GoBed® II MedSurg Bed

Model FL28EX

stryker®

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

Warning / Caution, Refer to Accompanying Documentation

Alternating Current

Direct 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 Classified by Underwriters Laboratories Inc. with respect to Electric Shock, Fire, Mechanical and Other Specified Hazards Only in Accordance with UL 60601-1, First Edition (2003) 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.

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Symbols and Definitions

WARNING / CAUTION / NOTE DEFINITION

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

⚠ WARNING

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

⚠ CAUTION

Alerts the reader of a potentially hazardous situation, which if not avoided, may result in minor or moderate injury to the user or patient or damage to the 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.

Note

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

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Introduction

This manual is designed to assist you with the maintenance of GoBed® II MedSurg Bed, Model FL28EX. Carefully read this manual thoroughly before using the equipment or beginning maintenance on it. To ensure safe operation of this equipment, it is recommended that methods and procedures be established for educating and training staff on the safe operation of this bed.

PRODUCT DESCRIPTION

The GoBed® II MedSurg Bed, Model FL28EX offers a high level of security, inituitive operation and enhanced mobility that allows you to support varying types of patient populations with ease and efficiency.

- **Safe.** Full siderail coverage, low bed height and the Chaperone center-of-gravity bed exit system combine to provide your patients with the highest level of protection.
- **Simple.** One-hand release siderails, single-button controls and an integrated pump holder are among the many features designed to help you save time and effort during your daily patient care routine.
- **Mobile.** Low start-up force, easy-roll casters and fifth-wheel steering reduce physical strain and risk of injury for you, while helping to ensure safer transport for your patient.

SPECIFICATIONS

	Safe Working Load **Note:** Safe Working Load indicates the sum of the patient, mattress, and accessory weight.	500 lb	227 kg
Scale System (Optional) - Capacity - Accuracy - Operating Angular Range		 Patients weighing up to 500 lb (227 kg) ± 2% for weight from 100 lb to 500 lb (45,3 to 227 kg) ± 2 lb for weight under 100 lb (45,3 kg) -12˚ to +12˚	
Overall Length/Width - Siderails Up - Siderails Down		 94 5/8” x 40” (240,34 cm x 101,6 cm) 94 5/8” x 39” (240,34 cm x 99,06 cm)	
Weight with Headboard and Footboard		472 lb (214,1 kg)	
Patient Sleep Surface		35 x 84” (89 x 213 cm)	
Recommended Mattress Size Mattress **Maximum** Thickness		35 x 84” (89 x 213 cm) 6” (15,24 cm)	
Minimum/Maximum Bed Height		14 1/2” to 29” (36,8 to 73,7 cm)	
Fowler Angle		0˚ to 61˚	
Gatch Angle - With Auto Contour (Optional) - Without Auto Contour		 0˚ to 24˚ 0˚ to 32˚	
Trendelenburg/Reverse Trendelenburg		+14˚ to -14˚	
Electrical Requirements - all electrical requirements meet CSA C22.2 No. 601.1, UL 60601-1 and IEC 60601-1, 60601-2-38 specifications.		100Vac, 50-60Hz, 7.5A - Two 250Vac, 10A Fuses 120Vac, 50-60Hz, 4A (9.8A with 120Vac Optional Auxiliary Outlet) - Two 250V, 10A Fuses 200Vac, 50-60Hz, 3.2A -Two 250Vac, 6.3A Fuses 220Vac, 50-60Hz, 2.9A -Two 250Vac, 6.3A Fuses 240Vac, 50-60Hz, 2.7A -Two 250Vac, 6.3A Fuses	
Duty Cycle		10%	

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.

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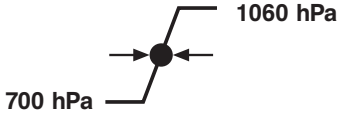
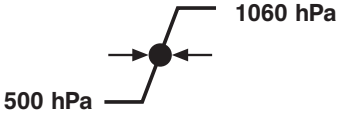
ENVIRONMENTAL CONDITIONS

Environmental Conditions	Operation	Storage and Transportation
Ambient Temperature		
Relative Humidity (Non-Condensing)		
Atmospheric Pressure		

Stryker reserves the right to change specifications without notice.

- Specifications listed are approximate and may vary slightly from unit to unit..
- Operating environment recommended to ensure the scale system (optional) precision.

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PRODUCT ILLUSTRATION

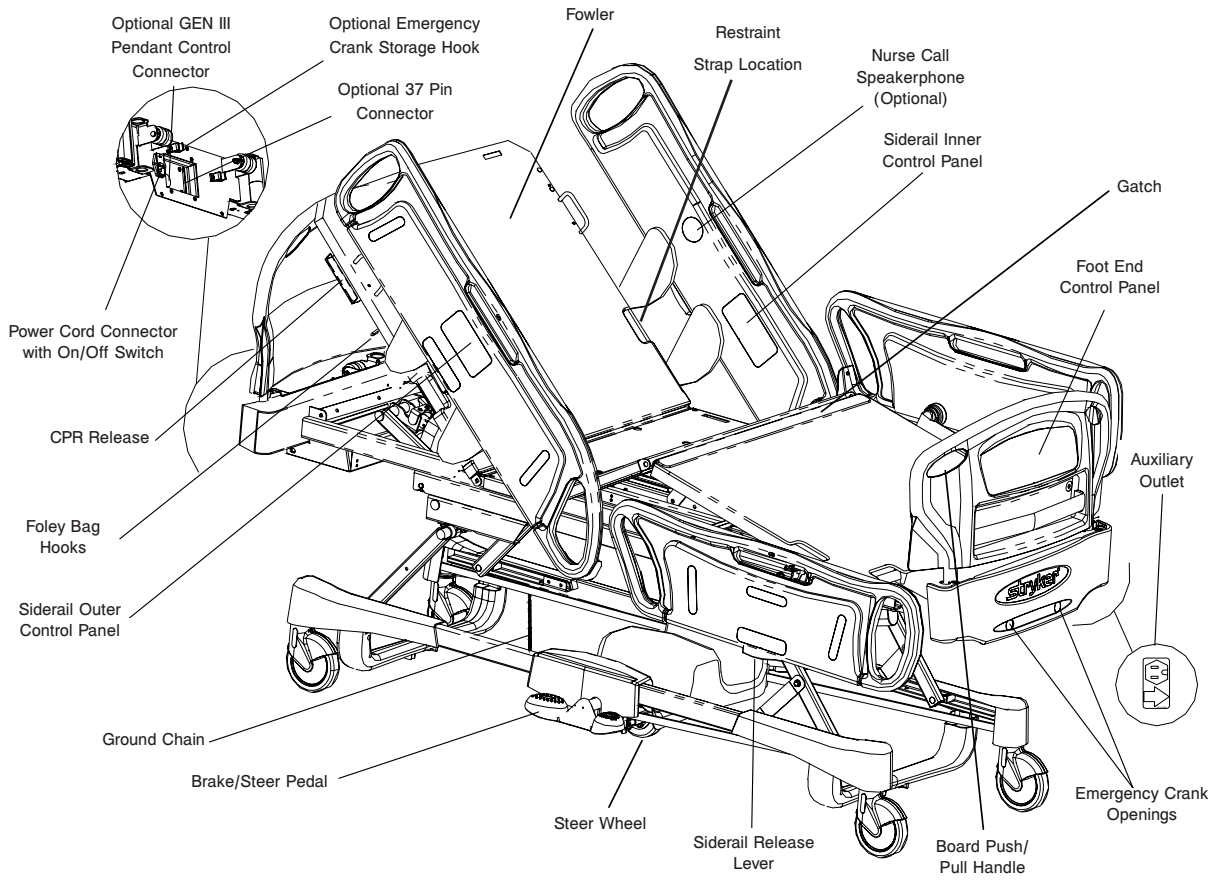

Figure 1.9

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STANDARD FEATURES

- 14.5” (37 cm) low bed height
- Retractable fifth-wheel steering
- Retractable sleep surface
- 6” (15 cm) casters
- Trendelenburg/Reverse Trendelenburg
- Four independent electric motors
- Trendelenburg display on footboard (only available with scale option)
- Centrally located steer and four wheel brake mechanism
- Four drainage bag hooks
- Eight IV pole/traction equipment sockets
- Roller bumpers
- Manual back up for head and knee control
- Integrated pump holder
- Nurse controls on footboard and siderails
- Fixed patient controls on siderails
- Degree indicator for head elevation
- Patient restrain locations
- Electronic function lockout controls
- One handed dampened siderail release
- Auto contour
- Photo sensitive night light
- In-bed scale system
- One-button cardiac chair

OPTIONAL FEATURES

- Chaperone center-of-gravity bed exit system
- Chaperone with Zone Control®
- CPR release
- Smart TV - includes channel up/down
- Siderail communications - includes nurse call with speakers, TV, radio, volume, room/read lights
- Mattresses: management and prevention
- Pillow speaker interface
- Removable litter covers

ACCESSORIES

- Monitor tray
- Patient helper
- Emergency crank handle
- Oxygen bottle holder
- Bed extender and pad
- Removable I.V. poles
- Fixed I.V. poles
- Traction sleeves and adapters

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Safety Tips and Guidelines

Before operating the GoBed® II MedSurg Bed, Model FL28EX, 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.

⚠ WARNING

- 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 not exceed 6 inches (15,24 cm).
- This bed is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded outlet. Grounding reliability can be achieved only when a hospital grade outlet 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 do so could result in serious injury or death.
- 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 siderails in the fully raised position and the sleep surface horizontal in its lowest position, unless its 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 the patient’s limbs are within the raised siderails to avoid patient injury.
- When a patient’s condition requires greater safety measures for his/her security, use the lockout controls in the foot board control panel to inhibit the siderail functions 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 patient 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 steer wheel cannot swivel.
- The CPR emergency release (optional) is for emergency use only. When activating the CPR release handle, all people and equipment must be removed from the area below and around the head, thigh and foot sections of the bed or serious personal injury and/or equipment damage could occur.
- Possible fire hazard exists when this bed is used with oxygen administering equipment other than nasal, mask type or half bed-length tent type. Unplug the bed power cord from the wall when oxygen administering equipment is used. When using a half bed-length tent type, ensure that the siderails are outside the oxygen tent and that the tent does not extend below the mattress support level.
- The weight system is intended to assist in the monitoring of the patient’s weight variation. Under no circumstances should its readings be used as sole reference for medical treatment.
- The Bed Exit system (optional) is intended only to aid in the detection of a patient exiting the bed. It is not intended to replace patient monitoring protocol. The Bed Exit system signals when a patient is about to exit the bed. The addition or removal of equipment with a Bed Exit system armed must be done using the “Adding or Removing Equipment with the System Armed” procedure, otherwise the sensitivity of the system may be affected and the readings of the patient’s movements in the bed be erroneous.
- The Bed Exit system (optional) is not designed to be used with patients weighing less than 50 lb (23 kg).

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⚠ WARNING (CONTINUED)

- When large fluid spills occur in the area of the circuit boards, cables and motors, 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. Ensure, among other things, that the plastic components being used as covers for the siderail mechanism arms and the foot end casing are removed and that the parts they cover are thoroughly dried.
- 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 the mattress, or dispose of it if defective, may increase the risk of exposure to pathogenic substances and may bring about diseases to the patient and user.
- Preventative maintenance should be performed at least once a year to ensure all bed features are functioning properly. Ensure that any bed malfunction is promptly reported to your service personnel for immediate attention.
- Always unplug the bed power cord from the wall outlet when servicing or cleaning the bed. When working under the bed with the bed in the high position, always apply the brakes and place blocks under the Hi-Low levers to prevent injury in case the bed down switch is accidentally pressed.
- Before using the optional emergency crank during a power failure, always unplug the power cord. An unexpected return of the power could rotate the handle and cause injury to the user.
- Because individual beds may have different options, footboards should not be moved from one bed to another. Mixing foot boards could result in unpredictable bed operation.
- 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 Figure 1.9, page 10).
- Do not put anything under the bed.

⚠ 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. Move the bed using the push/pull handles integrated to the boards.

Note

Throughout this Maintenance Manual, the words "right" and "left" refer to the right and left sides of a patient lying face up on the bed.

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Static Discharge Precautions

The electronic circuits in the GoBed® II MedSurg Bed, Model FL28EX 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. Whenever you are touching wires, you should be using static protection.

Static Protection Equipment

The necessary equipment for proper static protection is:

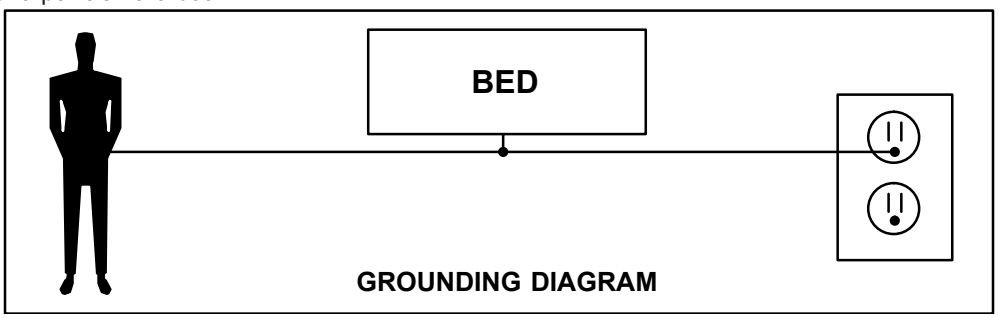
- 1 static wrist strap; 3M part number 2214 or equivalent,
- 1 grounding plug; 3M part number 61038 or equivalent,
- 1 test lead with a banana plug on one end and an alligator clip on the other; Smith part number N132B699 or equivalent.

CAUTION

All electronic 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 Medical should be shipped in the static shielding bags the new boards were shipped in.

Static Protection Procedure

1. Unplug the power cord from the wall outlet.
2. Insert the grounding plug into a properly grounded hospital grade wall outlet. Plug the banana plug of the test lead into the outlet 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.



GROUNDING DIAGRAM

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⚠ CAUTION

Unplug unit prior to cleaning or servicing.

Hand wash all surfaces of the GoBed® II MedSurg Bed, Model FL28EX with warm water and mild detergent. **Dry thoroughly**. Do not steam clean or hose off the bed. Using these methods of cleaning is **not** recommended and may void this product's warranty. Do not immerse any part of the bed in any kind of liquid. Some of the internal parts of the bed are electric and may be damaged by exposure to water.

Suggested cleaners for bed surfaces:

- Quaternary Cleaners (active ingredient - ammonium chloride).
- Phenolic Cleaners (active ingredient - o-phenylphenol).
- Chlorinated Bleach Solution (5.25% - less than 1 part bleach to 100 parts water).

Avoid over saturation and ensure the product does not stay wet longer than the chemical manufacturer's guidelines for proper disinfecting.

⚠ CAUTION

SOME CLEANING PRODUCTS ARE CORROSIVE IN NATURE AND MAY CAUSE DAMAGE TO THE PRODUCT IF USED IMPROPERLY. If the products suggested above are used to clean Stryker patient care equipment, measures must be taken to insure the bed is wiped with a damp cloth soaked in clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the bed 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.

For mattress cleaning instructions, please see the tag on the mattress, or contact the mattress manufacturer.

Clean Velcro® **after each use**. Saturate Velcro® with disinfectant and allow disinfectant to evaporate. (Appropriate disinfectant for nylon Velcro® should be determined by the hospital).

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Preventative Maintenance

Beds require an effective maintenance program. We recommend checking these items annually. Use this sheet for your records and keep on file.

CHECKLIST

_____ All fasteners secure (reference all assembly drawings).
_____ Inspect for excessive wear on the oil-impregnated bronze shoulder spacers found at the bed hinge points. Do not lubricate these spacers. Replace as needed.
_____ Check that grease is present on the components detailed in section “Lubrication Requirements”, lubricate if necessary. Lubricate at least every two years.
_____ On both sides of the bed, depress the side of the pedal identified with a red arrow and ensure that the brakes are applied and the bed is immobilized. Toggle the pedal to neutral and ensure the brakes are release.
_____ On both sides of the bed, depress the side of the pedal identified with a green arrow and ensure that the steer wheel is engaged. Toggle the pedal to neutral and ensure that the steer wheel disengages.
_____ Siderails move, latch and stow properly.
_____ All controls of the foot end panel working properly, including LEDs.
_____ Calibrate the scale. Refer to the “Scale Calibration Procedure”.
_____ All siderail controls working properly.
_____ Ensure that the nurse call (optional) alarm sounds in the nurse station.
_____ Verify the CPR emergency release (optional) using both CPR release handles: raise the Fowler fully up and, using the CPR handle, lower the Fowler gradually to flat position by pulling, holding and releasing the handle several times. Ensure the Gatch (if raised) also starts flattening when the Fowler is completely down. Following the complete lowering of the Fowler, wait approximately 30 seconds (the time for the Fowler actuator to reset) then verify that the actuator has indeed reset itself by raising the Fowler fully up.
_____ Verify the Fowler, Gatch and Hi-Lo movements to ensure that the motion interrupt switch integrated to the four electric actuators is operating properly.
_____ Auxiliary outlet (option available only with 120Vac beds) working properly.
_____ Night light (optional) working properly.
_____ No cracks in the headboard or footboard, siderails, wheel covers, steer wheel hood (optional) and plastic covers (optional) of the head and foot sections.
_____ Head end bumpers tightly secured to frame and working properly.
_____ No rips or cracks in mattress cover. Replace if so.
_____ Power cord intact.
_____ No cables pinched or worn.
_____ All electrical connections tight.
_____ All grounds secure to the frame.
_____ All casters roll properly. Check caster for cuts, wear, etc.
_____ Ground Impedance not more than 100 mΩ (milliohms).
_____ Current leakage not more than 100 µA (microamps).
_____ Make sure that the ground chain is in place, intact and it’s touching the floor (see Figure 1.9, page 10).

Bed Serial Number:		

Completed by: _____ Date: _____

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LUBRICATION REQUIREMENTS

The only components of the bed needing periodic lubrication are the four actuator screws and the clevis pins holding the head actuator to the head section lever. These components should be inspected annually and lubricated every two years.

⚠ CAUTION

The bed uses oil impregnated shoulder spacers at hinge points. DO NOT lubricate these shoulder spacers. When shoulder spacers become worn, replace them.

ACTUATOR SCREW LUBRICATION

Tools Required:

- #2 Phillips Screwdriver
- Brush
- Bungee Cord (or equivalent)
- OG2 Grease (or equivalent)

Procedure:

Clevis Pin

1. Raise the bed to the highest height and apply the brakes.
2. Remove the plastic head section cover (if equipped). Raise the head section to the highest position.
3. Remove the headboard.
4. Unplug the power cord from the wall outlet.
5. Apply a coat of OG2 grease to the clevis pin (A).
6. Raise and lower the head section several times to ensure the clevis pin is properly coated.

Procedure:

Head and Thigh Actuators

1. Raise the bed to the highest height and apply the brakes.
2. Remove the plastic head and foot section covers (if equipped).
3. Raise the head section to the highest position and flatten the thigh section. Lower the four siderails.
4. Unplug the power cord from the wall outlet.
5. Lift the foot section and fold it back towards the head end of the bed. Secure it using a bungee cord.
6. Using a #2 Phillips screwdriver, remove the four screws (B) holding the cover plate to the frame and remove the plate. Remove the night light if equipped.
7. Using a #2 Phillips screwdriver, remove the two screws (C) holding the dust tube of each actuator. Push the tube back to uncover the screw threads.
8. Using a brush, apply OG2 grease to the screw threads. Ensure the grease penetrates to the bottom of the threads.
9. Replace the dust tubes and cover plate, and lower the foot section.
10. Plug the power cord into the wall outlet.
11. Using the electronic controls, raise and lower the head and thigh section several times to spread the grease evenly.

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ACTUATOR SCREW LUBRICATION (CONTINUED)

Procedure:

Hi-Lo Actuators

1. Lower the bed to the lowest position and apply the brakes. Flatten the litter.
2. Lower the four siderails.
3. Using a #2 Phillips screwdriver, remove the head and foot section plastic covers (if equipped), to reach the Hi-Lo actuators, or raise the head section to the highest position and fold the foot section back towards the head end of the bed. Secure the foot section using a bungee cord.
4. Unplug the power cord from the wall outlet.
5. Using a brush, apply OG2 grease to the screw threads of both actuators through the openings on the sides of the dust tubes. Ensure the grease penetrates to the bottom of the threads.
6. Lower the foot section.
7. Plug the power cord into the wall outlet.
8. Using the electronic controls, raise and lower the bed several times to spread the grease evenly.

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Notes

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Troubleshooting Guide

Problem / Failure	Recommended Action
No power to bed.	• Verify power at wall outlet. • Verify the power cord connections at the wall outlet and the bed. • Verify the On/Off switch is turned on. • Check the power cord for damage. Replace if necessary. • Check the two fuses inside the power connector.
No bed up or down motion.	• Ensure Total Lockout (padlock LED) is not enabled. • Check the siderail control panel cable connection to the bed outlet (under the mattress support). • Verify the bed has power.
No Fowler up or down motion.	• Ensure Total Lockout (padlock LED) is not enabled. • Ensure Fowler Lockout (padlock LED) is not enabled. • Check the siderail control panel cable connection to the bed outlet (under the mattress support). • Verify the bed has power.
Fowler does not reach full height.	This situation happens when the CPR handle is used to partly lower the Fowler. The use of the CPR mechanism for this purpose creates a situation where the Fowler motor is out of sync with the actual position of the Fowler. To correct the situation: • Completely lower the Fowler using the CPR handle or the Fowler down control to enable the Fowler motor to reset itself. Refer to the “Emergency CPR Release” section of the Operations Manual for more information.
No Gatch up or down motion.	• Ensure Total Lockout (padlock LED) is not enabled. • Ensure Gatch Lockout (padlock LED) is not enabled. • Check the siderail control panel cable connection to the bed outlet (under the mattress support). • Verify the bed has power.
No Auto Contour motion.	• Ensure Gatch Lockout (padlock LED) is not enabled. • Check the two Auto Contour limit switches. Replace if needed.

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Troubleshooting Guide

Problem / Failure	Recommended Action
Improper operation of the CPR positioning (optional): Gatch does not lower and/or the Fowler actuator does not reset.	• Check the two CPR limit switches and replace if needed.
The weight shown on the scale display is incorrect.	• Zero the bed without the patient on it (see the “Scale System Usage” section in the Operations Manual). • Calibrate the scale.
Scale display reads OVERLOAD or shows incorrect weight.	• The weight on the bed is greater than the scale capacity. • If the patient weight is greater than 500 lb (227 kg), do not use the scale. If that is not the case, zero the scale without the patient on the bed. • Ensure equipment added to the bed was done using the “Add/Remove Equipment Procedure” (see the Operations Manual). • One or more load cell cables are not properly connected or completely disconnected from the scale control board (see Figure 13 (page 55), for the connecting positions of the load cell cable).
Angle shown on the scale display is incorrect.	• Calibrate the scale.
Scale display does not turn on when the scale is activated.	• Verify the bed has power. • Press ENTER key twice. • Unhook the foot board from the bed by lifting it off the connectors. Ensure the connectors match correctly and press the foot board down firmly to reconnect it to the bed. • Check the Scale user interface cable connection to the scale control board (J6 connector, see drawing L28-008L page 80).
Scale displays “No scale found”.	• Press the ENTER key. If message persists, contact our Technical Service. If message disappears, data displayed is correct and current procedure can be resumed.
All lockout LEDs (padlock icons) flash or “ERROR” appears at the bottom of the LCD display.	• The scale is unable to measure the weight due to an electrical problem. Please contact our Technical Service.
Bed Exit system (optional) does not operate properly.	• Verify the load cell cable connections to the scale control board (see Figure 13 (page 55), for the load cell cable connection positions).
Bed Exit system (optional) does not work at all or alarm goes off when Bed Exit is activated.	• Check the load cell cable connections to the scale control board (see Figure 13 (page 55), for the load cell cable connection positions).
Nurse call (optional) or Bed Exit (optional) signal does not reach the nurse desk.	• Verify the bed has power. • Check the connecting cable. • Check the wall outlet. • Contact the Technical Service.

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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, Canada: 1-888-233-6888 for availability and pricing.

Part Name	Part Number
ELECTRIC/ELECTRONIC COMPONENTS	
Motor Control Board	QDF28-0592
Scale Control Board	QDF28-0593
Scale Display	QDF25-0463
Footboard Control Board (Optional)	QDF21-1154
Nurse Call (Optional)/GEN III (Optional) Control Board	QDF21-1163
Micro Switch	1325P003
Push Button Micro Switch	QDF9159
Power Connector	QDF2034
Fuse - Fast Acting 10A, 250Vac for 100/120Vac Electric Systems	QDF8078
Fuse - Slow Blow 6.3A, 250Vac for 200/220/240Vac Electric Systems	QDF8068
Power Cord with Straight North American Molded Plug	QDF8066
Power Cord with 90° North American Molded Plug (Optional)	QDF8066-90D
Foot Board/Control Board Cable	QDF28-0258
Night Light	QDF9539
Load Cell with Long Cable	QDF14-1367
Load Cell with Short Cable	QDF25-0218
Hi-Lo Actuator	28-0768
Head Section Actuator	28-0769
Thigh Section Actuator	28-0770
FOOT BOARD COMPONENTS	
Round Self-Sticking Screw Cover	QDF28-0334
SIDERAIL COMPONENTS	
“Lift To Release” Self-Sticking Sticker	QDF28-0146
Oblong Self-Sticking Screw Cover	QDF28-0145

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Quick Reference Replacement Parts List

Part Name	Part Number
BASE COMPONENTS	
Foot End Casing Plastic Cover	QP28-0111-13
Plastic Base Tube Cover	QP25-0023-13
6” Caster with Locking Mechanism	R25-0388-13
Fifth Steer Wheel	RL5
Right Wheel Cover	QP28-0299-13
Left Wheel Cover	QP28-0300-13
Brake/Steer Pedal	QP28-0130-11
MISCELLANEOUS	
OG2 Grease	M0027
Touch-Up Paint - Opal	PD020
Cable Tie	QDF9518

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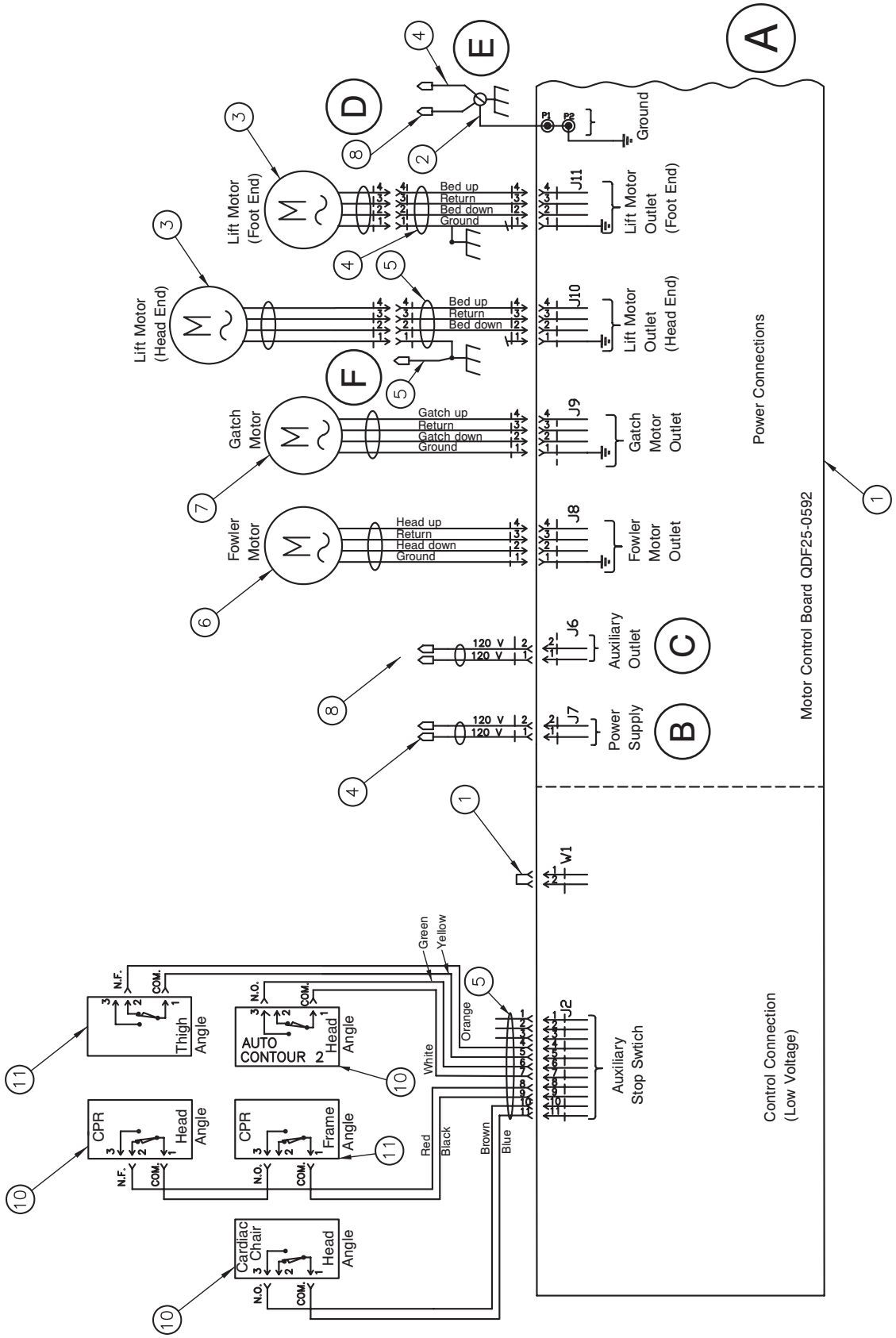
MOTOR CONTROL BOARD - QDF25-0592



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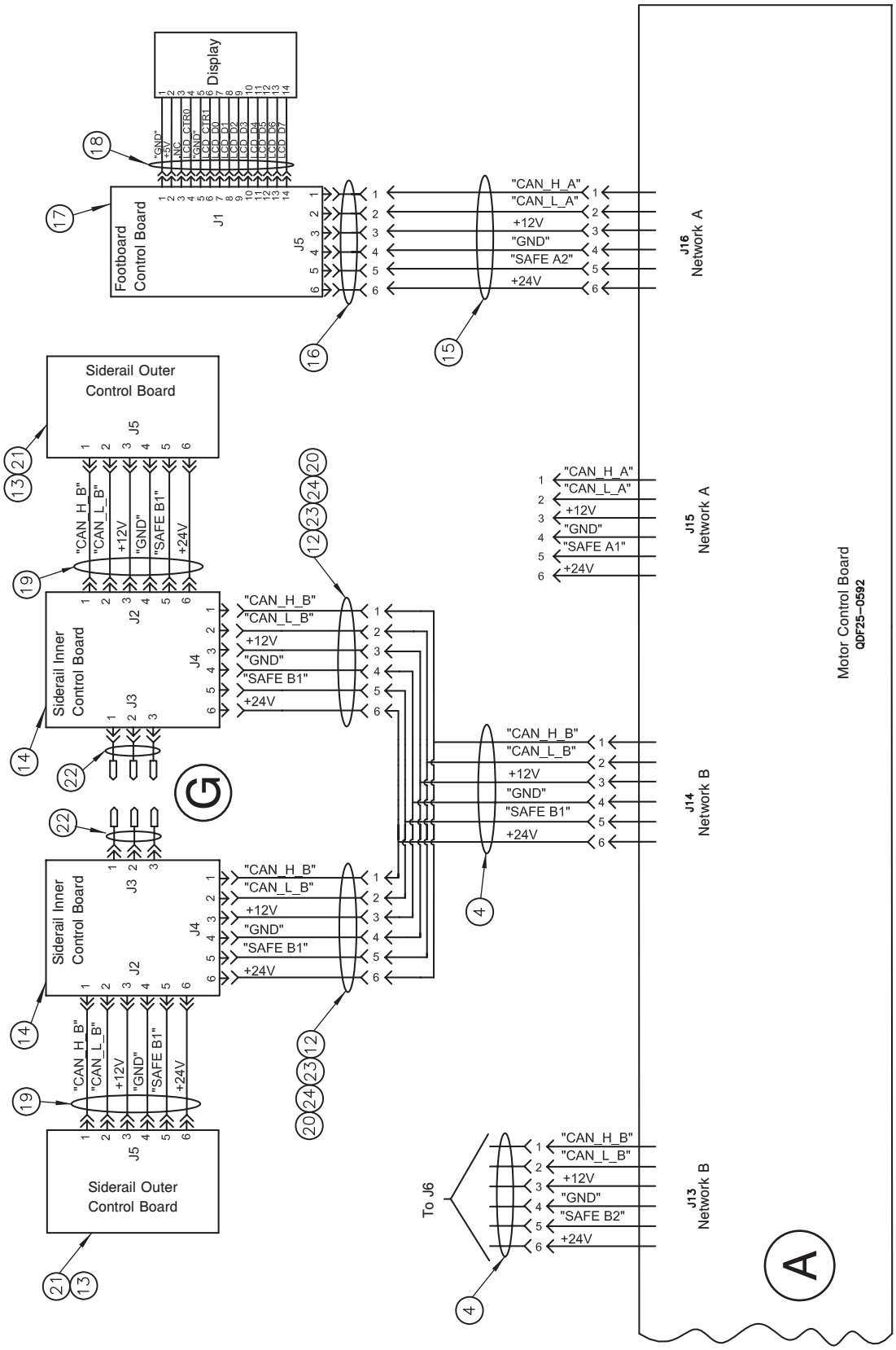
MOTOR CONTROL BOARD - QDF25-0592



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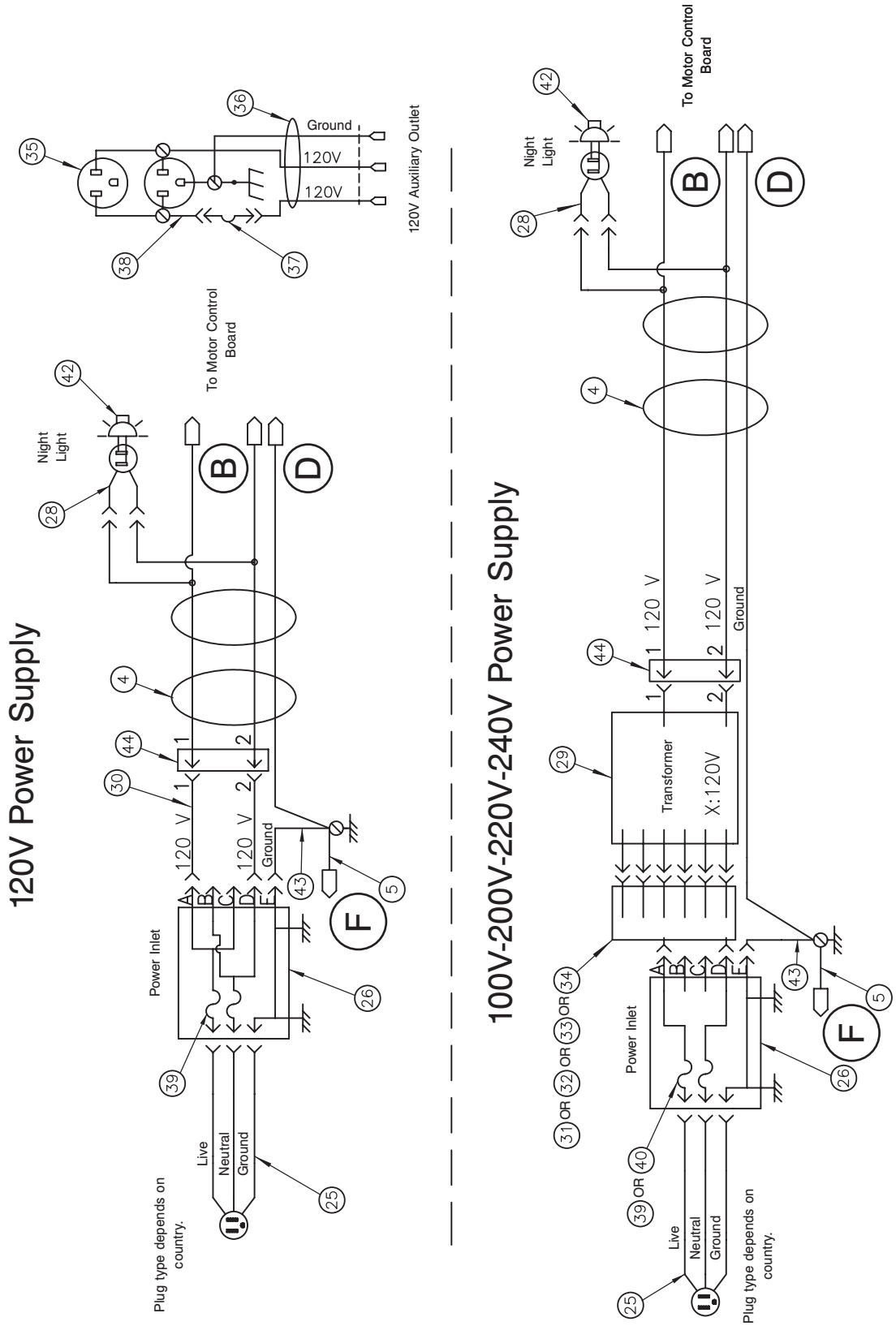
POWER SUPPLY



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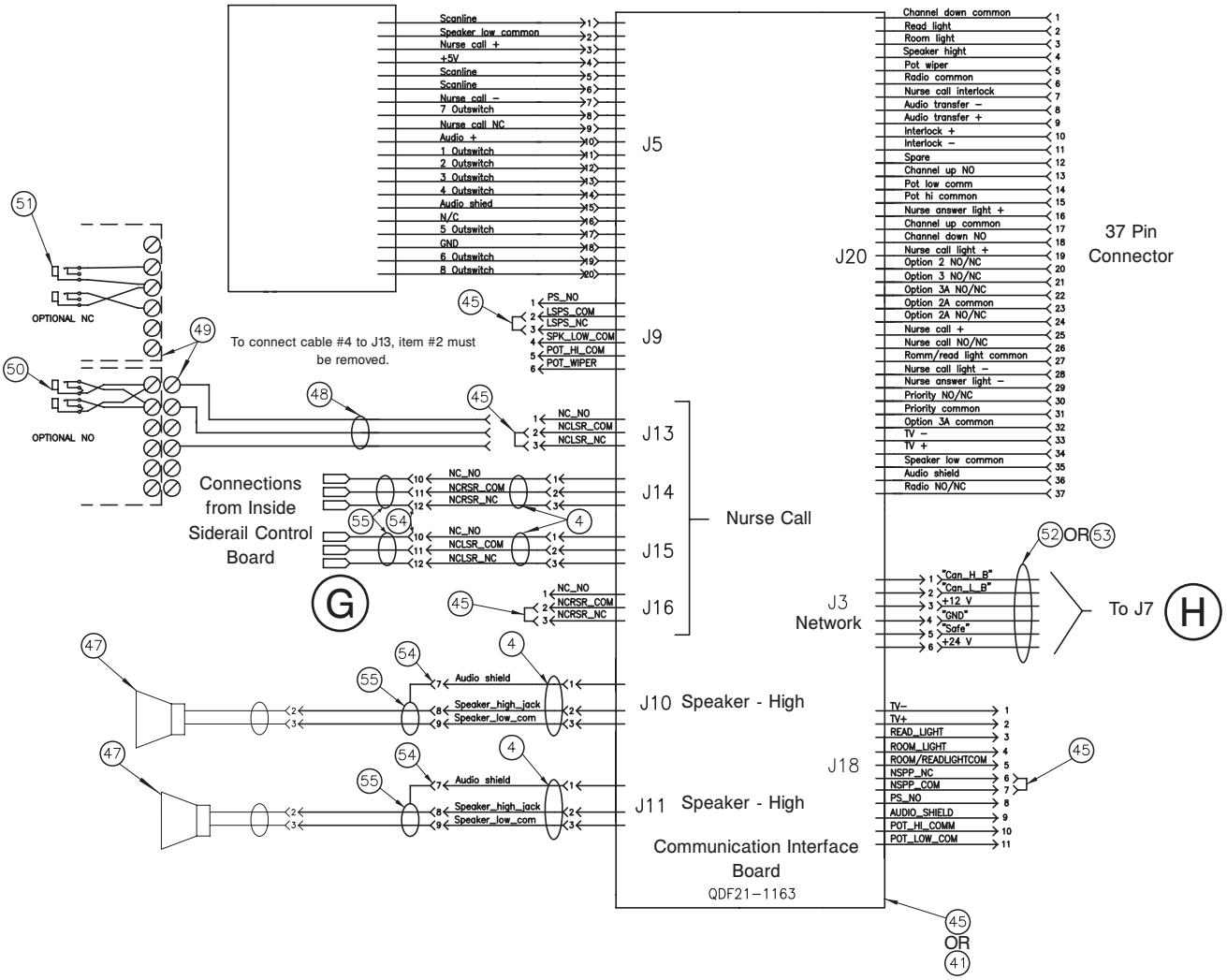
COMMUNICATION INTERFACE - QDF21-1163 (OPTIONAL)



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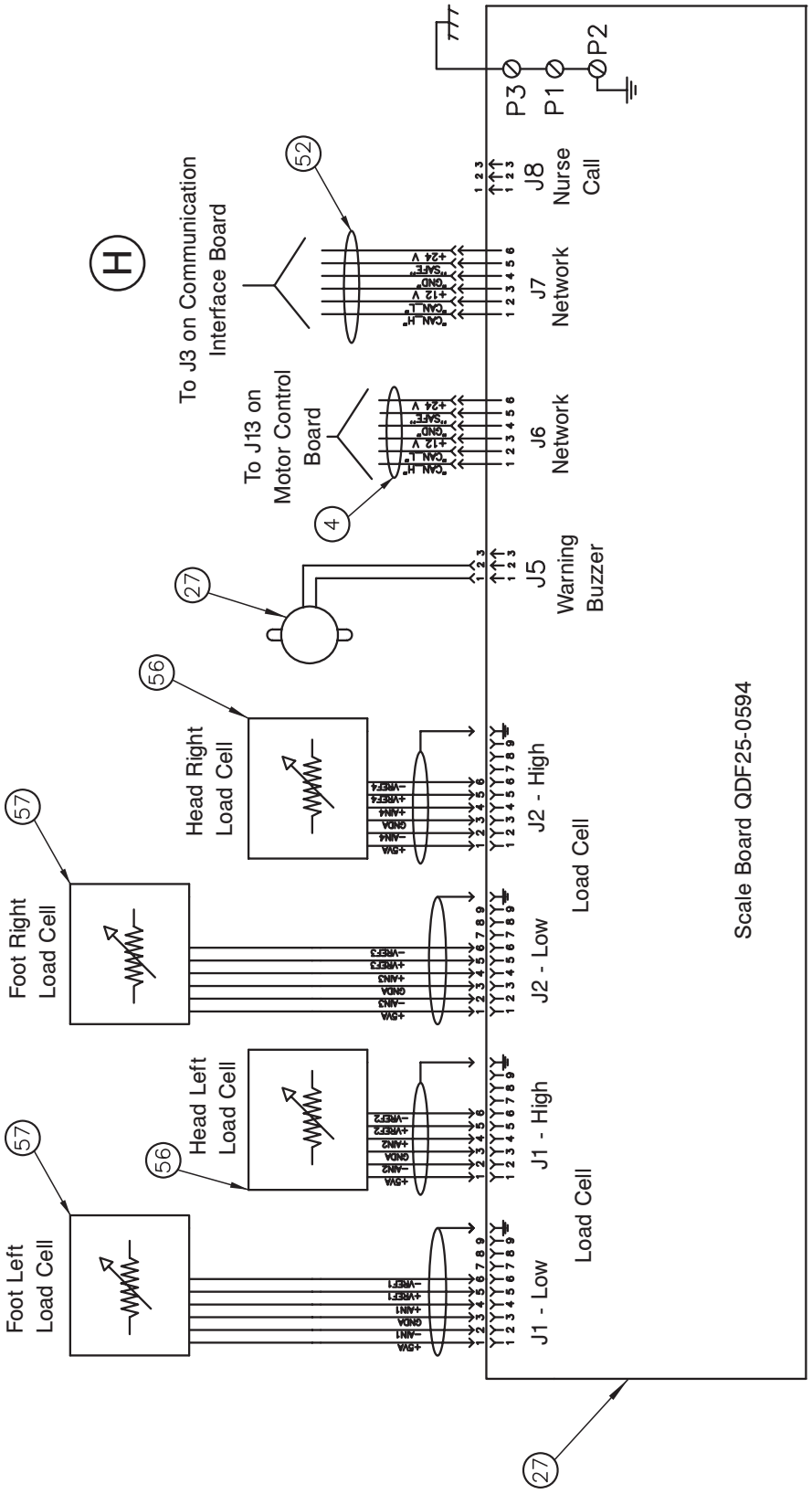
SCALE BOARD - QDF25-0594



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Electrical Diagram - 28-0229 Rev 02 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QDF25-0592	Motor Control Board	1
2	QDF17-0138	Ground Wire	1
3	28-0768	Lift Motor	2
4	QDF28-0230	Wire Harness, Left, Scale/Network	1
5	QDF28-0231	Wire Harness, Right	1
6	28-0769	Fowler Motor	1
7	28-0770	Gatch Motor	1
8	QDF17-0199	Auxiliary Outlet Screw	1
10	1325P003	Micro Switch	3
11	QDF9159	Cherry Switch	2
12	QDF25-0387	Siderail Network Cable	2
13	QDF21-1151	Siderail Control Board, Outside	2
14	QDF21-1169	Siderail Control Board, Inside	2
15	QDF25-0381	Footboard Control Board Cable	1
16	QDF21-2898	Footboatd Network Cable	1
17	QDF21-1154	Footboard Control Board	1
18	QDF25-0463	Scale Display	1
19	QDF21-2895	12” Network Cable	2
20	QDF2043	Cable Clamp	2
21	25-0522	EMi Protective Strip	2
23	QDF9018	Male AMP Contact	12
24	QDF2042	14 Position Connector	2
26	QDF2034	Power Supply Connector	1
27	25-0594	Scale Board	1
28	QDF188225	Night Light Cable	1
29	QDF14-1160	Transformer	1
30	QDF28-0238	120 Vac Connector	1
31	QDF28-0081	100 Vac Connector	1
32	QDF28-0082	200 Vac Connector	1
33	QDF28-0083	220 Vac Connector	1
34	QDF28-0084	240 Vac Connector	1
35	QDF8024	Auxiliary Outlet (120 Vac)	1
36	QDF17-0199	Auxiliary Outlet Screw	1

Item	Part No.	Part Name	Qty.
37	QDF9025	Circuit Breaker, 5A	1
38	QDF17-0223	Circuit Breaker Screw	1
39	QDF8078	Fuse, 10A	2
40	QDF8068	Fuse, 6.3A	2
41	QDF21-1180	Communication Interface Board without GENIII	1
42	QDF9539	Night Light	1
43	QDF25-0508	Ground Wire	1
44	QDF8042	Female AMP Connector	1
45	QDF21-1163	Communication Interface Board	1
47	QDF26-0111	Speaker with Connector	2
48	QDF20-0140	Connection Cable	1
49	QDF9012	Connection Terminal	1
50	QDF13-0033	1/4” N.O. Phono Cable	2
51	QDF20-0138	1/4” N.C. Phono Cable	2
52	QDF21-2895	12” Network Cable	1
53	QDF25-0382	Head End Network Cable	1
54	QDF9018	Male AMP Contact	12
55	QDF28-0344	Speaker Cable	2
56	QDF25-0218	Load Cell Cable, Short	2
57	QDF14-1367	Load Cell Cable, Long	2

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MAINTENANCE MENU: ERROR CODES

Scale Error Codes

16 = Angle sensor defective.
17 = Scale chip failure. The scale chip on the scale board is faulty.

For errors 16 and 17, unplug the bed and wait 5 seconds. Then plug the bed back in. If the error persists, replace the scale board and calibrate the bed scale.

18 = Value of the foot left load cell is out of range: load cell may be disconnected, faulty or scale board is faulty.
19 = Value of the head right load cell is out of range: load cell may be disconnected, faulty or scale board is faulty.
20 = Value of the foot right load cell is out of range: load cell may be disconnected, faulty or scale board is faulty.
21 = Value of the head left load cell is out of range: load cell may be disconnected, faulty or scale board is faulty.

For errors 18 to 21, first verify load cell cables are plugged in and inspect for broken wires. If no visible problem is found, swap two load cells on the scale connectors. This will help determine whether the load cell or the scale board is faulty. If the error code changes with the load cell, the problem is with the load cell. Replace the load cell. However, if the error code remains the same, then the problem is with the scale board. Replace scale board. In both cases, the bed has to be calibrated.

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MAINTENANCE PROCEDURES

⚠ WARNING

Only service technicians from Stryker or service personnel trained by Stryker should perform the procedures detailed in this maintenance manual. This is especially important for procedures related to the Scale (option) and Bed Exit (option) systems. Failure to follow this restriction can result in serious damage to the bed and/or severe injury to users or patients.

To prevent injury when working under the bed with the bed in the high position, always place blocks under the mattress support frame and apply the brakes.

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

Note

Throughout this maintenance manual, the words “right” and “left” refer to the right and left sides of a patient lying face up on the bed.

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HEAD END SIDERAIL ASSEMBLY REPLACEMENT

Tools Required:

- 1/2” Socket
- 3/8” Drive Ratchet
- 3/16” Allen Wrench
- Cutting Pliers

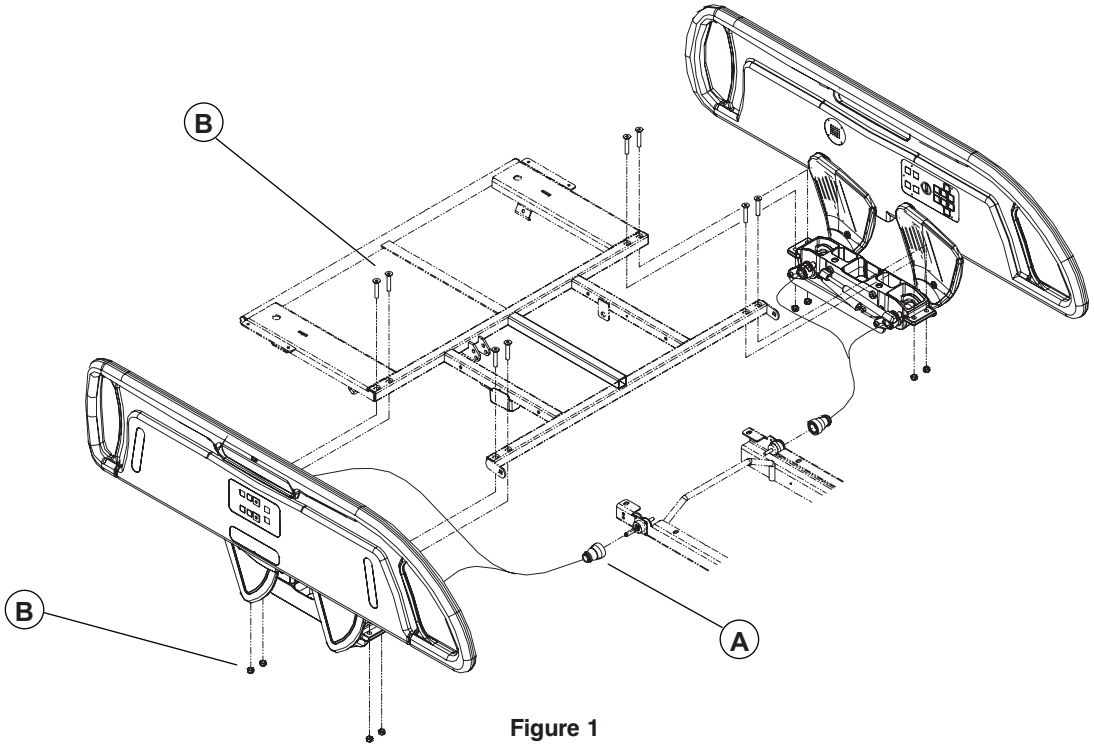

Figure 1

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. If applicable, remove the plastic litter cover (if equipped). Raise the fowler to the highest position and raise the siderail to be repaired.
3. Unplug the power cord from the wall outlet.
4. Loosen the lock ring (A) and unplug the siderail cable.
5. Using cutting pliers, remove the cable ties holding the siderail cable to the frame.
6. Using a 3/16” Allen wrench and a 1/2” socket, remove the four locknuts/bolts (B) holding the siderail assembly to the head section and remove the assembly. Support the assembly when removing the last bolts.
7. Reverse the above steps to install the new siderail assembly.
8. Test the siderail movement and all controls of both control panels, including the nurse call (optional) and the communications package (optional), for proper operation before returning the bed to service.

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FOOT END SIDERAIL ASSEMBLY REPLACEMENT

Tools Required:

- 1/2” Socket
- 1/2” Combination Wrench
- 3/8” Drive Ratchet
- Bungee Cord (or equivalent)

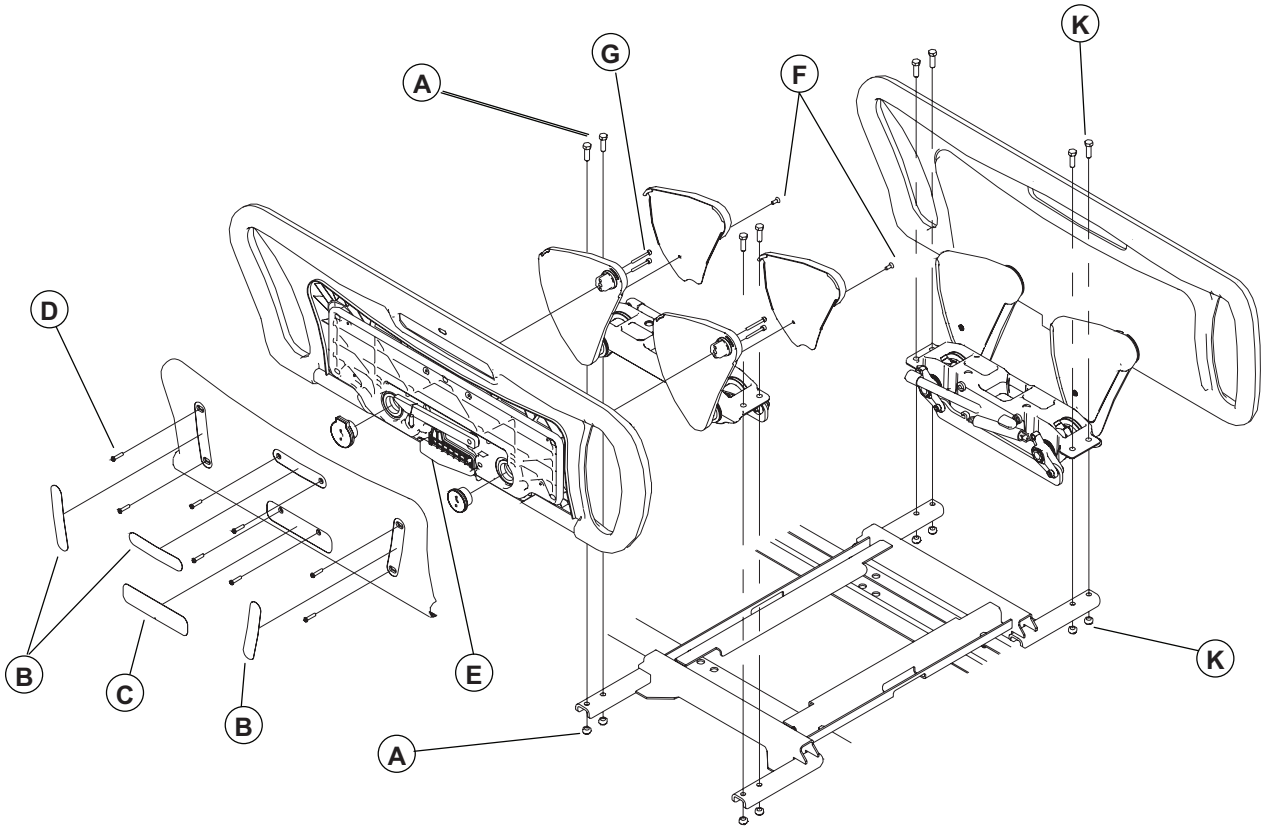

Figure 2

Procedure:

1. Raise the bed to the highest position and apply the brakes. Raise the siderail to be repaired.
2. Raise the Gatch to the highest position and unplug the power cord from the wall outlet.
3. If applicable, remove the plastic litter cover (optional). Lift and fold the foot section back toward the head end of the bed. Secure it using a bungee cord.
4. Using a 1/2” socket and a 1/2” combination wrench, remove the four locknuts and four bolts (A) holding the siderail assembly to the support and remove the assembly. Support the siderail assembly while removing the last bolts.
5. Reverse the above steps to install the new siderail assembly.
6. Test the siderail for proper operation before returning the bed to service.

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HEAD END SIDERAIL OUTER PANEL FASCIA REPLACEMENT

Tools Required:

- Small Regular Screwdriver
- #2 Phillips Screwdriver

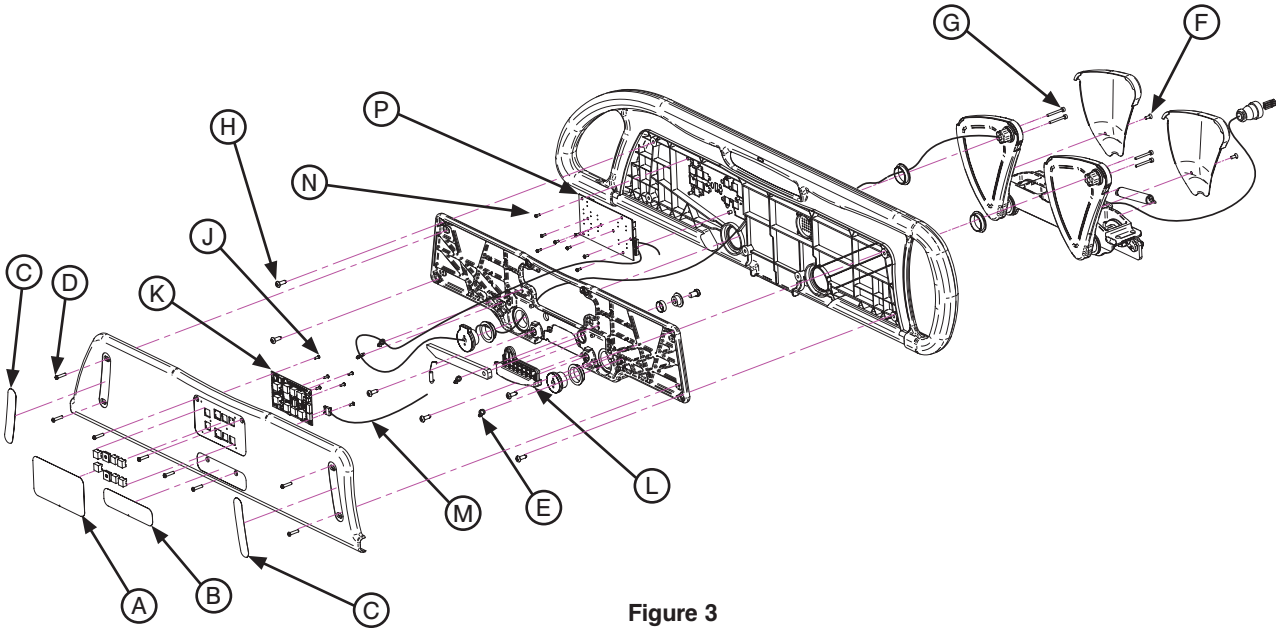

Figure 3

Procedure:

1. Raise the bed to the highest position and apply the brakes. Raise the siderail to be repaired.
2. Unplug the power cord from the wall outlet.
3. Using a small regular screwdriver, lift and remove the outer fascia (A). Use caution when inserting the screwdriver under the fascia to avoid damaging the cover.
4. Install the new fascia and ensure that the fascia is properly located over the control board switches.
5. Test all controls of the control panel for proper operation before reassembling the siderail and returning the bed to service.

SIDERAIL OUTER CONTROL BOARD REPLACEMENT

Tools Required:

- Small Regular Screwdriver
- #2 Phillips Screwdriver

Procedure:

Note

Refer to Figure 3 for this procedure.

1. Raise the bed to the highest position and apply the brakes. Raise the siderail to be repaired.
2. Unplug the power cord from the wall outlet.
3. Using a small regular screwdriver, lift and remove the outer membrane (A), two screw covers (C) and the label (B). Use caution when inserting the screwdriver under the labels to avoid damaging the cover.

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Note

Do not reuse the self-sticking parts removed since their self-adhesive coating considerably looses its efficiency once they are removed. Replace them with new parts.

4. Properly ground yourself (see the “Static Protection Procedure”, page 14).
5. Using a #2 Phillips screwdriver, remove the eight screws (D) holding the outer cover to the siderail.
6. Disconnect the control board cable (M) and remove the outer cover.

Note

Ensure the cable are positioned properly when reinstalling the cover.

7. Remove the yellow locking lever (L).
8. Using a #2 Phillips screwdriver, remove the six screws (J) holding the control board (K) to the outer cover. Remove the cable connected to the control board.
9. Reverse the above steps to install the new control board.
10. Test all controls of the outer control panel for proper operation before reassembling the siderail and returning the bed to service.

SIDERAIL INNER CONTROL BOARD REPLACEMENT

Tools Required:

- Small Regular Screwdriver
- #2 Phillips Screwdriver
- #3 Phillips Screwdriver
- Cutting Pliers
- Bungee Cord (or equivalent)
- 5/32” Allen Wrench

Procedure:

Note

Unless otherwise indicated, refer to Figure 3, page 34, for this procedure.

1. Raise the bed to the highest position and apply the brakes. Raise the siderail to be repaired.
2. Unplug the power cord from the wall outlet.
3. Using a small regular screwdriver, lift and remove the outer membrane (A), two screw covers (C) and the label (B). Use caution when inserting the screwdriver under the labels to avoid damaging the cover.
4. Properly ground yourself (see the “Static Protection Procedure”, page 14).
5. Using a #2 Phillips screwdriver, remove the eight screws (D) holding the outer cover to the siderail.
6. Disconnect the control board cable (M) and remove the outer cover.
7. Secure the siderail to be repair to the adjacent siderail using a bungee cord (see Figure 4).

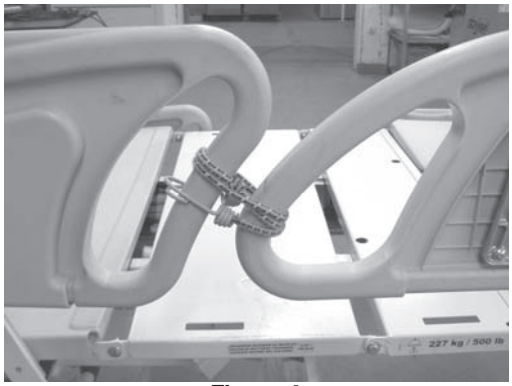

Figure 4

8. Using cutting pliers, cut the lower cable tie (E) holding the bottom part of the grey cable (there may be two cables) to the aluminum structure. The slack in the cable will be necessary for the following steps.

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SIDERAIL INNER CONTROL BOARD REPLACEMENT (CONTINUED)

Note

Ensure the cable ties are inserted in the aluminum structure before reinstalling the structure.

9. Using a #2 Phillips screwdriver, remove the screw (F) holding each siderail arm cover and lift up the covers to remove them.
10. Using a 5/16” Allen wrench, remove the two Allen screws (G) holding each pommel to the siderail arms. Leave one screw loosened on each pommel until ready to remove both pommels.
11. While supporting the rail, remove the two last screws and the bungee cord.
12. Lift the siderail, pass it over the mechanism arms and lay it on the mattress support while gently pulling on the cables.
13. Using a #3 Phillips screwdriver, remove the six screws (H) holding the aluminum structure to the siderail.
14. Grasp and lift the upper part of the aluminum structure until it may be secured temporarily to one of the mechanism arms using a cable tie.
15. Using a #2 Phillips screwdriver, remove the eight screws (N) holding the control board (P) to the siderail.
16. Reverse the above steps to install the new control board.
17. Test all controls of the inner and outer control panels for proper operation before reassembling the siderail and returning the bed to service.

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FOOTBOARD CONTROL BOARD REPLACEMENT

Tools Required:

- Small Regular Screwdriver
- #2 Phillips Screwdriver

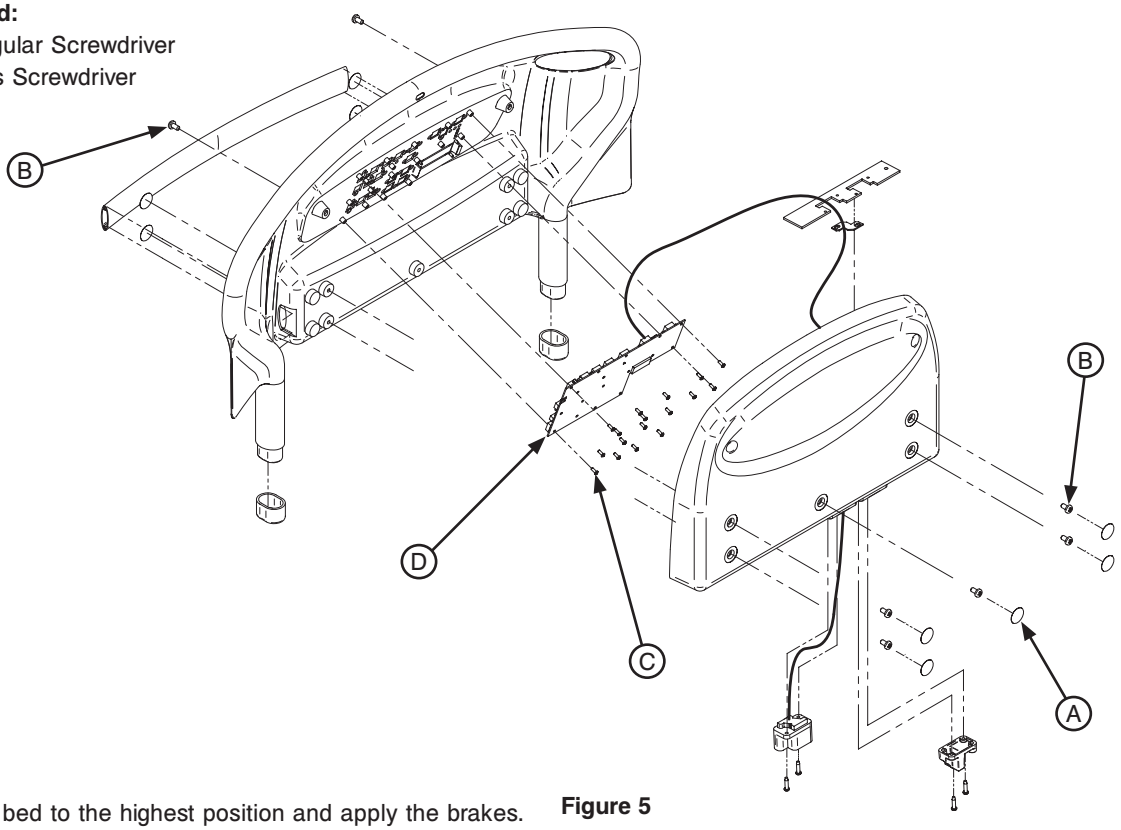

Figure 5

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the power cord from the wall outlet.
3. Using a small regular screwdriver, lift and remove the five round self-adhesive screw-covers (A) located on the foot board cover and the self-adhesive membrane of the foot board control panel to expose the screws holding the cover to the foot board. Use caution when inserting the screwdriver under the membrane to avoid scratching the plastic cover.

Note

Do not reuse the self-sticking parts removed since their self-adhesive coating considerably looses its efficiency once they are removed. Replace them with new parts.

4. Properly ground yourself (see the “Static Protection Procedure”, page 14).
5. Using a #2 Phillips screwdriver, remove the seven screws (B) holding the cover to the foot board and remove the cover.
6. Disconnect the cables from the control board. Note the location of each cable in order to properly connect them to the new control board.
7. Using a #2 Phillips screwdriver, remove the 17 screws (C) holding the control board (D) to the footboard and remove the control board.
8. Remove the scale system display by pushing aside the clips using a small regular screwdriver. Disconnect the cable from the board and install the display on the new board.
9. Reverse the above steps to install the new control board.
10. Test all the functions of the foot end control panel before returning the bed to service.

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SCALE SYSTEM LCD DISPLAY REPLACEMENT

Tools Required:

- Small Regular Screwdriver
- #2 Phillips Screwdriver

Note

Unless otherwise indicated, refer to Figure 5, page 37, for this procedure.

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the power cord from the wall outlet.
3. Using a small regular screwdriver, lift and remove the five round self-adhesive screw-covers (B) located on the foot board cover as well as the self-sticking membrane (A) of the foot board control panel to expose the screws holding the cover to the foot board. Use caution when inserting the screwdriver under the membrane to avoid scratching the plastic cover.

Note

Do not reuse the self-adhesive parts due to their adhesive coating considerably losing its effectiveness once they are removed. Replace them with new parts.

4. Properly ground yourself (see the “Static Protection Procedure”, page 14).
5. Using a #2 Phillips screwdriver, remove the seven screws (C) holding the cover to the foot board and remove the cover after having removed the cables connected to it. Note the cable positions in order to replace them properly.
6. Using a small regular screwdriver, push aside the clips (D) and remove the LCD display (E) after having disconnected its cable.
7. Reverse the above steps to install the new LCD display.
8. Test the LCD display for proper operation before replacing the foot board cover and returning the bed to service.

FOOT SECTION REPLACEMENT

Tools Required:

- 1/2” Combination Wrench
- #2 Phillips Screwdriver
- Bungee Cord (or equivalent)

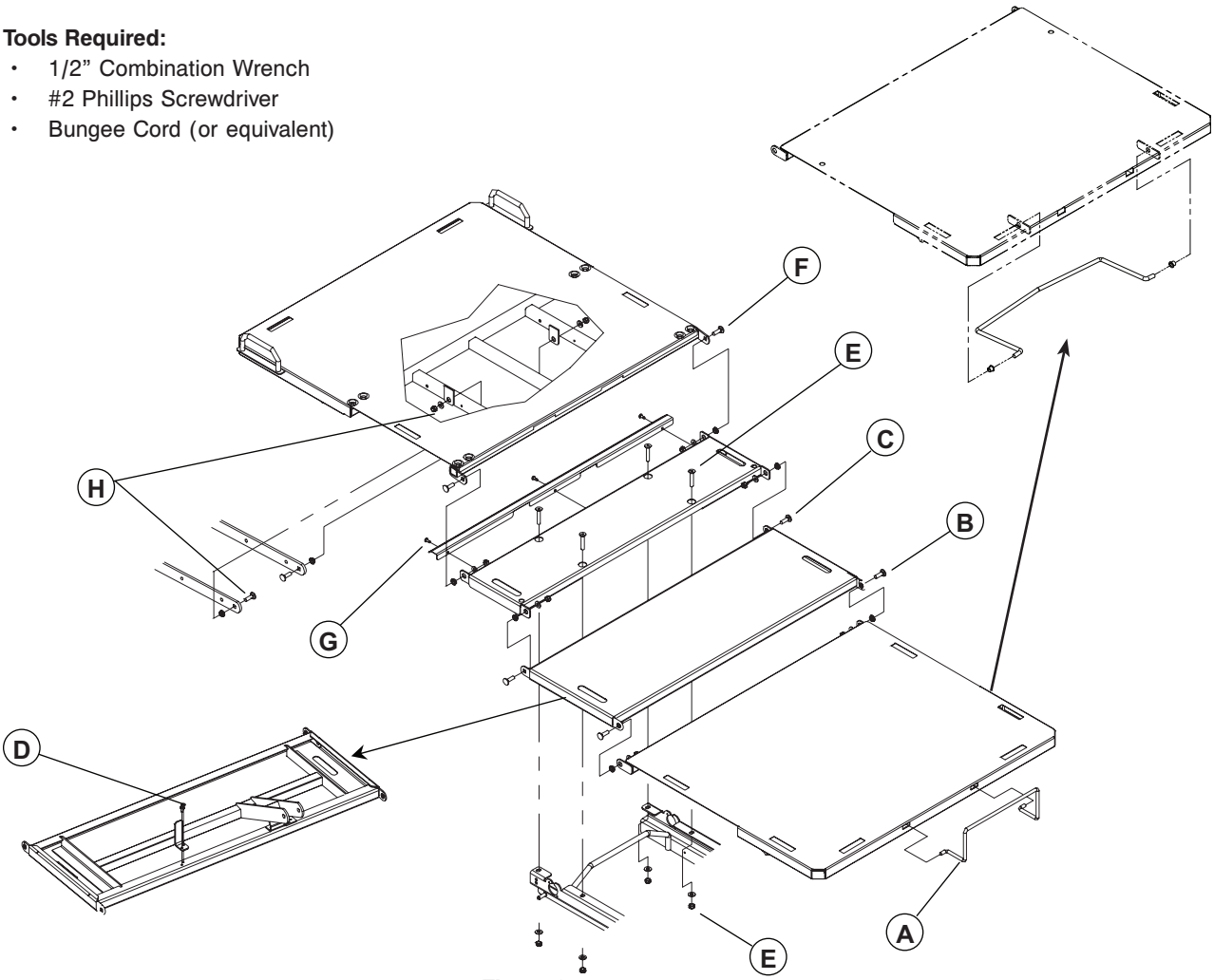

Figure 6

Procedure:

1. Raise the bed to the highest position and apply the brakes. Flatten all sections of the mattress support.
2. Unplug the power cord from the wall outlet.
3. Lower the siderails.
4. If applicable, remove the foot section plastic cover (optional). Lift and fold back the foot section toward the head end of the bed and secure it to the bed using a bungee cord (or equivalent).
5. Remove the foot end mattress retainer (A) and the prop rod and install it on the new foot section. Replace the foot section to horizontal position.
6. Using a 1/2” combination wrench, remove the two locknuts, two washers, two shoulder spacers, two bolts (B) linking the foot section to the thigh section and remove the defective section.
7. Reverse the above steps to install the new foot section.
8. Test the bed for proper operation before returning it to service.

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THIGH SECTION REPLACEMENT

Tools Required:

- Needle Nose Pliers
- 1/2” Combination Wrench
- #2 Phillips Screwdriver

Procedure:

Note

Unless otherwise indicated, refer to Figure 6, page 39, for this procedure.

1. Raise the bed to the highest position and apply the brakes. Flatten all sections of the mattress support.
2. Unplug the power cord from the wall outlet.
3. Raise the siderails.
4. Using needle nose pliers, remove the rue ring cotter/washers/clevis pin (E, Figure 8, page 44) linking the thigh section lever arms to the thigh actuator tube.
5. Using a 1/2” combination wrench, remove the four locknuts, four washers, four shoulder spacers, and four bolts (B, C) linking the thigh section to the foot and seat sections.
6. Remove the defective thigh section and lay it upside down on a workbench.
7. Using a #2 Phillips screwdriver, remove the two screws (D) holding the micro switch activator to the thigh section. Install the micro switch activator on the new thigh section.
8. Reverse the above steps to install the new thigh section.

Note

Apply grease on the clevis pin and nylon washers before joining the foot section to the actuator tube.

9. Test the Gatch as well as the Auto Contour positioning (optional) before returning the bed to service.

Note

Check the positioning of the switch activator on the thigh section if Auto Contour (option) does not operate properly.

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SEAT SECTION REPLACEMENT

Tools Required:

- 1/2” Long Socket
- (2) 1/2” Combination Wrenches
- 3/8” Drive Ratchet
- #2 Phillips Screwdriver

Procedure:

Note

Unless otherwise indicated, refer to Figure 6, page 39, for this procedure.

1. Raise the bed to the highest position and apply the brakes. Flatten the mattress support.
2. Unplug the power cord from the wall outlet.
3. Lower the siderails.
4. Using two 1/2” combination wrenches, remove the locknut, shoulder spacers and bolt holding the mattress support lever of the CPR mechanism (N, Figure 17, page 63) to the seat section.
5. Using a 1/2” long socket and a 1/2” combination wrench, remove the four locknuts, four washers and four bolts (E) holding the seat section to the frame.
6. Using a 1/2” combination wrench, remove the four locknuts, four washers, four shoulder spacers and four bolts (C, F) linking the seat section to the thigh and head section and remove the defective seat section.
7. Using a #2 Phillips screwdriver, remove the three screws (G) holding the protective plate to the seat section.
8. Reverse the above steps to install the new seat section.
9. Test the bed for proper operation before returning the bed to service.

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FOWLER REPLACEMENT

Tools Required:

- 1/2” Socket
- (2) 1/2” Combination Wrenches
- #2 Phillips Screwdriver
- 3/16” Allen Wrench
- 7/16” Combination Wrench
- Cutting Pliers
- Strap (or equivalent)
- 3/8” Drive Ratchet

Procedure:

Note

Unless otherwise indicated, refer to Figure 6, page 39, for this procedure.

⚠ WARNING

Do not activate the CPR emergency release handles (if equipped) during this procedure or serious injury to the maintenance technician or damage to equipment could occur.

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the power cord from the wall outlet.
3. Raise the head siderails.
4. If applicable, remove the litter plastic cover (if equipped) or raise the fowler to the highest position. Secure the head section to the bed using a strap to prevent the head section from moving during the procedure.
5. Loosen the lock rings (A, Figure 1, page 32) of both siderail cables and remove the siderail cables. Using cutting pliers, cut the cable ties holding the siderail cables to the frame.
6. Using a 3/16” Allen wrench and a 1/2” socket, remove the four locknuts and four bolts (B, Figure 1, page 32) holding each head siderail assembly to the head section and remove the siderails.
7. Using a #2 Phillips screwdriver, remove the screw holding each cable tie present on both sides of the fowler structure.
8. Using a 1/2” combination wrench, remove the two nuts, two shoulder spacers and two bolts (H) holding the fowler to the stabilizer arms. Lay the stabilizer arms down.

If the bed is equipped with the CPR mechanism, proceed with steps 9 to 16.
If the bed is not equipped with the CPR mechanism, proceed to steps 17 to 21.

9. Remove the two wires (C, Figure 17, page 63) from the micro switch. Note their position before removing them.
10. Using two 1/2” combination wrenches, remove the locknut, shoulder spacer and bolt (L, Figure 17, page 63) holding each CPR handle to the head section. To remove the cable ends from the handle slots, loosen the two locknuts holding each CPR cable to its handle using a 7/16” combination wrench.

Note

Insert the cable ends inside the handle slots before assembling the handle to the new head section. Then adjust the two locknuts of each cable in order to have a 1/8” play in the CPR handle movement.

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FOWLER REPLACEMENT (CONTINUED)

11. Using two 1/2” combination wrenches, remove the locknut and bolt (M, Figure 17, page 63) holding the pneumatic cylinder end fitting to the head section lever arms. Lay the CPR mechanism down on the frame.
12. Grasp the head section firmly. Remove the strap and lower the head section.
13. Using a 1/2” combination wrench, remove the two locknuts, two shoulder spacers and two bolts (F) holding the head section to the seat section.
14. Remove the micro switch from the defective head section by pressing its two side clips.
15. Reverse the above steps to install the new head section.
16. Test the head section and CPR mechanism for proper operation before returning the bed to service.

End of procedure.

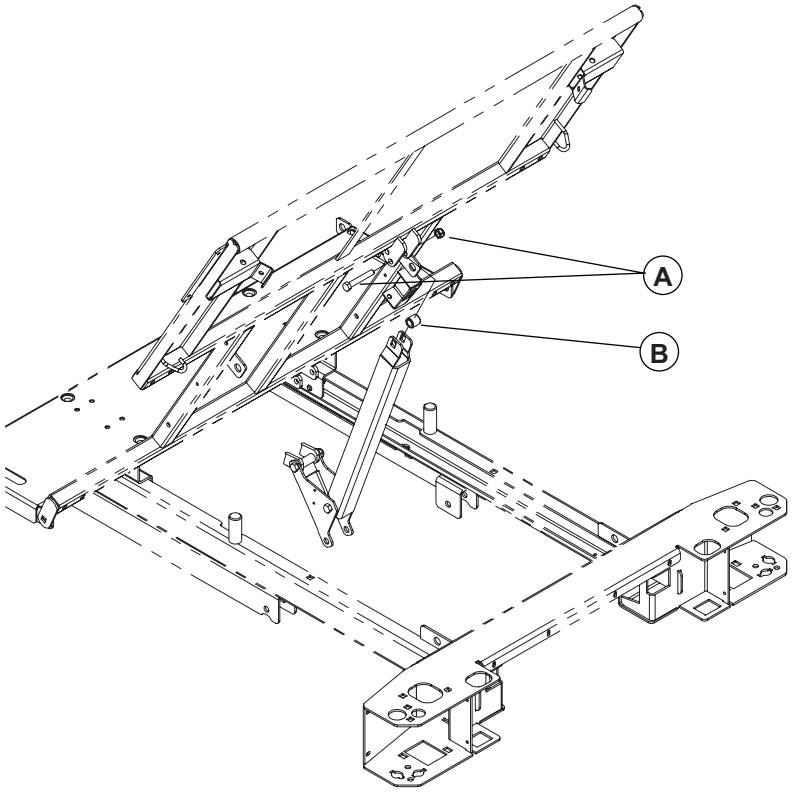

Figure 7

17. Using two 1/2” combination wrenches, remove the locknut and bolt (A, Figure 7) holding the lever to the head section. Lay the lever down on the frame. Keep the spacer (B, Figure 7).
18. Grasp the head section firmly. Remove the strap and lower the head section.
19. Using a 1/2” combination wrench, remove the two locknuts, two shoulder spacers and two bolts (F) holding the head section to the seat section.
20. Reverse the above steps to install the new head section.
21. Test the head section for proper operation before returning the bed to service.

End of procedure.

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FOWLER MOTOR REPLACEMENT

Tools Required:

- Needle Nose Pliers
- #2 Phillips Screwdrivers
- #3 Phillips Screwdrivers
- Pliers
- Cutting Pliers
- 5/16” Socket
- 3/8” Drive Ratchet
- Bungee Cord (or equivalent)
- Small Regular Screwdriver

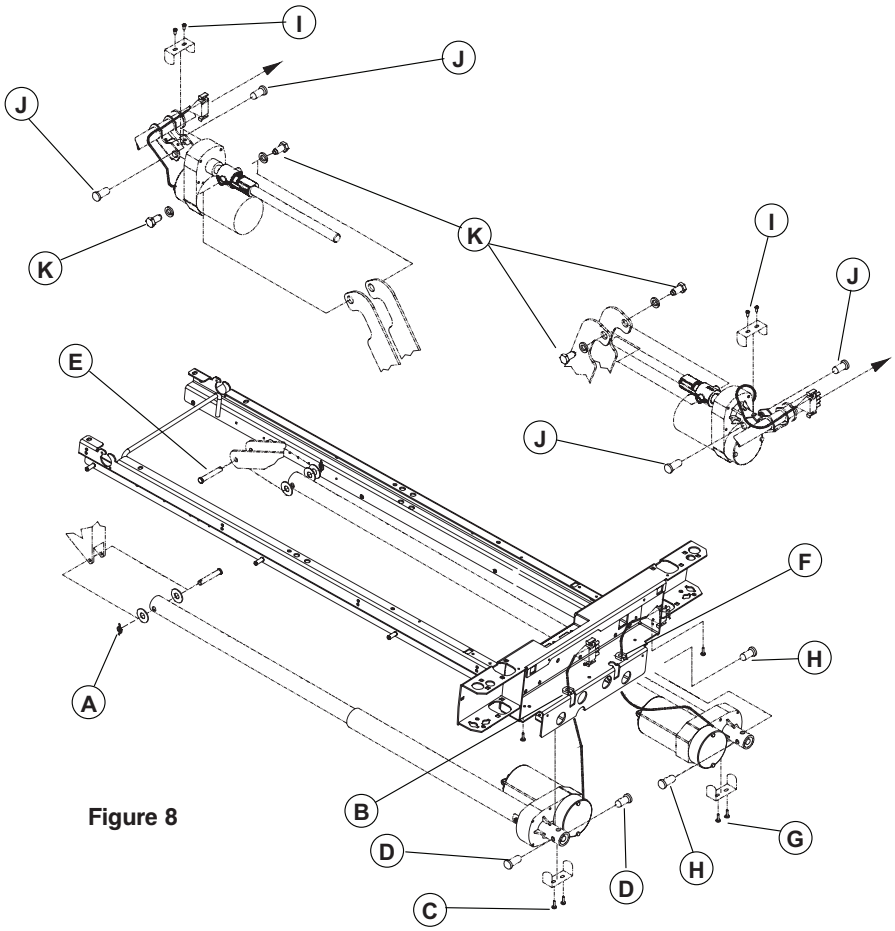

Figure 8

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Lower the fowler to the flat (0˚) position.
3. Raise the gatch to the highest position.
4. Unplug the power cord from the wall outlet.
5. Raise the siderails.
6. Remove the headboard and footboard.
7. Lift and fold the foot section back toward the head end of the bed. Secure it to the bed using a bungee cord.
8. Using needle nose pliers, remove the rue ring cotter, washers, clevis pin (A) linking the actuator tube to the fowler section lever arms.

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FOWLER MOTOR REPLACEMENT (CONTINUED)

9. Using a #3 Phillips screwdriver, remove the six screws (A, Figure 11, page 51) holding the plastic cover to the foot end casing. Grasp both ends of the cover, move them apart to disengage the inside clips from the round accessory brackets and remove the cover.
10. Using a #2 Phillips screwdriver, remove the four screws (B, Figure 11, page 51) holding the protective plate to the foot end casing.
11. Properly ground yourself (see the “Static Protection Procedure”, page 14).
12. Using cutting pliers, cut the cable tie holding the head actuator cable to the other cables.
13. Remove the actuator cable (connector J8) from the control board.
14. Using pliers, squeeze the upper part of the strain relief bushing (B) and lift it up to remove it from its location.
15. Remove the cable from the bushing and pass the cable connector through the rear casing hole.
16. Using a 5/16” socket, remove the two screws (C) holding the retaining plate to the actuator support.
17. Remove the two pivot pins (D) holding the actuator to the support. To ease the removal of the pins, insert a small regular screwdriver into the opening at the end of the actuator and push out the pins.
18. Move the actuator toward the center of the bed to remove it from its location.
19. Reverse the above steps to install the new actuator.

⚠ CAUTION

The limits of the new fowler motor must be adjusted before reconnecting the tube to the head section lever arms. An improper adjustment can damage the head section structure.

20. To adjust the limits of the replacement head actuator, proceed as follows:

    A. Ensure the motor cable is connected to the control board and plug the power cord into the wall outlet.
    B. Position the new motor tube holes horizontally. Grasp the tube firmly to prevent it from rotating and press the “Fowler Up” control for a few seconds. Then press the down control until the motor stops. This will be the lower limit of the motor.
    C. Gently turn the tube in either direction to align the tube holes with those of the head section lever arms. Then raise the fowler a few inches while firmly holding the tube and lower it completely.
    D. Check the alignment of the holes. If the tube holes are not aligned with those of the lever arms, repeat steps B and C until they are. Once the holes are aligned, install the washers and the clevis pin. Slightly raise the head section manually to ease the insertion of the clevis pin.
    E. Before installing the rue ring cotter, raise and lower the fowler completely to ensure the fowler section reaches the frame.
21. Test the fowler section for proper operation before returning the bed to service.

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GATCH MOTOR REPLACEMENT

Tools Required:

- Needle Nose Pliers
- #2 Phillips Screwdrivers
- #3 Phillips Screwdrivers
- Pliers
- Cutting Pliers
- Bungee Cord (or equivalent)
- 5/16” Socket
- 3/8” Drive Ratchet
- Small Regular Screwdriver

Procedure:

Note

Unless otherwise indicated, refer to Figure 8, page 44, for reference for this procedure.

1. Raise the bed to the highest position and apply the brakes. Flatten the litter.
2. Unplug the power cord from the wall outlet.
3. Raise the siderails.
4. Remove the litter plastic covers (if equipped).
5. Using needle nose pliers, remove the rue ring cotter, washers and clevis pin (E) linking the motor tube to the thigh section lever arms.
6. Using a #3 Phillips screwdriver, remove the six screws (A, Figure 11, page 51) holding the plastic cover to the foot end casing. Grasp both ends of the cover, move them apart to disengage the inside clips from the round accessory brackets and remove the cover.
7. Using a #2 Phillips screwdriver, remove the four screws (B, Figure 11, page 51) holding the protective plate to the foot end casing.
8. Properly ground yourself (see the “Static Protection Procedure” section, page 14).
9. Using cutting pliers, cut the cable tie holding the thigh actuator cable to the other cables.
10. Remove the motor cable (connector J9) from the control board.
11. Using pliers, squeeze the upper part of the strain-relief bushing (F) and lift it up to remove it from its location.
12. Remove the cable from the bushing and pass the cable connector through the casing hole.
13. Using a 5/16” socket, remove the two screws (G) holding the retaining plate to the actuator support.
14. Remove the two pivot pins (H) holding the motor to the support. To ease the removal of the pins, insert a small regular screwdriver into the opening at the end of the motor and push out the pins.
15. Move the actuator toward the center of the bed to remove it from its location.
16. Reverse the above steps to install the new motor.

⚠ CAUTION

The limits of the new gatch motor must be adjusted before reconnecting the tube to the thigh section lever arms. An improper adjustment can damage the thigh section structure.

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GATCH MOTOR REPLACEMENT (CONTINUED)

17. To adjust the limits of the replacement thigh motor, proceed as follows:
    A. Ensure the motor cable is connected to the control board and plug the power cord into the wall outlet.
    B. Position the new actuator tube holes horizontally. Grasp the tube firmly to prevent it from rotating, and press the Gatch up control for a few seconds. Then press the down control until the motor stops. This will be the lower limit of the motor.
    C. Gently turn the tube in either direction to align the tube holes with those of the thigh section lever arms. Then raise the Gatch a few inches while firmly holding the tube and lower it completely.
    D. Check the alignment of the holes. If the tube holes are not aligned with those of the lever arms, repeat steps B and C until they are. Once the holes are aligned, install the washers and the clevis pin. Slightly raise the thigh section manually to ease the insertion of the clevis pin.
    E. Before installing the rue ring cotter, raise and lower the Gatch completely to ensure the motor stops when the thigh section reaches the frame.
18. Test the Gatch section for proper operation before returning the bed to service.

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HEAD END LIFT MOTOR REPLACEMENT

Note

In order to maintain the adjustment of the low position when replacing a lift motor, a special tool kit must be used. The kit includes alignment fixtures. To obtain this kit, contact our Customer Service department and order part number KR0154.

Tools Required:

- Tool Kit KR0154
- Cutting Pliers
- #2 Phillips Screwdriver
- Small Regular Screwdriver
- 1/2” Combination Wrench
- 5/16” Socket
- 3/8” Drive Ratchet

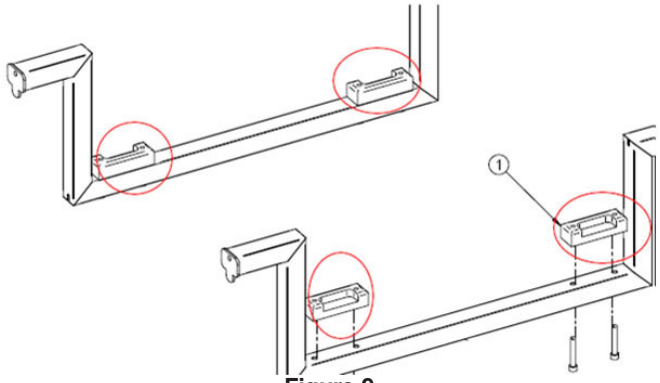

Figure 9

Procedure:

Note

When raising or lowering any of the litter sections, ensure that all siderails are in the highest position. Unless otherwise indicated, refer to Figure 10 for reference for this procedure.

1. Install the alignment fixtures (KR0154) on both sides of the brake mechanism on the base frame, under the lower fixed frame.
2. Lower the bed, until the lower fixed frame is completely supported by the U-shaped pieces of the fixture (see Figure 9).
3. Remove the headboard.
4. Raise the head section to about 45˚.
5. Unplug the power cord from the wall outlet.
6. Using cutting pliers, cut the cable ties holding the defective lift motor power cord to the bed frame. Then unplug the motor connector.
7. Using a 1/2” combination wrench, remove the two bolts (D), two washers (C) and two shoulder spacers (B) holding the molded nut support to the elevation lever arm.
8. Using a 5/16” socket, remove the two screws (E) holding the actuator support cover (G) to the head lever arm and remove it.
9. Remove the two pivot pins (H) holding the motor (A) to the support. To ease the removal of the pins, insert a small regular screwdriver into the opening at the end of the motor and push out the pins.

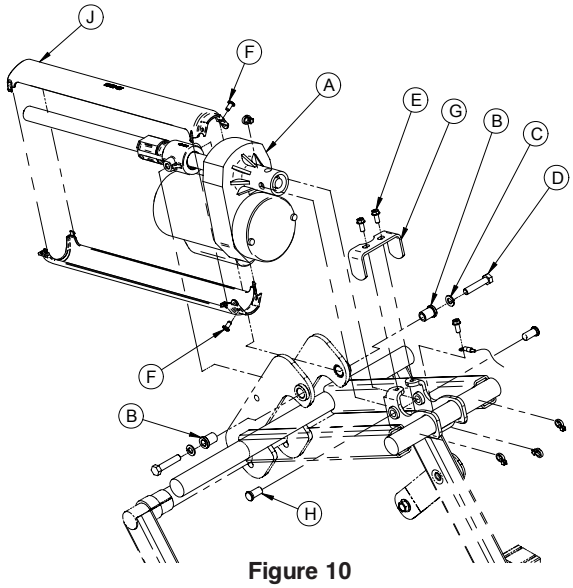

Figure 10

10. Using a #2 Phillips screwdriver, remove the two screws (F) holding the plastic screw cover (J) to the motor. Remove the plastic screw cover and install it on the new actuator.
11. Reverse the above steps to install the new actuator.

⚠ CAUTION

The limit of the new motor must be adjusted prior to reconnecting it to the lift lever. An improper adjustment can damage the lift mechanism.

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HEAD END LIFT MOTOR REPLACEMENT (CONTINUED)

12. To adjust the limits of the new motor, proceed as follows:

    A. Ensure the motor cable is connected to the control board and plug the power cord into the wall outlet.
    B. Press the bed down control until the motor stops. This will be the lower limit of the motor.
    C. Attach the molded nut support on the motor to the lift lever arms.
    D. With the alignment fixtures still in place, raise and lower the bed completely to ensure the lower limit is properly adjusted.
13. Test the Bed Up and Bed Down functions for proper operation before returning the bed to service.

FOOT END LIFT MOTOR REPLACEMENT

Note

In order to maintain the adjustment of the low position when replacing a lift motor, a special tool kit must be used. The kit includes alignment fixtures. To obtain this kit, contact our Customer Service department and order part number KR0154.

Tools Required:

- Tool Kit KR0154
- Cutting Pliers
- #2 Phillips Screwdriver
- Small Regular Screwdriver
- 1/2” Combination Wrench
- Bungee Cord (or equivalent)
- 5/16” Socket
- 3/8” Drive Ratchet

Procedure:

Note

When raising or lowering any of the litter sections, ensure that all siderails are in the highest position. Unless otherwise indicated, refer to Figure 10, page 48, for reference for this procedure.

1. Install the alignment fixtures (KR0154) on both sides of the brake mechanism on the base frame, under the lower fixed frame.
2. Lower the bed, until the lower fixed frame is completely supported by the U-shaped pieces of the fixture (see Figure 9, page 48).
3. Remove the mattress and the plastic litter cover (if equipped) from the foot section metal frame.
4. Raise the fowler section to about 45˚, and raise the thigh section to the highest position.
5. Fold the foot section back toward the head end of the bed. Secure it using a bungee cord.
6. Unplug the power cord from the wall outlet.
7. Using a #2 Phillips screwdriver, remove the four screws holding the frame cover plate.
8. Using cutting pliers, cut the cable ties holding the defective lift motor power cord to the bed frame. Unplug the motor connector.
9. Using a 1/2¨ combination wrench, remove the two bolts (D), two washers (C) and two spacers (B) holding the molded nut support to the elevation lever arm.
10. Using a 5/16” socket, remove the two screws holding the motor support cover to the lift lever arm and remove it.
11. Remove the two pivot pins (H) holding the motor (A) to the support. To ease the removal of the pins, insert a small regular screwdriver into the opening at the end of the motor and push out the pins.

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12. Remove the defective motor by passing it under the bed frame.
13. Using a #2 Phillips screwdriver, remove the two screws (F) holding the plastic screw cover (J) to the motor. Remove the plastic screw cover and install it on the new actuator.

FOOT END LIFT MOTOR REPLACEMENT (CONTINUED)

14. Reverse the above steps to install the new motor.
15. Plug the bed into the wall outlet.
16. Lower the bed, and hold the bed down button until the lift motor reaches its lowest position.

CAUTION

The limits of the new motor must be adjusted prior to reconnecting it to the lift lever. An improper adjustment can damage the lift mechanism.

17. To adjust the limits of the new motor, proceed as follows:

    A. Ensure the motor cable is connected to the control board and plug the power cord into the wall outlet.
    B. Press the bed down control until the motor stops. This will be the lower limit of the motor.
    C. Attach the molded nut support on the motor to the lift lever arms.
    D. With the alignment fixtures still in place, raise and lower the bed completely to ensure the lower limit is properly adjusted.
18. Test the Bed Up and Bed Down functions for proper operation before returning the bed to service.

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CONTROL BOARD REPLACEMENT

Tools Required:

- #2 Phillips Screwdriver
- #3 Phillips Screwdriver
- Needle Nose Pliers
- Cutting Pliers
- 3/8” Combination Wrench

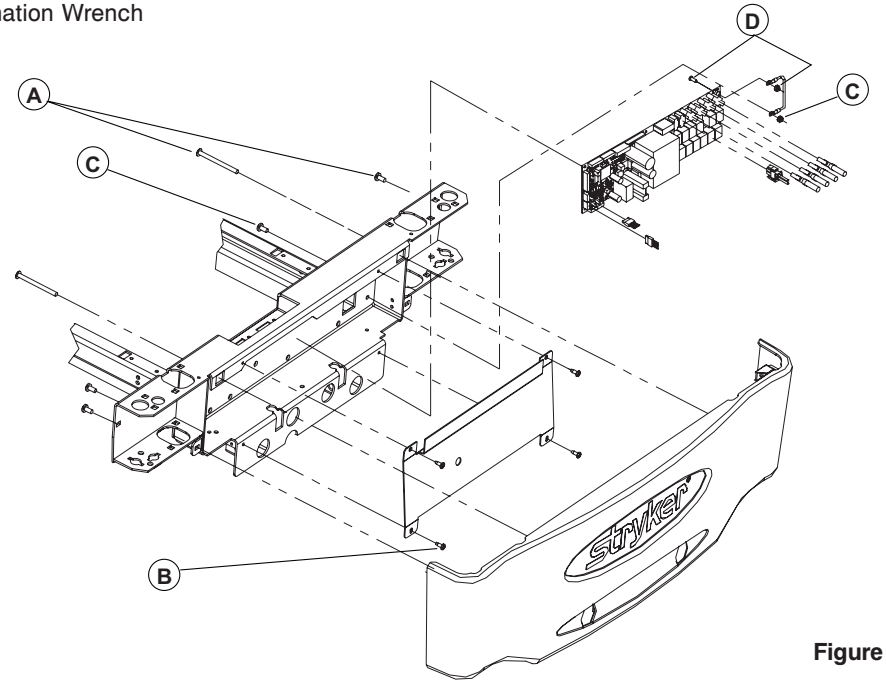

Figure 11

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the bed from the wall outlet.
3. Remove the foot board.
4. Using a #3 Phillips screwdriver, remove the six screws (A) holding the plastic cover to the foot end casing. Grasp both ends of the cover, move them apart to disengage the inside clips from the round accessory brackets and remove the cover.
5. Using a #2 Phillips screwdriver, remove the four screws (B) holding the protective plate to the foot end casing.
6. Properly ground yourself (see “Grounding Diagram” page 14).
7. Using cutting pliers, cut the cable ties holding together the cables.

Note

- Carefully note the position and the grouping of the cables before clipping the cable ties.
- Ensure Dip Switch settings of the new control board match the ones on the old board.

8. Remove the jumper from W1 on the control board and install it on the new board.
9. Remove all cables connected to the control board. Note their location so they will be connected properly to the new board. Refer to drawing OL280118, page 88, or OL280119, page 94, for the connecting position of the cables on the motor control board.
10. Using a 3/8” combination wrench, remove the nut/screw (C) holding the ground cable to the frame.
11. Using needle nose pliers, pinch the upper part of the stand-off pins and lift the defective board up and out.
12. Using a 3/8” wrench and a #2 Phillips screwdriver, remove the nut/screw (D) holding the ground cables to the board.
13. Reverse the above steps to install the new control board.
14. Test all the bed functions before returning the bed to service.

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HEADWALL CONTROL BOARD REPLACEMENT (OPTIONAL)

Tools Required:

- #2 Phillips Screwdriver

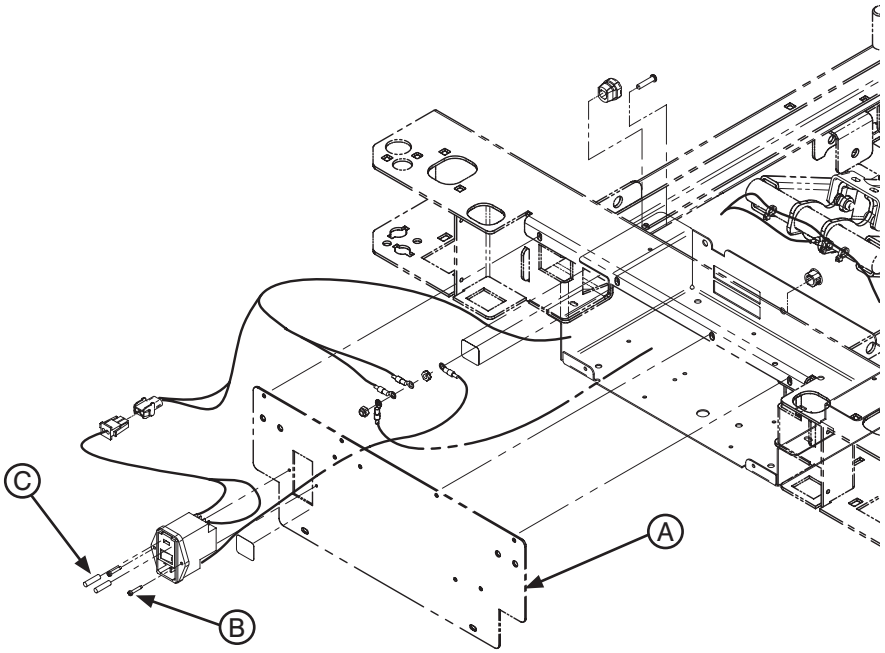
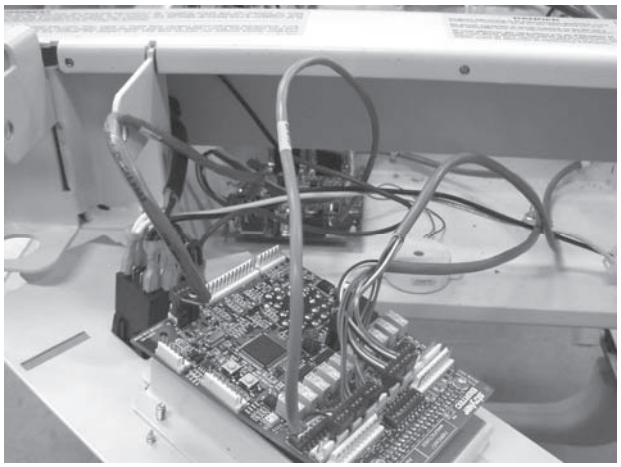


Figure 12

Procedure:



1. Raise the bed to the highest position and apply the brakes.
2. Unplug the bed power cord from the wall outlet.
3. Remove the power cord from the power connector and disengage it from the wire clip.
4. Properly ground yourself (see “Grounding Diagram” page 14).
5. Using a #2 Phillips screwdriver, remove the six screws (A) holding the cover to the litter. Keep the cable clips.
6. Once the screws removed, pivot the cover and lay it flat on the bottom of the litter (see opposite illustration).
7. Remove all cables connected to the control board. Note their location so they will be connected properly to the new board. Refer to drawing OL280118, page 88, or OL280119, page 94, for the connecting position of the cables on the power connector.
8. Turn the cover to a vertical position.
9. Using a #2 Phillips screwdriver, remove the four screws holding the control board (C) to the head casing cover and remove the board.
10. Reverse the above steps to install the new control board. Before installing the new board, ensure the dip switch settings on the new board match the ones on the old board.
11. Test the nurse call for proper operation before returning the bed to service.

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POWER CORD CONNECTOR REPLACEMENT

Tools Required:

- #1 Phillips Screwdriver
- #2 Phillips Screwdriver

Procedure:

Note

Unless otherwise indicated, refer to Figure 12, page 52,for reference for this procedure.

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the bed power cord from the wall outlet.
3. Remove the power cord from the power connector and disengage it from the wire clip.
4. Properly ground yourself (see “Grounding Diagram” page 14).
5. Using a #2 Phillips screwdriver, remove the six screws holding the cover (A) to the litter. Keep the cable clips.
6. Once the screws are removed, pivot the cover and lay it flat on the bottom of the litter (see opposite illustration).
7. Remove all cables connected to the power cord connector. Note the location of the cables in order to properly reconnect them later. Refer to drawing OL280118, page 88, or OL280119, page 94, for the connecting position of the cables on the power connector.
8. Turn the cover to a vertical position. Using a #1 Phillips screwdriver, remove the two screws (B) holding the power connector to the cover.
9. Unplug the connector and remove it.

Note

Ensure the proper size fuses are used in the new power cord connector before installing it.

5. Reverse the above steps to install the new power cord connector.
6. Test all the bed functions before returning the bed to service.

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POWER CORD CONNECTOR FUSE REPLACEMENT

Tools Required:
- Small Regular Screwdriver

Procedure:

Note
Refer to Figure 12, page 52, for this procedure.

1. Remove the power cord from the power cord connector.
2. Using a small regular screwdriver, slide the fuse holder door open.
3. Remove the defective fuse and replace it with a new one.

Note
120 Vac rated FL28EX beds use fast acting, 250 Vac, 10A type fuses. For beds rated at voltages other than 120 Vac, see "Specifications", page 8, for fuse ratings.

4. Close the fuse holder door.

Note
Make sure to use the right fuse holder for the fuses used with the bed and make sure the fuses are correctly installed to be stable in the fuse holder.

5. Test the bed for proper operation before returning the bed to service.

BED EXIT BEEPER REPLACEMENT

Tools Required:
- #2 Phillips Screwdriver

Procedure:

Note
Refer to Figure 13, page 55, for this procedure.

1. Raise the bed to the highest position and apply the brakes.
2. Remove the plastic litter cover (if equipped) and raise the fowler to the highest position.
3. Unplug the power cord from the wall outlet.
4. Using a #2 Phillips screwdriver, remove the two screws (A) holding the cover plate.
5. Properly ground yourself (see "Grounding Diagram" page 14).
6. Disconnect the beeper cable from J3 on the scale board (B).
7. Lift the beeper (C) to remove it from the plate. Remove any glue residue.
8. Reverse the above steps to install the new beeper.
9. Test the Bed Exit system to ensure the beeper for proper operation before returning the bed to service.

SCALE/BED EXIT BOARD REPLACEMENT

Tools Required:

- #2 Phillips Screwdriver
- 3/8” Socket
- 3/8” Drive Ratchet
- Needle Nose Pliers

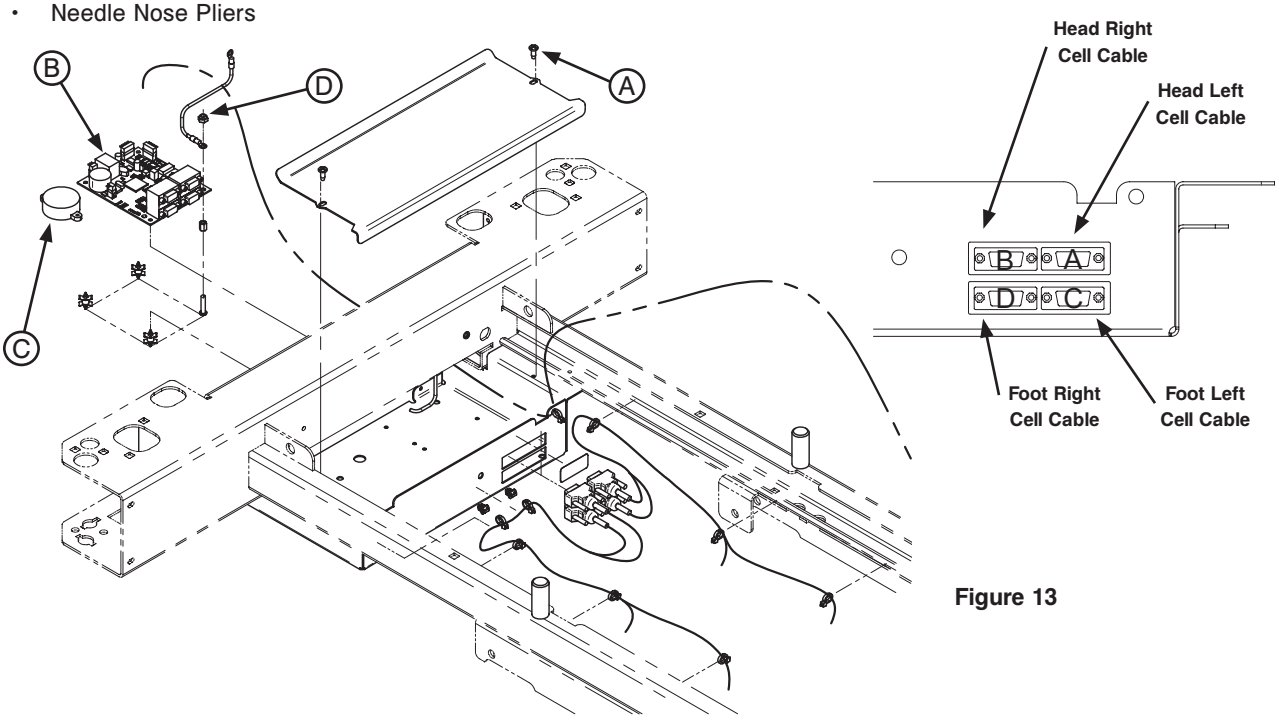

Figure 13

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Remove the plastic litter cover (if equipped) and raise the fowler to the highest position.
3. Unplug the power cord from the wall outlet.
4. Using a #2 Phillips screwdriver, remove the two screws (A) holding the cover plate to the litter.
5. Properly ground yourself (see “Grounding Diagram” page 14).
6. Remove all cables connected to the scale board (B). Note the cable locations in order to properly reconnect them. Refer to drawing L28-008L, page 80, for the connecting position of the cables on the scale/bed exit board.
7. Using a 3/8” socket, remove the nut holding the ground cable to the scale board (B).
8. Using needle nose pliers, pinch the upper part of the stand-off pins and lift the defective board up and out.
9. Reverse the above steps to install the new scale control board.

Note

Ensure the load cell cables on the scale/bed exit board are properly reconnected. Refer to Figure 13 when reconnecting the load cell cables.

14. Calibrate the scale before returning the bed to service. Refer to the “Scale Calibration” procedure, page 59.

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TRANSFORMER REPLACEMENT (100/200/220/240 VAC OPTIONS)

Tools Required:

- #2 Phillips Screwdriver
- 1/2” Combination Wrench

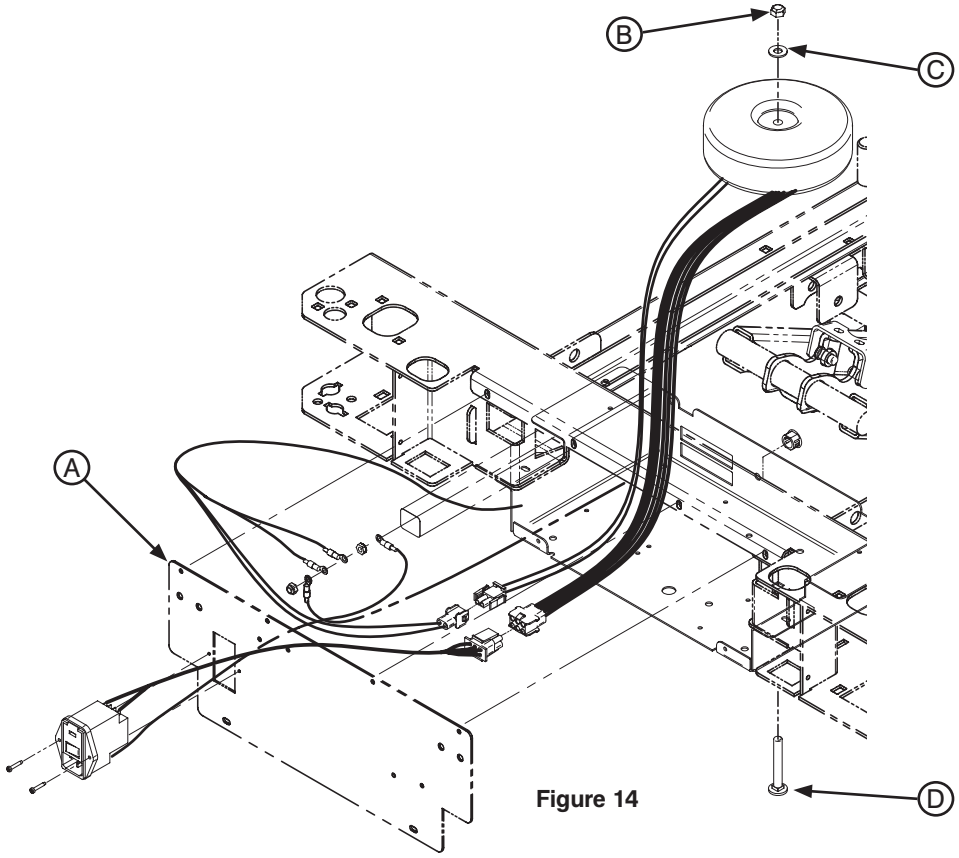

Figure 14

Procedure:

Note

Unless otherwise indicated, refer to Figure 14 for this procedure.

1. Raise the bed to the highest position and apply the brakes.
2. Unplug the power cord from the wall outlet.
3. Using a #2 Phillips screwdriver, remove the six screws holding the cover (A) to the litter. Keep the cable clips.
4. Using a #2 Phillips screwdriver, remove the two screws (A, Figure 13, page 55) holding the cover plate to the litter.
5. Properly ground yourself (see “Grounding Diagram” section, page 14).
6. Using a 1/2” combination wrench, remove the nut (B), washer (C) and bolt (D) holding the transformer to the litter. Disconnect the transformer cable and remove it.

Note

Use caution to avoid overtightening the bolt.

7. Reverse the above steps to install the new transformer.
8. Test the bed for proper operation before returning the bed to service.

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LOAD CELL REPLACEMENT

Tools Required:

- Needle Nose Pliers
- Diagonal Pliers
- (2) Jack Stands (or equivalent)
- 1/4” Allen Wrench
- 1/2” Combination Wrench

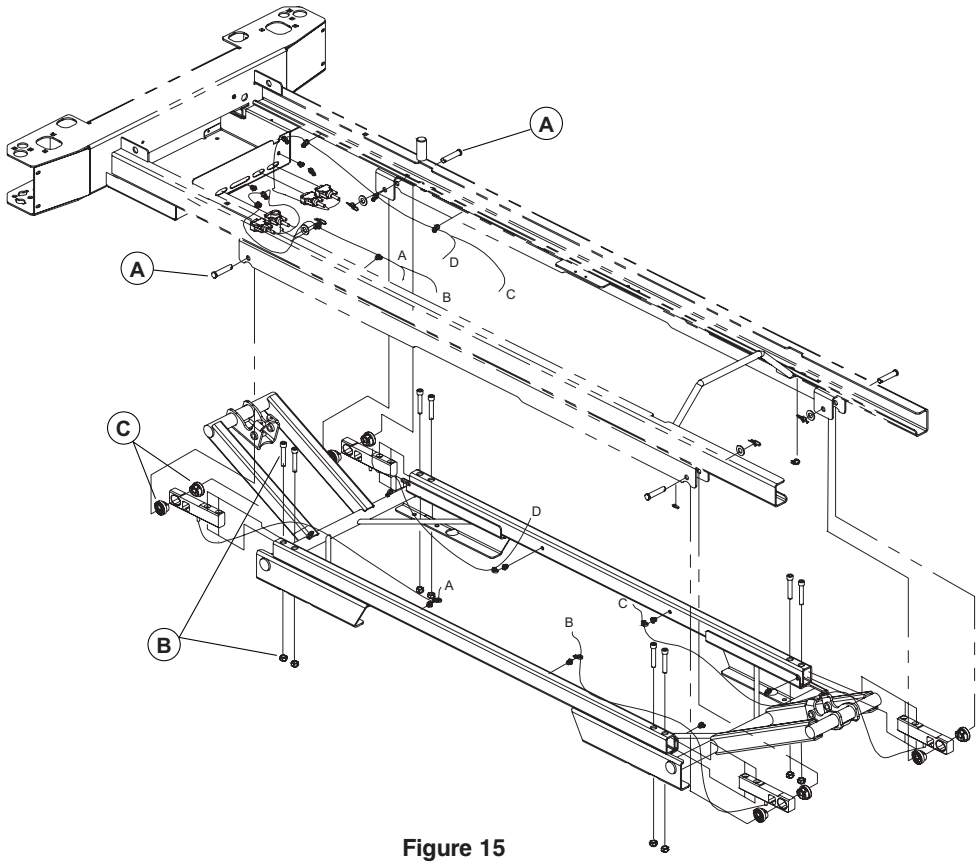

Figure 15

Procedure:

1. Plug the power cord in to the wall outlet.
2. Raise the bed to the highest position and apply the brakes.
3. Depending on the location of the load cell to replace, proceed with the following operation:

   Head end of the bed: Remove the head board. Remove the plastic littler cover (if equipped) of the fowler or raise the fowler to the highest position.
   Foot end of the bed: Remove the foot board. Remove the plastic litter cover (if equipped) of the foot section or raise the gatch to the highest position.

4. Place a jack stand under each side of the frame at the head or foot end of the bed, depending on the location of the load cell to be replace (see following illustrations).
5. Using needle nose pliers, remove the two rue ring cotters, two washers and two clevis pins (A) holding the defective load cell and the one adjacent to it. It is important that the end of both load cells be freed and their cables loosened.

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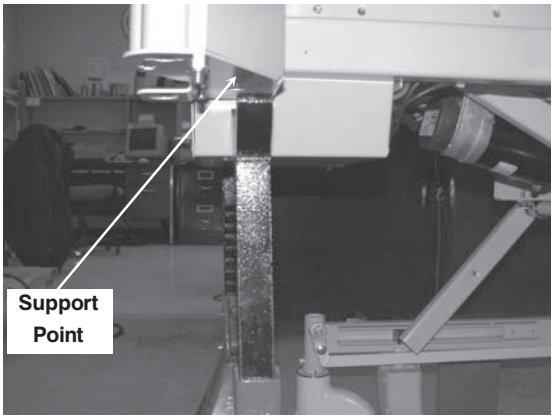
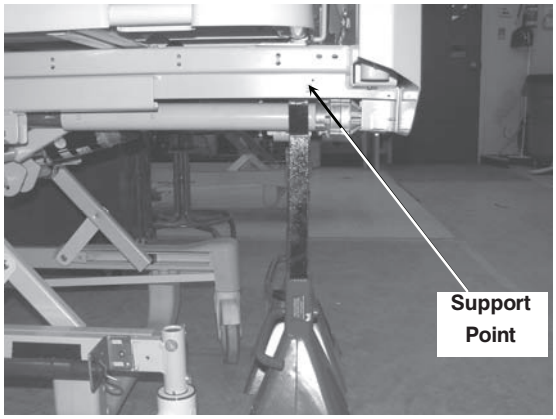
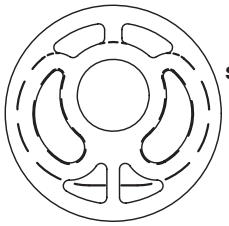
LOAD CELL REPLACEMENT (CONTINUED)





6. Using diagonal pliers, cut the two cable ties holding the defective cell cable to the frame immediately after the cell. Repeat for the adjacent cell.
7. Lower the bed until the two Allen screws holding the defective load cells to the frame are easily accessible.
8. Unplug the power cord from the wall outlet.
9. Using a 1/4” Allen wrench and a 1/2” combination wrench, remove the two nuts and two Allen screws (B) holding the defective load cell to the frame.
10. Cut the cable ties holding the defective load cell cable the frame. Unplug the defective load cell cable from the scale/bed exit board. Remove the defective load cell.
11. Inspect the elastomer sleeves (C) to ensure that the inner circular hole is not worn. Replace if necessary. Note the orientation of the elastomer sleeves when replacing (see detail at right).
12. Reverse the above steps to install the new load cell.
13. Calibrate the scale before returning the bed to service. Refer to the “Scale Calibration” procedure, page 59.



Proper elastomer sleeve orientation.

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SCALE CALIBRATION

VERIFYING THE SCALE ACCURACY

1. Remove all accessories, linens, mattress, etc. from the bed and zero the scale by:
   - Press ⏻ to activate the scale. The screen will display:

Weight	Angle
XXX.X KG	+/-XX.X˚

   - Press and hold ZERO. Display will read:
     HOLD TO ZERO WT., followed by:
     RELEASE TO ZERO (release ZERO), followed by:
     DO NOT TOUCH BED (do not touch the bed)
     Once the zeroing process is completed, the system will return to the Scale mode. The display will read zero for the weight and the current angle value.

2. Place a calibrated weight on the center of the mattress support. The weight displayed should be within the following range: ± 2% for a weight ≥100 lb (45.4 kg) or ± 2 lb (0.9 kg) if the weight <100 lb (45.4 kg).
3. If the weight displayed is incorrect, remove the weight from the bed and calibrate the scale.

Note

If the scale calibration procedure cannot be completed once it has been started, unplug the bed from the wall outlet and plug it back in to restore the previous calibration data.
The scale calibration is done in three steps. Steps 2 and 3 begin automatically as soon as the preceding step is over. Once the calibration process is over, the system returns to the main maintenance menu.

In the maintenance menus, the ZERO key returns to the previous level of the maintenance menus.

The system will automatically shut off after one minute of idle time when in the main maintenance menu. Should this occur, the main maintenance menu will have to be accessed again.

Tools Required:

- Digital Inclinometer

Procedure:

1. Power off the bed using the main switch at the head end of the bed.
2. Power on the bed while simultaneously holding the Up and Down buttons on the scale system control panel. This allows access to the main maintenance menu. Display will read:
   ▶ DEBOG MENU
   CALIB. MENU ▼

Note

The main maintenance menu can only be accessed for five seconds after the bed is powered on. The system will shut off after this delay. Repeat the process should the system time out.

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SCALE CALIBRATION (CONTINUED)

3. Select CALIB. MENU using the Down key and press ENTER. The display will read:
   PUT BED AT 0˚
   PRESS ENTER

4. Put the inclinometer on the seat section of the mattress support and position the bed to 0˚. Then press ENTER. Display will read:
   DO NOT TOUCH BED

5. Do not touch the bed until the end of this step. When completed, the display will read:
   PUT BED AT +12˚
   PRESS ENTER

6. Put the bed in the Trendelenburg position (head down, foot up) until the inclinometer reads +12˚. Press ENTER. The display will read:
   DO NOT TOUCH BED

7. Do not touch the bed until the end of this step. When completed, the display will read:
   PUT BED AT -12˚
   PRESS ENTER

8. Put the bed in the Reverse Trendelenburg position (head up, foot down) until the inclinometer reads -12˚. Press ENTER. The display will read:
   DO NOT TOUCH BED

9. Once the last step is completed, the system will automatically return to the main maintenance menu.
10. To return to the normal scale display, press ZERO.
11. Before returning the bed to service, test the scale accuracy. See the “Verifying Scale Accuracy”, page. 59

Note

It is possible to end the calibration process any time before it is completed by pressing the ZERO key. The preceding calibration data will be restored.

If the bed is in the incorrect angle in step two or three, the same message will reappear on the display until the bed is placed at the angle requested on the display.

CARDIAC CHAIR AND AUTO CONTOUR MICRO SWITCH REPLACEMENT

Tools Required:

- Bungee Cord (or equivalent)
- #1 Phillips Screwdriver

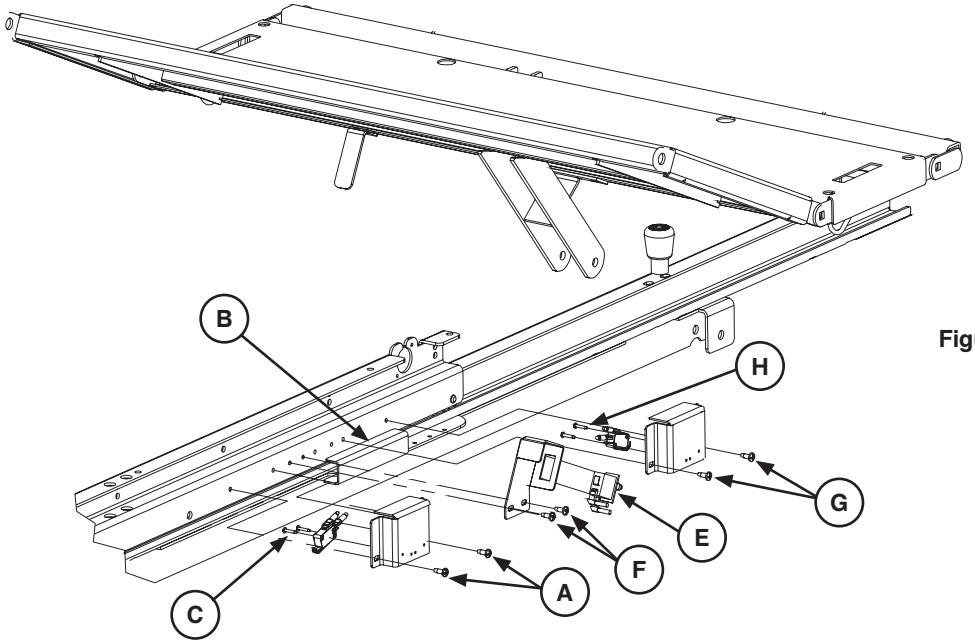


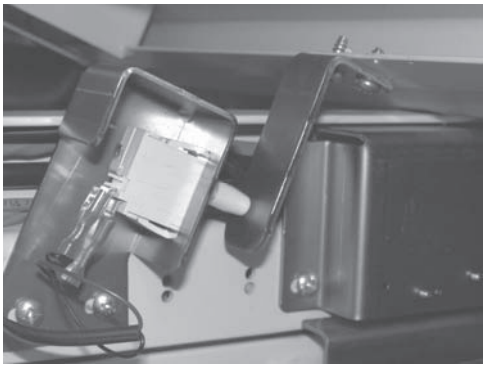
Figure 16

Cardiac Chair Micro Switch

This switch tell the control board that the fowler has reached the preset angle for the Cardiac Chair position.

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Raise the thigh section. Remove the plastic litter cover (if equipped) of the fowler section. Lift and fold the foot section back toward the head end of the bed. Secure it using a bungee cord.
3. Unplug the bed from the wall outlet.
4. Using a #1 Phillips screwdriver, remove the two screws (A) holding the support to the frame.
5. Remove the cables from the switch. **Note the cable locations in order to properly reconnect them to the new switch.**



Note

The oblong holes in the support allow for adjustment in the mounting position. The proper adjustment of the support enables the switch to be activated when it meets the activator (B) during the Cardiac Chair positioning process.

6. Using a #1 Phillips screwdriver, remove the two screws (C) holding the switch to the support and remove the switch.
7. Reverse the above steps to install the new switch.
8. Test the Cardiac Chair for proper operation before returning the bed to service. The Cardiac Chair test must be completed with a minimum of 50 lb (22.7 kg) on the litter surface.

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CARDIAC CHAIR AND AUTO CONTOUR MICRO SWITCH REPLACEMENT (CONTINUED)

1st Auto Contour Micro Switch

This switch tells the control board that the Gatch has reached the preset angle for the Cardiac Chair and Auto Contour position.

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Raise the thigh section. Remove the plastic litter cover (if equipped) of the fowler section. Lift and fold the foot section back toward the head end of the bed. Secure it using a bungee cord.
3. Unplug the bed from the wall outlet.
4. Remove the cables from the switch. **Note the cable locations in order to properly reconnect them to the new switch.**
5. Using the Gatch down control, slowly lower the thigh section until only light contact remains between the activator (A) attached to the knee section and the push-button switch (B). The replacement procedure will start from this position (see opposite illustration).
6. Unplug the bed power cord from the wall outlet.
7. Using a #1 Phillips screwdriver, remove the two screws (C) holding the support to the frame.
8. Press the two clips on each side of the switch to remove it from the support.
9. Reverse the above steps to install the new micro switch.
10. Test the Auto Contour positioning for proper operation before returning the bed to service.

2nd Auto Contour Micro Switch

This switch tells the control board to start lowering the Gatch when the Fowler is lowered while the bed is in the Auto Contour position.

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Raise the thigh section. Remove the plastic litter cover (if equipped) of the fowler section. Lift and fold the foot section back toward the head end of the bed. Secure it using a bungee cord.
3. Unplug the bed from the wall outlet.
4. Using a #1 Phillips screwdriver, remove the two screws (D) holding the support to the litter and remove the support.
5. Remove the cables from the switch. **Note the cable locations in order to properly reconnect them to the new switch.**
6. Using a #1 Phillips screwdriver, remove the two screws (E) holding the switch to the support.
7. Reverse the above steps to install the new micro switch.
8. Test the Auto Contour positioning for proper operation before returning the bed to service.

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CPR MICRO SWITCH REPLACEMENT (OPTIONAL)

Tools Required:

- #1 Phillips Screwdriver
- #2 Phillips Screwdriver

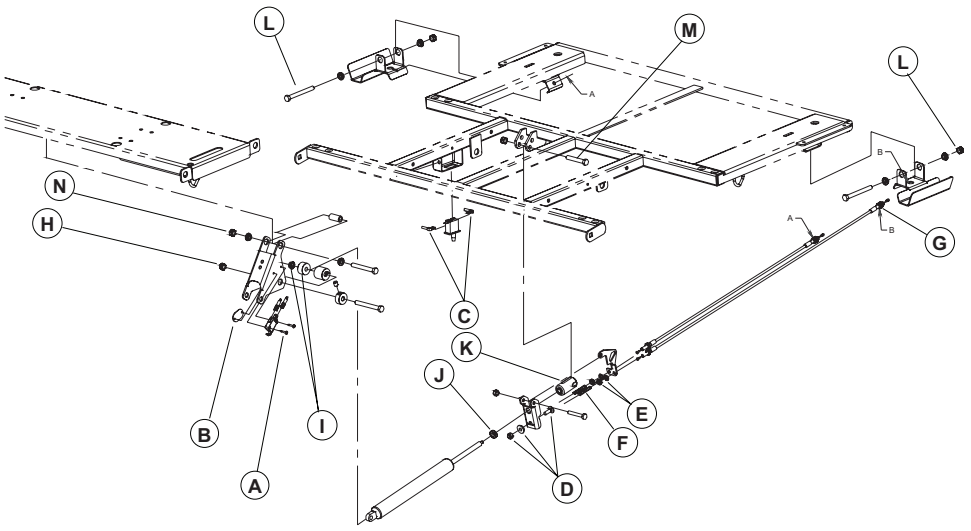

Figure 17

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Raise the head siderails.
3. Remove the plastic litter cover (if equipped) of the fowler or raise the fowler to the highest position.
4. Unplug the power cord from the wall outlet.

FOWLER LEVER MICRO SWITCH

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

5. Using a #1 Phillips screwdriver, remove the two screws (A) holding the micro switch to the fowler lever. Keep the mounting plate (B). Remove the defective micro switch.
6. Remove the cables from the micro switch. **Note the cable locations in order to properly reconnect them to the new switch.**
7. Reverse the above steps to install the new micro switch.
8. Test the CPR positioning before returning the bed to service.

FOWLER STRUCTURE MICRO SWITCH

This switch signals to the motor control board on the one hand that the resetting of the Fowler actuator may begin because the Fowler is completely lowered, and on the other hand that the lowering to flat of the Gatch may also begin.

9. Remove the cable wires (C) from the micro switch. **Note the location of the wires so they will be connected correctly to the new micro switch.**
10. Press the switch clips to remove it from the support.
11. Reverse the above steps to install the new micro switch.
12. Test the CPR positioning before returning the bed to service.

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CPR ACTIVATION CABLE REPLACEMENT (OPTIONAL)

Tools Required:

- 7/16” Combination Wrench

Note

Unless otherwise indicated, refer to Figure 17, page 63, for this procedure.

Procedure:

1. Raise the bed to the highest position and apply the brakes.
2. Remove the head section plastic cover (if equipped) or raise the head section completely.
3. Remove the head board.
4. Unplug the power cord from the wall outlet.
5. Using a 7/16” combination wrench, remove the nut, sleeve and bolt (D) holding both ends of the activation cable to the fixed lever.
6. Using a 7/16” combination wrench, remove the nut, washer (E) holding the cable jacket to the mobile lever. Remove the cable from the lever and keep the spring (F). Use caution to avoid moving the other cable from its position.
7. Unscrew the two lock nuts (G) holding the jacket of the other end of the cable to the CPR handle. Remove the wire from the handle. Once the new cable is installed, the free play of the CPR handle must not be more than 1/8”.
8. Reverse the above steps to install the new cable.
9. Test the CPR positioning before returning the bed to service.

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CPR PNEUMATIC CYLINDER (OPTIONAL)

Tools Required:

- Needle Nose Pliers
- (2) 1/2” Combination Wrenches
- 11/16” Combination Wrench
- Strap (or equivalent)

Procedure:

Note

Unless otherwise indicated, refer to Figure 17, page 63, for this procedure.

1. Raise the bed to the highest position and apply the brakes.
2. Remove the head section plastic cover (if equipped).
3. Unplug the power cord from the wall outlet.
4. Using needle nose pliers, remove the rue ring, washer, two nylon washers and clevis pin (A, Figure 8, page 44) connecting the head actuator tube to the seat section lever arms.

Note

Apply grease to the clevis pin and the nylon washers before reconnecting the actuator tube to the head section.

5. Lift the head section completely and secure it using a strap.
6. Using two 1/2” combination wrenches, remove the nut (H) from the bolt holding the lower end of the pneumatic cylinder. Partially remove the bolt until the lower end of the cylinder is free. Keep the shoulder spacer/sleeve (I). Disengage the lower end of the cylinder from the remaining sleeve.
7. Using an 11/16” combination wrench, loosen the lock nut (J) and unscrew the cylinder completely from the end fitting (K). Note the location of the lock nut before loosening it so the new cylinder will be properly screwed into the end fitting.
8. Reverse the above steps to install the new cylinder.
9. Test the CPR mechanism for proper operation before returning the bed to service.

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BRAKE/STEER PEDAL REPLACEMENT

Tools Required:

- 1/2” Combination Wrench
- Soft Hammer

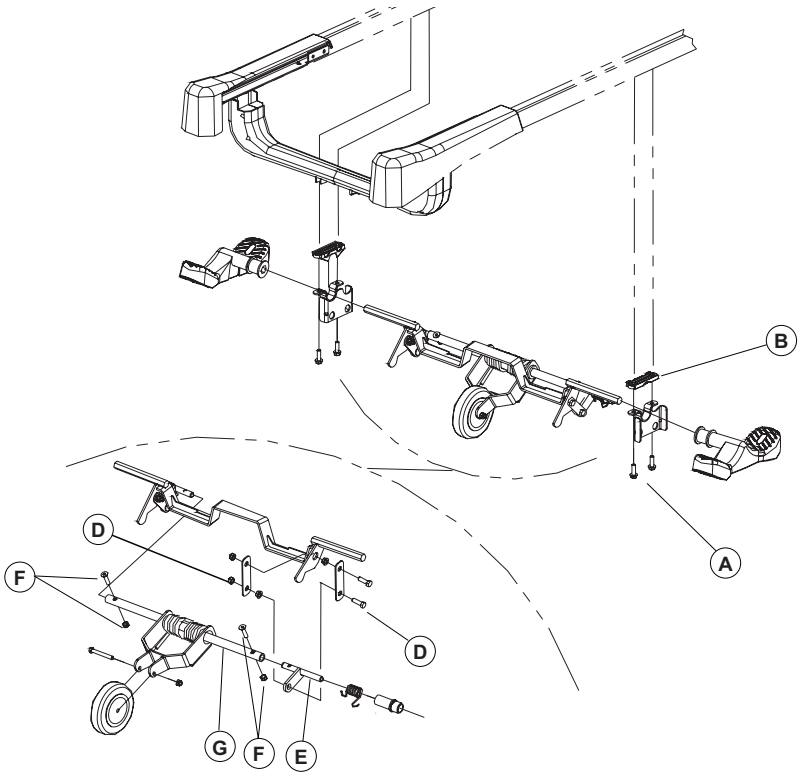

Figure 18

Procedure:

1. Raise the bed to the highest position.
2. Unplug the power cord from the wall outlet.
3. Remove the optional steer wheel hood.

Note

When reinstalling the steer wheel hood, ensure the colored labels affixed to the hood match the brake/steer pedal.

4. Position the brake/steer pedal to neutral.
5. Using a 1/2” combination wrench, remove the two bolts (A) holding the steer wheel support on the side of the defective pedal and lay the support down. Keep the molded spacer (B).
6. Using a soft hammer, remove the pedal from the activation lever shaft.
7. Reverse the above steps to install the new pedal.

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STEER WHEEL CASTER REPLACEMENT

Tools Required:

- (2) 1/2” Combination Wrenches

Procedure:

Note

Unless otherwise indicated, refer to Figure 18, page 66, for this procedure.

1. Raise the bed to the highest position.
2. Unplug the power cord from the wall outlet.
3. Remove the optional steer wheel hood.

Note

When reinstalling the steer wheel hood, ensure the colored labels affixed to the hood and the brake/steer pedal match.

4. Position the brake/steer pedal to neutral.
5. Using two 1/2” combination wrenches, remove the nut/bolt (C) holding the caster to the swing arm.
6. Reverse the above steps to install the new caster.

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STEER WHEEL ASSEMBLY REPLACEMENT

Tools Required:

- 1/2” Combination Wrench
- Soft Hammer

Procedure:

Note

Unless otherwise indicated, refer to Figure 18, page 66, for this procedure.

1. Raise the bed to the highest position.
2. Unplug the power cord from the wall outlet.
3. Remove the optional steer wheel hood.

Note

When reinstalling the steer wheel hood, ensure the colored labels affixed to the hood and the brake/steer pedal match.

4. Position the brake/steer pedal to neutral.
5. Using a 1/2” combination wrench, remove the two nuts, two shoulder spacers, two washers, and two bolts (C1, C2, Figure 19, page 70) holding the brake rods to the locking levers on both sides of the mechanism.
6. Remove the fasteners holding the two other brake rods to the locking levers.
7. Using a 1/2” combination wrench, remove the two bolts (A) holding each side of the steer wheel mechanism to the base. Keep the molded spacers (B). Remove the assembly.
8. Using a soft hammer, remove the two brake/steer pedals from the activation lever shafts.
9. Keep the two locking levers (D, Figure 19, page 70).
10. Reverse the above steps to install the new steer wheel assembly.
11. Test the steer wheel before returning the bed to service.

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STEER WHEEL SWING ARM ASSEMBLY REPLACEMENT

Tools Required:

- (2) 1/2” Combination Wrench
- 3/16” Allen Wrench

Procedure:

Note

Unless otherwise indicated, refer to Figure 18, page 66, for this procedure.

1. Raise the bed to the highest position.
2. Position the brake/steer pedal to neutral.
3. Remove the optional steer wheel hood.

Note

When reinstalling the steer wheel hood, ensure the colored labels affixed to the hood and the brake/steer pedal match.

4. Using a 1/2” combination wrench, remove the nut, shoulder spacer, washer, and bolt (C1, Figure 19, page 70) holding the brake rod to the locking lever on the right side of the steer wheel mechanism. If the optional four-wheel brake system is present on the bed, also remove the fasteners holding the other brake rod to the locking lever.
5. Using a 1/2” combination wrench, remove the two bolts (A) holding the right steer wheel support to the base. Lay the support down and keep the molded spacer (B).
6. Using two 1/2” combination wrenches, remove the nut, shoulder spacers and bolt (D) holding the right torsion lever (E) to the lower part of the right counter lever.
7. Using a 1/2” combination wrench and a 3/16” Allen wrench, remove the two nuts and two Allen screws (F) holding the torsion levers (E) to both ends of the torque shaft (G).

Note

When reassembling the steer wheel swing arm assembly, screw down the Allen screws before installing the nuts.

8. Disengage the swing arm assembly from the torsion levers and remove it.
9. Using two 1/2” combination wrenches, remove the nut/bolt (C) holding the caster to the swing arm and install the caster on the new swing arm assembly.
10. Reverse the above steps to install the new swing arm assembly.
11. Test the steer wheel before returning the bed to service.

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BED CASTER REPLACEMENT

Tools Required:

- #2 Phillips Screwdriver
- Jack Stand (or equivalent)
- Needle Nose Pliers
- 1/2” Combination Wrench

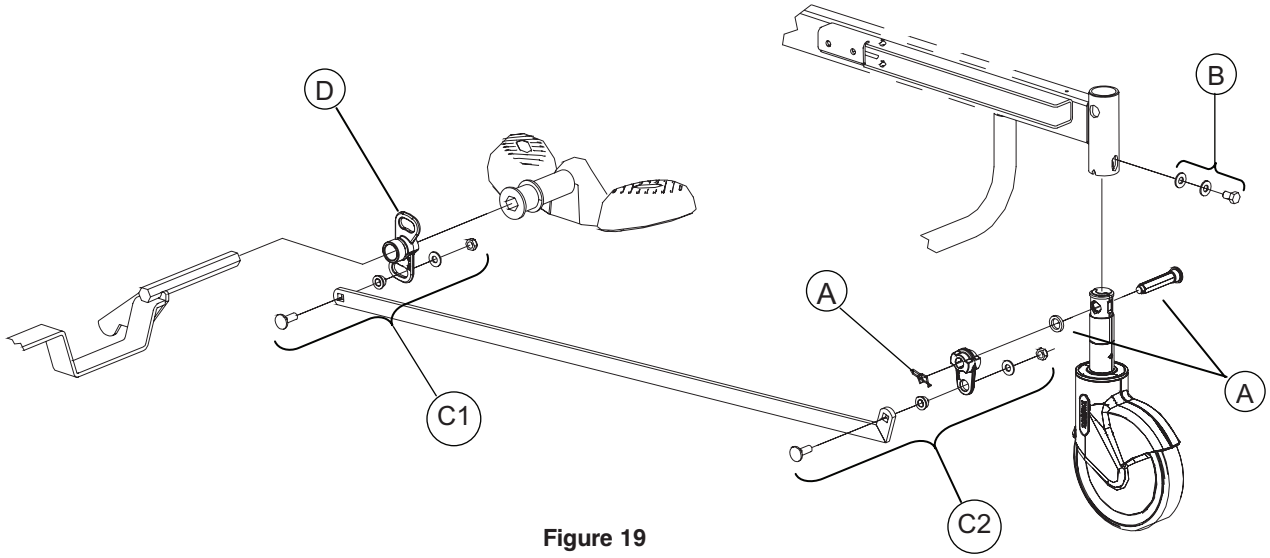
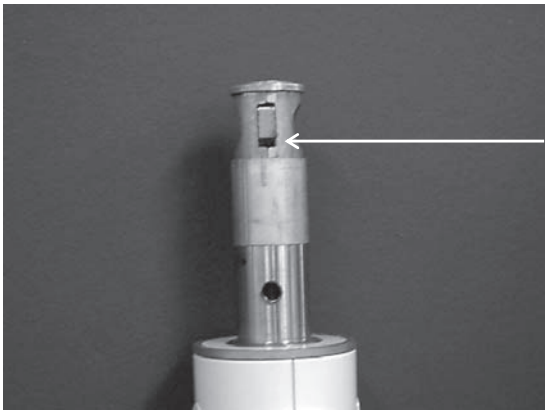


Figure 19

Procedure:

1. Raise the bed to the highest position.
2. Position the brake/steer to neutral.
3. Place a jack stand under the frame where the defective caster is.
4. Using a #2 Phillips screwdriver, remove the screw holding the wheel cover and remove it.
5. Lower the bed until the caster is six inches off the ground.
6. Unplug the power cord from the wall outlet.
7. If the caster is part of the braking mechanism, using needle nose pliers, remove the rue ring cotter, washer, and locking axle (A) linking the caster shaft to the locking lever.



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 hole below the cam in the neutral position.

8. Using a 1/2” combination wrench, remove the bolt and two washers (B) holding the caster to the base.

Note

Before tightening the bolt (B), make sure the shaft is completely inserted into the mounting socket.

9. Reverse the above steps to install the new caster.
10. Test the bed for proper operation before returning it to service.

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BRAKE ROD REPLACEMENT

Tools Required:

- 1/2” Combination Wrench

Procedure:

Note

Unless otherwise indicated, refer to Figure 19, page 70, for this procedure.

1. Raise the bed to the highest position.
2. Remove the steer wheel hood.

Note

When reinstalling the steer wheel hood, ensure the colored labels affixed to the hood and the brake/steer pedal match.

3. Using a 1/2” combination wrench, remove the two nuts, two shoulder spacers, two washers and two bolts (C1, C2) holding each end of the brake rod to the locking levers.
4. Remove the defective rod.
5. Reverse the above steps to install the new brake rod.
6. Test the brakes before returning the bed to service.

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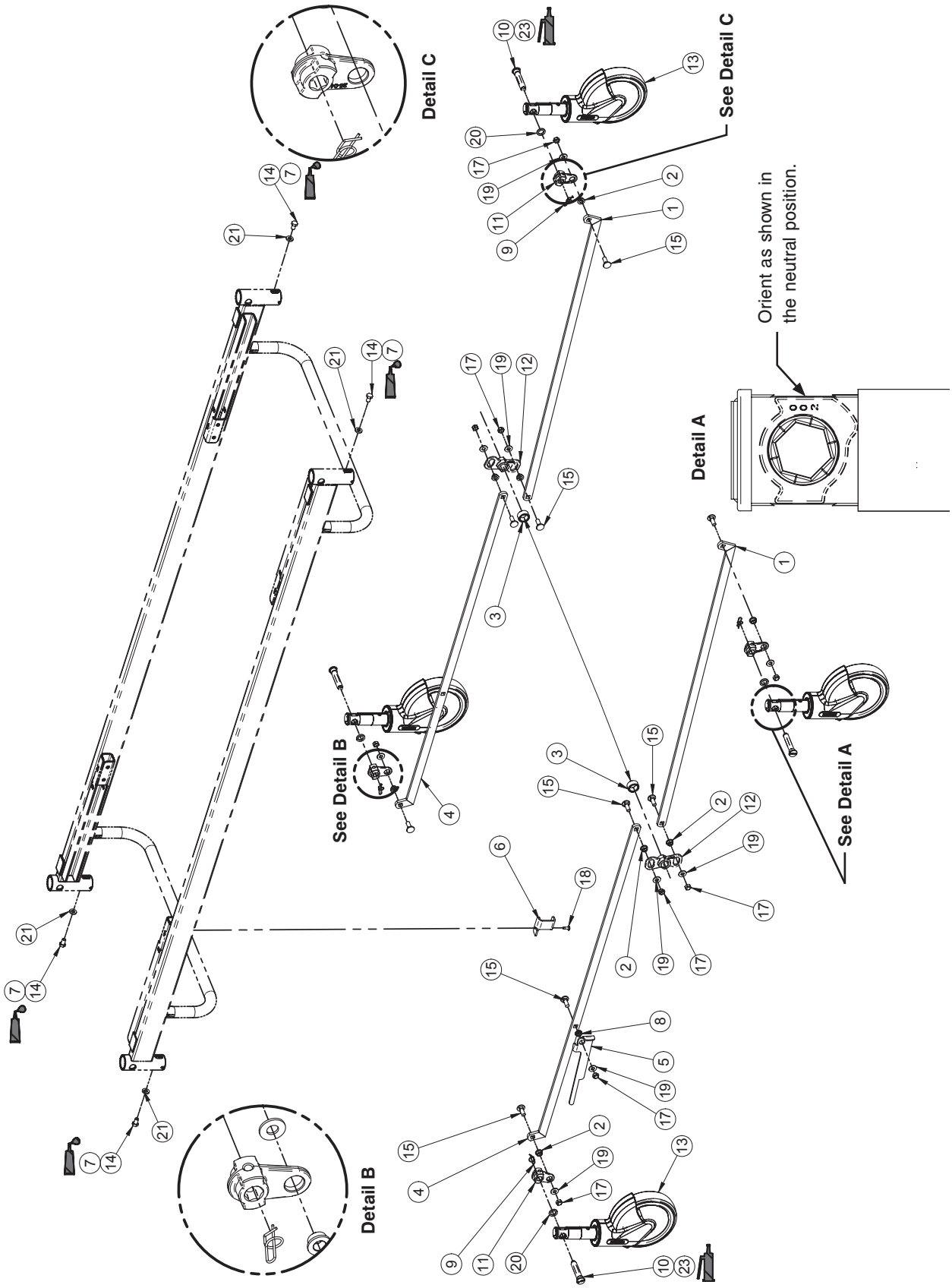
OL280003L Rev 08 (Reference Only)



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Brake System - OL280003L Rev 08 (Reference Only)

Item	Part No.	Part Name	Qty.
1	25-0291L	Foot Connecting Rod	2
2	QPA25-0340	Spacer	8
3	25-0451	Lever Spacer	2
4	28-0165L	Head Connecting Rod	2
5	28-0340L	Brake Hammer	1
6	28-0341L	Brake Hammer Stop	1
7	M0008	Threadlocker (Blue)	.16 mL
8	QDF17-0020	Shoulder Spacer	1
9	QDF7878	Rue Ring Cotter	4
10	QPA23-0233	Locking Axle	4
11	QPA25-0411	Brake Lever	4
12	QPA25-0427	Locking Lever	2
13	R25-0388-13	6” Wheel with Lock	4
14	VB15A1O16	Hex Head Bolt	4
15	VB35A1O28FT	Long Neck Carriage Bolt	9
17	VE79A1O	Nylon Locknut	9
18	VV83A9G16	ESNA Nut	1
19	VW10A10	Flat Washer	9
20	VW10C162404	Nylon Washer	4
21	VW10A1120	Flat Washer	4
22	M0019	OG2 Petro-Canada Grease	.03 kg

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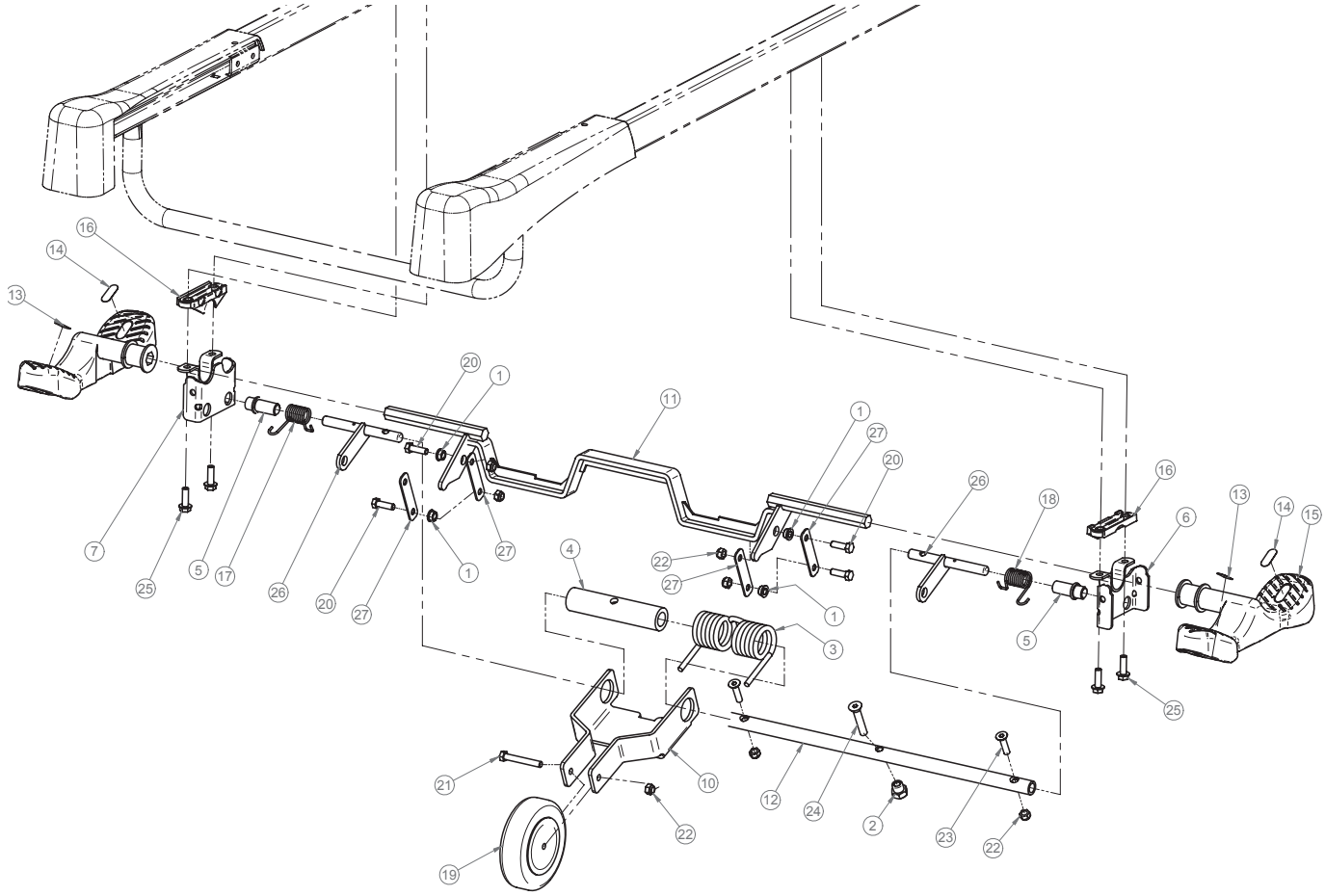
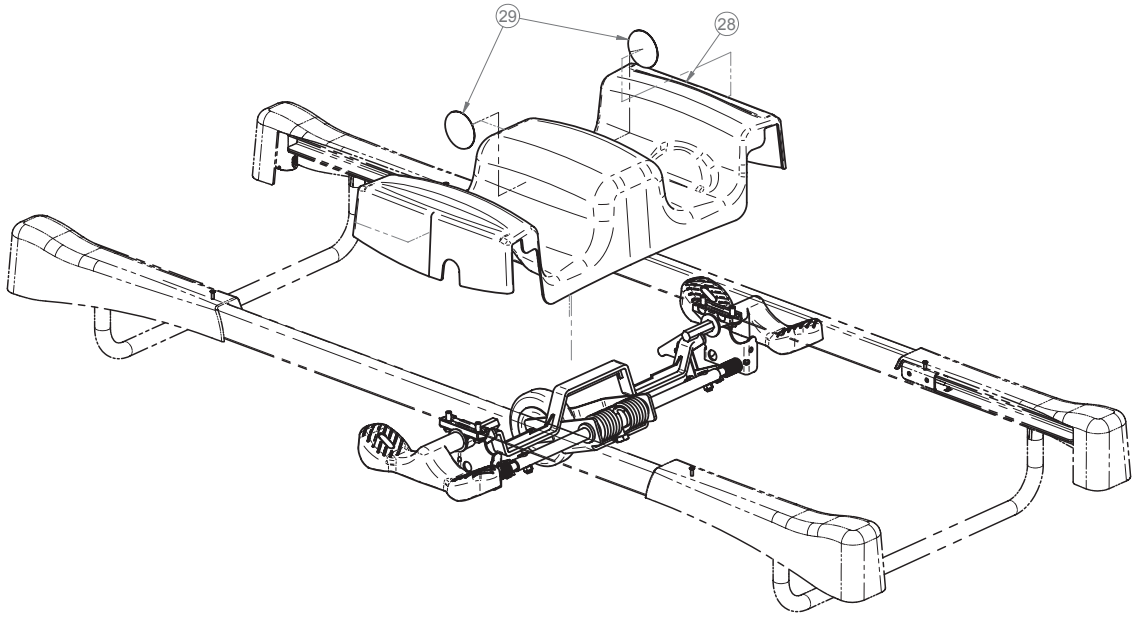
Fifth Wheel Assembly

L28-006L Rev 06 (Reference Only)





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Fifth Wheel Assembly

Fifth Wheel Assembly - L28-006L Rev 06 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QPA25-0340	Spacer	4
2	17-0104Z	Fifth Wheel Support	1
3	17-0124L	Fifth Wheel Spring	1
4	QP28-0773	Fifth Wheel Bushing	1
5	QP25-0581	Nylon Bushing	2
6	28-0132Z	Right Fifth Wheel Support	1
7	28-0133Z	Fifth Wheel Left Support	1
10	28-0151L	Clearance Arm	1
11	28-0156L	Activation Lever	1
12	17-0082L	Torque Shaft	1
13	QE71-0496	Fifth Wheel Green Label	2
14	QE71-0511	Brake Label	2
15	QP28-0130-11	Pedal	2
16	QPA25-0312	Molded Spacer	2
17	QRD25-0582	Left Torsion Spring	1
18	QRD25-0585	Right Torsion Spring	1
19	RL5	Fifth Wheel	1
20	VB15A1O32	Hex Bolt	4
21	VB15A1O50	Hex Bolt	1
22	VE30A1O	Nylon Locknut	7
23	VV11A1O36	Hex Head Flat Cap Screw	2
24	VV11A1P48	Hex Head Flat Cap Screw	1
25	VB4A1O32	Hex Head Bolt	4
26	28-0149Z	S.A. Lever	2
27	28-0150Z	Torsion Lever	4
28	QP25-0156-13	Fifth Wheel Cover	1
29	QE71-0904	No Oxygen Bottle Label	2

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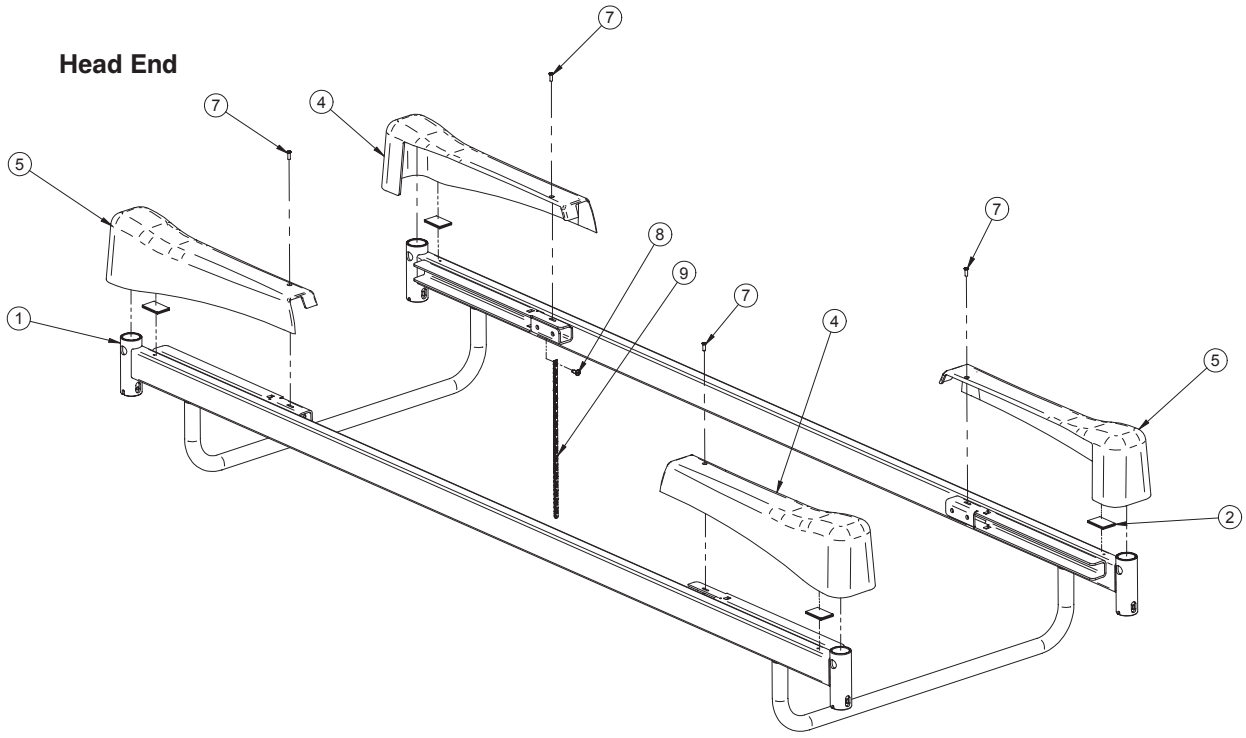
Caster Hood Assembly

L28-020L Rev 03 (Reference Only)



Item	Part No.	Part Name	Qty.
1	25-0108L	Base	1
2	25-0550	Caster Hood Velcro	4
4	QP28-0299-13	Right Wheel Cover	2
5	QP28-0300-13	Left Wheel Cover	2
7	VV81A9E16-13	Flat Head Tapping Screw	4
8	VV83A9G16	Pan Head Tapping Screw	1
9	28-0469	Ground Chain	1

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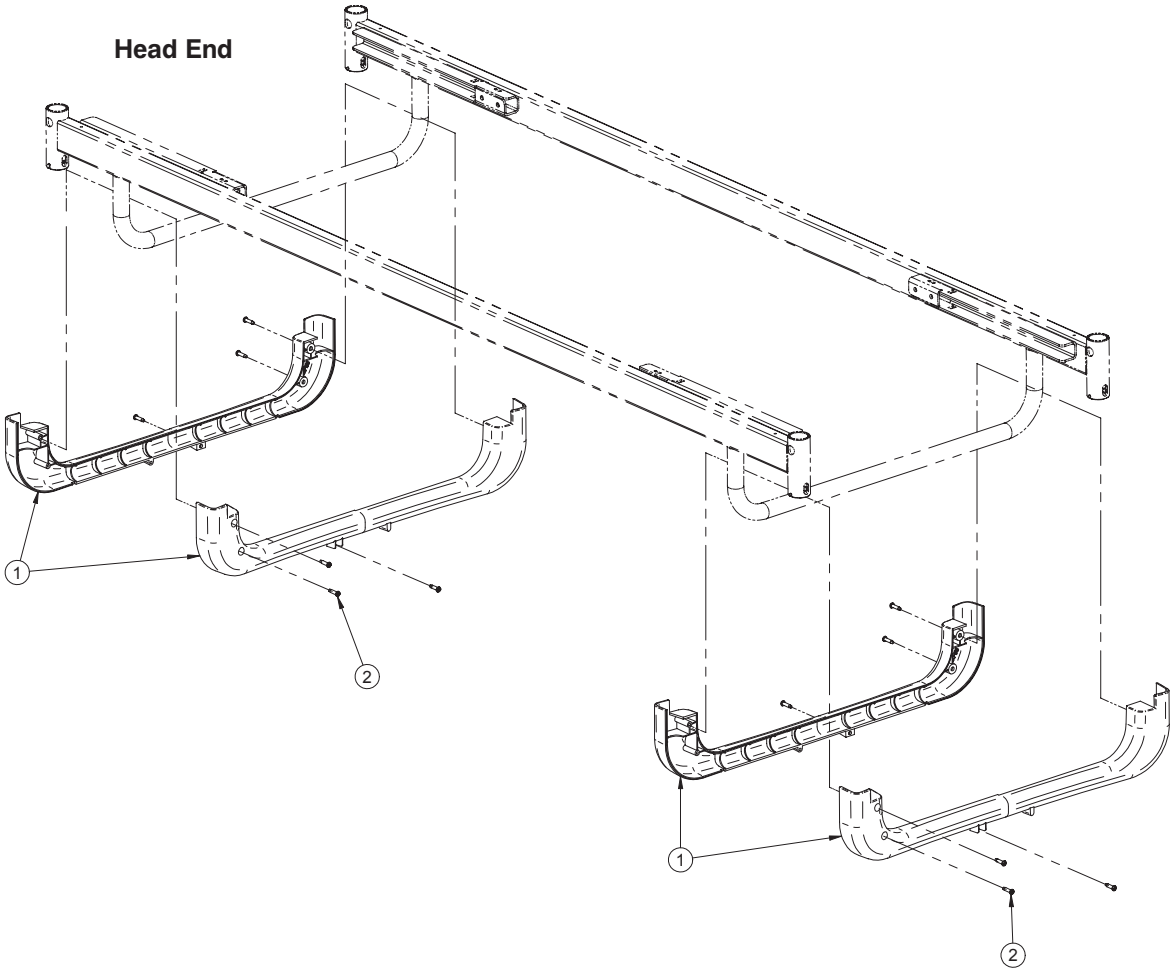
Base Tube Cover Assembly

OL280090 Rev 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QP25-0023-13	Base Tube Cover	4
2	VV23A1G24HL	Pan Head Tapping Screw	12

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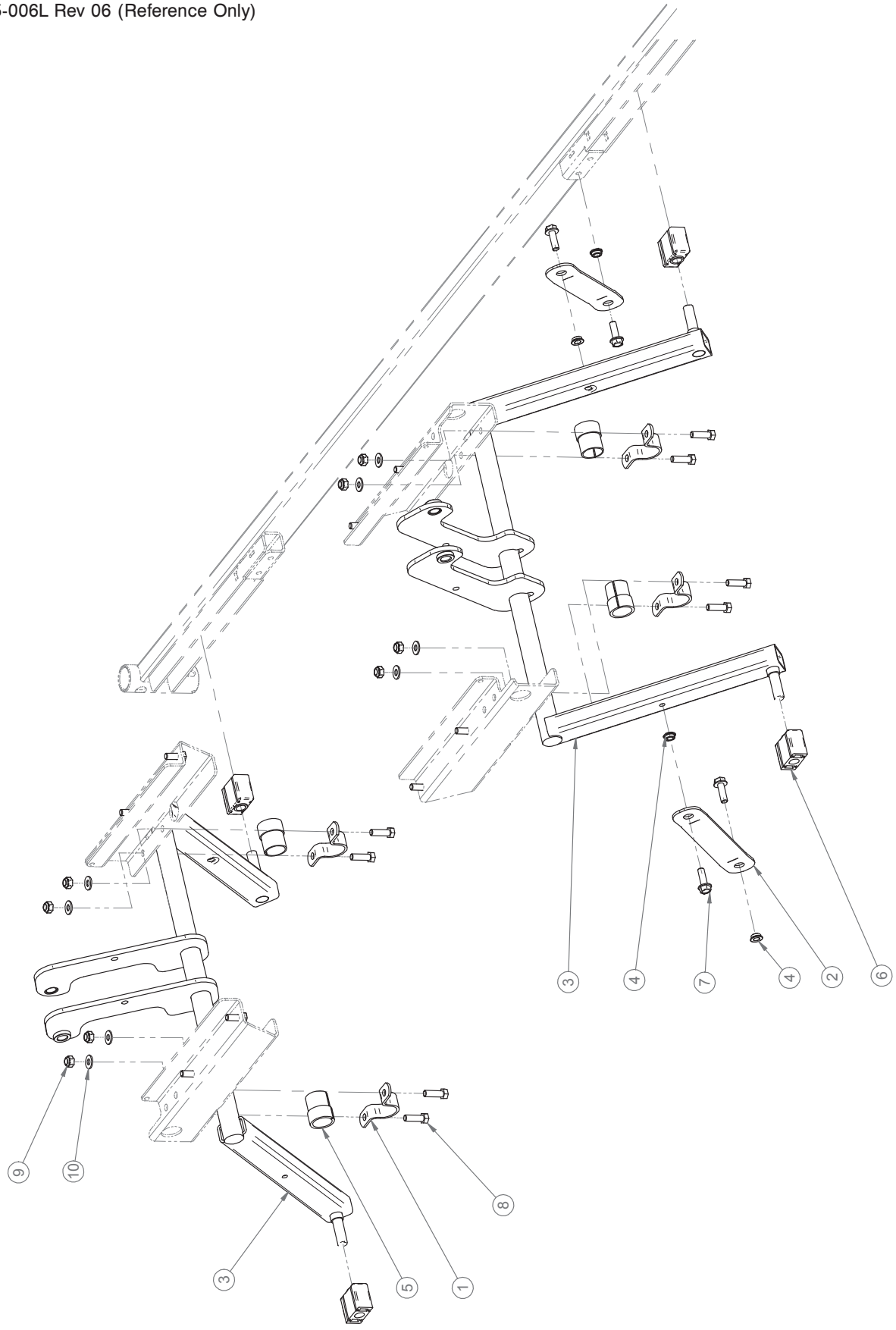
Lift Mechanism

L25-006L Rev 06 (Reference Only)



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Lift Mechanism - L25-006L Rev 06 (Reference Only)

Item	Part No.	Part Name	Qty.
1	14662Z	Lever Clamp	4
2	25-0281L	Stabilizer	2
3	25-0402L	Hi-Lo Lever	2
4	QDF17-0020	Shoulder Spacer	4
5	QP25-0270-01	Molded Support Bearing	4
6	QPN-1310P009	Nylon Glide	4
7	VVB4A1O32	Rolling Thread Bolt	4
8	VB15A1O32	Hex Head Bolt	8
9	VE30A1O	Nylon Locknut	8
10	VW10A10	Flat Washer	8

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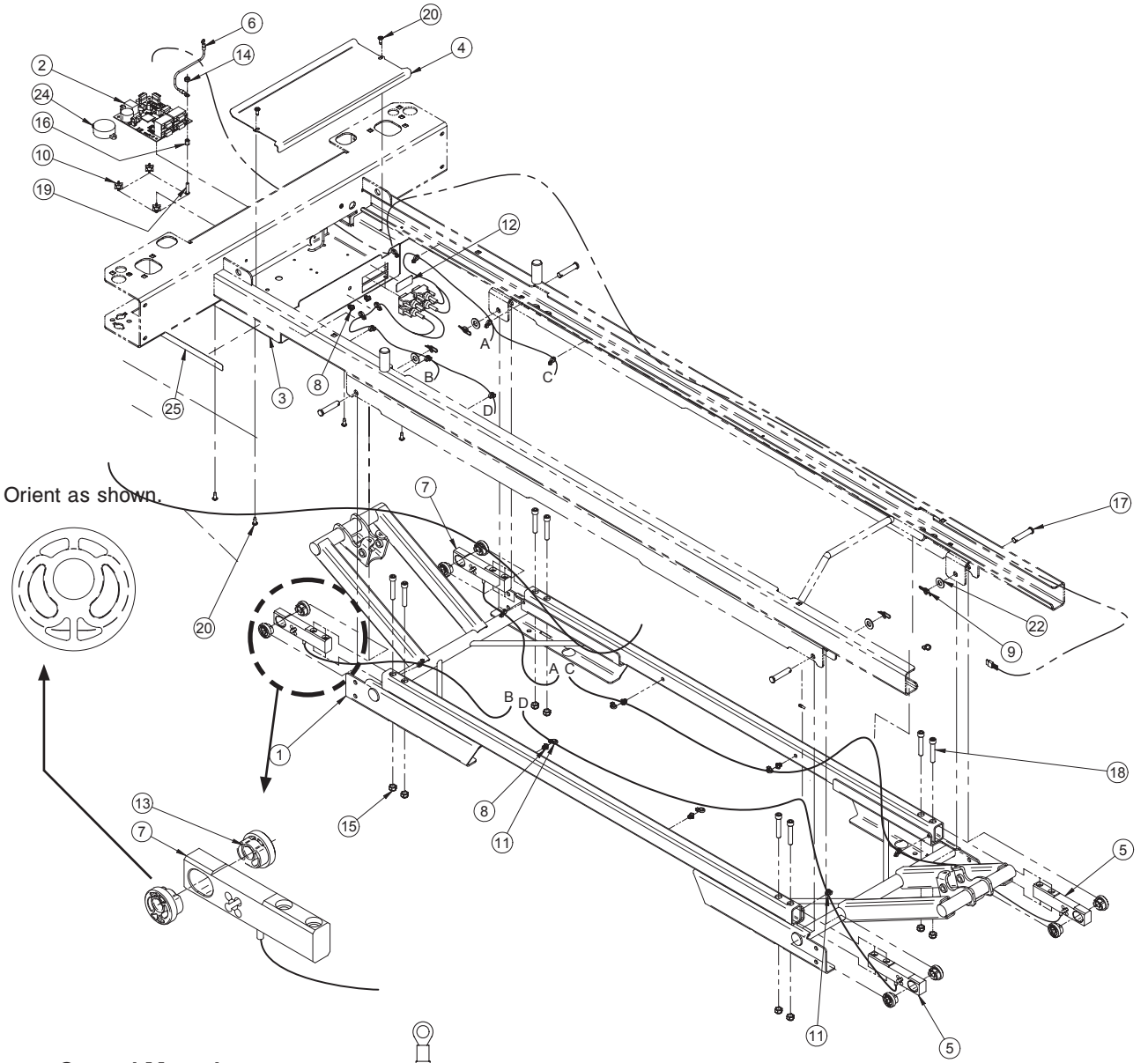
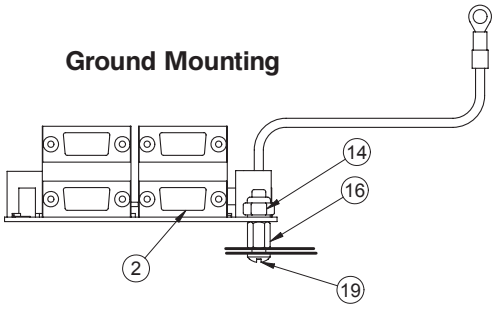
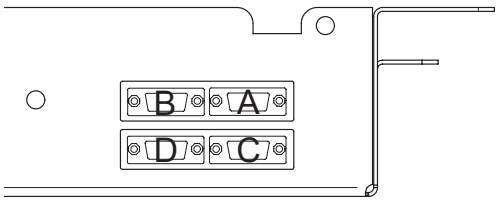
Lower Stationary Frame with Scale and Network

L28-008L Rev 06 (Reference Only)



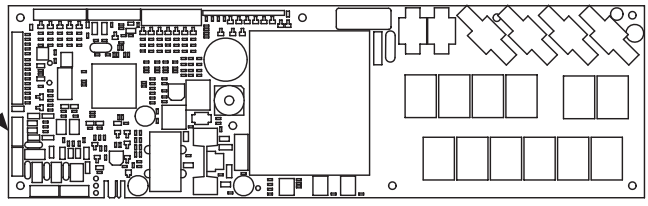
Ground Mounting





Connector Positions

J13 - Network Connector



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Lower Stationary Frame with Scale and Network - L28-008L Rev 06 (Reference Only)

Item	Part No.	Part Name	Qty.
1	28-0544L	Fixed Lower Frame with Load Cells	1
2	QDF25-0593	Scale Board	1
3	28-0652L	Scale Board Casing with Network	1
4	28-0186L	Casing Cover	1
5	QDF14-1367	Load Cell with Flexible Cable - Long	2
6	QDF17-0138	PC Board Ground Wire	1
7	QDF25-0218	Load Cell with Flexible Cable - Short	2
8	QDF5096	Plastic Tie Holder	6
9	QDF7878	Rue Ring Cotter	4
10	QDF9576	PC Board Support	3
11	QDF9518	Cable Tie	19
12	QE71-0701E	Label - Connector Position	1
13	QP20-0037-00	Elastomer Sleeve	8
14	VE30A0G	Nylon Locknut	1
15	VE30A1O	Nylon Locknut	8
16	QDF9577	Spacer	1
17	VG50A1244	Clevis Pin	4
18	VV10A1O44	Hex Socket Cap Bolt	8
19	VV33A0G28	Pan Head Machine Screw	1
20	VV83A9G16	Pan Head Tapping Screw	6
22	VW10A12	Washer	4
24	QDF5095	Beeper	1
25	QE71-1001-T	Label - Caution	1

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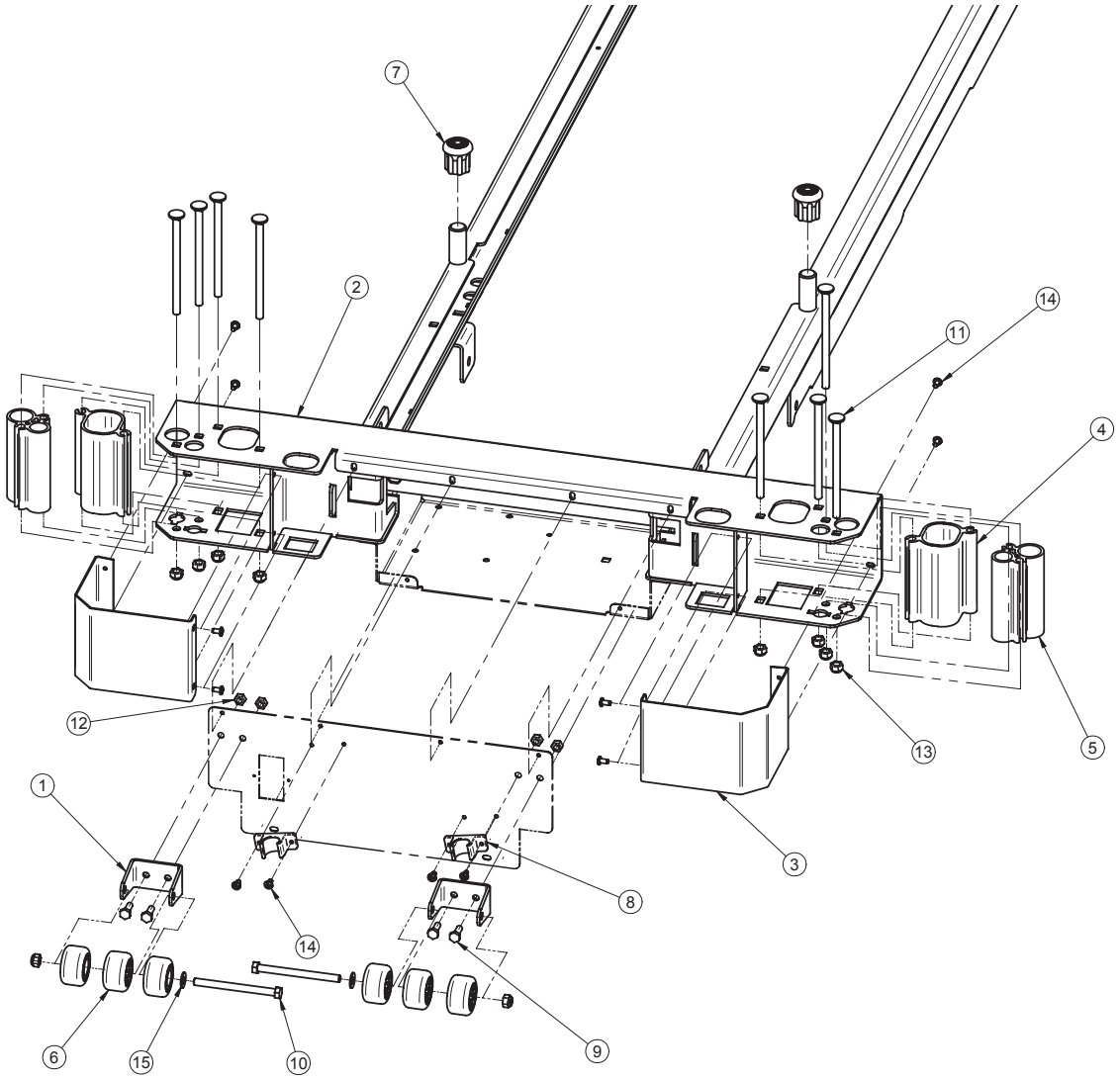
Upper Stationary Frame with Scale Option

OL280028L Rev 04 (Reference Only)



Item	Part No.	Part Name	Qty.
1	25-0519L	Bumper Bracket	2
2	28-0141L	Upper Fixed Frame	1
3	28-0475L	Head End Casing Lateral Plate	2
4	AAL28-0134	Head/Footboard Extrusion	2
5	AAL28-0144	Accessory Extrusion	2
6	QPC-14-0321	Bumper Roller	6
7	QPCF1001	Crutch Tip	2
8	QPAG1801	Rod Support	2
9	VB15A1N24	Bolt	4
10	VB15A1O62	Hex Bolt	2
11	VB35A1O72-13	Carriage Bolt	8
12	VE30A1N	Nylon Locknut	4
13	VE30A1O	Nylon Locknut	10
14	VV83A9G12	Pan Head Tapping Screw	12
15	VW10A10	Flat Washer	2

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Notes

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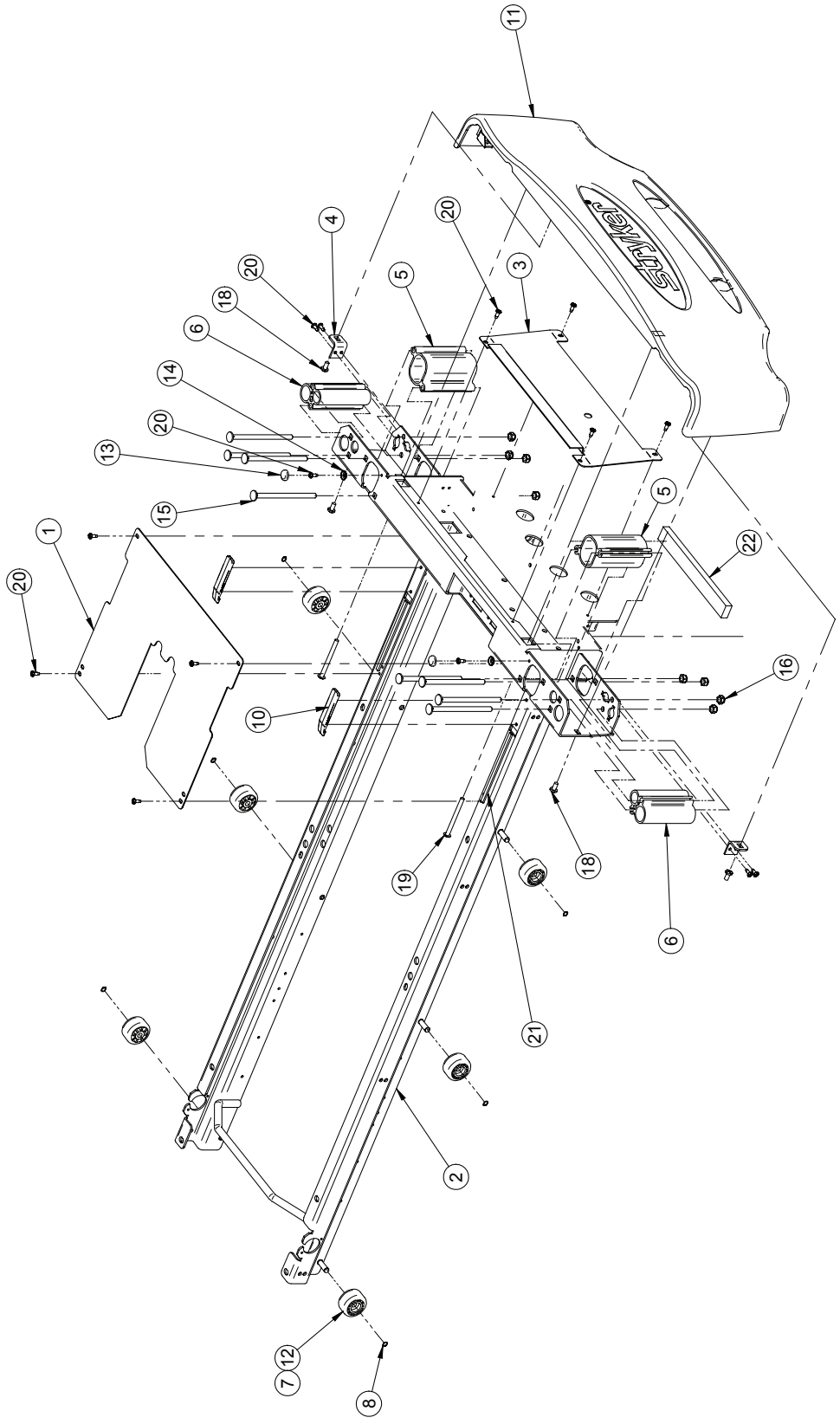
Moving Frame Assembly

L28-005L Rev 08 (Reference Only)



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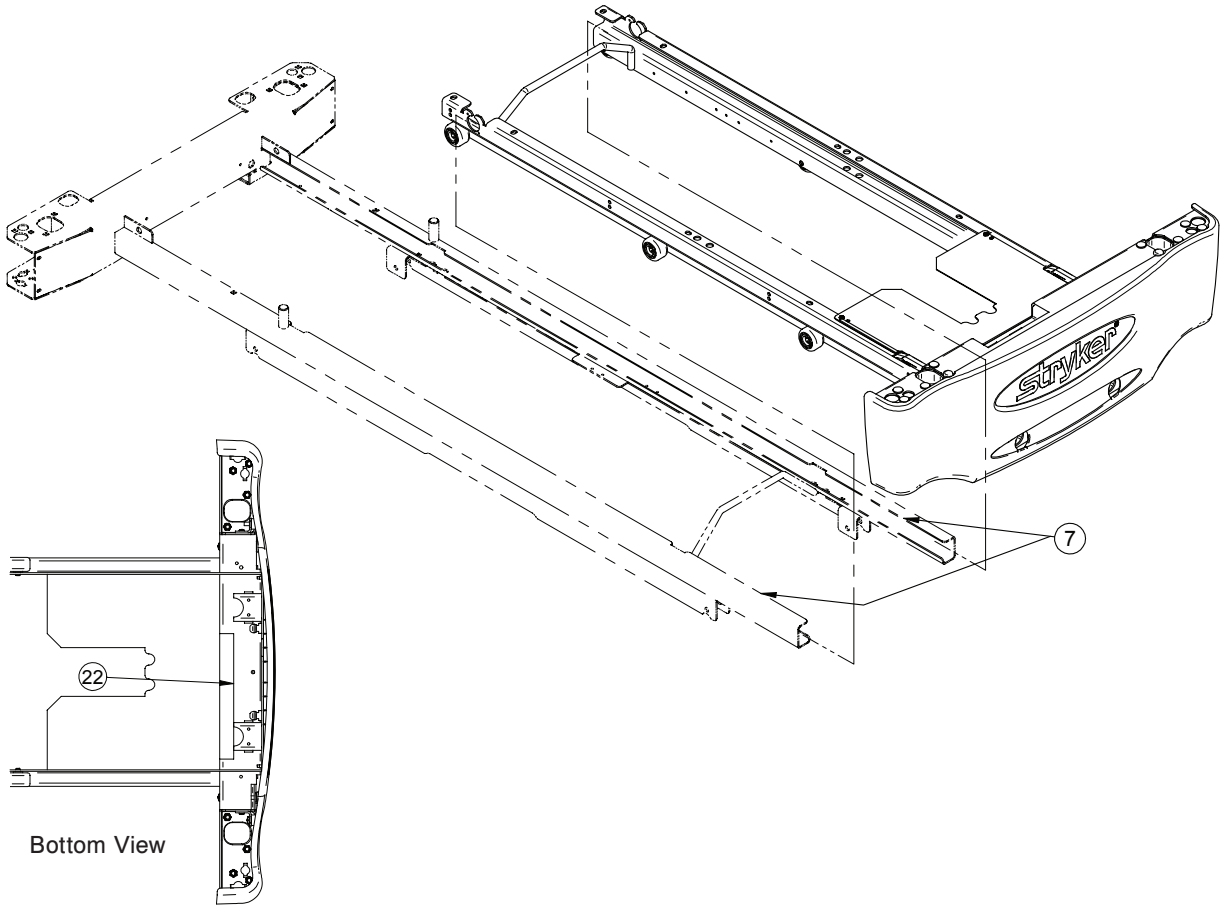
Moving Frame Assembly



Moving Frame Assembly - L28-005L Rev 08 (Reference Only)

Item	Part No.	Part Name	Qty.
1	28-0420L	Frame Cover Plate	1
2	28-0107L	Mobile Frame	1
3	28-0220L	Foot End Casing Cover	1
4	28-0272Z	Anchor Plate	2
5	AAL28-0134	Head/Foot Board Extrusions	2
6	AAL28-0144	Accessory Extrusion	2
7	M0019	Petro Canada OG2 Grease	.03 kg
8	QDF7881	Outer Retaining Ring	6
10	QP23-0257	Mattress Support Glide	2
11	QP28-0111-13	Foot End Molded Section	1
12	QPN-14-0705	Roller	6
13	QPPF1514-1	White Plastic Cap	2
14	QPPF1515	Metal Washer	2
15	VB35A1O72-13	Carriage Bolt	8
16	VE30A1O	Nylon Locknut	8
18	VV33A1N16	Pan Head Machine Screw	4
19	VV37A1N56	Truss Head Machine Screw	2
20	VV83A9G16	Pan Head Tapping Screw	14
21	QDF132X	Weather Strip Tape	1 ft
22	QDF233X	Cushion Tape	.75 ft

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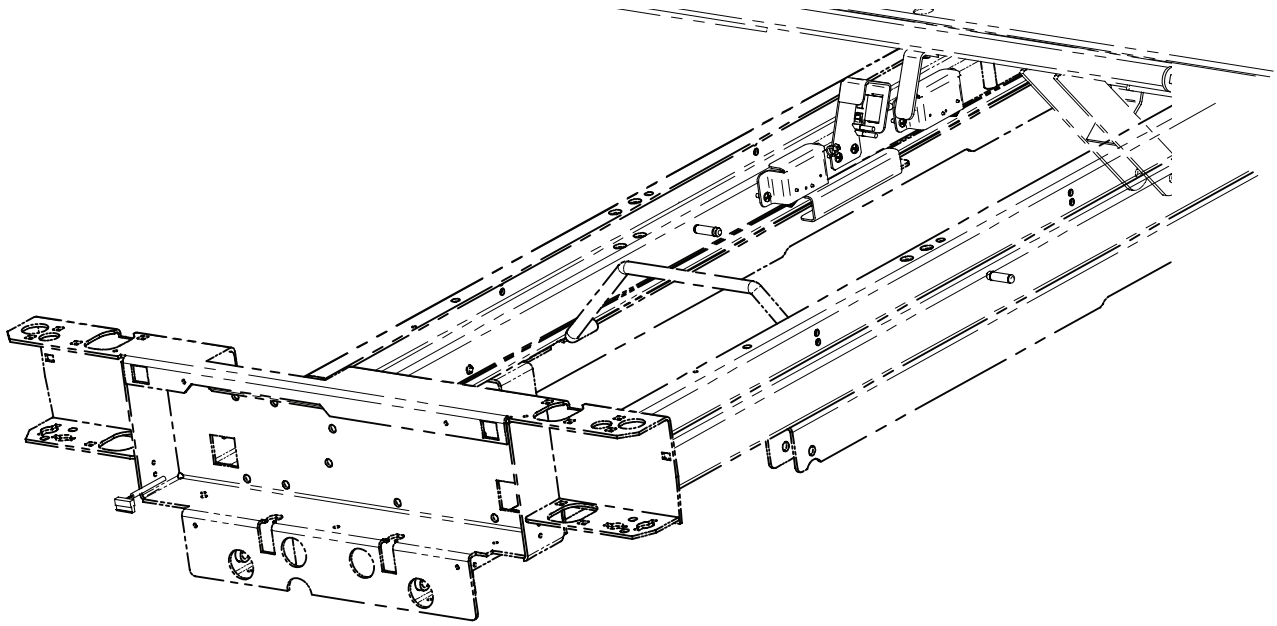
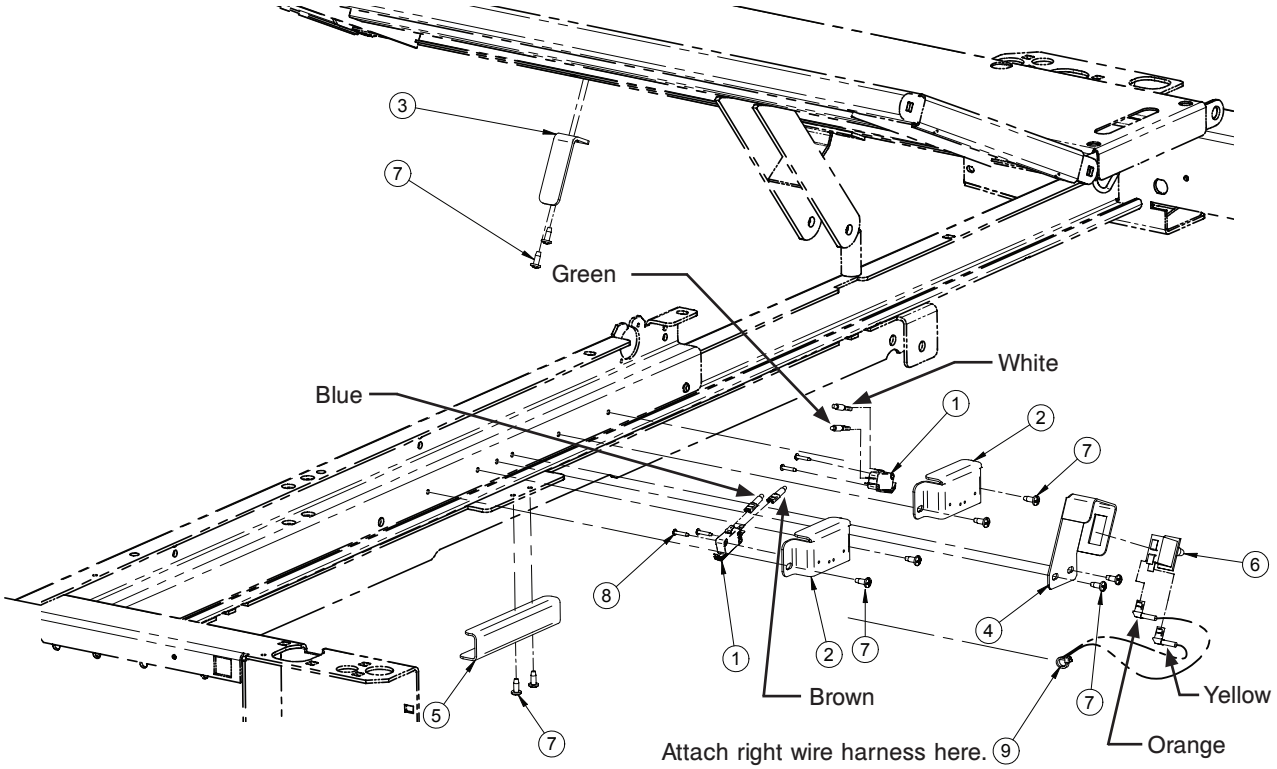
Auto Contour with Scale Option

L28-013L Rev 02 (Reference Only)





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Auto Contour with Scale Option - L28-013L Rev 02 (Reference Only)

Item	Part No.	Part Name	Qty.
1	1325P003	Micro Switch	2
2	25-0465L	Micro Switch Support	2
3	25-0468Z	Micro Switch Activator	1
4	25-0469L	Micro Switch Support	1
5	25-0470L	Micro Switch Activator	1
6	QDF9159	Limit Switch	1
7	VV83A9G16	Pan Head Tapping Screw	10
8	VV87A9A20	Truss Head Tapping Screw	4
9	QDF9518	Wire Clip	1

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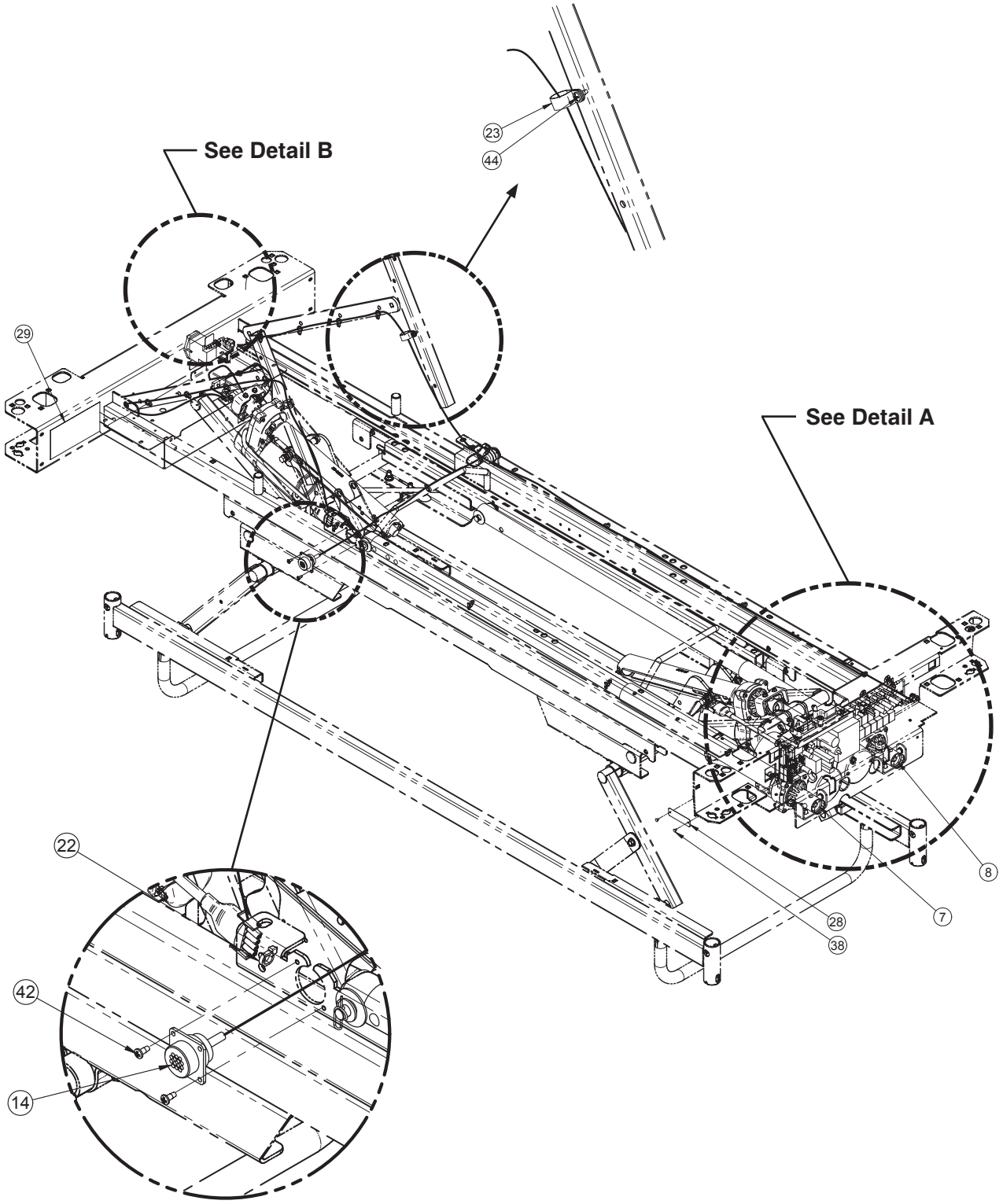
120 VAC Electrical System

OL280118L Rev 00 (Reference Only)



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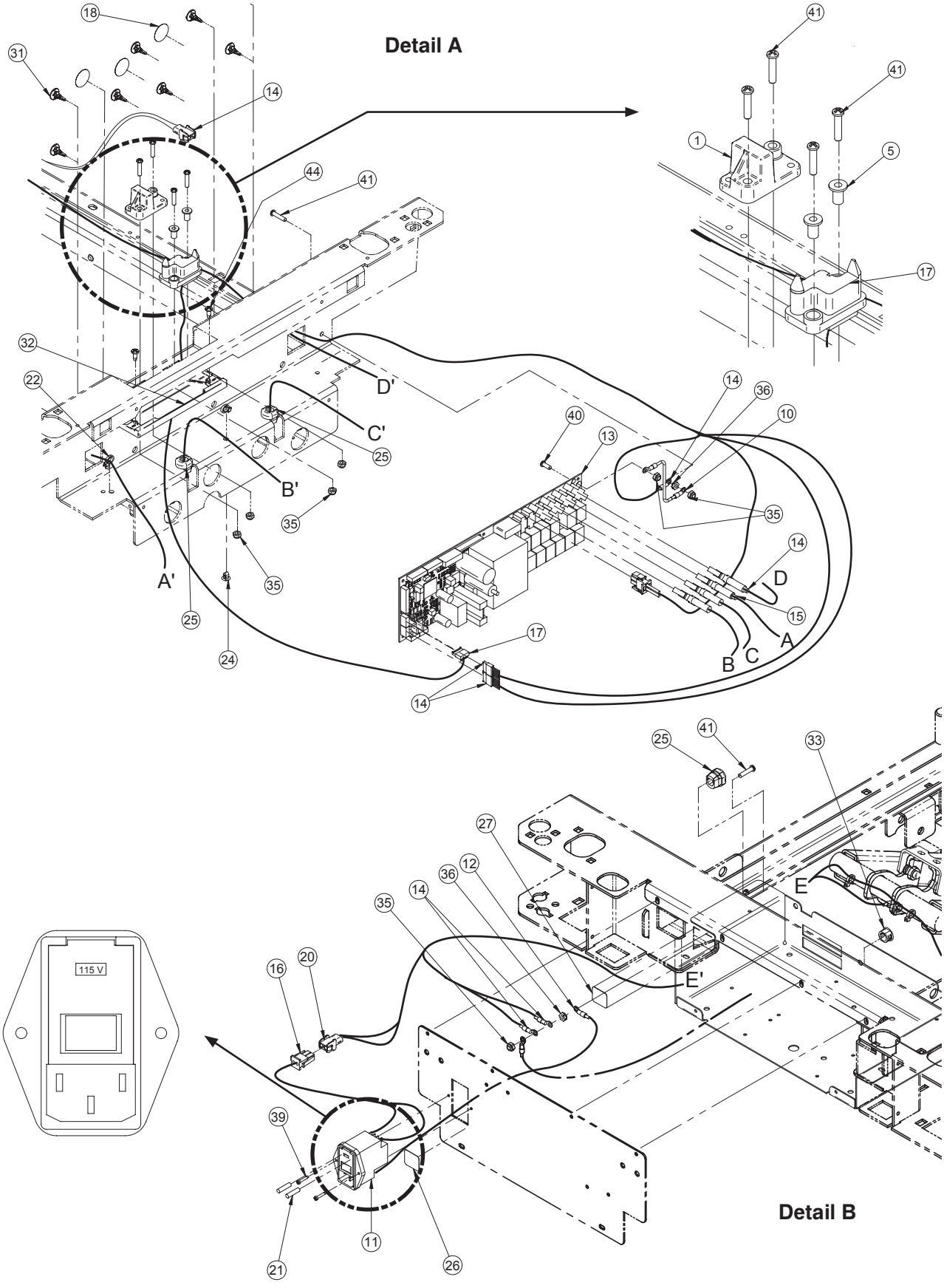
120 VAC Electrical System



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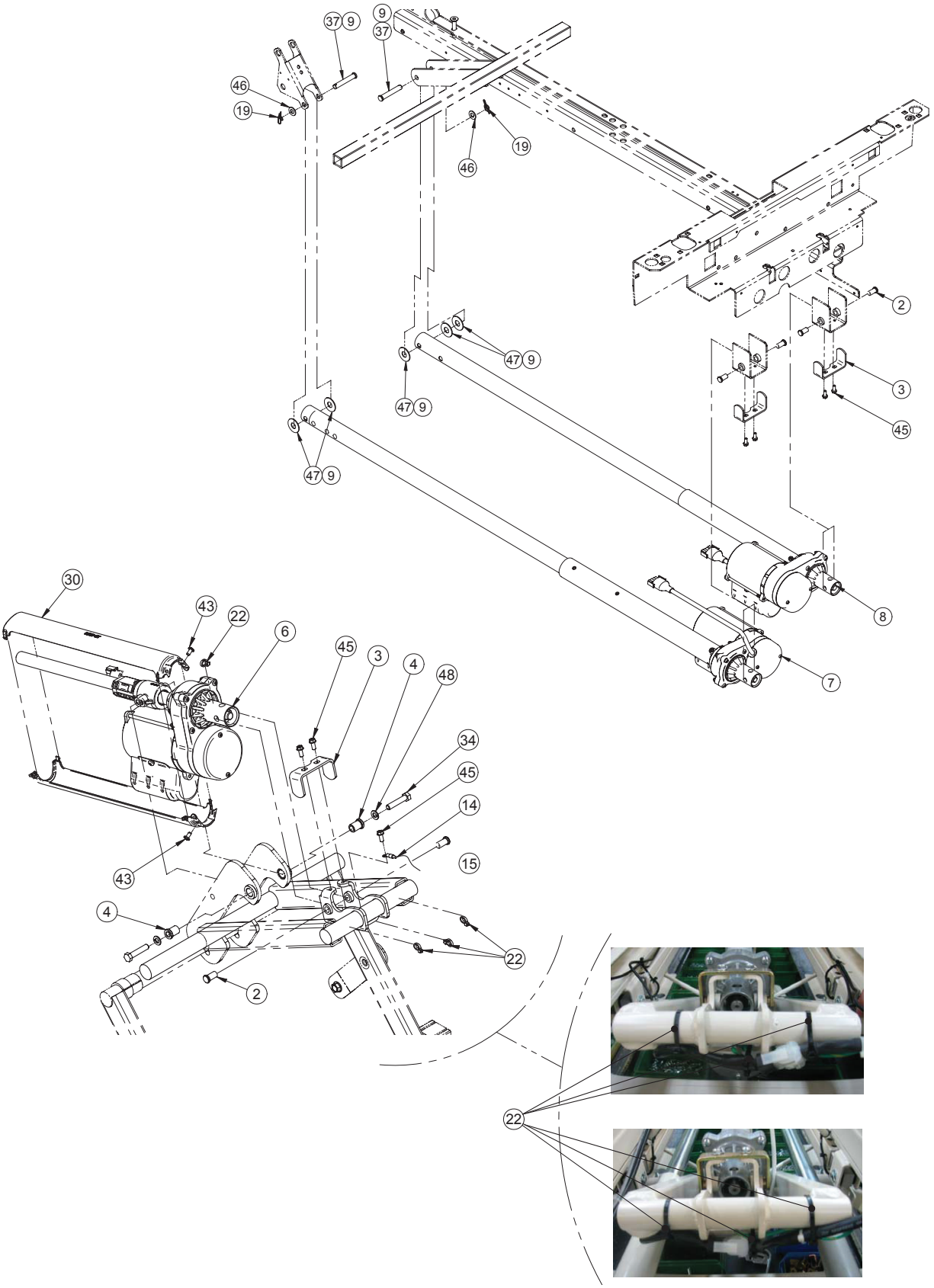
120 VAC Electrical System



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120 VAC Electrical System - OL280118L Rev 00 (Reference Only)

Item	Part No.	Part Name	Qty
1	QP28-0182-11	Protective Plug	1
2	25-0250Z	Motor Pivot	8
3	25-0251Z	Head/Thigh Motor Support Cover	4
4	25-0521	Spacer	4
5	25-0527Z	Connector Sleeve	2
6	28-0768	Lift Motor	2
7	28-0769	Fowler Motor	1
8	28-0770	Gatch Motor	1
9	M0019	Petro Canada OG2 Grease	.03 kg
10	QDF17-0138	PC Board Ground Wire	1
11	QDF2034	120Vac Power Supply	1
12	QDF25-0508	Main Grounding Wire	1
13	QDF25-0592	Motor Control Board	1
14	QDF28-0230	Left Harness - Scale and Network	1
15	QDF28-0231	Right Harness	1
16	QDF28-0238	120 Vac Connector	1
17	QDF28-0258	Scale Control Board/Footboard Cable	1
18	QDF28-0334	Screw Cap	3
19	QDF7878	Rue Ring Cotter	2
20	QDF8042	AMP Cap Housing	1
21	QDF8078	10A Fuse	2
22	QDF9518	Cable Tie	30
23	QDF9532	Wire Clip	2
24	QDF9533	Pressure Cable Clip	1
25	QDF9541	Strain Relief	3
26	QE71-0571	Label - 10A, 250 Vac Fuse	1
27	QE71-0572	Ground Label	1
28	QE71-0819-T	Serial Number Plate	1
29	QE71-1282-E	Label - 120Vac CSA	1
30	QP23-0256	Screw Cover	4
31	QP23-0735	Control Board Stand-off Pin	8
32	QP28-0131-00	Liquid Retention Device	1
33	QPPF1518	Double D Cap	1
34	VB15A1O40	Hex Bolt	4
35	VE30A0G	Nylon Locknut	7
36	VE80A0G	K-lok Locknut	2
37	VG50B1250	Clevis Pin	2
38	VR11H43	Dome Head Pop Rivet	2
39	VV23A9A20	Pan Head Tapping Screw	2
40	VV33A0G16	Pan Head Machine Screw	1
41	VV33A0G28	Pan Head Machine Screw	6
42	VV83A9E12	Pan Head Tapping Screw	4
43	VV83A9G12	Pan Head Tapping Screw	4
44	VV83A9G16	Pan Head Tapping Screw	4
45	VV84A1H46	Hex Head Tapping Screw	10
46	VW10C122402	Nylon Washer	2
47	VW10C173602	Nylon Washer	5
48	VW20A10	Spring Washer	4

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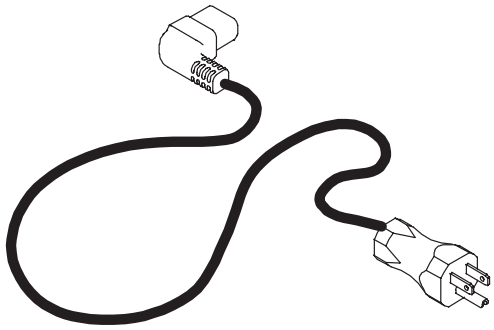
Straight Plug - QDF8066

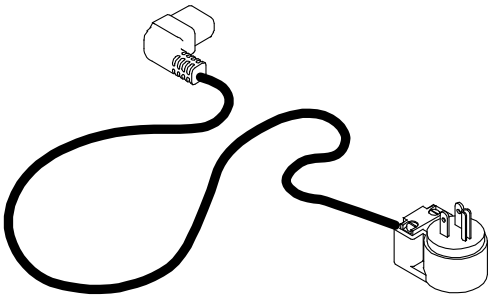
Rev 00



Reference Only: OL250053 Rev 00

90° Plug - QDF8066-90D

Rev 00



Reference Only: OL250055 Rev 00

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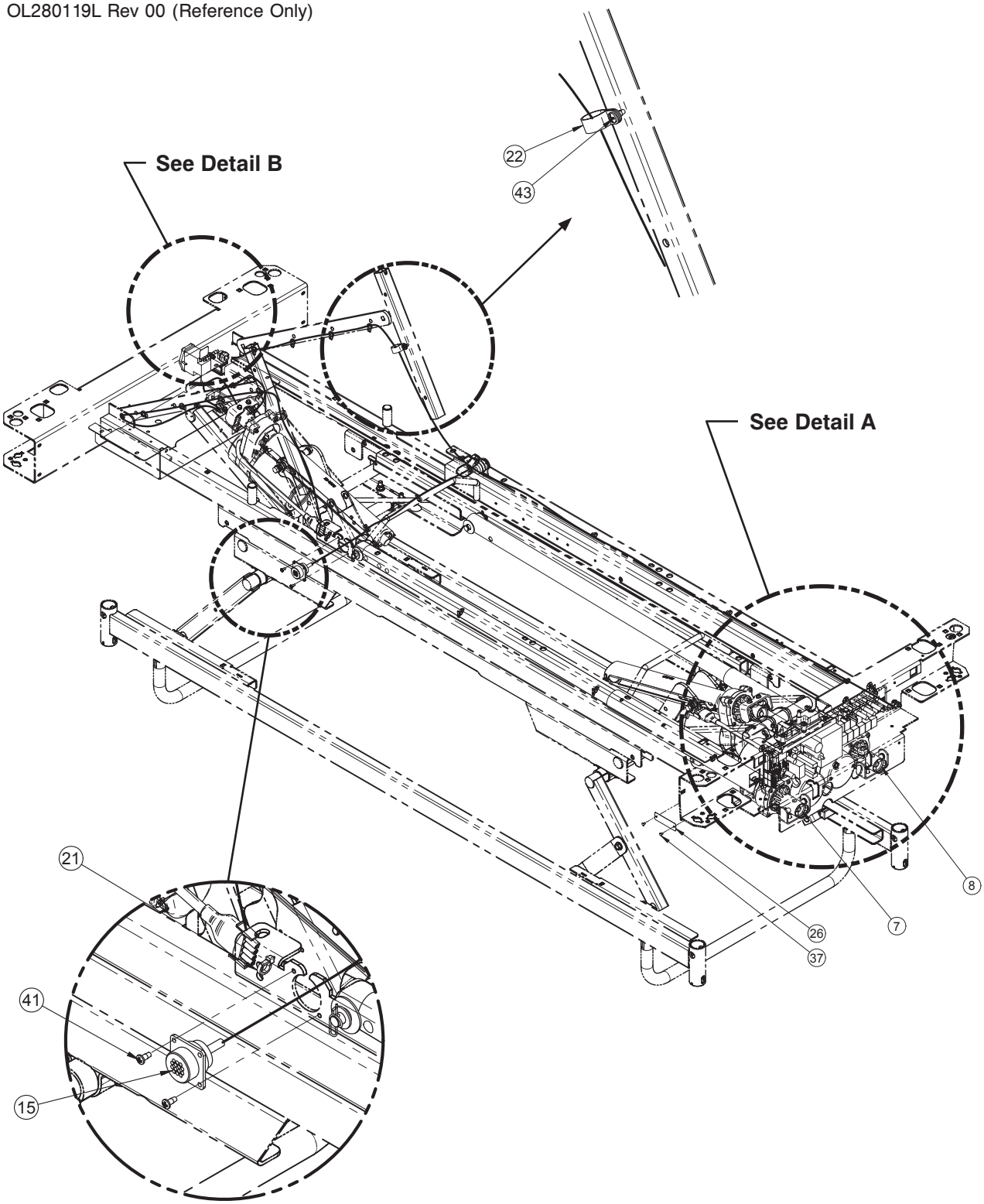
International Electrical System

OL280119L Rev 00 (Reference Only)



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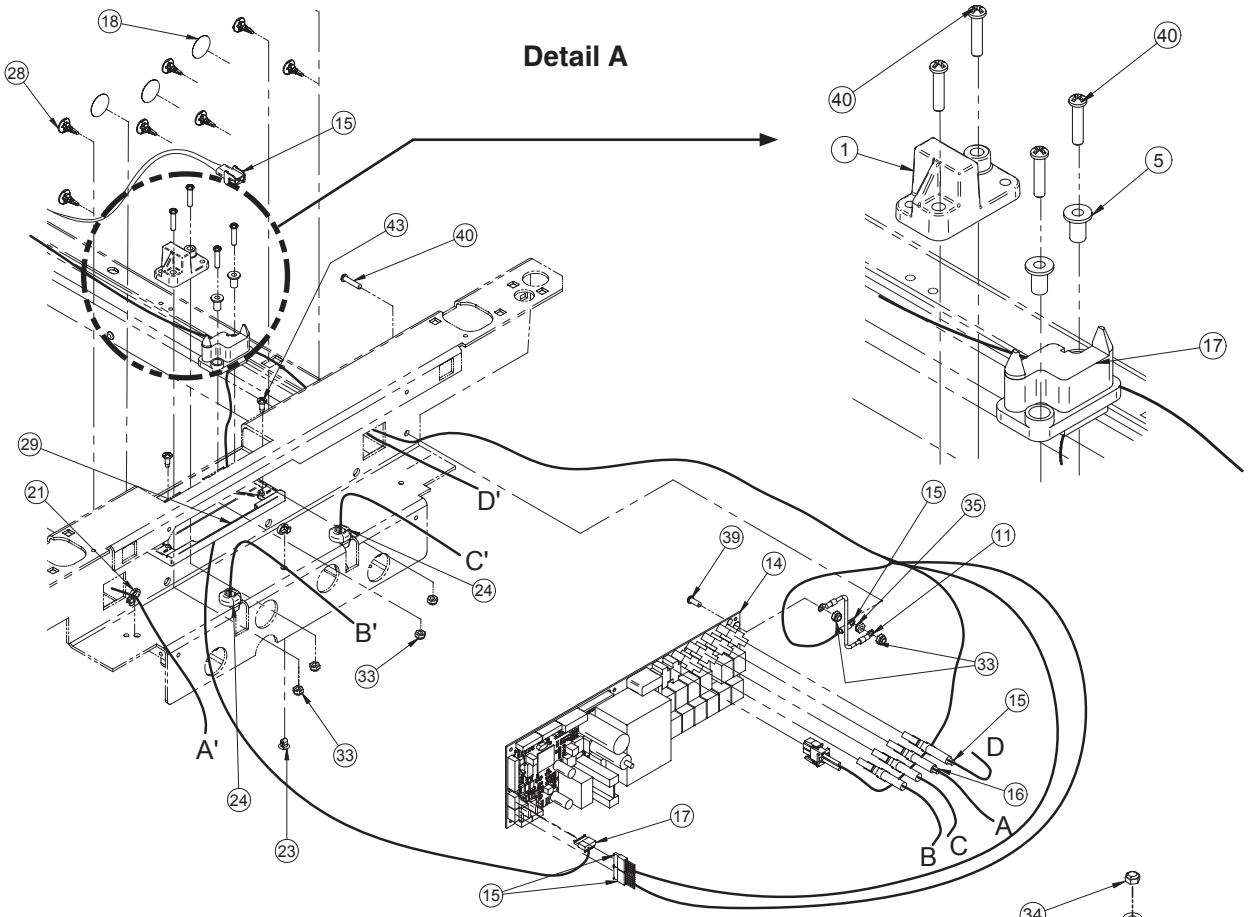

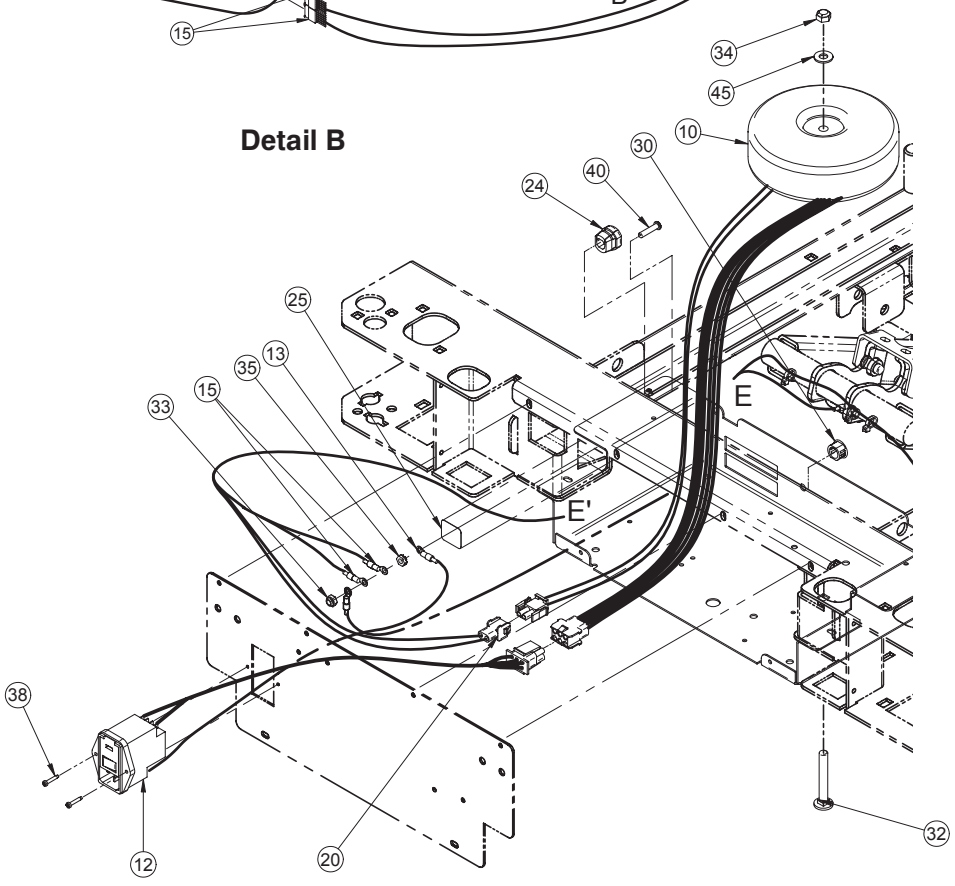

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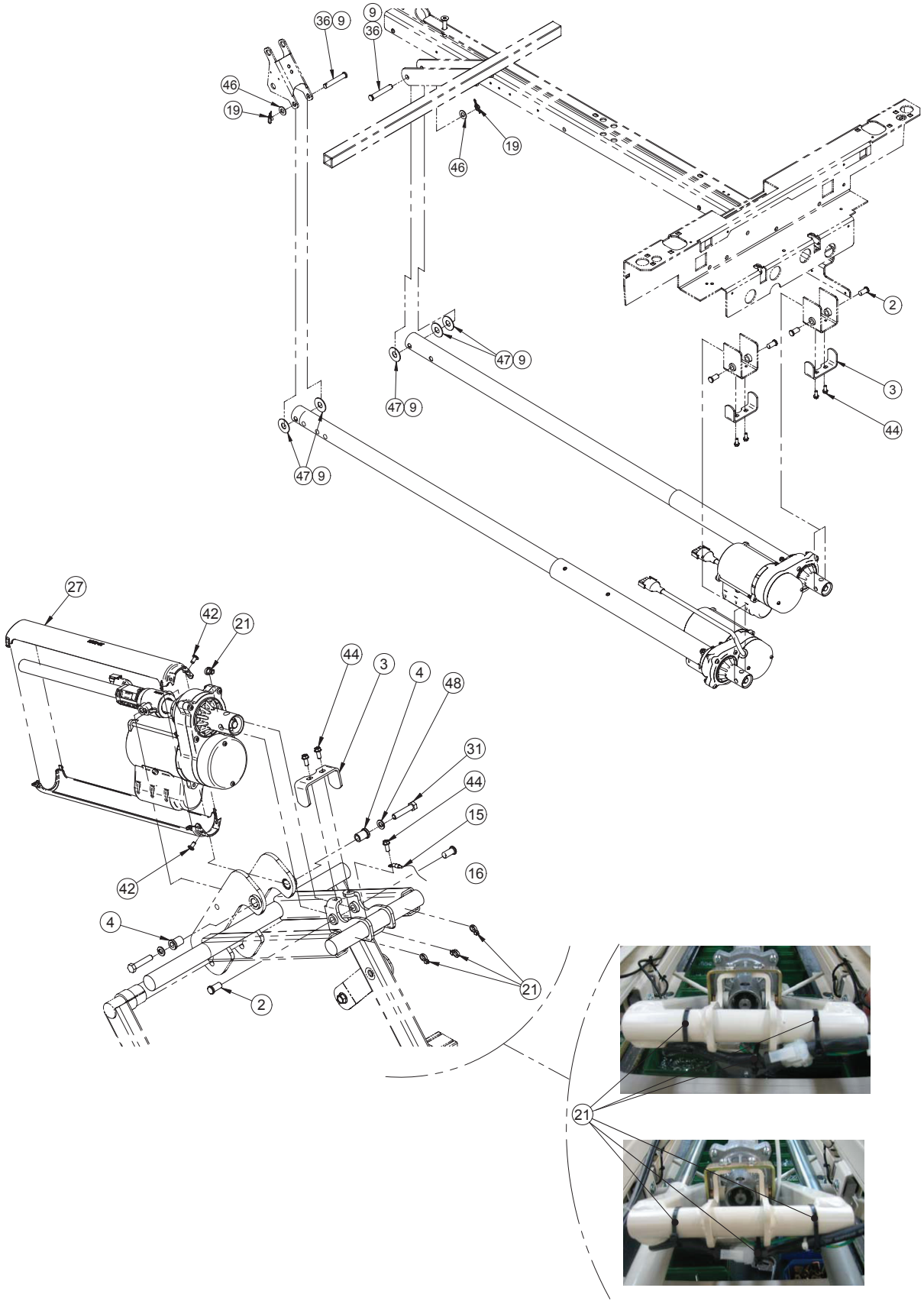
International Electrical System



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International Electrical System - OL280119L Rev 00 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QP28-0182-11	Protective Plug	1
2	25-0250Z	Motor Pivot	8
3	25-0251Z	Head/Thigh Motor Support Cover	4
4	25-0521	Spacer	4
5	25-0527Z	Connector Sleeve	2
6	28-0768	Lift Motor	2
7	28-0769	Fowler Motor	1
8	28-0770	Gatch Motor	1
9	M0019	Petro Canada OG2 Grease	.03kg
10	QDF14-1160	Transformer	1
11	QDF17-0138	PC Board Ground Wire	1
12	QDF2034	120Vac Power Supply	1
13	QDF25-0508	Main Grounding Wire	1
14	QDF25-0592	Control Board, Motor	1
15	QDF28-0230	Left Harness - Scale and Network	1
16	QDF28-0231	Right Harness	1
17	QDF28-0258	Scale Control Board/Footboard Cable	1
18	QDF28-0334	Screw Cap	3
19	QDF7878	Rue Ring Cotter	2
20	QDF8042	AMP Cap Housing	1
21	QDF9518	Cable Tie	30
22	QDF9532	Wire Clip	2
23	QDF9533	Pressure Cable Clip	1
24	QDF9541	Strain Relief	3
25	QE71-0572	Ground Label	1
26	QE71-0819-T	Serial Number Plate	1
27	QP23-0256	Screw Cover	4
28	QP23-0735	Control Board Standoff	8
29	QP28-0131-00	Liquid Retention Device	1
30	QPPF1518	Double “D” Plug	1
31	VB15A1O40	Hex Bolt	4
32	VB35A1O50	Carriage Bolt	1
33	VE30A0G	Nylon Locknut	7
34	VE79A1O	Locknut	1
35	VE80A0G	K-lok Locknut	2
36	VG50B1250	Clevis Pin	2
37	VR11H43	Pop Rivet	2
38	VV23A9A20	Pan Head Tapping Screw	2
39	VV33A0G16	Pan Head Machine Screw	1
40	VV33A0G28	Pan Head Machine Screw	6
41	VV83A9E12	Pan Head Tapping Screw	4
42	VV83A9G12	Pan Head Tapping Screw	4
43	VV83A9G16	Pan Head Tapping Screw	4
44	VV84A1H46	Hex Head Tapping Screw	10
45	VW10A10	Flat Washer	1
46	VW10C122402	Washer	2
47	VW10C173602	Nylon Washer	5
48	VW20A10	Spring Washer	4

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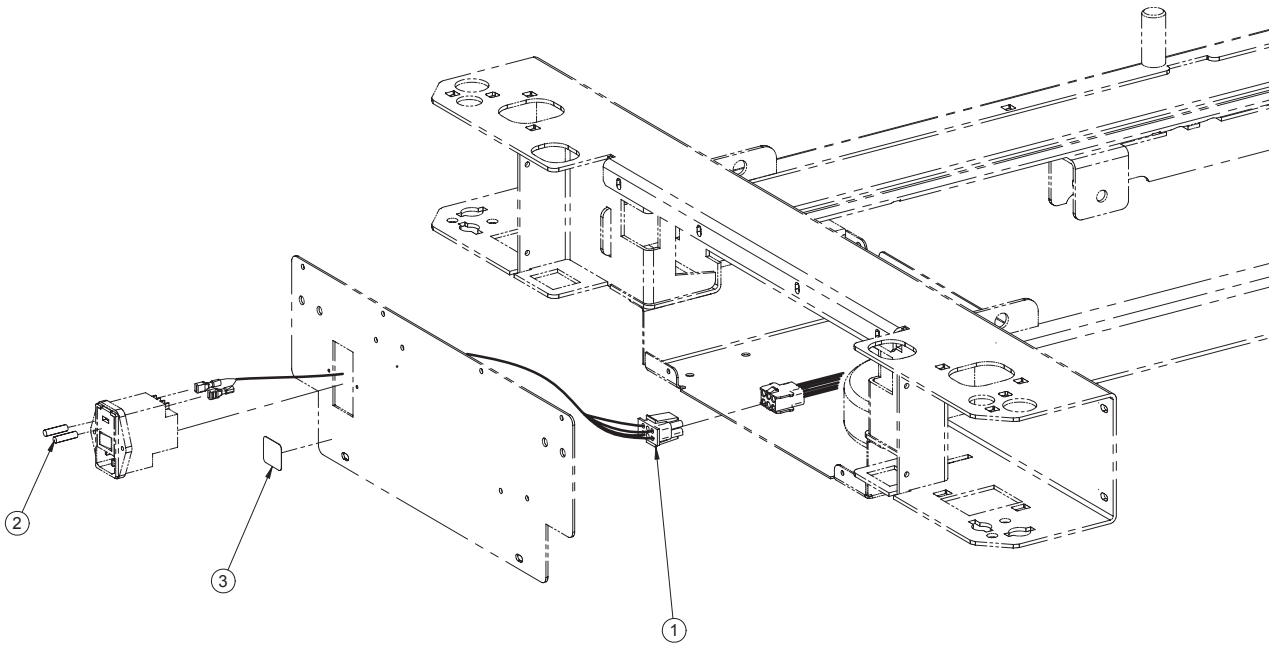
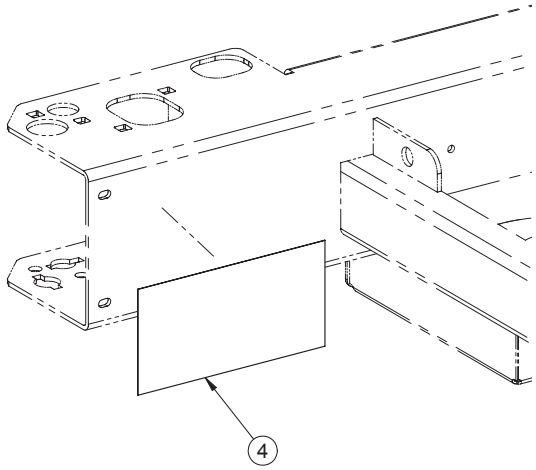
OL280011 Rev 01 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF20-0081	100 Vac Connector	1
2	QDF8078	10A, 250 Vac Fuse	2
3	QE71-0571	Label - 10A, 250 Vac Fuse	1
4	QE71-1283-E	Label - CSA 100 Vac	1

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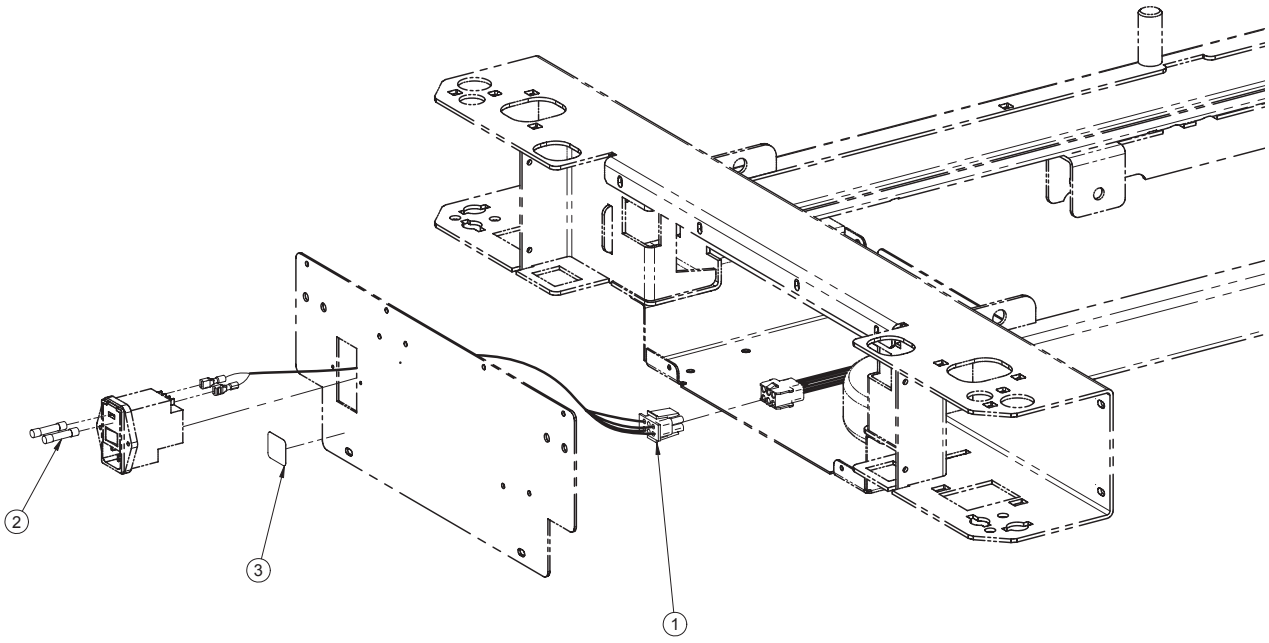
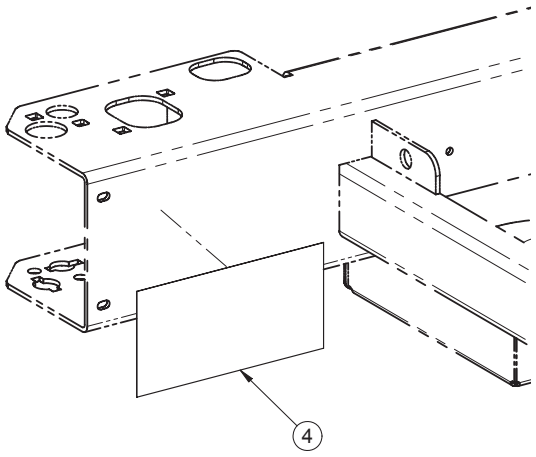
200VAC Electrical System

OL280012 Rev 01 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF20-0082	200 Vac Connector	1
2	QDF8068	6.3A, 250 Vac Fuse	2
3	QE71-0573	Label - 6.3A, 250 Vac Fuses	1
4	QE71-1284-E	Label - CSA 200 Vac	1

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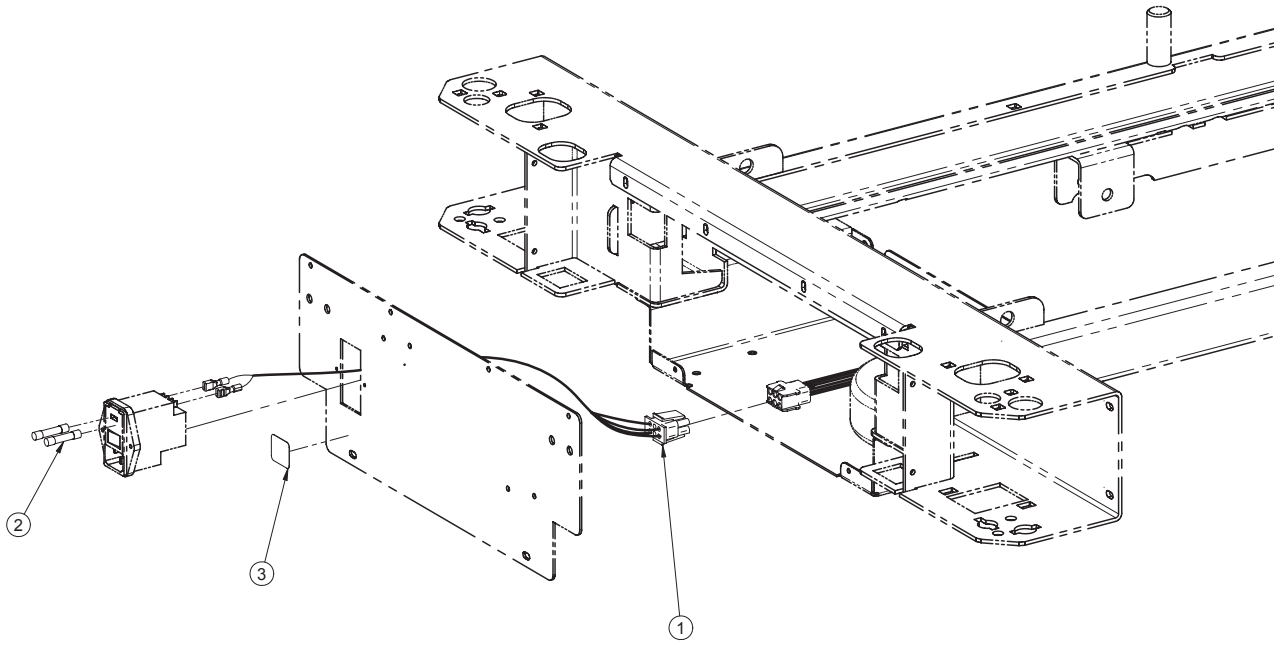
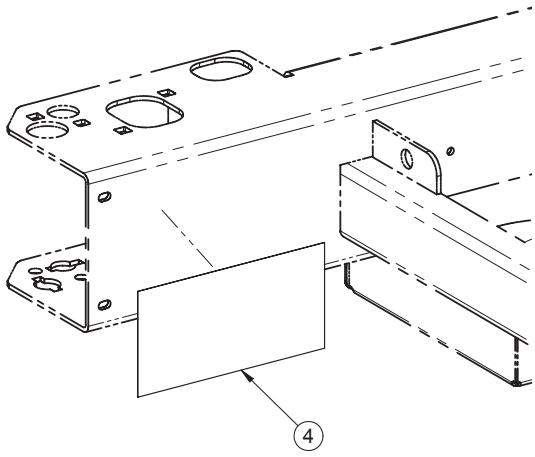
220VAC Electrical System

OL280013 Rev 01 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF20-0083	220 Vac Connector	1
2	QDF8068	6.3A, 250 Vac Fuse	2
3	QE71-0573	Label - 6.3A, 250 Vac Fuse	1
4	QE71-1285-E	Label - CSA 220 Vac	1

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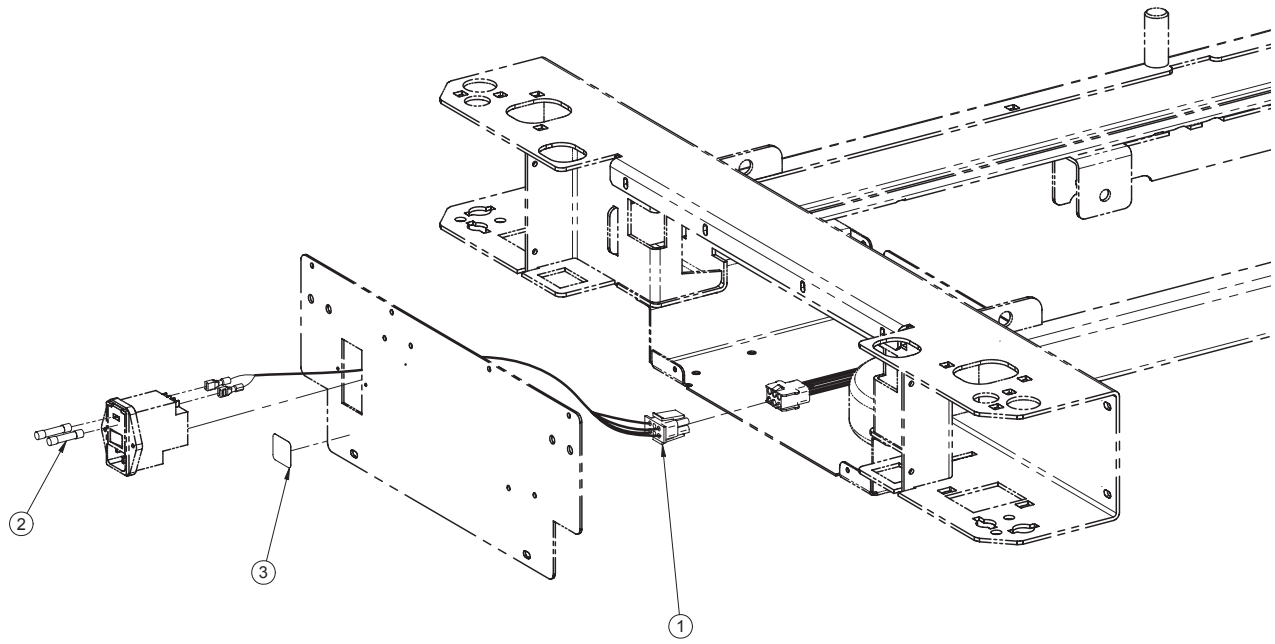
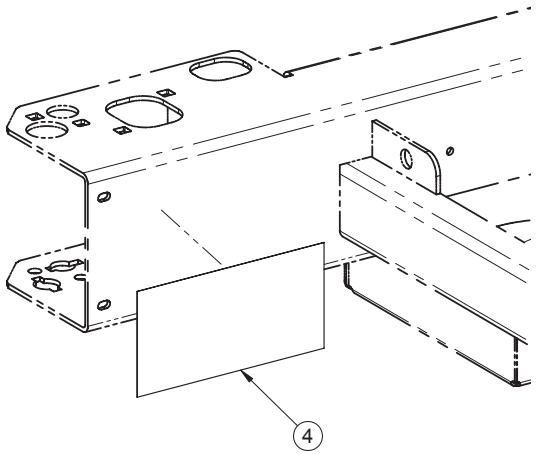
240VAC Electrical System

OL280014 Rev 01 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF20-0084	240 Vac Connector	1
2	QDF8068	6.3A, 250 Vac Fuse	2
3	QE71-0573	Label - 6.3A, 250 Vac Fuse	1
4	QE71-1286-E	Label - CSA 240 Vac	1

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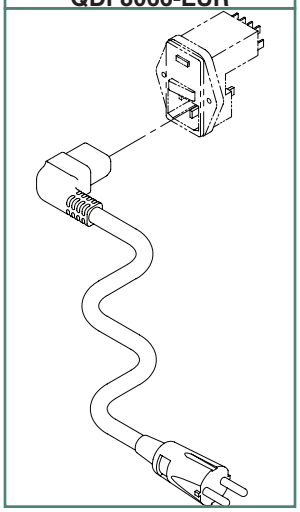
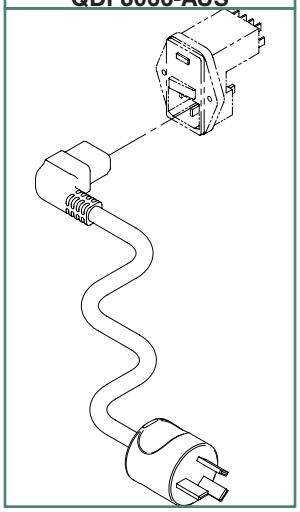
International Power Cord Options

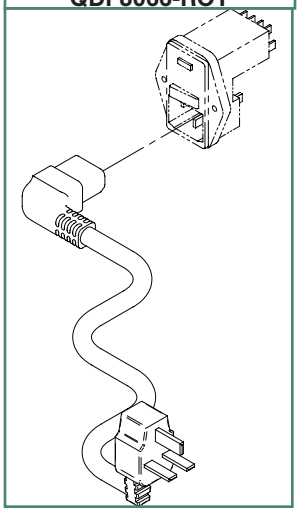
Continental Europe
QDF8066-EUR



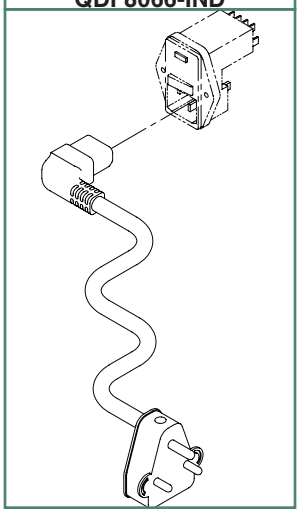
Australia
QDF8066-AUS



United Kingdom
QDF8066-ROY



India
QDF8066-IND



Denmark
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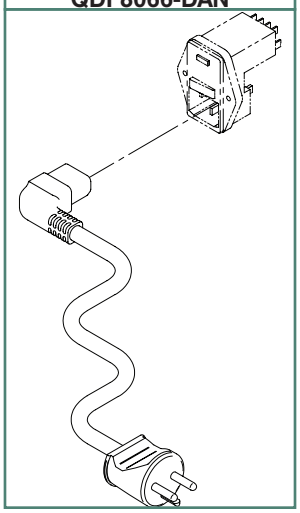
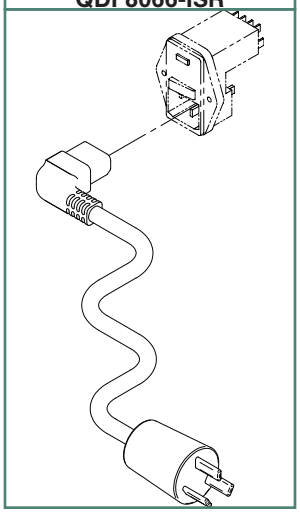
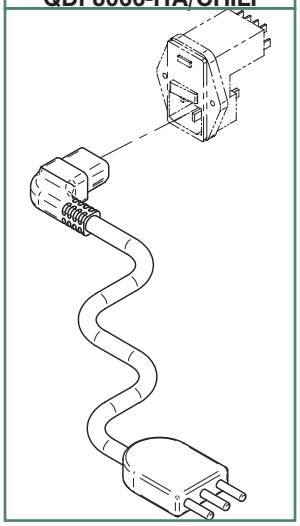


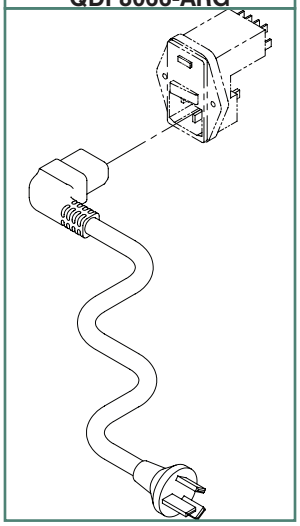
Israel
QDF8066-ISR



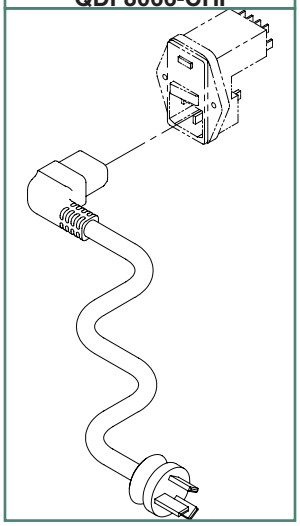
Italy / Chile
QDF8066-ITA/CHILI



Argentina
QDF8066-ARG



China
QDF8066-CHI



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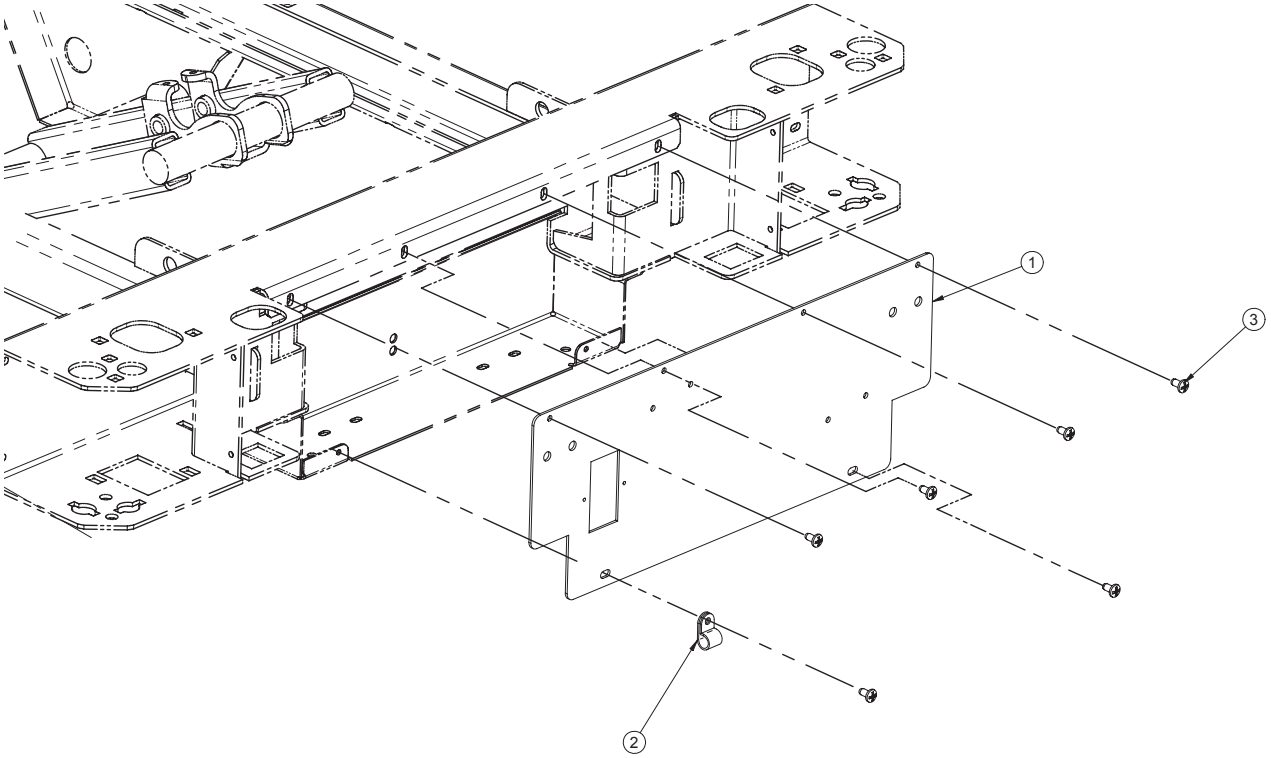
Head End Cover

OL280023L Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.
1	28-0154L	Head End Cover	1
2	QDF9520	Wire Clip	1
3	VV83A9G12	Pan Head Tapping Screw	6

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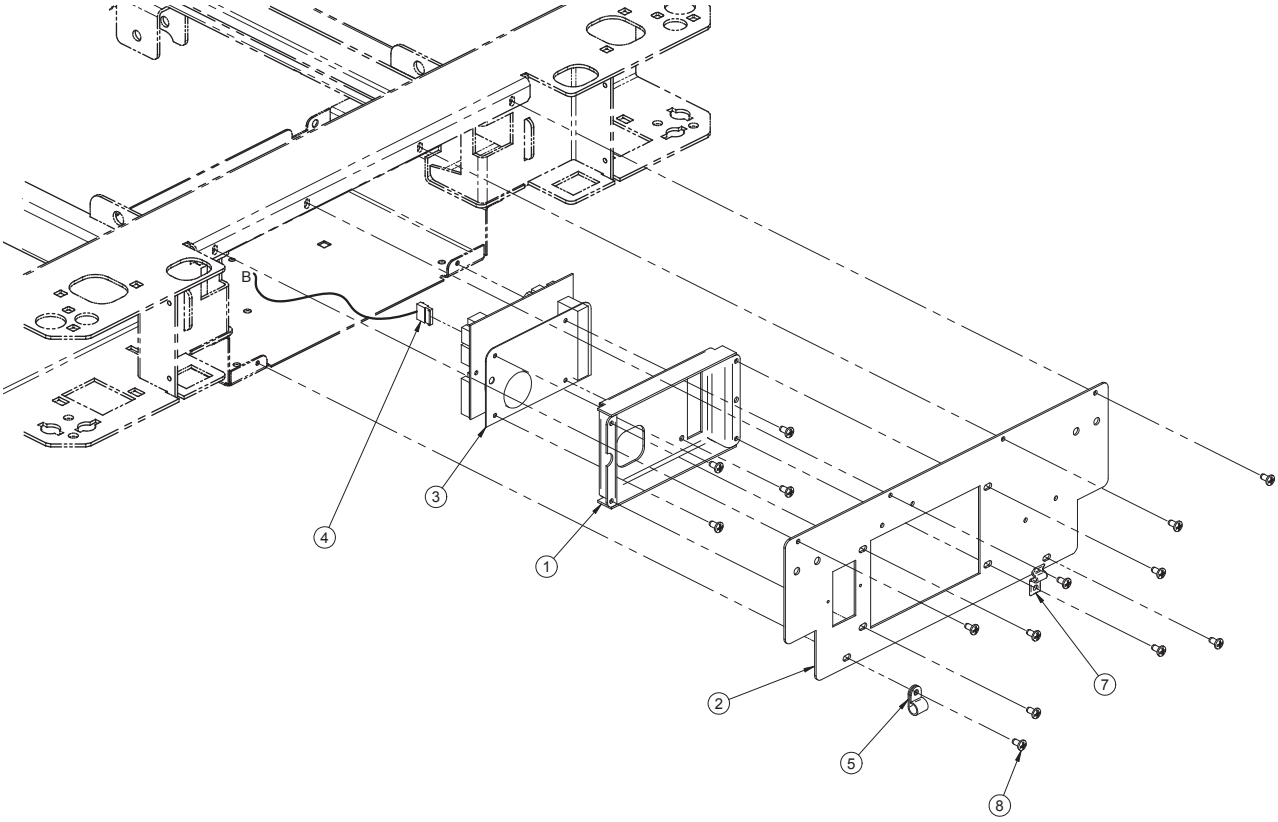
Head End Cover with Nurse Call, without Scale and Pendant Port

OL280022L Rev 04 (Reference Only)



Cable Connection Table				
Cable	**Connector**	**To**	**Cable**	**Connector**
QDF21-2895	1	To	QDF21-1163	J3
QDF21-2895	2	To	QDF25-0492	J7

Item	Part No.	Part Name	Qty.
1	25-0379L	Nurse Call Mounting Plate	1
2	28-0163L	Head End Cover	1
3	QDF21-1163	Room Interface Board	1
4	QDF21-2895	Network Cable	1
5	QDF9520	Wire Clip	1
7	QDF5097	GENIII Connector Support	1
8	VV83A9G12	Pan Head Tapping Screw	14

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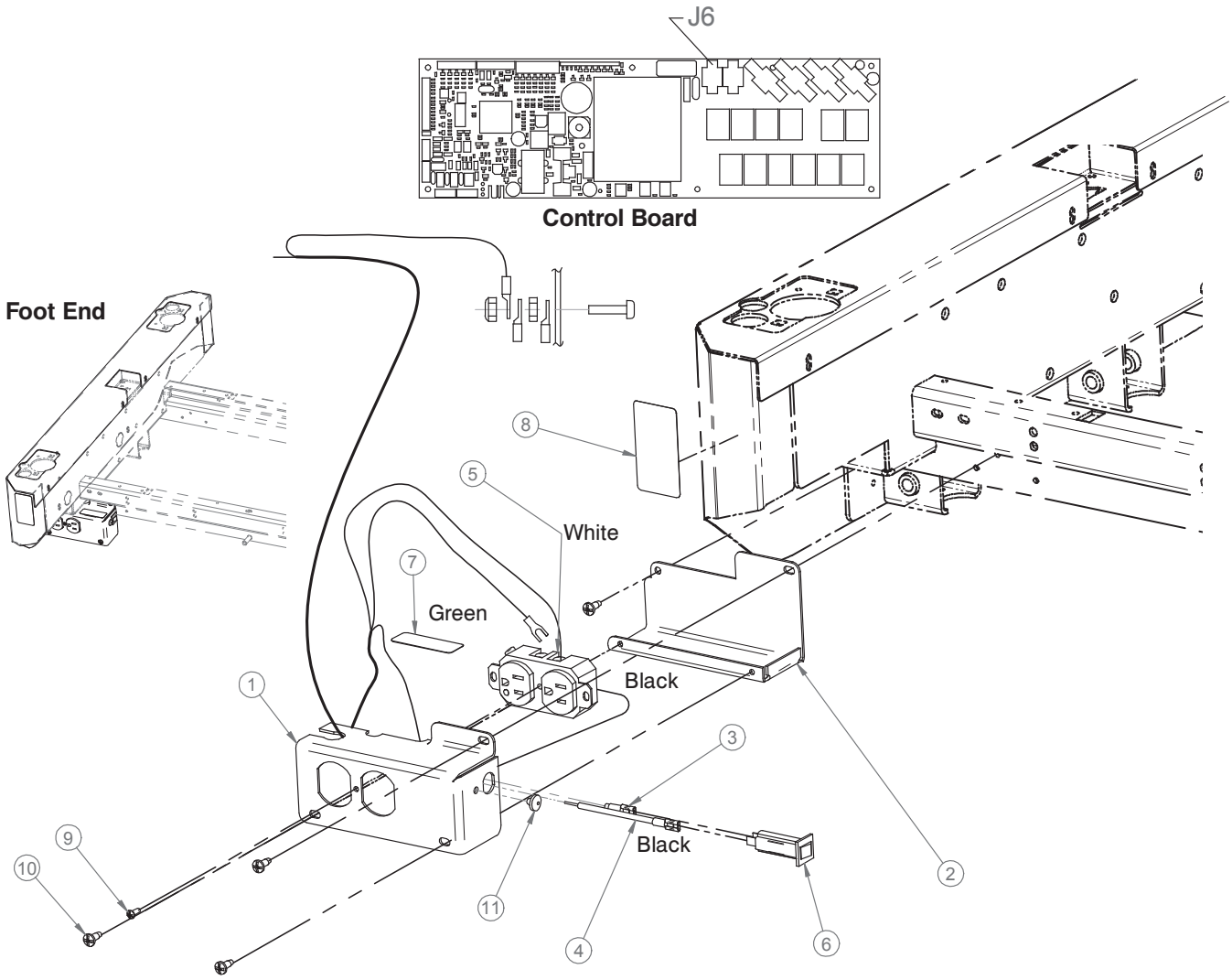
120 VAC Auxiliary Outlet

OL250029L Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.
1	25-0408L	Auxiliary Outlet Casing	1
2	25-0409L	Auxiliary Outlet Bracket	1
3	QDF17-0199	Auxiliary 120V Plug Wire	1
4	QDF17-0223	Circuit Breaker Wire	1
5	QDF8024	Double Socket Outlet	1
6	QDF9025	Circuit Breaker - 5A	1
7	QE71-0225-T	Circuit Breaker Label	1
8	QE71-0742-T	Auxiliary Outlet Label	1
9	VV37A1C12	Truss Head Machine Screw	1
10	VV83A9G16	Pan Head Tapping Screw	4
11	QPCK3001	Rubber Play Bumper	1

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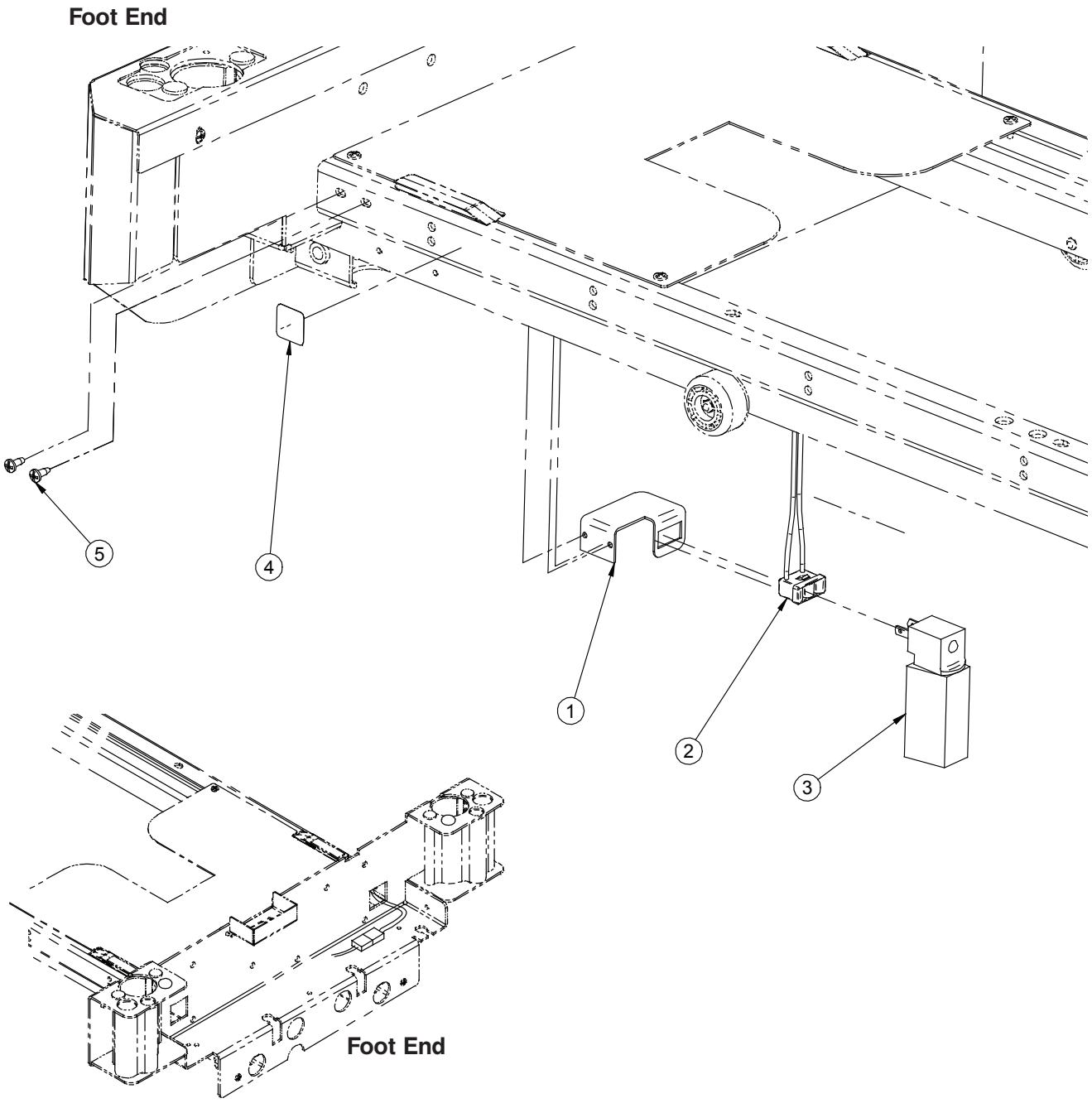
Night Light Option

OL250018 Rev 03 (Reference Only)



Item	Part No.	Part Name	Qty.
1	25-0273Z	Night Light Support	1
2	QDF18825	Interlocking Outlet	1
3	QDF9539	Night Light	1
4	QE71-0712	Night Light Label	1
5	VV83A9G16	Pan Head Tapping Screw	2

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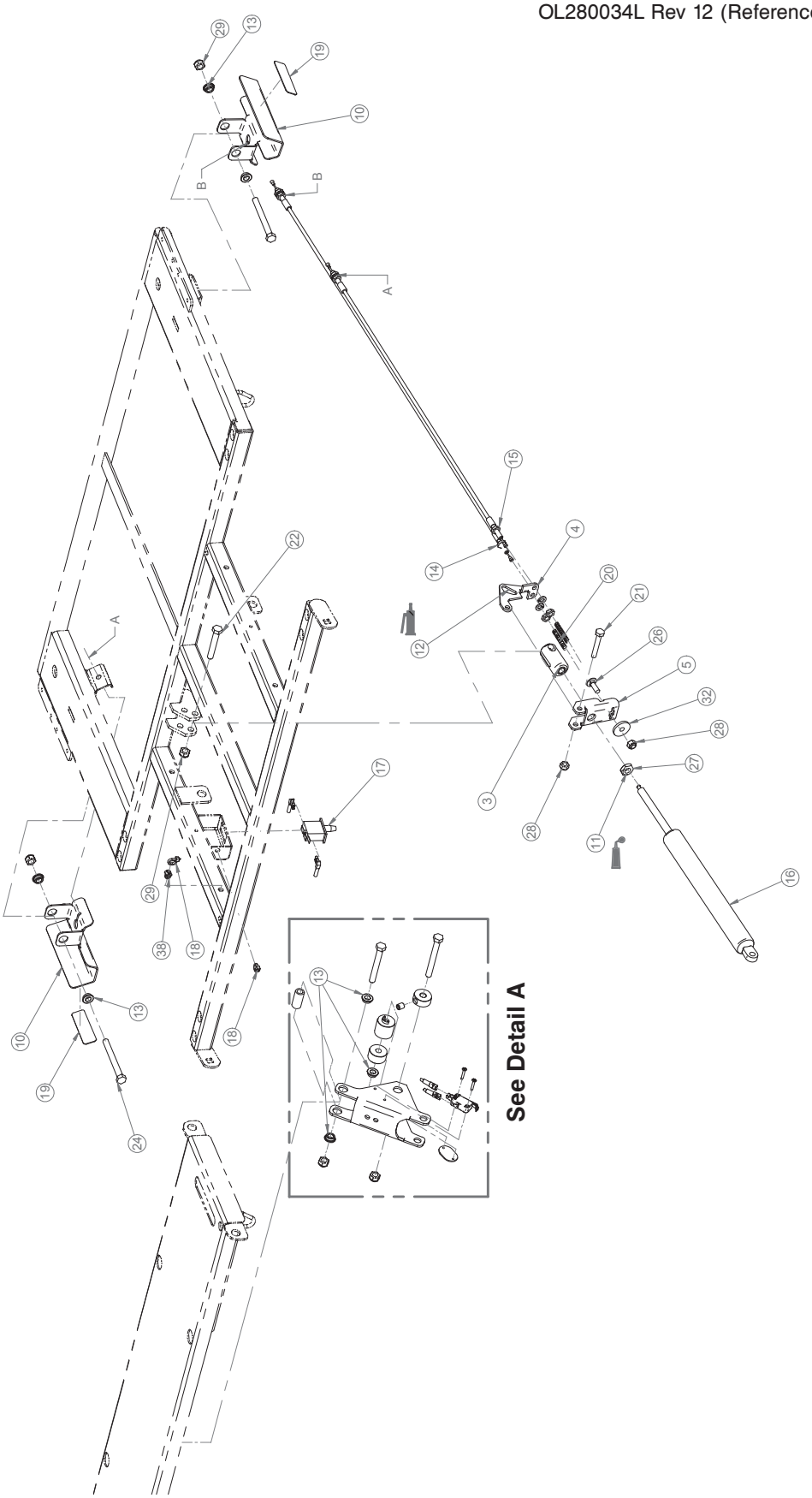
CPR Mechanism

OL280034L Rev 12 (Reference Only)



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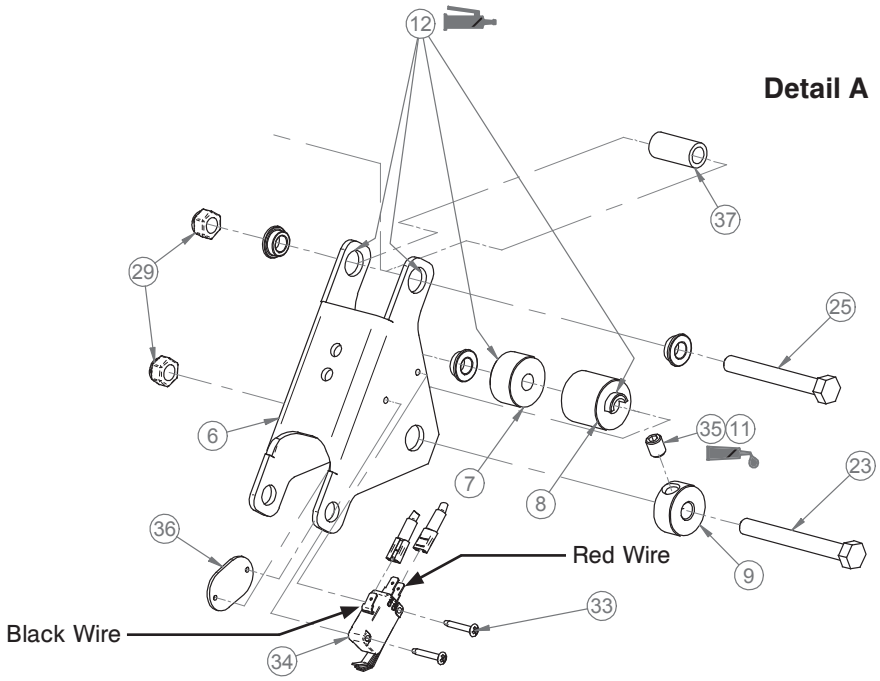
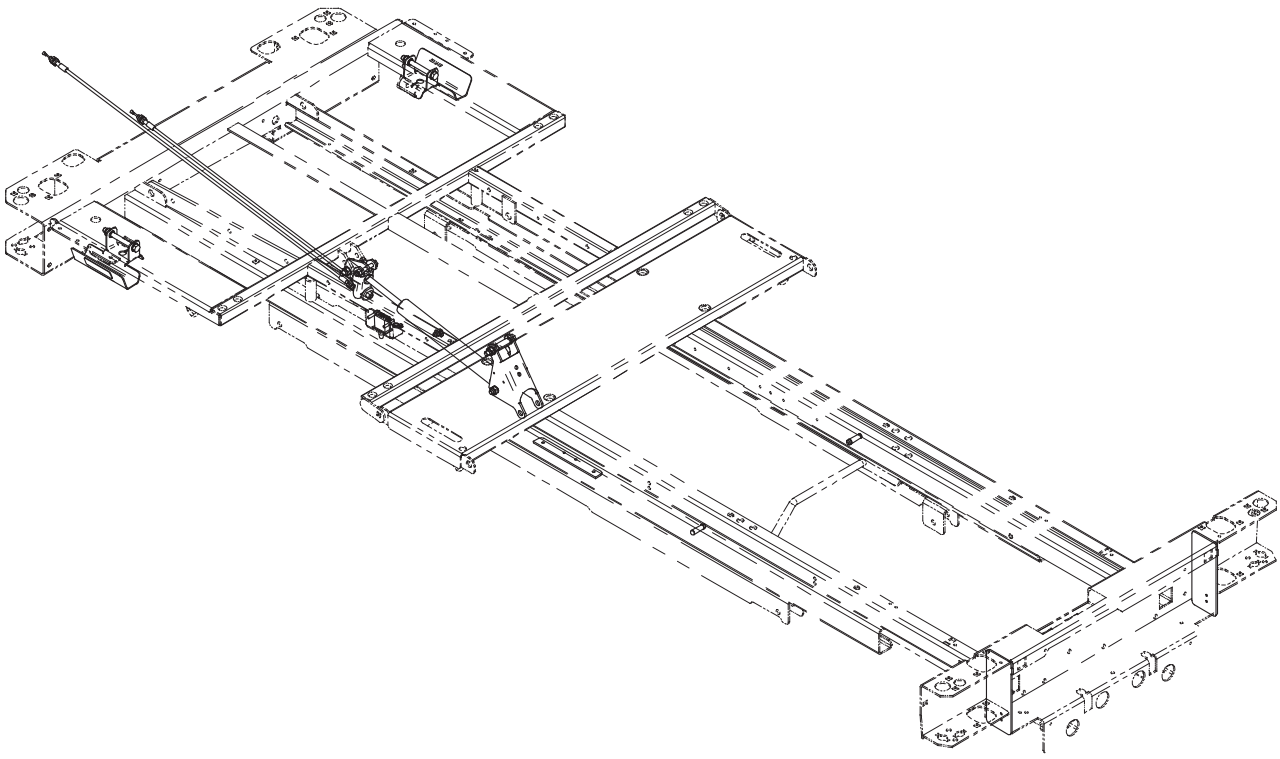
CPR Mechanism





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CPR Mechanism - OL280034L Rev 12 (Reference Only)

Item	Part No.	Part Name	Qty.
3	20-0017Z	Activation Mechanism Socket	1
4	20-0018Z	Mobile Lever	1
5	20-0019Z	Fixed Lever	1
6	25-0362Z	Mattress Support Lever	1
7	25-0456Z	Sleeve	1
8	25-0514Z	Cylinder Inner Sleeve	1
9	25-0515Z	Cylinder Outer Sleeve	1
10	28-0242L	CPR Handle	2
11	M0008	Threadlocker (Blue)	.15 mL
12	M0019	Petro Canada OG2 Grease	.03 kg
13	QDF17-0020	Shoulder Spacer	7
14	QDF19-0354	Head Section Cable	1
15	QDF19-0815	Short Head Section Cable	1
16	QDF5090	CPR Pneumatic Cylinder	1
17	QDF9159	Cherry Switch	1
18	QDF9518	Cable Tie	2
19	QE71-0963-BIL	Label - CPR	2
20	QRC18579	Compression Spring	2
21	VB15A1N44	Hex Bolt	1
22	VB15A1O48	Hex Bolt	1
23	VB15A1O54	Hex Bolt	1
24	VB15A1O56	Hex Bolt	2
25	VB18A1O52	Hex Bolt	1
26	VB35A1N24	Carriage Bolt	1
27	VE20AOP	Locknut	1
28	VE30A1N	Nylon Hex Locknut	2
29	VE30A1O	Nylon Hex Locknut	5
32	23-0762	Nylon Shoulder Washer	1
33	VV87A9A24	Truss Head Tapping Screw	2
34	1325P003	Micro Switch	1
35	VV60B1O12	Set Screw	1
36	17-0192	Nut	1
37	28-0402	Spacer	1
38	QDF5096	Flat Tie Holder	1

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Notes

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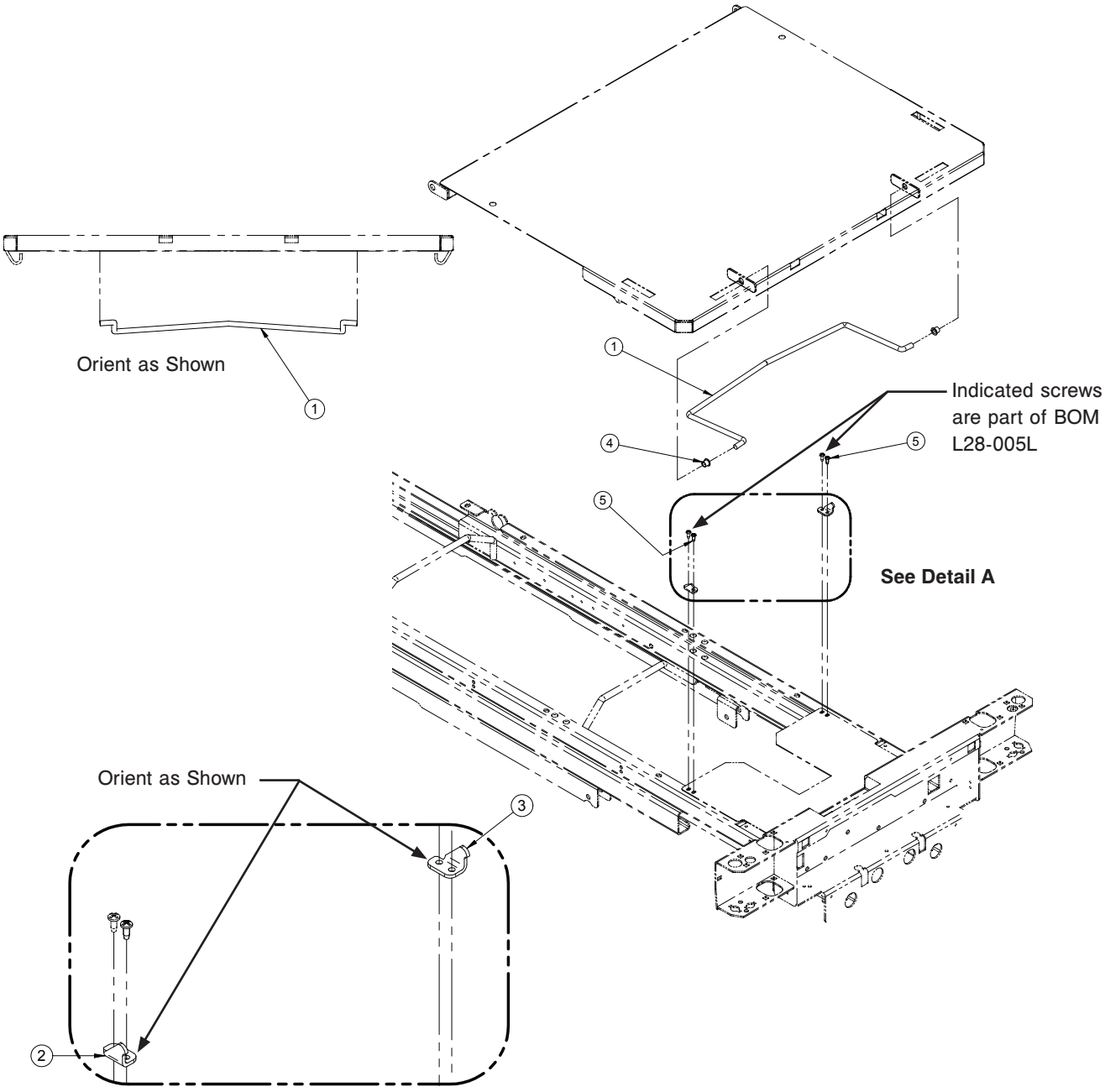
Foot Section with Support Rod

OL280047L Rev 00 (Reference Only)



Detail A

Item	Part No.	Part Name	Qty.
1	QDF28-0419L	Support Rod	1
2	28-0461Z	Right Hook	1
3	28-0468Z	Left Hook	1
4	QPNI2404	Nylon Bushing with Shoulder Spacer	2
5	VV83A9G16	Pan Head Tapping Screw	2

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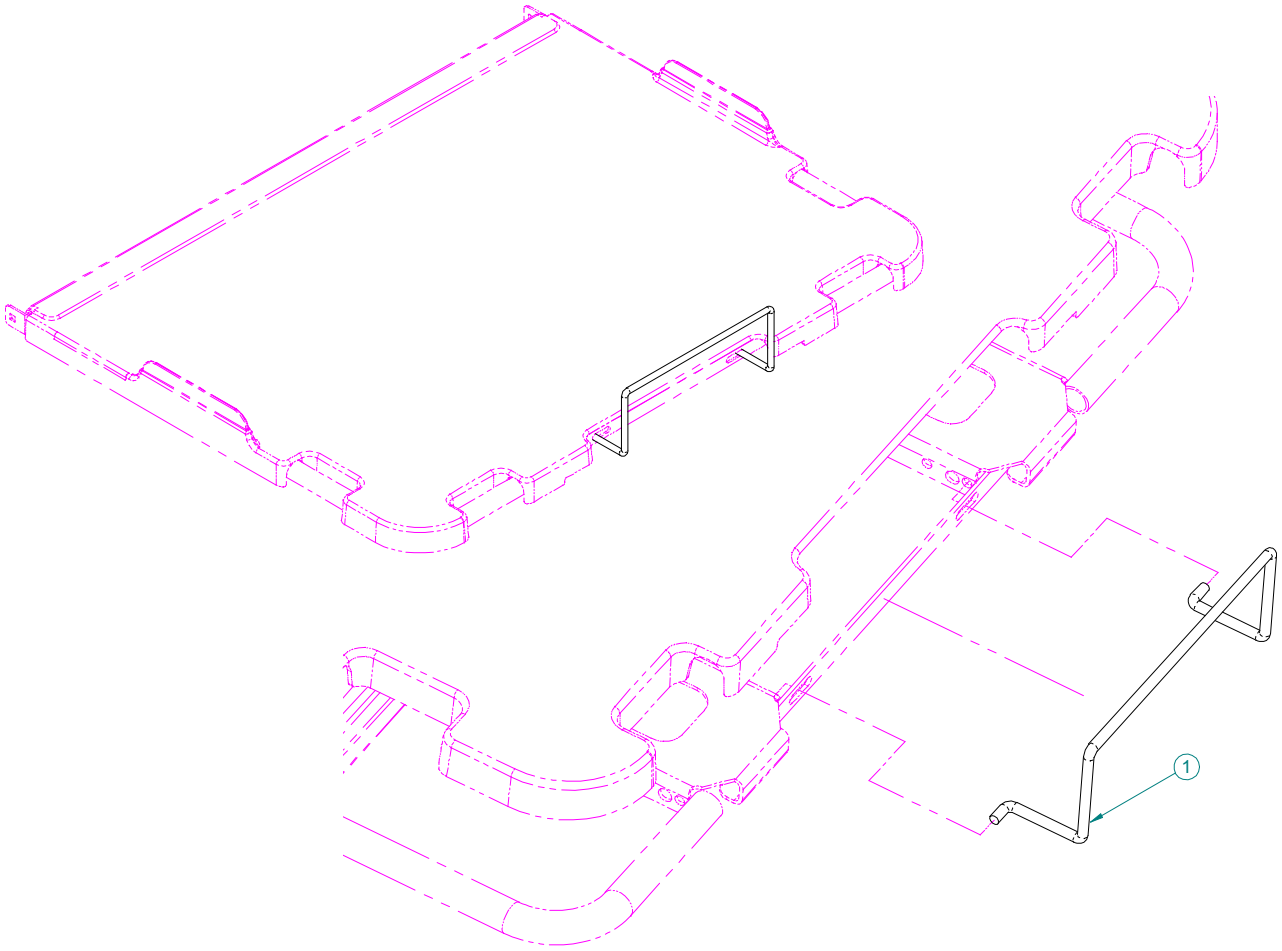
Foot End Mattress Retainer

OL250022L Rev 00 (Reference Only)
OL250023L Rev 00 (Reference Only)



Foot End Mattress Retainer - OL250022 (80”) / OL250023 (82”/84”) Rev-00 (For Reference Only)

Item	Part No.	Part Name	Qty.
1	17-0211L	Foot End Mattress Retainer	1

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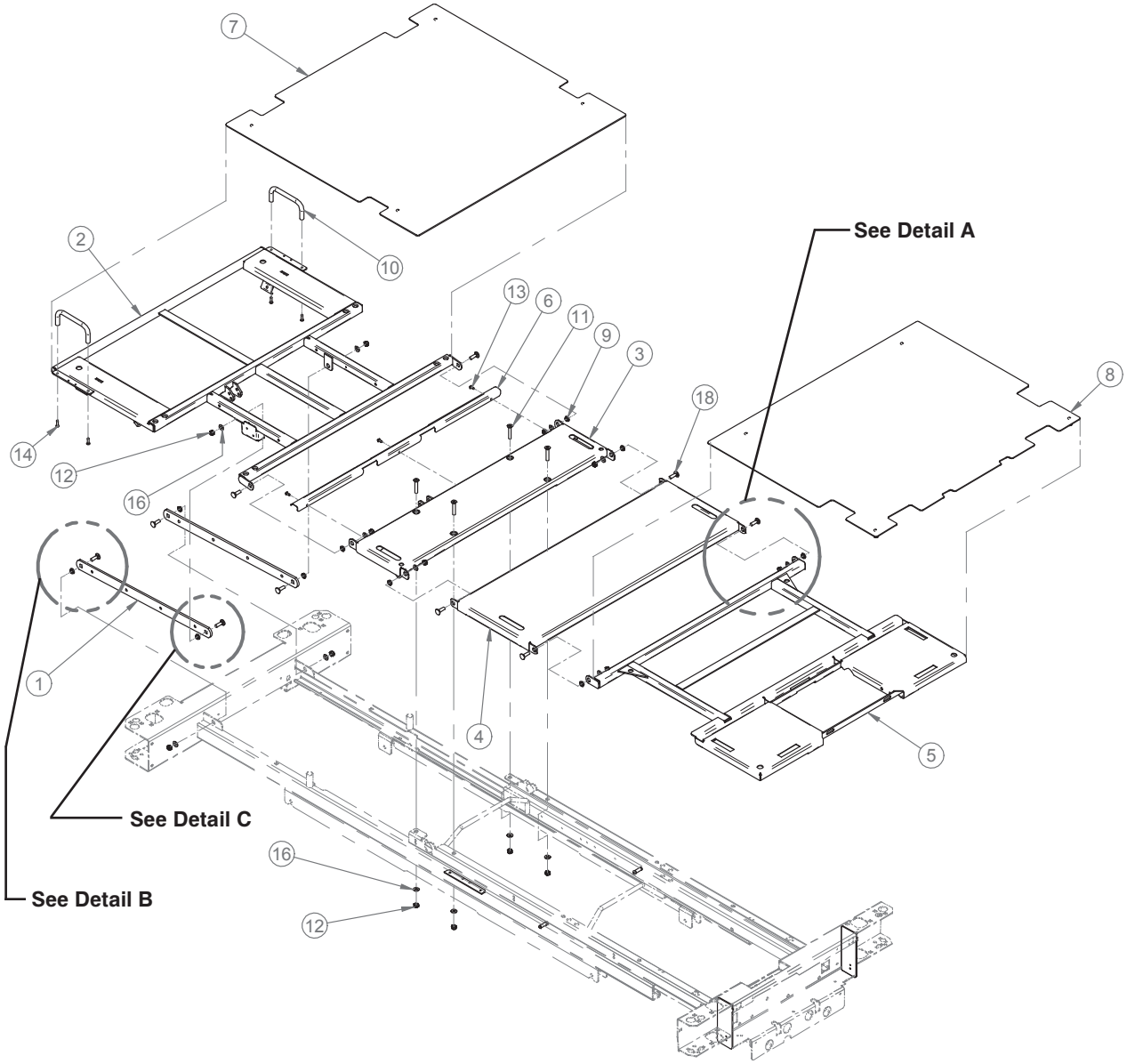
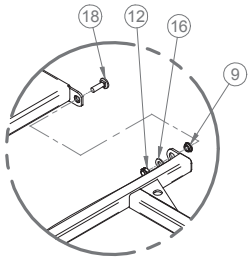
Litter with Plastic Covers

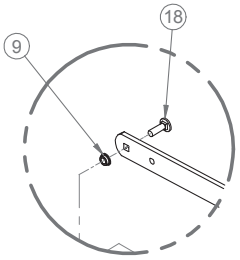
OL280032L Rev 03 (Reference Only)



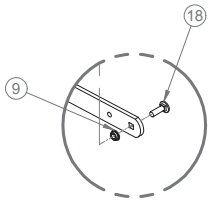
Detail A



Detail B



Detail C



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Litter with Plastic Covers - OL280032 Rev 03 (For Reference Only)

Item	Part No.	Part Name	Qty.
1	28-0342L	Head Section Lever	2
2	28-0530L	Head Section Frame	1
3	28-0345L	Seat Section	1
4	28-0034L	Thigh Section	1
5	28-0035L	Foot Section Frame	1
6	28-0354L	Protective Plate	1
7	28-0101	Plastic Head Section	1
8	28-0103	Plastic Foot Section	1
9	QDF17-0020	Shoulder Spacer	10
10	QP14034-13	Mattress Retainer	2
11	VV11A1O44	Flat Head Hex Socket Cap Screw	4
12	VE30A1O	Nylon Hex Locknut	14
13	VV83A9G16	Pan Head Tapping Screw	3
14	VV83A9G24	Pan Head Tapping Screw	4
16	VW10A10	Flat Washer	14
18	VB35A1O32	Carriage Bolt	10

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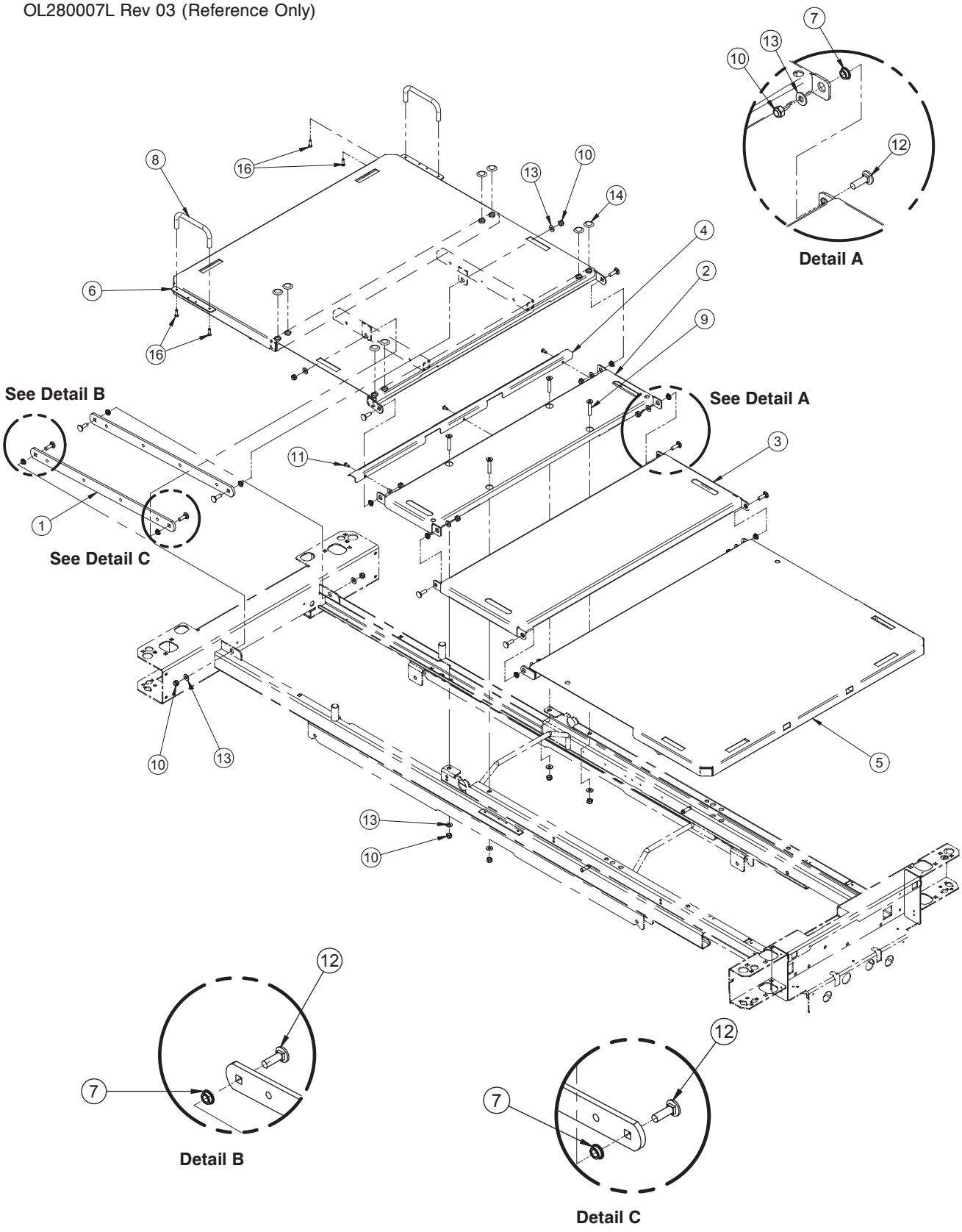
Litter with Steel Covers

OL280007L Rev 03 (Reference Only)



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Litter with Steel Covers - OL280007L Rev 03 (For Reference Only)

Item	Part No.	Part Name	Qty.
1	28-0342L	Head Section Lever	2
2	28-0345L	Seat Section	1
3	28-0034L	Thigh Section	1
4	28-0354L	Protective Plate	1
5	28-0196L	Foot Section - Steel	1
6	28-0529L	Head Section - Steel	1
7	QDF17-0020	Shoulder Spacer	10
8	QP14034-13	Mattress Retainer	2
9	VV11A1O44	Flat Head Hex Socket Cap Screw	4
10	VE30A1O	Nylon Hex Locknut	14
11	VV83A9G16	Pan Head Tapping Screw	3
12	VB35A1O32	Carriage Bolt	10
13	VW10A10	Flat Washer	14
14	QDF8086	Cap	8
16	VV83A9G24	Pan Head Tapping Screw	4

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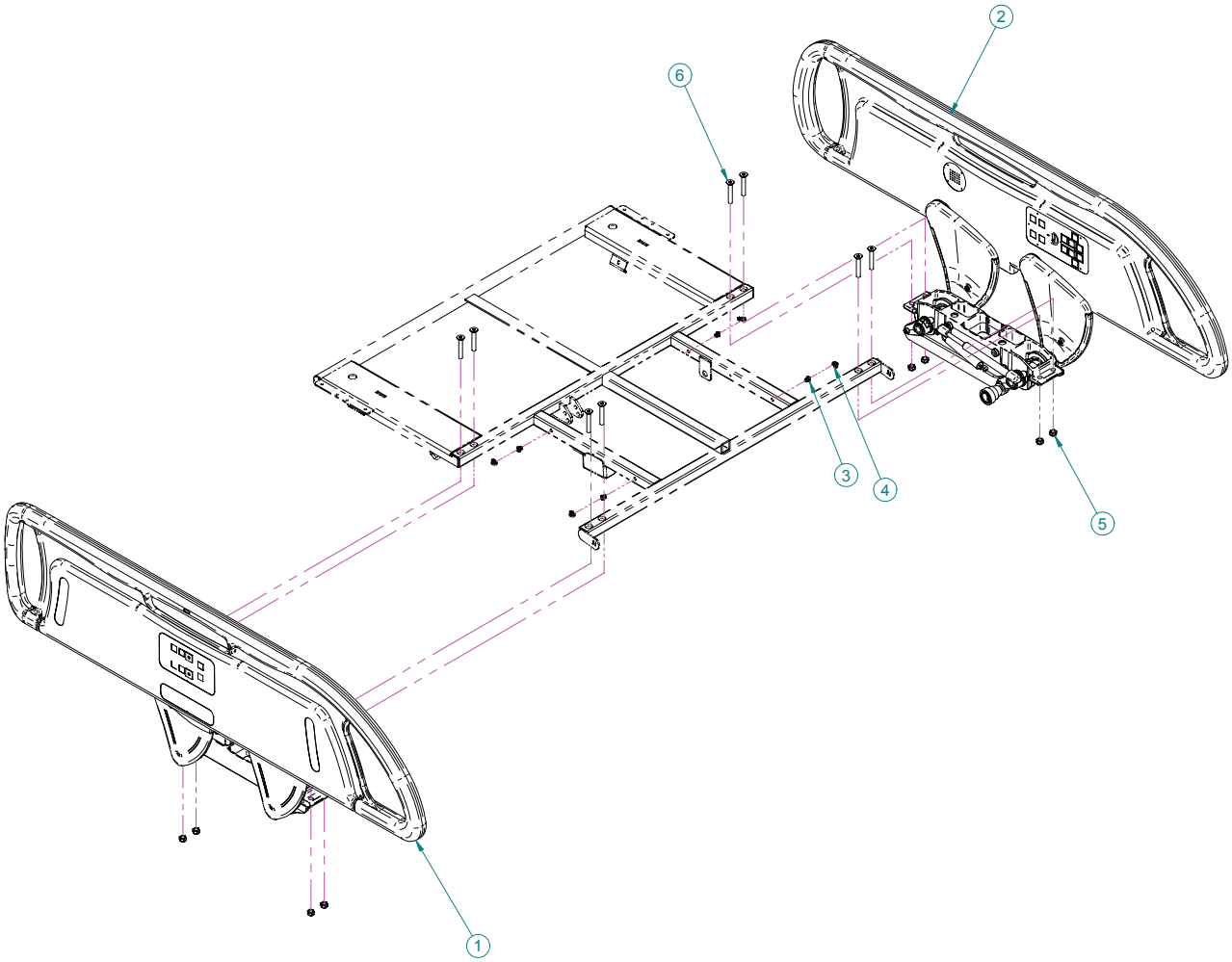
Head End Siderail Assembly

L28-001L Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
1	28-0001L	Right Head Siderail (page 119)	1
2	28-0002L	Left Head Siderail (page 121)	1
3	QDF5096	Flat Tie Holder	4
4	QDF9518	Cable Tie	4
5	VE30A1O	Nylon Hex Locknut	8
6	VV11A1O48	Flat Head Hex Socket Cap Screw	8

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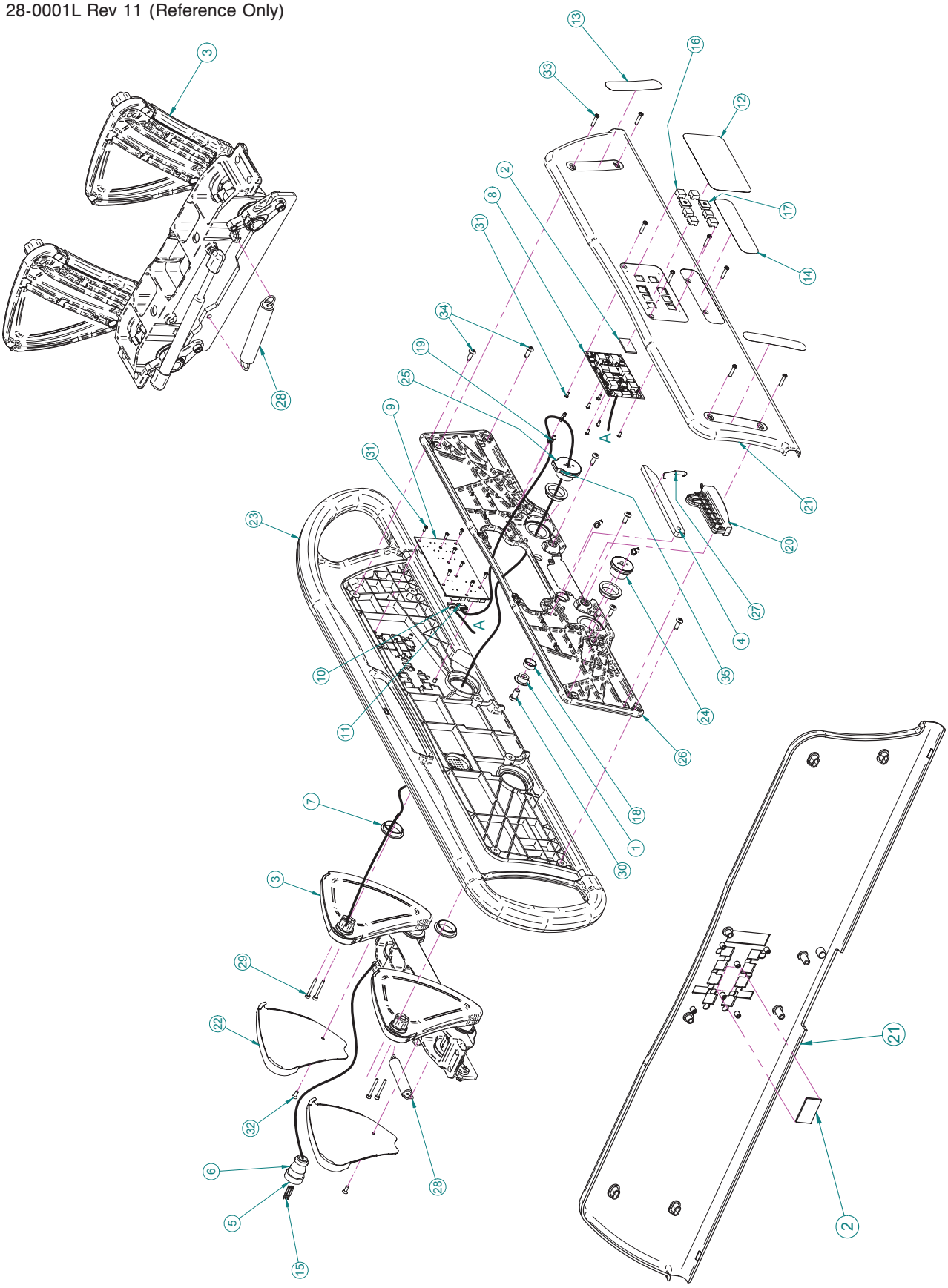
Head End Siderail Assembly, Right

28-0001L Rev 11 (Reference Only)



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Head End Siderail Assembly, Right

Head End Siderail Assembly, Right - 28-0001L Rev 11 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QPA28-0493	Siderail Sleeve	1
2	25-0522	EMI Protective Tape	1
3	28-0006L	Siderail Mechanism (page 134)	1
4	QDB28-0278Z	Siderail Latch	1
5	QDF2042	14 Position Connector	1
6	QDF2043	Cable Clamp	1
7	QDF2049	Bushing	4
8	QDF21-1151	Control Board, Head End	1
9	QDF21-1169	Control Board, Patient	1
10	QDF21-2895	Network Cable	1
11	QDF25-0387	Network Cable, Side Controls	1
12	QDF28-0139	Label - Bed Controls, Outside, Right	1
13	QDF28-0145	Screw Cap	2
14	QDF28-0146	Label - Siderail Latch	1
15	QDF9018	Amp Pin Contact	6
16	QDF9183	Control Board Button	6
17	QDF9184	Control Board Cap	2
18	QDF28-0491	Bushing	1
19	QDF9518	Cable Tie	4
20	QP28-0489-08	Siderail Handle, Right	1
21	QP25-0186-13	Siderail Cover, Head End, Right	1
22	QP28-0040-13	Cover, Siderail Arm	2
23	QP28-0517-13	Siderail, Head Right	1
24	QPA28-0015	Siderail Sleeve	1
25	QPA28-0016	Sleeve with Lock	1
26	QPA28-0095	Siderail Frame, Head, Right	1
27	QRE25-0245	Spring	1
28	QRE28-0293	Spring	1
29	VV10B0G40-S	Hex Socket Head Cap Screw	4
30	VV10A1P20-S	Hex Socket Low Head Cap Screw	1
31	VV23A9C12HL	Pan Head Tapping Screw	14
32	VV31A0G16	Flat Head Machine Screw	2
33	VV33A0G28-S	Pan Head Machine Screw	8
34	VVB3A9N24PF	Pan Head Screw	6
35	M0019	OG2 Grease	.03 kg

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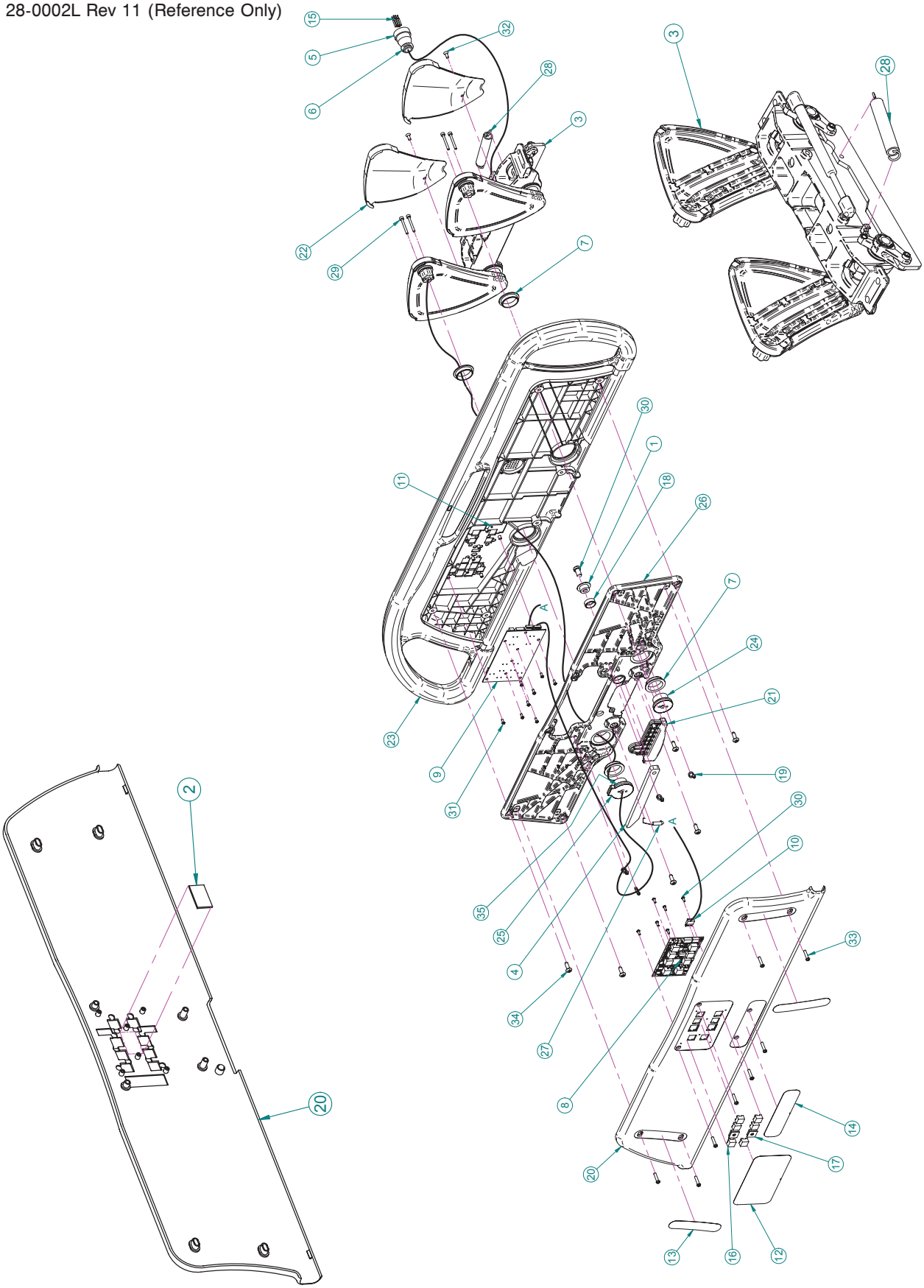
Head End Siderail Assembly, Left

28-0002L Rev 11 (Reference Only)



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Head End Siderail Assembly, Left

Head End Siderail Assembly, Left - 28-0002L Rev 11 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QPA28-0493	Siderail Sleeve	1
2	25-0522	EMI Protective Tape	1
3	28-0005L	Siderail Mechanism (page 135)	1
4	QDB28-0278Z	Siderail Latch	1
5	QDF2042	14 Position Connector	1
6	QDF2043	Cable Clamp	1
7	QDF2049	Bushing	4
8	QDF21-1151	Control Board, Head End	1
9	QDF21-1169	Control Board, Patient	1
10	QDF21-2895	Network Cable	1
11	QDF25-0387	Network Cable, Side Controls	1
12	QDF28-0140	Label - Bed Controls, Outside, Left	1
13	QDF28-0145	Screw Cap	2
14	QDF28-0146	Label - Siderail Latch	1
15	QDF9018	Amp Pin Contact	6
16	QDF9183	Control Board Button	6
17	QDF9184	Control Board Cap	2
18	QDF28-0491	Bushing	1
19	QDF9518	Cable Tie	4
20	QP25-0187-13	Outside Cover, Head End, Left	1
21	QP28-0490-08	Siderail Handle, Left	1
22	QP28-0039-13	Cover, Siderail Arm	2
23	QP28-0518-13	Siderail, Head Left	1
24	QPA28-0015	Siderail Sleeve	1
25	QPA28-0016	Sleeve with Lock	1
26	QPA28-0096	Siderail Frame, Head, Left	1
27	QRE25-0245	Spring	1
28	QRE28-0293	Spring	1
29	VV10B0G40-S	Hex Socket Head Cap Screw	4
30	VV10A1P20-S	Hex Socket Low Head Cap Screw	1
31	VV23A9C12HL	Pan Head Screw	14
32	VV31A0G16	Flat Head Machine Screw	2
33	VV33A0G28-S	Pan Head Machine Screw	8
34	VVB3A9N24PF	Pan Head Tapping Screw	6
35	M0019	OG2 Grease	.03 kg

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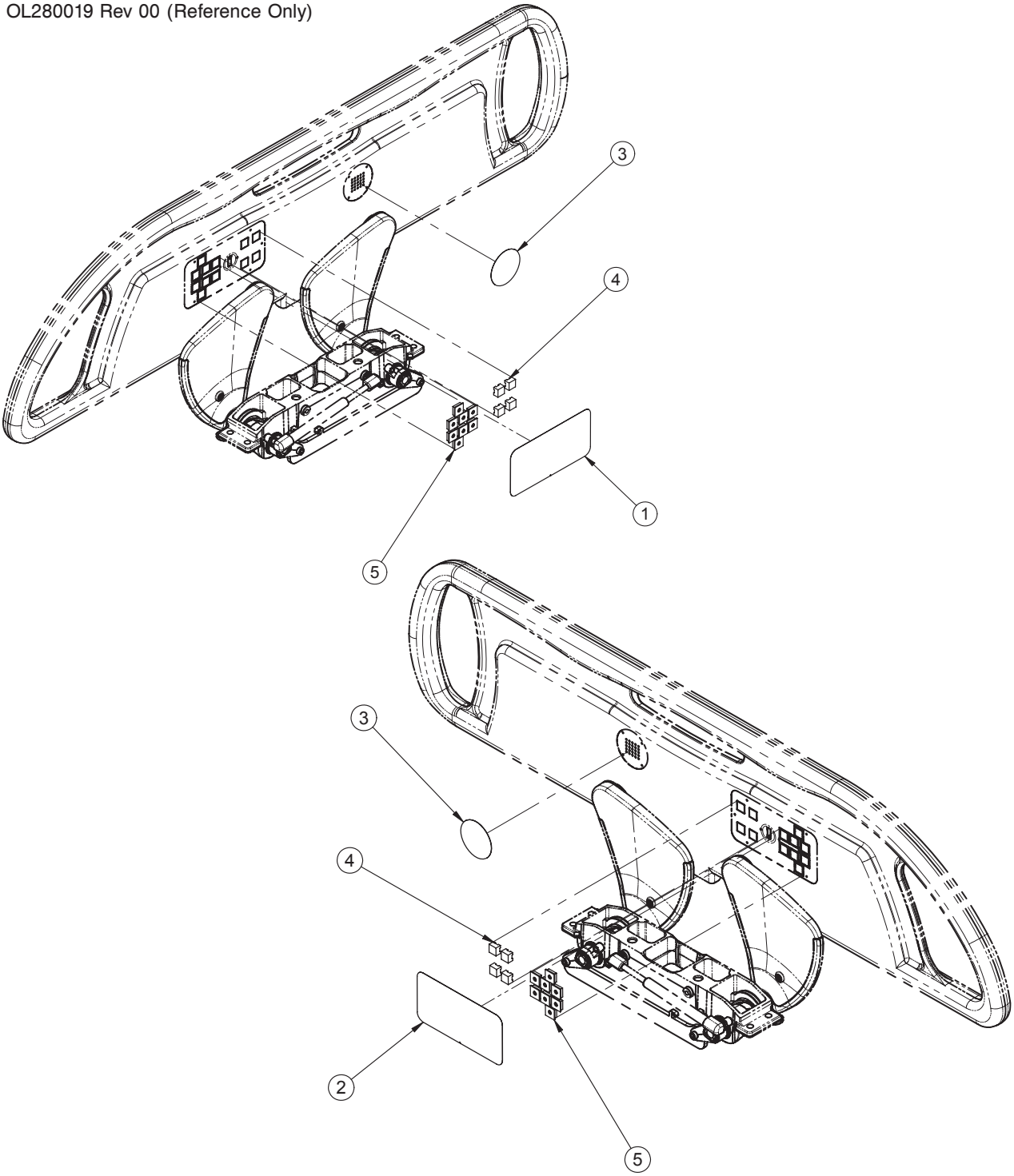
Head End Siderails without Nurse Call and Communication

OL280019 Rev 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QDF28-0248	Label - Patient Control, Right	1
2	QDF28-0249	Label - Patient Control, Left	1
3	QDF28-0335	Speaker Label	2
4	QDF9183	Control Card Button	8
5	QDF9184	Control Card Cap	16

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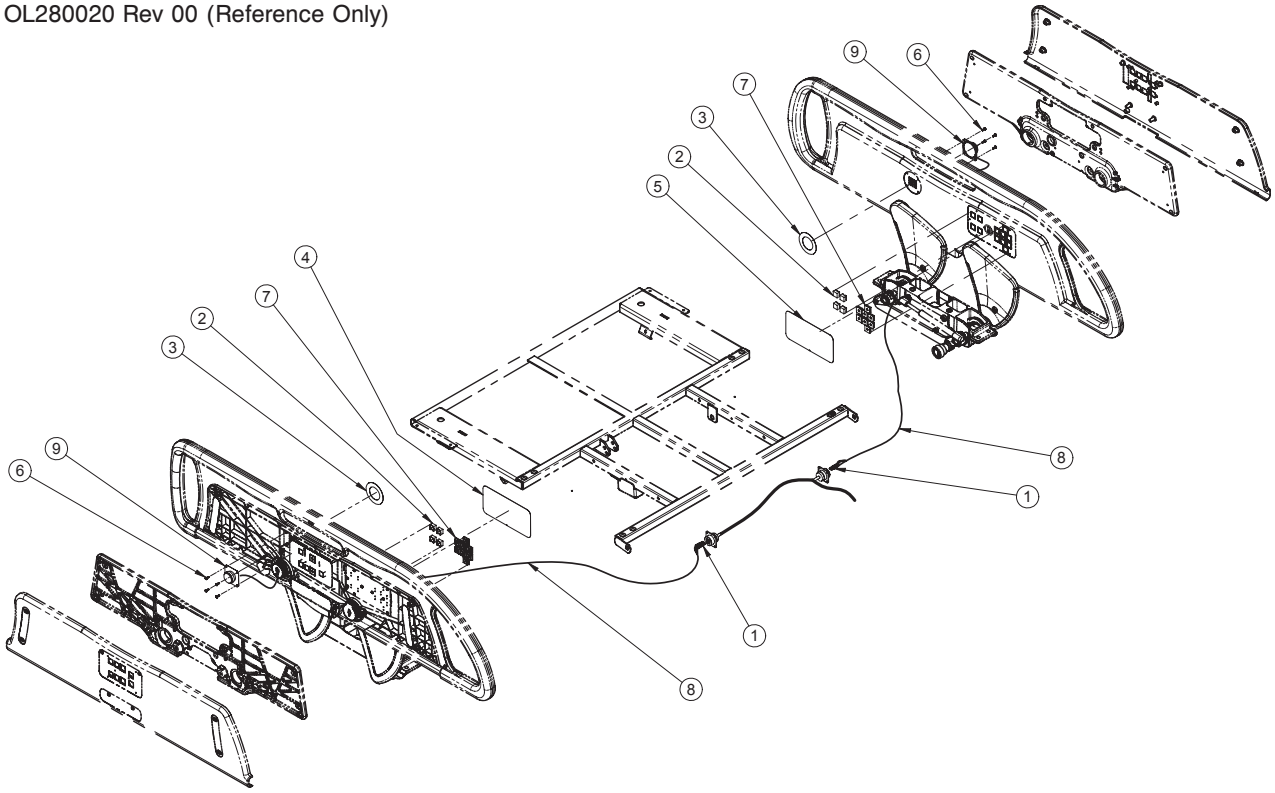
Head End Siderails with Nurse Call, without Communication

OL280020 Rev 00 (Reference Only)



Cable Connection Table				
Cable	**Connector**	**To**	**Cable**	**Connector**
QDF28-0344	MTA 3 Position	To	QDF21-1169	J3
QDF28-0344	Blue Wire	To	QDF2042	Position 9
QDF28-0344	Green Wire	To	QDF2042	Position 8
QDF28-0344	Drain	To	QDF2042	Position 7
QDF28-0344	White Wire	To	QDF2042	Position 10
QDF28-0344	Black Wire	To	QDF2042	Position 11
QDF28-0344	Red Wire	To	QDF2042	Position 12
QDF28-0344	N.C.	To	QDF26-0111	Position 1
QDF28-0344	Position 2	To	QDF26-0111	Position 2
QDF28-0344	Position 3	To	QDF26-0111	Position 3
QDF28-0230	MTA 3 (Blue, Green)	To	QDF26-1163	J10, J11
QDF28-0230	MTA 3 (White, Black)	To	QDF26-1163	J14, J15

Item	Part No.	Part Name	Qty.
1	QDF9018	AMP Pin Contact	12
2	QDF9183	Control Board Button	8
3	QDF28-0336	Label - Speaker	2
4	QDF28-0252	Label - Patient Control, Right	1
5	QDF28-0253	Label - Patient Control, Left	1
6	VV23A9C12HL	Pan Head Tapping Screw	8
7	QDF9184	Control Board Cap	16
8	QDF28-0344	Speaker Cable	2
9	QDF26-0111	Speaker with Connector	2

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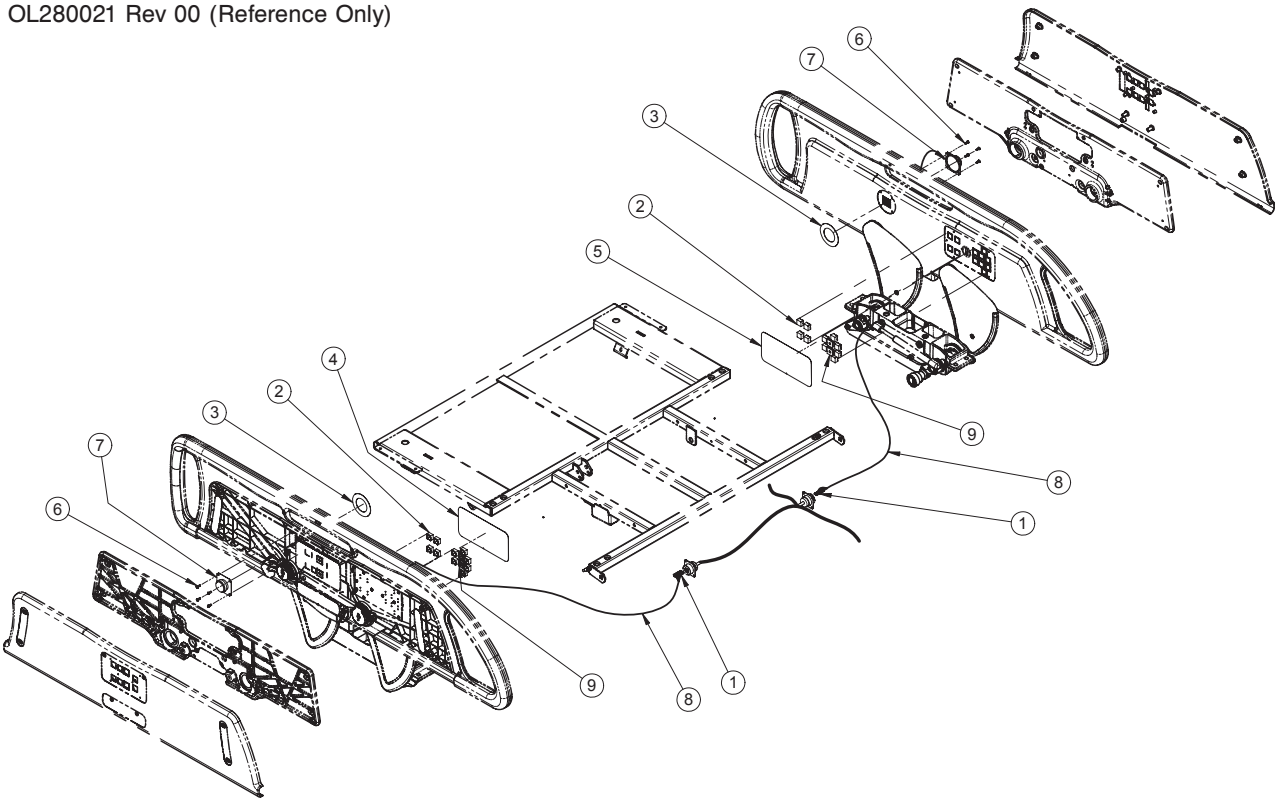
OL280021 Rev 00 (Reference Only)



Cable Connection Table				
Cable	**Connector**	**To**	**Cable**	**Connector**
QDF28-0344	MTA 3 Position	To	QDF21-1169	J3
QDF28-0344	Blue Wire	To	QDF2042	Position 9
QDF28-0344	Green Wire	To	QDF2042	Position 8
QDF28-0344	Drain	To	QDF2042	Position 7
QDF28-0344	White Wire	To	QDF2042	Position 10
QDF28-0344	Black Wire	To	QDF2042	Position 11
QDF28-0344	Red Wire	To	QDF2042	Position 12
QDF28-0344	N.C.	To	QDF26-0111	Position 1
QDF28-0344	Position 2	To	QDF26-0111	Position 2
QDF28-0344	Position 3	To	QDF26-0111	Position 3
QDF28-0230	MTA 3 (Blue, Green)	To	QDF26-1163	J10, J11
QDF28-0230	MTA 3 (White, Black)	To	QDF26-1163	J14, J15

Item	Part No.	Part Name	Qty.
1	QDF9018	AMP Pin Contact	12
2	QDF9183	Control Board Button	20
3	QDF28-0336	Label - Speaker	2
4	QDF28-0250	Label - Patient Control, Right	1
5	QDF28-0251	Label - Patient Control, Left	1
6	VV23A9C12HL	Pan Head Tapping Screw	8
7	QDF26-0111	Speaker with Connector	2
8	QDF28-0344	Speaker Cable	2
9	QDF9184	Control Board Cap	4

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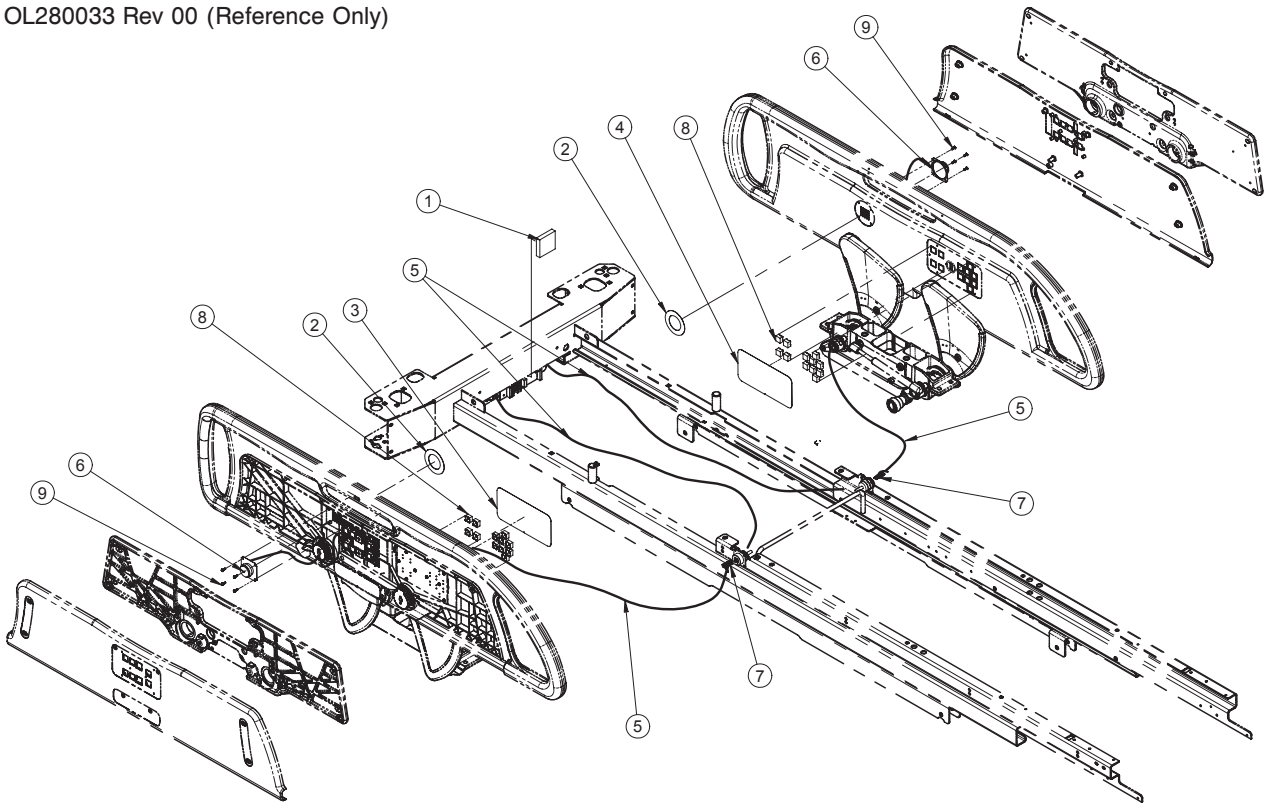
OL280033 Rev 00 (Reference Only)



Cable Connection Table				
Cable	**Connector**	**To**	**Cable**	**Connector**
QDF28-0344	MTA 3 Position	To	QDF21-1169	J3
QDF28-0344	Blue Wire	To	QDF2042	Position 9
QDF28-0344	Green Wire	To	QDF2042	Position 8
QDF28-0344	Drain	To	QDF2042	Position 7
QDF28-0344	White Wire	To	QDF2042	Position 10
QDF28-0344	Black Wire	To	QDF2042	Position 11
QDF28-0344	Red Wire	To	QDF2042	Position 12
QDF28-0344	N.C.	To	QDF26-0111	Position 1
QDF28-0344	Position 2	To	QDF26-0111	Position 2
QDF28-0344	Position 3	To	QDF26-0111	Position 3
QDF28-0230	MTA 3 (Blue, Green)	To	QDF26-1163	J10, J11
QDF28-0230	MTA 3 (White, Black)	To	QDF26-1163	J14, J15

Item	Part No.	Part Name	Qty.
1	QDF2060	Smart TV Board	1
3	QDF28-0336	Label - Speaker	2
4	QDF28-0279	Label - Patient Control, Right	1
5	QDF28-0280	Label - Patient Control, Left	1
5	QDF28-0344	Speaker Cable	2
6	QDF26-0111	Speaker with Connector	2
7	QDF9018	AMP Pin Contact	12
8	QDF9183	Control Board Button	24
9	VV23A9C12HL	Pan Head Tapping Screw	8

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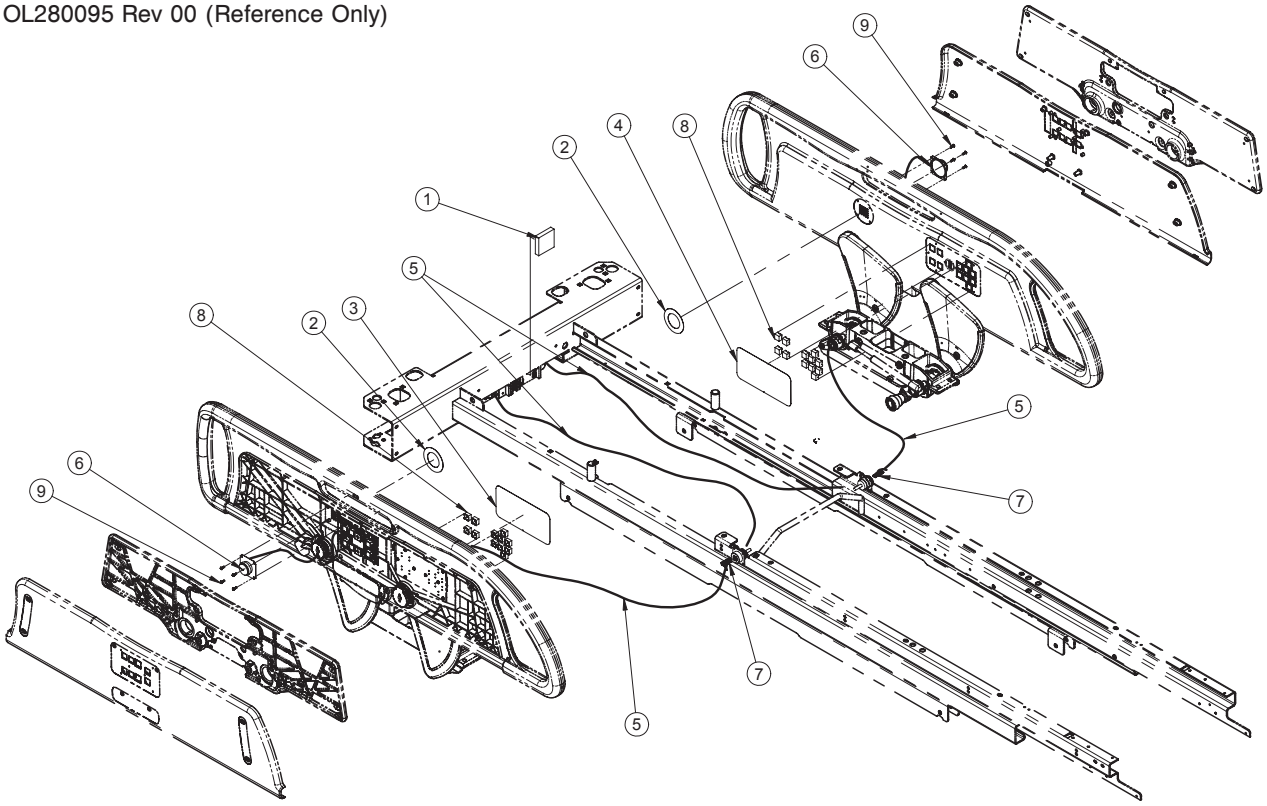
Head End Siderails with Nurse Call, Communication and Zenith Smart TV

OL280095 Rev 00 (Reference Only)



Cable Connection Table				
Cable	**Connector**	**To**	**Cable**	**Connector**
QDF28-0344	MTA 3 Position	To	QDF21-1169	J3
QDF28-0344	Blue Wire	To	QDF2042	Position 9
QDF28-0344	Green Wire	To	QDF2042	Position 8
QDF28-0344	Drain	To	QDF2042	Position 7
QDF28-0344	White Wire	To	QDF2042	Position 10
QDF28-0344	Black Wire	To	QDF2042	Position 11
QDF28-0344	Red Wire	To	QDF2042	Position 12
QDF28-0344	N.C.	To	QDF26-0111	Position 1
QDF28-0344	Position 2	To	QDF26-0111	Position 2
QDF28-0344	Position 3	To	QDF26-0111	Position 3
QDF28-0230	MTA 3 (Blue, Green)	To	QDF26-1163	J10, J11
QDF85-0230	MTA 3 (White, Black)	To	QDF26-1163	J14, J15

Item	Part No.	Part Name	Qty.
1	QDF28-0595	Smart TV Board for Zenith	1
2	QDF28-0336	Label - Speaker	2
3	QDF28-0279	Label - Patient Control, Right	1
4	QDF28-0280	Label - Patient Control, Left	1
5	QDF28-0344	Speaker Cable	2
6	QDF26-0111	Speaker with Connector	2
7	QDF9018	AMP Pin Contact	12
8	QDF9183	Control Board Button	24
9	VV23A9C12HL	Pan Head Tapping Screw	8

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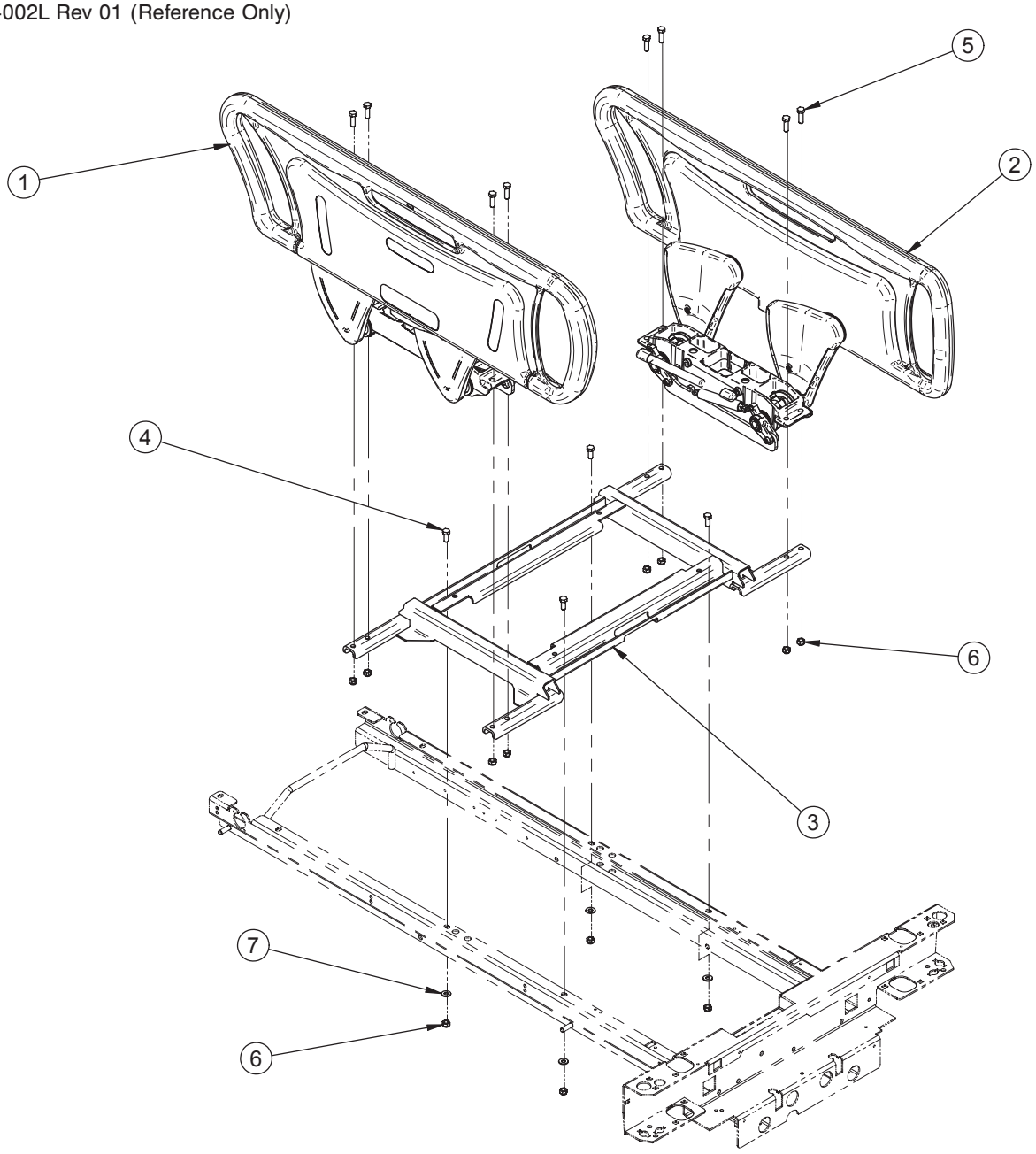
Notes

Foot End Siderail Assembly

L28-002L Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
1	28-0003L	Foot Siderail, Right (page 130)	1
2	28-0004L	Foot Siderail, Left (page 132)	1
3	28-0178L	Siderail Support	1
4	VB18A1O24	Hex Bolt	4
5	VB15A1O32	Hex Bolt	8
6	VE30A1O	Nylon Hex Locknut	12
7	VW10A10	Flat Washer	4

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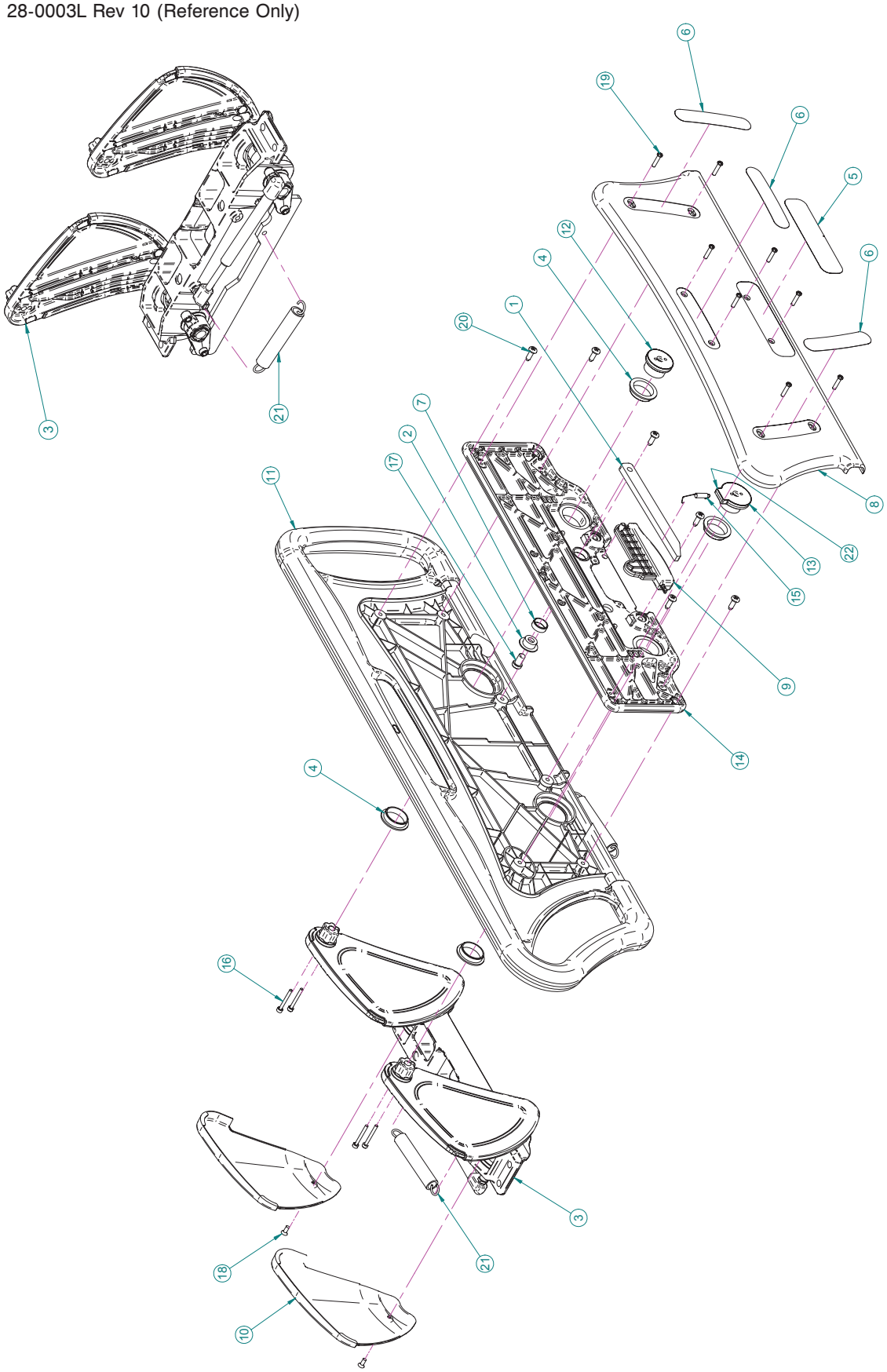
Foot End Siderail Assembly, Right

28-0003L Rev 10 (Reference Only)



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Foot End Siderail Assembly, Right

Foot End Siderail Assembly, Right - 28-0003L Rev 10 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QDB28-0278Z	Siderail Latch	1
2	QPA28-0493	Siderail Sleeve	1
3	28-0005L	Siderail Mechanism (page 135)	1
4	QDF2049	Bushing	4
5	QDF28-0146	Label - Siderail Latch	1
6	QDF28-0145	Screw Cover	3
7	QDF28-0491	Bushing	1
8	QP25-0188-13	Inner Siderail Panel, Foot, Right	1
9	QP28-0490-08	Siderail Handle, Foot	1
10	QP28-0039-13	Siderail Cover	2
11	QP28-0519-13	Siderail, Foot, Right	1
12	QPA28-0015	Siderail Sleeve	1
13	QPA28-0016	Sleeve with Lock	1
14	QPA28-0097	Siderail Frame, Foot, Right	1
15	QRE25-0245	Spring	1
16	VV10B0G40-S	Hex Socket Head Cap Screw	4
17	VV10A1P20-S	Hex Socket Low Head Cap Screw	1
18	VV31A0G16	Flat Head Machine Screw	2
19	VV33A0G28-S	Pan Head Machine Screw	8
20	VVB3A9N24PF	Pan Head Screw	6
21	QRE28-0293	Spring	1
22	M0019	OG2 Grease	.03 kg

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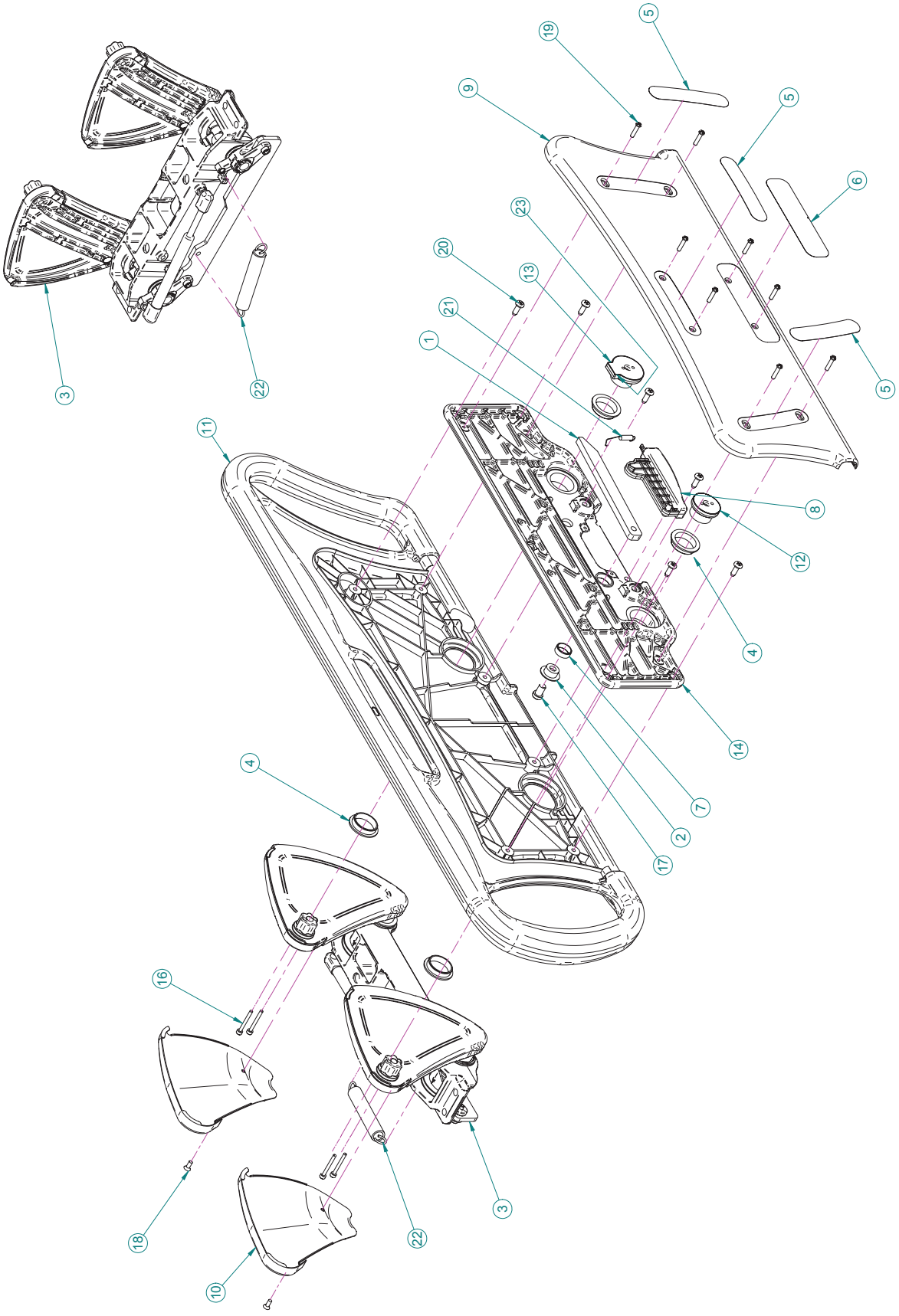
Foot End Siderail Assembly, Left

28-0004L Rev 10 (Reference Only)



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Foot End Siderail Assembly, Left

Foot End Siderail Assembly, Left - 28-0004L Rev 10 (Reference Only)

Item	Part No.	Part Name	Qty.
1	QDB28-0278Z	Siderail Latch	1
2	QPA28-0493	Siderail Sleeve	1
3	28-0006L	Siderail Mechanism, Inverse (page 134)	1
4	QDF2049	Bushing	4
5	QDF28-0145	Screw Cover	3
6	QDF28-0146	Label - Siderail Latch	1
7	QDF28-0491	Bushing	1
8	QP28-0489-08	Siderail Handle, Right	1
9	QP25-0189-13	Inner Siderail Panel, Foot, Left	1
10	QP28-0040-13	Siderail Cover	2
11	QP28-0520-13	Siderail, Foot, Left	1
12	QPA28-0015	Siderail Sleeve	1
13	QPA28-0016	Sleeve with Lock	1
14	QPA28-0098	Siderail Frame, Foot, Left	1
16	VV10B0G40-S	Hex Socket Head Cap Screw	4
17	VV10A1P20-S	Hex Socket Low Head Cap Screw	1
18	VV31A0G16	Flat Head Machine Screw	2
19	VV33A0G28-S	Pan Head Machine Screw	8
20	VVB3A9N24PF	Pan Head Screw	6
21	QRE25-0245	Spring	1
22	QRE28-0293	Spring	1
23	M0019	OG2 Grease	.03 kg

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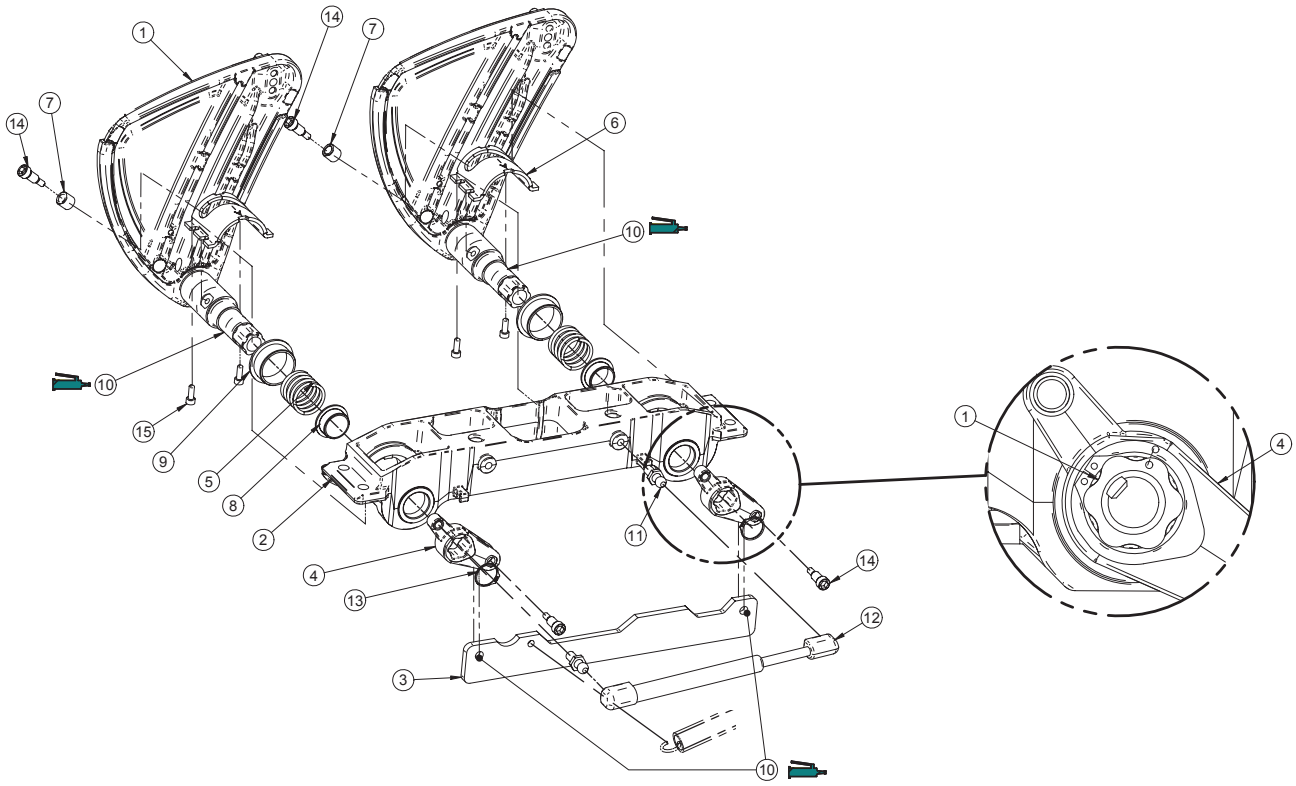
Siderail Mechanism - 28-0006L

Rev 13



Item	Part No.	Part Name	Qty.
1	28-0283L	Siderail Arm, Reverse	2
2	28-0284L	Siderail Base Angle Bracket	1
3	28-0014Z	Transfer Plate	1
4	QPA28-0086	Transfer Siderail Arm, Reverse	2
5	QRC28-0208	Compression Spring	2
6	28-0219Z	Sliding Guide, Reverse	2
7	QPA27-1720	Bushing	2
8	QDF28-0270	Flanged Bushing	2
9	QDF28-0268	Flanged Bushing	2
10	M0019	OG2 Grease	.03 kg
11	QDF2005-S	Ball Stud	2
12	QDF2033	Damper	1
13	QDF7894	Bushing	2
14	VD60A1N1016-S	Shoulder Bolt	4
15	VV10A0G16-S	Hex Socket Head Cap Screw	4

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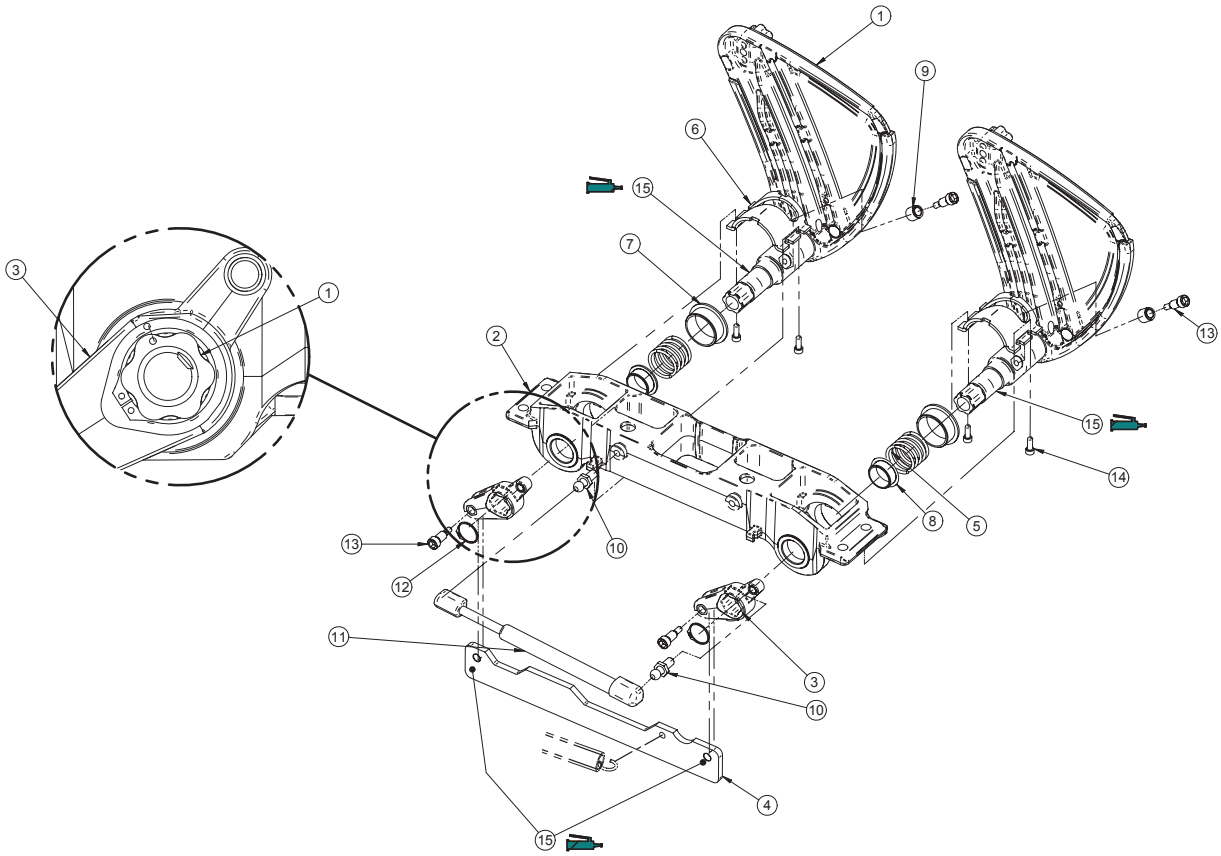
Siderail Mechanism - 28-0005L

Rev 13



Item	Part No.	Part Name	Qty.
1	28-0282L	Siderail Arm	2
2	28-0284L	Siderail Base Angle Bracket	1
3	QPA28-0011	Transfer Siderail Arm	2
4	28-0014Z	Transfer Plate	1
5	QRC28-0208	Compression Spring	2
6	28-0218Z	Sliding Guide	2
7	QDF28-0268	Flanged Bushing	2
8	QDF28-0270	Flanged Bushing	2
9	QPA27-1720	Bushing	2
10	QDF2005-S	Ball Stud	2
11	QDF2033	Damper	1
12	QDF7894	Bushing	2
13	VD60A1N1016-S	Shoulder Bolt	4
14	VV10A0G16-S	Hex Socket Head Cap Screw	4
15	M0019	OG2 Grease	.03 kg

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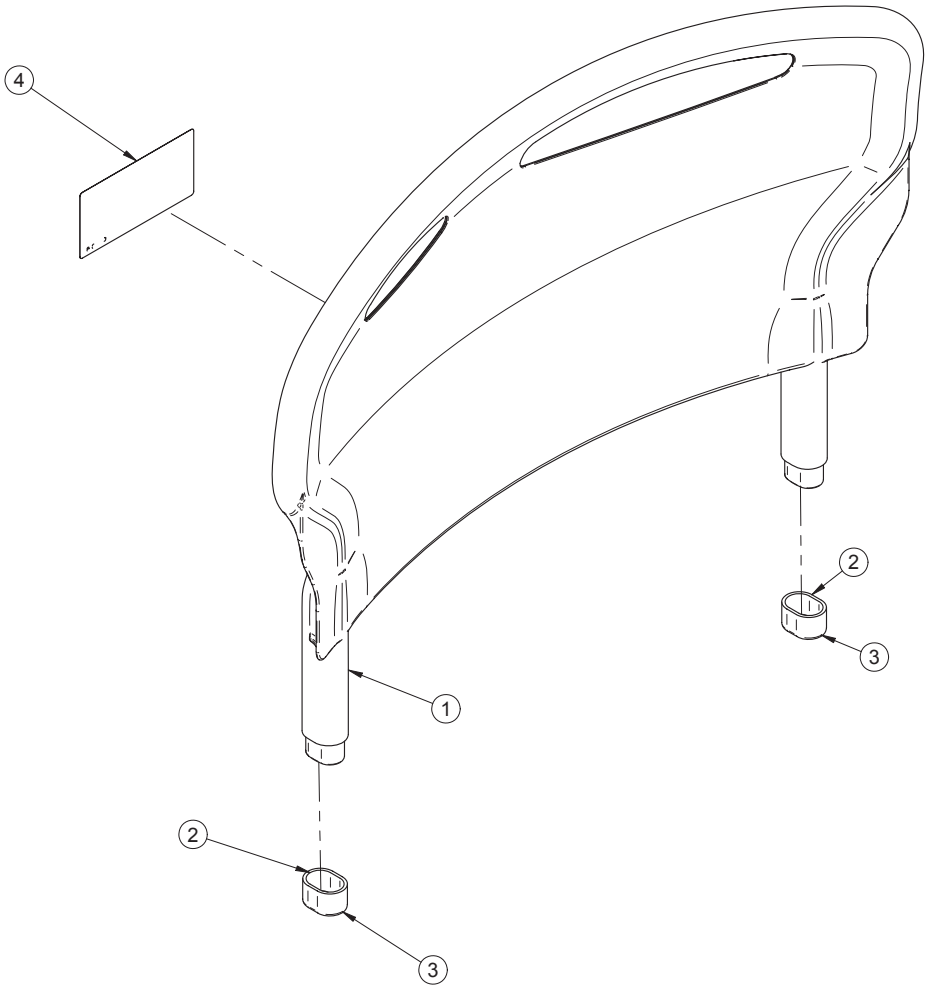
Headboard Assembly

L28-011 Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QP21-3139-13	Head Board	1
2	M0005	Glue	0.0170 kg
3	QPC21-3855	Rubber Cap	2
4	QE14376-T	Label - Installation	1

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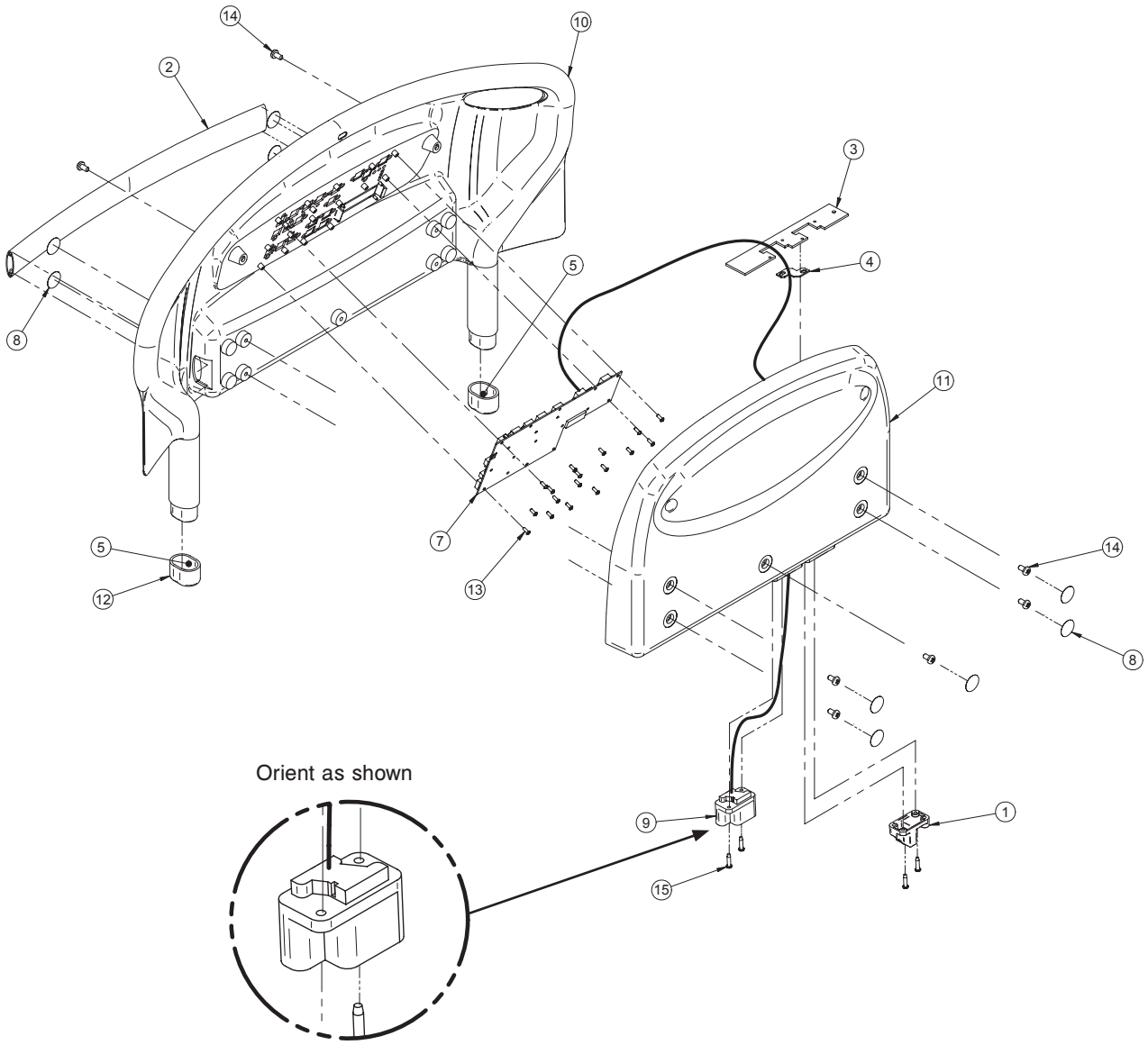
Footboard Assembly

L28-014L Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QP28-0182-11	Protective Cap	1
2	25-0260L	Pump Support	1
3	28-0263L	Reinforced Board Connector	1
4	28-0325Z	Connector Reinforcement Plate	1
5	M0005	Glue	.5 mL
7	QDF21-1154	Foot Control Board	1
8	QDF28-0334	Screw Cover	9
9	QDF28-0261	Footboard Cable	1
10	QP28-0675	Footboard	1
11	QP28-0676	Foot Rest Panel	1
12	QPC21-3855	Rubber Cap	2
13	VV23A9C12HL	Pan Head Machine Screw	17
14	VVB3A9N16PF	Pan Head Screw	7
15	VV83A9E24	Pan Head Tapping Screw	4

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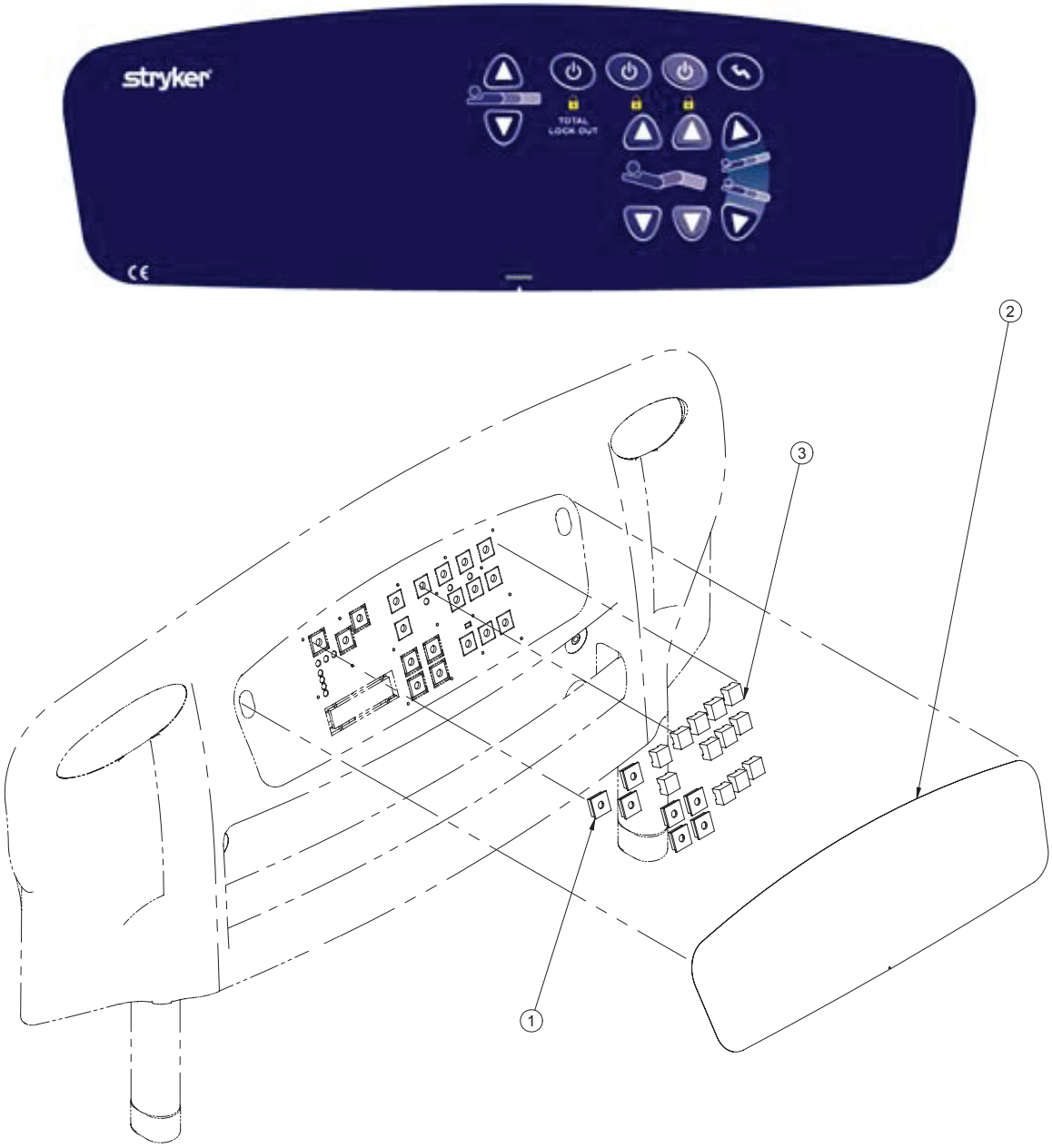
Footboard without Scale and Bed Exit

OP280015L 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QDF9184	Control Board Cap	7
2	QDF28-0657	Label - Footboard Controls without Scale and Bed Exit	1
3	QDF9183	Control Board Button	12

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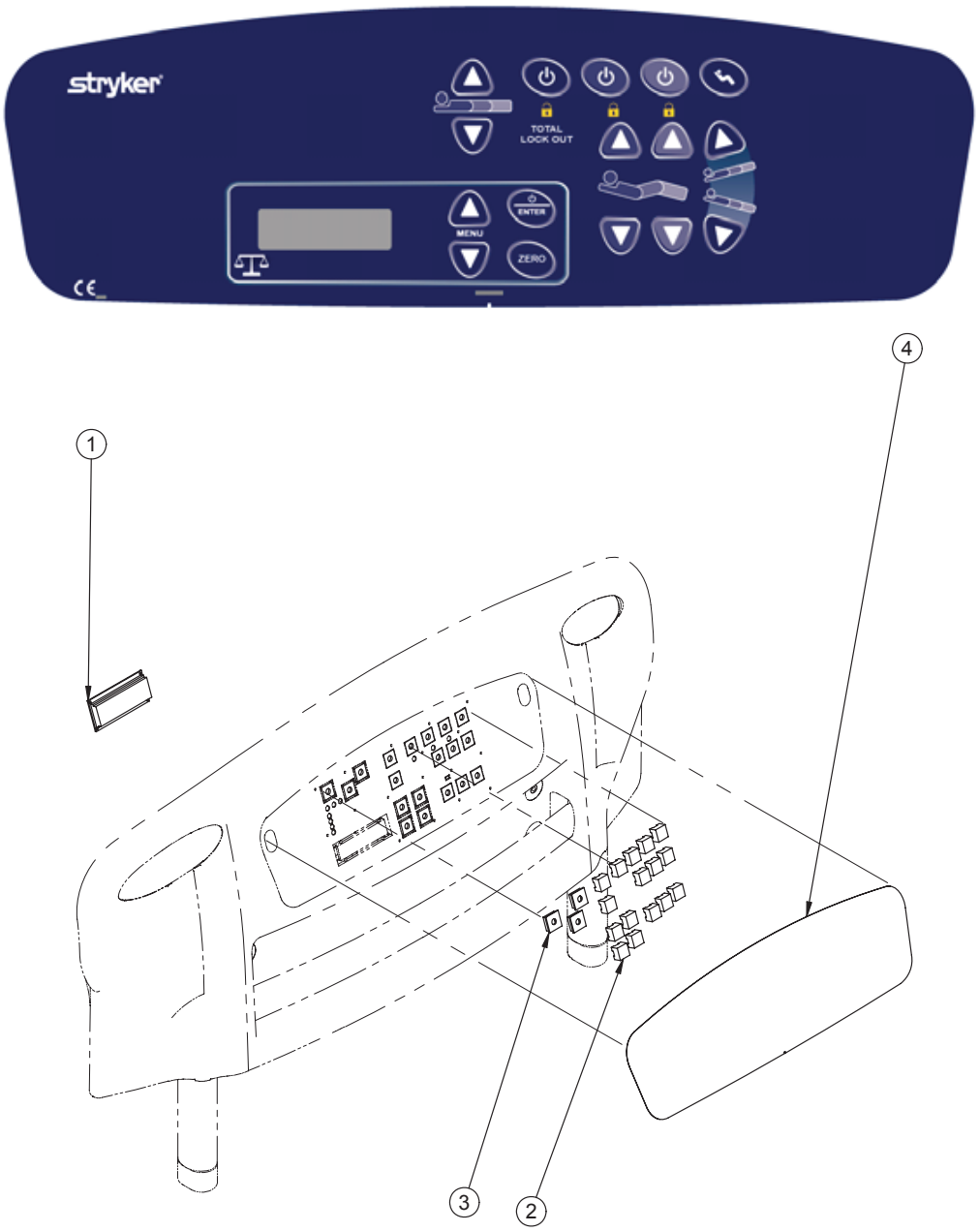
Footboard with Scale, without Bed Exit

OP280014L 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QDF25-0463	Scale Display	1
2	QDF9183	Control Board Button	16
3	QDF9184	Control Board Cap	3
4	QDF28-0656	Label - Footboard Controls with Scale, without Bed Exit	1

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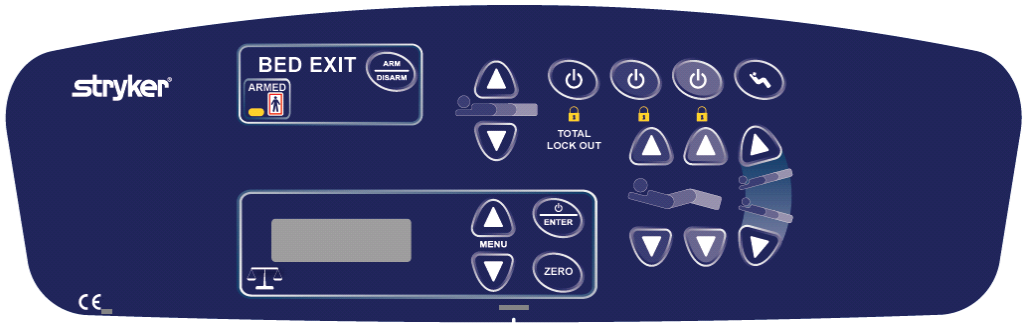
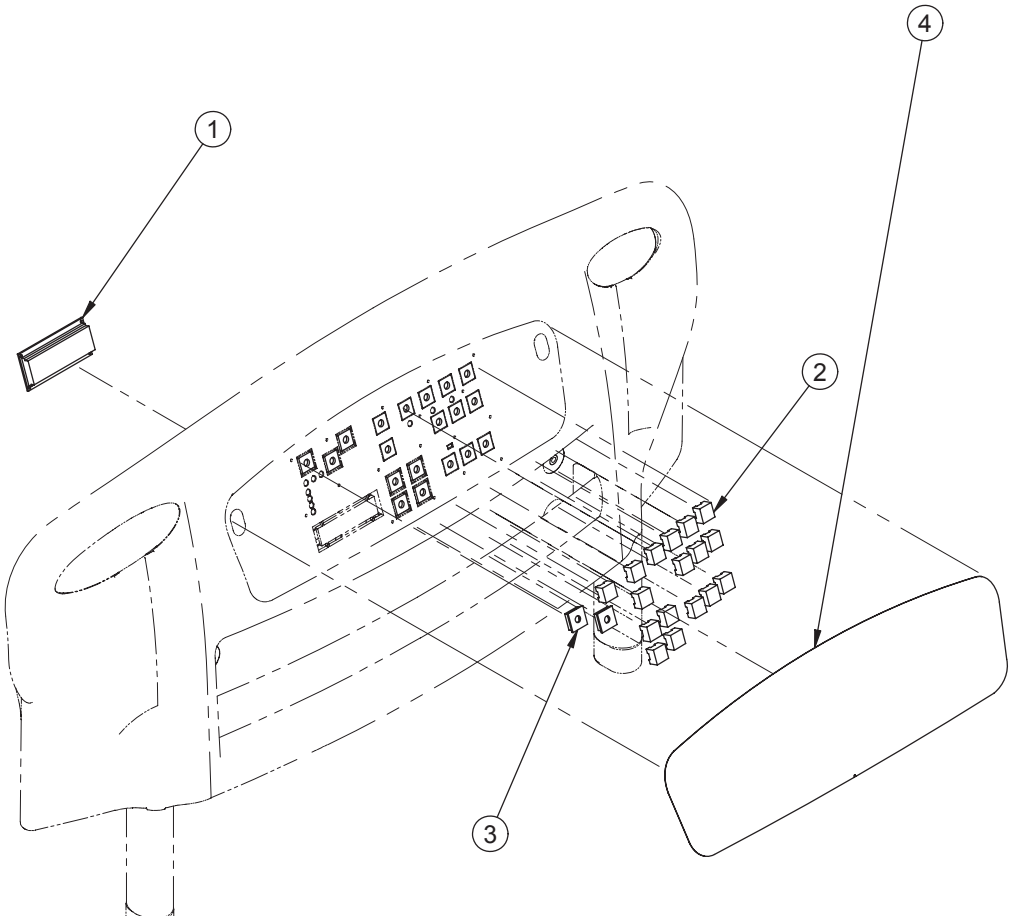
Footboard with Scale and One Zone Bed Exit

OP280013L Rev 00 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF25-0463	Scale Display	1
2	QDF9183	Control Board Button	17
3	QDF9184	Control Board Cap	2
4	QDF28-0655	Label - Footboard Controls with Scale and One Zone Bed Exit	1

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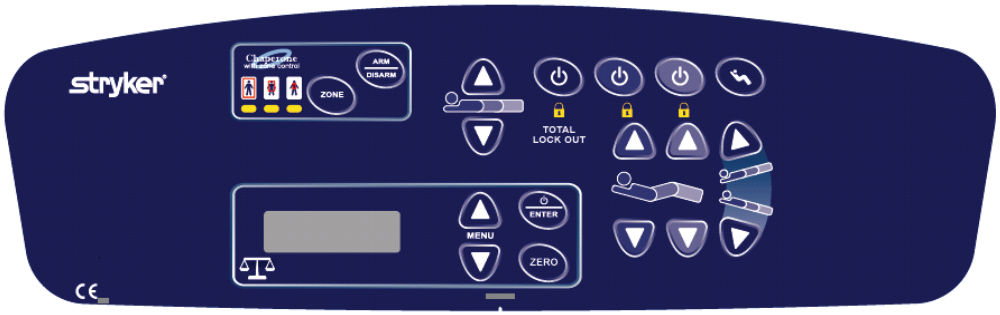
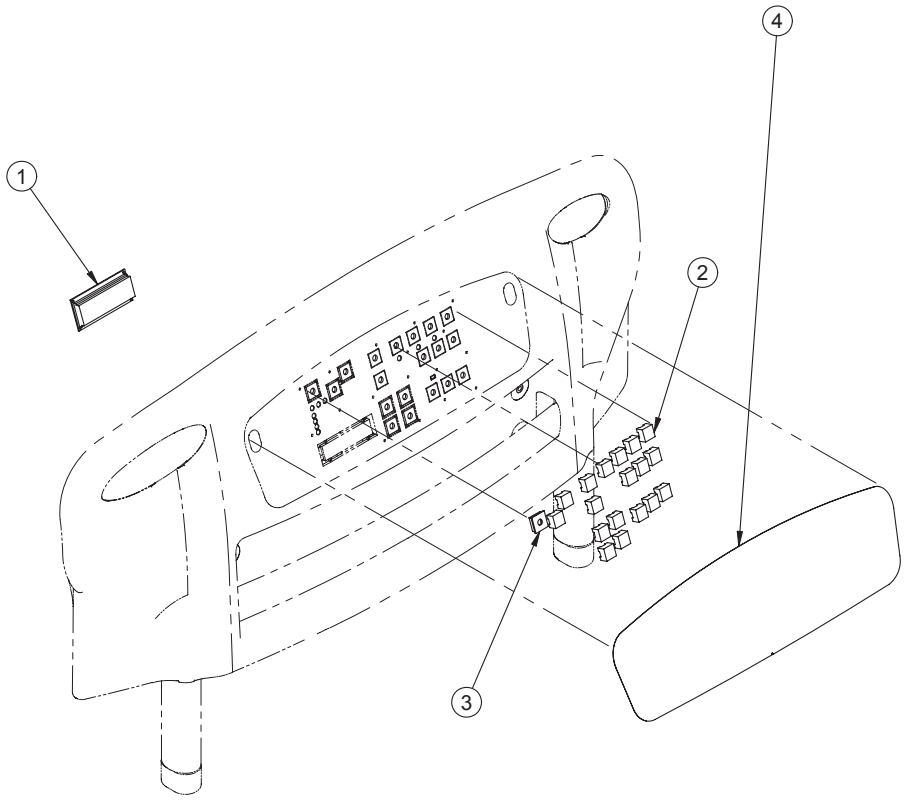
Footboard with Scale and Three Zone Bed Exit

OP280012L 00 (Reference Only)





Item	Part No.	Part Name	Qty.
1	QDF25-0463	Scale Display	1
2	QDF9183	Control Board Button	18
3	QDF9184	Control Board Cap	1
4	QDF28-0651	Label - Footboard Controls with Scale and Three Zone Bed Exit	1

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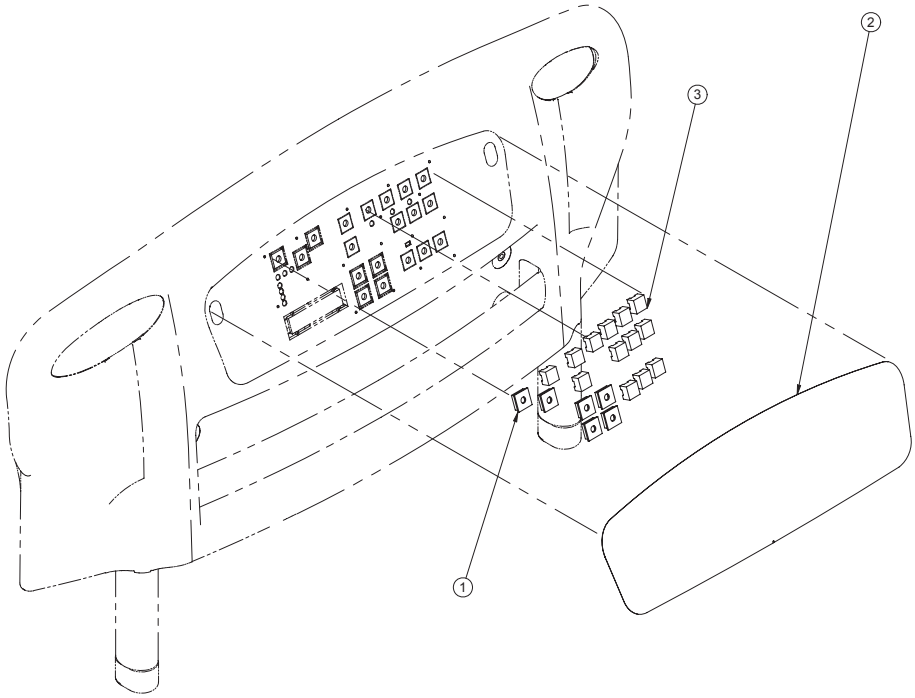
Footboard without Scale, with One Zone Bed Exit

OP280016L 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QDF9184	Control Board Cap	6
2	QDF28-0658	Label - Footboard Controls without Scale, with One Zone Bed Exit	1
3	QDF9183	Control Board Button	13

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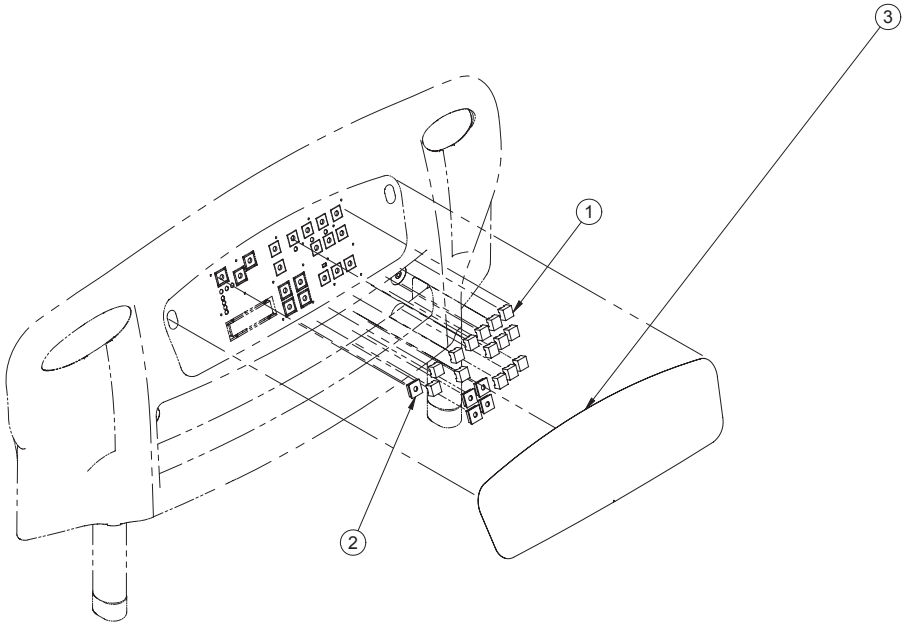
Footboard without Scale, with Three Zone Bed Exit

OP280017L 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	QDF9183	Control Board Button	14
2	QDF9184	Control Board Cap	5
3	QDF28-0651	Label - Footboard Controls without Scale, with Three Zone Bed Exit	1

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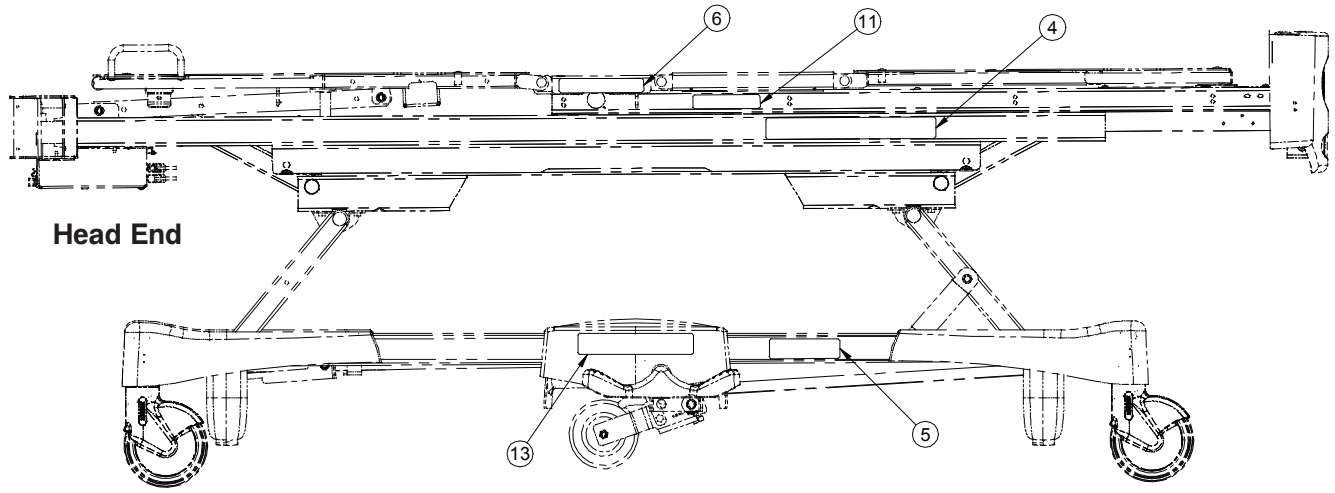
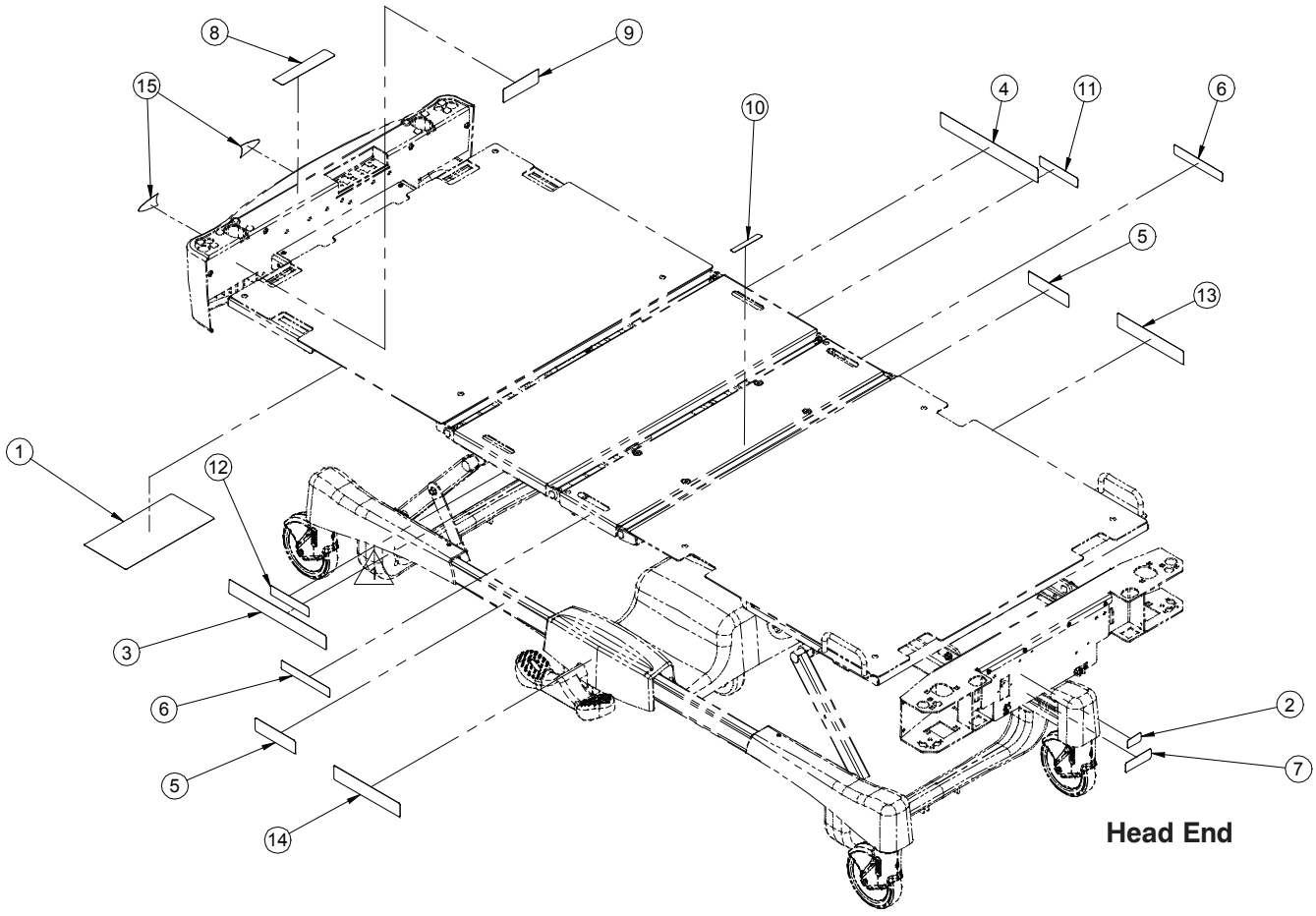
Bed Labeling - English

OL280037 Rev 01 (Reference Only)





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Bed Labeling - English - OL280037 Rev 01 (For Reference Only)

Item	Part No.	Part Name	Qty.
2	QE14400-F	Label - Results of Automated Tests	1
3	QE18545	Label - Refer to Manual	1
4	QE71-0301	Label - Graduated Scale, Left	1
5	QE71-0303	Label - Graduated Scale, Right	1
6	QE71-0346	Label - STRYKER	2
7	QE71-0547	Label - Maximum Load	2
8	QE71-0699-E	Label - Serious Injury	1
9	QE71-0700-E	Label - Electric Shock Hazard	1
10	QE71-0706-E	Label - Fire Hazard	1
13	QE71-0709-E	Label - Mattress Maximum Thickness	1
14	QE71-0719-E	Label - Head Elevation Angle, Right	1
15	QE71-0720-E	Label - Head Elevation Angle, Left	1
16	QE71-0721-E	Label - Right Pedal Positions	1
17	QE71-0722-E	Label - Left Pedal Position	1
18	QE71-0875	Label - Emergency Crank Handle	1

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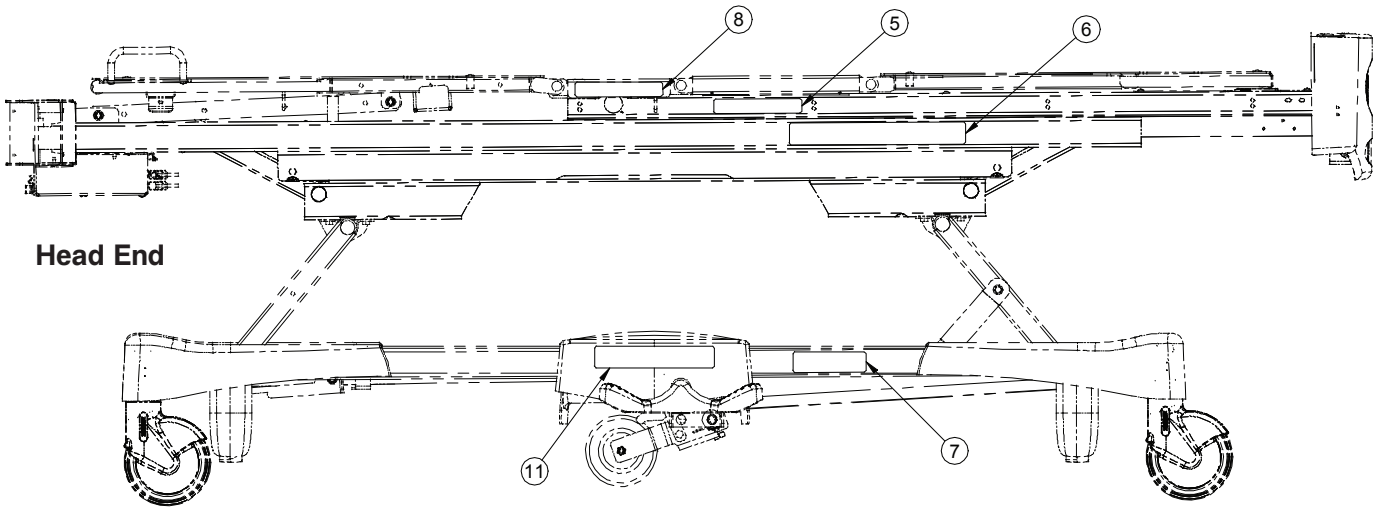
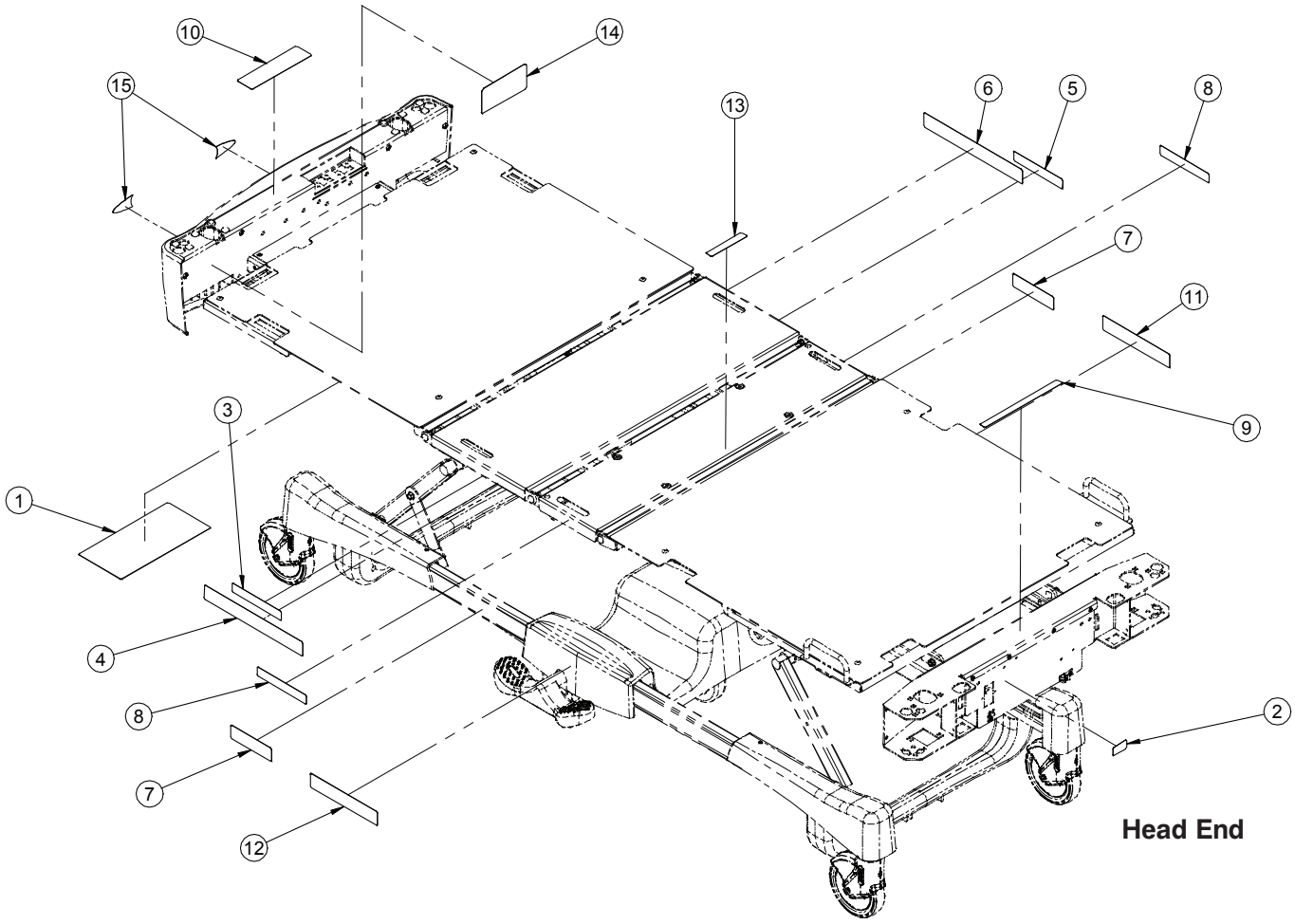
Bed Labeling - English / French

OL280036 Rev 01 (Reference Only)





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Bed Labeling - English / French - OL280036 Rev 01 (For Reference Only)

Item	Part No.	Part Name	Qty.
1	QE14400-F	Label - Results of Automated Tests	1
2	QE18545	Label - Refer to Manual	1
3	QE71-0247-F	Label - Head Elevation Angle, Left	1
4	QE71-0301	Label - Graduated Scale, Left	1
5	QE71-0302-F	Label - Head Elevation Angle, Right	1
6	QE71-0303	Label - Graduated Scale, Right	1
7	QE71-0346	Label - STRYKER	2
8	QE71-0547	Label - Maximum Load	2
9	QE71-0737-T	Label - Serious Injury	1
10	QE71-0738-T	Label - Electric Shock Hazard	1
11	QE71-0739-T	Label - Right Pedal Positions	1
12	QE71-0740-T	Label - Left Pedal Positions	1
13	QE71-0741-T	Label - Mattress Maximum Thickness	1
14	QE71-0752-F	Label - Fire Hazard	1
15	QE71-0875	Label - Emergency Crank Handle	1

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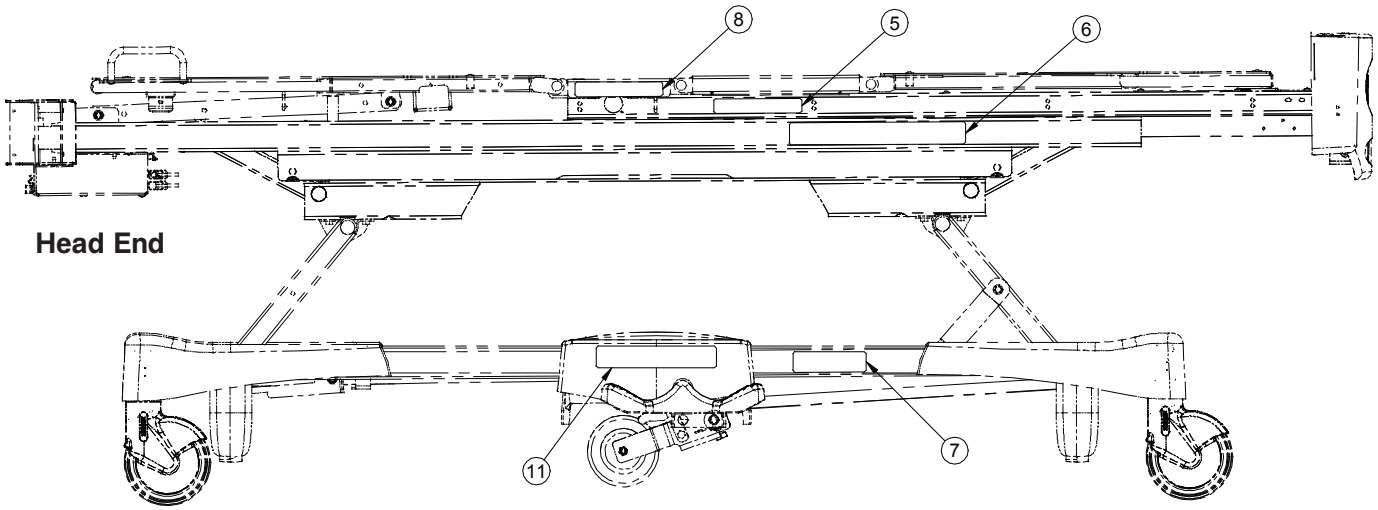
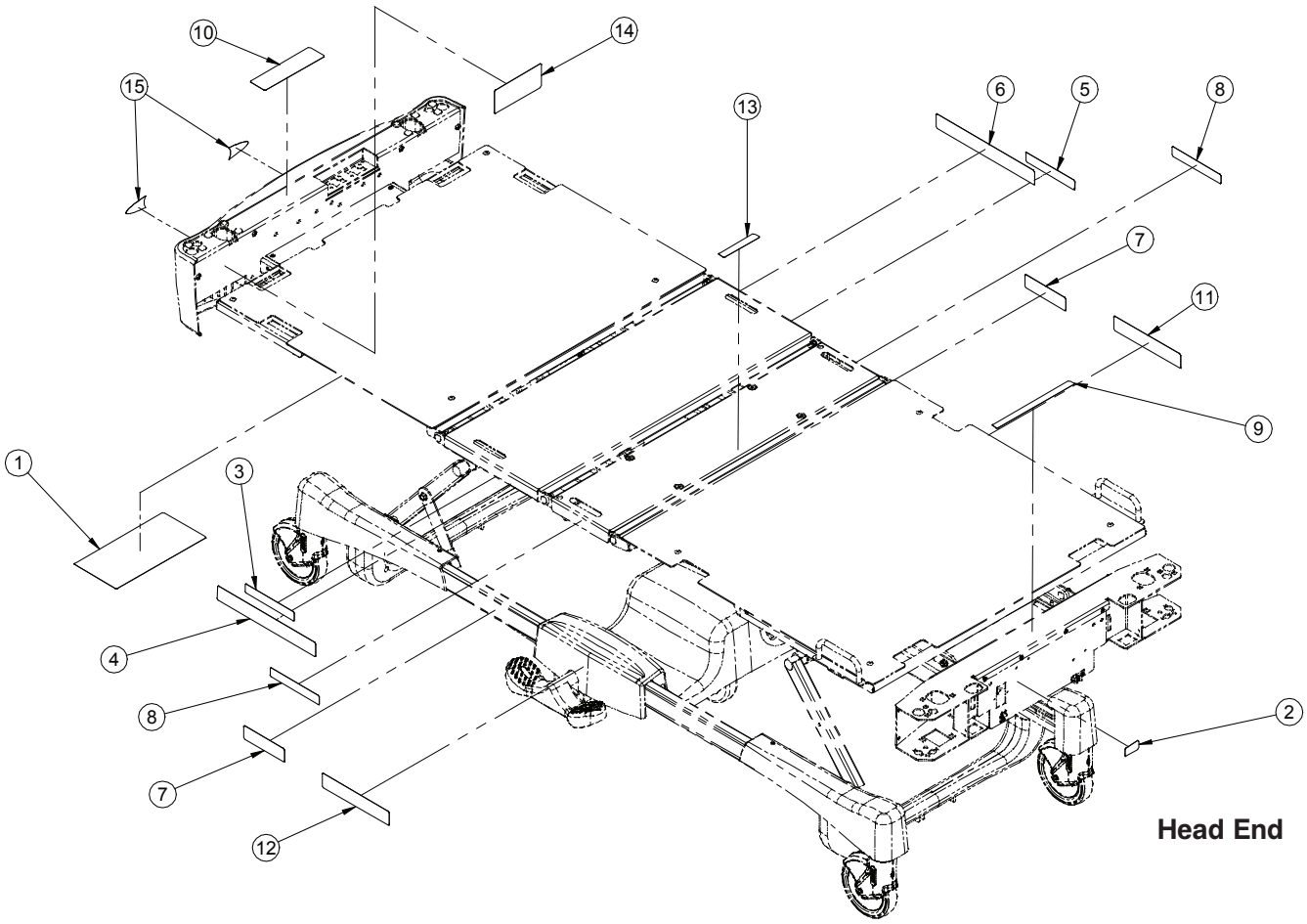
Bed Labeling - English / Spanish

OL280038 Rev 01 (Reference Only)





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Bed Labeling - English / Spanish - OL280038 Rev 01 (For Reference Only)

Item	Part No.	Part Name	Qty.
1	QE14400-F	Label - Results of Automated Tests	1
2	QE18545	Label - Refer to Manual	1
3	QE71-0247-E	Label - Head Elevation Angle, Left	1
4	QE71-0301	Label - Graduated Scale, Left	1
5	QE71-0302-E	Label - Head Elevation Angle, Right	1
6	QE71-0303	Label - Graduated Scale, Right	1
7	QE71-0346	Label - STRYKER	2
8	QE71-0547	Label - Maximum Load	2
9	QE71-0737-T	Label - Serious Injury	1
10	QE71-0738-T	Label - Electric Shock Hazard	1
11	QE71-0739-T	Label - Right Pedal Positions	1
12	QE71-0740-T	Label - Left Pedal Positions	1
13	QE71-0741-T	Label - Mattress Maximum Thickness	1
14	QE71-0752-E	Label - Fire Hazard	1
15	QE71-0875	Label - Emergency Crank Handle	1

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Optional Accessories

Accessory	Part Number	Page Reference
Pendant Assemblies	FA64136 FA64137 FA64165	See page 151
Monitor Tray	FA64163	See page 152
Patient Helper	FA64148L	See page 153
Emergency Crank Handle	FOHMAU	See page 154
Oxygen Bottle Holder	FA64169	See page 155
Bed Extender with Scale	FA64172	See page 156
Removable I.V. Pole, 1/2”	FDTSH	See page 157
Removable I.V. Pole, 1”	FA61002-G	See page 158
Fixed Two Stage I.V. Pole	FA64174	See page 159
Fixed Two Stage I.V. Pole, Foldable	FA64171	See page 160
Fixed Three Stage I.V. Pole, Foldable	FA64170	See page 161
Traction Sleeve Sets	FA64188 FA64189 FA64190 FA64191	See page 162

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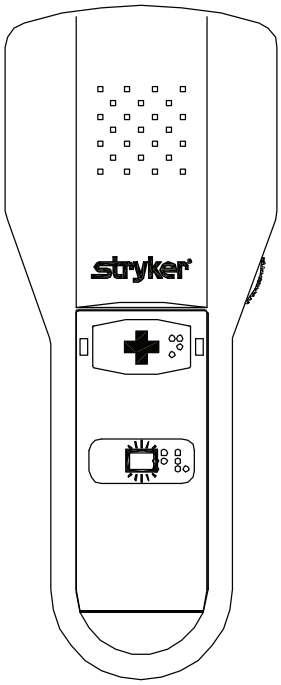
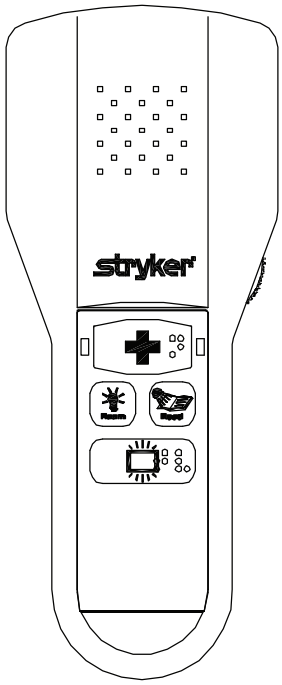
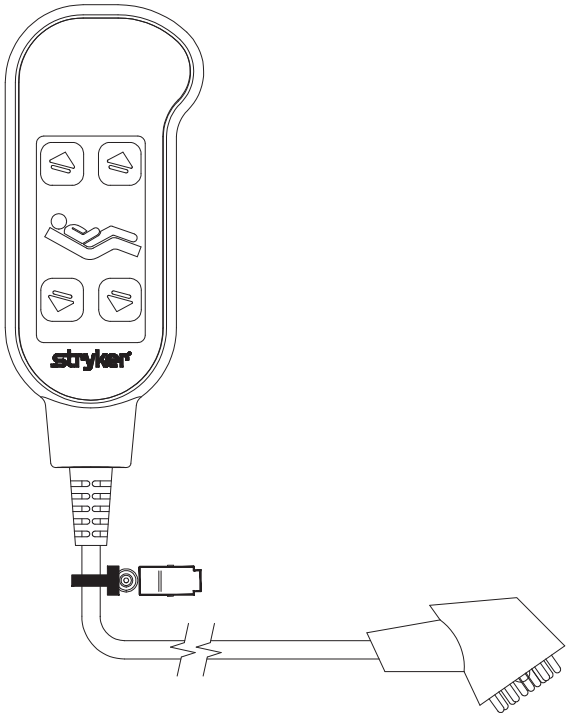
Nurse Call and TV Control Pendant - FA64136



Nurse Call, Lights and TV Control Pendant - FA64137



Head / Foot Section Control Pendant - FA64165



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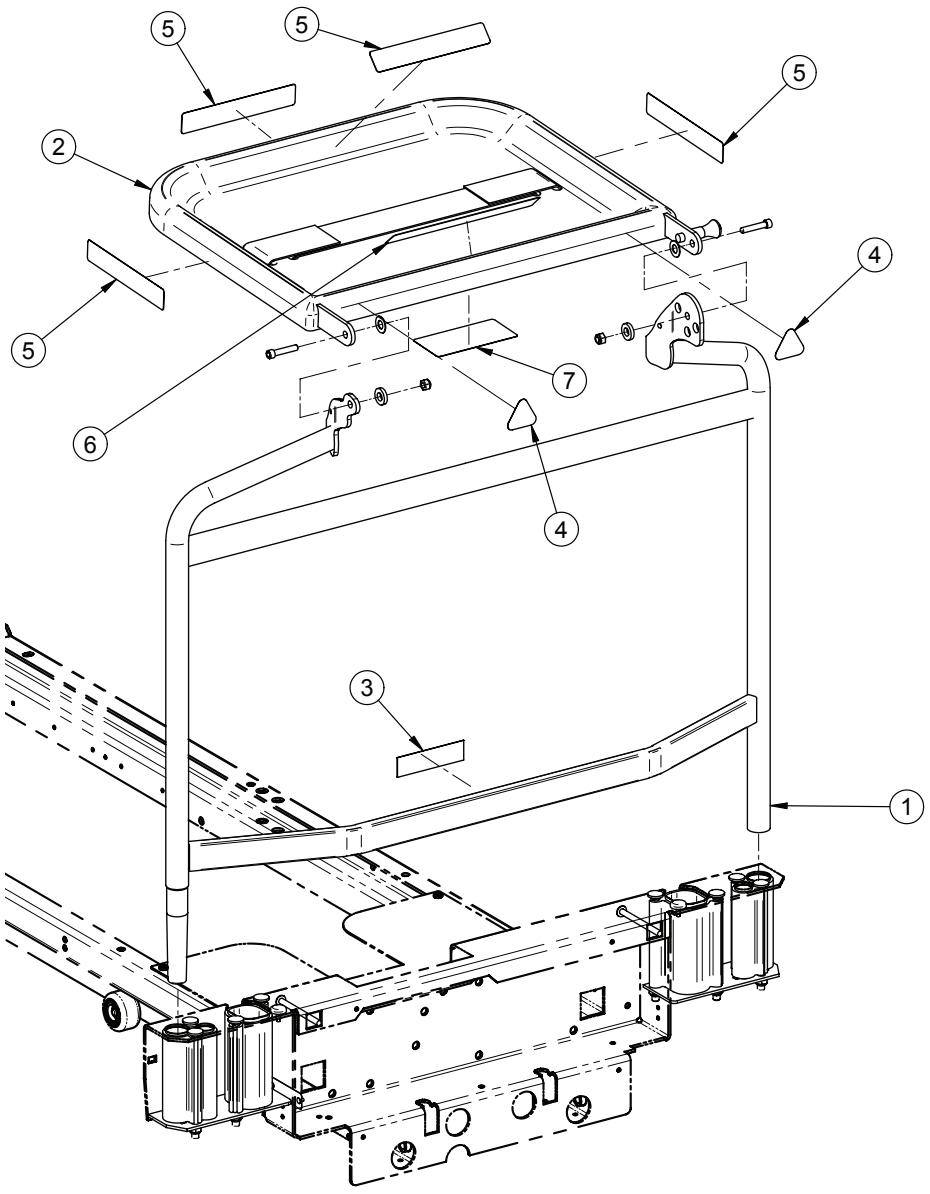
Monitor Tray - FA64163

L64-085 Rev 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	64-0777L	Tray Support	1
2	QDF5093	Tray and Fasteners	1
3	QE14399-T	Label - Manufacturer	1
4	QE71-0533	Label - Protective Top	2
5	QE71-0578	Label - Maximum Load	4
6	QE71-0579-F	Label - Tied Up Load	1
7	QE71-0580-F	Label - Caution	1

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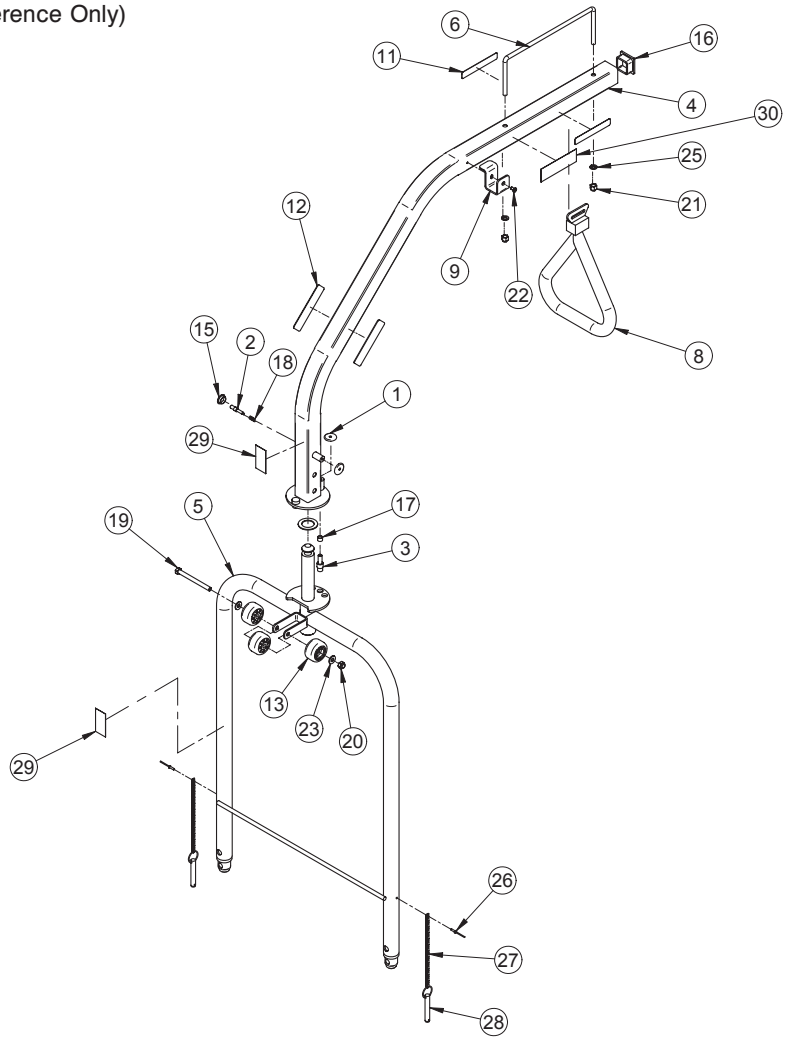
Patient Helper - FA64148L

L64-075 Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
1	16424C	Plunger Washer	2	21	VE40A1O	Cap Nut	2
2	16243Z	Plunger	1	22	VV83A9G12	Pan Head Tapping Screw	1
3	18939Z	Plunger	1	23	VW10A10	Washer	2
4	64-0700L	Support Tube	1	24	VW10C322802	Nylon Washer	1
5	64-0725L	Trapeze Frame	1	25	VW20A10	Spring Washer	2
6	9870C	Triangle Retainer	1	26	VR11H46	Pop Rivet	2
8	QDF6023	Trapeze Handle	1	27	64-0536	Chain	2
9	64-1298L	Trapeze Hook	1	28	QDF7871	Hitch Pin	2
11	QE71-0292-T	Label - Maximum Load	2	29	QE14399-T	Label - Manufacturer	2
12	QE71-0731-F	Label - Caution	2	30	QE71-1163-T	Label - Handle Storage	1
13	QPC-14-0321	Roller Bumper	3				
15	QPPE1205	Cap	1				
16	QPPF1505	Square Tube Cap	1				
17	QR110027	Compression Spring	1				
18	QRC9793	Compression Spring	1				
19	VB15A1O60	Hex Bolt	1				
20	VE30A1O	Nylon Hex Locknut	1				

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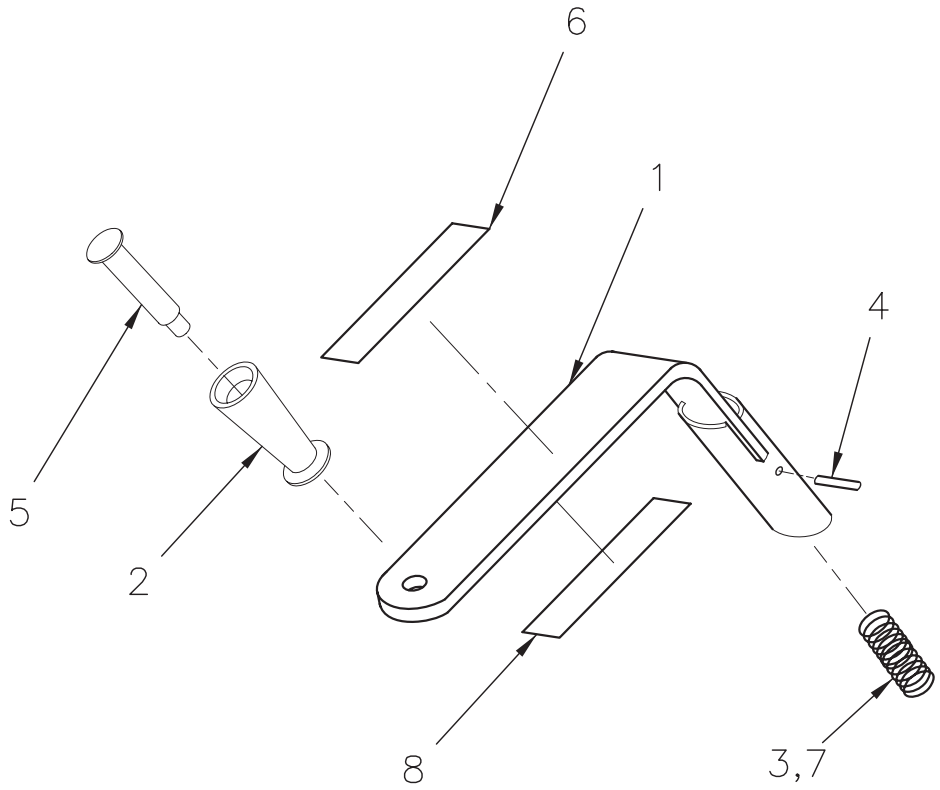
Emergency Crank Handle - FOHMAU

LC-3203 Rev 03 (Reference Only)



Item	Part No.	Part Name	Qty.
1	16142C	Crank	1
2	QPN-9438	Handle	1
3	QRC16887	Compression Spring	1
4	VG10B0424	Spring Pin	1
5	VR43A9439	Shoulder Rivet	1
6	QE71-0814-F	Label - Emergency Crank	1
7	M0019	Petro Canada OG2 Grease	.03 kg
8	QE71-1313-T	Label - Manufacturer	1

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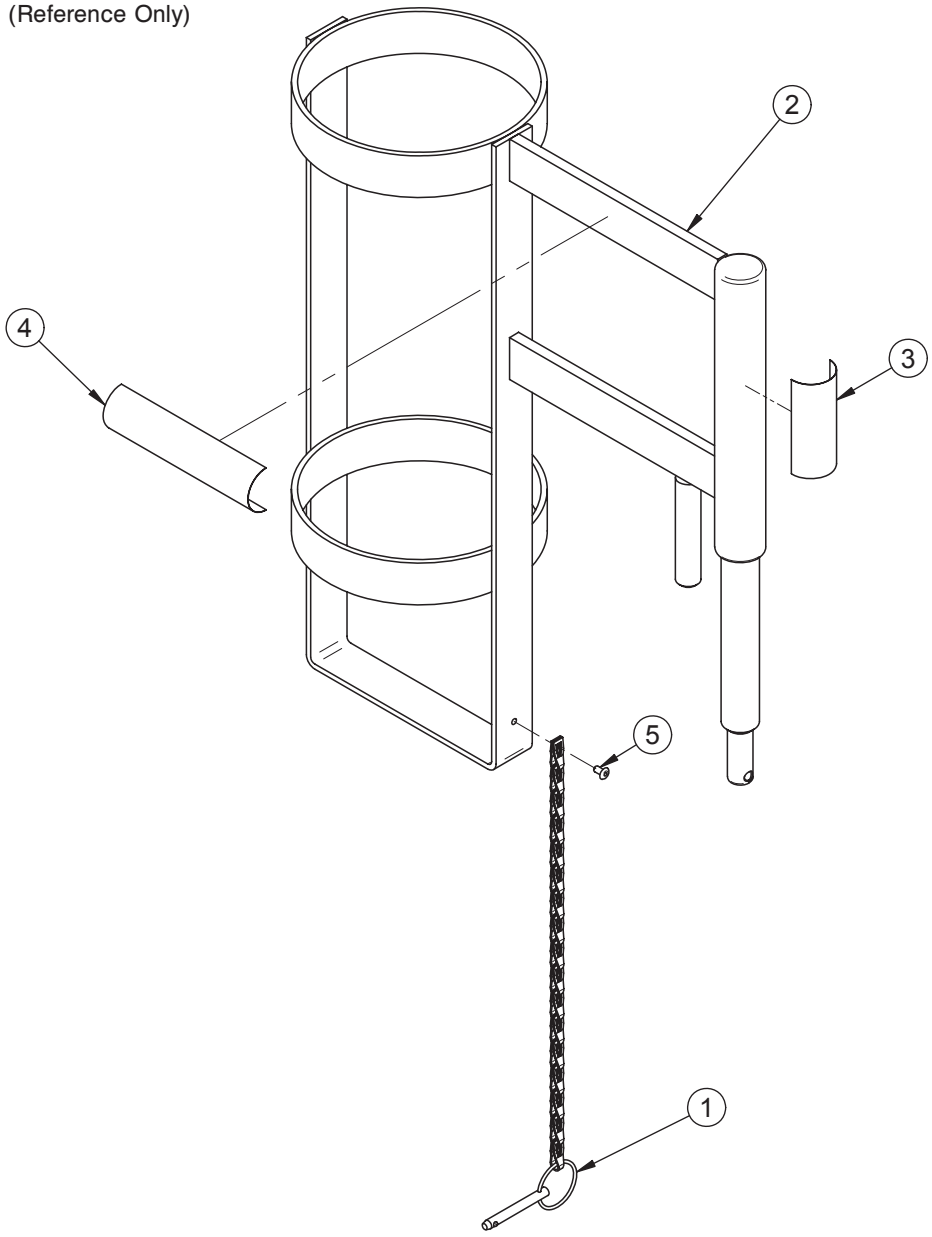
Oxygen Bottle Holder - FA64169

L64-097L Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
1	64-0647	Chain	1
2	QDF64-0973	Bottle Holder	1
3	QE14399-T	Label - Manufacturer	1
4	QE71-0601	Label - Maximum Load	1
5	VR11H42	Pop Rivet	1

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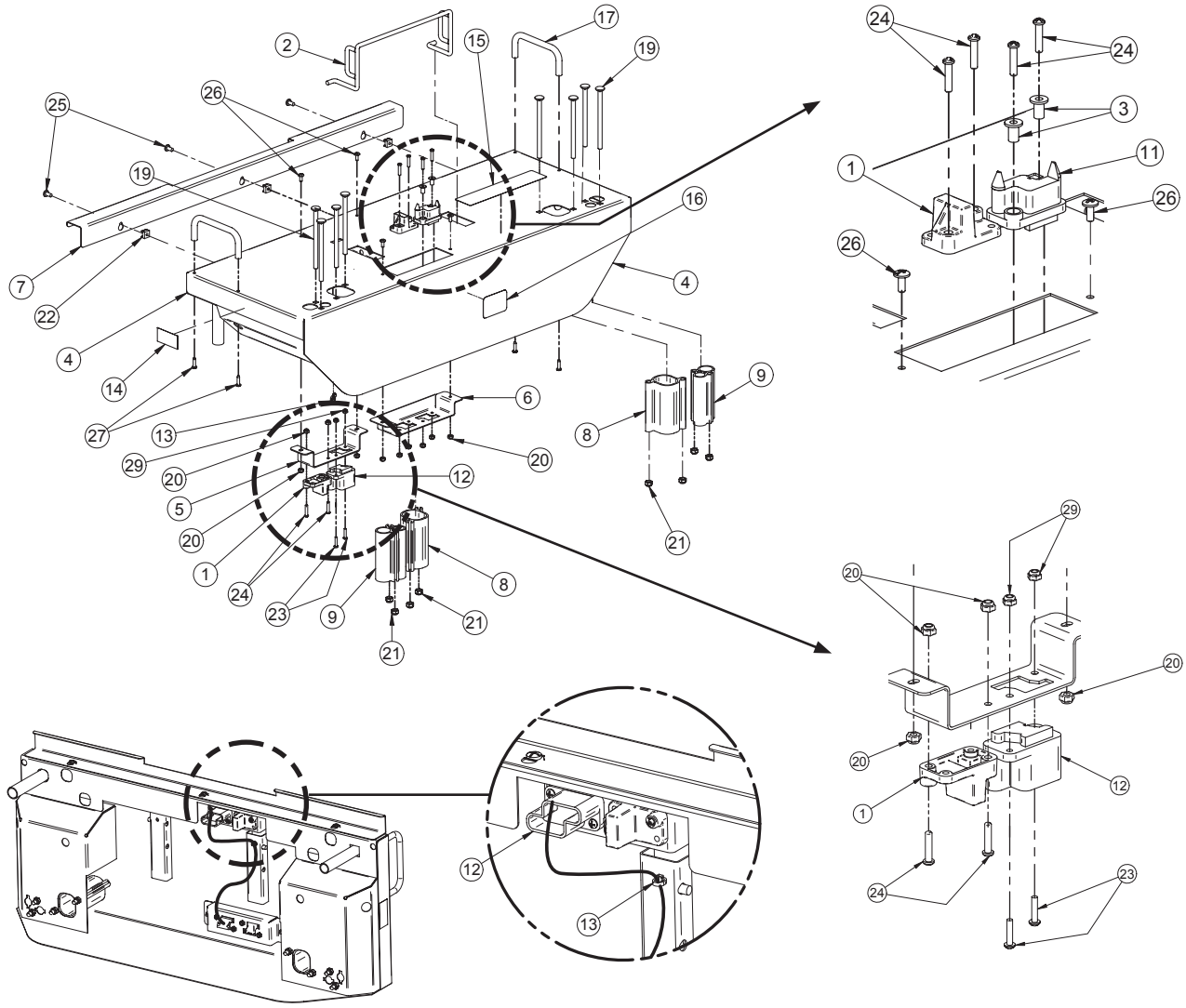
Bed Extender - FA64172

L64-101L Rev 05 (Reference Only)



Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
1	QP28-0182-11	Protective Cap	2	19	VB34A1O72-13	Carriage Bolt	8
2	64-1337L	Mattress Retainer	1	20	VE30A0G	Nylon Hex Locknut	10
3	25-0527Z	Connector Sleeve	2	21	VE30A1O	Nylon Hex Locknut	8
4	64-0781L	Bed Extender	1	22	VE90A08	Stationary Nut	3
5	64-0996L	Connector Support	1	23	VV33A1E24	Pan Head Machine Screw	2
6	64-0783L	Male Connector Support	1	24	VV33A0G28	Pan Head Machine Screw	6
7	64-0995L	Support	1	25	VV33A1N16-S	Pan Head Machine Screw	3
8	AAL28-0134	Head/Footboard Extrusions	2	26	VV37A0G16	Truss Head Machine Screw	4
9	AAL28-0144	Accessory Extrusion	2	27	VV83A9G24	Pan Head Tapping Screw	4
11	QDF28-0258	Motor Control Board / Cable	1	28	VW10C142402	Nylon Washer	8
12	QDF28-0332	Footboard Connector	1				
13	QDF9518	Cable Tie	1				
14	QE14399-T	Label - Manufacturer	1				
15	QE71-0697T	Label - Extension Warning	1				
16	QE71-0872-F	Label - Bed Extender	1				
17	QP14034-13	Mattress Retainer	2				

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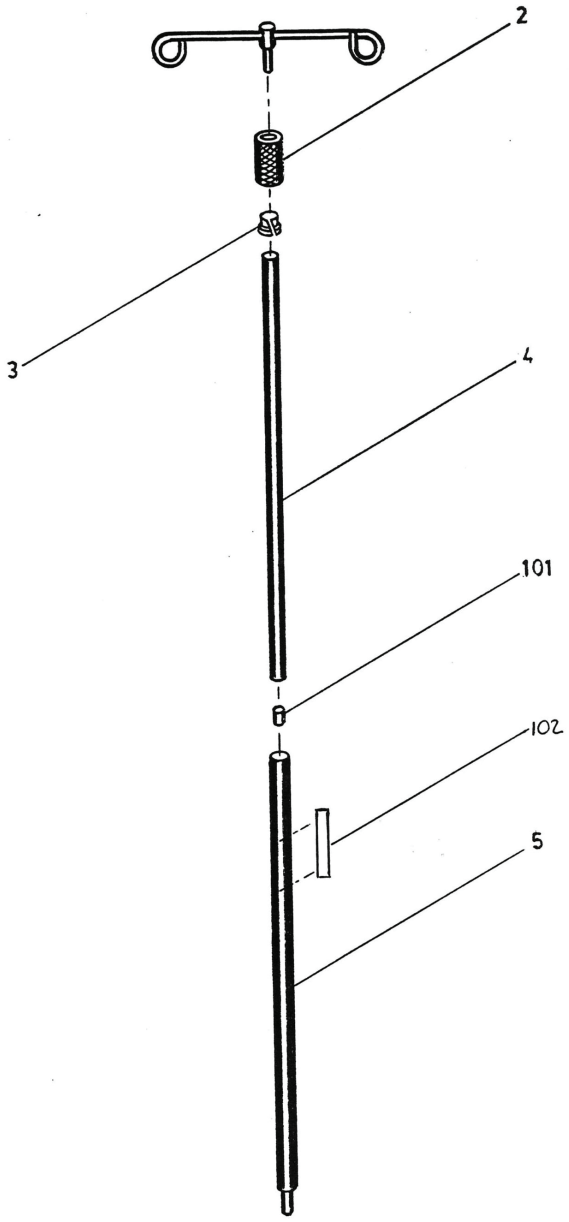
Removable I.V. Pole - 1/2” - FDTSH

LC-7300 Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
2	2111A	Tightening Sleeve	1
3	2109	Compression Socket	1
4	2107A	Top Tube	1
5	2105A	Bottom Tube	1
101	QPCE1206	Rubber cap	1
102	QE71-0246-T	Label - Warning	1

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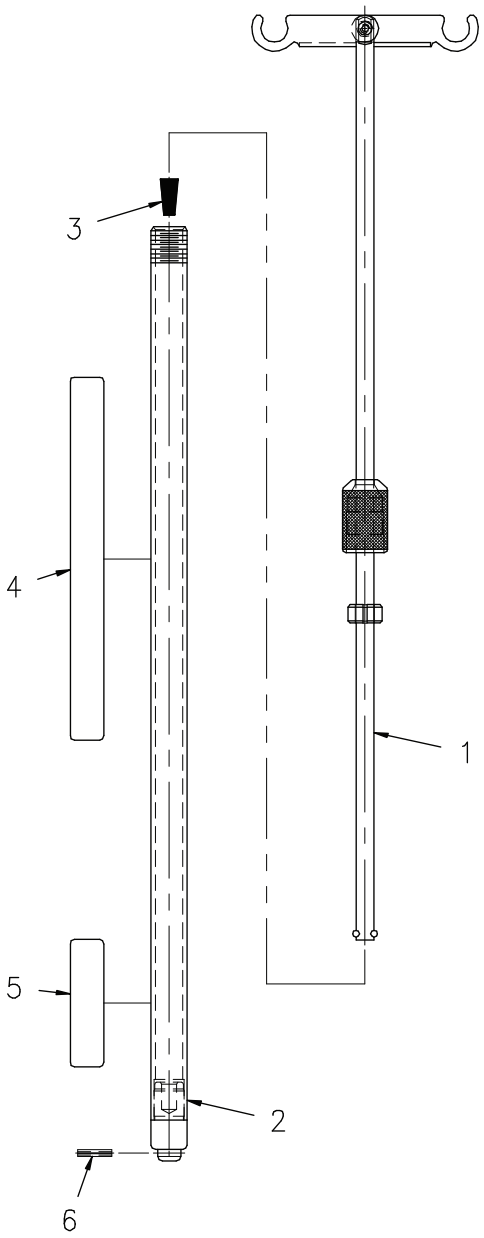
Removable I.V. Pole - 1” - FA61002-G

61-0014 Rev 01 (Reference Only)



Item	Part No.	Part Name	Qty.
1	61-0011G	Top Rod	1
2	61-0002A	Bottom Tube	1
3	QPCE1206	Rubber cap	1
4	QE71-0246-T	Label - Warning	1
5	QE14399-T	Label - Manufacturer	1
6	VG10B0630	Spring Pin	1

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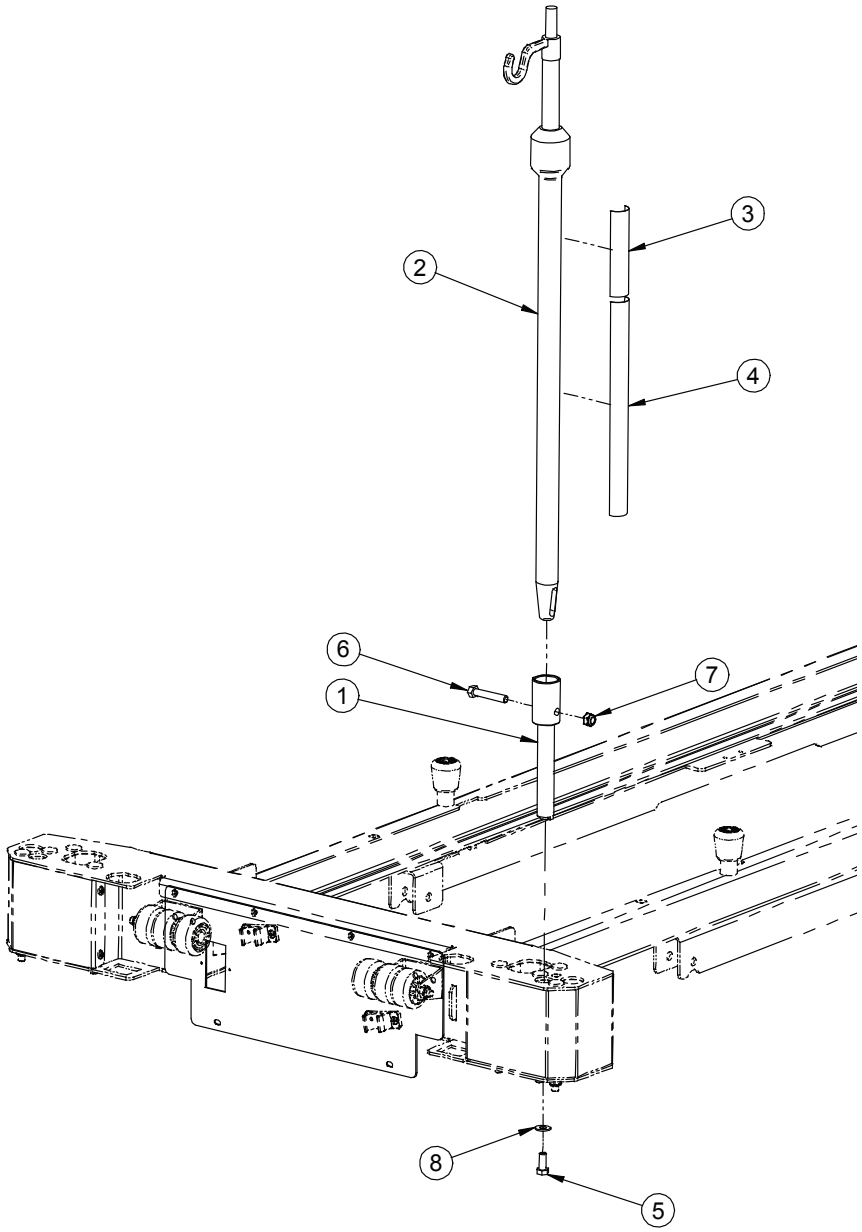
Fixed Two Stage I.V. Pole - FA64174

L64-103 Rev 00 (Reference Only)



Item	Part No.	Part Name	Qty.
1	64-0979C	I.V. Pole Support	1
2	QDF64-0613	Two Stage I.V. Pole	1
3	QE14399-T	Label - Manufacturer	1
4	QE71-0246-T	Label - Warning	1
5	VB15A1O24-S	Hex Bolt	1
6	VB15AO44	Hex bolt	1
7	VE30A1O	Nylon Hex Locknut	1
8	VW10A10	Washer	1

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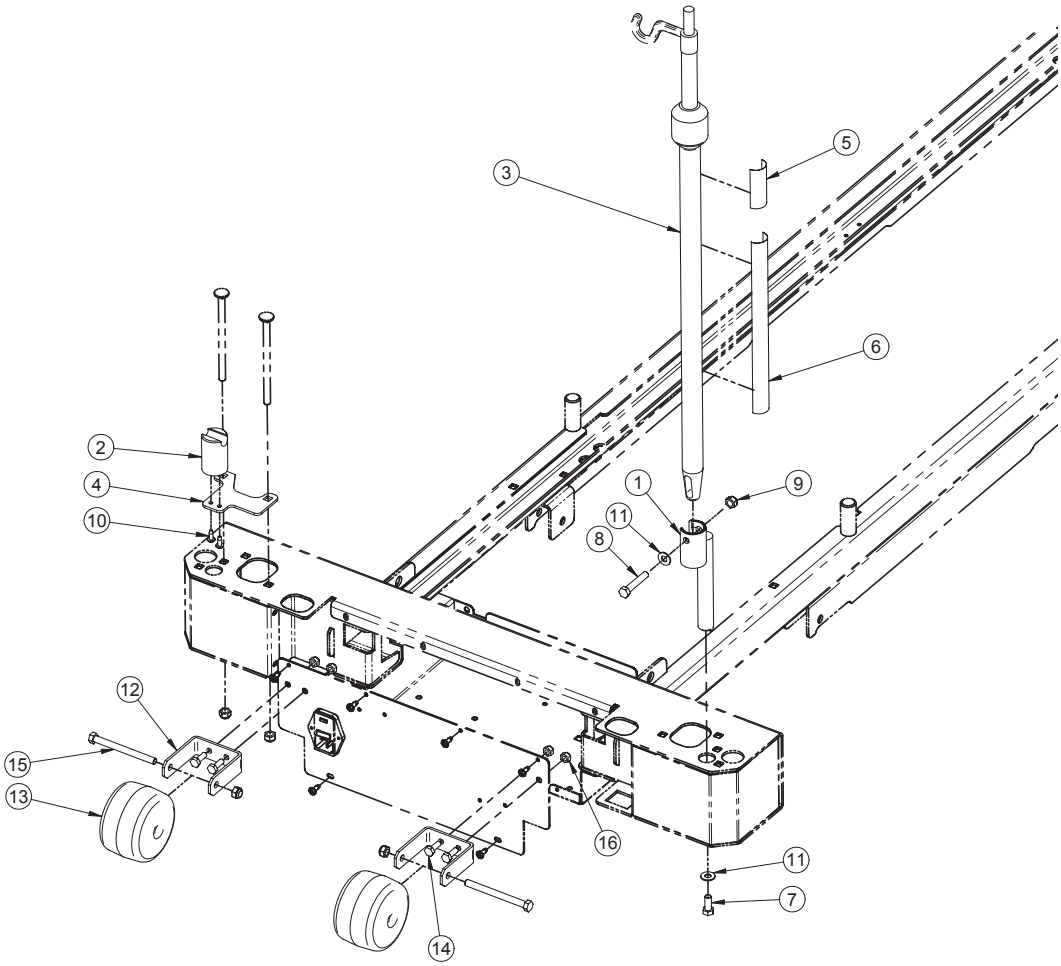
Fixed Two Stage I.V. Pole, Foldable - FA64171

L64-100 Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.
1	64-0734C	I.V. Pole Support	1
2	64-1351	I.V. Pole Stopper	1
3	QDF64-0613	Two Stage I.V. Pole	1
4	64-1215L	Storage Bracket Plate	1
5	QE14399-T	Label - Manufacturer	1
6	QE71-0246-T	Label - Warning	1
7	VB15A1O24-S	Hex Bolt	1
8	VB15AO44	Hex Bolt	2
9	VE30A1O	Nylon Hex Locknut	3
10	VV83A9G16	Pan Head Tapping Screw	2
11	VW10A10	Washer	2
12	90-1854L	Roller Bumper Support	2
13	QDF2094	Roller Bumper	2
14	VB15A1N24	Hex Bolt	4
15	VB15A1O60	Hex Bolt	2
16	VE30A1N	Nylon Hex Locknut	4

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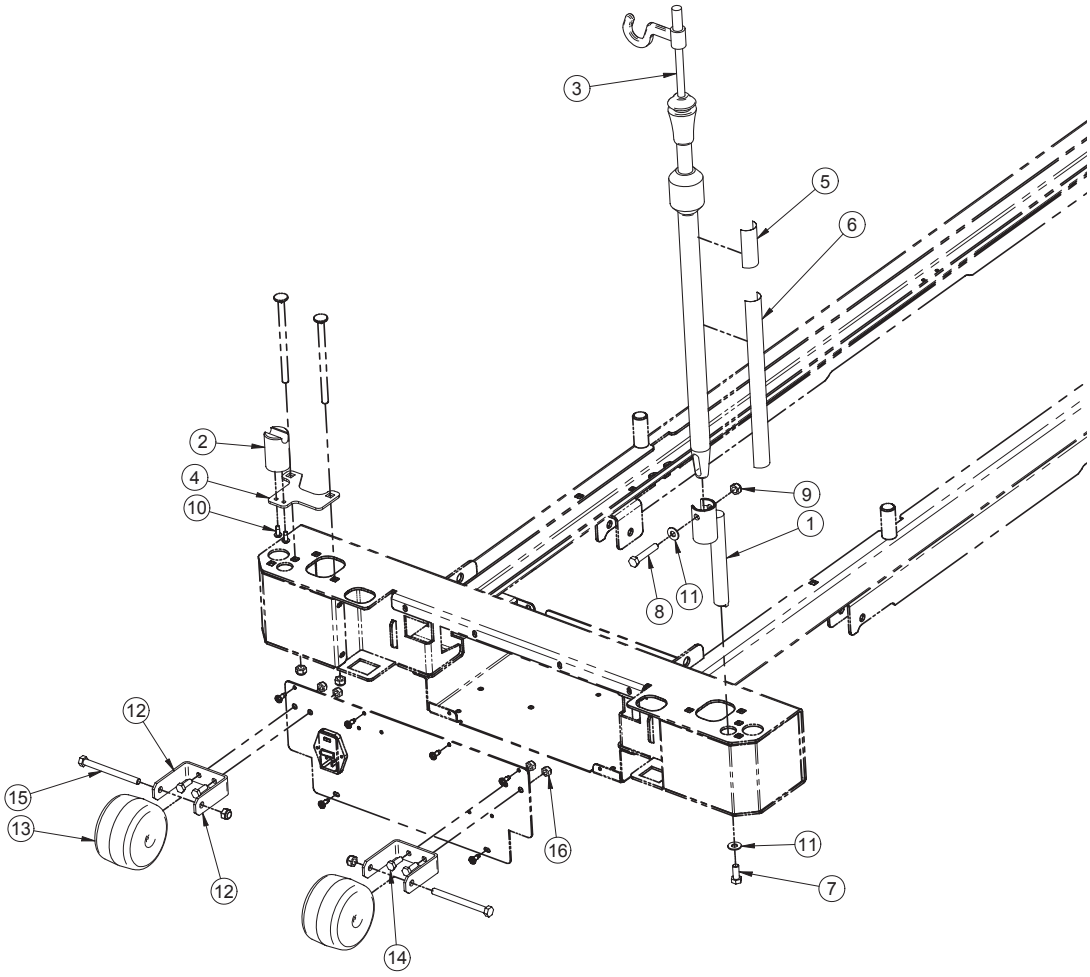
Fixed Three Stage I.V. Pole, Foldable - FA64170

L64-099 Rev 02 (Reference Only)



Item	Part No.	Part Name	Qty.
1	64-0734C	I.V. Pole Support	1
2	64-1351	I.V. Pole Stopper	1
3	QDF64-0614	Three Stage I.V. Pole	1
4	64-1215L	Storage Bracket Plate	1
5	QE14399-T	Label - Manufacturer	1
6	QE71-0246-T	Label - Warning	1
7	VB15A1O24-S	Hex Bolt	1
8	VB15AO44	Hex Bolt	2
9	VE30A1O	Nylon Hex Locknut	2
10	VV83A9G16	Pan Head Tapping Screw	2
11	VW10A10	Washer	2
12	90-1854L	Roller Bumper Support	2
13	QDF2094	Roller Bumper	2
14	VB15A1N24	Hex Bolt	4
15	VB15A1O60	Hex Bolt	2
16	VE30A1N	Nylon Hex Locknut	4

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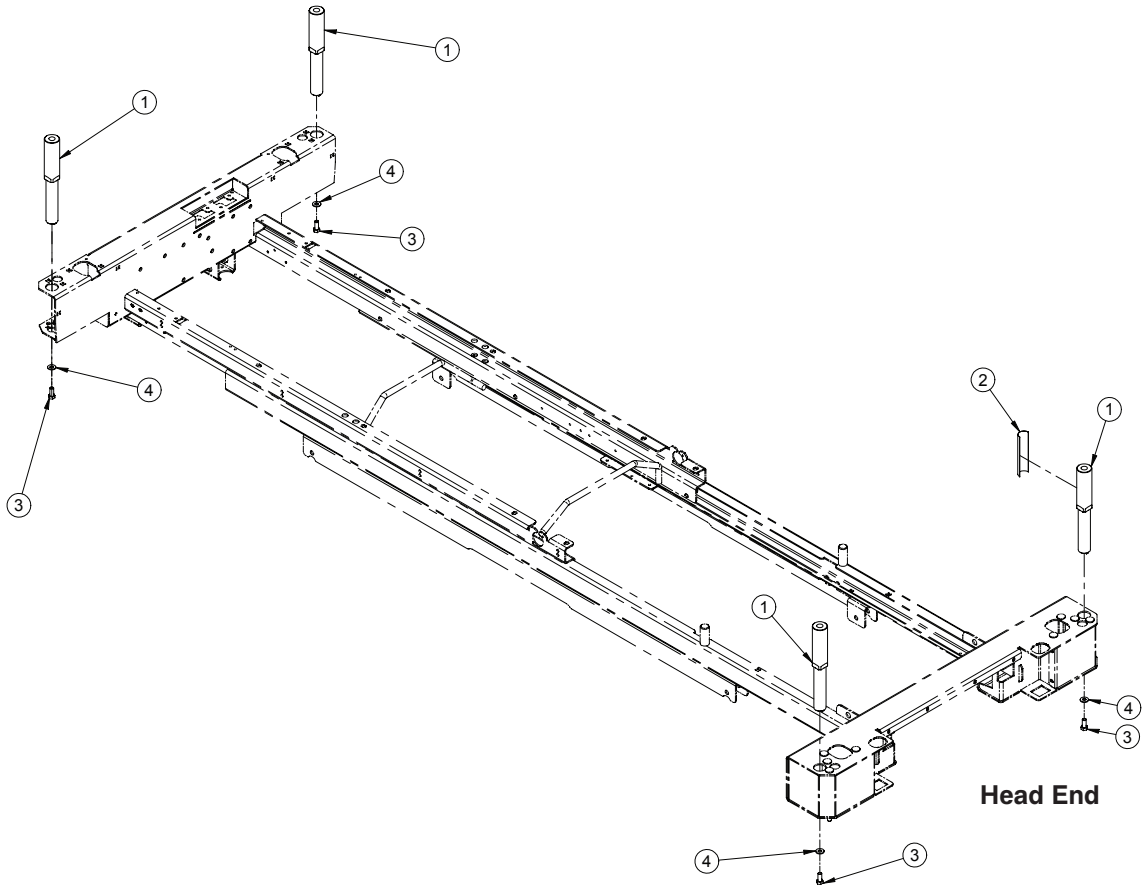
Traction Sleeves

Traction Sleeve Set Size	Part Number	Reference Part Number
4” x 1/2”	FA64188	L64-113 (Rev 00)
4” x 3/4”	FA64189	L64-114 (Rev 00)
8” x 1/2”	FA64190	L64-115 (Rev 00)
8” x 3/4”	FA64191	L64-116 (Rev 00)



Item	Part No.	Part Name	Qty.
1	64-1035C	Traction Sleeve Set - 4” x 1/2”	4
	90-1778C	Traction Sleeve Set - 4” x 3/4”	4
	64-1036C	Traction Sleeve Set - 8” x 1/2”	4
	64-1037C	Traction Sleeve Set - 8” x 3/4”	4
2	QE14399-T	Label - Manufacturer	1
3	VB15A1O24-S	Hex Bolt	4
4	VW10A10	Washer	4

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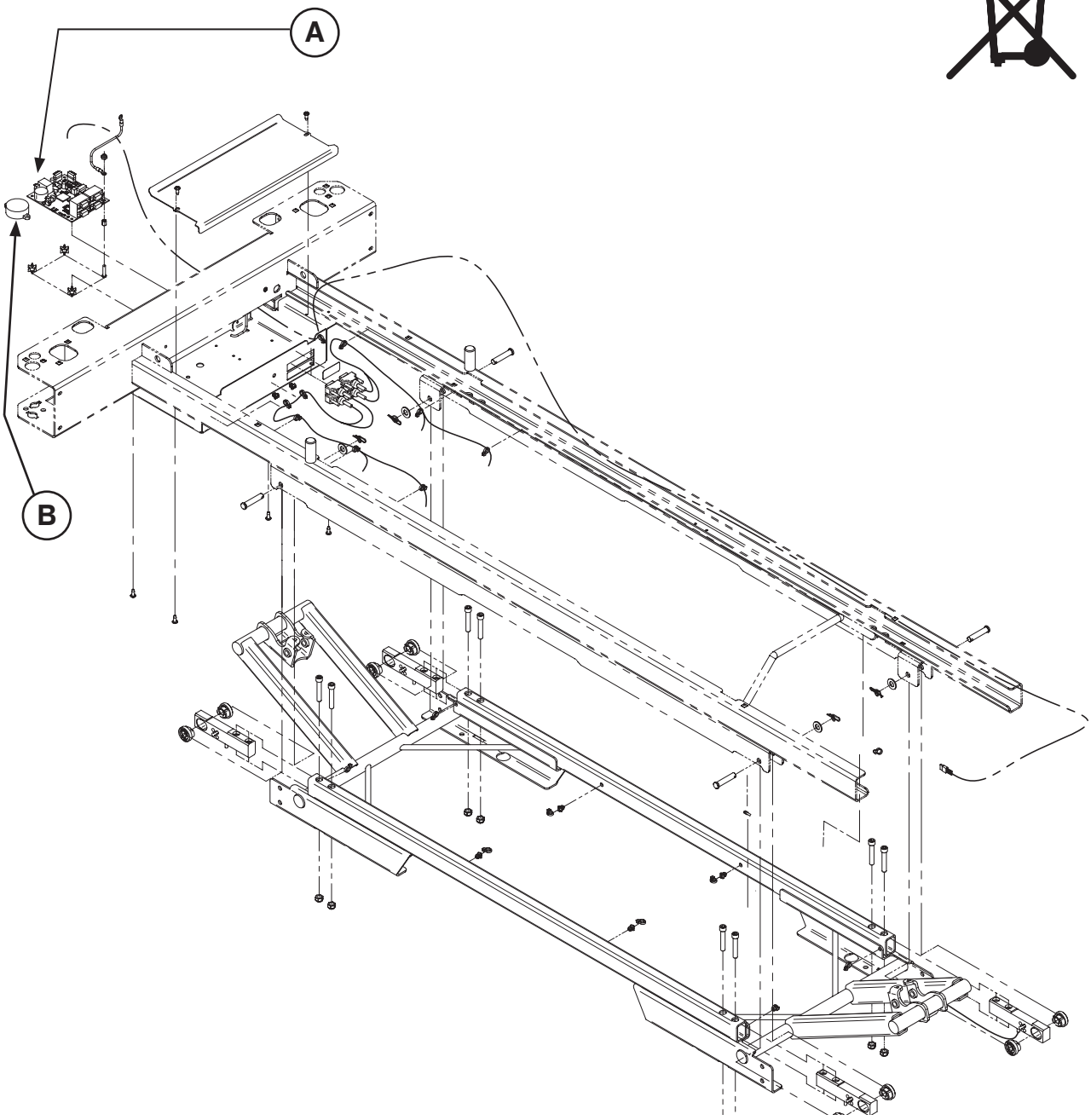
L28-006 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF25-0593 Circuit Board		1
B	QDF5095 Buzzer		1

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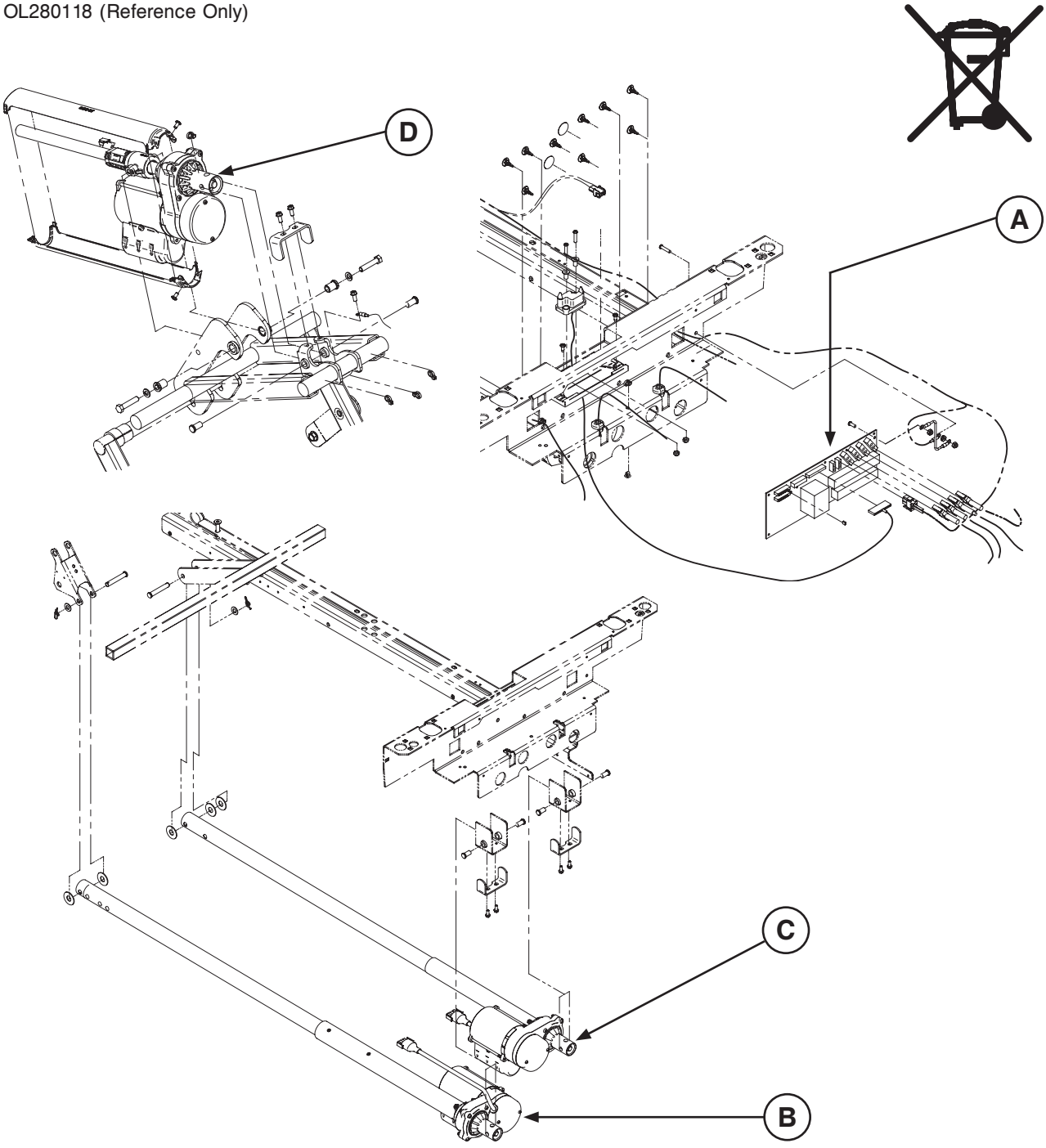
Recycling Passport

OL280118 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF25-0592 Circuit Board		1
B	28-0769 Motor		1
C	28-0770 Motor		1
D	28-0768 Motor		2

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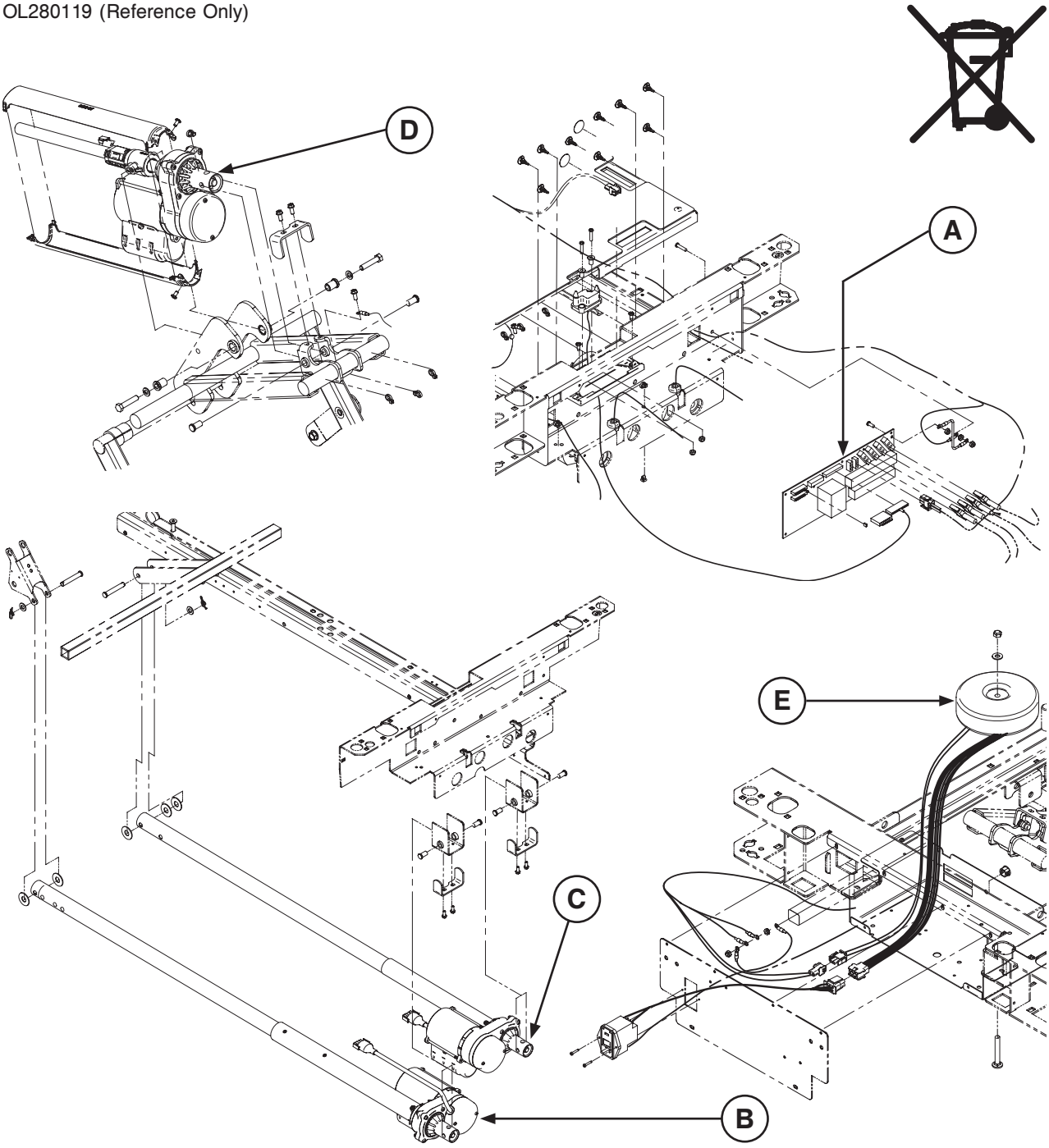
OL280119 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF25-0592 Circuit Board		1
B	28-0769 Motor		1
C	28-0770 Motor		1
D	28-0768 Motor		2
E	QDF14-1160 Transformer		1

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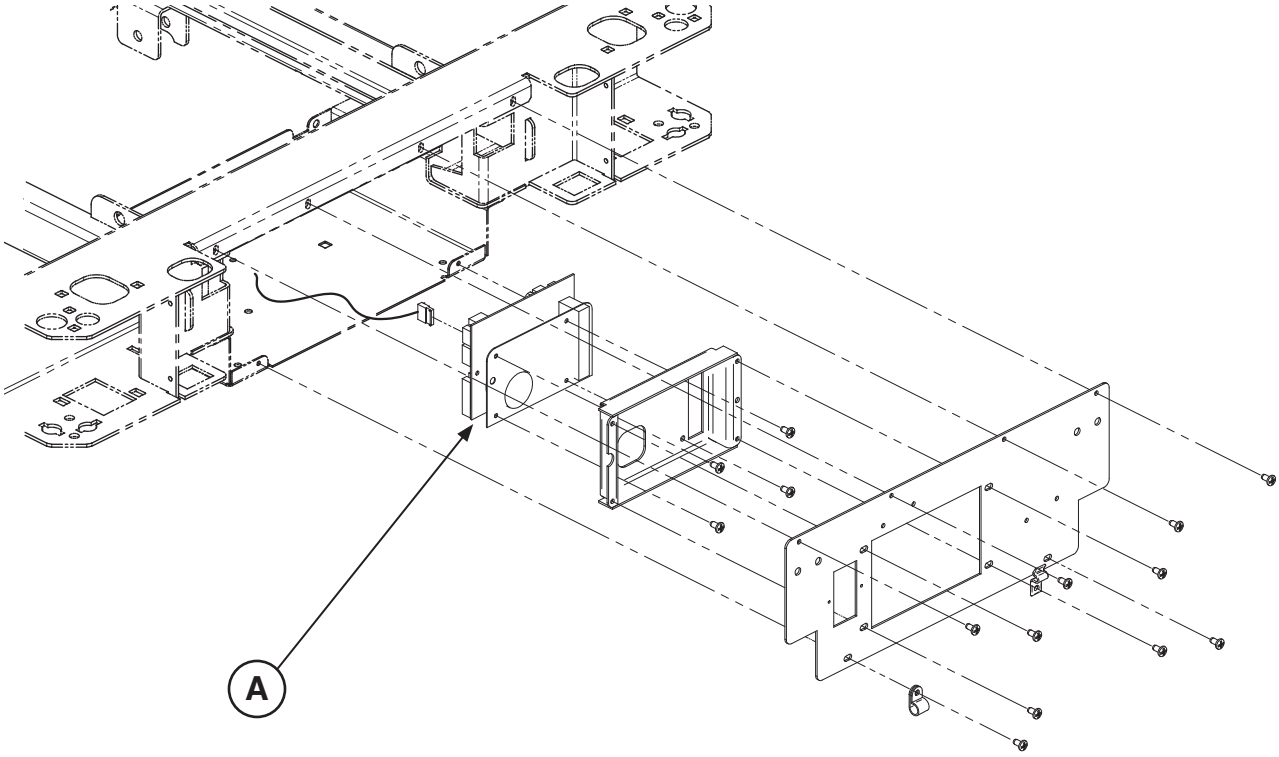
Recycling Passport

OL280022 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF21-1163 Circuit Board		1

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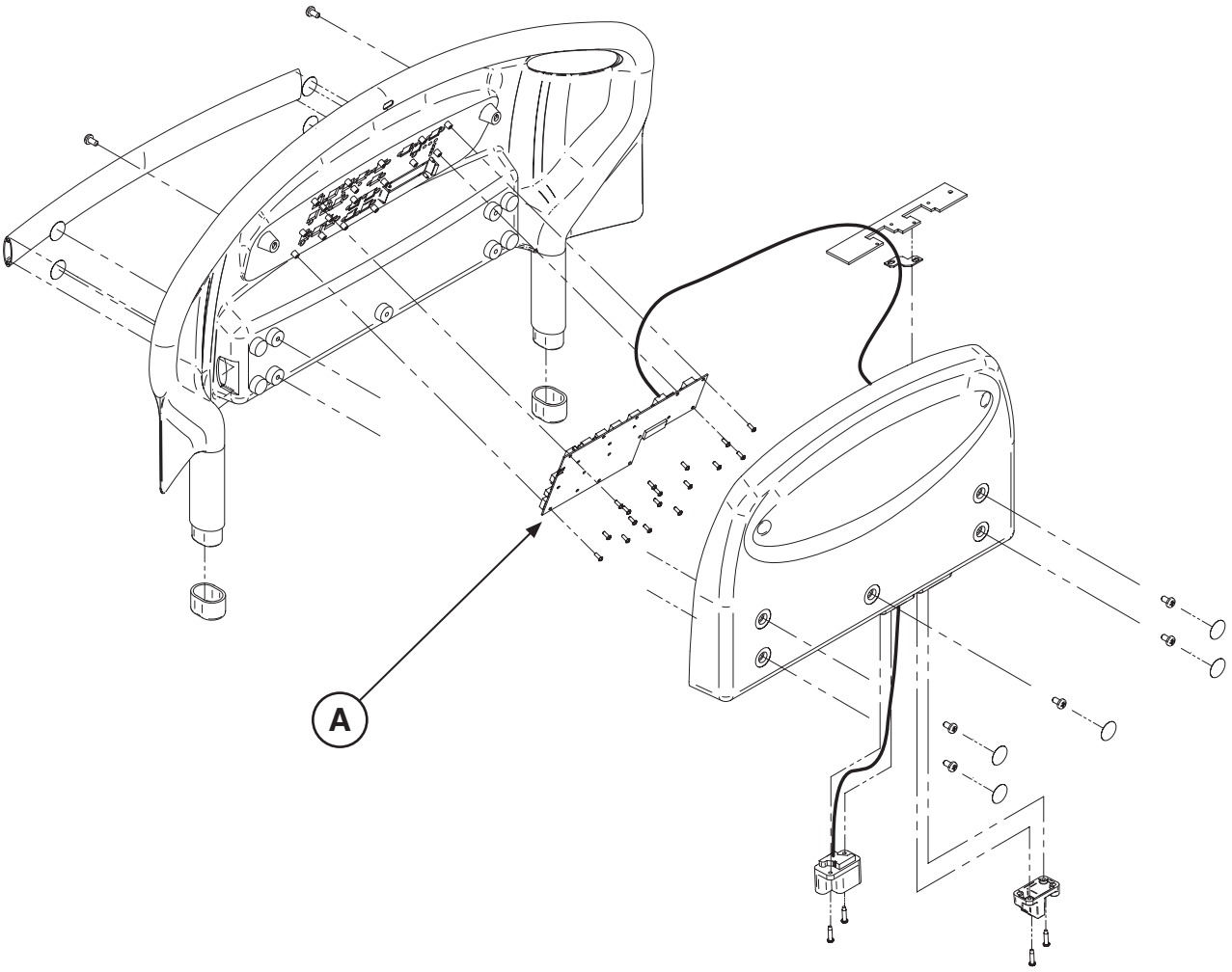
L28-014 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF21-1154 Circuit Board		1

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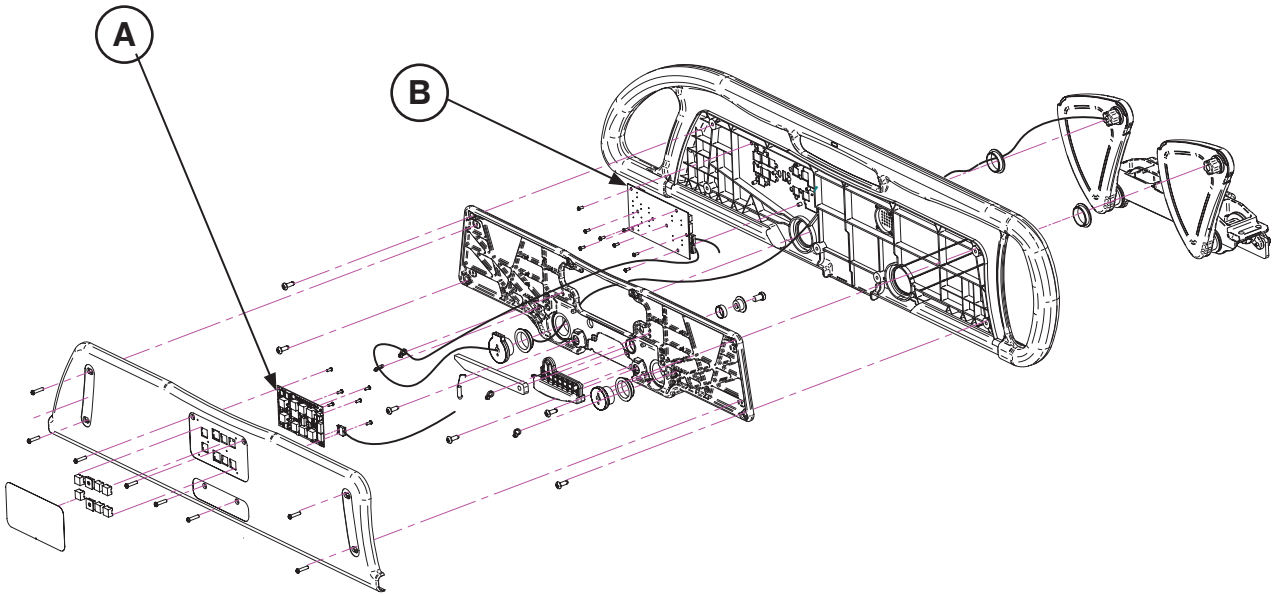
Recycling Passport

28-0001, 28-0002 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF21-1151 Circuit Board		1
B	QDF21-1169 Circuit Board		1

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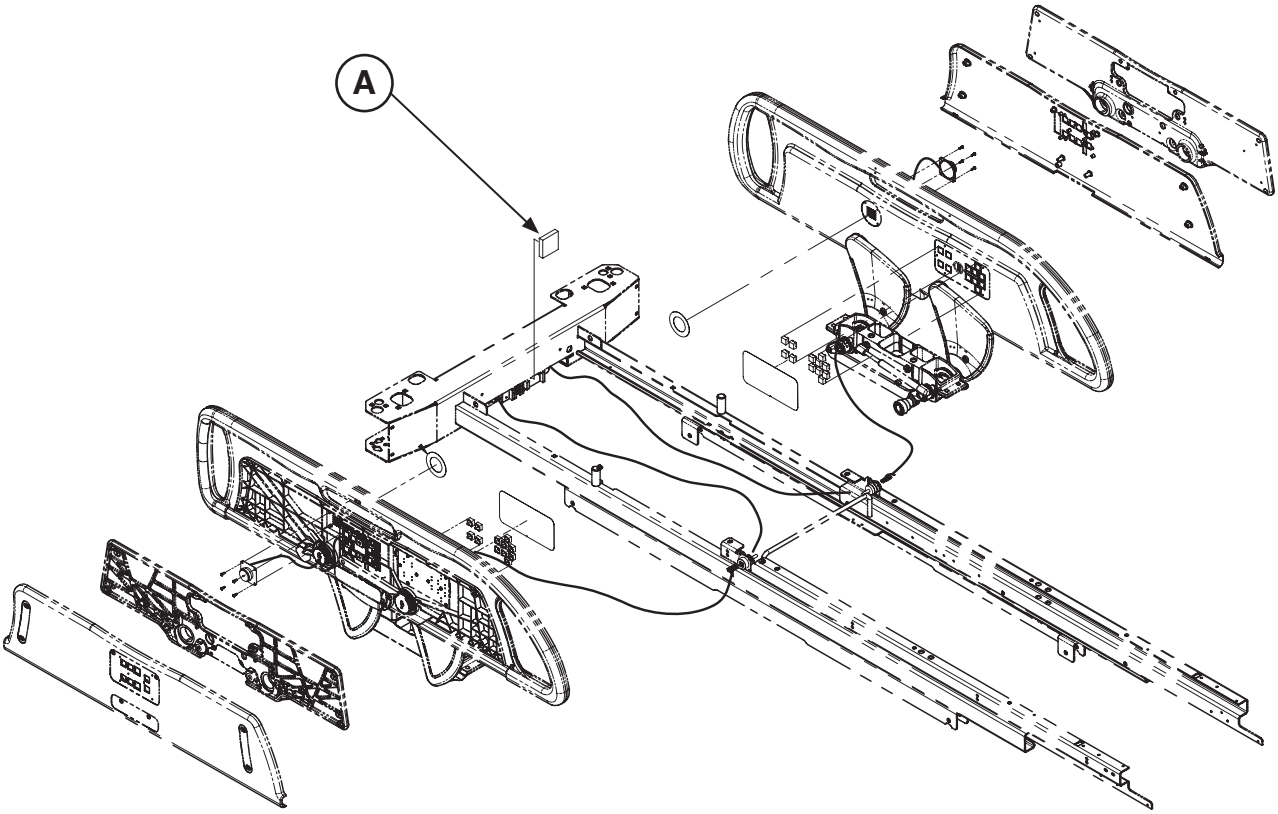
Recycling Passport

OL280033, OL280095 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF2060 / QDF28-0595 Circuit Board		1

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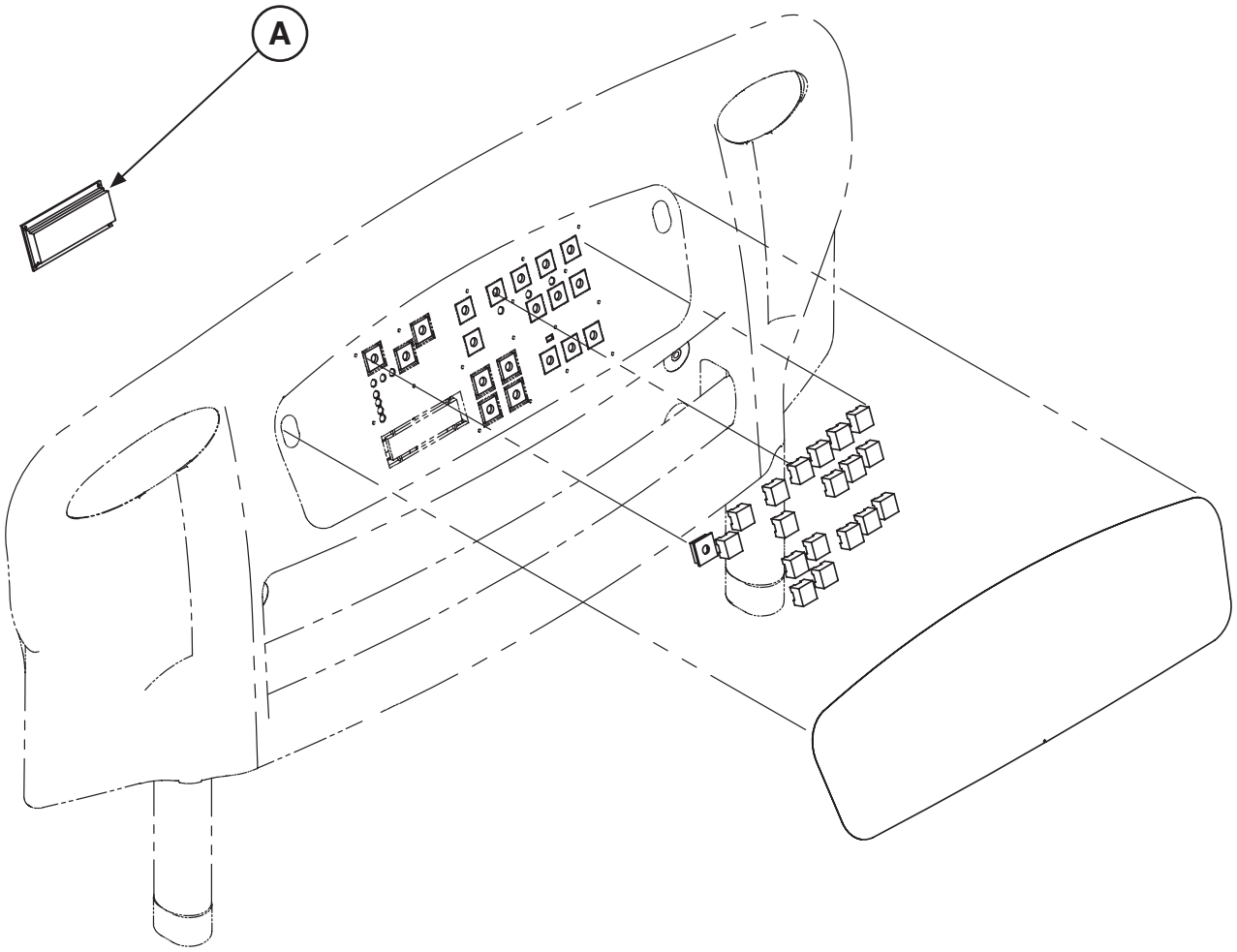
Recycling Passport

OP280012, OP280013, OP280014 (Reference Only)



Item	Recycling/Material Code	Important Information	Qty
A	QDF25-0463 Vacuum Fluorescent Display		1

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LIMITED WARRANTY

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser the GoBed® II MedSurg Bed, Model FL28EX 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 15 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 15 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, Canada 1-888-233-6888.

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

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SERVICE CONTRACT PROGRAMS

Stryker offers the following service contract programs:

Service Agreement Options *	Premium	Complete	Standard
Annually scheduled preventative maintenance	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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GOBED® II MEDSURG BED, MODEL FL28EX

Guidance and Manufacturer's declaration - Electromagnetic Immunity			
The GoBed® II MedSurg Bed, Model FL28EX is suitable for use in the electromagnetic environment specified below. The customer or the user of the GoBed® II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.			
Immunity Test	**IEC 60601 Test Level**	**Compliance Level**	**Electromagnetic Environment Guidance**
Electrostatic Discharge (ESD) IEC 61000-4-2	±6 kV contact ±8 kV air	±6 kV contact ±8 kV air	Floors should be wood, concrete, or ceramic tile. If floors are covered with synthetic material, the relative humidity should be at least 30%.
Electrostatic fast Transient/burst IEC 61000-4-4	±2 kV for power supply lines ±1 kV for input/ output lines	±2 kV for power supply lines ±1 kV for input/ output lines	Main power quality should be that of a typical commercial or hospital environment.
Surge IEC 61000-4-5	±8 kV differential mode ±2 kV common mode	±8 kV differential mode ±2 kV common mode	Main power quality is that of a typical commercial and/or hospital environment.
Voltage dips, voltage variations and short interruptions on power supply input lines IEC 61000-4-11	<5%Ut (95% dip in Ut) for 0.5 cycle 40%Ut (60% dip in Ut) for 5 cycles 70%Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	<5%Ut (95% dip in Ut) for 0.5 cycle 40%Ut (60% dip in Ut) for 5 cycles 70%Ut (30% dip in Ut) for 25 cycles. <5% Ut (>95% dip in Ut) for 5 sec.	Main power quality should be that of a typical commercial and/or hospital environment. If the user of the GoBed® II MedSurg Bed, Model FL28EX requires continued operation during power main interruptions, it is recommended that the device be powered from an uninterrupted power supply or a battery.
Power frequency (50/60 Hz) magnetic field IEC 61000-4-8	3 A/m	3 A/m	Power frequency magnetic fields should be at levels characteristic of a typical location in a typical commercial and/or hospital environment.
Note: U_T is the a.c. mains voltage prior to applications of the test level.			

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GOBED® II MEDSURG BED, MODEL FL28EX (CONTINUED)

Recommended separation distances between portable and mobile RF communications equipment and the GoBed® II MedSurg Bed, Model FL28EX.

The GoBed® II MedSurg Bed, Model FL28EX is intended for use in an electromagnetic environment in which radiated RF disturbances are controlled. The customer or the user of the GoBed® II MedSurg Bed, Model FL28EX can help prevent electromagnetic interferences by maintaining a minimum distance between portable and mobile RF communications equipment (transmitters) and the GoBed® II MedSurg Bed, Model FL28EX as recommended below, according to the maximum output power of the communications equipment.

Rated maximum output power of transmitter W	**Separation distance according to frequency of transmitter m**		
	150 kHz to 80 MHz $d=1.2\sqrt{P}$	80 MHz to 800 MHz $d=1.2\sqrt{P}$	800 MHz to 2.5 GHz $d=2.3\sqrt{P}$
0.01	1.12	0.12	0.23
0.1	0.38	0.38	0.73
1	1.2	1.2	2.3
10	3.8	3.8	7.3
100	12	12	23

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

Note 1
At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.

Note 2
These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

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GOBED® II MEDSURG BED, MODEL FL28EX (CONTINUED)

The GoBed® II MedSurg Bed, Model FL28EX is suited for use in the electromagnetic environment specified below. The customer or the user of the GoBed® II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.

Immunity Test	IEC 60601 Test Level	Compliance Level	Electromagnetic Environment - Guidance
Conducted RF IEC 61000-4-6	3 Vrms 150 kHz to 80 MHz	3 Vrms	Portable and mobile RF communications equipment should be used no closer to any part of the GoBed® II MedSurg Bed, Model FL28EX, including cables, than the recommended separation distance calculated from the equation appropriate for the frequency of the transmitter. Recommended Separation Distance $d=1.2\sqrt{P}$
Radiated RF IEC 61000-4-3	3 V/m 80 MHz to 2.5 GHz	3 V/m	$d=1.2\sqrt{P}$ $d=2.3\sqrt{P}$ 800 MHz to 2.5 GHz where P is the maximum output power rating of the transmitter in watts (W) according to the transmitter manufacturer and d is the recommended separation distance in meters (m). Field strengths from fixed RF transmitters, as determined by an electromagnetic site survey,[a] should be less than the compliance level in each frequency range.[b] Interference may occur in the vicinity of equipment marked with the following symbol: 

Note 1
At 80 MHz and 800 MHz, the higher frequency range applies.
Note 2
These guidelines may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.

[a]Field strengths from fixed transmitters, such as base stations for radio (cellular/cordless) telephones and land mobile radios, amateur radio, AM and FM radio broadcast, and TV broadcast cannot be predicted theoretically with accuracy. To assess the electromagnetic environment due to fixed RF transmitters, an electromagnetic site survey should be considered. If the measured field strength in the location in which the GoBed® II MedSurg Bed, Model FL28EX is used exceeds the applicable RF compliance level above, the GoBed® II MedSurg Bed, Model FL28EX should be observed to verify normal operation. If abnormal performance is observed, additional measures may be necessary, such as reorienting or relocating the GoBed® II MedSurg Bed, Model FL28EX.
[b]Over the frequency range 150 kHz to 80 MHz, field strengths are less than 3 V/m.

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GOBED® II MEDSURG BED, MODEL FL28EX (CONTINUED)

Guidance and Manufacturer's declaration - Electromagnetic Emissions		
The GoBed® II MedSurg Bed, Model FL28EX is intended for use in an electromagnetic environment specified below. The customer or the user of the GoBed® II MedSurg Bed, Model FL28EX should assure that it is used in such an environment.		
Emissions Test	**Compliance**	**Electromagnetic Environment**
RF Emissions CISPR 11	Group 1	The GoBed® II MedSurg Bed, Model FL28EX uses RF energy only for its internal function. Therefore, its RF emissions are very low and are not likely to cause any interference in nearby electronic equipment.
RF Emissions CISPR 11	Class A	The GoBed® II MedSurg Bed, Model FL28EX is suitable for use in all establishments other than domestic and those directly connected to the public low voltage power supply network that supplies buildings used for domestic purposes.
Harmonic Emissions IEC 61000-3-2	Class A	
Voltage Fluctuations Flicker Emissions IEC 61000-3-3	Complies	

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