an ESD system, ground yourself.
7. Unclip the three clips that secure the board cover on.
8. Unplug the cable from the board.
9. Reverse steps to reinstall.

   Note - Do not over-tighten the two screws.
10. Recalibrate the bed. See*Calibrating the bed* (page 10).
11. Verify proper operation before you return the product to service.

Angle sensor replacement, foot end, litter

Tools Required:

- #2 Phillips short screwdriver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Raise the product to the full up position and level the litter surface.
3. Remove or fold back the mattress, exposing the foot section.
4. Using a #2 Phillips short screwdriver, remove the two screws (A and B) that secure the electrical cover (C) (Figure 67). Remove the cover. Save the screws.
5. Using a #2 Phillips short screwdriver, remove the two screws that secure the angle sensor (D) to the foot frame (Figure 68). Save the screws.

Note - Use caution as the cover is large and heavy.

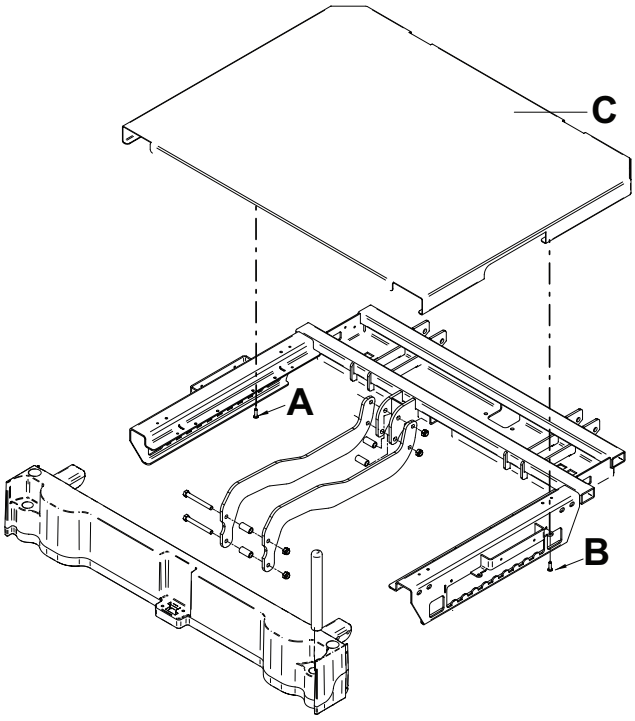


Figure 67 – Electrical cover

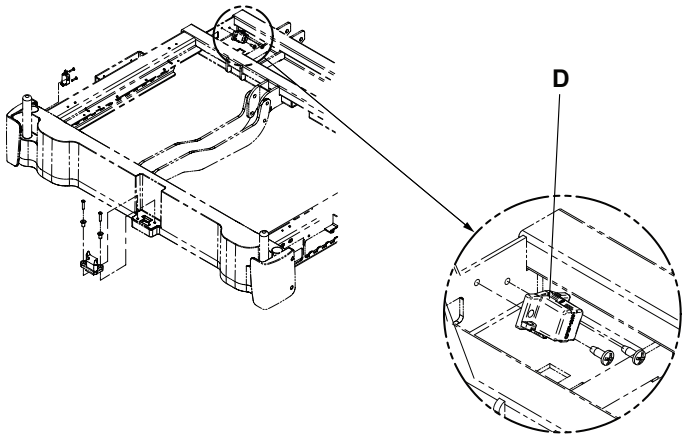


Figure 68 – Angle sensor

6. Using an ESD system, ground yourself.
7. Unclip the three clips that secure the board cover on.
8. Unplug the cable from the board.
9. Reverse steps to reinstall.

   Note - Do not over-tighten the two screws.
10. Recalibrate the bed. See*Calibrating the bed* (page 10).
11. Verify proper operation before you return the product to service.

Angle sensor replacement, base

Tools required:

- #2 Phillips short screwdriver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Push down on the brake pedal to apply the brake.
3. Raise the product to the full up position and raise the patient right siderails (foot end and head end).
4. Remove the head end, enter, foot end, and right base cover.
5. Using a #2 Phillips short screwdriver, remove the two screws that secure the base angle sensor (A) to the base frame (Figure 69). Save the screws.

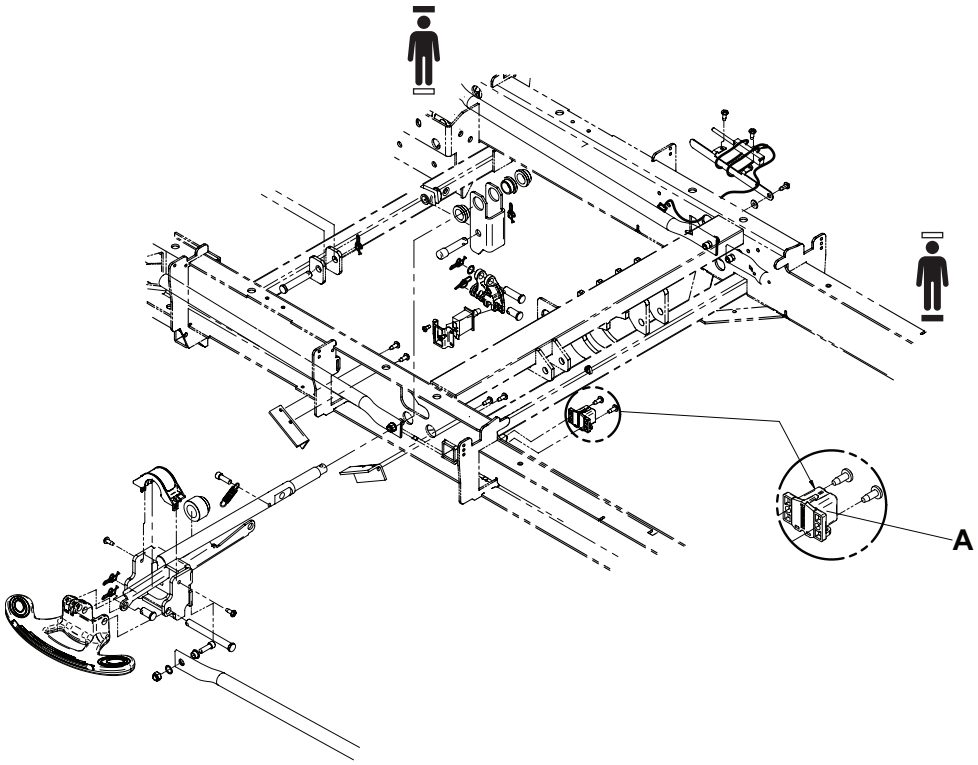


Figure 69 – Base angle sensor

6. Using an ESD system, ground yourself.
7. Unclip the three clips that secure the board cover on.
8. Unplug the cable from the board.
9. Reverse steps to reinstall.

   Note - Do not over-tighten the two screws.
10. Recalibrate the bed. See *Calibrating the bed* (page 10).
11. Verify proper operation before you return the product to service.

Angle sensor replacement, Trendelenburg, litter

Tools required:

- #2 Phillips short screwdriver
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Plug the power cord into a wall outlet.
2. Raise the product to the full up position and raise the patient right siderail.
3. Working from the patient's right side, use a #2 Phillips short screwdriver to remove the two screws that secure the Trendelenburg angle sensor (A) to the litter frame (Figure 70). Save the screws.

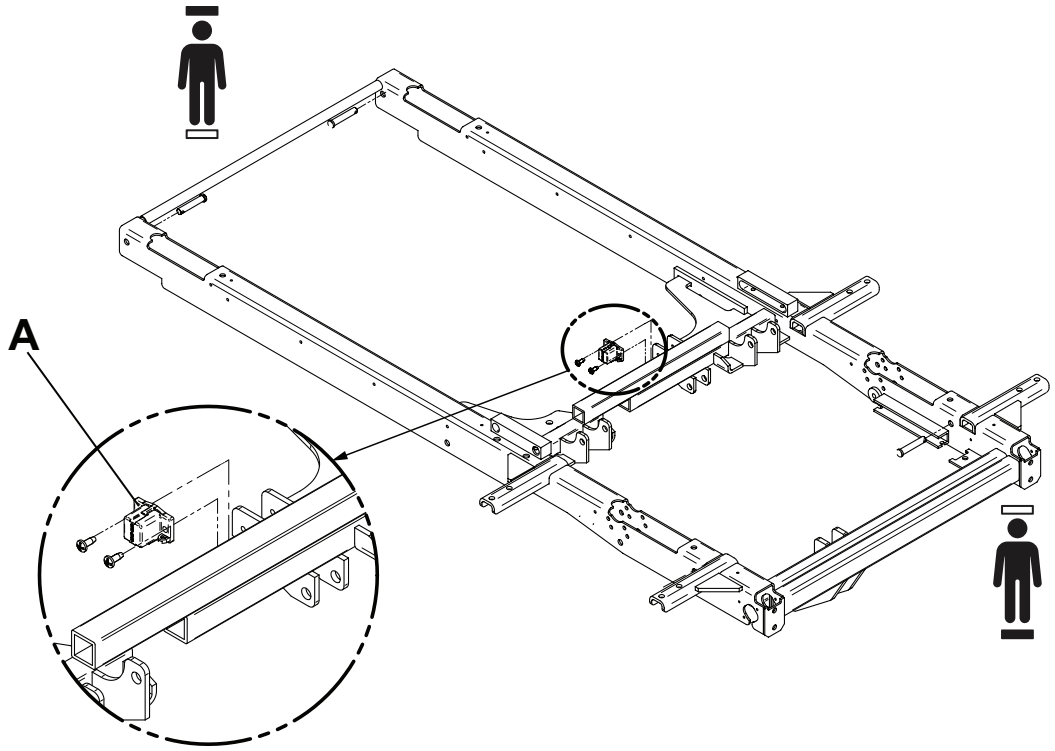


Figure 70 – Trendelenburg angle sensor

4. Using an ESD system, ground yourself.
5. Unclip the three clips that secure the board cover on.
6. Unplug the cable from the board.
7. Reverse steps to reinstall.

   Note - Do not over-tighten the two screws.
8. Recalibrate the bed. See*Calibrating the bed* (page 10).
9. Verify proper operation before you return the product to service.

Headwall communication board replacement, litter

Tools required:

- #2 Phillips short screwdriver
- #2 Phillips screwdriver
- 1/2” socket
- 3/8” drive ratchet
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Using an ESD system, ground yourself.
2. Plug the power cord into a wall outlet.
3. Raise the product to the full up position.
4. Raise the Fowler to the full up position.

5. Unplug the bed power cord from the wall outlet.
6. Turn the battery disconnect switch off.
7. Remove the headboard from the bed.
8. If the head end IV pole option is present, use a 1/2" socket and 3/8" drive ratchet to remove the IV pole.
9. Using a #2 Phillips short screwdriver, remove the six screws that secure the head end frame cover to the head end frame. Save the screws.
10. Remove the head end frame cover and set aside.
11. Using a #2 Phillips screwdriver, remove the two screws (A) that secure the right IR module (B) and gasket (C) to the head end frame (D) (Figure 71). Save the screws.

    Note - Make sure that the IR module cable is routed in the wire track before reinstallation.

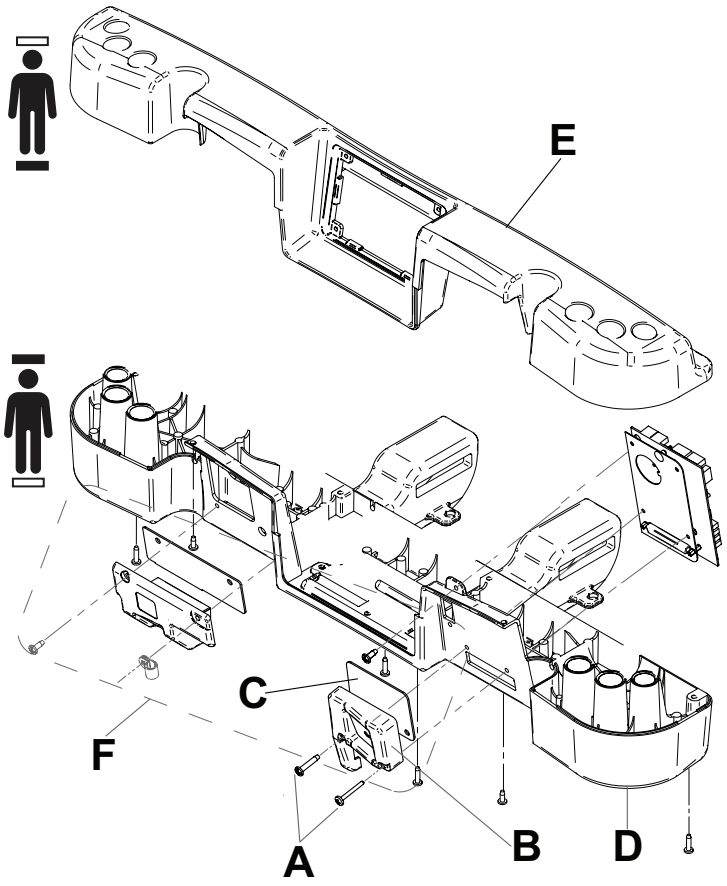


Figure 71 – headwall communication board

12. Using a #2 Phillips screwdriver, remove the screw that secures the headwall communication board (E) to the head end frame (D) (Figure 71). Save the screw.
13. Disconnect all of the cables that goes into the headwall communication board.

    Note - Make note of all cable connections and dip switch settings on the headwall communication board.
14. Configure the new headwall communication board to match the dip switch settings from the old headwall communication board.
15. If the bed is equipped with the Smart TV option (F), transfer the Smart TV board from the old headwall communication board to the new headwall communication board (Figure 71).
16. Reverse steps to reinstall.
17. Verify proper operation before you return the product to service.

IR module option replacement, litter

Tools required:

- #2 Phillips screwdriver
- 1/2" socket
- 3/8" drive ratchet
- Diagonal pliers
- ESD system

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Using an ESD system, ground yourself.
2. Plug the power cord into a wall outlet.
3. Raise the product to the full up position.
4. Raise the Fowler to the full up position.
5. Unplug the bed power cord from the wall outlet.
6. Turn the battery disconnect switch off.
7. Remove the headboard from the bed.
8. If the head end IV pole option is present, use a 3/8" drive ratchet and 1/2" socket to remove the IV pole.
9. Using a #2 Phillips screwdriver, remove the six screws that secure the head end frame cover to the head end frame. Save the screws.
10. Remove the head end frame cover and set aside.
11. Using a #2 Phillips screwdriver, remove the two screws (A) that secure the right IR module (B) and gasket (C) to the head end frame (D) (Figure 72). Save the screws.

    Note - Make sure that the IR module cable is routed in the wire track before reinstallation.

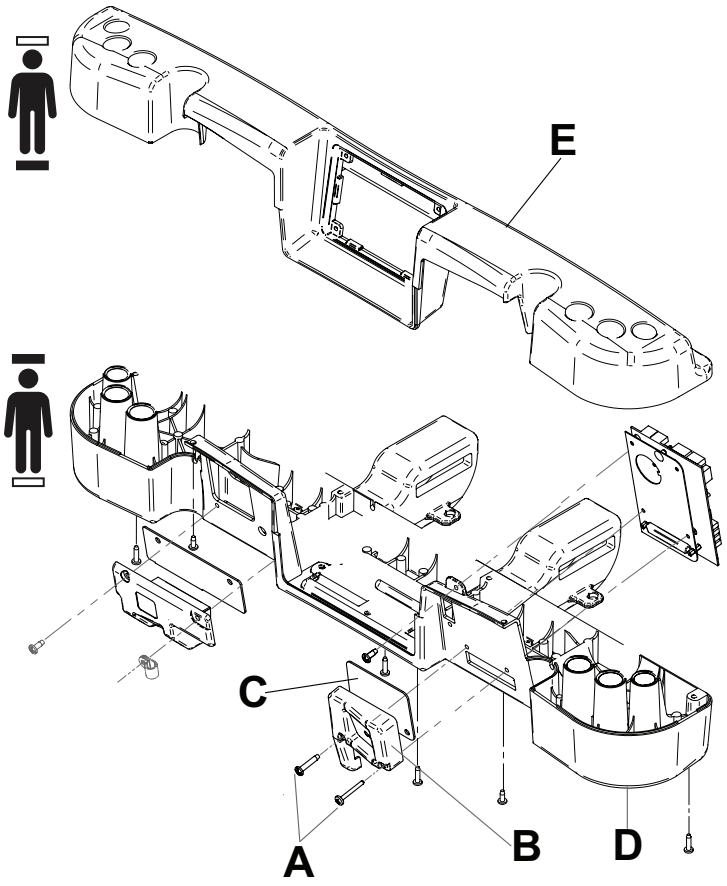


Figure 72 – IR module

12. Using a #2 Phillips screwdriver, remove the two screws that secure the left IR module and gasket to the head end frame. Save the screws.
13. Using diagonal pliers, cut the cable tie that secures the IR module cables below the head end frame.
14. Disconnect the right IR module cable from connector J5 on the headwall communication board (E).
15. Disconnect the left IR module cable from connector J2 on the headwall communication board (E).
16. Reverse steps to reinstall.

    Note - Route both right and left IR module cables into the head end frame through the matching right and left **Zoom** handle cable cutouts in the head end frame.
17. Verify proper operation before you return the product to service.

Wi-Fi board option replacement, footboard

Note

- The facility's IT department must be contacted to update the IP/DNS record for the affected product. The MAC address for the record will need to be updated from the old Wi-Fi board MAC address to the new Wi-Fi board MAC address. Failing to do so will prevent the product from connecting to the facility's wireless network.

Tools required:

- #3 Phillips screwdriver
- Small pick
- Small slotted screwdriver
- ESD system

- **iBed** Wireless configuration tool
- Router

Procedure:

Note - Use ESD protection when necessary. See *Protecting against electrostatic discharge (ESD)* (page 68).

1. Using an ESD system, ground yourself.
2. Remove the footboard assembly and place face down onto a nearby work surface.
3. Using a small pick, remove the four screw covers (A) from the back of the footboard (Figure 73). Save the screw covers.

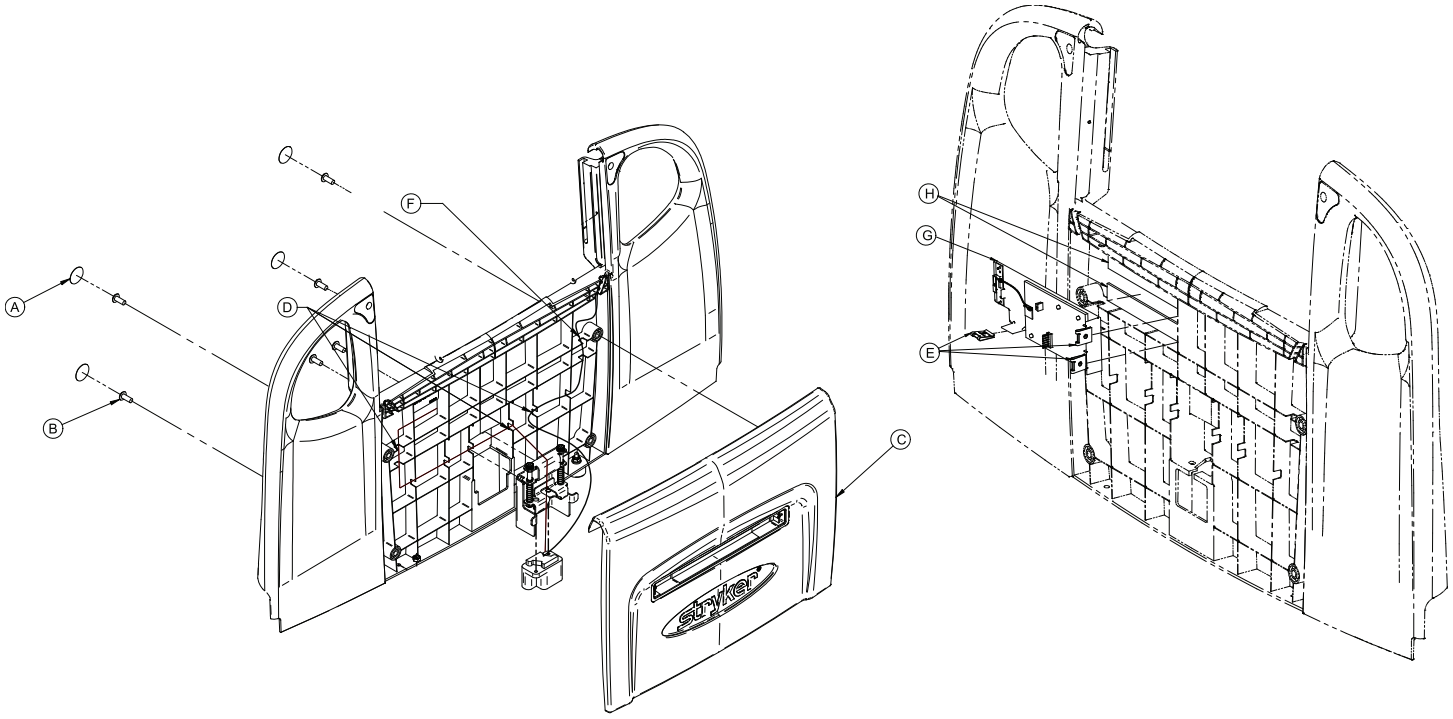


Figure 73 – Wi-Fi board

4. Using a #3 Phillips screwdriver, remove the four screws (B) that secure the footboard cover (C) to the footboard. Save the screws.
5. Lift the footboard up so the display faces you. Lift the footboard cover (C) out and up to remove. Disconnect the local bed status board (D). Save the footboard cover.
6. Place the footboard onto a work surface with the display up and pivot the nurse control pane upward.
7. Using a small slotted screwdriver, remove the three clip nuts (E). Save the clip nuts.
8. Disconnect the footboard cable (F) from the Gateway heat stake board assembly (G).
9. Pull on all four corners of the Gateway heat stake board assembly (G) to remove the board from the double sided tape (H) that secures it to the footboard. Discard the board.
10. Remove all doublesided tape (H) from the footboard.
11. Reverse steps to reinstall.

    Note - To configure the wireless network connection settings, you must have a laptop and a router configured for Stryker defaults.

12. Plug in the router configured for Stryker defaults.
13. Plug the power cord into the wall outlet. Turn on the wireless option.
14. Connect the laptop to they syk_med_install SSID which the configured router is broadcasting.
15. Open the **iBed** Wireless configuration tool.

16. On the bed, enter the **Connectivity Info** menu by accessing the service menu on the footboard.
17. Scroll down to the IP address which the router provided for the bed.
18. Enter the bed IP address in the **Wireless Device URL/IP** box (Figure 74).
19. Click the **Get Wireless Device Configuration** button. This will retrieve the bed wireless default settings and connect to the bed that is shown in the left column of the tool.
20. Click the **OK** button of the retrieval confirmation.
21. Enter the facility network information and make sure that you fill in all of the appropriate blanks in the right column of the tool.
22. Select the **Radio Mode** for the facility requirements.
23. Click the **Upload Configuration to Device** button.

    Note - If the radio does not connect, make sure that you check the settings entered into the column on the right. If they are incorrect, the radio will need to be reset to defaults, and then repeat the configuration process.

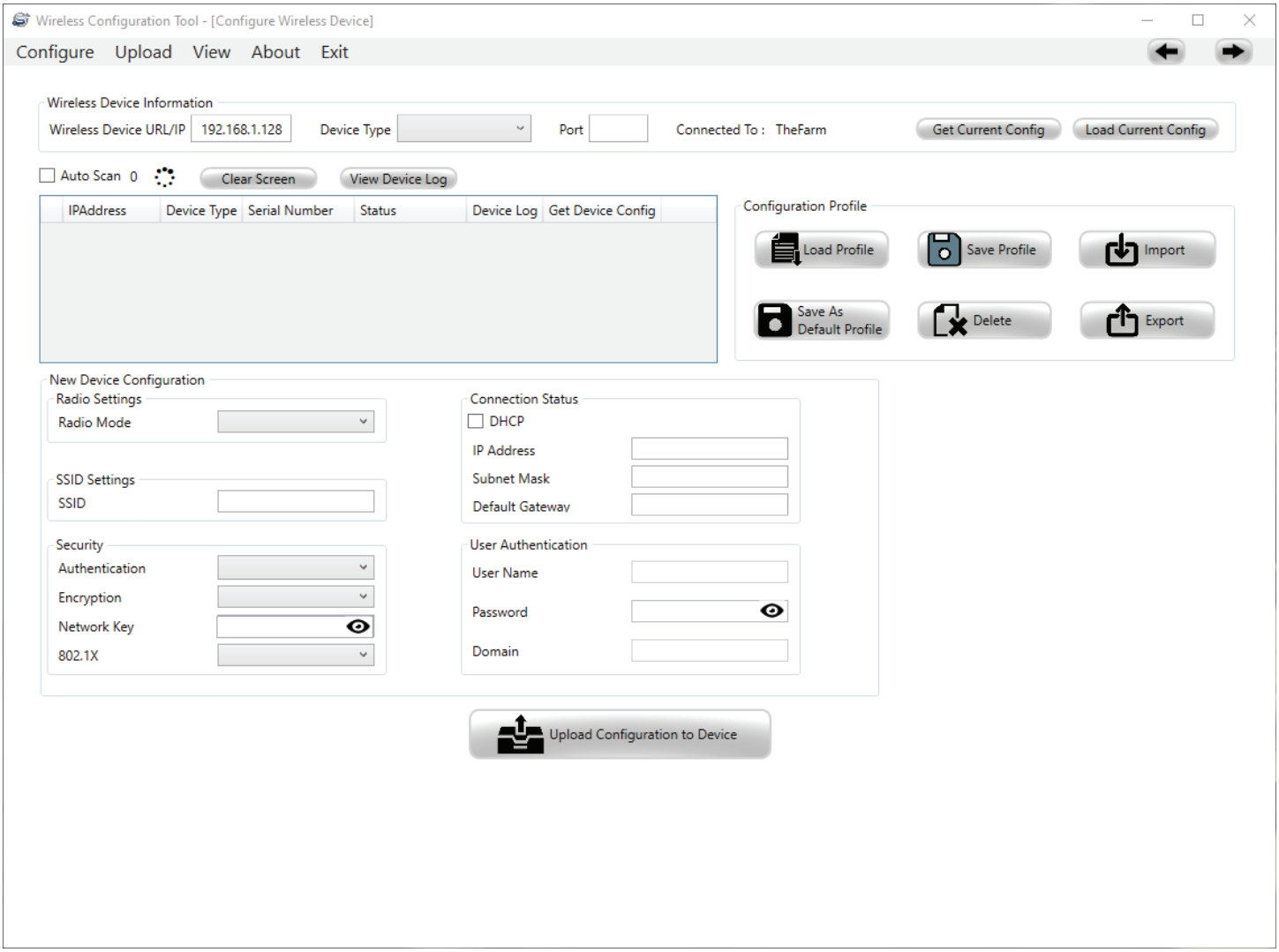
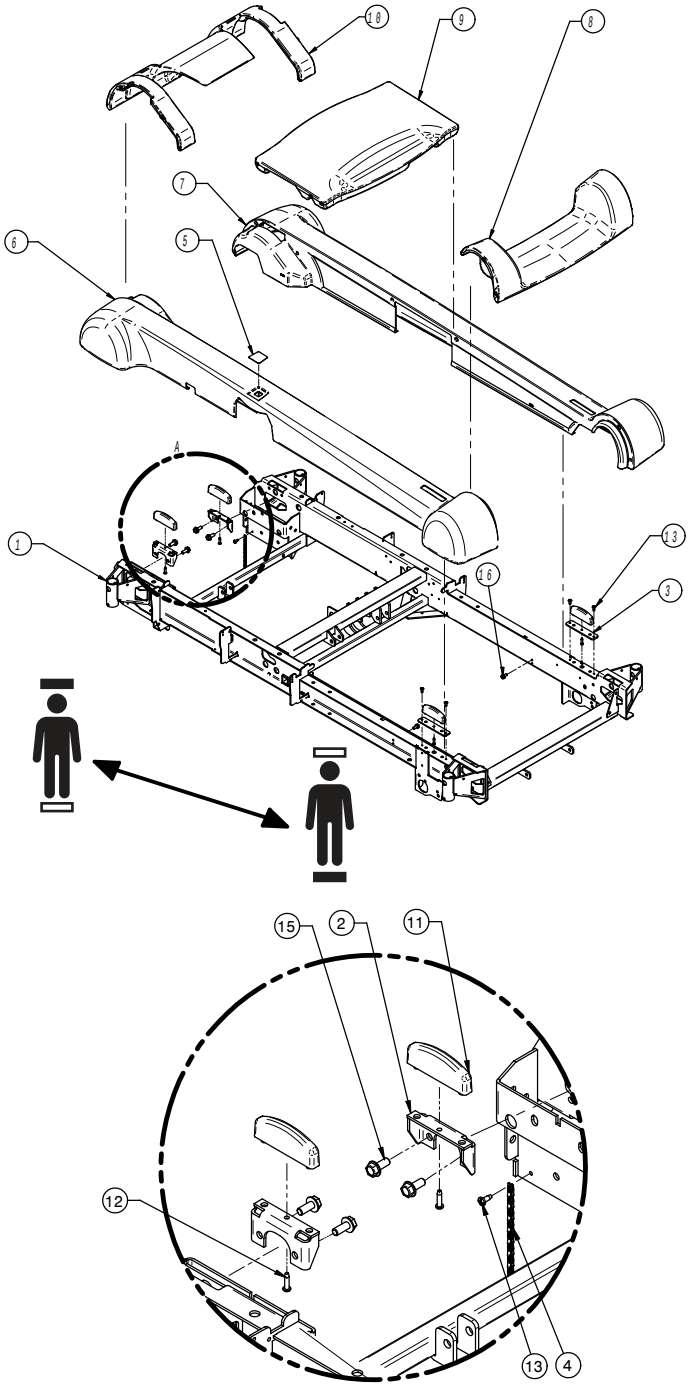


Figure 74 – Wireless device URL/IP

24. Verify proper operation before you return the product to service.

Base assembly, hood

L27-026 Rev J (Reference only)



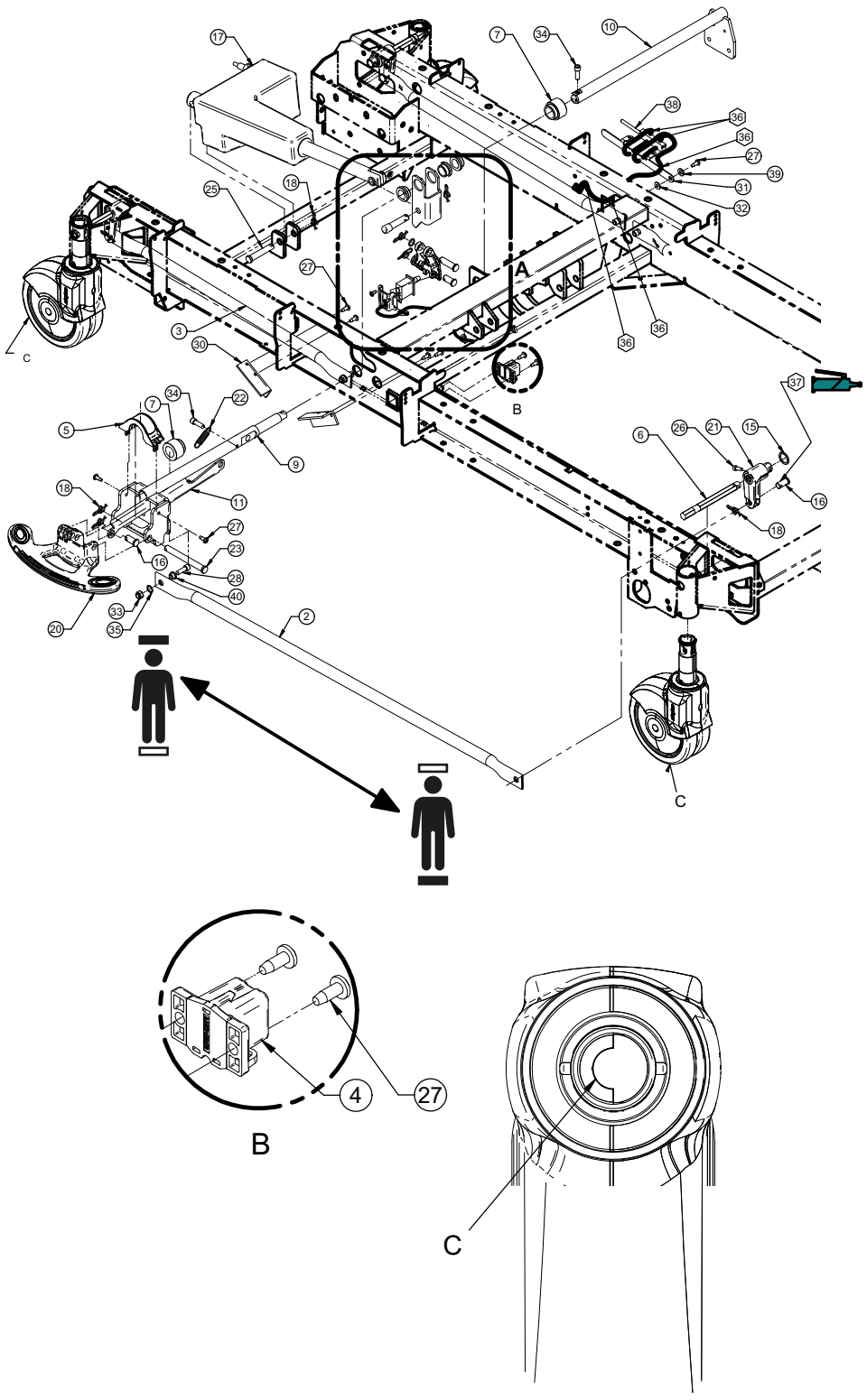
A

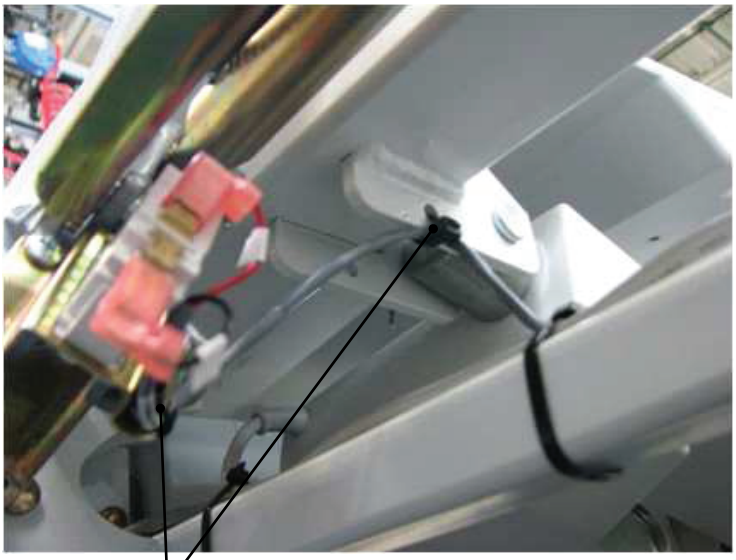
Item	Number	Name	Quantity
1	27-0758P	Base assembly	1
2	27-1462P	Support stopper	2
3	27-1628P	Foot stopper support	2
4	27-2123	Ground chain	1
5	QDF27-1419	Base transparent plate	1
6	QP27-1008	Base cover, right	1

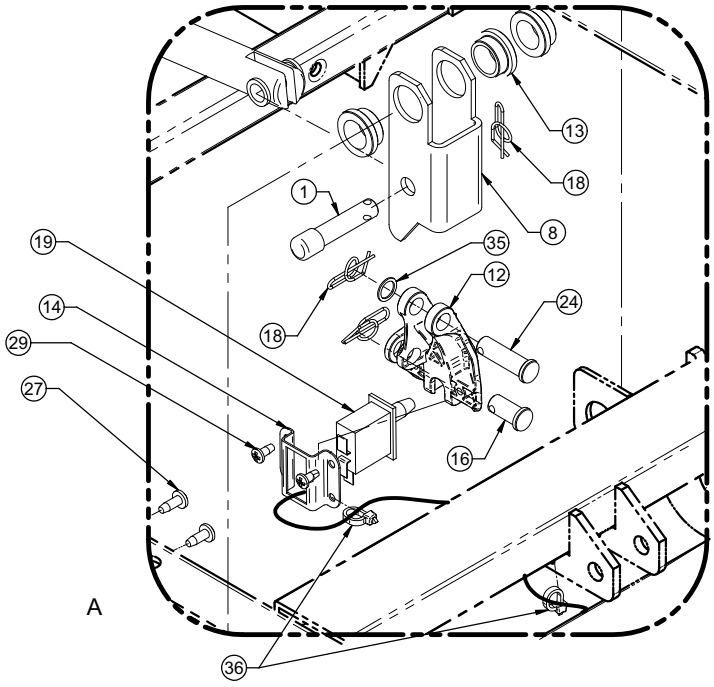
Item	Number	Name	Quantity
7	QP27-1009	Base cover, left	1
8	QP27-1087	Foot base cover	1
9	QP27-1093	Center base cover	1
10	QP27-1105	Head base cover	1
11	QP27-1461	Stopper in base	4
12	VV23A1G24HL	Tapping screw	4
13	VV83A9G16	Tapping screw	5
15	VVB4A1O24	Thread rolling bolt	4
16	VV84A1I16	Flanged hex head tapping screw	2

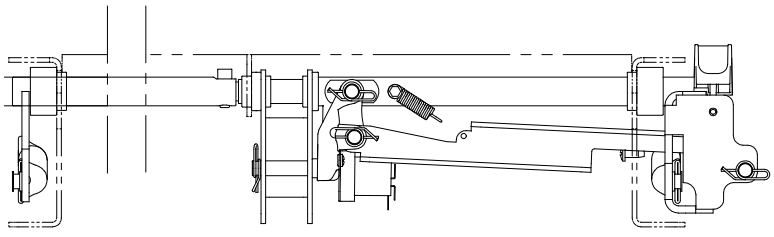
Base assembly, brake

L27-043 Rev AA (Reference only)







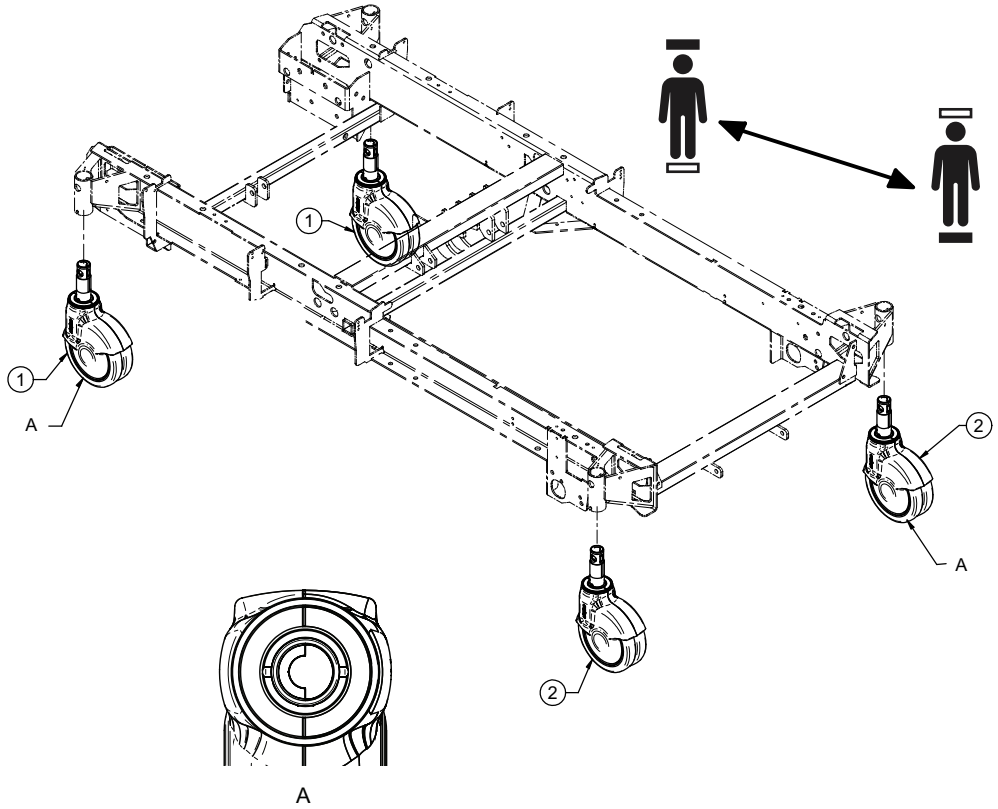


Item	Number	Name	Quantity
1	27-1402Z	Brake clevis pin	1
2	27-0772Z	Foot brake tube	2
3	27-0773Z	Head brake tube	2
4	27-2477	Angle sensor assembly	1
5	QP27-1255	Brake indicator	1

Item	Number	Name	Quantity
6	27-1336Z	Casters activation roller strike	4
7	27-1354	Brake bearing	2
8	27-1391Z	Brake actuator pivot	1
9	27-1405Z	Brake cross member, right	1
10	27-1406Z	Brake cross member, left	1
11	27-1411Z	Brake shift control stem	1
12	QPA27-1448	Brake trigger	1
13	27-1449	Braking bearing	3
14	27-1452Z	Microswitch bracket	1
15	VW10C202802	Washer	4
16	VG50A1224	Clevis pin	6
17	QDF27-1227	Brake actuator	1
18	QDF7878	Fastener pin	10
19	QDF9159	Cherry limit switch	1
20	27-2519P	Emergency pedal	1
21	QPA27-1335	Brake lever	4
22	QRE27-1844	Extension spring	1
23	VG50A1259	Clevis pin	1
24	VG50B1236	Clevis pin	1
25	VG50B1248	Clevis pin	1
26	VV10A0G16-S	Hexagon cylinder head	4
27	VV83A9G16	Tapping screw	9
28	VV10A1N24	Hexagon cylinder head	4
29	VV83A9E12	Tapping screw	2
30	27-1745Z	Head brake microswitch stop	2
31	27-1946Z	Potentiometer support	1
32	27-1948	Copper sleeve spacer	1
33	VE30A1N	Nylon locknut	4
34	VV10A1N24-S	Cylinder head hex screw	2
35	VW10C121601	Nylon washer	5
36	QDF9518	Cable tie	3
37	M0019	Grease	1
38	27-2935	Position sensor	1
39	VW10C081602	Nylon washer	1
40	QB2938T1	Sleeve	4

Base assembly, caster lock - Model 2131 only

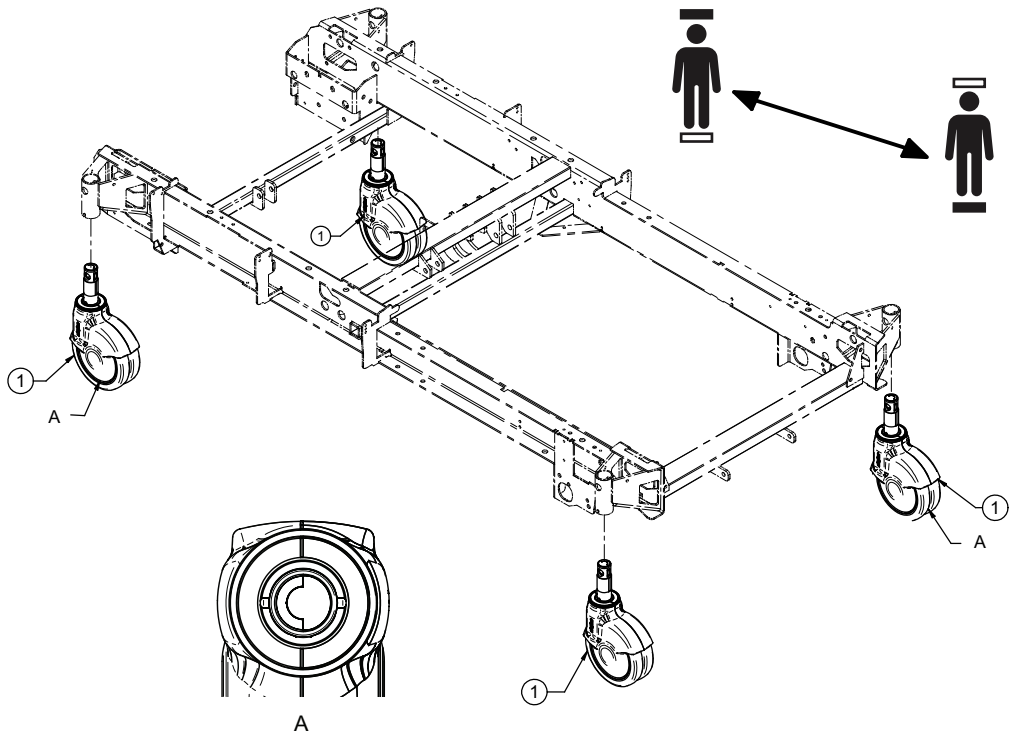
OL270006 Rev D (Reference only)



Item	Number	Name	Quantity
1	RD27-2787	5.5" caster brake/neutral/neutral	2
2	RD27-2788	5.5" caster brake/neutral/drive	2

Base assembly, caster non-lock - Model 2141 only

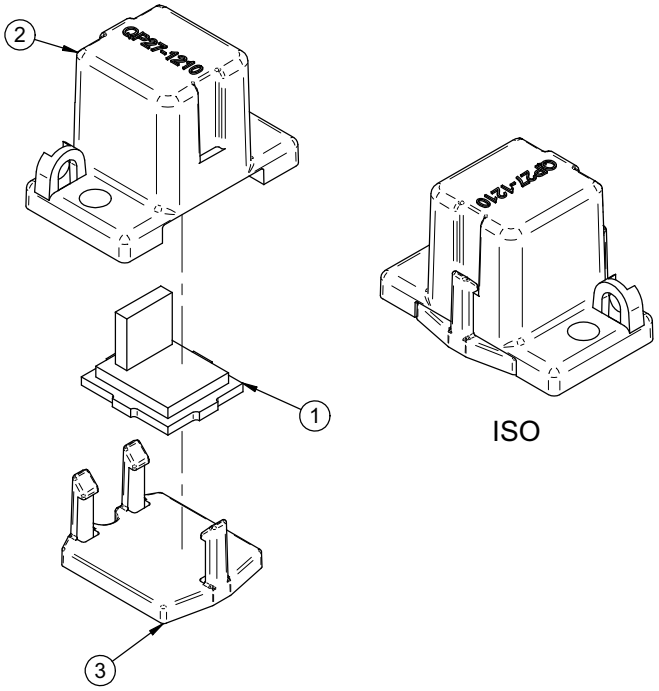
OL270005 Rev D (Reference only)



Item	Number	Name	Quantity
1	RD27-2787	5.5" caster brake/neutral/neutral	4

Angle sensor assembly

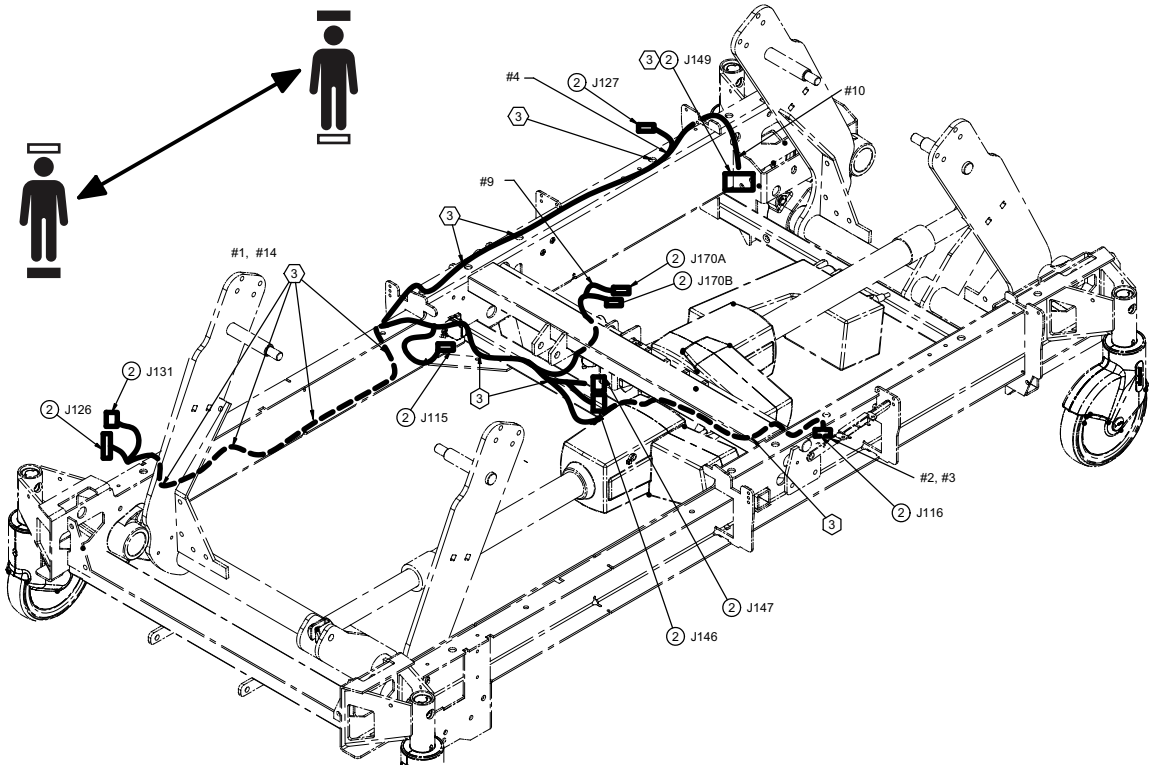
27-2477 Rev B (Reference only)

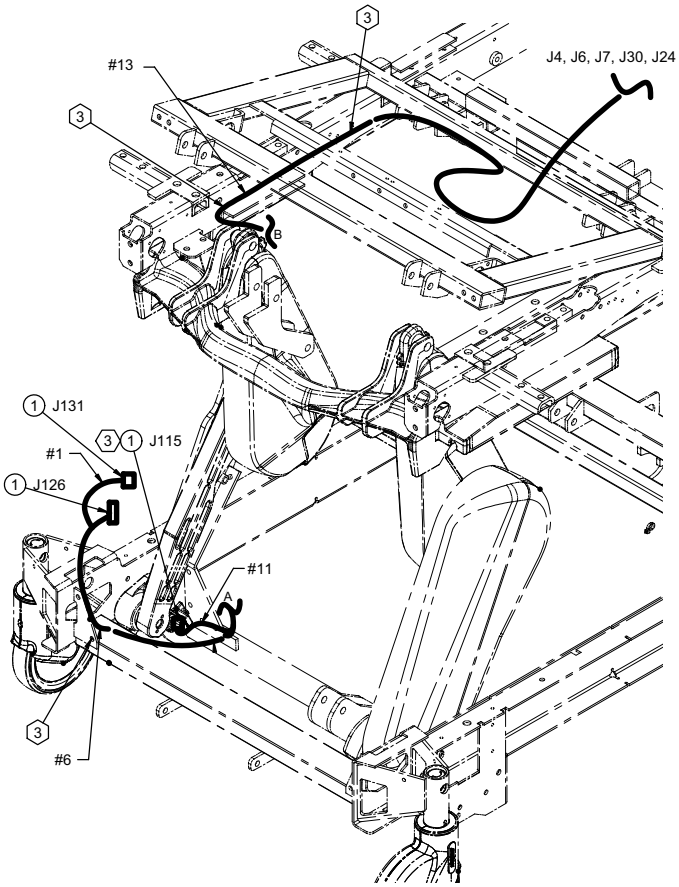


Item	Number	Name	Quantity
1	27-2913	Angle sensor	1
2	QP27-1210	Angle sensor case	1
3	QP27-1211	Bottom lid for tilt sensor	1

Base assembly, electrical

27-2687 Rev AA (Reference only)





Note - To avoid pinching when assembling these cables:

- Bed must be in high position
- Gatch must be at 15 degrees
- Foot litter must be at 45 degrees

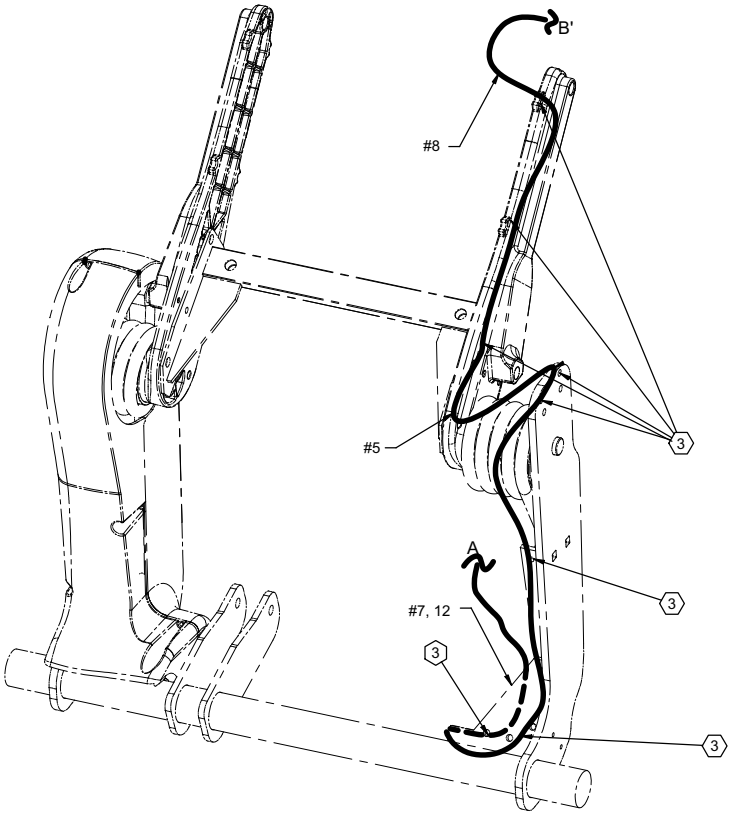


Photo #1

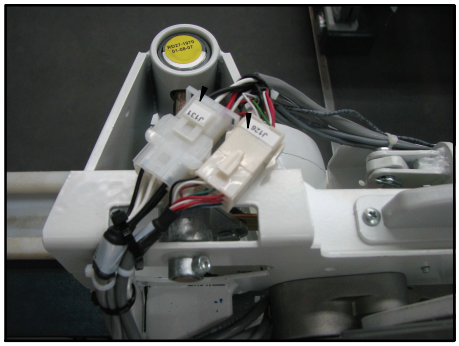


Photo #2

Photo #3

Photo #4

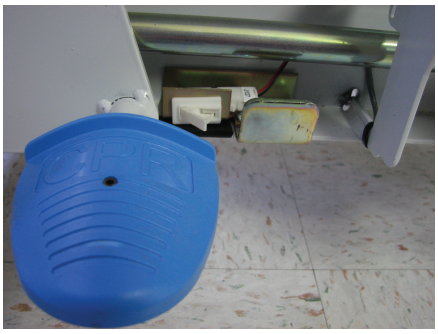


Photo #5

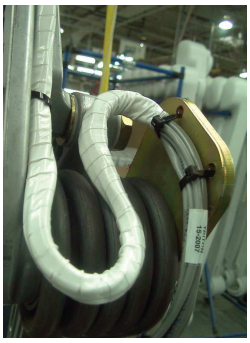


Photo #6

Photo #7

Photo #8

Photo #9

Photo #10

Photo #11

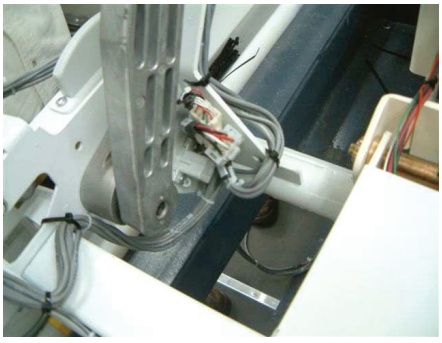


Photo #12

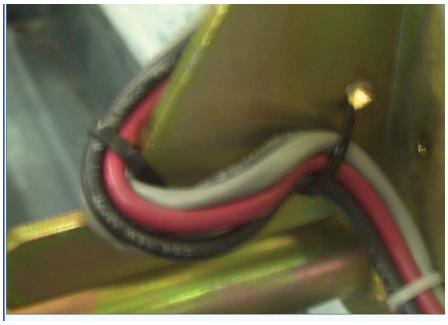


Photo #13

Photo #14

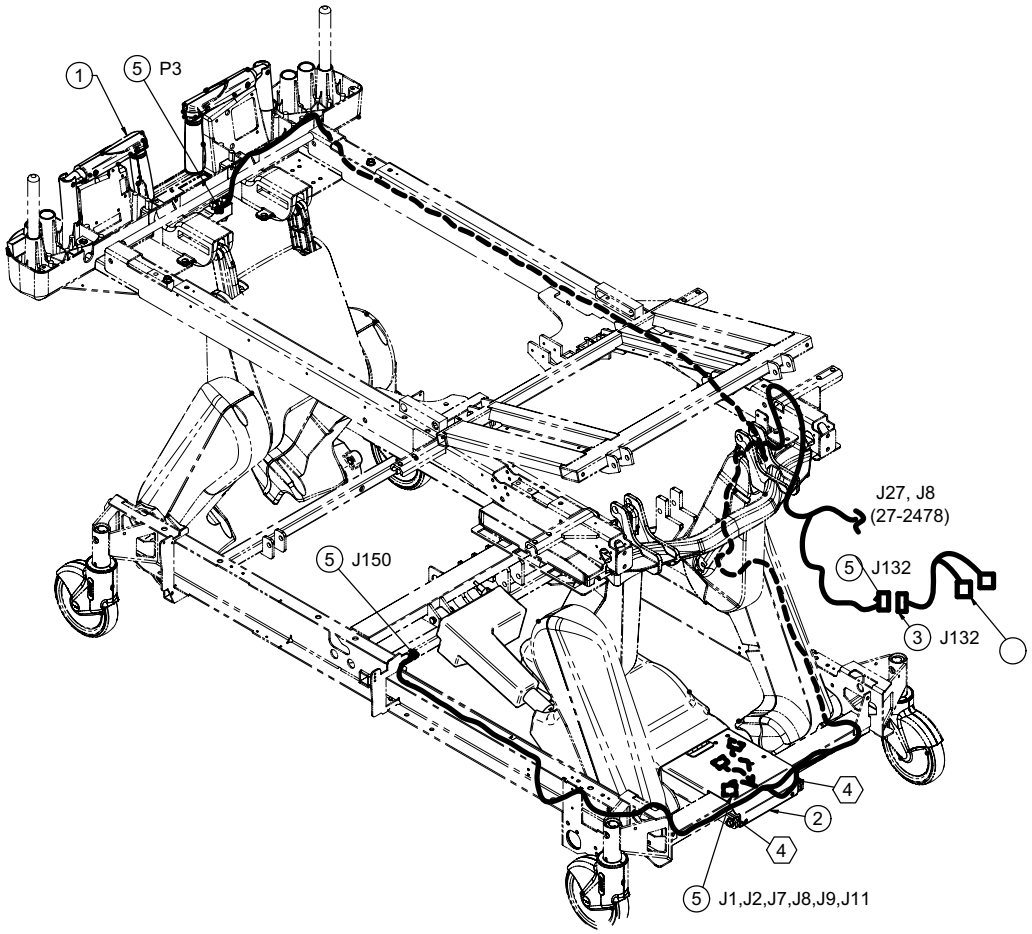
Cable 27-2936 connection table				
Cable number	Connector number	To	Cable number	Connector number
27-2936	J126	To	QDF27-1181	J126 Hi-lo harness
27-2936	J131	To	QDF27-1181	J131 Hi-lo harness
27-2936	J115	To	27-2477	Sensor base
27-2936	J127	To	QDF2083	CPR switch
27-2936	J116	To	27-2935	Brake potentiometer
27-2936	Bornes J170A	To	QDF9159	No manual switch
27-2936	Bornes J170B	To	QDF9159	COM manual switch
27-2936	J146	To	QDF27-1252	Hi-lo head motor
27-2936	J147	To	QDF27-1251	Hi-lo foot motor
27-2936	J149	To	QDF27-1227	Brake motor

Cable QDF27-2181 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2181	J126	To	27-2936	J126 Hi-lo harness
QDF27-2181	J131	To	27-2936	J131 Hi-lo harness
QDF27-2181	J115	To	27-2477	Sensor base
QDF27-2181	J7	To	QDF75-0440	J7 DC Control Board
QDF27-2181	J6	To	QDF75-0440	J6 DC Control Board
QDF27-2181	J4	To	QDF75-0440	J4 DC Control Board
QDF27-2181	J30	To	QDF75-0440	J30 DC Control Board
QDF27-2181	J24	To	QDF75-0440	J24 DC Control Board

Item	Number	Name	Quantity
1	QDF27-2181	Wires Harness #2	1
2	27-2936	Base Structure Extender	1
3	QDF9518	Wire Tie	51
4	QDF9523	Wire Tie	2

Base assembly, Zoom drive

OL270232 Rev C (Reference only)



Cable QDF27-1646 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1646	Mini fit	To	QDF27-1185	J132
QDF27-1646	Black eyelets	To	QDF9188	BAT #2 pole
QDF27-1646	White eyelets	To	QDF9188	BAT #2 pole

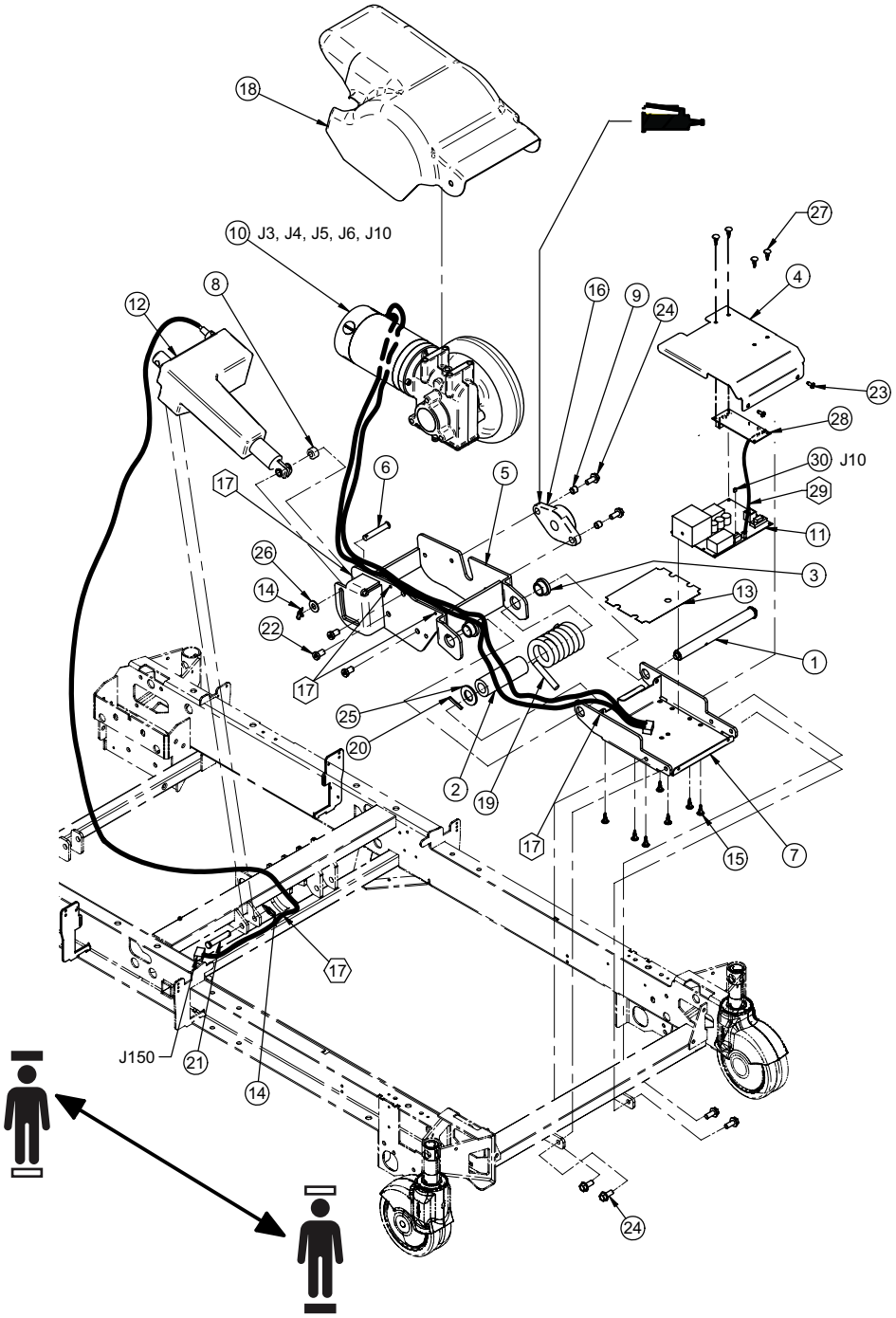
Cable QDF27-1185 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1185	J27	To	QDF21-1174	DC card J27
QDF27-1185	J8	To	QDF21-1174	DC card J8
QDF27-1185	J132	To	QDF27-1646	Mini fit
QDF27-1185	P3	To	QDF27-1430	P3 (27-2547-XXX)
QDF27-1185	J150	To	QDF27-1445	**Zoom** (27-2546)
QDF27-1185	J1	To	QDF27-2548	J1 (27-2546)
QDF27-1185	J9	To	QDF27-2548	J9 (27-2546)

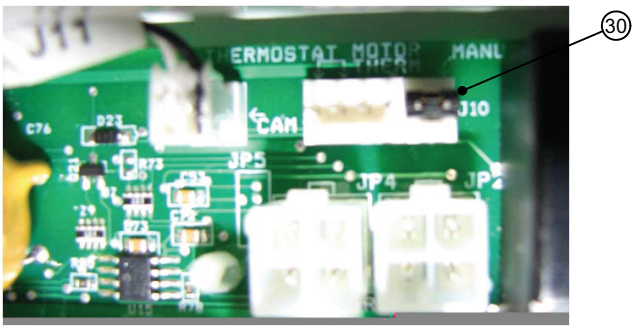
Cable QDF27-1185 connection table				
QDF27-1185	J2	To	QDF27-2548	J2 (27-2546)
QDF27-1185	J8	To	QDF27-2548	J8 (27-2546)
QDF27-1185	J7	To	QDF75-0240	J7
QDF27-1185	J11	To	QDF75-0240	J11

Item	Number	Name	Quantity
1	27-2547	**Zoom** handle assembly	1
2	27-2546	**Zoom** drive base assembly	1
3	QDF27-1646	Battery wire	1
4	QDF9518	Cable attachment	1
5	QDF27-1185	Wire harness	1

Base assembly, Zoom drive - Model 2141 only

27-2546 Rev 02 (Reference only)





Actuator connection QDF27-1445 table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1445	2-positions con.	To	QDF27-1185	J150 (OL270002)

Motor reducer connection 27-2593 table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2523	Red 2-positions con.	To	QDF27-1430	J3, J4
QDF27-2523	Black 2-positions.cCon.	To	QDF27-1430	J5, J6 (CSI 1109)
QDF27-2523	4-positions MTA	To	QDF27-1430	J10 (CSI 1109)

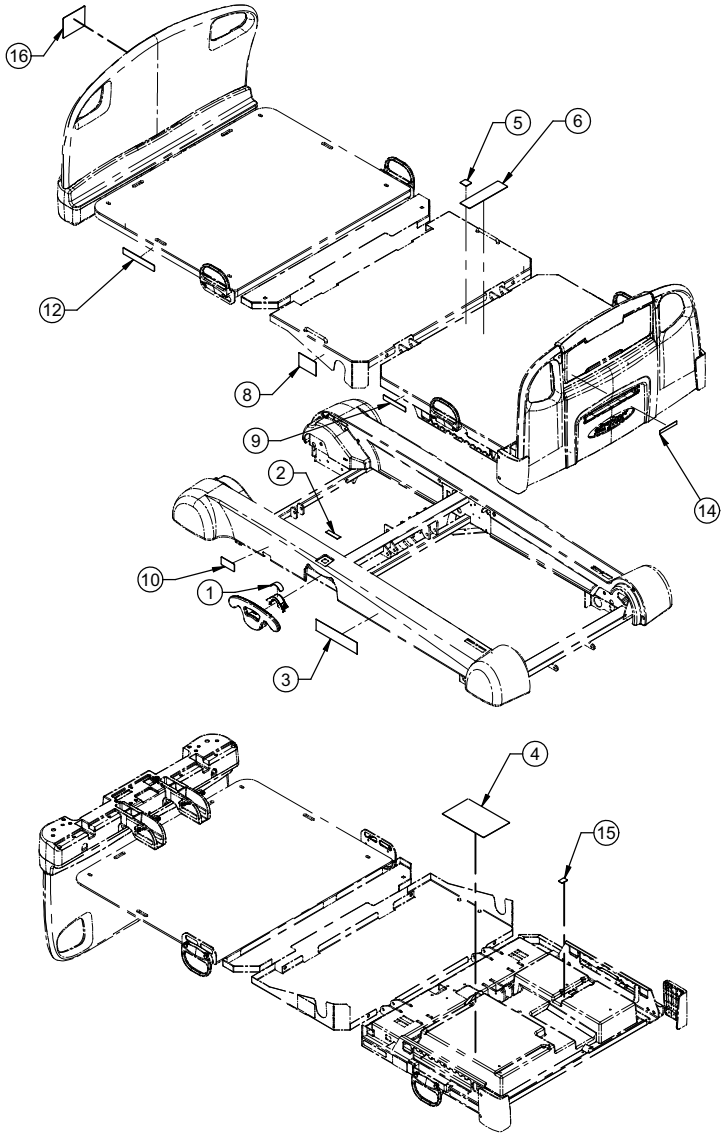
Cable connections 27-2542 table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2542	J7, 18-position mini fit	To	QDF27-1430	J7 (CSI 1109)
QDF27-2542	J11, 2-positions MTA	To	QDF27-1430	J11 (CSI 1109)
QDF27-2542	J7A, 9-positions MTA	To	QDF75-0240	J7A, 9-positions MTA
QDF27-2542	J11A, 3-positions MTA	To	QDF75-0240	J11A, 3-positions MTA

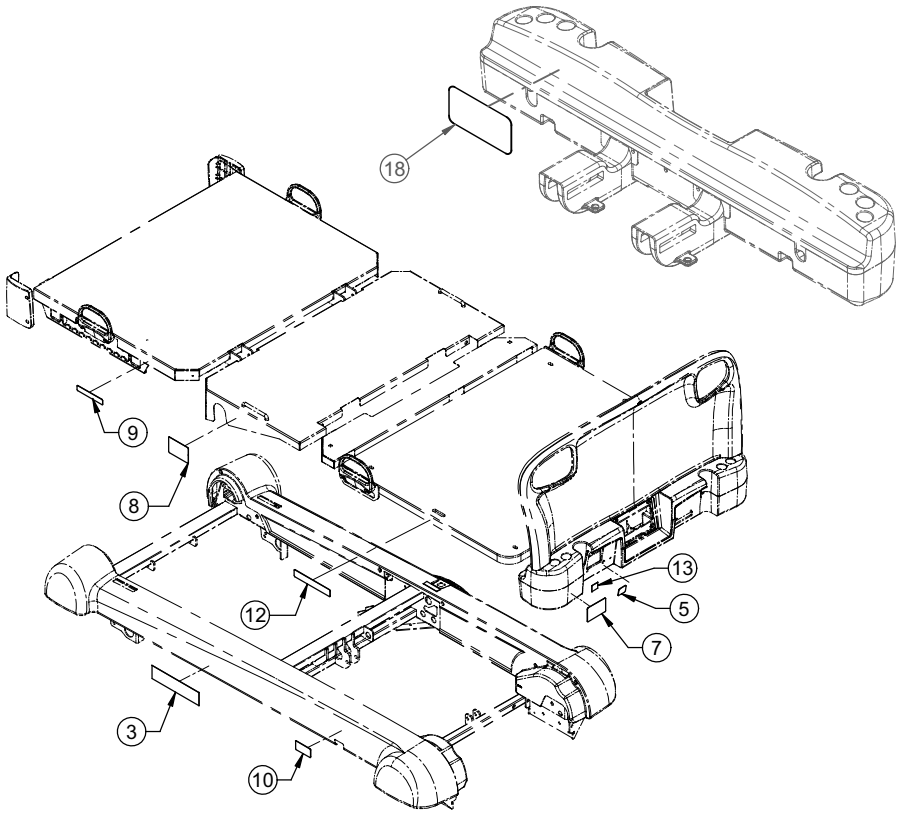
Item	Number	Name	Quantity
1	27-0804Z	Fifth wheel long shaft	1
2	QP27-2556	Motorized fifth wheel spring pivot	1
3	27-0915	Fifth wheel thread spacer	2
4	27-2545P	CSI 1109 box cover	1
5	27-1059P	Motorized wheel structure	1
6	27-1138	Fifth wheel actuator axis	1
7	27-1140P	Fifth wheel structure box	1
8	27-1150	Fifth wheel actuator spacer	1
9	27-1636	Motorized fifth wheel sleeve	2
10	27-2593	Fifth wheel	1
11	QDF27-1430	CSI 1109 **Zoom** board	1
12	QDF27-1445	Fifth wheel actuator	1
13	QE71-1019	Fifth wheel board protector	1
14	QDF7878	Clevis pin	2
15	QDF8011	Board support	7
16	QDF9162	Fifth wheel flange bearing	1
17	QDF9518	Cable tie	5
18	QP27-1916	Motorized wheel cover	1
19	QRT27-0796	Fifth wheel torsion spring	1
20	VG10B0636	Spring pin	1
21	VG50B1248	Clevis pin diameter	1
22	VV10A1P20-S	Cylindric head screw	3
23	VV83A9G16	Pan head tapping screw	2
24	VVB4A1024	Thread rolling bolt	6

Item	Number	Name	Quantity
25	VW10B264004	Steel washer	1
26	VW10C122802	Nylon washer	1
27	QDF2134	Board support	4
28	QDF75-0240	**Zoom** interface board	1
29	QDF27-2542	**Zoom** interface board harness	1
30	QDF8047	Jumper	1

Bed labeling

OL270016-XXX Rev P (Reference only)

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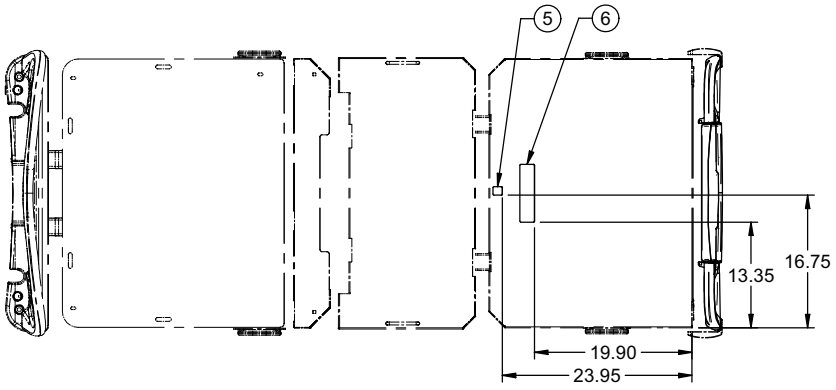
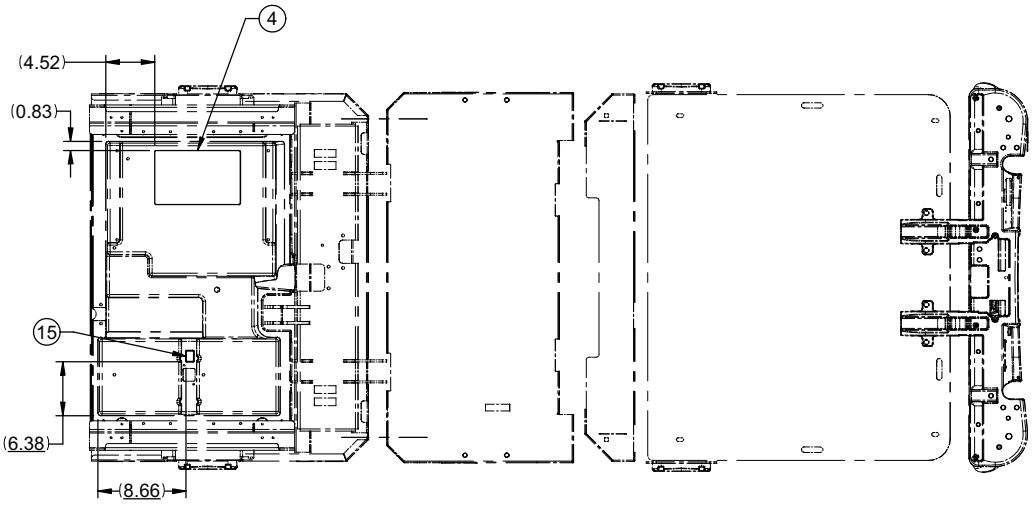
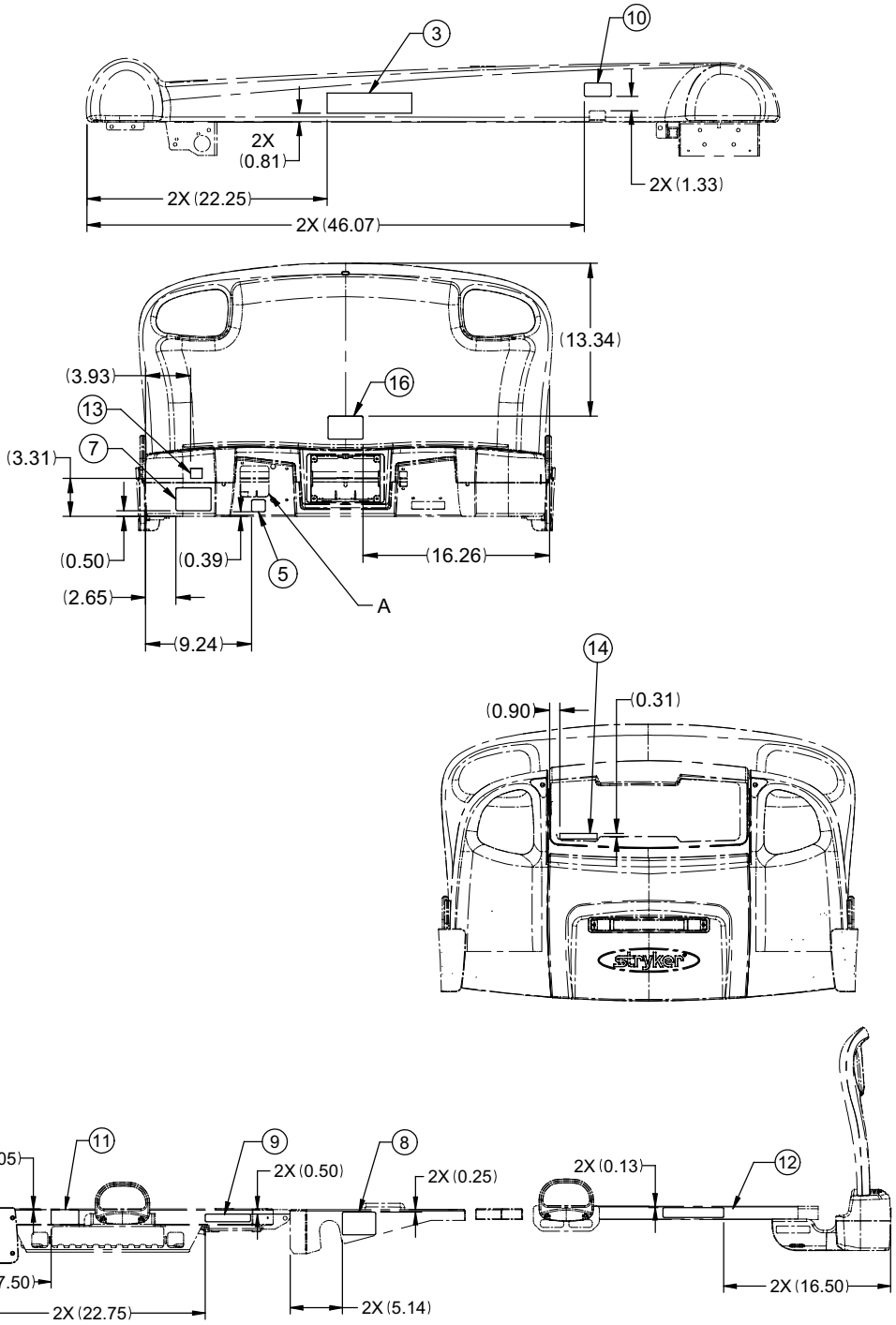
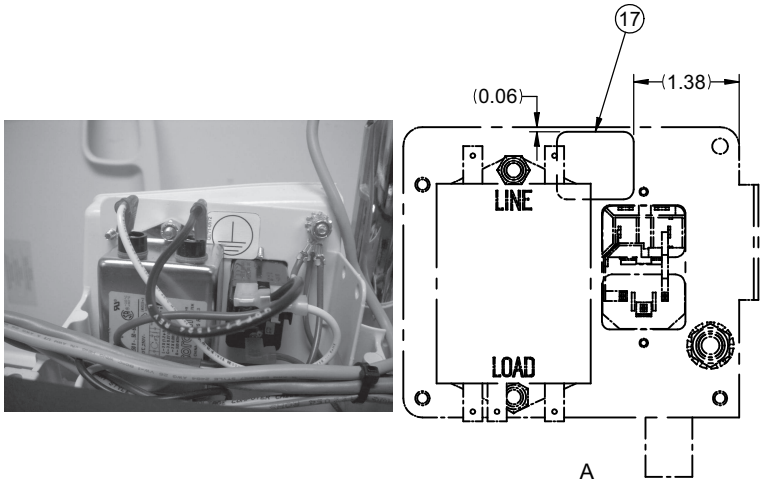

5
6
13.35
16.75
19.90
23.95


4
(4.52)
(0.83)
15
(6.38)
(8.66)


3
10
2X
(0.81)
2X (1.33)
2X (22.25)
2X (46.07)
(13.34)
(3.93)
16
13
7
(3.31)
(0.50)
(0.39)
5
(16.26)
(2.65)
A
(9.24)
14
(0.90)
(0.31)
stryker
11
9
8
(0.05)
2X (0.50)
2X (0.25)
2X (0.13)
12
(7.50)
2X (22.75)
2X (5.14)
2X (16.50)

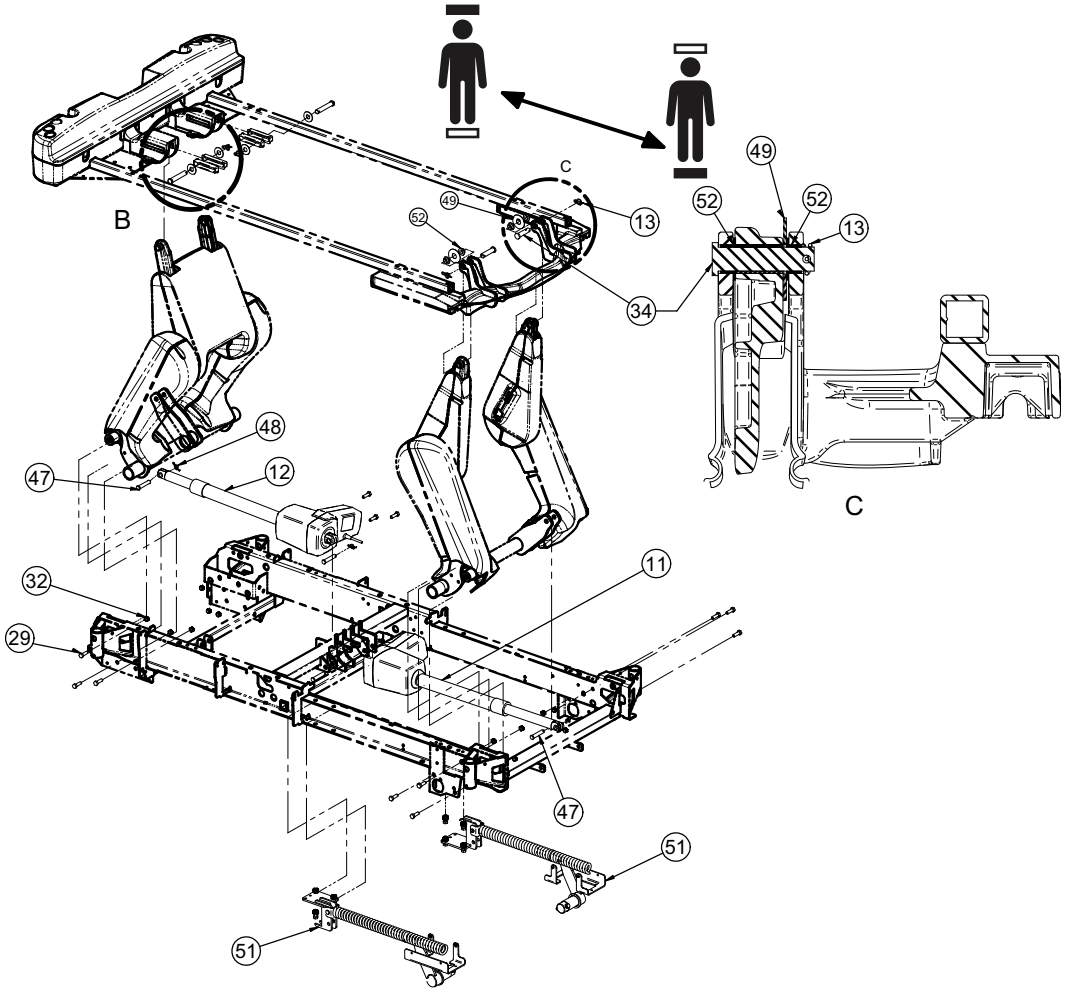


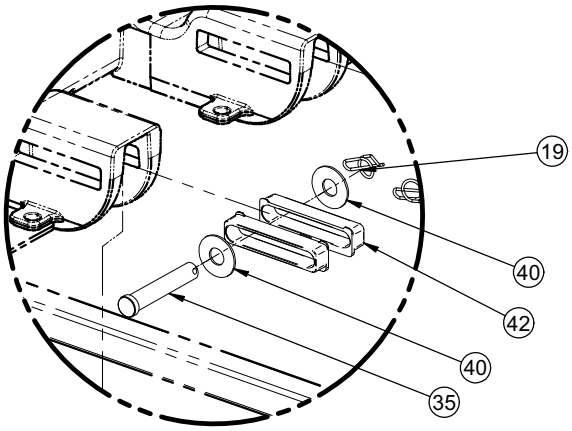
Note - XXX: indicates language choice (tri - English/French/Spanish; bil - English/French

Item	Number	Name	Quantity
1	QDF27-1256-XXX	Label, brake pedal	1
2	QE71-0947-XXX	Label, Manual backup	1
3	QE71-1046	Label, Stryker	2
4	QE14400	Label, Result of isolation room	1
5	QE18545	Label, Reference customer manual	2
6	QE71-1207-XXX	Label, Electric shock hazard	1
7	QE71-0943-XXX	Label, Grounding reliability	1
8	QE71-0944-XXX	Label, Oxygen tent	2
9	QE71-0949-XXX	Label, Maximum mattress thickness	2
10	QE71-0963-XXX	Label, CPR	2
12	QE71-1010	Label, 550 lb safe working load	2
13	QE71-0571	Label, Fuse 10a 250v	1
14	QE71-1094-XXX	Label, Patent pending	1
15	QE71-1042-XXX	Label, On-off	1
16	QE71-1257-XXX	Label, Orientation	1
17	QE71-0572	Label, Ground	1
18	QE71-1368	Label, CSA	1

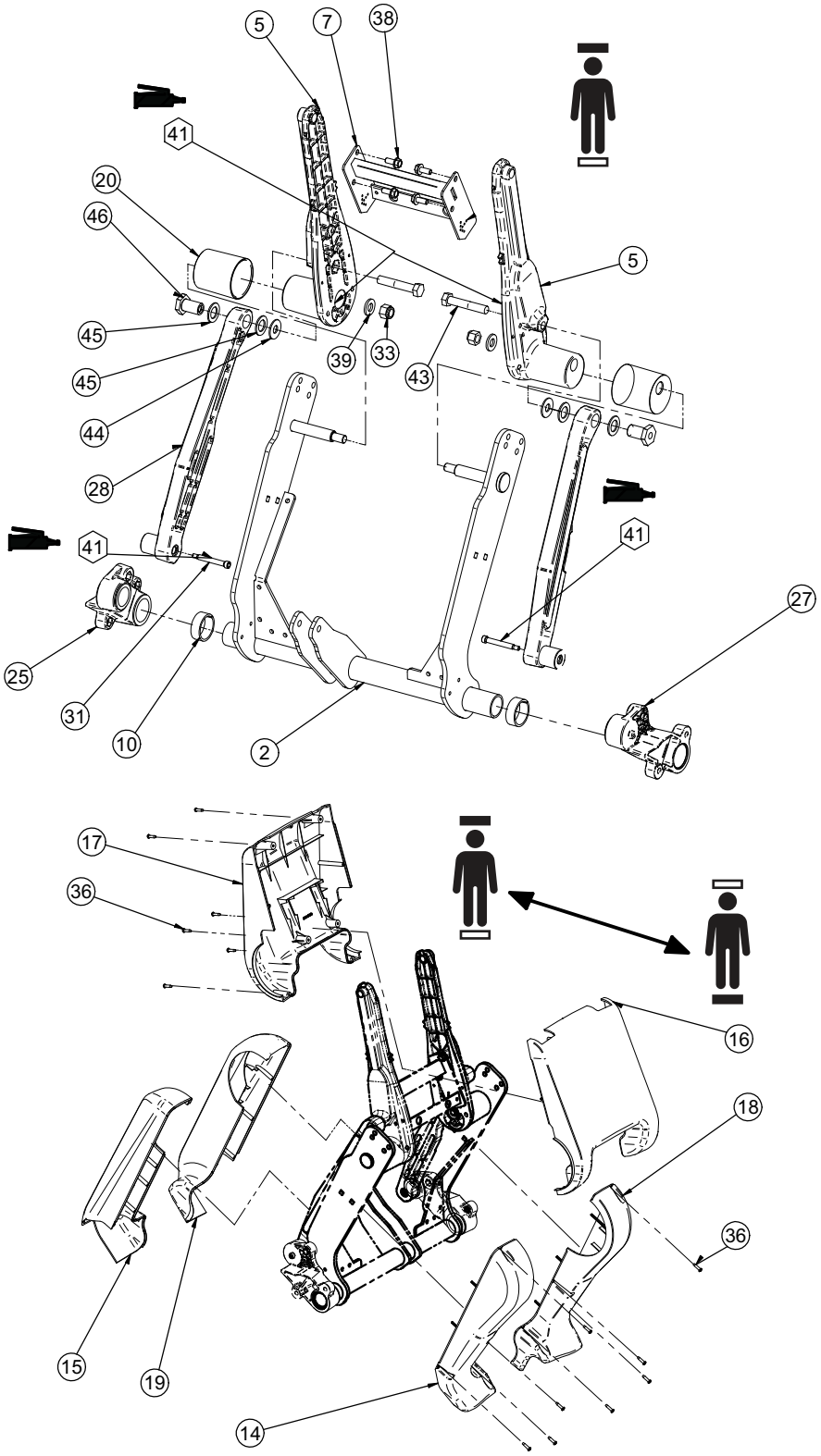
Lift assembly

L27-044 Rev C (Reference only)





B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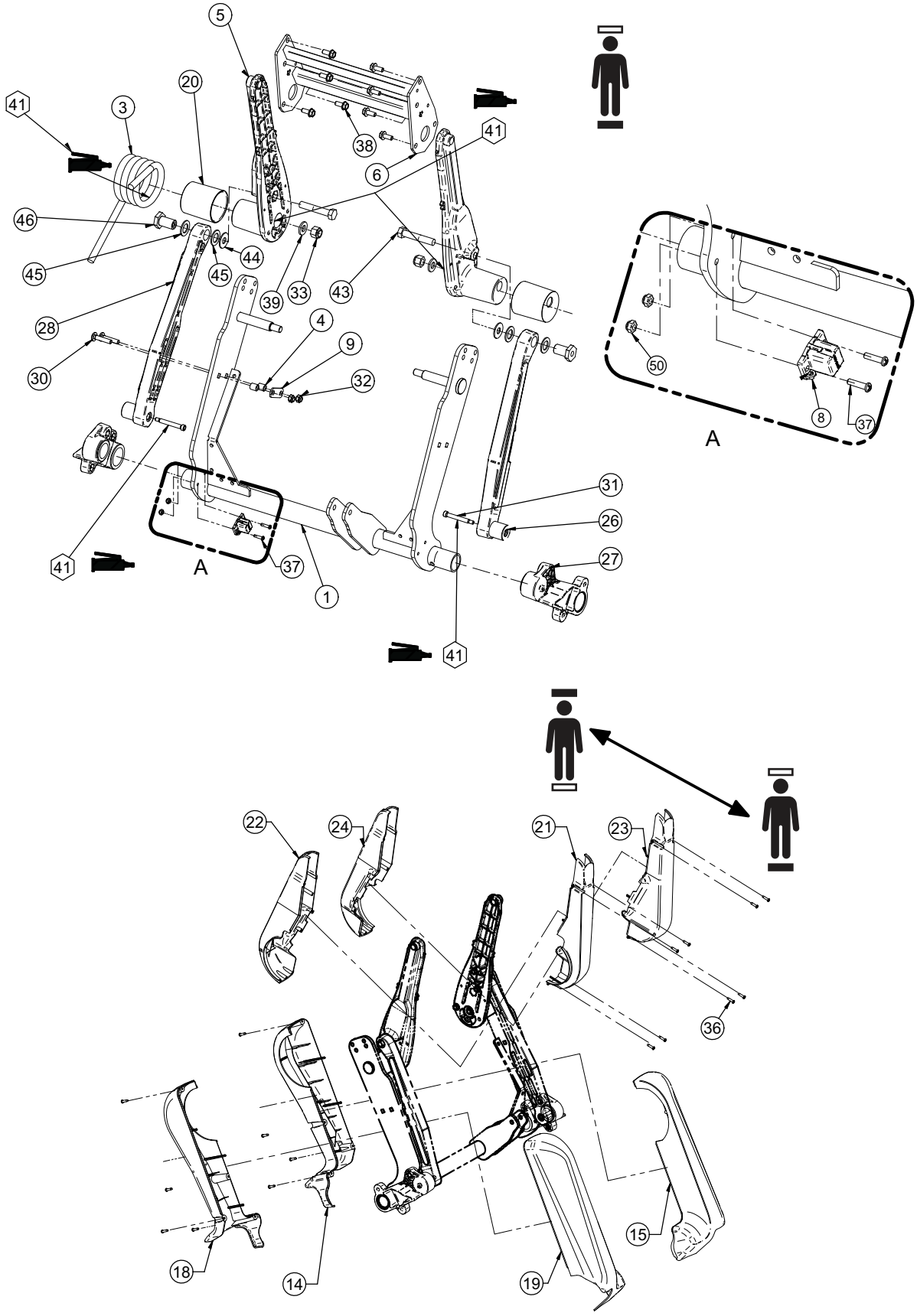


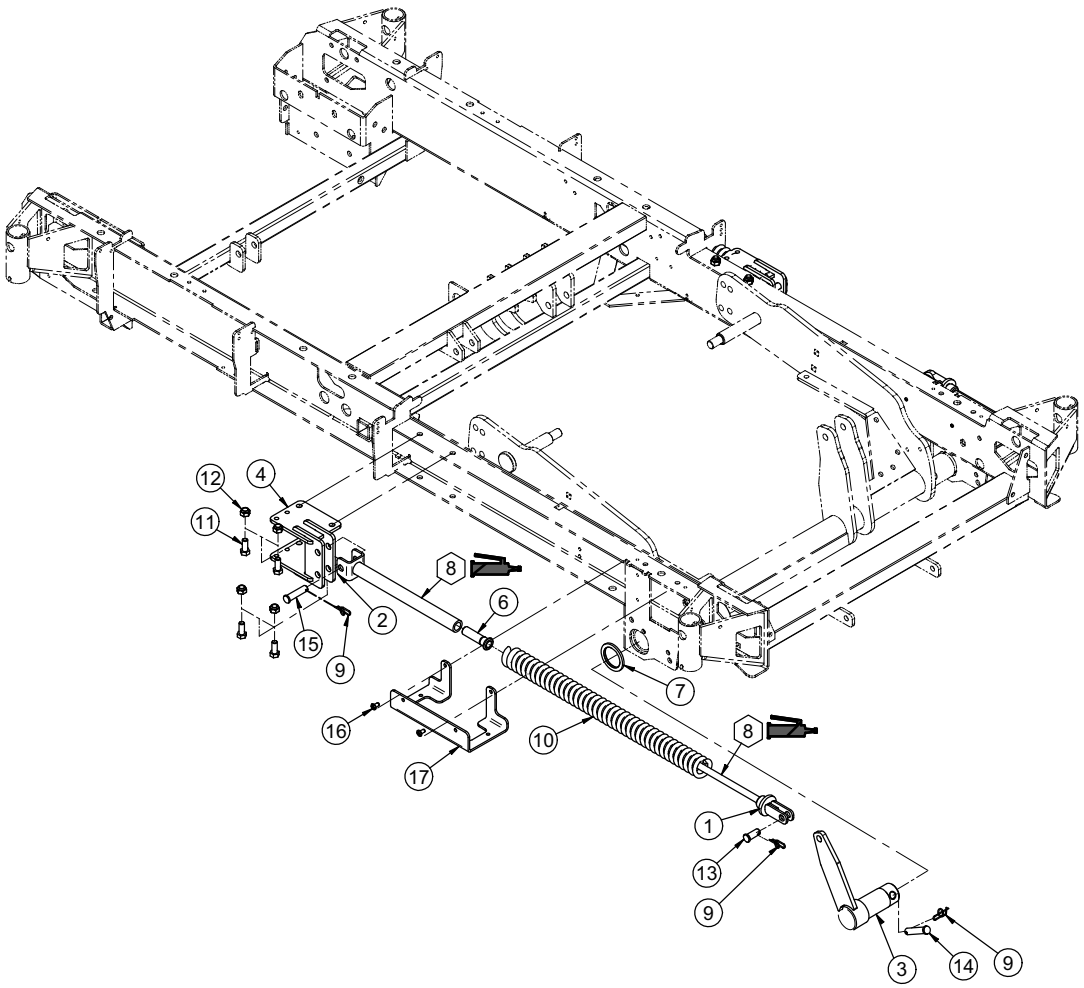
Item	Number	Name	Quantity
1	27-0992W	Foot main lift	1
2	27-0993W	Head main lift	1

Item	Number	Name	Quantity
3	QRT27-1011	Bed lift system right spring	1
4	27-1012	Spring stop	2
5	QPA27-1013	Molded bed lift system arm	4
6	27-1977W	Foot reinforcement	1
7	27-1089W	Head transverse reinforcement	1
8	27-2477	Angle sensor assembly	1
9	27-1243Z	Spring retention plate	1
10	27-1623	Lift spacer	2
11	QDF27-1251	Foot lift actuator	1
12	QDF27-1252	Head lift actuator	1
13	QDF7899	Hitch pin diameter 1/2"	4
14	QP27-0982-10	Exterior right low lift cover	2
15	QP27-0983-10	Interior right low lift cover	2
16	QP27-0984-10	Interior head high lift cover	1
17	QP27-0985-10	Exterior head high lift cover	1
18	QP27-0986-10	Exterior left low lift cover	2
19	QP27-0987-10	Interior left low lift cover	2
20	QP27-1065	Spring sleeve	4
21	QP27-1236-10	Exterior right foot high lift cover	1
22	QP27-1237-10	Interior right foot high lift cover	1
23	QP27-1238-10	Exterior left foot high lift cover	1
24	QP27-1239-10	Interior left foot high lift cover	1
25	QPA27-1024	Right lever support	2
26	QPA27-1030	Right stiffener arm	2
27	QPA27-1036	Left lever support	2
28	QPA27-1040	Left stiffener arm	2
29	VB18A1O32	Bolt	12
30	VB35A1O40	Carriage bolt	2
31	VD60B1O48	Shoulder screw	4
32	VE30A1O	Nylon locknut	14
33	VE30A1R	Nylon locknut diameter	4
34	VG50A1648	Clevis pin diameter	2
35	VG50A1654	Clevis pin diameter	2
36	VV23A1G24HL	Pan head tapping screw	32
37	VV33A0G24	Pan head tapping screw	2
38	VVB4A1024	Thread rolling bolt	12
39	VW10A173308	Flat washer	4
40	VW10C173602	Nylon washer	4
41	M0019	Grease	1
42	QP27-1830-01	Glider	4
43	VB18A1R54-S	Hexagon bolt	4
44	27-2022Z	Stiffener arm steel washer	4
45	QP27-2019	Stiffener arm acetal washer	8
46	27-2018Z	Stiffener arm bearing	4
47	27-2053Z	Clevis pin diameter	4

Item	Number	Name	Quantity
48	QDF7878	Hitch pin diameter	4
49	VW10C432002	Nylon washer	2
50	VE30A0G	Nylon locknut	2
51	27-2117	Spring in base	1
52	QDF2100	Round	4

Spring assembly

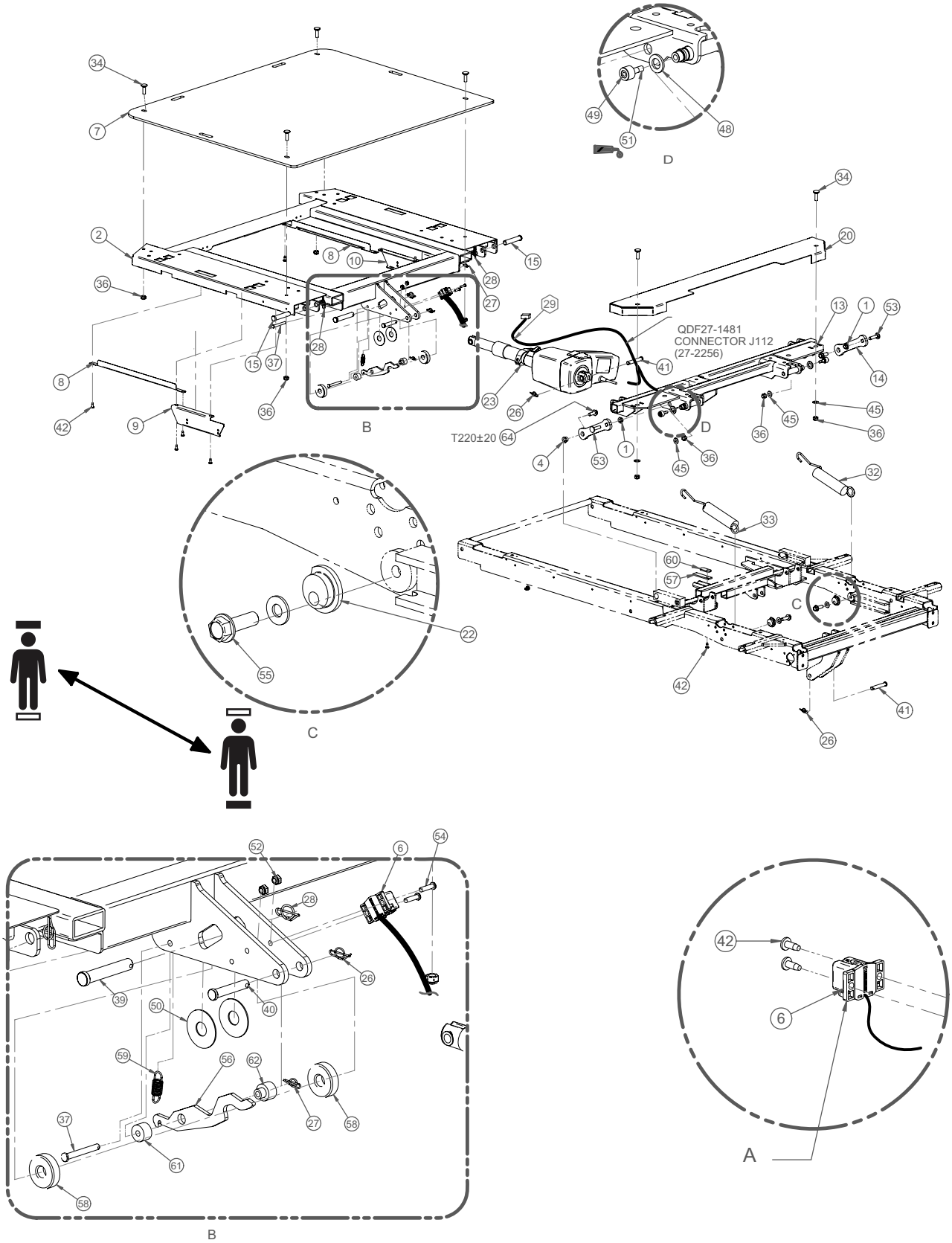
27-2117 Rev 06 (Reference only)

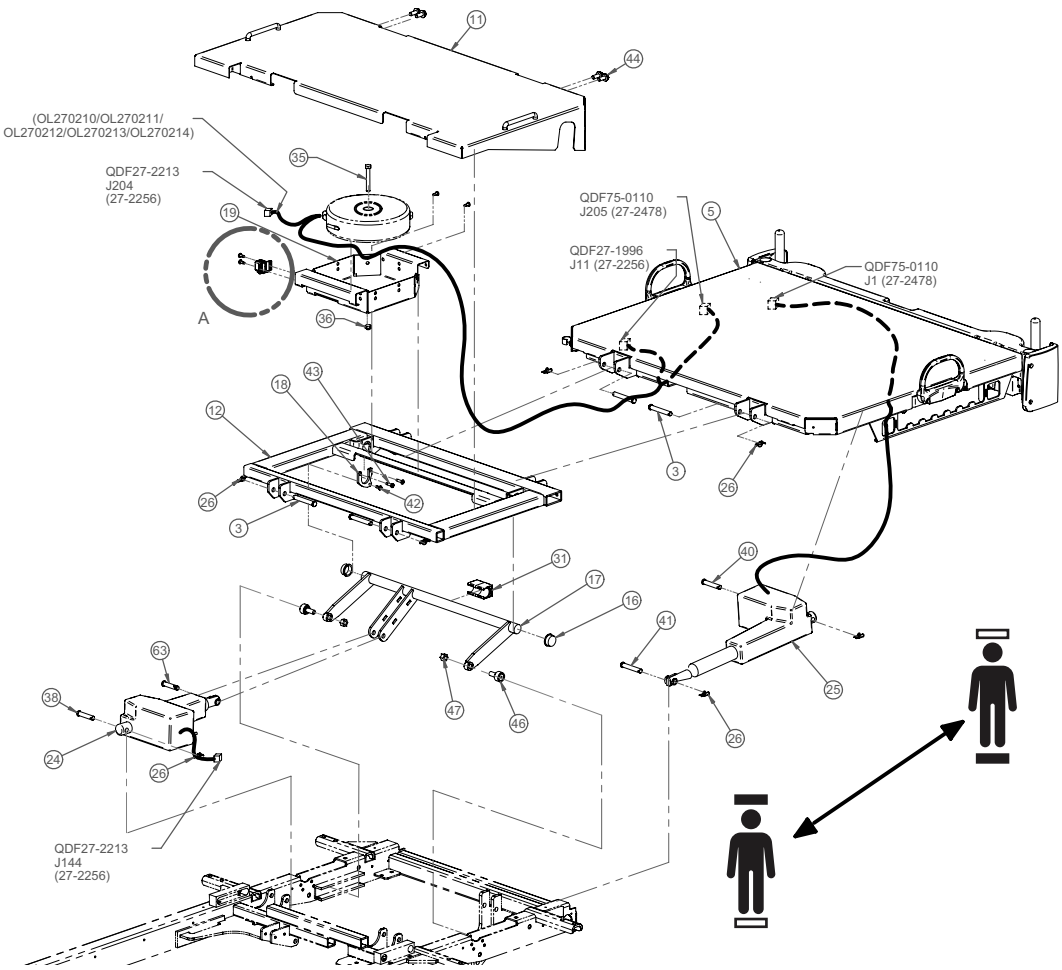


Item	Number	Name	Quantity
1	27-2096P	Hi-lo spring support	2
2	27-2099P	Hi-lo spring support tube	2
3	27-2102P	Spring tie	2
4	27-2107P	Spring support assembly	2
6	27-2115	Hi-lo spring support glider	2
7	27-2116	Acetal washer	2
8	M0019	Grease	1
9	QDF7878	Clevis pin diameter	6
10	QRC27-2114	Base compression spring	2
11	VB15A1O24	Bolt	8
12	VE30A1O	Nylon locknut	8
13	VG50A1228	Clevis pin	2
14	VG50A1244	Clevis pin	2
15	VG50A1240	Clevis pin	2
16	VV83A9G12	Phillips head tapping screw	4
17	27-2139P	Base wire routing	2

Litter assembly

L27-056 Rev E (Reference only)



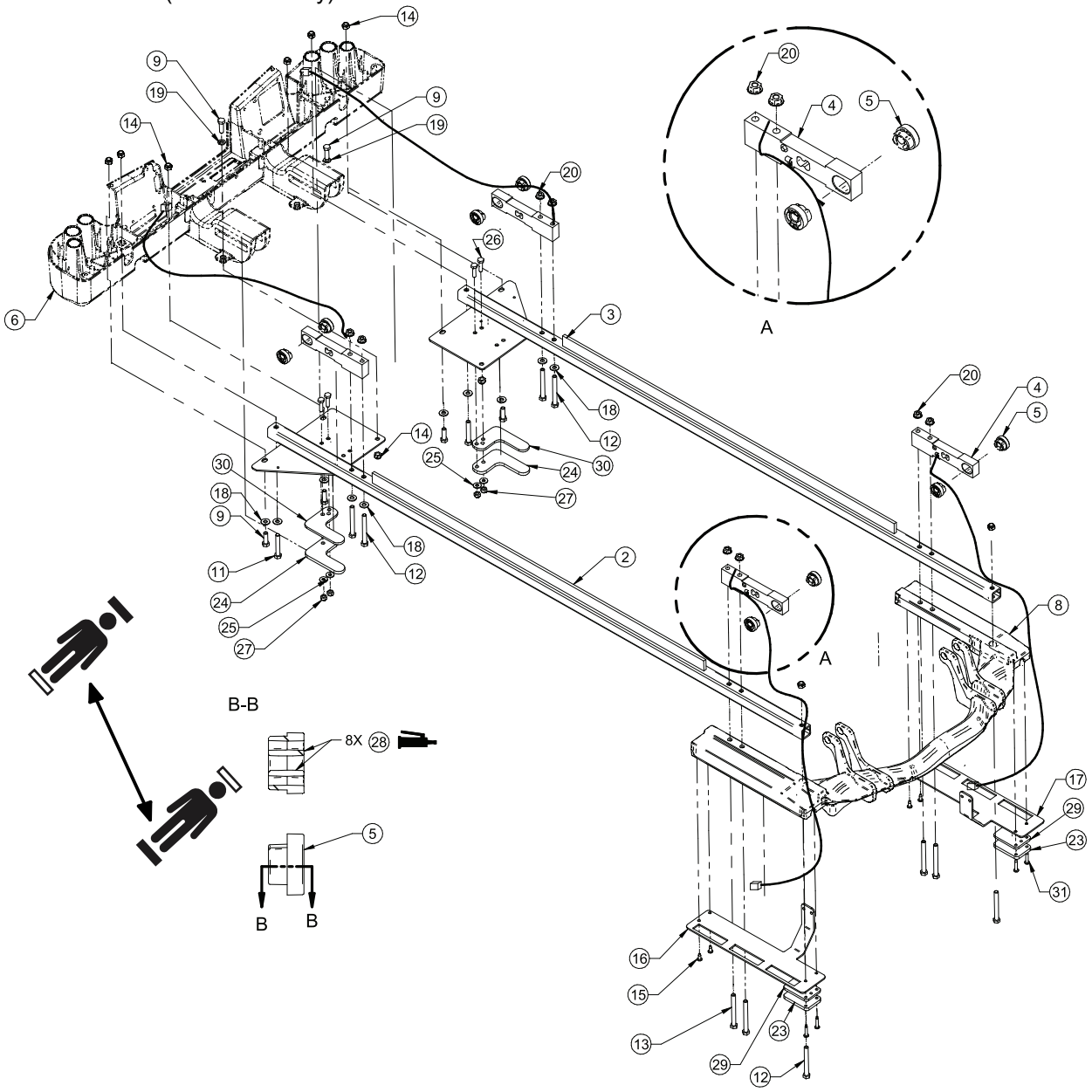


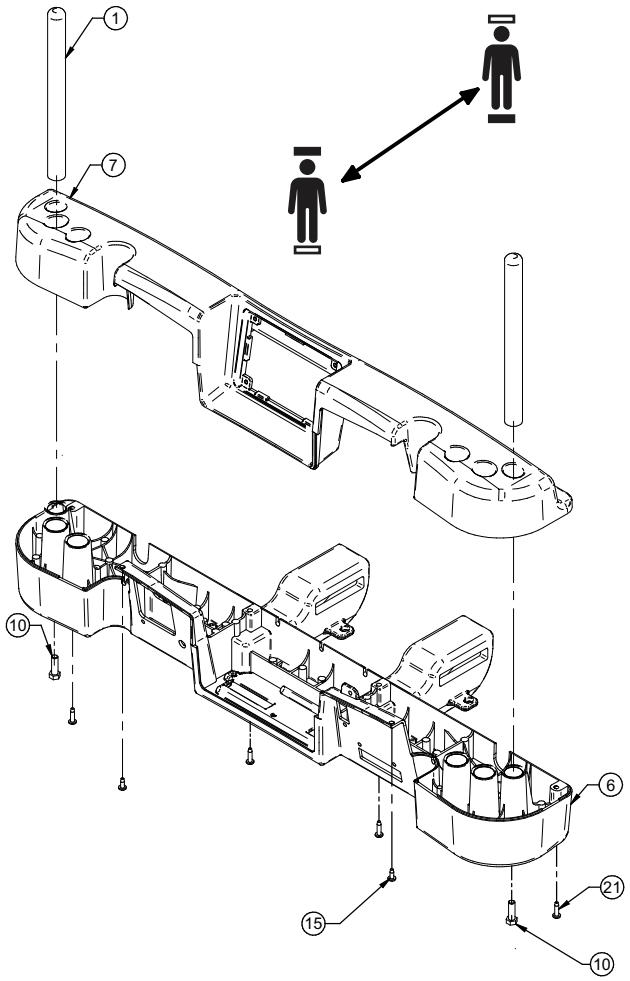
Item	Number	Name	Quantity
1	21-3613	5/16" sleeve for 3/16	2
2	27-2269P	Fowler S.A.	1
3	27-0485	Clevis pin	4
4	27-0919	5/16" sleeve for 5/16	2
5	27-2688	Bolted foot litter	1
6	27-2477	Angle sensor assembly	2
7	QDF27-1397	Fowler	1
8	27-1634P	Cable protector	2
9	27-1652P	Right cable protector	1
10	27-1667P	Left cable protector	1
11	27-1825P	Welded center section cover	1
12	27-1862P	Gatch	1
13	27-1888P	Intermediary Fowler	1
14	27-1919Z	Lever arm	2
15	27-1920	Clevis pin	2
16	27-1925	Gatch bushing	2
17	27-1932Z	Gatch pivot	1
18	27-1935Z	Upper pivot support	1
19	27-1940P	Transformer box	1
20	27-1973P	Intermediary section cover	1
22	27-2141	Unbalanced spring support rod	2

Item	Number	Name	Quantity
23	QDF27-1214	Fowler actuator	1
24	QDF27-1215	Gatch actuator	1
25	QDF27-1216	Foot actuator	1
26	QDF7878	Cotter pin	9
27	QDF7898	Cotter pin	2
28	QDF7899	Cotter pin	3
29	QDF9518	Cable tie	1
31	QP27-1958	Gatch pivot stopper	1
32	QRT27-2020	Torsion spring	1
33	QRT27-2026	Right upper frame spring base rod	1
34	VB35A1O32	Carriage bolt	6
35	VB15A1O50	Carriage bolt	1
36	VE30A1O	Nylon locknut 5/16-18	9
37	VG50A0848	Clevis pin	2
38	VG50A1244	Clevis pin	1
39	VG50A1654	Clevis	1
40	VG50B1248	Clevis pin	2
41	VG50A1250	Clevis pin	2
42	VV83A9G16	Phillips screw	14
43	VV83A9G24	Phillips screw	2
44	VVB4A1O24	Thread rolling bolt	4
45	VW10A10	Flat washer	6
46	QDF2098	Cam follower	2
47	VE59A0P	Nylon locknut 3/8-24	2
48	27-2063	Intermediary pivot washer	2
49	QDF2110	Needle bearing	2
50	VW10C432002	Nylon washer	2
51	M0008	Threadlocker (blue)	-
52	VE30A0G	Nylon locknut	2
53	VB35A1O36	Carriage bolt	2
54	VV33A0G24	Phillips screw	2
55	VVB4A1O32	Hex head thread rolling bolt	2
56	27-2223Z	Finger	1
57	27-2217	PVC slide	1
58	27-2227	Bushing latch finger	2
59	QRE27-2218	Finger bracket spring	1
60	27-2219Z	Plate of tightening	1
61	27-2221	Female bushing latch finger	1
62	27-2220	Male bushing latch finger	1
63	QDF2132	Clevis pin	1
64	VVB4A1O28	Thread rolling bolt	2

Litter assembly, interior frame

L27-055 Rev D (Reference only)



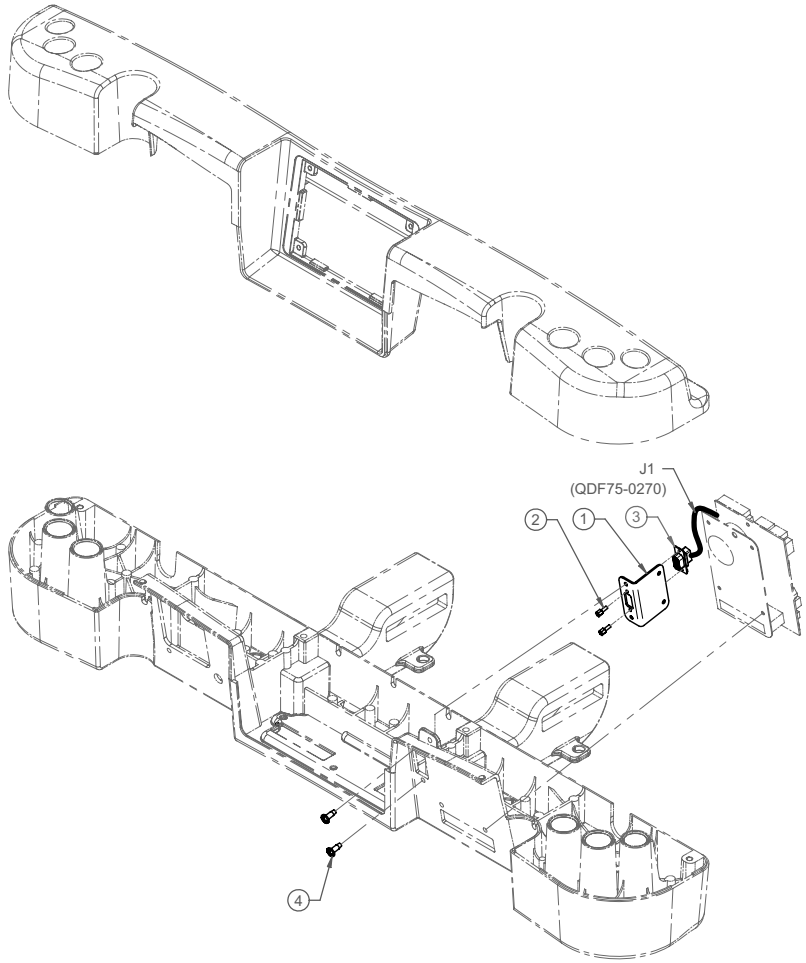


Item	Number	Name	Quantity
1	27-1180C	Headboard anchoring	2
2	27-1310P	Right lower frame support	1
3	27-1368P	Left lower frame support	1
4	QDF27-1372	Symmetrical load cell	4
5	QP27-1469	Elastimer sleeve	8
6	QPA27-1290	Head chassis	1
7	QPA27-1291	Frame head cover	1
8	27-1426P	Foot frame support	1
9	VB15A1O32	Bolt	6
10	VB15A1O32-S	Bolt	2
11	VB15A1O48	Bolt	2
12	VB15A1O54	Bolt	6
13	VB15A1O56	Hex bolt	4
14	VE30A1O	Nylon hex locknut	10
15	VV83A9G16	Pan head tapping screw	6
16	27-1806P	Right frame support cover	1
17	27-1385P	Left frame support cover	1
18	VW10A10	Flat washer	10
19	VW20A10	Spring washer	2
20	VE78A1O	Flanged locknut	8

Item	Number	Name	Quantity
21	VV83A9G24	Pan head tapping screw	4
23	27-2143P	Spacer foot	2
24	27-2144P	Spacer head	2
25	VW10A08	Flat washer	4
26	VB15A1N32	Bolt	4
27	VE30A1N	Nylon hex locknut	4
28	M0019	Grease	1
29	27-2880	Foot end hard stop additional spacer	2
30	27-2881	Head end hard stop additional spacer	2
31	VV83A9G32	Tapping screw pan head	4

Litter assembly with serial port

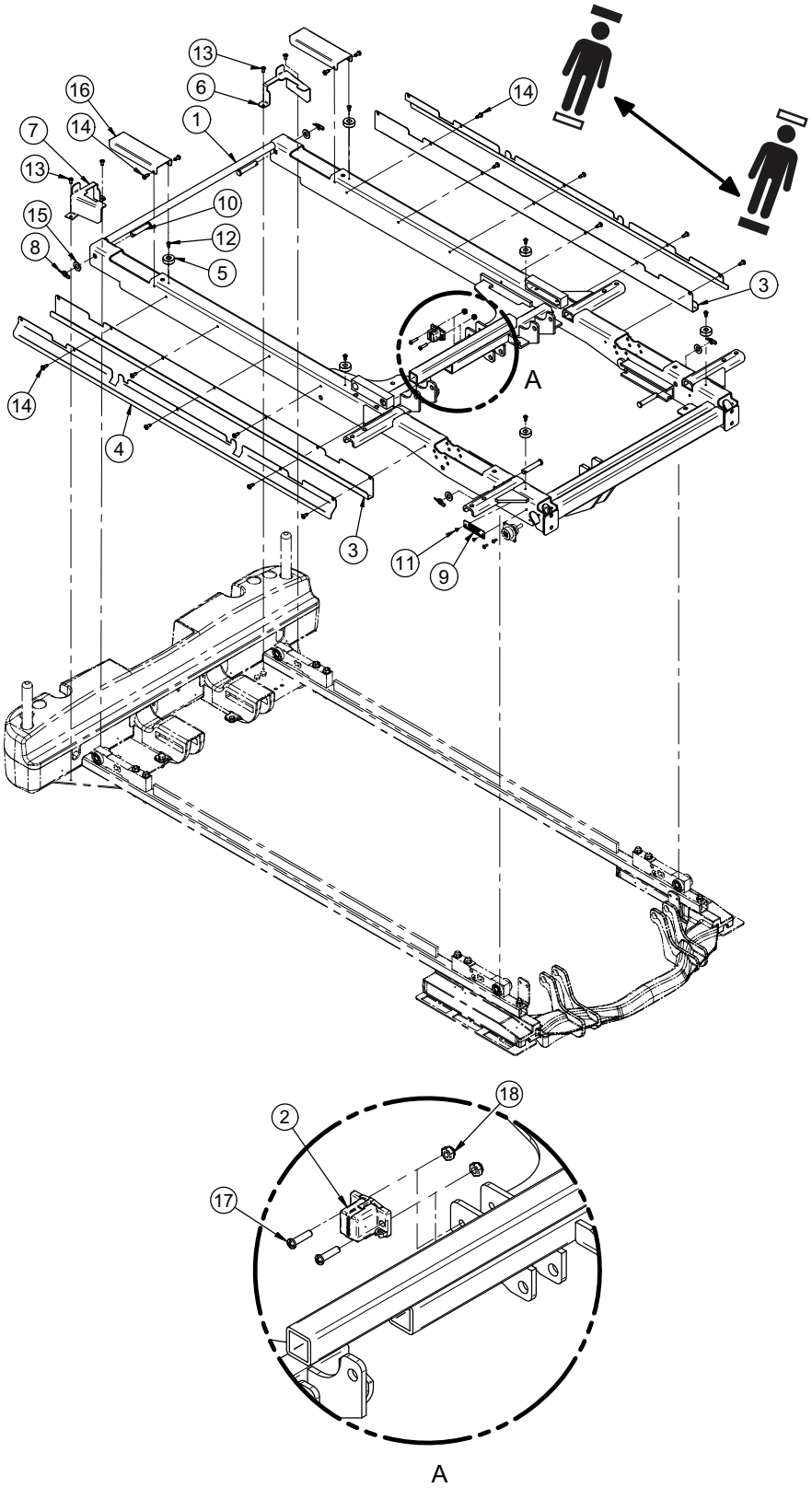
OL270278 Rev A (Reference only)



Item	Number	Name	Quantity
1	27-1520P	Support connector	1
2	QDF2056	Standoff	2
3	QDF27-2432	Serial interconnection cable	1
4	VV83A9G16	Phillips pan head screw	2

Litter assembly, upper frame

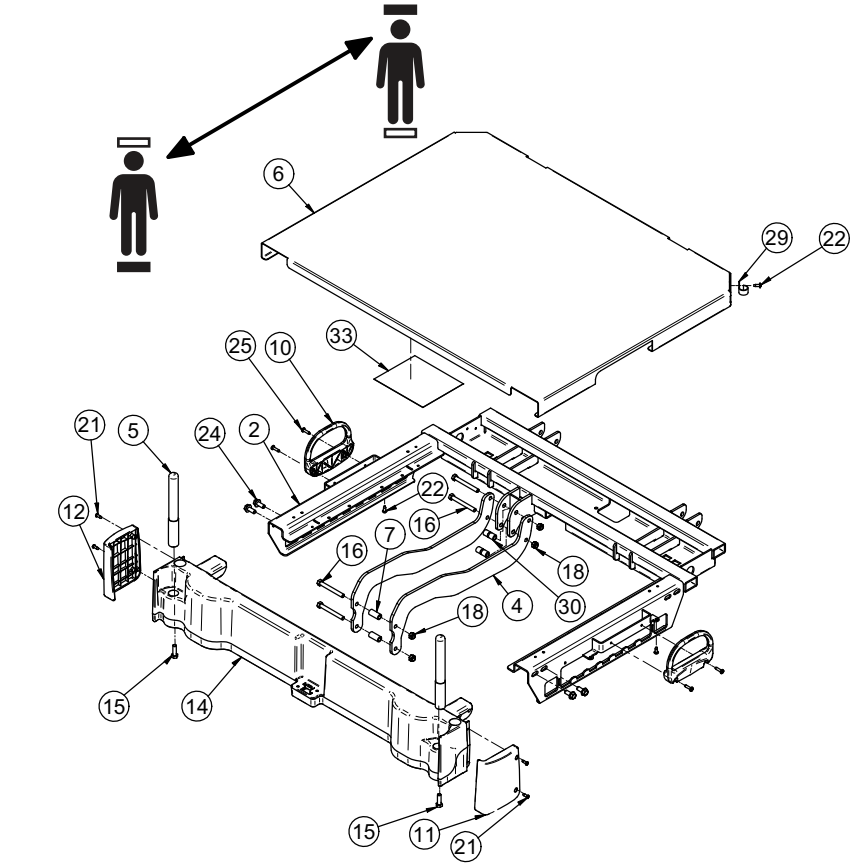
L27-046 Rev 01 (Reference only)

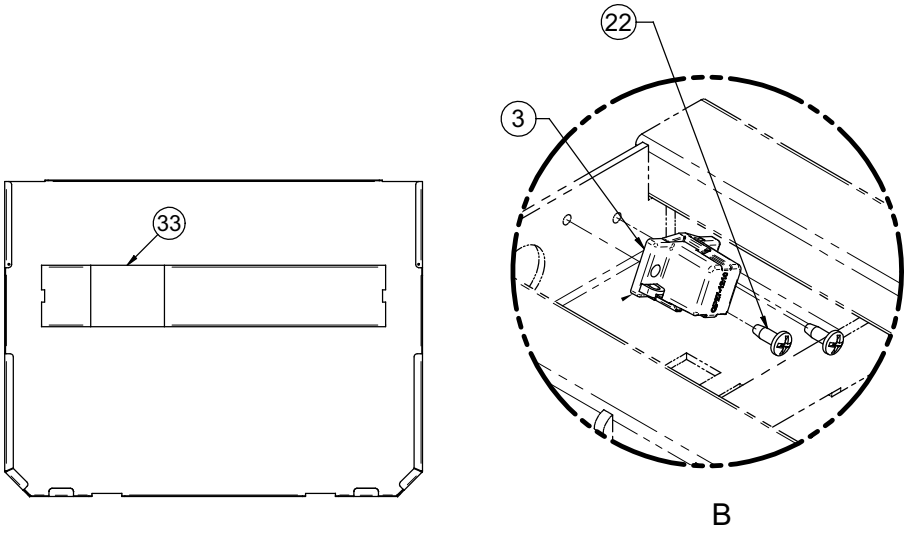


Item	Number	Name	Quantity
1	27-2598P	Upper frame	1
2	27-2477	Angle sensor assembly	1
3	27-1433P	Wire channel	2
4	27-1434P	Wire cover	2
5	QP27-1760	Stopper	6
6	27-1850P	Left head frame wire cover	1
7	27-1851P	Right head frame wire cover	1
8	QDF7878	Coupling pin	4
9	QE71-1181	Serial number plate	1
10	VG50B1248	Clevis pin	4
11	VR11H43	Pop rivet	2
12	VV83A9E12	Pan head tapping screw	6
13	VV83A9G12	Pan head tapping screw	4
14	VV83A9G16	Pan head tapping screw	16
15	VW10A12	Washer	4
16	27-2005P	Hiding place cell	2
17	VV33A0G24	Phillips head screw	2
18	VE30A0G	Nylon nut	2

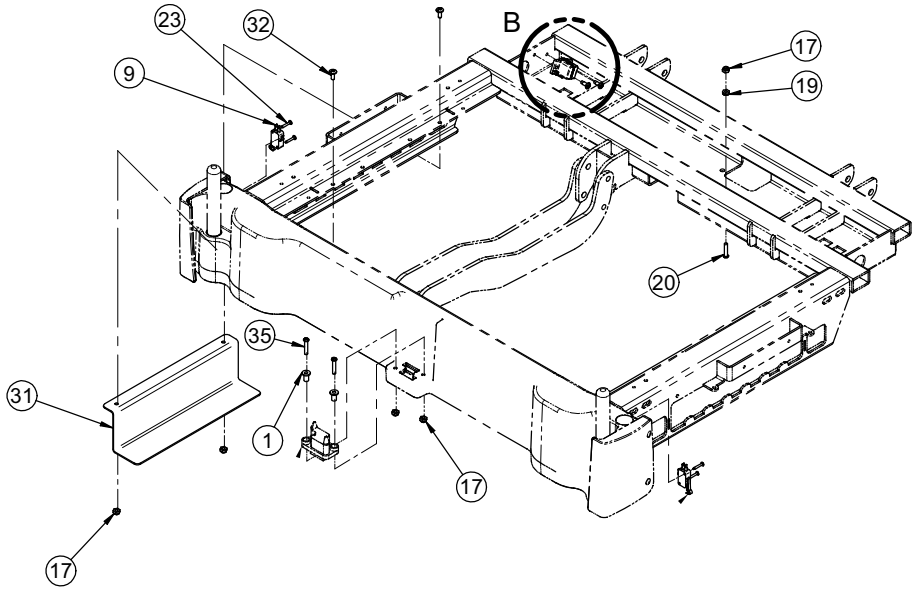
Litter assembly, foot end

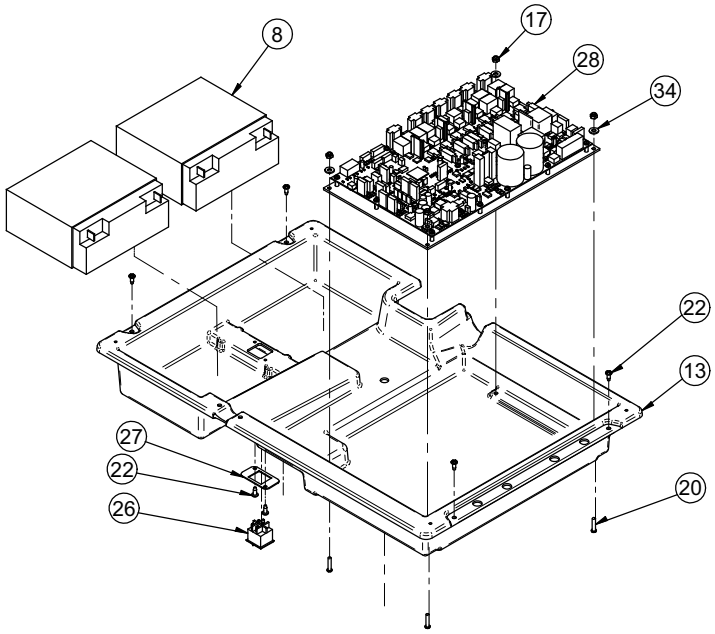
27-2688 Rev B (Reference only)





B



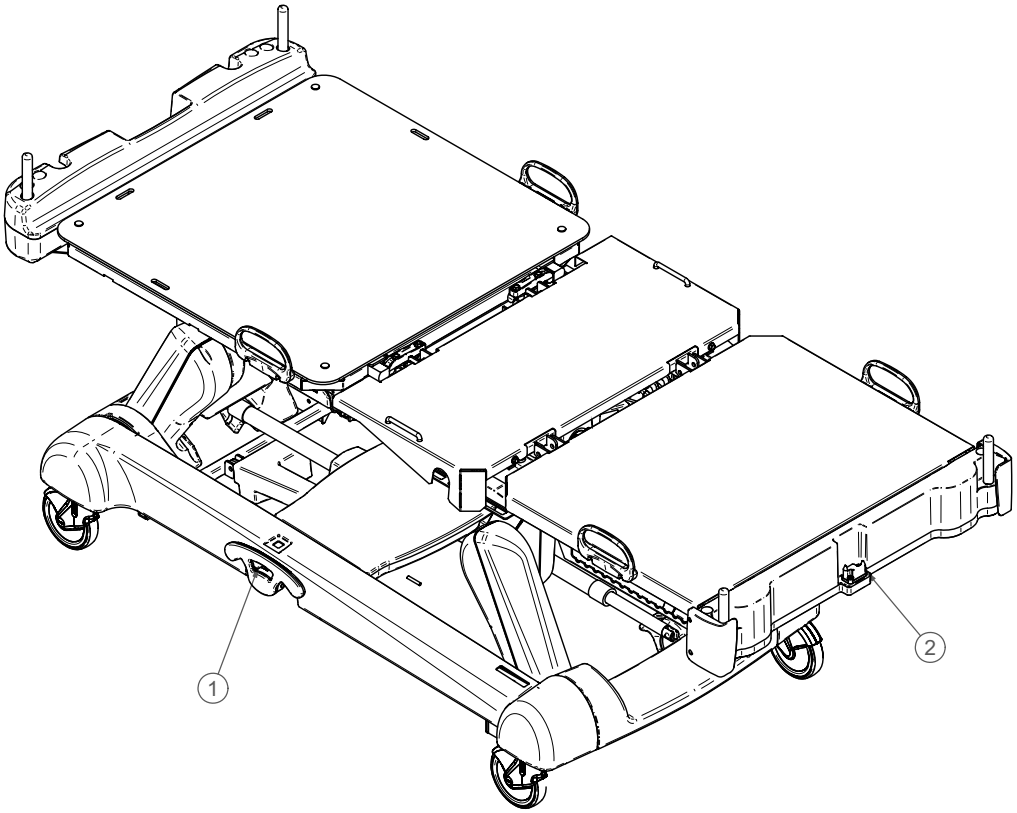


Item	Number	Name	Quantity
1	25-0527Z	Connector’s sleeve	2
2	27-0112P	Foot section	1
3	27-2477	Angle sensor	1
4	27-1579W	Foot litter center plate	2
5	27-1833C	Footboard rod	2
6	27-1606W	Mattress support	1
7	27-1710Z	Spacer	2
8	QDF9188	12V 18AH battery	2
9	QDF9535	Micro switch	2
10	QP27-1435-10	Mattress stopper	2
11	QP27-2644	Left foot bumper	1
12	QP27-2645	Right foot bumper	1
13	QP27-1597	Molded electronic box	1
14	QPA27-1576-W	Molded foot litter end	1

Item	Number	Name	Quantity
15	VB15A1O32-S	Scotch grip bolt	2
16	VB15A1O54	Full thread bolt	4
17	VE30A0G	Nylon locknut	9
18	VE30A1O	Nylon locknut	4
19	VE80A0G	Locknut	1
20	VV33A0G28	Phillips machine screw	5
21	VV83A9E16	Phillips screw	4
22	VV83A9G16	Phillips screw	11
23	VV87A9A24	Phillips tapping screw	4
24	VVB4A1024	Thread rolling bolt	4
25	VV83A9G24	Phillips tapping screw	4
26	QDF2089	Battery switch	1
27	27-1972Z	Switch support plate	1
28	QDF75-0440	DC control board	1
29	QDF2091	Wiring clip	1
30	27-2058Z	Spacer	2
31	27-1858W	Electronic box reinforcement	1
32	VV37A0G16	Phillips machine screw	2
33	QE71-1061	Battery protection sticker	1
34	VW10C081802	Nylon washer	4
35	VV31A0G32	Phillips machine screw	2

Litter assembly, standard cabling

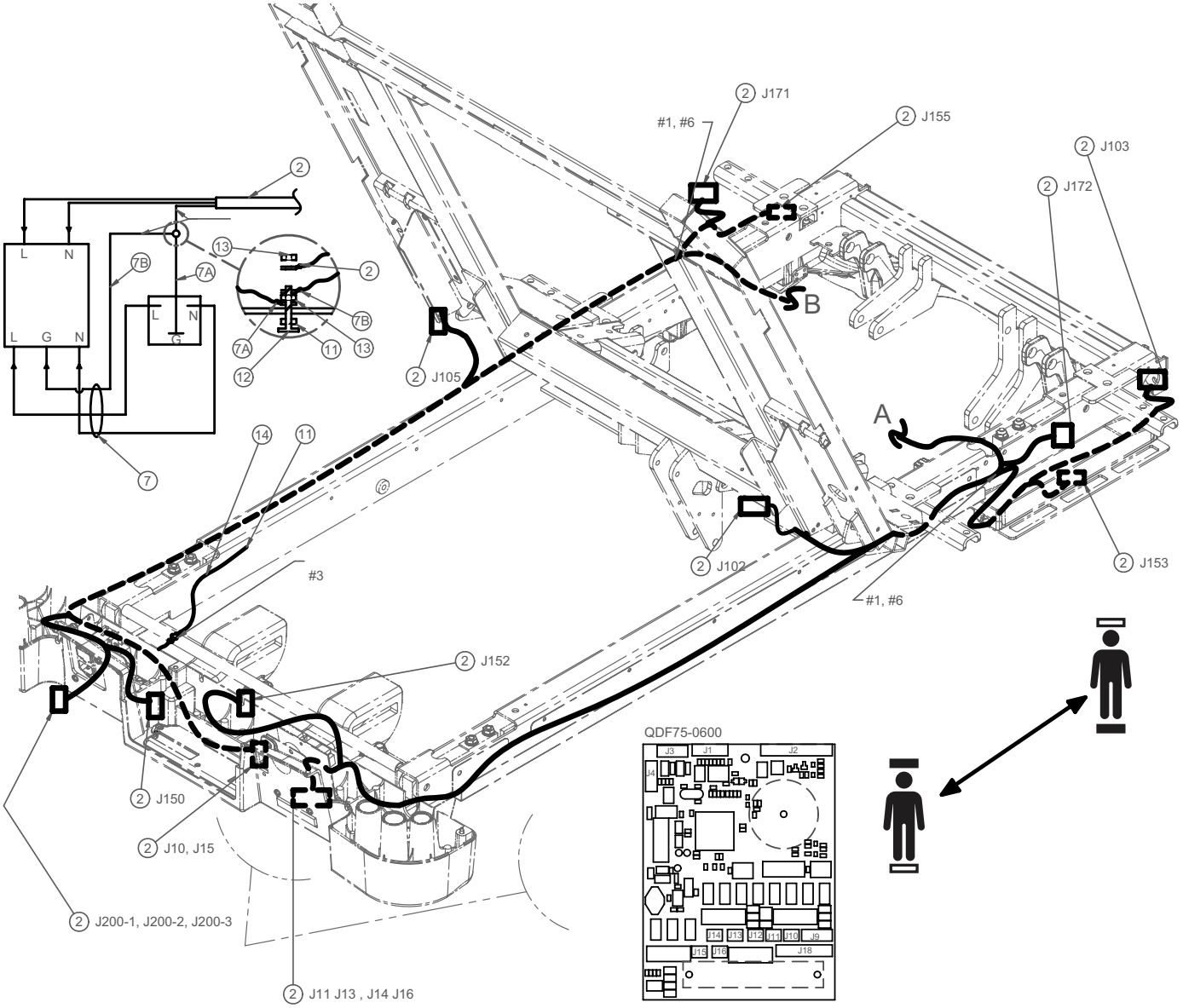
L27-059 Rev B (Reference only)



Item	Number	Name	Quantity
1	27-2687	Base and lever wiring	1
2	27-2695	Litter wiring	1

Litter assembly, electrical

27-2695 Rev AA (Reference only)



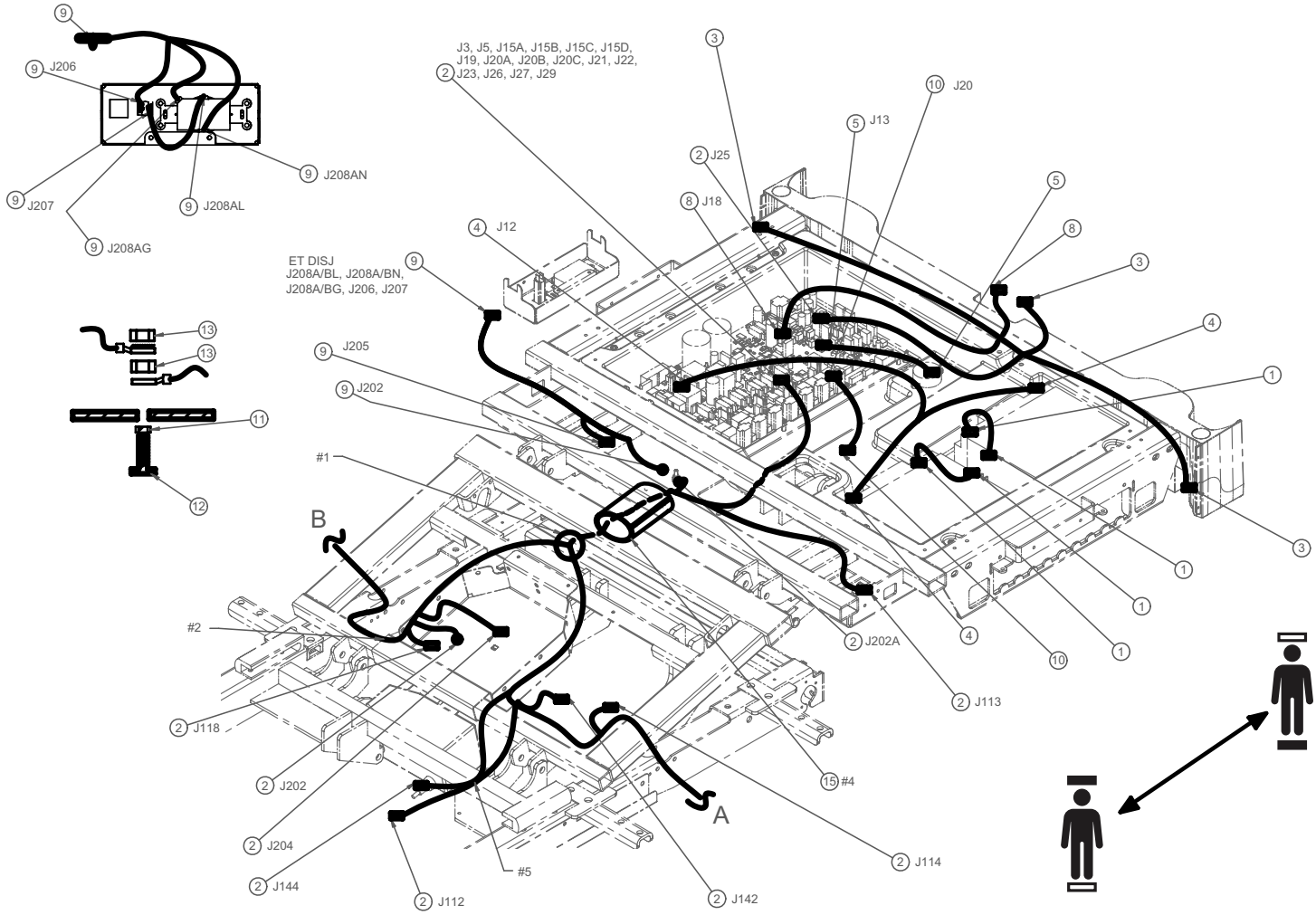


Photo #1 Photo #2 Photo #3

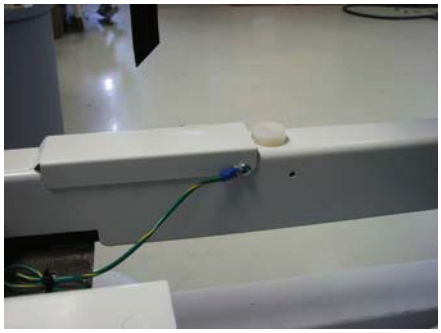


Photo #4

Photo #5

Photo #6

QDF27-1381 cables #1 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1381	Grommet	To	QDF9188	Battery
QDF27-1381	Terminal	To	QDF2089	Interrupter
QDF27-1381	Terminal	To	QDF2089	Interrupter

QDF27-1646 cables #4 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1646	Mini fit	To	QDF75-0440	J12 DC board
QDF27-1646	Black grommet	To	QDF9188	Battery #2 pole -
QDF27-1646	White grommet	To	QDF9188	Battery #1 pole +

QDF27-2213 cables #2 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2213	J22	To	QDF75-0440	J22 DC board
QDF27-2213	J21	To	QDF75-0440	J21 DC board
QDF27-2213	J20A	To	QDF75-0440	J20A DC board
QDF27-2213	J20B	To	QDF75-0440	J20B DC board
QDF27-2213	J20C	To	QDF75-0440	J20C DC board
QDF27-2213	J19	To	QDF75-0440	J19 DC board
QDF27-2213	J29	To	QDF75-0440	J29 DC board
QDF27-2213	J15A	To	QDF75-0440	J15A DC board
QDF27-2213	J15B	To	QDF75-0440	J15B DC board
QDF27-2213	J15C	To	QDF75-0440	J15C DC board
QDF27-2213	J15D	To	QDF75-0440	J15D DC board
QDF27-2213	J204	To	QDF27-2038	Transformer J204
QDF27-2213	J27	To	QDF75-0440	J27 DC board

QDF27-2213 cables #2 connection table				
QDF27-2213	J3	To	QDF75-0440	J3 DC board
QDF27-2213	J5	To	QDF75-0440	J5 DC board
QDF27-2213	J113	To	27-2477	Foot sensor
QDF27-2213	J202	To	-	Gatch ground
QDF27-2213	J114	To	27-2477	Trendelenburg sensor
QDF27-2213	J153	To	QDF27-1372	Right foot cell
QDF27-2213	J103	To	27-2598	Removable control
QDF27-2213	J172	To	QDF27-1208	Right foot siderail
QDF27-2213	J102	To	QDF27-2212	Right head siderail
QDF27-2213	J152	To	QDF27-1372	Right head cell
QDF27-2213	J202A	To	-	Foot ground
QDF27-2213	J16	To	QDF75-0270	J16
QDF27-2213	J15	To	QDF75-0270	J15
QDF27-2213	J14	To	QDF75-0270	J14
QDF27-2213	J13	To	QDF75-0270	J13
QDF27-2213	J10	To	QDF75-0270	J10
QDF27-2213	J11	To	QDF75-0270	J11
QDF27-2213	J144	To	QDF27-1215	Gatch motor
QDF27-2213	J142	To	QDF27-1214	Fowler motor
QDF27-2213	J112	To	27-2477	Fowler sensor
QDF27-2213	J118	To	27-2477	Gatch sensor
QDF27-2213	J155	To	QDF27-1372	Left foot cell
QDF27-2213	J171	To	QDF27-1208	Left foot siderail
QDF27-2213	J105	To	QDF27-2212	Left head siderail
QDF27-2213	J150	To	QDF27-1372	Left head cell
QDF27-2213	J23	To	QDF75-0440	J23 DC board
QDF27-2213	J26	To	QDF75-0440	J26 DC board
QDF27-2213	J200A black	To	QDF9571	Line “L”
QDF27-2213	J200B white	To	QDF9571	Line “N”
QDF27-2213	J200C Green/yellow	To	Ground	Head screw

QDF27-1607 cables #3 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1607	Con. MTA 5 pos.	To	QDF75-0440	J25 DC board
QDF27-1607	Contact	To	QDF27-1213	Contact 7 or 8
QDF27-1607	Contact	To	QDF27-1213	Contact 7 or 8

QDF27-1607 cables #3 connection table				
QDF27-1607	Terminal	To	QDF9535	Right limit switch no/ com
QDF27-1607	Terminal	To	QDF9535	Right limit switch com/ no
QDF27-1607	Terminal	To	QDF9535	Left limit switch no/ com
QDF27-1607	Terminal	To	QDF9535	Left limit switch com/ no

QDF5095 cables #5 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF5095	Con. MTA	To	QDF75-0440	J13 DC Board
QDF5095	Buzzer	To	Electrical box	See position on drawing

QDF27-1524 cables #7 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1524	Black 90º terminal	To	QDF9571	Line “L”
QDF27-1524	White 90º terminal	To	QDF9571	Line “L”
QDF27-1524	Green 90º terminal	To	QDF9571	Line “L”
QDF27-1524	Black right terminal	To	27-2848	“L” (power supply)
QDF27-1524	White right terminal	To	27-2848	“N” (power supply)
QDF27-1524	Green right terminal	To	27-2848	“E” (power supply)
QDF27-1524	Cross grommet	To	Head ground	Screw
QDF27-1524	Cross grommet	To	Head ground	Screw

QDF27-2214 cables #10 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2214	Con. MTA 6 pos.	To	QDF75-0440	J18 DC board
QDF27-2214	Con. metrimate	To	27-1547	Panel (27-1547)

QDF27-2025 cables #12 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2025	Light	To	QDF75-0440	J20 DC board

QDF27-2228 cables #11 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2228	J205	To	QDF27-2038	Transformer
QDF27-2228	J202 Grommet	To	-	Foot litter ground
QDF27-2228	J208AL (black)	To	QDF9573	Single outlet

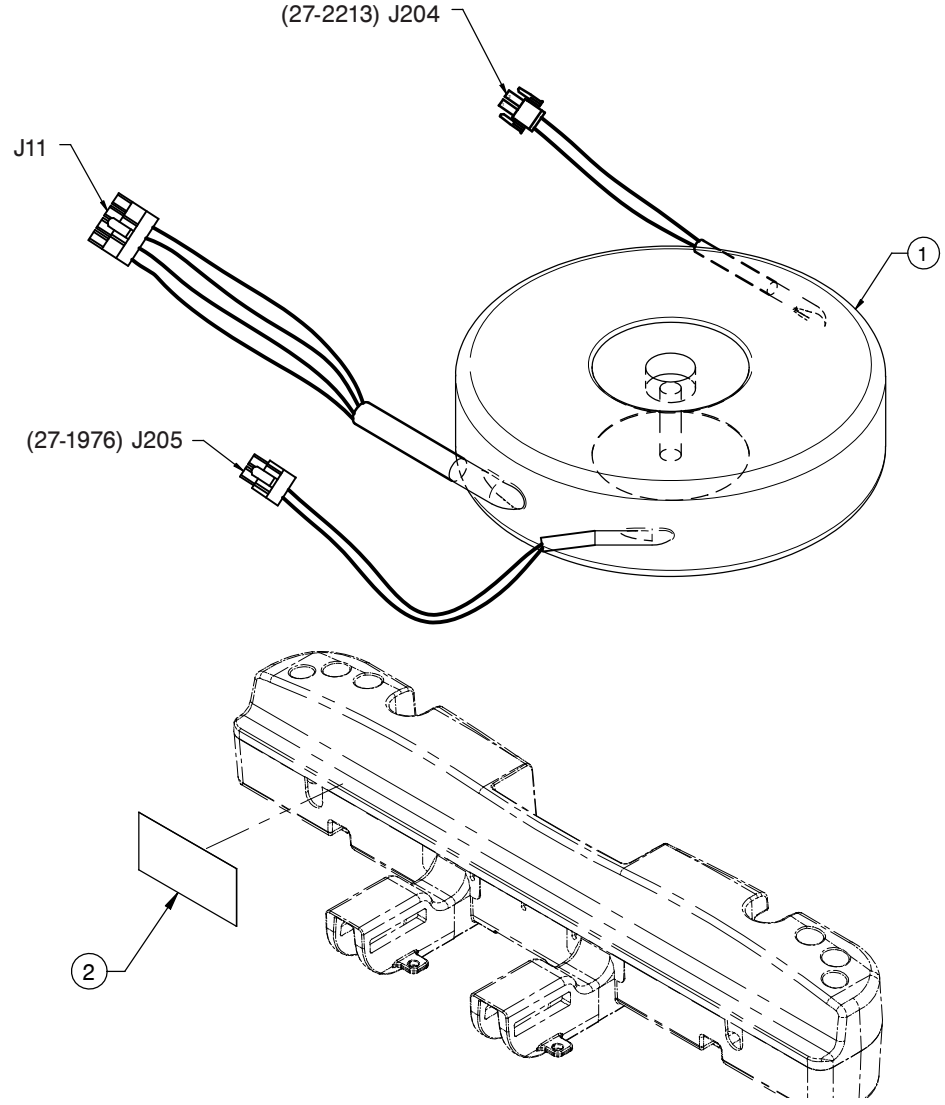
QDF27-2228 cables #11 connection table				
QDF27-2228	J207 Terminal	To	QDF9025	Breaker
QDF27-2228	J206 Terminal	To	QDF9025	Breaker
QDF27-2228	J208AN (white)	To	QDF9573	Right limit switch no/ com
QDF27-2228	J208AG (green/ yellow)	To	QDF9573	Ground

Item	Number	Name	Quantity
1	QDF27-1381	Battery switch wire	2
2	QDF27-2213	#1 wire harness	1
3	QDF27-1607	IV pole and bed extender cable	1
4	QDF27-1646	Battery wires	1
5	QDF5095	Buzzer	1
6	QDF9518	Cable tie	51
7	QDF27-1524	Filter and receiver connector	1
8	QDF27-2214	Panel - control board cable	1
9	QDF27-2228	Auxiliary 120V outlet cable without mattress connector	1
10	QDF27-2025	12V night light	1
11	VW20A76	Locking washer	4
12	VV33A0G28	Phillips machine screw #10-32 x 7/8"	3
13	VE30A0G	Nylon locknut #10-32	6
14	QDF27-2284	Electronic board ground wire	1
15	QDF2115	1.25 split loom polyethylene	1
16	QDF9523	Cable tie	2

120V electric system

OL270206-XXX Rev E (Model 2131 only) (Reference only)

OL270211-XXX Rev E (Model 2141 only)

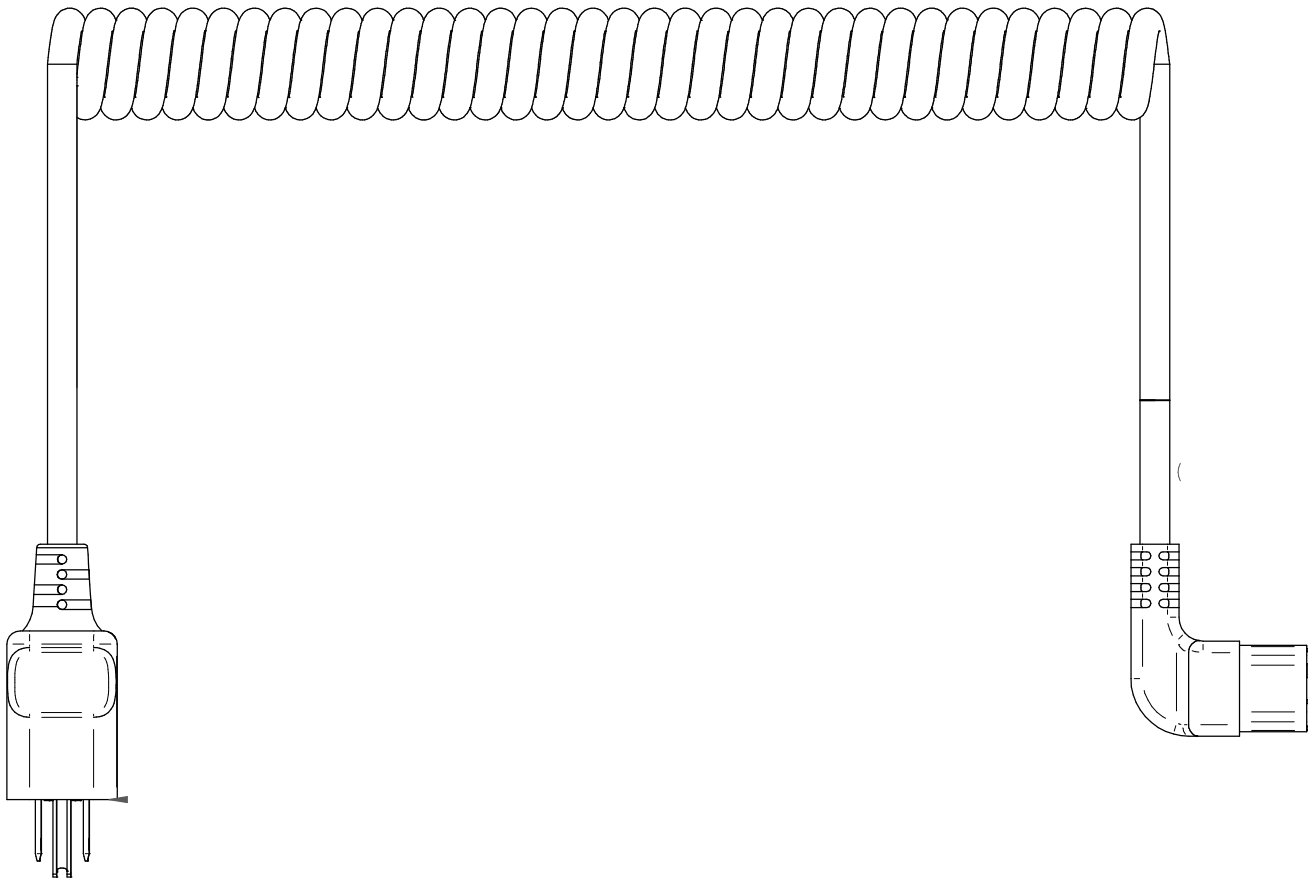


Note - NOTE: XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF27-2038	Medical toroidal transformer	1
2	QE71-1183-XXX	120V CSA Label (Model 2131 only)	1 or
	QE71-1188-XXX	120V CSA Label (Model 2141 only)	1

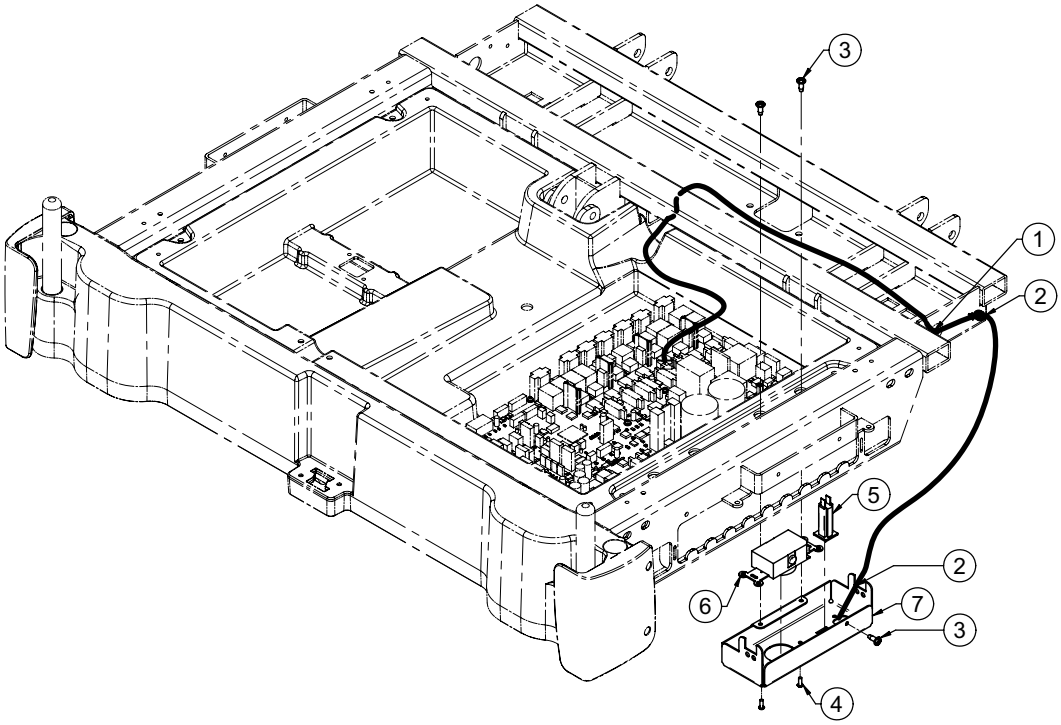
Coiled power cord

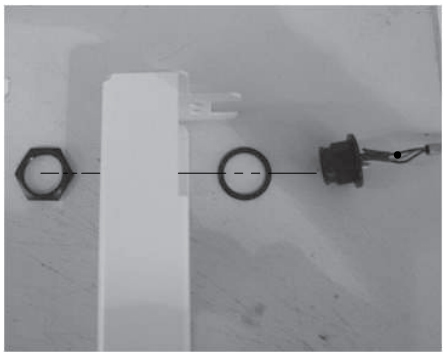
27-2782 Rev B (Reference only)

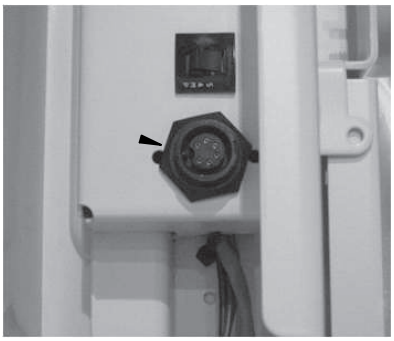


Litter assembly, foot end, with mattress connector

OL270166 Rev 2 (Reference only)





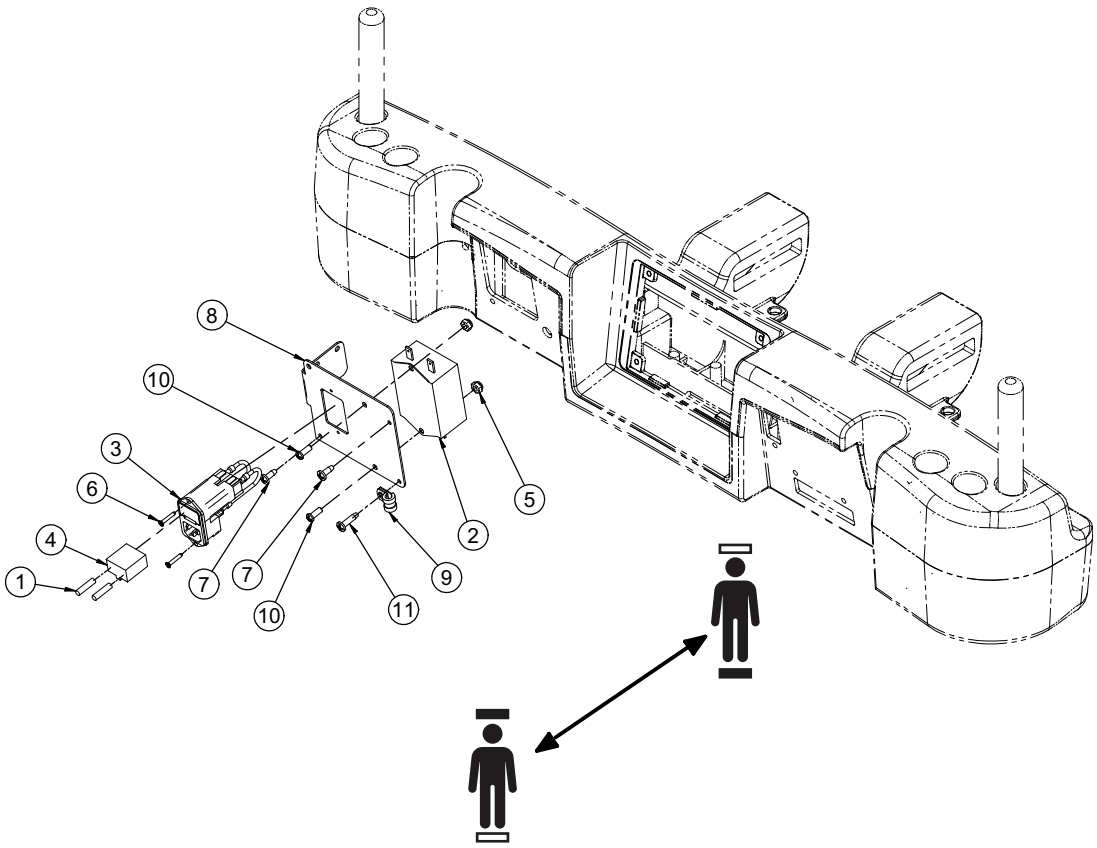


QDF27-2248 cables #1 connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-2248	J17	To	QDF27-1960	J17 DC board
QDF27-2248	J17A	To	Hole	(27-1200)

Item	Number	Name	Quantity
1	QDF27-2248	Mattress connector cable	1
2	QDF9518	Cable tie	2
3	VV83A9G16	Tapping screw	3
4	VV37A1C12	Machine screw	2
5	QDF9025	5A breaker	1
6	QDF9573	Single leviton 8310-g outlet	1
7	27-1967P	Auxiliary outlet box	1

Standard outlet

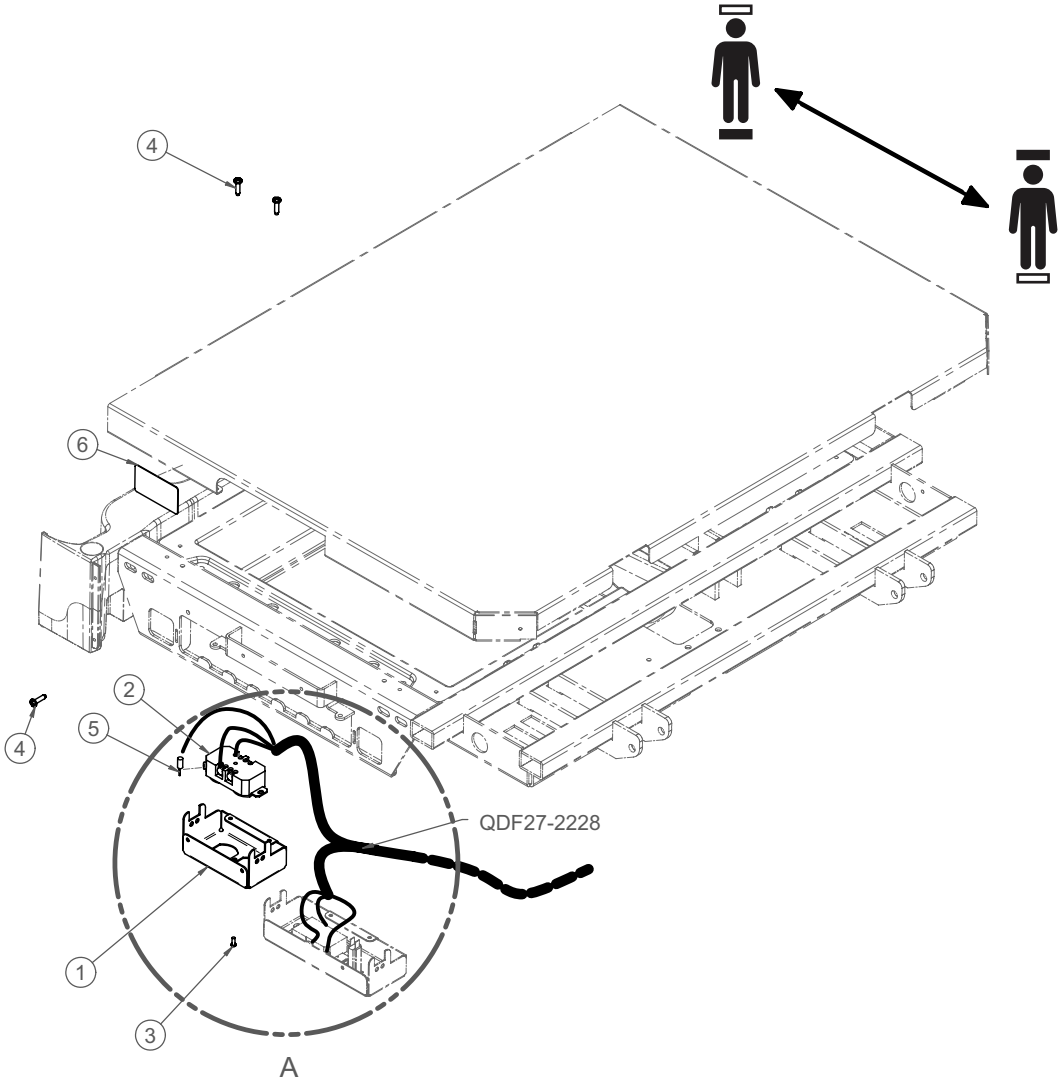
OL270247 Rev D (Reference only)

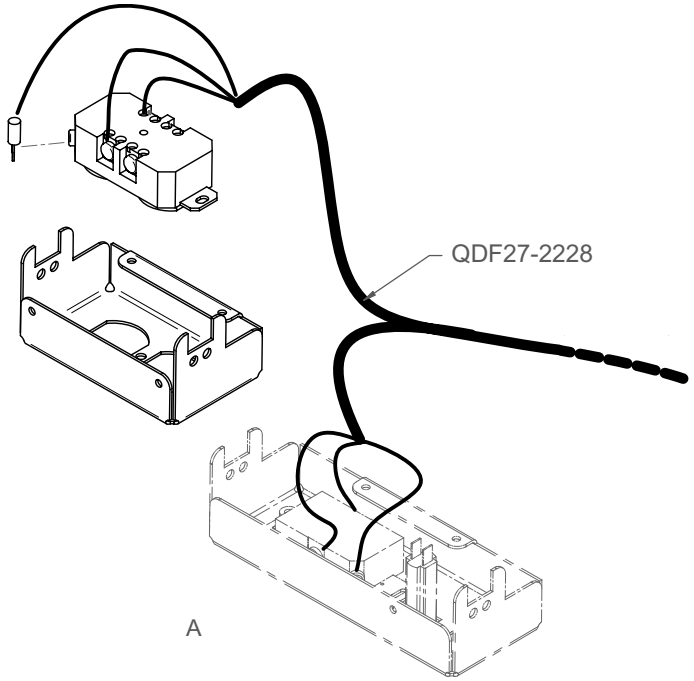


Item	Number	Name	Quantity
1	QDF8078	10A 250V fuse	2
2	QDF9571	Medical filer	1
3	27-2848	Inlet filter assembly	1
4	QDF9575	Fuse holder	1
5	VE30A0G	Nylon hex locknut	2
6	VV41A1A20	Phillips flat head tapping screw	2
7	VV83A9G16	Phillips pan head tapping screw	2
8	27-1723P	Head plate without auxiliary outlet	1
9	QDF2155	Steel cable clamp	1
10	VV33A0G16	Phillips machine screw pan head	2
11	VV83A9G24	Pan head tapping screw	1

Litter assembly, dual 120V outlet - option

OL270013-XXX Rev 04 (Reference only)





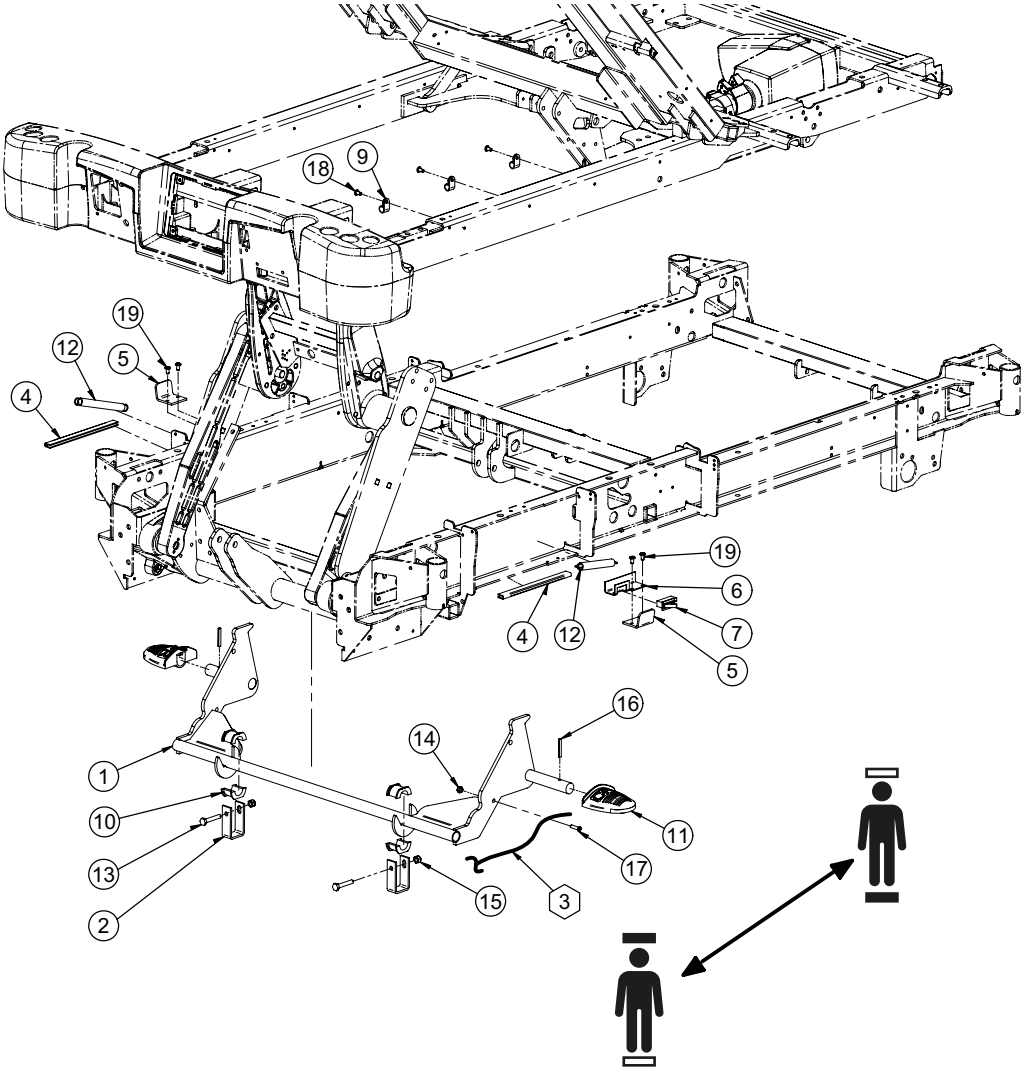
QDF27-2228 cable connection table			
Cable number	Connector number	Cable number	Connector number
QDF27-2228	J108A-L (black)	QDF9573	“L”
QDF27-2228	J108A-N (white)	QDF9573	“N”
QDF27-2228	J108A-G (green)	QDF9573	“GROUND”
QDF27-2228	J108B-L (orange)	QDF8024	“L”
QDF27-2228	J108B-N (yellow)	QDF8024	“N”
QDF27-2228	J108B-G (brown)	QDF8024	“GROUND”

Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	27-1978P	Auxiliary outlet box - option	1
2	QDF8024	Leviton 8200-w double outlet	1
3	VV37A1C12	Truss head machine screw	1
4	VV83A9G24	Tapping screw	3
5	QDF2124	Terminal #10 for 16-14 AWG	1
6	QE71-0964-XXX	Label, auxiliary plug -XXX	1

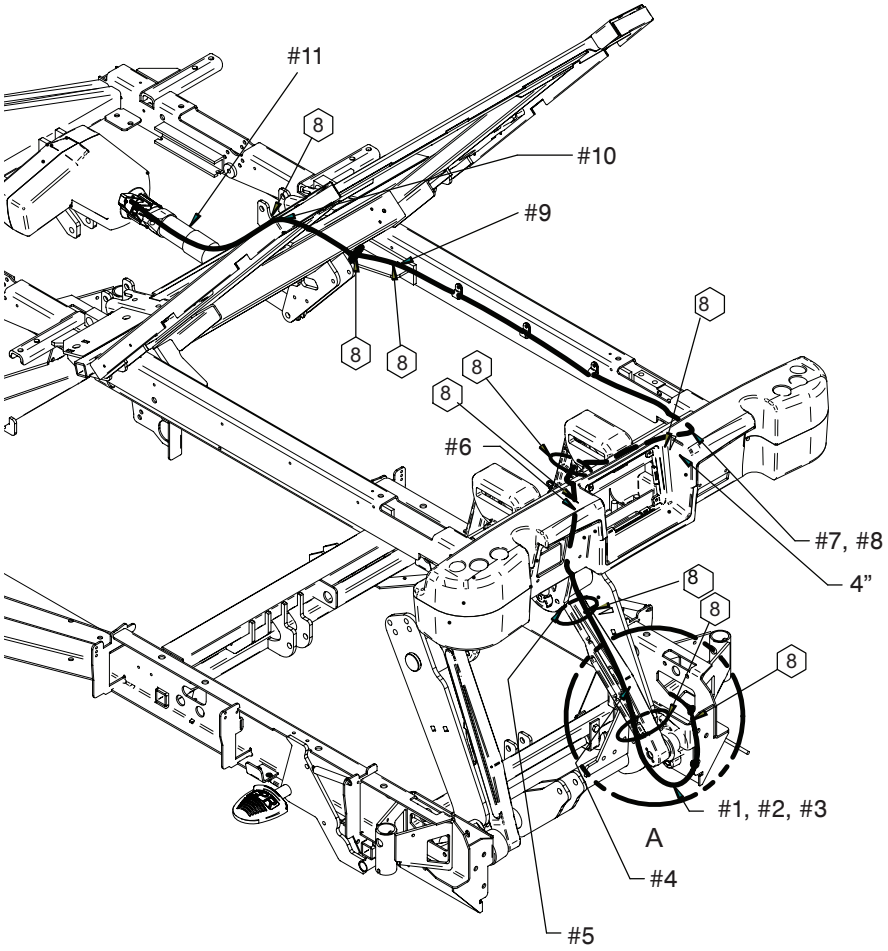
CPR assembly, mechanical

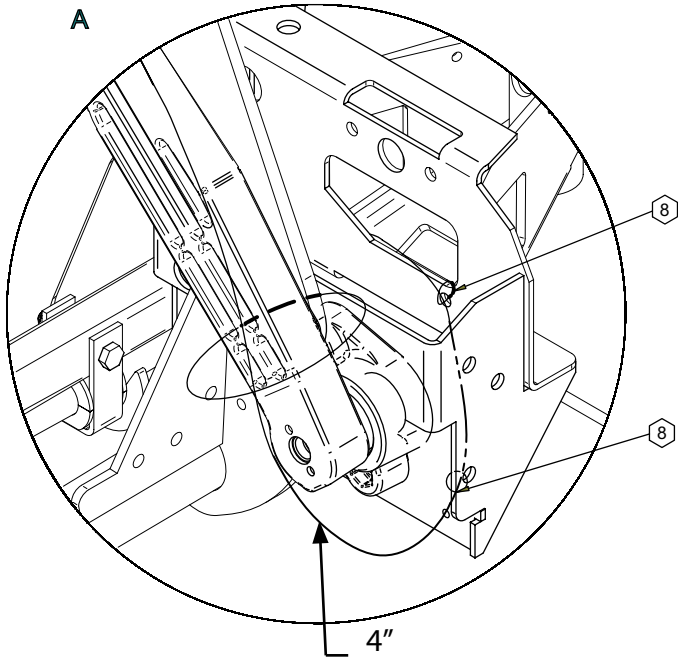
L27-033 Rev K (Reference only)

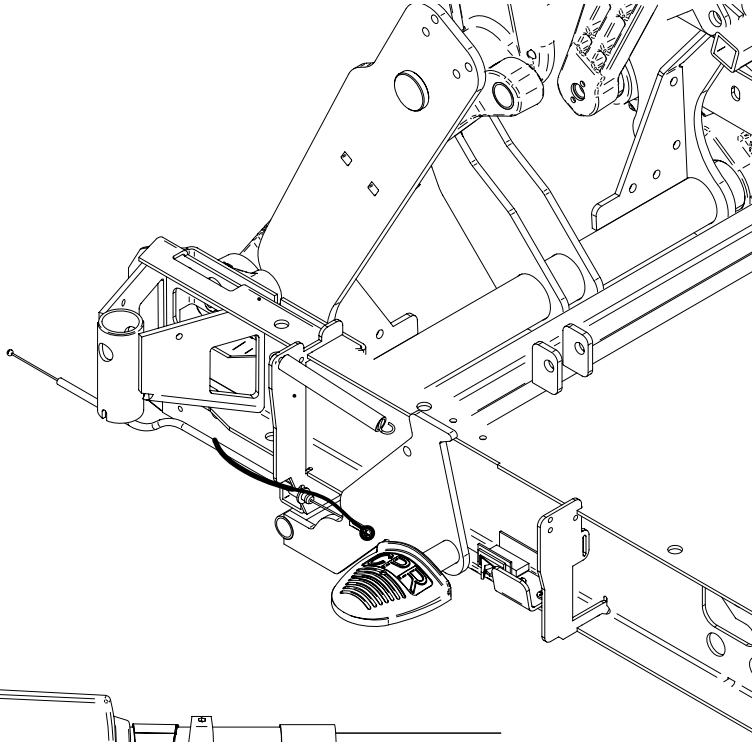


Note - For cable routing:

- The Fowler must be at least 30 degrees when you install the cable.
- Do not install a tie wrap to the actuator.


#11
8
#10
#9
8
8
8
8
8
#6
#7, #8
4”
8
8
8
#1, #2, #3
A
#4
#5


A
8
8
4″



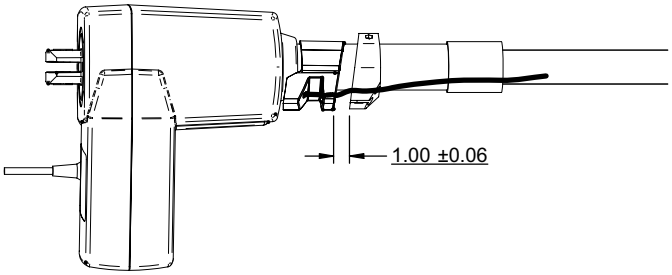


Photo #1

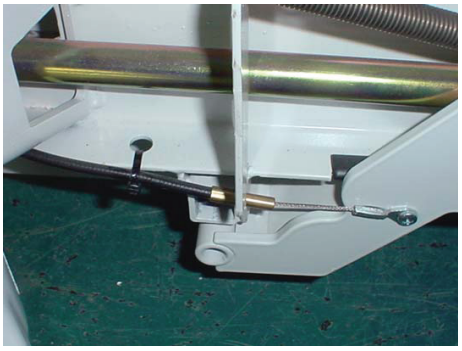


Photo #2

Photo #3

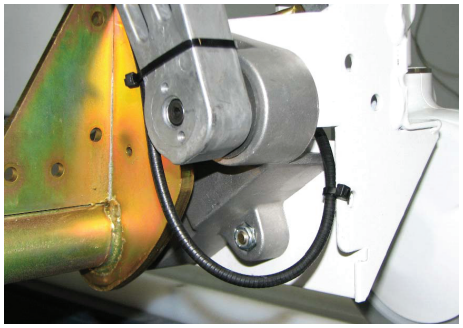


Photo #4

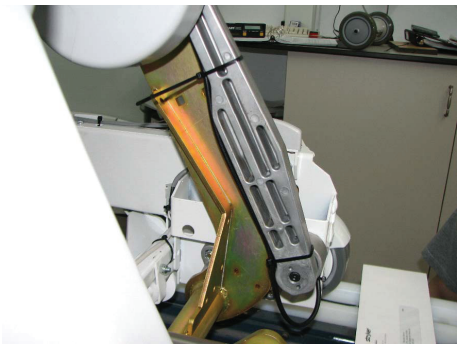


Photo #5

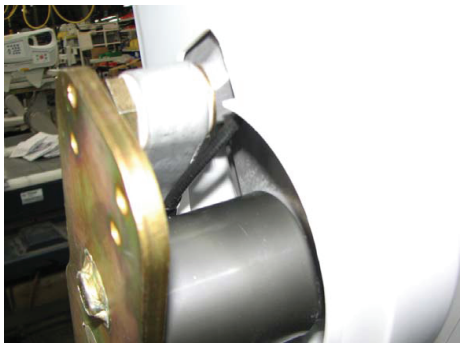


Photo #6

Photo #7

Photo #8

Photo #9

Photo #10

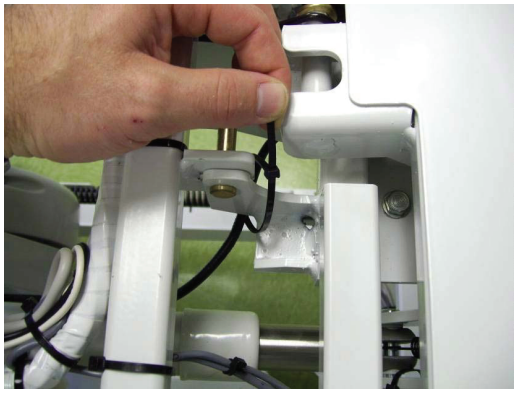
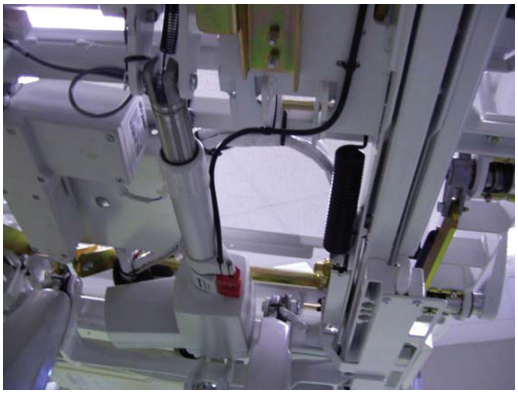


Photo #11

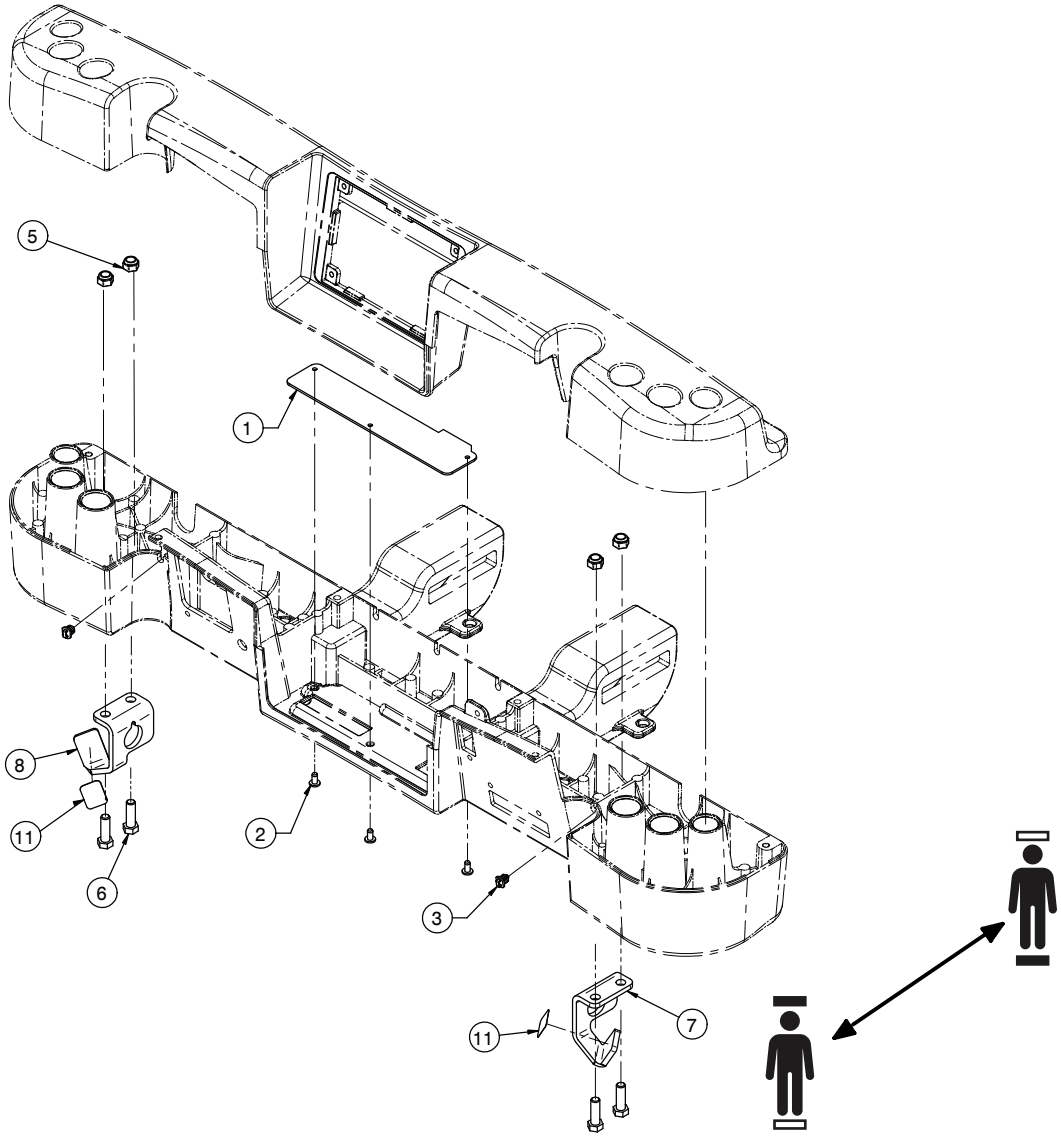


Cable connection table			
Cable number	Connector number	Cable number	Connector number
QDF2083	CPR Switch	QDF27-1204	J127

Item	Number	Name	Quantity
1	27-1897P	CPR pedal	1
2	27-1917Z	CPR support	2
3	27-2932	CPR cable	1
4	27-2036	CPR lateral stop	2
5	27-2062Z	CPR pedal stopper	2
6	27-2086Z	CPR switch support	1
7	QDF2083	Lever switch	1
8	QDF9518	Cable tie	12
9	QDF2155	Steel cable clamp	3
10	QP19-0270	Shaft support bearing	4
11	QP27-2065	CPR pedal	2
12	QRE23-0438	Siderail spring	2
13	VB15A1N44	Bolt	2
14	VE30A0G	Nylon locknut	1
15	VE30A1N	Nylon locknut	2
16	VG10B0636	Spring pin	2
17	VV33A0G24	Pan head machine screw	1
18	VV83A9G12	Pan head tapping screw	3
19	VV83A9G16	Pan head	4

Handle assembly - Model 2131 only

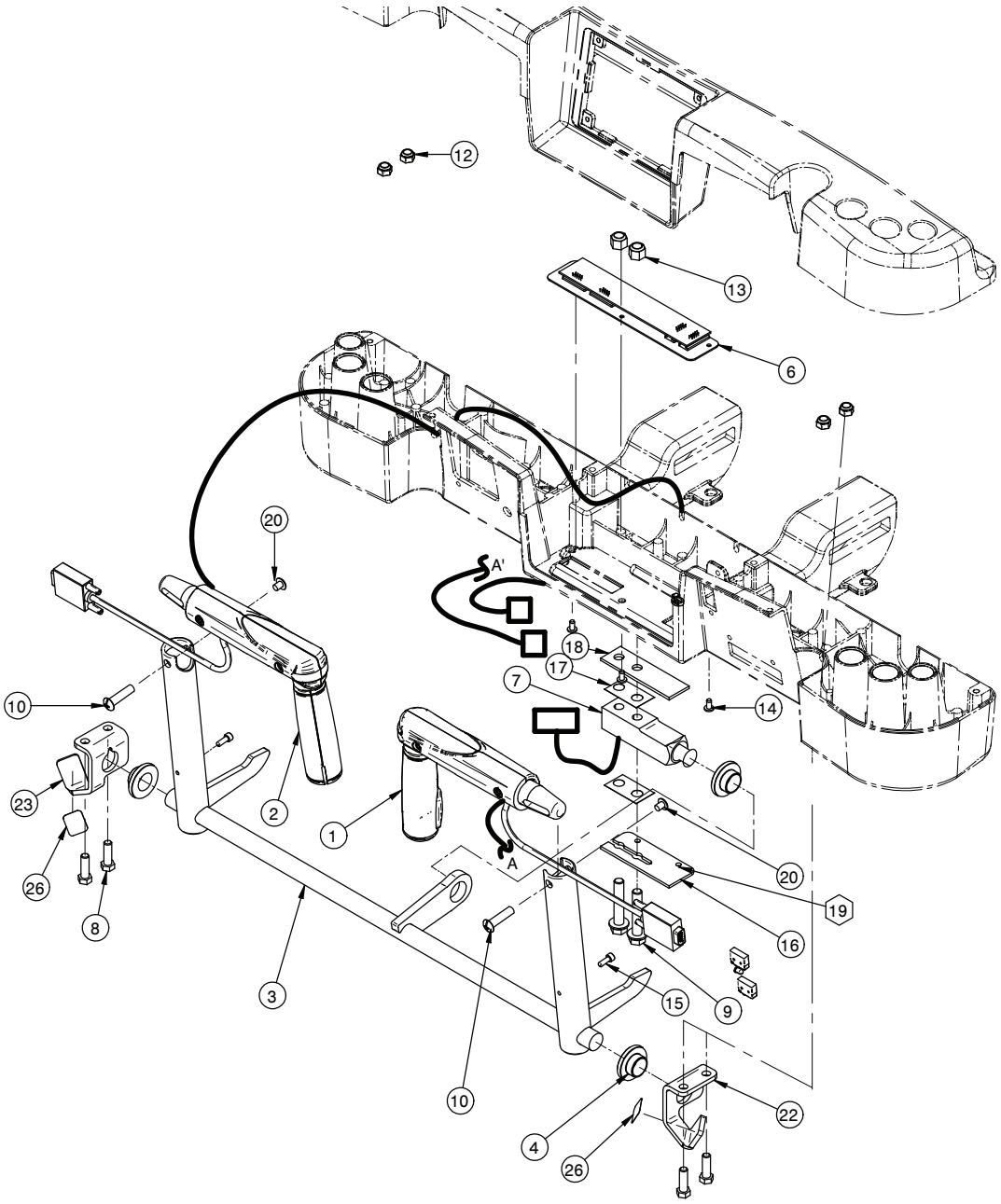
OL270058 Rev G (Reference only)



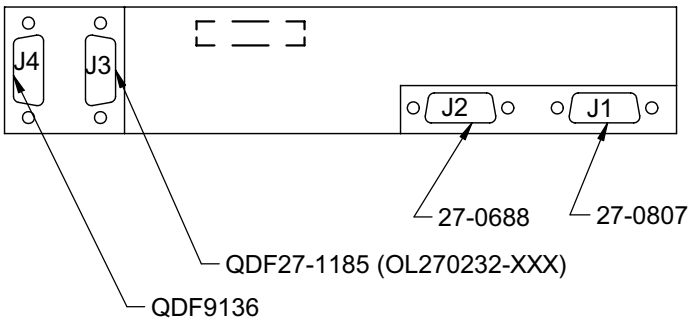
Item	Number	Name	Quantity
1	27-1651P	Without 5th wheel plate	1
2	VV83A9G12	Pan head tapping screw	3
3	QDF5096	Plastic tie	2
5	VE30A1O	Nylon hex locknut	4
6	VB15A1O32	Bolt	4
7	27-2790P	**Zoom** handle bracket, right	1
8	27-2789P	**Zoom** handle bracket, left	1
11	QE71-1373	Label, coiled power cord	2

Zoom handle assembly - Model 2141 only

27-2547 Rev B (Reference only)



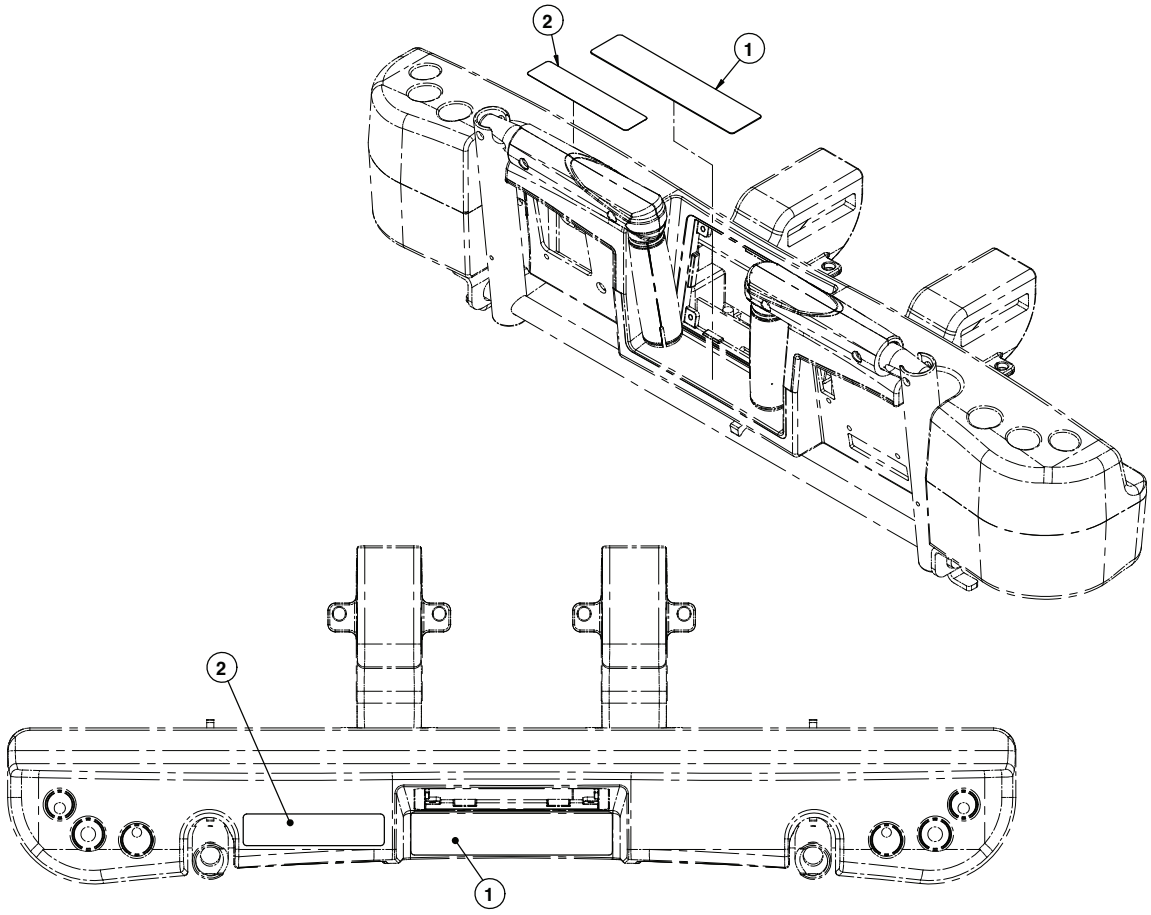
27-2548



Item	Number	Name	Quantity
1	27-0688	**Zoom** handle, right	1
2	27-0807	**Zoom** handle, left	1
3	27-0880C	Tie bus	1
4	27-1181	**Zoom** handle sleeve	3
6	27-2548	**Zoom** control board assembly	1
7	QDF9136	250 lb load cell	1
8	VB15A1O32	Bolt	4
9	VB95A1P48	Hex neck bolt	2
10	VE42A9036	Combination barrel nut	2
12	VE30A1O	Nylon locknut	4
13	VE30A1P	Nylon locknut	2
14	VV83A9G12	Phillips head tapping screw	3
15	VV10A0G16-S	Hex head screw	2
16	27-1857Z	**Zoom** load cell stopper, bottom	1
17	QDF27-1780	Load cell spacer	2
18	27-1775Z	**Zoom** load cell stopper	1
19	QDF9518	Nylon tie-wrap	1
20	VV33A1N10-S	Machine screw	2
22	27-2790P	**Zoom** handle bracket, right	1
23	27-2789P	**Zoom** handle bracket, left	1
26	QE71-1373	Label, coiled power cord	2

Zoom assembly

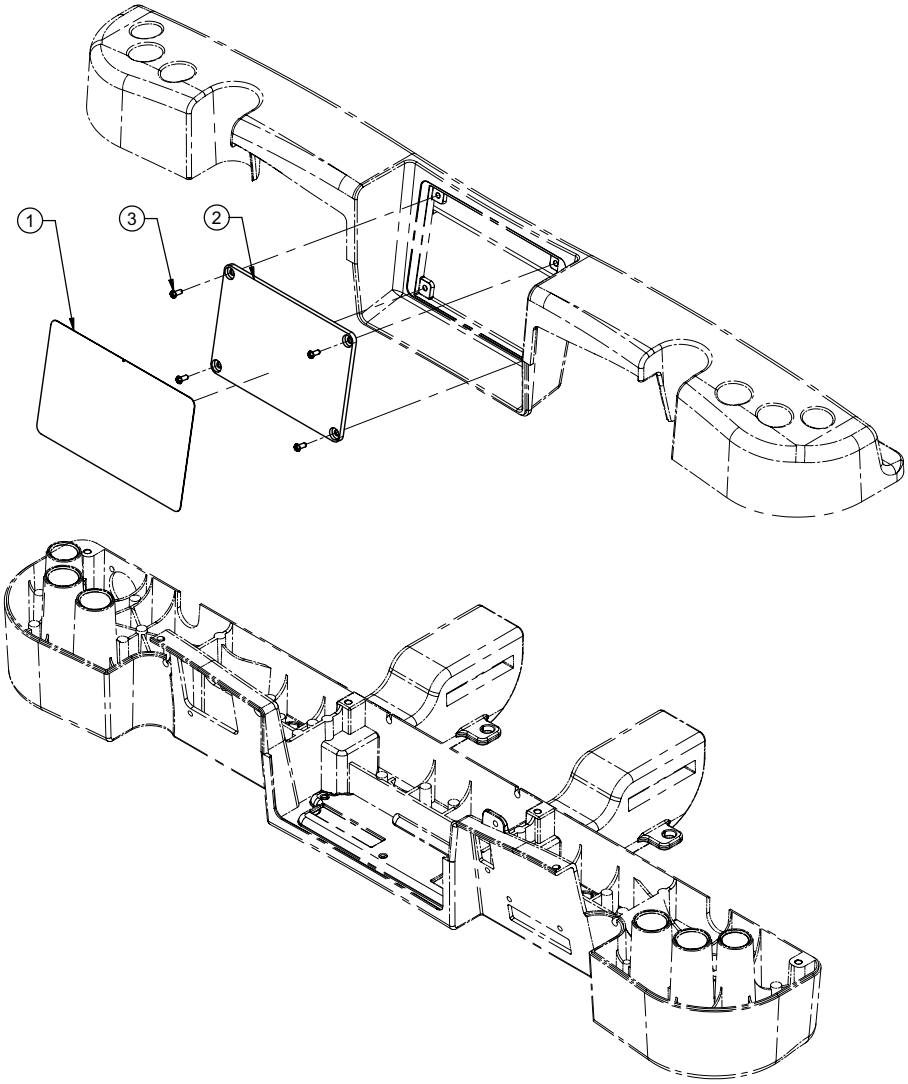
OL270077-XXX Rev D (Reference only)



Item	Number	Name	Quantity
1	QE71-0946-XXX	Label, **Zoom**	1
2	QE71-1372	Label, **Zoom** handle	1

No head end control panel - option

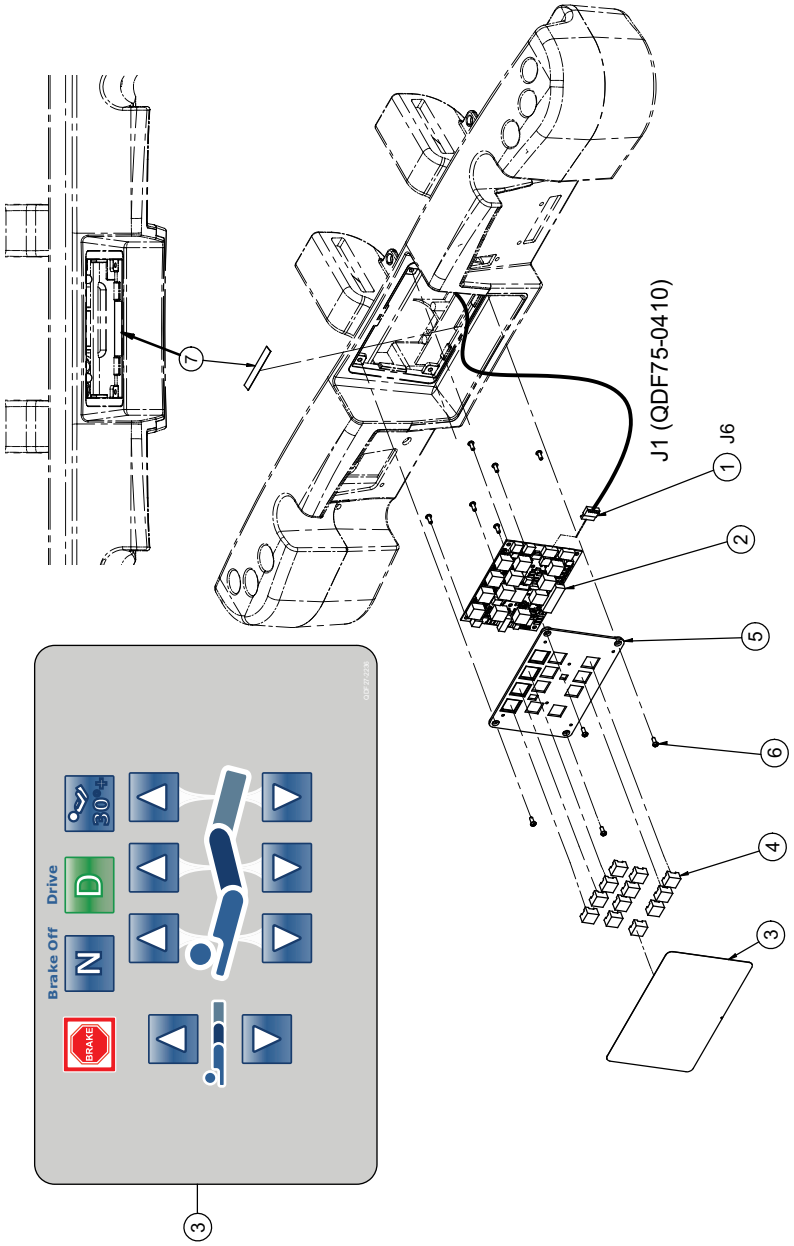
OL270019 Rev 01 (Reference only)



Item	Number	Name	Quantity
1	QDF27-1649	Head end control fascia without motorized **Zoom** drive	1
2	QP27-1650	Head frame plate	1
3	VV23A9C12HL	Pan head screw	4

Head end control panel assembly - option

OL270263-XXX Rev C (Reference only)



QDF21-2895 Connection table			
Cable number	Connector number	Cable number	Connector number
QDF21-2895	MTA6	QDF27-1099	J6
QDF21-2895	MTA6	QDF75-0270	J1

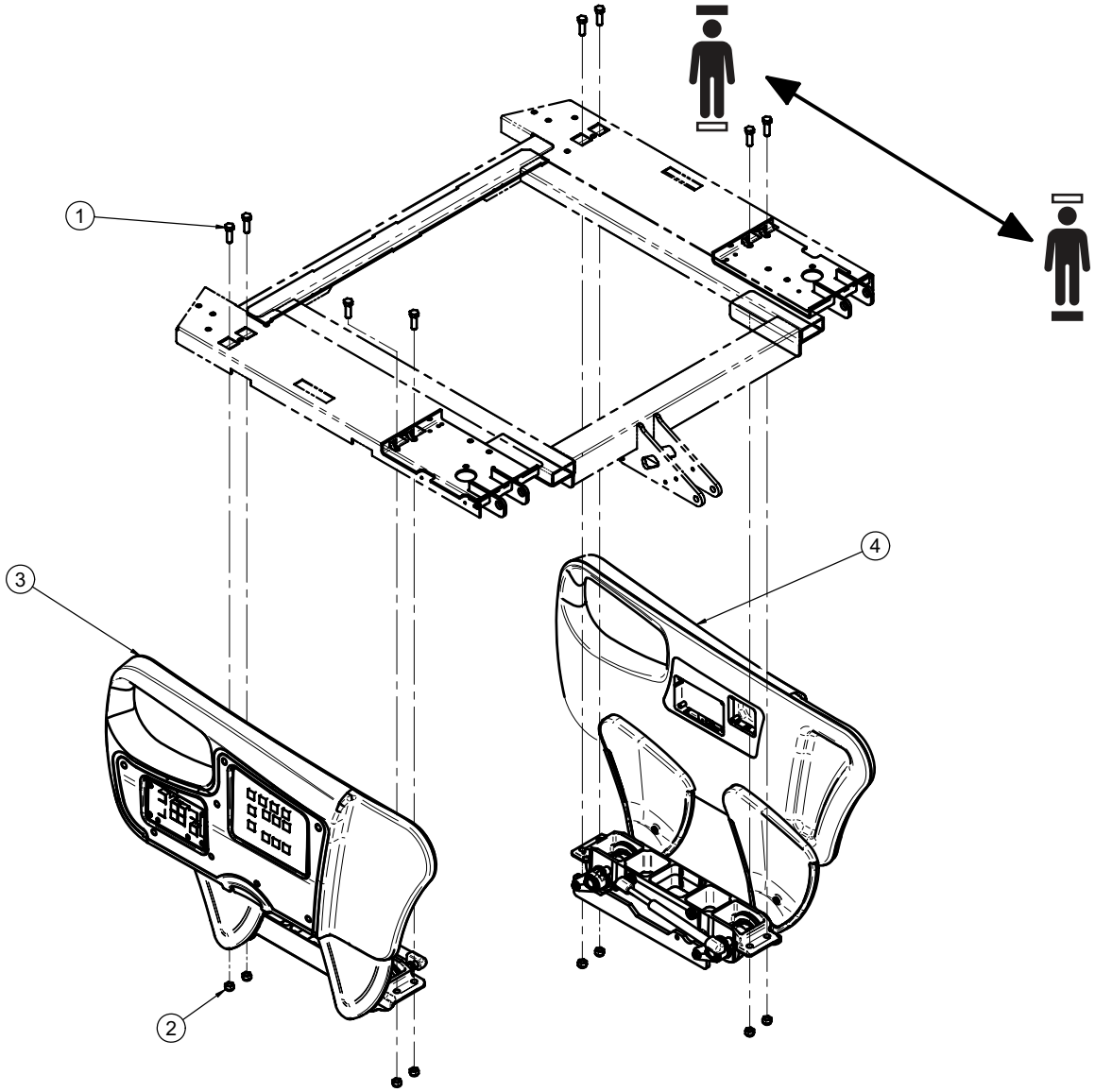
Dip switch configuration on QDF27-1099			
SW13	ON	OFF	ON
SW14	OFF	OFF	-

Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF21-2895	12" network cable	1
2	QDF27-1099	Siderail nurse control board	1
3	QF27-2236-XXX	Fascia, head end control	1
4	QDF9183	Electronic board button	12
5	QP27-1111	Nurse control board support	1
6	VV23A9C12HL	Pan head screw	10
7	QE71-1340	Connection isolation sticker	1

Siderail mounting assembly, head end

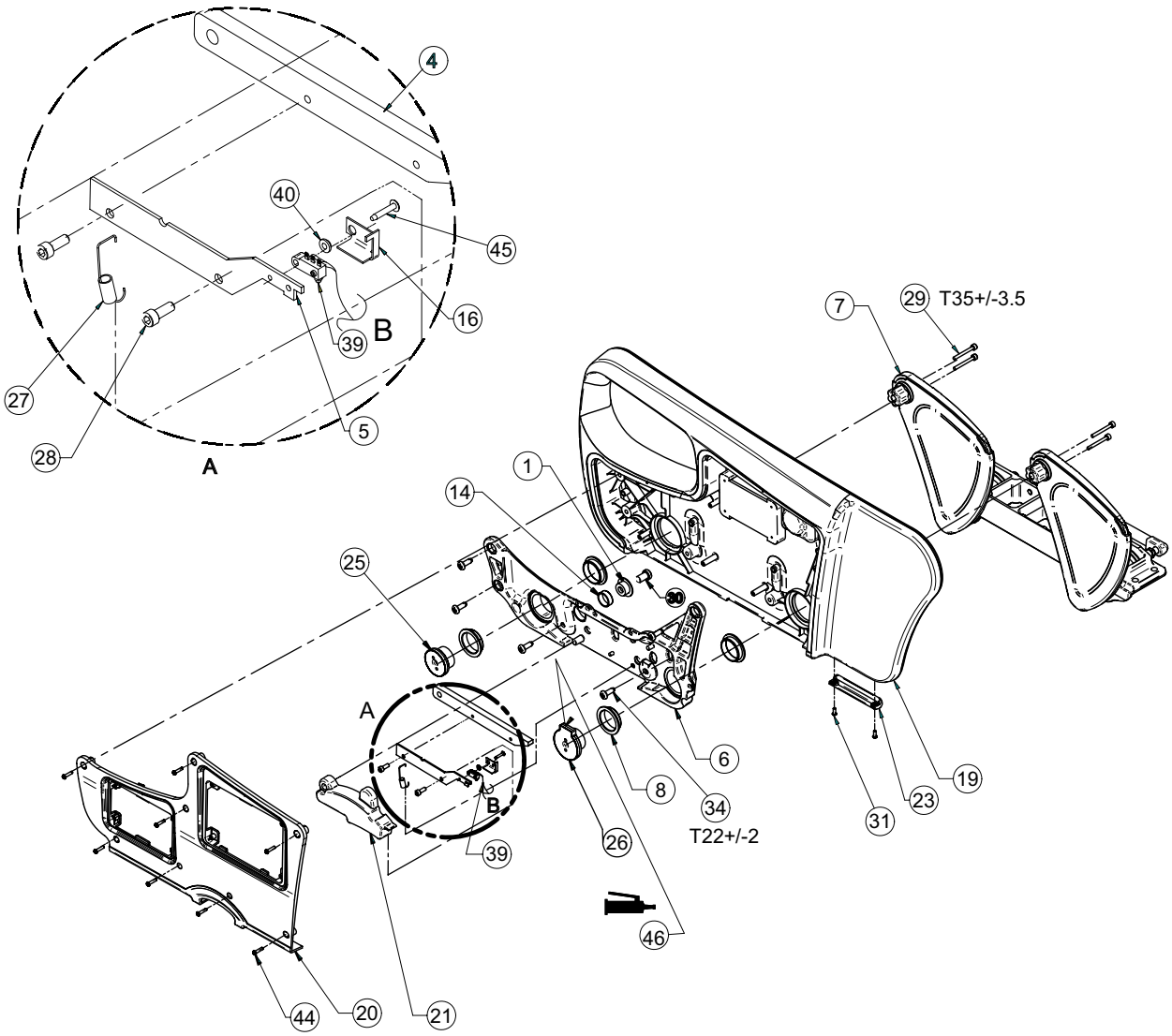
L27-039 Rev 01 (Reference only)

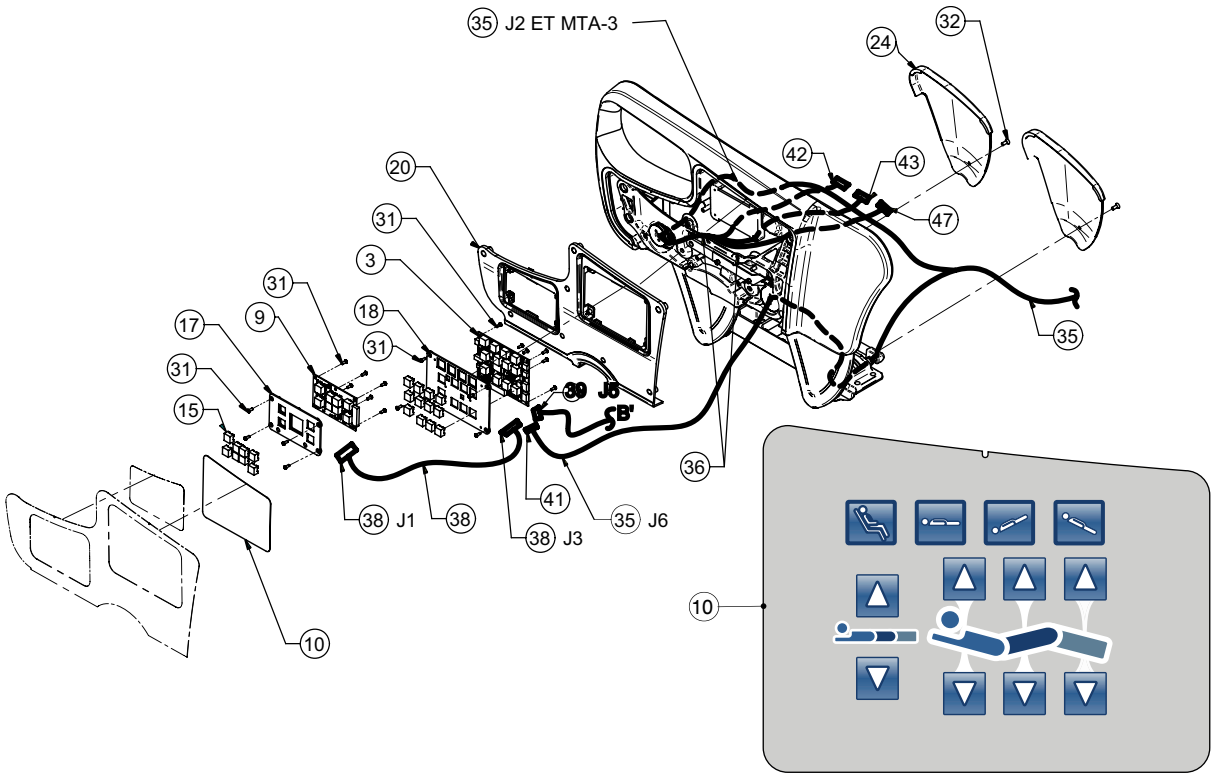


Item	Number	Name	Quantity
1	VB18A1O32	Bolt	8
2	VE30A1O	Nylon locknut	8
3	27-2287	Head end siderail, right	1
4	27-2288	Head end siderail, left	1

Standard siderail assembly, head end, right

27-2287 Rev AB (Reference only)





Position on connector						
Cable 36 (QDF27-2212)	Position on connector 47 (QDF2127)	Position on connector 41 (QDF2088)	Position on connector 43 (QDF2087)	Position on connector 42 (QDF9028)	Signal	Color
1	-	1	-	-	CAN H	Black/red
2	-	2	-	-	CAN L	Red
3	-	3	-	-	+12V	Black/white
4	-	4	-	-	GND	White
5	-	5	-	-	SAFE	Black/green
6	-	6	-	-	+24V	Green
-	-	-	-	-	Audioshield	-
1	-	-	1	-	SPK high	Black
2	-	-	2	-	SPK COM	White
1	-	-	-	1	N.O.	Red
2	-	-	-	2	COM	Green
3	-	-	-	3	N.C.	Brown
1	1	-	-	-	Speaker	Blue
2	2	-	-	-	Speaker	Orange

Dip switch configuration on QDF27-1099			
SW13	ON	ON	ON
SW14	ON	ON	-

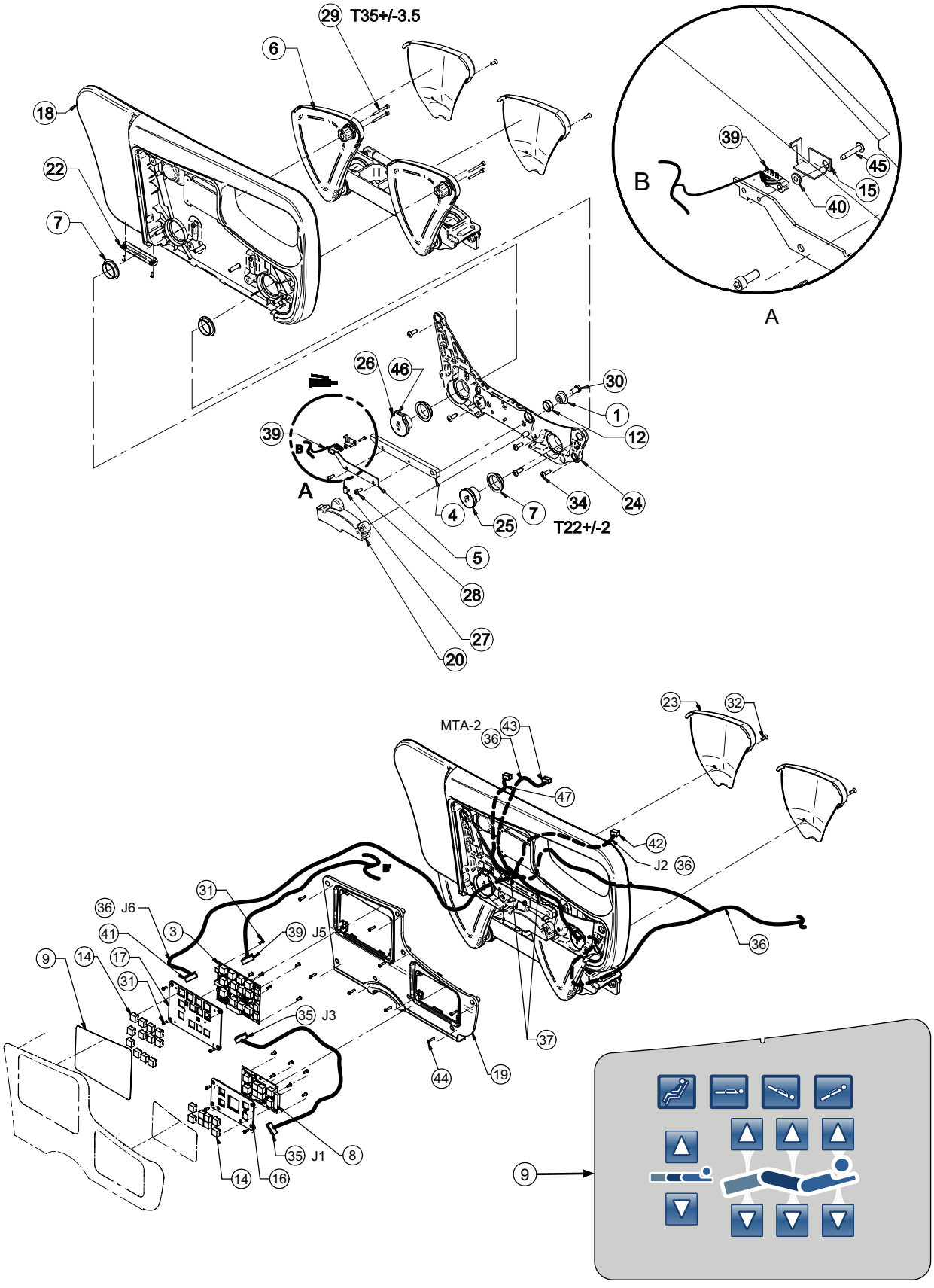
Cables connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1681	MTA - 3 positions	To	QDF27-1099	J5
QDF27-1156	MTA - 6 positions	To	QDF27-1099	J3
QDF27-1156	MTA - 6 positions	To	QDF27-1097	J1
QDF27-1784	MTA - 3 positions	To	QDF27-2212	MTA - 2 positions
QDF27-2212	Mate N lock - 12 positions	To	QDF27-2213	J105 (L27-038)
QDF27-2212	MTA - 6 positions	To	QDF27-1099	J6
QDF27-2212	MTA - 3 positions	To	See OL270164, OL270308, OL270322	
QDF27-2212	MTA - 2 positions	To		
QDF27-2212	Connector 2 pins	To		

Item	Number	Name	Quantity
1	QPA28-0493	Siderail sleeve	1
3	QDF27-1099	Siderail nurse control board	1
4	QDF27-2574Z	Siderail lock	1
5	27-2575Z	Siderail switch support	1
6	27-2295	Head siderail structure, right	1
7	27-2061W	Reversed siderail mechanism S.A.	1
8	QDF2049	Shoulder spacer	4
9	QDF27-1097	Brake control board	1
10	QDF27-2237	Head nurse control fascia, right	1
14	28-0491	Machined spacer QDF9191	1
15	QDF9183	Electronic board button	20
16	27-2292Z	Switch guide 2	1
17	QP27-1109-10	Brake board support	1
18	QP27-1111	Nurse control board support	1
19	QP27-2225-05	Head siderail, right	1
20	QP27-1265-05	Head siderail cover, right	1
21	QP27-1273-08	Siderail handle, right	1
23	QP27-1496-05	Head siderail cap	1
24	QP28-0040-10	Reversed siderail arm cover	2
25	QPA28-0015	Siderail sleeve	1
26	QPA28-0016	Sleeve with lock	1
27	QRE27-1736	Return spring	1
28	VV10A0G16-S	Cylinder head screw	2
29	VV10B0G40-S	Cylinder head screw	4
30	VV10A1P20-S	Cylinder head screw	1
31	VV23A9C12HL	Phillips screw	22
32	VV31A0G16	Phillips machine screw	2
34	VVB3A9N24PF	Screw	5
35*	QDF27-2212	Head siderail wire	1

Item	Number	Name	Quantity
36*	QDF9518	Cable tie	2
38*	QDF27-1156	Brake board cable	1
39*	27-2929	Siderail limit switch	1
40	27-1839	Spacer washer	1
41*	QDF2088	6 positions polarized connector	1
42*	QDF9028	3 positions connector	1
43*	27-2940	2 positions connector	1
44	VV23A9C20HL	Phillips screw	8
45	VV87A9A20	Phillips screw	1
46*	M0019	OG 2 grade grease	1
47*	QDF2127	2 pins connector	1

Standard siderail assembly, head end, left

27-2288 Rev AB (Reference only)



Position on connector						
Cable 36	**Position on connector 47**	**Position on connector 41**	**Position on connector 43**	**Position on connector 42**	**Signal**	**Color**
1	-	1	-	-	CAN H	Black/red
2	-	2	-	-	CAN L	Red
3	-	3	-	-	+12V	Black/white
4	-	4	-	-	GND	White
5	-	5	-	-	Safe	Black/green
6	-	6	-	-	+24V	Green
-	-	-	-	-	Audioshield	-
1	-	-	1	-	SPK High	Black
2	-	-	2	-	SPK COM	White
1	-	-	-	1	N.O.	Red
2	-	-	-	2	COM	Green
3	-	-	-	3	N.C.	Brown
1	1	-	-	-	Speaker	Blue
2	2	-	-	-	Speaker	Orange

Dip switch configuration on QDF27-1099			
SW13	OFF	ON	ON
SW14	OFF	OFF	-

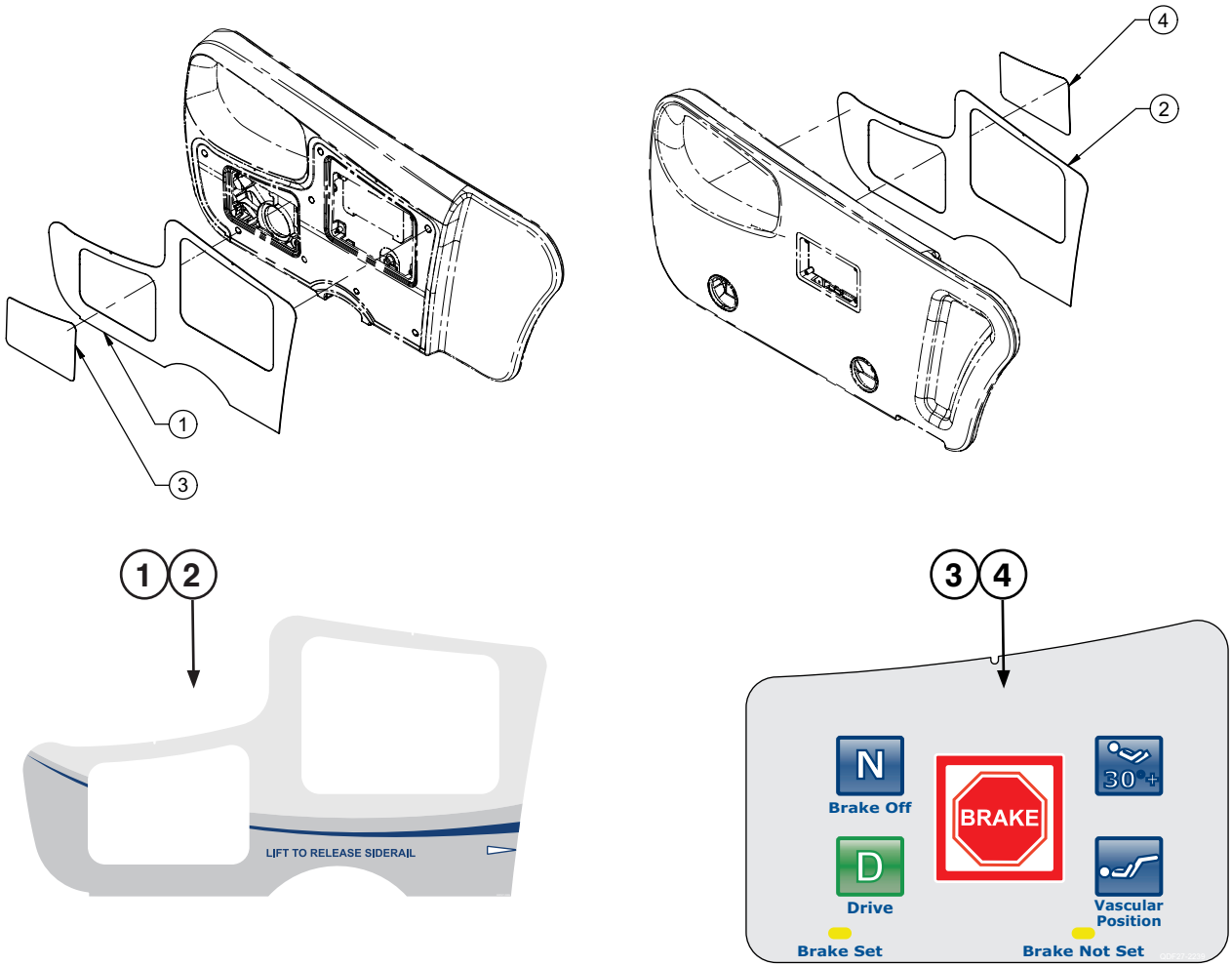
Cables connection table				
Cable number	Connector number	To	Cable number	Connector number
QDF27-1681	MTA - 3 positions	To	QDF27-1099	J5
QDF27-1156	MTA - 6 positions	To	QDF27-1099	J3
QDF27-1156	MTA - 6 positions	To	QDF27-1097	J1
QDF27-1784	MTA - 3 positions	To	QDF27-2212	MTA - 2 positions
QDF27-2212	Mate N lock - 12 positions	To	QDF27-2213	J105 (L27-038)
QDF27-2212	MTA - 6 positions	To	QDF27-1099	J6
QDF27-2212	MTA - 3 positions	To	See OL270164, OL270308, OL270322	
QDF27-2212	MTA - 2 positions	To		
QDF27-2212	Connector 2 pins	To		

Item	Number	Name	Quantity
1	QPA28-0493	Siderail sleeve	1
3	QDF27-1099	Siderail nurse control board	1
4	QDF27-2574Z	Siderail lock	1

Item	Number	Name	Quantity
5	27-2575Z	Switch support	1
6	27-2060W	Siderail mechanics S.A.	1
7	QDF2049	Spacer	4
8	QDF27-1097	Brake control board	1
9	QDF27-2238	Head nurse control fascia, left	1
12	QDF28-0491	Machining spacer QDF9191	1
14	QDF9183	Electronic board button	20
15	27-2293Z	Switch guide 1	1
16	QP27-1109-10	Brake board support	1
17	QP27-1111	Nurse control board support	1
18	QP27-2226-05	Head siderail, left	1
19	QP27-1266-05	Head siderail cover, left	1
20	QP27-1274-08	Siderail handle, left	1
22	QP27-1496-05	Head siderail cap	1
23	QP28-0039-10	Siderail rotation lever cover	2
24	QPA27-2296	Head siderail structure, left	1
25	QPA28-0015	Siderail sleeve	1
26	QPA28-0016	Sleeve with lock	1
27	QRE27-1736	Spring balance	1
28	VV10A0G16-S	Hexagon socket head screw	2
29	VV10B0G40-S	Hexagon socket head screw	4
30	VV10A1P20-S	Hexagon socket head screw	1
31	VV23A9C12HL	Pan head screw type hi-lo	22
32	VV31A0G16	Flat head machine screw	2
34	VVB3A9N24PF	Screw	5
35*	QDF27-1156	Brake board cable	1
36*	QDF27-2212	Head siderail wire	1
37*	QDF9518	Cable tie	2
39*	27-2929	Siderail limit switch S.A.	1
40	27-1839	Side ring	1
41*	QDF2088	Polarized 6-position connector	1
42*	QDF9028	3-position connector	1
43*	27-2940	2-position connector	1
44	VV23A9C20HL	Pan head Hi-Low screw	8
45	VV87A9A20	Truss head tapping screw	1
46*	M0019	OG2 grade grease	1
47*	QDF2127	2 pins connector	1

Standard siderail assembly, labeling

OL270180-XXX Rev 02 (Reference only)

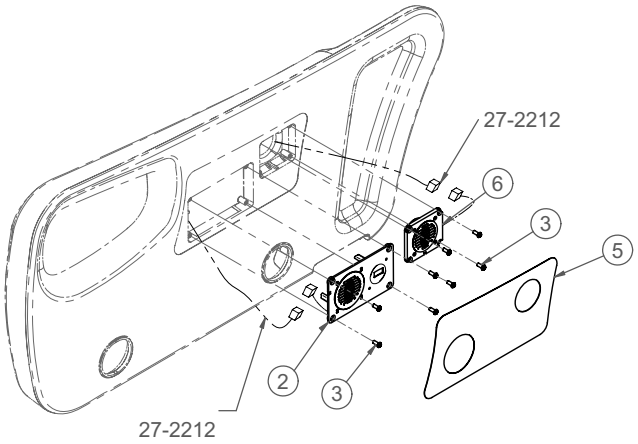


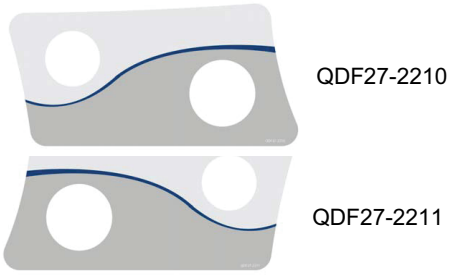
Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

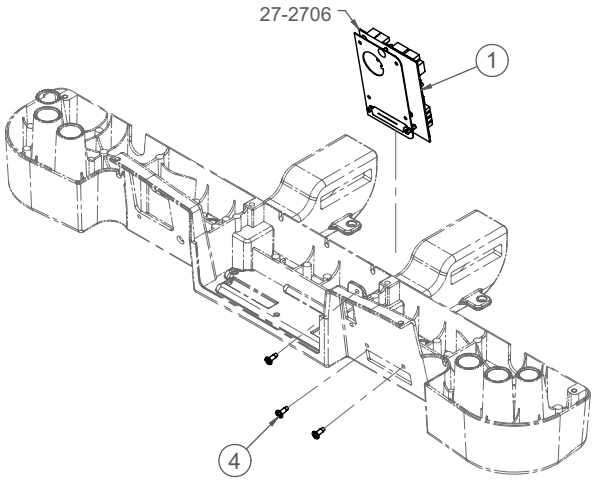
Item	Number	Name	Quantity
1	QDF27-0906-XXX	Label, nurse control, head end, right	1
2	QDF27-0907-XXX	Label, nurse control, head end, left	1
3	QDF27-2239-XXX	Label, brake control, head end, right	1
4	QDF27-2240-XXX	Label, brake control, head end, left	1

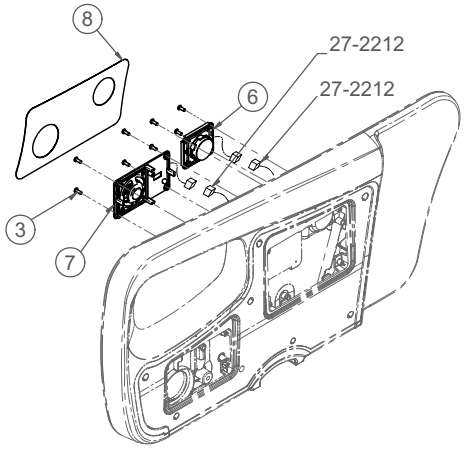
Siderail assembly, head end, with speaker/*i*Audio - option

OL270308 Rev AA (Reference only)









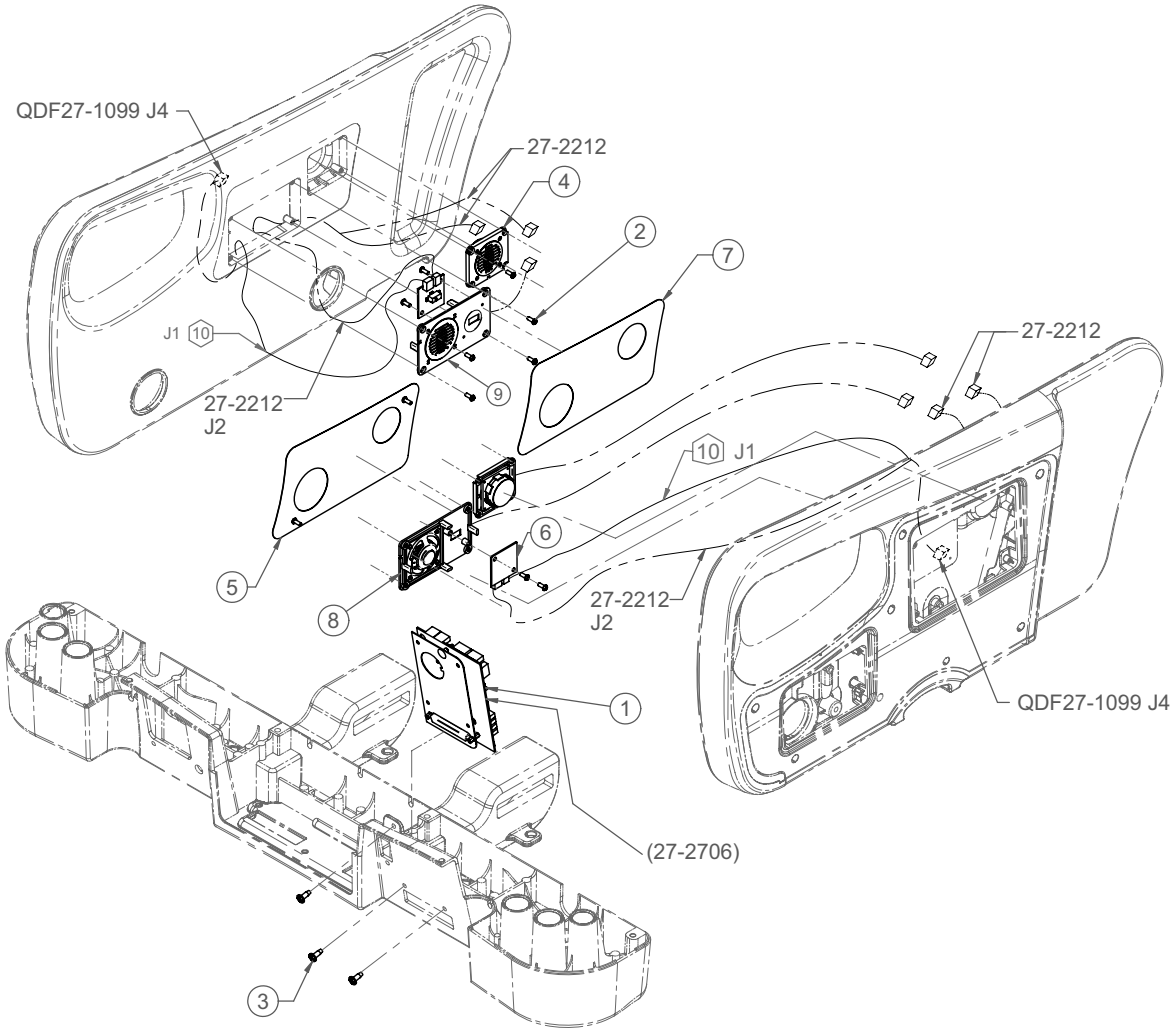
Cable number	Connector number	To	Cable number	Connector number
27-2939	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, left)
27-2938	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, right)
QDF27-2196	2 position connection	To	QDF27-2212	(Standard siderail assembly, head end, left) and (Standard siderail assembly, head end, right)

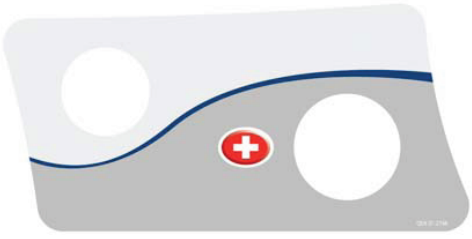
Item	Number	Name	Quantity
1	QDF75-0270	Room interface board	1
2	27-2939	Siderail speaker, left	1
3	VV23A9C12HL	Pan head tapping screw	16
4	VV83A9G16	Pan head tapping screw	3

Item	Number	Name	Quantity
5	QDF27-2211	Label, left communications	1
6	QDF27-2196	Head speaker	2
7	27-2938	Siderail speaker, right	1
8	QDF27-2210	Label, right communications	1

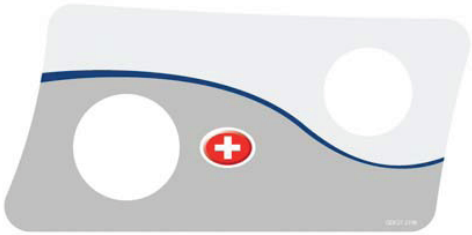
Siderail assembly, head end, with speaker/with NC/with iAudio - option

OL270311 Rev AA (Reference only)





QFD27-2198



QFD27-2199

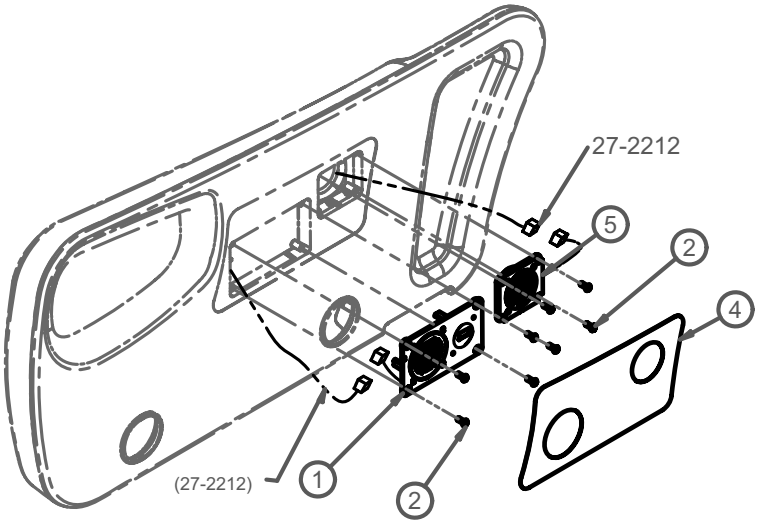
Cable number	Connector number	To	Cable number	Connector number
27-2939	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, left)
QDF27-1429	J1	To	QDF27-1682	MTA - 3 positions

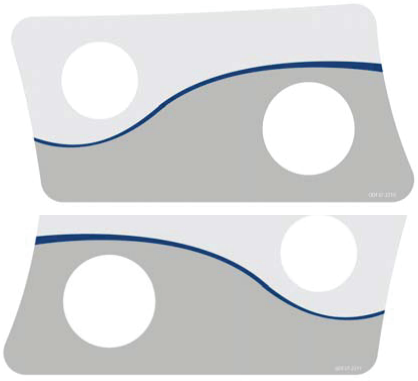
Cable number	Connector number	To	Cable number	Connector number
QDF27-1429	J2	To	QDF27-1206	MTA - 3 positions, (Standard siderail assembly, head end, left), and (Standard siderail assembly, head end, right)
QDF27-1682	MTA - 3 positions	To	QDF27-1429	J1
QDF27-1682	MTA - 3 positions	To	QDF27-1099	J4, (Standard siderail assembly, head end, left), and (Standard siderail assembly, head end, right)
27-2938	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, right)
QDF27-2196	2 position connection	To	QDF27-2212	(Standard siderail assembly, head end, left) and (Standard siderail assembly, head end, right)

Item	Number	Name	Quantity
1	QDF75-0270	Room interface board	1
2	VV23A9C12HL	Pan head tapping screw	20
3	VV83A9G16	Pan head tapping screw	3
4	QDF27-2196	Head speaker	2
5	QDF27-2198	Nurse call and speaker fascia, right	1
6	QDF27-1429	Nurse call board	2
7	QDF27-2199	Nurse call and speaker fascia, left	1
8	27-2938	Siderail speaker, right	1
9	27-2939	Siderail speaker, left	1
10*	QDF27-1682	Siderail nurse call wires	2

Siderail assembly, head end, with speaker/iAudio/IR - option

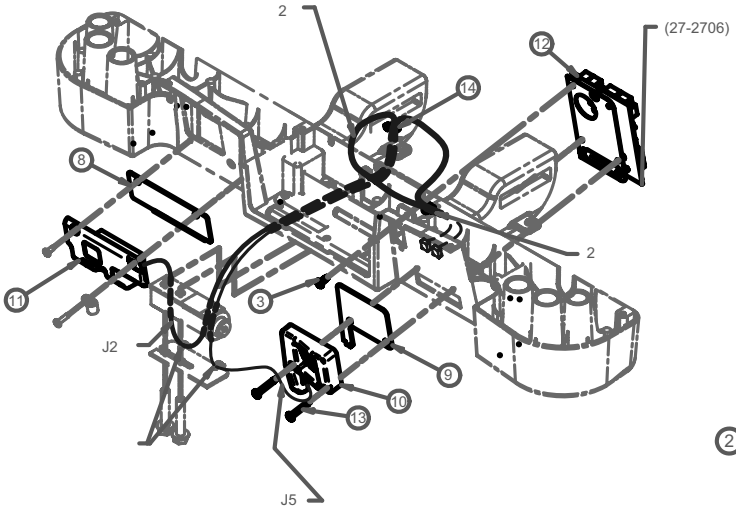
OL270322 Rev AA (Reference only)

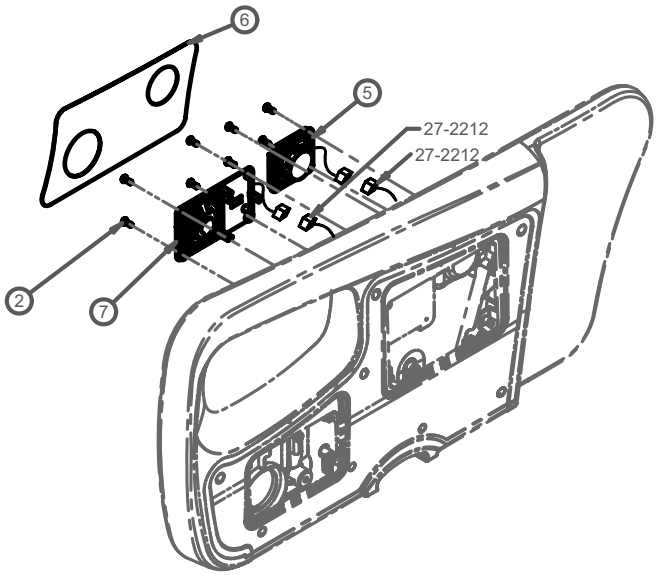




QDF27-2210

QDF27-2211



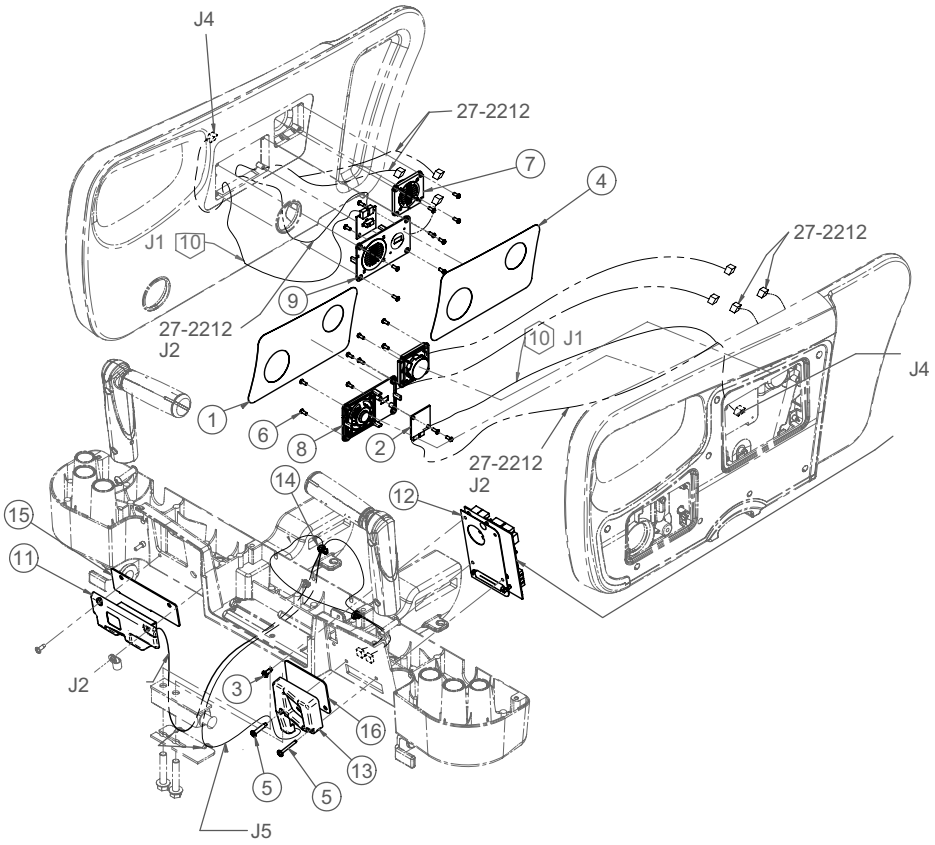


Cable number	Connector number	To	Cable number	Connector number
27-2939	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, left)
27-2938	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, right)
QDF27-2196	2 position connection	To	QDF27-2212	(Standard siderail assembly, head end, left) and (Standard siderail assembly, head end, right)

Item	Number	Name	Quantity
1	27-2939	Siderail speaker, left	1
2	VV23A9C12HL	Pan head tapping screw	16
3	VV83A9G16	Pan head tapping screw	2
4	QDF27-2211	Label, iAudio/comm., left	1
5	QDF27-2196	Head speaker	2
6	QDF27-2210	Label, iAudio/comm., right	1
7	27-2938	Siderail speaker, right	1
8	QP27-2735	IR support gasket, left	1
9	QP27-2734	IR support gasket, right	1
10	27-2662	IR module, right	1
11	27-2661	IR module, left	1
12	QDF75-0270	Room interface board	1
13	VV83A9G36	Phillips pan head screw	2
14	QDF9518	Cable tie	3

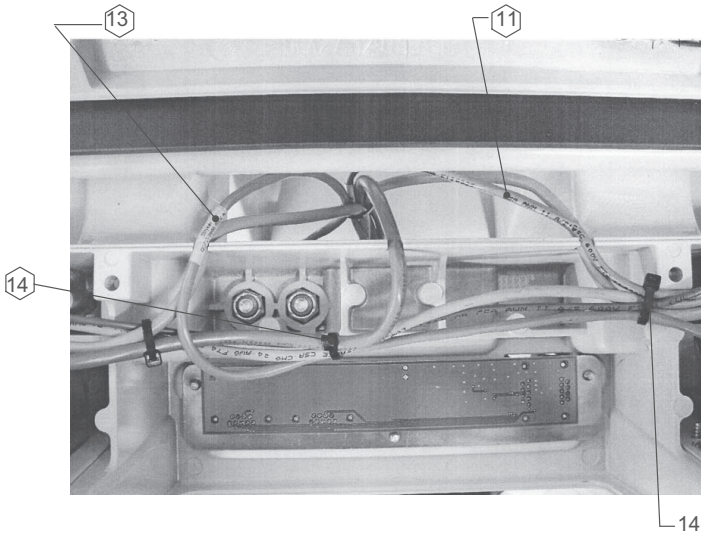
Siderail assembly, head end, with speaker/with NC/with iAudio/with iBed Wireless - option

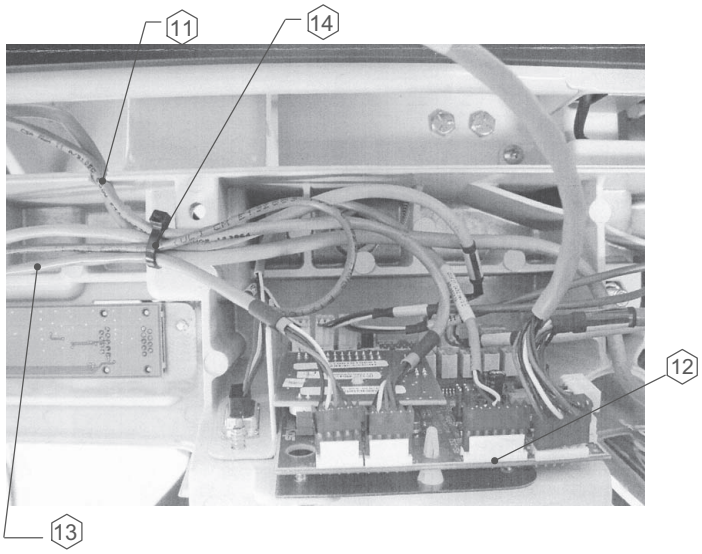
OL270302 Rev AA (Reference only)

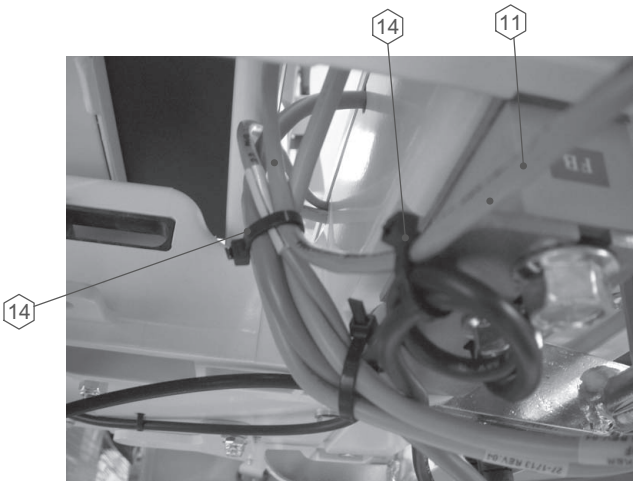


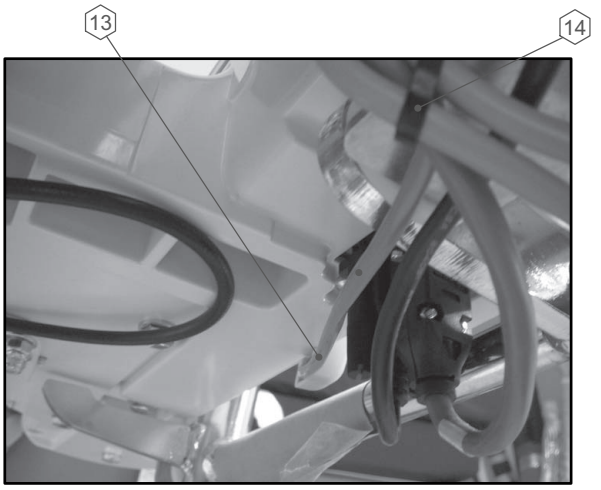
QFD27-2198

QFD27-2199









Note - Make sure that a jumper or a connector is plugged into J14 and J16 of the QDF75-0270 room interface board. If no connector is plugged in, put a jumper on pin 2 and pin 3, J14 and J16 of the QDF75-0270 room interface board.

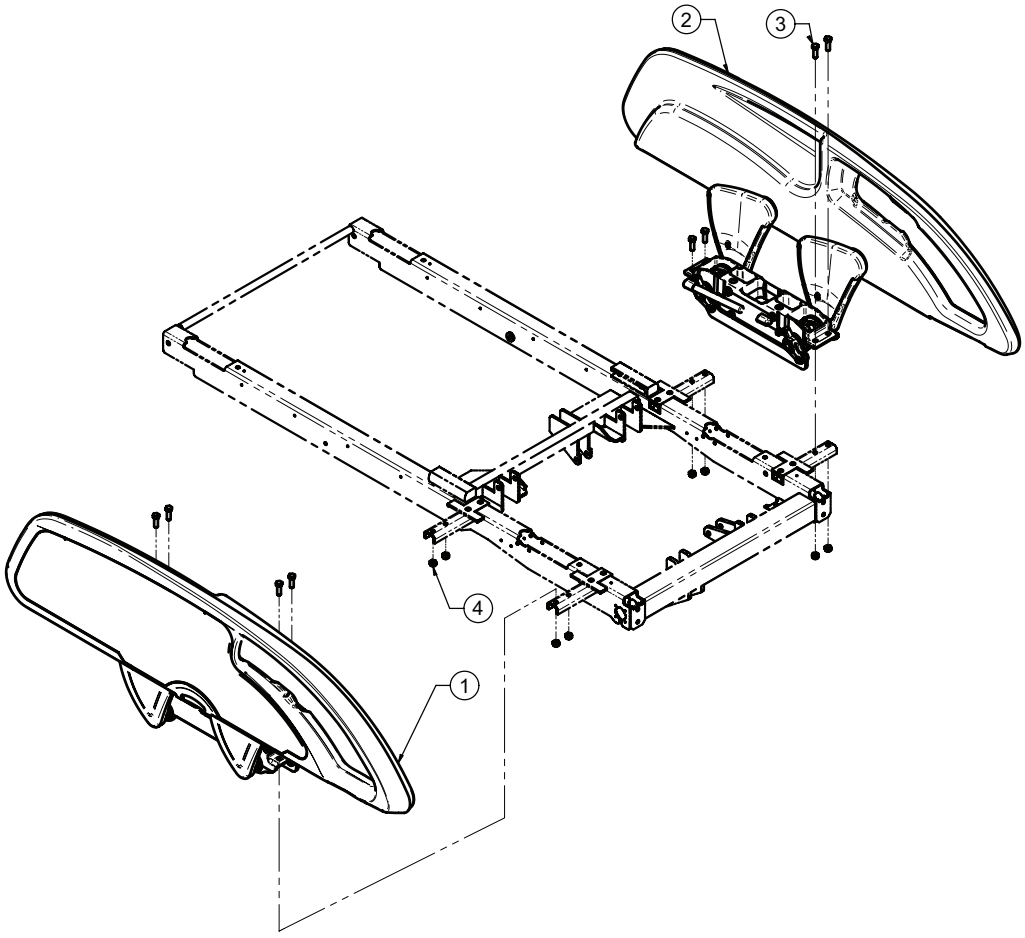
Cable number	Connector number	To	Cable number	Connector number
27-2939	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, left)
QDF27-1429	J1	To	QDF27-1682	MTA - 3 positions
QDF27-1429	J2	To	QDF27-1206	MTA - 3 positions, (Standard siderail assembly, head end, left), and (Standard siderail assembly, head end, right)
QDF27-1682	MTA - 3 positions	To	QDF27-1429	J1
QDF27-1682	MTA - 3 positions	To	QDF27-1099	J4, (Standard siderail assembly, head end, left), and (Standard siderail assembly, head end, right)

Cable number	Connector number	To	Cable number	Connector number
27-2938	MTA - 2 positions	To	QDF27-2212	MTA - 2 positions (Standard siderail assembly, head end, right)
QDF27-2196	2 position connection	To	QDF27-2212	(Standard siderail assembly, head end, left) and (Standard siderail assembly, head end, right)

Item	Number	Name	Quantity
1	QDF27-2198	Audio speaker and nurse call overlay, right	1
2	QDF27-1429	Nurse call board	2
3	VV83A9G16	Pan head tapping screw	1
4	QDF27-2199	Audio speaker and nurse call overlay, left	1
5	VV83A9G36	Round head tapping screw	2
6	VV23A9C12HL	Pan head tapping screw	20
7	QDF27-2196	Head speaker cover	2
8	27-2938	Siderail speaker, right	1
9	27-2939	Siderail speaker, left	1
10	QDF27-1682	Siderail nurse call wires	2
11	27-2661	IR module, left	1
12	QDF75-0270	Room interface board	1
13	27-2662	IR module, right	1
14	QDF9518	Cable tie	3
15	QP27-2735	IR support gasket, left	1
16	QP27-2734	IR support gasket, right	1

Siderail mounting assembly, foot end

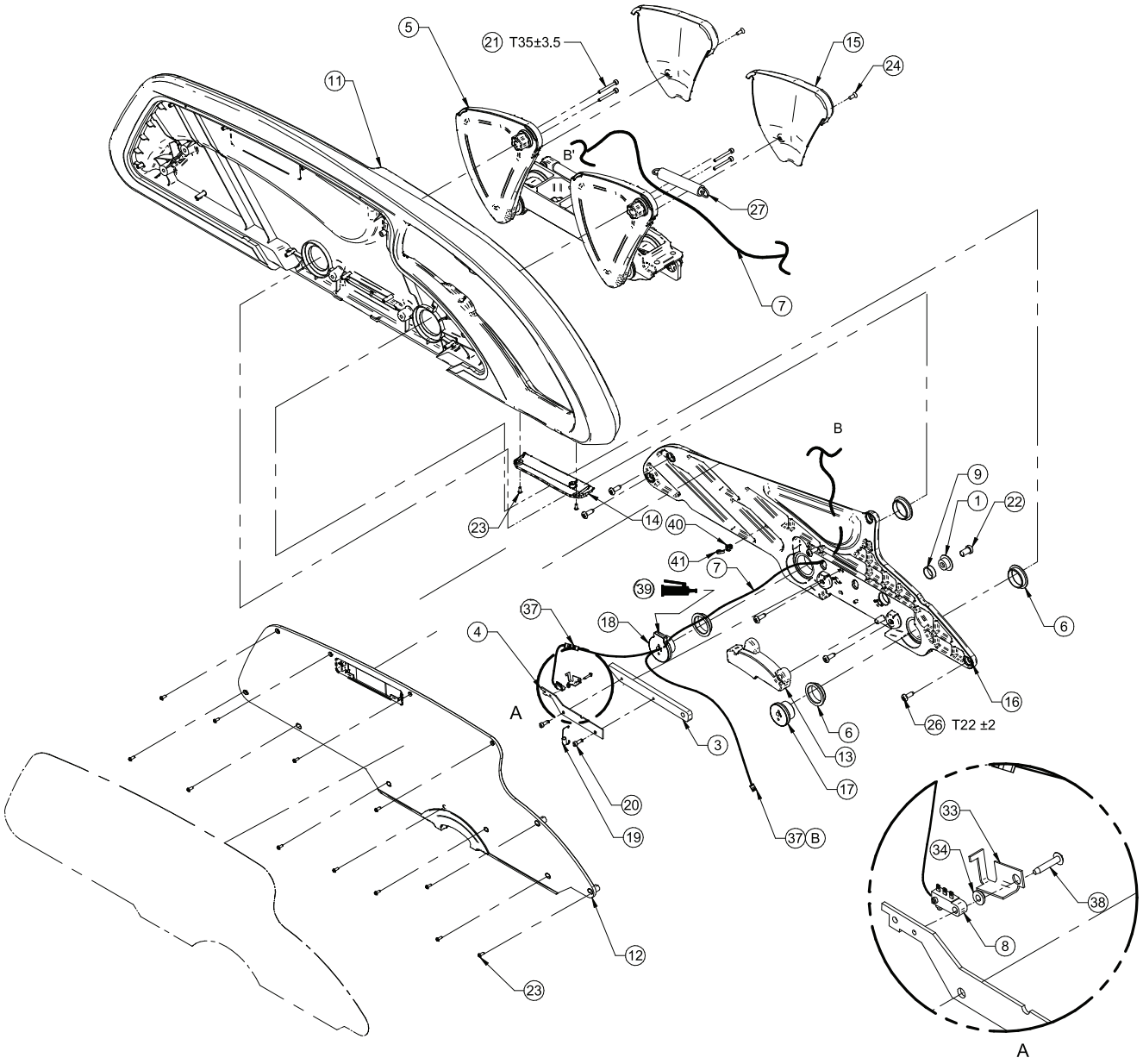
L27-032 Rev 02 (Reference only)



Item	Number	Name	Quantity
1	27-2289	Foot siderail assembly, right	1
2	27-2290	Foot siderail assembly, left	1
3	VB18A1O32	Bolt	8
4	VE30A1O	Nylon locknut	8

Standard siderail assembly, foot end, right

27-2289 Rev AA (Reference only)



Position on connector			
Cable number	Connector number	Cable number	Connector number
27-2929	MTA - 100 3 positions	27-2937	MTA - 100 3 positions

Position on connector			
27-2937	MTA - 100 3 positions	27-2929	MTA - 100 3 positions
27-2937	Mate N lock 3 positions	QDF27-1481	J172 (L27-029)

Position on connector				
Cable 7 (27-2937)	Signal	Color	Position on connector 37A (QDF2099)	Position on connector 37B (QDF2099)
1	No switch	White	1	-
2	COM switch	Black	2	-
3	NC switch	Green	3	-
4	LED1 lbs	Orange	-	1
5	+12V	Red	-	3
6	LED2 lbs	Blue	-	2

Note

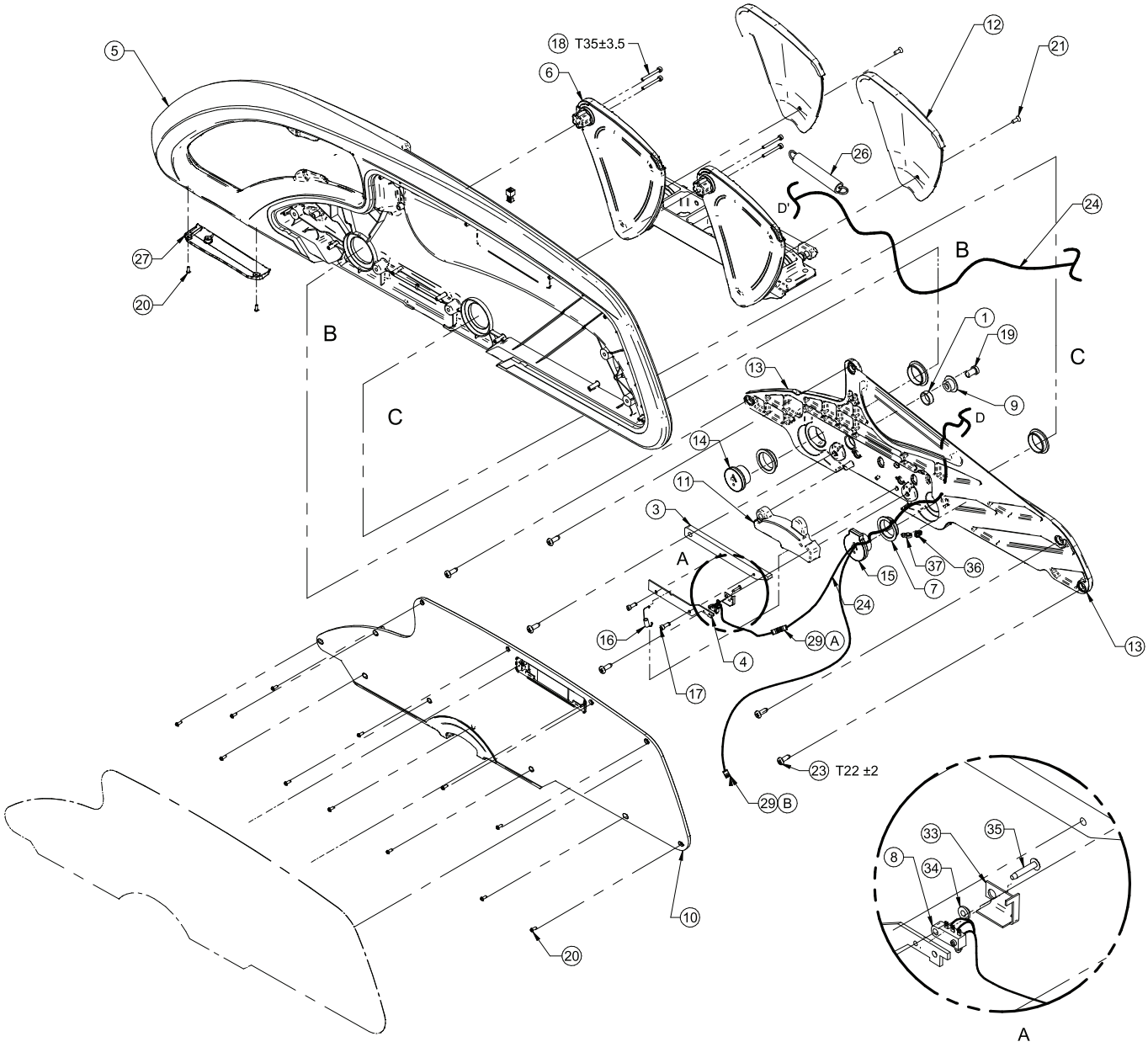
- Siderail without **iBed** option - see OL270059-XXX (*Standard siderail assembly without iBed* (page 189)).
- Siderail with **iBed** option - see OL270060-XXX (*Siderail assembly with iBed - option* (page 190)).

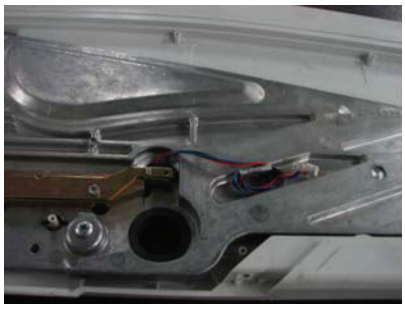
Item	Number	Name	Quantity
1	QPA28-0493	Siderail sleeve	1
3	QDF27-2574Z	Siderail lock	1
4	27-2575Z	Switch support	1
5	27-2060	S.A. siderail mechanism	1
6	QDF2049	Shoulder spacing	4
7	27-2937	Foot siderail limit switch cable	1
8	27-2929	S.A. siderail switch	1
9	28-0491	Machined spacer QDF9191	1
11	QP27-1263	Foot siderail, right	1
12	QP27-1267	Foot siderail cover, right	1
13	QP27-1274	Siderail handle, left	1
14	QP27-1508	Foot siderail cap, right	1
15	QP28-0039	Siderail rotation arm cover	2
16	QPA27-2297	Foot siderail structure, right	1
17	QPA28-0015	Siderail sleeve	1
18	QPA28-0016	Sleeve with lock	1
19	QRE27-1736	Return spring	1
20	VV10A0G16-S	Hexagon cylindric head screw	2
21	VV10B0G40-S	Hexagon cylindric head screw	4
22	VV10A1P20-S	Hexagon cylindric head screw	1
23	VV23A9C12HL	Phillips pan head screw	15
24	VV31A0G16	Phillips flat head screw	2
26	VVB3A9N24PF	Screw	6
27	QRE28-0293	Siderail tension spring	1
33	27-2293Z	Switch guide 1	1
34	27-1839	Shoulder washer	1

Item	Number	Name	Quantity
37	27-2931	Female connector MTA-100 (3 positions)	2
38	VV87A9A20	Phillips truss head tapping screw	1
39	M0019	Grease	1
40	QDF5096	Plastic tie support	1
41	QDF9518	Cable tie	1

Standard siderail assembly, foot end, left

27-2290 Rev AA (Reference only)





Position on connector			
Cable number	Connector number	Cable number	Connector number
27-2929	MTA - 100 3 positions	27-2937	MTA - 100 3 positions

Position on connector			
27-2937	MTA - 100 3 positions	27-2929	MTA - 100 3 positions
27-2937	Mate N lock 3 positions	QDF27-1481	J171 (L27-029)

Position on connector				
Cable 24 (QDF27-1208)	Signal	Color	Position on connector 29A (QDF2099)	Position on connector 29B (QDF2099)
1	No switch	White	1	-
2	COM switch	Black	2	-
3	NC switch	Green	3	-
4	LED1 lbs	Orange	-	1
5	+12V	Red	-	3
6	LED2 lbs	Blue	-	2

Note

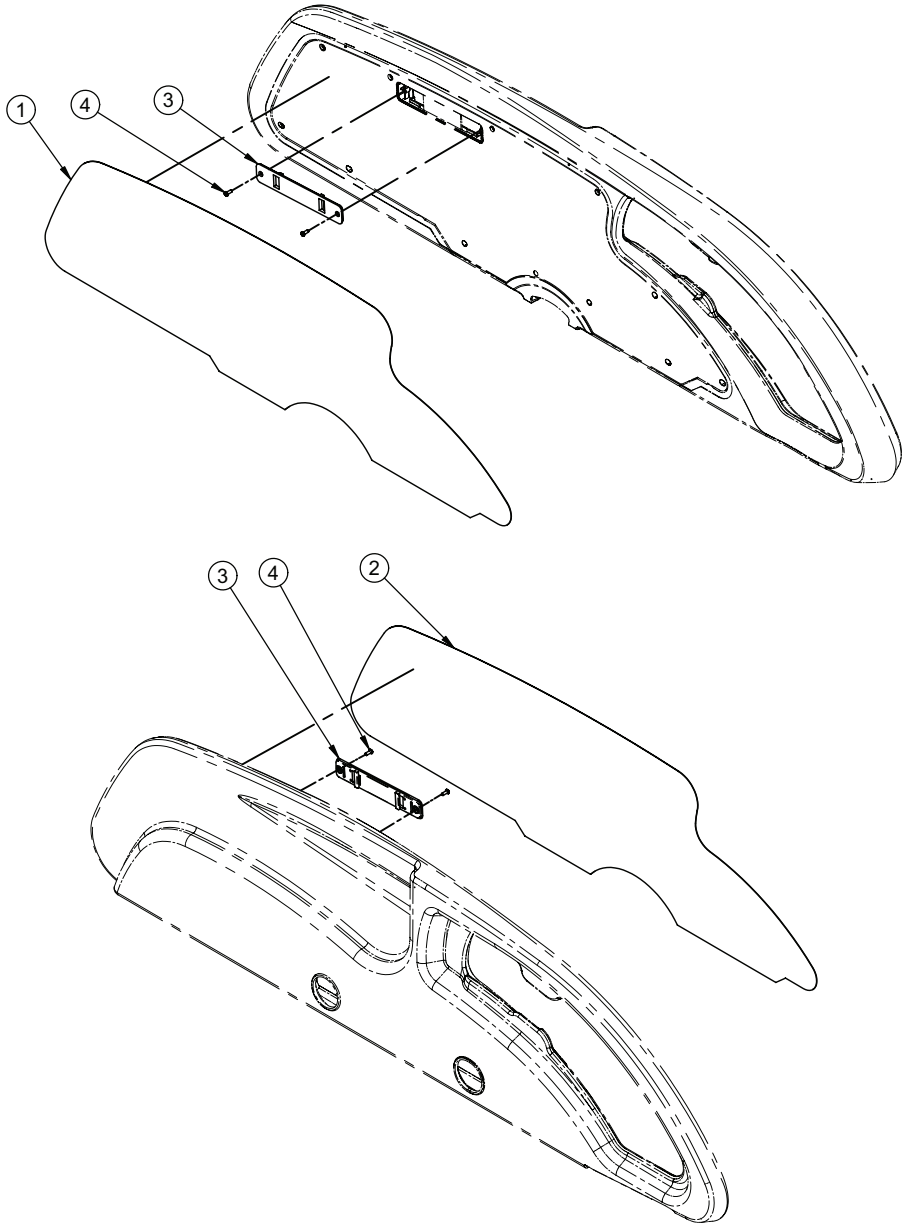
- Siderail without **iBed** option - see OL270059-XXX (*Standard siderail assembly without iBed* (page 189)).
- Siderail with **iBed** option - see OL270060-XXX (*Siderail assembly with iBed - option* (page 190)).

Item	Number	Name	Quantity
1	QDF28-0491	Machined spacer QDF9191	1
3	QDF27-2574Z	Siderail lock	1
4	27-2575Z	Switch support	1
5	QP27-1264	Foot siderail, left	1
6	27-2061	S.A. reversed siderail mechanism	1
7	QDF2049	Shoulder spacer	4
8	27-2929	S.A. siderail switch	1
9	QPA28-0493	Siderail sleeve	1
10	QP27-1268	Foot siderail cover, left	1
11	QP27-1273	Siderail handle, right	1
12	QP28-0040	Reversed siderail arm cover	2
13	QPA27-2298	Foot siderail casting, left	1
14	QPA28-0015	Siderail sleeve	1
15	QPA28-0016	Sleeve with lock	1
16	QRE27-1736	Return spring	1
17	VV10A0G16-S	Hexagon cylindric head screw	2
18	VV10B0G40-S	Hexagon cylindric head screw	4
19	VV10A1P20-S	Hexagon cylindric head screw	1
20	VV23A9C12HL	Phillips pan head screw	15
21	VV31A0G16	Phillips flat head screw	2
23	VVB3A9N24PF	Screw	6
24	27-2937	Foot siderail limit switch cable	1
26	QRE28-0293	Siderail tension spring, K11	1
27	QP27-1509-05	Foot siderail cap, left	1
29	27-2931	Female connector MTA-100 (3 positions)	2

Item	Number	Name	Quantity
33	27-2292Z	Switch guide 2	1
34	27-1839	Shoulder washer	1
35	VV87A9A20	Phillips tapping screw	1
36	QDF5096	Plastic tie support	1
37	QDF9518	Cable tie	1

Standard siderail assembly without iBed

OL270059-XXX Rev 05 (Reference only)

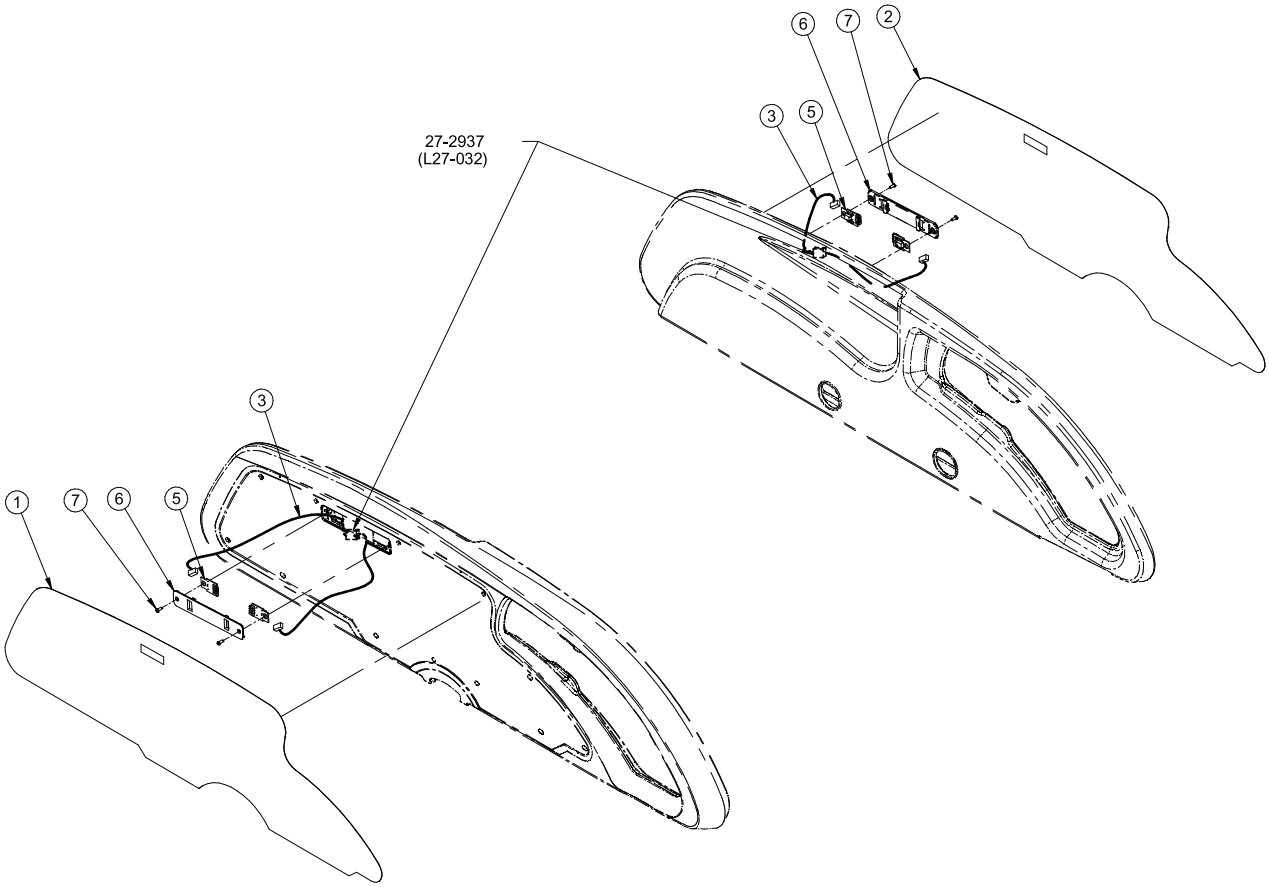


Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF27-0909-XXX	Right foot siderail cover fascia	1
2	QDF27-0910-XXX	Left foot siderail cover fascia	1
3	QP27-1831	LBS lens foot siderail	2
4	VV23A9C12HL	Pan head tapping screw	4

Siderail assembly with iBed - option

OL270060-XXX Rev AA (Reference only)



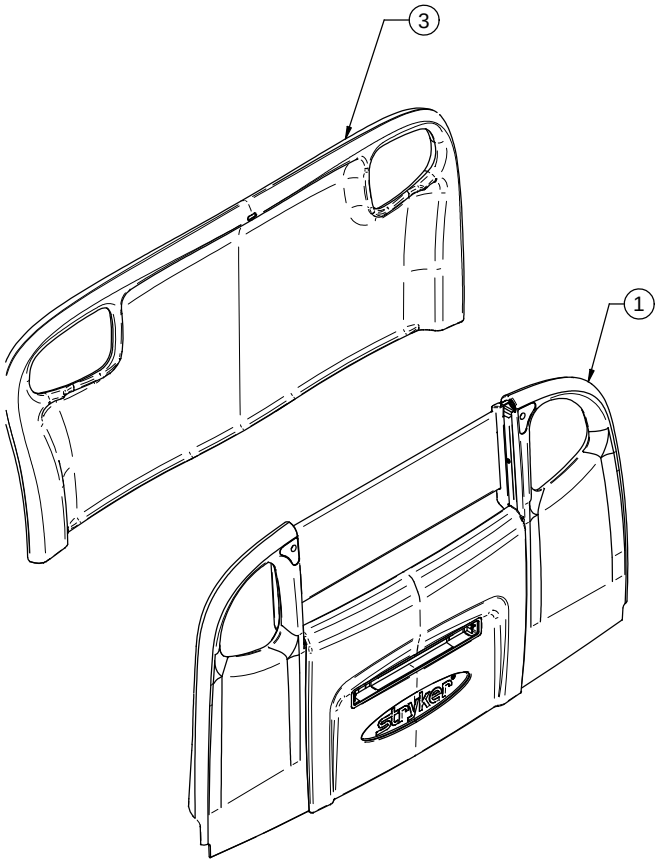
Position on wire 27-2930	Position on wire 27-2937	Signal
1	1	LED 1
2	2	LED 2
3	3	+12V

Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF27-2030-XXX	Right foot siderail fascia with **iBed**	1
2	QDF27-2031-XXX	Left foot siderail fascia with **iBed**	1
3	27-2930	LBS cable foot siderail	2
5	QDF27-1562	**iBed** electronic board lens	4
6	QP27-1831	LBS foot siderail lens	2
7	VV23A9C12HL	Pan head tapping screw	4

Headboard and footboard assembly

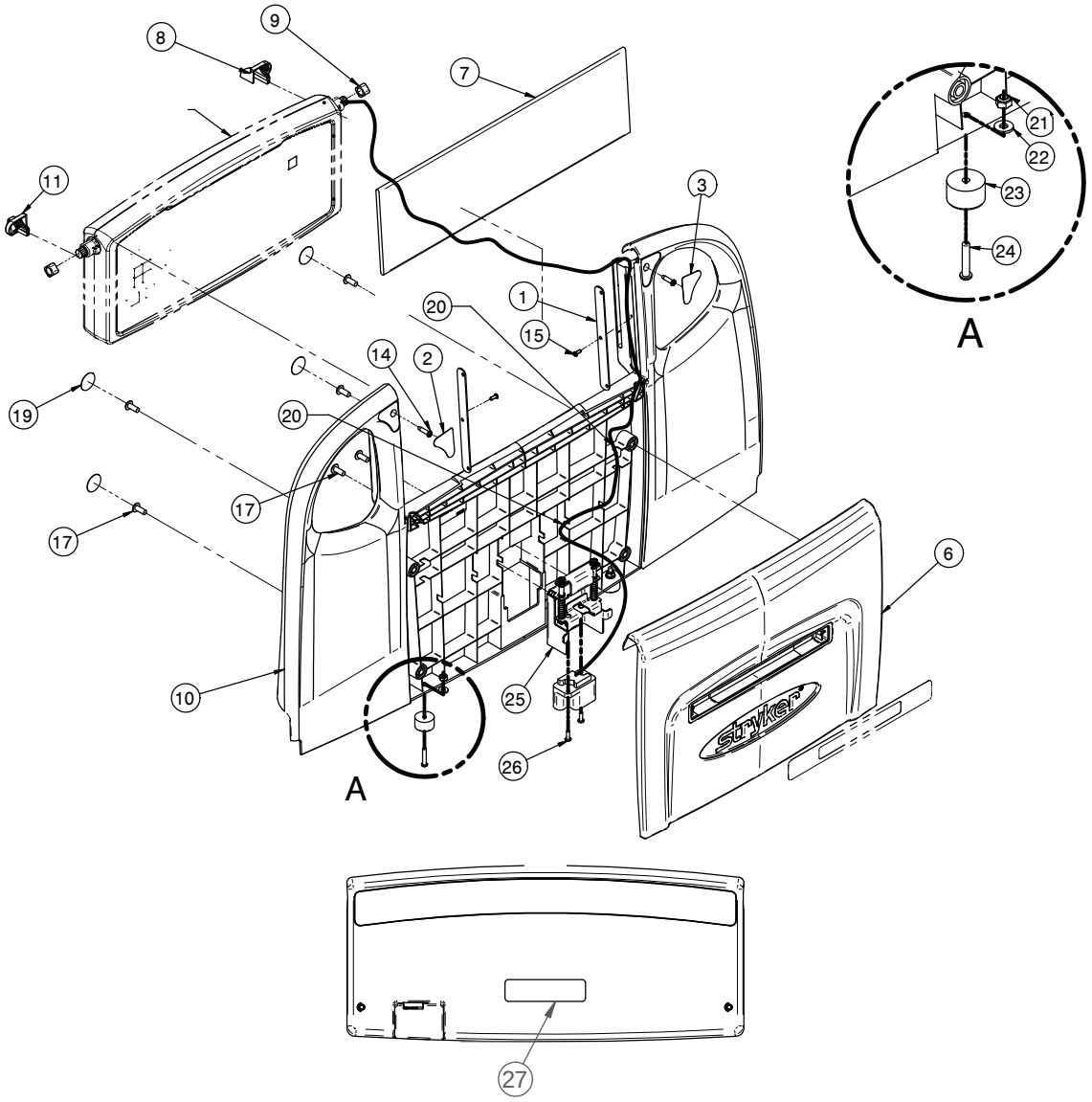
L27-028 Rev E (Reference only)



Item	Number	Name	Quantity
1	27-1547	Footboard assembly	1
3	QP27-1077	Head panel	1

Standard footboard assembly

27-1547 Rev U (Reference only)



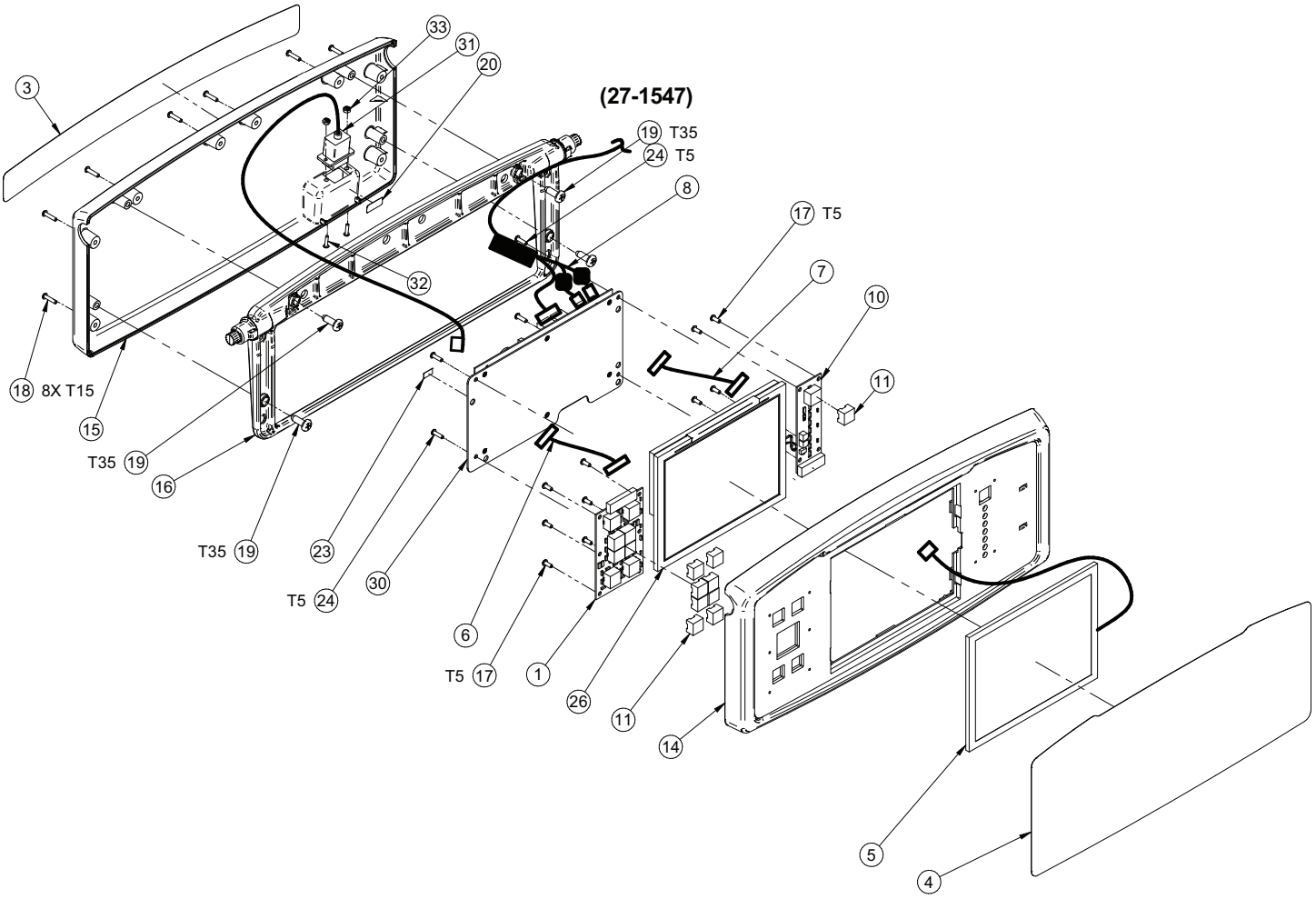
Note - Pierce holes to install item 20 and make an opening to insert the cables if necessary.

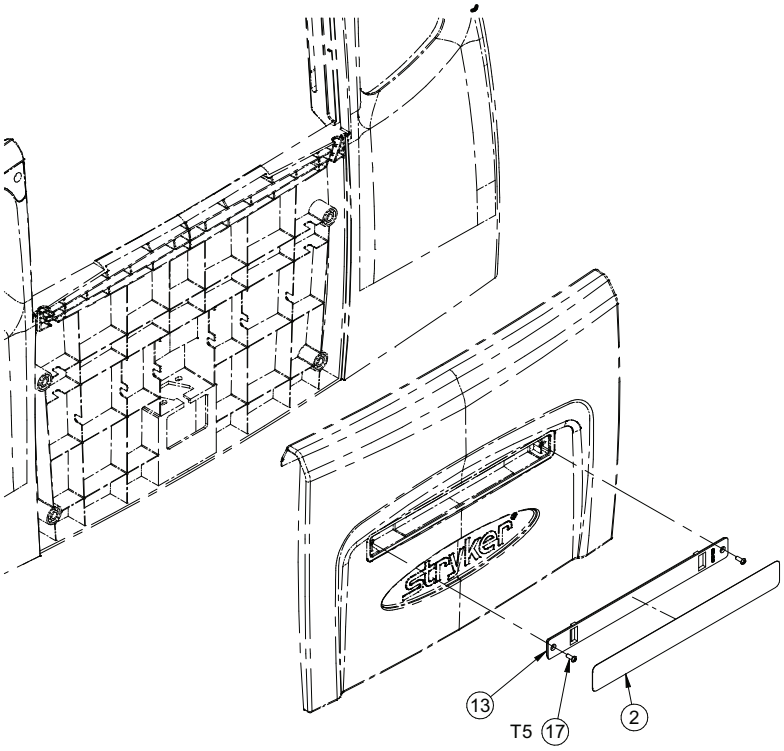
Item	Number	Name	Quantity
1	27-2274P	Board wire cover	2
2	QDF27-1601	Footboard screw cover sticker, right	1
3	QDF27-1602	Footboard screw cover sticker, left	1
6	QP27-1026	Footboard cover	1
7	QP27-1359	Foot support	1
8	QP27-1493	Right foot control support	1
9	QP27-1511	Foot control pivot bushing	2
10	27-2785	Main footboard	1
11	QP27-1569	Left foot control support	1
14	VV23A1G24HL	Phillips screw	2
15	VV23A9C12HL	Pan head tapping screw	2
17	VV37A1N20-S	Truss head machine screw	6

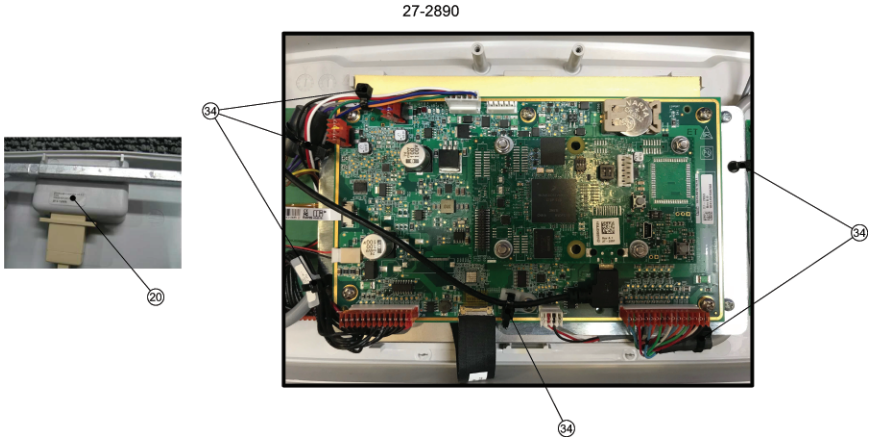
Item	Number	Name	Quantity
19	QDF21-3943	Screw cover	4
20	QDF9518	Cable tie	4
21	VE30A1G	Nylon hex locknut	2
22	VW10A06	Flat washer	2
23	0056-028-000	Black TPR bumper	2
24	VV33A1G32	Pan head machine screw	2
25	27-2770	Spring load connector	1
26	VV33A1E16	Pan head machine screw	2
27	QE71-1367-T	Label, footboard serial number	1

Footboard assembly without iBed, without Wi-Fi

OL270347-XXX Rev B (Reference only)







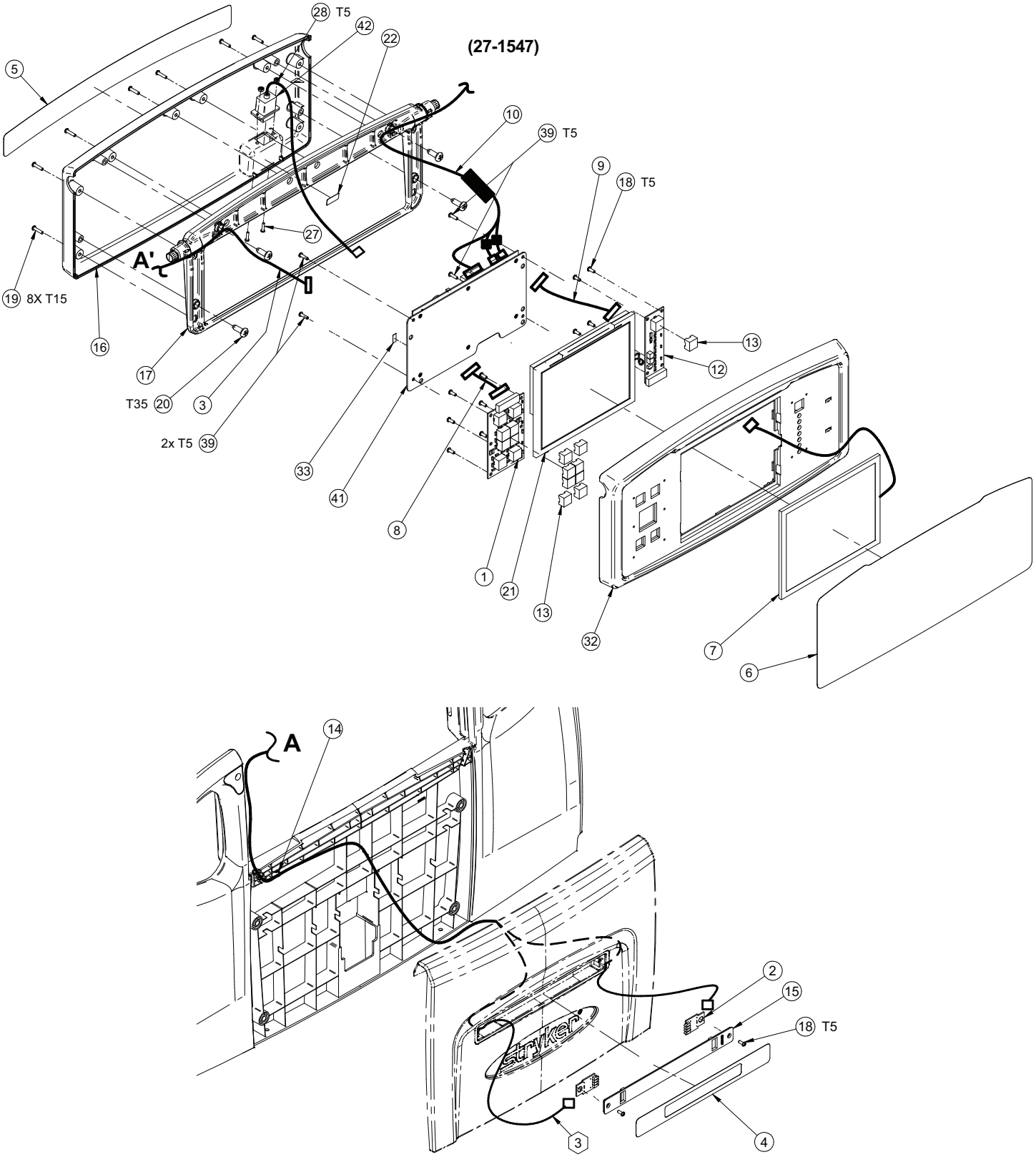
Cables connection table			
Cable number	From	To	Description
QDF27-2594	27-2890	QDF27-1097	Brake board cable
QDF27-2230	27-2890	QDF75-0010	Menu board cable
27-2910	27-2890	Outside footboard	Left speaker
27-2910	27-2890	Outside footboard	Right speaker
27-2910	27-2890	Outside footboard	CAN, power, wake
27-2874	27-2890	Footboard housing	USB programming cable
27-2875	27-2890	27-2876/27-2902	LVDS cable assembly
N/A	27-2890	QDF27-2193	5-wire cable part of QDF27-2193
N/A	27-2890	27-2876/27-2902	LCD backlight cable

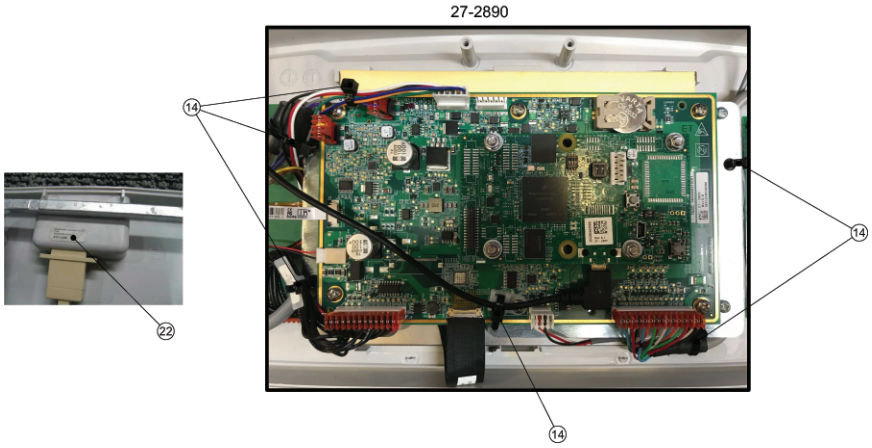
Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF27-1097	Brake control board	1
2	QDF27-2054	Label, **iBed** without lens	1
3	QDF27-2756	Back foot control fascia	1
4	QDF27-2188-XXX	Foot control overlay	1
5	QDF27-2193	8 in. touch screen	1
6	QDF27-2229	Brake to interface cable	1
7	QDF27-2230	Menu to interface cable	1
8*	27-2910	Samurai footboard main power cable	1
10	QDF75-0010	Main menu board	1
11	QDF9183	Control board button	9
13	QP27-1609	**iBed** lens	1
14	QP27-2185	Nurse panel, footboard	1
15	QP27-2186	Rear footboard control	1
16	QPA27-1494	Foot control reinforcement	1
17	VV23A9C12HL	Pan head tapping screw	12
18	VV23A9C20HL	Pan head tapping screw	8
19	VVB3A9N24PF	Screw	4
20	27-2909	Label, Windows license CE	1
22*	27-2861	**InTouch** 6.0 touchscreen software	1
23	27-2897	Label, **InTouch** 6.0 software	1
24	VV23A9C16HL	Pan head tapping screw	4
26	27-2902	LCD display	1
30	27-2890	Touch board assembly	1
31	27-2874	USB programming cable	1
32	VV33A0A16	Machine screw pan head	2
33	VE39A0A	Nylon hex locknut	2
34	QDF9518	Tie wrap	6

Footboard assembly with iBed

OL270346-XXX Rev B (Reference only)





Cables connection table			
Cable number	From	To	Description
QDF27-2253	27-2890	QDF27-1562 x2	LBS cable foot panel
QDF27-2594	27-2890	QDF27-1097	Brake board cable
QDF27-2230	27-2890	QDF75-0010	Menu board cable
27-2910	27-2890	Outside footboard	Left speaker
27-2910	27-2890	Outside footboard	Right speaker
27-2910	27-2890	Outside footboard	CAN, power, wake
27-2874	27-2890	Footboard housing	USB programming cable
27-2875	27-2890	27-2876/27-2902	LVDS cable assembly
N/A	27-2890	QDF27-2193	5-wire cable part of QDF27-2193
N/A	27-2890	27-2876/27-2902	LCD backlight cable

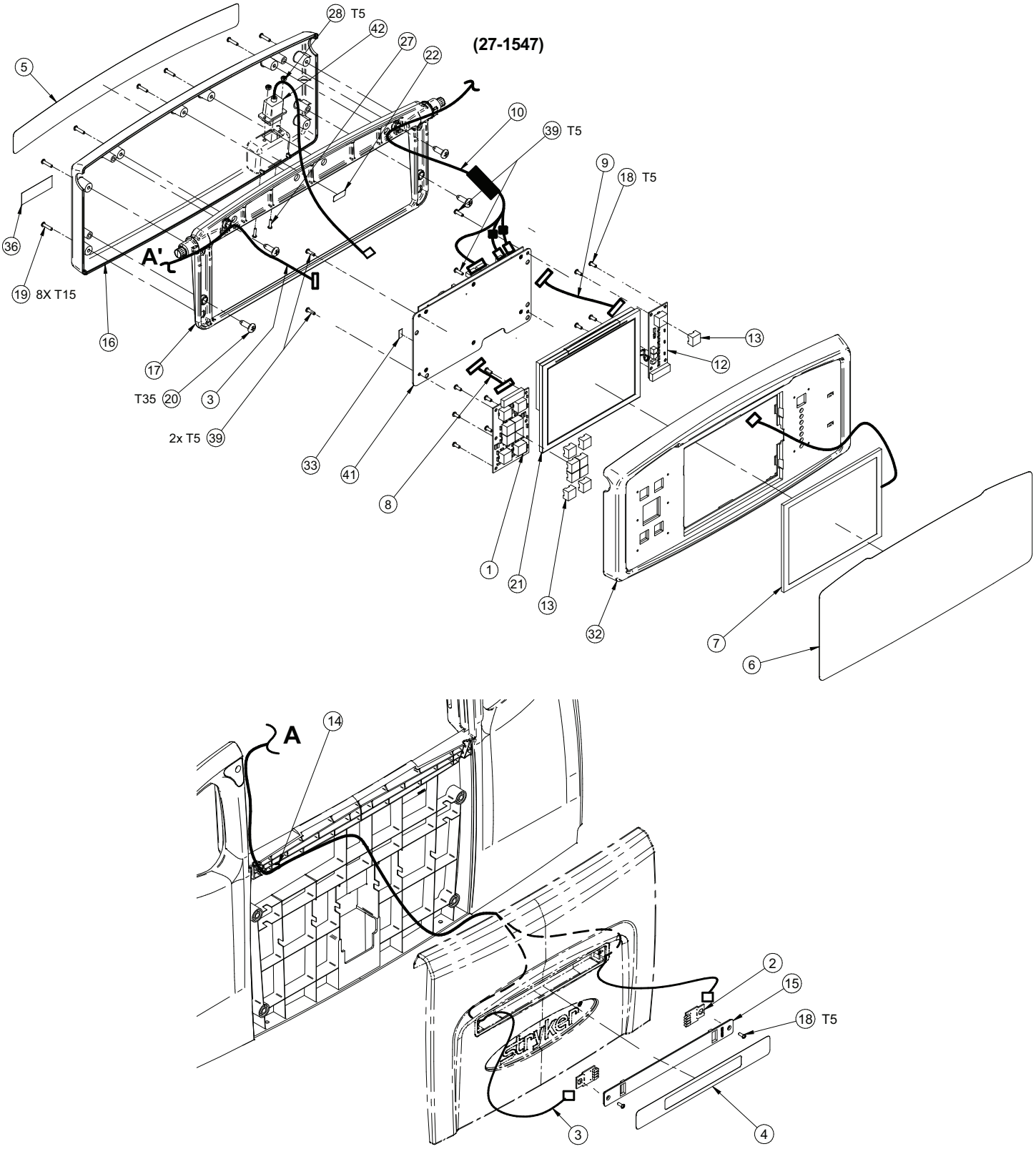
Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

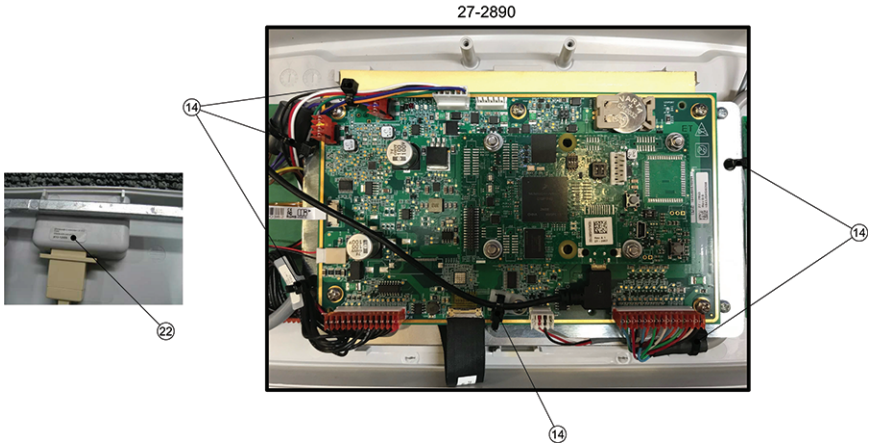
Item	Number	Name	Quantity
1	QDF27-1097	Brake control board	1
2	QDF27-1562	Local bed status board	2
3	QDF27-2253	LBS cable foot panel	1
4	QDF27-1610	Label, **iBed** lens	1
5	QDF27-2756	Back foot control fascia	1
6	QDF27-2188-XXX	Foot control overlay	1
7	QDF27-2193	8 in. touch screen	1
8	27-2229	Brake to interface cable	1
9	QDF27-2230	Menu to interface cable	1
10	QDF27-2232	Foot panel cable	1
12	QDF75-0010	Main menu board	1
13	QDF9183	Control board button	9
14	QDF9518	Cable tie	6
15	QP27-1609	**iBed** lens	1
16	QP27-2186	Rear footboard control	1

Item	Number	Name	Quantity
17	QPA27-1494	Foot control frame	1
18	VV23A9C12HL	Pan head tapping screw	12
19	VV23A9C20HL	Pan head tapping screw	8
20	VVB3A9N24PF	Screw	4
21	27-2902	LVDS SA LCD display	1
22	27-2909	Label, EC7 license	1
24*	27-2861	**InTouch** 6.0 touchscreen software	1
27	VV33A0A16	Pan head machine screw	2
28	VE39A0A	Nylon hex locknut	2
32	QP27-2185	Footboard nurse panel	1
33	27-2897	Label, **InTouch** 6.0 software	1
39	VV23A9C16HL	Pan head tapping screw	4
41	27-2890	Touch board assembly	1
42	27-2874	USB programming cable	1

Footboard assembly with iBed and Wi-Fi

OL270345-XXX Rev B (Reference only)





Cables connection table			
Cable number	From	To	Description
QDF27-2253	27-2890	QDF27-1562 x2	LBS cable foot panel
QDF27-2594	27-2890	QDF27-1097	Brake board cable
QDF27-2230	27-2890	QDF75-0010	Menu board cable
27-2910	27-2890	Outside footboard	Left speaker
27-2910	27-2890	Outside footboard	Right speaker
27-2910	27-2890	Outside footboard	CAN, power, wake
27-2874	27-2890	Footboard housing	USB programming cable
27-2875	27-2890	27-2876/27-2902	LVDS cable assembly
N/A	27-2890	QDF27-2193	5-wire cable part of QDF27-2193
N/A	27-2890	27-2876/27-2902	LCD backlight cable

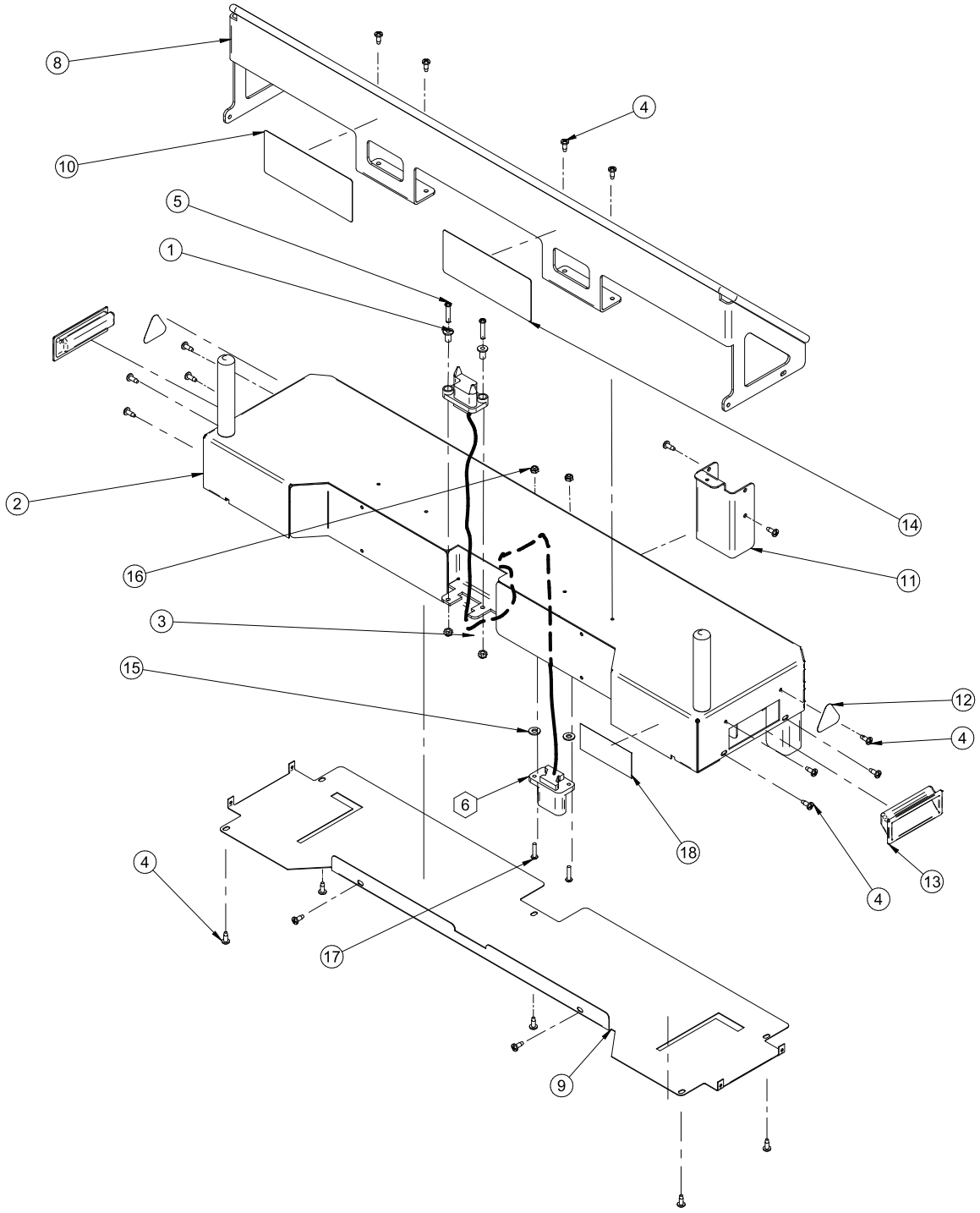
Note - XXX - indicates language choice (tri = English/French/Spanish; bil = English/French)

Item	Number	Name	Quantity
1	QDF27-1097	Brake control board	1
2	QDF27-1562	Local bed status board	2
3	QDF27-2253	LBS cable foot panel	1
4	QDF27-1610	Label, **iBed** lens	1
5	QDF27-2756	Back foot control fascia	1
6	QDF27-2188-XXX	Foot control overlay	1
7	QDF27-2193	8 in. touch screen	1
8	27-2229	Brake to interface cable	1
9	QDF27-2230	Menu to interface cable	1
10	27-2910	Footboard main power cable	1
12	QDF75-0010	Main menu board	1
13	QDF9183	Control board button	9
14	QDF9518	Cable tie	6
15	QP27-1609	**iBed** lens	1
16	QP27-2186	Rear footboard control	1

Item	Number	Name	Quantity
17	QPA27-1494	Foot control frame	1
18	VV23A9C12HL	Pan head tapping screw	12
19	VV23A9C20HL	Pan head tapping screw	8
20	VVB3A9N24PF	Screw	4
21	27-2902	LVDS SA LCD display	1
22	27-2909	Label, Windows license EC7	1
24*	27-2861	**InTouch** 6.0 touchscreen software	1
27	VV33A0A16	Pan head machine screw	2
28	VE39A0A	Nylon hex locknut	2
32	QP27-2185	Nurse control panel, foot end	1
33	27-2897	Label, **InTouch** 6.0 software	1
36	5212-300-802	Label, FCC	1
39	VV23A9C16HL	Pan head tapping screw	4
41	27-2890	Touch board assembly	1
42	27-2874	USB programming cable	1

Bed extender - FA64234-XXX

L64-150-XXX Rev AB (Reference only)

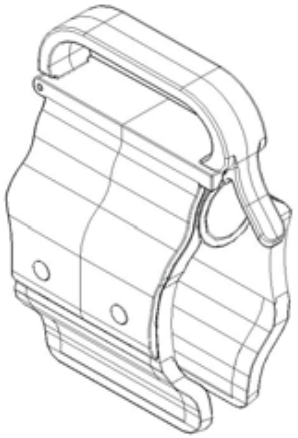


Item	Number	Name	Quantity
1	25-0527Z	Connector sleeve	2
2	64-1158P	Bed extender	1
3	VE30A0G	Nylon hex locknut	2
4	VV83A9G16	Pan head tapping screw	21
5	VV31A0G32	Pan head machine screw	2
6	QDF64-1358	Bed extender cable	1

Item	Number	Name	Quantity
8	64-1271P	Bed extender protective device	1
9	64-1278P	Bed extender cover	1
10	QE71-1112-XXX	Label, bed extender warning	1
11	64-1284P	Bed extender connector protective device	1
12	QE71-0533	Protective top sticker	2
13	QDF6029	ABS handle	2
15	VW10C081802	Nylon washer	2
16	VE30A1E	Nylon hex locknut	2
17	VV33A1E24	Pan head machine screw	2
18	QE71-1399	Label, specification	1

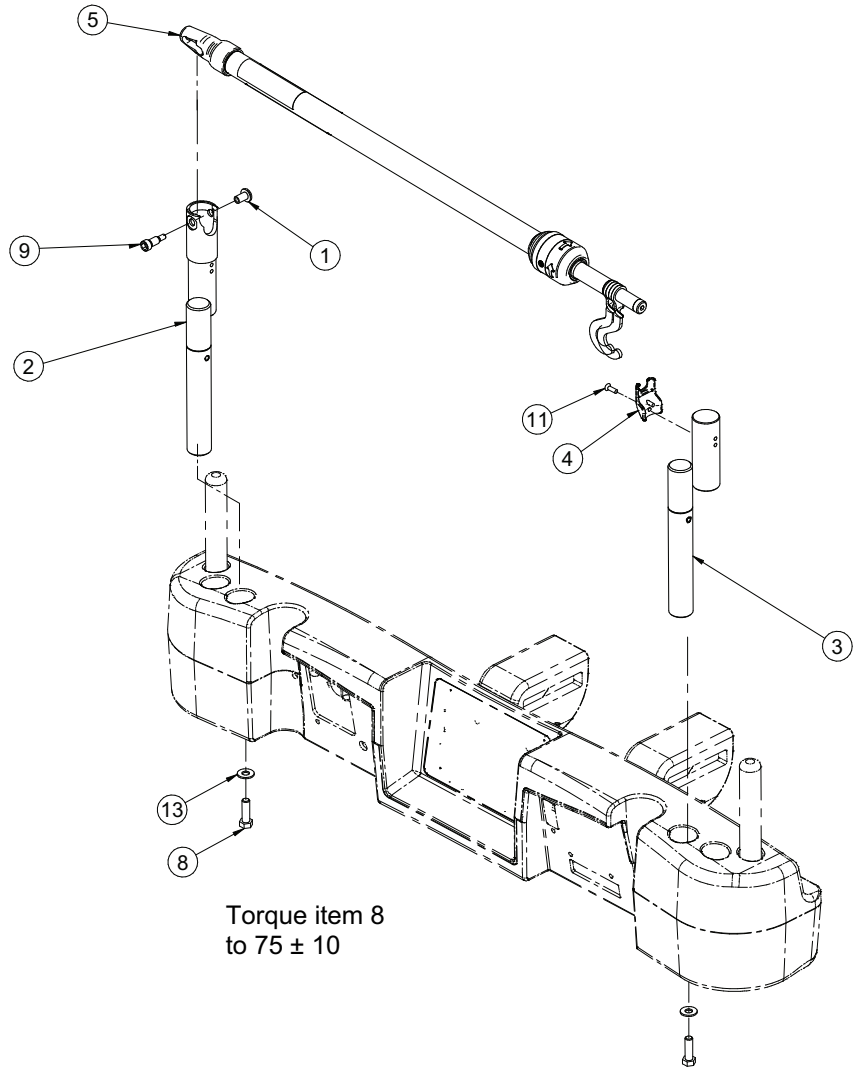
Line management clip - FA64210-XXX

L64-130-XXX Rev A (Reference only)



HAVASU IV pole assembly, permanent left- FA64221-XXX

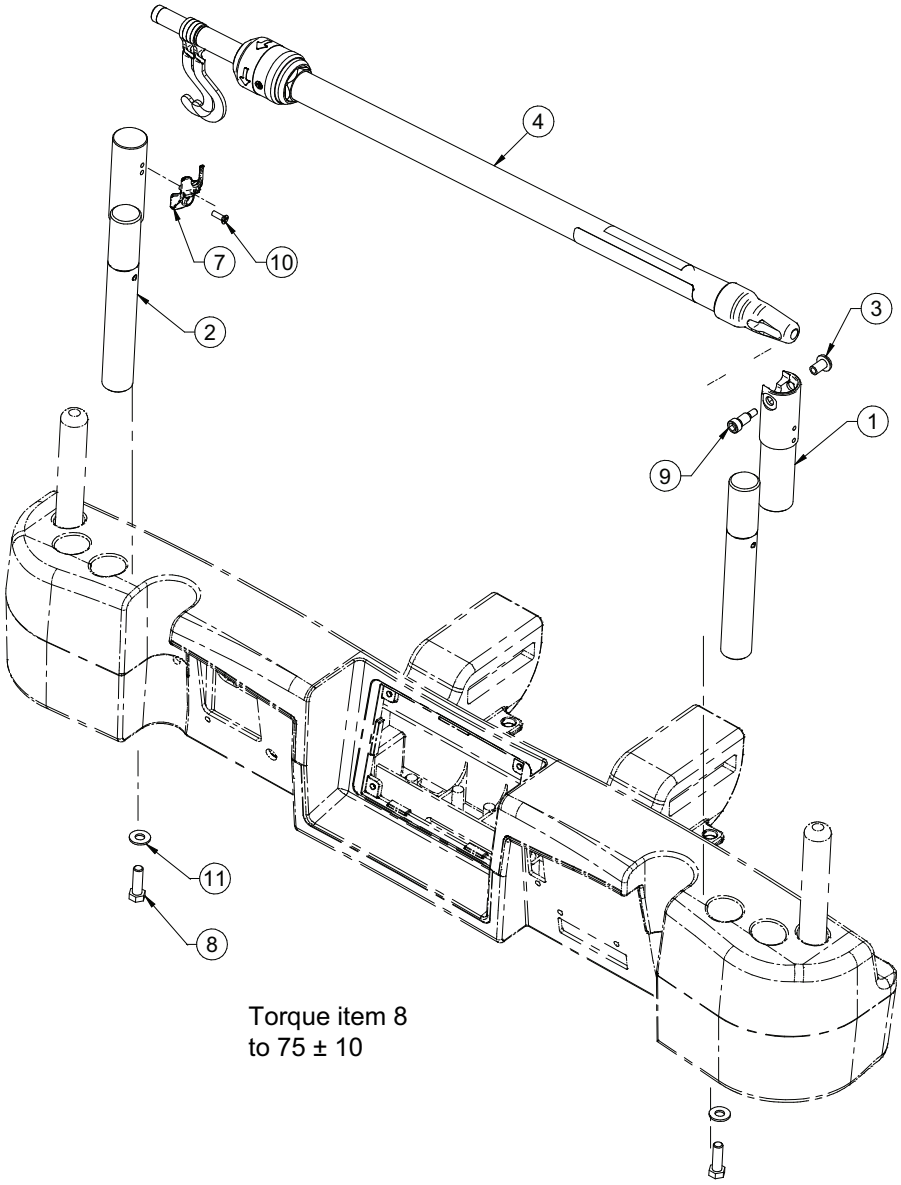
L64-139-XXX Rev AA (Reference only)



Item	Number	Name	Quantity
1	QDF2121	Sleeve nut	1
2	QDF64-1362	IV pole support, left	1
3	QDF64-1365	Simple stop IV pole, right	1
4	QP64-1225	IV pole plastic support	1
5	1211-210-010	2-stage IV pole assembly	1
8	VB15A1O32-S	Bolt	2
9	VD60A1N1016-S	Shoulder screw	1
11	VV81A9E16-10	Flat head tapping screw	1
13	VW10A10	Flat washer	2

HAVASU IV pole assembly, permanent right - FA64238-XXX

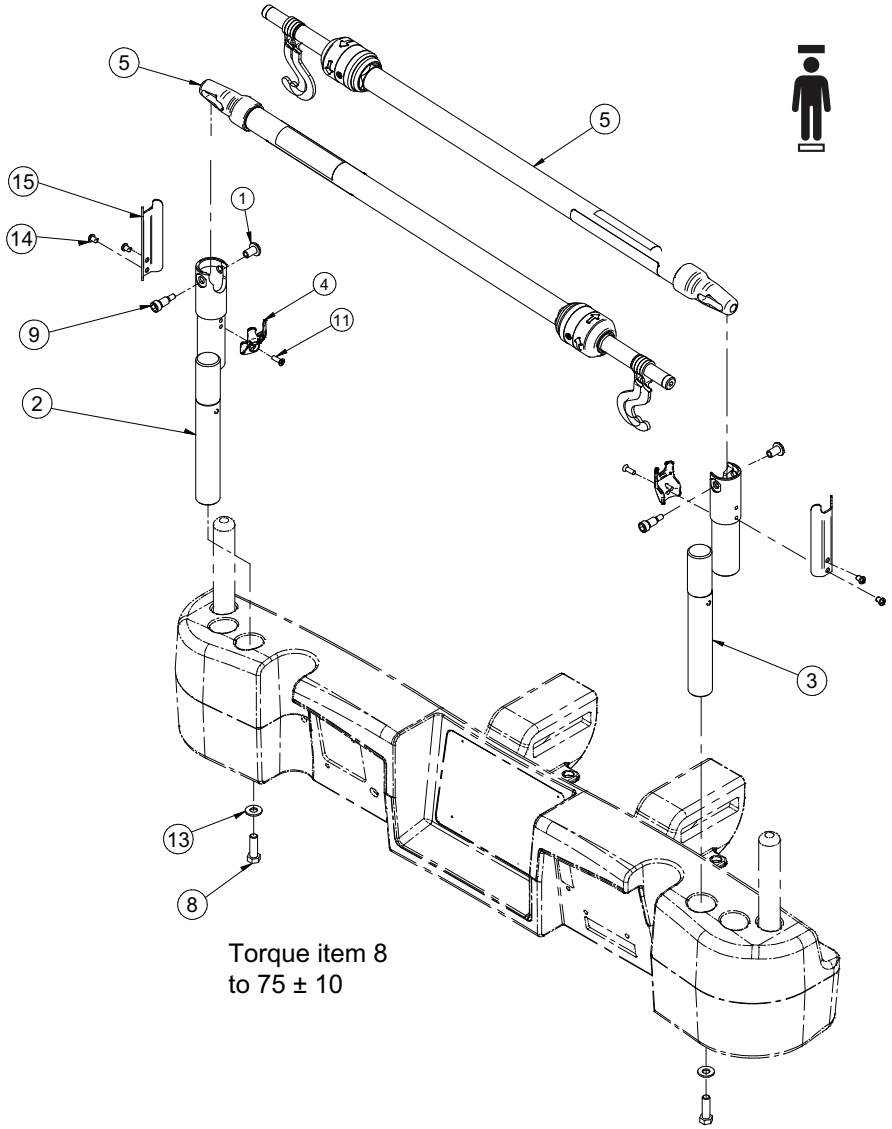
L64-153-XXX Rev AA (Reference only)



Item	Number	Name	Quantity
1	QDF64-1366	IV pole support, right	1
2	QDF64-1367	Simple stop IV pole, left	1
3	QDF2121	Sleeve nut	1
4	1211-210-010	2-stage IV pole assembly	1
7	QP64-1225	IV pole plastic support	1
8	VB15A1O32-S	Bolt	2
9	VD60A1N1016-S	Shoulder screw	1
10	VV81A9E16-10	Flat head tapping screw	1
11	VW10A10	Flat washer	2

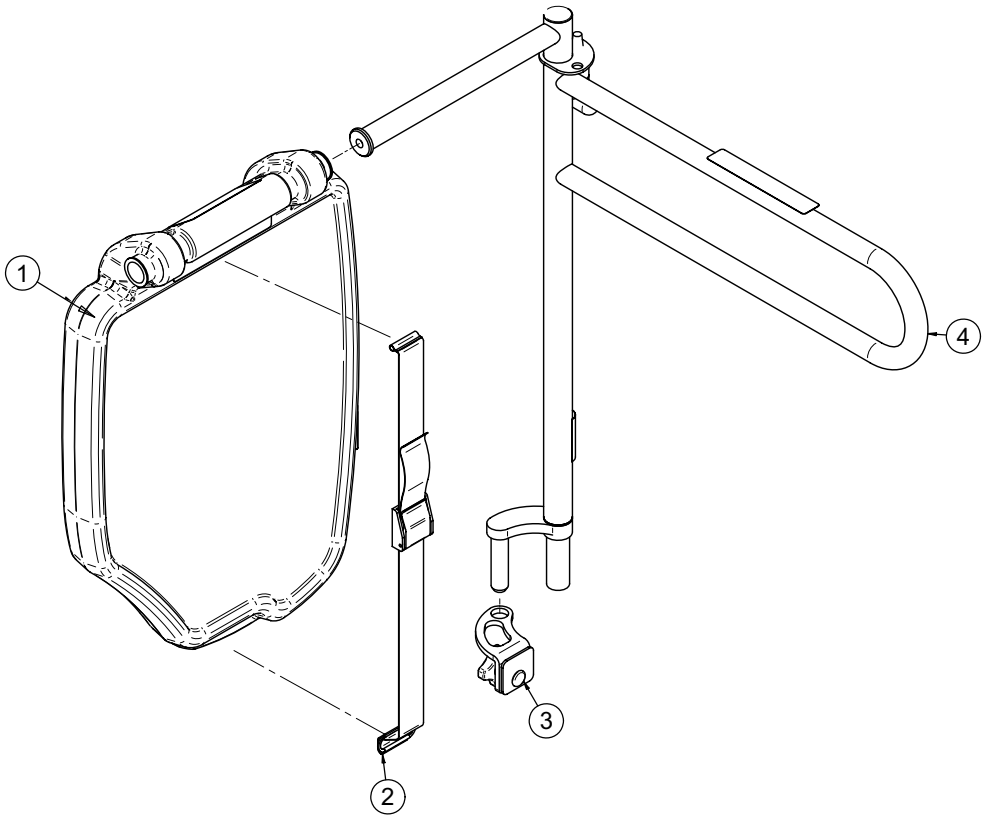
HAVASU IV pole assembly, dual head end, permanent - FA64202-XXX

L64-107-XXX Rev AA (Reference only)



Item	Number	Name	Quantity
1	QDF2121	Sleeve nut	2
2	QDF64-1362	IV pole support, left	1
3	QDF64-1366	IV pole support, right	1
4	QP64-1225	IV pole plastic support	2
5	1211-210-010	2-stage IV pole assembly	2
8	VB15A1O32-S	Bolt	2
9	VD60A1N1016-S	Shoulder screw	2
11	VV81A9E16-10	Flat head tapping screw	2
13	VW10A10	Flat washer	2
14	VV33A1G08-S	Pan head machine screw	4
15	64-1269C	Support IV pole double	2

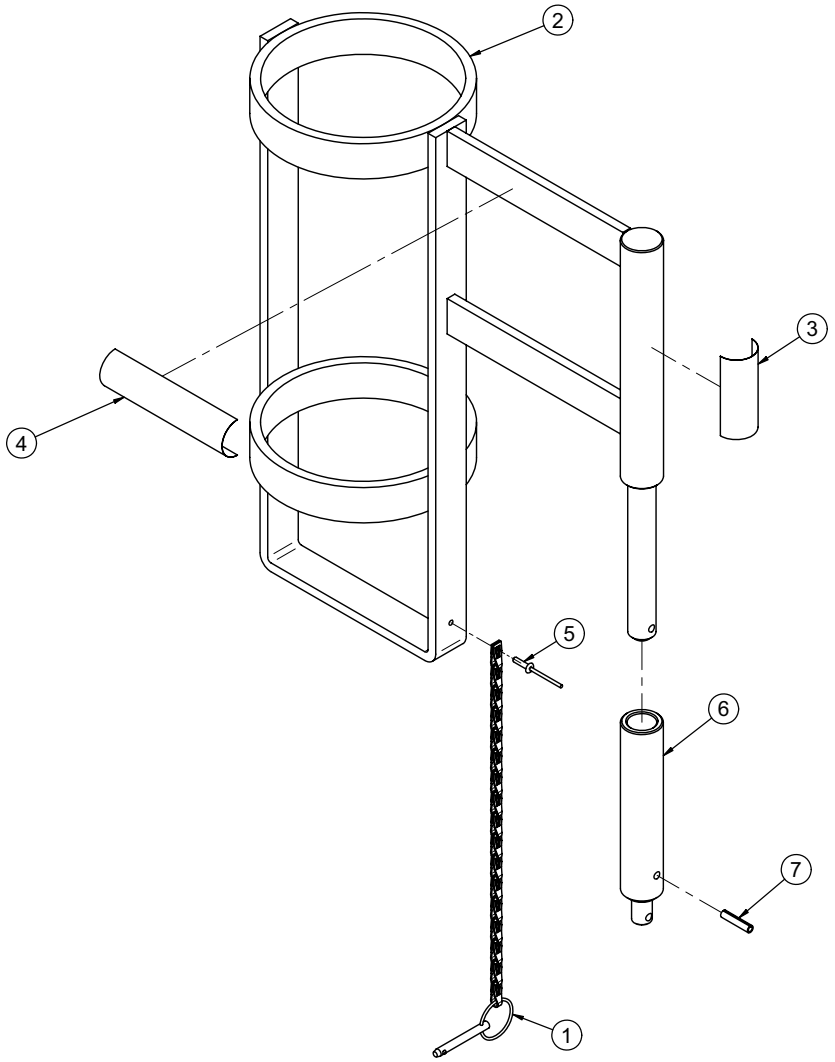
Monitor tray assembly - FA64214-XXX



Item	Number	Name	Quantity
1	QDF64-1300	Tray	1
2	QDF64-1301	Transport strap	1
3	QDF64-1302	Fastener sleeve	1
4	QDF64-1303T	Tray support pole	1

Upright oxygen bottle holder assembly - FA64187-XXX

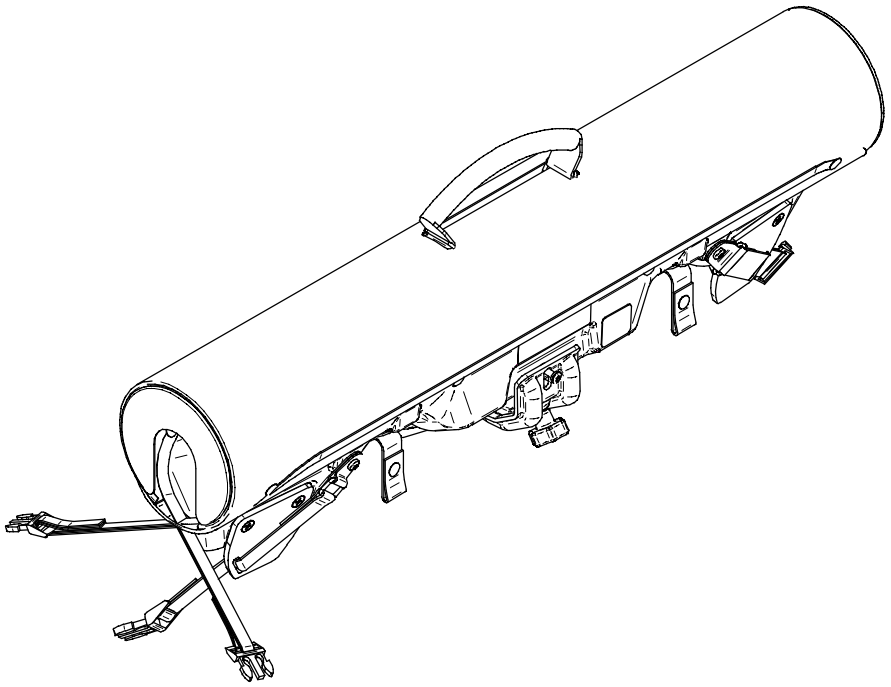
L64-112-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-0647	Security chain	1
2	QDF64-1059	Bottle holder	1
3	QE71-1350-XXX	Manufacturer sticker	1
4	QE71-0601	Maximum load sticker	1
5	VR11H46	Dome head pop rivet	1
6	64-1285	Oxygen bottle holder socket	1
7	VG10B0628	Spring pin	1

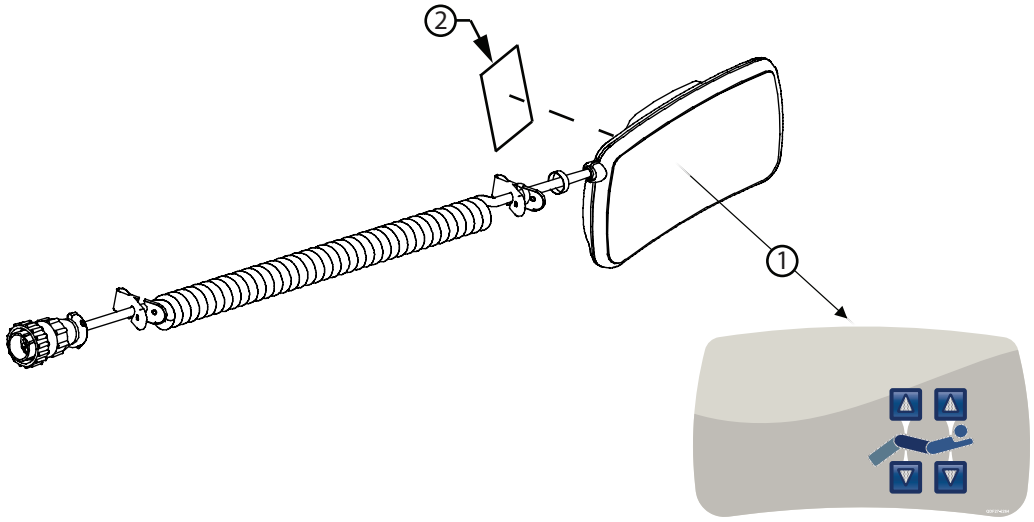
Right-fit oxygen bottle holder assembly - FA64203

L64-124 Rev 00 (Reference only)



Pendant assembly with motion control - FA64228-XXX

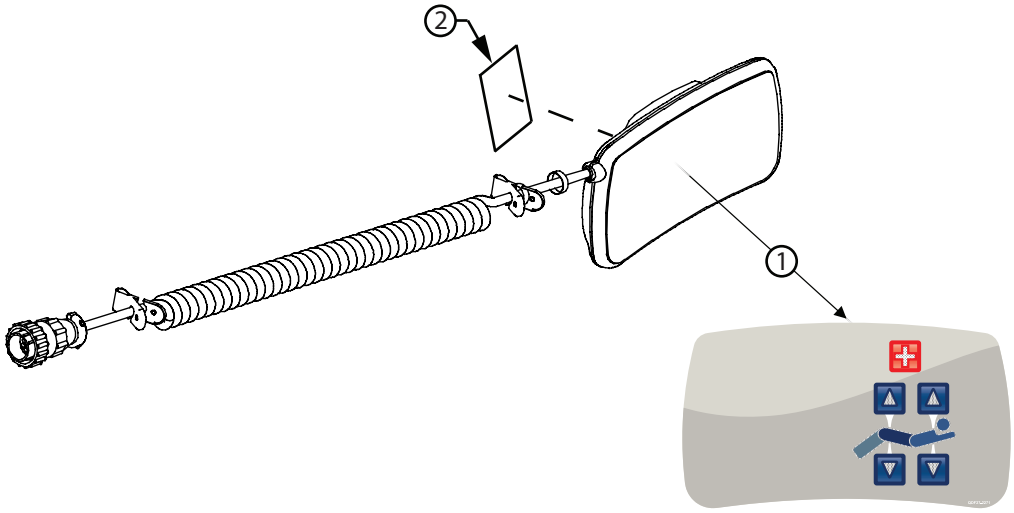
L64-146-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	QDF64-1240	Removable pendant with motion control	1
2	QE14399-T	Manufacturer sticker	1

Pendant assembly with motion control/NC - FA64226

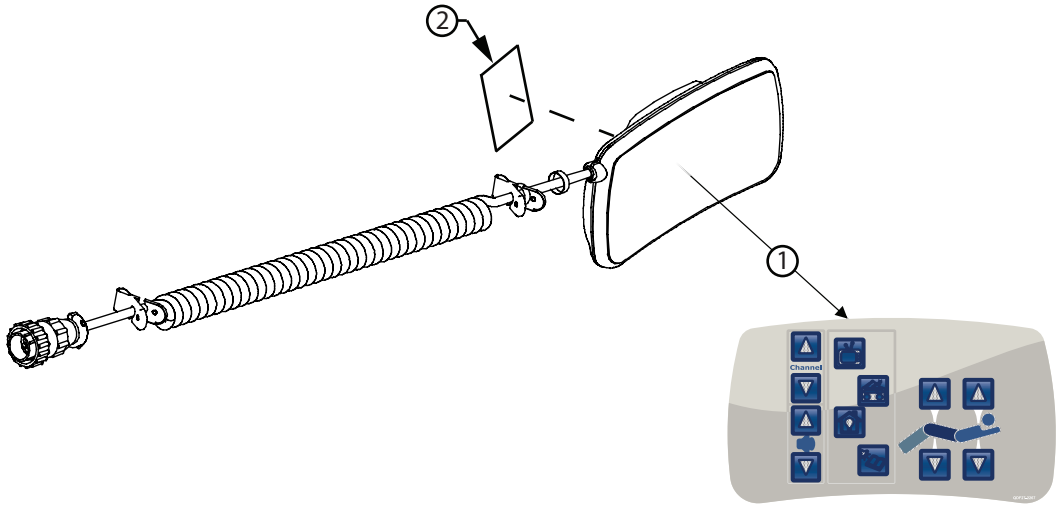
L64-118 Rev 2 (Reference only)



Item	Number	Name	Quantity
1	QDF64-1238	Removable pendant with nurse call and motion control	1
2	QE14399-T	Manufacturer sticker	1

Pendant assembly with motion control/smart TV - FA64227

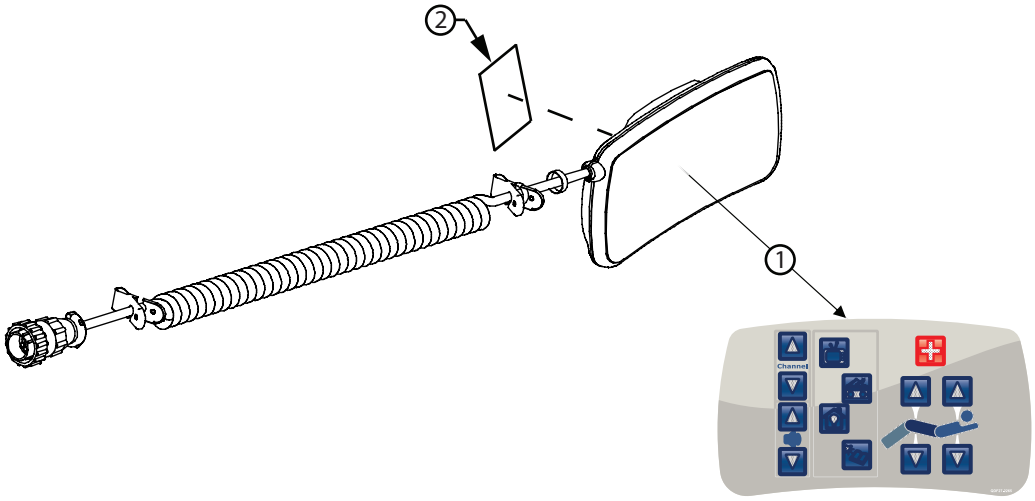
L64-119 Rev 3 (Reference only)



Item	Number	Name	Quantity
1	QDF64-1239	Removable pendant with motion control and smart TV	1
2	QE14399-T	Manufacturer sticker	1

Pendant assembly with motion control/NC/smart TV - FA64225

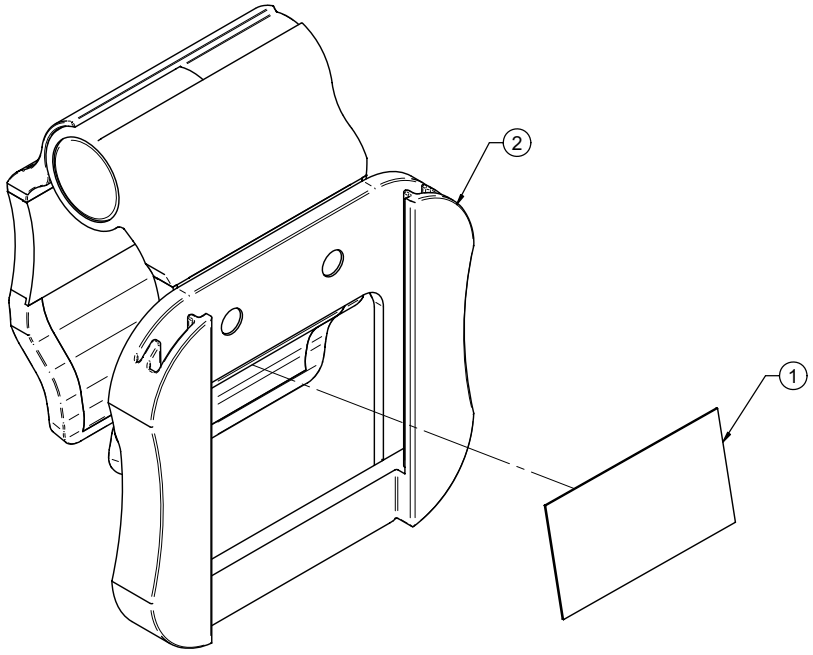
L64-117 Rev 2 (Reference only)



Item	Number	Name	Quantity
1	QDF64-1237	Removable pendant with nurse call, motion control, and smart TV	1
2	QE14399-T	Manufacturer sticker	1

Pendant clip assembly - FA64186-XXX

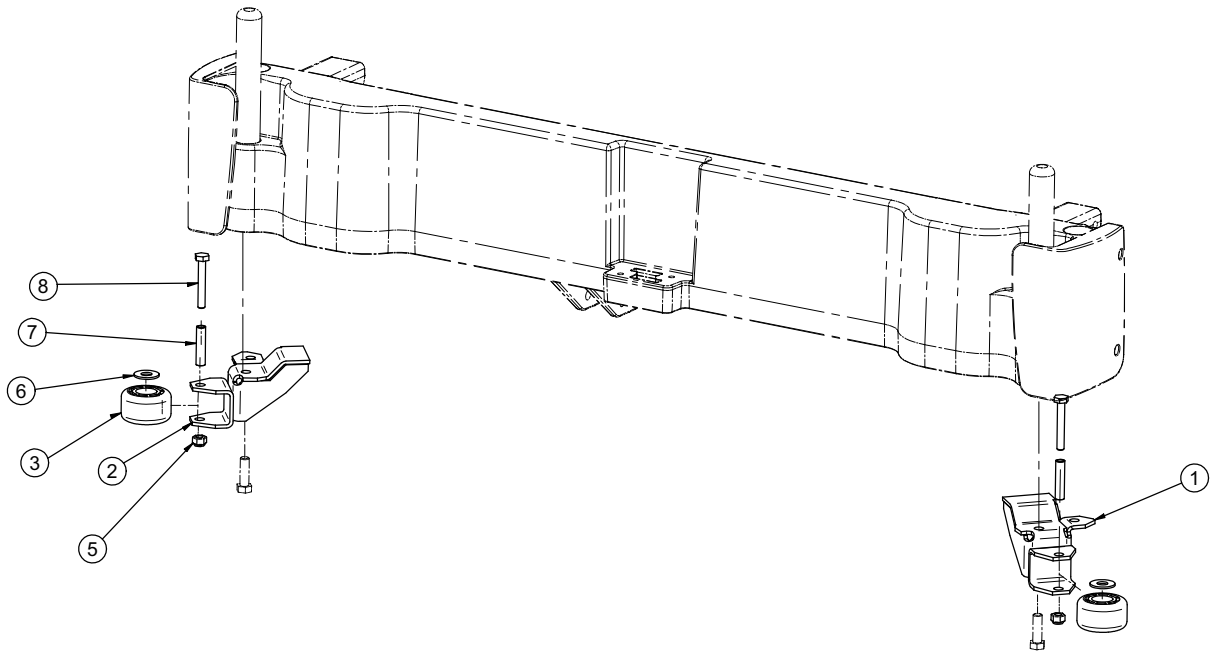
L64-111-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	QE71-1350-XXX	Manufacturer sticker	1
2	QDF64-1282	Additional removable grip	1

Roller bumpers

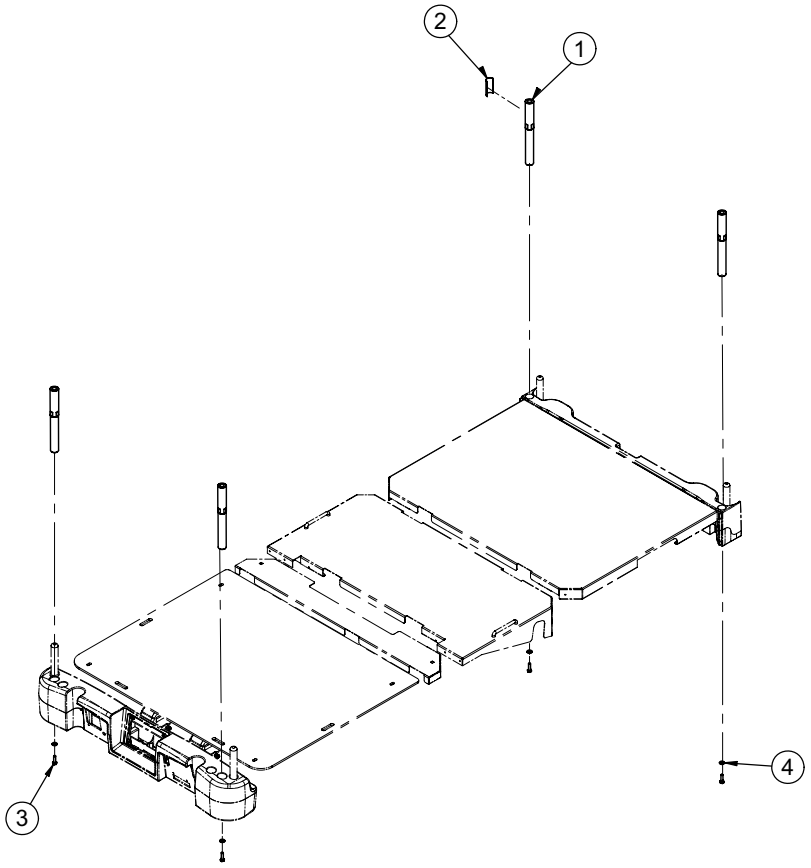
OL270050 Rev F (Reference only)



Item	Number	Name	Quantity
1	27-2046P	Left bumper support	1
2	27-2056P	Right bumper support	1
3	27-2844	Wheel, 1 3/4" diameter	2
5	VE30A1N	Nylon locknut	2
6	VW10C122802	Nylon washer	2
7	27-2235Z	Bumper spacer	2
8	VB15A1N44	Bolt	2

Traction sleeve assembly, 4" x 1/2" - FA64215-XXX

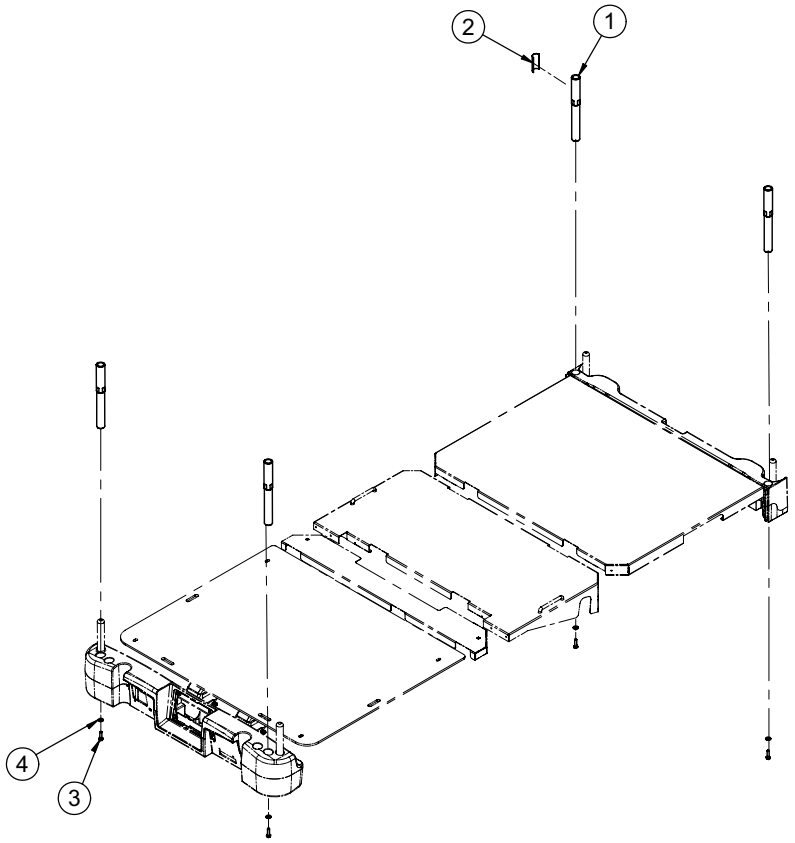
L64-134-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-1262C	Traction sleeve 4" x 1/2"	4
2	QE71-1350-XXX	Manufacturer sticker	1
3	VB15A1N32-S	Hex bolt	4
4	VW10A08	Flat washer	4

Traction sleeve assembly, 4" x 3/4" - FA64216-XXX

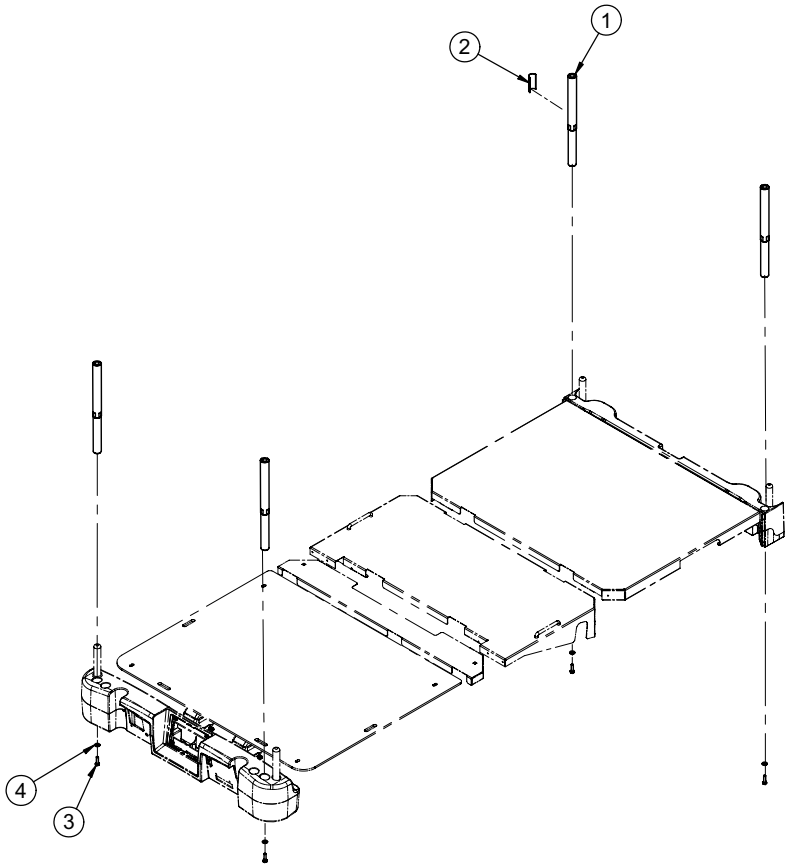
L64-135-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-1263C	Traction sleeve 4" x 3/4"	4
2	QE71-1350-XXX	Manufacturer sticker	1
3	VB15A1N32-S	Hex bolt	4
4	VW10A08	Flat washer	4

Traction sleeve assembly, 8" x 1/2" - FA64217-XXX

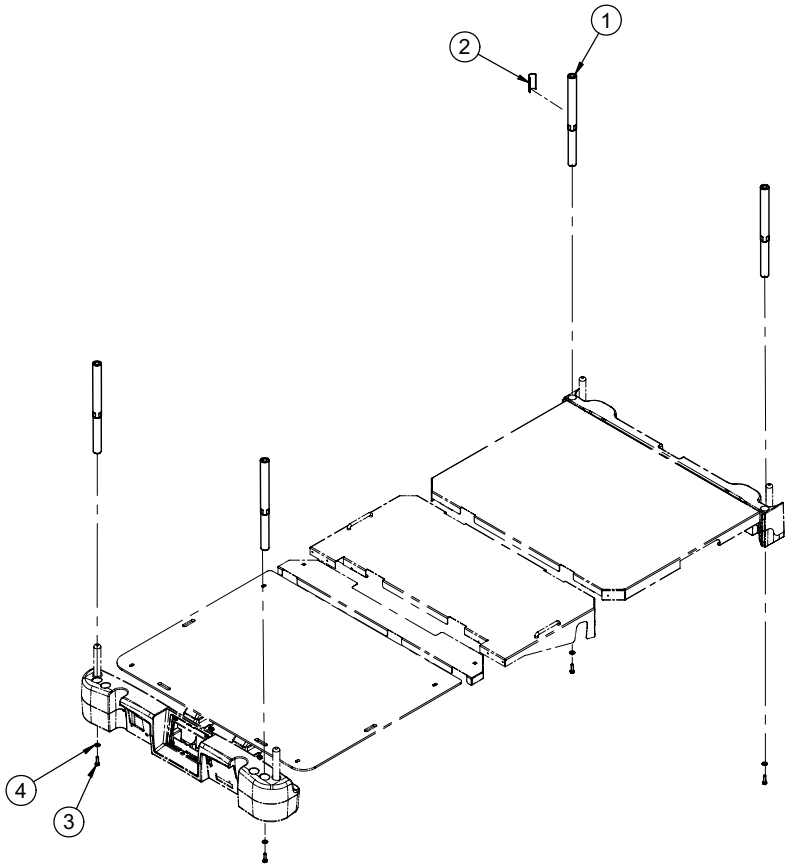
L64-136-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-1264C	Traction sleeve 8" x 1/2"	4
2	QE71-1350-XXX	Manufacturer sticker	1
3	VB15A1N32-S	Hex bolt	4
4	VW10A08	Flat washer	4

Traction sleeve assembly, 8" x 3/4" - FA64218-XXX

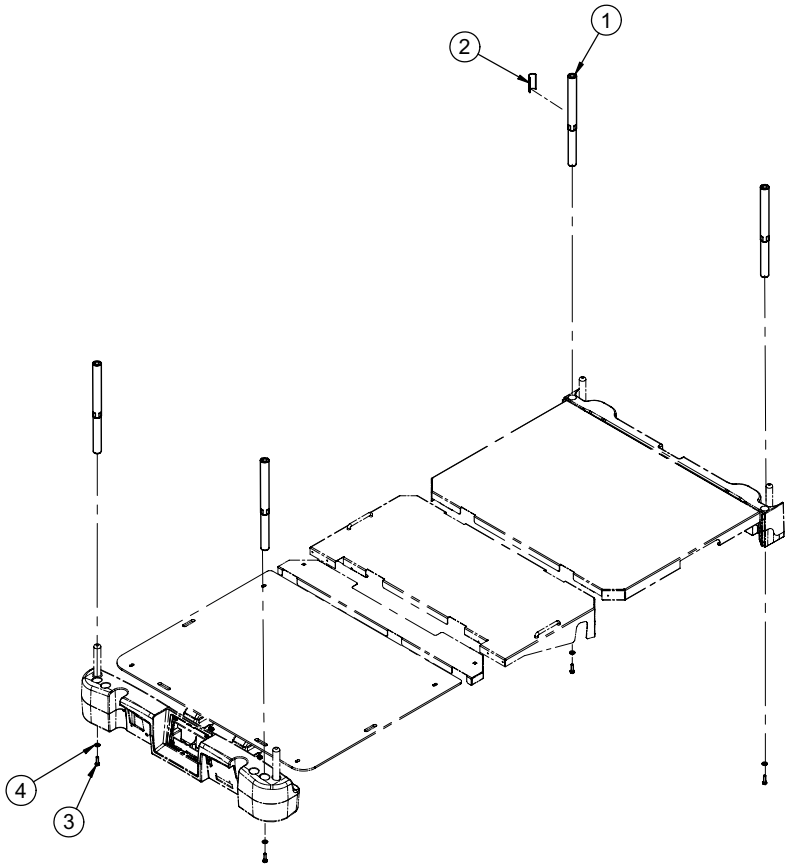
L64-137-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-1265C	Traction sleeve 8" x 3/4"	4
2	QE71-1350-XXX	Manufacturer sticker	1
3	VB15A1N32-S	Hex bolt	4
4	VW10A08	Flat washer	4

Traction sleeve assembly, 6-1/2" x 3/4" - FA64219-XXX

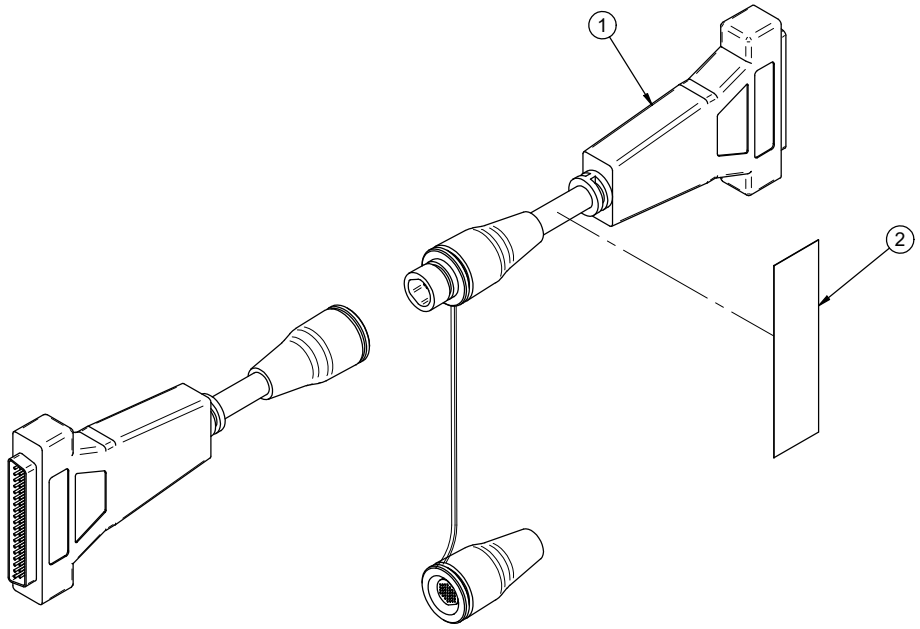
L64-138-XXX Rev A (Reference only)



Item	Number	Name	Quantity
1	64-1266C	Traction sleeve 6-1/2" x 3/4"	4
2	QE71-1350-XXX	Manufacturer sticker	1
3	VB15A1N32-S	Hex bolt	4
4	VW10A08	Flat washer	4

Wall saver cable assembly - FA64208

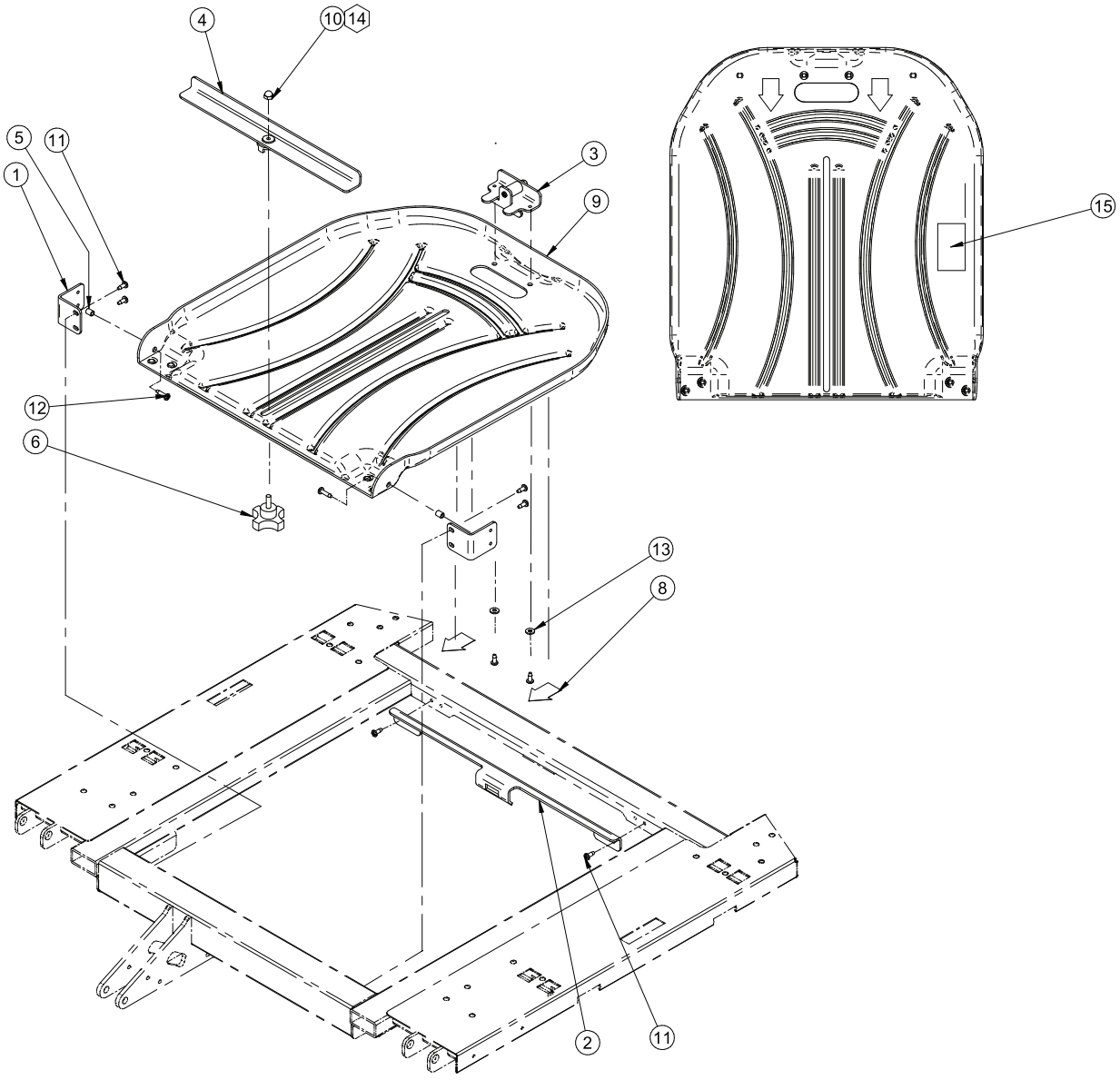
L64-129 Rev - (Reference only)



Item	Number	Name	Quantity
1	QDF64-1371	Wall Saver	1
2	QE71-1313-T	Manufacturer sticker	1

X-ray cassette holder assembly - FA64205-XXX

L64-123-XXX Rev AA (Reference only)

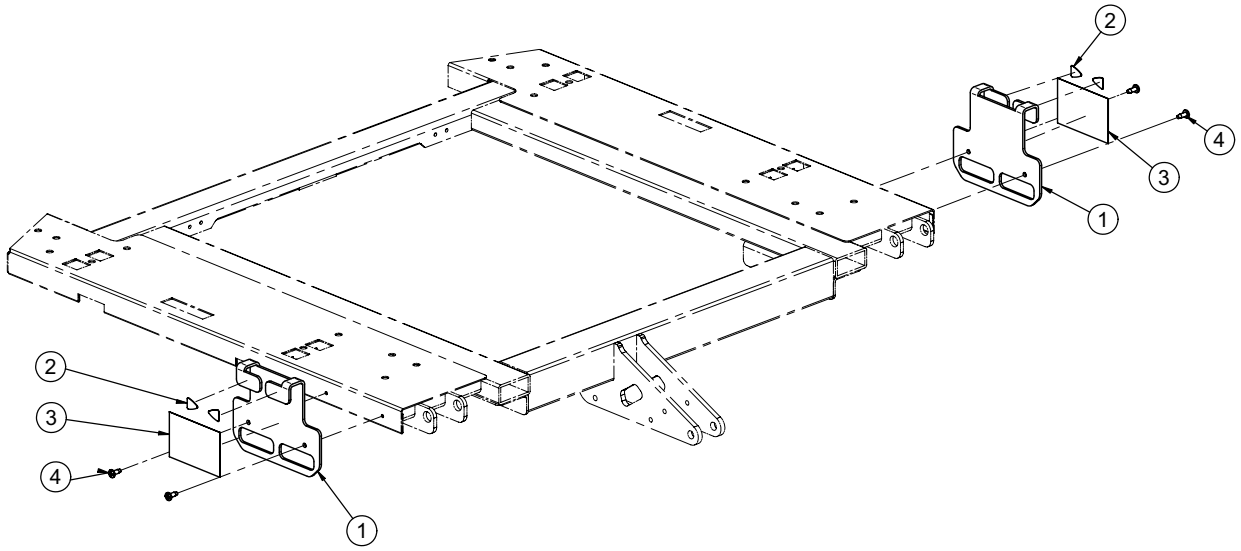


Item	Number	Name	Quantity
1	64-1199Z	Right cassette holder pivot point	2
2	64-1372P	Fastener	1
3	64-1255	Plunger	1
4	64-1260Z	Cassette support	1
5	64-1276	X-ray cassette support spacer	2
6	QDF2093	X-ray cassette manual tightening screw	1
8	QE71-1080	X-ray cassette handle sticker	2
9	QP64-1185	X-ray cassette for plate	1
10	VE40A1N	Cap nut	1
11	VV83A9G16	Phillips head tapping screw	8
12	VV83A9G24	Phillips head tapping screw	2
13	VW10A06	Flat washer	2

Item	Number	Name	Quantity
14	M0008	Threadlocker medium strength (blue)	-
15	QE71-1400	Label, specification	1

Tube support

OL270224-XXX Rev C (Reference only)



Item	Number	Name	Quantity
1	27-2518P	Tube support	2
2	QE71-0498	Triangular sticker	4
3	QE71-1248-XXX	Sticker to drainage tube	2
4	VV83A9G16	Tapping screw pan head	4

EMC information

Guidance and manufacturer's declaration - electromagnetic emissions		
The **InTouch** Critical Care bed is intended for use in the electromagnetic environment specified below. The customer or the user of the **InTouch** Critical Care bed should assure that it is used in such an environment.		
Emissions test	**Compliance**	**Electromagnetic environment**
RF Emissions CISPR 11	Group 1	The **InTouch** Critical Care bed uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The **InTouch** Critical Care bed is suitable for use in all establishments other than domestic and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations Flicker Emissions IEC 61000-3-3	Complies	

Recommended separations distances between portable and mobile RF communication equipment and the InTouch Critical Care bed

The **InTouch** Critical Care bed is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the **InTouch** Critical Care bed can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the **InTouch** Critical Care bed as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter **W**	**Separation distance according to frequency of transmitter** **m**		
	150 kHz to 80 MHz **D=(1.2) (√*P*)**	**80 MHz to 800 MHz** **D=(1.2) (√*P*)**	**800 MHz to 2.5 GHz** **D=(2.3) (√*P*)**
0.01	0.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

For transmitters rated at a maximum output power not listed above, the recommended separation distance *d* in meters (m) can be estimated using the equation applicable to the frequency of the transmitter, where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer.

Note - At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note - These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

Guidance and manufacturer's declaration - electromagnetic immunity			
The **InTouch** Critical Care bed is suitable for use in the electromagnetic environment specified below. The customer or the user of the **InTouch** Critical Care bed should assure that it is used in such an environment.			
Immunity test	**IEC 60601 test level**	**Compliance level**	**Electromagnetic environment-guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic fast transient/ burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/output lines	±2 kV for power supply lines ±1 kV for input/output lines	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±1 kV lines to lines ±2 kV lines to earth	±1 kV lines to lines ±2 kV lines to earth	Main power quality should be that of a typical commercial or hospital environment.
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	<5%U_T (>95% dip in U_T) for 0.5 cycle 40%U_T (60% dip in U_T) for 5 cycles 70%U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec.	<5%U_T (>95% dip in U_T) for 0.5 cycle 40%U_T (60% dip in U_T) for 5 cycles 70%U_T (30% dip in U_T) for 25 cycles <5% U_T (>95% dip in U_T) for 5 sec.	Main power quality should be that of a typical commercial or hospital environment. If the user of the **InTouch** Critical Care bed requires continued operation during power main interruptions, it is recommended that the device be powered from an uninterrupted power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial or hospital environment.
Note - U_T is the a.c. mains voltage before applications of the test level.			

Conducted RF IEC 61000- 4-6 Radiated RF IEC 61000-4-3	3 Vrms 150 kHz to 80 MHz 3 V/m 80 MHz to 2.5 GHz	3 Vrms 3 V/m	Portable and mobile RF communications equipment should be used no closer to any part of the **InTouch** Critical Care bed, including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter. Recommended separation distance D=(1.2) (√*P*) 80 MHz to 800 MHz D=(2.3) (√*P*) 800 MHz to 2.5 GHz where *P* is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and *d* is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey[a], should be less than the compliance level in each frequency range[b]. Interference may occur in the vicinity of equipment marked with the following symbol: 

Note - At 80 MHz and 800 MHz, the higher frequency range applies.

Note - These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects, and people.

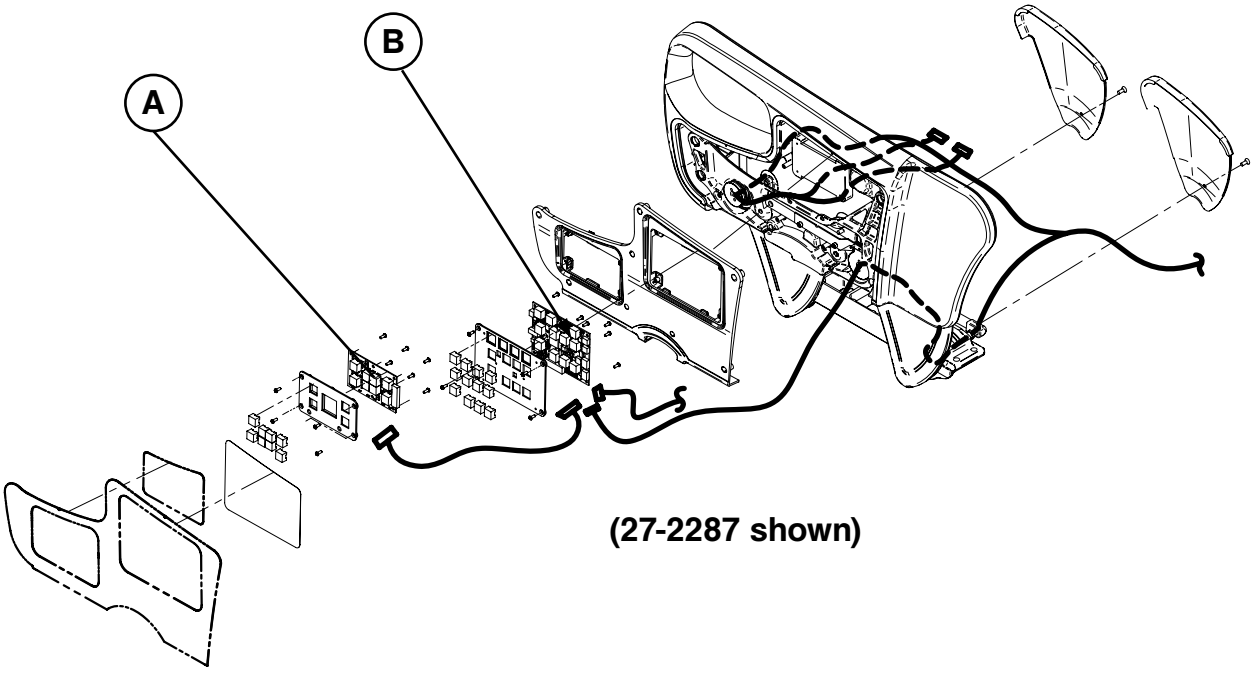
[a]Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the **InTouch** Critical Care bed is used exceeds the applicable RF compliance level above, the **InTouch** Critical Care bed should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the **InTouch** Critical Care bed.

[b]Over the frequency range 150 kHz to 80 MHz, field strengths are less than 3 V/m.

Recycling passport

27-2287/27-2288

Rev AB

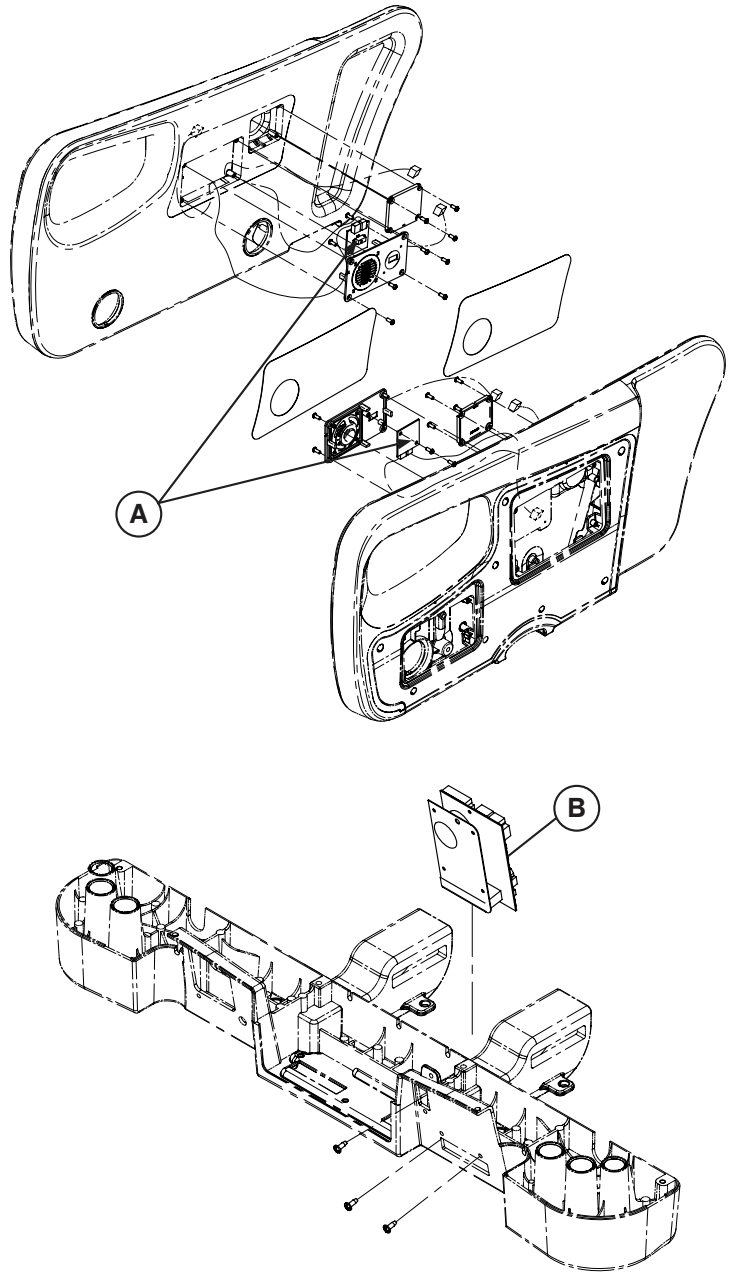


(27-2287 shown)

Item	Recyclable part number	Material code	Important	Quantity
A	QDF27-1097	Brake control board		2
B	QDF27-1099	Siderail nurse control board		2

OL270311

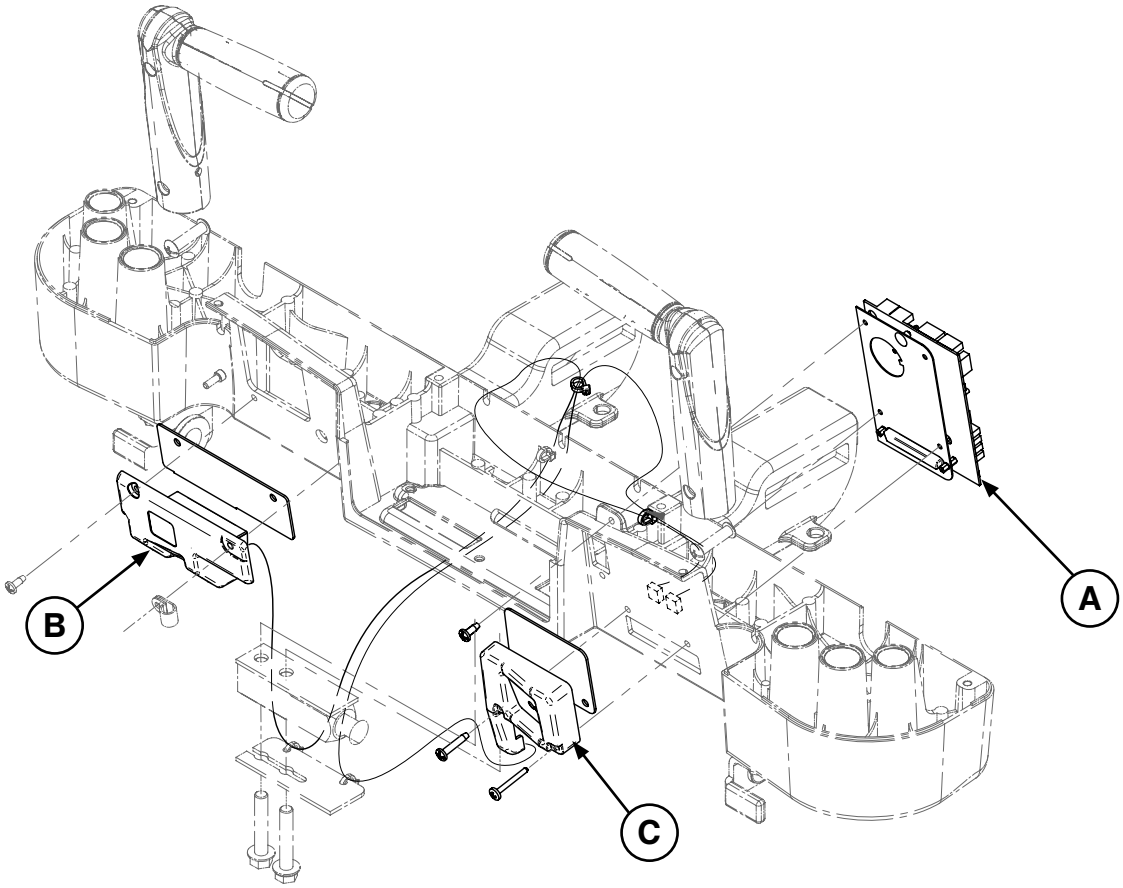
Rev AA



Item	Recyclable part number	Material code	Important	Quantity
A	QDF27-1429	Nurse call board		2
B	QDF75-0270	Room interface board		1

OL270302

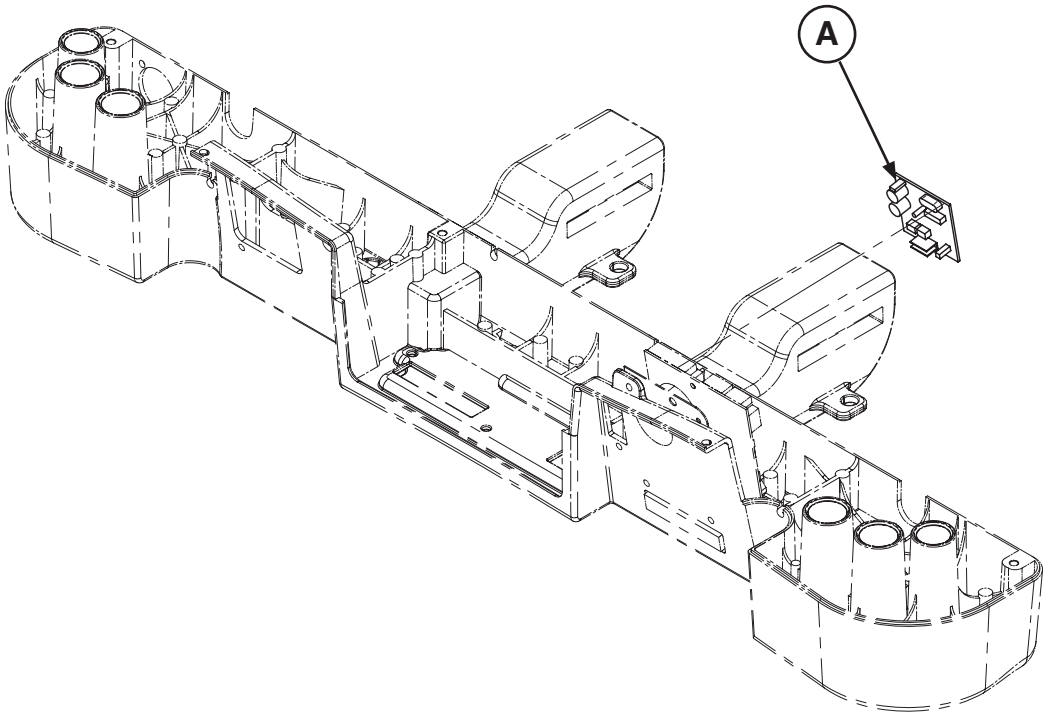
Rev AA



Item	Recyclable part number	Material code	Important	Quantity
A	QDF75-0270	Room interface board		1
B	27-2661	IR module, left		1
C	27-2662	IR module, right		1

OL270032

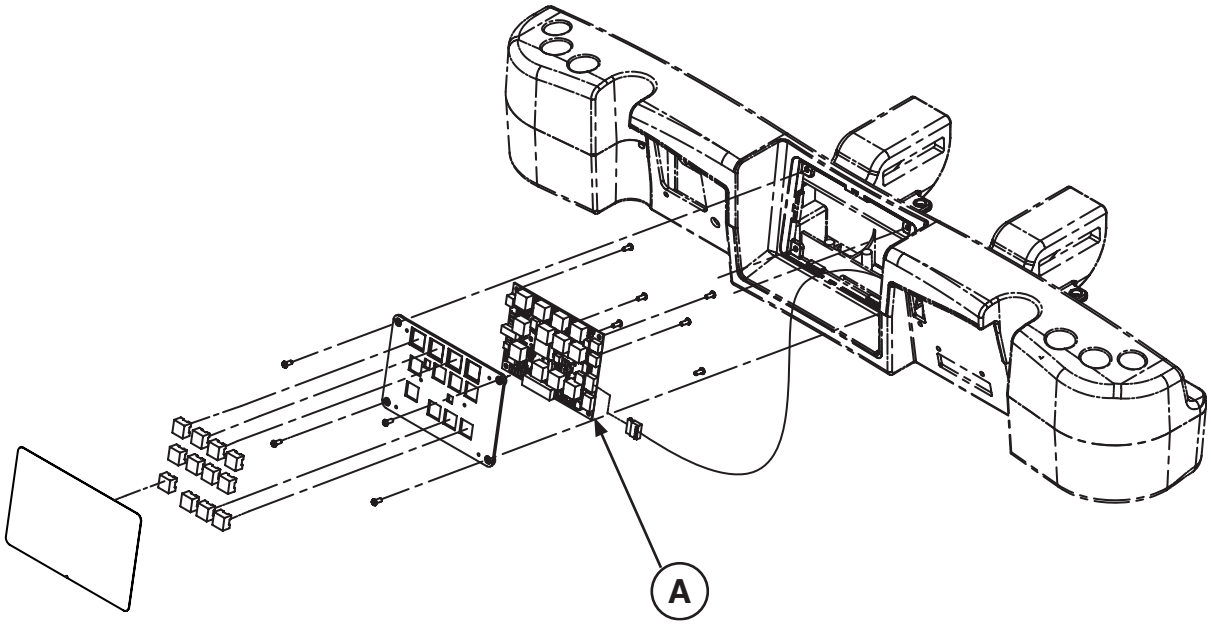
Rev 0



Item	Recyclable part number	Material code	Important	Quantity
A	QDF2060	Smart TV board		1

OL270263-XXX

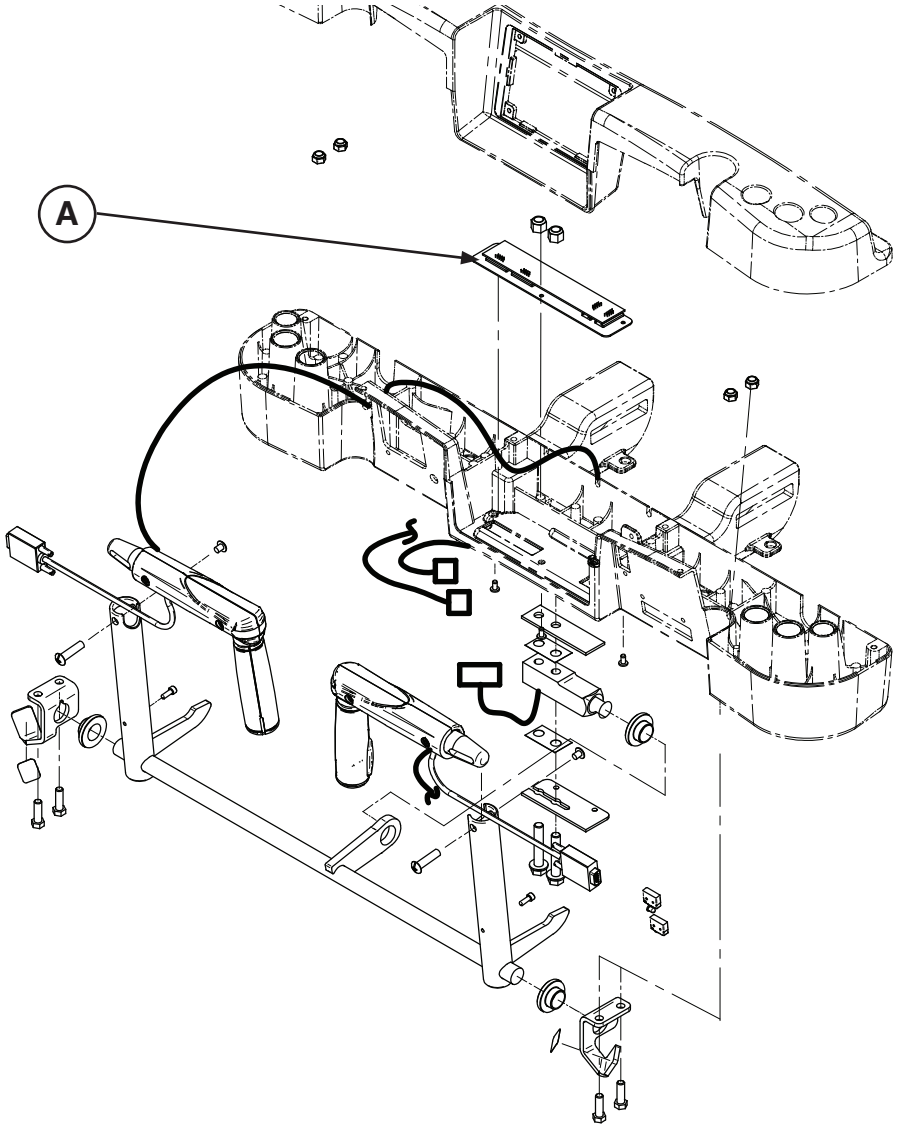
Rev C



Item	Recyclable part number	Material code	Important	Quantity
A	QDF27-1099	Siderail nurse control board		3

27-2547-XXX

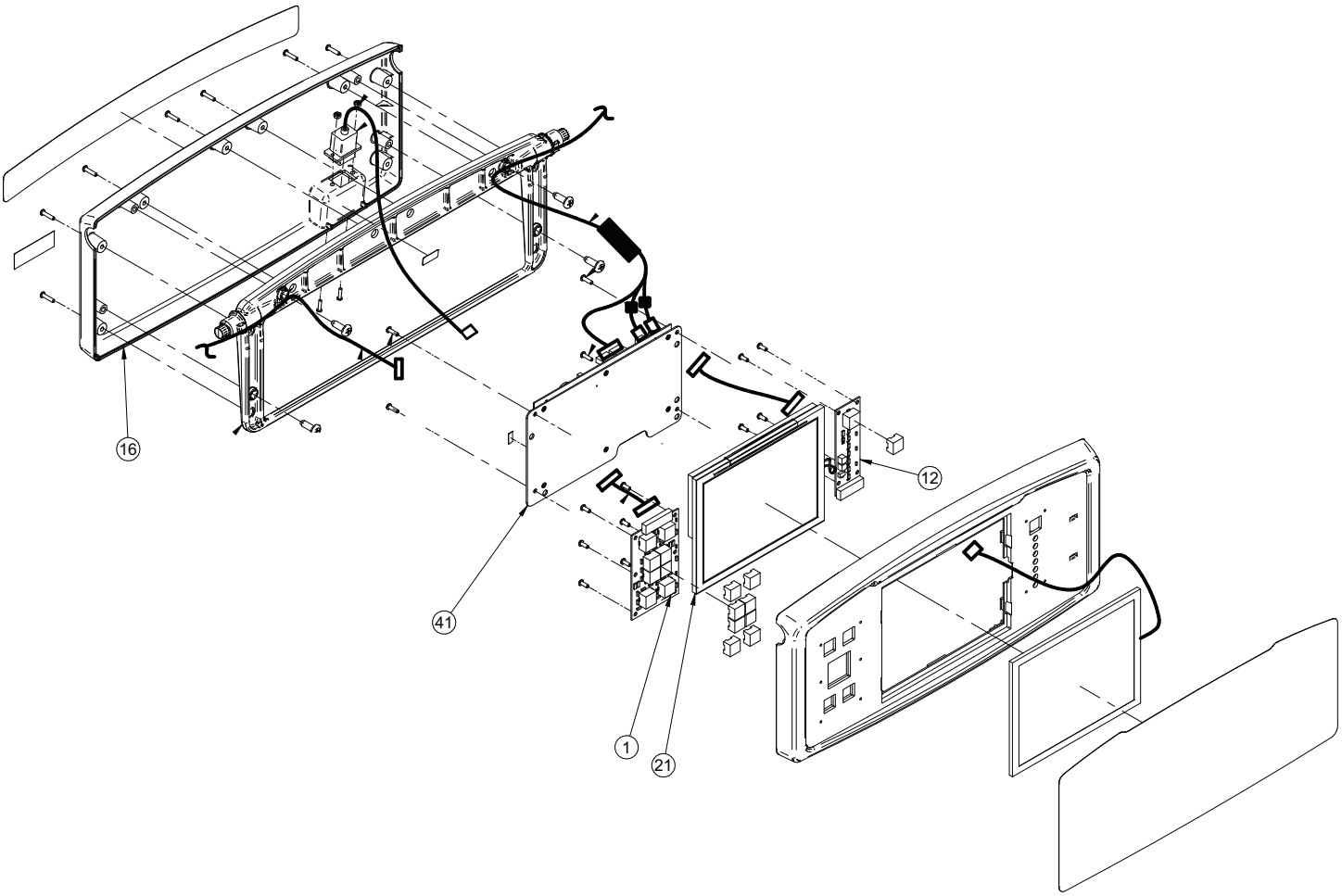
Rev 00



Item	Recyclable part number	Material code	Important	Quantity
A	27-2548	**Zoom** control board		3

OL270345-XXX/OL270346-XXX

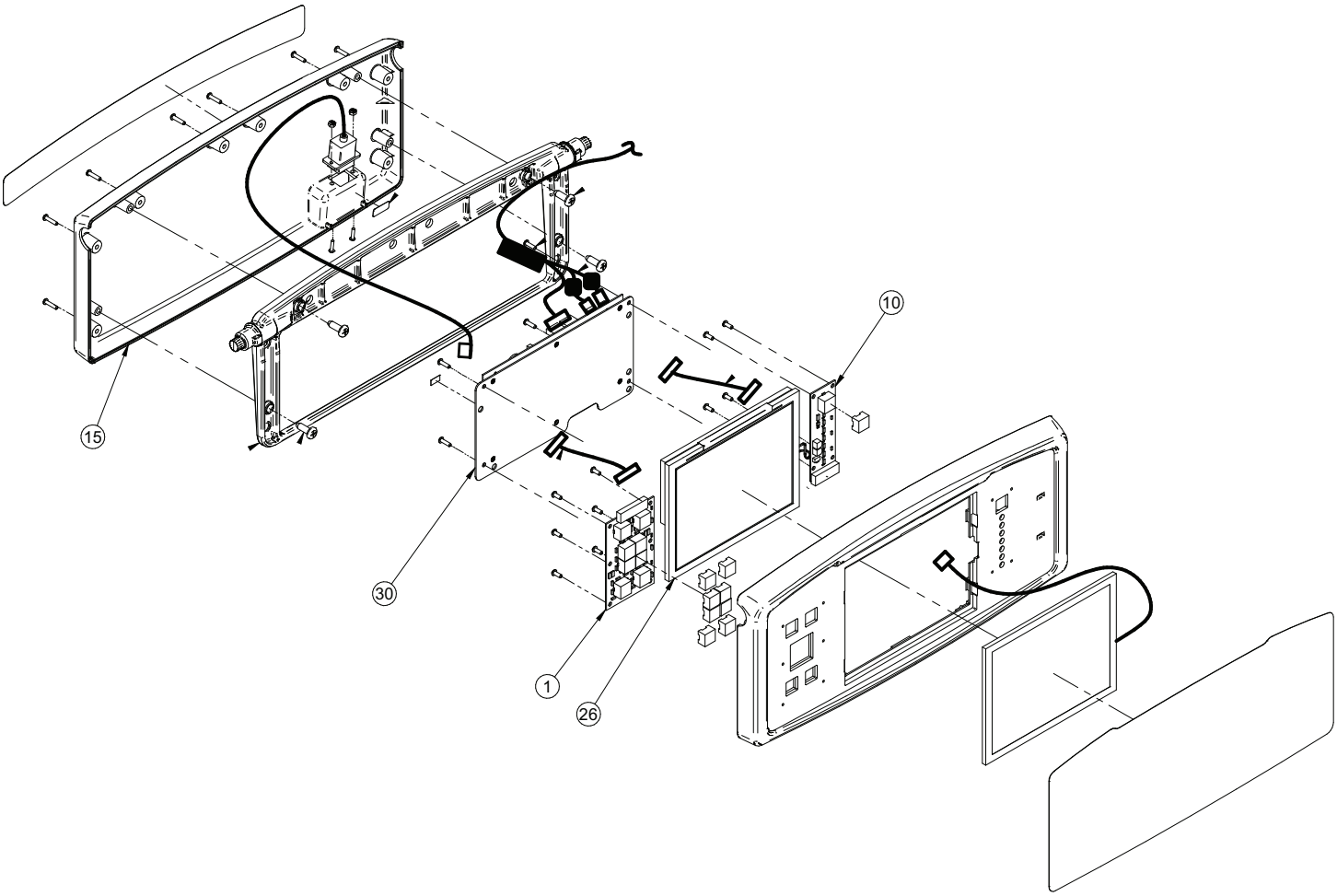
Rev B



Item	Recyclable part number	Material code	Important	Quantity
1	QDF27-1097	Brake control board		1
12	QDF75-0010	Main menu board		1
16	QP27-2186	Rear foot control board		1
21	27-2902	LCD display		1
41	27-2890	Touch board assembly		1

OL270347-XXX

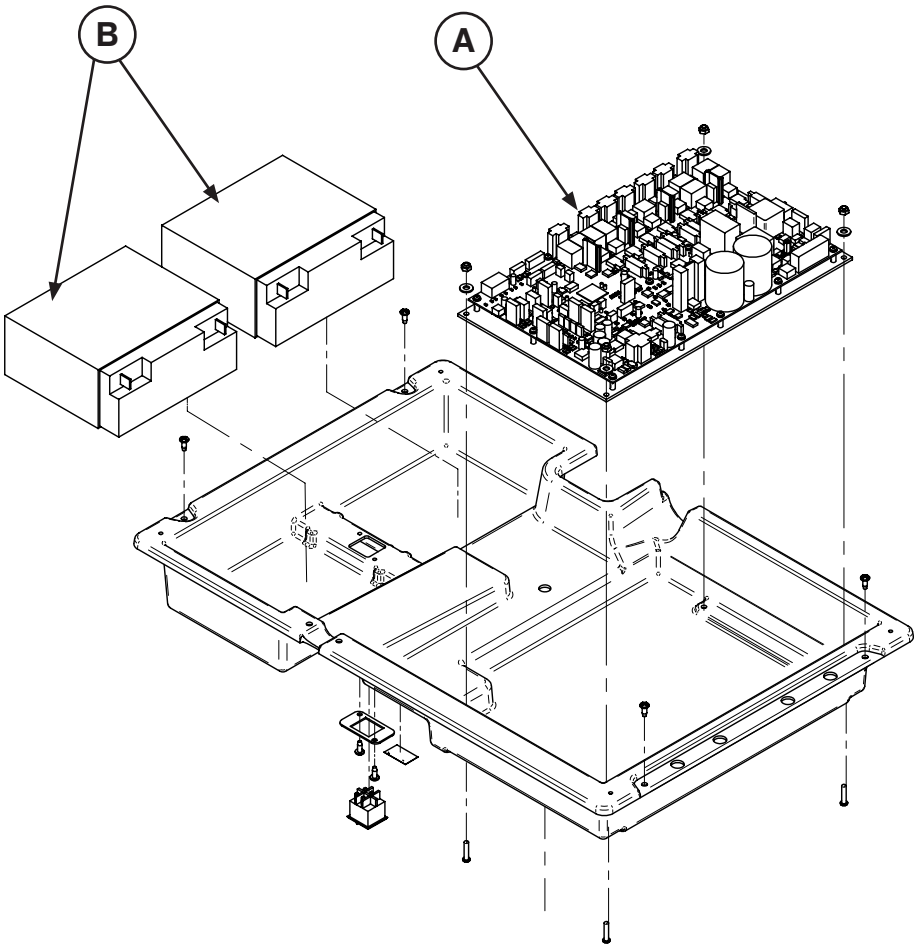
Rev B



Item	Recyclable part number	Material code	Important	Quantity
1	QDF27-1097	Brake control board		1
10	QDF75-0010	Main menu board		1
15	QP27-2186	Rear foot control board		1
26	27-2902	LCD display		1
30	27-2890	Touch board assembly		1

27-2688

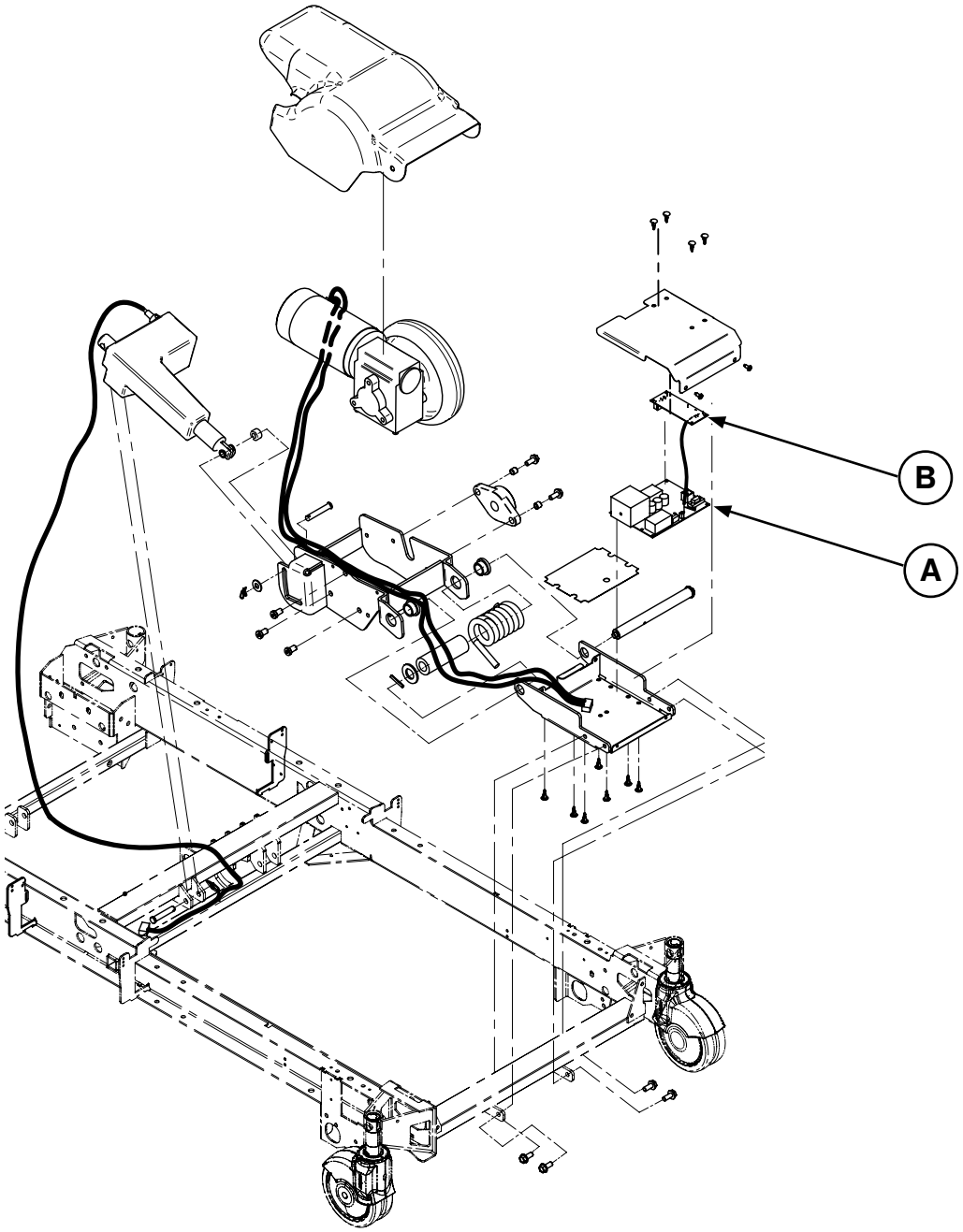
Rev B



Item	Recyclable part number	Material code	Important	Quantity
A	QDF75-0440	DC power control board		1
B	QDF9188	12V 18Ah battery		2

27-2546

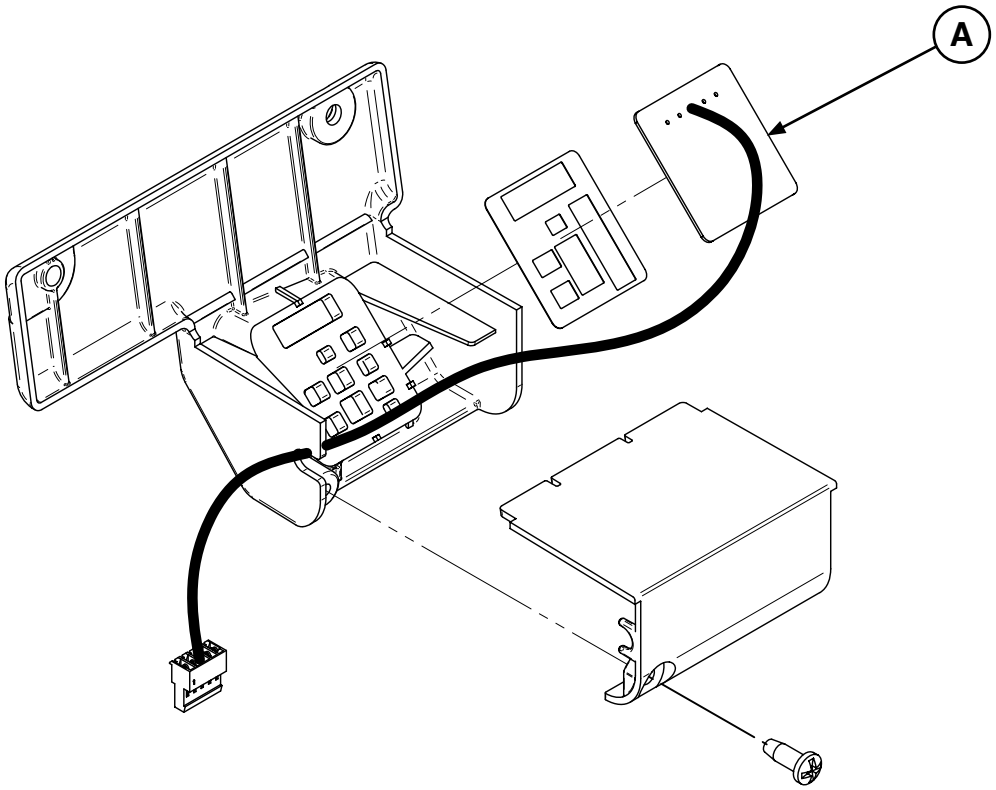
Rev 02



Item	Recyclable part number	Material code	Important	Quantity
A	QDF27-1430	**Zoom** board		1
B	QDF75-0240	**Zoom** interface board		1

27-2661

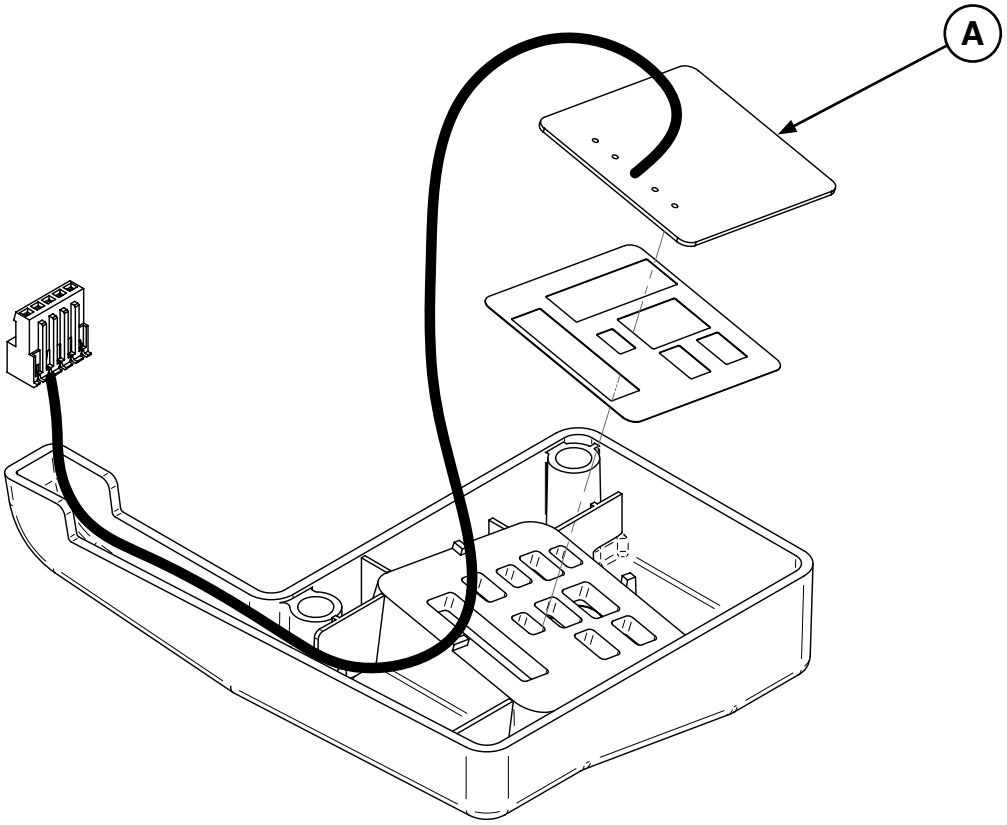
Rev C



Item	Recyclable part number	Material code	Important	Quantity
A	QDF75-0310	IR board		1

27-2662

Rev B



Item	Recyclable part number	Material code	Important	Quantity
A	QDF75-0310	IR board		1

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WCR: AB.6