

**MedSurg Bed**

**Model FL23SE  
(Electric)**

# stryker<sup>®</sup>

## Maintenance Manual



For Parts or Technical Assistance:  
USA: 1-800-327-0770 (option 2)  
Canada: 1-888-233-6888



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# Symbols and Definitions

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Warning/Caution, Refer to Accompanying Documentation



Alternating Current



Type B Equipment: Equipment providing a particular degree of protection against electric shock, particularly regarding allowable leakage current and reliability of the protective earth connection.

Class 1 Equipment: Equipment in which protection against electric shock does not rely on basic insulation only, but which includes an additional safety precaution in that means are provided for the connection of the equipment to the protective earth conductor in the fixed wiring of the installation in such a way that accessible metal parts cannot become live in the event of a failure of the basic insulation.

**IPX4**

Protection from liquid splash



Dangerous Voltage Symbol



Protective Earth Terminal



Potential Equalization Symbol



Medical Equipment certified by CSA with Respect to Electric Shock, Fire, Mechanical and Other Specified Hazards Only in Accordance with UL 60601-1, Second Edition (2005) and CAN/CSA C22.2 No. 601.1-M90 with updates 1 and 2.



Safe Working Load Symbol



In accordance with **European Directive 2002/96/EC** on Waste Electrical and Electronic Equipment (**WEEE**), this symbol indicates that the product must not be disposed of as unsorted municipal waste, but should be collected separately. Refer to your local distributor for return and/or collection systems available in your country.



Handle here Symbol

# Symbols and Definitions

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## **WARNING / CAUTION / NOTE DEFINITION**

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

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### **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.

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### **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 equipment 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.

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### **Note**

This provides special information to make maintenance easier or important instructions clearer.



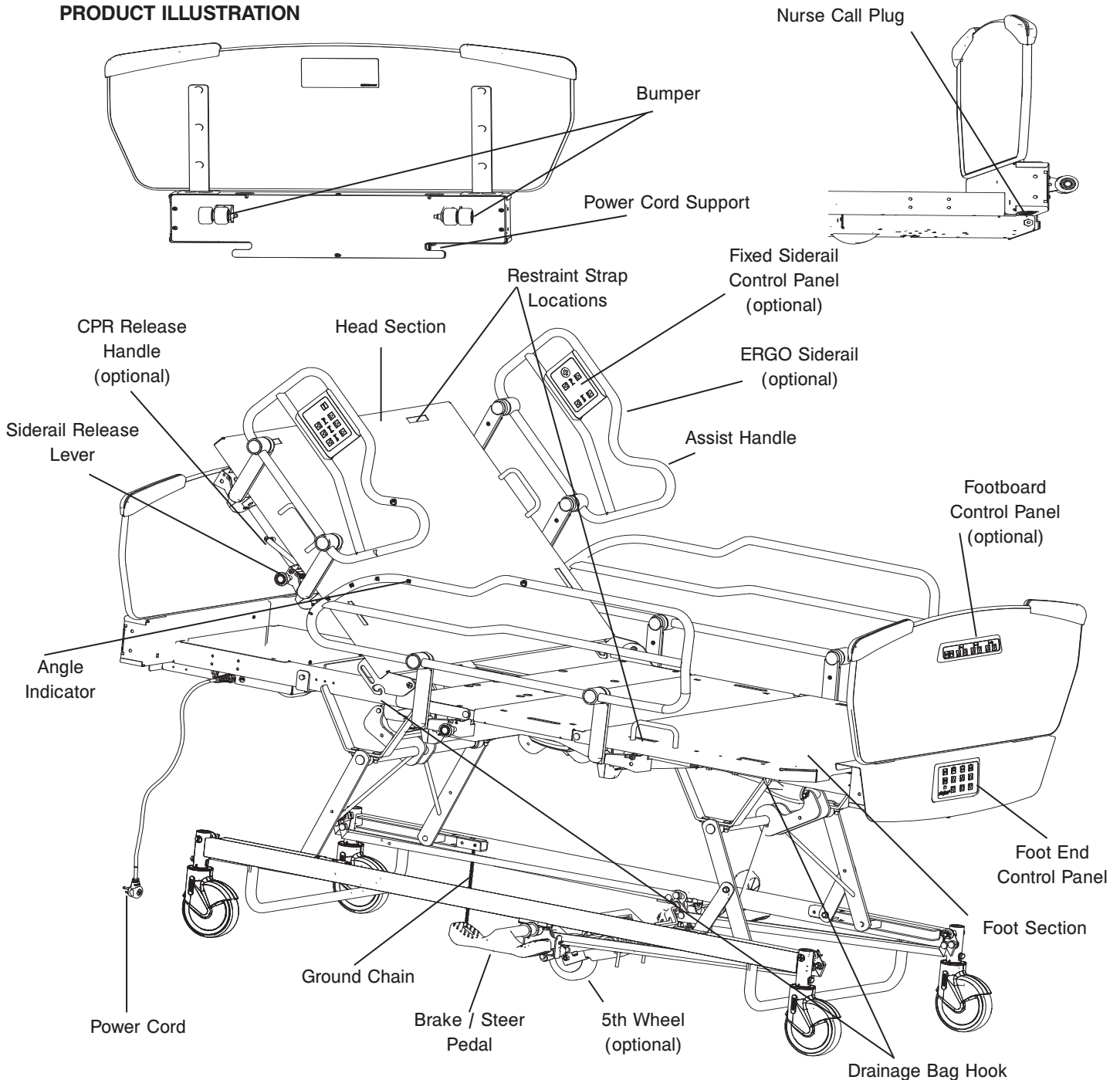
# Introduction

This manual is designed to assist you with the maintenance of Stryker Model FL23SE Electrical MedSurg Bed. Carefully read this manual thoroughly before using the equipment or beginning maintenance on it.

## INTENDED USE - STRYKER MODEL FL23SE

The FL23SE BED is an AC-powered adjustable hospital bed with four built-in electric DC motors and remote controls that is intended for medical purposes. It can be operated by the patient or the caregiver to adjust the height and surface contour of the bed. The bed includes movable and latch able siderails. FL23SE BED is intended for use with patients for procedures, therapy, and recovery in healthcare environment, transport patients between bays and procedural rooms.

## PRODUCT ILLUSTRATION



# Introduction

## SPECIFICATIONS

	Safe Working Load*			
	<b>Note:</b> Safe Working Load indicates the sum of the patient, mattress and accessory weight.		500 lbs	227 kg
Overall Length/ Width	Half-Length Siderails Raised		90.4" x 41.3"	229,6 x 104,9 cm
	Full-Length Siderails Raised		90.4" x 39.9"	229,6 x 101,3 cm
Weight with Head/Foot Boards			375 lbs	170 kg
Patient Sleep Surface			35" x 78"	88,9 x 198,1 cm
Recommended Mattress Size	Length/Width		35" x 78" or 80"	88,9 x 198,1 or 203,2 cm
Maximum Thickness	BNQ Standard	Bed with diameter 5" (12,7 cm) casters	6"	15,2 cm
		Bed with diameter 6" (15,2 cm) casters	5"	12,7 cm
	Non-BNQ Standard		6"	15,2 cm
Minimum/ Maximum Bed Height	With diameter 5" (12,7 cm) casters		11.9" to 29"	30.3 to 73,7 cm
	With diameter 6" (15,2 cm) casters		12.9" to 30"	32,8 to 76,2 cm
Fowler Angle			0° to 62°	
Knee Gatch Angle			0° to 25°	
Trendelenburg/Reverse Trendelenburg			+12° to -12°	
Environmental Conditions	Transport and Storage • Ambient Temperature • Relative Humidity • Atmospheric Pressure		-40° to 158°F 10 to 100% 500 to 1060 hPa	-40° to 70°C
	Operating • Ambient Temperature • Relative Humidity • Atmospheric Pressure		50° to 104°F 5 to 95% <b>without condensation</b> 700 to 1060 hPa	10° to 40°C
Electrical and mechanical requirement	Complies with the following standards: CSA C22.2 No. 601.1, UL 60601-1, IEC 60601-1, 60601-2-38 and BNQ 6641-120 : 2003.		120V~, 60Hz, 4A 230V~, 50Hz, 2A	
Battery	Lead Acid Battery 1.2Ah 24V		Charging voltage: 27.6 VDC ± 2% Charging current: < 300 mA	

\* The Safe Working Load for the BNQ beds is 390 lbs (177 kg)

### Note

This device has a 10% duty cycle.

**Stryker reserves the right to change specifications without notice.**

Specifications listed are approximate and may vary slightly from unit to unit or by power supply fluctuations.

# Summary of Safety Precautions

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Before operating the bed, it is important to read and understand all information in this manual. Carefully read and strictly follow the safety guidelines listed below. It is important that all users have been trained and educated on the inherent hazards associated with the usage of electric beds.

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## WARNING

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- Always unplug the bed power cord from the power source before moving the bed.
- This bed is not intended for pediatric use, i.e., for any patient measuring 35 inches (88,9 cm) or less.
- The mattress thickness should never exceed 6 inches (15,24 cm).
- Do not use an accessory that slides under the bed frame when the bed is in low position or remove it before lowering the bed. Failure to conform to this safety precaution could result in serious patient injury and equipment damage.
- This bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded power source. Grounding reliability can be achieved only when a hospital grade power source is used.
- Shock Hazard - Improper handling of the power cord may result in damage to the power cord and potential shock hazards. If damage has occurred to the power cord, immediately remove the bed from service, and contact the appropriate maintenance personnel. Failure to conform to this safety precaution could result in death or serious injury.
- Serious injury can result if caution is not used when operating the bed. Operate the bed only when all people and equipment are clear of the electrical and mechanical systems.
- Always apply the brakes when a patient is on the bed or entering/exiting the bed. Serious injury could result if the bed moves while a patient is getting on or off the bed. After the brake pedal is engaged, push on the bed to ensure the brakes are securely applied.
- To help reduce the number and severity of a potential fall when the patient is unattended, keep the sleep surface horizontal in its lowest position and the siderails fully raised, unless the patient's medical condition dictates otherwise. When raising the siderails, be sure that you hear the "click" that signals the locked condition. Pull firmly on the siderail to ensure it is locked into position.
- When the sleep surface sections are articulated, ensure that all patient's extremities are within the raised siderails to avoid patient injury.
- When a patient's condition requires greater safety measures for his/her security, lock the siderail controls using the foot end lockout controls or remove any optional pendant control and install protective pads on the siderails.
- Siderails, with or without their padded covers, are not intended to serve as restraint devices to keep patients from exiting the bed. Siderails are designed to keep a patient from inadvertently rolling off the bed. It is the responsibility of the attending medical personnel to determine the degree of restraint necessary to ensure a patient will remain safely in bed. Failure to use the siderails properly could result in serious patient injury.
- To reduce risk of injury, ensure the sleep surface is horizontal and in the lowest position with the siderails fully raised and locked when moving the bed with a patient in it.
- To avoid injury to the patient and/or user, do not attempt to move the bed laterally with the steer mode engaged.
- The CPR emergency release (optional) is for emergency use only. To avoid serious injury, personal injury or equipment damage, ensure all people and equipment are removed from the area below and around the head, thigh and foot sections of the bed, before activating the CPR release handle. Remove any item that could be in touch with the activation mechanism.
- Possible fire hazard exists when this bed is used with oxygen administering equipment other than nasal or mask type. Unplug the bed power cord from the wall when oxygen administering equipment is used.
- When a large fluid spill occurs, immediately unplug the bed power cord from the wall outlet. Remove the patient from the bed and clean up the fluid. Have maintenance completely check the bed. Fluids can have an adverse effect on operational capabilities of any electrical product. **Do not** put the bed back into service until it is completely dried and has been thoroughly tested for safe operation.
- Do not **steam clean, hose off or ultrasonically clean the bed. Do not immerse any part of the bed in any kind of liquid.** The internal electrical parts may be damaged by exposure to water. Hand wash regularly all surfaces of the bed with warm water and a mild detergent. Wipe cleaned surfaces dry to avoid build up of cleaning substance. Inspect the mattress after each use. Discontinue use if any cracks or rips, which may allow fluid to enter the mattress, are found in the mattress cover. Failure to properly clean or dispose the mattress if defective may increase

## Summary of Safety Precautions

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the risk of exposure to pathogenic substances and may cause the patient and user to develop diseases.

- Preventative maintenance should be performed at least once a year to ensure all bed features are operating properly. Ensure that any bed malfunction is promptly reported to your service personnel for immediate attention.
- Always unplug the bed power cord from the power source when cleaning the bed.
- Always unplug the bed power cord from the power source as well as the battery when servicing the bed. When working under the bed with the bed in the high position, always place blocks under the mattress support frame and apply the brakes to prevent injury in case the bed down control is accidentally pressed.
- When servicing, use only identical replacement parts provided by Stryker.
- Make sure that the ground chain is in place, intact and it's touching the floor (See "Product Illustration" on [page 9](#))
- Do not put anything under the bed.
- It is recommended that the facilities evaluate the risk level of entrapment for the patient and take action to lower that risk level.



### CAUTION

- When using a mattress thicker than 6 inches (15,24 cm) or a mattress overlay, extra caution and/or patient supervision may be required to reduce the likelihood of occurrence of a patient fall.
- To avoid damage to the siderail mechanisms, do not move the bed using the raised siderails. Use the head or foot board to move the bed.

**Note:** Throughout this operations manual, the words "right" and "left" refer to the right and left sides of a patient lying face up on the bed.

# Preventative Maintenance

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Preventive maintenance should be performed at least once a year to ensure that all bed features are operating properly. Ensure that any bed malfunction is promptly reported to your service personnel for an immediate attention. When servicing, use only identical replacement parts provided by Stryker. Preventive maintenance may need to be performed more frequently based on the usage level of the bed.

## CHECKLIST

- \_\_\_\_\_ All fasteners secure.
- \_\_\_\_\_ Inspect for excessive wear the oil-impregnated bronze shoulder spacers found at the bed hinge points. **Do not lubricate these spacers, replace as needed.**
- \_\_\_\_\_ On both sides of the bed, depress fully down the side of the pedal identified with a red label and ensure that the brakes are applied and the bed immobilized. Toggle the pedal to neutral and ensure the brakes are released.
- \_\_\_\_\_ On both sides of the bed, depress fully down the side of the pedal identified with a green label and ensure that the steer mode - bed steer caster or optional fifth wheel is engaged. Toggle the pedal to neutral and ensure that the steer mode disengages.
- \_\_\_\_\_ Ensure that siderails move upward and downward, and latch properly in high position.
- \_\_\_\_\_ Ensure that each control of the inner and outer head siderail control panels (optional) are working properly.
- \_\_\_\_\_ Ensure that all controls of the foot end panel and those of the foot board panel (optional) are working properly, including the lockout and battery charging indicator LEDs.
- \_\_\_\_\_ When the CPR handles (optional) are pulled until Fowler is flattened, ensure that Fowler (if raised) flatten and the Fowler control motor resets itself automatically. Wait 35 seconds to allow the Fowler motor to reset and then raise the Fowler to ensure the motor reset properly.
- \_\_\_\_\_ Verify the Fowler, Gatch and Hi-Lo movements of the bed to ensure that the motion interrupt switch integrated to each electric actuators is operating properly.
- \_\_\_\_\_ Night light (optional) working properly.
- \_\_\_\_\_ Head end bumpers tightly secured to frame and working properly.
- \_\_\_\_\_ No rips or cracks in mattress cover, replace if necessary.
- \_\_\_\_\_ Power cord is intact. Replace if the protective sleeve is cut or torn.
- \_\_\_\_\_ No cables worn or pinched.
- \_\_\_\_\_ All electrical connections tight.
- \_\_\_\_\_ All grounds secured to the frame.
- \_\_\_\_\_ All casters roll properly. Check caster for cuts, wear, etc.
- \_\_\_\_\_ Confirm power and functionality for the battery (refer to pg. 26)
- \_\_\_\_\_ Measure current leakage and grounding continuity of the bed. Contact your local Technical Service department for the acceptable values.
- \_\_\_\_\_ Make sure that the ground chain is in place, intact and it's touching the floor (see "Product Illustration" on [page 9](#)).

Bed Serial Number:		

Completed by: \_\_\_\_\_

Date: \_\_\_\_\_

# Preventive Maintenance

## AVERTISSEMENT

- Always unplug the bed power cord from the wall outlet when cleaning or servicing the bed.
- Ensure that bed functions will not be activated otherwise, unplug the battery cord.
- To reduce the risk of injury while working under the bed, always place blocks under the lift levers and apply the brakes.

## MECHANISM LUBRICATION

**Note:** In compliance with the service life requirement of the BNQ 6641-120/2003 standard, this unit was designed to be maintenance free with regard to lubrication. Improper use or failure to follow cleaning recommendations may require lubrication of the actuator.

### Tools Required:

- Bungee Cords (or equivalent)
- OG2 Grease (or equivalent)
- Brush
- Long Nose Pliers

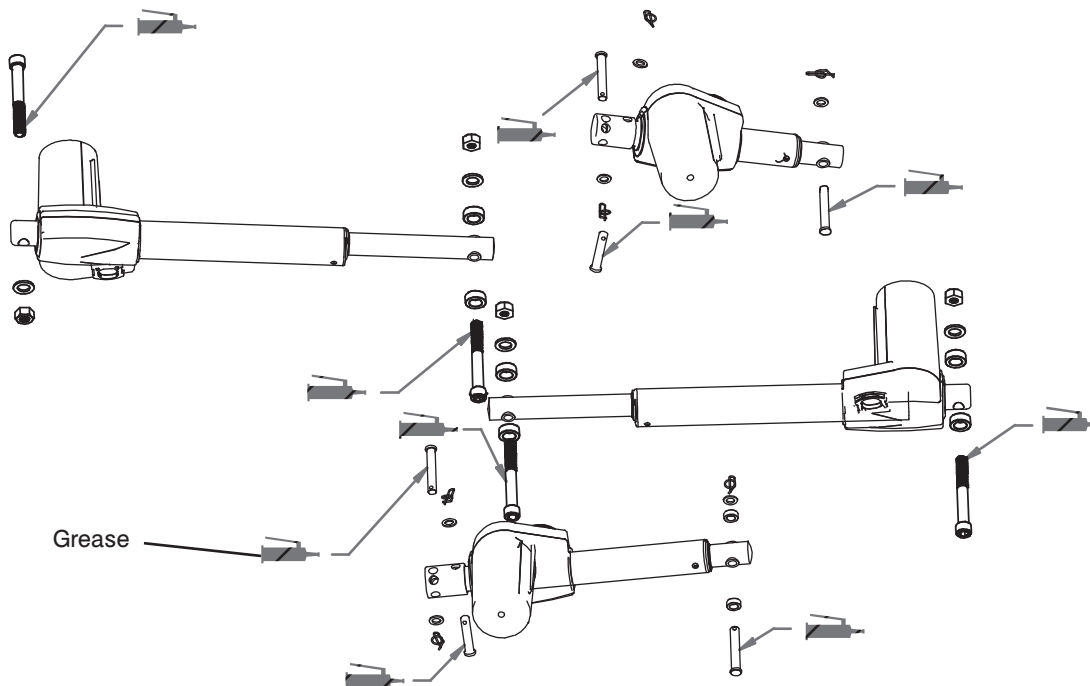


Figure 1

# Preventive Maintenance

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## MECHANISM LUBRICATION (CONTINUED)

### Procedure:

1. Raise the bed to its highest height and apply brakes.
2. Raise the head section to its highest position and put the gatch section in flat position. Lower the four siderails.
3. Lower the bed on blocks to release the bed lift mechanism.
4. Unplug the power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
5. Using the long nose pliers, lift the foot section and fold it back toward the head end of the bed. Secure it using bungee cords.
6. Remove the pivot pins. Using a brush, apply grease to the axel pivot pins.
7. Plug the power cord into the wall outlet and, the battery cord.
8. Replace the cover plate.

# Cleaning

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## WARNING

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Always unplug the bed power cord from the power source when cleaning or servicing the bed.

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## CAUTION

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**Do not use harsh cleaners, solvents or detergents. Do not steam clean, hose off or ultrasonically clean the bed. Do not immerse any part of the bed in any kind of liquid. The bed electrical parts may be damaged by exposure to water.**

Germicidal disinfectant, used as directed, and/or Chlorine Bleach products **are not** considered mild detergents. These products are corrosive in nature and may cause damage to your bed if used improperly. If these types of products are used, ensure the beds are rinsed with clean water and thoroughly dried following cleaning. **Failure to properly rinse and dry the beds will leave a corrosive residue on the surface of the bed, possibly causing premature corrosion of critical components.** Failure to follow the above directions when using these types of cleaners may void this product's warranty.

### **Procedure:**

Hand wash all surfaces of the bed with a soft cloth moistened with a solution of lukewarm water and a mild detergent. Wipe the bed clean and dry thoroughly to avoid build up of cleaning solution.

Suggested cleaners for bed surfaces:

- Quaternary Cleaners (active ingredients - ammonium chloride)
  - Chlorinated Bleach Solution (5.25% - less than 1 part bleach to 100 parts water)
- 

## WARNING

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Inspect the mattress after each use. Discontinue use if any cracks or rips, which may allow fluid to enter the mattress, are found in the mattress cover. For cleaning instructions, refer to the mattress label or, contact the manufacturer.



# Troubleshooting Guide

Problem/Failure	Recommended Action
No power to bed	<ul style="list-style-type: none"> <li>• Verify power at the wall outlet.</li> <li>• Verify power cord connections at the wall outlet and the power connector on the bed.</li> <li>• Inspect power cord for damage. Replace if necessary.</li> </ul>
No bed up or down motion when <ul style="list-style-type: none"> <li>• Siderail control panel (optional) is used</li> <li>• Foot board control panel is used</li> </ul>	<ul style="list-style-type: none"> <li>• Is the Lift Lockout activated (LED lit)? If yes, unlock (LED off).</li> <li>• The removable pendant control cable (optional) is properly connected to the bed.</li> <li>• Verify the action points from section “No power to bed”.</li> </ul>
No Fowler up or down motion when <ul style="list-style-type: none"> <li>• Siderail control panel (optional) or the Pendant control (optional) is used</li> <li>• Foot board control panel is used</li> </ul>	<ul style="list-style-type: none"> <li>• Is the Fowler Lockout activated (LED lit)? If yes, unlock (LED off).</li> <li>• The control cable of the siderail control panel (optional) or the removable pendant control (optional) is properly connected to the bed.</li> <li>• Verify the action points from section “No power to bed”.</li> </ul>
The Fowler <b>does not raise to the maximum capacity.</b>	Happens when the CPR Emergency Release (optional) is used to partially lower the Fowler section. The motor becomes out of synch with the real Fowler position. To correct the situation: <ul style="list-style-type: none"> <li>• Lower the Fowler <b>completely</b> using the CPR release (wait 35 seconds to allow the Fowler motor to reset) or the Fowler controls until motor stops completely.</li> </ul>
The CPR auto-reset function does not operate normally	<ul style="list-style-type: none"> <li>• Verify if CPR switches connectors are properly plugged.</li> <li>• Verify if CPR board connectors are properly plugged.</li> <li>• If no continuity on J2 pins (Refer to CPR Board Diagram for details) when CPR is activated, replace the CPR Board.</li> </ul>
No Gatch up or down motion when: <ul style="list-style-type: none"> <li>• Siderail control panel (optional) or the Pendant control (optional) is used</li> <li>• Foot board control panel is used</li> </ul>	<ul style="list-style-type: none"> <li>• Is the Gatch Lockout activated (LED lit)? If yes, unlock (LED off).</li> <li>• The control cable of the siderail control panel (optional) or the removable pendant control (optional) is properly connected to the bed.</li> <li>• Verify the action points from section “No power to bed”.</li> </ul>
The positioning mechanisms of the Fowler, and/or the Gatch, and/or the bed height operate with difficulty.	<ul style="list-style-type: none"> <li>• Verify battery charge. Plug the power cord to power source if battery charge is low.</li> <li>• If power source and battery charge are adequate, verify the actuator.</li> </ul>
No Auto Contour (optional) motion.	<ul style="list-style-type: none"> <li>• Is the Gatch Lockout activated (LED lit)? If yes, unlock (LED off).</li> </ul>
Improper operation of the CPR emergency release (optional): Gatch does not lower and/or the Fowler actuator does not reset.	<ul style="list-style-type: none"> <li>• Check and replace if necessary the CPR mechanism limit switches for proper operations.</li> </ul>
No actuator movement when control box power LED is on.	<ul style="list-style-type: none"> <li>• Verify all cables are properly plugged-in.</li> <li>• Verify actuator for proper operation</li> <li>• If cables and actuators are working properly, replace the control box.</li> </ul>

# Troubleshooting Guide

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Problem/Failure	Recommended Action
No actuator sound or movement of piston rod	<ul style="list-style-type: none"> <li>• The actuator is not connected to the control box, connect it.</li> <li>• Cable is damaged, replaced it.</li> <li>• If the cable is in good condition, replace the actuator.</li> </ul>
Actuator sound but no movement of piston rod	<ul style="list-style-type: none"> <li>• Gear wheel or spindle damaged, replace the actuator.</li> </ul>
Piston rod will only move inwards and not outwards	<ul style="list-style-type: none"> <li>• Safety nut has operated, replace the actuator.</li> </ul>
Power indicator does not light up	<ul style="list-style-type: none"> <li>• Not connected to main, plug the bed.</li> <li>• Defective power cable, replace de cable.</li> <li>• Control box defective, replace the control box.</li> </ul>
Power indicator does lights up, but actuator does not run	<ul style="list-style-type: none"> <li>• Actuator plug not pushed into the control box properly, push actuator plug in place and make sure all cable locking clips are properly installed.</li> </ul>
Control box completely dead on battery	<ul style="list-style-type: none"> <li>• Battery completely flat, charge it.</li> <li>• Battery defective, replace it.</li> </ul>
Actuator does not run on battery	<ul style="list-style-type: none"> <li>• Actuator plug not pushed into the control box properly, push actuator plug in place and make sure all cable locking clips are properly installed.</li> <li>• Actuator is defective, replace it.</li> <li>• Control box defective, replace it.</li> </ul>

## Quick Reference Replacement Parts List

The parts and accessories listed on this page are all currently available for purchase. Some of the parts identified on the assembly drawing parts in this manual may not be individually available for purchase. Please call Stryker Customer Service USA: 1-800-327-0770 (Option 2) or Canada: 1-888-233-6888 for availability and pricing.

Part Name	Part Number
6" Caster with Lock Mechanism	RD25038807
5" Swivel Caster	RD25039107
6" Swivel Caster	RD25049307
5" Caster with Lock Mechanism	RD25049407
5" Total Lock Caster	RD25049507
6" Total Lock Caster	RD25049607
Fifth Wheel Caster	RL5
Patient control Two-Function without Nurse Call - Left	QDF23-5923
Patient control Two-Function without Nurse Call - Right	QDF23-5924
Patient control Two-Function with Nurse Call - Left	QDF23-5925
Patient control Two-Function with Nurse Call - Right	QDF23-5926
Three-Function Membrane - Left	QDF23-5927
Three-Function Membrane - Right	QDF23-5928
Three-Function Membrane with Flat bed positioning button- Left	QDF23-5938
Three-Function Membrane with Flat bed positioning button - Right	QDF23-5939
Support for Fixe Control Membrane	QP23-0391-07
Foot Board Control Membrane	QDF23-5918
Foot Board Connector	QDF23-5921
Support for Foot Board Control	QP23-5090-07
Optional Foot Board Control Membrane	QDF23-5935
Optional Foot Board Connector	QDF17-0139
Support for Optional Foot Board Membrane	QDF17-0127-07
Control Box 120V	QDF23-5902
Control Box 120V with Auto Contour	23-5955
Control Box 230V	QDF23-5933
Control Box 230V with Auto Contour	23-5956
Power cord - North American	QDF23-5913
Power cord - Continental Europe	QDF23-5930
Power cord - Argentina	QDF23-5931
Power cord - UK	QDF23-5932

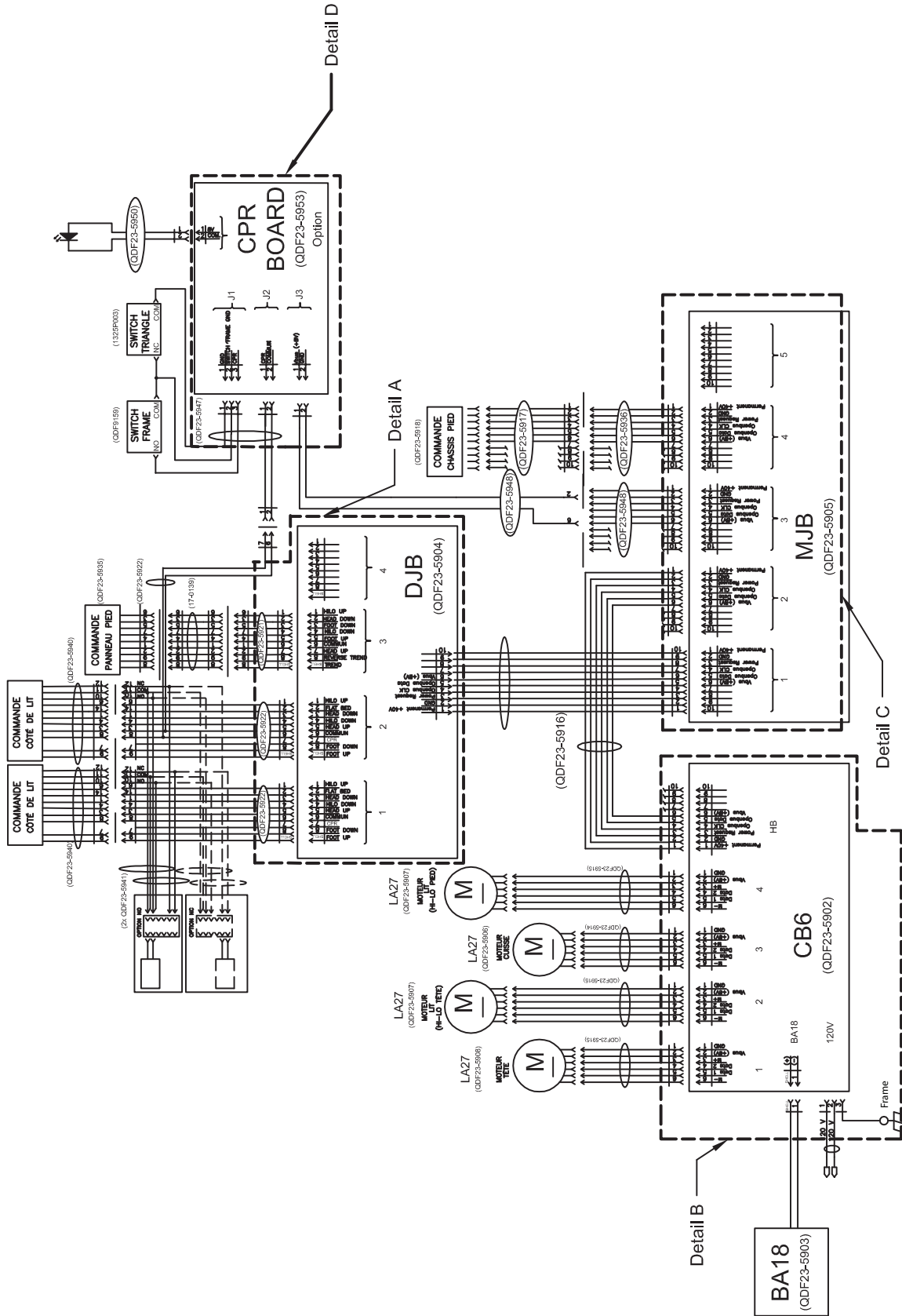
## Quick Reference Replacement Parts List

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Part Name	Part Number
Fowler Actuator	QDF23-5908
Lift Actuator	QDF23-5907
Gatch Actuator	QDF23-5906
Micro-Switch	1325P003
Battery BA18	QDF23-5903
Grease OG2 Cartridge 400 gr.	M0027
White Spray Paint 15ml.	PD017
Transfer tape 3M	QDF7826
Tie Wrap 3/16 x 8	QDF9518
Dome Cap 1 1/4	QDFP1514
Shoulder Spacer Diameter 5/16 x 0.210	QDF17-0020

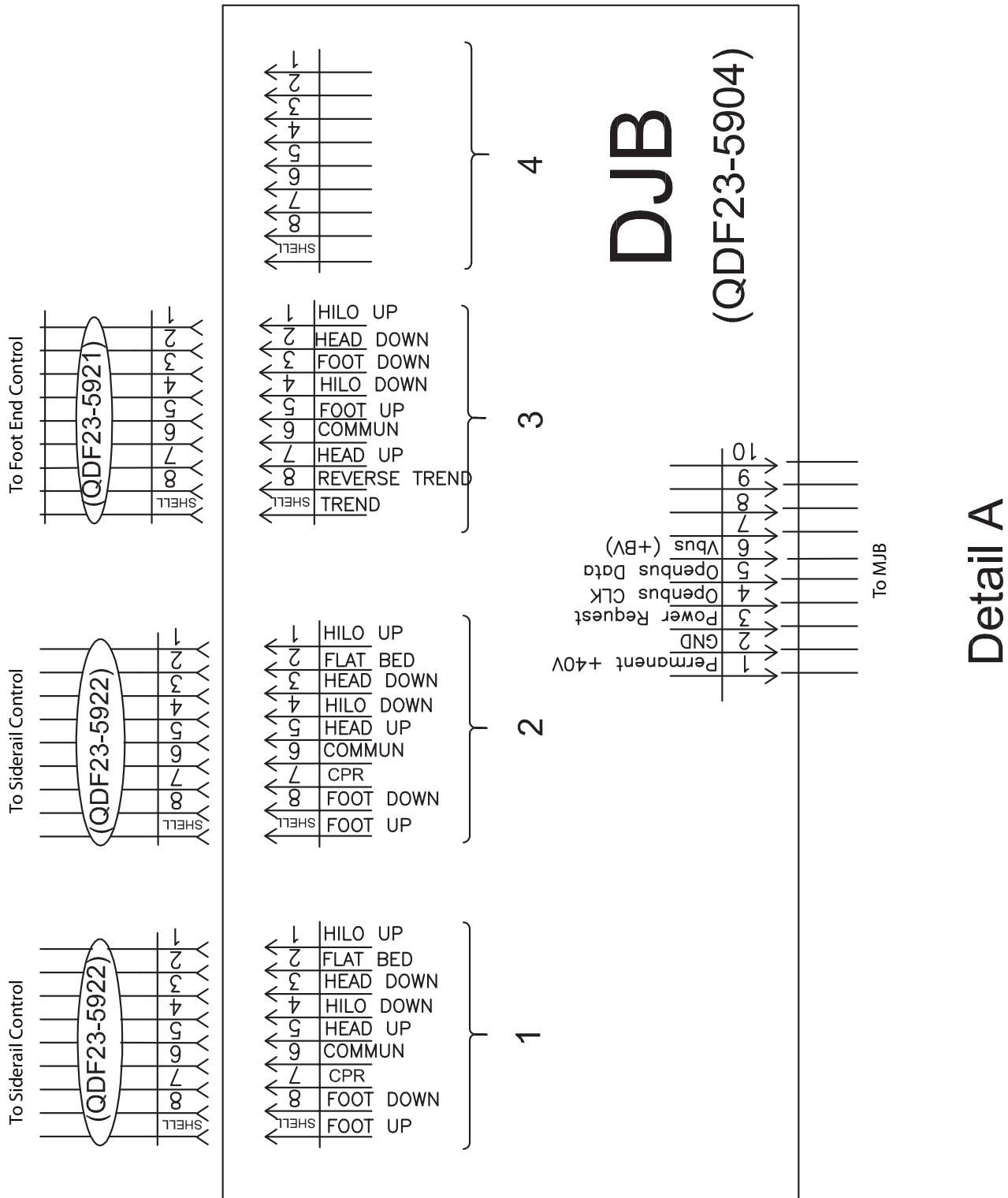
# Service Information

## CONNECTION DIAGRAM



# Service Information

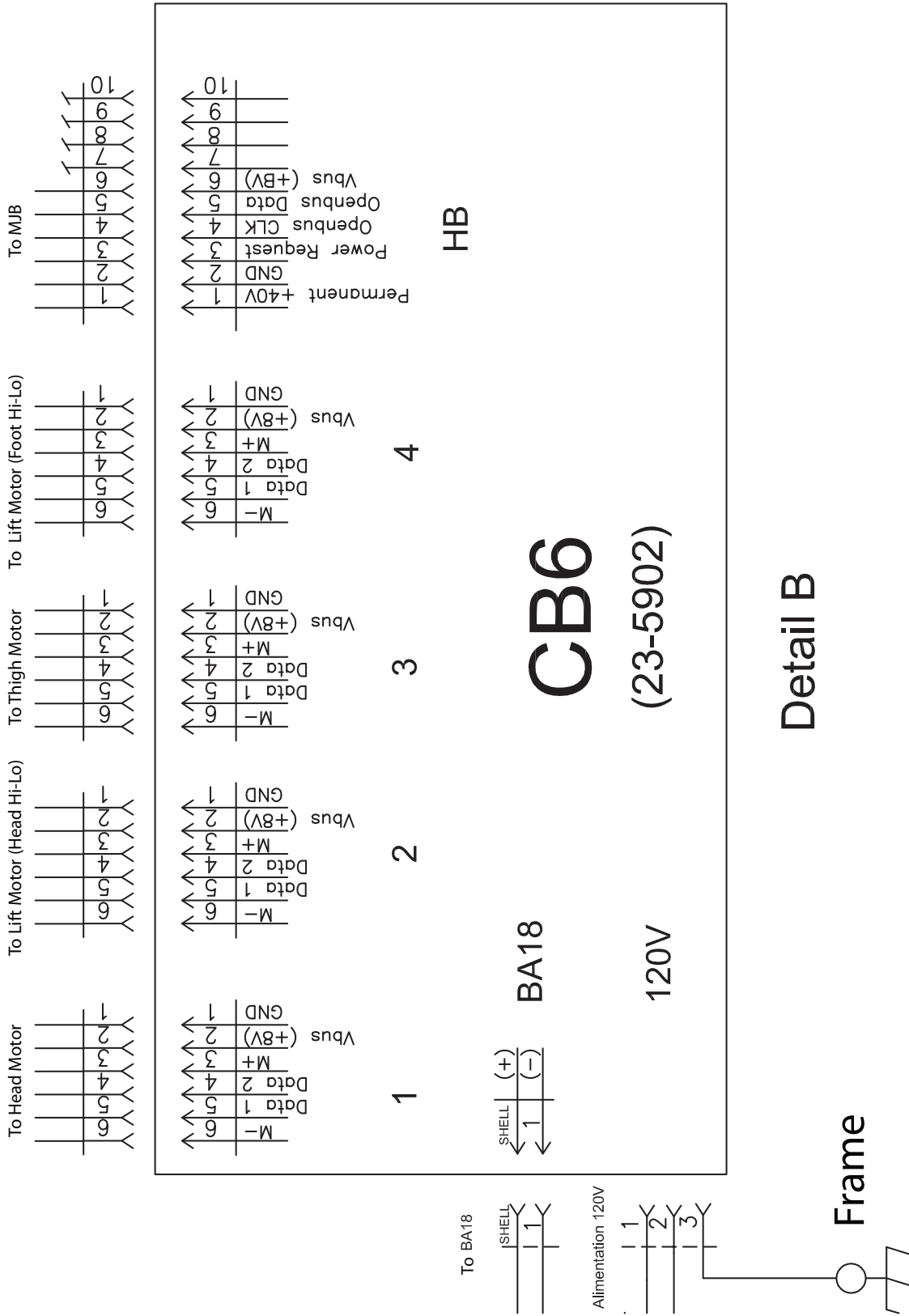
## CONNECTION DIAGRAM (CONTINUED)



Detail A

# Service Information

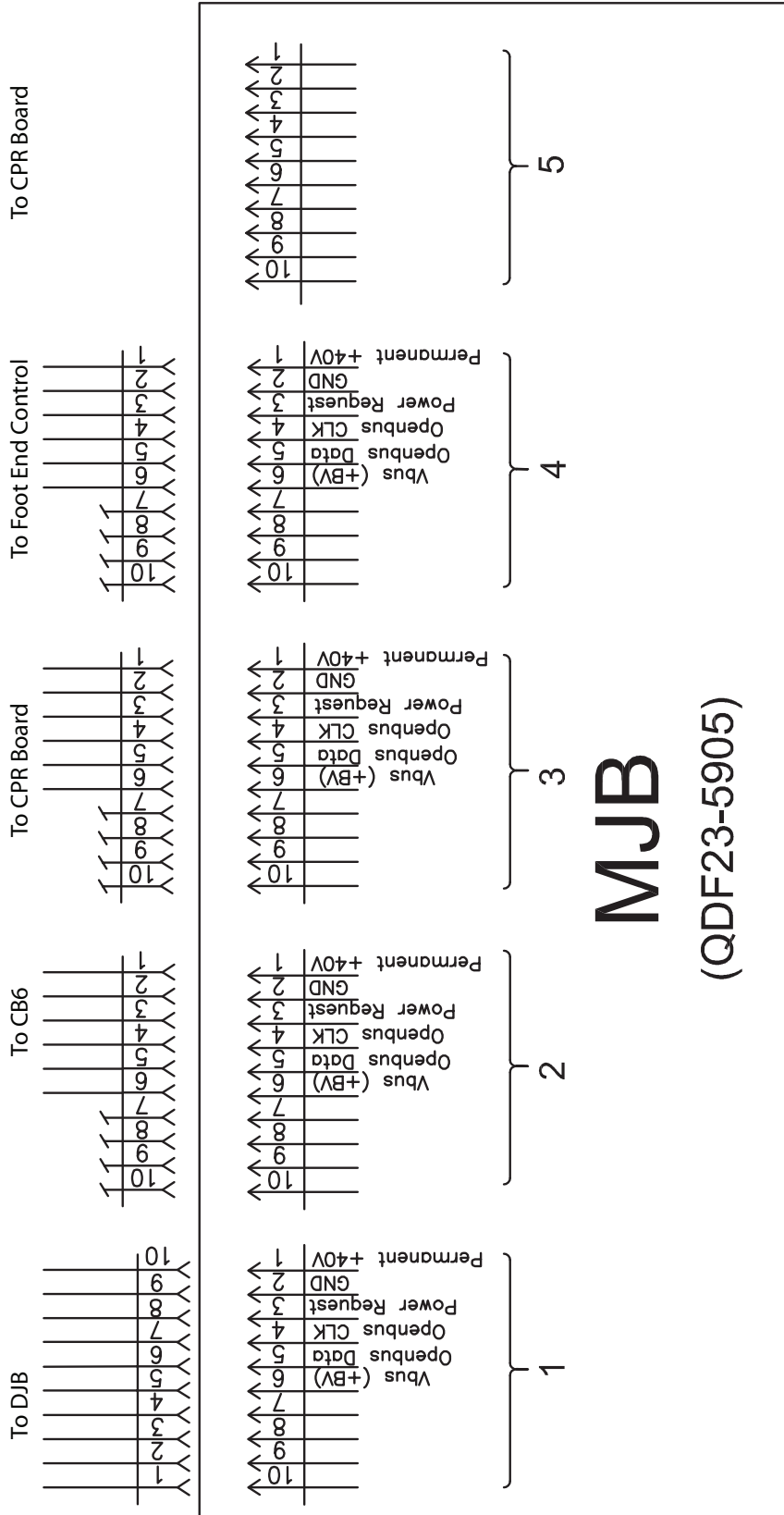
## CONNECTION DIAGRAM (CONTINUED)



Detail B

# Service Information

## CONNECTION DIAGRAM (CONTINUED)



**MJB**

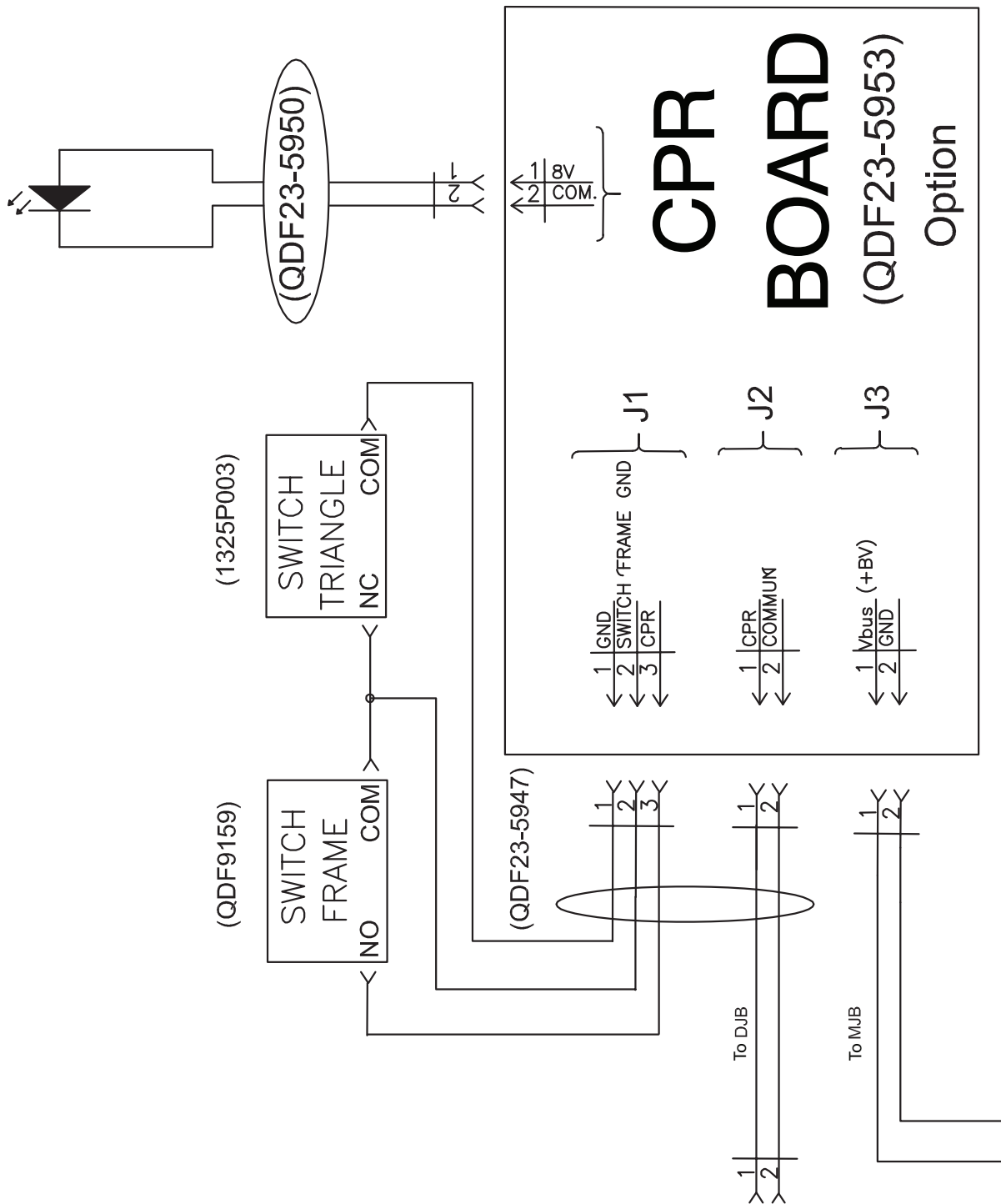
(QDF23-5905)

**Detail C**



# Service Information

## CONNECTION DIAGRAM (CONTINUED)



Detail D

# Service Information

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## STATIC DISCHARGE PRECAUTION FOR MAINTENANCE PROCEDURE

---

### CAUTION

- Always unplug the power cord from the power source when cleaning the bed.
  - Always unplug the bed power cord from the power source as well as the battery when servicing the bed.
  - To reduce the risk of injury while working under the bed, always place blocks under the lift levers and apply the brakes.
- 

### CAUTION

All electronics service parts will be shipped in static shielding bags. Do not open the bags until you have completed steps 2 and 3 of the following procedure. Do not place unprotected circuit boards on the floor. All circuit boards to be returned to Stryker should be shipped in the static shielding bags the new boards were shipped in.

### Static Protection

The electronic circuits in the bed are completely protected from static electricity damage only while the bed is assembled. It is extremely important that all service personnel always use adequate static protection when servicing the electronic systems of the bed.

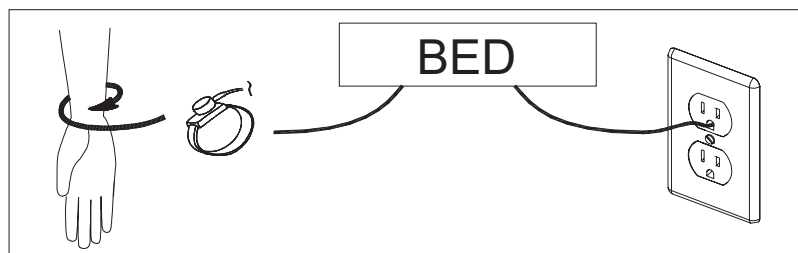
### Static Protection Equipment

The necessary equipment for proper static protection is:

- 1 static wrist strap;
- 1 grounding plug;
- 1 test lead with a banana plug on one end and an alligator clip on the other;

### Static Protection Procedure

1. Unplug the power cord from the wall receptacle and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
2. Insert the grounding plug into a properly grounded hospital grade wall receptacle. Plug the banana plug of the test lead into the receptacle on the grounding plug. Connect the alligator clip on the other end of the test lead to a ground point on the bed.
3. Place the static control wrist strap on your wrist. Connect the alligator clip at the other end of the wrist strap cord to a ground point on the bed.



# Service Information

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## PREVENTIVE MAINTENANCE FOR BATTERY

### BATTERY VOLTAGE LEVEL

Battery capacity testing






1. Apply brakes
2. Unplug the bed – ensure bed was plugged for a minimum of 4 hours.
3. Put a load of approximately 200 pounds on the bed.
4. Lower and flatten the bed.
5. Raise the head and foot sections to the maximum position.
6. Lower them both.
7. Raise the Hi-Lo to the highest position.
8. Lower it.
9. If the bed works normally after testing and there was no buzzer beep, the battery is in good condition.
10. If bed beeps, refer to the table :

Battery Voltage = BV	Bed Operation
BV > 20V	Normal Operation
18V > BV < 20V	Normal Operation with buzzer BEEP when button is pressed.
BV < 18V	NO Operation but buzzer BEEP when button is pressed.
BV < 8V	Constant BEEP. Battery is very low level. <b>Attention:</b> If the battery reaches a too low charge level, it may be damaged and, be impossible to recharge.

# Service Information

## BATTERY ALARM DIAGNOSTIC

Alarms are heard only at function activation.

Alarme	Diagnostic
Battery low level Constant beep 	Functions can be activated; however the buzzer indicates that the battery has reached low voltage level.
Battery very low level Constant beep 	The controller does not respond to the command. The buzzer indicates that the battery has reached very low voltage level. Plug the bed immediately.
Position Lost 200 ms no-beep 200ms beep 	The bed functions may be inhibited. Active the hi-lo down to the lowest position to reset the alarm & re-synchronize the hi-lo actuators.
Fatal Error 500 ms no-beep 50 ms beep 	The controller does not respond to command. Activate the hi-lo up and down button at the same time on any controller to reset the fatal error.
Surchauffe Tonalité de 5 sec. Silence 	Function inhibited. Maintain inactivated until components cool down.

### CAUTION

- Frequent and high-powered discharges reduce the battery life. For an optimum lifetime the product must be connected to the mains voltage as often as possible.
- The batteries must be charged at least every 3rd month - otherwise they will be damaged in due to self-discharge. It is recommended to test the battery function at least once every year.
- If the bed is used in accordance with the operator manual and maintained properly, the life expectancy of the battery is estimated at approximately four years but will vary based on usage. Please follow battery capacity testing instruction above to determine if your battery's capacity is within acceptable levels.

### WARNING

- For the battery to maintain sufficient charge, you must plug the bed into a wall outlet (Hospital Grade) when not in use to maximize bed performance while on battery power.
- If battery is observed to display cracking, has expanded or is bulging at the sides, or no longer can maintain a full charge, it should be replaced immediately.
- When replacing the battery, use only Stryker authorized batteries. Use of non-Stryker batteries may lead to unpredictable system performance.
- Upon a Battery Low alarm (Battery Low audible beep), stop using the bed and recharge the battery immediately. Ignoring the Battery Low alarms may cause your battery to degrade quicker than normal and may decrease battery life.

# Service Information

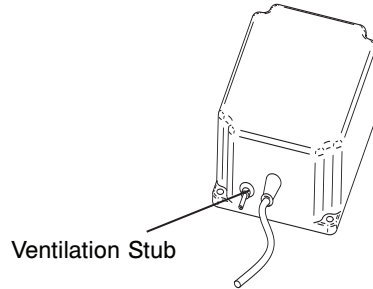
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## ADDITIONAL BATTERY PREVENTIVE MAINTENANCE ITEMS

Replace battery immediately if can no longer maintain a full charge. Use only QDF23-5903 for battery replacement.

## VENTILATION OF EXTERNAL BATTERY

Check at regular intervals that the ventilation stub is not obstructed and intact. The construction of the ventilation stub permits battery gasses to get out, but it does not permit penetration of water.



## DISPOSITION OF BATTERY

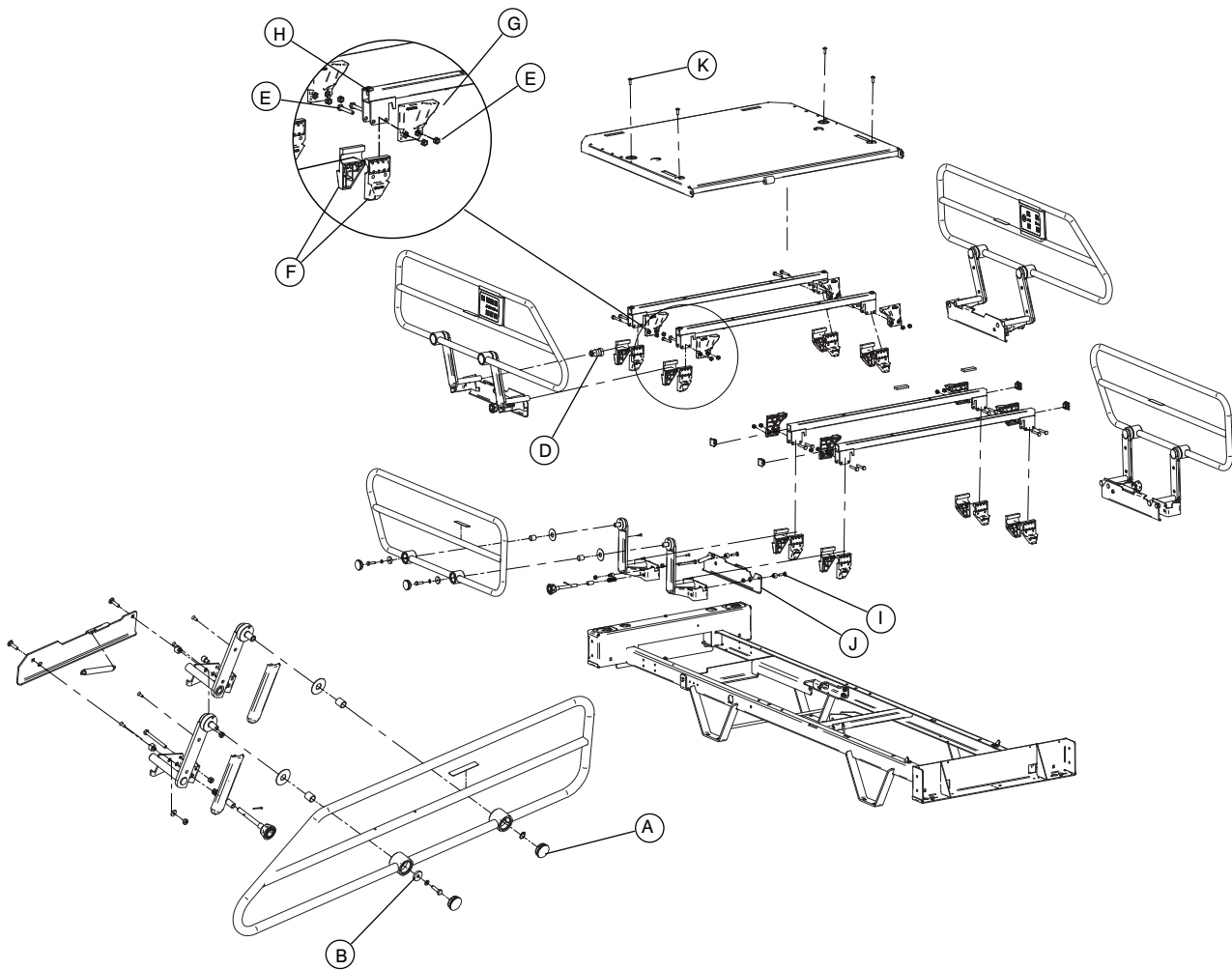
It is possible to dispose of a lead-acid battery the same way as a car battery.

# Service Information

## HALF LENGTH SIDERAIL REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- Small Slotted Head Screwdriver
- Long Nose Pliers
- Retaining Ring Pliers
- Rubber Mallet
- 7/16" Socket



Left Head Siderail Shown

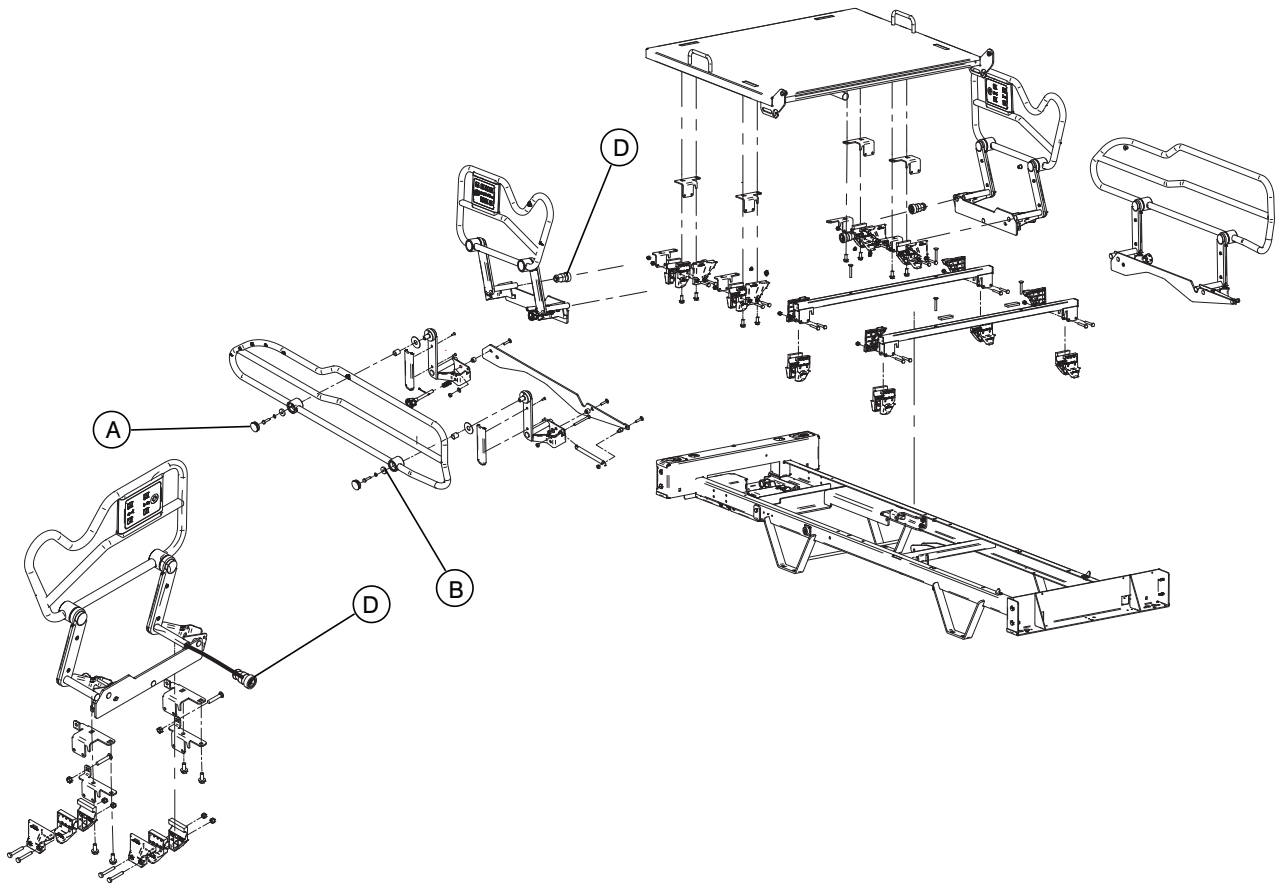
Figure 4.1 A, Part 1

# Service Information

## SIDERAIL REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- Small Slotted Head Screwdriver
- Long Nose Pliers
- Retaining Ring Pliers
- Rubber Mallet
- 7/16" Socket



Right Head Siderail Shown

Figure 4.1 A, Part 2 (ERGO Model Shown)

# Service Information

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## SIDERAIL REPLACEMENT (CONTINUED)

### Procedure:

1. Completely raise the bed and apply the brakes.
2. Position all the mattress support sections to flat.
3. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
4. Raise the siderail needing repair.
5. Using a small slotted head screwdriver and long nose pliers, remove the two protective caps (A). Be careful while using the tools not to damage the siderail paint.
6.
  - a. For a head siderail, using the retaining ring pliers, remove the retaining ring on one arm and using the 7/16" socket, remove the nut, spring washer and spacer holding the rail in place.
  - b. For a foot siderail, remove using the 7/16" socket the nut, the spring washer and the spacer holding the siderail in place (B).

### Note:

- Replace the caps using a rubber mallet. The removal of the caps may damage them; make sure you have some on hand.
  - Inspect the self-lubricating bearings for wear and replace them if need be.
7. Reverse the above steps to install the replacement rail.
  8. Verify the siderail movement and locking mechanism for proper operation before returning the bed to service.



# Service Information

---

## HALF-LENGTH SIDERAIL ASSEMBLY REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- 7/16" Socket
- 7/16" Combination Wrench
- Diagonal Pliers

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 A on [pg. 30](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Depending on the position of the siderail needing repair, place the mattress support sections as follows:
  - Head Siderail: Completely raise the head section.
  - Foot Siderail: Lower completely the head section. Completely raise the thigh section, then lift and fold back the foot section toward the head end of the bed.
3. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
4. Raise the siderail needing repair.
5. Using diagonal pliers, cut, if applicable, the cable ties holding the siderails fixed control cable (optional). Loosen the lock ring (D) and unplug the cable.

**Note:** Note the position and the gathering of the cable before cutting the cable ties to make sure the replacement cable will be connected correctly.

6. Using the 7/16" socket and 7/16" combination wrench, remove the two locknuts and bolts (E) holding the two half bushings (F), the stopper (G) and the siderail mechanism to each of the two siderail support (H). Remove the half bushings and the mechanism from their location, hold the bushings tightly to prevent them from falling to the ground.

**Note:** First, remove the two locknuts and bolts at one end of the assembly and, while holding the assembly, finish with the ones at the opposite end.

7. Reverse the above steps to install the replacement siderail assembly.
8. Verify the siderail for proper operation before returning the bed to service.

# Service Information

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## TRANSFER PLATE REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- 7/16" Socket
- 7/16" Combination Wrench
- Torque Wrench

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 A on [pg. 30](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Depending on the siderail position, place the mattress support sections as follows:
  - Head Siderail: Completely raise the head section.
  - Foot Siderail: Lower completely the head section. Completely raise the thigh section, then lift and fold back the foot section toward the head end of the bed.
3. Unplug the bed power cord from the wall outlet and the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
4. Lower the siderail needing repair.
5. Remove the spring connecting the transfer plate to the system.
6. Using the 7/16" socket and 7/16" combination wrench, remove the two locknuts, bushings, washers and bolts (I) holding the transfer plate (J) to the siderail mechanism.

**Note:** At assembly, tighten the two locknuts to a 75 in/lb torque using the torque wrench.

6. Reverse the above steps to install the replacement transfer plate.
7. Verify the siderail for proper operation before returning the bed to service.

# Service Information

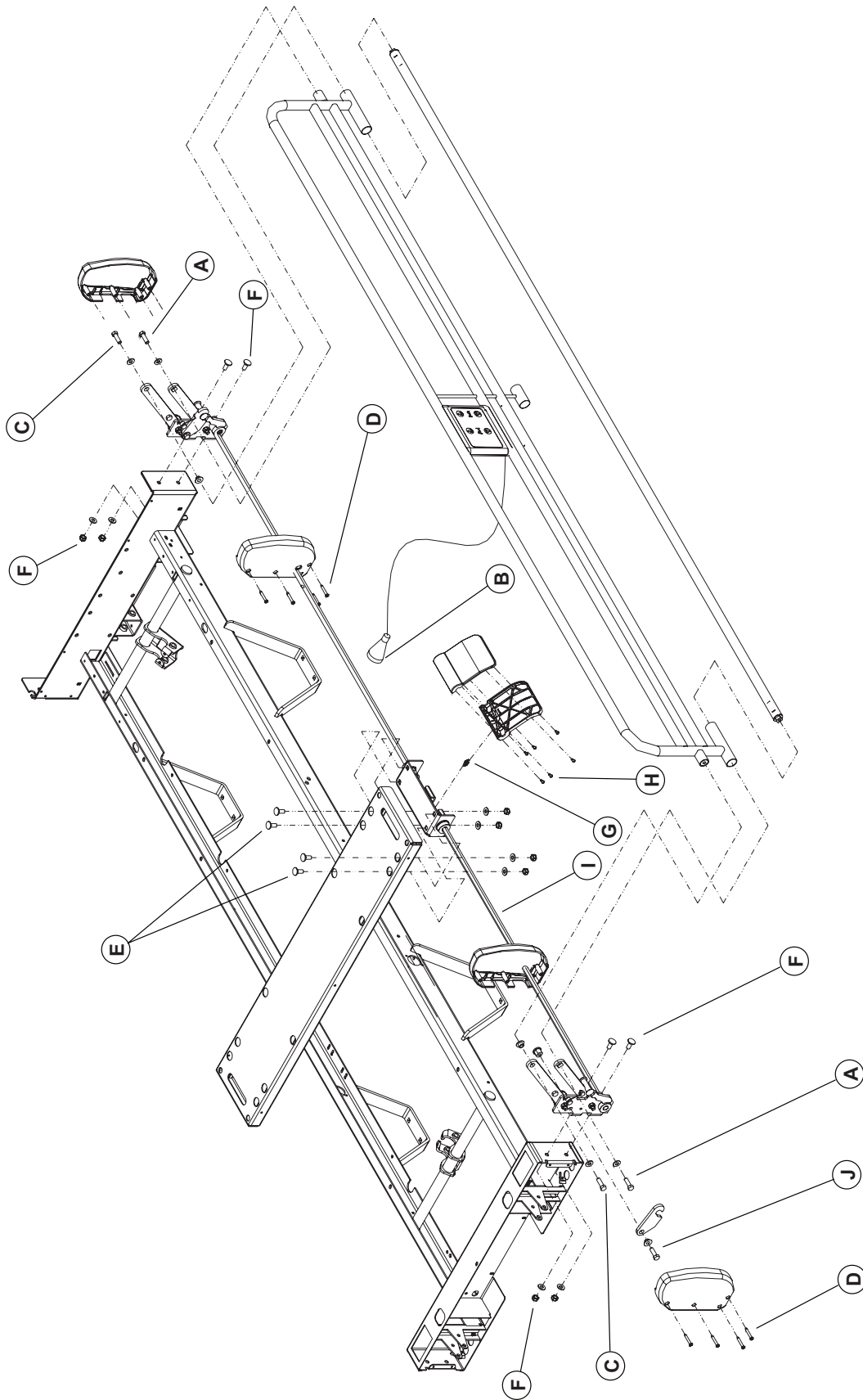


Figure 4.1 B

# Service Information

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## FULL-LENGTH SIDERAIL PIVOT TUBE REPLACEMENT

### Tools Required:

- 1/2" Combination Wrench
- Rubber Mallet

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 B on [pg. 35](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Lower the siderail needing repair.
4. Using the 1/2" combination wrench, remove the two bolts and washers (A) holding the pivot tube ends to the siderail mechanism arms. Use a rubber mallet to free the tube ends from the arms.
5. Slide the tube out of its location.

**Note:** Apply OG2 grease on a 4" distance from both ends of the tube.

6. Reverse the above steps to install the replacement pivot tube.
7. Verify the siderail movement before returning the bed to service.

# Service Information

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## FULL-LENGTH RAIL REPLACEMENT

### Tools Required:

- 1/2" Combination Wrench
- Rubber Mallet

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 B on [pg. 34](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 56) after removal of electrical box cover.
3. Raise the siderail needing repair.
4. Loosen, if applicable, the lock ring (B) and unplug the removable pendant control (optional) cable. Remove the pendant control from the siderail by sliding it out its supports.
5. Using the 1/2" combination wrench, remove the four bolts and washers (A, C) holding the rail to the siderail mechanism arms. Use a rubber mallet to free the tube ends from the arms.

**Note:** Hold the rail firmly when removing the last bolts.

6. Reverse the above steps to install the replacement rail.
7. Verify the siderail movement before returning the bed to service.

# Service Information

---

## FULL-LENGTH SIDERAIL ASSEMBLY REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- (2) 1/2" Combination Wrenches

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 B on [pg. 35](#) for the following replacement procedure.

1. Completely raise the bed and raise the siderail needing repair.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, [pg. 57](#)) after removal of electrical box cover.
3. Remove the head and foot boards.
4. Using the #2 Phillips screwdriver, remove the seven screws (D, [Figure 2, pg. 58](#)) holding the cover to the head end casing.
5. Using the #2 Phillips screwdriver, remove the 9 screws (A, [Figure 4.2 A, pg. 41](#)) holding the cover and the I.V. pole holders to the foot casing. Lift and remove the cover while taking care to disconnect the control panel cable (B, [Figure 4.2 A, pg. 41](#)) from the control board and, if applicable, the foot end casing connector cable (C, [Figure 4.2 A, pg. 42](#)) (optional).
6. Using the no. 2 Phillips screwdriver, remove the four screws (D) holding together the two parts of both siderail mechanism covers. Remove the covers.
7. Using the 1/2" combination wrenches, remove the four nuts, washers and bolts (E) holding the siderail release handle to the seat section.
8. Using the 1/2" combination wrenches, remove the two nuts, washers and bolts (F) holding each end of the full-length siderail to the head end and foot end casings.
9. Reverse the above steps to install the replacement siderail assembly.
10. Verify the siderail for proper operation before returning the bed to service.

# Service Information

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## FULL-LENGTH SIDERAIL RELEASE HANDLE REPLACEMENT

### Tools Required:

- Needle Nose Pliers
- #1 Phillips Screwdriver
- Bungee Cord (or equivalent)

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 B on [pg. 35](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Raise both siderails.
4. Using needle nose pliers, remove the return spring (G).
5. Attach the siderail needing repair to the other siderail using a bungee cord.
6. Using the #1 Phillips screwdriver, remove the six screws (H) holding both parts of the release handle. Hold the lower part to prevent it from falling.
7. Reverse the above steps to install the replacement release handle.
8. Verify the release handle for proper operation before returning the bed to service.

# Service Information

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## FULL-LENGTH SIDERAIL LOCKING HOOK REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- Bungee Cord (or equivalent)
- (2) 1/2" Combination Wrenches

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.1 B on [pg. 35](#) for the following replacement procedure.

1. Apply brakes.
2. Completely raise the bed and raise the siderail needing repair.
3. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, [pg. 57](#)) after removal of electrical box cover.

**If the hook is at the head end of the bed, follow steps 3 to 6, then go to step 8.**

**If the hook is at the foot end of the bed, go directly to step 7.**

### Head End

4. Remove the head board.
5. Raise the defective siderail.
6. Using the #2 Phillips screwdriver, remove the seven screws (Q, [Figure 4.3 C, pg. 53](#)) holding the cover of the head box.

### Foot End

7. Using the #2 Phillips screwdriver, remove the 9 screws (A, [Figure 4.2 A, pg. 41](#)) holding the cover as well as the two I.V. poles to the foot box. Raise and remove the cover taking care to disconnect the electronic board first, the cable (B, [Figure 4.2 A, pg. 41](#)) of the control panel and, if applicable, the cable (C, [Figure 4.2 A, pg. 41](#)) of the connector from the foot box (optional).
8. Using the #2 Phillips screwdriver, remove the four screws (D, [Figure 4.1B, pg. 35](#)) holding the two parts of the plastic cover over the siderail mechanism. Remove cover.
9. Using the two 1/2" combination wrenches, remove locknut, shoulder spacer and bolt (J) holding the locking hook to the plate. Remove hook.
10. Reverse the preceding steps to install the new hook.
11. Verify siderail for proper operation before returning the bed to service.



# Service Information

## FOOT END CONTROL PANEL REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver

**Note:** The control panel is made of a membrane and its support. Both parts should be ordered for this replacement procedure. Refer to the "Assembly Drawings" section on pg. 180.

### Procedure:

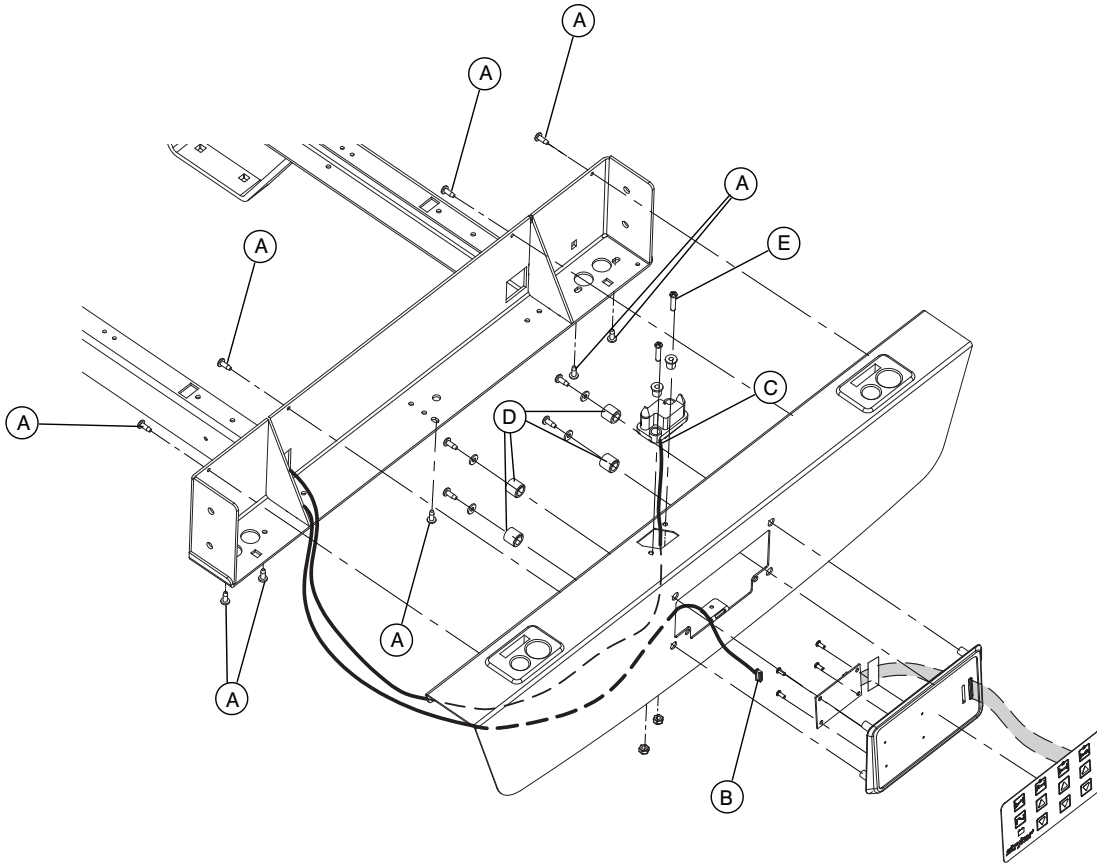


Figure 4.2 A, part 1

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Remove the foot board.
4. Using the #2 Phillips screwdriver, remove the 9 screws (A) holding the cover and the I.V. pole holders to the foot casing.
5. Use the Static Discharge Precautions procedure (see pg. 26).
6. Lift and remove the cover taking care to disconnect the electronic board, the cable (B) from the control panel. Lay the cover on a workbench.
7. Using the #2 Phillips screwdriver, remove the four screws, washers and spacers (D) holding the panel to the cover.
8. Reverse the above steps to install the new control panel.
9. Verify all the controls of the foot end control panel before returning the bed to service.

# Service Information

## FOOT END CASING CONNECTOR REPLACEMENT (OPTIONAL)

### Tools Required:

- #2 Phillips Screwdriver
- 3/8" Combination Wrench

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.2 A on [pg. 41](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Remove the foot board.
4. Using the #2 Phillips screwdriver, remove the 9 screws (A) holding the cover and the two I.V. pole holders to the foot casing.
5. Cut the tie wraps holding the cable up to the Head end casing and remove the cable. Using the 3/8" combination wrench and #2 Phillips screwdriver, remove the two locknuts, shoulder spacers and screws (E) holding the connector and the seal (F) to the cover. Remove the defective connector using the 3/8" combination wrench and #2 Phillips screwdriver. Keep the seal for the replacement connector.
6. Lift and remove the cover taking care to disconnect the control panel cable (B) and the foot casing connector cable (C). Lay the cover aside.
7. Reverse the above steps to install the new connector.
8. Verify all the controls of the foot end control panel for proper operation before returning the bed to service.

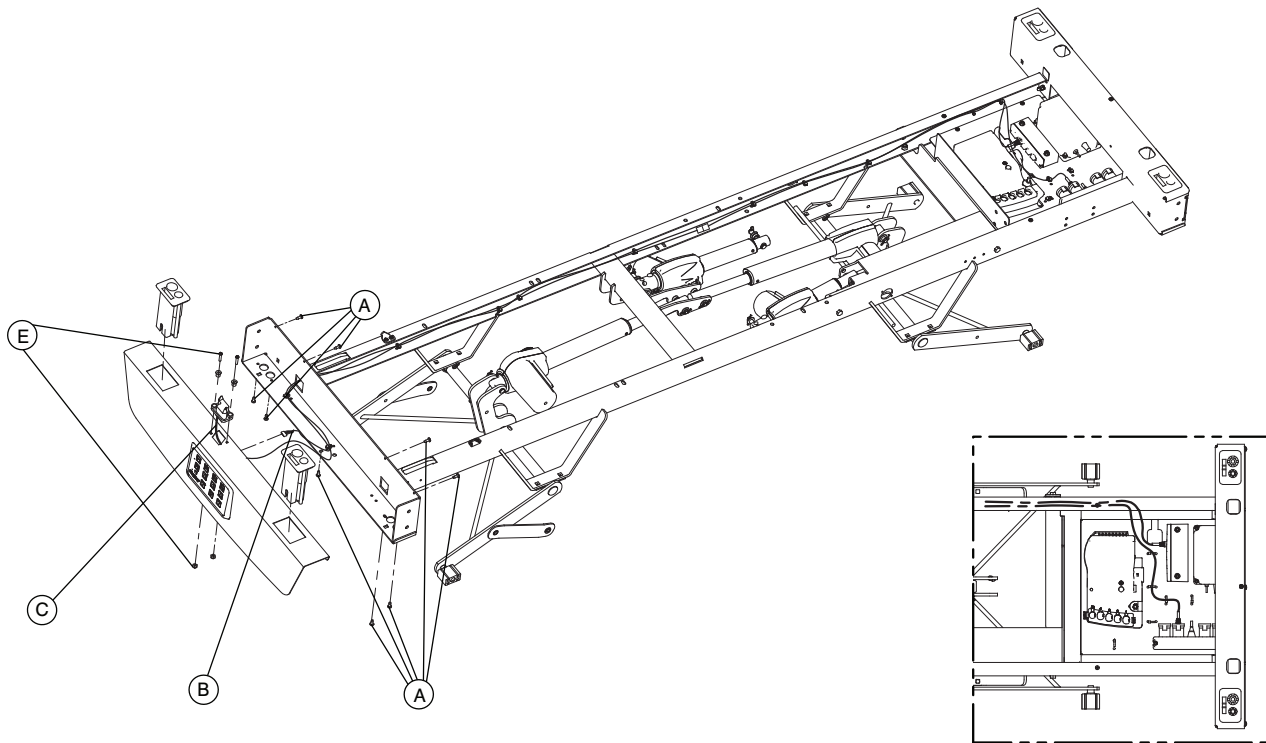


Figure 4.2 A, part 2

# Service Information

## FOOT BOARD CONTROL PANEL REPLACEMENT (OPTIONAL)

### Tools Required:

- #2 Phillips Screwdriver
- Double Sided Tape

### Procedure:

**Note:** The control panel is made of a membrane and its support. Both parts should be ordered for this replacement procedure. Refer to the “Quick Reference Replacement Parts List” section on pg. 19.

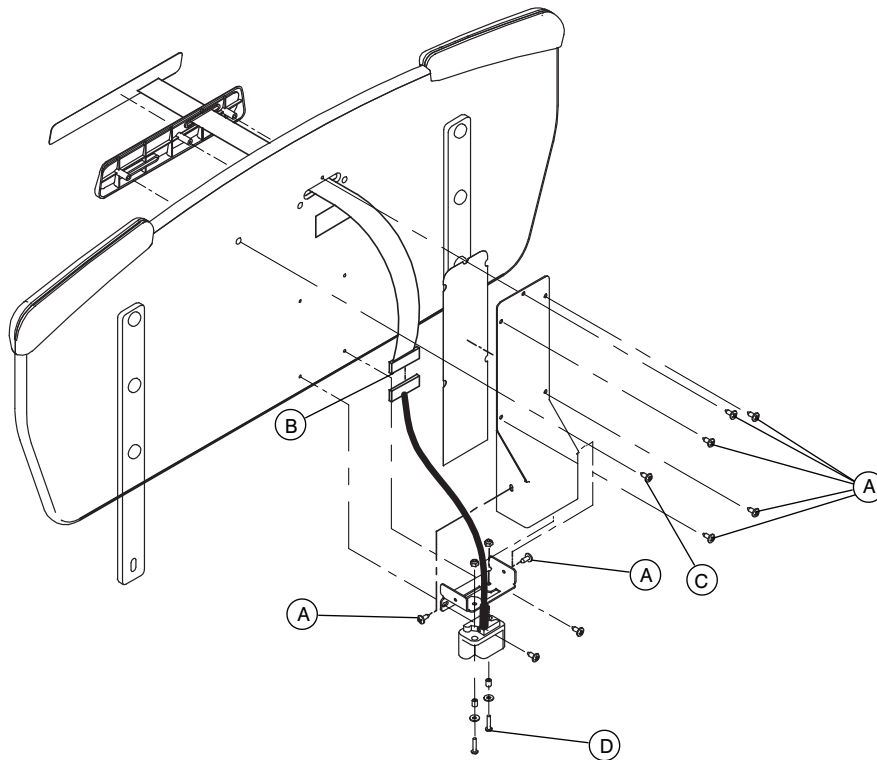


Figure 4.2 B

1. Completely raise the bed and apply the brakes.
2. Remove the foot board and lay it on a workbench.
3. Using the #2 Phillips screwdriver, remove the seven screws (A) holding the support cover to the inner face of the foot board and remove the cover.
4. Disconnect the foot board panel cable (B).
5. Using the #2 Phillips screwdriver, remove the last screw (C) holding the control panel to the foot board. Remove the panel. A small part of the panel cable is stuck to the inner face of the panel with a small double-sided tape. Do the same at reassembly.
6. Reverse the above steps to install the replacement foot board panel.
7. Verify all the controls of the foot board panel for proper operation before returning the bed to service.

# Service Information

---

## FOOT BOARD CONNECTOR REPLACEMENT (OPTIONAL)

### Tools Required:

- #2 Phillips Screwdriver
- 9 mm Combination Wrench

### Procedure:

**Note:** This connector is present when the bed is equipped with a foot board control panel.

Unless otherwise indicated, refer to Figure 4.2 B on pg. 43 for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Remove the foot board and lay it on a workbench.
3. Using the No. 2 Phillips screwdriver, remove the seven screws (A) holding the support cover to the inner face of the foot board and remove the cover.
4. Disconnect the foot board connector cable (B).
5. Using the 9 mm combination wrench and #2 Phillips screwdriver, remove the two locknuts, washers, sleeves and screws (D) holding the connector to its support. Remove the defective connector.
6. Reverse the above steps to install the replacement connector.
7. Verify the foot board controls for proper operation before returning the bed to service.

# Service Information

## SIDERAIL CONTROL PANEL MEMBRANE REPLACEMENT

### Tools Required:

- #1 Phillips Screwdriver

**Note:** The replacement of a membrane implies that the one facing it on the inner or outer control panel also has to be replaced.

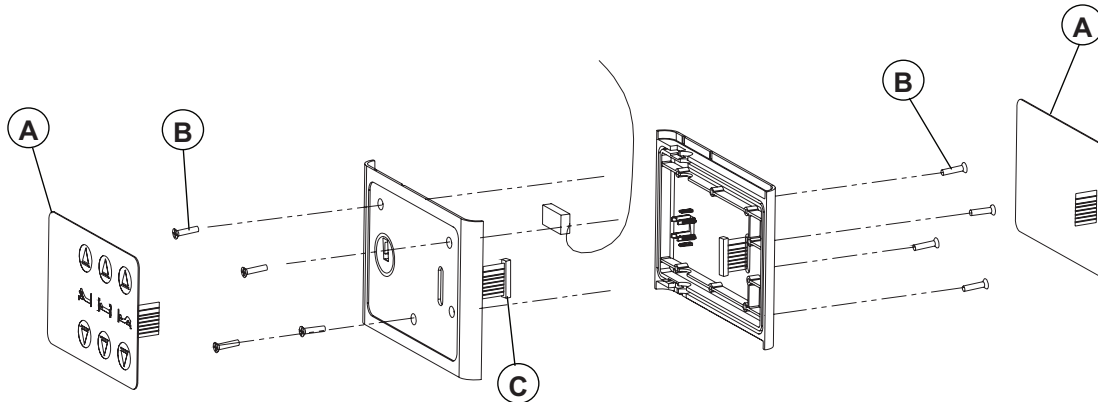


Figure 4.2 C

### Procedure:

1. Completely raise the bed and apply the brakes. Bring the head section to horizontal position.
2. Loosen the lock ring (D) and unplug the cable.
3. Raise the head siderail needing repair.
4. Properly ground yourself (see pg. 26).
5. Detach the two membranes (A) from their mounting plates and let them hang down.
6. Using a #1 Phillips screwdriver, remove the eight screws (B) holding together the two sections of the control panel housing.
7. Open the housing, disconnect the defective membrane cable (C) and remove the membrane.
8. Reverse the above steps to install the new control panel membranes.

**Note:** Make sure to connect the membrane cables before fastening together the two sections of the control panel housing. Stick the membranes to the support at the end of the replacement procedure.

9. Verify all the siderail functions for proper operation before returning the bed to service.

# Service Information

## MATTRESS SUPPORT REPLACEMENT (ERGO)

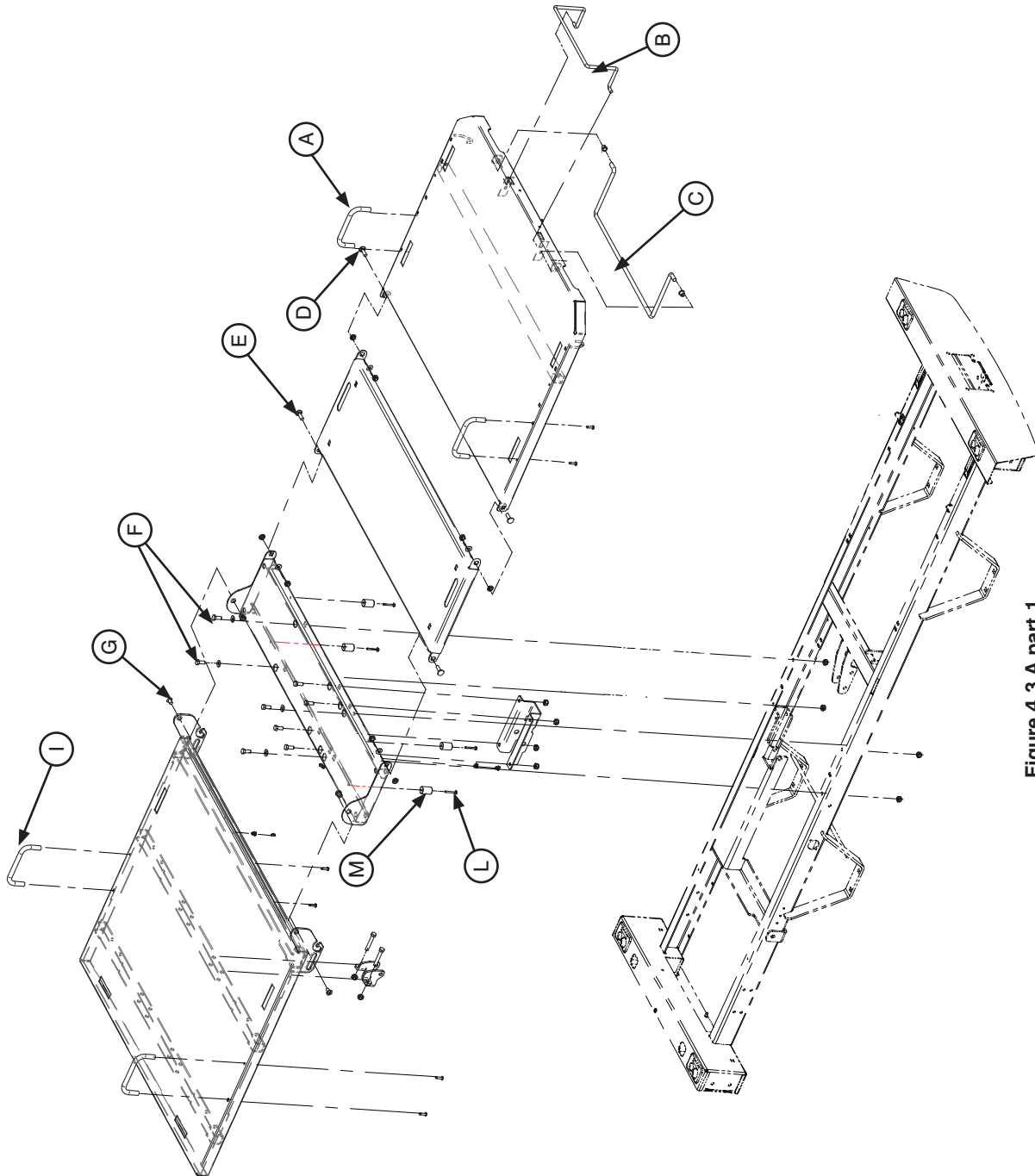


Figure 4.3 A part 1

# Service Information

## MATTRESS SUPPORT REPLACEMENT

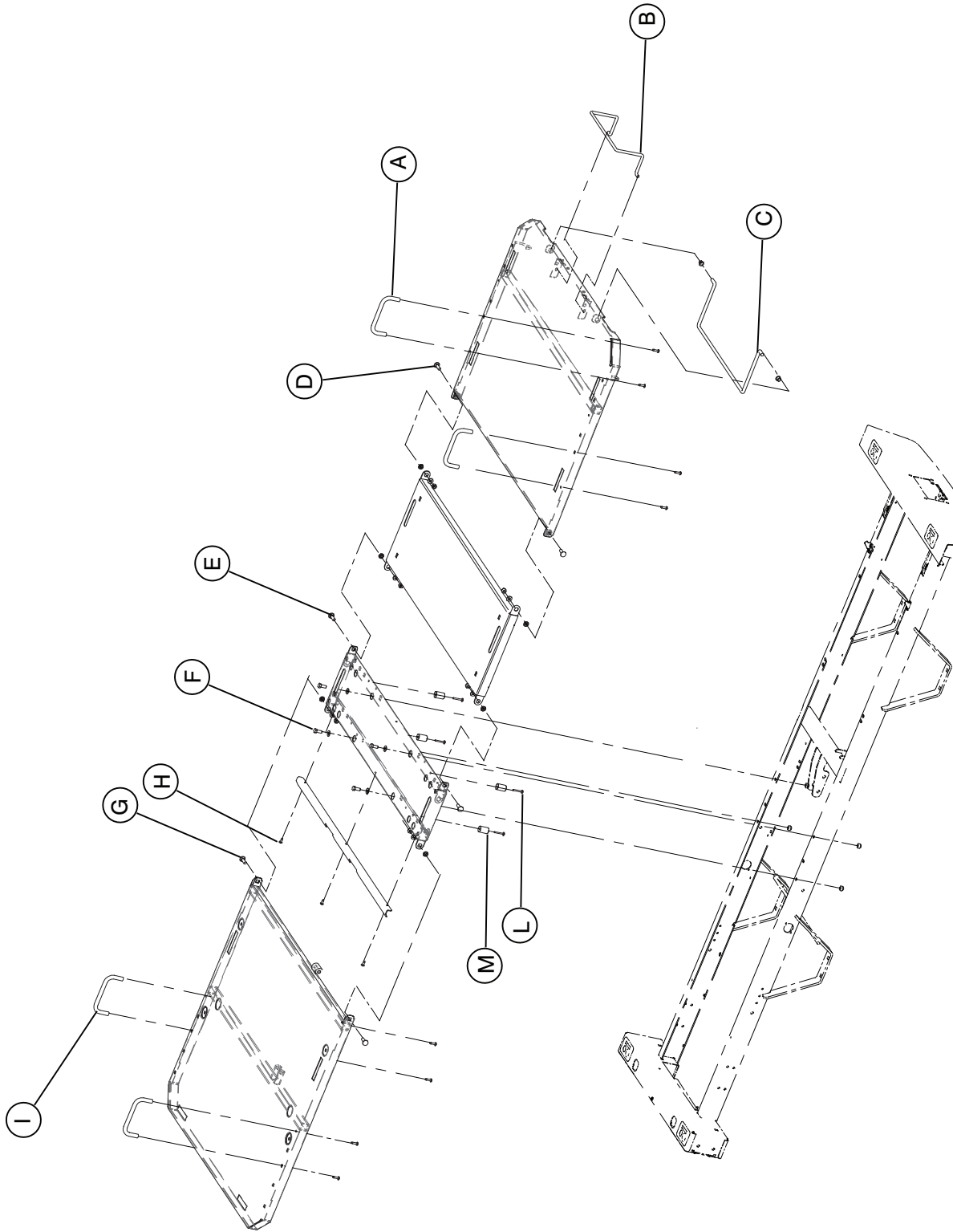


Figure 4.3 A part 2

# Service Information

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## FOOT SECTION REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- 1/2" Combination Wrench
- Bungee Cords (or equivalent)

### Procedure:

1. Completely raise the bed and apply the brakes. Flatten all sections of the mattress support.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Lower the siderails.
4. Lift and fold back the foot section toward the head end of the bed. Secure the section to the bed using a bungee cord.
5. Using the #2 Phillips screwdriver, remove the two lateral mattress retainers (A).
6. Remove the foot end mattress retainer (B).
7. Remove the foot prop rod (C).
8. Remove the bungee cord and replace the foot section to horizontal position.
9. Using the 1/2" combination wrench, remove the two locknuts, washers, shoulder spacers and bolts (D) linking the foot section to the thigh section and remove the defective section.
10. Reverse the above steps to install the new foot section.



# Service Information

---

## THIGH SECTION REPLACEMENT

### Tools Required:

- Needle Nose Pliers
- 1/2" Combination Wrench

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.3 A on pg. 46 for the following replacement procedure.

1. Completely raise the bed and apply the brakes. Flatten all sections of the mattress support.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Lower the siderails.
4. Using needle nose pliers, remove the rue ring cotter, washers and clevis pin (D, Figure 4.3 C, pg. 53) linking the thigh section lever arms to the thigh actuator tube.
5. Using the 1/2" combination wrench, remove the four locknuts, washers, shoulder spacers and bolts (D, E) linking the thigh section to the foot and seat sections and remove the thigh section.
6. Reverse the above steps to install the replacement thigh section.

# Service Information

---

## SEAT SECTION REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- 1/2" Socket - Deep Well
- Torque Wrench
- 1/2" Combination Wrench
- #2 Phillips Screwdriver

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.3 A on pg. 46 for the following replacement procedure.

1. Completely raise the bed and apply the brakes. Flatten the mattress support.
2. Unplug the power plug from the wall outlet.
3. Lower the siderails.
4. Using the 3/8" Drive Ratchet and the 1/2" socket, remove the four bolts (F) holding the seat section to the frame.

**Note:** Align the new seat section so that foot siderails are at equal distance with foot section. At reassembly, screw the bolts in manually and then tighten applying a 220 lbs/in torque.

5. Using the 1/2" combination wrench, remove the four locknuts, washers, shoulder spacers and bolts (E, G) linking the seat section to the thigh and head sections and remove the seat section.
6. Using the #2 Phillips screwdriver turn the seat section up side down and remove the three screws (H) holding the protective plate to the seat section. Keep the plate for the replacement seat section (model with siderail without assist handle only (Figure 4.3 A, pg.47 ).
7. Remove the four screws (L) holding the stops (M) to the defective section and replace the parts on the replacement section.
8. Reverse the above steps to install the replacement seat section.

# Service Information

## HEAD SECTION REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- Bungee Cords (or equivalent)
- (2) 1/2" Combination Wrenches
- (2) 7/16" Combination Wrenches

### Procedure:

#### Note

- Unless otherwise indicated, refer to Figure 4.3 A on pg. 47 for the following replacement procedure.
1. Completely raise the bed and apply the brakes.
  2. If the bed is equipped with full-length siderails, lower them. If equipped with half-length siderails, raise the head siderails and lower the foot ones.
  3. Remove the head board.
  4. Completely raise the head section and attach it securely to the bed using the bungee cord. **It must not move during the procedure.**
  5. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
  6. Using the #2 Phillips screwdriver, remove the two lateral mattress retainers (I) and keep them for the replacement head section.

If the bed is not equipped with the CPR emergency release (optional), proceed with steps 7 to 14. Otherwise, proceed with steps 15 to 23.

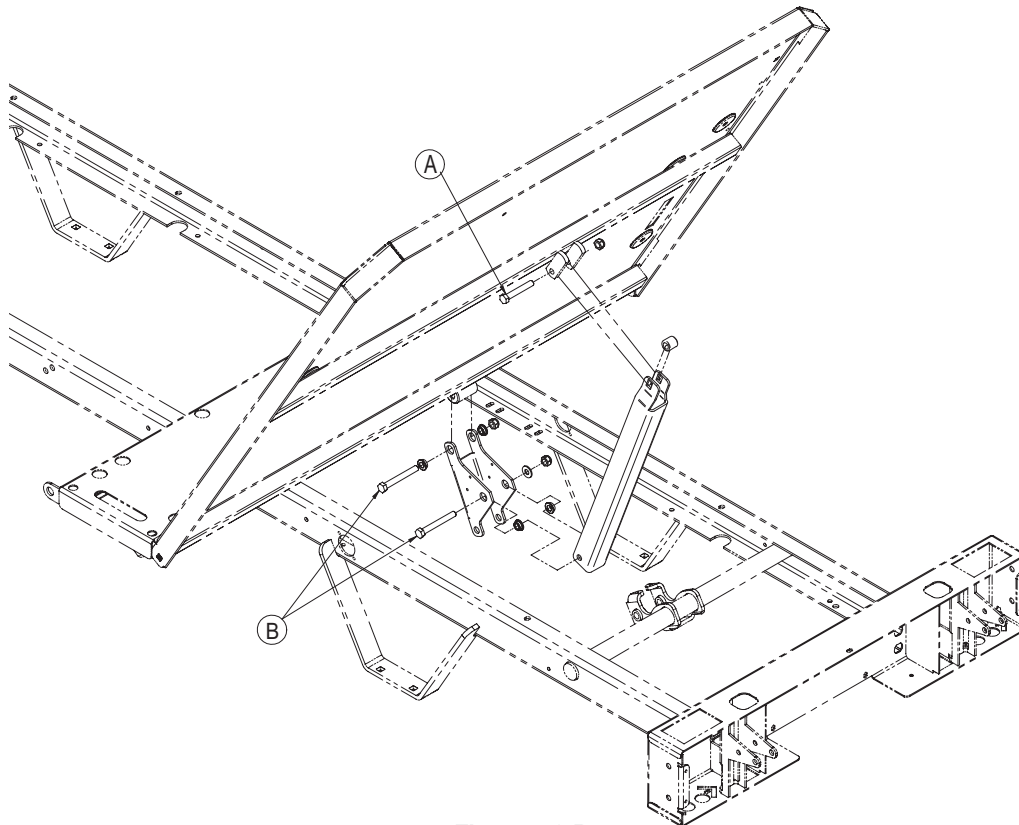


Figure 4.3 B

# Service Information

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## HEAD SECTION REPLACEMENT (CONTINUED)

**Note:** For the bed with ERGO siderails, refer to figure 4.3 C. Remove item A and release the motor. Move to sept No 10.

7. For the ERGO siderail, refer to Figure 4.3 C; remove item A, lay down the motor and proceed to step number 10.
8. Using two 1/2" combination wrenches, remove the locknut, spacer and bolt (A, Figure 4.3 B, pg. 51) holding the upper part of the compression bar to the head section and lay it down.
9. Using two 1/2" combination wrenches, remove the locknut, shoulder spacers and bolt (B, Figure 4.3 B, pg. 51) linking the mattress support lever to the head section and remove the lever-compression bar assembly.
10. Remove the strap and manually lower the head section completely.
11. If the bed is equipped with half-length siderails, lower the head siderails and use the #2 Phillips screwdriver to remove the four screws (K, Figure 4.1 A, pg. 30) holding the two siderail supports to the head section. Let the support-siderail assembly rest on the frame.
12. Using the 1/2" combination wrench, remove the two locknuts, flat washers, shoulder spacers and bolts (G Figure 4.3 A, pg. 47) linking the head section to the seat section. Remove the defective head section.
13. Reverse the above steps to install the replacement head section.
14. Verify the Auto Contour positioning (optional) for proper operation before returning the bed to service.

**End of the procedure for beds with CPR.**

**Note:** Unless otherwise indicated, refer to Figure 4.3 A on pg. 46,47 for the following replacement procedure.

15. Disconnect the two wires (A, Figure 4.3 F, pg. 61) from the micro switch located on the head section lever. Note their position before doing so.
16. Using two 7/16" combination wrenches, remove the locknut and bolt (O, Figure 4.3 F, pg. 61) holding the cylinder end fitting to the head section.
17. Using two 1/2" combination wrenches, remove the nut, shoulder spacers and bolt (P, Figure 4.3 F, pg. 61) holding the upper part of the section lever to the head section.
18. Using a 7/16" combination wrench, remove the two locknuts and bolts (Q, Figure 4.3 F, pg. 61) holding each CPR release handle to the head section.
19. Remove the strap and manually lower the head section completely.
20. If the bed is equipped with half-length siderails, lower the head siderails and use the No. 2 Phillips screwdriver to remove the four screws (K, Figure 4.1 A, pg. 30) holding the two siderail supports to the head section. Let the supports-siderails assembly rests on the frame.
21. Using the 1/2" combination wrench, remove the two locknuts, shoulder spacers, washers and bolts (G) holding the head section to the seat section. Remove the defective head section.
22. Reverse the above steps to install the replacement head section.
23. Verify the CPR emergency release for proper operation before returning the bed to service.

**End of the procedure for beds with CPR.**

# Service Information

## FOWLER ACTUATOR REPLACEMENT

### Tools Required:

- Needle Nose Pliers
- Small Slotted Screwdriver

### Procedure:

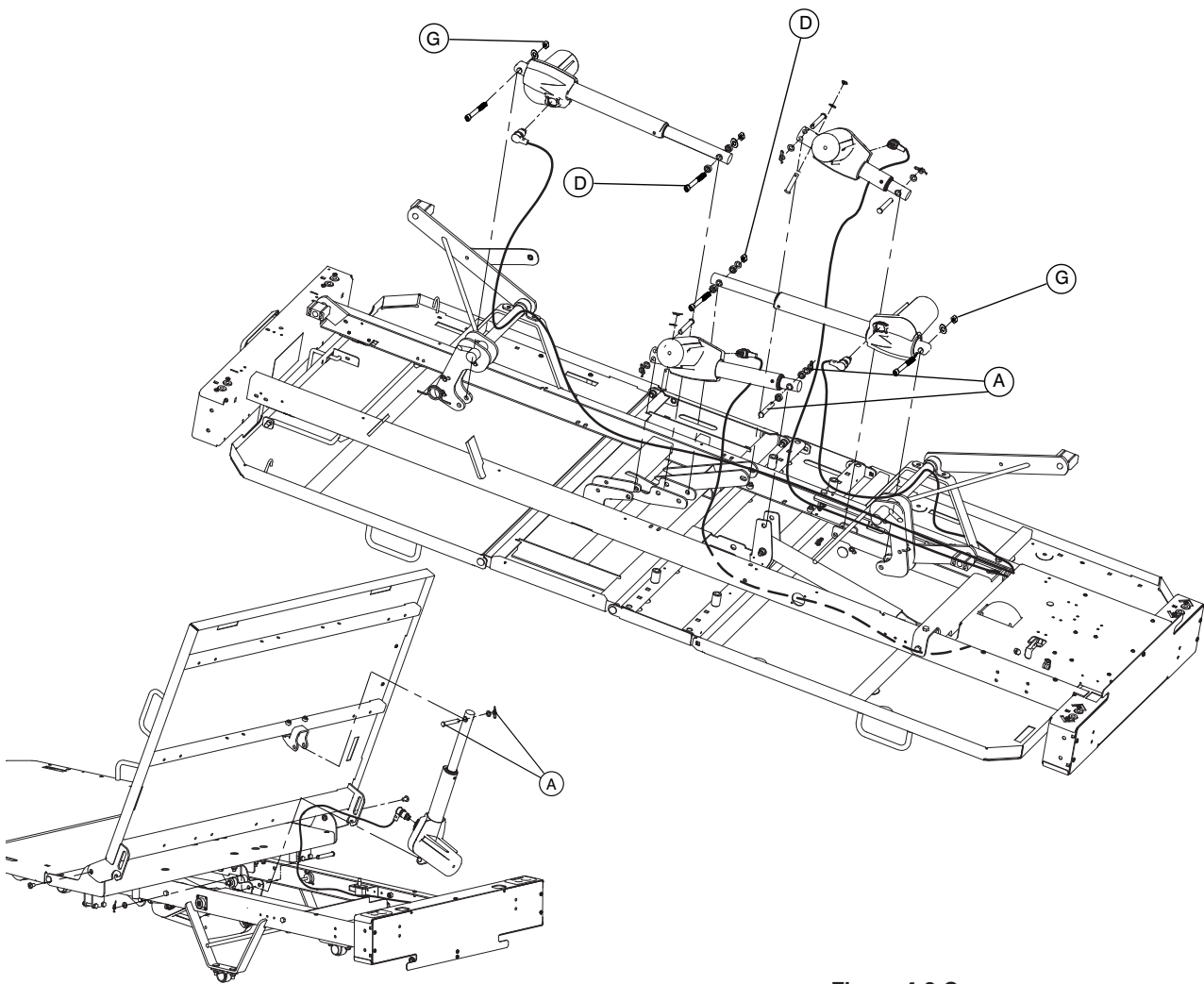


Figure 4.3 C

ERGO Model

# Service Information

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## FOWLER ACTUATOR REPLACEMENT (CONTINUED)

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Raise the siderails.
4. Remove the head board.
5. Properly ground yourself (see [pg. 26](#)).
6. Disconnect the actuator cable (release the cable locking clip).
7. Using needle nose pliers, remove the rue ring cotters, washers and clevis pins (A, Figure 4.3 C, pg. 53 ) linking the head actuator tube to the section lever arms.
8. If applicable, remove the actuator from its location.
9. If applicable, reuse the adaptor. Note its position and reinstall on the new actuator.
10. Reverse the above steps to install the replacement actuator.

# Service Information

---

## KNEE GATCH ACTUATOR REPLACEMENT

### Tools Required:

- Needle Nose Pliers
- Small Slotted Screwdriver

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.3 C on [pg. 53](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes. Raise the head section to its highest position and put the gatch section in flat position.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, [pg. 57](#)) after removal of electrical box cover.
3. Raise the siderails.
4. Properly ground yourself (see [pg. 26](#)).
5. Disconnect the motor cable, release the cable locking clip.
6. Using needle nose pliers, remove the rue ring cotters, washers and clevis pins (D) linking the thigh actuator tube to the thigh section lever arms.
7. Remove the two pivot pins (G) holding the motor to the support.
8. Remove the defective actuator from its location.
9. Reuse the adaptor. Note its position and reinstall on the new actuator.
10. Reverse the above steps to install the replacement actuator.

# Service Information

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## BED LIFT ACTUATOR REPLACEMENT

### Tools Required:

- Small Slotted Screwdriver
- Bungee Cord (or equivalent)
- Needle Nose Pliers
- 3/16" Allen Key
- 1/2" Wrench

### Procedure:

1. Apply brakes.
2. Position the mattress support sections depending on the location of the bed lift motor to replace:
  - A. At the **foot of the bed**: Completely raise the thigh section, then lift and fold back the foot section toward the head end of the bed. Attach it securely to the bed using a bungee cord. Finally completely raise the Fowler.
  - B. At the **head of the bed**: Completely raise the Fowler.
  - C. Lower the bed to its lowest position.
3. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
4. Raise the siderails.
5. Disconnect the motor cable (Release the cable locking clip).
6. Remove the two shoulder bolts and nuts (D and G) holding the motor to the support (Refer to Figure 4.3 C, pg 53).
7. Remove the defective motor.
8. Reverse the above steps to install the replacement actuator. Follow the procedure below.

---

### CAUTION

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Reinitialize the bed after replacement of one or two bed lift actuators. Proceed as follow to do so:

9. Using the bed down button, lower the bed to the lowest position until both motor stop. End of procedure.



# Service Information

## BATTERY REPLACEMENT

### Tools required :

- #2 Phillips Screwdriver
- Slotted Screwdriver
- Cutting Pliers
- 3/8" Combination Wrench

### Procedure :

#### Note

Unless otherwise specified, refer to Figure 1, 2, 3 and 4, on pages 57 and 58 for the replacement procedure.

1. Follow the appropriate Static Protection procedure. (see page 26).
2. Unplug the bed.
3. Remove the two #10 screws (A) and remove electrical box cover (B).
4. Lift up the battery cable locking clip (C) and unplug the cable..
5. Remove the six #10 screws (D) and remove the electrical box cover (E).
6. Remove the four screws (F) and nuts holding the battery.
7. Cut the tie wraps (G)
8. Remove the battery (H).
9. Reverse the above steps to install the replacement battery.

#### Note

Replug the bed for four hours for a complete battery recharge.

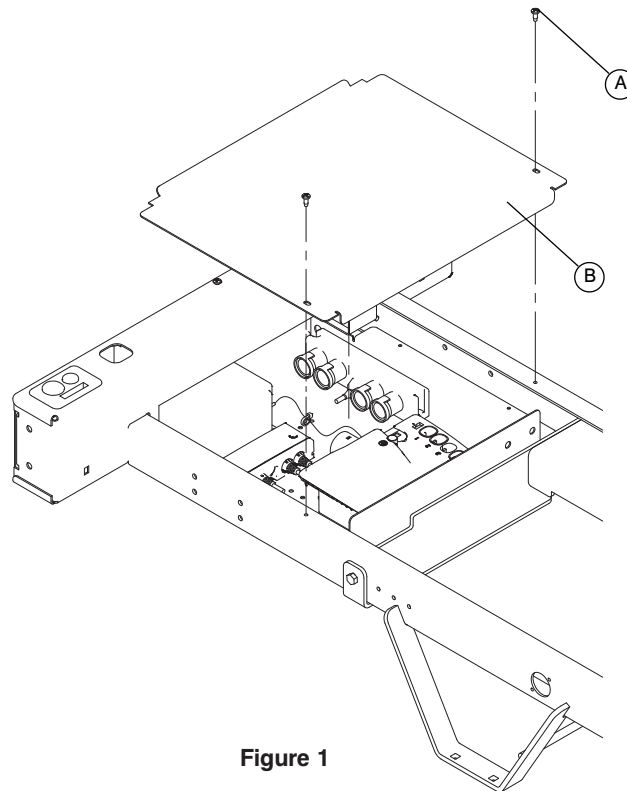


Figure 1

# Service Information

## BATTERY REPLACEMENT (CONTINUED)

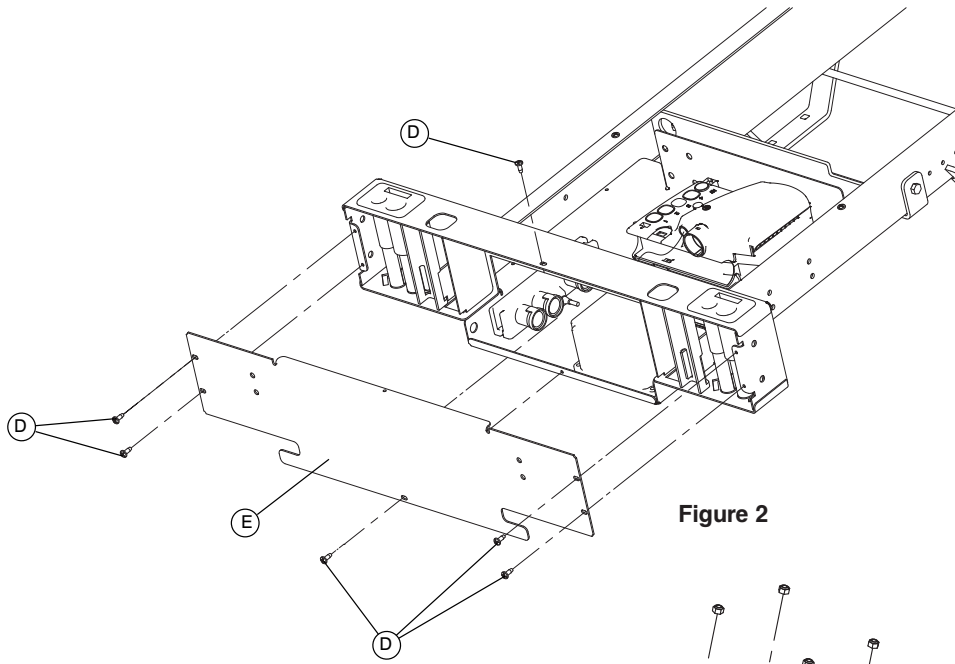


Figure 2

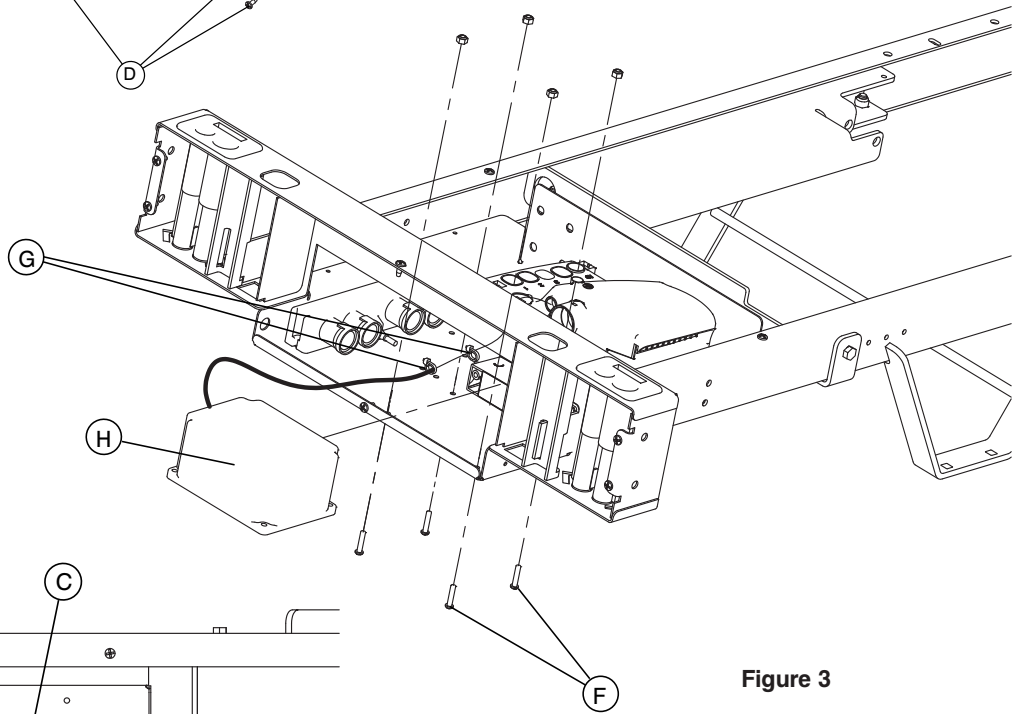


Figure 3

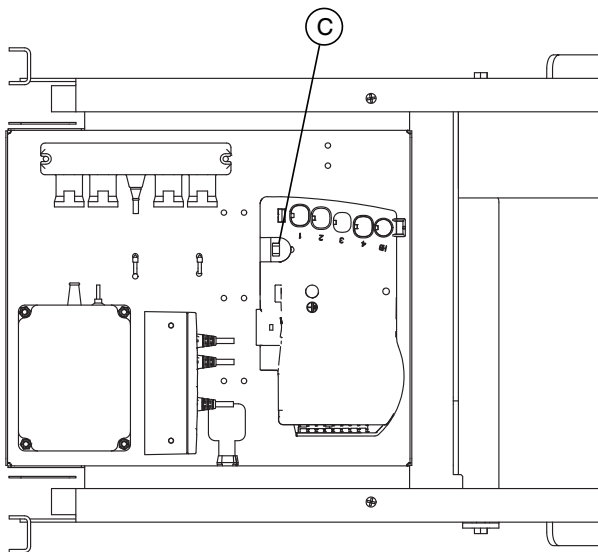


Figure 4

# Service Information

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## CONTROL BOX REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- Needle Nose Pliers
- 7/16" Combination Wrench
- 3/8" Drive Ratchet
- 7/16" socket
- Small Slotted Screwdriver

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.3 C on [pg. 53](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, [pg. 57](#)) after removal of electrical box cover.
3. Lift up and remove the cover.
4. Properly ground yourself (see [pg. 26](#)).
5. Using the needle nose pliers and the small Regular Head Screwdriver, remove cable locking clips.
6. Remove all cables connected to the control box. Note their location so they will be connected properly to the replacement box. Refer to the connection diagram in the "Electrical Service Information" section for the connecting position of the cables on the motor control box.
7. Using the drive ratchet, the 7/16" socket and the 7/16" combination wrench remove the bolts holding the control board and remove it.
8. Reverse the above steps to install the replacement control board.

**Note:** Ensure that cable locking clips are properly installed prior to put bed back in service.

9. Perform the reinitialization as describe on [page 56](#).
10. Test all the bed electric functions before returning the bed to service.

# Service Information

---

## CPR BOARD REPLACEMENT

### Tools Required:

- #2 Phillips Screwdriver
- Needle Nose Pliers
- Small Slotted Screwdriver

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 1 for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Lift up and remove the cover.
4. Properly ground yourself (see [pg. 26](#)).
5. Remove all cables (A) connected to the CPR board (B). Note their location so they will be connected properly to the replacement CPR board. Refer to the connection diagram in the “Electrical Service Information” section for the connecting position of the cables on the CPR board.
6. Using the needle nose pliers remove the 4 PCB stand-off pins (C) holding the CPR board and remove it.
7. Reverse the above steps to install the replacement CPR board.
8. Test all the bed electric functions before returning the bed to service.

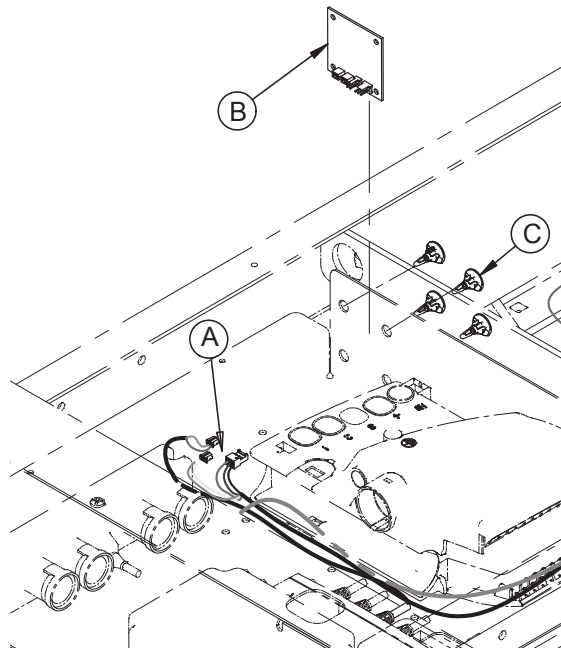


Figure 1

# Service Information

## CPR MICRO SWITCH REPLACEMENT (OPTIONAL)

### Tools Required:

- Inclinometer
- #1 Phillips Screwdriver
- Slotted Screwdriver
- #2 Phillips Screwdriver
- Cutting Pliers
- 3/8" Combination Wrench

### Procedure:

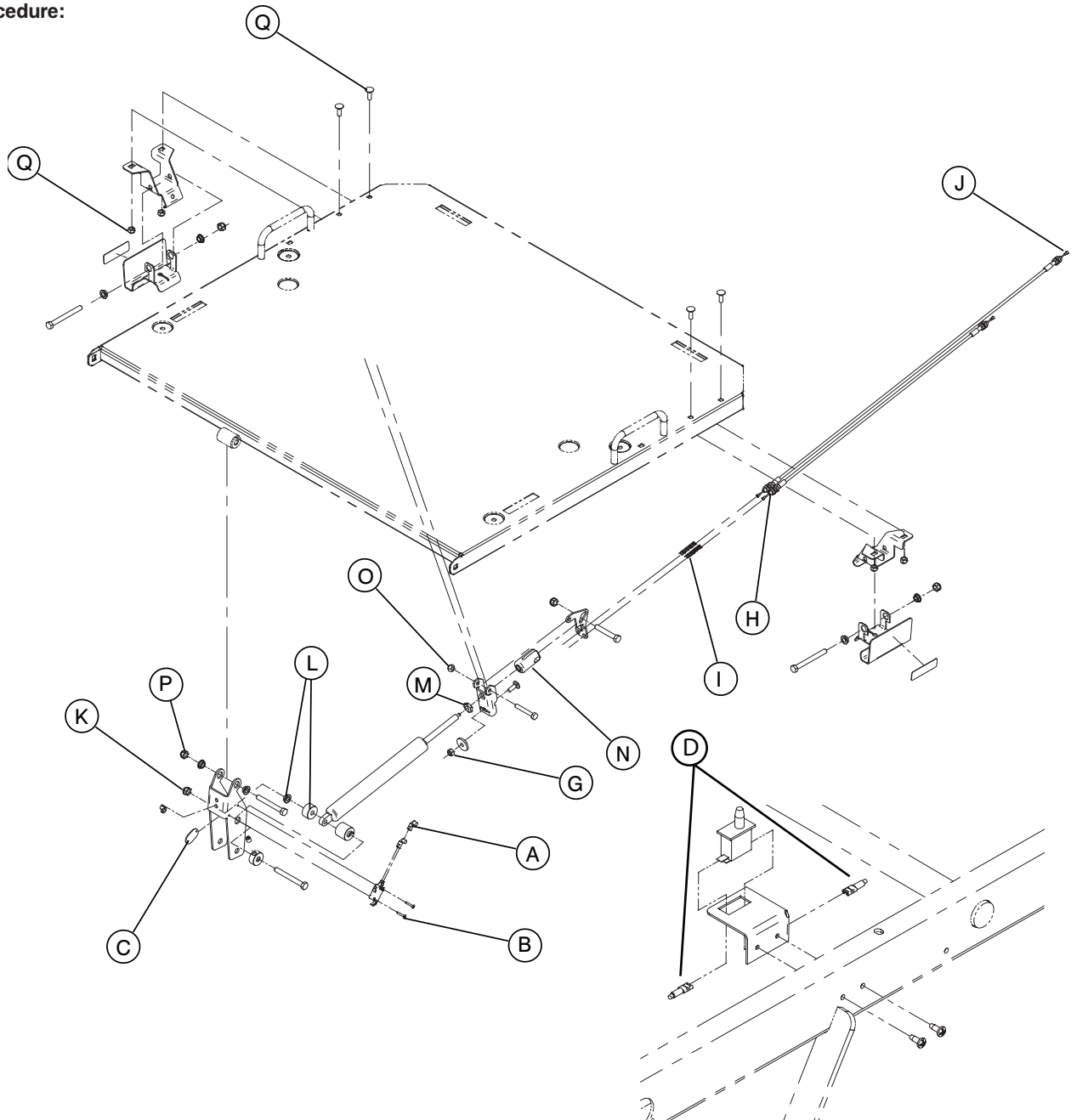


Figure 4.3 F

# Service Information

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## CPR MICRO SWITCH REPLACEMENT (OPTIONAL) (CONTINUED)

### Micro Switch Attached to the Head Section Lever

**Note:** This switch informs on the state of the Fowler motor (engaged or disengaged) when the CPR emergency release is activated.

1. Completely raise the bed and apply the brakes.
2. Raise the head siderails.
3. Raise the head section at an angle of 45° (use the inclinometer).
4. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
5. Remove the wires (A) from the micro switch. Note the location of the wires so they will be connected correctly to the replacement micro switch.
6. Using the #1 Phillips screwdriver, remove the two screws (B) holding the micro switch to the fowler section lever. Keep the mounting plate (C). Remove the defective micro switch.
7. Reverse the above steps to install the replacement micro switch.
8. Test the CPR emergency release before returning the bed to service.

### Micro Switch Attached to the Frame

**Note:** This switch signals to the CPR board on one hand, that the resetting of the Fowler motor may begin because the Fowler is completely lowered.

1. Completely raise the Fowler.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Remove the cable wires (D) from the micro switch. Note the location of the wires so they will be connected correctly to the replacement micro switch.
4. Using the regular screwdriver, remove the micro switch from its support.
5. Reverse the above steps to install the replacement micro switch.
6. Test the CPR emergency release before returning the bed to service.

# Service Information

---

## CPR ACTIVATION CABLE REPLACEMENT (OPTIONAL)

### Tools Required:

- 7/16" Combination Wrench

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.3 F on [pg. 61](#) for the following replacement procedure.

1. Completely raise the bed and apply the brakes.
2. Completely raise the Fowler and remove the head board.
3. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
4. Using the 7/16" combination wrench, remove the nut, sleeve and bolt (G) holding both ends of the activation cable to the fixed lever.
5. Using the 7/16" combination wrench, remove the nut and washer (H) holding the defective cable jacket to the mobile lever. Remove the cable from the mobile lever and keep the spring (I). Try not to move the other cable from its position.
6. Unscrew completely the two locknuts (J) holding the defective cable to the CPR handle end. Remove the cable.
7. Reverse the above steps to install the replacement cable.

**Note:** Ensure there is no loose space over 1/8" at the CPR handle once the replacement cable is installed.

8. Test the CPR emergency release before returning the bed to service.

# Service Information

## BRAKE/STEER PEDAL REPLACEMENT

### Tools Required:

- 3/8" Drive Ratchet
- 1/2" Socket
- Rubber Mallet

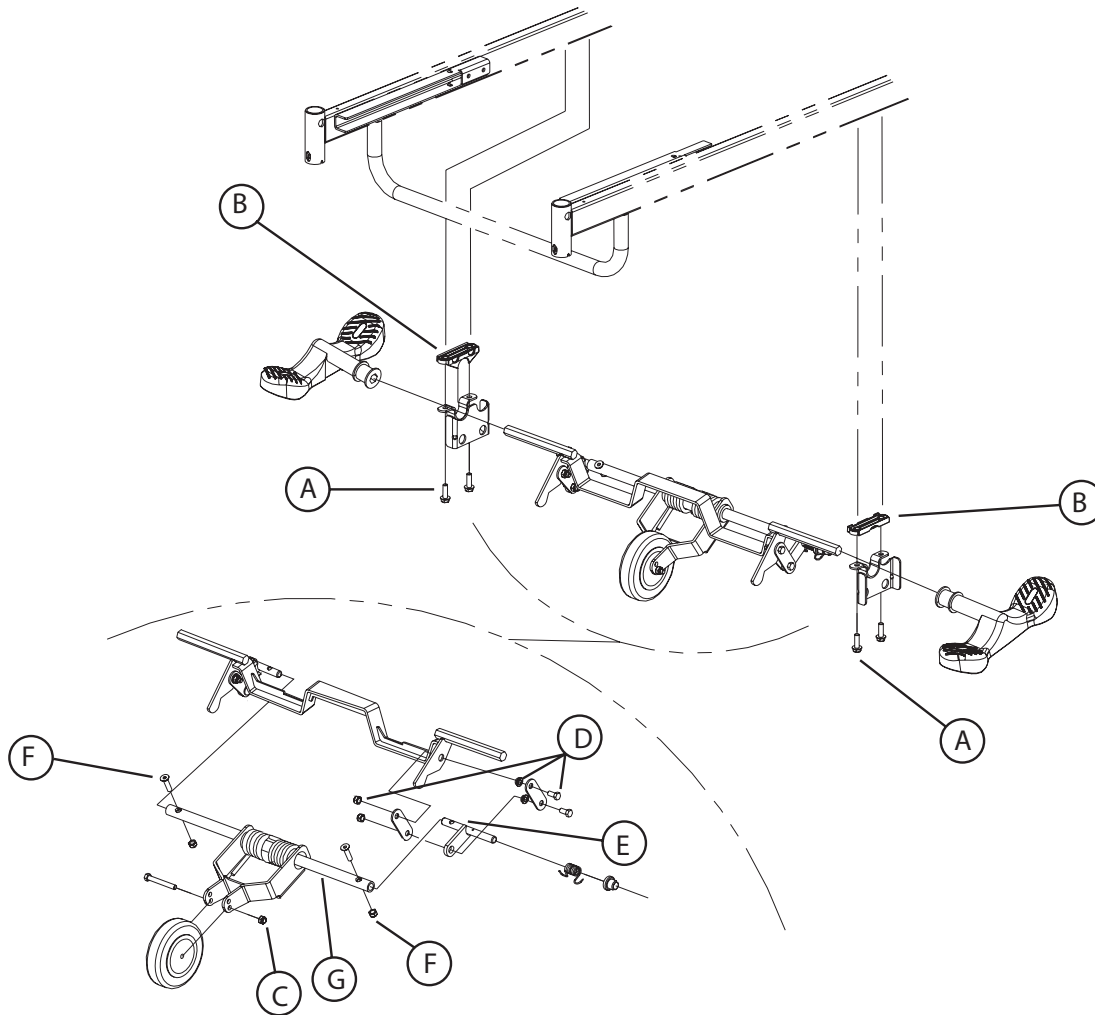


Figure 4.4 A

### Procedure:

1. Completely raise the bed.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Position the brake/steer pedal to neutral.
4. Using the 3/8" Drive Ratchet and the 1/2" socket, remove the two bolts (A) holding the fifth wheel support (optional) or the lever support (F, Figure 4.4 B, (without fifth wheel option) [pg. 67](#)) on the side of the defective pedal and lay the support down. Keep the molded spacer (B).
5. Remove the pedal from the activation lever shaft. Use a rubber mallet if necessary.
6. Reverse the above steps to install the replacement pedal.
7. Install new labels.



# Service Information

---

## FIFTH WHEEL CASTER REPLACEMENT (OPTIONAL)

### Tools Required:

- Two 1/2" Combination Wrenches

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.4 A on [pg. 64](#) for the following replacement procedure.

1. Completely raise the bed.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
3. Position the brake/steer pedal to neutral.
4. Using two 1/2" combination wrenches, remove the nut and bolt (C) holding the caster to the swing arm.
5. Reverse the above steps to install the replacement caster.

# Service Information

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## FIFTH WHEEL ASSEMBLY REPLACEMENT (OPTIONAL)

### Tools Required:

- 1/2" Combination Wrench
- 1/2" Socket
- Rubber Mallet
- 3/8" Drive Ratchet

### Procedure:

**Note:** Unless otherwise indicated, refer to Figure 4.4 A on [pg. 64](#) for the following replacement procedure.

1. Completely raise the bed.
2. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, [pg. 57](#)) after removal of electrical box cover.
3. Position the brake/steer pedal to neutral.
4. Using the 1/2" combination wrench, remove the two nuts, washers, shoulder spacers and bolts (E1, [Figure 4.4 B, pg. 67](#)) linking the end of the brake rod to the locking levers, on the side of the pedals. If the optional four-wheel brake system is present on the bed, also remove the fasteners linking the end of the two other brake rods to the same locking levers.
5. Using the 3/8" Drive Ratchet and the 1/2" socket, remove the four bolts (A) holding both fifth wheel supports to the base. Keep the molded spacers (B). Remove the assembly.
6. Remove the two brake/steer pedals from the activation lever shafts. Use a rubber mallet if necessary.
7. Remove and keep the two locking levers (G, [Figure 4.4 B, pg. 67](#)).
8. Reverse the above steps to install the replacement fifth wheel assembly.
9. Test the fifth wheel for proper operation before returning the bed to service.

# Service Information

## BED CASTER REPLACEMENT

### Tools Required:

- Jack Stand
- Needle Nose Pliers
- 1/2" Combination Wrench
- 

### Procedure:

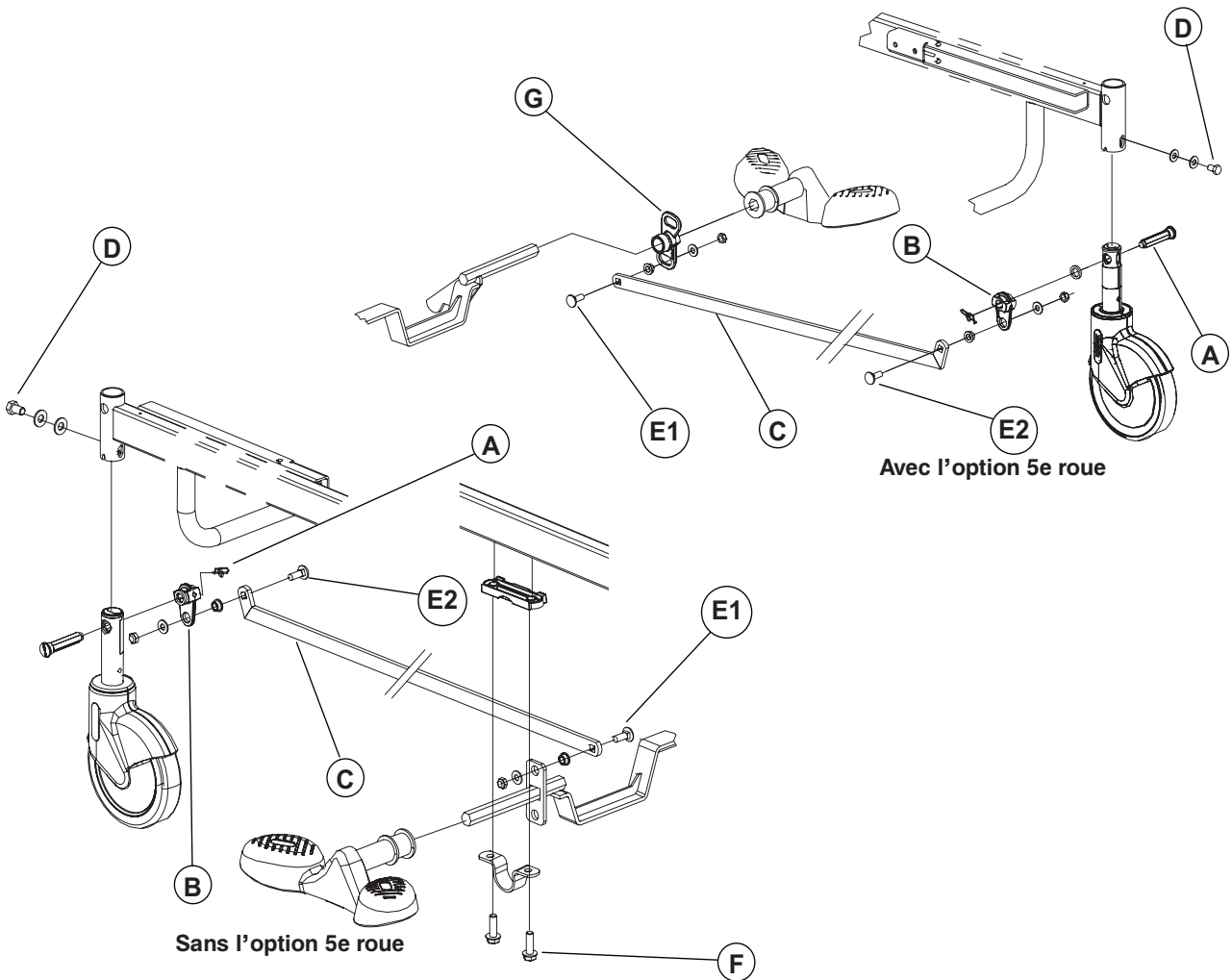


Figure 4.4 B

1. Completely raise the bed.
2. Position the brake/steer to neutral.
3. Install a jack stand under the frame near the defective caster.
4. If present, remove the wheel cover (optional).
5. Lower the bed until the caster is six inches off the ground.
6. Unplug the bed power cord from the wall outlet and, the battery cord (refer to Figure 1, pg. 57) after removal of electrical box cover.
7. Remove, using needle nose pliers, the rue ring, washer and locking axle (A) linking the caster shaft to the locking lever (B) and the brake rod (C) if the caster is part of the braking system.

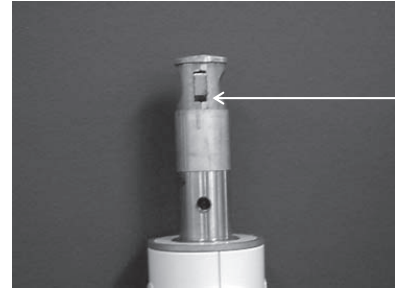
# Service Information

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## BED CASTER REPLACEMENT (CONTINUED)

**Note:** The shaft of a caster that is part of the braking mechanism must be properly oriented before mounting it to the base. The opposite illustration shows the side of the shaft that should be facing the inside of the bed: it is the side showing the largest opening below the cam in neutral position.

8. Using the 1/2" combination wrench, remove the bolt and washers (D) holding the caster to the base.



**Note:** Before completely tightening the bolt (D), make sure that the caster shaft is completely inserted into the mounting socket.

9. Reverse the above steps to install the replacement caster.
10. If the replacement caster is part of the brake mechanism, apply the brakes and check that the caster is locked before returning the bed to service.

# Service Information

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## BRAKE ROD REPLACEMENT

### Tools Required:

- 1/2" Combination Wrench
- Torque Wrench

### Procedure:

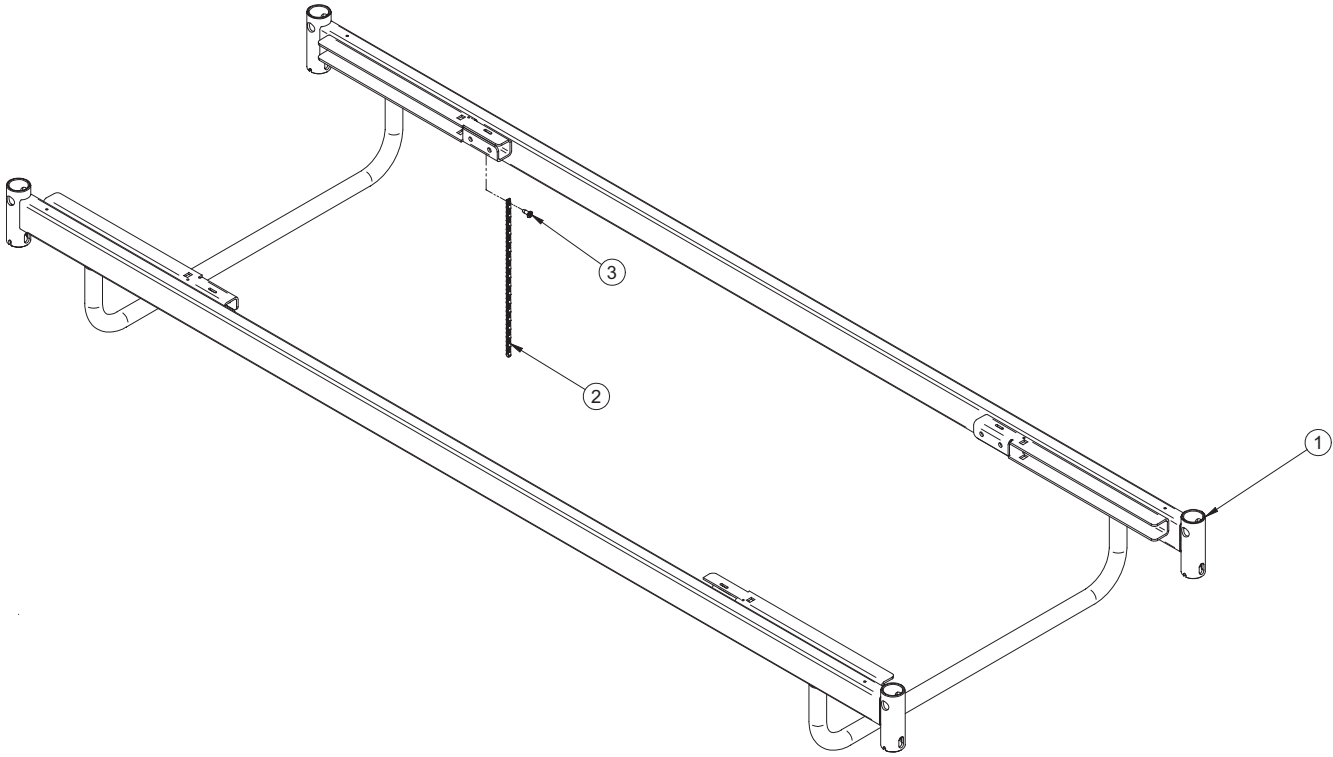
**Note:** Unless otherwise indicated, refer to Figure 4.4 B on [pg. 67](#) for the following replacement procedure.

1. Completely raise the bed.
2. Using a 1/2" combination wrench, remove the nut, shoulder spacer, washer and bolt (E1, E2) holding each end of the linking rod.
3. Remove the defective linking rod.
4. Reverse the above steps to install the replacement linking rod.
5. Check the braking mechanism before returning the bed to service.
6. Using the torque wrench, tight the bolt at 135 lb\*po.

# Base

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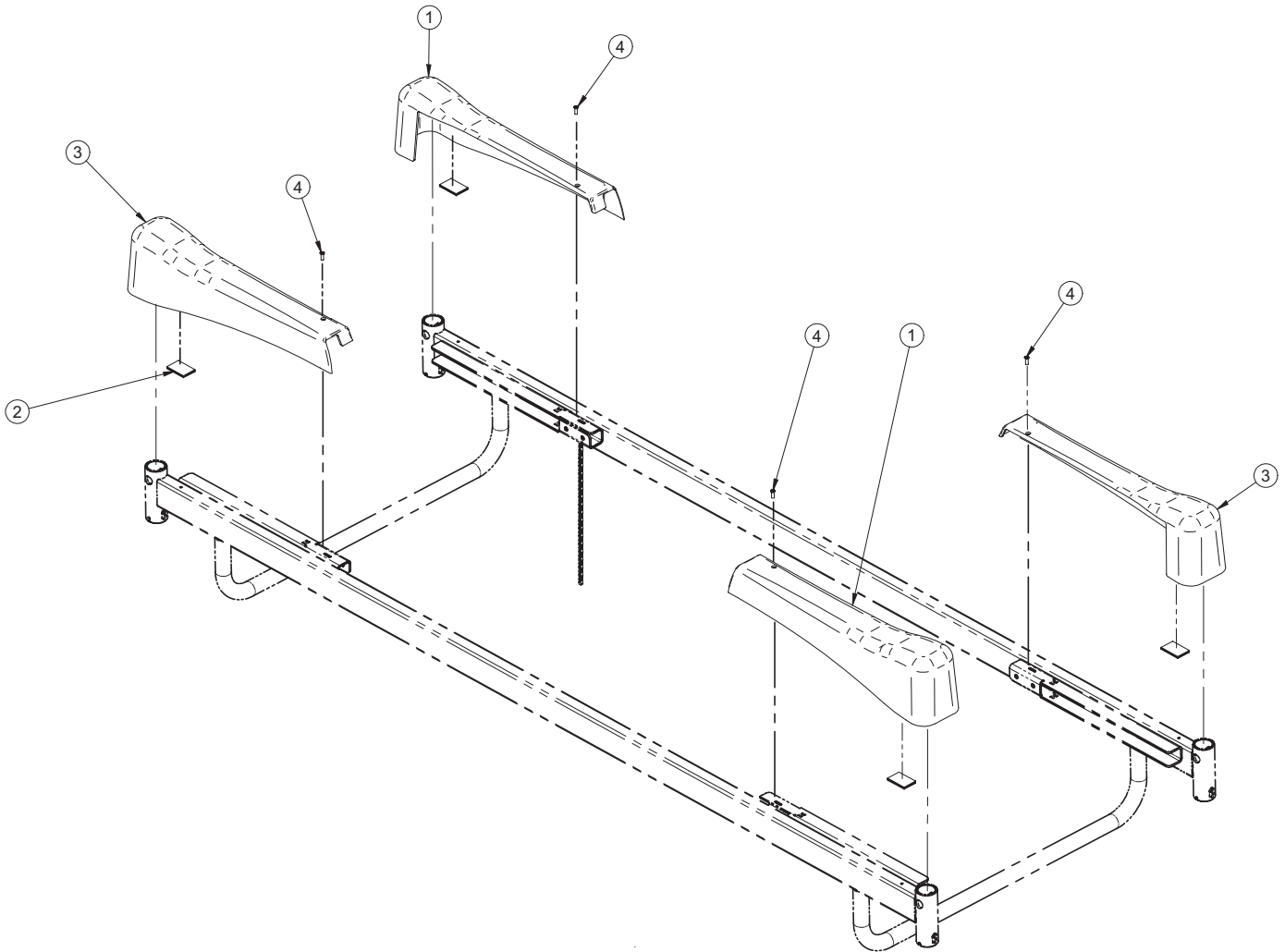
For Reference Only : L23-508W  
Rev. 02



Item	Part No.	Part Name	Qty.
1	23-5151W	Base	1
2	28-0469	Ground Chain	1
3	VV83A9G16	Pan Head Tapping Screw	1

# Wheel Covers

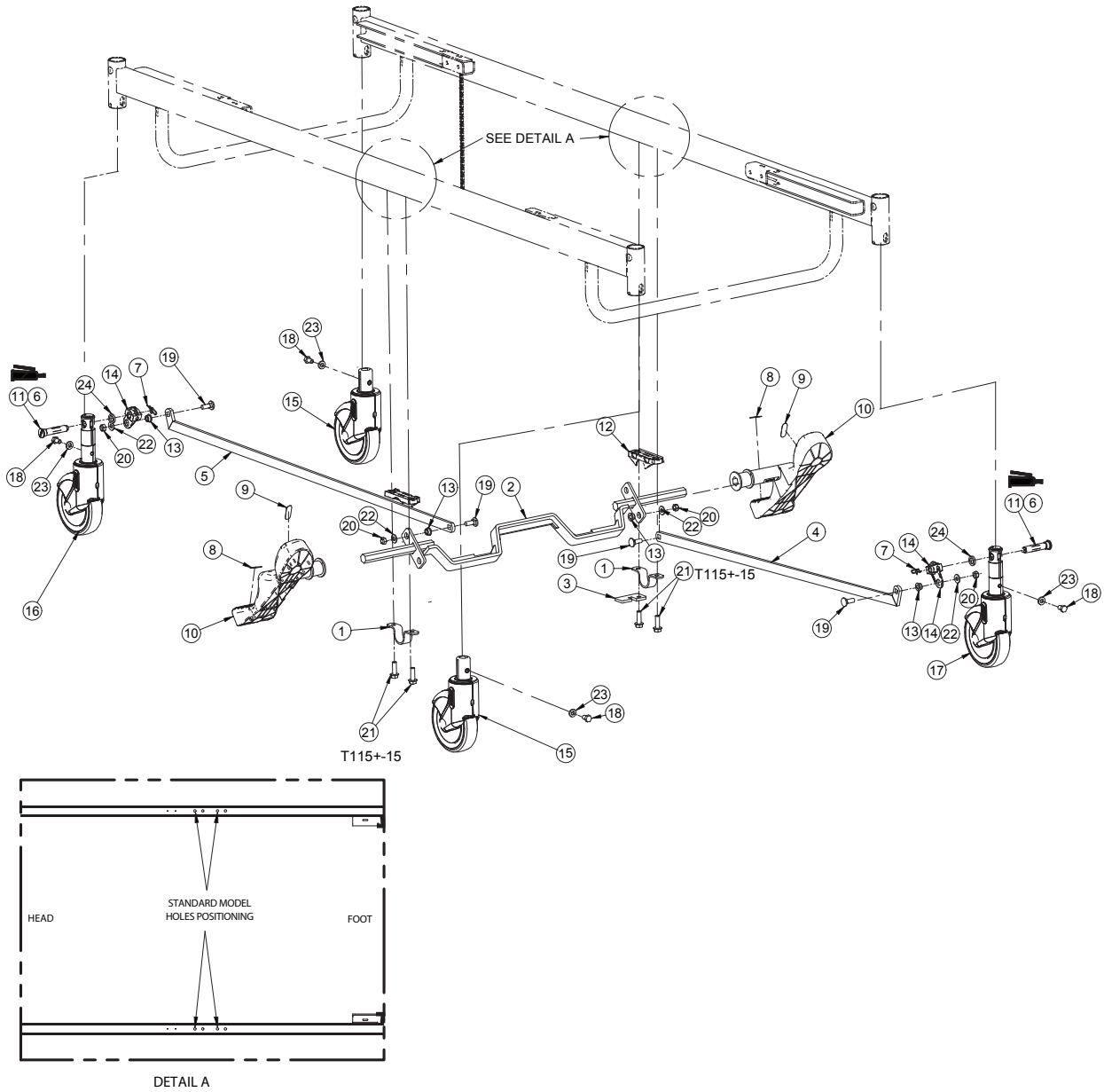
For Reference Only : OL230101  
Rev. 02



Item	Part No.	Part Name	Qty.
1	QP28-0299	Right Caster Cover	2
2	25-0550	Caster Hood Velcro	4
3	QP28-0300	Left Caster Cover	2
4	VV81A9E16	Flat Head Tapping Screw	4

# Two 5" Wheels Brake Mechanism Without Fifth Wheel

For Reference Only : OL235048W  
Rev. 02





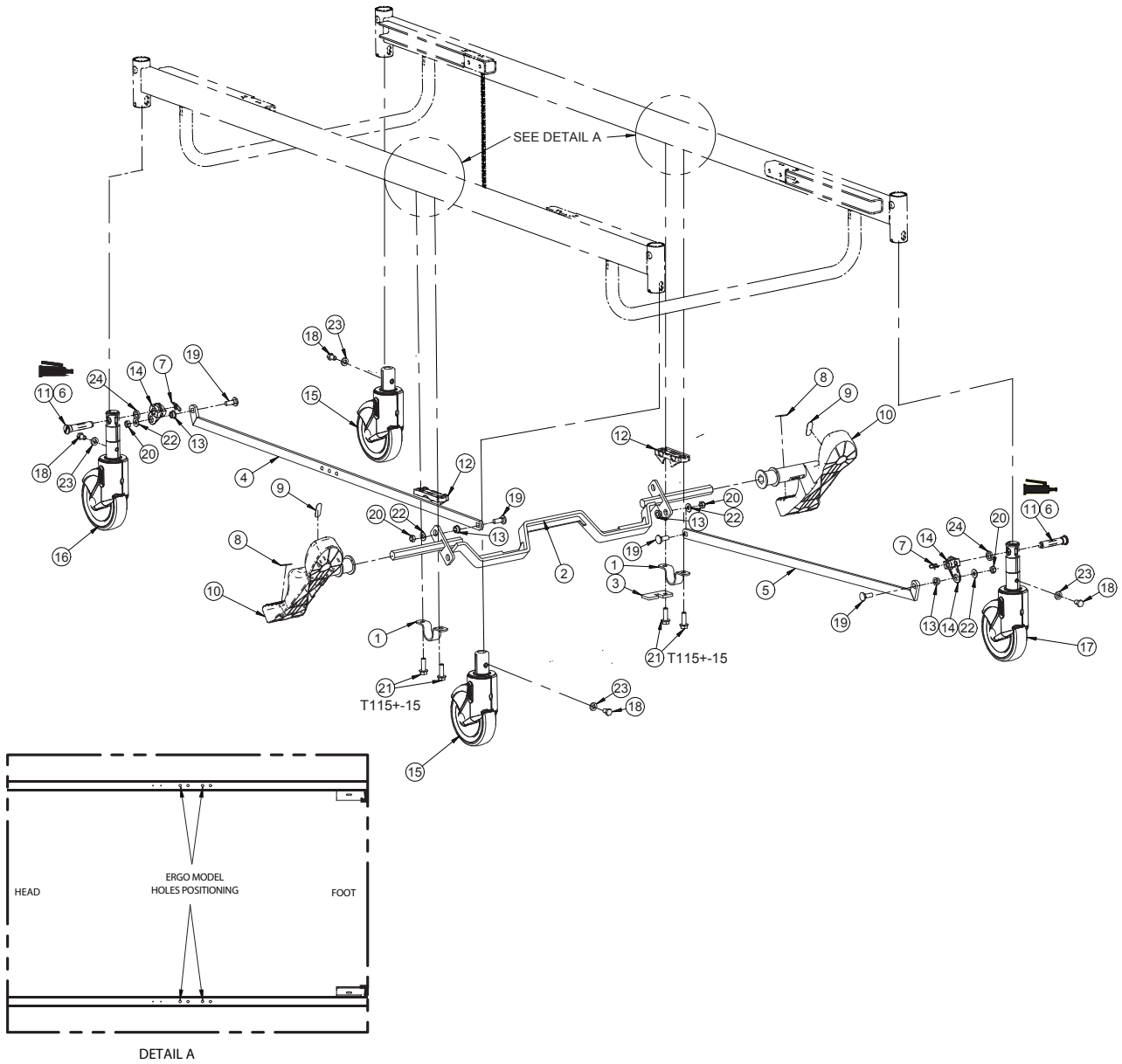
## Two 5" Wheels Brake Mechanism Without Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5147W	Locking Rod - Foot	1
5	23-5148W	Locking Rod - Head	1
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	2
8	QE71-0496	5Th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	2
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Spacer	4
14	QPA25-0411	Brake Lever	2
15	RD25039107	5" Swivel Caster	2
16	RD25049407	5"Locking Caster	1
17	RD25049507	5" Steer Caster	1
18	VB15A1O16-S	Hex Bolt	4
19	VB35A1O28FT	Long Neck Carriage Bolt	4
20	VE79A1O	Nut	4
21	VVB4A1O32	Bolt 5/16-18 X 1" Thread Rolling	4
22	VW10A10	Flat Washer	4
23	VW10A1120	Flat Washer	4
24	VW10C162404	Nylon Washer	2

# Two 5" Wheels Brake Mechanism Without Fifth Wheel - ERGO

For Reference Only : OL235049W  
Rev. 02



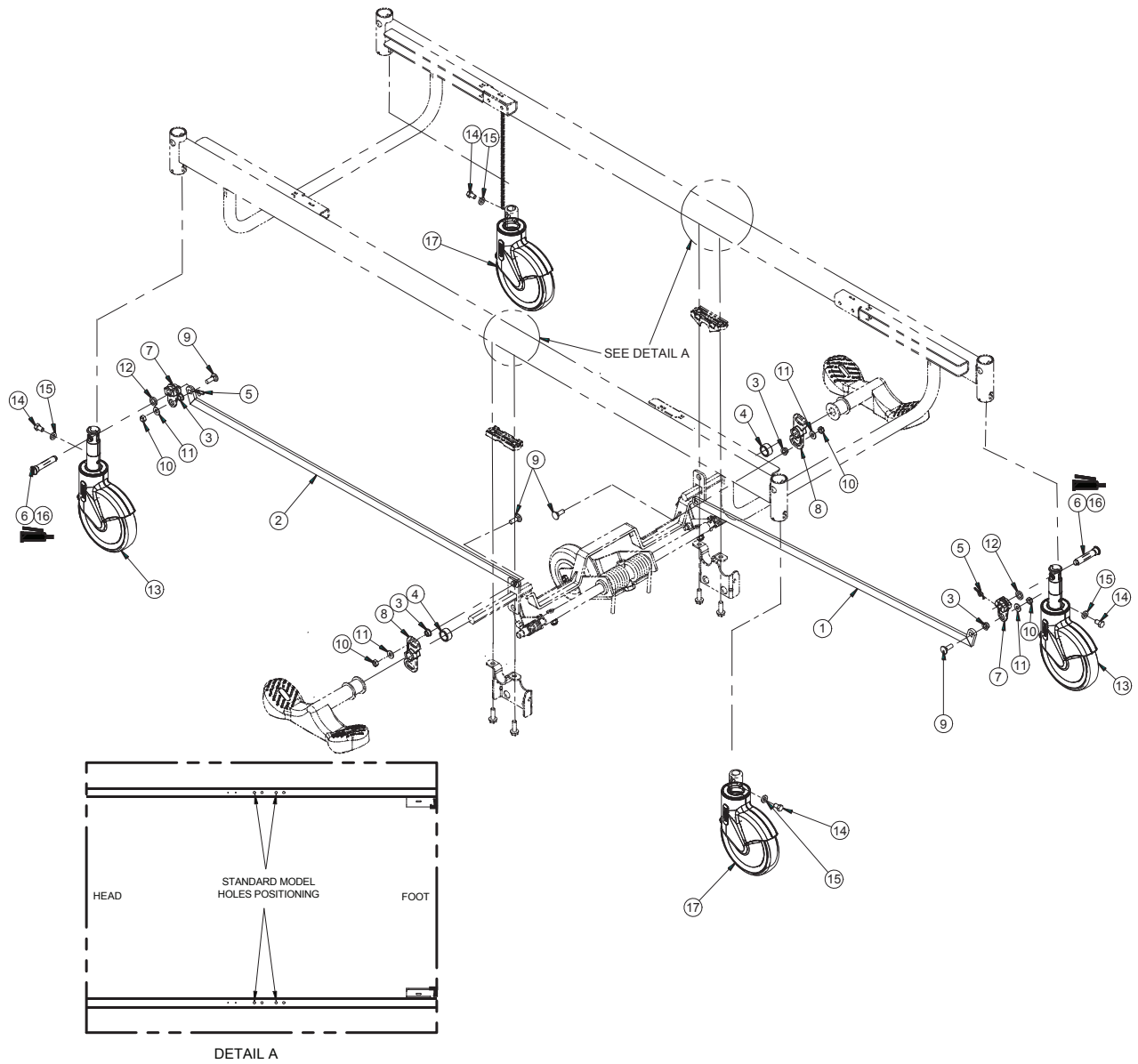
## Two 5" Wheels Brake Mechanism Without Fifth Wheel - ERGO

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5167W	Locking Rod - Foot	1
5	23-5168W	Locking Rod - Head	1
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	2
8	QE71-0496	5th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	2
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Bushing 5/16 X 3/16	4
14	QPA25-0411	Brake Lever	2
15	RD25039107	5" Swivel Caster	2
16	RD25049407	5" Locking Caster	1
17	RD25049507	5" Steer Caster	1
18	VB15A1O16-S	Hex Bolt	4
19	VB35A1O28FT	Long Neck Carriage Bolt	4
20	VE79A1O	Nut	4
21	VVB4A1O32	Bolt 5/16-18 X 1" Thread Rolling	4
22	VW10A10	Flat Washer	4
23	VW10A1120	Flat Washer	4
24	VW10C162404	Nylon Washer	2

# Two 6" Wheels Brake Mechanism With Fifth Wheel

For Reference Only : OL235044W  
Rev. 02



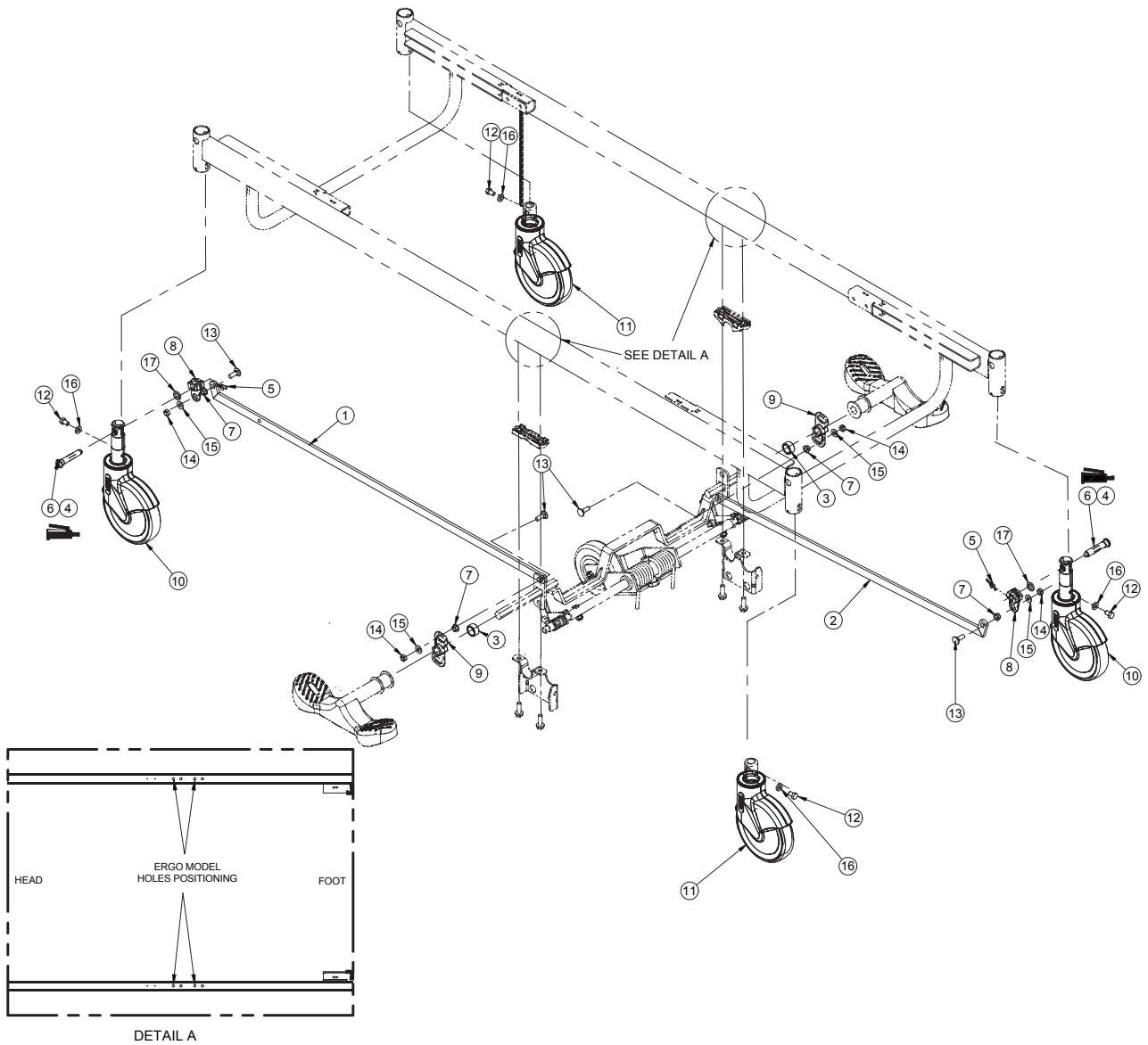
## Two 6" Wheels Brake Mechanism With Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	23-5147W	Locking Rod - Foot	1
2	23-5148W	Locking Rod - Head	1
3	QPA25-0340	Spacer	4
4	25-0451	Lever Spacer	2
5	QDF7878	Rue Ring Cotter	2
6	QPA23-0233	Locking Axle	2
7	QPA25-0411	Brake Lever	2
8	QPA25-0427	Locking Lever	2
9	VB35A1O28FT	Long Neck Carriage Bolt	4
10	VE79A1O	Nut	4
11	VW10A10	Flat Washer	4
12	VW10C162404	Nylon Washer	2
13	RD25038807	6" Locking Caster	2
14	VB15A1O16-S	Bolt 5/16-18 X 1/2" Gr.5 Scotch Grip	4
15	VW10A1120	Flat Washer	4
16	M0019	OG2 Grease	1
17	RD25049307	6" Swivel Caster	2

# Two 6" Wheels Brake Mechanism With Fifth Wheel - ERGO

For Reference Only : OL235045W  
Rev. 02



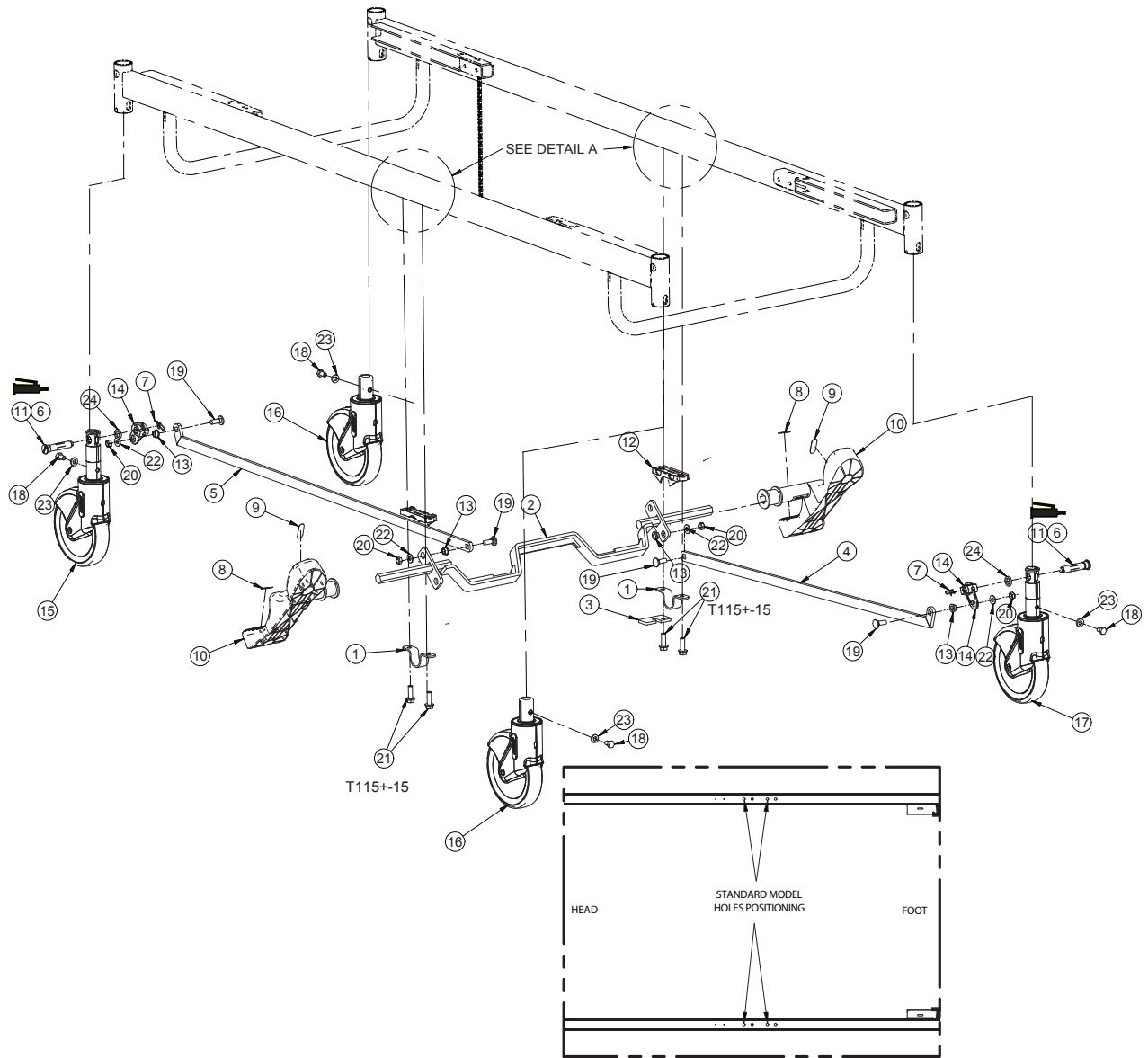
## Two 6" Wheels Brake Mechanism With Fifth Wheel - ERGO

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<b>Item</b>	<b>Part No.</b>	<b>Part Name</b>	<b>Qty.</b>
1	23-5167W	Locking Rod - Foot	1
2	23-5168W	Locking Rod - Head	1
3	25-0451	Lever Spacer	2
4	M0019	OG2 Grease	1
5	QDF7878	Rue Ring Cotter	2
6	QPA23-0233	Locking Axle	2
7	QPA25-0340	Spacer	4
8	QPA25-0411	Brake Lever	2
9	QPA25-0427	Locking Lever	2
10	RD25038807	6" Locking Caster	2
11	RD25049307	6" Swivel Caster	2
12	VB15A1O16-S	Bolt 5/16-18 X 1/2" Gr.5 Scotch Grip	4
13	VB35A1O28FT	Long Neck Carriage Bolt	4
14	VE79A1O	Nut	4
15	VW10A10	Flat Washer	4
16	VW10A1120	Flat Washer	4
17	VW10C162404	Nylon Washer	2

# Two 6" Wheels Brake Mechanism Without Fifth Wheel

For Reference Only : OL235046W  
Rev. 02





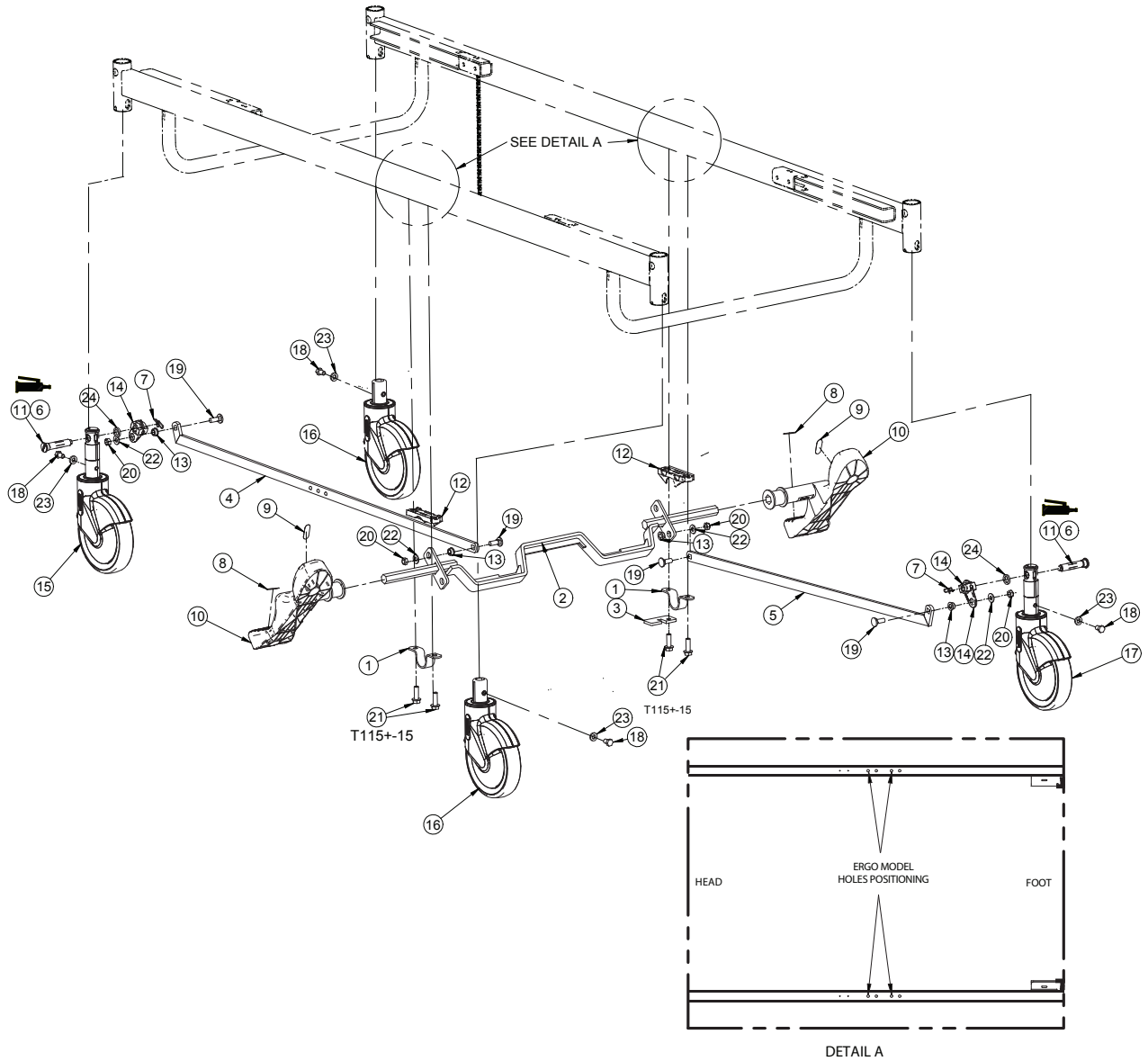
## Two 6" Wheels Brake Mechanism Without Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5147W	Locking Rod - Foot	1
5	23-5148W	Locking Rod - Head	1
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	2
8	QE71-0496	5Th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	2
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Spacer	4
14	QPA25-0411	Brake Lever	2
15	RD25038807	6" Locking Caster	1
16	RD25049307	6" Swivel Caster	2
17	RD25049607	6" Steer Caster	1
18	VB15A1O16-S	Hex Bolt	4
19	VB35A1O28FT	Long Neck Carriage Bolt	4
20	VE79A1O	Nut	4
21	VVB4A1O32	Bolt Thread Rolling	4
22	VW10A10	Flat Washer	4
23	VW10A1120	Flat Washer	4
24	VW10C162404	Nylon Washer	2

# Two 6" Wheels Brake Mechanism Without Fifth Wheel - ERGO

For Reference Only : OL235047W  
Rev. 02



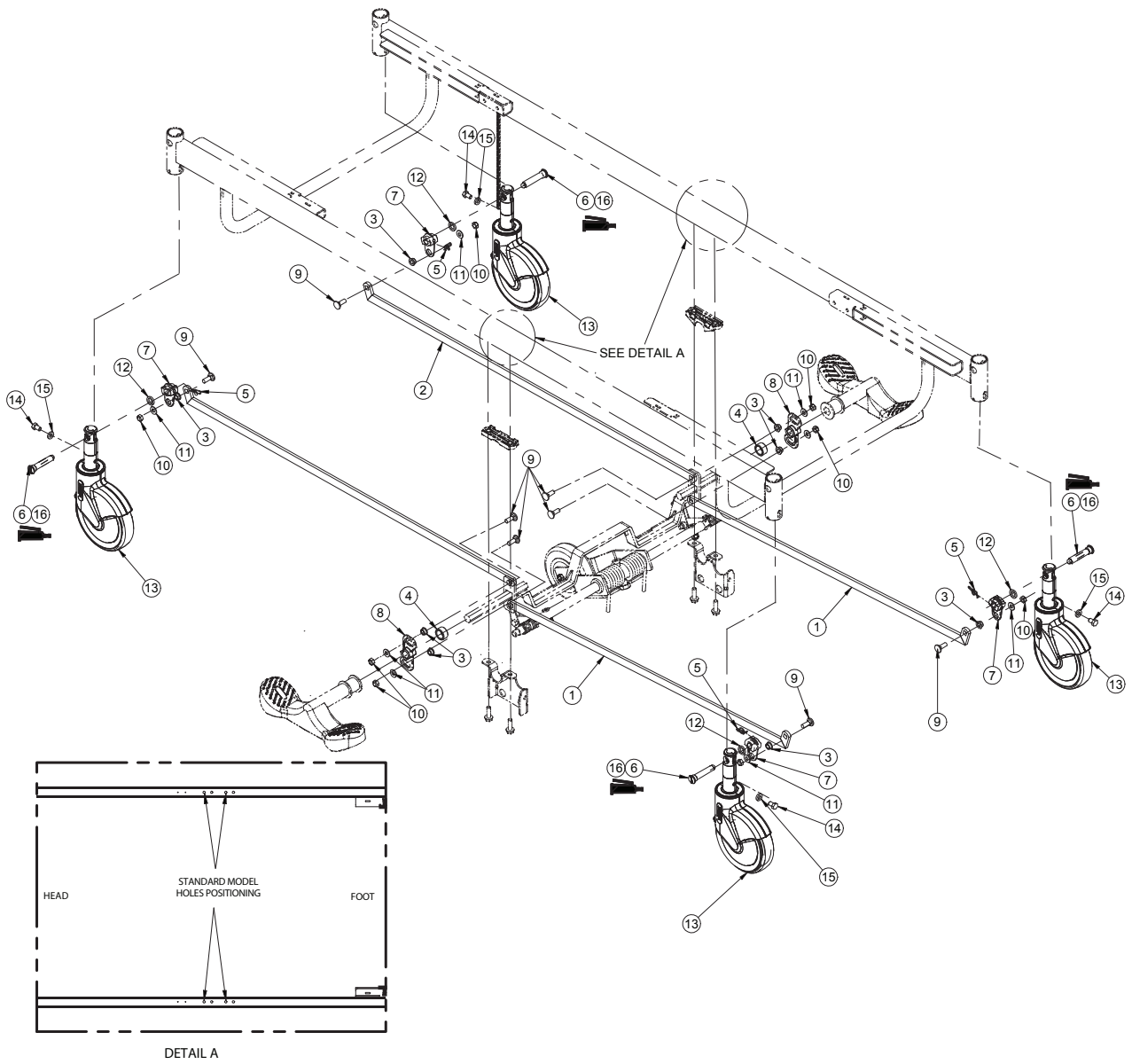
## Two 6" Wheels Brake Mechanism Without Fifth Wheel - ERGO

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5167P	Locking Rod - Foot	1
5	23-5168P	Locking Rod - Head	1
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	2
8	QE71-0496	5Th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	2
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Spacer	4
14	QPA25-0411	Brake Lever	2
15	RD25038807	6" Locking Caster	1
16	RD25049307	6" Swivel Caster	2
17	RD25049607	6" Steer Caster	1
18	VB15A1O16-S	Hex Bolt	4
19	VB35A1O28FT	Long Neck Carriage Bolt	4
20	VE79A1O	Nut	4
21	VVB4A1O32	Bolt Thread Rolling	4
22	VW10A10	Flat Washer	4
23	VW10A1120	Flat Washer	4
24	VW10C162404	Nylon Washer	2

# Four 6" Wheels Brake Mechanism With Fifth Wheel

For Reference Only : OL235043W  
Rev. 02



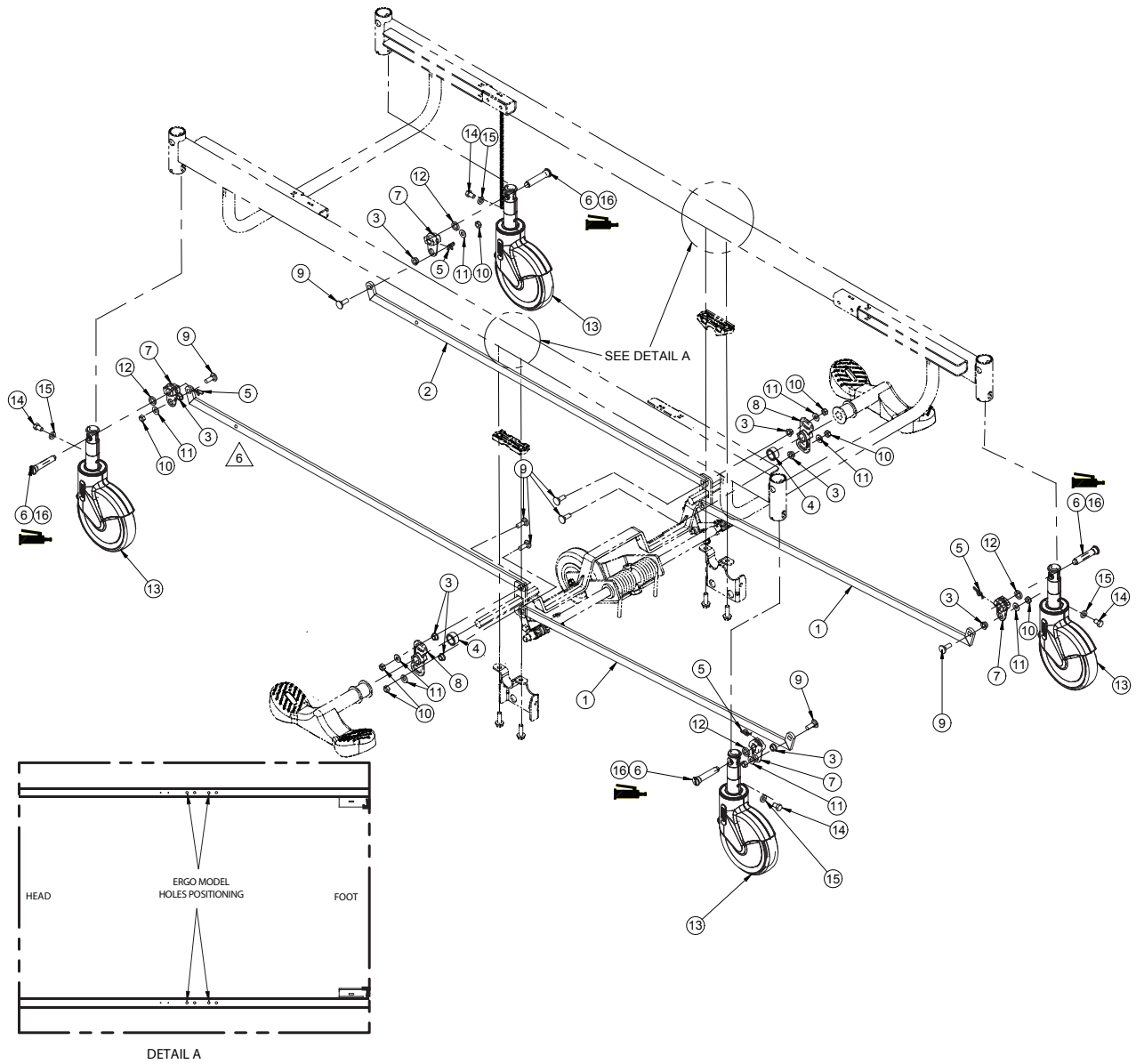
## Four 6" Wheels Brake Mechanism With Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	23-5147W	Locking Rod - Foot	2
2	23-5148W	Locking Rod - Head	2
3	QPA25-0340	Spacer	8
4	25-0451	Lever Spacer	2
5	QDF7878	Rue Ring Cotter	4
6	QPA23-0233	Locking Axle	4
7	QPA25-0411	Brake Lever	4
8	QPA25-0427	Locking Lever	2
9	VB35A1O28FT	Long Neck Carriage Bolt	8
10	VE79A1O	Nut	8
11	VW10A10	Flat Washer	8
12	VW10C162404	Nylon Washer	4
13	RD25038807	6" Locking Caster	4
14	VB15A1O16-S	Bolt 5/16-18 X 1/2" Gr.5 Scotch Grip	4
15	VW10A1120	Flat Washer	4
16	M0019	OG2 Grease	1

# Four 6" Wheels Brake Mechanism With Fifth Wheel - ERGO

For Reference Only : OL235009W  
Rev. 06



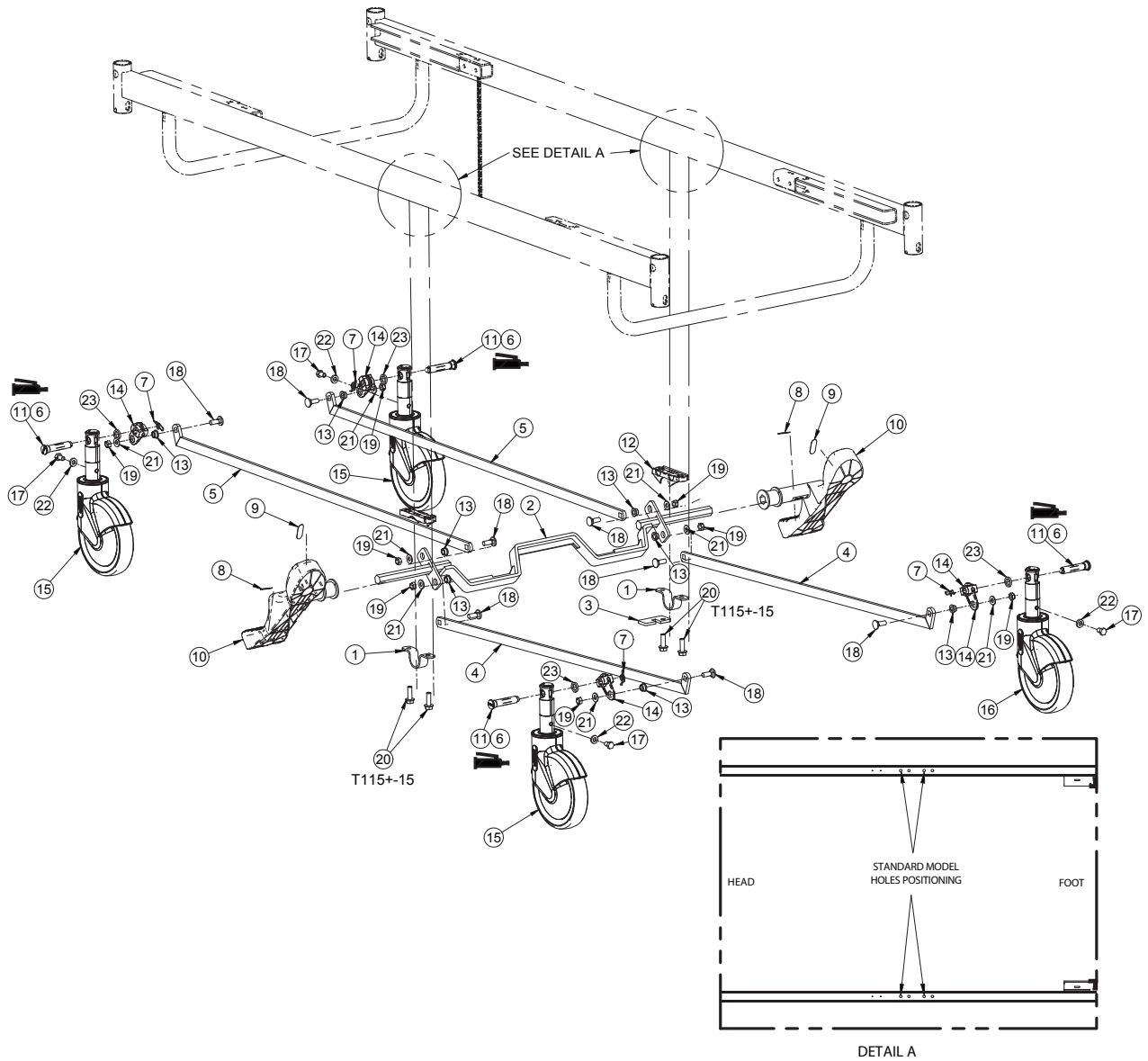
## Four 6" Wheels Brake Mechanism With Fifth Wheel - ERGO

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<b>Item</b>	<b>Part No.</b>	<b>Part Name</b>	<b>Qty.</b>
1	23-5168W	Locking Rod - Foot	2
2	23-5167W	Locking Rod - Head	2
3	QPA25-0340	Spacer	8
4	25-0451	Lever Spacer	2
5	QDF7878	Rue Ring Cotter	4
6	QPA23-0233	Locking Axle	4
7	QPA25-0411	Brake Lever	4
8	QPA25-0427	Locking Lever	2
9	VB35A1O28FT	Long Neck Carriage Bolt	8
10	VE79A1O	Nut	8
11	VW10A10	Flat Washer	8
12	VW10C162404	Nylon Washer	4
13	RD25038807	6" Locking Caster	4
14	VB15A1O16-S	Bolt 5/16-18 X 1/2" Gr.5 Scotch Grip	4
15	VW10A1120	Flat Washer	4
16	M0019	OG2 Grease	1

# Four 6" Wheels Brake Mechanism Without Fifth Wheel

For Reference Only : OL235042W  
Rev. 02





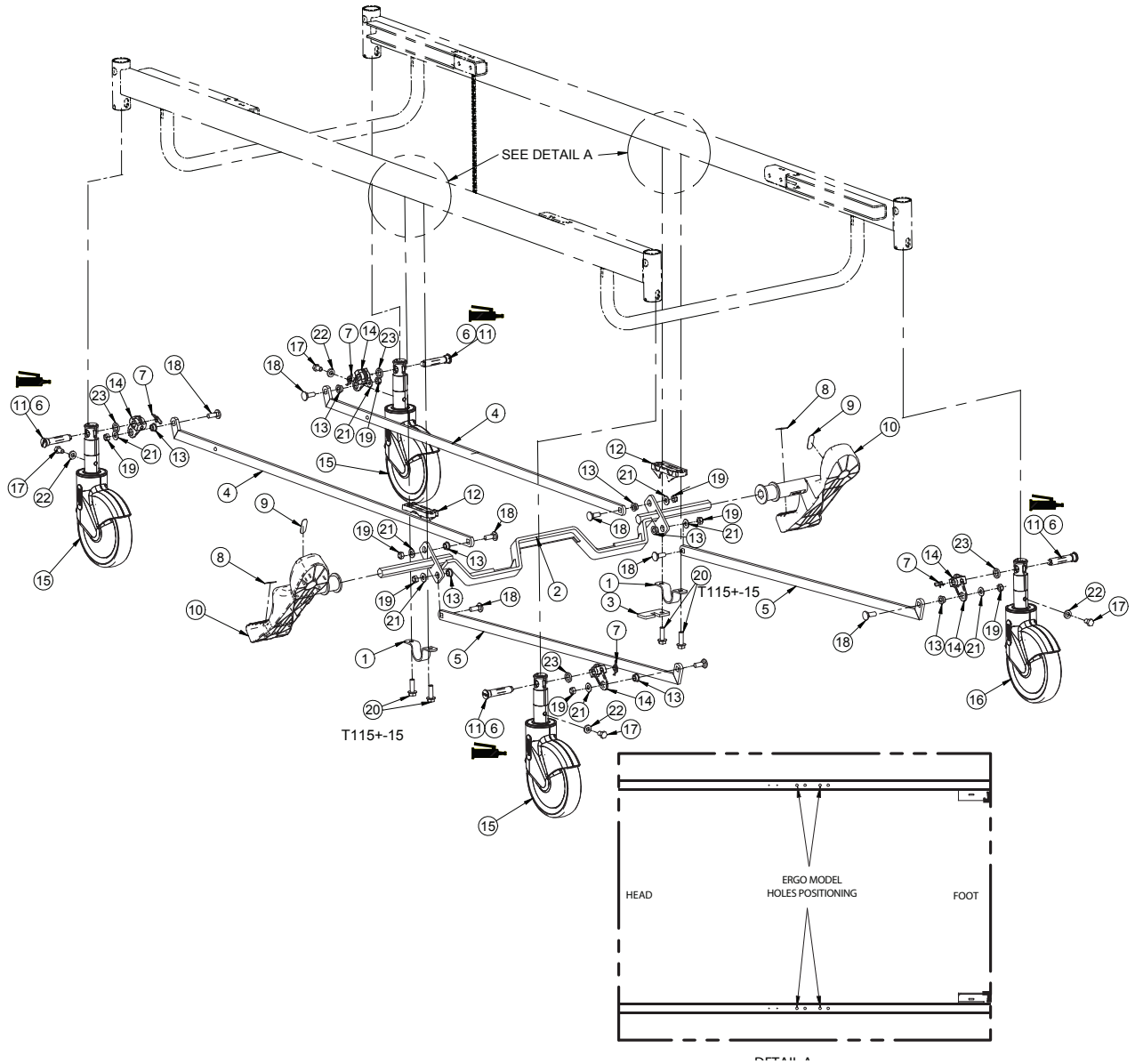
## Four 6" Wheels Brake Mechanism Without Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5147W	Locking Rod - Foot	2
5	23-5148W	Locking Rod - Head	2
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	4
8	QE71-0496	5Th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	4
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Spacer	8
14	QPA25-0411	Brake Lever	4
15	RD25038807	6" Locking Caster	3
16	RD25049607	6" Steer Caster	1
17	VB15A1O16-S	Hex Bolt	4
18	VB35A1O28FT	Long Neck Carriage Bolt	8
19	VE79A1O	Nut	8
20	VVB4A1O32	Bolt Thread Rolling	4
21	VW10A10	Flat Washer	8
22	VW10A1120	Flat Washer	4
23	VW10C162404	Nylon Washer	4

# Four 6" Wheels Brake Mechanism Without Fifth Wheel - ERGO

For Reference Only : OL235001W  
Rev. 05



## Four 6" Wheels Brake Mechanism Without Fifth Wheel - ERGO

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Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	2
2	23-0327W	Brake Lever	1
3	23-0333Z	Steer Stop	1
4	23-5167W	Locking Rod - Foot	2
5	23-5168P	Locking Rod - Head	2
6	M0019	OG2 Grease	1
7	QDF7878	Rue Ring Cotter	4
8	QE71-0496	5Th Wheel Green Sticker	2
9	QE71-0511	Brake Sticker	2
10	QP23-0627-11	Pedal	2
11	QPA23-0233	Locking Axle	4
12	QPA25-0312	Molded Spacer	2
13	QPA25-0340	Spacer	8
14	QPA25-0411	Brake Lever	4
15	RD25038807	6" Locking Caster	3
16	RD25049607	6" Steer Caster	1
17	VB15A1O16-S	Hex Bolt	4
18	VB35A1O28FT	Long Neck Carriage Bolt	8
19	VE79A1O	Nut	8
20	VVB4A1O32	Bolt Thread Rolling	4
21	VW10A10	Flat Washer	8
22	VW10A1120	Flat Washer	4
23	VW10C162404	Nylon Washer	4



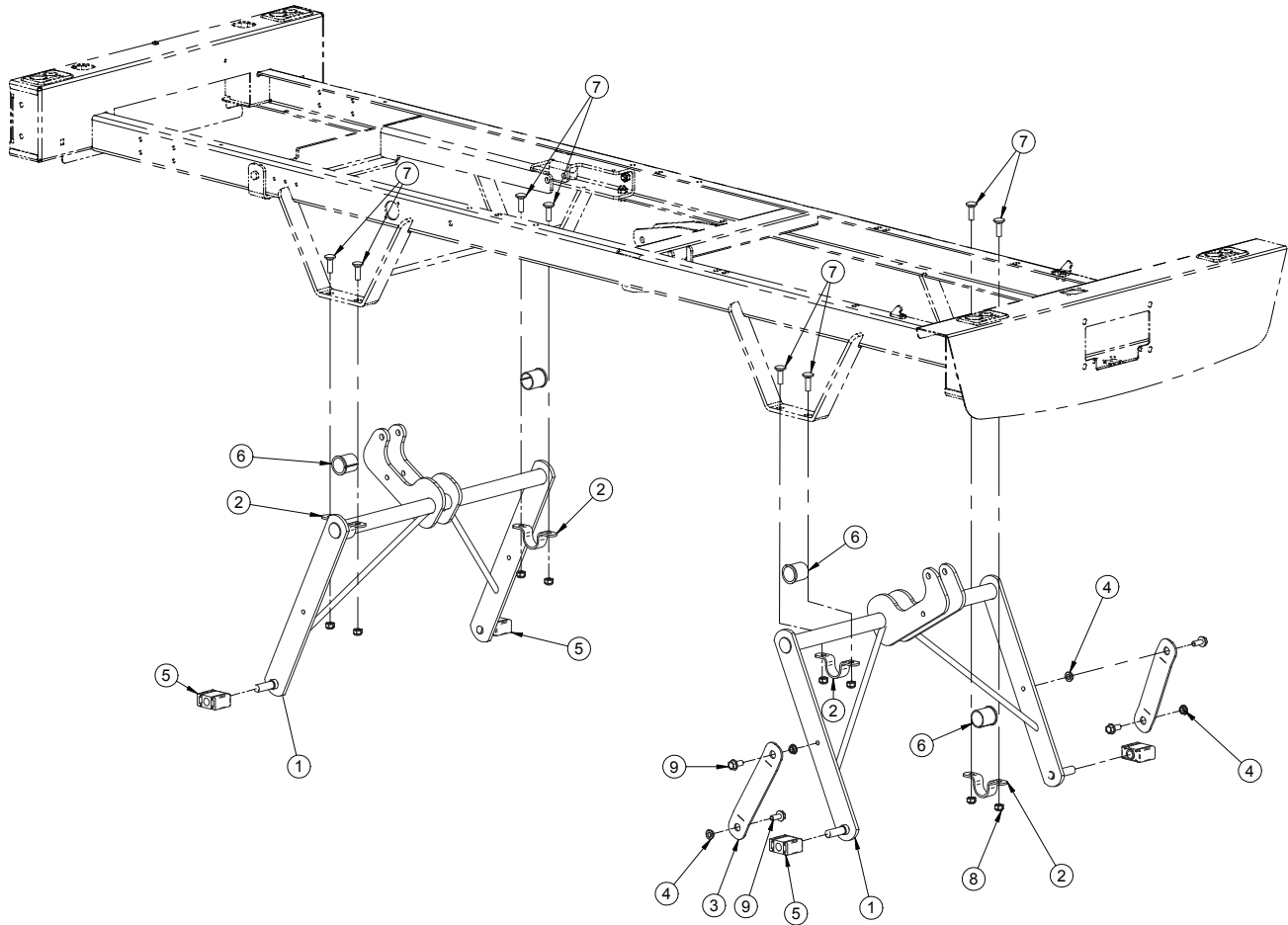
## Fifth Wheel

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Item	Part No.	Part Name	Qty.
1	17-0082W	Torque Shaft	1
2	17-0104Z	Fifth Wheel Support	1
3	17-0124W	Fifth Wheel Spring	1
4	23-0714W	Actuating Lever S.A.	1
5	28-0132Z	Right Fifth Wheel Support S.A.	1
6	28-0133Z	Left Fifth Wheel Support S.A.	1
7	28-0149Z	Torsion Lever	2
8	28-0150Z	Counter Lever	4
9	28-0151W	Clearance Arm	1
10	QE71-0496	5th Wheel Green Sticker	2
11	QE71-0511	Brake Sticker	2
12	QP23-0627-11	Pedal	2
13	QP25-0581	Nylon Sleeve	2
14	QP28-0773	5th Wheel Bushing	1
15	QPA25-0312	Molded Spacer	2
16	QPA25-0340	Spacer	4
17	QRD25-0582	Left Torsion Spring	1
18	QRD25-0585	Right Torsion Spring	1
19	RL5	Fifth Wheel	1
20	VB15A1O32	Bolt 5/16-18 X 1" Gr.5	4
21	VB15A1O50	Bolt 5/16-18 X 2-1/4" Gr.5	1
22	VE30A1O	Nylon Hex. Locknut 5/16"-18	7
23	VV11A1O36	Flat Head Hex Socket Cap Screw 5/16-18 Unc X 1-1/4"	2
24	VV11A1P48	Flat Head Hex Socket Cap Screw 3/8-16 Unc X 2"	1
25	VVB4A1O32	Bolt 5/16-18 X 1" Thread Rolling	4

# Bed Lift Mechanism

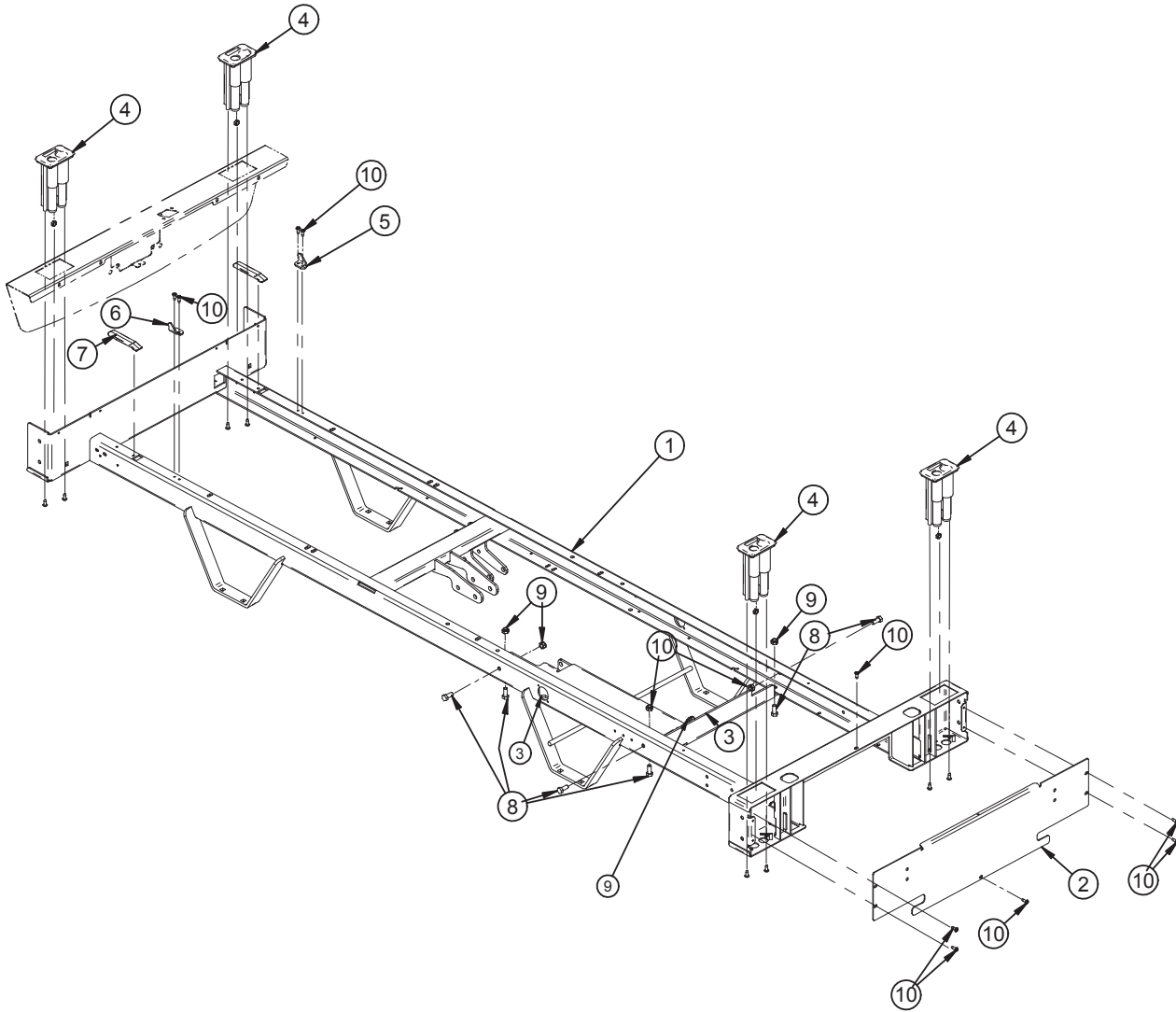
For Reference Only : L23-501W  
Rev. 03



Item	Part No.	Part Name	Qty.
1	23-5017W	Bed Lift Lever S.A.	2
2	23-5177	Lever Clamp	4
3	25-0281P	Stabilizer	2
4	QDF17-0020	Spacer	4
5	QPN-1310P009	Nylon Glide	4
6	QPN-18121	Molded Frame Bushing	4
7	VB35A1O32	Carriage Bolt (Short Neck) 5/16-18 X 1", Gr.5 Z.P.	8
8	VE30A1O	Nylon Hex. Locknut 5/16"-18 Unc Z.P.	8
9	VVB4A1O24	Bolt 5/16-18 X 3/4" Thread Rolling	4

# Short Frame

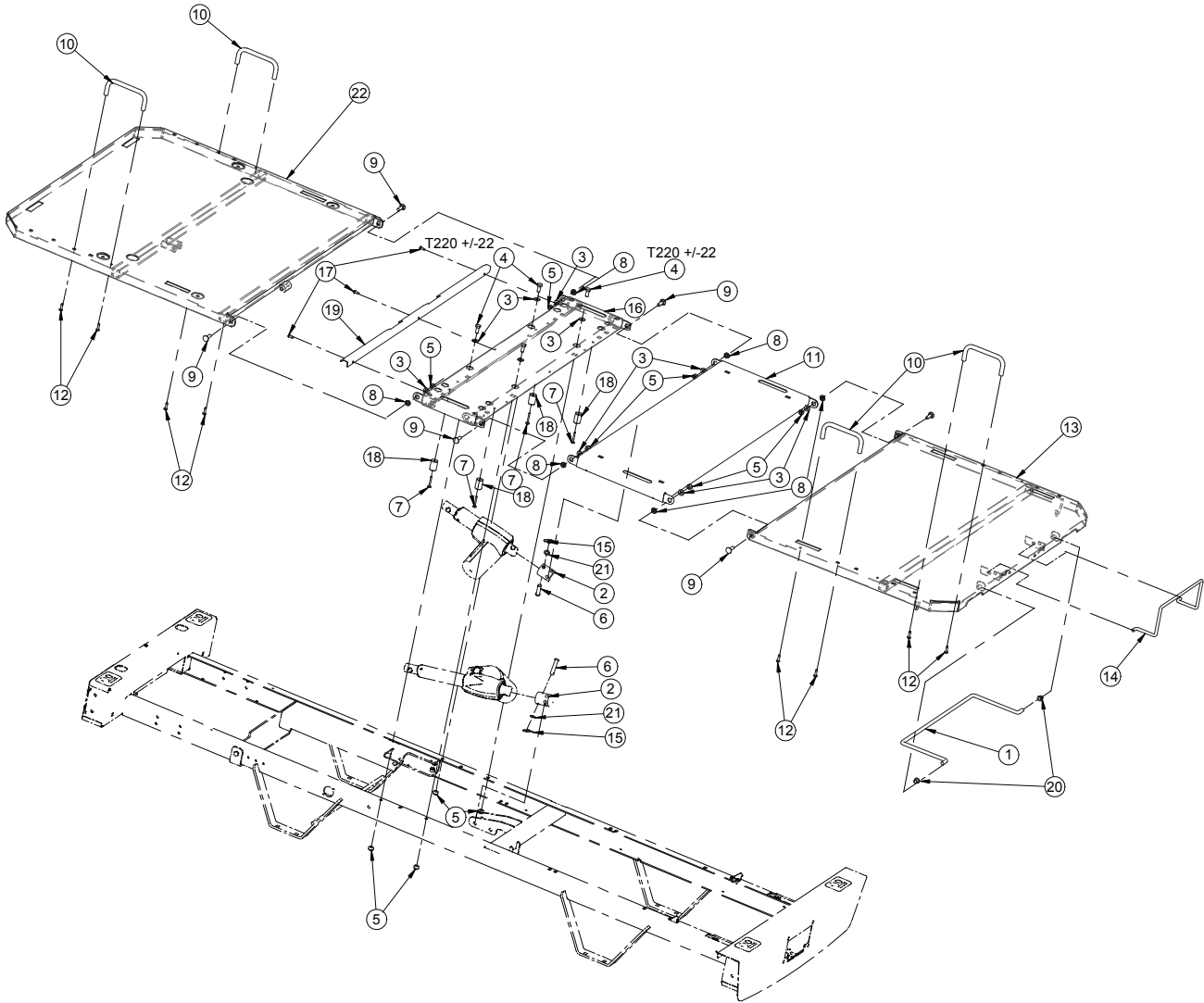
For Reference Only : L23-502W  
Rev. 07



Item	Part No.	Part Name	Qty.
1	23-5001W	Frame S.A.	1
2	23-5011W	Head Cover	1
3	23-5162W	Thigh Motor Support S.A.	1
4	23-5179	I.V. Pole Holder S.A.	4
5	28-0461Z	Right Hook	1
6	28-0468Z	Left Hook	1
7	QP23-0257	Mattress Support Glide	2
8	VB18A1O24	Bolt 5/16-18 X 3/4" Gr.8 Z.P.	6
9	VE30A1O	Nylon Hex. Locknut 5/16"-18	6
10	VV83A9G16	Pan Head Tapping Screw	10

# Mattress Support

For Reference Only : L23-505W  
Rev. 03





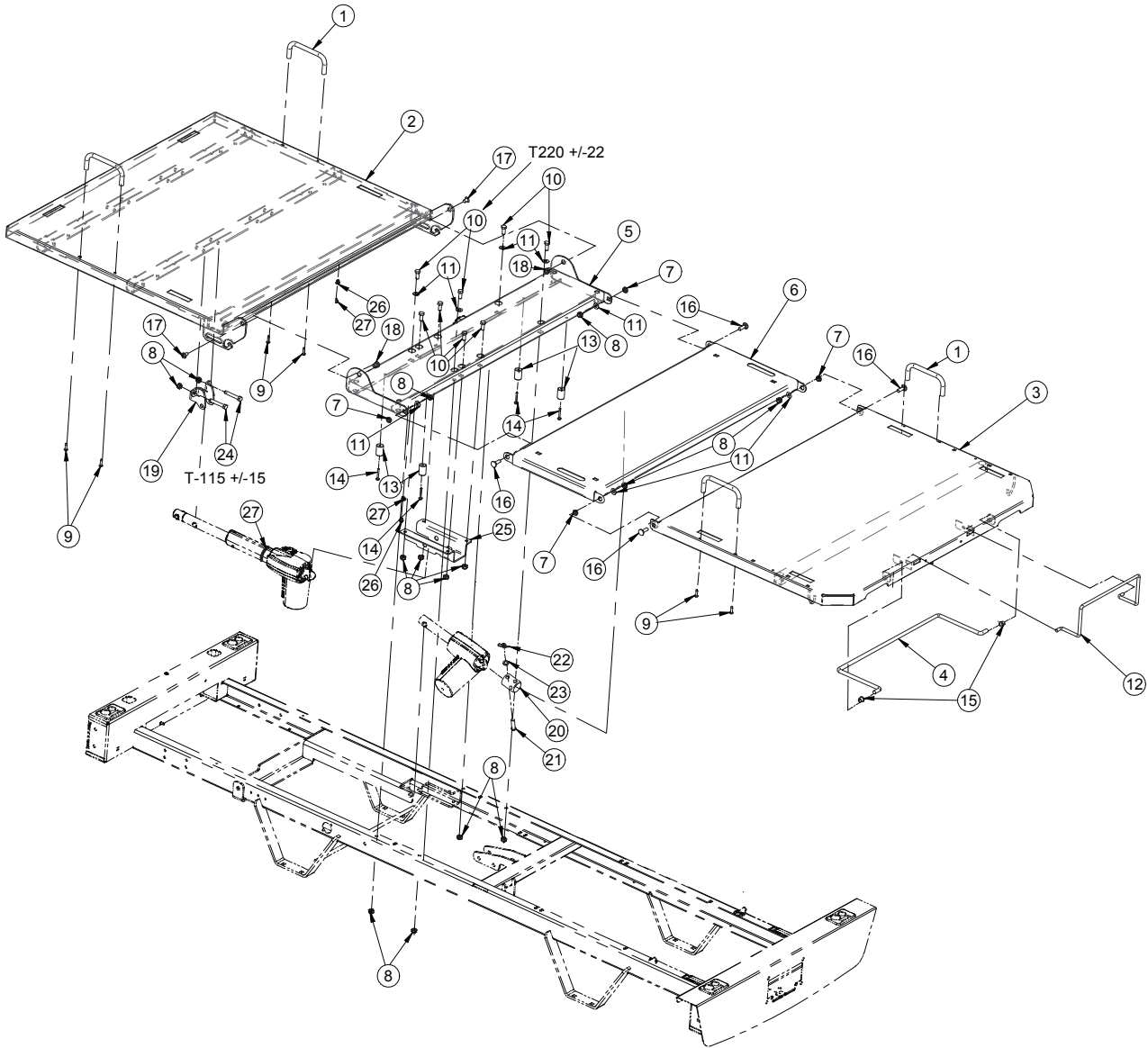
# Mattress Support

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Item	Part No.	Part Name	Qty.
1	23-0704W	Support Rod	1
2	23-5082W	Actuator Angle Adapter	2
3	VW10A10	Flat Washer	10
4	VB18A1O24	Bolt	4
5	VE30A1O	Nut	10
6	VG50A1244	Clevis Pin Dia. 3/8" X 1-3/4" Lg.	2
7	VV83A9G36	Tapping Screw Round Head Phillips Type B #10 X 1-1/4"	4
8	QDF17-0020	Spacer	6
9	VB35A1O32	Carriage Bolt	6
10	QP14034-07	Mattress Retainer	4
11	25-0634P	Thigh Section S.A.	1
12	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
13	23-0705W	Foot Section S.A.	1
14	17-0211W	Foot End Mattress Retainer	1
15	QDF7878	Rue Ring Cotter	2
16	23-0640W	Seat Section S.A.	1
17	VV83A9G16	Tapping Screw PanHead Phillips Type B #10 X 1/2" Z.P.	3
18	23-0815	Centre Section Stop	4
19	25-0274W	Protective Angle	1
20	QPNI2404	Nylon Shoulder Bushing 3/8" Id	2
21	VW10C241002	Nylon Washer 0.380" Id 5/8" Od 1/16"	2
22	23-0091W	Head Section S.A.	1

# Mattress Support - ERGO

For Reference Only : L23-503W  
Rev. 07



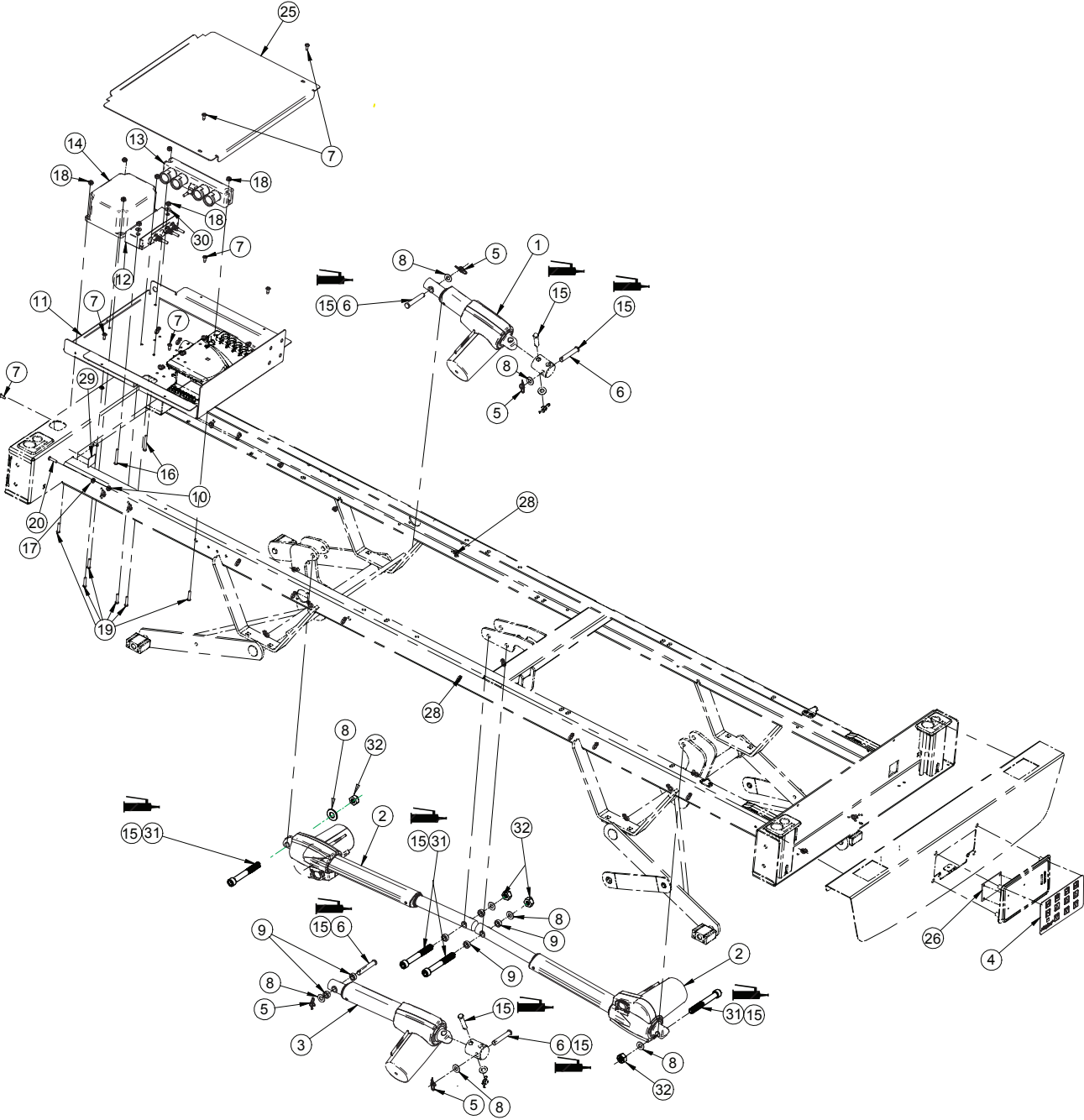
# Mattress Support - ERGO

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Item	Part No.	Part Name	Qty.
1	QP14034-07	Mattress Retainer	4
2	23-5040W	Head Section S.A.	1
3	23-0705W	Foot Section S.A.	1
4	23-0704W	Support Rod	1
5	23-5052W	Center Section S.A.	1
6	25-0634W	Thigh Section S.A.	1
7	QDF17-0020	Spacer	4
8	VE30A1O	Nut	14
9	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
10	VB18A1O24	Bolt	8
11	VW10A10	Flat Washer	12
12	17-0211W	Foot End Mattress Retainer	1
13	23-0815	Centre Section Stop	4
14	VV83A9G36	Tapping Screw Round Head Phillips Type B #10 X 1-1/4"	4
15	QPNI2404	Nylon Shoulder Bushing 3/8" Id	2
16	VB35A1O32	Carriage Bolt	4
17	VV33AS1016	Tapping Screw Pan Head Phillips 5/16" - 18 X 1/2" Lg. S.G.	2
18	23-5086	Head Section Pivot	2
19	23-5141W	Head Actuator Fastening	1
20	23-5082W	Actuator Angle Adapter	1
21	VG50A1244	Clevis Pin Dia. 3/8" X 1-3/4" Lg.	1
22	QDF7878	Rue Ring Cotter	1
23	VW10C241002	Nylon Washer 0.380" Id 5/8" Od 1/16"	1
24	VB15A1O48	Bolt 5/16-18 X 2" Gr.5	2
25	23-5176W	Cpr Triangle Fixation	1
26	QDF5096	Plastic Tie Holder	2
27	QDF9518	Tie Wrap	3

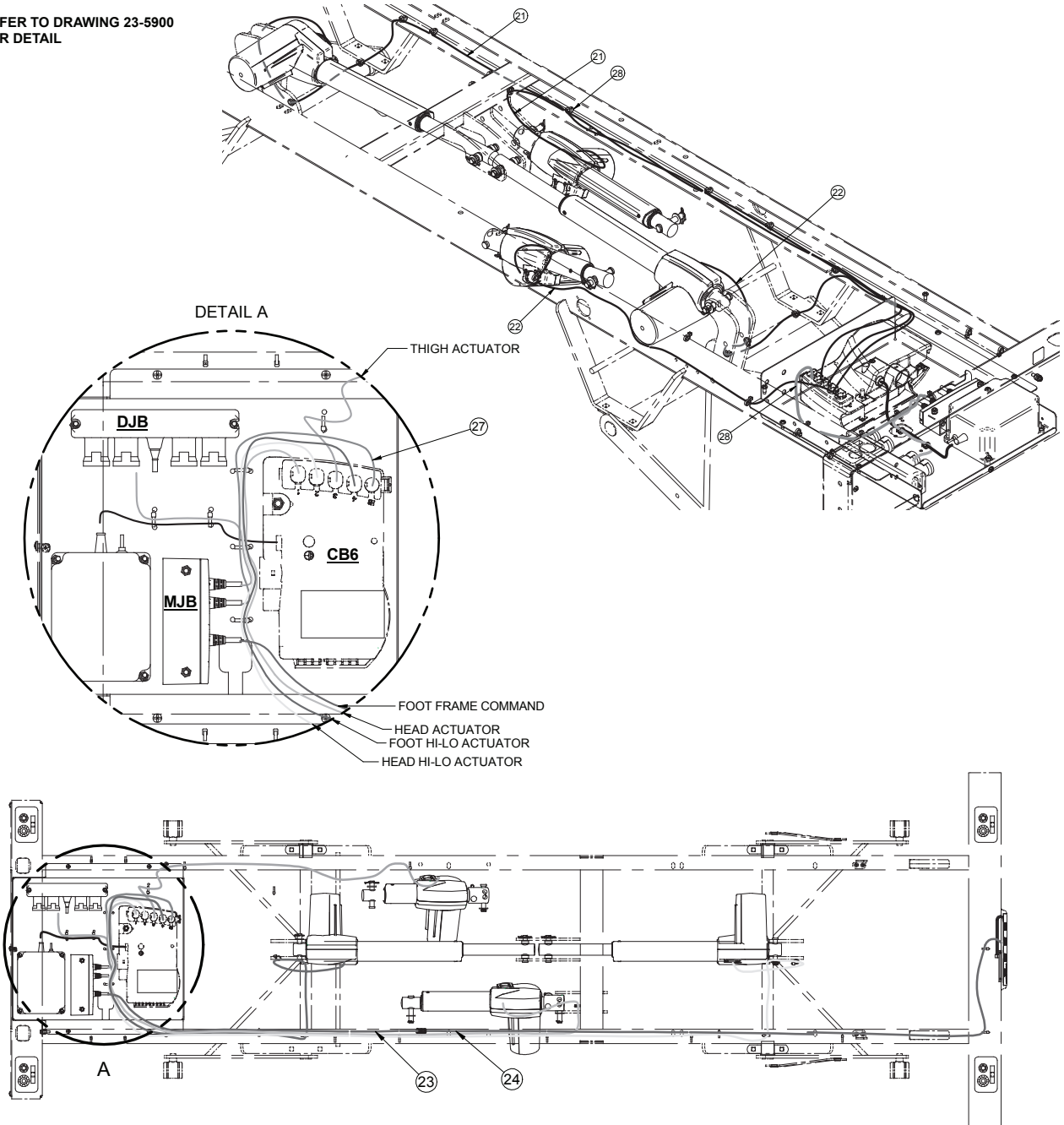
# Electrical List

For Reference Only : L23-509W  
Rev. 02

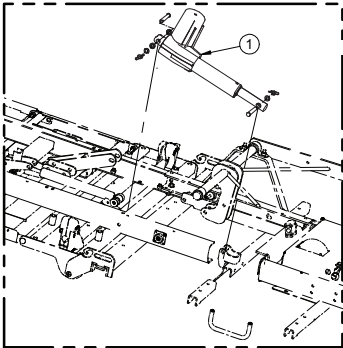
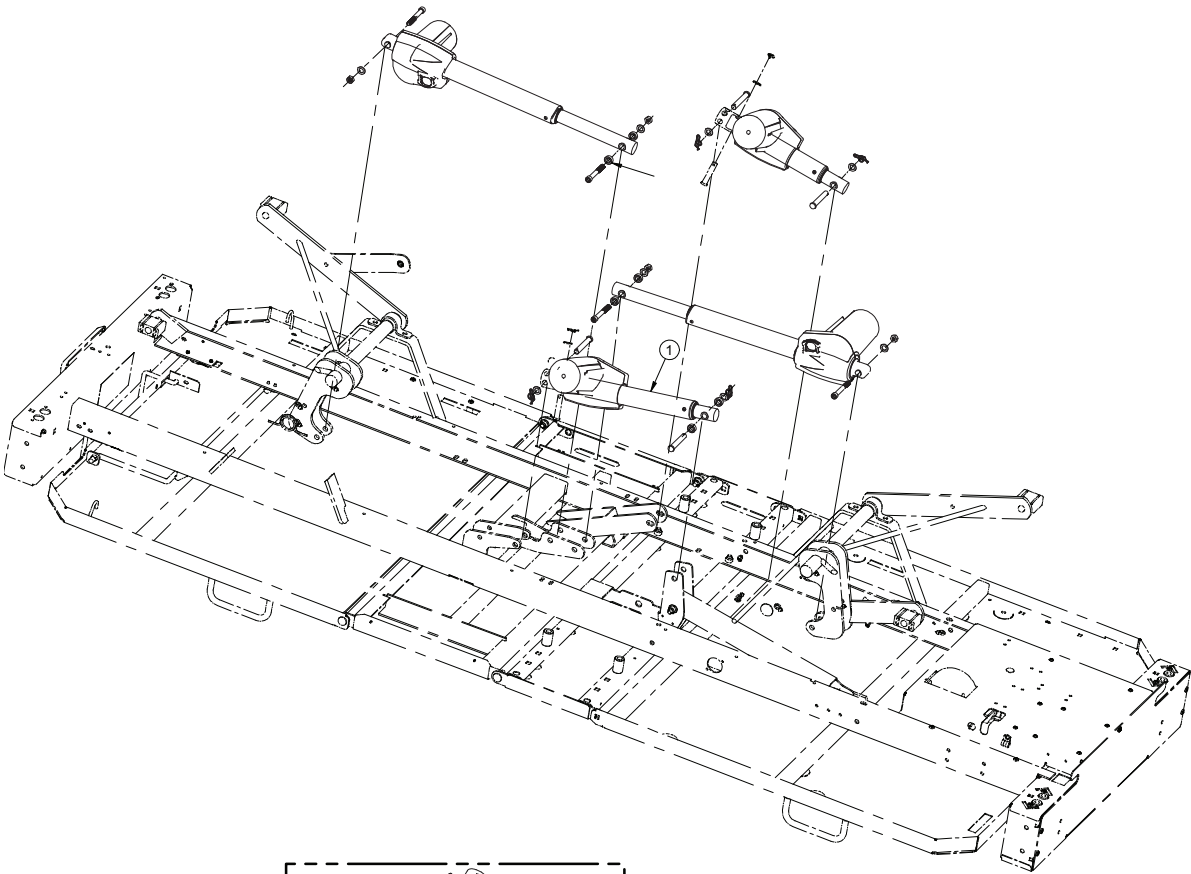


# Electrical List

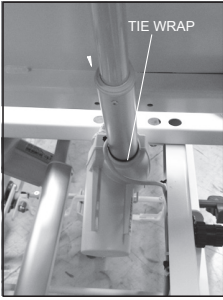
REFER TO DRAWING 23-5900  
FOR DETAIL



# Electrical List



HEAD ACTUATOR POSITIONING - ERGO MODEL



HEAD ACTUATOR WIRING  
ERGO MODEL

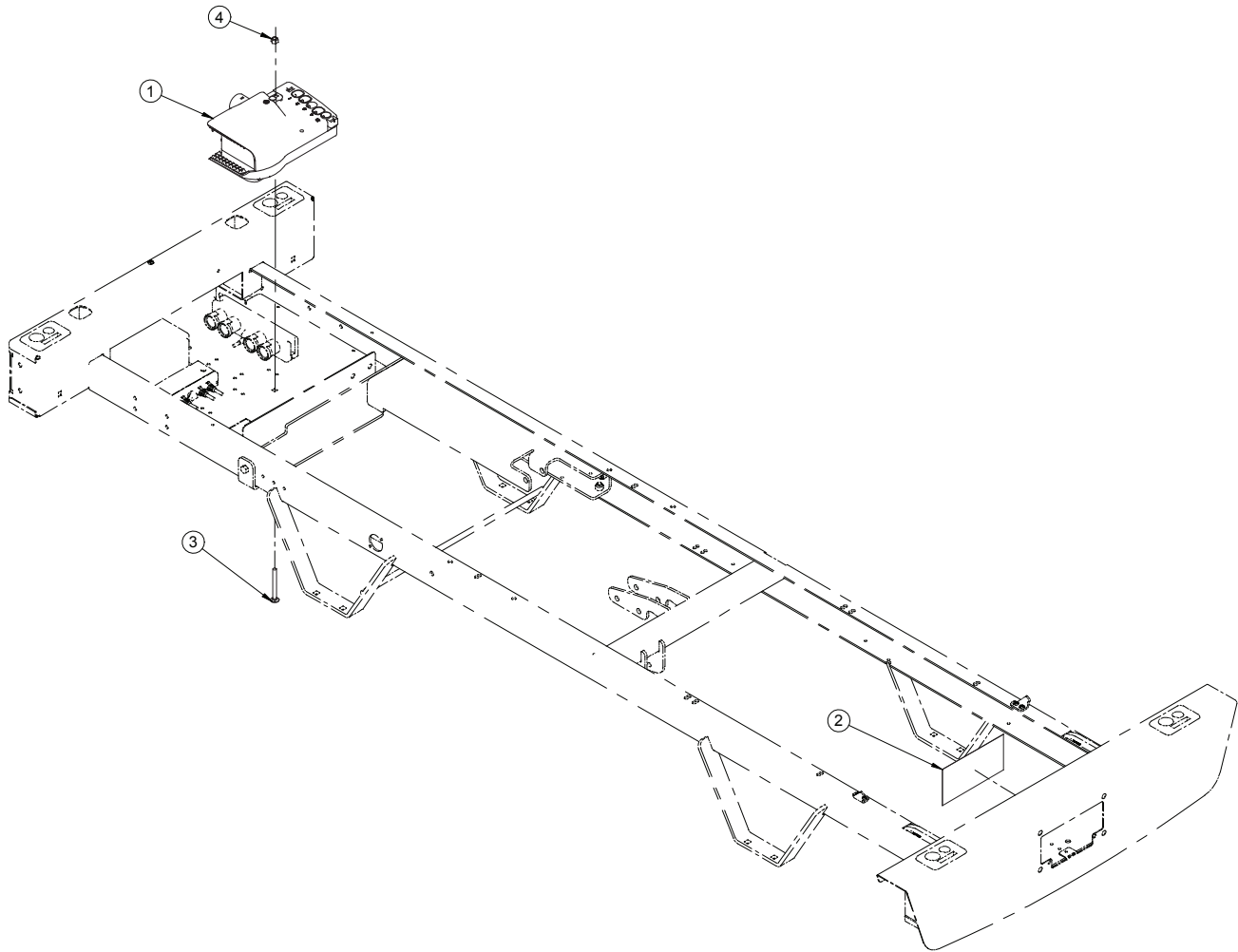
# Electrical List

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Item	Part No.	Part Name	Qty.
1	QDF23-5906	Thigh Actuator	1
2	QDF23-5907	Hi-Lo Actuator	2
3	QDF23-5908	Head Actuator	1
4	QDF23-5918	Foot Membrane	1
5	QDF7878	Rue Ring Cotter Dia	4
6	QDF23-5195Z	Clevis Pin Dia. 3/8" X 2-1/4" Lg. Gr.5	4
7	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	7
8	VW10C122402	Nylon Washer Id 0.375", Od 3/4". 1/16" Thick	8
9	23-5136	Nylon Spacer	6
10	VE30A0G	Nylon Hex. Locknut #10-32	1
11	23-5015P	Electronic Case	1
12	QDF23-5905	Mjb - Modular Junction Box	1
13	QDF23-5904	Junction Box	1
14	QDF23-5903	Battery Box Ba18	1
15	M0019	OG2 Grease	1
16	VV33A0G40	Machine Screw Pan Head Phillips 10-32 X 1-1/2" Lg.	2
17	VE80A0G	Hex. "K-Lok" Locknut #10-32 Z.P.	1
18	VE30A0G	Nylon Hex. Locknut #10-32	8
19	VV33A0G28	Machine Screw Pan Head Phillips 10-32 X 7/8" Lg.	6
20	VV33A0G24	Machine Screw Pan Head Phillips 10-32 X 3/4" Lg.	1
21	QDF23-5915	Long Motor Cable	2
22	QDF23-5914	Short Motor Cable	2
23	QDF23-5936	Foot Control Extension	1
24	QDF23-5917	Foot Control Cable	1
25	23-5016W	Electronic Case Cover	1
26	QDF23-5949	Foot Control Board	1
27	QDF23-5916	Modular Cable	1
28	QDF9518	Tie Wrap	29
29	QE71-0572	Ground Sticker	1
30	VW10A06	Flat Washer	2
31	VD61A101248-S	Shoulder Bolt 3/8 x 2"	4
32	VE30A1O	Nylon Hex. Locknut 5/16-18	4

# 120V Electric System Without Auto Contour

For Reference Only : OL235050  
Rev. 01



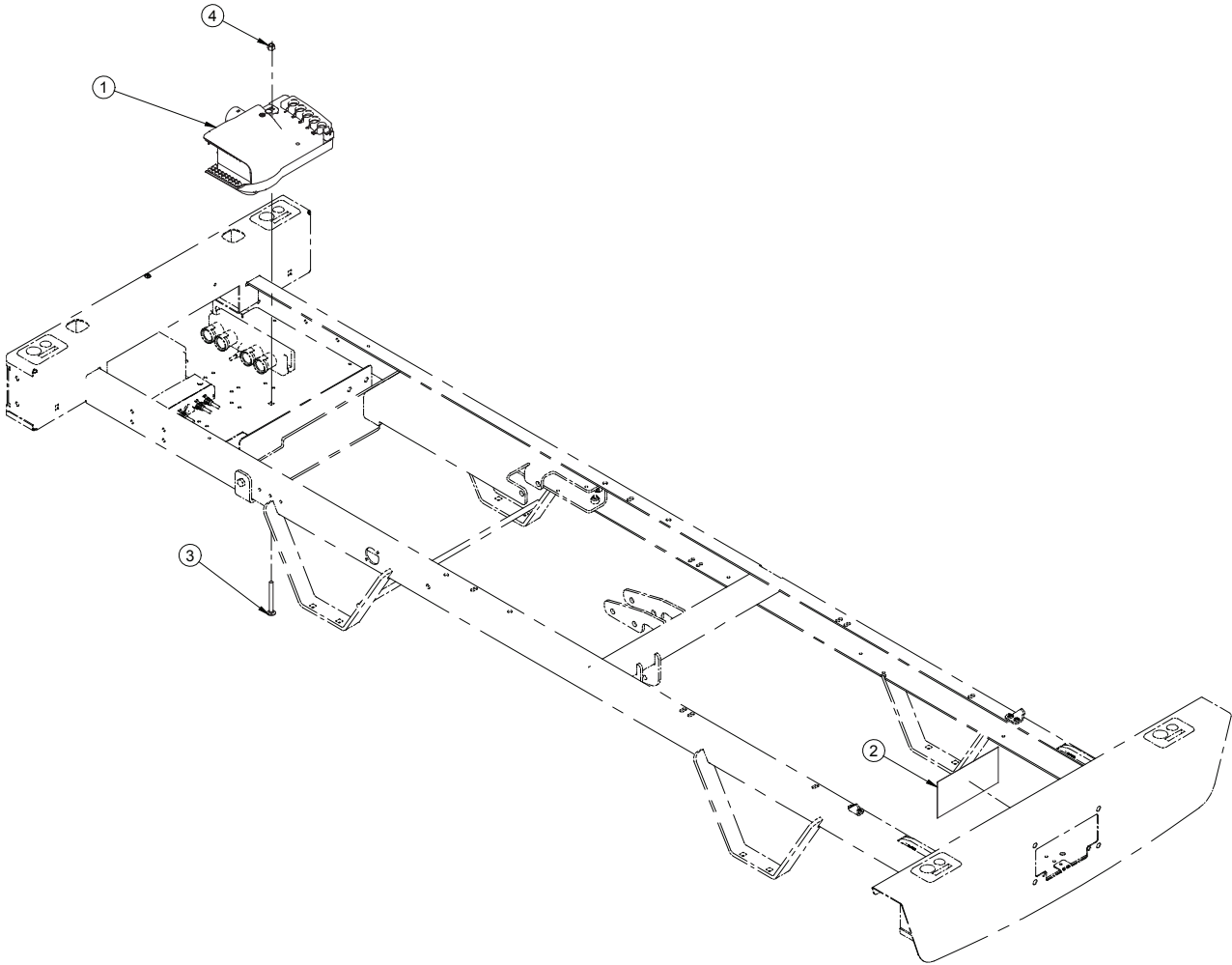
Item	Part No.	Part Name	Qty.
1	QDF23-5902	120 V Control Box Without Autocontour	1
2	QE23-5139	Csa Sticker 120V	1
3	VB35A1N80	Carriage Bolt	1
4	VE30A1N	Nylon Hex. Locknut 1/4-20	1



# 120V Electric System With Auto Contour

For Reference Only : OL235051

Rev. 01

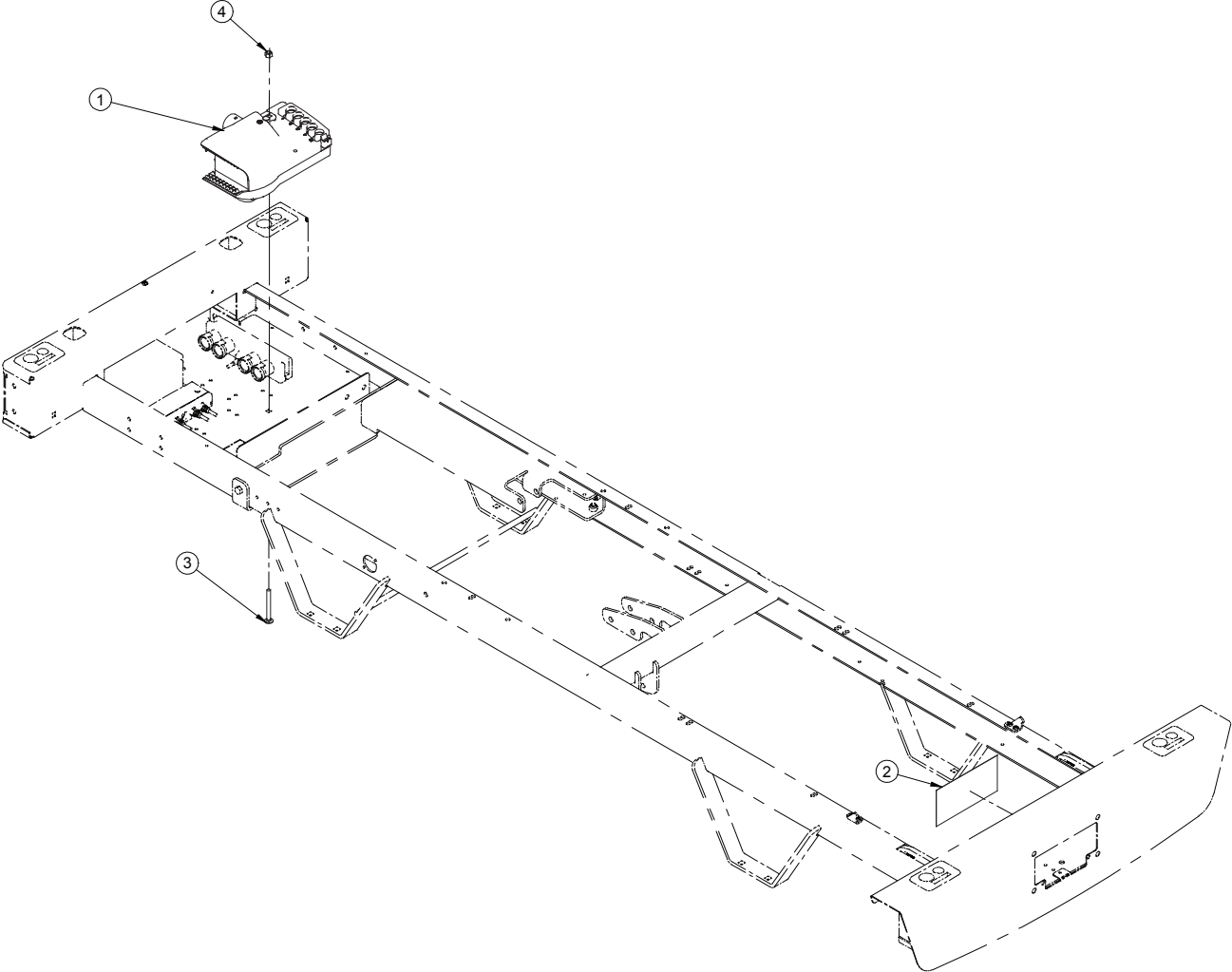


Item	Part No.	Part Name	Qty.
1	23-5955	120 V Control Box With Autocontour	1
2	QE23-5139	Csa Sticker 120V	1
3	VB35A1N80	Carriage Bolt	1
4	VE30A1N	Nylon Hex. Locknut 1/4-20	1

# 230V Electric System Without Auto Contour

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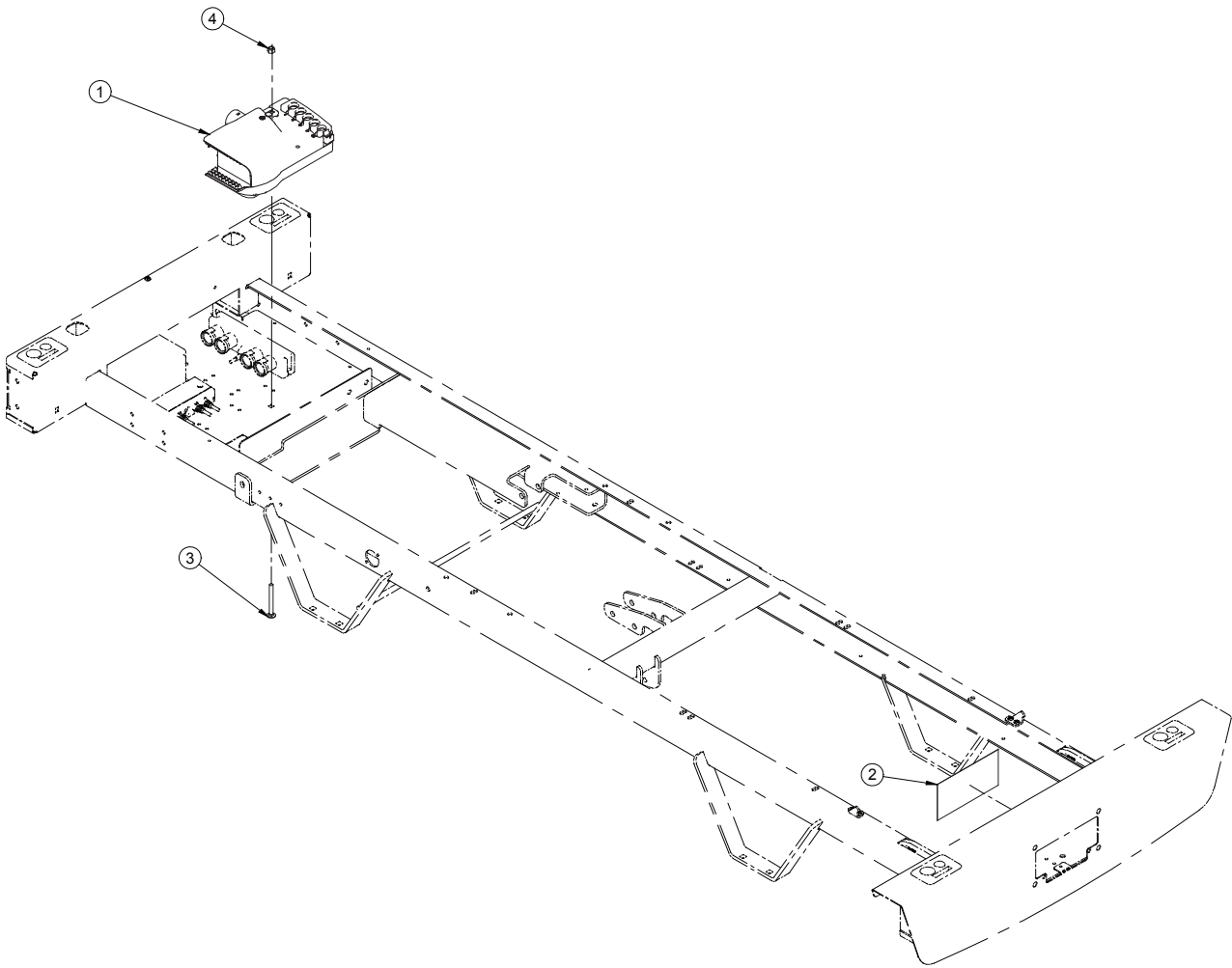
For Reference Only : OL235052  
 Rev. 01



Item	Part No.	Part Name	Qty.
1	QDF23-5933	230 V Control Box Without Autocontour	1
2	QE23-5140	CSA Sticker 230V	1
3	VB35A1N80	Carriage Bolt	1
4	VE30A1N	Nylon Hex. Locknut 1/4-20	1

# 230V Electric System With Auto Contour

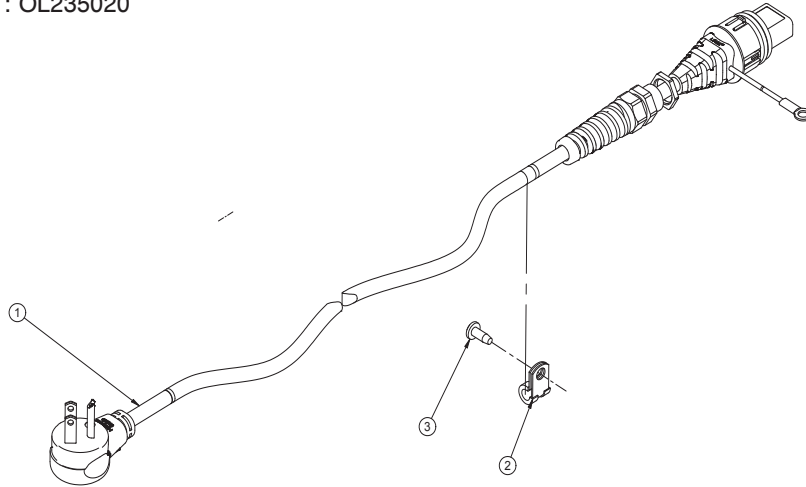
For Reference Only : OL235053  
Rev. 01



Item	Part No.	Part Name	Qty.
1	23-5956	230 V Control Box With Autocontour	1
2	QE23-5140	CSA Sticker 230V	1
3	VB35A1N80	Carriage Bolt	1
4	VE30A1N	Nylon Hex. Locknut	1

## Power Cord - North American Grade Plug

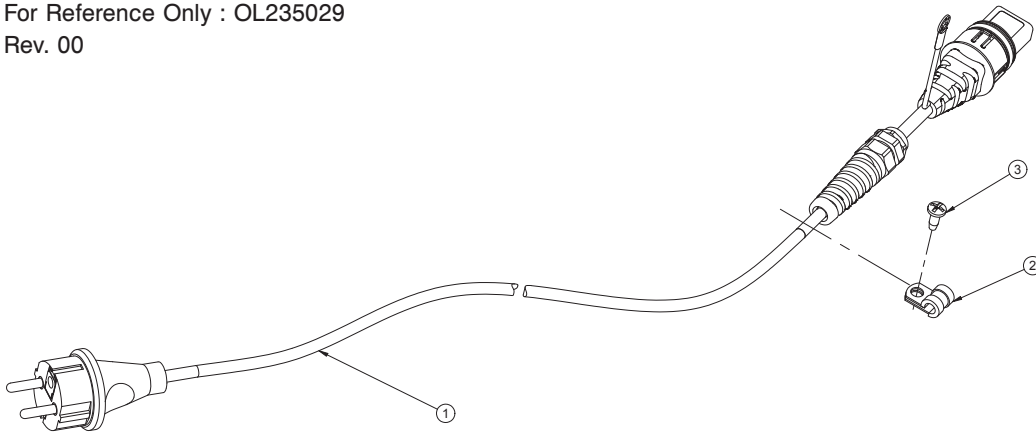
For Reference Only : OL235020  
Rev. 00



Item	Part No.	Part Name	Qty
1	QDF23-5913	120 V - North American plug	1
2	QDF2155	Steel Cable Clamp 1/4 ZP	1
3	VV83A9G16	B Phil Pan HD Tap Screw 10 x 1/2	1

## Power Cord - Straight Molded Continental Europe Grade Plug

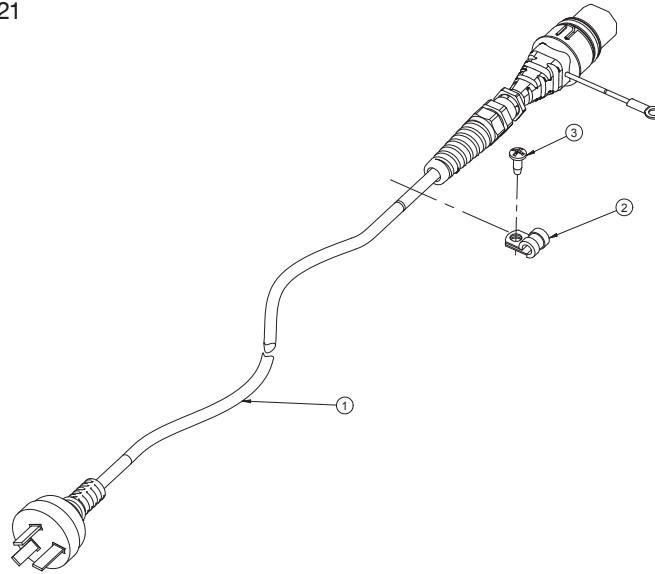
For Reference Only : OL235029  
Rev. 00



Item	Part No.	Part Name	Qté
1	QDF23-5930	Straight Molded Continental Europe Hospital Grade Plug	1
2	QDF2155	Steel Cable Clamp 1/4 ZP	1
3	VV83A9G16	B Phil Pan HD Tap Screw 10 x 1/2	1

## Power Cord - Argentina Grade Plug

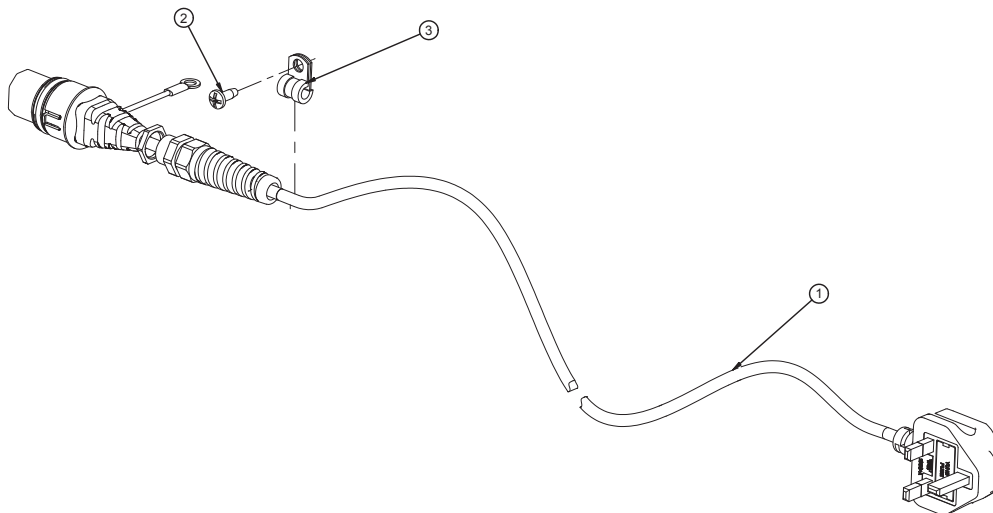
For Reference Only : OL235021  
Rev. 00



Item	Part No.	Part Name	Qty
1	QDF23-5923	Hospital grade plug - Argentina	1
2	QDF2155	Steel Cable Clamp 1/4 ZP	1
3	VV83A9G16	B Phil Pan HD Tap Screw 10 x 1/2	1

## Power Cord - Molded UK Grade Plug

For Reference Only : OL235022 Rev. 00

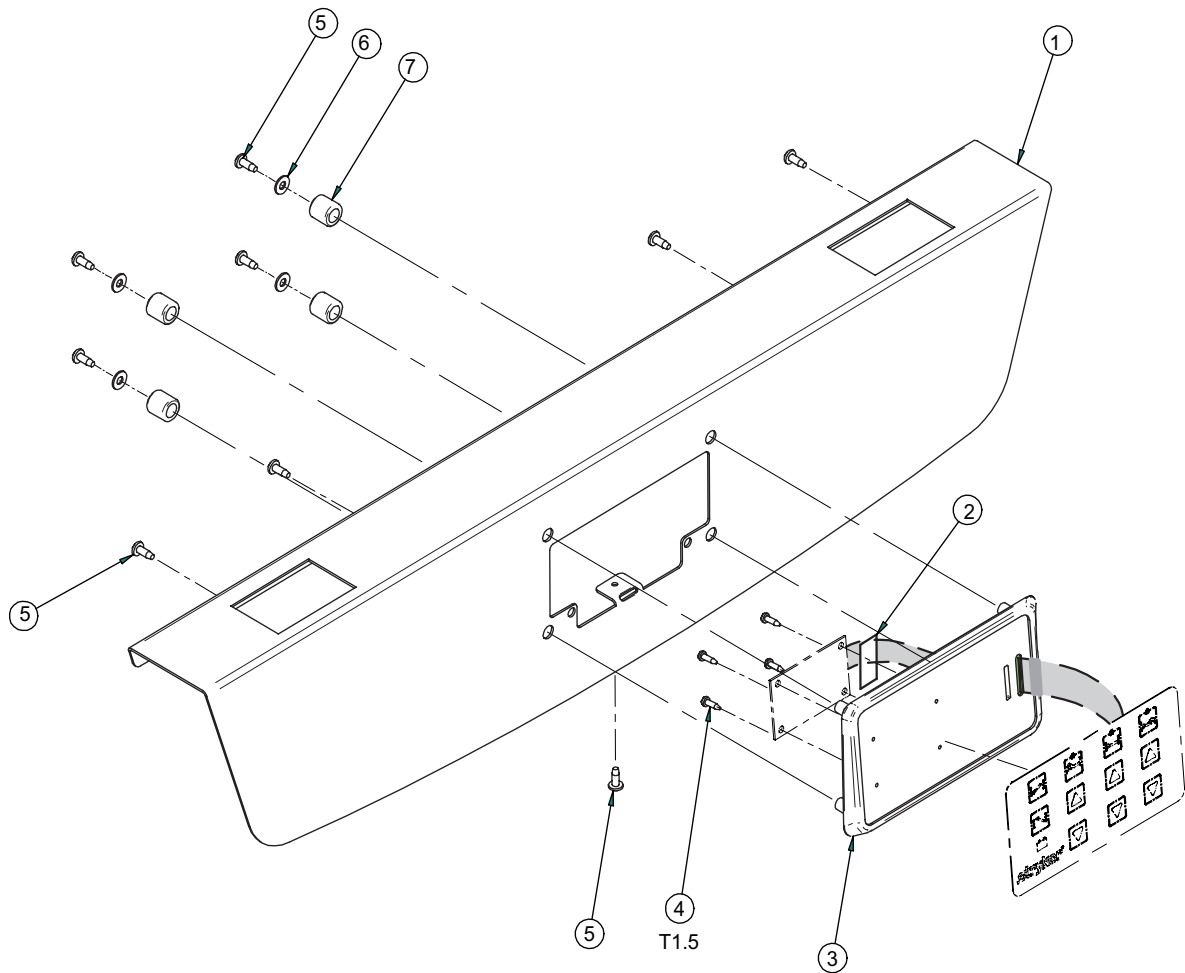


Item	Part No.	Part Name	Qté
1	QDF23-5932	Molded UK Grade Plug	1
2	QDF2155	Steel Cable Clamp 1/4 ZP	1
3	VV83A9G16	B Phil Pan HD Tap Screw 10 x 1/2	1

[Retour à la table des matières](#)

# Foot End Control Panel - Half Length

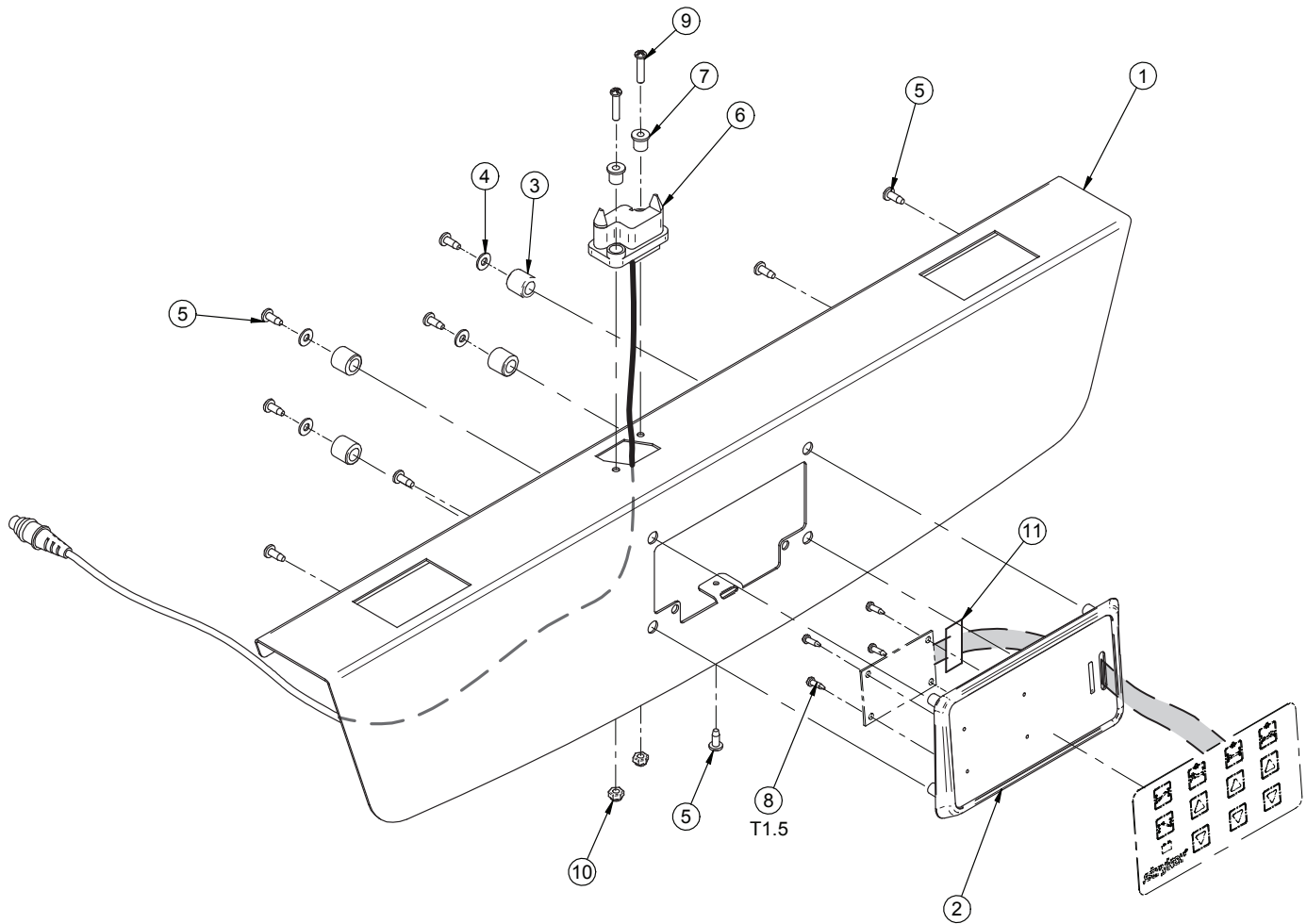
For Reference Only : OL235012W  
Rev. 03



Item	Part No.	Part Name	Qty.
1	23-5012W	Foot Casing Cover	1
2	QDF7826	3M Adhesive Tape #950 X 1"	1
3	QP23-5090-07	Nurse Control Board	1
4	VV23A9C12HL	Tapping Screw Pan Head Phillips Type B #6 X 3/8" Z.P.	4
5	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	9
6	VW10A06	Flat Washer #10	4
7	VW60C201320	Nylon Spacer	4

# Foot End and Foot Board Control Panels - Half Length

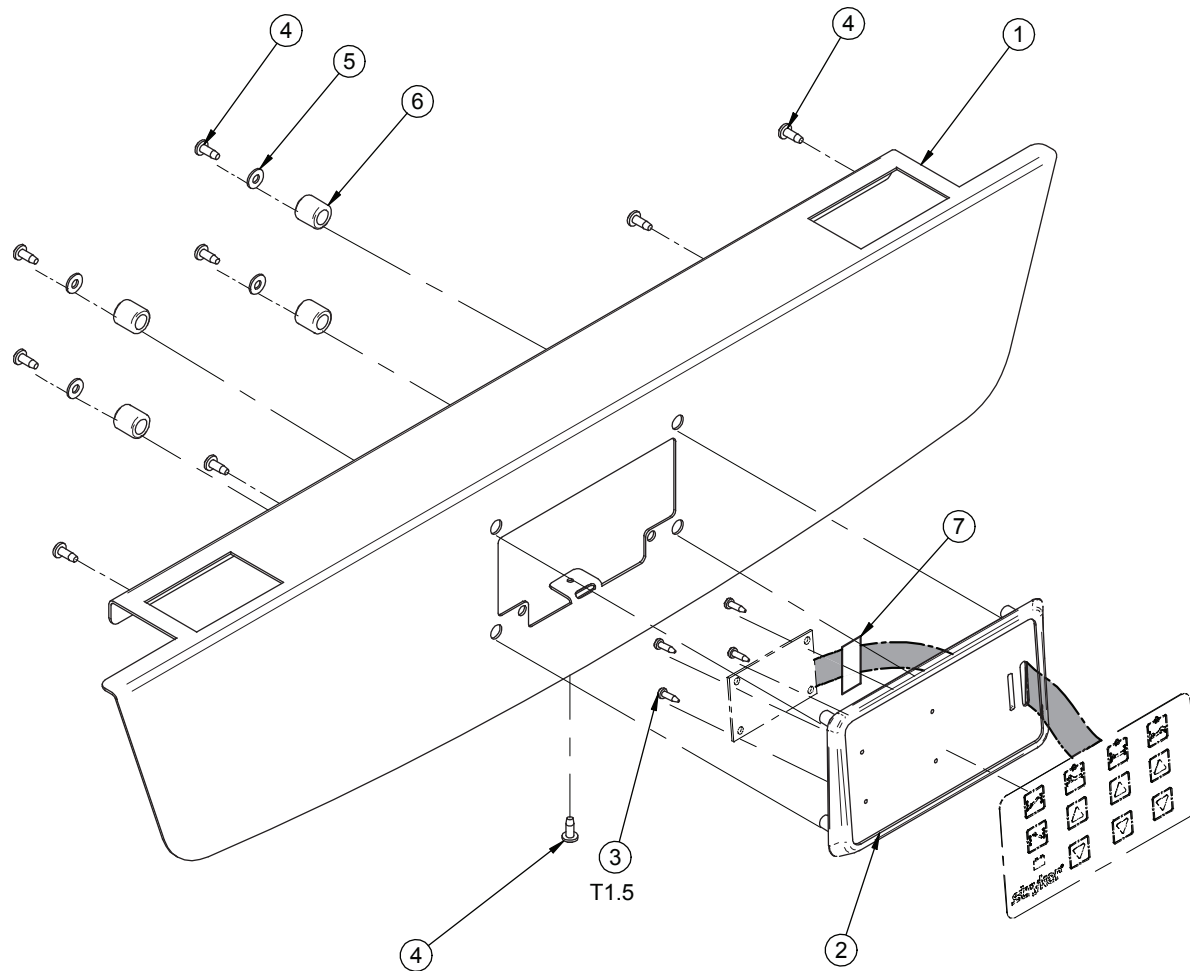
For Reference Only : OL235013W  
Rev. 05



Item	Part No.	Part Name	Qty.
1	23-5098W	Foot Casing Cover With Connector	1
2	QP23-5090-07	Nurse Control Board	1
3	VW60C201320	Nylon Spacer	4
4	VW10A06	Flat Washer #10	4
5	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	9
6	QDF23-5921	Z Plug Cable	1
7	17-0014Z	Connector Bushing	2
8	VV23A9C12HL	Tapping Screw Pan Head Phillips Type B #6 X 3/8" Z.P.	4
9	VV33A0G28	Machine Screw Pan Head Phillips 10-32 X 7/8" Lg.	2
10	VE30A0G	Nylon Hex. Locknut	2
11	QDF7826	3M Adhesive Tape #950 X 1"	1

# Foot End Control Panel - Full Length

For Reference Only : OL235014W  
Rev. 03

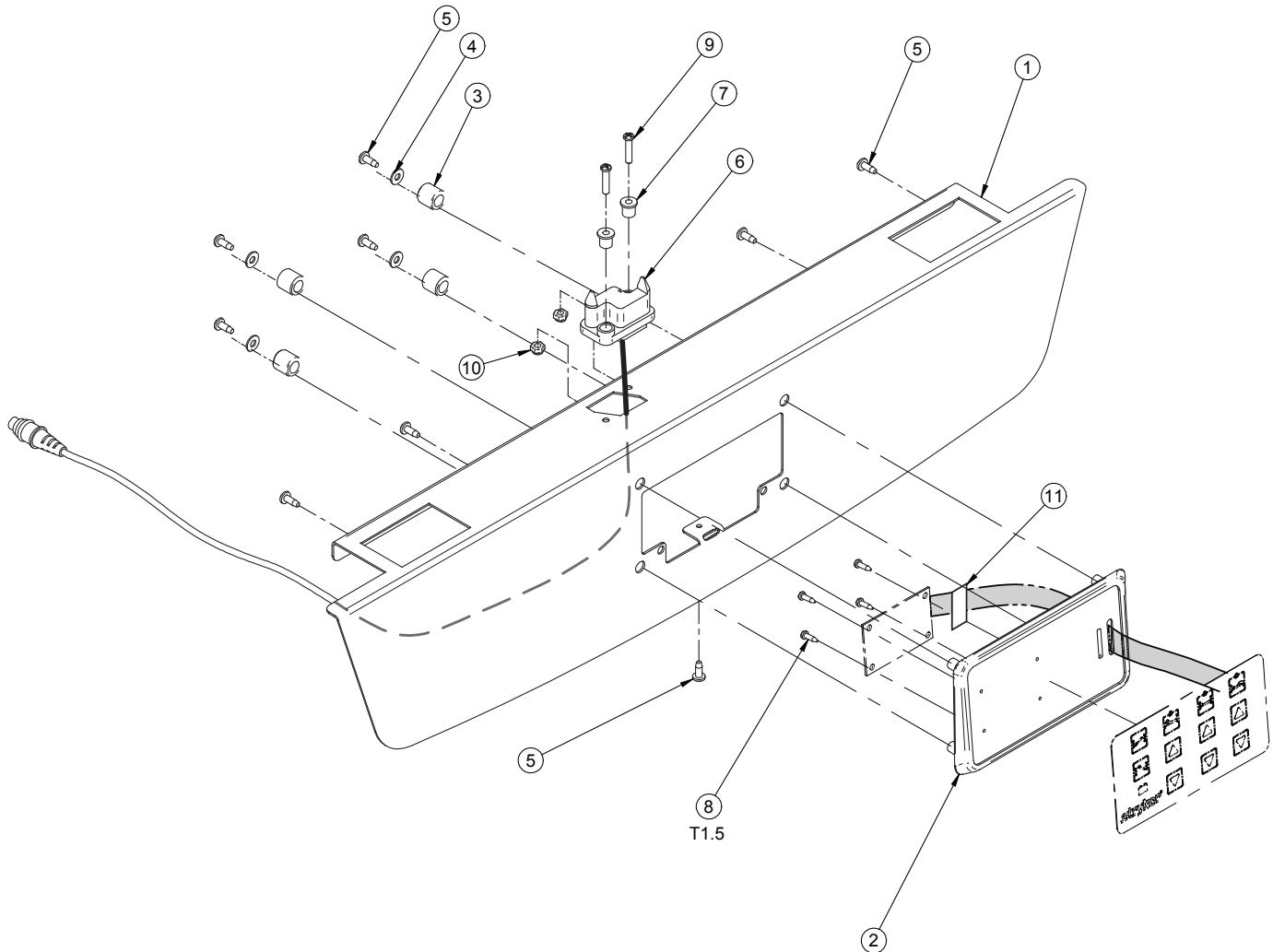


Item	Part No.	Part Name	Qty.
1	23-5099W	Foot Casing Cover	1
2	QP23-5090-07	Nurse Control Board	1
3	VV23A9C12HL	Tapping Screw Pan Head Phillips Type B #6 X 3/8" Z.P.	4
4	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	9
5	VW10A06	Flat Washer #10	4
6	VW60C201320	Nylon Spacer	4
7	QDF7826	3M Adhesive Tape #950 X 1"	1



# Foot End and Foot Board Control Panels - Full Length

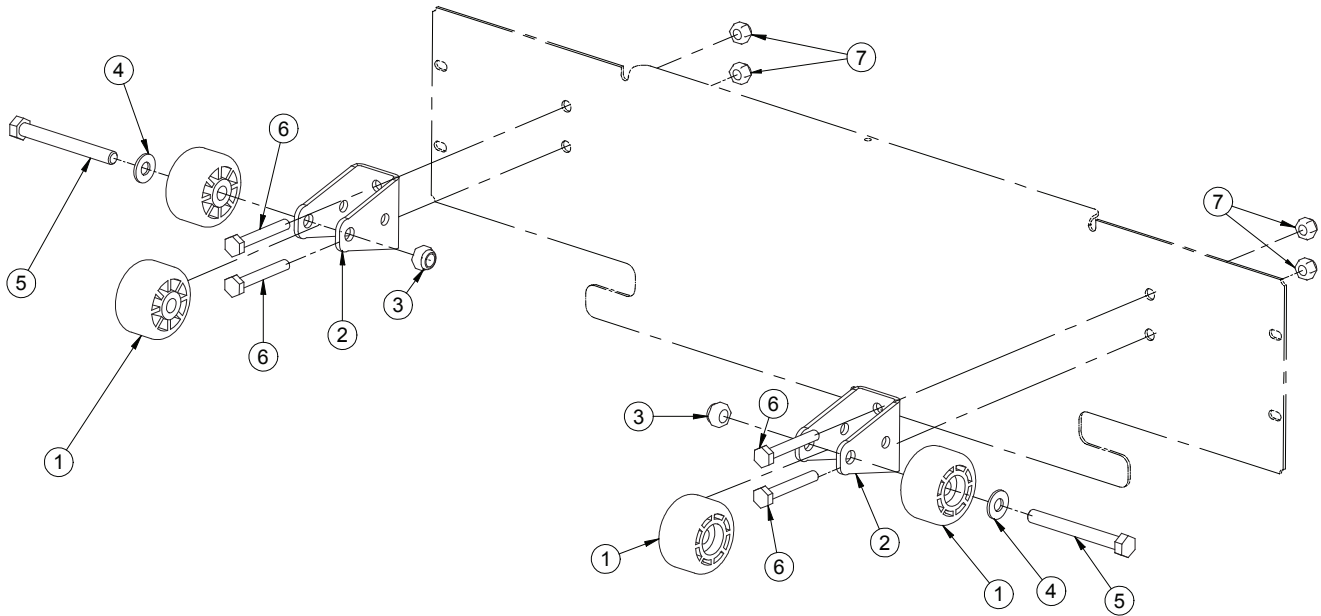
For Reference Only : OL235015W  
Rev. 02



Item	Part No.	Part Name	Qty.
1	23-5100W	Foot Casing Cover With Connector	1
2	QP23-5090-07	Nurse Control Board	1
3	VW60C201320	Nylon Spacer	4
4	VW10A06	Flat Washer #10	4
5	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	9
6	QDF23-5921	Z Plug Cable	1
7	17-0014Z	Connector Bushing	2
8	VV23A9C12HL	Tapping Screw Pan Head Phillips Type B #6 X 3/8" Z.P.	4
9	VV33A0G28	Machine Screw Pan Head Phillips 10-32 X 7/8" Lg.	2
10	VE30A0G	Nylon Hex. Locknut	2
11	QDF7826	3M Adhesive Tape #950 X 1"	1

# Bumper with Two Casters

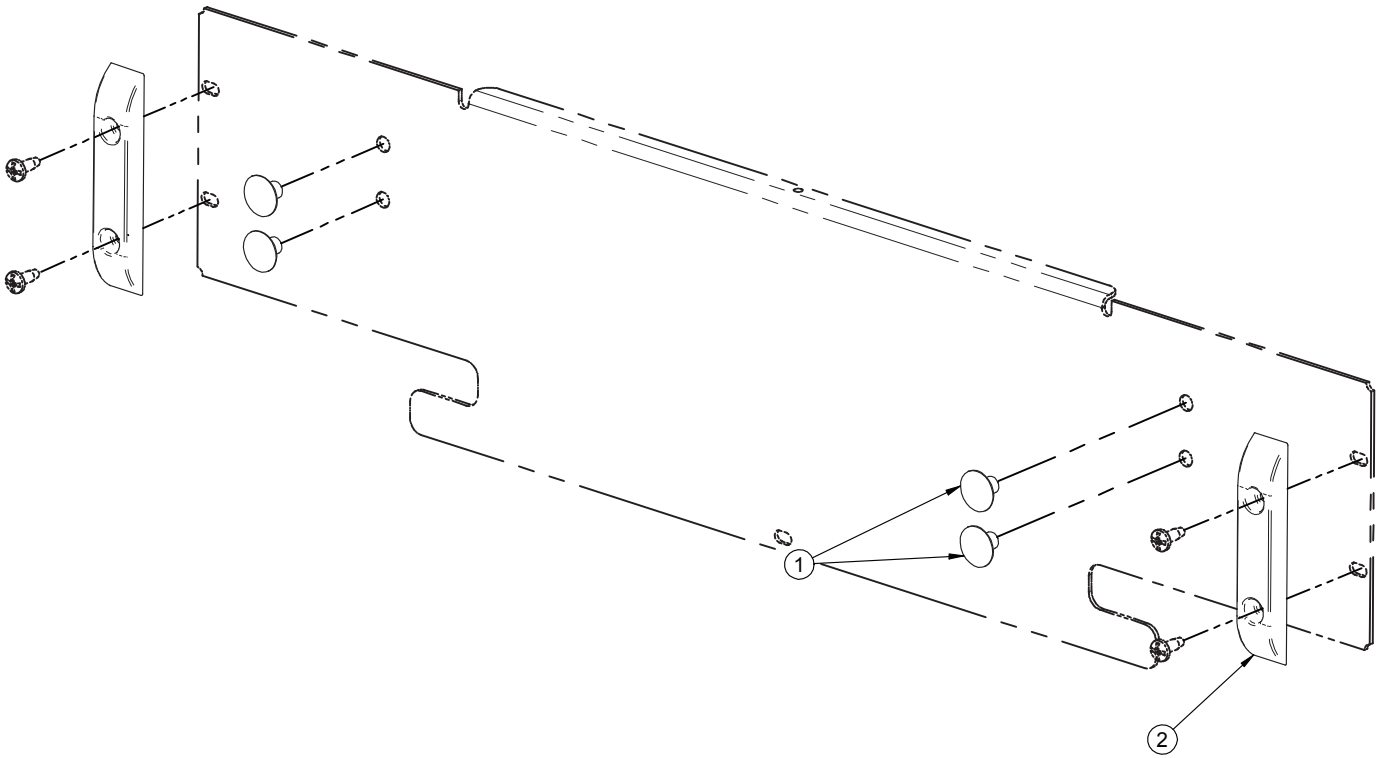
For Reference Only : OL235019W  
Rev. 02



Item	Part No.	Part Name	Qty.
1	QPC27-2059-05	Caster For Head Lever Arm	4
2	23-0798W	Single Bumper Support	2
3	VE30A1O	Nylon Hex. Locknut	2
4	VW10A10	Flat Washer	2
5	VB15A1O54	Bolt 5/16-18 X 2-3/4" Fully Threaded	2
6	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	4
7	VE30A1N	Nylon Hex. Locknut	4

# Short Bed Bumper

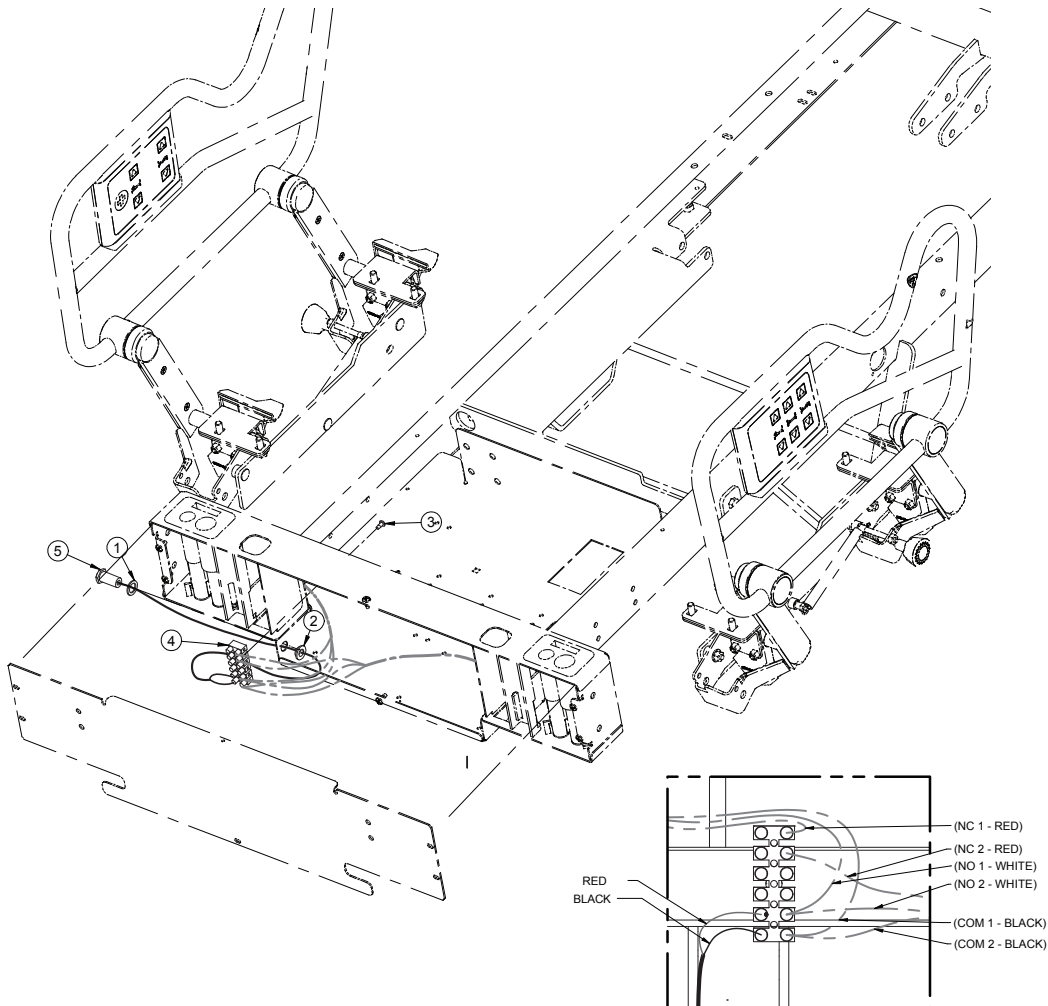
For Reference Only : OL230244  
Rev. 00



Item	Part No.	Part Name	Qty.
1	QPPE1207	Plastic Cap 1/4" Diam.	4
2	QP23-0776	Glider	2

# Nurse Call Normally Open (N.O.)

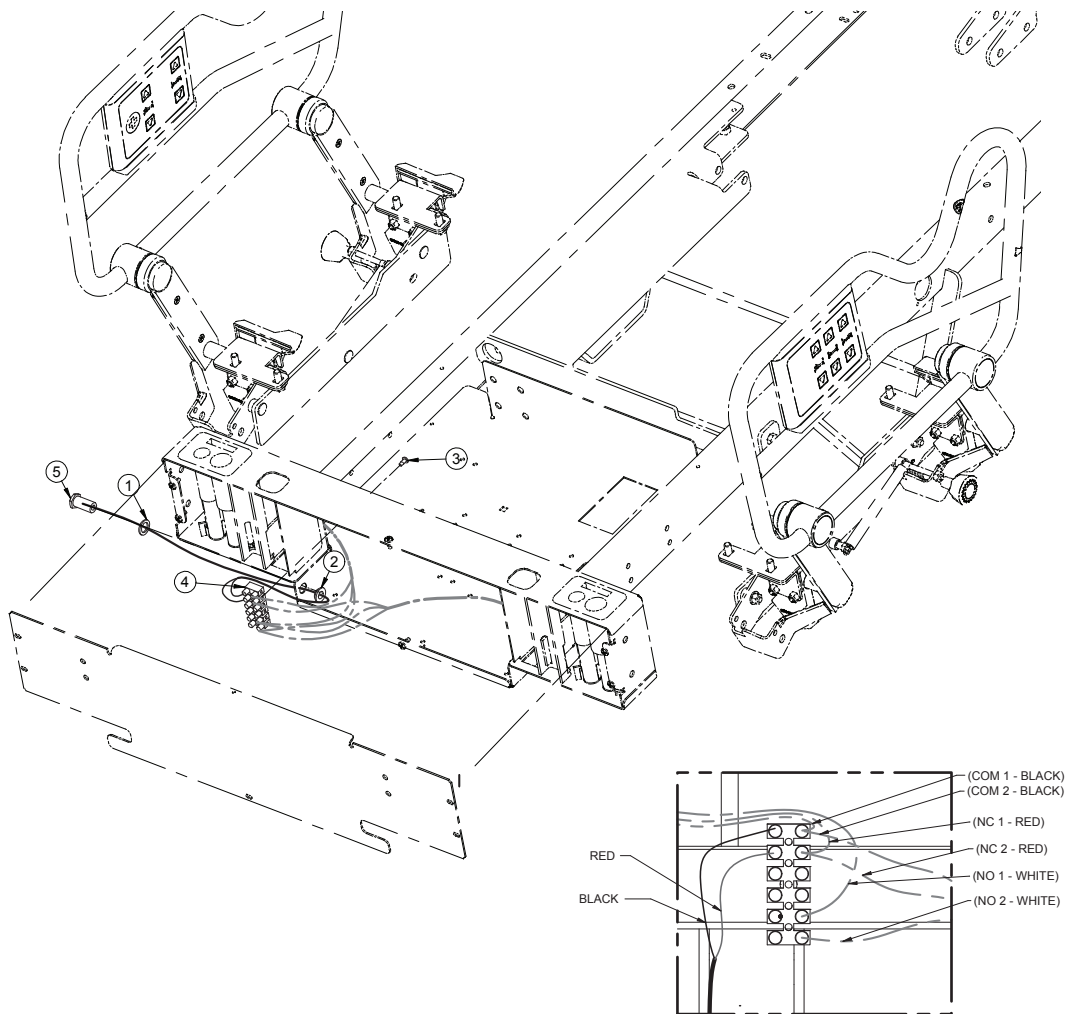
For Reference Only : OL235017  
Rev. 01



Item	Part No.	Part Name	Qty.
1	VW10C162402	Nylon Washer 0.505" Int. X 3/4" Ext. 1/16" Thick	1
2	VW60C122408	Nylon Spacer Washer	1
3	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	1
4	QDF9012	Connection Terminal (6X2)	1
5	QDF23-0530	1/4 Normally Open (N.O.) Phono Plug Cable	1

# Nurse Call Normally Closed (N.C.)

For Reference Only : OL235018  
Rev. 02

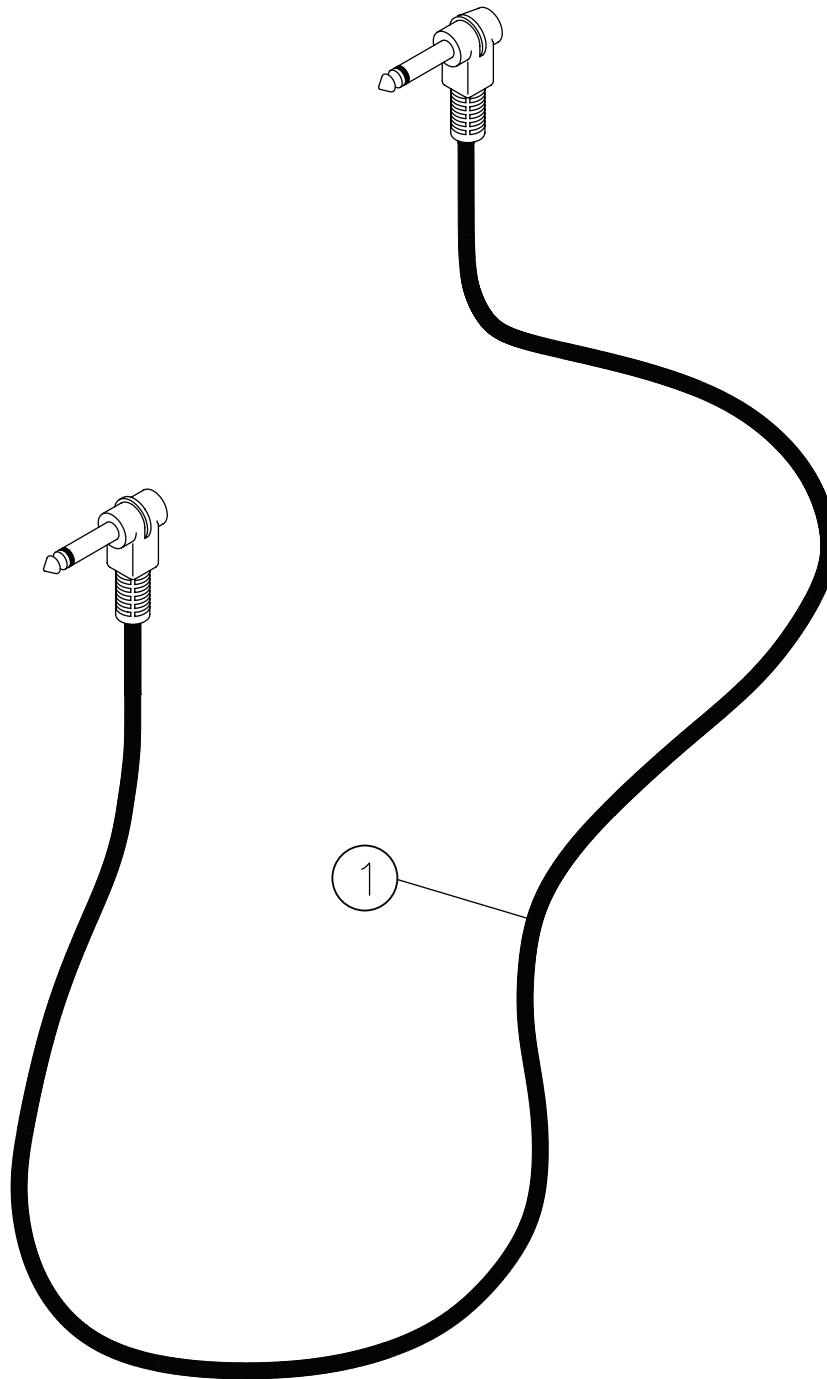


Item	Part No.	Part Name	Qty.
1	VW10C162402	Nylon Washer 0.505" Int. X 3/4" Ext. 1/16" Thick	1
2	VW60C122408	Nylon Spacer Washer	1
3	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	1
4	QDF9012	Connection Terminal (6X2)	1
5	QDF23-0530	1/4 Normally Open (N.O.) Phono Plug Cable	1

# Cable and Phono Plug 1/4"

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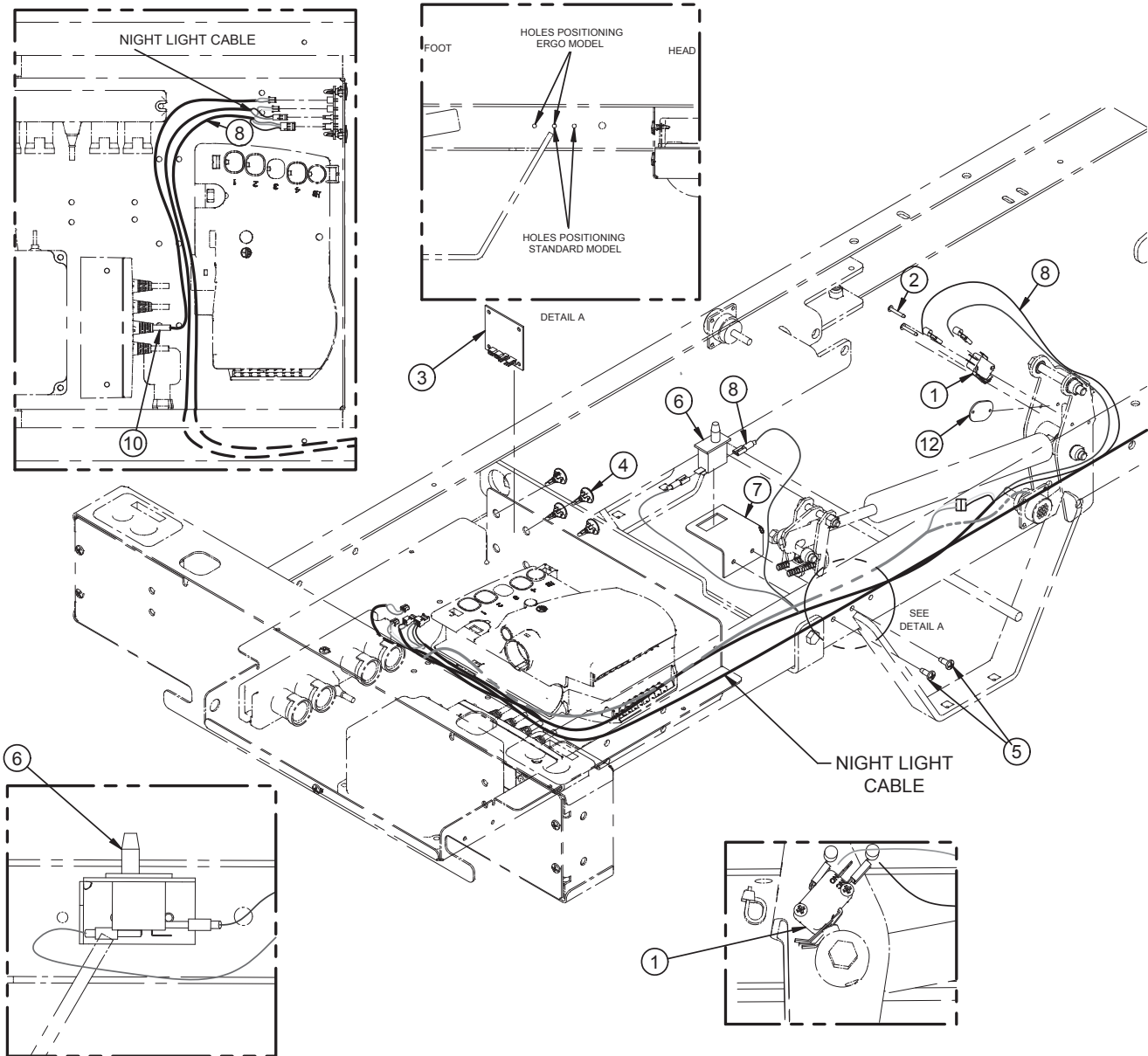
For Reference Only : OL230215  
Rev. 01



Item	Part No.	Part Name	Qty.
1	QDF23-0571	Cable and Phono plug 1/4	1

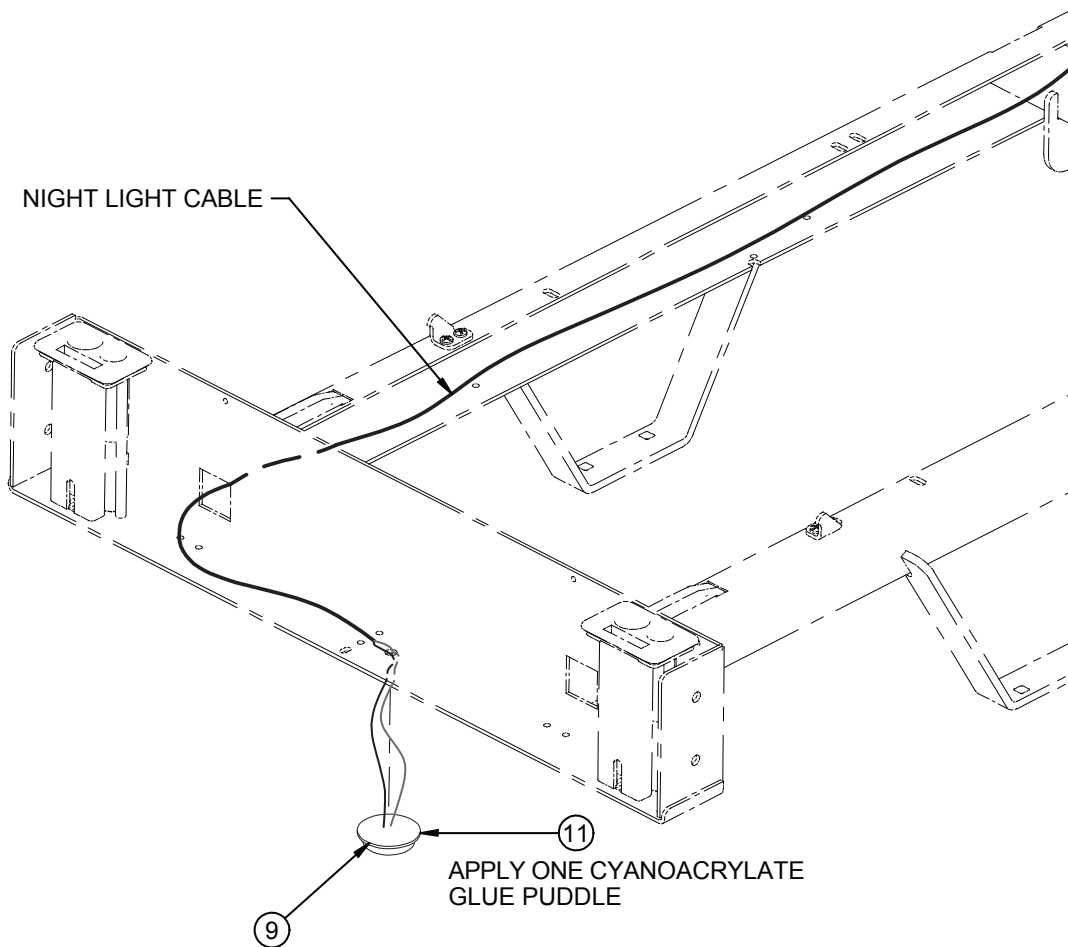
# Option - With Night Light With CPR

For Reference Only : OL235032  
Rev. 02



## Option - With Night Light With CPR

For Reference Only : OL235032  
Rev. 02



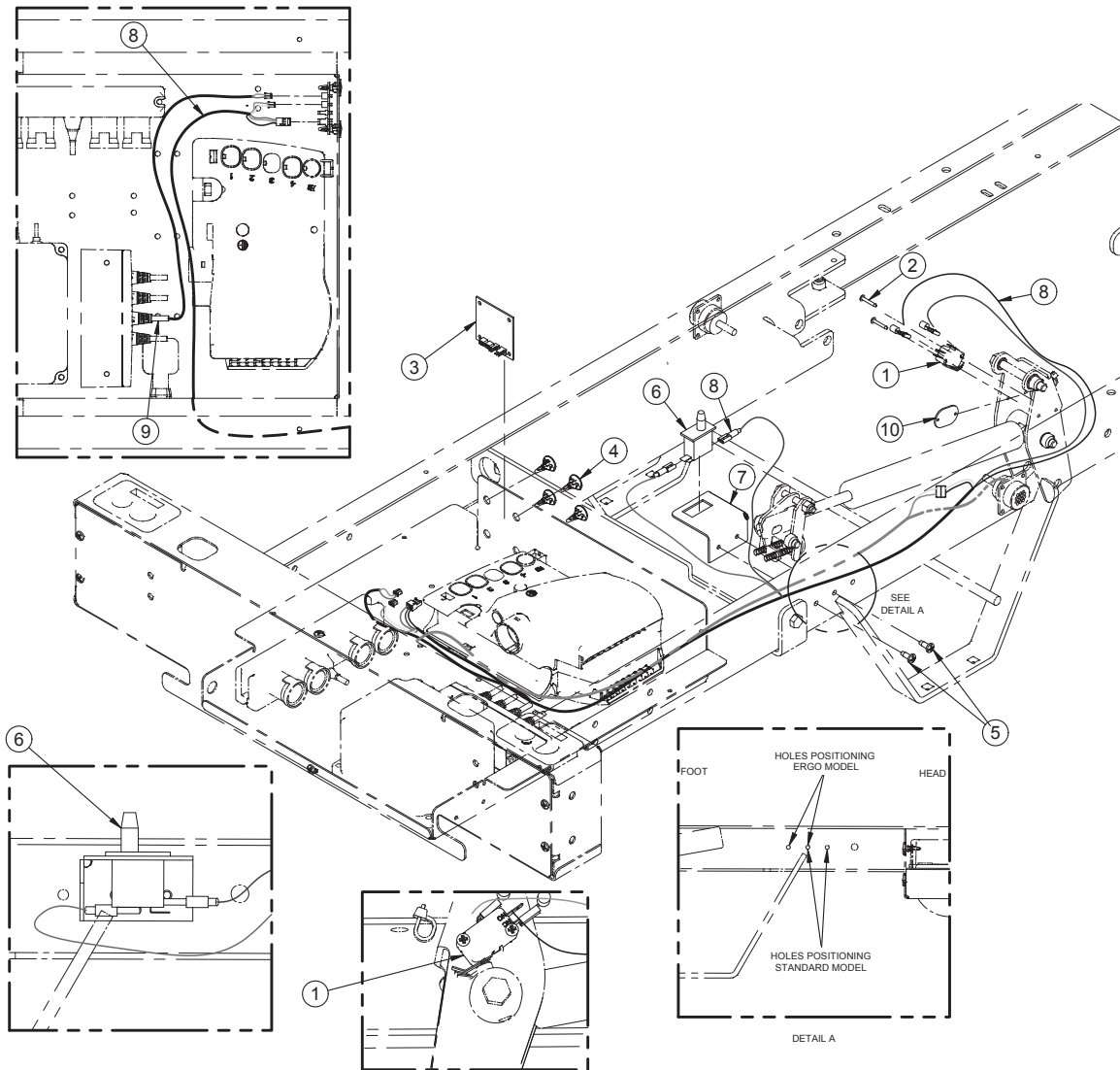
Item	Part No.	Part Name	Qty.
1	1325P003	Micro-Switch	1
2	VV87A9A24	Tapping Screw Truss Head Phillips Type B #4 X 3/4" Z.P.	2
3	QDF23-5953	CPR Board	1
4	QP23-0735	PCB Stand-Off Pin	4
5	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	2
6	QDF9159	Cherry Limit Switch	1
7	23-0736Z	Micro-Switch Support	1
8	QDF23-5947	CPR Harness	1
9	QDF23-5950	Night Light	1
10	QDF23-5948	CPR Cable	1
11	M0005	Cyanoacrylate Glue	1
12	17-0192	Nut For Micro-Switch	1



# Option - Without Night Light With CPR

For Reference Only : OL235035

Rev. 02



Item	Part No.	Part Name	Qty.
1	1325P003	Micro-Switch	1
2	VV87A9A24	Tapping Screw Truss Head Phillips Type B #4 X 3/4" Z.P.	2
3	QDF23-5953	CPR Board	1
4	QP23-0735	PCB Stand-Off Pin	4
5	VV83A9G16	Tapping Screw Pan Head Phillips Type B #10 X 1/2" Z.P.	2
6	QDF9159	Cherry Limit Switch	1
7	23-0736Z	Micro-Switch Support	1
8	QDF23-5947	CPR Harness	1
9	QDF23-5948	CPR Cable	1
10	17-0192	Nut For Micro-Switch	1



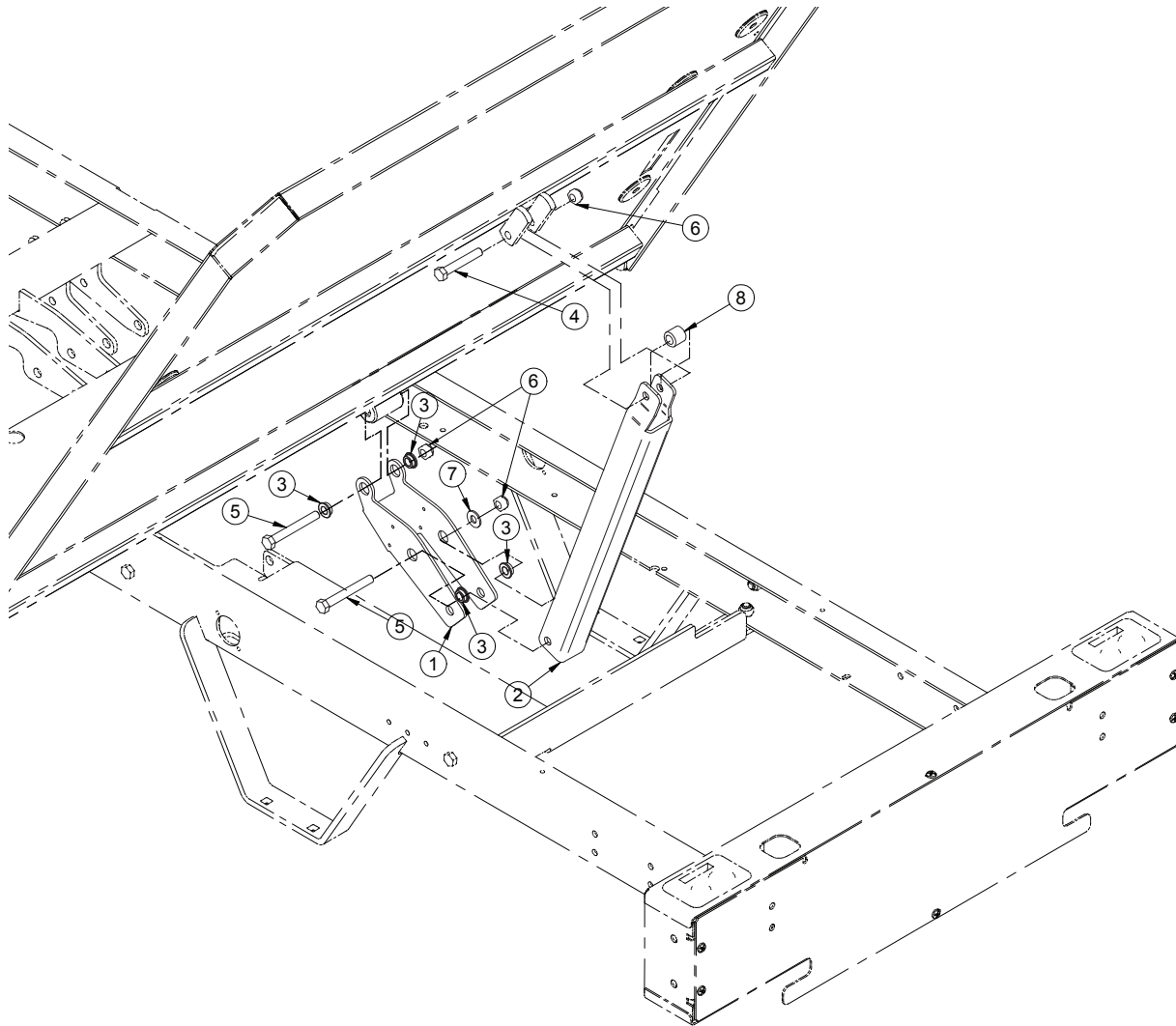
# Mechanical System With CPR

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Item	Part No.	Part Name	Qty.
1	23-5073W	Activation Handle	2
2	23-5074W	Activation handle braket	2
3	QDF17-0020	Shoulder Spacer	7
4	VB15A1O56	Hex Bolt 5/16-18 X 3" Gr.5	2
5	VE30A1O	Nylon Hex. Locknut 5/16"-18	5
6	VB35A1N24	Carriage Bolt 1/4-20 X 3/4"	5
7	VE30A1N	Nylon Hex. Locknut 1/4-20	6
8	QE71-0963-T	Sticker - CPR	2
9	23-5013W	Mattress Support Lever	1
10	20-0017Z	Activation Mechanism Socket	1
11	20-0019Z	Fixed Lever	1
12	VB15A1O48	Bolt 5/16-18 X 2" Gr.5	1
13	20-0018Z	Mobile Lever	1
14	QDF5090	CPR Pneumatic Cylinder	1
15	25-0456Z	Sleeve	1
16	25-0514Z	Cylinder Inner Sleeve	1
17	25-0515Z	Cylinder Outer Sleeve	1
18	VB15A1O54	Bolt 5/16-18 X 2-3/4" Fully Threaded	1
19	VB18A1O52	Bolt 5/16-18 X 2-1/2" Gr.8	1
20	VV60B1O12	Hex Socket Set Screw 5/16-18 X 3/8"	1
21	VE20A80	Hex Jam Nut M10 X 1.0 Z.P.	1
22	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	1
23	QDF19-0354	Long Head Section Cable	1
24	QDF19-0815	Short Head Section Cable	1
25	23-0762	Shoulder Washer	1
26	QRC18579	Compression Spring	2
27	QDF9518	Tie Wrap	1

# Mechanical System Without CPR

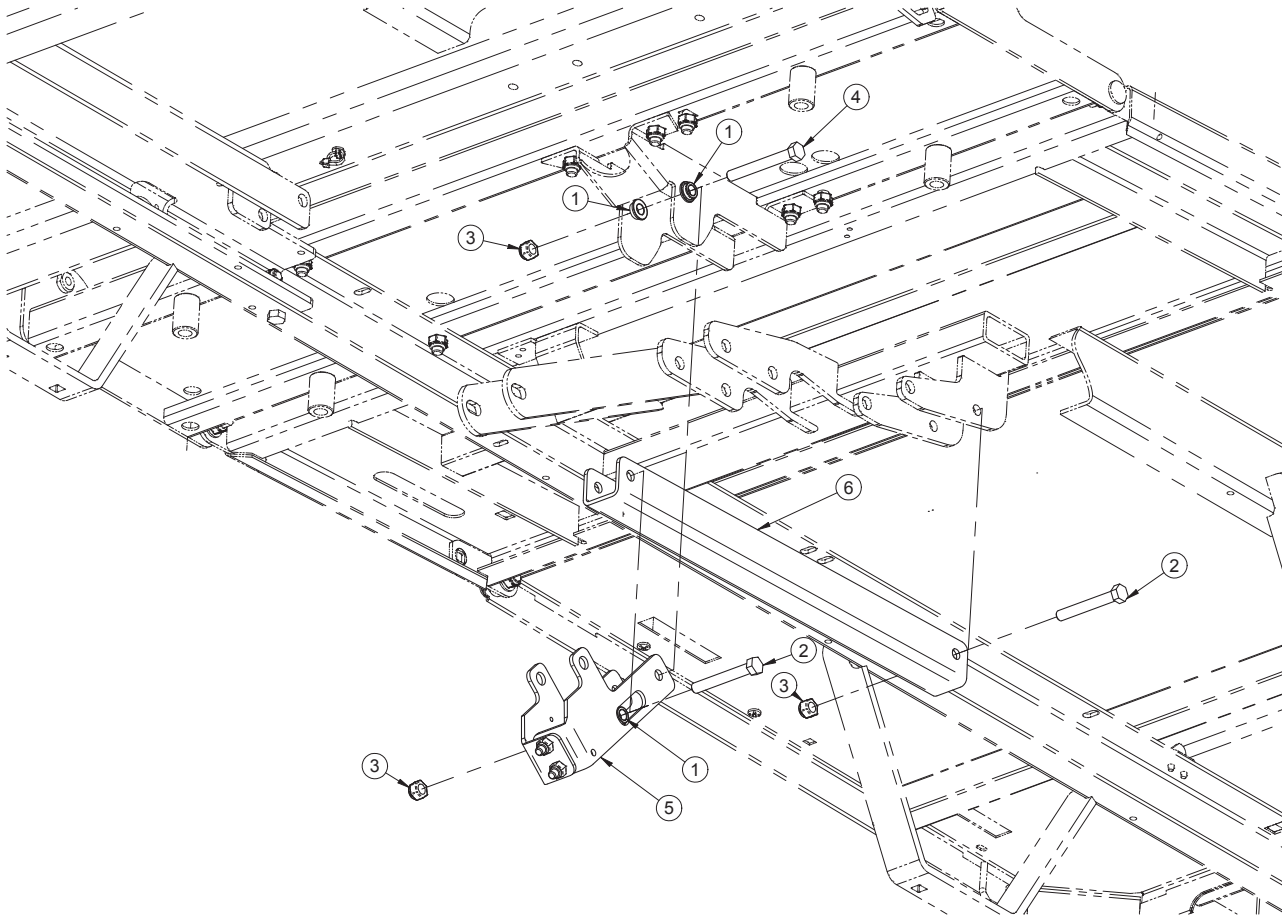
For Reference Only : OL235033W  
Rev. 02



Item	Part No.	Part Name	Qty.
1	23-5013W	Mattress Support Lever	1
2	23-5071W	Head Section Arm Lever	1
3	QDF17-0020	Shoulderspacer	4
4	VB15A1O48	Bolt 5/16-18 X 2" Gr.5	1
5	VB18A1O52	Bolt 5/16-18 X 2-1/2" Gr.8	2
6	VE30A1O	Nylon Hex. Locknut	3
7	VW10A10	Flat Washer	1
8	VW60C201320	Nylon Spacer	1

# Mechanical System Without CPR - ERGO

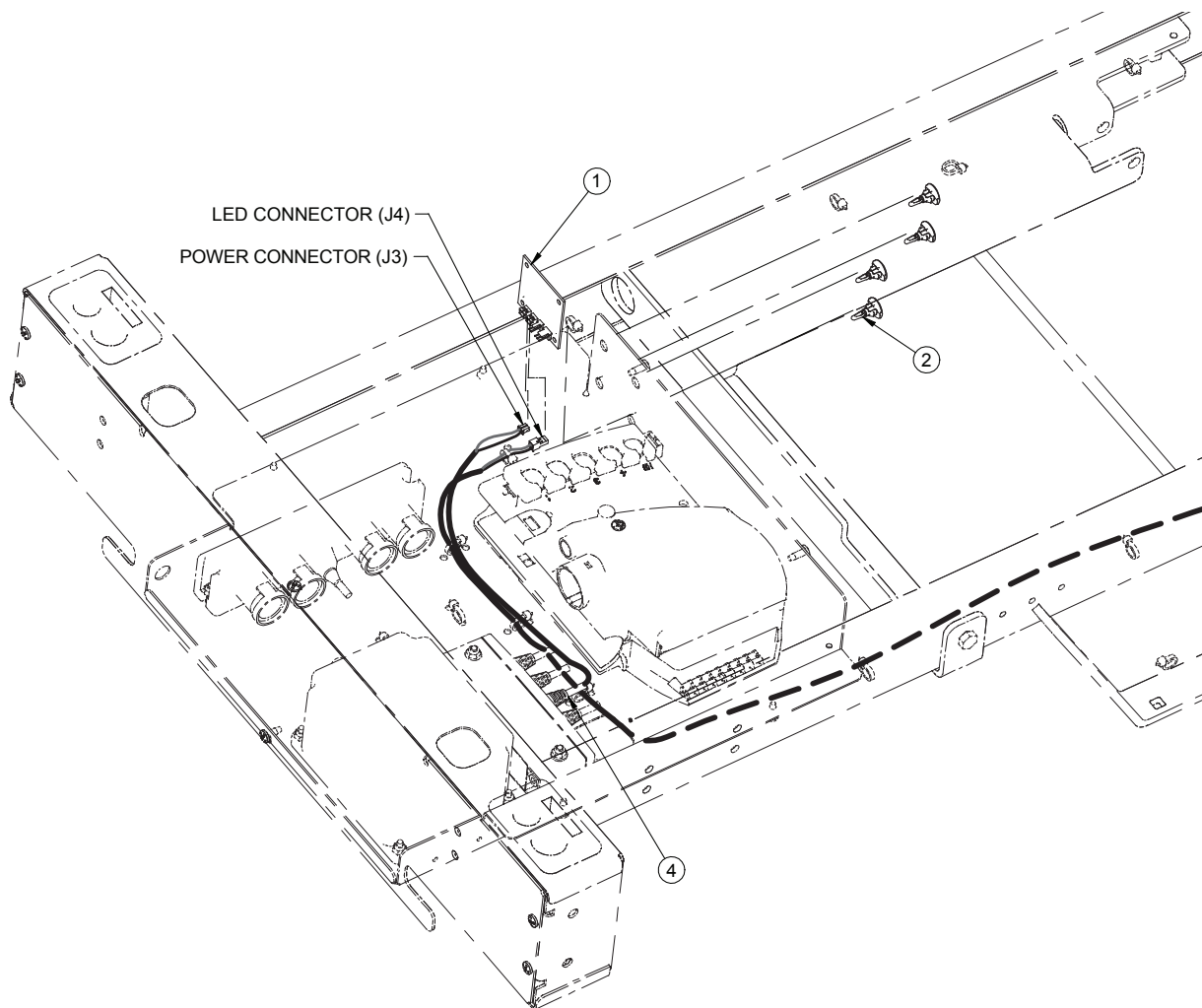
For Reference Only : OL235030W  
Rev. 07



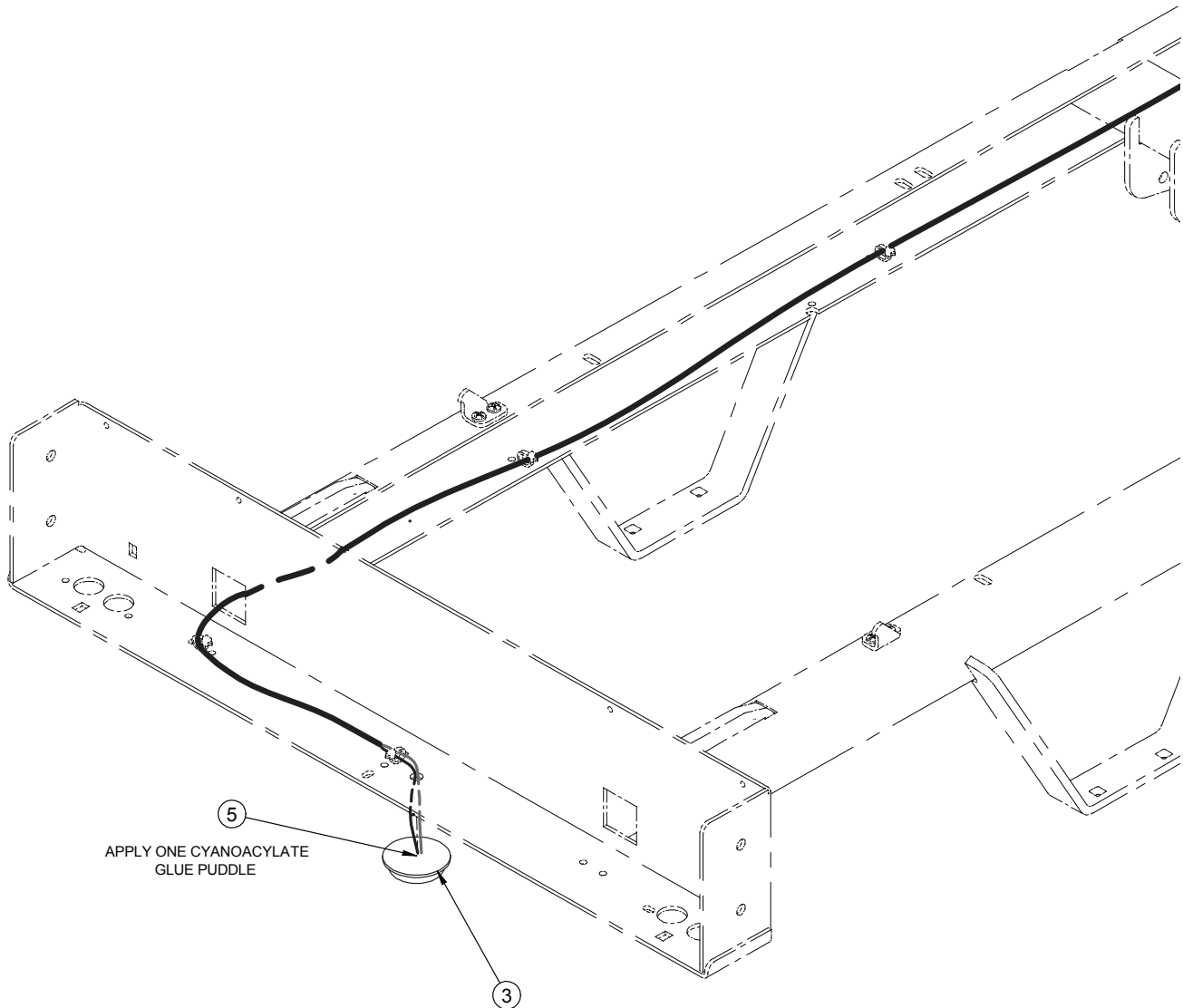
Item	Part No.	Part Name	Qty.
1	QDF17-0020	Shoulder Spacer	4
5	23-5144W	Mattress Support Lever	1
5	23-5142W	Mattress Support Lever	1
2	VB15A1O50	Bolt 5/16-18 X 2-1/4" Gr.5	2
3	VE30A1O	Nylon Hex. Locknut 5/16"-18	3
4	VB18A1O52	Bolt 5/16-18 X 2-1/2" Gr.8	1

# Option - With Night Light Without CPR

For Reference Only : OL235031  
Rev. 01



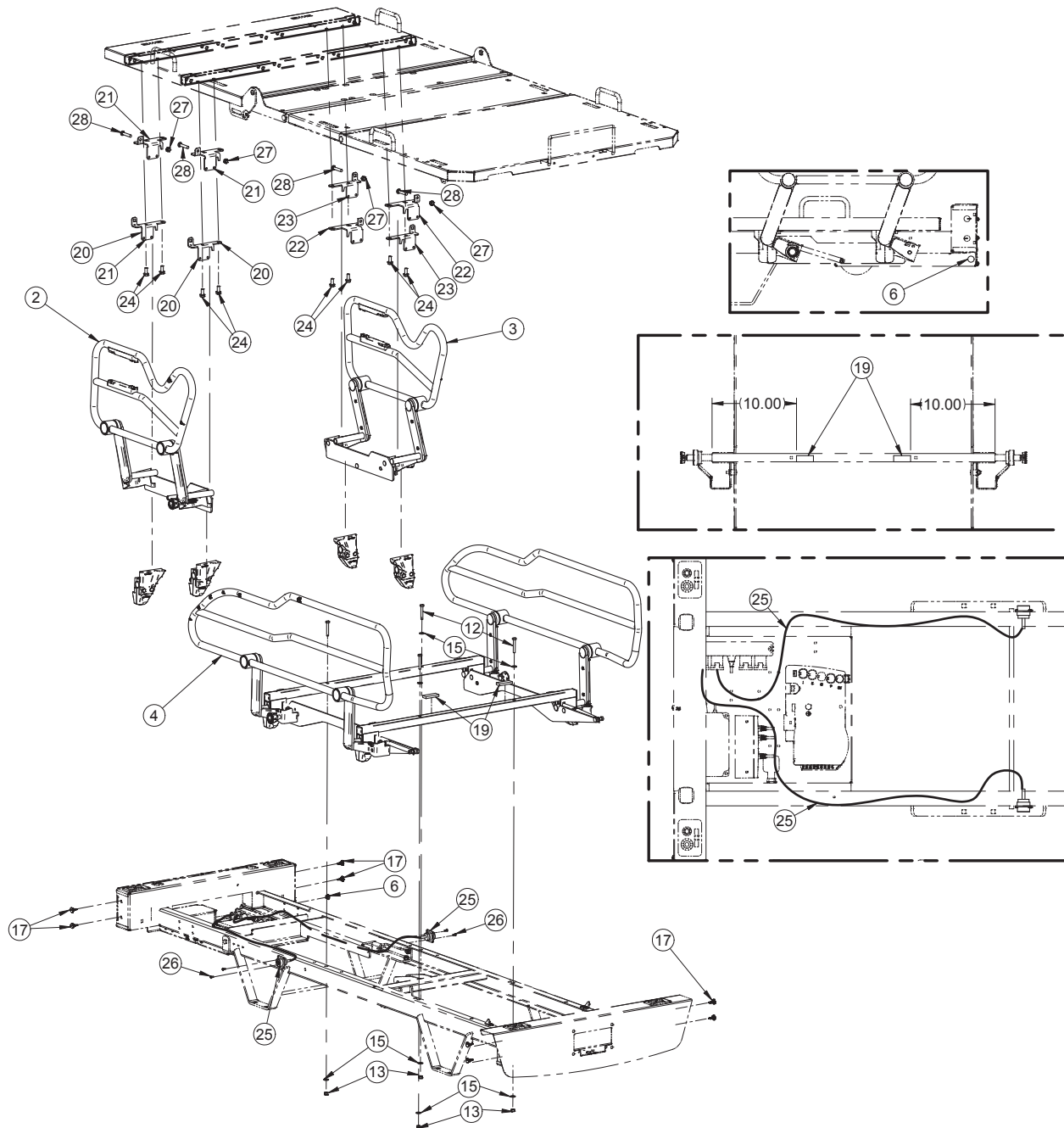
## Option - With Night Light Without CPR



Item	Part No.	Part Name	Qty.
1	QDF23-5953	CPR Board	1
2	QP23-0735	PCB Stand-Off Pin	4
3	QDF23-5950	Night Light	1
4	QDF23-5948	CPR Power Cable	1
5	M0005	Cyanoacrylate Glue	1

# ERGO Siderail With Removable Controls

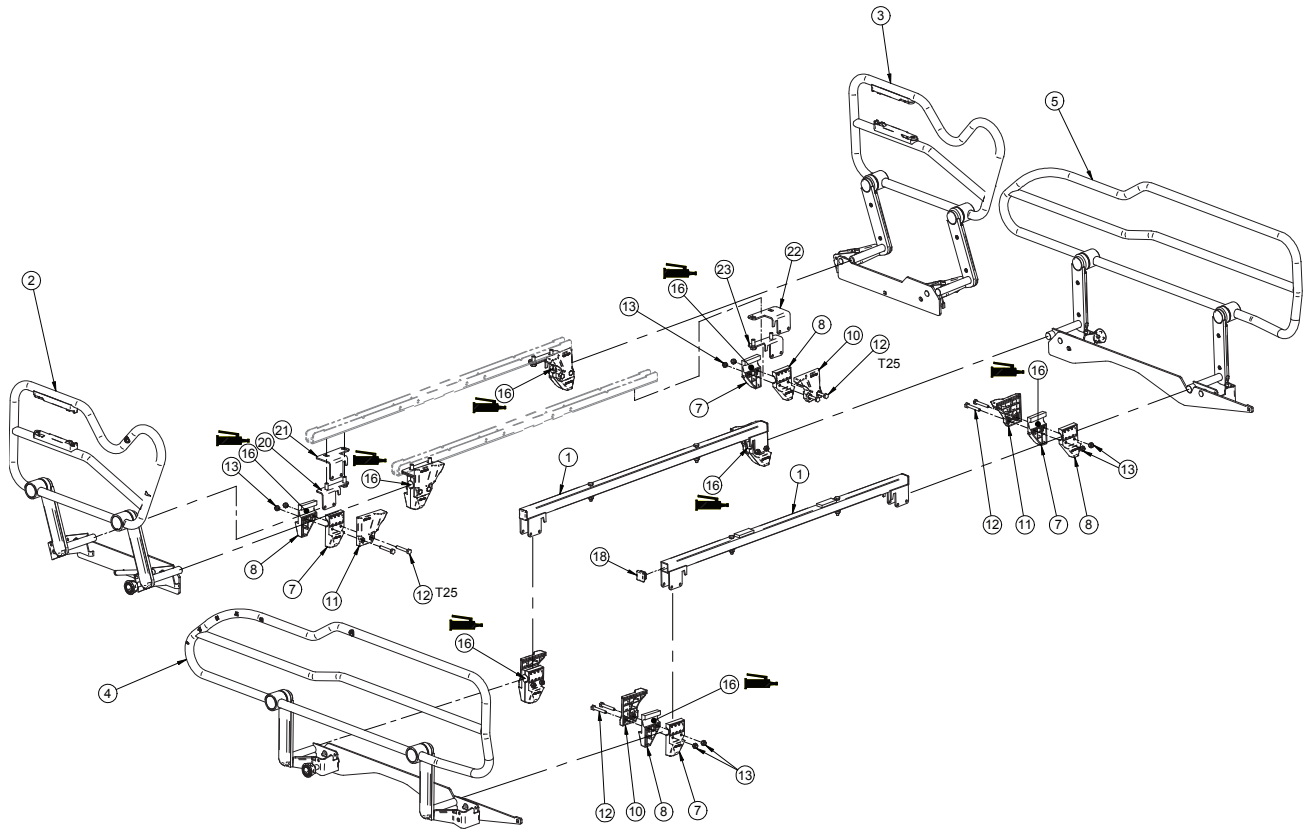
For Reference Only : OL235003XX<sup>1</sup>  
Rev. 03



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.



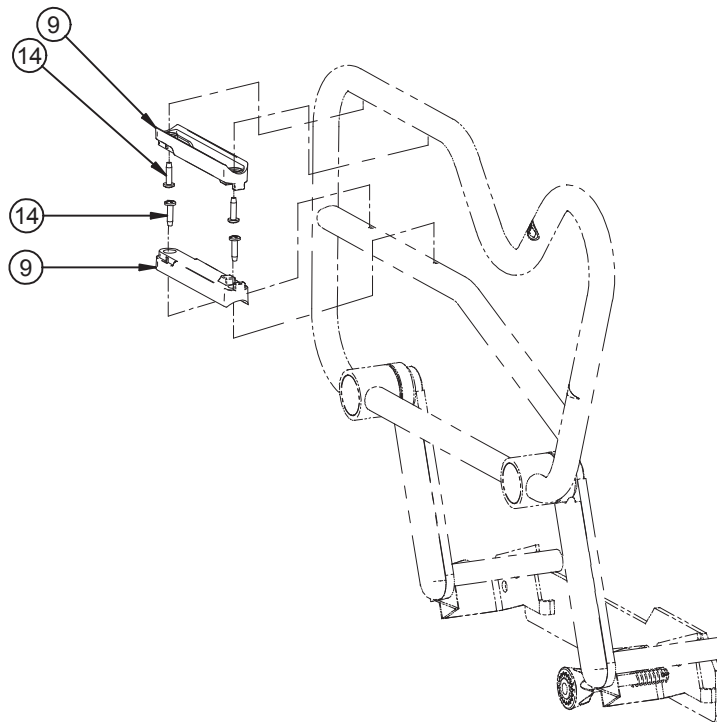
# ERGO Siderail With Removable Controls



# ERGO Siderail With Removable Controls

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For Reference Only : OL235003XX<sup>1</sup>  
Rev. 03



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## ERGO Siderail With Removable Controls

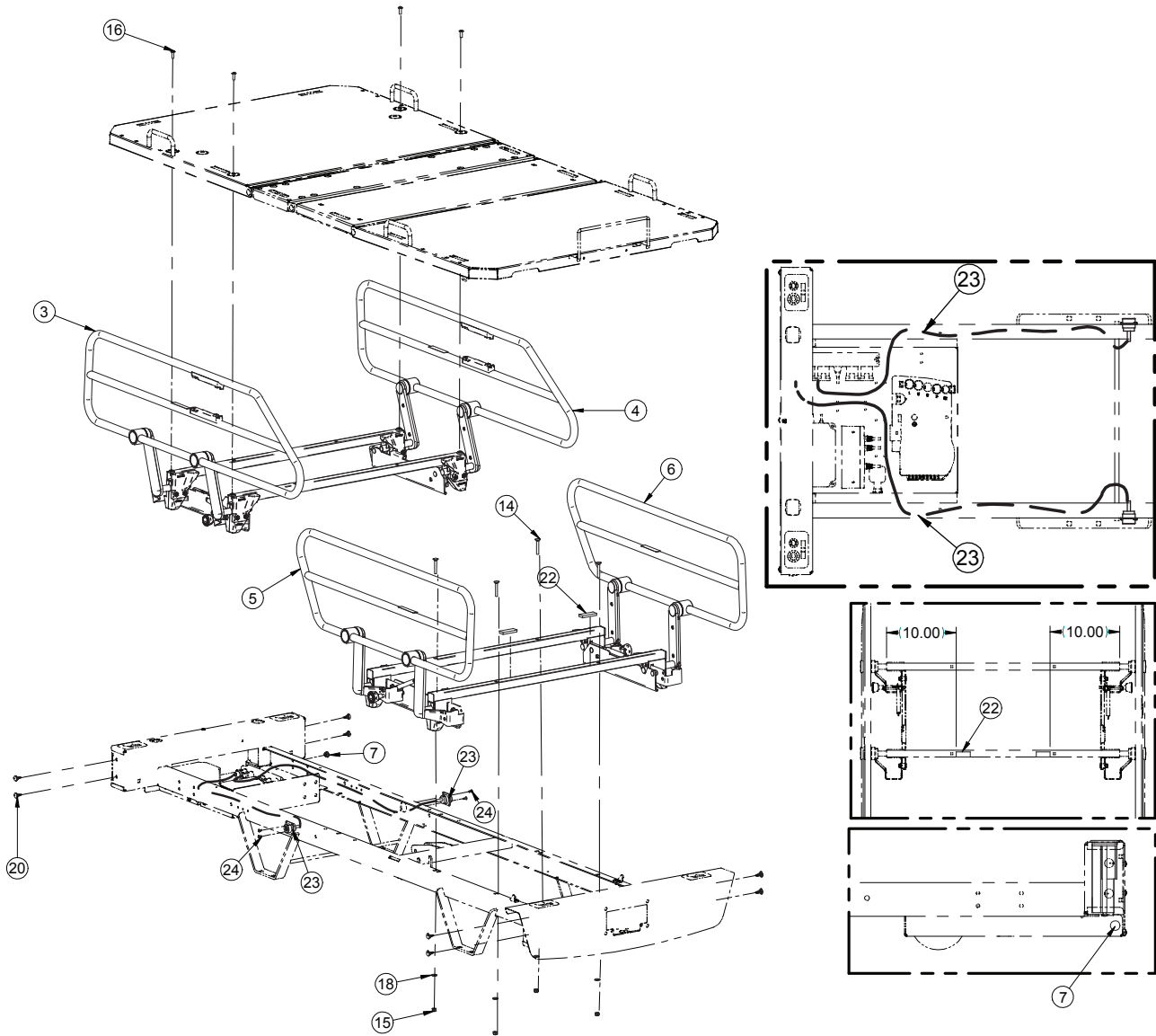
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Item	Part No.	Part Name	Qty.
1	23-0650W	Siderail Support	2
2	23-5057XX	Head Right Siderail S.A.	1
3	23-5058XX	Head Left Siderail S.A.	1
4	23-5059XX	Foot Right Siderail S.A.	1
5	23-5060XX	Foot Left Siderail S.A.	1
6	QPCE1207	Cap	1
7	QP18-0240-07	Anchoring - Left Glider	8
8	QP18-0243-07	Anchoring - Right Glider	8
9	QP23-5093	Removable Control Panel Support	4
10	QP18-0241-07	Rear Glider - Right	4
11	QP18-0242-07	Rear Glider - Left	4
12	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	20
13	VE30A1N	Nylon Hex. Locknut 1/4-20	20
14	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
15	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	8
16	M0019	OG2 Grease	1
17	QP23-0735	PCB Stand-Off Pin	8
18	QDF7908	1" Black Cap #Sqr-1-10-14	4
19	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
20	23-5034W	Siderail Support - Interior Left	2
21	23-5036W	Siderail Support - Exterior Left	2
22	23-5035W	Siderail Support - Exterior Right	2
23	23-5033W	Siderail Support - Interior Right	2
24	VVB4A1O24	Bolt 5/16-18 X 3/4" Thread Rolling	8
25	QDF23-5922	Round Connector Din Cable	2
26	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4
27	VE30A1O	Nylon Hex. Locknut 5/16"-18	4
28	VB30A1O44	Carriage Bolt 5/16-18 X1-3/4"	4

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

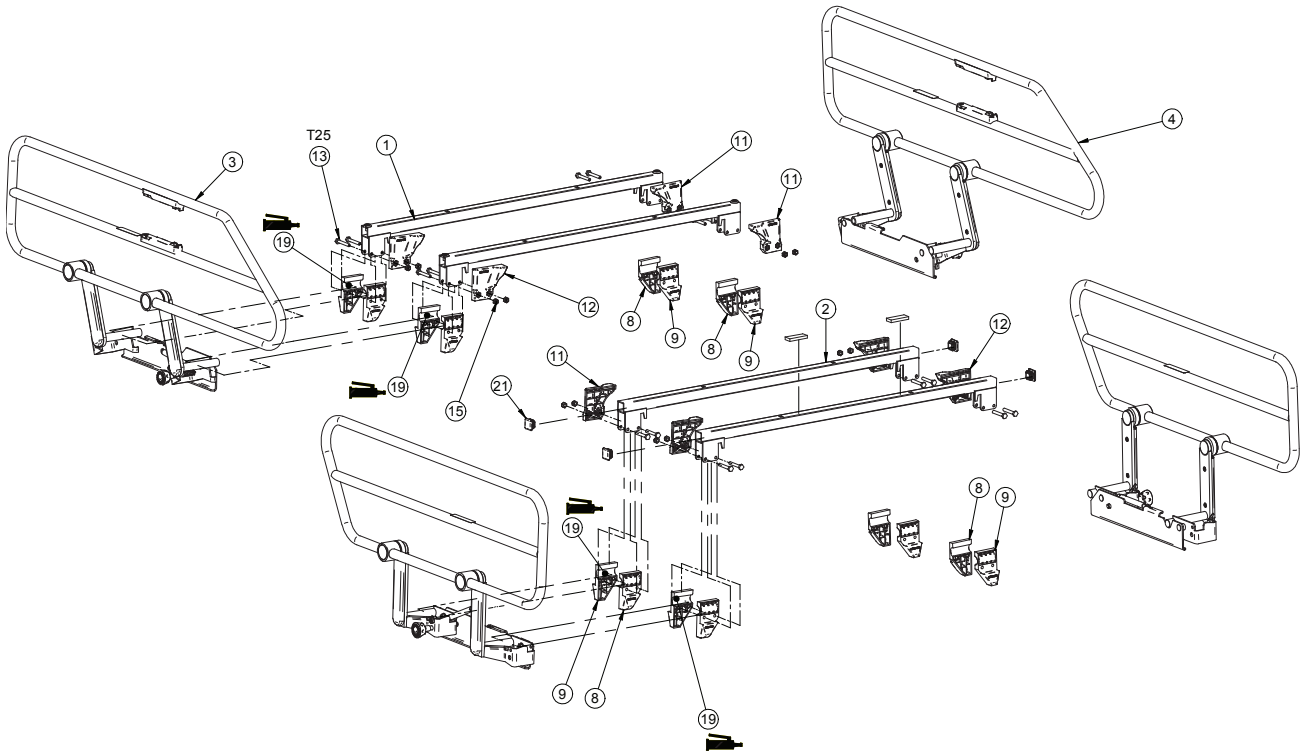
# Siderail With Removable Controls

For Reference Only : OL235055XX<sup>1</sup>  
Rev. 01

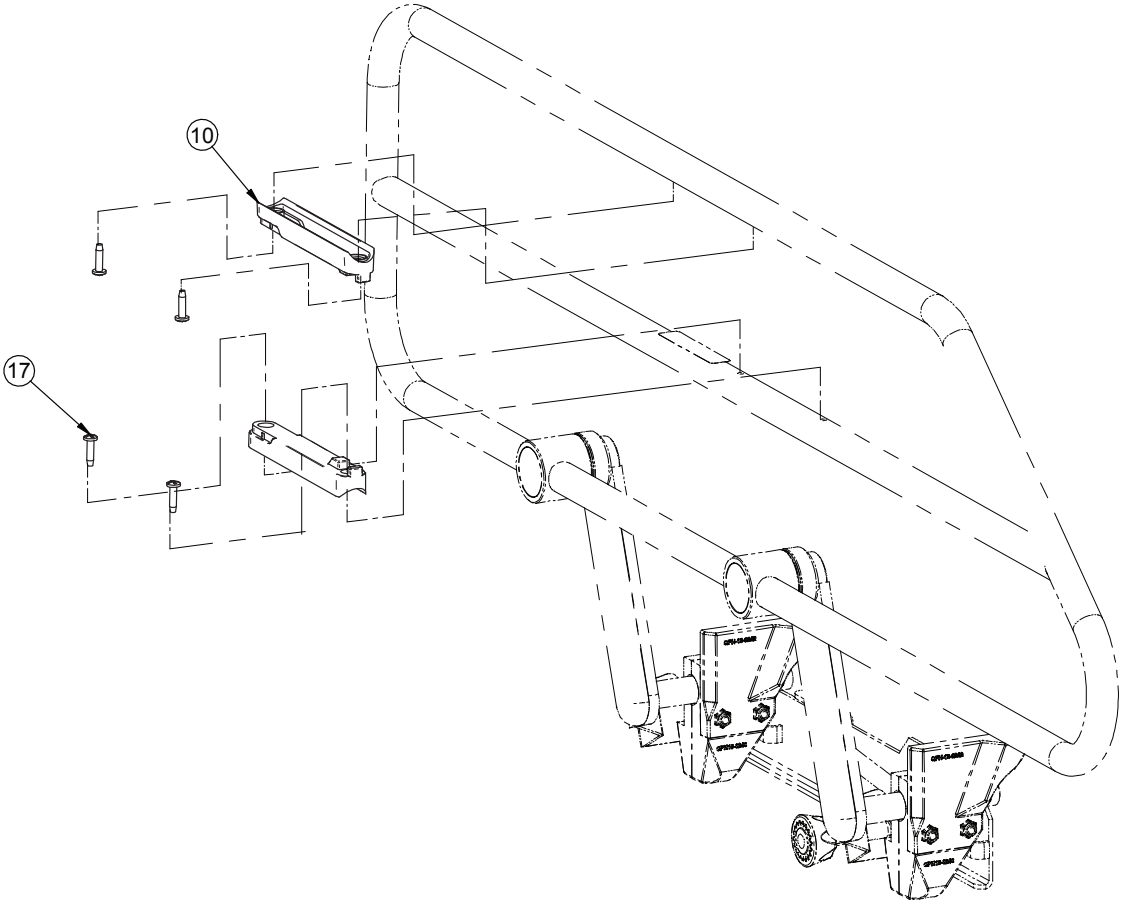


<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# Siderail With Removable Controls



# Siderail With Removable Controls



## Siderail With Removable Controls

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Item	Part No.	Part Name	Qty.
1	23-0188W	Siderail Support And Insert	2
2	23-0650W	Siderail Support S.A.	2
3	23-0769XX	Chromed Head Right Siderail	1
4	23-0770XX	Chromed Head Left Siderail	1
5	23-0785XX	Chromed Foot Right Siderail	1
6	23-0786XX	Chromed Foot Left Siderail	1
7	QPCE1207	Cap	1
8	QP18-0240-07	Anchoring - Left Glider	8
9	QP18-0243-07	Anchoring - Right Glider	8
10	QP23-5093	Removable Control Panel Support	4
11	QP18-0241-07	Rear Glider - Right	4
12	QP18-0242-07	Rear Glider - Left	4
13	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	16
14	VB35A1N44	Carriage Bolt 1/4-20 X 1-3/4" Gr.5	4
15	VE30A1N	Nylon Hex. Locknut 1/4-20	20
16	VV37A1N24-S	Machine Screw Truss Head Phillips 1/4-20 X 3/4" Scotch Grip	4
17	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
18	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	4
19	M0019	OG2 Grease	1
20	QP23-0735	PCB Support	8
21	QDF7908	1" Black Cap #Sqr-1-10-14	4
22	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
23	QDF23-5922	Round Connector Din Cable	2
24	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.

If siderails are chromed, replace the suffix XX by CW.

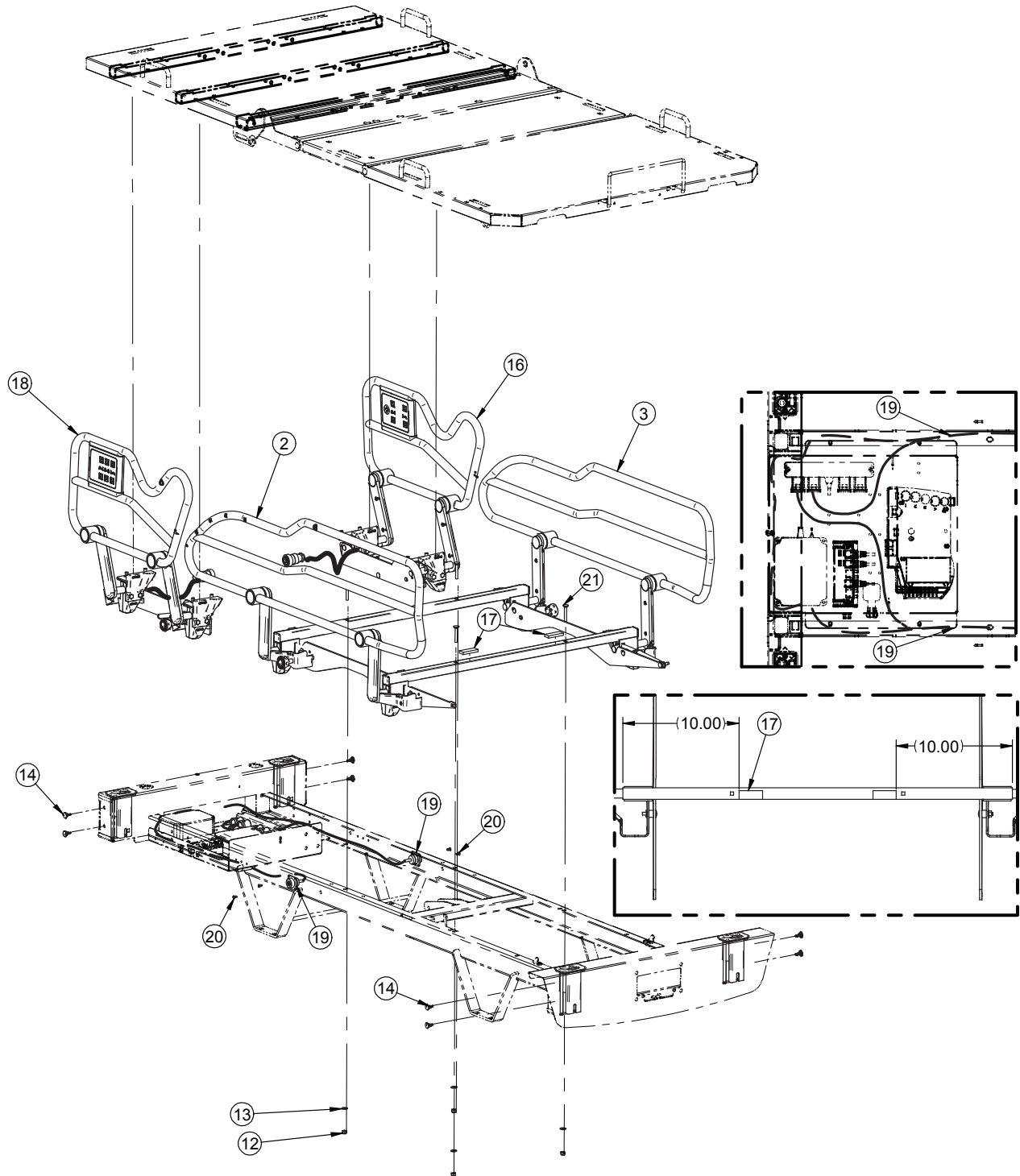
# ERGO Siderail - Fixed Control Panel With Nurse Call

For Reference Only : OL235026XX<sup>1</sup> Without Flat Position

Rev. 01

For Reference Only : OL235028XX<sup>1</sup> With Flat Position

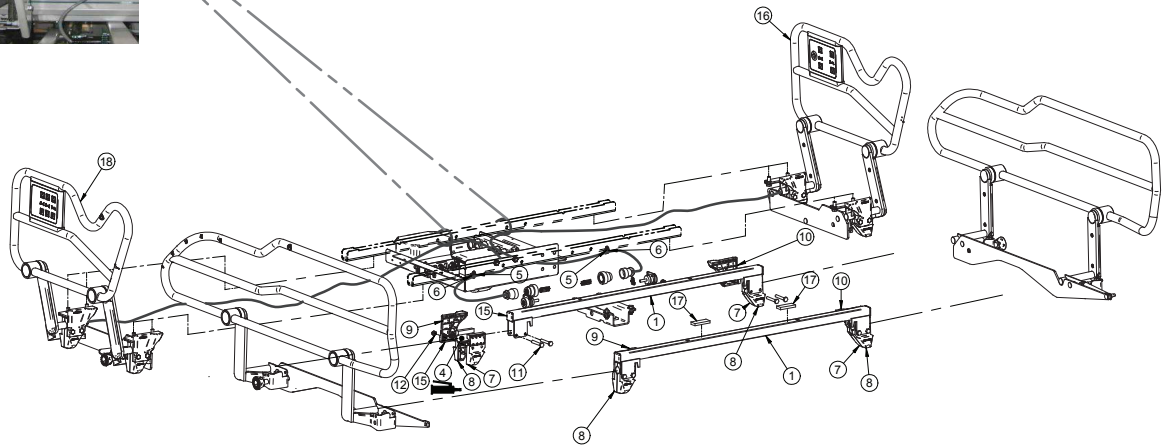
Rev. 01



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.



# ERGO Siderail - Fixed Control Panel With Nurse Call



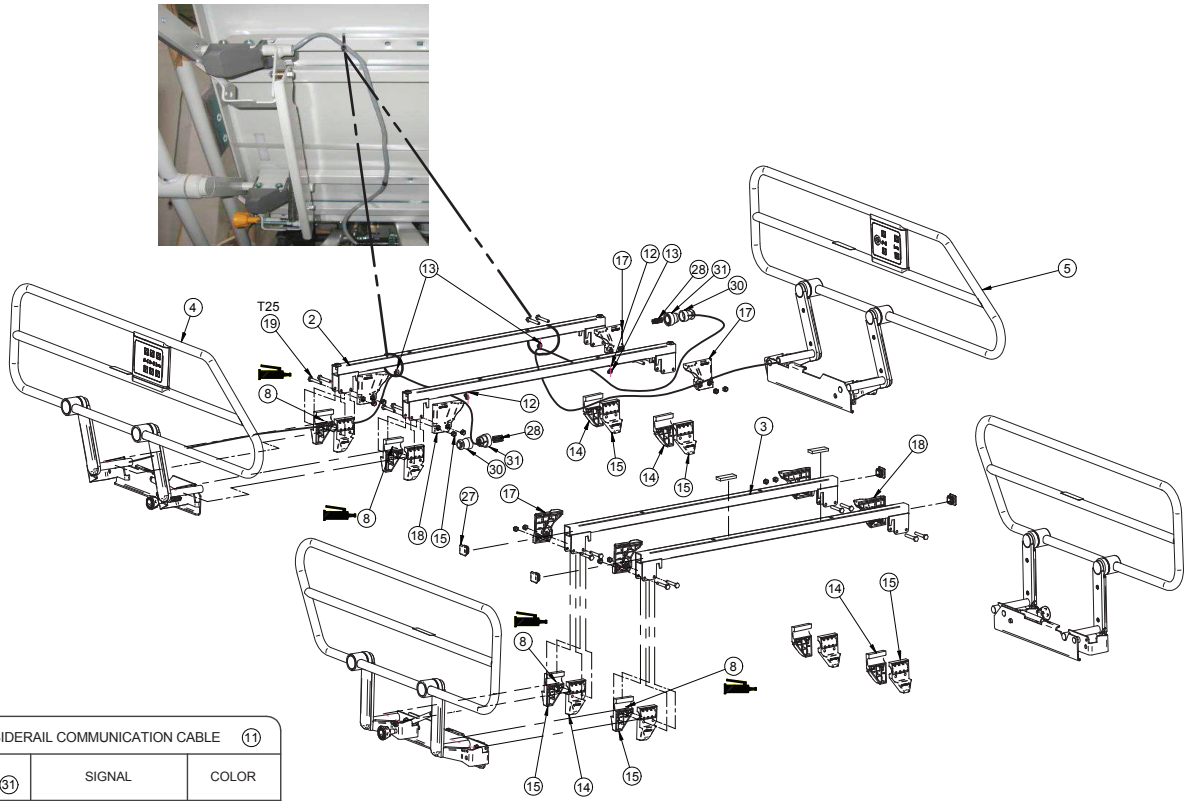
## ERGO Siderail - Fixed Control Panel With Nurse Call

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Item	Part No.	Part Name	Qty.
1	23-0650W	Siderail Support	2
2	23-5059XX	Foot Right Siderail S.A.	1
3	23-5060XX	Foot Left Siderail S.A.	1
4	M0019	OG2 Grease	1
5	QDF5096	Plastic Tie Holder	2
6	QDF9518	Tie Wrap	4
7	QP18-0240-07	Anchoring - Left Glider	4
8	QP18-0243-07	Anchoring - Right Glider	4
9	QP18-0241-07	Rear Glider - Right	2
10	QP18-0242-07	Rear Glider - Left	2
11	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	8
12	VE30A1N	Nylon Hex. Locknut 1/4-20	12
13	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	4
14	QP23-0735	Pcb Stand-Off Pin	8
15	QDF7908	1" Black Cap	4
16	23-51--XX <sup>1</sup>	Left Siderail S.A. With Nurse Call	1
17	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
18	23-51--XX <sup>1</sup>	Right Siderail S.A. With Nurse Call	1
19	QDF23-5941	Side Bed Cable With Nurse Call	2
20	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4
21	VB35A1N44	Carriage Bolt 1/4-20 X1-3/4"	4

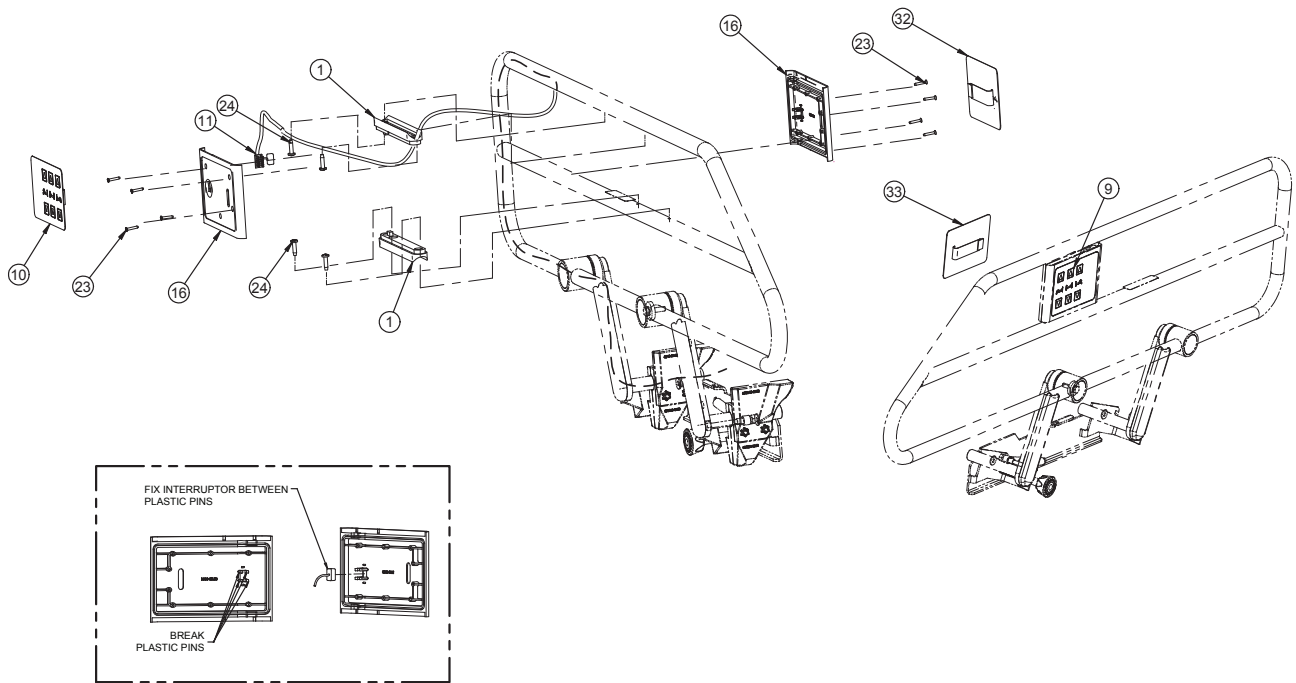


# Siderail - Fixed Control Panel With Nurse Call



WIRING - SIDERAIL COMMUNICATION CABLE (11)		
PIN # (31)	SIGNAL	COLOR
3	HEAD UP	BROWN
6	HI-LO UP	BLUE
9	THIGH UP	ORANGE
8	COMMON	BLACK
7	THIGH DOWN	WHITE
4	HI-LO DOWN	GREEN
1	HEAD DOWN	RED
10	NURSE CALL N.O.	YELLOW
11	NURSE CALL COM	GREY
12	NURSE CALL N.C.	PURPLE
14	FLAT POSITION	PINK

# Siderail - Fixed Control Panel With Nurse Call



## Siderail - Fixed Control Panel With Nurse Call

---

Item	Part No.	Part Name	Qty.
1	QP18821-07	Patient Control Panel Support	4
2	23-0188W	Siderail Support And Insert	2
3	23-0650W	Siderail Support	2
4	23-0769XX	Head Right Siderail	1
5	23-0770XX	Head Left Siderail	1
6	23-0785XX	Foot Right Siderail	1
7	23-0786XX	Foot Left Siderail	1
8	M0019	OG2 Grease	1
9	QDF23-5927	Left Three-Function Membrane (refer to table, page 174 )	1
10	QDF23-5928	Right Three-Function Membrane (refer to table, page 174 )	1
11	QDF23-5940	Siderail Control Panel Cable	2
12	QDF5096	Flat Tie Holder	2
13	QDF9518	Tie Wrap	4
14	QP18-0240-07	Anchoring - Left Glider	8
15	QP18-0243-07	Anchoring - Right Glider	8
16	QP23-0391-07	Fixed Control Box	4
17	QP18-0241-07	Rear Glider - Right	4
18	QP18-0242-07	Rear Glider - Left	4
19	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	16
20	VB35A1N44	Carriage Bolt 1/4-20 X 1-3/4" Gr.5	4
21	VE30A1N	Nylon Hex. Locknut 1/4-20	20
22	VV37A1N24-S	Machine Screw Truss Head Phillips 1/4-20 X 3/4" Scotch Grip	4
23	VV41A1A20	Tapping Screw Flat Head Phillips Type F #4-40 X 5/8", Z.P.	16
24	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
25	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	4
26	QP23-0735	Control Board Stand Off Pin	8
27	QDF7908	1" Black Cap	4
28	QDF9018	"Amp" Pin Contact #66103-2	22
29	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
30	QDF2043	Cable Clamp	2
31	QDF2042	14 Positions Circular Connector	2
32	QDF23-5926	Right Two Function Membrane With Nurse Call	1
33	QDF23-5925	Left Two Function Membrane With Nurse Call	1
34	QDF23-5941	Side Bed Cable With Nurse Call	2
35	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4

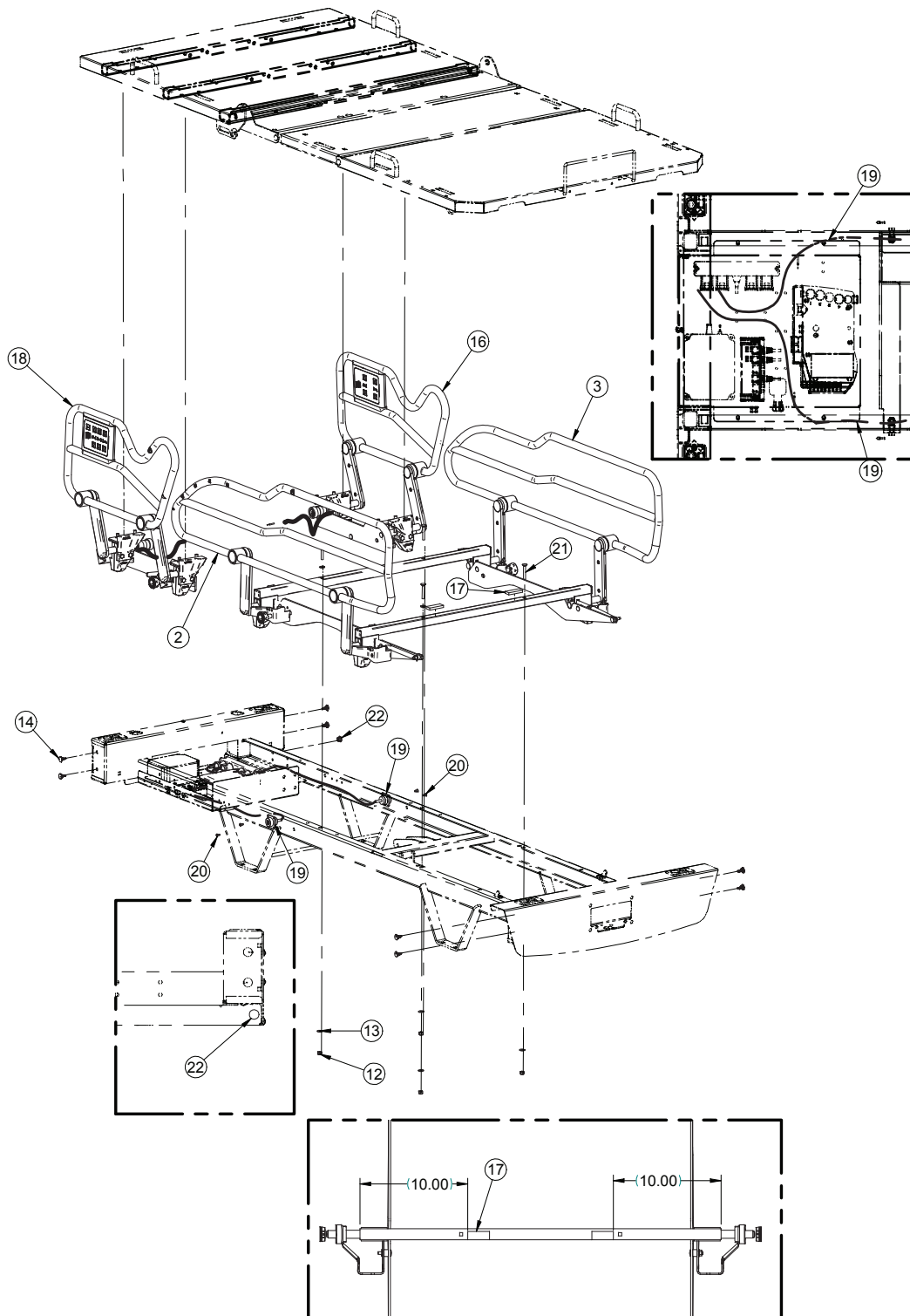
# ERGO Siderail - Fixed Control Panel Without Nurse Call

For Reference Only : OL235027XX<sup>1</sup> With Flat Position

Rev. 01

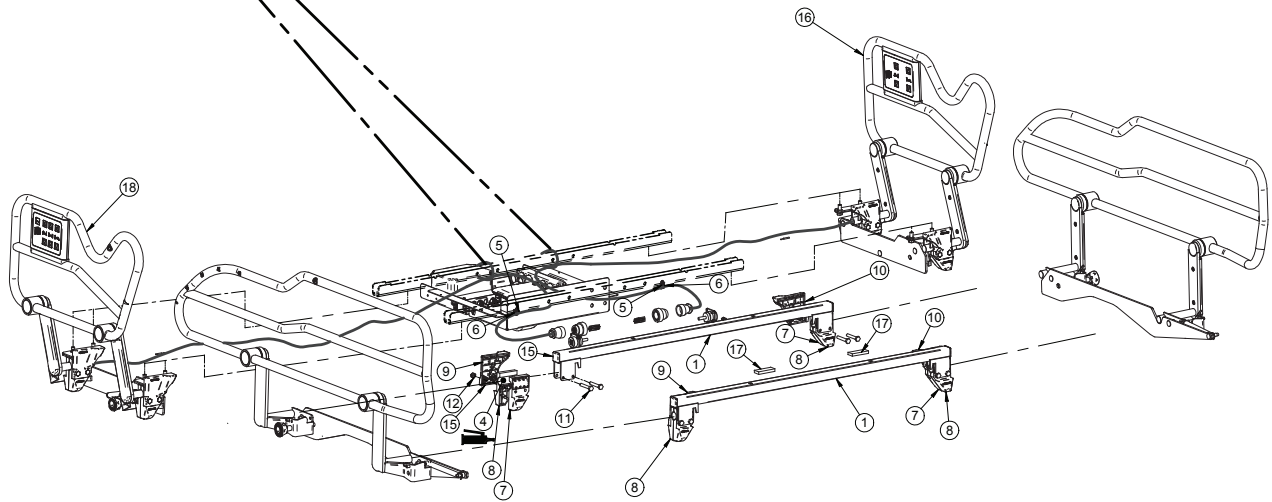
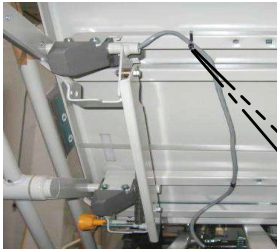
For Reference Only : OL235016XX<sup>1</sup> Without Flat Position

Rev. 03



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# ERGO Siderail - Fixed Control Panel Without Nurse Call





# ERGO Siderail - Fixed Control Panel Without Nurse Call

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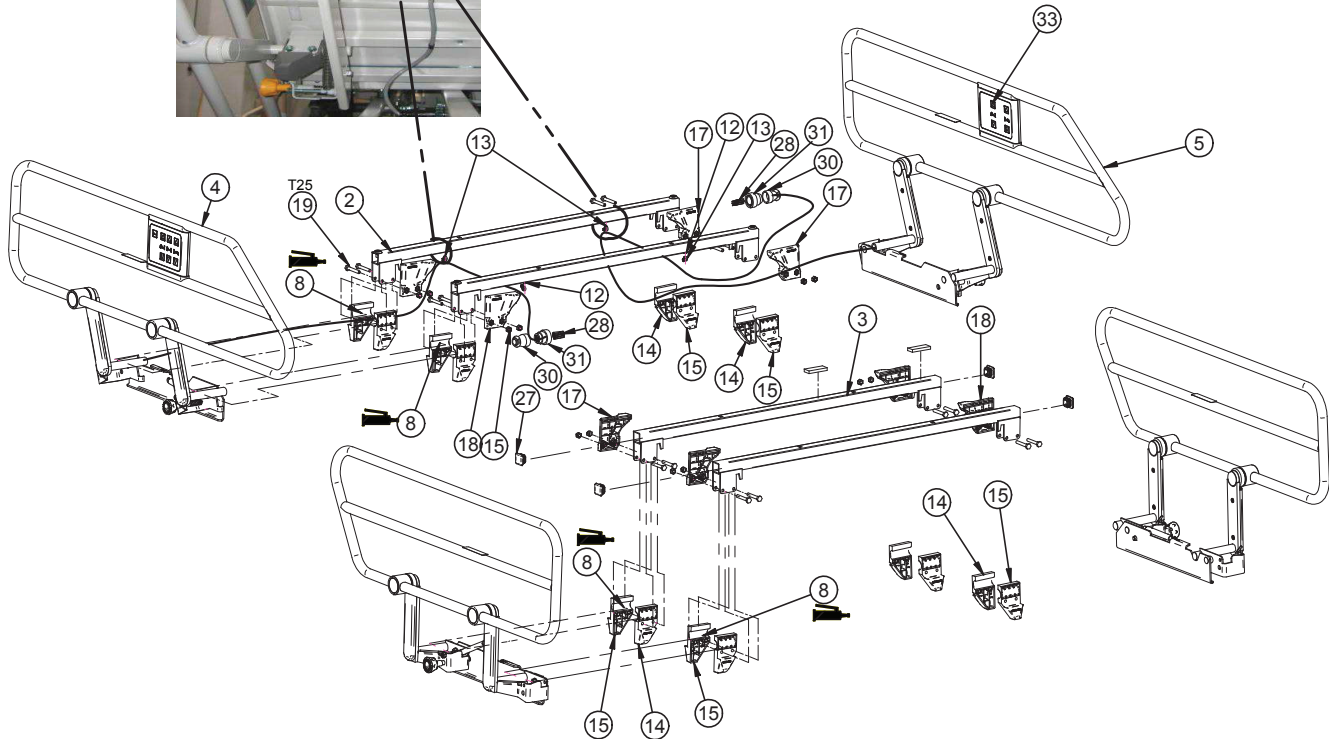
Item	Part No.	Part Name	Qty.
1	23-0650W	Siderail Support	2
2	23-5059XX	Foot Right Siderail S.A.	1
3	23-5060XX	Foot Left Siderail S.A.	1
4	M0019	OG2 Grease	1
5	QDF5096	Plastic Tie Holder	2
6	QDF9518	Tie Wrap	4
7	QP18-0240-07	Anchoring - Left Glider	4
8	QP18-0243-07	Anchoring - Right Glider	4
9	QP18-0241-07	Rear Glider - Right	2
10	QP18-0242-07	Rear Glider - Left	2
11	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	8
12	VE30A1N	Nylon Hex. Locknut 1/4-20	12
13	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	6
14	QP23-0735	Pcb Stand-Off Pin	8
15	QDF7908	1" Black Cap	4
16	23-51--XX <sup>1</sup>	Siderail S.A. Without Nurse Call	1
17	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
18	23-51--XX <sup>1</sup>	Siderail S.A. Without Nurse Call	1
19	QDF23-5922	Round Connector Din Cable	2
20	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4
21	VB35A1N44	Carriage Bolt 1/4-20 X1-3/4"	4
22	QPCE1207	Cap	1



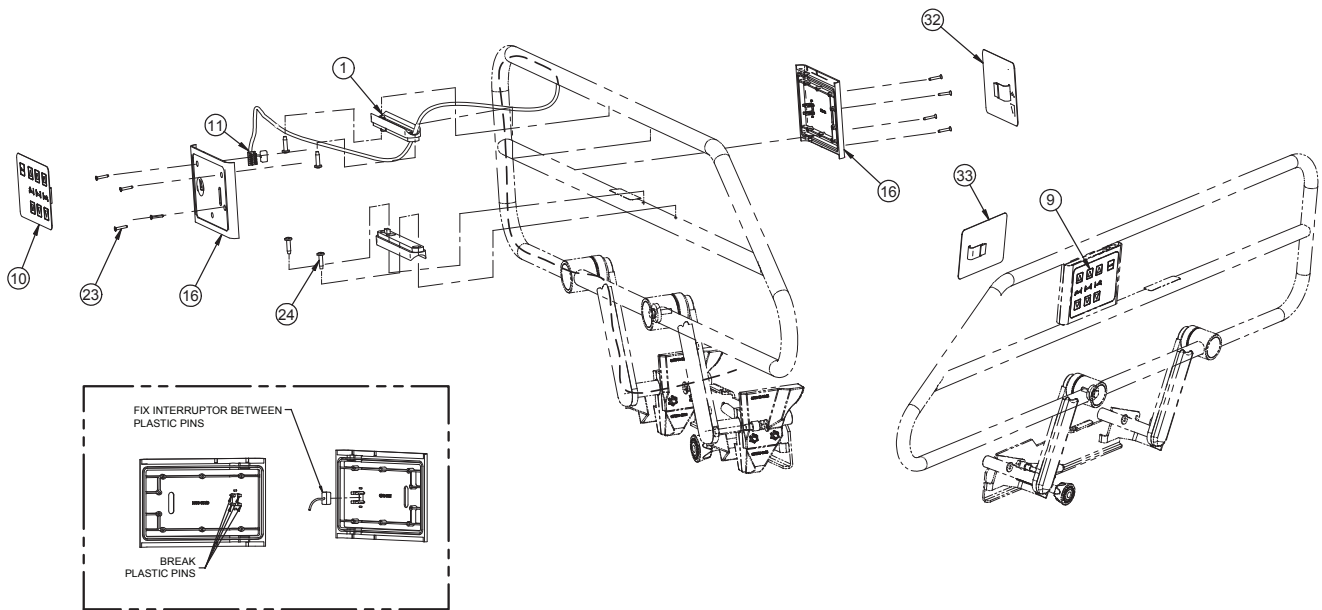
# Siderail - Fixed Control Panel Without Nurse Call

WIRING - SIDERAIL COMMUNICATION CABLE (11)		
PIN # (31)	SIGNAL	COLOR
3	HEAD UP	BROWN
6	HI-LO UP	BLUE
9	THIGH UP	ORANGE
8	COMMON	BLACK
7	THIGH DOWN	WHITE
4	HI-LO DOWN	GREEN
1	HEAD DOWN	RED
10	NURSE CALL N.O.	YELLOW
11	NURSE CALL COM	GREY
12	NURSE CALL N.C.	PURPLE
14	FLAT POSITION	PINK

TIE-WRAP DETAIL



# Siderail - Fixed Control Panel Without Nurse Call



## Siderail - Fixed Control Panel Without Nurse Call

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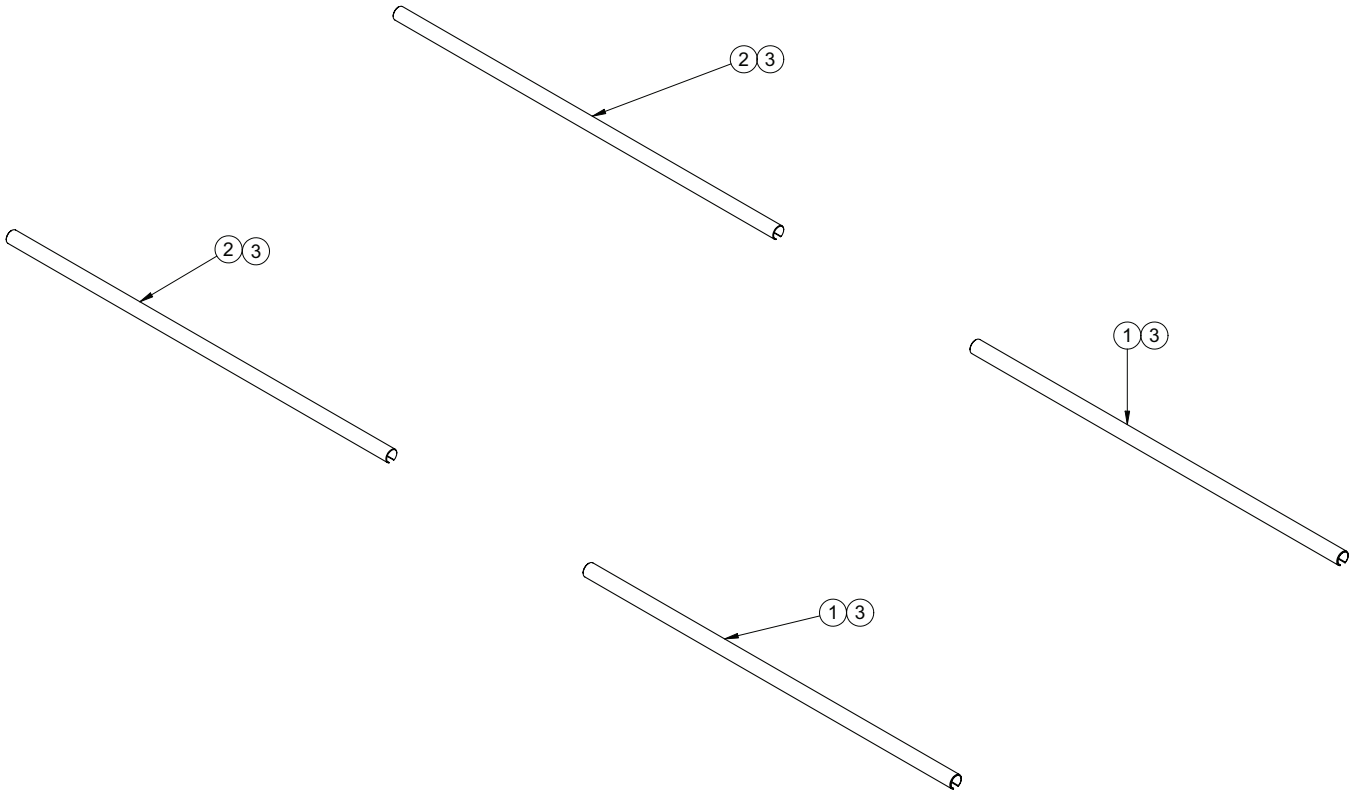
Item	Part No.	Part Name	Qty.
1	QP18821-07	Patient Control Support	4
2	23-0188W	Siderail Support And Insert	2
3	23-0650W	Siderail Support	2
4	23-0769XX	Head Right Siderail	1
5	23-0770XX	Head Left Siderail	1
6	23-0785XX	Foot Right Siderail	1
7	23-0786XX	Foot Left Siderail	1
8	M0019	OG2 Grease	1
9	QDF23-5927	Left Three-Function Membrane	1
10	QDF23-5928	Right Three-Function Membrane	1
11	QDF23-5940	Siderail Control Panel Cable	2
12	QDF5096	Flat Tie Holder	2
13	QDF9518	Tie Wrap	4
14	QP18-0240-07	Anchoring - Left Glider	8
15	QP18-0243-07	Anchoring - Right Glider	8
16	QP23-0391-07	Fixed Control Box	4
17	QP18-0241-07	Rear Glider - Right	4
18	QP18-0242-07	Rear Glider - Left	4
19	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	16
20	VB35A1N44	Carriage Bolt 1/4-20 X 1-3/4" Gr.5	4
21	VE30A1N	Nylon Hex. Locknut 1/4-20	20
22	VV37A1N24-S	Machine Screw Truss Head Phillips 1/4-20 X 3/4" Scotch Grip	4
23	VV41A1A20	Tapping Screw Flat Head Phillips Type F #4-40 X 5/8", Z.P.	16
24	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
25	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	4
26	QP23-0735	Control Board Stand Off Pin	8
27	QDF7908	1" Black Cap	4
28	QDF9018	"Amp" Pin Contact #66103-2	22
29	QDF299X	Adhesive Neoprene Tape 1/4" X 3/4"	2
30	QDF2043	Cable Clamp	2
31	QDF2042	14 Positions Circular Connector	2
32	QDF23-5924	Right Two Function Membrane Without Nurse Call	1
33	QDF23-5923	Left Two Function Membrane Without Nurse Call	1
34	QDF23-5922	Round Connector Din Cable	2
35	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4
36	QPCE1207	Cap	1

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.

If siderails are chromed, replace the suffix XX by CW.

# PVC Protector - Half-Length Retractable Siderail

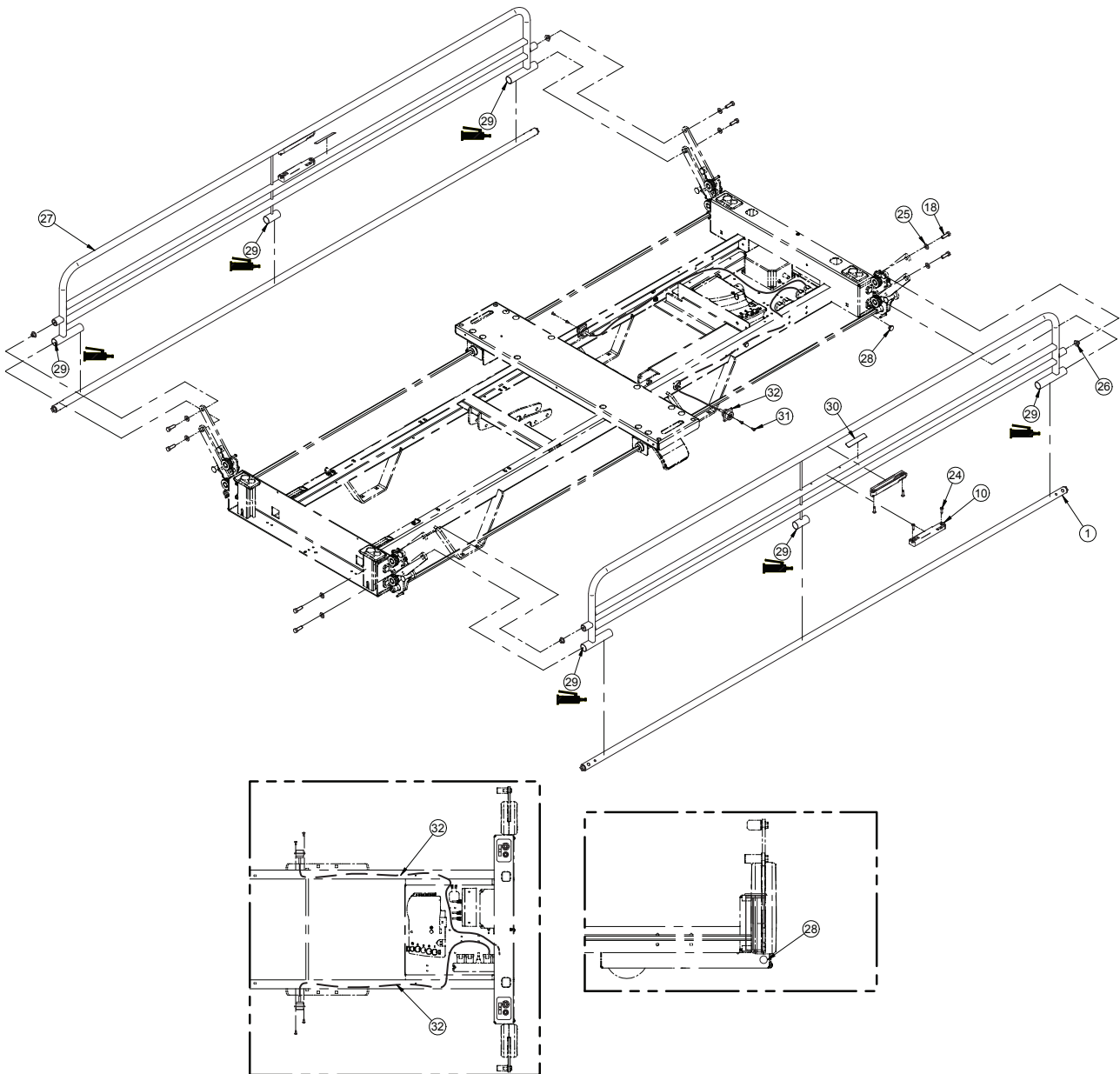
For Reference Only : OL230205  
Rev. 01



Item	Part No.	Part Name	Qty.
1	23-0478	Foot Siderail Pvc Protector	2
2	23-0617	Head Siderail Pvc Protector	2
3	QDF7826	3M Adhesive Tape #950 X 1"	116"

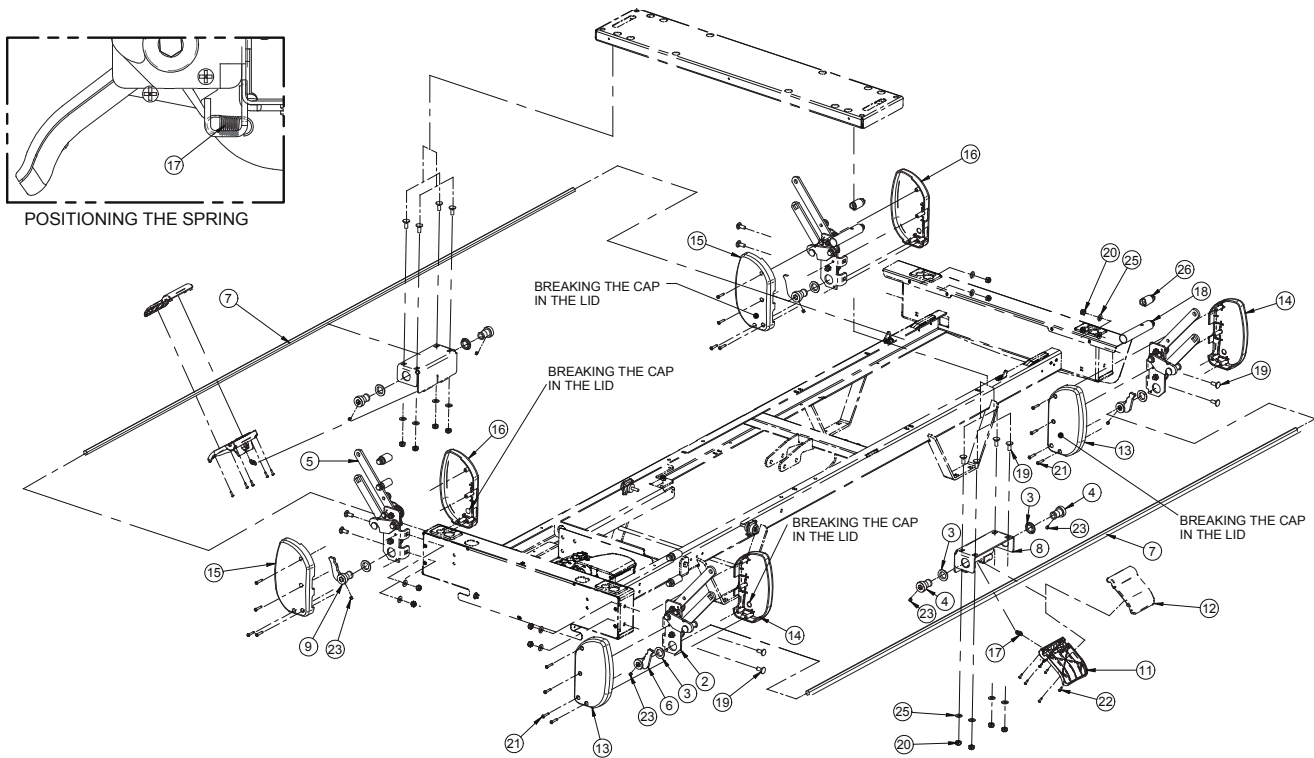
# Full-Lenght Retractable Siderail

For Reference Only : OL235054XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# Full-Length Retractable Siderail





# Full-Lenght Retractable Siderail

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Item	Part No.	Part Name	Qty.
1	23-0492C/XX	Pivot Tube S.A.	2
2	23-0535	Right Siderail Mechanism S.A.	2
3	23-0541	Shoulder Spacer	8
4	23-0547Z	Lock Bushing	4
5	23-0548	Left Siderail Mechanism S.A.	2
6	23-0549Z	Right Release Finger S.A.	2
7	23-0550Z	Release Rod - Head	2
8	23-0551W	Siderail Handle Bracket	2
9	23-0555Z	Left Release Finger S.A.	2
10	QP23-5093	Removable Control Panel Support	4
11	QP23-0556	Release Handle - Lower Part	2
12	QP23-0557	Release Handle - Upper Part	2
13	QP23-0623	Head Right Siderail Mechanism Outer Cover	2
14	QP23-0624	Foot Right Siderail Mechanism Outer Cover	2
15	QP23-0625	Head Left Siderail Mechanism Outer Cover	2
16	QP23-0626	Foot Left Siderail Mechanism Outer Cover	2
17	QRE23-0561	Release Handle Extension Spring	2
18	VB15A1O32-S	Bolt 5/16-18 X 1" Gr.5 Scotch Grip	8
19	VB35A1O24	Carriage Bolt 5/16-18 X 3/4", Gr.5 Z.P.	16
20	VE30A1O	Nylon Hex. Locknut 5/16"-18	16
21	VV23A1G32HL	Tapping Screw Pan Head Phillips High-Low #10 X 1" Z.P.	16
22	VV23A9C16HL	Tapping Screw Pan Head Phillips High-Low Type B #6 X 1/2"	12
23	VV61A0M08	Nylon Hex Socket Set Screw 1/4-28 X 1/4"	8
24	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	8
25	VW10A10	Flat Washer Ø5/16" S.A.E.	24
26	23-0658	Spacer	4
27	23-0485C/XX	Full Lenght Retractable Siderail S.A.	2
28	QPCE1207	Cap	1
29	M0019	OG2 Grease	1
30	QE71-1175-T	Sticker : Manipulate Here	2
31	VV83A9E12	Tapping Screw Pan Head Phillips Type B #8 X 3/8", Z.P.	4
32	QDF23-5922	Round Connector Din Cable	2

# S.A. for Right Siderail With Fixed Controls - ERGO

For Reference Only : 23-5125XX<sup>1</sup> Without Flat Position, Without Nurse Call

Rev. 01

For Reference Only : 23-5126XX<sup>1</sup> Without Flat Position, With Nurse Call

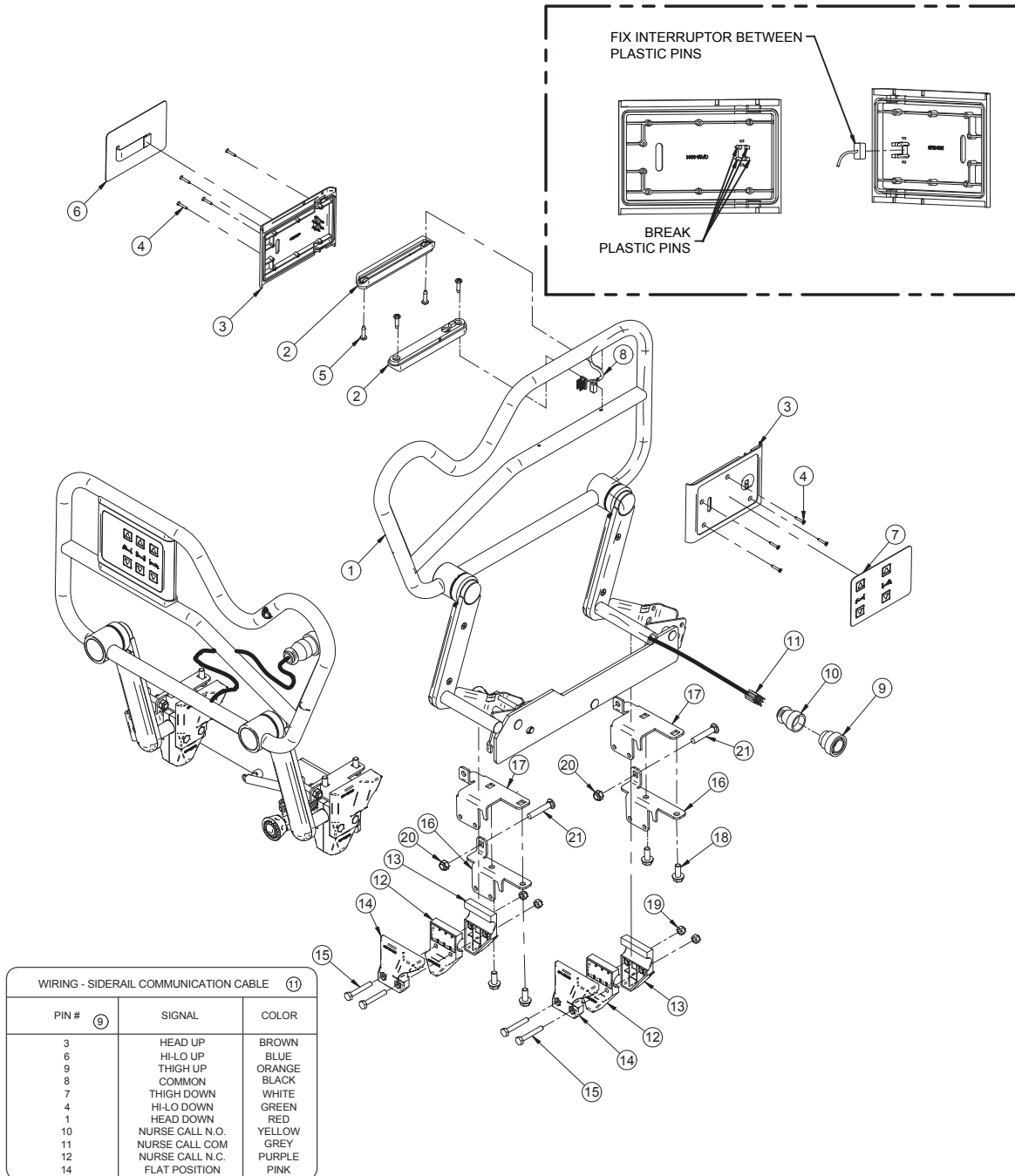
Rev. 01

For Reference Only : 23-5127XX<sup>1</sup> With Flat Position, Without Nurse Call

Rev. 01

For Reference Only : 23-5128XX<sup>1</sup> With Flat Position, With Nurse Call

Rev. 01



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## S.A. for Right Siderail With Fixed Controls - ERGO

---

Item	Part No.	Part Name	Qty.
1	23-5057XX	Head Right Siderail S.A.	1
2	QP18821-07	Fix Control Support	2
3	QP23-0391	Fix Control Case	2
4	VV41A1A20	Tapping Screw Flat Head Phillips Type F #4-40 X 5/8", Z.P.	8
5	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	4
6	QDF23-5928	Right Three-Function Membrane (Refer to table, page 174 )	1
7	QDF23-5924	Right Two Function Membrane (Refer to table, page 174 )	1
8	QDF23-5940	Siderail Control Panel Cable	1
9	QDF2042	14 Positions Circular Connector	1
10	QDF2043	Cable Clamp	1
11	QDF9018	"Amp" Pin Contact #66103-2	10
12	QP18-0240-07	Anchoring - Left Glider	2
13	QP18-0243-07	Anchoring - Right Glider	2
14	QP18-0242-07	Rear Glider - Left	2
15	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	4
16	23-5034W	Siderail Support - Interior Left	2
17	23-5036W	Siderail Support - Exterior Left	2
18	VVB4A1O24	Bolt 5/16-18 X 3/4" Thread Rolling	4
19	VE30A1N	Nylon Hex. Locknut 1/4-20	4
20	VE30A1O	Nylon Hex. Locknut 5/16"-18	2
21	VB30A1O44	Carriage Bolt 5/16-18 X1-3/4"	2

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# S.A. for Left Siderail With Fixed Controls - ERGO

For Reference Only : 23-5129XX<sup>1</sup> Without Flat Position, Without Nurse Call

Rev. 01

For Reference Only : 23-5130XX<sup>1</sup> Without Flat Position, With Nurse Call

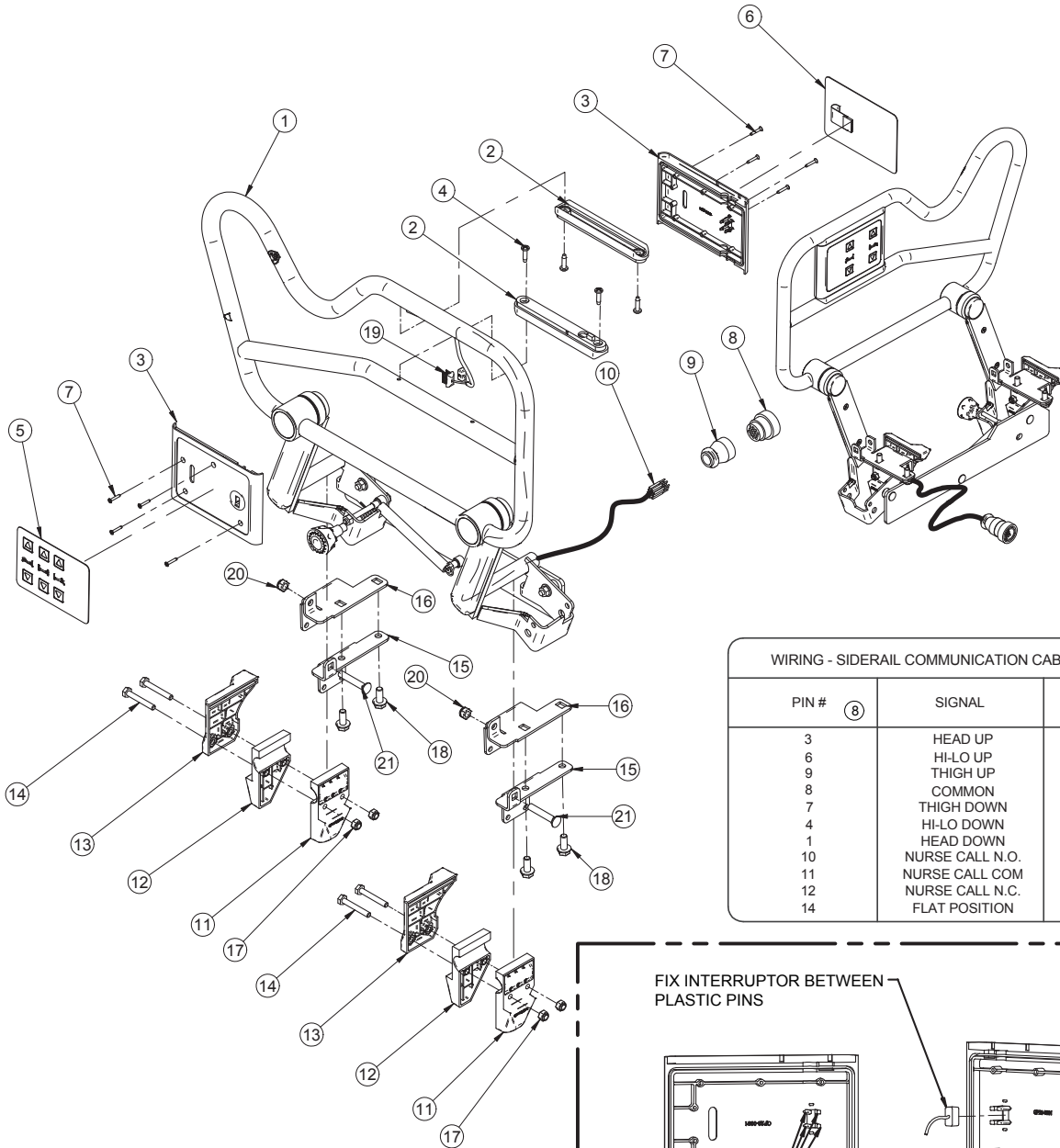
Rev. 01

For Reference Only : 23-5131XX<sup>1</sup> With Flat Position, Without Nurse Call

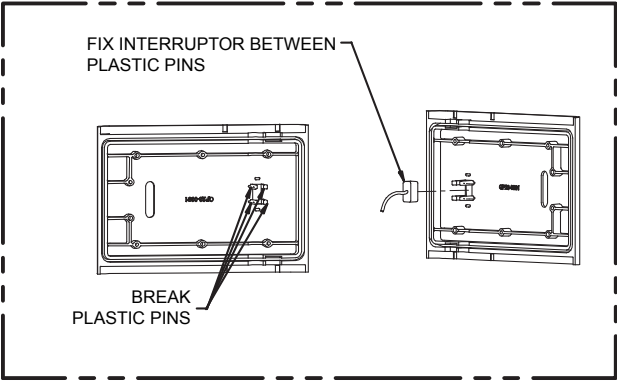
Rev. 01

For Reference Only : 23-5132XX<sup>1</sup> With Flat Position, With Nurse Call

Rev. 01



WIRING - SIDERAIL COMMUNICATION CABLE (10)		
PIN # (8)	SIGNAL	COLOR
3	HEAD UP	BROWN
6	HI-LO UP	BLUE
9	THIGH UP	ORANGE
8	COMMON	BLACK
7	THIGH DOWN	WHITE
4	HI-LO DOWN	GREEN
1	HEAD DOWN	RED
10	NURSE CALL N.O.	YELLOW
11	NURSE CALL COM	GREY
12	NURSE CALL N.C.	PURPLE
14	FLAT POSITION	PINK



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

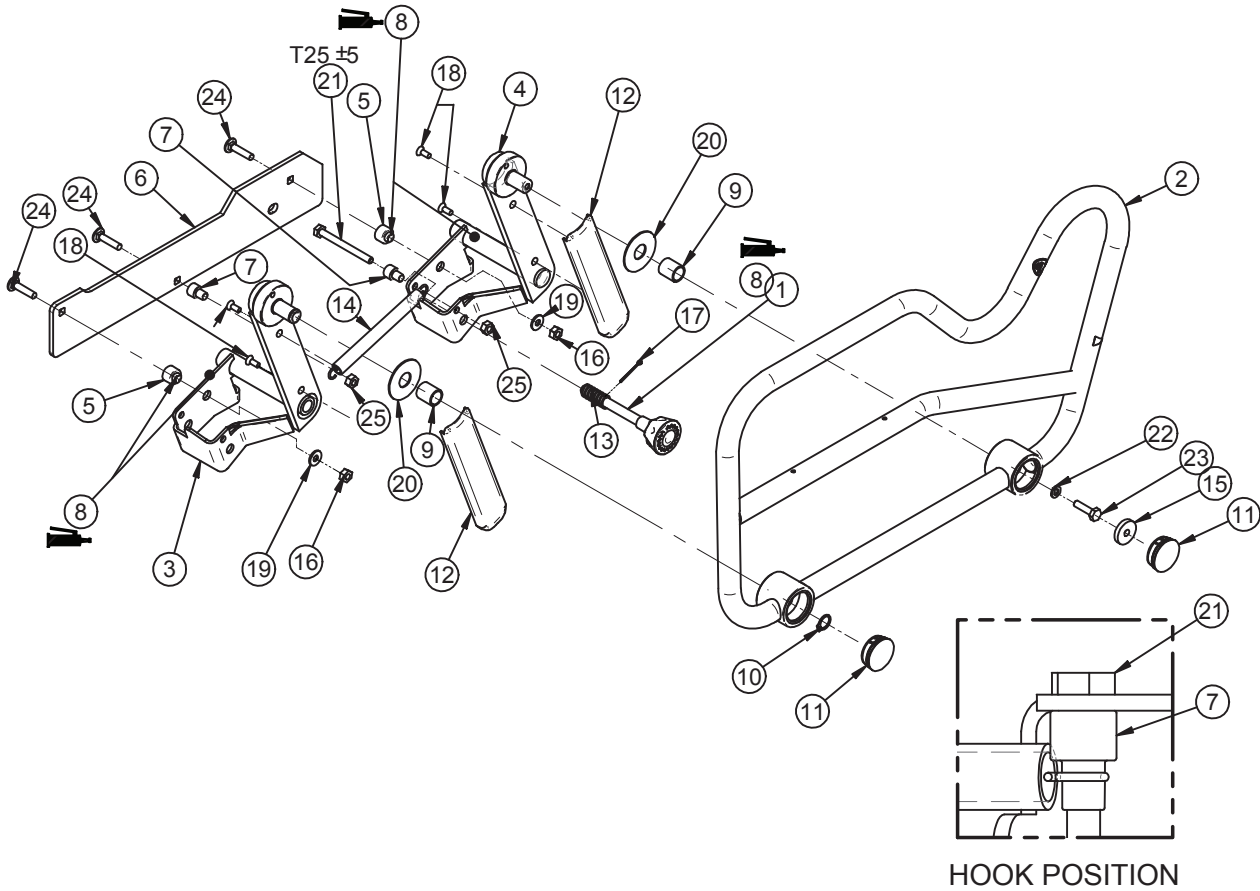
## S.A. for Left Siderail With Fixed Controls - ERGO

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Item	Part No.	Part Name	Qty.
1	23-5058XX	Head Left Siderail S.A.	1
2	QP18821-07	Fix Control Support	2
3	QP23-0391	Fix Control Case	2
4	VV83A9G24	Tapping Screw Pan Head Phillips Type B #10 X 3/4"	4
5	QDF23-5927	Head Left Three Function Membrane (Refer to table, page 174 )	1
6	QDF23-5923	Head Left Two Functions Membrane (Refer to table, page 174 )	1
7	VV41A1A20	Tapping Screw Flat Head Phillips Type F #4-40 X 5/8", Z.P.	8
8	QDF2042	14 Position Circular Connector	1
9	QDF2043	Clamp	1
10	QDF9018	"Amp" Pin Contact #66103-2	11
11	QP18-0240-07	Anchoring - Left Glider	2
12	QP18-0243-07	Anchoring - Right Glider	2
13	QP18-0241-07	Rear Glider - Right	2
14	VB15A1N44	Bolt 1/4"-20 X 1-3/4" Lg. Gr.5	4
15	23-5033W	Right Interior Safety Siderail Support	2
16	23-5035W	Right Exterior Safety Siderail Support	2
17	VE30A1N	Nylon Hex. Locknut 1/4-20	4
18	VVB4A1O24	Bolt 5/16-18 X 3/4" Thread Rolling	4
19	QDF23-5940	Siderail Control Panel Cable	1
20	VE30A1O	Nylon Hex. Locknut 5/16"-18	2
21	VB30A1O44	Carriage Bolt 5/16-18 X1-3/4"	2

# S.A. for Right Head Siderail - ERGO

For Reference Only : 23-5057XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## S.A. for Right Head Siderail - ERGO

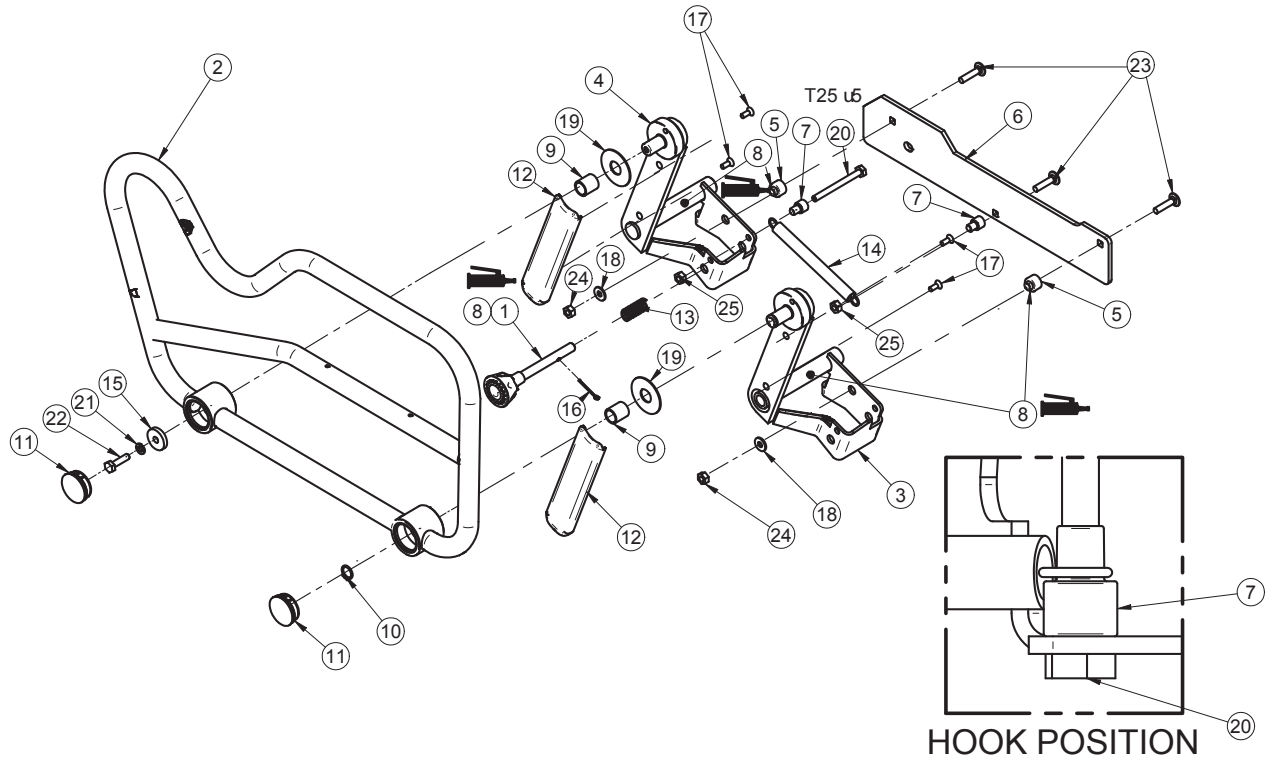
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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-5114XX	Printed Right Siderail - Head	1
3	23-0772W	Siderail S.A -Head Right (Wire)	1
4	23-0774W	Siderail S.A -Head Right (Screw)	1
5	23-0816	Sleeve	2
6	23-5080P	Transfer Arm - Head	1
7	QP23-0657	Spacer For Spring	2
8	M0019	OG2 Grease	1
9	QBP56-6	Self-Lubricant Bushing	2
10	QDF7859	Exterior Snap Ring Dia. 9/16"	1
11	QDFP1514	Heyco Dome Plug	2
12	QP23-0781	Wire Protector	2
13	QRC23-0877	Compression Spring	1
14	QRE23-0789	Siderail Spring	1
15	QPA23-0753	Washer	1
16	VE50A1N	Two-Ways Hex. Locknut 1/4-20	4
17	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
18	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
19	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
20	VW10C432002	Nylon Washer	2
21	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
22	VW20A08	Spring Washer 1/4"	1
23	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	1
24	VB30A1N34	Carriage Bolt 1/4-20 X 1-1/8"	3
25	VE30A1N	Nylon Hex. Locknut 1/4-20	2

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# S.A. for Left Head Siderail - ERGO

For Reference Only : 23-5058XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.



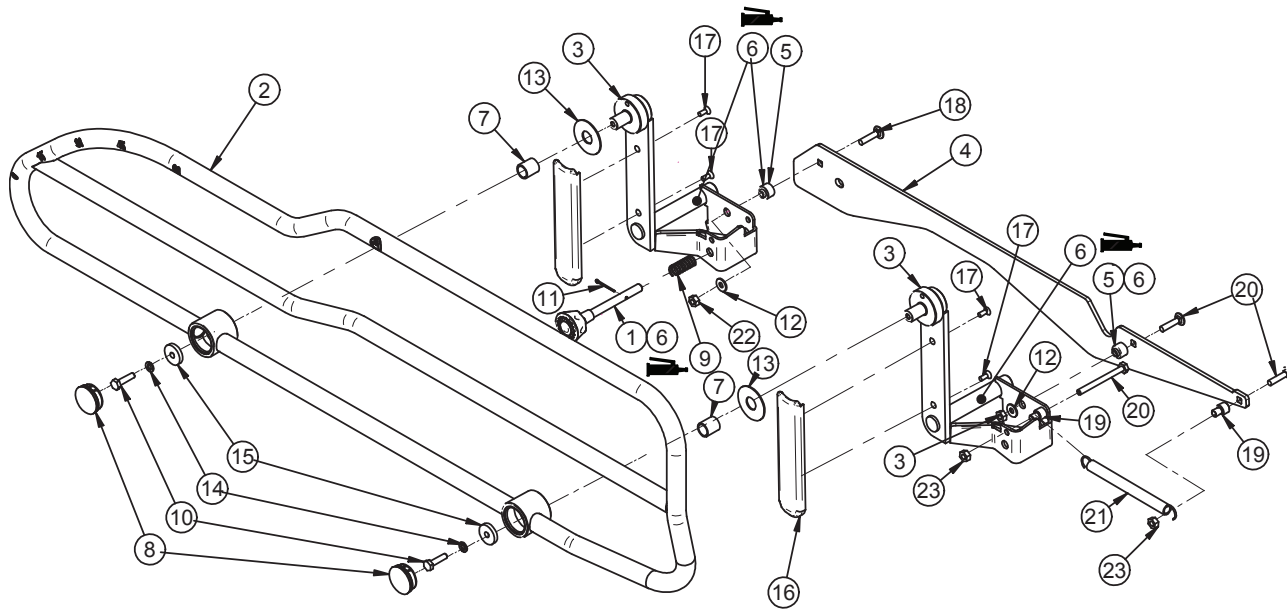
## S.A. for Left Head Siderail - ERGO

---

Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-5115XX	Printed Left Siderail - Head	1
3	23-0780W	Siderail S.A -Head Left (Wire)	1
4	23-0779W	Siderail S.A -Head Left (Screw)	1
5	23-0816	Sleeve	2
6	23-5080P	Transfer Arm - Head	1
7	QP23-0657	Spacer For Spring	2
8	M0019	OG2 Grease	1
9	QBP56-6	Self-Lubricant Bushing	2
10	QDF7859	Exterior Snap Ring Dia. 9/16"	1
11	QDFP1514	Heyco Dome Plug	2
12	QP23-0781	Wire Protector	2
13	QRC23-0877	Compression Spring	1
14	QRE23-0789	Siderail Spring	1
15	QPA23-0753	Washer	1
16	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
17	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
18	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
19	VW10C432002	Nylon Washer	2
20	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
21	VW20A08	Spring Washer 1/4"	1
22	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	1
23	VB30A1N34	Carriage Bolt 1/4-20 X 1-1/8"	3
24	VE50A1N	Two-Ways Hex. Locknut 1/4-20	4
25	VE30A1N	Nylon Hex. Locknut 1/4-20	2

# S.A. for Right Foot Siderail - ERGO

For Reference Only : 23-5059XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## S.A. for Right Foot Siderail - ERGO

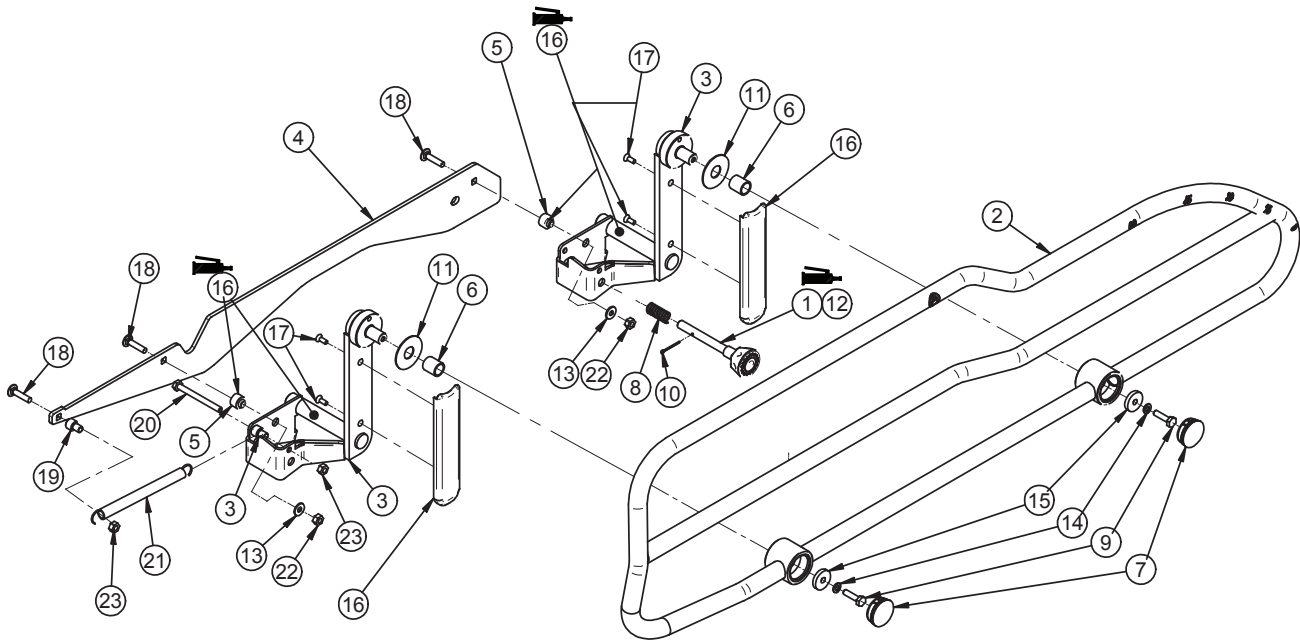
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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-5116P/C	Printed Right Siderail - Foot	1
3	23-0779P	Siderail S.A -Head Left (Screw)	2
4	23-5031P	Transfer Arm - Foot	1
5	23-0816	Sleeve	2
6	M0019	OG2 Grease	1
7	QBP56-6	Self-Lubricant Bushing	2
8	QDFP1514	Heyco Dome Plug	2
9	QRC23-0877	Compression Spring	1
10	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	2
11	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
12	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
13	VW10C432002	Nylon Washer	2
14	VW20A08	Spring Washer 1/4"	2
15	QPA23-0753	Washer	2
16	QP23-0781	Wire Protector	2
17	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
18	VB30A1N34	Carriage Bolt 1/4-20 X 1-1/8"	3
19	QP23-0657	Spacer For Spring	2
20	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
21	QRE23-0789	Siderail Spring	1
22	VE50A1N	Two-Ways Hex. Locknut 1/4-20	4
23	VE30A1N	Nylon Hex. Locknut 1/4-20	2

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# S.A. for Left Foot Siderail - ERGO

For Reference Only : 23-5060XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## S.A. for Left Foot Siderail - ERGO

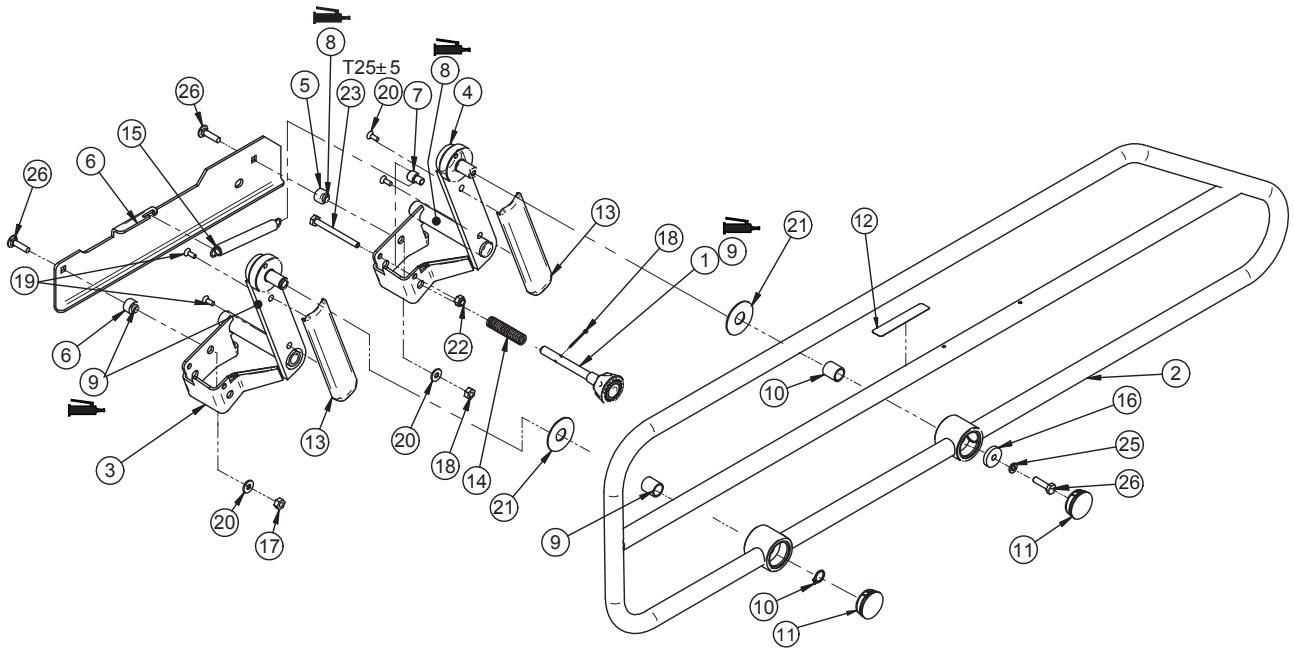
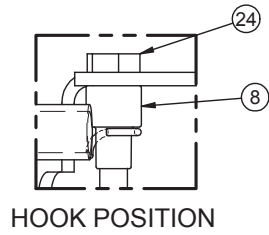
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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-5117XX	Printed Left Siderail - Foot	1
3	23-0774P	Siderail S.A -Head Right (Screw)	2
4	23-5031P	Transfer Arm - Foot	1
5	23-0816	Sleeve	2
6	QBP56-6	Self-Lubricant Bushing	2
7	QDFP1514	Heyco Dome Plug	2
8	QRC23-0877	Compression Spring	1
9	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	2
10	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
11	VW10C432002	Nylon Washer	2
12	M0019	OG2 Grease	1
13	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
14	VW20A08	Spring Washer 1/4"	2
15	QPA23-0753	Washer	2
16	QP23-0781	Wire Protector	2
17	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
18	VB30A1N34	Carriage Bolt 1/4-20 X 1-1/8"	3
19	QP23-0657	Spacer For Spring	2
20	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
21	QRE23-0789	Siderail Spring	1
22	VE50A1N	Two-Ways Hex. Locknut 1/4-20	4
23	VE30A1N	Nylon Hex. Locknut 1/4-20	2

<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

# S.A. for Right Head Siderail

For Reference Only : 23-0769XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

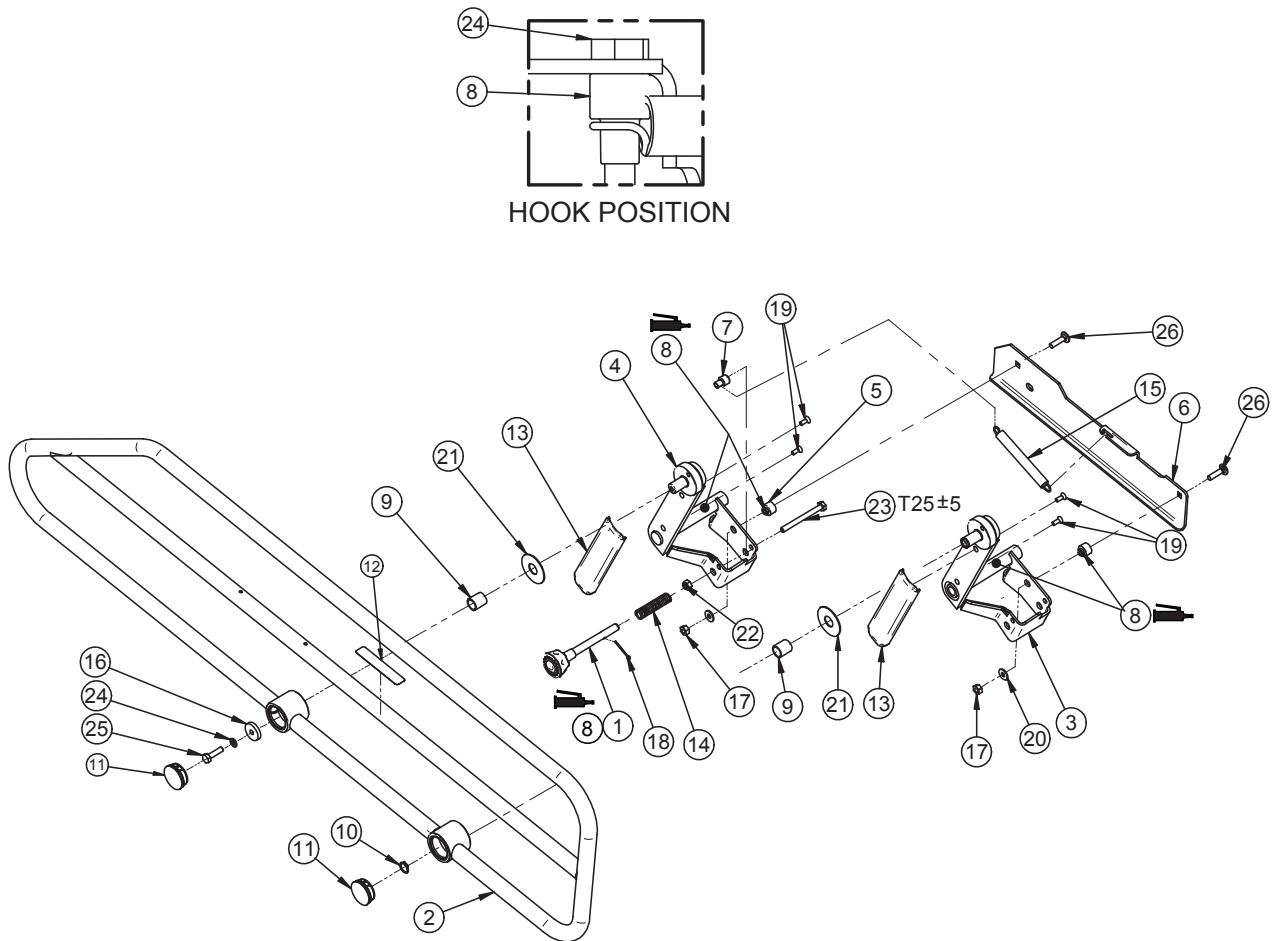
## S.A. for Right Head Siderail

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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-0767X	Headright Siderail S.A.	1
3	23-0772W	Siderail S.A -Head Right (Wire)	1
4	23-0774W	Siderail S.A -Head Right (Screw)	1
5	23-0816	Sleeve	2
6	23-0777W	Transfer Arm - Head	
7	QP23-0657	Spacer	
8	M0019	Graisse Grade OG2	1
9	QBP56-6	Self-Lubricant Bushing	2
10	QDF7859	Snap Ring Dia. 9/16"	1
11	QDFP1514	Heyco Dome Plug	2
12	QE71-1175-T	Sticker: Manipulate Here	1
13	QP23-0781	Wire Protector	2
14	QRC23-0877	Spring Compression	1
15	QRE23-0789	Siderail Spring	1
16	QPA23-0753	Washer	1
17	VE50A1N	Two-Ways Hex. Locknut 1/4-20	2
18	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
19	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
20	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
21	VW10C432002	Nylon Washer	2
22	VE30A1N	Nylon Hex. Locknut 1/4-20	1
23	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
24	VW20A08	Spring Washer 1/4"	1
25	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	1
26	VB35A1N32	Carriage Bolt 1/4-20 X 1-1/8"	2

# S.A. for Left Head Siderail

For Reference Only : 23-0770XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.



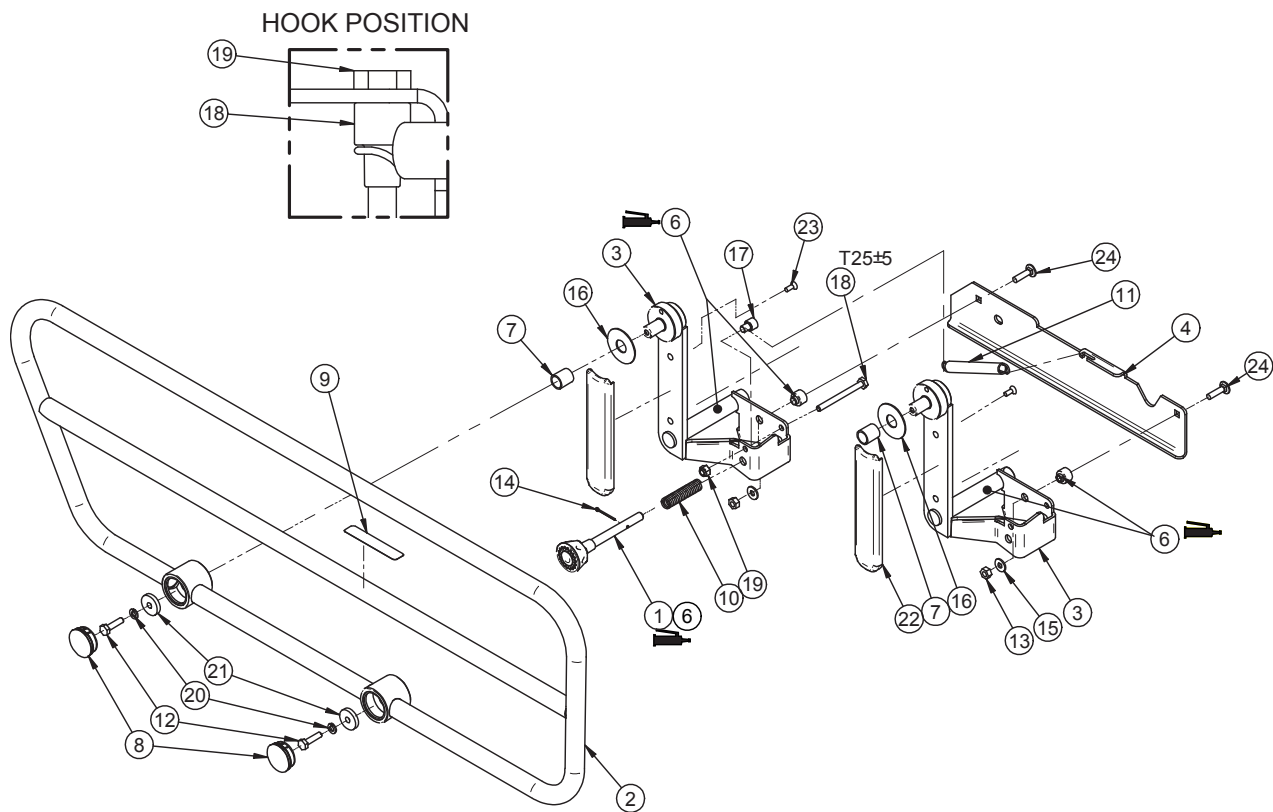
## S.A. for Left Head Siderail

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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-0768X	Head Left Siderail S.A.	1
3	23-0780X	Siderail S.A -Head Left (Wire)	1
4	23-0779X	Siderail S.A -Head Left (Screw)	1
5	23-0816	Sleeve	2
6	23-0778W	Transfer Arm - Head	1
7	QP23-0657	Spacer	1
8	M0019	Graisse Grade OG2	1
9	QBP56-6	Self-Lubricant Bushing	2
10	QDF7859	Snap Ring Dia. 9/16"	1
11	QDFP1514	Heyco Dome Plug	2
12	QE71-1175-T	Sticker: Manipulate Here	1
13	QP23-0781-07	Wire Protector	2
14	QRC23-0877	Spring Compression	1
15	QRE23-0789	Siderail Spring	1
16	QPA23-0753	Washer	1
17	VE50A1N	Two-Ways Hex. Locknut 1/4-20	2
18	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
19	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
20	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
21	VW10C432002	Nylon Washer	2
22	VE30A1N	Nylon Hex. Locknut 1/4-20	1
23	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
24	VW20A08	Spring Washer 1/4"	1
25	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P. Fully Threaded Scotch Grip	1
26	VB35A1N32	Carriage Bolt 1/4-20 X 1-1/8"	2

# S.A. for Right Foot Siderail

For Reference Only : 23-0785XX<sup>1</sup>  
Rev. 02



<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

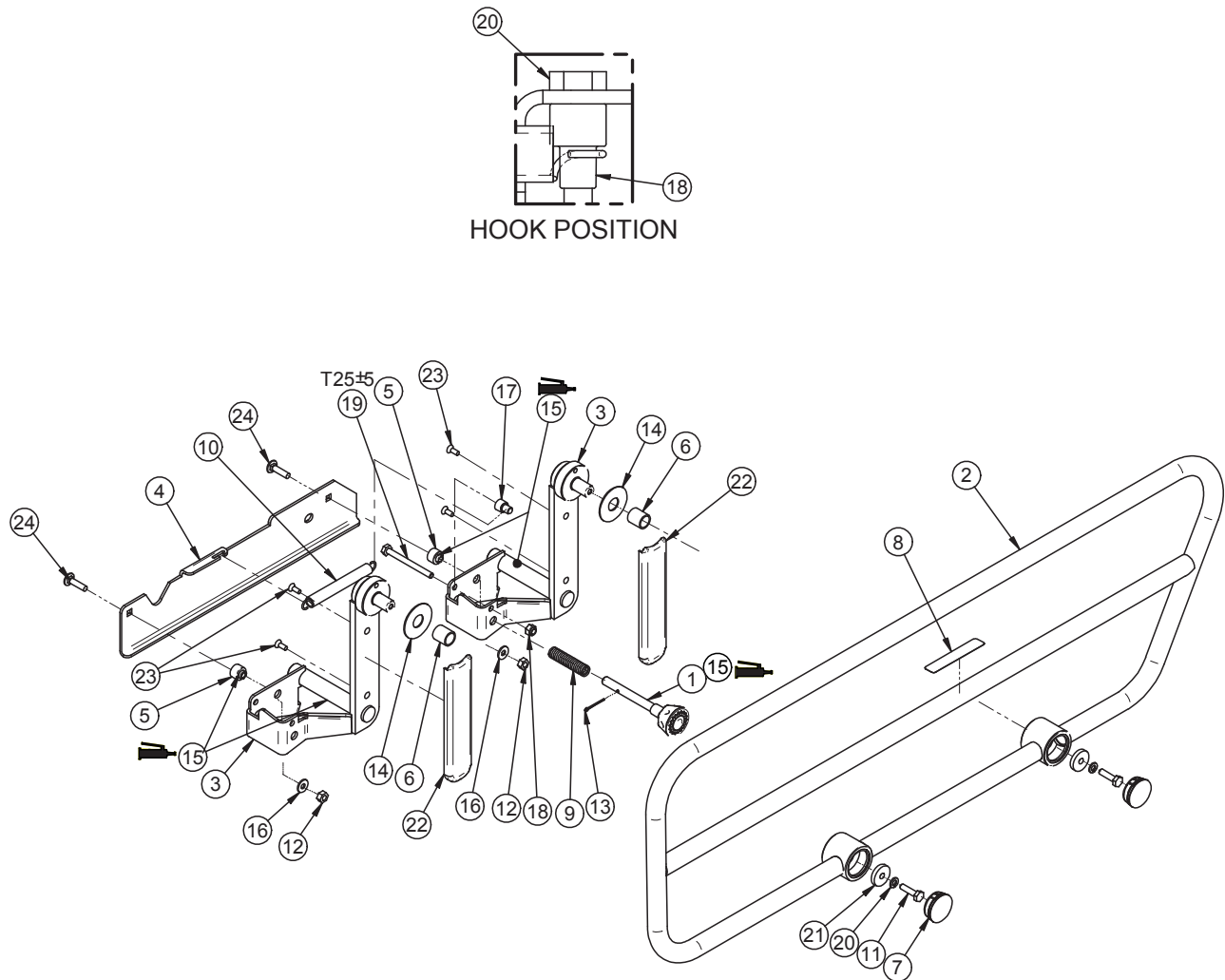
## S.A. for Right Foot Siderail

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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-0783X	Foot Right Siderail S.A.	1
3	23-0779W	Siderail S.A -Foot Left (Screw)	1
4	23-0817W	Transfer Arm - Foot Right	1
5	23-0816	Sleeve	2
6	M0019	Graisse Grade OG2	1
7	QBP56-6	Self-Lubricant Bushing	2
8	QDFP1514	Heyco Dome Plug	2
9	QE71-1175-T	Sticker: Manipulate Here	1
10	QRC23-0877	Spring Compression	1
11	QRE23-0789	Siderail Spring	1
12	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P.	
		Fully Threaded Scotch Grip	1
13	VE50A1N	Two-Ways Hex. Locknut 1/4-20	2
14	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
15	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
16	VW10C432002	Nylon Washer	2
17	QP23-0657	Spacer	1
18	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
19	VE30A1N	Nylon Hex. Locknut 1/4-20	1
20	VW20A08	Spring Washer 1/4"	1
21	QPA23-0753	Washer	1
22	QP23-0781-07	Wire Protector	2
23	VV81A1G16	Tapping Screw Flat Head	
		Phillips Type B #10 X 1/2", Z.P.	4
24	VB35A1N32	Carriage Bolt 1/4-20 X 1-1/8"	2

# S.A. for Left Foot Siderail

For Reference Only : 23-0786XX<sup>1</sup>  
Rev. 03




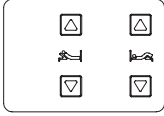
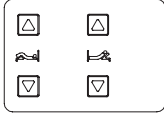
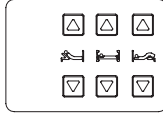
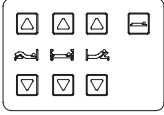
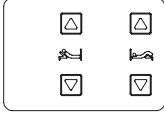
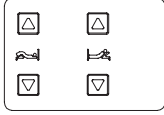
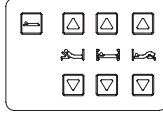
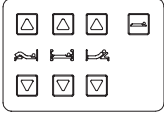
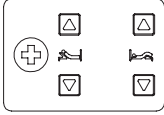
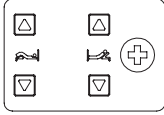
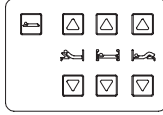
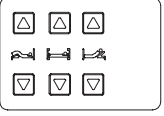
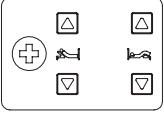
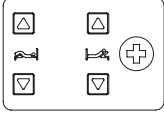
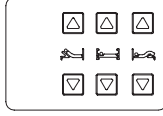
<sup>1</sup>: If siderails are painted, replace the suffix XX by W.  
If siderails are chromed, replace the suffix XX by CW.

## S.A. for Left Foot Siderail

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Item	Part No.	Part Name	Qty.
1	23-0341	Latch S.A.	1
2	23-0782X	Foot Left Siderail S.A.	1
3	23-0774W	Siderail S.A -Foot Left (Screw)	1
4	23-0818W	Transfer Arm - Foot Left	1
5	23-0816	Sleeve	2
6	QBP56-6	Self-Lubricant Bushing	2
7	QDFP1514	Heyco Dome Plug	2
8	QE71-1175-T	Sticker: Manipulate Here	1
9	QRC23-0877	Spring Compression	1
10	QRE23-0789	Siderail Spring	1
11	VB15A1N32-S	Bolt 1/4"-20 X 1" Gr.5 Z.P.	
		Fully Threaded Scotch Grip	1
12	VE50A1N	Two-Ways Hex. Locknut 1/4-20	2
13	VG40B0332	Cotter Pin Dia. 3/32" X 1" Lg.	1
14	VW10C432002	Nylon Washer	2
15	M0019	Graisse Grade OG2	1
16	VW10A08	Flat Washer Dia. 1/4" X 1/16" Thick	2
17	QP23-0657	Spacer	1
18	VE30A1N	Nylon Hex. Locknut 1/4-20	1
19	VB15A1N54	Bolt 1/4"-20 X 2-3/4" Gr.5 Z.P.	1
20	VW20A08	Spring Washer 1/4"	1
21	QPA23-0753	Washer	1
22	QP23-0781-07	Wire Protector	2
23	VV81A1G16	Tapping Screw Flat Head Phillips Type B #10 X 1/2", Z.P.	4
24	VB35A1N32	Carriage Bolt 1/4-20 X 1-1/8"	2

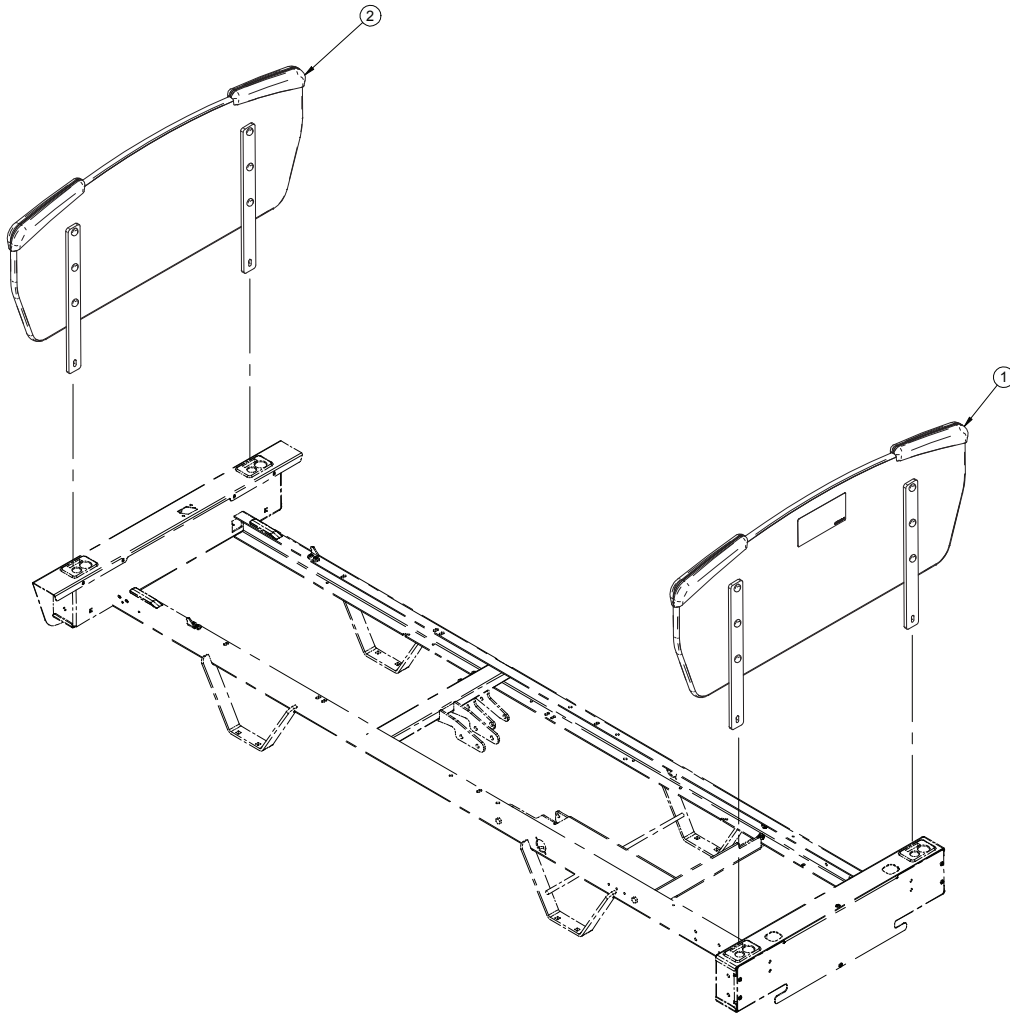
# Membranes for Fixed Controls

Without Flat Position and Without Nurse Call			
			
QDF23-5927	QDF23-5923	QDF23-5924	QDF23-5928
Left Three Functions Membrane	Left Two Functions Without Nurse Call Membrane	Right Two Functions Without Nurse Call Membrane	Right Three Functions Membrane
With Flat Position and Without Nurse Call			
			
QDF23-5938	QDF23-5923	QDF23-5924	QDF23-5939
Left Three Functions With Flat Position Membrane	Left Two Functions Without Nurse Call Membrane	Right Two Functions Without Nurse Call Membrane	Right Three Functions With Flat Position Membrane
With Flat Position and With Nurse Call			
			
QDF23-5938	QDF23-5925	QDF23-5926	QDF23-5939
Left Three Functions With Flat Position Membrane	Left Two Functions With Nurse Call Membrane	Right Two Functions With Nurse Call Membrane	Right Three Functions With Flat Position Membrane
Without Flat Position and With Nurse Call			
			
QDF23-5927	QDF23-5925	QDF23-5926	QDF23-5928
Left Three Functions Membrane	Left Two Functions With Nurse Call Membrane	Right Two Functions With Nurse Call Membrane	Right Three Functions Membrane

# Boards Without Control - ERGO

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For Reference Only : OP235001XXXX'W  
Rev. 03

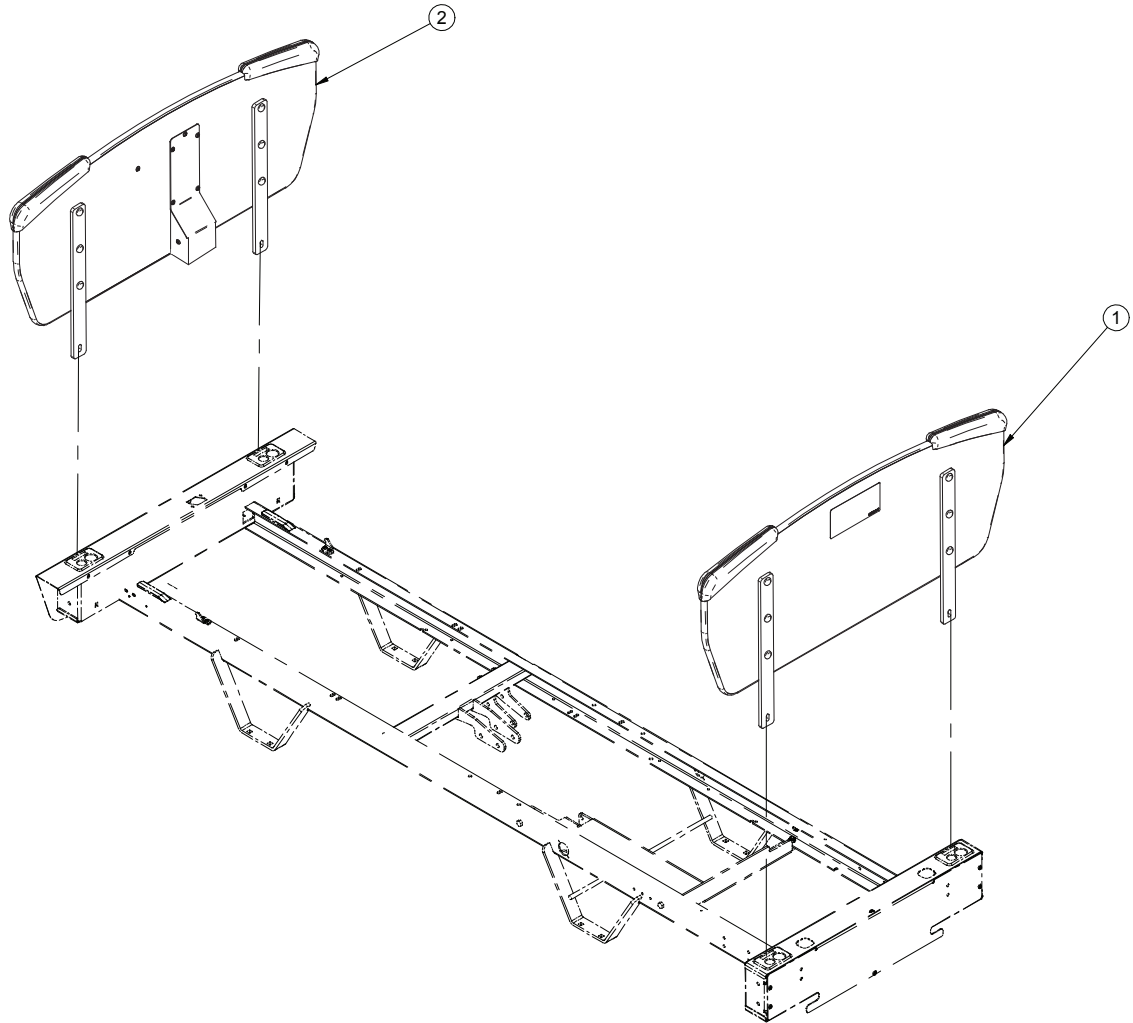


Item	Part No.	Part Name	Qty.
1	23-5118W	ERGO Head Board Without Control	1
2	23-5138W	ERGO Foot Board Without Control	1

<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# Boards With Control - ERGO

For Reference Only : OP235002XXXX'W  
Rev. 05



Item	Part No.	Part Name	Qty.
1	23-5118W	ERGO Head Board Without Control	1
2	23-5119W	ERGO Footboard W/ Control	1

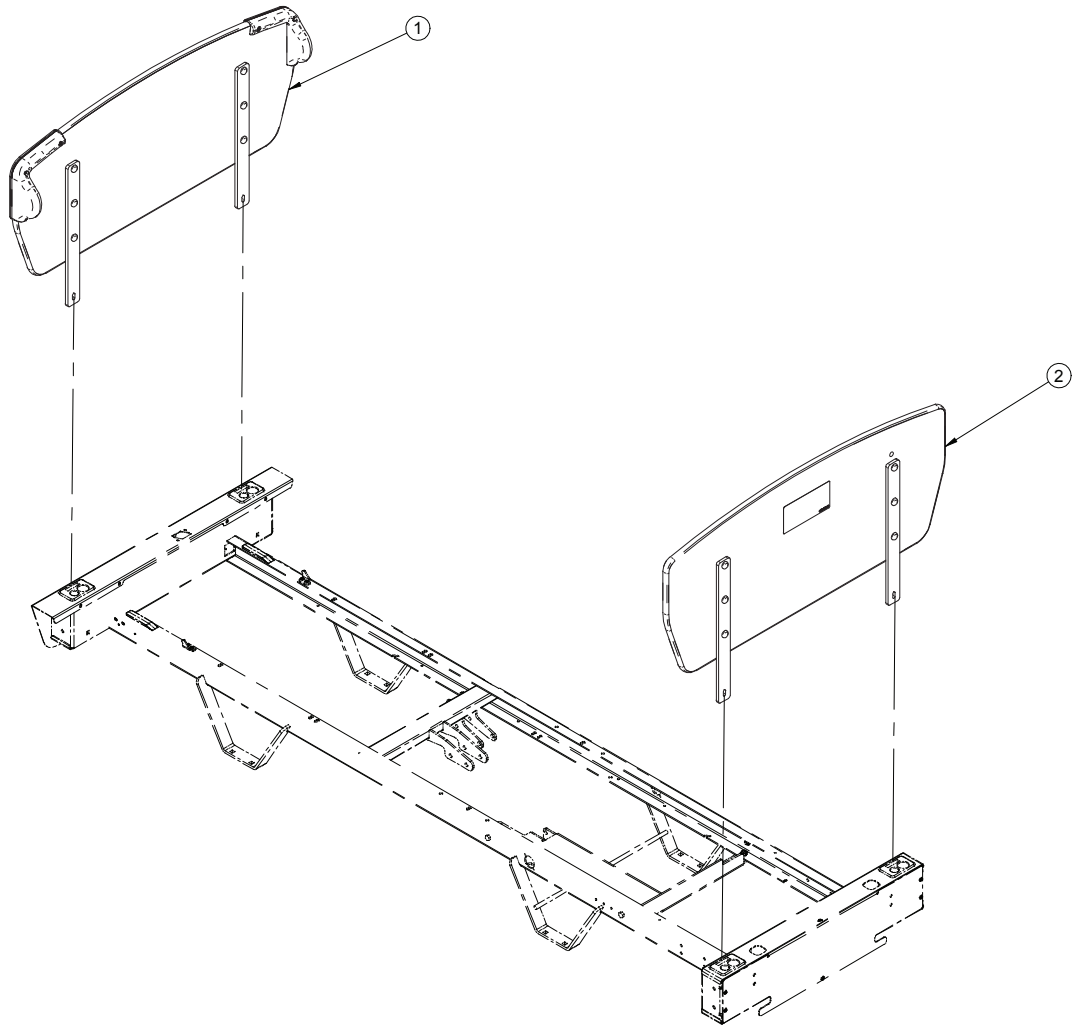
<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.



# Boards Without Control

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For Reference Only : OP235003XXXX<sup>1</sup>W  
Rev. 03



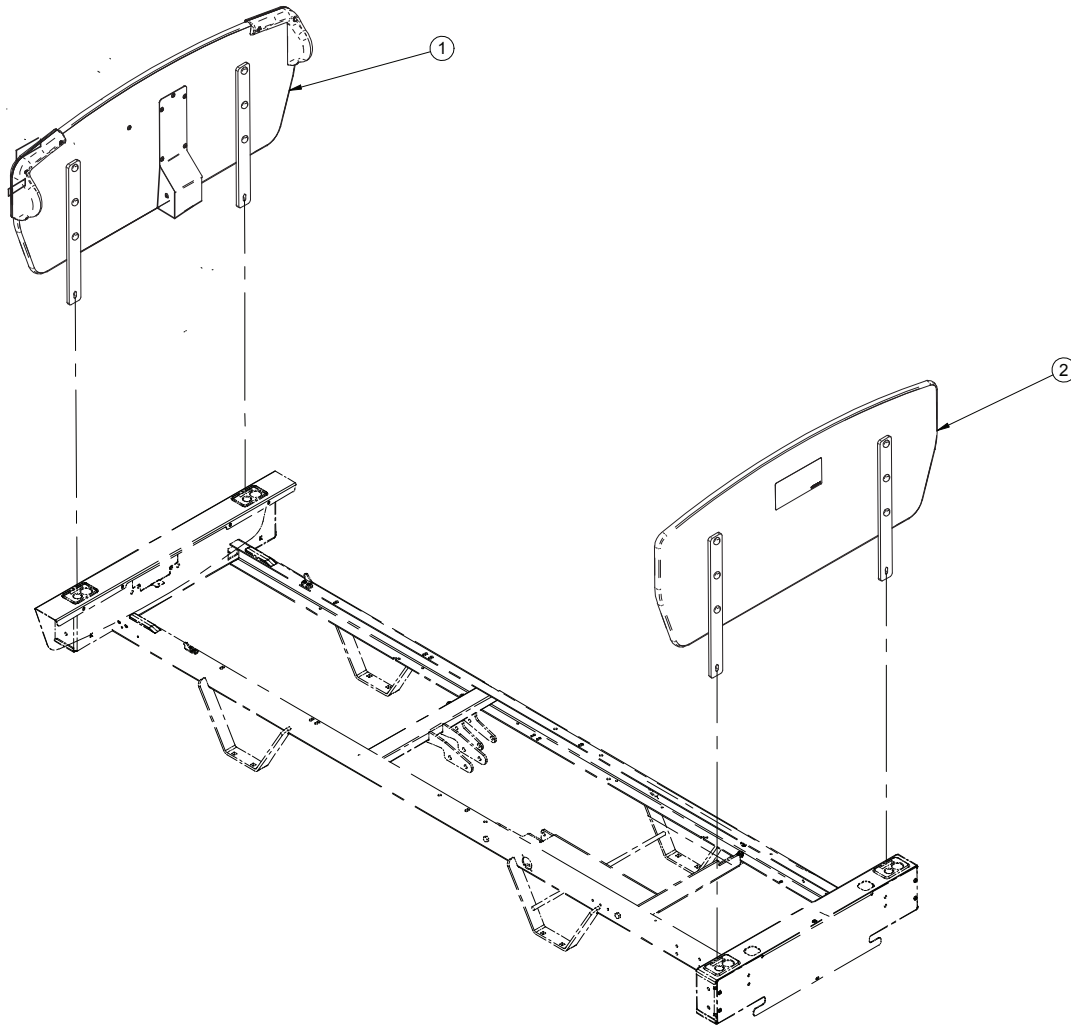
Item	Part No.	Part Name	Qty.
1	23-5120W	Foot Board Without Control	1
2	23-5122W	Head Board Without Control	1

<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# Boards With Control

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For Reference Only : OP235004W  
Rev. 02

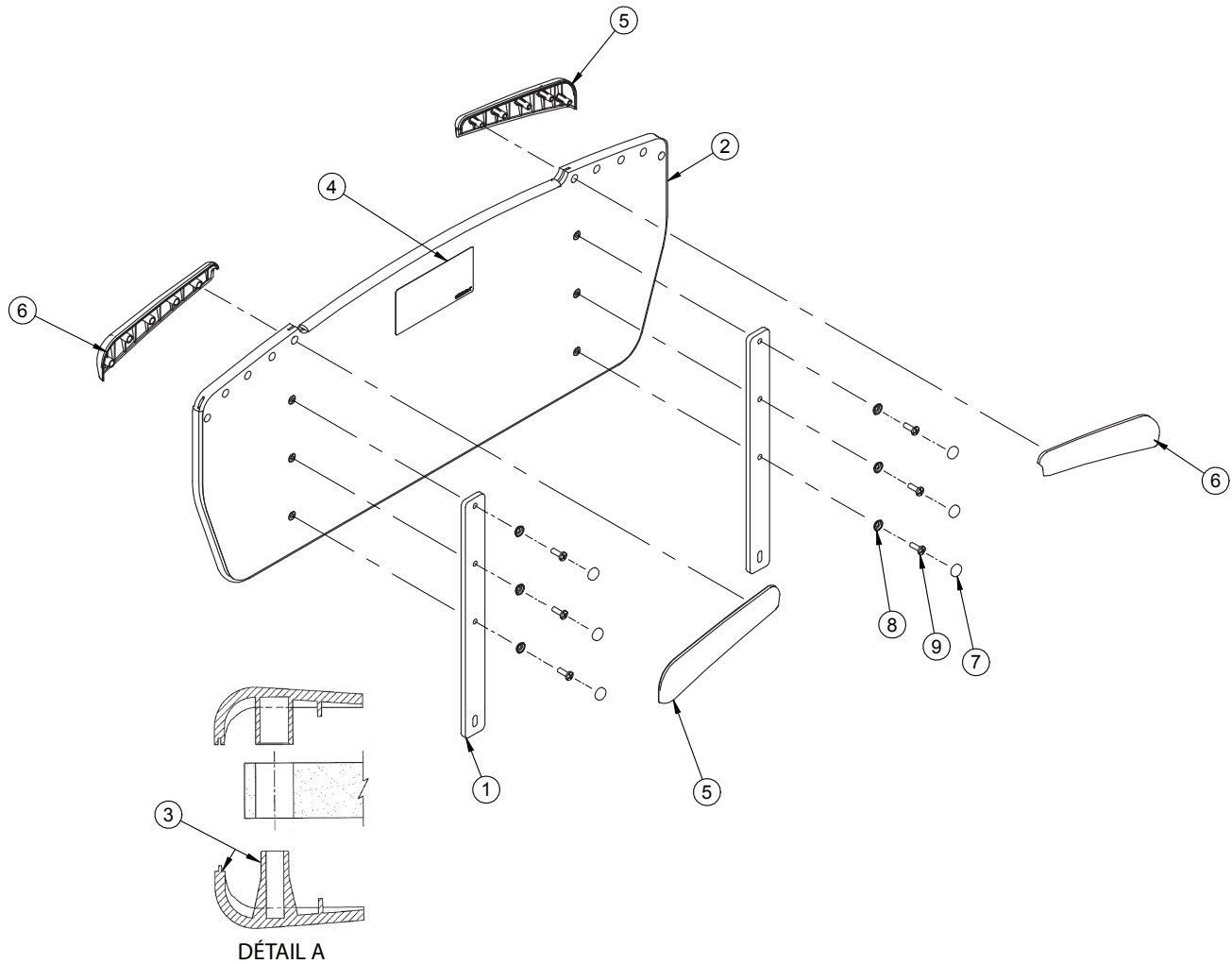


Item	Part No.	Part Name	Qty.
1	23-5121W	Foot Board With Control	1
2	23-5122W	Head Board Without Control	1

<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# S.A. for Head Board Without Control - ERGO

For Reference Only : 23-5118XXXX'W  
Rev. 02

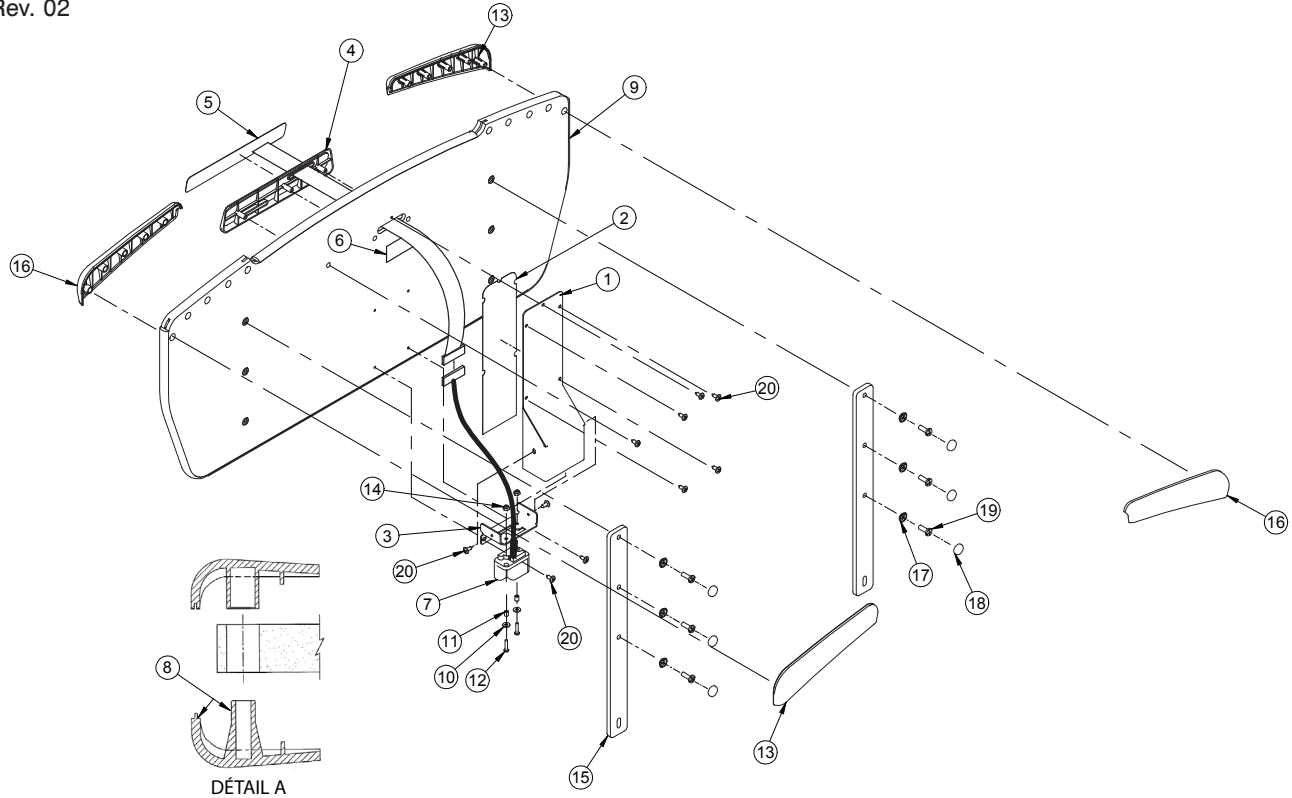


Item	Part No.	Part Name	Qty.
1	23-0124W	Post	2
2	23-5048	Head Board	1
3*	M0005	Cyanoacrylate Glue (Refer To Detail A)	1
4	QE14376-T	Sticker - Headboard installation	1
5	QP17-0146-07	Left Handle	2
6	QP17-0157-07	Right Handle	2
7	QPPF1514-1	White Plastic Cap	6
8	QPPF1521	Metal Washer 1/4"	6
9	VV33A1N24-S	Machine Screw Pan Head Phillips 1/4-20 X 3/4" Lg. Scotch Grip	6

<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# S.A. for Foot Board With Control - ERGO

For Reference Only : 23-5119XXXX'W  
Rev. 02

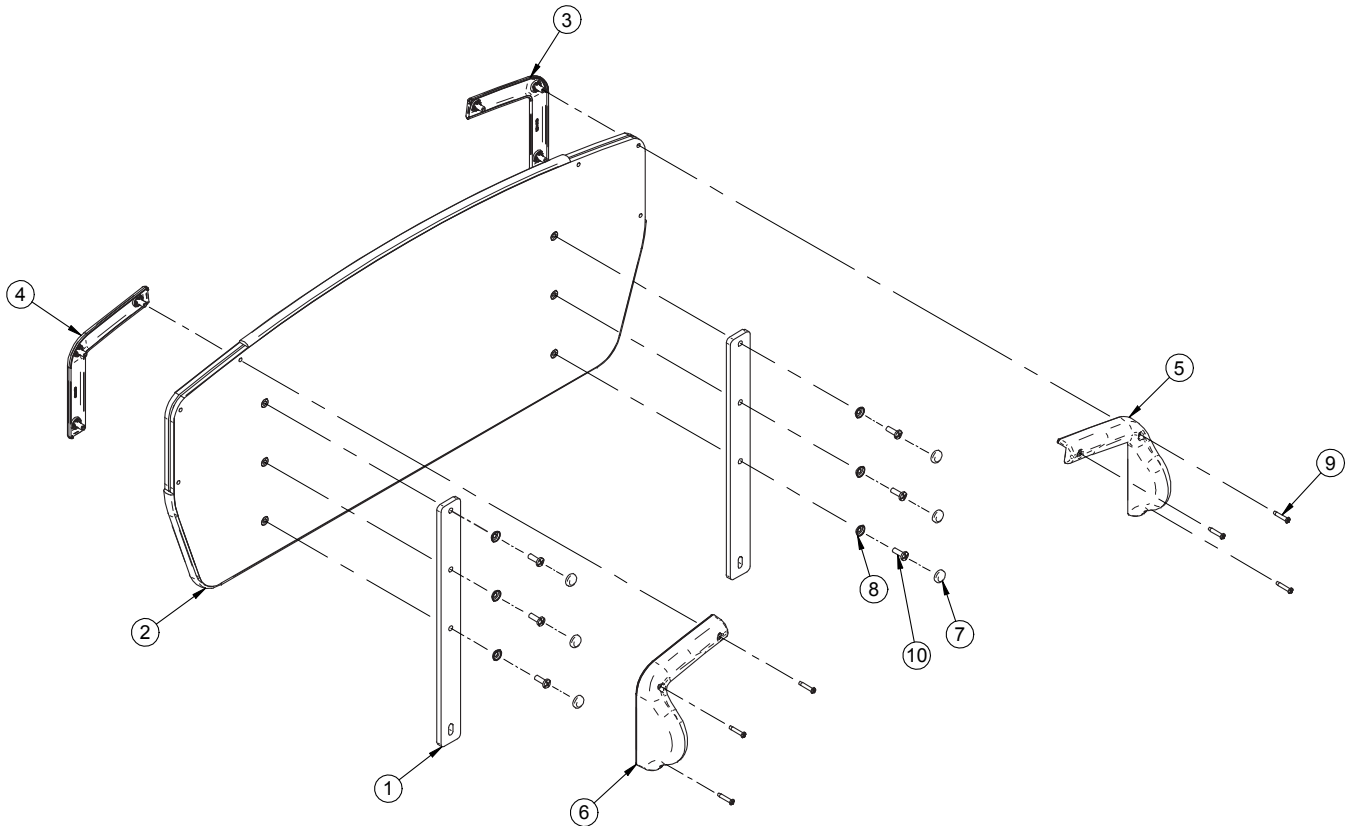


Item	Part No.	Part Name	Qty.
1	23-0334W	Support Cover	1
2	QE71-0751	Sticker Foot Board Isolation	1
3	17-0144W	Connector Support	1
4	QP17-0127-07	Panel Command Plate	1
5	QDF23-5935	Foot Board Control Membrane	1
6*	QDF7826	Transfer Tape "3M" X 1" Wide	1
7	QDF17-0139	Extension Cord For Membrane	1
8*	M0005	Cyanoacrylate Glue (Refer To Detail A)	1
9	23-5050	Laminated Foot Board	1
10	VW11A9E	Flat Washer #8	2
11	VW60C081005	Sleeve	2
12	VV33A1E24	Machine Screw Round Head Phillips 8-32 X 3/4"	2
13	QP17-0146-07	Left Handle	2
14	VE30A1E	Nylon Hex. Locknut #8-32	2
15	23-0124W	Post	2
16	QP17-0157-07	Right Handle	2
17	QPPF1521	Metal Washer 1/4" Diameter	6
18	QPPF1514-1	White Plastic Cap	6
19	VV33A1N24-S	Machine Screw Pan Head Phillips 1/4-20 X 3/4" Lg. Scotch Grip	6
20	VV27A9G16	Tapping Screw Truss Head Phillips Type A #10 X 1/2" Lg.	10

1: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# S.A. for Foot Board Without Control

For Reference Only : 23-5120XXXX'W  
Rev. 03

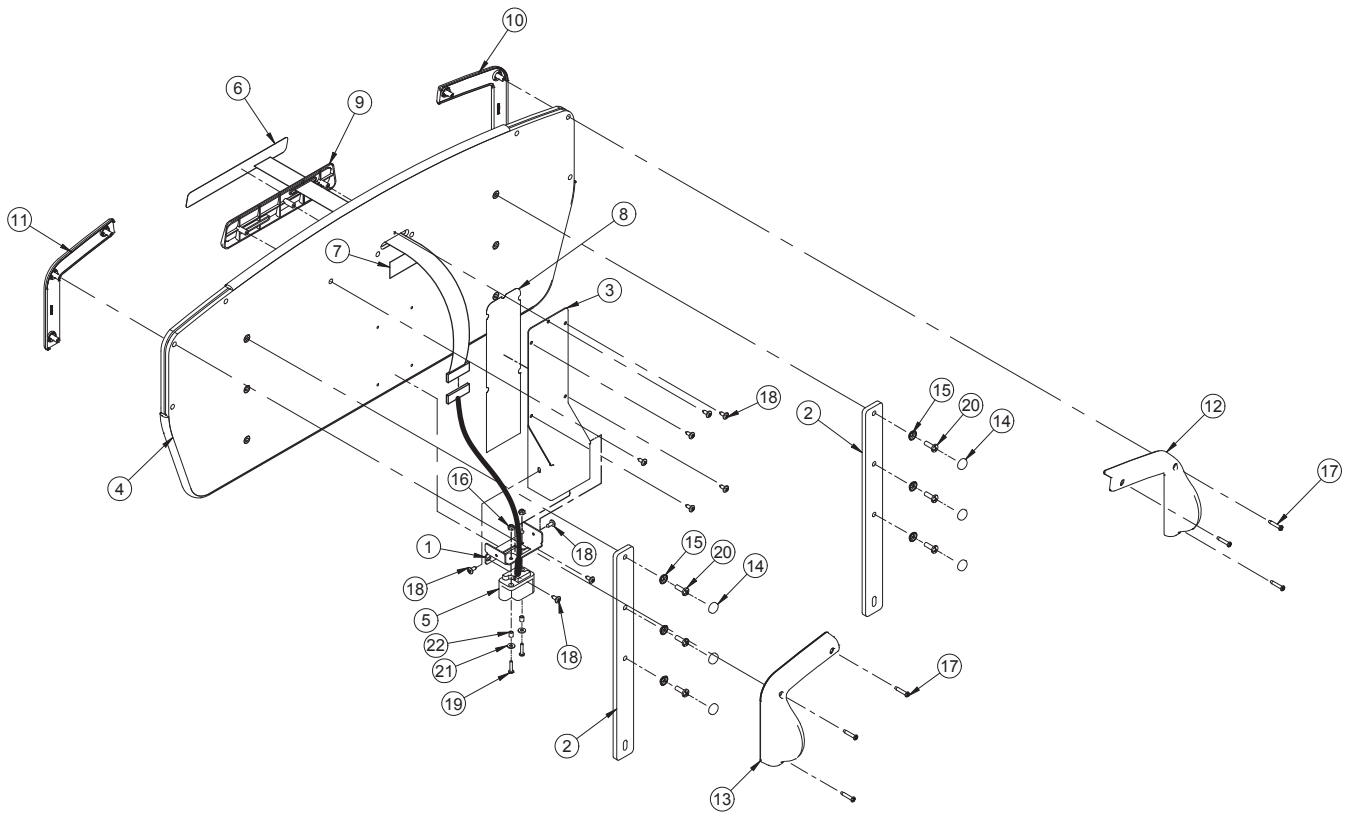


Item	Part No.	Part Name	Qty.
1	23-0124W	Post	2
2	23-5110	Laminated Foot Board	1
3	QP23-0472-07	Outer Right Handle	1
4	QP23-0473-07	Outer Left Handle	1
5	QP23-0474-07	Inner Right Handle	1
6	QP23-0475-07	Inner Left Handle	1
7	QPPF1514-1	White Plastic Cap	6
8	QPPF1521	Metal Washer 1/4" Diameter	6
9	VV23A1G32HL	Tapping Screw Pan Head Phillips High-Low #10 X 1" Z.P.	6
10	VV33A1N24-S	Machine Screw Pan Head Phillips 1/4-20 X 3/4" Lg. Scotch Grip	6

<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

# S.A. for Foot Board With Control

For Reference Only : 23-5121XXXX'W  
Rev. 03



<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.

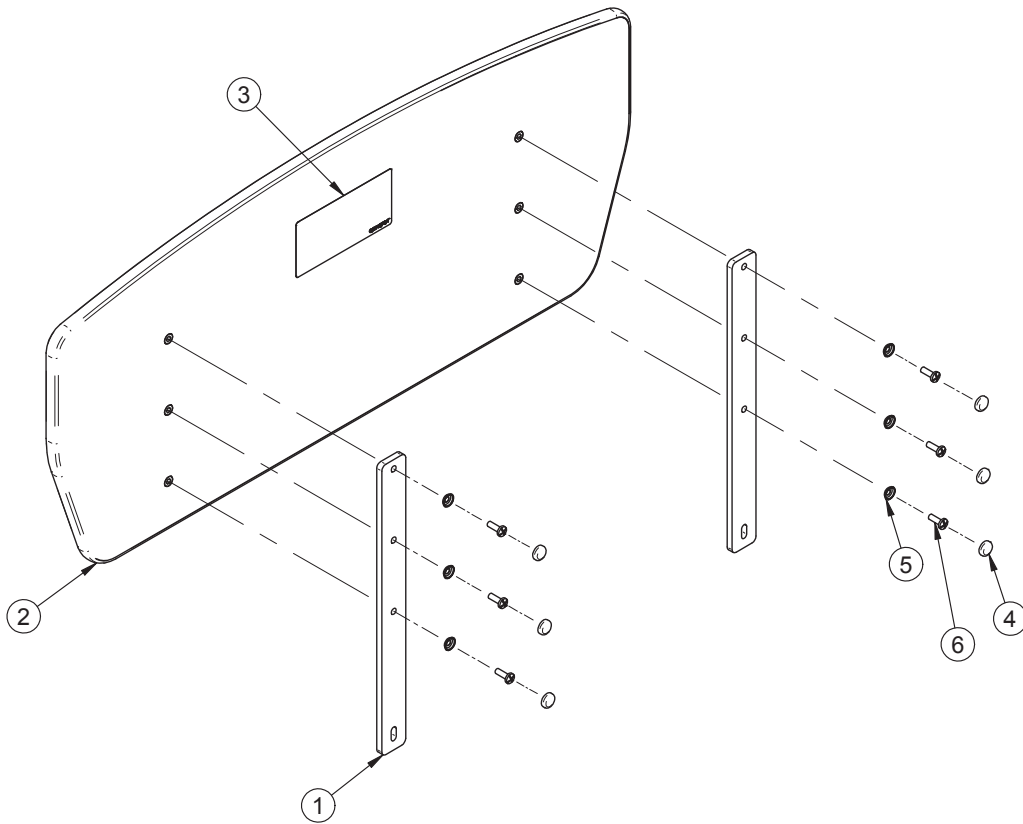
## S.A. for Foot Board With Control

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Item	Part No.	Part Name	Qty.
1	17-0144P	Connector Support	1
2	23-0124P	Post	2
3	23-0334P	Support Cover	1
4	23-5111XXXX	Laminated Foot Board	1
5	QDF17-0139	Extension Cord For Membrane	1
6	QDF23-5935	Foot Board Control Membrane	1
7*	QDF7826	Transfer Tape "3M" X 1" Width	1
8	QE71-0751	Sticker Foot Board Isolation	1
9	QP17-0127-07	Panel Command Plate	1
10	QP23-0472-07	Outer Right Handle	1
11	QP23-0473-07	Outer Left Handle	1
12	QP23-0474-07	Inner Right Handle	1
13	QP23-0475-07	Inner Left Handle	1
14	QPPF1514-1	White Plastic Cap	6
15	QPPF1521	Metal Washer 1/4" Diameter	6
16	VE30A1E	Nylon Hex. Locknut #8-32	2
17	VV23A1G32HL	Tapping Screw Pan Head Phillips High-Low #10 X 1" Z.P.	6
18	VV27A9G16	Tapping Screw Truss Head Phillips Type A #10 X 1/2" Lg.	10
19	VV33A1E24	Machine Screw Round Head Phillips 8-32 X 3/4"	2
20	VV33A1N24-S	Machine Screw Pan Head Phillips 1/4-20 X 3/4" Lg. Scotch Grip	6
21	VW11A9E	Flat Washer #8	2
22	VW60C081005	Sleeve	2

# S.A. for Head Board

For Reference Only : 23-5122XXXX1W  
Rev. 03



Item	Part No.	Part Name	Qty.
1	23-0124P	Post	2
2	23-5112XXXX	Laminated Head Board	1
3	QE14376-T	Sticker - Panel Orientation	1
4	QPPF1514-1	White Plastic Cap	6
5	QPPF1521	Metal Washer 1/4" Diameter	6
6	VV33A1N24-S	Machine Screw Pan Head Phillips 1/4-20 X 3/4" Lg. Scotch Grip	6

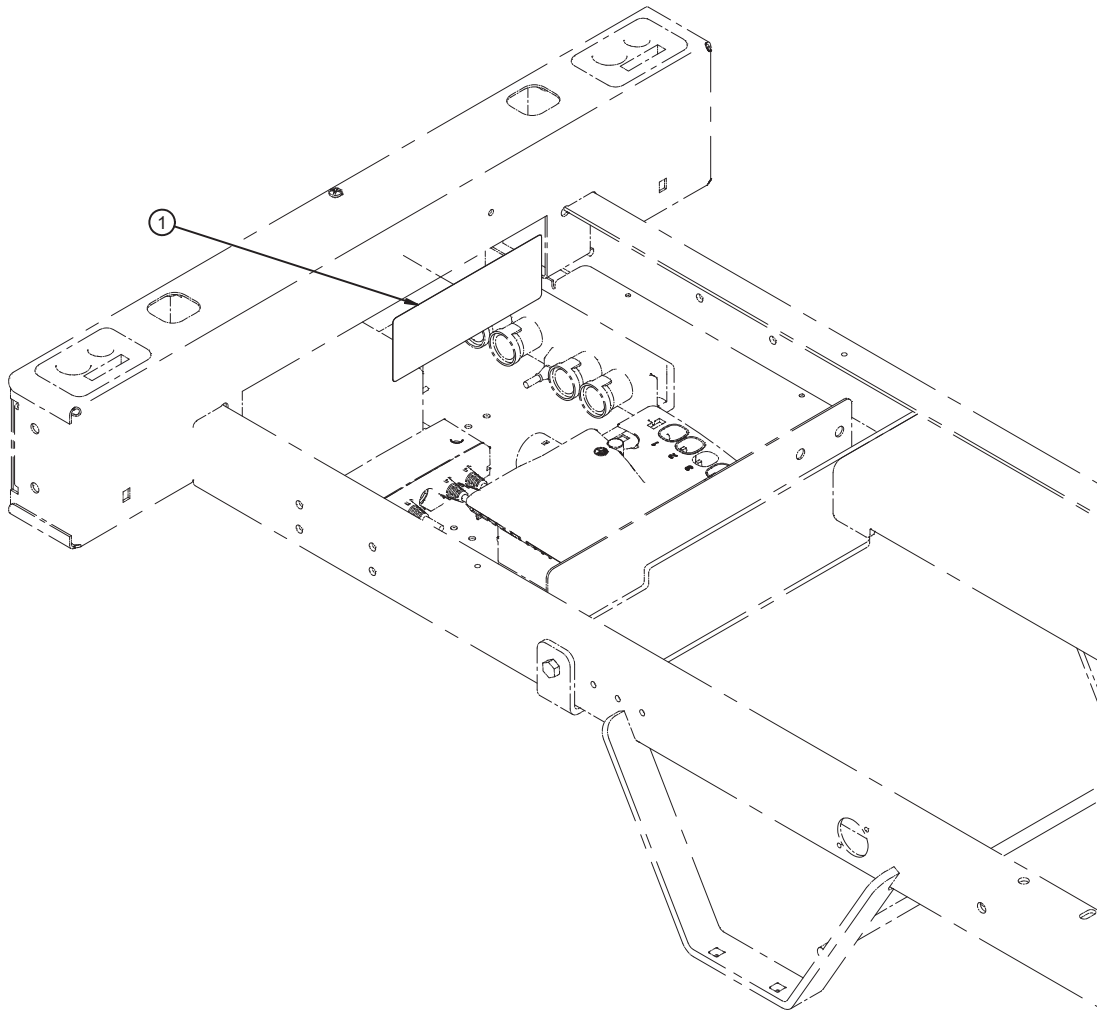
<sup>1</sup>: Please note that the first 2 X are for board color and the 2 last X are for edge color.  
Contact your representative.



# BNQ Certification

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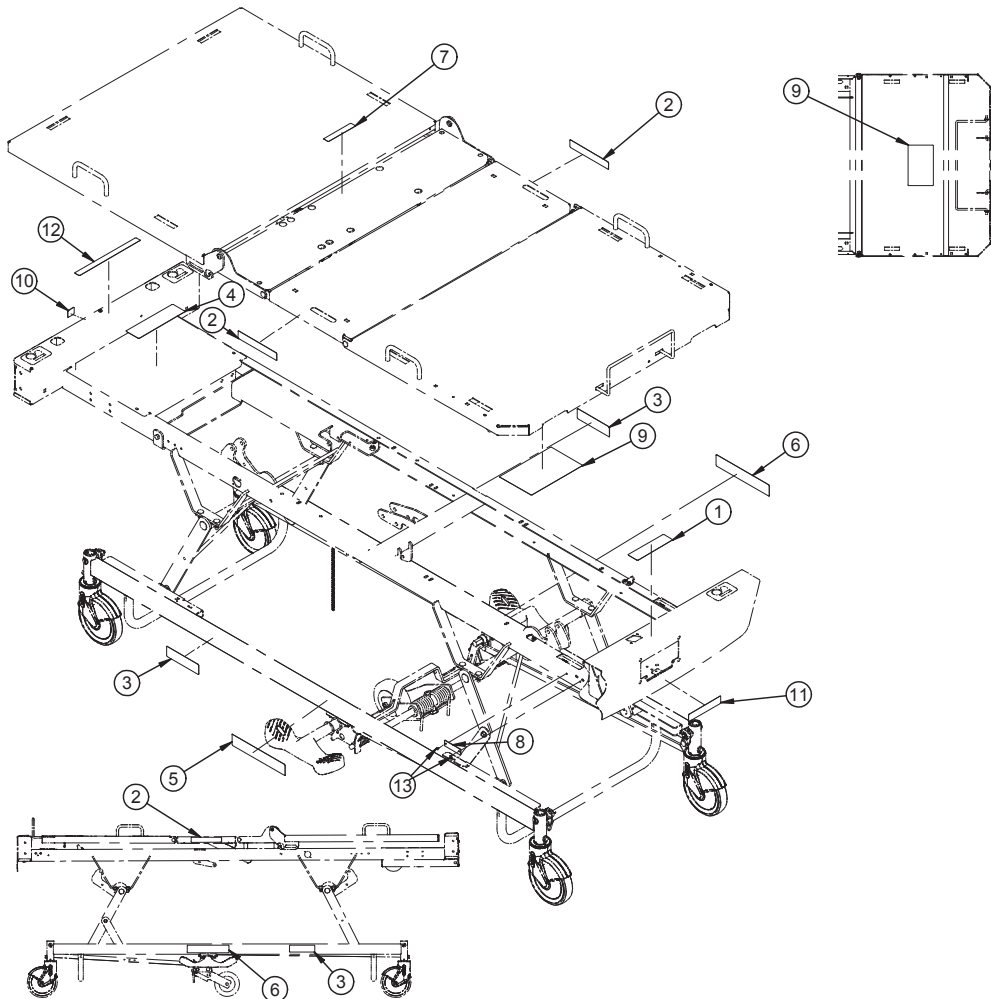
For Reference Only : OL235056  
Rev. 01



Item	Part No.	Part Name	Qty.
1	QE23-5186	BNQ Sticker	1

# Trilingual Labelling

For Reference Only : L23-507  
Rev. 01



Item	Part No.	Part Name	Qty.
1	QE71-0752-T	Sticker - Fire Hazard	1
2	QE71-0547	Sticker - Maximum Load	2
3	QE71-0346	Sticker - Stryker	2
4	QE71-0738-T	Sticker - Shock Hazard	1
5	QE71-0739-T	Sticker - Right Pedal Position	1
6	QE71-0740-T	Sticker - Left Pedal Position	1
7	QE71-0741-T	Sticker - Mattres Maximum Thickness	1
8	QE71-0749-T	Serial Number Plate	1
9	QE14400	Sticker - Automated Test results	1
10	QE18545	Sticker - Refer to Manual	1
11	QE-71-0778-T	Sticker - Accessory Warning	1
12	QE71-0737-T	Sticker - Ground Reliability	1
13	VR11H43	Dome Head Pop Rivet Dia. 1/8" .220" Lg.	2

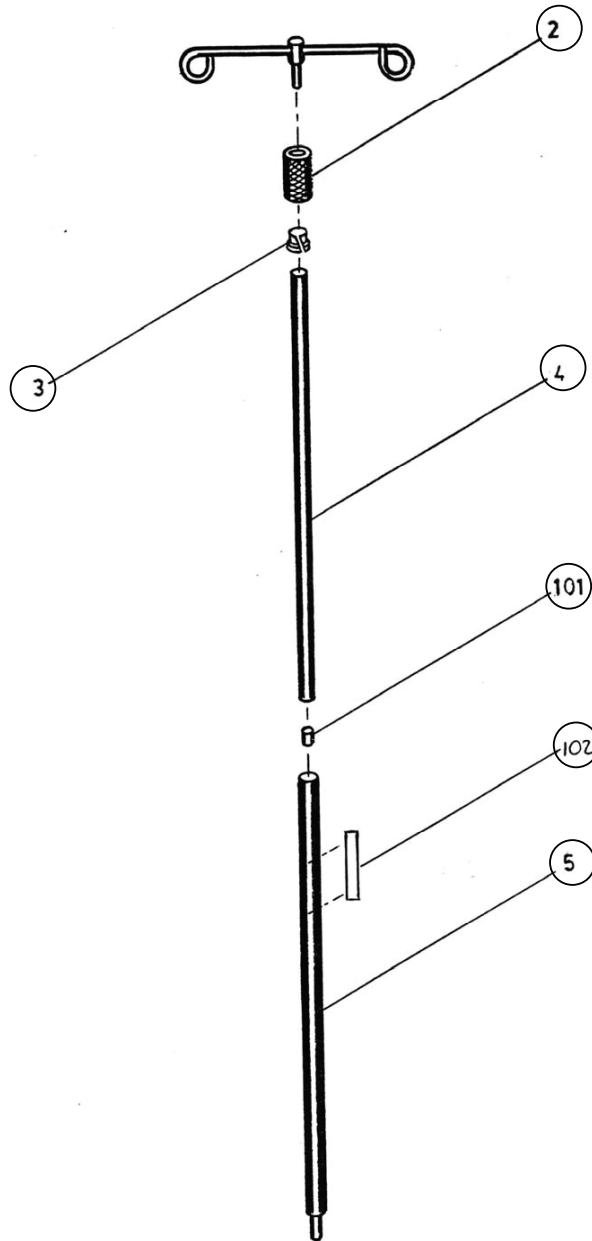
# Notes

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## Optional Accessories

Accessory	Part Number	Page Reference
Bed Extender (for Half Length Siderail bed only)	FA64152-W	<a href="#">See page 190</a>
Cushion for Bed Extender (for 6" mattress)	DM64063	<a href="#">See page 192</a>
Cushion for Bed Extender (for 5" mattress)	DM64064	<a href="#">See page 192</a>
Removable I.V. Pole	FDTSH	<a href="#">See page 189</a>
Removable Two-Sided, Two-Function Pendant Control (bed with Assist Handle)	FA64500	<a href="#">See page 193</a>
P&D Two-Function Pendant Control	FA64155	<a href="#">See page 194</a>
Half an Inch Diameter Stryker Removable I.V. Pole	FA64135	<a href="#">See page 195</a>
Half-Length Siderail Protective Pads	DM64232	<a href="#">See page 196</a>
Full-Length Siderail Protective Pads	DM64176	<a href="#">See page 196</a>
Half-Length Siderail Protective Pads (with access to patient controls)	DM64233	<a href="#">See page 197</a>
Full-Length Siderail Protective Pads (with access to patient controls)	DM64178	<a href="#">See page 197</a>
Split Siderail with Assist Handle Protective Pads (with access to patient controls)	DM64501	<a href="#">To Come</a>
Split Siderail with Assist Handle Protective Pads	DM64502	<a href="#">To Come</a>
One Inch Diameter Removable I.V. Pole	FA61002-W	<a href="#">See page 198</a>
Oxygen Bottle Holder	FA64036-W	<a href="#">See page 199</a>
Upright Oxygen Bottle Holder	FA64117	<a href="#">See page 200</a>
Monitor Tray	FA64153-W	<a href="#">See page 201</a>
One Inch Diameter Fixed I.V. Pole	FA64157-W	<a href="#">See page 202</a>

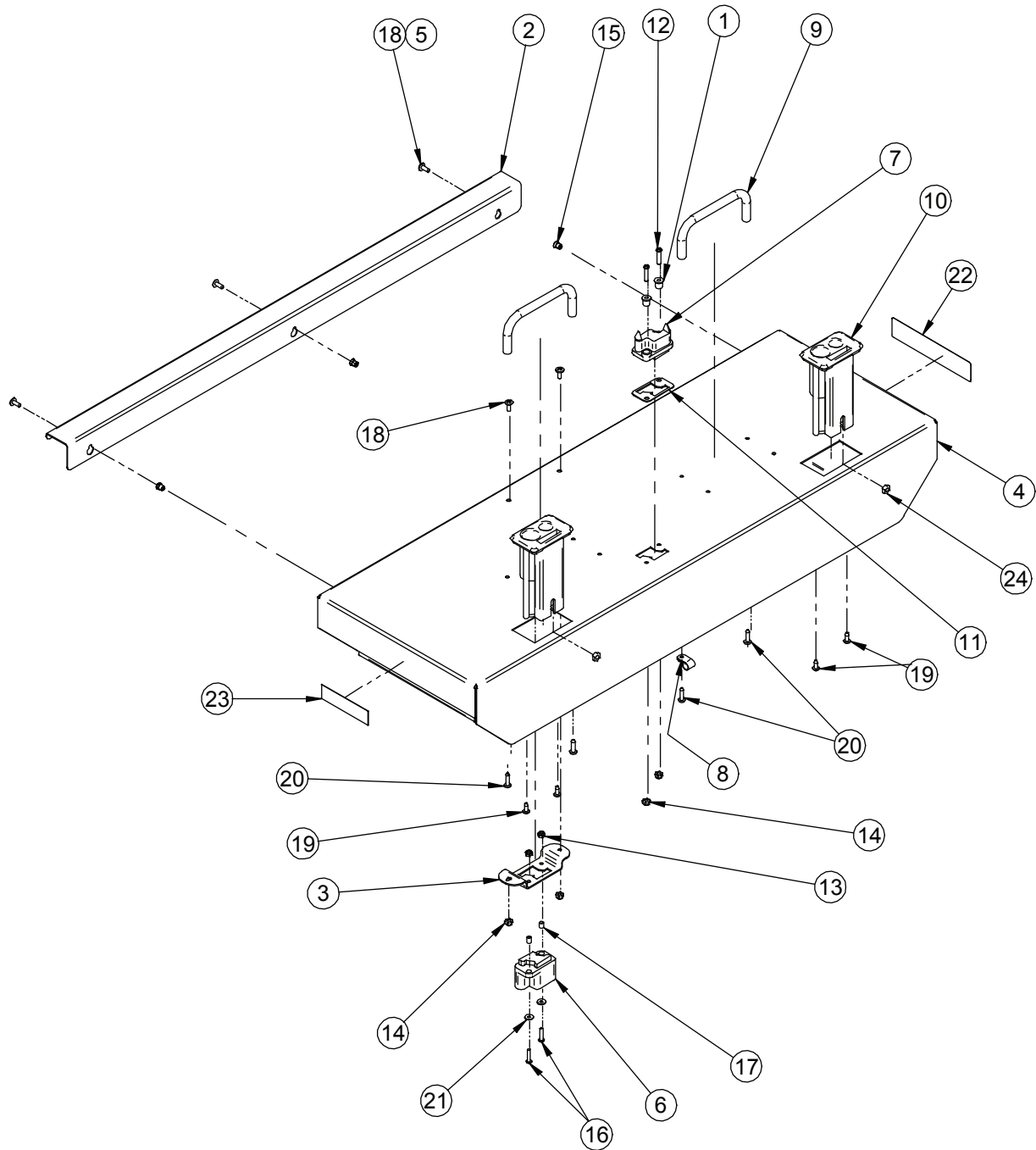
# Removable I.V. Pole - FDTSH



Tige porte-soluté amovible (For Reference Only : FDTSH)

Item	Part No.	Description	Qty.
2	2111A	Tightening Sleeve-Anodized	1
3	2109	Compression Socket	1
4	2107A	Top Tube-Anodized	1
5	2105A	Bottom Tube-Anodized	1
6	QE14399-T	Manufacturer's Nameplate	1
101	QPCE1206	Rubber Cap #000 Black (1/2" x 11/32" x 7/8")	1
102	QE71-0246-T	"Warning" Sticker	1

# Bed Extender - FA64152-W



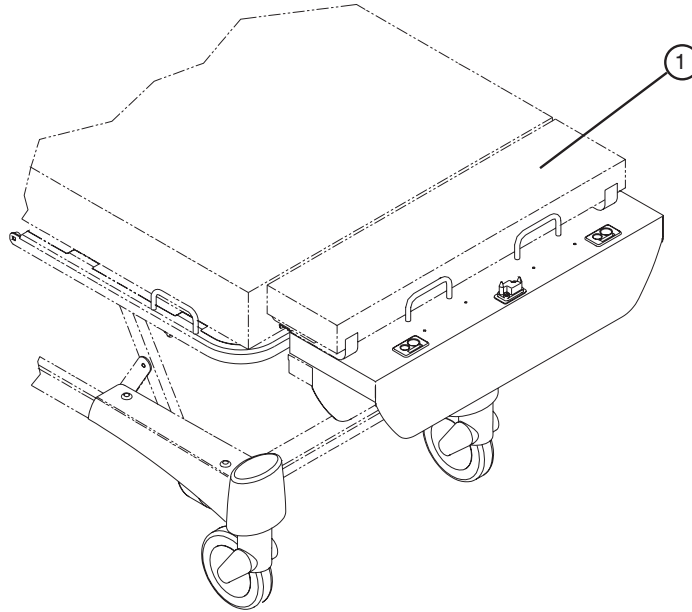
## Bed Extender - FA64152-W

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Item	Part No.	Description	Qty.
1	17-0014Z	Shoulder Sleeve	2
2	64-0203G	Support for Bed Extension	1
3	64-0742G	Connector Support	1
4	64-0744G	S.A. Bed Extension	1
5	M0008	Threadlocker - Medium Strength (Blue)	0.15
6	QDF17-0139	Extension Cord for Membrane	1
7	QDF17-0141	PC-Board/Connector Cable	1
8	QDF9520	3/8" Diameter Calbe Clip	1
9	QP14034-07	Mattress Retainer	2
10	QP17-0121-07	I.V. Pole Holder	2
11	QPN-17-0011	Seal	1
12	VV33A0G28	Machine Screw Pan Phillips #10-32 x 7/8" z.p.	2
13	VE30A1E	Nylon Hexagone Locknut #8-32 z.p.	2
14	VE30A0G	Nylon Hexagone Locknut #10-32 z.p.	4
15	VEX9A0G	Nutsert #10-32 Hexagone	3
16	VV33A1E24	Machine Screw Pan Phillips #8-32 x 3/4" z.p.	2
17	VW60C081005	Sleeve	2
18	VV37A0G16	Machine Screw Truss Phillips #10-32 x 1/2" z.p.	5
19	VV83A9G16	Tapping Screw Pan Phillips Type B #10 x 1/2" z.p.	4
20	VV83A9G24	Tapping Screw Pan Phillips Type B #10 x 3/4" z.p.	4
21	VW11A9E	Flat Washer #8	2
22	QE71-0787-T	Sticker - Emergency Crank Warning	1
23	QE14399-T	Manufacturer's Nameplate	1
24	VE20A1N	Hexagone Locknut 1/4-20 z.p.	2

## 3" Cushion for Bed Extender - DM64063

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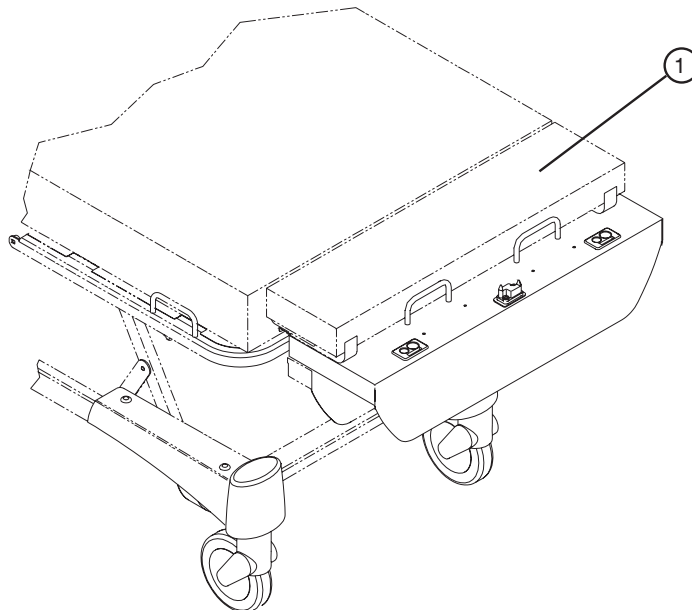


Cushion for Bed Extender (For Reference Only : DM64063)

Item	Part No.	Description	Qty.
1	DM64063	Cushion for Bed Extender	1

## 2" Cushion for Bed Extender - DM64064

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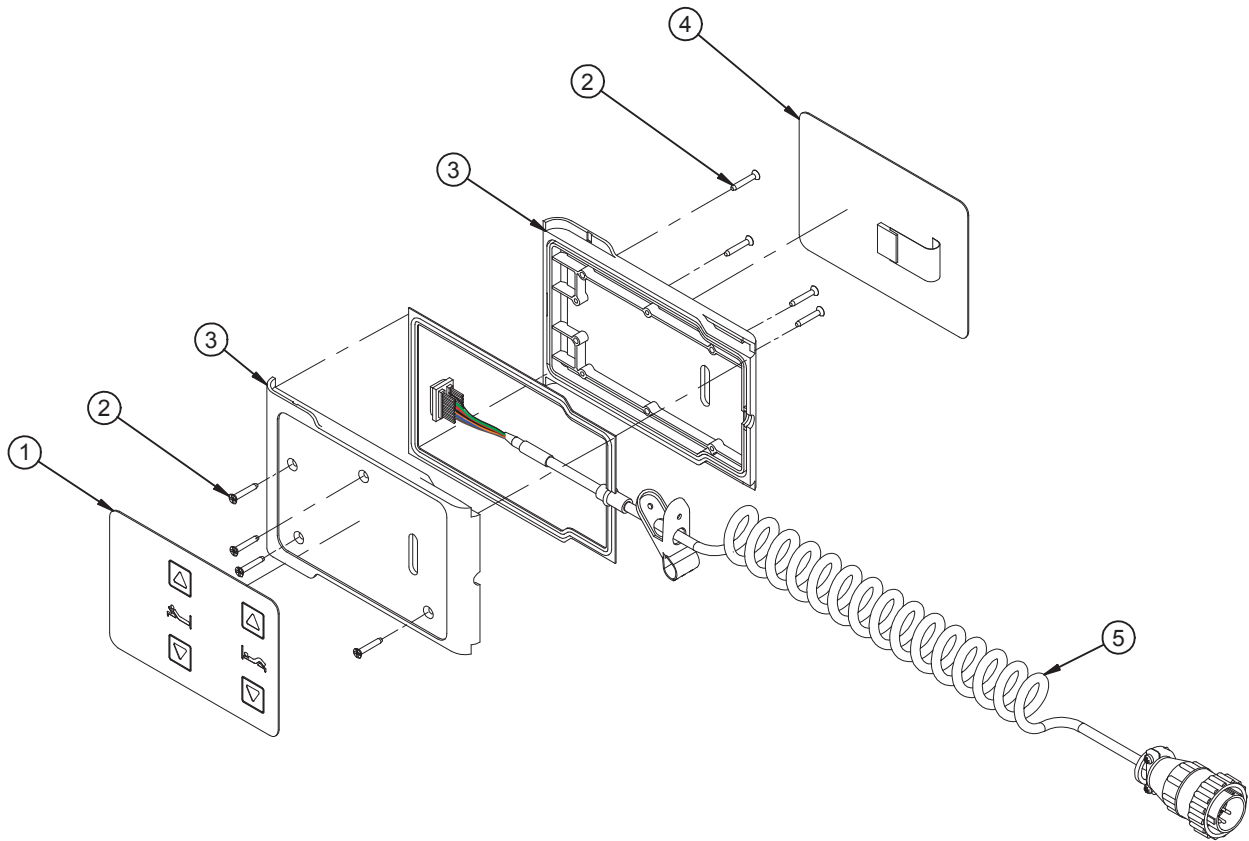
Cushion for Bed Extender (For Reference Only : DM64064)

Item	Part No.	Description	Qty.
1	DM64064	Cushion for Bed Extender	1



# Removable Two-Sided Pendant Control - FA64500

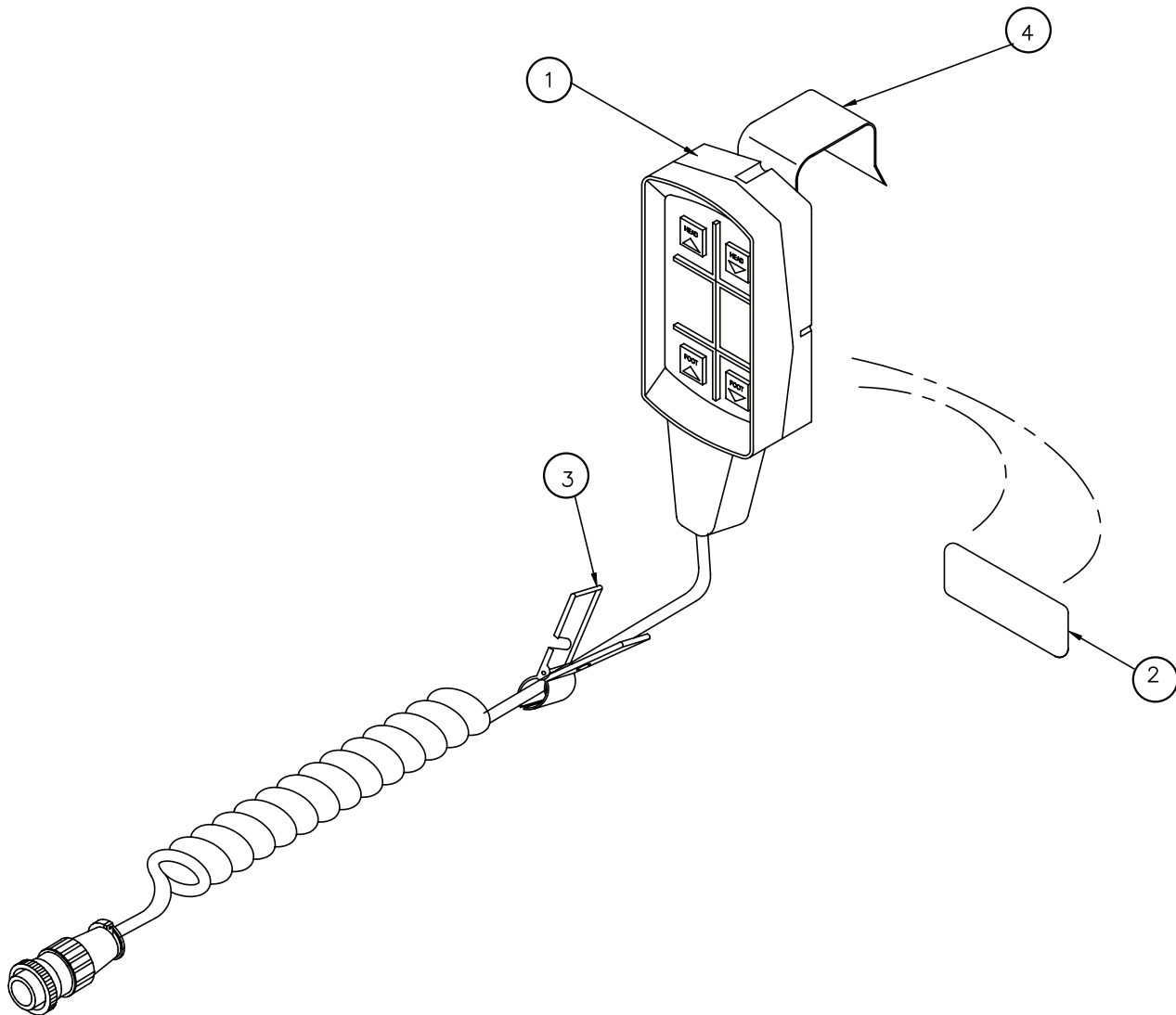
For Reference Only : L64-500  
Rev. 01



Item	Part No.	Description	Qty.
1	QDF23-5923	Left Membrane without nurse call	1
2	VV41A1A20	Flat Head Philips Tapping Screw type F #4 x 5/8"	8
3	QP23-5091-07	Removable Control Casing	2
4	QDF23-5924	Right Membrane without nurse call	1
5	QDF23-5954	Removable Control Cable	1

# P&D Two-Function Pendant Control - FA64155

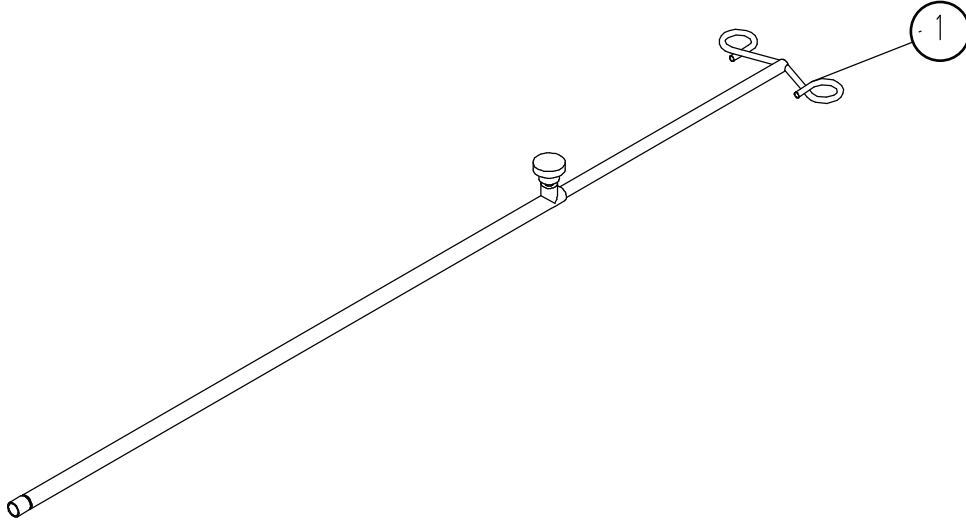
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Item	Part No.	Description	Qty.
1	QDF64-0687	P&D Two-Function Pendant Control	1
2	QE71-0133	Stryker Label	1
3	QDF8066	Security Clip (Interlock Press)	1
4	6400-035W	Hook of the Pendant Control	1

# Half an Inch Diameter Stryker Removable I.V. Pole - FA64135

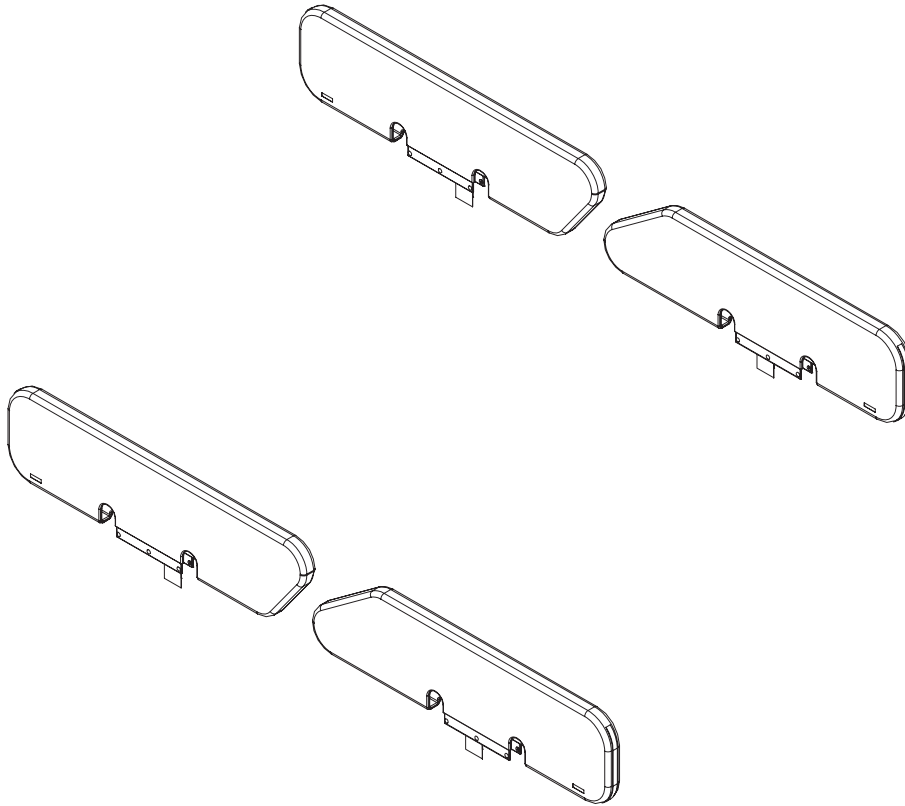
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Item	Part No.	Description	Qty.
1	QDF9165	Stryker's 1/2" Diameter Removable I.V. Pole	1

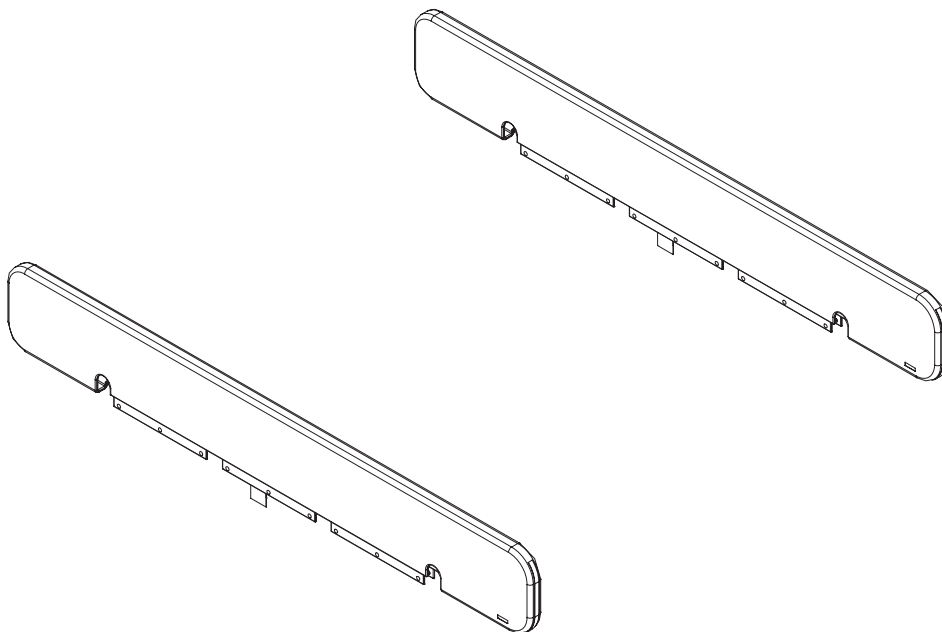
## Half-Lenght Siderail Protective Pads - DM64232

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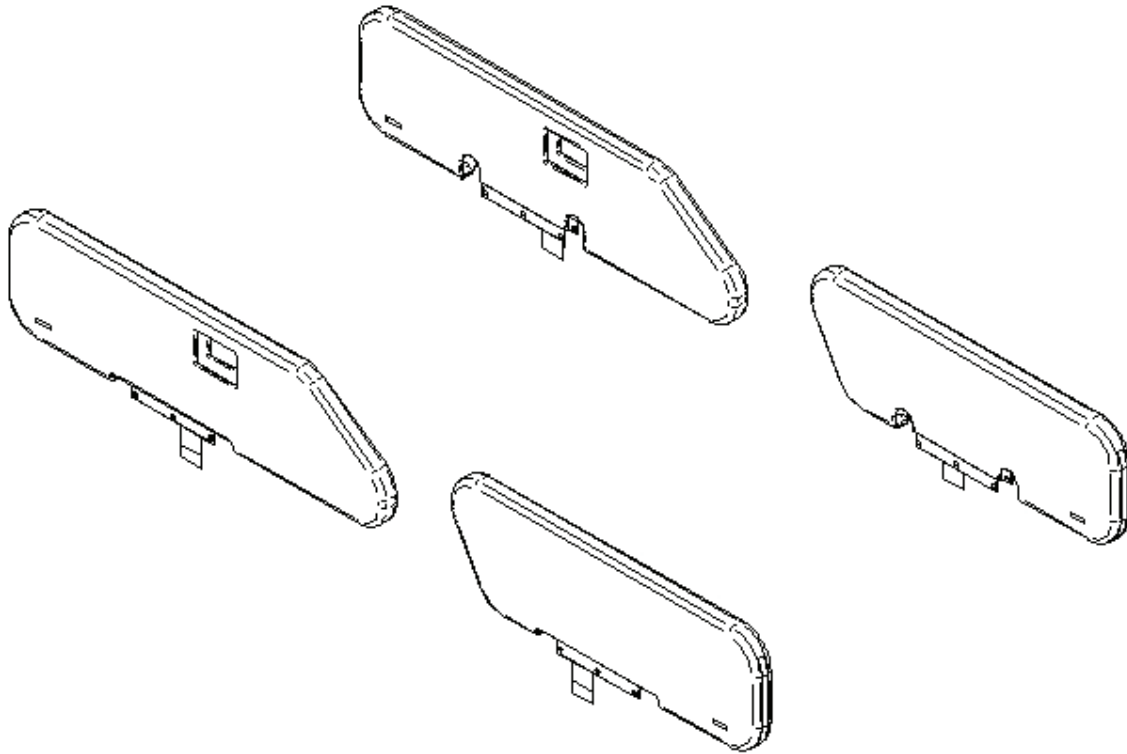
## Full-Lenght Siderail Protective Pads - DM64176

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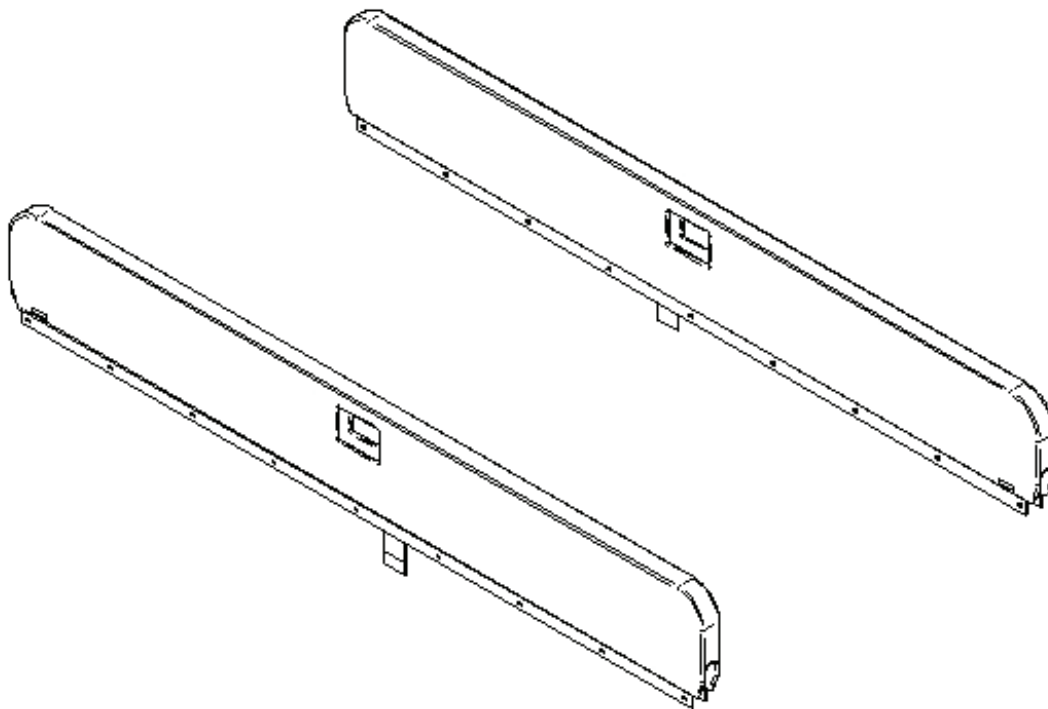
## Half-Lenght Siderail Protective Pads - DM64233

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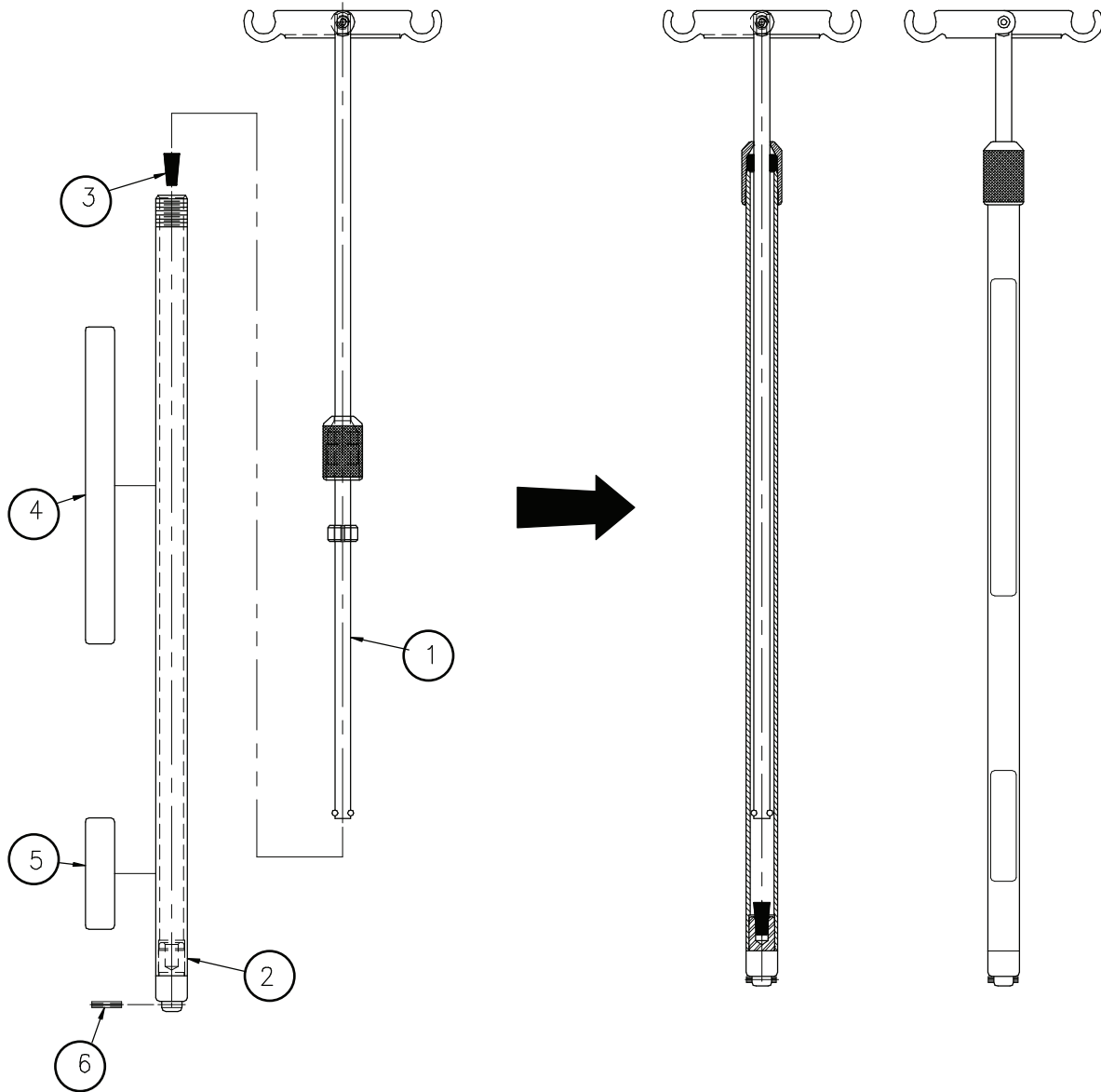


## Full-Lenght Siderail Protective Pads - DM64178

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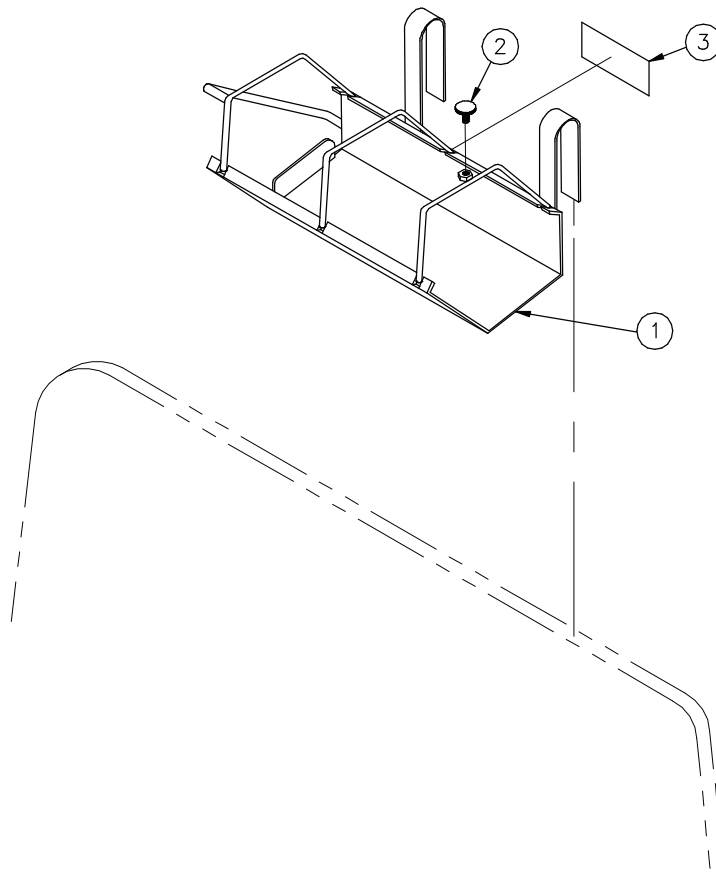
# One Inch Diameter Removable I.V. Pole - FA61002-W



Item	Part No.	Description	Qty.
1	61-0011W	S.A. Top Rod	1
2	61-0002A	S.A. Bottom Tube	1
3	QPCE1206	Rubber Cap #000 (1/2" x 11/32" x 7/8") Black	1
4	QE71-0246-T	Warning Sticker	1
5	QE14399-T	Manufacturer's Nameplate	1
6	VG10B0630	Spring Pin 3/16" Diameter x 15/16"	1

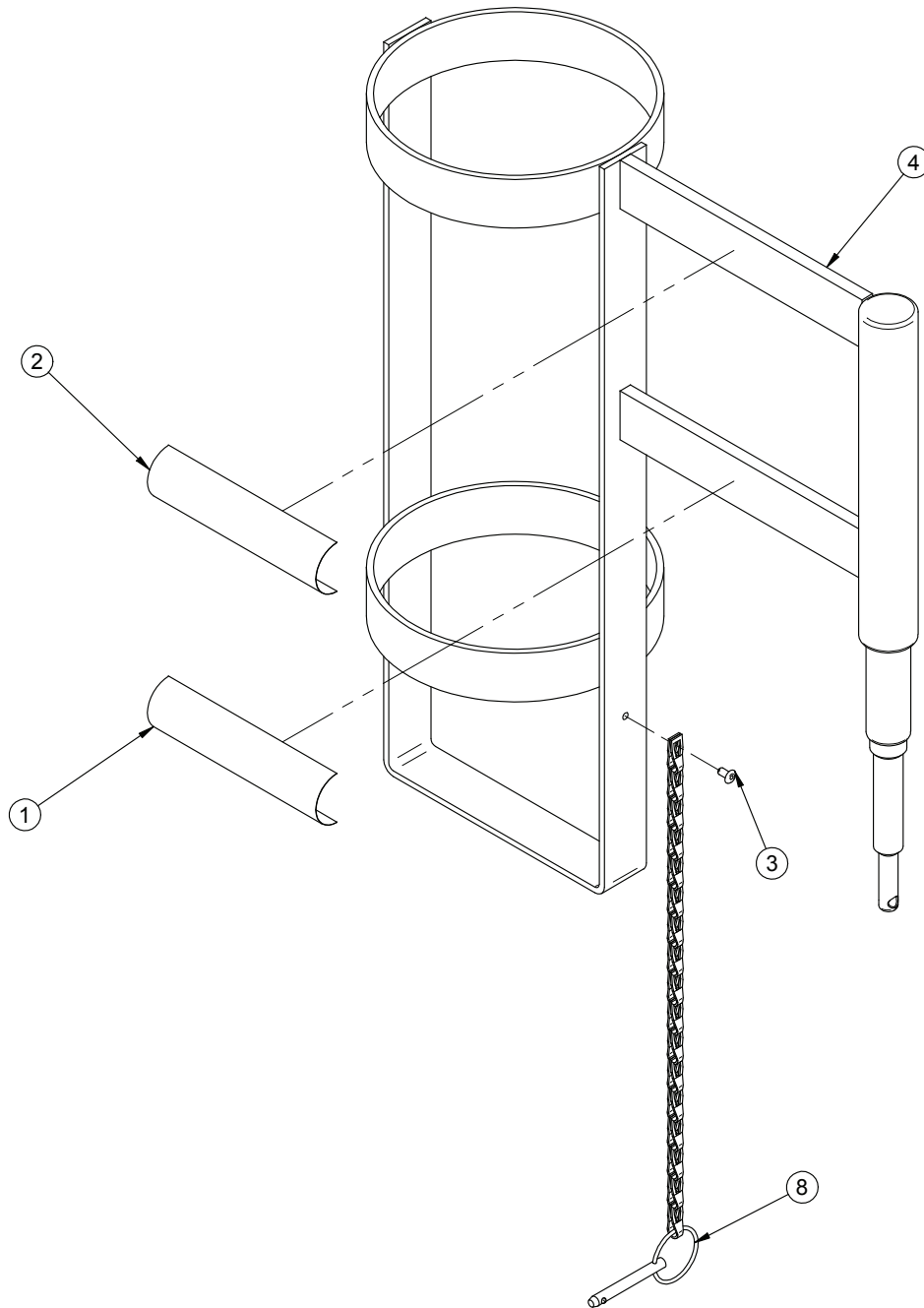
# Oxygen Bottle Holder - FA64036-W

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Item	Part No.	Description	Qty.
1	64-0193W	S.A. Oxygen Bottle Holder	1
2	64-0294	S.A. Stop Screw	1
3	QE14399-T	Manufacturer's Nameplate	1

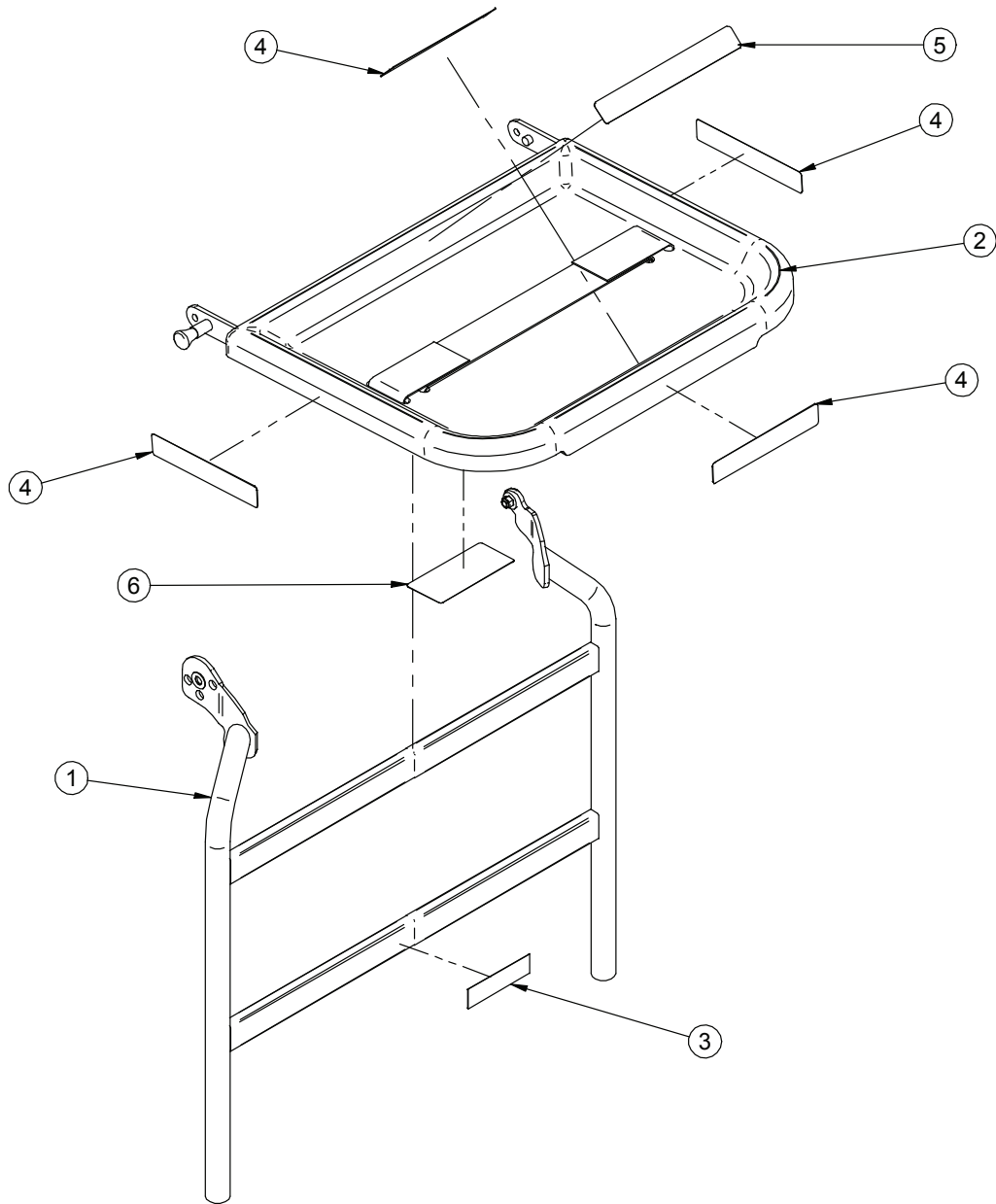
# Upright Oxygen Bottle Holder - FA64117



Item	Part No.	Description	Qty.
1	QE14399-T	Manufacturer's Nameplate	1
2	QE71-0601	Sticker - Maximum Load	1
3	VR11H42	Pop Rivet #42 Dome Head	1
4	QDF64-1005	Oxygen Support Bottle	1
8	64-0647	S.A. Security Chain	1

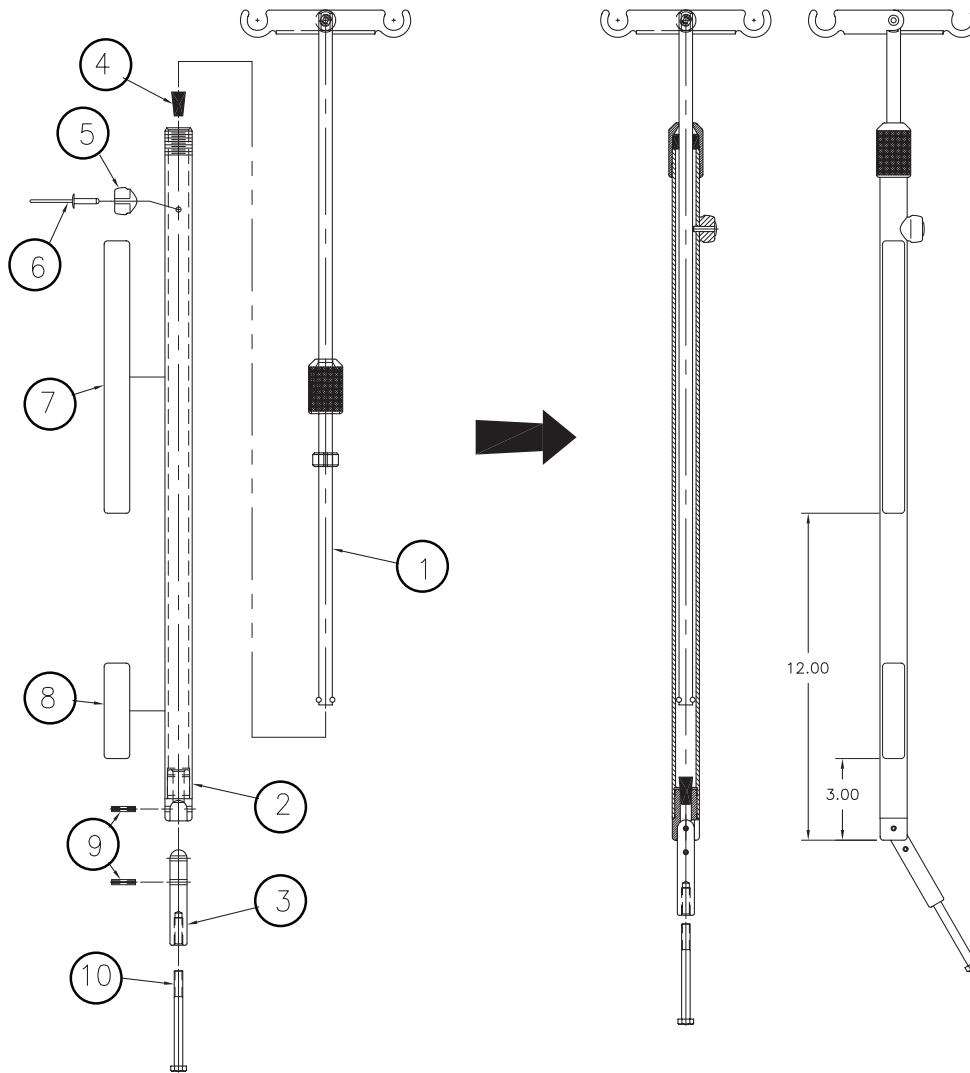


# Monitor Tray - FA64153-W



Item	Part No.	Description	Qty.
1	64-0745W	S.A. Tray Support	1
2	QDF5093	Tray and Fasteners	1
3	QE14399-T	Manufacturer's Nameplate	1
4	QE71-0578	Sticker - Maximum Load Capacity	4
5	QE71-0579-F	Sticker - Tied Up Load	1
6	QE71-0580-F	Sticker - Caution	1

# One Inch Diameter Fixed I.V. Pole - FA64157-W



Tige porte-soluté fixe diamètre un pouce (For Reference Only : FA64157)

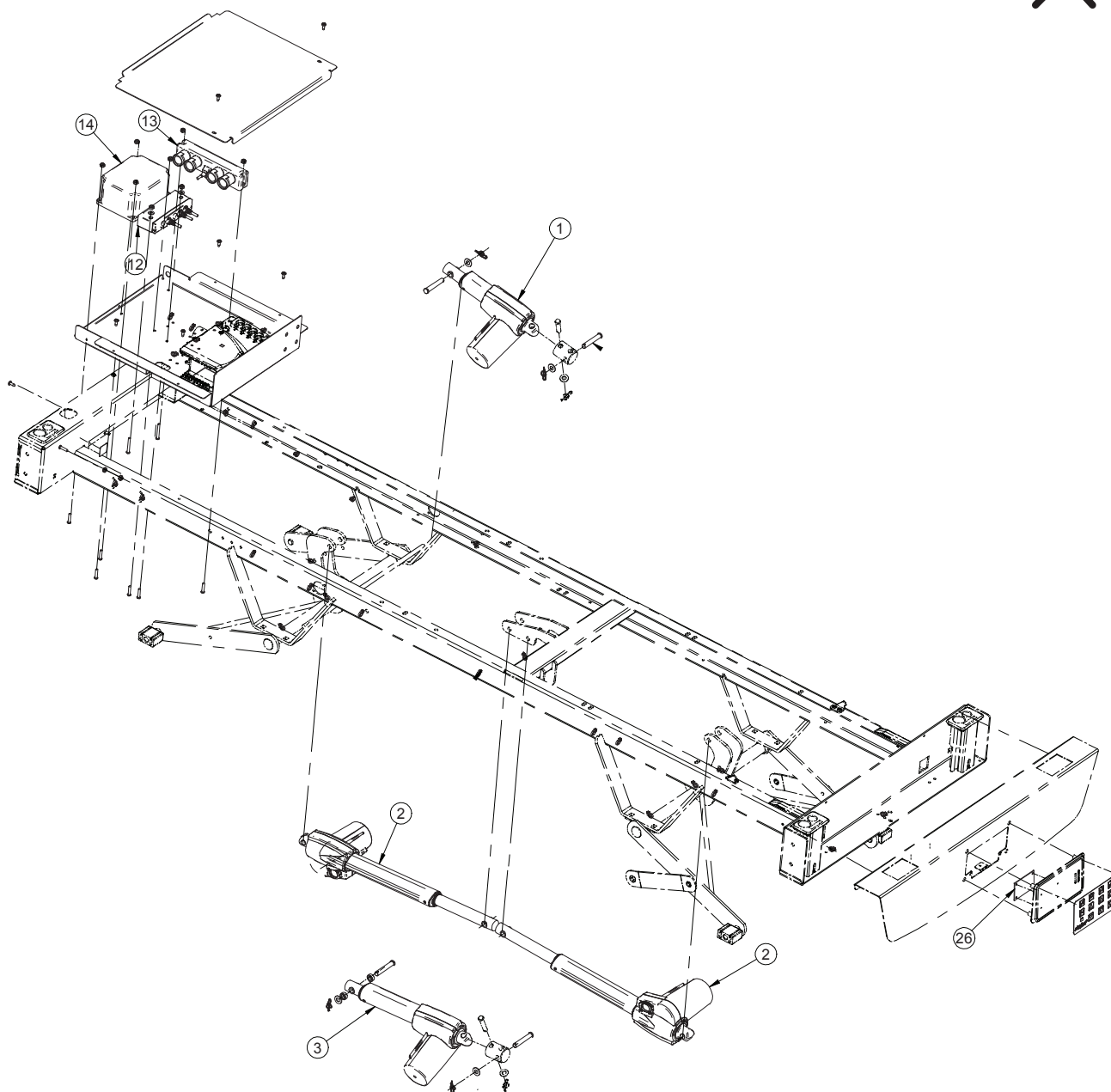
Item	Part No.	Description	Qty.
1	61-0011W	S.A. Top Rod	1
2	64-0752	S.A. Lower Tube	1
3	61-0012A	Fixing Shaft	1
4	QPCE1206	Rubber Cap #000 (1/2" x 11/32" x 7/8") Black	1
5	61-0016A	Pole Stopper	1
6	VR15A610	Pop Rivet 3/16" x 0.815" #AD610ABSLF	1
7	QE71-0246-T	Warning Sticker	1
8	QE14399-T	Manufacturer's Nameplate	1
9	VG10B0630	Spring Pin 3/16" Diameter x 15/16"	2
10	VB15A1O60	Hexagone Bolt 5/16-18 x 3 1/2" Grade 5 z.p.	1

# Notes

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# Recycling Passport

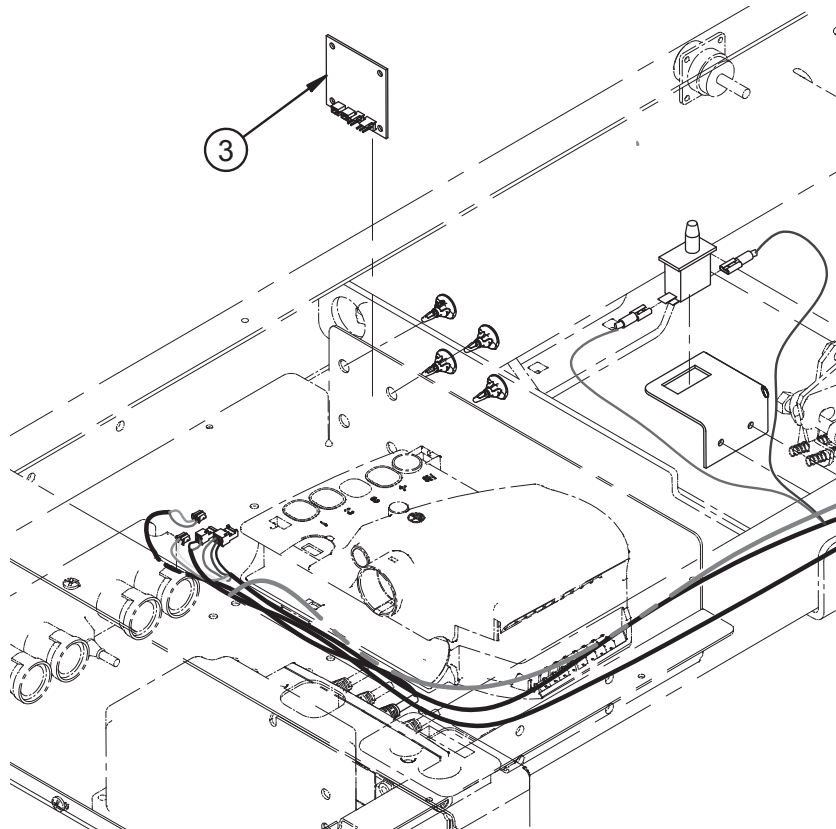
For Reference Only : L23-509W  
Rev. 02



Item	Part No.	Description	Qty.
1	QDF23-5906	Thigh Actuator	1
2	QDF23-5907	Hi-Lo Actuator	2
3	QDF23-5908	Head Actuator	1
12	QDF23-5905	Mjb - Modular Junction Box	1
13	QDF23-5904	Junction Box	1
14	QDF23-5903	Battery Box Ba18	1
26	QDF23-5949	Foot Control Board	1

# Recycling Passport

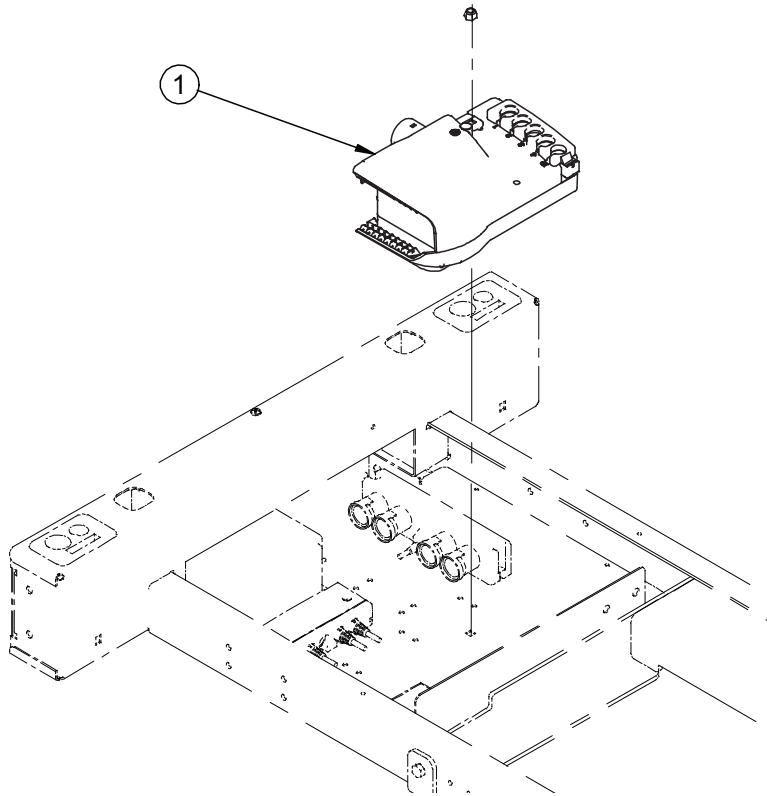
For Reference Only : OL235032  
Rev. 02



Item	Part No.	Description	Qty.
3	QDF23-5953	CPR Board	1

# Recycling Passport

For Reference Only : OL235051  
Rev. 01



Item	Part No.	Part Name	Qty.
1	23-5955	120 V Control Box With Autocontour	1
1	QDF23-5902	120 V Control Box Without Autocontour	1
1	QDF23-5933	230 V Control Box Without Autocontour	1
1	23-5956	230 V Control Box With Autocontour	1

# Warranty

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## LIMITED WARRANTY

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser the Electric MedSurg Bed, Model FL23SE, to be free from defects in material and workmanship for a period of one (1) year after date of delivery. Stryker's obligation under this warranty is expressly limited to supplying replacement parts and labor for, or replacing, at its option, any product which is, in the sole discretion of Stryker, found to be defective. If requested by Stryker, products or parts for which a warranty claim is made shall be returned prepaid to the factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgment affects the product materially and adversely shall void this warranty. Any repair of Stryker products using parts not provided or authorized by Stryker shall void this warranty. No employee or representative of Stryker is authorized to change this warranty in any way.

Stryker Medical Bed products are designed for a 10 year expected service life under normal use, conditions, and with appropriate periodic maintenance as described in the maintenance manual for each device. Stryker warrants to the original purchaser that the welds on its bed products will be free from structural defects for the expected 10 year life of the bed product as long as the original purchaser owns the product.

This statement constitutes Stryker's entire warranty with respect to the aforesaid equipment. **Stryker makes no other warranty or representation, either expressed or implied, except as set forth herein. There is no warranty of merchantability and there are no warranties of fitness for any particular purpose. In no event shall Stryker be liable here under for incidental or consequential damages arising from or in any manner related to sales or use of any such equipment.**

## TO OBTAIN PARTS AND SERVICE

Stryker products are supported by a nationwide network of dedicated Stryker Field Service Representatives. These representatives are factory trained, available locally, and carry a substantial spare parts inventory to minimize repair time. Simply call your local representative, or call Stryker Customer Service USA at 1-800-327-0770.

## SERVICE CONTRACT COVERAGE

Stryker has developed a comprehensive program of service contract options designed to keep your equipment operating at peak performance at the same time it eliminates unexpected costs. We recommend that these programs be activated before the expiration of the new product warranty to eliminate the potential of additional equipment upgrade charges.

### A Service Contract helps to:

- Ensure equipment reliability
- Stabilize maintenance budgets
- Diminish downtime
- Establish documentation for JCAHO
- Increase product life
- Enhance trade-in value
- Address risk management and safety

# Warranty

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## SERVICE CONTRACT PROGRAMS

Stryker offers the following service contract programs:

<b>Service Agreement Options *</b>	<b>Premium</b>	<b>Complete</b>	<b>PM</b>
Annually scheduled preventative maintenance (PM)	X		X
All parts	X	X	
All labor and travel	X	X	
Unlimited emergency service calls	X	X	
Priority one contact: two hour phone response	X	X	
Most repairs completed within 3 days	X	X	
JCAHO documentation	X	X	X
On-site record of PM & emergency service	X		X
Factory-trained Stryker service technician	X	X	X
Stryker authorized parts used	X	X	X
Service during regular business hours (8–5)	X	X	X

\* Does not include maintenance due to abuse or for any disposable items. Stryker reserves the right to change options without notice.

Stryker Medical also offers personalized service contracts.  
Pricing is determined by age, location, model and condition of product.

**For more information on our service contracts,  
please call your local representative.**

## RETURN AUTHORIZATION

Merchandise cannot be returned without approval from the Stryker Customer Service Department. An authorization number will be provided which must be printed on the returned merchandise. Stryker reserves the right to charge shipping and restocking fees on returned items. **Special, modified, or discontinued items not subject to return.**

## DAMAGED MERCHANDISE

ICC Regulations require that claims for damaged merchandise must be made with the carrier within fifteen (15) days of receipt of merchandise. **Do not accept damaged shipments unless such damage is noted on the delivery receipt at the time of receipt.** Upon prompt notification, Stryker will file a freight claim with the appropriate carrier for damages incurred. Claim will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker within the fifteen (15) day period following the delivery of the merchandise, or the damage was not noted on the delivery receipt at the time of receipt, the customer will be responsible for payment of the original invoice in full. Claims for any short shipment must be made within thirty (30) days of invoice.

## INTERNATIONAL WARRANTY CLAUSE

This warranty reflects U.S. domestic policy. Warranty outside the U.S. may vary by country. Please contact your local Stryker Medical representative for additional information.









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