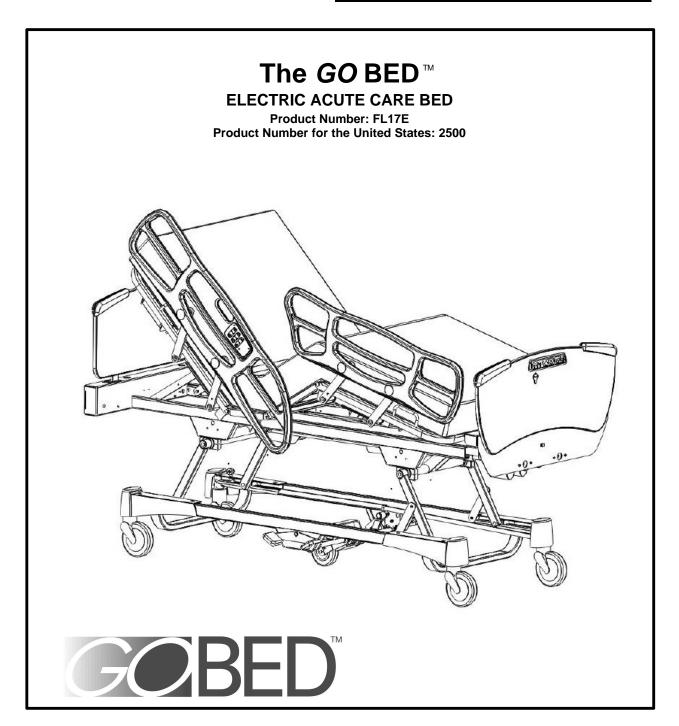


# **MAINTENANCE MANUAL**



### **TECHNICAL ASSISTANCE AND PARTS**

1 800 428-5025 (Service in English in Canada)

1 800 361-2040 (Service in French in Canada)

1 800 327-0770 (In United States)

E-mail (Canada): <a href="mailto:service@bertec.strykercorp.com">service@bertec.strykercorp.com</a>

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### 1. INTRODUCTION

This manual is designed to assist you with the servicing of the *GO* BED. Before servicing the bed, it is important to read and understand all information in this manual. Qualified maintenance personnel should be able to refer to this manual at all time when servicing the bed.

An Operations Manual is also available to assist you with the operation of the bed.

This Maintenance Manual is an integral part of the unit and should be included if the bed is sold or transferred.

1.1 BED SPECIFICATIONS	
Maximum Weight Capacity	500 lb including 100 lb of boards and accessories
	227 kg including 45.5 kg of boards and accessories
Overall Bed Length/Width - Steel Side-rails	93" x 41 9/16" (steel side-rails up) 93" x 38 3/8" (steel side-rails down) 236.2 cm x 105.5 cm (steel side-rails up)
Overall Bed Length/Width - Plastic side-rails	236.2 cm x 97.5 cm (steel side-rails down) 93" x 42 9/16" (plastic side-rails up) 93" x 38 3/4" (plastic side-rails down) 236.2 cm x 108.1 cm (plastic side-rails up) 236.2 x 98.4 cm (plastic side-rails down)
Overall Weight (w/o boards and accessories)	385 lb - 175 kg
Patient Sleeping Surface	35" x 80" extendable to 82" and 84" 89 cm x 203 cm extendable to 208 cm and 213 cm
Minimum/Maximum Bed Height	14" to 29" - 35.5 cm to 73.7 cm
Sound Level	< 58 dBa
Fowler Angle	0° to 65°
Knee Gatch w/o Contour Positioning	0° to 32°
Knee Gatch w/Contour Positioning	0° to 24°
Trendelenburg/Reverse Trendelenburg	-14° to +14°
Electrical Requirements	100 V~, 50-60 Hz, 7.5 A
	120 V~, 50-60 Hz, 4.8 A
	120 V~, 50-60 Hz, 9.8 A w/auxiliary outlet
	200 V~, 50-60 Hz, 3.2 A
	220 V~, 50-60 Hz, 2.9 A
	240 V~, 50-60 Hz, 2.7 A

<sup>\*</sup> Stryker Bertec pays special attention to product improvement and reserves the right to change specifications without notice.

### 1.2 TECHNICAL SUPPORT

For questions regarding this product, contact the following Technical Service department or your local representative:

### In Canada:

Stryker Bertec

Service in English: 1 800 428-5025 Service in French: 1 800 361-2040

E-mail (Canada): <a href="mailto:service@bertec.strykercorp.com">service@bertec.strykercorp.com</a>

70, 5<sup>th</sup> Avenue, P.O. Box 128 L'Islet (Québec), G0R 2C0, Canada

### In the United States:

Stryker Medical 1 800 327-0770

6300, South Sprinkle Road Kalamazoo, MI 49001-9799

USA

### 1.3 SAFETY

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

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



### **WARNING**

The personal safety of the patient or user may be involved. Disregarding this information could result in injury to the patient or user.



#### **CAUTION**

These instructions point out special procedures or precautions that must be followed to avoid damaging the equipment.

#### **NOTE**

Notes provides special information to make maintenance easier or important instruction clearer.

#### STATIC DISCHARGE PRECAUTIONS

The electronic circuits of the bed are 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 components of the bed.

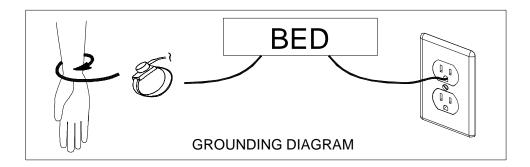
### **Static Protection Equipment**

The necessary equipment for a proper static protection is:

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

#### **Static Protection Procedure**

- 1. Unplug the bed power cord from the wall receptacle.
- 2. Insert the grounding plug into a properly grounded hospital grade wall receptacle. Plug the banana plug of the test lead into the receptacle on the grounding plug. Connect the alligator clip on the other end of the test lead to a ground point on the bed.
- 3. Place the static control wrist strap on your wrist. Connect the clip at the other end of the wrist strap cord to a ground point on the bed.



### 1.4 Warranty

#### LIMITED WARRANTY

All Stryker Bertec products are guaranteed against material or manufacturing defects, improper operation of mechanisms, and premature wear of bed components under normal use conditions.

For questions regarding warranty, please contact Stryker Bertec Technical Service department (see section 1.2) or your local representative.

#### TO OBTAIN SERVICE AND/OR PARTS

#### NOTE

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

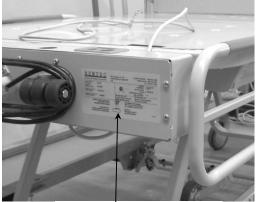
### To Require Service

To obtain the service of a Stryker Field Service Representative for an on-site diagnosis and/or repair of a bed malfunction, contact the Stryker Bertec Technical Service department or your local representative.

#### **To Order Parts**



Figure 1.4



MANUFACTURER'S NAMEPLATE

In order to correctly identify and order parts to be replaced, proceed as follow:

- Once you have established the nature of the problem, locate the serial number plate (fig. 1.4) and the manufacturer's nameplate (fig. 1.4) affixed respectively on the right side of the mobile frame at the foot end of the bed, and on the right side of the head end casing cover.
- Write down the serial number, the production number (e.g. FL17-XXXX) and the bed model (manufacturer's nameplate). Make sure that the bed is indeed a Stryker Bertec bed. At first glance, beds manufactured by other companies may resemble ours.
- Locate the Parts Manual or Customer's Guide (containing the Parts Lists needed) number
  on the manufacturer's nameplate and refer to its drawings and part lists to identify the
  defective part. Write down the name of the part and its part number. Also write down the
  problem encountered while using the equipment.

#### NOTE

It is very important that you refer to the Customer's Guide drawings and part lists that are specific to the bed needing repair.

- Contact Stryker Bertec Technical Service department (see section 1.2) or your local representative and provide all the previously noted information.
  - Bed model
  - Serial number and production number
  - Name and part number of the defective part
  - Problem encountered

#### NOTE

We will do our best to help you identify the parts to be replaced. However, if an error occurs when ordering, the user remains responsible for identifying parts to change. Stryker Bertec will take back wrong parts ordered but will not assume shipping charges and restocking fees will be charged to the user unless a Technical Service representative has been requested for an on-site diagnosis of the malfunction.

#### **RETURN AUTHORIZATION**

Merchandise cannot be returned without approval from the Stryker Bertec Technical Service department. An authorization number will be provided, which must be clearly printed on the returned merchandise. Stryker Bertec reserves the right to charge shipping and restocking fees on returned items.

#### **DAMAGED MERCHANDISE**

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 Bertec will file a freight claim with the appropriate carrier for damages incurred. Claims will be limited in amount to the actual replacement cost. In the event that this information is not received by Stryker Bertec within the fifteen (15) days period following the delivery of the merchandise, or the damage was not noted on the delivery notice 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 5 days of invoice.

### 2. PREVENTATIVE MAINTENANCE

This section contains a recommended spare parts list as well as cleaning instructions and a checklist to assist with the preventative maintenance and cleaning of your equipment.

In the text, the words "right" and "left" refer to the right and left sides of a patient lying face up on the bed.

### 2.1 BED CLEANING AND MATTRESS CARE



### **CAUTION**

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

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

#### **CLEANING BEDS**

Hand wash all surfaces of the bed with a soft cloth moistened with a solution of lukewarm water and a mild detergent.

Wipe the bed clean and dry thoroughly to avoid build up of cleaning solution.

### **MATTRESS CARE**



### **WARNING**

Inspect the mattress after each use. Discontinue use if any cracks or rips are found in the mattress cover, which may allow fluid to enter the mattress. Failure to properly clean the mattress, or dispose of it if defective, may increase the risk of exposure to pathogenic substances and may cause injury to the patient and/or user.

### Inspection

Implement local policies to address regular care, maintenance, and cleaning of mattresses and covers. The cover cleaning procedure can be found below and on the bed label.

Inspect mattress cover surface (also zip fasteners and cover inner surface if mattresses have zip fasteners) regularly for signs of damage. If the mattress cover is stained, soiled, or torn, remove the mattress from service.

#### Cleaning

Stains: Wash with lukewarm water using a mild detergent. Rinse with water and let dry. For tough stains use bleach diluted with ten parts of water.

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Listed below are the lubrication points and their recommended time interval check. When needed, lubricate these points with OG2 grease (Stryker Bertec part number M0027).

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#### **WARNING**

The use of types of grease other than the one recommended (OG2 grease) could lead to deterioration of critical parts and to mechanism failure, resulting in injury to the patient or user and damage to the bed.



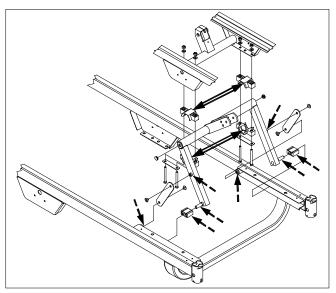
#### **CAUTION**

The *GO* BED uses oil-impregnated shoulder spacers at hinge points. **Do not** lubricate these shoulder spacers. When shoulder spacers are found worn, replace them.

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$\mathbf{H}$	IVIV	JAI	CHECKI	1.51

The Hi-Lo lever nylon sliders and tl	heir shafts (see fig. 2.2A, page 11). Verify that grease is
still present along the course of the	e sliders (inner surfaces (bottom and side) of the rail).
The lower mounting points (se	ee fig. 2.2A, page 11) of the Hi-Lo system stabilizer.
The side-rail plungers and plu	nger springs (see fig. 2.2B, page 11).
The side-rail arm glide rods (s	ee fig. 2.2B, page 11).
TWO YEAR INTERVAL CHECKLIST:	
	n actuator tubes (see fig. 2.2C, page 11) to facilitate tubes. Bring the bed and the head section to full up lator tubes.
The four actuator screws (see fig. 2 not appear on illustration 2.2C.	2.2C, page 11). Note that the foot actuator screw does
	linking the actuator tubes to the head and Knee Gatch Lo lever arms (see fig. 2.2C, page 11).
Actuator bolts that hold actuators t	o their brackets as well as the inner sides of the
brackets, including the pivot pin (se	ee fig. 2.2C, page 11).
Micro-switch activator (see fig. 2.2l	E, page 11) of the optional Auto Contour mechanism.
FIVE YEARS INTERVAL CHECKLIST:	
The side-rail shafts and transfer pla	ate sleeves (see fig. 2.2B, page 11).
The inside of the Hi-Lo lever mould	ded bearings (see fig. 2.2A, page 11).
· · · · · · · · · · · · · · · · · · ·	the pivot shaft of the CPR support, and the activation ge 11), all from the instant CPR release mechanism.
Serial Number:	
<del></del>	<del></del>
Completed by:	Date:

# **LUBRICATION POINTS**



LEGEND:

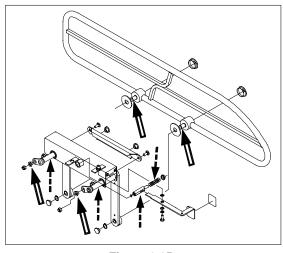


Figure 2.2B

Figure 2.2A

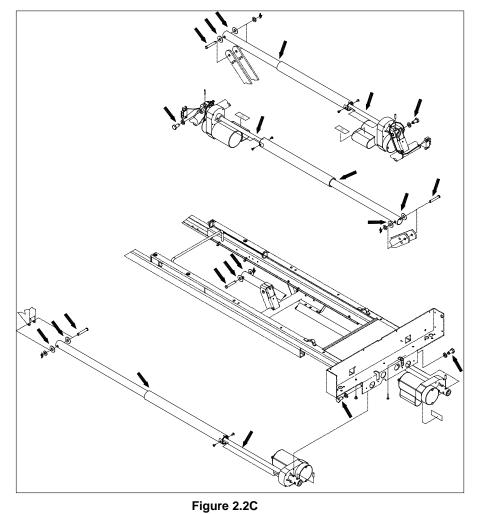


Figure 2.2D

Figure 2.2

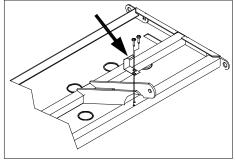


Figure 2.2E

### 2.3 PREVENTATIVE MAINTENANCE PROGRAM

The following periodic maintenance and inspection program has been devised to ensure a long and productive life to your GO BED. Each item on the schedule should be checked and any necessary adjustment made during the preventive maintenance process. Persistence in performing it **annually** will help minimize bed failures and reduce downtimes.



#### **WARNING**

Only qualified and authorized maintenance personnel should perform the procedures detailed in this maintenance guide. Failure to observe this restriction can result in serious damage to material and/or severe injury to people.

### **ANNUAL CHECKLIST**

Inspection for excessive wear of all the oil-impregnated bronze shoulder spacers found in
 the following components of the bed. Do not lubricate, replace if worn.
Linkage of the mattress support sections together
Linkage of the head section lever arms to the head section and the fixed frame
5th wheel activation mechanism
Instant CPR release mechanism
 Inspect and lubricate when needed the bed lubrication points described in section 2.2.
 Inspection of all bolt, locknut and screw tightening, tighten if necessary.
 Engage brake pedal and push on the bed to ensure it is completely immobilized.
Using the Axial Steer pedal, ensure that the 5th wheel engages and disengages properly.
 Side-rails move, latch and stow properly
 All functions on the foot board control panel working properly (give special attention to lock-out switches and their LED indicators). See "Control Board Integrated Maintenance Program", next page.
 Verify the Fowler and Knee Gatch movements to ensure the motor course is properly adjusted. Refer to Caution following step 10 of the thigh actuator replacement procedure and step 11 of the head actuator replacement procedure at page 39 and 40 respectively.
 All functions on the side-rail control panels (inner and outer) working properly. See "PC Board Integrated Maintenance Program", next page.
 On/Off switch and LED power indicator working properly.
 Optional 120 volt auxiliary outlet working properly.
 Optional photoelectric night light working properly.
 Optional instant CPR release working properly. The motor resets itself once the Fowler is down.
 Optional Auto Contour working properly.
 Fowler slides securely in tracks without making noise (grease applied on the assembly line along the path of the mobile frame wheels and on the wheel shafts should last as long as the bed life. Should a problem occur with this part of the bed, please contact our Technical Service department (see section 1.2).
Automatic foot prop rod working properly when Knee Gatch or Auto Contour function is activated.
 No cracks or splits in head and foot boards.
 Head end bumpers tightly secured to frame and working properly.
 No rips or cracks in mattress cover. Remove from service if damaged.
 Power cord not frayed.

No cables worn or pinched.
All electrical connections tight
All ground secure to the frame
All casters roll properly. Verify the caster tire for cuts, wear.
Ground chain intact and in place
Measure current leakage and grounding continuity of the bed and the optional auxiliary outlet (verify with our Technical Service department (see section 1.2) for the acceptable values).
NOTE
Preventive maintenance may need to be performed more frequently based on the usage level of the bed.
CONTROL BOARD INTEGRATED MAINTENANCE PROGRAM
This bed has a PC Board equipped with a maintenance program. To activate and process the program, perform the following steps:
<ul> <li>Unplug the bed power cord, remove the foot board and the foot end casing cover (see section 4.6, step 1 through 4 and fig. 4.6A) to gain access to the PC Board.</li> </ul>
<ul> <li>Move the board four dip switches to the ON position and replace temporarily the casing cover and the foot board (do not fasten the cover to the casing for the moment).</li> </ul>
<ul> <li>Plug the bed power cord and turn the main power switch on. Note that the LED of the Trendelenburg function switch may light up, do not mind it.</li> </ul>
<ul> <li>Press all function switches of the control panels (foot board and side-rails) one after the other. The green LED of the Fowler lock-out switch will be the maintenance test indicator. It should lit up when a function switch is pressed and go out when the same function switch is pressed again thus indicating that the wiring and the membrane are working properly. If the LED does not light up when a function switch is pressed, the wiring and/or the membrane may be defective.</li> </ul>
<ul> <li>After completion of the test, unplug the bed power cord, remove the foot board and the casing cover, readjust the dip switches to their normal position (1= Off; 2= On; 3= Off; 4= Off), fasten the cover to the foot end casing, and replace the foot board.</li> </ul>
Serial Number:

Completed By:\_\_\_\_\_ Date:\_\_\_\_

#### **RECOMMENDED SPARE PARTS**

The following is a list of recommended on hand spare parts for the GO BED.

#### **Electronic/Electrical Parts**

Motor Control Board QDF14-0990
Control Board stand off pins QDF8011
Strain relief bushing QPNC0604

Power cord 120V/Connector QDF17-0236/QDF8042

Micro switch 1325P003
Night light QDF9539

### **Actuator Assembly Parts**

Hi-Lo actuator QDF17-0005
Knee Gatch actuator QDF17-0006
Head actuator 17-0041

### **Control Panel Assembly Parts**

Nurse control plate and membrane QDF17-0180/QDF17-0127
Fixed 3 way patient control (H-B-F) 13-0220
Fixed 3 way patient control (F-B-H) 13-0221
Fixed 2 way patient control (F-H) 17-0193
Fixed 2 way patient control (H-F) 17-0194

### **Side-Rail Assembly Parts**

Head side-rail protector 17-0220
Foot side-rail protector 17-0221
3M adhesive tape #950 x 1" QDF7826
Side-rail right handed release 17-0306-P
Side-rail left handed release 17-0307-P
Dome cap DP1250 1-1/4" QDFP1514
Protective cap QPN-18748

### **Mattress support Assembly Parts**

Warm grey mattress retainer QPN-14034-2

### **Base Assembly Parts**

Caster with locking system RT61C
Caster without locking system T61CSW
5th wheel caster RL5
Pedal green treadle tip QPN-18028

Pedal green treadle tip QPN-18028
Pedal red treadle tip QPN-18029
Anchor washer for 3/16 dia. stud VW00A06
Rue ring cotter dia. 3/8" p.z. QDF7878

### **Miscellaneous**

OG-2 grease M0027
Tread locker - medium strength (blue) M008

"Sand Grey" aerosol spray paint DDCAP-GSP

# 3. TROUBLESHOOTING

Please consult the following troubleshooting checklist and call our Technical Service department (see section 1.2) if none of the recommended actions described below solves the problem.

3.1 TROUBLESHOOTING GUIDE	
PROBLEM/FAILURE	WHAT TO VERIFY
No power to bed	<ul> <li>A Is the bed power switch turned on?</li> <li>B Is the power cord plugged into the wall outlet?</li> <li>C Is the power cord severed? Replace if needed.</li> <li>D Verify power at wall outlet.</li> </ul>
No bed up or down motion when:  1. the foot board command is used  2. the siderail command is used	<ul> <li>1-2 A Verify the "No power to bed" section above.</li> <li>2 B Is the Hi-Lo lockout control activated in the foot board control panel? Deactivate it</li> <li>2 C Is the siderail control panel cable properly connected to the bed connector under the sleep surface?</li> </ul>
No Fowler up or down motion when:  1. the foot board command is used  2. the siderail command is used	<ul> <li>1-2 A Verify the "No power to bed" section above.</li> <li>2 B Is the Fowler lockout control activated in the foot board control panel? Deactivate it</li> <li>2 C Is the siderail control panel cable connected to the bed connector under the sleep surface?</li> </ul>
No Knee Gatch up or down motion when:  1. the foot board command is used  2. the siderail command is used	<ul> <li>1-2 A Verify the "No power to bed" section above.</li> <li>2 B Is the Knee Gatch lockout control deactivated in the foot board control panel?</li> <li>2 C Is the siderail control panel cable connected to the bed connector under the sleep surface?</li> </ul>
No Auto Contour motion	<ul><li>A Verify the "No power to bed" section above.</li><li>B Is the Auto Contour control activated (LED off) in the foot board control panel?</li></ul>

# 4. MAINTENANCE PROCEDURES



#### **WARNING**

Only qualified maintenance personnel should perform the procedures detailed in this maintenance guide. Failure to observe this restriction can result in serious damage to material and/or severe injury to people.

Always unplug the bed power cord from the wall outlet when cleaning or servicing the bed. When working under the bed with the bed in the high position, always place blocks under the mattress support frame to prevent injury in case the bed-down switch is accidentally pressed.

#### **NOTE**

In the text, the words "right and "left" refer to the right and left sides of a patient lying face up on the bed.

Except for rare exceptions, reference points - i.e. A, B, C, appearing in sequence of instructions will refer to a figure immediately preceding this sequence of instructions.

### 4.1 SIDE-RAIL ASSEMBLY COMPONENT REPLACEMENT

#### FOOT SIDE-RAIL ASSEMBLY

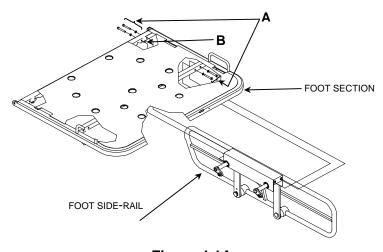


Figure 4.1A

- 1. Raise the bed to the high position and lock casters.
- Put the head side-rails in the down position and raise the foot side-rails.
- 3. Raise the Knee Gatch to the high position.
- 4. Unplug the power cord from the wall receptacle.
- Manually lift and fold the foot section back towards the head end of the bed (see figure 4.1 in Appendix B).
- 6. Remove the four screws/lock washers (A) holding the side-rail assembly to the foot section.



### WARNING

The four screws (A) used to mount the siderail assembly cannot be reused because their Scotch-Grip coating is less efficient once they have been tightened and removed thereafter. They **must** be replaced with new identical screws.

- 7. Lift up assembly to disengage from anchor point (**B**) and remove assembly
- 8. Reverse the above steps to install the replacement foot side-rail assembly.
- 9. Verify the foot side-rail for proper operation before returning the bed to service.

#### **HEAD SIDE-RAIL ASSEMBLY**

#### NOTE

If the bed being maintain is equipped with the nurse call option, be sure to mention it to the Service representative when ordering a new head side-rail assembly.

- 1. Raise the bed to the high position and lock casters.
- 2. Raise head side-rail to be replaced and raise Fowler to high position.
- 3. Unplug the power cord from the wall receptacle.
- 4. Unscrew the lock ring of the side-rail cable plug (**J**, fig. 4.1C, page 18) and remove cable from the bed receptacle.
- 5. If the bed being repaired **is not** equipped with the optional nurse call function, proceed with step 10.

If the bed being repaired **is** equipped with the optional nurse call function, and its version is prior to version 03 (bed with serial number  $\leq$  C02025), proceed with step 6. For version 03 (bed with serial number  $\geq$  C02026) and higher of the GO BED (equipped with the optional nurse call function, proceed with step 10.

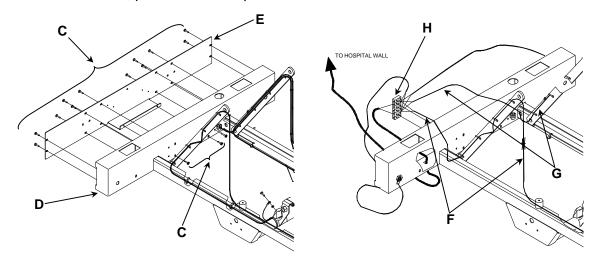


Figure 4.1B

- 6. Remove the fourteen screws (**C**) holding the head end casing (**D**) cover and remove the cover (**E**).
- 7. Identify the right (**F**) or left (**G**) nurse call cable wires in the head end casing, cut the cable tie if necessary.
- 8. Loosen the two screws holding the two groups of red and black wires on the multiple connector (**H**), remove both groups of wires and segregate from them the red and black wires of the nurse call cable involved in the procedure.
- 9. Pull on the cable to slide it out of the cable ties holding it along its path under the bed. It might be necessary to cut the cable ties to install the new nurse call cable.

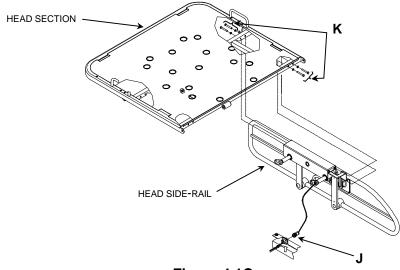


Figure 4.1C

10. Remove the four screws/lock washers (**K**) holding the side-rail assembly to the head section. Begin with the two screws located near the latch lever followed by the two others. Support the assembly when removing the two last screws.



#### **WARNING**

The four screws (A) used to mount the siderail assembly cannot be reused because their Scotch-Grip coating is less efficient once they have been tightened and removed thereafter. They **must** be replaced with new identical screws.

- 11. Lift up assembly to disengage from anchor pin and remove it.
- 12. Reverse the above steps to install the replacement head side-rail assembly.

### **NOTE**

Be sure to connect the side-rail cable to the bed receptacle before verifying the bed.

13. Verify the side-rail motion, all side-rail controls, and if present the nurse call function for proper operation before returning bed to service.

#### **FOOT RAIL**

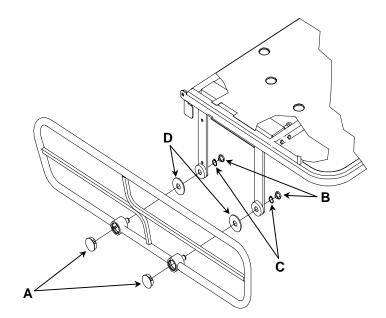


Figure 4.1D

- 1. Raise the bed to the high position and lock casters.
- 2. Raise side-rail needing a rail replacement.
- 3. Unplug the power cord from the wall receptacle.
- 4. Use a small screwdriver to remove the plastic dome caps (A) sealing the front part of the two rail shafts.
- 5. **NOTE**
- 6. We recommend that you have some of these dome caps on hand because they can hardly be removed without damaging them.
- 7. Use a hammer and a blunt-ended tool to remove the nylon protective caps (**B**) from the rear part of the two rail shafts.
- 8. Remove lock rings (**C**) from each shaft and remove the defective barrier. Keep the nylon washers (**D**).
- 9. Reverse the above steps to install the replacement rail.

#### NOTE

Apply grease on the rail shafts before installing the rail.

### **HEAD RAIL**

Replacing the rail of head side-rail is a complex task requiring a good knowledge of the product. We recommend that you contact our Technical Service department (see section 1.2) in order for them to suggest an appropriate solution to the problem.

### 4.2 MEMBRANE REPLACEMENT (FOOT BOARD CONTROL PANEL)

#### NOTE

The membrane comes with the control panel plate, already affixed to it.

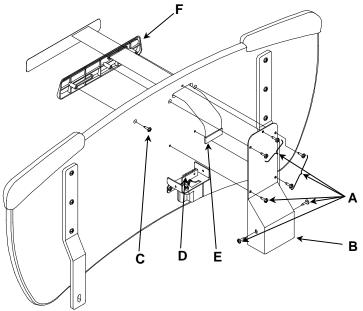


Figure 4.2

- 1. Raise the bed to the high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the head board and lay it on a workbench
- 4. Remove the 7 screws (A) securing the support cover (B) to the inner face of the foot board and remove cover.
- 5. Remove the screw (**C**) holding the membrane support to the foot board.
- 6. Disconnect the defective membrane cable (**E**) from the board connector (**D**).
- 7. Remove the control panel plate (**F**).
- 8. Reverse the above steps to install the replacement membrane.

#### NOTE

Be sure to connect the new membrane cable correctly. The side of the membrane connector bearing the inscription "1" must face the black wire of the foot board connector.

9. Verify all the foot board control panel functions for proper operation before returning bed to service.

### 4.3 MEMBRANE REPLACEMENT (SIDE-RAIL CONTROL PANEL)

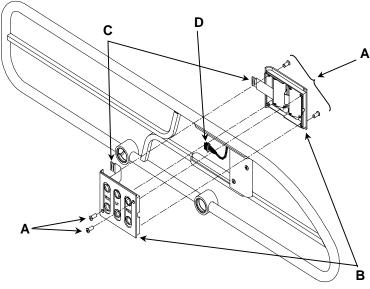


Figure 4.3

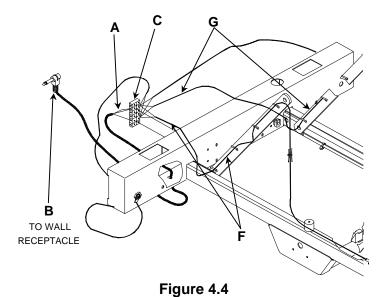
- 1. Raise the bed to high position and lock casters.
- 2. Raise the head side-rail needing a membrane replacement.
- 3. Unplug the power cord from the wall receptacle.
- 4. Remove the four screws (A) holding together the two sections of the side-rail control panel housing (B).
- 5. Open the side-rail control panel housing. Both sections of the housing contain a membrane permanently fixed to it. Changing a side-rail control panel membrane means replacing one of the two sections of the control panel housing.
- 6. Disconnect the faulty membrane cable (**C**) from the side-rail connecting board (**D**) and remove the membrane.
- 7. Reverse the above steps to install the replacement side-rail control membrane.

### NOTE

Make sure to connect the new membrane cable correctly. The side of the connector bearing the inscription "1" must face the brown wire of the connecting board.

8. Verify all side-rail control panel functions (inner and outer sides) for proper operation before returning bed to service.

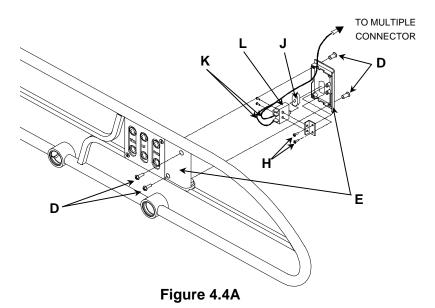
### 4.4 NURSE CALL COMPONENT REPLACEMENT



- 1. Raise the bed to high position and lock casters.
- 2. Remove the head board.
- 3. Remove the fourteen screws (**C**, fig. 4.1 B, page 17) holding the head end casing cover (**E** fig. 4.1B, page 17) to the head end casing and remove the cover.
- 4. Identify the wires (A) of the nurse call wall connector cable (B). Loosen the two screws holding the cable wires to the multiple connector (C) and remove wires.

#### **NOTE**

If the wall connector cable is made of three wires, ensure that the red and orange wires are connected together in the same multiple connector slot.



- 5. Verify the nurse call wall connector cable.
  - if defective, proceed with step 6 through step 8 and end procedure.
  - if functioning properly, proceed with step 9.
- 6. Remove nurse call wall connection cable.

- 7. Reverse the above steps to install the replacement cable.
- 8. Verify the nurse call function for proper operation before returning bed to service.
- 9. End of procedure
- 10. Identify the right (**F**, fig. 4.4, page 22) or left (**G**, fig. 4.4, page 22) nurse call cable wires, cut the cable tie if necessary.
- 11. Loosen the two screws holding the two groups of red and black wires on the multiple connector (**C**, fig. 4.4, page 22), remove both groups of wires and segregate the two red and black wires of the defective nurse call control.
- 12. Remove the four screws (**D**) holding together the two sections of the nurse call control housing (**E**).
- 13. Remove the two screws (**H**) holding the switch support to the housing. Remove the nurse call button (**J**) and clean it as well as its housing, if dirt has accumulated.
- 14. Verify the switch and the two sections of the nurse call cable to determine which is responsible for the problem. <u>Note that in prior versions of the GO BED (beds with a serial number ≤ C02025)</u>, the nurse call cable is in one section, running from the nurse call switch to the multiple connector located in the head end casing.
  - if the switch is defective but the cable functions properly, proceed with step 14 through step 18 and end procedure.
  - if one of the cable sections is defective, read the following note.

#### NOTE

Replacing a defective nurse call cable is a complex task requiring a good knowledge of the product. We recommend that you contact our Technical Service department (see section 1.2) before attempting to repair a nurse call cable.

End of procedure

- 15. Unsolder the two nurse call cable wires (**K**) from the defective switch (**L**). Note the position of each soldered wire on the switch.
- 16. Unsolder from the replacement switch the two wires of the cable attached to it. Keep the cable as an on-hand replacement part.
- 17. Solder to the replacement switch the two wires of the original nurse call cable.
- 18. Reverse the above steps to install the replacement nurse call switch and finalize installation of the nurse call assembly.
- 19. Verify the nurse call function for proper operation before returning bed to service.

### 4.5 FOOT BOARD CONNECTOR REPLACEMENT

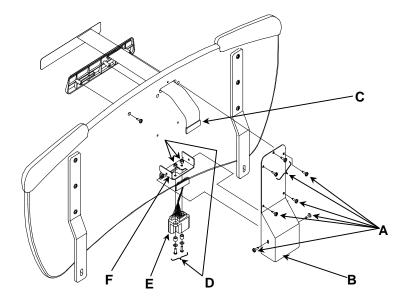


Figure 4.5

- 1. Raise the bed to high position and lock casters.
- 2. Remove head board and lay on a workbench.
- 3. Remove the 7 screws (A) securing the support cover (B) to the inner face of the foot board and remove cover.
- 4. Disconnect the foot board control panel membrane (C) from the connector.
- 5. Remove the two bolts/washers/sleeves/locknuts (**D**) holding the connector (**E**) to its support (**F**) and remove defective connector.
- 6. Reverse steps to install replacement foot board connector.

#### NOTE

Make sure to connect the foot board control panel cable correctly. The side of the cable connector bearing the inscription "1" must be aligned with the black wire of the foot board connector.

7. Verify all foot board control panel functions for proper operation before returning bed to service.

### 4.6 FOOT END CASING CONNECTOR REPLACEMENT

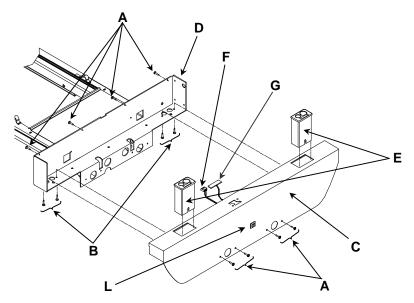


Figure 4.6A

- 1. Raise the bed to high position, lock casters and remove the foot board.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the 12 screws (**A**, **B**) holding the foot end casing cover (**C**) and the two IV pole holders (**E**) to the foot end casing (**D**).
- 4. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (**F**) and the PC Board to foot end casing connector cable (**G**). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover on a workbench.

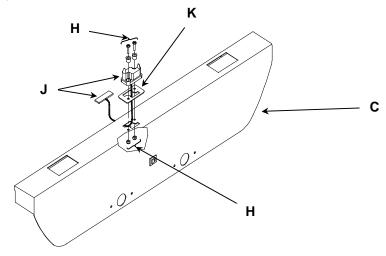


Figure 4.6B

- 5. Remove the two bolts/shoulder sleeves/locknuts (**H**) holding the connector (**J**) to the foot end casing cover (**C**) and remove the defective connector. Keep the seal (**K**).
- 6. Reverse the above steps to install replacement foot end casing connector.

### NOTE

Make sure to properly connect the foot casing connector cable to the PC Board connector. See step 4

7. Verify all nursing control functions for proper operation before returning bed to service.

### 4.7 MOTOR CONTROL BOARD

- 1. Raise the bed to high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the foot panel.
- 4. Properly ground yourself (see "Static Discharge Precautions", page 6).
- 5. Remove the 12 screws (**A**, **B**, fig. 4.6A, page 25) holding the foot end casing cover (**C**, fig. 4.6A, page 25) and the two IV pole holders (**E**, fig. 4.6A, page 25) to the foot end casing.
- 6. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (**F**) and the PC Board to foot end casing connector cable (**G**). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover aside.

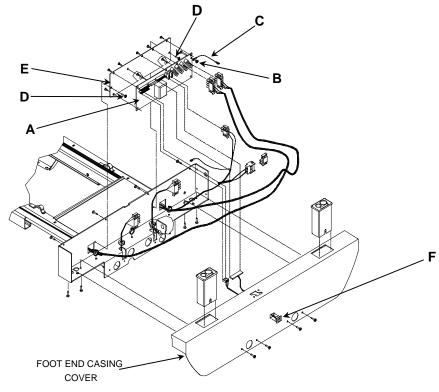


Figure 4.7

- Carefully identify the position of all the cables connected to the PC Board before disconnecting them. Disconnect cables.
- 8. Remove locknut (**B**) holding the PC Board ground wire (**C**).
- 9. Remove the two screws (**D**) holding the PC Board support (**E**) to the frame and remove the PC Board.
- 10. Disengage PC Board from the support stand off pins and remove it.
- 11. Reverse the above steps to install replacement PC Board.

#### NOTE

Before closing the foot end casing, ensure that the PC Board dip switches are in the following positions: dip switch #1 = off; dip switch #2 = off; dip switch #3 = off; dip switch #4 = off.

12. Verify all bed functions for proper operation before returning bed to service.

### 4.8 POWER SWITCH REPLACEMENT

#### NOTE

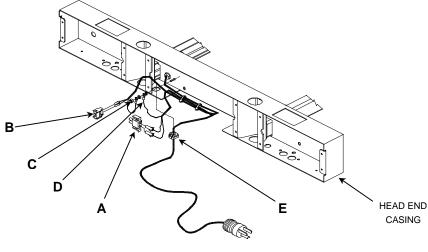
Refer to fig. 4.6A, page 25, for illustration of the reference points mentioned in this section.

- 1. Raise the bed to high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the foot panel.
- 4. Properly ground yourself (see "Static Discharge Precautions", page 6).
- 5. Remove the 12 screws (**A**, **B**) holding the foot end casing cover (**C**) and the two IV pole holders (**E**) to the foot end casing.
- 6. Lift up and hold cover while disconnecting from the PC Board the power switch cable (**F**) and the PC Board to foot end casing connector cable (**G**). Note carefully the connecting positions of the cable connectors to the PC Board connectors (Power switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover on a workbench.
- 7. Remove the power switch (L) by squeezing both sides and passing it through its housing aperture.
- 8. Reverse the above steps to install replacement power switch.
- 9. Verify the power switch and LED state indicator for proper operation before returning bed to service.

### 4.9 POWER CORD REPLACEMENT

#### NOTE

Step 9 of this procedure requires that the connector be removed from the extremity of the power cord in order to remove the cord from the head end casing. The connector does not pass through the orifice provided for the power cord. A special tool exists that enables the removal of the connector without damaging the cord wires or the connector female sockets. If this tool is not available and you have to cut the wires to remove the connector, be sure to order the connector (P/N QDF8042) in addition to the power cord.



- Figure 4.9
- 1. Unplug the power cord from the wall receptacle.
- Remove the head panel.
- 3. Remove the fourteen screws (**C**, fig. 4.1B, page 17) holding the head end casing cover and remove cover.

- 4. Cut the cable tie holding wires together.
- 5. Disconnect the bed power cord connector (A) from the PC Board power cord connector (B). Note the connecting position of the connectors, white wire opposite white wire, black opposite black.
- 6. Remove locknut (**C**) holding the power cord ground wire (green) (**D**) to the head end casing. Note position of the ground wire among the others. Remove wire.

#### NOTE

Replace the power cord ground wire exactly at the same position it was before being removed.

- 7. Use pliers to squeeze the strain relief bushing (**E**) and remove it from its location by pulling the cable from under the head end casing. Remove bushing from cable.
- 8. Remove connector (A) from end of power cord to remove power cord from head end casing.

#### NOTE

Do not install connector before having inserted the power cord extremity in the head end casing through the orifice provided. Remember that the connector does not pass through the orifice provided for the power cord.

- 9. Remove defective power cord.
- 10. Reverse the above steps to install replacement power cord.
- 11. Verify the power cord for proper operation before returning bed to service.

### 4.10 NIGHT LIGHT COMPONENT REPLACEMENT

#### NOTE

The following procedure aims at troubleshooting and replacing a defective part in the photoelectric night light assembly.

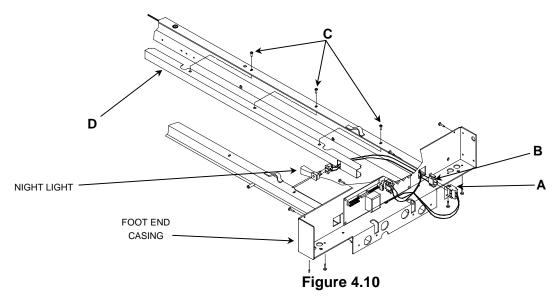
- 1. Raise bed to maximum elevation and lock casters.
- 2. Put the head side-rails in the down position and raise the foot side-rails.
- 3. Raise the Knee Gatch to the high position.
- 4. Unplug the power cord from the wall receptacle.
- 5. Remove the head panel.
- 6. Manually lift and fold the foot section back towards the head end of the bed (see fig. 4.1 in Appendix B).
- 7. Remove night light located on the left rail at the foot end of the bed (see fig. 4.10, page 29).
- 8. Verify the bulb and replace if necessary with a 120V, 7W type bulb and/or verify that bulb is correctly inserted into the socket. Plug night light into a 120V wall power receptacle and mask the photoelectric cell. Does the bulb light up?
  - **NO:** Proceed to step 9. **YES:** Plug night light back into bed socket.

Does night light work properly when plugged back to bed and photo cell masked?

NO: Proceed to step 9. YES: End the procedure.

- 9. Replace photoelectric night light with a new 120V, 7.5W max. Type and test on a 120V wall power receptacle for proper functioning. Plug night light back into bed socket.
  - Does night light work properly when plugged back to bed and photo cell masked?
  - **NO:** Proceed with step 10. **YES:** End the procedure.
- 10. Remove night light from the bed socket.
- 11. Use the necessary equipment for proper static protection (see "Static Discharge Precautions, page 6).
- 12. Remove the 12 screws (**A**, **B**, fig. 4.6A, page 25) holding the foot end casing cover and the two IV pole holders (**E**, fig. 4.6A, page 25) to the foot end casing.

13. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (**F**, fig. 4.6A, page 25) and the PC Board to foot end casing connector cable (**G**, fig. 4.6A, page 25). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover aside.



- 14. Disconnect the night light cable connector (**A**) from the PC Board power cord connector (**B**). Note the connecting position of the connectors, white wire facing white wire, black facing black.
- 15. Cut the cable tie holding cables together.
- 16. Remove the 3 screws (**C**) holding the rail cover (**D**) to the left rail and slowly remove rail cover from its location. The night light wiring will follow.
- 17. Make necessary tests to detect faulty component.
- 18. Reverse steps to install night light assembly with replacement component.
- 19. Verify the night light for proper operation before returning bed to service.

### 4.11 120V AUXILIARY OUTLET COMPONENT REPLACEMENT (OPTIONAL)



### **WARNING**

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

Danger: 120V current.

### **NOTE**

The following procedure aims at troubleshooting and replacing a defective part in the 120V auxiliary outlet assembly.

- 1. Raise the bed to high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the 12 screws (**A**, **B**, fig. 4.6A, page 25) holding the foot end casing cover and the two IV pole holders (**E**, fig. 4.6A, page 25) to the foot end casing.
- 4. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (F, fig. 4.6A, page 25) and the PC Board to foot end casing connector cable (G, fig. 4.6A, page 25). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover aside.

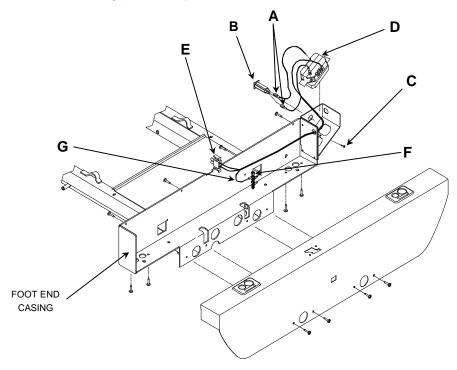


Figure 4.11

- 5. Disconnect the two wires (**A**) connected to the 5A circuit breaker (note their connecting positions) and remove circuit breaker (**B**) from its location by squeezing both sides simultaneously and passing it through its housing aperture.
- 6. Test the circuit breaker.
  - if defective, proceed with step 7 through step 9 and end procedure.
  - if functioning properly, go to step 10.
- 7. Replace the defective circuit breaker with a new 5A type circuit breaker.
- 8. Reverse steps to reassemble the auxiliary outlet with the replacement 5A circuit breaker.
- 9. Verify the auxiliary outlet for proper operation before returning bed to service. End of procedure

- 10. Remove the screw (C) holding the duplex receptacle (D) to the housing.
- 11. Loosen the screws holding the wires to the duplex receptacle. Note their connecting positions.
- 12. Test the duplex receptacle.
  - if defective, proceed with step 13 through step 15 and end procedure.
  - if functioning properly, go to step 16.
- 13. Replace defective duplex receptacle by one of the same type (Leviton 8200-W).
- 14. Reverse above steps to reassemble auxiliary outlet with replacement duplex receptacle.
- 15. Verify the auxiliary outlet for proper operation before returning bed to service.

### End of procedure

- 16. Disconnect auxiliary outlet cable (E) from PC Board.
- 17. Remove locknut (**F**) holding cable ground wire (**G**) to the PC Board housing and remove outlet cable. Note the position of the ground wire among the others.

#### **NOTE**

Replace the auxiliary outlet cable ground wire exactly at the same position it was before being removed.

- 18. Verify the auxiliary outlet cable:
  - if defective, proceed with step 19 through 21.
  - if functioning properly, suspect a problem with the motor control board (refer to section 4.7 for the motor control board replacement procedure).
- 19. Replace defective auxiliary outlet cable.
- 20. Reverse above steps to reassemble auxiliary outlet with replacement cable.
- 21. Verify the auxiliary outlet for proper operation before returning bed to service.

### 4.12 MATTRESS SUPPORT SECTION REPLACEMENT

#### **FOOT SECTION**

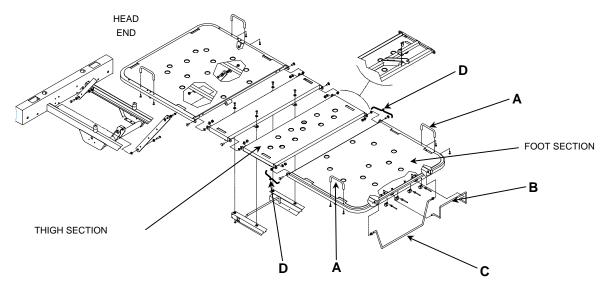


Figure 4.12A

- 1. Raise the bed to high position and lock casters.
- 2. Put the head side-rails in the down position and raise the foot side-rails.
- 3. Raise the Knee Gatch to maximum height.
- 4. Unplug the power cord from the wall receptacle.
- 5. Manually lift and fold the foot section back towards the head end of the bed (see figure 4.1 in Appendix B).
- 6. Remove from the foot section the parts that will be transferred to the replacement foot section, i.e. foot mattress retainer (**B**), prop rod (**C**) and side mattress retainers (two) (**A**).
- 7. Remove both foot end side-rail assemblies. Refer to the "Foot Side-Rail Assembly" replacement procedure, section 4.1, page 16.
- 8. Manually bring the foot section back to normal position. Plug the bed power cord and bring the Knee Gatch down to flat position. Unplug bed power cord again.
- 9. Remove the two bolts/shoulder spacers/flat washers/locknuts (**D**) linking the foot and thigh sections together and remove the foot section.
- 10. Reverse the above steps to install replacement foot section.
- 11. Verify the foot section mobility for proper operation before returning bed to service.

#### THIGH SECTION

#### NOTE

Before ordering a replacement thigh section, verify if the bed is equipped with the Auto Contour option and, if so, mention it when ordering the part.

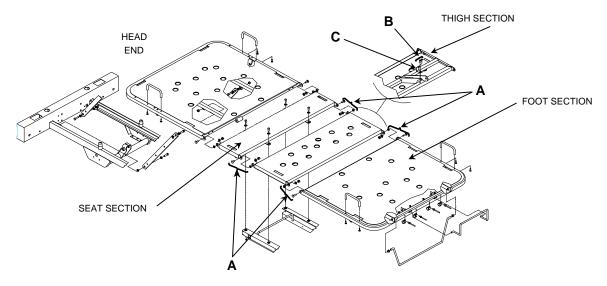


Figure 4.12B

- 1. Raise the bed to high position, lock casters and bring mattress support to horizontal position.
- 2. Unplug the power cord from the wall receptacle.
- 3. Lower the four safety side-rails without pushing them against the bed.
- 4. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**A**, fig. 4.13, page 38) hooking up the Knee Gatch actuator tube to the thigh section lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking back the thigh section to the actuator tube.

- 5. Remove the four bolts/shoulder spacers/flat washers/locknuts (**A**) linking the thigh section to the foot and seat sections. Remove the thigh section.
- 6. **If the bed is equipped with the Auto Contour option**, remove the two screws (**B**) holding the micro switch activator (**C**) underneath the thigh section and save activator for the replacement thigh section.

#### NOTE

Apply grease on the activator after having replaced it back underneath the replacement thigh section.

- 7. Reverse the above steps to install the replacement thigh section. Before hooking up the actuator tube to the thigh section lever arms, carefully read the caution appearing at step 10 of the Knee Gatch replacement procedure, page 39. The caution tells of the importance of adjusting the Knee Gatch actuator before finalizing the installation.
- 8. Verify the Knee Gatch mobility for proper operation before returning the bed to service.

### **SEAT SECTION REPLACEMENT**

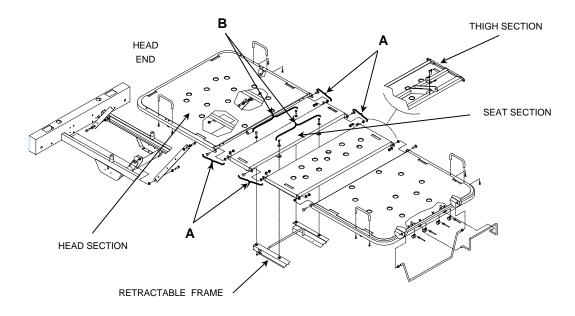


Figure 4.12C

- 1. Raise the bed to high position, lock casters and bring mattress support to horizontal position.
- 2. Unplug the power cord from the wall receptacle.
- 3. Lower the four side-rails without pushing them against the bed.
- 4. Remove the four bolts/shoulder spacers/flat washers/locknuts (A) linking the seat section to the thigh and head sections.
- 5. Remove the four bolts/washers (**B**) holding the seat section to the mobile frame and remove seat section.

#### NOTE

Before replacing the bolts, apply medium strength tread locker (blue) on the bolt treads.

- 6. Reverse the above steps to install replacement seat section.
- 7. Verify the Fowler and Knee Gatch mobility for proper operation before returning bed to service.

#### **HEAD SECTION**

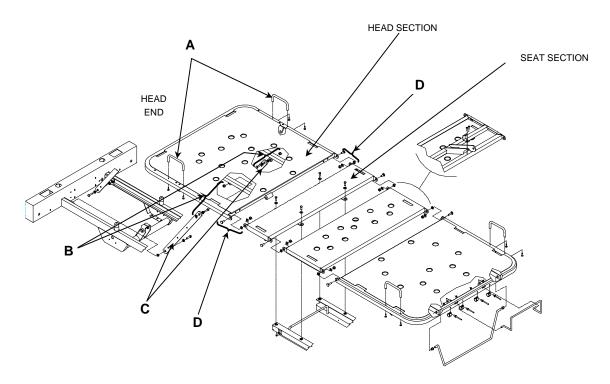


Figure 4.12D

### **BED WITHOUT OPTIONAL CPR**

- 1. Raise the bed to high position, lock casters and bring mattress support to horizontal position.
- 2. Remove the head board.
- 3. Raise Fowler to high position.
- 4. Unplug the power cord from the wall receptacle.
- 5. Remove both head safety side-rails. Refer to the "Head Side-Rail Assembly" replacement procedure, section 4.1, page 18).
- 6. Remove the two mattress side retainers (A) and save them for the replacement head section.
- 7. Plug the bed power cord and bring Fowler back to horizontal position.
- 8. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**E**, fig. 4.13, page 38) hooking up the head actuator tube to the head section lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking up the actuator tube to the head section.

9. Manually lift the head section completely and attach it to the foot section using a bungee cord to stabilize it.

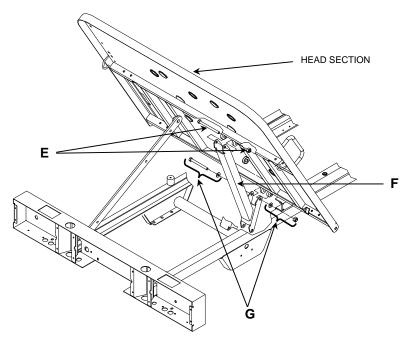


Figure 4.12E

- 10. Remove the bolt/locknut (**E**) holding the upper part of the compression bar (**F**) to the head section and lay it down.
- 11. Remove the bolt/flat washers(2)/locknut (**G**) linking the lower part of the compression bar to the head section and remove the compression bar.
- 12. Remove the two bolts/shoulder spacers(4)/locknuts (**B**, fig. 4.12D, page 35) holding the upper part of the two head arms (**C**, fig. 4.12D, page 35) to the head section. Lay them down.
- 13. Remove the bungee cords and bring the head section back to horizontal position.
- 14. Remove the two bolts/shoulder spacers/flat washers/locknuts (**D**, fig. 4.12D, page 35) linking the head section to the seat section. Remove the head section.
- 15. Reverse the above steps to install replacement head section. <u>Before hooking up the</u> <u>actuator tube to the head section lever arms, carefully read the caution appearing at step 11 of the head replacement procedure, page 40. The caution tells of the importance of adjusting the head actuator before finalizing the installation.</u>
- 16. Verify the Fowler mobility for proper operation before returning bed to service.

### **BED WITH OPTIONAL CPR**

- 1. Raise the bed to high position, lock casters and bring mattress support to horizontal position.
- 2. Remove the head board.
- 3. Raise Fowler to high position.
- 4. Unplug the power cord from the wall receptacle.
- 5. Remove both head safety side-rails. Refer to the "Head Side-Rail Assembly" replacement procedure, section 4.1, page 16).
- 6. Remove the two mattress side retainers (**A**, fig. 4.12D, page 35) and save them for the replacement head section.
- 7. Plug the bed, bring Fowler back to horizontal position and unplug the bed.
- 8. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**E**, fig. 4.13, page 38) hooking up the head actuator tube to the head section lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking up the actuator tube to the head section.

9. Manually lift the head section completely and secure its position using bungee cords.

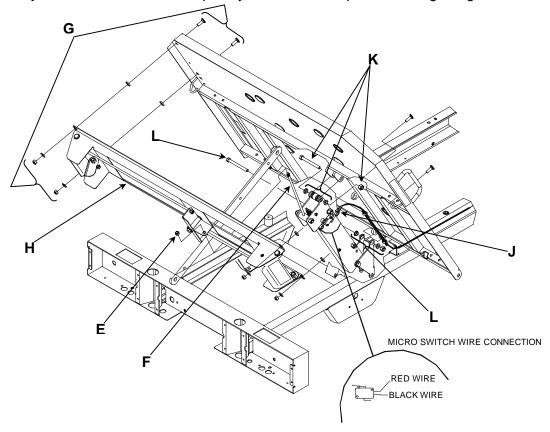


Figure 4.12F

- 10. Remove locknut (**E**) holding the activation rod (**F**) to the activation lever, disengage rod and lay it down.
- 11. Remove the four bolts/flat washers/locknuts (**G**) holding the CPR support (**H**) to the head section and remove the CPR support.
- 12. Disconnect the two wires (**J**) from the micro switch. Note the wire connecting positions.
- 13. Remove the bolt/shoulder spacers(4)/washers(4)//locknut (**K**) holding the upper part of the small locking lever to the head section and lay the assembly down.
- 14. Remove the bolt/shoulder spacers(2)locknut (L) linking the upper part of the mattress support lever to the head section and lay assembly aside.
- 15. Remove the two bolts/shoulder spacers(4)/locknuts (**B**, fig. 4.12D, page 35) holding the upper part of the two head arms (**C**, fig. 4.12D, page 35) to the head section. Lay them down.
- 16. Remove the bungee cords and bring the head section back to horizontal position.
- 17. Remove the two bolts/shoulder spacers/flat washers/locknuts (**D**, fig. 4.12D, page 35) linking the head section to the seat section. Remove the head section
- 18. Reverse the above steps to install the replacement head section. Before hooking up the actuator tube to the head section lever arms, carefully read the caution appearing at step 11 of the head replacement procedure, page 40. The caution tells of the importance of adjusting the head actuator before finalizing the installation.
- 19. Verify the Fowler mobility and instant CPR release for proper operation before returning bed to service.

# 4.13 ACTUATOR REPLACEMENT

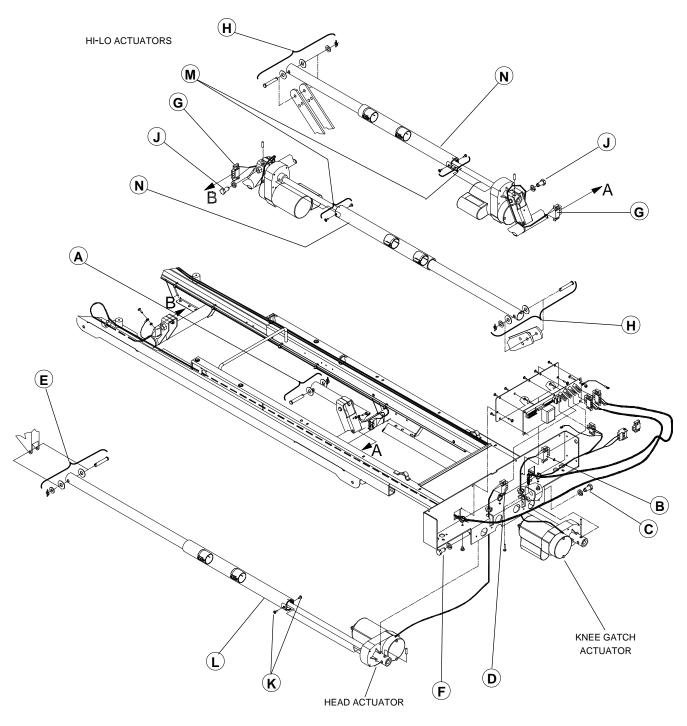


Figure 4.13

# **NOTE**

Unless otherwise stated, all reference points of each actuator replacement procedure will refer to figure 4.13 above.

#### **KNEE GATCH ACTUATOR**

- 1. Raise bed to maximum elevation, lock casters and bring mattress support to horizontal position.
- 2. Bring the head safety side-rails down and raise the foot safety side-rails.
- 3. Unplug the power cord from the wall receptacle and remove the foot board.
- 4. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**A**) holding the Knee Gatch actuator tube to the thigh section lever arms.

### NOTE

Apply grease on the clevis pin and the nylon washers before hooking up the actuator tube to the thigh section.

- 5. Manually lift and fold the foot and thigh sections back towards the head end of the bed until they come to rest on the head section.
- 6. Remove the 12 screws (**A**, **B**, fig. 4.6A, page 25) holding the foot end casing cover and the two IV pole holders (**E**, fig. 4.6A, page 25) to the foot end casing.
- 7. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (**F**, fig. 4.6A, page 25) and the PC Board to foot end casing connector cable (**G**, fig. 4.6A, page 25). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover aside.
- 8. Disconnect the Knee Gatch actuator cable (**B**) from the PC Board and disengage it from the strain relief bushing.
- 9. Loosen the bolt (**C**) holding the Knee Gatch actuator to the bracket until the actuator can be rotated downward and removed from its location.

### NOTE

Apply grease on the bolt, the spring washer and the inner sides of the bracket, including the pivot pin, when reassembling the actuator.

10. Reverse the above steps to install the replacement Knee Gatch actuator. Read the following caution before hooking up the actuator tube to the thigh section lever arms.



### CAUTION

It is of utmost importance that the Knee Gatch replacement actuator be adjusted before hooking up its tube to the thigh section. An improper adjustment of the actuator can damage the thigh section structure.

- 10.1 Proceed as follow to adjust the replacement Knee Gatch actuator:
  - Raise the four siderails and plug the bed power cord. Ensure the actuator cable is connected to the PC Board.
  - Hold firmly the actuator tube, holes positioned horizontally, and press the thigh section up switch for a few seconds using the siderail control panel, then press the down switch until the actuator stops. This will be the Knee Gatch actuator lower limit.
  - Gently turn, if needed, the tube in either direction to align the tube holes with the holes of the thigh section lever arms and insert the clevis pin and the nylon washers. Slightly raise manually the thigh section if having problem to insert the clevis pin.
  - Once the clevis pin is installed, check the actuator adjustment. Using the siderail
    control panel, raise the thigh section fully up, then press the down switch until the
    thigh section comes to rest on the frame; at that moment the actuator should stop
    working even though the down switch is still pressed. Should the actuator continue
    working once the Gatch has reached the frame thus trying to further lower the thigh
    section, repeat the whole operation until the proper adjustment is found.
  - Install the Rue ring (A) once the actuator has been properly adjusted.

#### **HEAD ACTUATOR**

- 1. Raise bed to high position, lock casters and bring Fowler to horizontal position.
- 2. Raise the Knee Gatch to high position.
- 3. Unplug the power cord from the wall receptacle.
- 4. Remove the foot board.
- 5. Manually lift and fold the foot section back towards the head end of the bed (see figure 4.1 in Appendix B).
- 6. Remove the 12 screws (**A**, **B**, fig. 4.6A, page 25) holding the foot end casing cover and the two IV pole holders (**E**, fig. 4.6A, page 25) to the foot end casing.
- 7. Lift up and hold cover while disconnecting from the PC Board the On/Off switch cable (**F**, fig. 4.6A, page 25) and the PC Board to foot end casing connector cable (**G**, fig. 4.6A, page 25). Note carefully the connecting positions of the cable connectors to the PC Board connectors (On/Off switch: cable connector green wire facing pin 11; foot end casing connector cable: connector black wire facing pin 1). Lay cover aside.
- 8. Disconnect the head actuator cable (**D**) from the PC Board and disengage it from the strain relief bushing.
- 9. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**E**) holding the head actuator tube to the head section lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking up the actuator tube to the head section.

10. Loosen the bolt (**F**) holding the head actuator to the bracket until the actuator can be rotated downward and removed from its location.

#### **NOTE**

Apply grease on the bolt, the spring washer and the inner sides of the bracket, including the pivot pin, when reassembling the actuator.

11. Reverse the above steps to install the replacement head actuator. Read the following caution before hooking up the actuator tube to the head section lever arms.



### **CAUTION**

It is of utmost importance that the replacement head actuator be adjusted before hooking up its tube to the head section. An improper adjustment of the actuator can damage the head section structure.

- 11.1 Proceed as follow to adjust the replacement head actuator:
  - Raise the four siderails and plug the bed power cord. Ensure the actuator cable is connected to the PC Board.
  - Hold firmly the actuator tube, holes positioned horizontally, and press the head section up switch for a few seconds using the siderail control panel, then press the down switch until the actuator stops. This will be the head actuator lower limit.
  - Gently turn, if needed, the tube in either direction to align the tube holes with the holes of the head section lever arms and insert the clevis pin and the nylon washers. Slightly raise manually the head section if having problem to insert the clevis pin.
  - Once the clevis pin is installed, check the actuator adjustment. Using the siderail
    control panel, raise the head section fully up, then press the down switch until the
    head section comes to rest on the frame; at that moment the actuator should stop
    working even though the down switch is still pressed. Should the actuator continue
    working once the head has reached the frame thus trying to further lower the head
    section, repeat the whole operation until the proper adjustment is found.
  - Install the Rue ring (E) once the actuator has been properly adjusted.

#### HI-LO ACTUATOR

#### NOTE

In order to preserve the adjustment of the bed lowest position when replacing a Hi-Lo actuator, a special tool kit designed for that purpose must be used.

To obtain this kit, contact our Service department (see section 1.2) and order part number KR0054.

- 1. Bring the head side-rails down and raise the foot side-rails.
- 2. Raise Fowler by approximately 50°, so that the loosening of the bolt (**L**) holding the Hi-Lo actuator to its support is not hindered.
- 3. Raise the Knee Gatch to the high position.
- 4. Manually lift and fold the foot section back towards the head end of the bed (see fig. 4.1 in Appendix B).
- 5. Place the alignment jigs on the base of the bed as illustrated in figure 4.14A in Appendix B.
- 6. Lower the bed until it rests completely on the jigs. If one or both Hi-Lo actuators are defective, use a ratchet and the socket included in the tool kit to lower the bed on the jigs.
- 7. Unplug the power cord from the wall receptacle.
- 8. Disconnect the actuator cable (**G**) connector and cut the cable ties holding it onto the frame.
- 9. Remove the Rue ring/washer/nylon washers(2)/clevis pin (**H**) holding the Hi-Lo actuator tube to the Hi-Lo lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking back the actuator tube to the Hi-Lo lever arms.

10. Loosen the bolt (**J**) holding the Hi-Lo actuator to the bracket until the actuator can be rotated downward and removed from its location.

#### NOTE

Apply grease on the bolt, the spring washer and the inner sides of the bracket, including the pivot pin, when reassembling the actuator.

11. Reverse the above steps to install replacement Hi-Lo actuator. Read the following caution before hooking up the actuator tube to the Hi-Lo lever arms.



## /!\ CAUTION

It is of utmost importance that the Hi-Lo replacement actuator be adjusted before hooking its tube to the Hi-Lo lever arms. An improper adjustment of the actuator can damage the bed mechanisms.

- 11.1. Proceed as follow to adjust the new Hi-Lo actuator:
  - Plug the bed. Make sure that the Hi-Lo actuator cable is connected.
  - Run the Hi-Lo function down until the motor of the replacement actuator stops. This
    will be the replacement actuator lower limit.
  - Turn, if necessary, the tube of the actuator in either direction to align the tube holes with the Hi-Lo lever arm holes and insert temporarily the nylon washers clevis pin.
  - Run the Hi-Lo function up and down again to ensure that the replacement actuator is properly adjusted. Once done, install the Rue ring (H) to lock the clevis pin.

### 4.14 ACTUATOR SCREW LUBRICATION PROCEDURE

The basic rule to grease the actuator screws is to extend the actuator to its maximum length so as to uncover a maximum of its screw treads.

#### **NOTE**

Unless otherwise stated, refer to fig. 4.13, page 38 for illustration of the reference points mentioned in this section.

### **HEAD AND KNEE GATCH ACTUATOR SCREWS**

- 1. Raise the bed to high position and lock casters. Bring the head side-rails down and raise the foot side-rails.
- 2. Raise Fowler to the high position (in this position, the head actuator will reach its maximum extension) and bring Knee Gatch down until flat (in this position, the Knee Gatch actuator will reach its maximum extension).
- 3. Unplug the power cord from the wall receptacle.
- 4. Manually lift and fold the foot section back towards the head end of the bed. You must secure this position by tying the foot section to another part of the bed head end section using bungee cords.
- 5. Remove the two screws (**K**) holding the head actuator tube support (**L**) to the actuator motor and slide the support back to uncover the actuator screw.
- 6. Remove the two screws holding the thigh actuator plastic dust cover (the two screws and the dust cover of the Knee Gatch are not illustrated on fig. 4.13) and slide the dust cover back to uncover the actuator screw.
- 7. Apply grease all over the screw treads with a brush making sure the grease reaches the bottom of the treads and replace the support tube and the dust cover.
- 8. Remove the bungee cords, replace the foot section to horizontal position and run both head section and Knee Gatch up and down completely a few times to spread grease evenly.
- 9. Verify the Knee Gatch and Fowler mobility for proper operation before returning bed to service.

### **HI-LO ACTUATOR SCREWS**

- 1. Raise the bed to high position (in this position, the two Hi-Lo actuators will reach their maximum extension) and lock casters.
- 2. Raise Fowler and Knee Gatch to the high position.
- 3. Unplug the power cord from the wall receptacle.
- 4. Bring the head side-rails down and raise the foot side-rails.
- 5. Manually lift and fold the foot section back towards the head end of the bed (see fig. 4.1 in Appendix B).
- 6. Remove the two screws (**M**) holding the Hi-Lo actuator tube supports (**N**) and slide them back to uncover the actuator screws.
- 7. Apply grease all over the screw treads with a brush making sure the grease penetrates to the bottom of the treads.
- 8. Replace the two tube supports.
- 9. Replace the foot section to horizontal position and run the Hi-Lo function up and down completely a few times to spread grease evenly and verify the Hi-Lo mechanism.

### 4.15 CPR MECHANISM COMPONENT REPLACEMENT



#### **WARNING**

When activating the CPR release, all people and equipment must be removed from the area below and around the head and foot sections of the bed or serious personal injury or damage to equipment could occur.

### NOTE

Unless otherwise stated, refer to fig. 4.12F, page 37 for illustration of the reference points mentioned in this section.

- 1. Raise the bed to high position, lock casters and bring mattress support to horizontal position.
- 2. Remove the head board.
- 3. Free the head actuator tube by removing the Rue ring/washer/nylon washers(2)/clevis pin (E, fig. 4.13, page 38) holding it to the head section lever arms.

#### NOTE

Apply grease on the clevis pin and the nylon washers before hooking up the actuator tube to the head section.

- 4. Manually lift the head section to maximum height and attach it to the foot section using bungee cords.
- 5. Unplug the power cord from the wall outlet
- 6. Remove nut (**E**) holding the activation rod (**F**) to the activation lever, disengage rod and lay it down.
- 7. Remove the bolt/shoulder spacers(4)/washers(4)/locknut (**K**) holding the upper part of the small locking lever to the head section and lay the assembly down.
- 8. Remove the bolt/shoulder spacers(2)locknut (L) linking the upper part of the mattress support lever to the head section. Remove the CPR mechanism and lay on a workbench.
- 9. Replace defective part (spring and/or damper) of the CPR mechanism.

#### NOTE

Apply grease on the lower damper bearings before replacing the damper.

- 10. Reverse above steps to install the CPR mechanism.
- 11. Verify the CPR mechanism for proper operation before returning bed to service.

### 4.16 CPR MICRO SWITCH

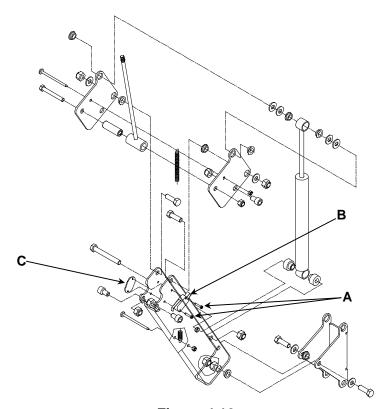


#### **WARNING**

When activating the CPR release, all people and equipment must be removed from the area below and around the head and foot sections of the bed or serious personal injury or damage to equipment could occur.

### MICRO SWITCH LOCATED UNDER THE HEAD SECTION

- 1. Raise the bed to the high position and lock casters.
- 2. Raise Fowler to the high position and attach it to the foot section using bungee cords to prevent the head section from dropping off when the upper part of the small locking lever is removed from the head section.
- 3. Unplug the power cord from the wall receptacle.
- 4. Remove the head panel.
- 5. Disconnect the two wires (**J**, fig. 4.12F, page 37) from the micro switch. Note the wire connecting positions.
- 6. Remove the bolt/shoulder spacers(4)/washers(4)/locknut (**K**, fig. 4.12F, page 37) linking the upper part of the small locking lever to head section. Disengage lever and lay the assembly down.



- Figure 4.16
- 7. Remove the two screws (**A**) holding the micro switch (**B**) to the head section long lever. Keep the mounting plate (**C**). Remove defective micro switch.
- 8. Reverse the above steps to install the replacement micro switch.
- 9. Verify the CPR mechanism for proper operation before returning bed to service.

# MICRO SWITCH LOCATED UNDER THE MATTRESS SUPPORT

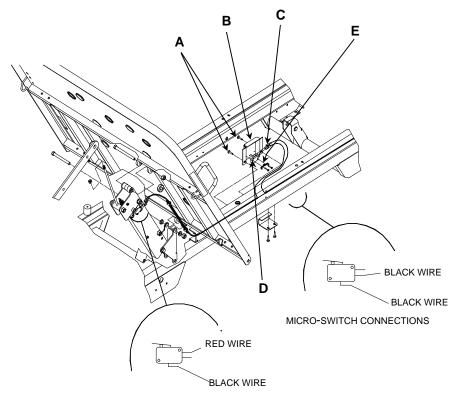


Figure 4.16A

- 1. Raise the bed to the high position and lock casters.
- 2. Raise Knee Gatch to maximum height.
- 3. Manually lift and fold the foot section back towards the head end of the bed (see fig. 4.1 in Appendix B).
- 4. Remove the two screws (**A**) holding the micro switch support (**B**) to the mobile frame right rail. Remove support.
- 5. Disconnect the two wires (**C**) from the micro switch (**D**). Note the wire connecting positions.
- 6. Remove the two screws (E) holding the micro switch to its support.
- 7. Reverse the above steps to install replacement micro switch.
- 8. Verify the CPR mechanism for proper operation before returning bed to service.

### 4.17 AUTO CONTOUR MICRO SWITCH REPLACEMENT

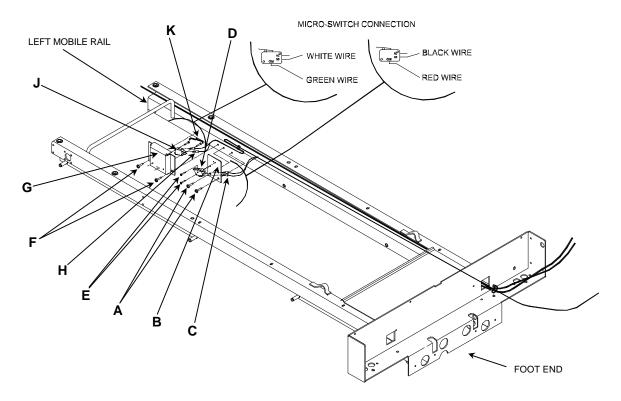


Figure 4.17

### **KNEE GATCH MICRO SWITCH**

- 1. Raise the bed to the high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Remove the two screws (**A**) holding the micro switch support (**B**) to the mobile frame left rail. Remove support.
- 4. Disconnect the two wires (**C**) from the micro switch (**D**). Note the wire connecting positions.
- 5. Remove the two screws (**E**) holding the micro switch to its support and remove micro switch.
- 6. Reverse the above steps to install replacement micro switch.
- 7. Verify the Auto Contour function for proper operation before returning bed to service.

### **HEAD SECTION MICRO SWITCH**

- 1. Raise the bed to the high position and lock casters.
- 2. Raise Fowler to approximately 40 degrees.
- 3. Remove the two screws (**F**) holding the micro switch support (**G**) to the mobile frame left rail. Remove support.
- 4. Disconnect the two wires (H) from the micro switch (J). Note the wire connecting positions.
- 5. Remove the two screws (**K**) holding the micro switch to its support and remove micro switch.
- 6. Reverse the above steps to install replacement micro switch.
- 7. Verify the Auto Contour function for proper operation before returning bed to service.

### 4.18 BRAKE/STEER PEDAL REPLACEMENT

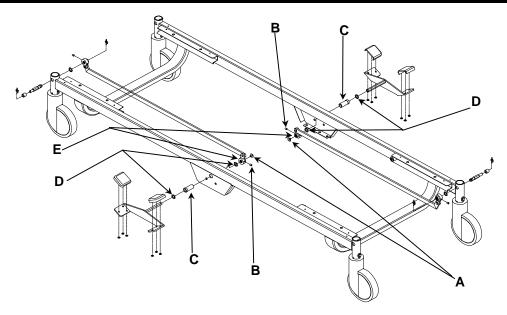


Figure 4.18

- 1. Raise the bed to the high position, lock casters and unplug the power cord.
- 2. Bring pedal to horizontal position (neutral) and remove the machine screw (**A**) located at the end of the right or left pedal shaft. <u>Note that in prior versions (beds with serial number ≤ C01340)</u>, the GO BED is equipped with a protective cap instead of a machine screw. If it's the case with your bed, disregard the following note and proceed with step 5.

### NOTE

Before replacing the machine screw, apply medium strength tread locker (blue) on its tread. When reassembling, the machine screw must first be inserted and tightened **before** tightening the pressure screws mentioned in steps 5 and 6.

3. Remove the pressure screw (**G**, fig. 4.19, page 48) located on the right or left socket (**H**, fig. 4.19, page 48) of the 5th wheel activation lever (**J**, fig. 4.19, page 48).

#### NOTE

Before replacing the pressure screw, apply medium strength tread locker (blue) on its tread.

4. Remove the pressure screw (B) located on the head or foot locking lever (E).

#### NOTE

Before replacing the pressure screw, apply medium strength tread locker (blue) on its tread.

5. Remove the defective pedal. Leave the pedal sleeve (**C**) in place. Keep the two nylon washers (**D**).

# NOTE

Apply grease on the new pedal shaft before placing it.

6. Reverse the above steps to install replacement pedal. Be sure to position the pedal horizontally (neutral) before inserting its shaft into the sockets of the locking lever and the 5th wheel activation lever. Verify the pedal for proper operation.

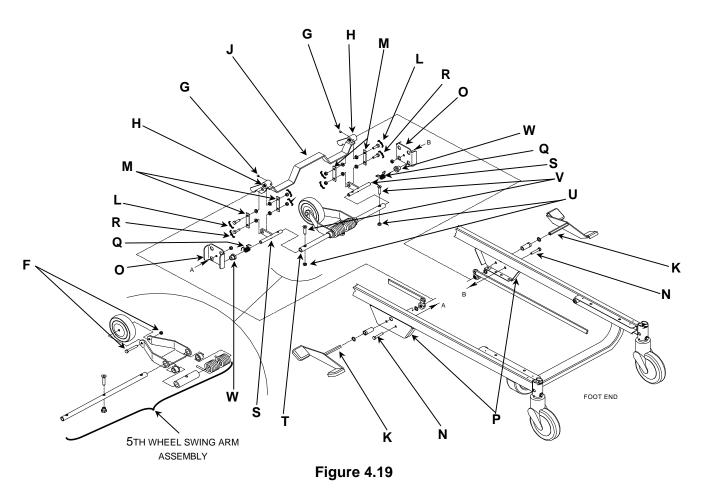
### NOTE

When inserting the pedal shaft into the sockets, make sure that the locking lever (**E**) is vertically positioned and that the upper flat part of the 5th wheel activation lever (**J**, fig. 4.19, page 48) is parallel to the floor (bring the wheel near the floor by exerting a pressure on it to ease this operation).

# 4.19 FIFTH STEER WHEEL MECHANISM COMPONENT REPLACEMENT

#### **NOTE**

Unless otherwise stated, all reference points mentioned in the procedures contained in section 4.19 will refer to figure 4.19 below.



# **5TH WHEEL CASTER**

- 1. Raise the bed to the high position.
- 2. Unplug the power cord from the wall receptacle.
- 3. Bring pedal to horizontal position (neutral).
- 4. Remove the bolt/locknut (F) holding the caster to the swing arms. Remove defective caster.
- 5. Reverse the above steps to install the replacement 5th wheel caster.
- 6. Verify the 5th wheel for proper operation before returning bed to service.

# **ACTIVATION LEVER (J, FIG. 4.19)**

- 1. Raise the bed to the high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Bring pedal to horizontal position (neutral).

4. Remove the machine screw (**A**, fig. 4.18, page 47) located at the end of the right and left pedal shafts. Note that in prior versions (beds with serial number ≤ C01340), the GO BED is equipped with protective caps instead of machine screws. If it's the case with your bed, disregard the following note and proceed with step 5.

### NOTE

Before replacing the machine screws, apply medium strength tread locker (blue) on their treads. When reassembling, the machine screws must first be inserted and tightened **before** tightening the pressure screws mentioned in steps 5 and 6.

5. Remove the pressure screws (**G**) located on the right and left sockets (**H**) of the 5th wheel activation lever (**J**).

#### NOTE

Before replacing the pressure screws, apply medium strength tread locker (blue) on their treads.

- 6. Remove the pressure screws (**B**, fig. 4.18, page 47) located on the head and foot locking levers (**E**, fig. 4.18, page 47).
- 7. Gradually pull out each pedal until the pedal shafts (**K**) disengage from the 5th wheel activation lever sockets (**H**), then stop.
- 8. Remove the two bolts/shoulder spacers(4)/locknuts (**L**) holding both extremities of the activation lever to the upper part of the two counter-levers (**M**).
- 9. Remove the activation lever (J).
- 10. Reverse the above steps to install the replacement activation lever.

#### NOTE

Be sure to position the activation lever horizontally before inserting each pedal shaft into its corresponding socket. To do so, position the top flat part of the lever parallel to the floor (bring 5th wheel near the floor by pressing it to facilitate this operation).

11. Verify the 5th wheel mechanism for proper operation before returning bed to service.

# **SWING ARM ASSEMBLY**

### **NOTE**

Although the swing arm assembly is shown with its different components in the Parts Lists 5th wheel drawing, it is sold completely assembled, except for the caster, when needed for a replacement on a GO BED.

- 1. Raise the bed to the high position and lock casters.
- 2. Unplug the power cord from the wall receptacle.
- 3. Bring pedal to horizontal position (neutral).
- 4. Remove the machine screws (**A**, fig. 4.18, page 47) located at the end of the right and left pedal shafts. Note that in prior versions, the GO BED is equipped with protective caps instead of machine screws. If it's the case with your bed, disregard the following note and proceed with step 5.

### NOTE

Before replacing the machine screws, apply medium strength tread locker (blue) on their treads. When reassembling, the machine screws must first be inserted and tightened **before** tightening the pressure screws mentioned in steps 5 and 6.

5. Remove the pressure screws (**G**) located on the right and left sockets (**H**) of the 5th wheel activation lever (**J**).

#### NOTE

Before replacing the pressure screws, apply medium strength tread locker (blue) on their treads.

- 6. Remove the pressure screws (**B**, fig. 4.18, page 47) located on the head and foot locking levers (**E**, fig. 4.18, page 47).
- 7. Remove both pedals completely. Remove the two pedal sleeves (**C**, fig. 4.18. page 47). Keep the four nylon washers (**D**, fig. 4.18, page 47).

#### NOTE

Apply grease on the pedal shafts before replacing them.

8. Remove the bolt/locknut (**N**) holding each 5th wheel mechanism support (**O**) to the retaining plates (**P**).

#### NOTE

When reassembling, tighten definitely the bolts/locknuts holding the supports to the retaining plates only after the pedal shafts are inserted into the lever sockets. Do not tighten too strongly, the supports could buckle.

- 9. Remove the complete 5th wheel mechanism from the retaining plates by doing the following:
  - Slide both 5th wheel mechanism supports (**O**) inside the retaining plate (**P**) towards the head of the bed and rotate them downwards through the orifice provided at the bottom of the retaining plates. The supports will then be partially disengaged from the plates.
  - Seize both supports and position them diagonally to completely disengage them from the retaining plates.

#### **NOTE**

Note the spring positions and the position of the two supports when removing them from the retaining plates, mark their position to help their re assembly.

- 10. Remove the supports (**O**) from the 5th wheel mechanism. Keep the torsion springs (**Q**).
- 11. Remove the bolts/shoulder spacers(4)/locknuts (**R**) holding the torsion levers (**S**) to the lower part of the two counter-levers (**M**).
- 12. Remove the two torsion levers (**S**) from both ends of the torque shaft (**T**) by first removing the two locknuts (**U**) then the two screws (**V**).

#### NOTE

Apply grease on the portion of the torsion levers that inserts into the nylon bushings  $(\mathbf{W})$  before replacing them.

When reassembling, screw down tightly the two screws (V) holding the torsion levers to the torque shaft before tightening the two locknuts (U).

- 13. Remove bolt/nut (**F**) holding the 5th wheel to the swing arm and remove wheel.
- 14. Reverse the above steps to install the replacement swing arm assembly. Read carefully the following note to properly reinstall the pedals.

### **NOTE**

Be sure to position the pedal horizontally (neutral) when inserting its shaft into the sockets of the locking levers and the 5th wheel activation levers.

When inserting the pedal shaft into the sockets, make sure that the locking lever is vertically positioned and that the upper flat part of the 5th wheel activation lever is parallel to the floor (bring the 5th wheel near the floor by exerting a pressure on it to ease this operation).

15. Verify the 5th wheel mechanism for proper operation before returning bed to service.

### 4.20 CASTER REPLACEMENT

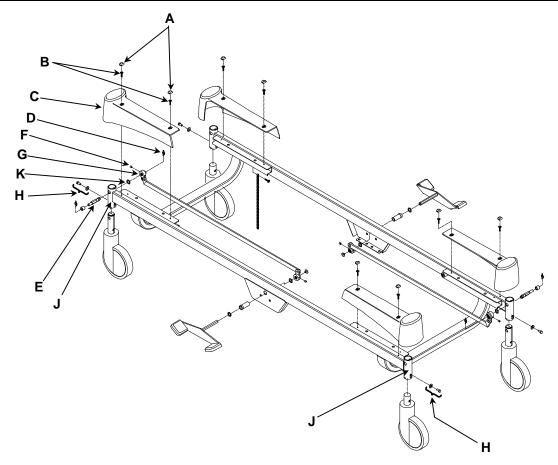


Figure 4.20

- Raise the bed enough to place under the frame at the head or foot end of the bed (depending on the caster to be changed) two jack stands adjusted to a height of 20" (see fig. 4.21A in Appendix B).
- Lower the bed until it rests on the jack stands and the caster lower part is at least 5" clear of the ground.
- 3. Unplug the power cord from the wall receptacle.
- 4. Remove the two pop-on screw covers (A) and the two screws (B) holding the caster cover (C) to the base.
- If the caster to be replaced is part of the locking mechanism, proceed with step 9.
   If the caster to be replaced is **not** part of the locking mechanism, proceed with step 6 through step 8 and end procedure.
- 6. Support the caster while removing the bolt/washer (**H**) holding the caster shaft to the mounting socket (**J**) and remove caster.
- 7. Reverse the above steps to install the replacement caster.
- 8. Verify the casters before returning bed to service

# End of procedure

- 9. Remove the Rue ring (**D**) at the inner end of the locking axle (**E**).
- 10. Remove the pressure screw (**F**) located on the locking lever (**G**) and remove the locking lever from the locking axle. Keep the nylon washer (**K**).

### **NOTE**

Before replacing the pressure screw, apply medium strength tread locker (blue) on its tread.

11. Remove the bolt/washer (H) holding the caster shaft to the mounting socket (J).

#### NOTE

Before replacing the bolt, apply medium strength tread locker (blue) on its tread.

12. Support caster while pulling the locking axle (**E**) out its location. Note the nearly vertical position of the Rue ring hole to correctly replace the locking axle later on. Remove caster.

#### NOTE

Ensure that the pedal is in horizontal position when the locking axle is inserted into the new caster shaft orifice.

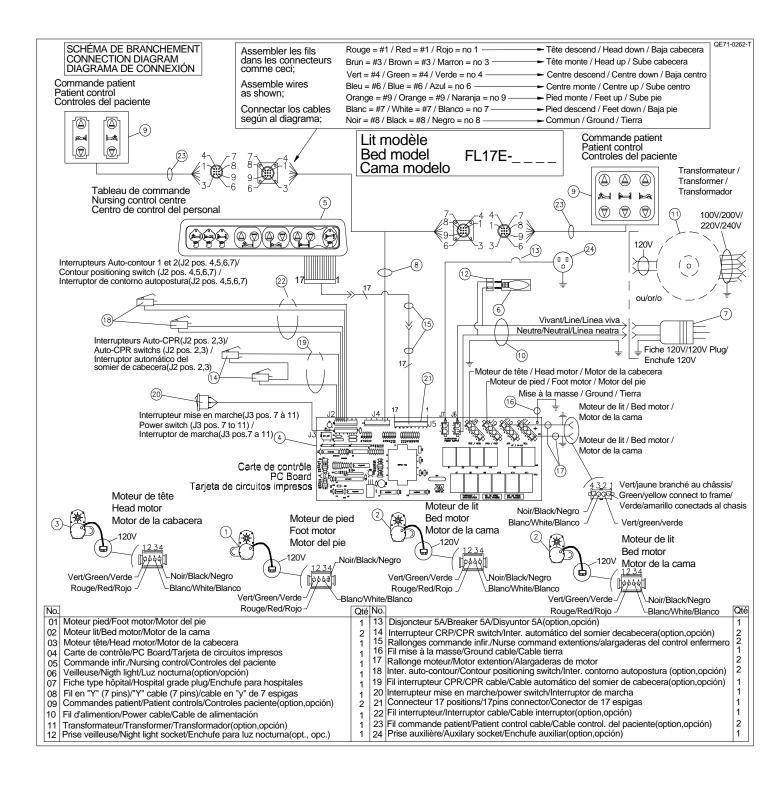
13. Reverse the above steps to install the replacement caster. Read the following note carefully before completing the installation of the replacement caster

#### NOTE

The shaft of a caster which is part of the locking mechanism must be oriented correctly before attaching it to the mounting socket, otherwise the caster will not lock when the brake pedal is activated.

- 13.1. Perform the following steps to correctly orient the caster shaft before finalizing the replacement caster installation:
  - Ensure the new caster shaft mechanism is in the neutral position (brake/steer pedal horizontal). To do so, insert the locking axle in the new caster shaft orifice and rotate the locking axle using a 7/16" open key to identify the three possible positions of the shaft mechanism: 5th wheel engaged, neutral, brake engaged). Set the mechanism to the neutral position (middle position). Once done, remove the locking axle from the caster shaft orifice.
  - Insert the caster shaft into the mounting socket (J) and insert the locking axle (E) completely (reverse the pulled out move with the Rue ring hole nearly vertical). Replace the locking lever on the locking axle (make sure the pedal is in the neutral position before replacing the locking lever on the locking axle), but not completely so as to have enough room between the mounting socket (J) and the locking lever to insert a 7/16" open key.
  - Using the 7/16" open key, rotate the locking axle while observing the pedal movements created by the rotation of the axle, it will occupy three positions:
    - o Green side of the pedal depressed: 5th wheel engaged.
    - o Pedal in horizontal position: neutral position.
    - Red side of the pedal depressed: locking system engaged.
  - When the pedal red side is depressed, verify if the caster locks. If the caster does not lock, the shaft is incorrectly oriented.
  - Remove the locking lever and the locking axle (E) while supporting the caster.
    Remove caster and rotate its shaft 180°. Replace caster shaft into the mounting
    socket and replace locking axle and locking lever as previously described. Rotate
    again the axle while observing the pedals movement created by the rotation of
    the axle.
  - This time, when the pedal red side depresses, the caster should lock. The caster shaft is now correctly oriented and its installation can now be finalized.
- 14. Verify the casters and the brakes for proper operation before returning bed to service.

### APPENDIX A: CONNECTION DIAGRAM



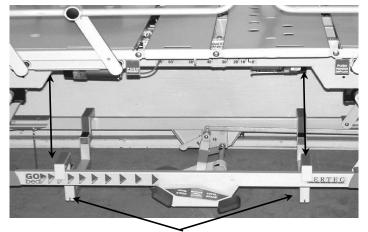
#### APPENDIX B: BED POSITIONS FOR MAINTENANCE PURPOSE

# Figure 4.1



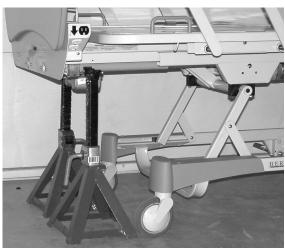
KNEE GATCH AND FOOT SECTION FOLDED BACK TOWARDS HEAD END OF THE BED

Figure 4.14A



ALIGNMENT JIGS POSITIONED ON THE BED BASE FOR A HI-LO ACTUATOR REPLACEMENT





JACK STANDS POSITIONED UNDER THE HEAD END OF THE BED THE BED THE BED

Figure 4.21A