# stryker

IMPORTANT File in your maintenance records



TriaDyne® III Proventa Bed

**Model 2033** 

**MAINTENANCE MANUAL** 

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#### INTRODUCTION

This manual is designed to assist you with the operation of the Model 2033 Critical Care Bed. Read it thoroughly before using the equipment.

### **SPECIFICATIONS**

Maximum Weight Capacity	300 pounds (136 kilograms)
Weigh System Capacity (optional equipment)	patients weighing up to 500 pounds or patients weighing up to 227 kilograms
Weigh System Accuracy (optional equipment)	$\pm$ 2% of total patient weight at zero degrees of Trend
Overall Bed Length/Width	L-91" /W-42.5" or L-231 cm /W-108 cm
Minimum/Maximum Bed Height (Standard) Minimum/Maximum Bed Height (Enhanced)	20.25" to 34.5" - 51.5 cm. to 88 cm. 21.9" to 36.5" - 56 cm. to 93 cm.
Fluoro Access	17.5"
Knee Gatch Angle	0° to 30°
Back Angle	0° to 90°
Trendelenburg/Reverse Trendelenburg	-14° to +14°
Electrical Requirements	115 VAC, 60 Hz, 7.0 Amps
Noise Level	> 65 Decibels

Stryker reserves the right to change specifications without notice.

### **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.



### $\triangle$ CAUTION

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

#### **NOTE**

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

### Warranty

### **Limited Warranty:**

Stryker Medical Division, a division of Stryker Corporation, warrants to the original purchaser that its products should 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. Stryker warrants to the original purchaser that the frame and welds on its beds will be free from structural defects for as long as the original purchaser owns the bed. If requested by Stryker , products or parts for which a warranty claim is made shall be returned prepaid to Stryker's factory. Any improper use or any alteration or repair by others in such manner as in Stryker's judgement 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 beds are designed for a 10 year expected life under normal use conditions and appropriate periodic maintenance as described in the maintenance manual for each device.

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 W ARRANTY OF MERCHANTABILITY AND THERE ARE NO WARRANTIES OF FITNESS FOR ANY PARTICULAR PURPOSE. IN NO EVENT SHALL STRYKER BE LIABLE HEREUNDER FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR IN ANY MANNER RELATED TO SALES OR USE OF ANY SUCH EQUIPMENT.

### **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 T O 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.

### **Safety Tips and Guidelines**

Before operating the 2030, it is important to read and understand all information in this manual. Carefully read and strictly follow the safety guidelines listed on this page. It is important that all users have been trained and educated on the inherent hazards associated with the usage of electric beds.

### $\overline{\mathbb{A}}$

#### WARNING

- The 2030 is not intended for use with patients less than two years of age.
- Powered bed mechanisms can cause serious injury. Operate bed only when all persons are clear of the mechanisms.
- To help reduce the number and severity of falls by patients, always leave the bed in the lowest position when the patient is unattended.
- Leave the siderails fully up and locked when the patient is unattended. When raising the siderails, listen for the "click" that indicates the siderail has locked in the up position. Pull firmly on the siderail to ensure it is locked into position.
  - Siderails are not intended to be a patient restraint device. 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.
- Always apply the caster brakes when a patient is getting on or off the bed. Always keep the caster brakes applied when a patient is on the bed (except during transport). Serious injury could result if the bed moves while a patient is getting in or out of bed. After the brake pedal is applied, push on the bed to ensure the brakes are locked. When moving the bed, toggle the steer pedal to put the bed in the steer mode. This locks the swivel motion of the right foot end caster and makes the bed easier to move.
- When large spills occur in the area of the circuit boards, 110 volt cables and motors, immediately unplug
  the bed power cord from the wall socket. Remove the patient from the bed and clean up the fluid. Have
  maintenance completely check the bed. Fluids can affect the operational capabilities of any electrical
  product. DO NOT put the bed back into service until it is completely dry and has been thoroughly tested
  for safe operation.
- Do not steam clean or hose off the bed. Do not immerse any part of the bed. The internal electric parts may be damaged by exposure to water. Hand wash all surfaces of the bed with warm water and mild detergent. Dry thoroughly. Quaternary Germicidal Disinfectants, used as directed, and/or Chlorine Bleach products, typically 5.25% Sodium Hypochlorite in dilutions ranging between 1 part bleach to 100 parts water, and 2 parts bleach to 100 parts water 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 to clean Stryker patient care equipment, measures must be taken to insure the beds are wiped with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the beds will leave a corrosive residue on the surface of the bed, possibly causing premature corrosion of critical components. Failure to follow the above directions when using these types of cleaners may void this product's warranty.
  - 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.)
- Preventative maintenance should be performed at a minimum of annually to ensure all bed features are
  functioning properly. Close attention should be given to safety features including, but not limited to:
  safety side latching mechanisms, frayed electrical cords and components, all electrical controls return
  to off or neutral position when released, caster braking systems, no controls or cabling entangled in bed
  mechanisms, leakage current 100 MA maximum, scale and bed exit systems calibrated properly.
- Always unplug bed during service or cleaning. When working under the bed with the bed in the high position, always place blocks under the litter frame and set the brakes to prevent injury in case the Bed Down switch is accidently pressed.
- Explosion Hazard do not use bed in the presence of flammable anesthetics.
- Because individual beds may have different options, foot boards should not be moved from one bed to another. Mixing foot boards could result in unpredictable bed operation.

# **Safety Tips and Guidelines**





Potential pinch points

# **Set-Up Procedures**

It is important that the bed is working properly before it is put into service. The following list will help ensure that each part of the bed is tested.

Plug the bed into a properly grounded, hospital grade wall receptacle and ensure the "Power" LED light at the foot end of the bed comes on.



### /!\ WARNING

The 2033 is equipped with a hospital grade plug for protection against shock hazard. It must be plugged directly into a properly grounded three-prong receptacle. Grounding reliability can be achieved only when a hospital grade receptacle is used.

- Ensure the siderails raise, lower and store smoothly and lock in the up and intermediate positions.
- Ensure that all four casters lock when the brake pedal is engaged

#### **NOTE**

Ensure that the "Brake Not Set" LEDs located on the outside of the head end siderails and on the foot board control panel come on when the brakes are disengaged.

- Run through each function on the foot board control panel to ensure that each function is working properly.
- Run through each function on both head end siderails to ensure that each is working properly.

If any problems are found during bed set-up, contact Stryker Customer Service at 800-327-0770.

#### **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. Stryker Customer Service must be notified immediately. Stryker will aid the customer in filing 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.



Warning, Refer to Service/Maintenance Manual



**Alternating Current** 



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

Class 1 Equipment: equipment in which protection against electric shock does not rely on BASIC INSULATION only, but which includes an additional safety precaution in that means are provided for the connection of the EQUIPMENT to the protective earth conductor in the fixed wiring of the installation in such a way that ACCESSIBLE METAL PARTS cannot become live in the event of a failure of the BASIC INSULA TION.

Mode of Operation: Continuous

IPX4: Protection from liquid splash



Dangerous Voltage Symbol



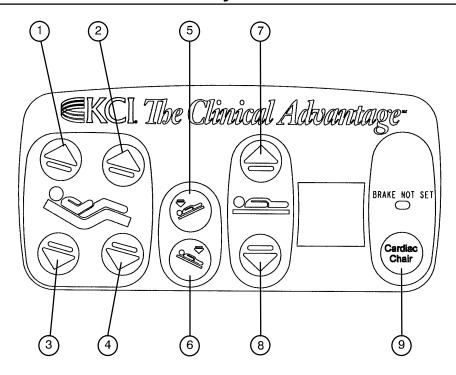
**Protective Earth Terminal** 



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 2601–1 and CAN/CSA C22.2 No. 601.1

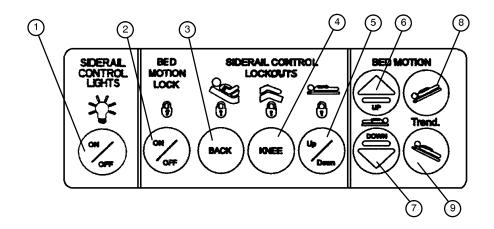


- 1. Press to raise back section.
- Press to raise knee section.
- 3. Press to lower back section.
- 4. Press to lower knee section.
- 5. Press to lower the head end of the bed (Trendelenburg).
- 6. Press to lower the foot end of the bed (Reverse Trendelenburg).
- 7. Press to raise the litter.
- 8. Press to lower the litter.
- 9. Press to activate emergency Cardiac Chair positioning.

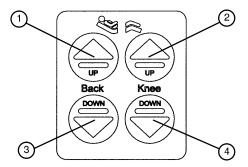


#### WARNING

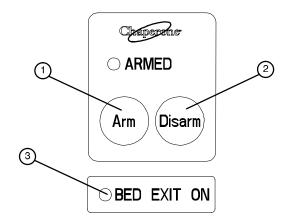
Because individual beds may have different options, foot boards should not be moved from one bed to another. Mixing foot boards could result in unpredictable bed operation.



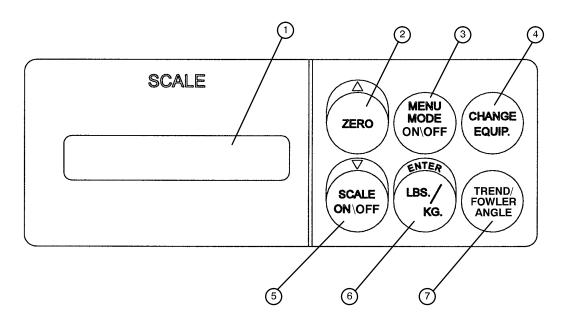
- 1. Press repeatedly for low, medium and high settings for the siderail control lights. Continue to press this switch to turn off the siderail control lights and the nurse call indicator light.
- 2. Press to lock out all bed motion controls on the siderails. Press again to unlock.
- 3. Press to lock out Back motion control on the siderails. Press again to unlock.
- 4. Press to lock out Knee motion control on the siderails. Press again to unlock.
- 5. Press to lock out bed up/down motion controls on the siderails. Press again to unlock.
- 6. Press to raise bed.
- 7. Press to lower bed.
- 8. Press to lower head end of bed (Trendelenburg).
- 9. Press to lower foot end of bed (Reverse Trendelenburg).



- 1. Press to raise back section.
- 2. Press to raise knee section.
- Press to lower back section.
- 4. Press to lower knee section.



- 1. Push to activate Bed Exit function.
- 2. Push to deactivate Bed Exit function.
- 3. "BED EXIT ON" LED will light when the BED EXIT function is armed.



- 1. LCD displays patient weight. Trendelenburg angle is displayed when the scale is not active.
- 2. Press to zero bed. Also press to scroll while Menu Mode is active.
- 3. Press to enter and exit the Menu Mode.
- 4. Press when adding or removing equipment to the bed.
- 5. Press to turn weigh system on and off. Also press to scroll while Menu Mode is active.
- 6. Press to change weight from pounds to kilograms or back. Also press while using the Menu Mode.
- 7. Press to display the Trendelenburg or Fowler angle of the bed.

# Chapter One - Introduction and Set-Up Information

# **Notes**

### Chapter Two - Preventive Maintenance

### **GENERAL INFORMATION**

This section contains cleaning instructions and a checklist to assist with the routine preventive maintenance and cleaning of your equipment.

### **PREVENTIVE MAINTENANCE CONTENTS**

Cleaning	2-2
Preventive Maintenance Checklist	2-3

### Cleaning

Hand wash all surfaces of the bed with warm water and mild detergent. Dry thoroughly. DO NOT STEAM CLEAN, PRESSURE WASH, HOSE OFF OR ULTRASONICALLY CLEAN. Using these methods of cleaning is **not** recommended and may void this product's warranty.

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.)

In general, when used in those concentrations recommended by the manufacturer, either phenolic type or quaternary type disinfectants can be used with Staph-Chek fabrics. Iodophor type disinfectants are not recommended for use on Staph-Chek fabrics because staining may result. The following products have been tested by the Herculite Laboratory and have been found not to have a harmful effect on Staph-Chek fabrics WHEN USED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDED DILUTION.\*

TRADE NAME	DISINFECTANT TYPE	MANUFACTURER	*MANUFACTURER'S RECOMMENDED DILUTION
A33	Quaternary	Airwick (Professional Products Division)	2 ounces/gallon
A33 (dry)	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Beaucoup	Phenolic	Huntington Laboratories	1 ounce/gallon
Blue Chip	Quaternary	S.C. Johnson	2 ounces/gallon
Elimstaph	Quaternary	Walter G. Legge	1 ounce/gallon
Franklin Phenomysan F2500	Phenolic	Purex Corporation	1 1/4 ounce/gallon
Franklin Sentinel	Quaternary	Purex Corporation	2 ounces/gallon
Galahad	Phenolic	Puritan Churchill Chemical Company	1 ounce/gallon
Hi-Tor	Quaternary	Huntington Laboratories	1/2 ounce/gallon
LPH	Phenolic	Vestal Laboratories	1/2 ounce/gallon
Matar	Phenolic	Huntington Laboratories	1/2 ounce/gallon
Omega	Quaternary	Airwick (Professional Products Division)	1/2 ounce/gallon
Quanto	Quaternary	Huntington Laboratories	1 ounce/gallon
Sanikleen	Quaternary	West Chemical Products	2 ounces/ gallon
Sanimaster II	Quaternary	Service Master	1 ounce/gallon
Vesphene	Phenolic	Vestal Laboratories	1 1/4 ounce/ gallon

Quaternary Germicidal Disinfectants, used as directed, and/or Chlorine Bleach products, typically 5.25% Sodium Hypochlorite in dilutions ranging between 1 part bleach to 100 parts water, and 2 parts bleach to 100 parts water 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 to clean Stryker patient handling equipment, measures must be taken to insure the beds are rinsed with clean water and thoroughly dried following cleaning. Failure to properly rinse and dry the beds will leave a corrosive residue on the surface of the bed, possibly causing premature corrosion of critical components. Failure to follow the above directions when using these types of cleaners may void this product's warranty.

#### REMOVAL OF IODINE COMPOUNDS

This solution may be used to remove iodine stains from mattress cover and foam footrest pad surfaces.

- 1. Use a solution of 1–2 tablespoons Sodium Thiosulfate in a pint of warm water to clean the stained area. Clean as soon as possible after staining occurs. If stains are not immediately removed, allow solution to soak or stand on the surface.
- 2. Rinse surfaces which have been exposed to the solution in clear water before returning bed to service.

### Chapter Two - Preventive Maintenance

# **Preventive Maintenance Checklist**

All fasten	ers secure				
Engage b	rake pedal and push on the bed to ensure all casters lock securely				
Optional I	Optional locking steer caster engages and disengages properly				
Siderails	move, latch and stow properly				
All function	ons on siderails working properly (including LED's)				
Manual C	PR release working properly				
Foot prop	intact and working properly				
I.V. pole v	vorking properly				
Optional l	Foley bag hooks intact				
Optional	chart rack intact and working properly				
Optional	CPR board not cracked or damaged and stores properly				
No cracks	s or splits in head and foot boards				
All function	ons on footboard working properly (including LED's)				
No rips or	r cracks in mattress cover				
Scale and	d Bed Exit system calibrated properly				
Power co	rd not frayed				
No cables	s worn or pinched				
All electri	cal connections tight				
All ground	ds secure to the frame				
Ground in	mpedence not more than 100 milliohms				
Current le	eakage not more than 100 microamps				
Fowler fu	nctioning properly				
Bed Serial No.	<u></u>				
	<u></u>				
	<u></u>				
	<u></u>				
Completed By:	Data:				

### **NOTE**

Preventative maintenance should be performed at a minimum of annually. A preventative maintenance program should be established for all Stryker Medical equipment. Preventative maintenance may need to be performed more frequently based on the usage level of the product.

# Chapter Two - Preventive Maintenance

# **Notes**

# Chapter Three - Troubleshooting

### **GENERAL INFORMATION**

This section contains troubleshooting charts to assist with the diagnosis of a problem with 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.

### TROUBLESHOOTING CONTENTS

Troubleshooting Guide	 3_
HOUDIESHOOHIU GUIGE	 

# **Troubleshooting Guide**

### **DEFINITIONS:**

DMM = Digital Multi-Meter PCB = Printed Circuit Board CPU = Central Processing Unit

### **NOTE**

See page 4-2 through page 4-4 for an outline of bed PCB's and voltage test points.

PROBLEM/FAILURE	RECOMMENDED ACTION
No power to bed	<ul> <li>A. Unplug bed power cord and check continuity of F1 and F2 with DMM.</li> <li>B. Check for 120 VAC power at J1 on the power supply, Pin 1 and 2.</li> <li>C. Check for DC voltages on J2 (Pins 1,2,3 &amp; 6) on power supply. See page page 4–4 for power supply voltage test points.</li> <li>D. If no voltage at J2, unplug connector HDR2 on the CPU board and recheck for DC voltages at J2 on the power supply.</li> <li>E. If still no voltage, unplug all cables from the CPU board and recheck voltages on the CPU board.</li> </ul>
No bed down motion.	<ul> <li>A. Enter diagnostics, (see page page 7-2) and press bed down. If motion is present, re-burn lift potentiometer limits.</li> <li>B. Verify HDR3 on the CPU board has a shunt on the two pins closest to the patient right side of the bed.</li> <li>C. Check for 5VDC on R145 and R149 positive lead, CPU ground test point negative lead while pressing the bed down button.</li> <li>D. Check for 120 VAC power on HDR33 and HDR34, Pin 1 white and Pin 3 black, of the CPU board.</li> </ul>
No bed up motion.	<ul> <li>A. Enter diagnostics, (see page page 7-2) and press bed down. If motion is present, re-burn lift potentiometer limits.</li> <li>B. Verify cable connection on R143 and R147 positive lead, CPU ground test point negative lead while pushing the bed up button.</li> <li>C. Check 120 VAC power on HDR33 and HDR34, Pin 1 white and Pin 6 red, of the CPU board.</li> </ul>
No Gatch down motion.	<ul> <li>A. Check for 5VDC on R141 positive lead, CPU ground test point negative lead while pushing the Gatch down button.</li> <li>B. Check for 120 VAC power on HDR30 Pin 1 white and Pin 3 black of the CPU board while pushing the Gatch down button.</li> </ul>
No Gatch up motion.	<ul> <li>A. Check for 5VDC on R137 positive lead, CPU ground test point negative lead while pushing the Gatch up button.</li> <li>B. Check for 120 VAC on HDR30, Pin 1 white and Pin 2 red of the CPU board while pushing the Gatch up button.</li> </ul>
No Fowler up/or uneven motion.	<ul> <li>A. Check for 5VDC on R135 positive lead, CPU ground test point negative lead while pushing the Fowler up button.</li> <li>B. Check for 120 VAC on HDR29, Pin 1 white and Pin 2 black of the power supply while pushing the Fowler up button.</li> <li>C. Refer to Fowler Mechanism Customer Guide (2030-009-028).</li> </ul>
No Fowler down/or uneven motion.	<ul> <li>A. Check for 5VDC on R139 positive lead, CPU ground test point negative lead while pushing the Fowler down button.</li> <li>B. Check for 120 VAC power on HDR29 Pin 1 white and Pin 3 red of the CPU board while pushing the Fowler down button.</li> <li>C. Refer to Fowler Mechanism Customer Guide (2030-009-028).</li> </ul>

# Chapter Four - Electrical System Information

### **GENERAL INFORMATION**

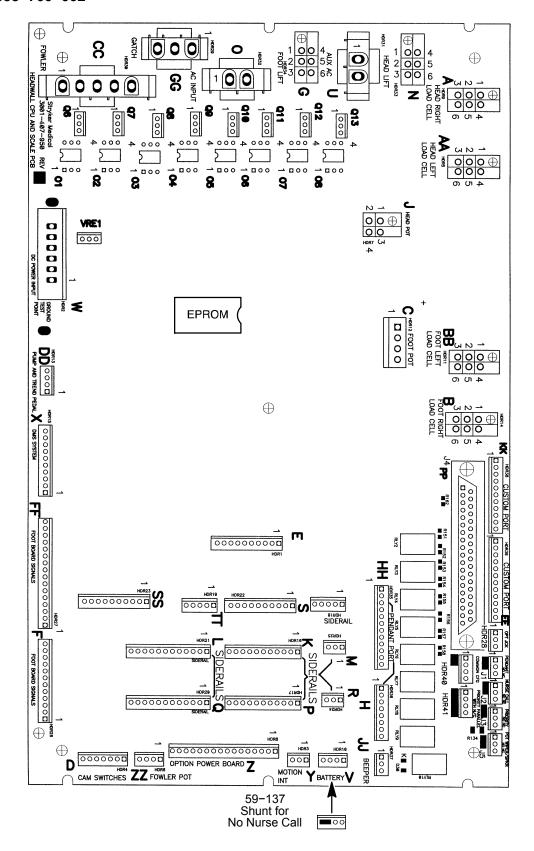
This section contains circuit board layouts and other information on the electrical system of the bed.

### **ELECTRICAL SYSTEM INFORMATION CONTENTS**

CPU Board	 4-2, 4-3
Power Supply	 4-4

# **CPU Board**

### CPU - 2033-700-002



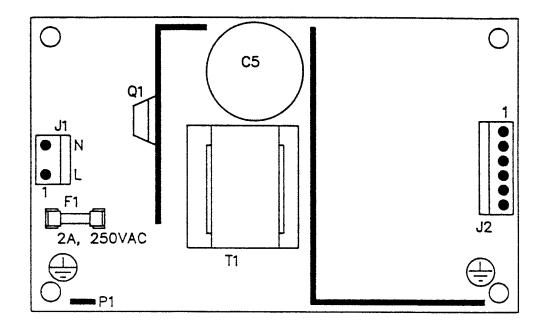
# **CPU Board (Continued)**

### CPU - 2033-700-002

CONNECTOR LOCATION	CABLE LOCATION	VOLTAGE	POSITIVE LEAD	NEGATIVE LEAD	DESCRIPTION
HDR 2	W	+12 VDC	Pin 1	Pin 4 or 5	Relays & Siderails Light Voltage
HDR 2	W	+5 VDC	Pin 2 & 3	Pin 4 or 5	+5 VDC from Power Supply
HDR 2	W	-12 VDC	Pin 6	Pin 4 or 5	Relays & Siderails Light Voltage
HDR 6	ZZ	+5 VDC	Pin 1 Red	Pin 4 Black	+5 VDC for Fowler Pot
HDR 6	ZZ	0 - 5 VDC	Pin 1 Red	Pin 3 Green	Fowler Pot Wiper
HDR 7	J	0 - 5 VDC	Pin 3 Red	Pin 2 White	Head Lift Pot Wiper
HDR 7	J	+5 VDC	Pin 4 Green	Pin 2 White	+5 VDC for Head Lift Pot
HDR 12	С	+5 VDC	Pin 1	Pin 2	+5 VDC for Foot Lift Pot
HDR 12	С	0 - 5 VDC	Pin 3	Pin 2	Foot Lift Pot Wiper
HDR 30	CC	0 VAC w/o Switch 110 VAC w/Switch	Pin 2 Red	Pin 1 White	Gatch Up
HDR 30	CC	0 VAC w/o Switch 110 VAC w/Switch	Pin 3 Black	Pin 1 White	Gatch Down
HDR 29	GG	0 VAC w/o Switch 160 VAC w/ Switch	Pin 2 Black	Pin 1 White	Fowler Up
HDR 29	GG	0 VAC w/o Switch 120 VAC w/ Switch	Pin 3 Red	Pin 1 White	Fowler Down
HDR 32	0	110 VAC	Pin 1	Pin 2	Line Voltage to Bed
HDR 33	N	0 VAC w/o Switch 120 VAC w/ Switch	Pin 3 Black	Pin 1 White	Head Lift Down
HDR 33	N	0 VAC w/o Switch 120 VAC w/ Switch	Pin 6 Red	Pin 1 White	Head Lift Up
HDR 34	G	0 VAC w/o Switch 120 VAC w/ Switch	Pin 3 Black	Pin 1 White	Foot Lift Down
HDR 34	G	0 VAC w/o Switch 120 VAC w/ Switch	Pin 6 Red	Pin 1 White	Foot Lift Up

# **Power Supply**

### **POWER SUPPLY - P/N 59-157**



CONNECTOR LOCATION	VOLTAGE	POSITIVE LEAD	NEGATIVE LEAD
J1	110V	Pin 1	Pin 2
J2	12V	Pin 1	Pin 4 or 5
J2	5V	Pin 2	Pin 4 or 5
J2	5V	Pin 3	Pin 4 or 5
J2	GND	Pin 4	Pin 4 or 5
J2	GND	Pin 5	Pin 4 or 5
J2	-12V	Pin 6	Pin 4 or 5

# Chapter Five - Quick Reference Replacement Parts List

### **ELECTRICAL COMPONENTS**

CPU KIT	2033-700-002
FOOT BOARD KEYBOARD (S/R LIGHTS, LOCKOUTS, ETC.)	3001-500-930
FOOT BOARD SCALE DISPLAY	3001-507-900
FOOT BOARD SCALE KEYBOARD	3001-507-910
FOOT BOARD BED EXIT KEYBOARD	3001-508-900
POWER SUPPLY	59-157

### **SIDERAIL BOARDS**

INSIDE BOARD	3001-400-930
OUTSIDE BOARD	3001-400-910
SPEAKER W/CABLE	3000-403-831

### **OTHER COMPONENTS**

CAPACITOR, FOWLER & GATCH	59-779
CAPACITOR, LIFT	59-778
CASTER, 8"	3001-200-90
CASTER, STEER, 8"	3001-200-80
COIL CORD, LIFT POWER	3001-200-864
COIL CORD, LIFT SENSOR	3001-200-815
ISOLATION PLATE KIT, LIFT MOTOR	3000-200-723
LOAD CELL	3001-307-57
MOTOR COUPLER KIT, LIFT	3000-200-725
MOTOR, FOWLER & GATCH W/CLUTCH	3001-300-705
MOTOR, LIFT (SAME FOR HEAD AND FOOT END)	3000-200-213
PAINT, TOUCH-UP, OPAL, BOTTLE W/BRUSH	7000-1-321
PAINT, TOUCH-UP, OPAL, SPRAY CAN	7000-1-318
POTENTIOMETER, FOOT END	3001-200-230
POTENTIOMETER, FOWLER W/CABLE	2035-32-803
POTENTIOMETER, HEAD END	3001-200-240
POWER CORD	39-254
SIDERAIL COVER, RIGHT	3000-336-11
SIDERAIL COVER, LEFT	3000-336-12
SINGLE TUBE OF GREASE	3000-200-700

# Chapter Five - Quick Reference Replacement Parts List

# **Notes**

# Chapter Six - Base Maintenance Procedures

### **GENERAL INFORMATION**

This section contains tool lists and step-by-step procedures to assist with the maintenance and servicing of the base portion 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.

### **BASE MAINTENANCE CONTENTS**

Static Discharge Precautions	6-2
Brake Pedal Replacement	6-3
Lift Motor and Capacitor Removal and Replacement	6-4
Lift Housing Removal and Replacement	6-5, 6-6
Lift Potentiometer Replacement and Adjustment	6-7, 6-8
Lift Potentiometer "Burn-In" Procedure	6-8
Lift Motor Coupler Replacement	6-9
Power and Sensor Coil Cord Replacement6-	10, 6-11

### **Static Discharge Precautions**

The electronic circuits in the 2030 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 2030. 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.

Stryker has available the following equipment for proper static protection:

- Complete static protection system part number 3000–000–753
- 1 grounding plug part number 3000–000–754
- 1 static wrist strap part number 3000-000-755
- 1 test lead part number 3000-000-756

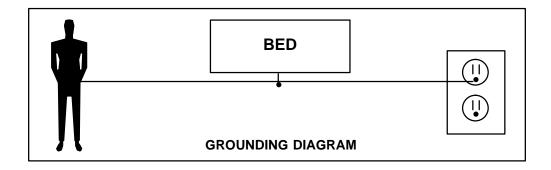


### /\ CAUTION

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 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 alligator clip at the other end of the wrist strap cord to a ground point on the bed.



### Chapter Six - Base Maintenance Procedures

# **Brake Pedal Replacement**

### **Required Tools:**

5/16" Hex Allen Wrench Torque Wrench Loctite 242

Hammer Punch #2 Phillips Screwdriver

Bungee Cords (or Equivalent)

#### **Procedure:**

- 8. Raise the litter to the full up position.
- 9. Unplug the bed power cord from the wall socket.
- 10. Using a #2 Phillips screwdriver, remove the three screws holding both the head end and the foot end upper lift covers. If you want, hold the covers out of the way by using bungee cords (or the equivalent) to secure them to the litter top.
- 11. Using a 5/16" hex Allen wrench, remove the two bolts holding the brake pedal to the brake rod.
- 12. Using a hammer and punch, remove the roll pins holding the brake shaft crank to the brake rod on both the head and the foot end.
- 13. Push the brake rod through the frame until the brake pedal is clear. Remove the brake pedal.
- 14. Reverse the above steps to attach the new brake pedal.

#### **NOTE**

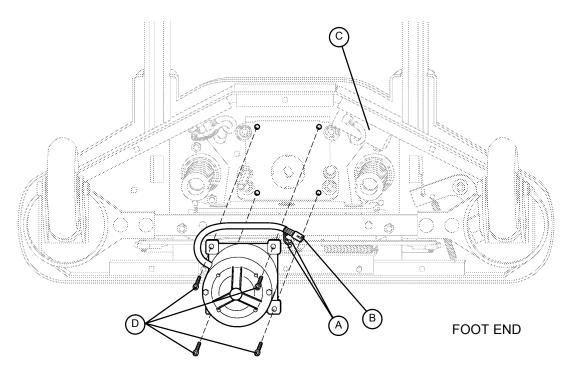
Use Loctite 242 when reinstalling the bolts and torque the bolts to 25 foot-pounds.

# Lift Motor and Capacitor Removal and Replacement

### **Required Tools:**

3/8" Socket Wrench w/Extension Side Cutters

5/16" Socket Wrench 7/16" Open End Wrench Floor Jack 2x4 (or Equivalent)



### **Procedure:**

#### NOTE

If you need more space to work under the base frame, place a 2x4 across the base frame rails and use a floor jack to raise the base frame off the floor.

- 1. Unplug the bed power cord from the wall socket. Using a 5/16 " socket wrench, remove the five bolts holding the lower lift cover to the base and remove the cover.
- 2. Disconnect the two connectors (A) at the motor capacitor.
- 3. Disconnect the white connector (B) from the power cord.
- 4. Using side cutters, cut the cable ties holding the capacitor (C) to the base and remove the capacitor.
- 5. Using a 3/8" socket wrench, remove the four screws (D) holding the motor assembly in the lift housing and remove the motor assembly.
- 6. Reverse the above steps to install the new motor.

#### **NOTE**

The drive shaft on the new motor probably will have to be turned to be aligned with the coupler. Use a 7/16" open end wrench to turn the drive shaft of the motor.

The procedure for lift motor and capacitor removal and replacement is the same for both ends of the bed.

### Lift Housing Removal and Replacement

### **Required Tools:**

#2 Phillips Screwdriver Bungee Cord (or Equivalent) 5/16" Socket Wrench

Side Cutters 9/16" Socket Wrench Floor Jack

7/32" Hex Allen Socket Wrench Sawhorses (or Equivalent) 2x4 (or Equivalent)

3/8" Socket Wrench (w/ 6" extension)

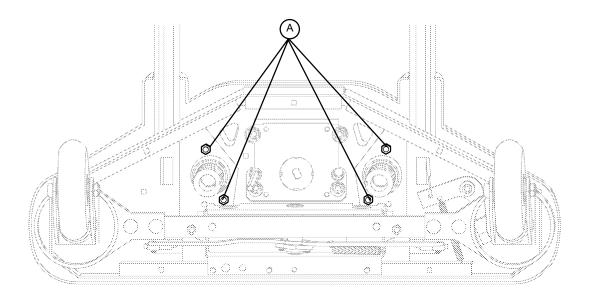
#### Procedure:

### **NOTE**

If you need more space to work under the base frame, place a 2x4 across the base frame rails and use a floor jack to raise the base frame off the floor.

- 1. Unplug the bed power cord from the wall socket.
- 2. Using a 5/16" socket wrench, remove the five bolts holding the lower lift cover to the base and remove the cover.
- Using a #2 Phillips screwdriver, remove the three screws holding the upper lift cover to the base. If you want, hold the covers out of the way by using bungee cords (or the equivalent) to secure them to the litter top.
- 4. Remove the lift motor and capacitor (refer to procedure on page 6-4).
- 5. Remove lift potentiometer (refer to procedure on page 6-7).
- 6. Using a 5/16" socket wrench, remove the cable clamps holding the power and sensor coil cords on top of the lift housing assembly. Cut the cable ties and disconnect the coil cords from under the lift housing. The power and sensor coil cords are now free of the lift housing assembly. Drape them up out of the way.
- 7. Using a 7/32" hex Allen socket, remove the two screws holding the lift screws to the header crossbar plate.
- 8. Lift the litter top up and support it about 6" above the lift screws with sawhorses or the equivalent.

# Lift Housing Removal and Replacement (Continued)



FOOT END - BOTTOM VIEW

- 9. Under the base, using a 9/16" socket, remove the four nuts (A) holding the lift housing to the base.
- 10. Lift up and out on the lift housing assembly to remove it from the base.



### CAUTION

To ensure proper reattachment of the power and sensor coil cords, refer to the procedure on page 6–10. Refer to the procedure on page 6–7 for reattachment of the lift potentiometer.

11. Reverse the above steps to reinstall the lift housing assembly after service is completed.

#### NOTE

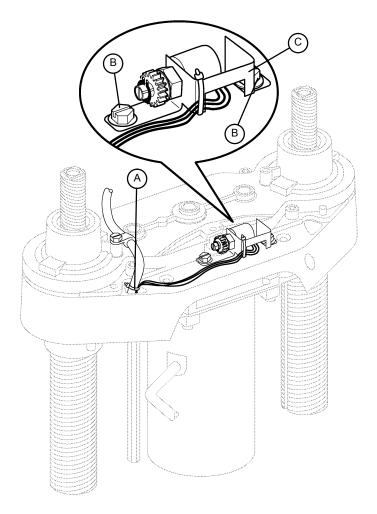
The procedure for lift housing removal and replacement is the same for both ends of the bed.

# Lift Potentiometer Replacement and Adjustment

### **Required Tools:**

#2 Phillips Screwdriver 3/8" Open End Wrench

Bungee Cord (or equivalent) Side Cutters 5/16" Socket Wrench



#### **Procedure:**

- 1. Raise the litter to the full up position.
- 2. Unplug the bed power cord from the wall socket.
- 3. Using a 5/16" socket wrench, remove the five bolts holding the lower lift cover to the base and remove the cover. If you want, hold the covers out of the way by using bungee cords (or the equivalent) to secure them to the litter top.
- 4. Using a #2 Phillips screwdriver, remove the three screws holding the upper lift cover to the base. If you want, hold the covers out of the way by using bungee cords (or the equivalent) to secure them to the litter top.
- 5. Using side cutters, cut the cable tie (A) holding the pot cable to the coil cord.
- 6. Unplug the pot cable from the sensor coil cord. If replacing a pot at the head end of the bed, unplug the cables attached to the brake sensor switch.
- 7. Pull the pot cable up through the base.
- 8. Using a 3/8" open end wrench, remove the two bolts (B) holding the pot housing (C) to the lift housing.

# Lift Potentiometer Replacement and Adjustment (Continued)

- 9. Lift up and out on the pot housing assembly to remove it from the lift housing.
- 10. Before installing the new pot on the bed, turn it clockwise until it stops. T urn it back counterclockwise two full (360°) revolutions. This allows a "window" position for proper upper and lower limits.
- 11. Reverse steps 4–8 to install the new pot and pot housing assembly.
- 12. After installing the new pot, the "burn-in" procedure below must be followed.

#### **NOTE**

Be sure to maintain the pot position while installing.

### Lift Potentiometer "Burn-In" Procedure

- 1. Unplug the bed power cord from the wall socket.
- 2. On the foot board control panel, press and hold down the Bed Motion On/Off button and the Knee button simultaneously.
- 3. While holding down the above two buttons, plug the power cord into the wall socket. The lights on the foot board control panel should flash, indicating the bed is in the diagnostics mode.
- 4. Press and hold the Bed Motion Up button until the litter raises completely.
- 5. Press and hold the Bed Motion Lock button until the lights flash. The bed upper limit is set.
- 6. Release the button, unplug the bed power cord from the wall socket and turn battery backup off.
- 7. Plug the power cord back in to the wall socket.
- 8. Unplug the bed power cord from the wall socket.
- 9. On the foot board control panel, press and hold down the Bed Motion On/Off button and the Knee button simultaneously.
- 10. While holding down the above two buttons, plug the power cord into the wall socket. The lights on the foot board control panel should flash, indicating the bed is in the diagnostics mode.
- 11. Raise or lower the bed height until the litter surface is 21.5" above the floor. Hold down the Up/Down Lock button until the light flashes.
- 12. Plug the power cord back in to the wall socket. Run the bed to full up, then full down and verify the bed limits with a tape measure.

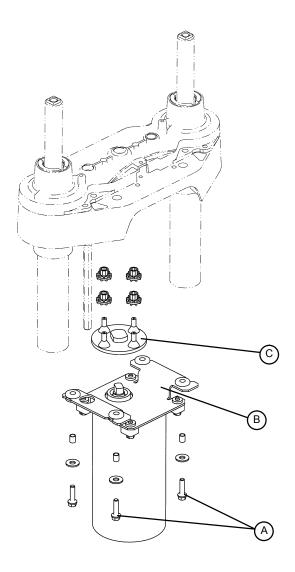
# **Lift Motor Coupler Replacement**

### **Required Tools:**

5/16" Socket Wrench 2x4 (or Equivalent)

3/8" Socket Wrench (w/6" Extension)

Floor Jack



### **Procedure:**

#### **NOTE**

If you need more space to work under the base frame, place a 2x4 across the base frame rails and use a floor jack to raise the base frame off the floor.

- 1. Unplug the bed power cord from the wall socket.
- 2. Using a 5/16" socket wrench, remove the five bolts holding the lower lift cover to the base and remove the cover.
- 3. Using a 3/8" socket with an extension, remove the four bolts (A) holding the isolation plate (B) to the lift housing and lower the lift motor and isolation plate assembly to allow access to the coupler (C).
- 4. The motor coupler can now be removed from the lift housing.
- 5. Reverse the above steps to install the new motor coupler and bushings.

### **Power and Sensor Coil Cord Replacement**

#### **Required Tools:**

#2 Phillips Screwdriver Side Cutters 5/16" Socket Wrench

Bungee Cord (or equivalent) 5/16" Nut Driver Floor Jack

2x4 (or Equivalent)

#### **Procedure:**

#### **NOTE**

If you need more space to work under the base frame, place a 2x4 across the base frame rails and use a floor jack to raise the base frame off the floor.

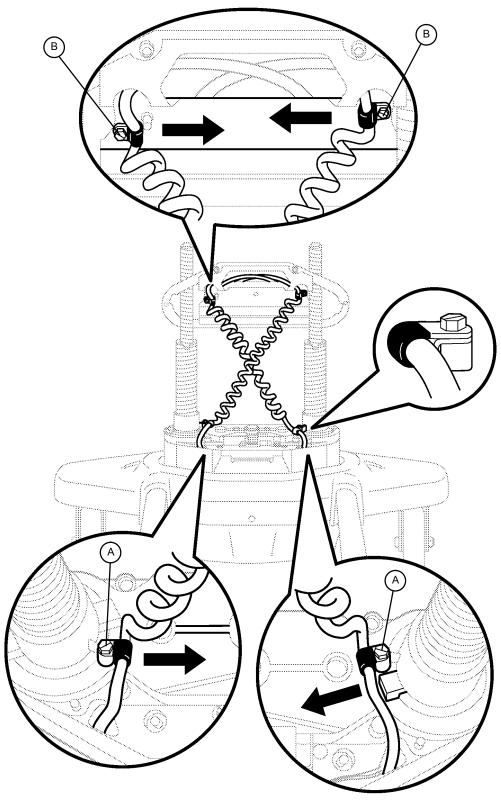
- 1. Unplug the bed power cord from the wall socket.
- 2. Using a 5/16" socket wrench, remove the five bolts holding the lower lift cover to the base and remove the cover.
- Using a #2 Phillips screwdriver, remove the three screws holding the upper lift cover to the base. If you
  want, hold the covers out of the way by using bungee cords (or the equivalent) to secure them to the litter
  top.
- 4. Using side cutters, cut the cable ties holding the power and sensor coil cords to the base. Remove the ground wire coming from the sensor cord that is attached to the base (note the star washer arrangement).
- 5. Disconnect the cables going to the motor and the lift potentiometer (at the head end, the sensor cord is also attached to the brake switch sensor).
- 6. Pull both cords up through the frame of the bed and the lift housing.
- 7. Using a 5/16" socket wrench, remove the two screws (A) holding the cable clamps\* to the top of the lift housing.
- 8. Using a 5/16" socket wrench, remove the two screws (B) securing the cable clamps\* to the underside of the header crossbar assembly.
- 9. Pull both coil cords up through the header crossbar assembly.
- Disconnect the power and sensor coil cords from the connectors.
- 11. The cords should now be completely removed from the bed. Reverse the above steps to install the new power and sensor cords.\*



#### CAUTION

<sup>\*</sup> When the power and sensor coil cords are being replaced, secure the cable clamps to the cords at the first coil both on the top and on the bottom to assure there is not too much slack in the cords between the top of the lift housing assembly and the bottom of the header crossbar. Be sure the clamps are fastened at exactly the correct angle, as shown by the arrows in the illustration. Arrange the cords exactly as shown in the illustration (left in front of right). If this is not done correctly, damage to the cords will result.

# **Power and Sensor Coil Cord Replacement Illustration**



VIEW FROM CENTER OF BED

# Chapter Six - Base Maintenance Procedures

# **Notes**

### Chapter Seven - Litter Maintenance Procedures

#### **GENERAL INFORMATION**

This section contains tool lists and step-by-step procedures to assist with the maintenance and servicing of the litter portion 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.

#### LITTER MAINTENANCE CONTENTS

Scale System Diagnostics and Calibration	<b>'</b> –3
Load Cell Replacement	7-4
Head Motor Removal and Replacement	7–4
Knee Motor Removal and Replacement	7-5
Power Supply Removal and Replacement	<sup>7</sup> –6
CPU Board Removal and Replacement	<b>7–</b> 6
Fowler Potentiometer Replacement	7–7
Fowler and Lift Potentiometer "Burn-In" Procedure	7-8

## **Scale System Diagnostics and Calibration**

#### **Diagnostic Mode Functions:**

- 1. Calibrate Scale: This is required in the field if a CPU board or a load cell is replaced.
- 2. **Display Corner:** This function displays the individual reference numbers for each load cell assembly and can be used to isolate a defective load cell.
- 3. Init. to Defaults: This may be required in the field when replacing a CPU board or a load cell.
- 4. **Erase E-prom:** This is a factory setting not used in the field.
- 5. Display Factor: This is a factory setting not used in the field.
- 5. **Exit Diagnostics:** Changes made in the diagnostic mode **must** be saved in permanent memory using this function. Switching off power without saving will reset all variables to their previous values.

#### **Diagnostic Mode:**

#### **NOTE**

It requires **two people** to enable the diagnostic mode for the scale system.

- 1. To enter diagnostic mode, unplug the bed's power cord from the wall socket.
- 2. Press and hold down the LBS/KGS button.
- 3. While still holding the LBS/KGS button, plug the bed's power cord into the wall socket.
- 4. After two seconds, release the LBS/KGS button. The LCD should display "CALIBRATE SCALE". The diagnostic mode is now active.

#### **Displaying Individual Load Cell Outputs:**

A defective load cell can be detected by entering diagnostics and displaying individual load cell outputs.

- 1. Enter the diagnostic mode. The LCD will display "CALIBRATE SCALE" when the diagnostic mode is activated.
- Repeatedly press and release the up or down arrow button (ZERO or SCALE ON/OFF) until the LCD displays "DISPLAY CORNER".
- 3. Press and release the ENTER button (LBS/KGS). The LCD should display "PICK CORNER NOW".

The four buttons listed in the group below function as POSITION buttons corresponding with the four corners of the bed's litter. Whenever the LCD displays "PICK CORNER NOW", press one of these buttons to select the load cell assembly at the desired corner.

- A. ZERO = head end, patient's left side
- B. CHANGE EQUIP. = head end, patient's right side
- C. TREND/FOWLER ANGLE = foot end, patient 's right side
- D. LBS/KGS = foot end, patient's left side
- 4. Press and release the position button that corresponds with the load cell to be checked. The LCD should display "X/X=NNN.N". "X/X" represents the initials of the selected corner, i.e. H/R will be displayed for the patient's head end, right side. "NNN.N" represents the resistance of the load cell.
- 5. Repeat step four for each corner. Head end weight readings will normally be lower than foot end weights. Weight readings should be constant. A drifting 000.0 or 999.9 weight, or a reading that does not change when weight is applied to that corner of the bed indicates a problem with the selected load cell assembly or load cell cable.
- When all the load cell outputs have been checked, repeatedly press and release the SCALE ON/OFF button until the LCD displays "EXIT DIAGNOSTICS". Press the ENTER button (LBS/KGS) to exit diagnostics.

## **Scale System Diagnostics and Calibration**

#### **Verifying Scale Accuracy:**

- 1. Zero the empty bed. Place a known weight on the center of the bed; the heavier the better and no less than 100 pounds. The displayed weight should be within 1% of the actual weight.
- 2. If the displayed weight is not accurate, remove the weight from the bed and proceed to the Scale Calibration section.

#### Scale Calibration:

#### NOTE

It requires **two people** to enable the calibration mode for the scale system.

Raise the siderails when calibrating the scale to avoid getting inaccurate scale readings due to possible interference between the siderails and the casters.

Calibrate the scale system with a known 200 pound weight. If exactly 200 pounds is not available, the factory default for calibration will have to be changed as described in step 8.

- 1. To enter the calibration mode, unplug the bed's power cord from the wall socket.
- 2. Press and hold down the LBS/KGS button.
- 3. While still holding the LBS/KGS button, plug the bed's power cord into the wall socket.
- After two seconds, release the LBS/KGS button. The LCD should read "CALIBRATE SCALE". The calibration mode is now active.
- 5. Using the up or down arrow button (ZERO or SCALE ON/OFF), toggle through the menu until "INIT. TO DEFAULTS" is displayed. Press and hold the ENTER button (LBS/KGS) until "SAVING DEFAULTS" is displayed. Release the ENTER button.
- 6. Using the up or down arrow buttons (ZERO or SCALE ON/OFF), toggle through the menu until "CALI-BRATE SCALE" is displayed.
- 7. Press and hold the ENTER button (LBS/KGS). Zero the bed, following the displayed instructions. When the bed is zeroed, the LCD should display "REF X100=<2 0000". This is the factory default for 200 pounds. If 200 pounds will be used to calibrate the scale, proceed to step 9.
- 8. If exactly 200 pounds is not available, change the display to match the weight you are using. Pressing the TREND/FOWLER ANGLE button will move the cursor position to the right. Pressing the up arrow (ZERO) button will increase the numbers. Pressing the down arrow (SCALE ON/OFF) button will decrease the numbers. Scroll through the numbers until they match the weight you will use for calibration.
- Press and release the ENTER button and the LCD will display "PRESS REV. TREND". Press the button
  with the Reverse Trendelenburg symbol (feet down/head up) until the bed reaches full reverse Trend.
  Release the button and the LCD will display "DO NOT TOUCH BED".
- 10. The LCD will display "PRESS TREND." Press the button with the Trendelenburg symbol (feet up/head down) until the bed reaches full trend. Release the button and the LCD will display "DO NOT TOUCH BED".
- 11. The LCD will display "CALIBRATE SCALE". This indicates the calibration procedure is complete.
- 12. Exit scale calibration by pressing the up arrow button (ZERO) until the LCD displays "EXIT DIAGNOSTICS". Press the ENTER (LBS/KGS) button to exit.
- 13. Level the bed at a full up or full down position. Remove the weight and zero the bed.
- 14. Verify scale accuracy and functionality before returning the bed to service.

#### Chapter Seven - Litter Maintenance Procedures

### **Load Cell Replacement**

#### **Required Tools:**

9/16" Socket Wrench 9/16" Open End Wrench Saw Horse (or Equivalent)

Wire Cutters

#### **Replacement Procedure:**

- 1. Raise the Fowler or knee section, depending which end of the litter needs service.
- 2. Unplug the load cell connector from the load cell cable.
- 3. Using wire cutters, remove the wire ties holding the cable to the frame.
- 4. Using a 9/16" socket and a 9/16" open end wrench, remove the two bolts holding the load cell to the litter cross tube and remove the load cell.
- 5. Using a saw horse, support the litter at the end where the load cell was removed. Reverse the above procedure to install the new load cell.

#### **NOTE**

Scale calibration procedure must be performed after the load cell is replaced (see page 7-3).

## **Head Motor Removal and Replacement**

#### **Required Tools:**

T27 Torx 7/16" Socket Wrench 3/8" Socket Wrench

Wire Cutters

#### **Procedure:**

- 1. Run the litter to the full up position and remove the mattress from the bed.
- 2. Fold the foot section back toward the head end of the bed. Electrically run the knee section to full up. If the knee section will not move electrically, pull the foot section toward the head end of the bed while pulling the CPR release handle (located at the head end of the bed). The knee section will raise.
- 3. Using a T27 torx, remove the four screws holding the cover to the actuator box and remove the cover.
- 4. Remove the two CPR release cables from the CPR release bracket. Using a 3/8" socket wrench underneath the actuator box, remove the two bolts holding the release bracket to the actuator box and remove the bracket from the actuator box.
- 5. Disconnect all the electrical connections going to the head motor and move aside any wiring that could interfere with the removal of the motor.
- 6. Using a 3/8" socket wrench underneath the actuator box, remove the four bolts holding the motor mounting bracket to the actuator box. Lift up and out on the motor to remove it.
- 7. Remove the motor mounting bracket from the old motor and install it on the replacement motor.
- 8. Reverse steps 3 through 6 to install the replacement motor.
- 9. Verify the bed is working properly before returning it to service.

#### Chapter Seven - Litter Maintenance Procedures

## **Knee Motor Removal and Replacement**

### **Required Tools:**

T27 Torx 7/16" Socket Wrench 3/8" Socket Wrench

Wire Cutters

#### **Procedure:**

1. Run the litter to the full up position and remove the mattress from the bed.

- 2. Fold the foot section back toward the head end of the bed. Electrically run the knee section to full up. If the knee section will not move electrically, pull the foot section toward the head end of the bed while pulling the CPR release handle (located at the head end of the bed). The knee section will raise.
- 3. Using a 7/16' socket wrench, remove the mounting bolt on the litter for the knee dampening cylinder. This leaves the knee dampener mounted only to the seat panel.
- 4. Using a T27 torx, remove the four screws holding the cover to the actuator box and remove the cover.
- Remove the two CPR release cables from the CPR release bracket. Using a 3/8" socket wrench underneath the actuator box, remove the two bolts holding the release bracket to the actuator box and remove the bracket from the actuator box.
- Disconnect all the electrical connections going to the knee motor and move aside any wiring that could interfere with the removal of the motor.
- 7. Pull the foot panel toward the head end of the bed. This causes the knee motor linkage to roll past center and allows the motor to be removed without supporting the knee section.
- 8. Using a 3/8" socket wrench underneath the actuator box, remove the four bolts holding the motor mounting bracket to the actuator box. Lift up and out on the motor to remove it.
- 9. Remove the motor mounting bracket from the old motor and install it on the replacement motor.
- 10. Install the replacement motor.
- 11. Reverse step 3 5 to reinstall the knee dampener, CPR bracket and actuator box cover.
- 12. Pull the foot panel toward the foot end of the bed. This causes the knee motor linkage to roll back past center. If this step is not done, damage to the motor or linkage will occur.
- 13. Verify the bed is working properly before returning it to service.

## **Power Supply Removal and Replacement**

#### **Required Tools:**

T27 Torx Needle-Nose Pliers

#### **Procedure:**

- 1. Run the litter to the full up position and remove the mattress from the bed.
- 2. Fold the foot section back toward the head end of the bed. Electrically run the knee section to full up. If the knee section will not move electrically, pull the foot section toward the head end of the bed while pulling the CPR release handle (located at the head end of the bed). The knee section will raise.
- 3. Using a T27 torx, remove the four screws holding the cover to the actuator box and remove the cover.
- 4. Properly ground yourself (see page 6-2)
- 5. Unplug all electrical connections from the power supply.
- 6. Using needle-nose pliers, squeeze the four stand-offs supporting the power supply and pull up gently on the power supply to remove it.
- 7. Reverse steps 2 through 5 to install the new power supply.
- 8. Verify the bed is working properly before returning it to service.

## **CPU Board Removal and Replacement**

#### **Required Tools:**

T27 Torx Needle-Nose Pliers

#### Replacement Procedure:

- 1. Run the litter to the full up position and remove the mattress from the bed.
- 2. Fold the foot section back toward the head end of the bed. Electrically run the knee section to full up. If the knee section will not move electrically, pull the foot section toward the head end of the bed while pulling the CPR release handle (located at the head end of the bed). The knee section will raise.
- 3. Using a T27 torx, remove the four screws holding the cover to the actuator box and remove the cover.
- 4. Properly ground yourself (see page 6-2)
- 5. Unplug all electrical connections from the CPU board.
- 6. Press the six stand-offs away from the board while gently lifting the board up and out.
- 7. Install the replacement CPU board.

#### **NOTE**

After the replacement CPU board is installed, a "burn-in" procedure must be performed for the Fowler and lift motor potentiometers (see page 7-8)

If the bed is equipped with a scale system, a scale calibration procedure must also be performed after the replacement CPU board is installed (see page 7–3).

#### Chapter Seven - Litter Maintenance Procedures

### **Fowler Potentiometer Replacement**

#### **Required Tools:**

T27 Torx Wire Cutters 1/2" Open End Wrench

7/64" Allen Wrench

#### **Replacement Procedure:**

- 1. Manually crank the knee section up until it stops.
- 2. Using a T27 Torx, remove the four screws holding the litter access cover to the litter and remove the cover.
- 3. Using a 7/64" Allen wrench, loosen the screw holding the linkage to the pot. shaft and remove the linkage from the shaft.
- 4. Using a 1/2" open end wrench, remove the nut holding the potentiometer to the frame.
- 5. Using wire cutters, remove the cable ties from the cable. Unplug the cable from the CPU and remove the pot.
- 6. Reverse the above procedure to install the replacement potentiometer.
- 7. The new potentiometer must be calibrated after it has been installed.
- 8. The Fowler pot. should be set at 150 ohms (± 10 ohms) in the full down position. This reading must be taken from pins 3 and 4 on the connector with the pot. unplugged from the board. After the correct ohm reading is achieved, tighten the screw on the linkage.
- 9. Press and hold the "Knee Lockout" and "Bed Motion Lock" buttons on the foot board.
- 10. Plug the power cord into the wall socket. Release the two buttons and the "Knee Lockout" LED should be flashing. This indicates the bed is in the correct calibration mode.
- 11. Using the foot board controls, run the Fowler up to 90°. Press and hold the button on the foot board to lock out the siderail controls for the back until the padlock LED flashes. Release the button.
- 12. Using the foot board controls, run the Fowler down to 0°. Press and hold the button on the foot board to lock out the siderail controls for the knee until the padlock LED flashes. Release the button and unplug the bed power cord to complete the "burn in" mode.
- 13. Plug the bed power cord into the wall socket and verify the back limits are set properly before returning the bed to service.

### Fowler and Lift Potentiometer "Burn-In" Procedure

#### **NOTE**

It requires **two people** to enable the diagnostics mode for the bed.

- 1. Unplug the bed power cord from the wall socket.
- On the foot board control panel, hold down the bed motion lock button and the button to lock out the siderail controls for the knee. While still holding the buttons, plug the bed power cord into the wall socket. Release the foot board buttons. The siderail control lights LED should be flashing to indicate the bed is in diagnostics mode.
- 3. Using the foot board controls, run the Fowler up to 90°. Press and hold the button on the foot board to lock out the siderail controls for the back until the padlock LED flashes. Release the button.
- 4. Using the foot board controls, run the Fowler down to 0°. Press and hold the button on the foot board to lock out the siderail controls for the knee until the padlock LED flashes. Release the button..
- 5. To "burn in" the Bed Up/Down limits, unplug the bed power cord from the wall socket.
- 6. On the foot board control panel, press and hold down the Bed Motion On/Off button and the Knee button simultaneously.
- 7. While holding down the above two buttons, plug the power cord into the wall socket. The lights on the foot board control panel should flash, indicating the bed is in the diagnostics mode.
- 8. Press and hold the Bed Motion Up button until the litter raises completely.
- 9. Press and hold the Bed Motion Lock button until the lights flash. The bed upper limit is set.
- Release the button, unplug the bed power cord from the wall socket and turn battery backup off.
- 11. Plug the power cord back in to the wall socket.
- 12. Unplug the bed power cord from the wall socket.
- 13. On the foot board control panel, press and hold down the Bed Motion On/Off button and the Knee button simultaneously.
- 14. While holding down the above two buttons, plug the power cord into the wall socket. The lights on the foot board control panel should flash, indicating the bed is in the diagnostics mode.
- 15. Raise or lower the bed height until the litter surface is 21.5" above the floor. Hold down the Up/Down Lock button until the light flashes.
- 16. Plug the power cord back in to the wall socket. Run the bed to full up, then full down and verify the bed limits with a tape measure.

### Chapter Eight - Siderail Maintenance Procedures

### **GENERAL INFORMATION**

This section contains tool lists and step-by-step procedures to assist with the maintenance and servicing of the siderail portion 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.

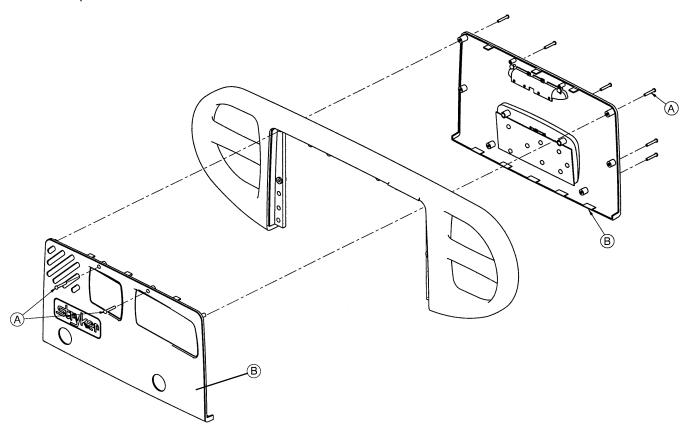
#### **SIDERAIL MAINTENANCE CONTENTS**

Head and Foot End Siderail Cover Removal	8-2
Head and Foot Molded Siderail Replacement	8-3
Head End Siderail Cable Replacement8-4,	8-5

## **Head and Foot Siderail Cover Removal**

#### **Required Tools:**

#2 Phillips Screwdriver



#### **Removal Procedure:**

- 1. Unplug the power cord from the wall receptacle.
- 2. Using a #2 Phillips screwdriver, remove the 8 phillips screws (A) holding the covers (B) to the siderail.



There are two cables connecting the outside cover to the head end siderail. Be careful not to pull on them when removing the cover.

- 3. Remove the cables from the siderail. Make note of the proper location for the cables.
- 4. Reverse the above steps to reattach the cover.

## 1 CAUTION

Do not snag the cables when installing the siderail cover.

#### **NOTE**

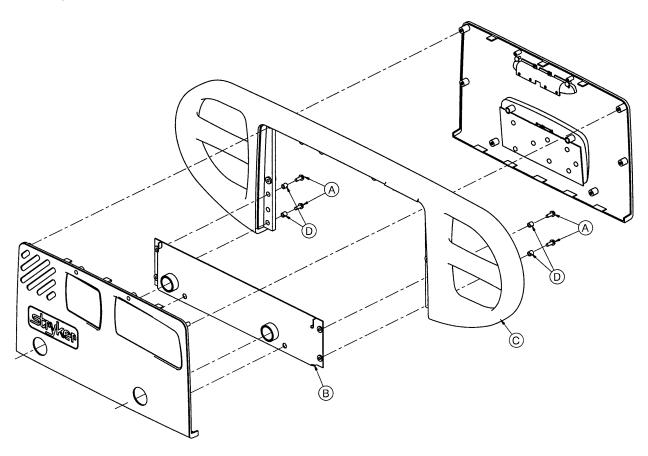
Follow the same procedure for siderail cover removal for the foot end rails.

## **Head and Foot Molded Siderail Replacement**

#### **Required Tools:**

#2 Phillips Screwdriver

3/8" Nut Driver



#### Procedure:

- 1. Unplug the bed power cord from the wall socket.
- 2. Remove the siderail cover (see page 8-2).
- 3. Using a 3/8" nut driver, remove the four screws (A) holding the molded rail (C) to the siderail support assembly (B).

#### **NOTE**

Note the location of the spacers (D) for re-assembly purposes.

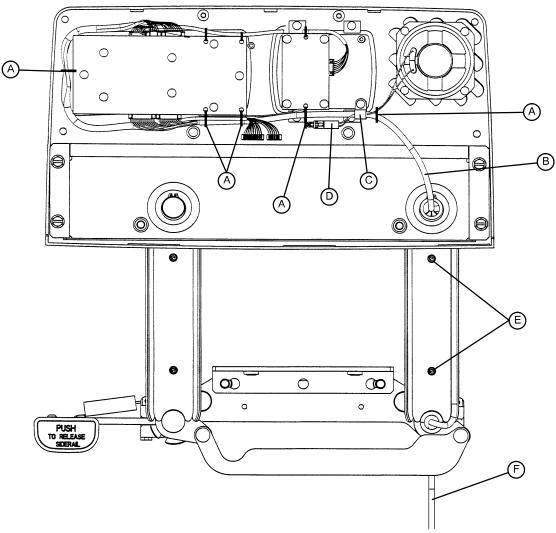
- 4. Pull up on the molded rail (C) to remove it from the siderail assembly.
- 5. Reverse the above steps to install the new molded rail.

## **Head End Siderail Cable Replacement**

#### **Required Tools:**

#2 Phillips Screwdriver

Side Cutters



#### **Procedure:**

- 1. Run the head section fully up.
- 2. Unplug the bed power cord from the wall socket.
- 3. Using a #2 Phillips screwdriver, remove the eight screws holding the siderail cover and remove the cover.
- 4. Put the siderail in the down position.
- 5. Using a #2 Phillips screwdriver, remove the two screws (E) holding the rear siderail pivot arm cover to the pivot arm. Remove the cover to expose the siderail cables.

## **Head End Siderail Cable Replacement (Continued)**

- 6. Using side cutters, clip the cable ties (A) holding the cables together.
- 7. Using a #2 Phillips screwdriver, remove the cable clamp (C) from the siderail.
- 8. Disconnect cable (B) from the circuit board and cable (D) from the speaker.

#### NOTE

The speaker and nurse call are optional equipment and may not be in the siderail as shown.

- 9. Pull the cables through the siderail (toward the center of the bed).
- 10. Unplug the cable assembly (F) underneath the head section.
- 11. Reverse the above steps to install the new cable.



#### **CAUTION**

Be sure to position the cables on both sides of the pivot arm, as shown in the illustration on page 8–4, before reattaching the pivot arm cover. If not done properly, the cover will not fit tightly and damage could occur to the cables.

# Chapter Eight - Siderail Maintenance Procedures

# **Notes**

### Chapter Nine - Foot Board Maintenance Procedures

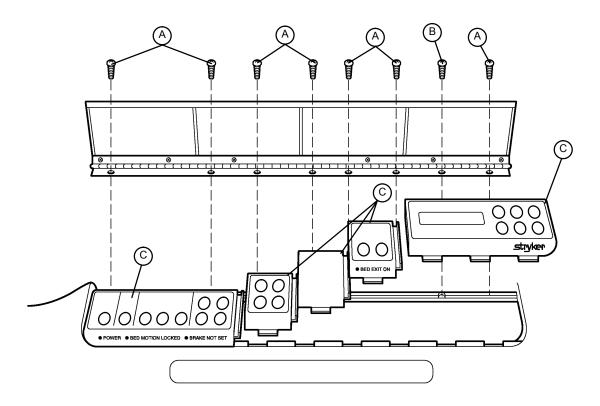
#### **GENERAL INFORMATION**

This section contains tool lists and step-by-step procedures to assist with the maintenance and servicing of the foot board portion of your equipment.

#### **FOOT BOARD MAINTENANCE CONTENTS**

Foot Board Hinge Removal	9-2	
Foot Board Module Replacement	9-3	
Foot Board Interface Plug Replacement	9-4	

# **Foot Board Hinge Removal**



### **Required Tools:**

#2 Phillips Screwdriver

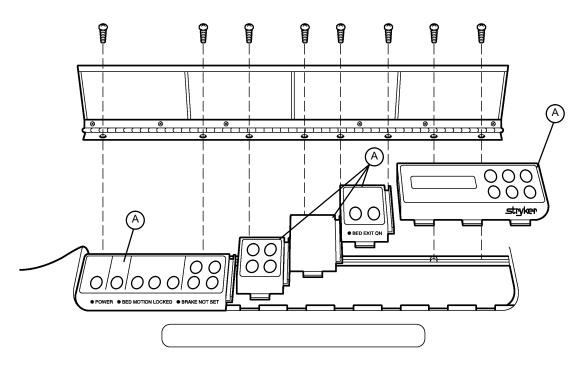
#### Procedure:

- 1. Using a #2 Phillips screwdriver, remove the screws (A & B) holding the door and hinge assembly to the foot board.
- 2. If replacing the hinge only, use a Phillips screwdriver to remove the screws holding the hinge to the door.
- 3. Reverse the above steps to attach the replacement door and/or hinge.

#### **NOTE**

Screw (B) is a machine screw and must be reinstalled in the proper hole.

## **Foot Board Module Replacement**



#### **Required Tools:**

#2 Phillips Screwdriver

#### Procedure:

1. Unplug the bed power cord from the wall socket. Remove the foot board hinge (see above).

#### **NOTE**

Regardless of which module is being replaced, the farthest module to the right must be removed first.

- 2. Pull the module out of the foot board and disconnect the cable from the module (A).
- 3. Reverse the above steps to install the new module.



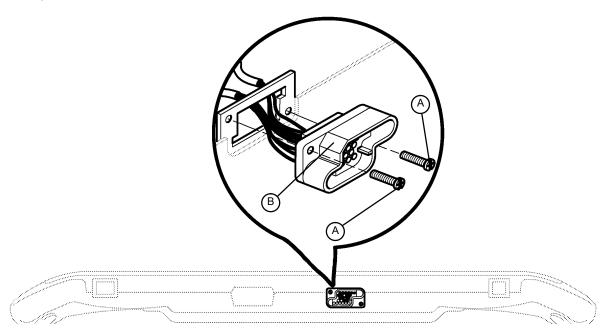
#### CAUTION

The modules must be overlapped as shown in the illustration to prevent fluids from entering the board cavity and causing damage.

## **Foot Board Interface Plug Replacement**

#### **Required Tools:**

#2 Phillips Screwdriver



**BOTTOM VIEW OF FOOT BOARD** 

#### Procedure:

- 1. Unplug the bed power cord from the wall socket.
- 2. Remove the foot board from the bed to access the bottom of the board.
- 3. Properly ground yourself (see page 6–2 for static discharge precautions).
- 4. Using a #2 Phillips screwdriver, remove the eight screws holding the foot board door to the foot board and remove the door.
- 5. Using a #2 Phillips screwdriver, remove the two screws (A) holding the plug to the foot board.
- 6. Disconnect the cable from the foot board module cable. Note proper placement of the cable so it will be reconnected properly.
- 7. Reverse the above steps to install the new interface plug.



Be sure to install the plug with the flat edge (B) at the top left, as shown in the illustration, or the foot board interface plug will not mate properly with the bed and damage to the plug or foot board could result.

#### **GENERAL INFORMATION**

This section contains assembly drawings and parts lists to assist with the identification of individual components of the equipment and accessories.

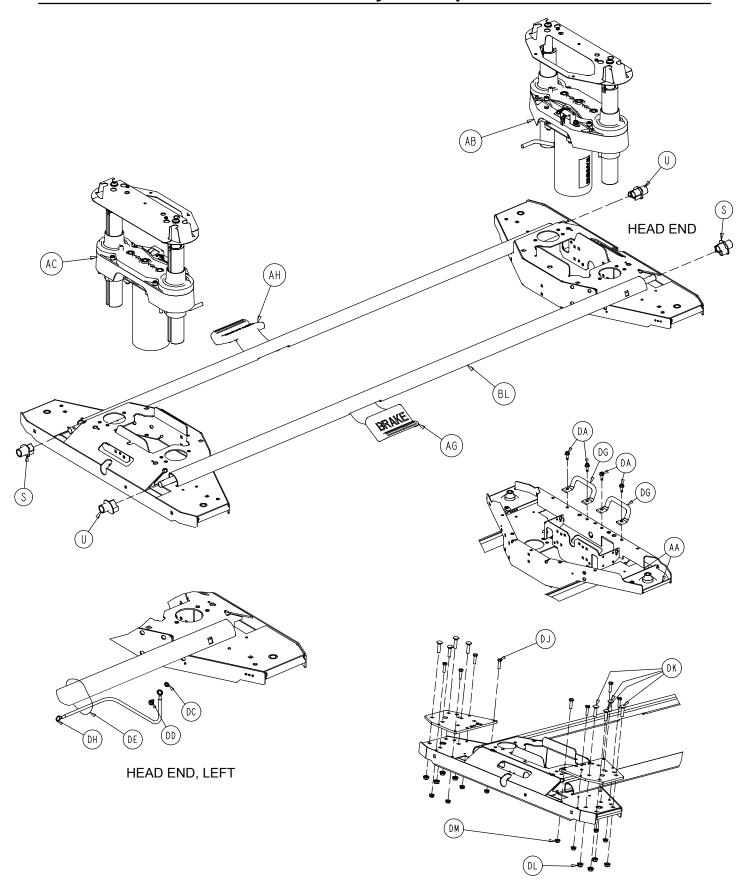
In the parts lists, the words "right" and "left" refer to the right and left sides of a patient lying face up on the bed.

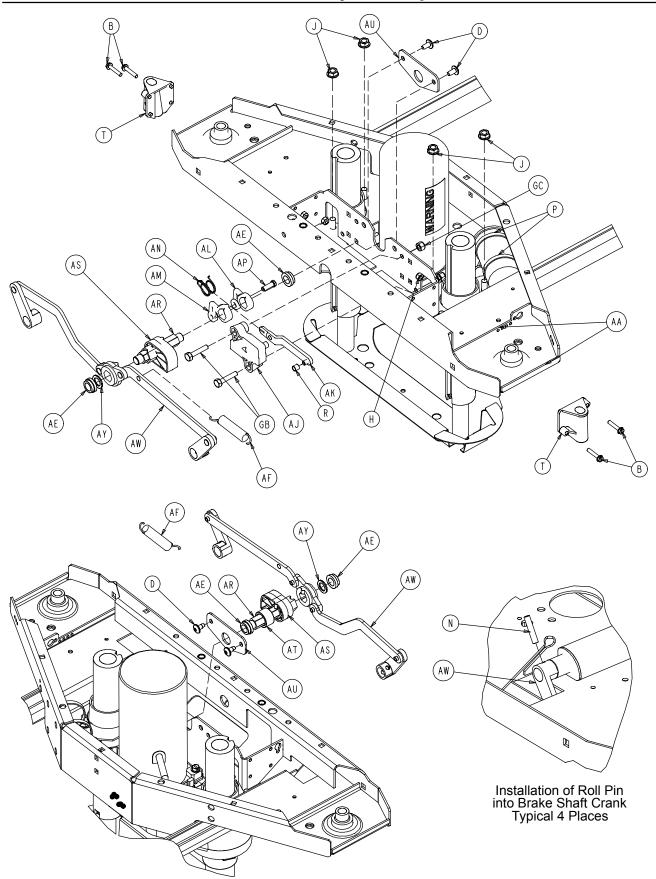
#### **ASSEMBLY DRAWINGS AND PARTS LISTS CONTENTS**

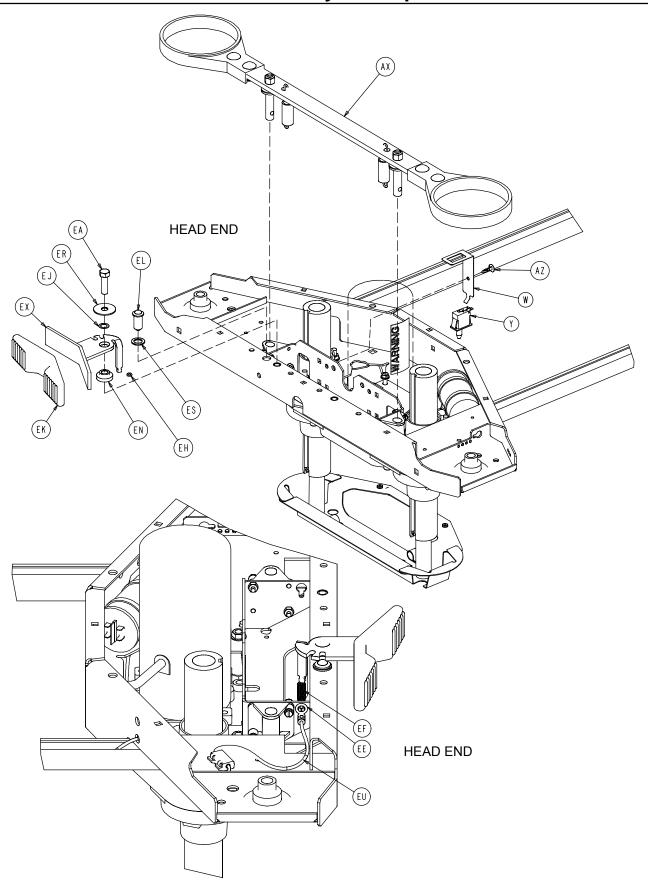
Base Assembly	
Lift Assembly	10-10 - 10-13
Isolation Plate Assembly	
Brake Shaft Assembly	
Brake Crank Assembly	
Brake Bar Assembly	
8" Caster Assembly	
8" Steer Caster Assembly	
8" Wheel Assembly	
Bottom Cover Assembly	10-21
Litter Assembly	10-22 - 10-34
Actuator Box Cover Assembly	
Fowler Brake Kit Assembly	
Head End Siderail Assembly	10-37 - 10-43
Siderail Release Lever Assembly	
Siderail Latch Assembly	
Siderail Bypass Detent Clip Assembly	
Head End Siderail Outer Panel Assembly	
Head End Siderail Inner Panel Assembly	
Foot End Siderail Assembly	10-51 - 10-55

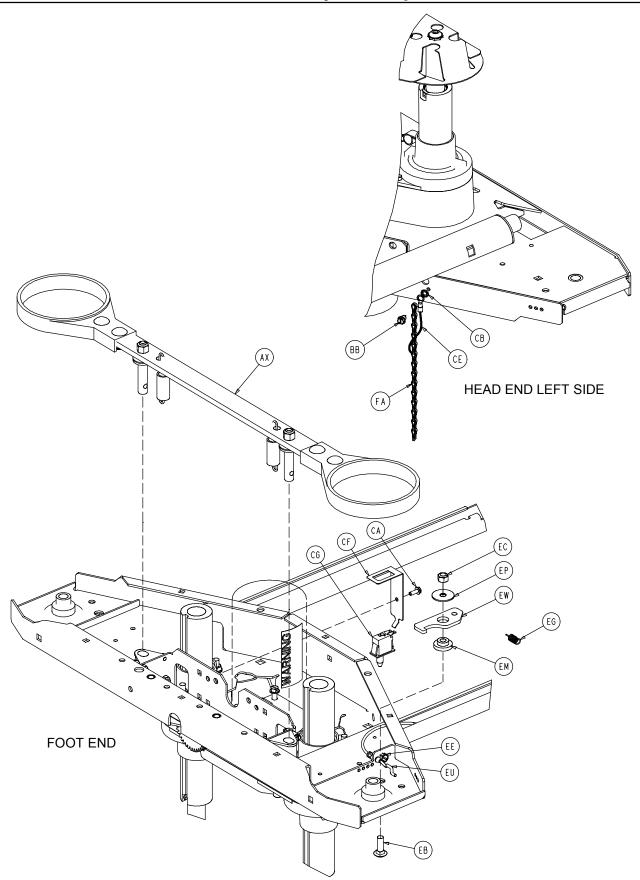
## ASSEMBLY DRAWINGS AND PARTS LISTS CONTENTS (CONTINUED)

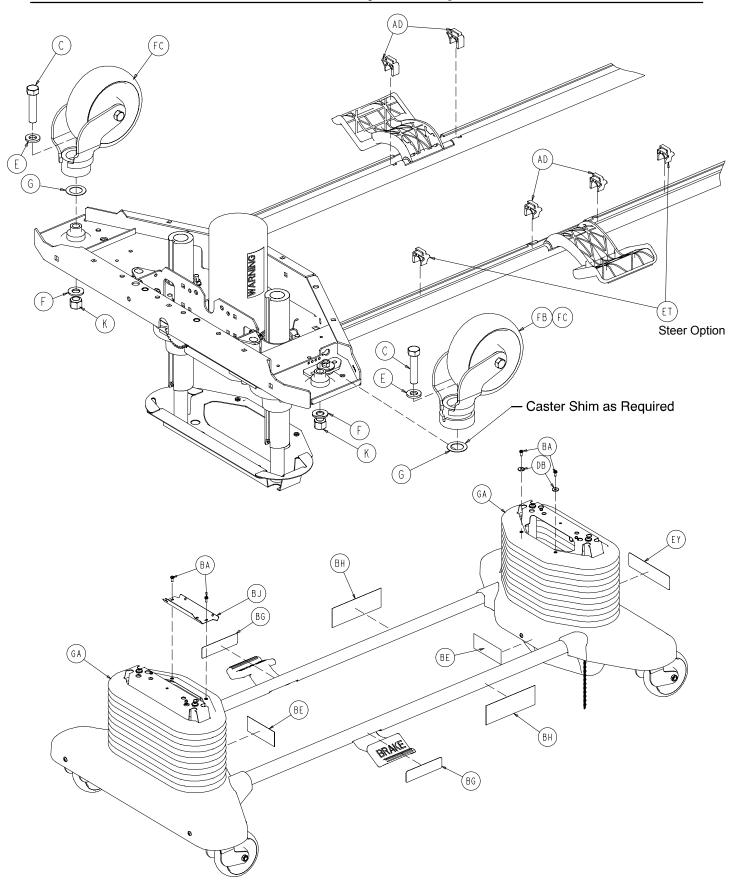
Head Board Assembly	10-56
Foot Board Assembly	10-57
Foot Board Bed Exit Module Assembly	10-58
KCI Foot Board Module Assembly	10-59
Foot Board Main Module Assembly	10-60
Foot Board Scale Module Assembly	10-61
2-Stage I.V. Mounting Assembly, Head End	10-62
2-Stage I.V. Pole Assembly	10-63
I.V. Pole Latch Assembly	10-64
Defibrillator Tray Assembly	10-65

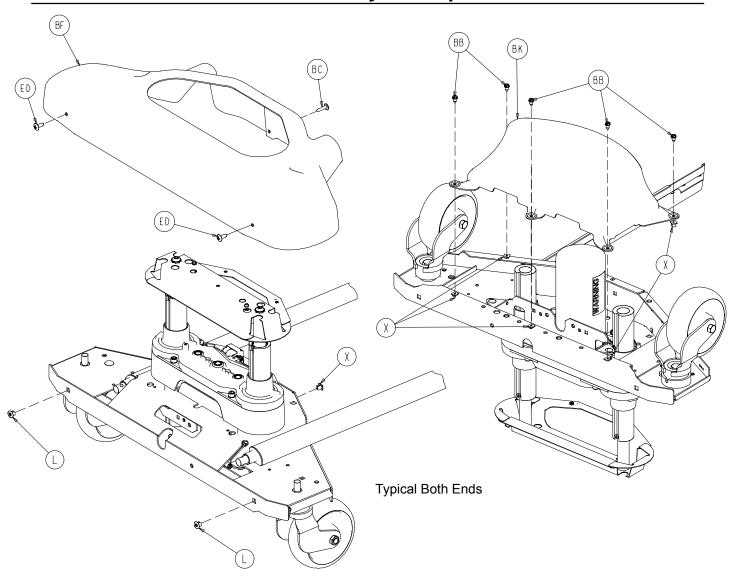


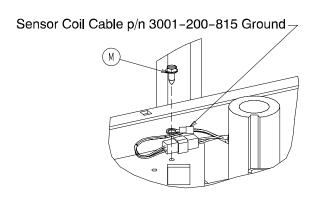












Typical Both Ends

### Base Assembly Common Components – Part Number 3002–200–3 (Reference Only)

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
В	3-122	Hex Washer Hd. Screw	8	AD	3001-200-306	Brake Pedal Shaft Bearing	ng 4
D	7-52	Truss Hd. Torx	4	ΑE	3001-200-317	Brake Cam Shaft Bushin	g 4
Ε	11-310	Washer	4	AF	3001-200-334	Brake Return Ext. Spring	2
G	11-343	Washer	4	AG	(page 10-15)	Brake Shaft Ass'y, Left	1
Н	16-2	Nylock Nut	8	AH	(page 10-15)	Brake Shaft Ass'y, Right	1
J	16-98	Hex Flange Nut	8	AJ	3002-201-301	Brake Ratchet Track	1
K	16-49	Nylock Nut	4	AK	3002-200-302	Brake Ratchet Link Ass'y	/ 1
L	18-36	Plastic Clip Nut	4	AL	3002-200-305	Brake Ratchet Crank, Lt.	1
M	3-224	Hex Washer Hd. Screw	2	AM	3002-200-306	Brake Ratchet Crank, Rt.	. 1
Ν	26-14	Roll Pin	4	AN	3002-200-307	Brake Latch Spring	1
Р	38-151	Cable Tie	4	AP	3002-200-318	Brake Ratchet Crank Pin	1
R	3002-200-316	Brake Track Roller	1	AR	3002-200-311	Brake Shaft	2
S	3000-200-305	Brake Shaft Bushing, Rt.	2	AS	3002-201-312	Brake Cam	2
Т	3000-200-328	Brake Guide Bushing	4	AT	3002-200-313	Brake Cam Spacer	1
U	3000-200-331	Brake Shaft Bushing, Lt.	2	AU	3002-200-314	Brake Mounting Bracket	2
W	3000-200-343	Brake Switch Bracket	1	AW	(page 10-16)	Brake Crank Assembly	2
Χ	3000-300-2	Plastic Clip Nut	10	AX	(page 10-17)	Brake Bar Assembly	2
Υ	3000-300-58	Plunger Switch	1	AY	3000-200-349	Special Narrow Washer	2
Z	3000-300-113	8" Cable Tie	6	ΑZ	3000-300-115	Stand-Off	1
AB	(page 10-10)	Head End Lift Assembly	1	GB	3-74	Hex Hd. Bolt	2
AC	(page 10-10)	Foot End Lift Assembly	1	GC	16-28	Nylock Nut	2

### Base Assembly, TriaDyne III Bed - Part Number 2033-245-3 (Reference Only)

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
С	3-333	Hex Hd. Cap Screw	4	DB	11-156	Flat Washer	2
Χ	3000-300-2	Plastic Clip Nut	1	DC	13-18	Ext. Tooth Lock Washer	1
AB	(page 10-10)	Head End Lift Assembly	1	DD	23-25	Hex Washer Hd. Screw	1
AC	(page 10-10)	Foot End Lift Assembly	1	DE	38-151	Cable Tie	1
BA	3-224	Hex Washer Hd. Screw	4	DG	3001-245-115	Tie Down Bar	4
BB	23-25	Hex Washer Hd. Screw	11	DH	3001-245-801	Ground Jumper	1
BC	23-264	Truss Hd. Screw	1	DJ	3-54	Hex Hd. Cap Screw	16
BD	52-800	Mounting Standoff	1	DK	5-16	Carriage Bolt	15
BE	988-2-708	Caution Label	2	DL	16-98	Hex Flange Nut	15
BF	3002-300-9	Uni-Pan Cover	1	DM	16-315	Hex Flange Nut	16
BJ	3001-200-8	Bellows Bracket	1	DN	3001-245-150	Reinforcement Plate	4
BK	3001-200-22	Bottom Cover	2	DP	2033-200-9	Uni-Pan Cover	1
BL	3002-245-102	Base Weldment	1	GA	2030-000-101	Bellows	2
DA	3-226	Hex Washer Hd. Screw	8				

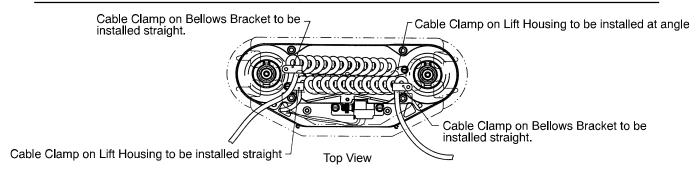
### Base Assembly, Steer Option - Part Number 3001-999-137 (Reference Only)

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
EA	3-349	Hex Hd. Cap Screw	1	EM	3000-200-339	Steer Lock Lever Bushin	ng 1
EB	5-16	Carriage Bolt	1	EN	3000-200-341	Steer Pedal Bushing	1
EC	16-11	Nylock Nut	1	EP	3000-200-347	Special Washer	1
ED	23-92	Truss Phillips Hd. Screw	4	ER	3000-200-348	Special Wide Washer	1
EE	30-52	Snap Bushing	2	ES	3000-200-349	Special Narrow Washer	1
EF	38-414	Pedal Extension Spring	1	ET	3001-200-306	Brake Pedal Shaft Brg.	2
EG	38-416	Lever Extension Spring	1	EU	3001-200-342	Steer Cable Assembly	1
EH	45-8	O-Ring	1	EW	3001-200-370	Steer Lock Lever	1
EJ	52-305	Brass Flat Washer	1	EX	3001-200-371	Steer Pedal Arm	1
EK	3000-200-336	Steer Pedal	1	EY	5000-90-13	Steer Label	1
EL	3000-200-337	Push Fit Ball Plunger	1				

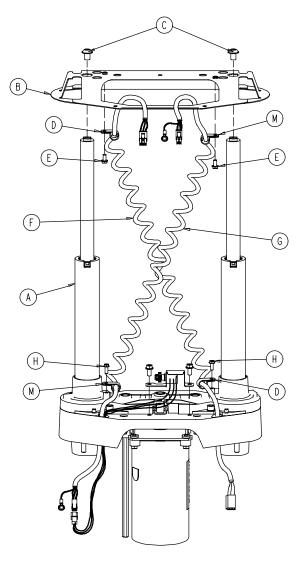
#### 8" Casters - 3001-999-139 (Ref.)

ltem	Part No.	Part Name	Qty.	ltem	Part No.	Part Name	Qty.
FA	3001-200-53	8" Ground Chain	1	FD	2025-1-47	Caster Cover, Right	4
FB	(page 10-19)	8" Steer Caster Assembly	/ 1	FE	2025-1-48	Caster Cover, Left	1
FC	(page 10-18)	8" Caster Assembly	3				

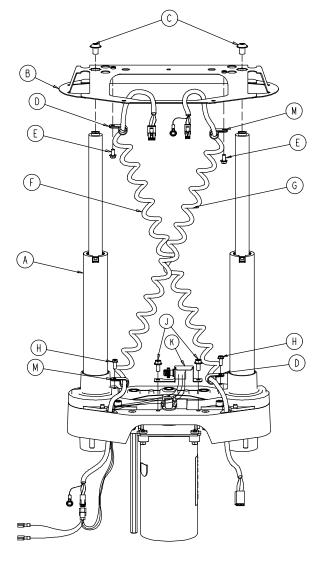
# Lift Assembly (Head and Foot End)



2033-245-250 Foot End

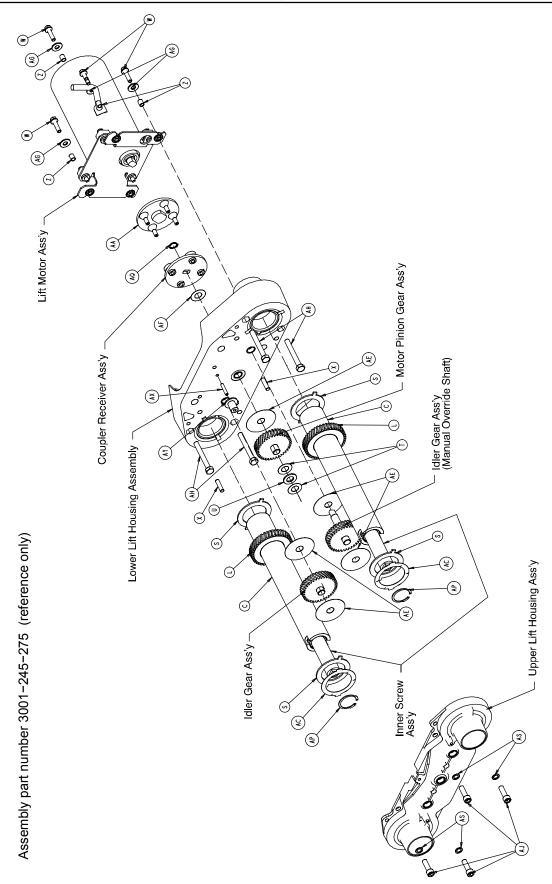


3001-245-200 Head End

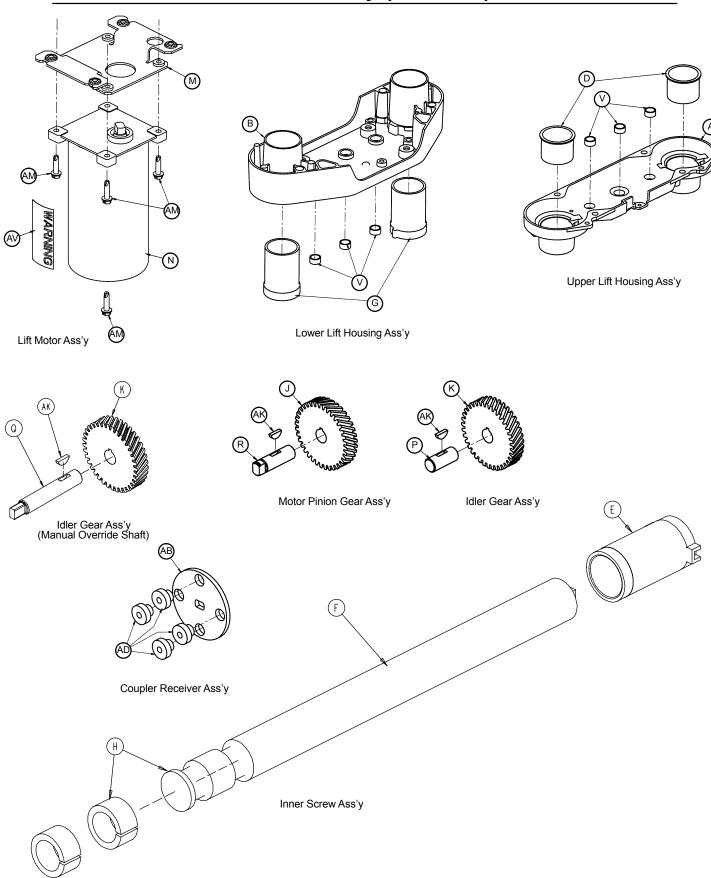


Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	(page 10-11)	Common Lift Assembly	1	Н	3-128	Hex Washer Hd. Screw	2
В	2033-200-52	Bellows Bracket	1	J	3-121	Hex Washer Hd. Screw	2
D	34-22	Cord Clamp	2	K	3001-200-240	Head End Pot. Ass'y	1
Ε	3-106	Hex Washer Hd. Screw	2		3001-200-230	Foot End Pot. Ass'y	1
F	3001-200-864	Power Coil Cord	1	M	34-381	Cord Clamp	2
G	3001-200-815	Sensor Coil Cord	1			•	

# **Lift Assembly (Common)**



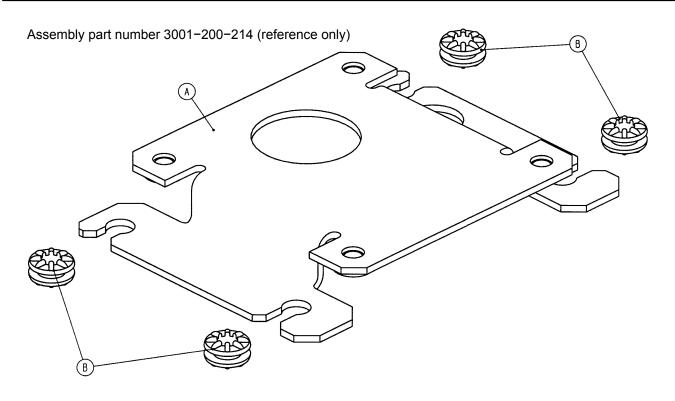
# **Lift Assembly (Common)**



# Lift Assembly (Common)

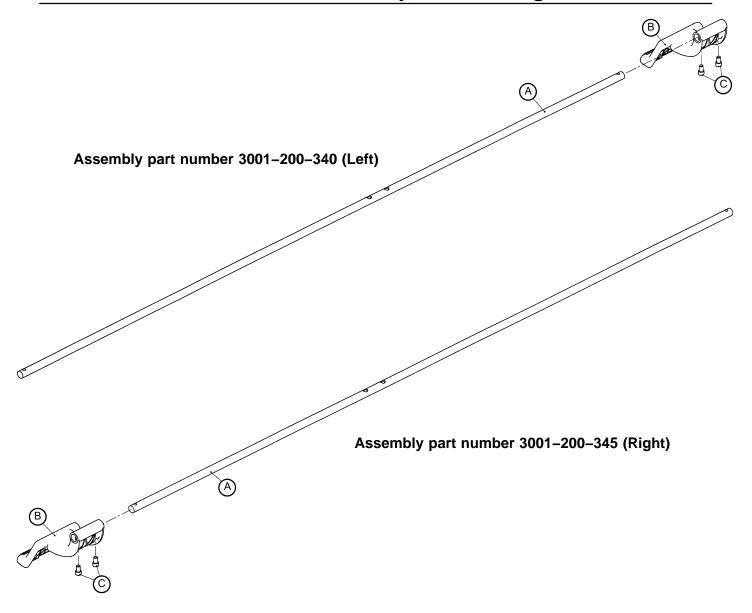
Item	Part No.	Part Name	Qty.
Α	3000-200-201	Upper Lift Housing	1
В	3000-200-202	Lower Lift Housing	1
С	3000-200-251	Outer Screw	2
D	3000-200-204	Upper Housing Sleeve	2
E	3000-200-205	Upper Stage Nut	2
F	3000-200-249	Inner Screw	2 2 2 2
G	3000-200-207	Lower Stage Nut	
Н	3000-200-208	Glide Bushing	4
J	3000-200-209	Motor Pinion Gear	1
K	3000-200-210	Idler Gear	2
L	3000-200-252	Output Gear	2
M	(page 10-14)	Motor Isolation Plate Ass'y	1
N	3000-200-213	Lift Motor	1
Р	3000-200-218	Idler Shaft, Lift	1
Q	3002-200-235	Idler Man. Over. Shaft	1
R	3000-200-220	Input Pinion Shaft	1
S	3000-200-223	Output Gear Thr. Washer	4
T	3000-200-224	Input Gear Thr. Washer	2
U	81-212	Thrust Needle Roller Brg.	1
V	3000-200-226	Pinion Shaft Bushing	6
W	3001-200-228	Mounting Standoff	4
Χ	26-231	Dowel Pin	2
Z	3001-300-19	Isolation Sleeve	4
AA	3000-200-233	Lift Motor Coupler	1
AB	3000-200-234	Coupler Receiver	1
AC	3000-200-241	Crush Washer	2
AD	3000-300-455	Isolation Bushing	4
AE	3000-200-245	Gear Washer	5
AF	3000-200-246	Nylon Washer	1
AG	11-408	Flat Washer	4
AH	3-82	Hex Hd. Cap Screw	4
AJ	4-213	Soc. Hd. Cap Screw	4
AK	58-44	Woodruff Key	3
AM	3-331	Hex Washer Hd. Screw	4
AP	28-121	Retaining Ring	2
AQ	28-97	Retaining Ring	1
AS	11-308	Serrated Belleville Washer	4
AV	3000-300-604	Warning Label	1
AX	3000-200-239	Pot. Drive Gear Shaft	1
AY	3000-200-216	Potentiometer Drive Gear	1

# 3000-200-723 Isolation Plate Assembly



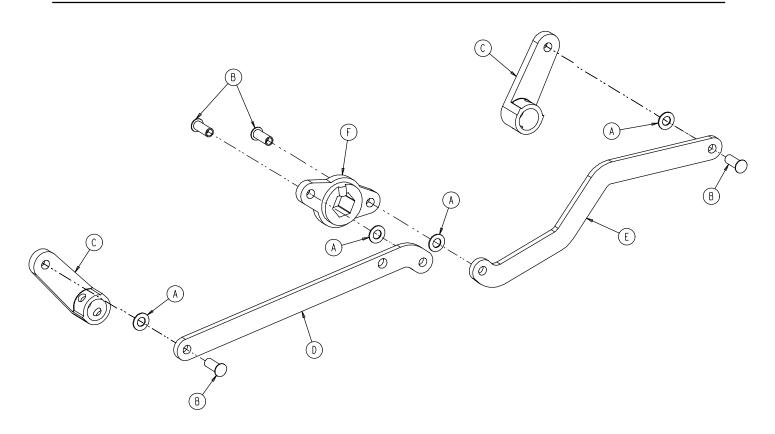
Item	Part No.	Part Name	Qty.
Α	3001-200-213	Isolation Plate	1
B	3000-300-442	Grommet	4

# **Brake Shaft Assembly, Left and Right**



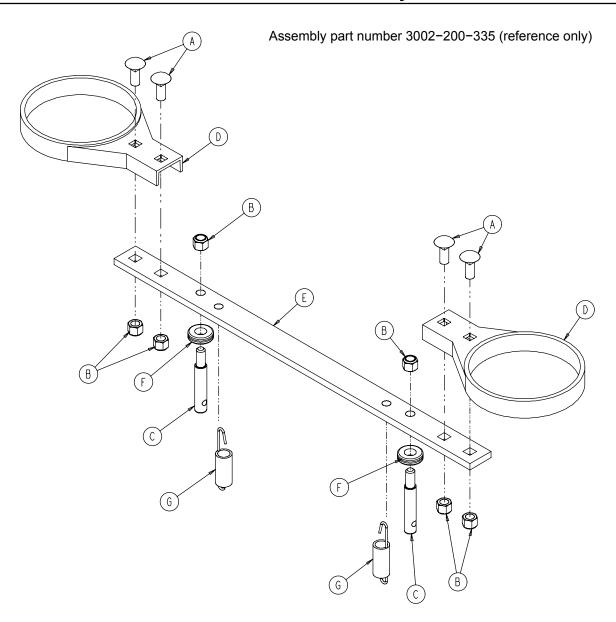
Item	Part No.	Part Name	Qty.
Α	3000-200-314	Brake Shaft	1
В	3001-200-325	Brake Pedal	1
С	4-270	Soc. Hd. Cap Screw	2

# 3001-200-330 Brake Crank Assembly



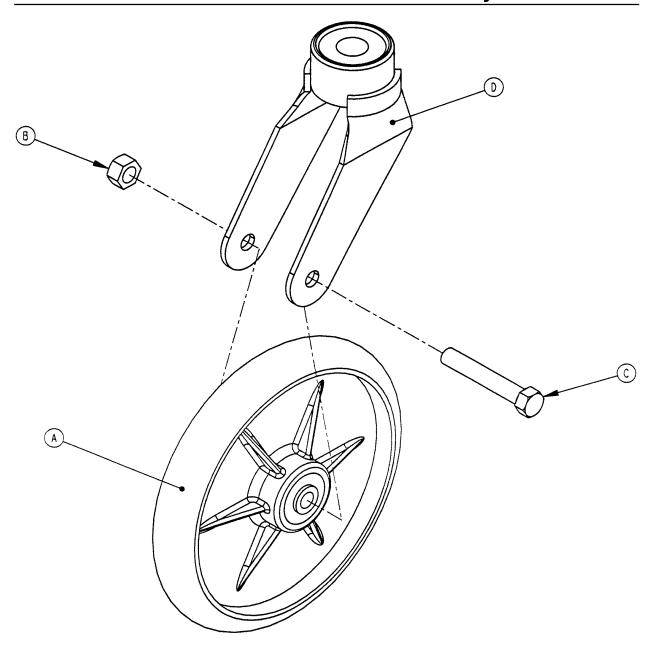
Item	Part No.	Part Name	Qty.
Α	14-4	Washer	4
В	25-146	Semi-Tubular Rivet	4
С	3000-200-302	Brake Shaft Crank	2
D	3001-200-311	Brake Link	1
E	3001-200-312	Dog Leg Brake Link	1
F	3002-200-309	Brake Crank	1

# **Brake Bar Assembly**



Item	Part No.	Part Name	Qty.
Α	5-18	Carriage Bolt	4
В	16-35	Nylock Hex Nut	6
С	3000-200-318	Guide Pin	2
D	3000-200-321	Brake Ring	2
E	3000-200-323	Brake Bar	1
F	3000-200-324	Brake Bar Bumper	2
G	3002-200-310	Brake Bar Return Spring	2

# 3001-200-90 8" Caster Assembly

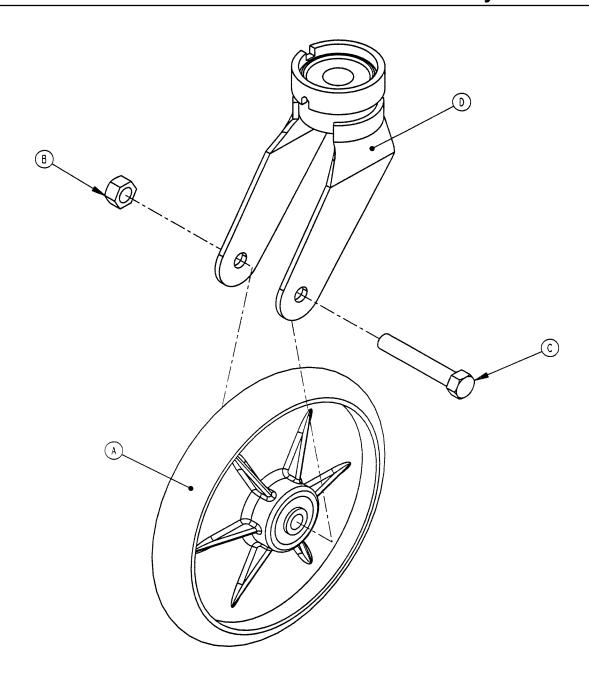


ltem	Part No.	Part Name	Qty.
Α	(page 10-20)	Wheel Assembly	1
В	16-60	Hex Nut	1
С	3-99	Hex Hd. Cap Screw	1
D	3001-200-76	Caster Horn	1

#### NOTE

The hex head cap screw (item C) must be threaded through the caster horn in the direction shown to avoid damaging the plastic caster covers.

### 3001-200-80 8" Steer Caster Assembly

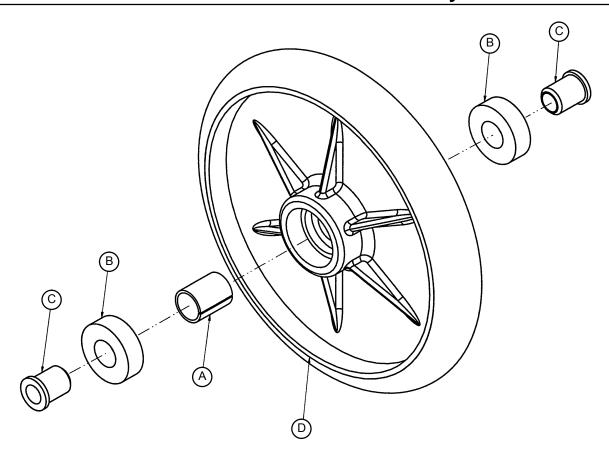


Item	Part No.	Part Name	Qty.
Α	(page 10-20)	Wheel Assembly	1
В	16-60	Hex Nut	1
С	3-99	Hex Hd. Cap Screw	1
D	3001-200-81	Caster Horn	1

#### **NOTE**

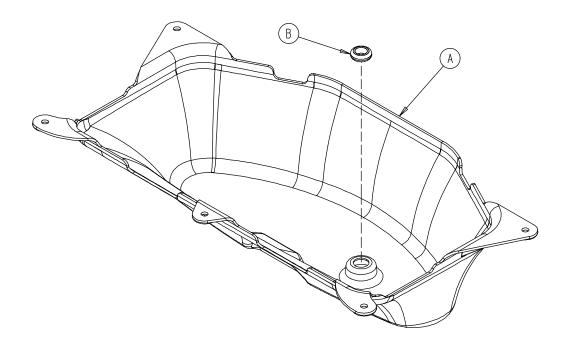
The hex head cap screw (item C) must be threaded through the caster horn in the direction shown to avoid damaging the plastic caster covers.

# 2025-1-49 8" Wheel Assembly

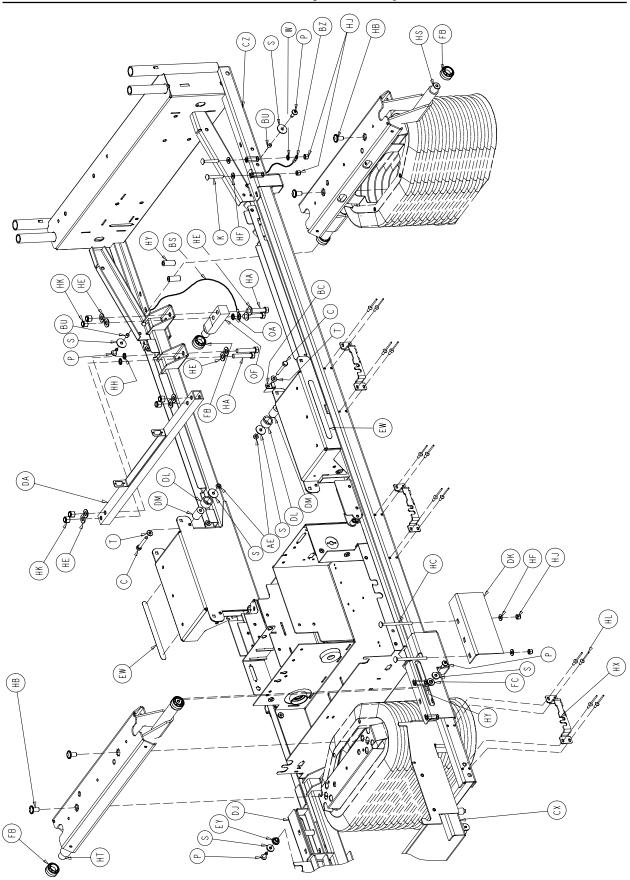


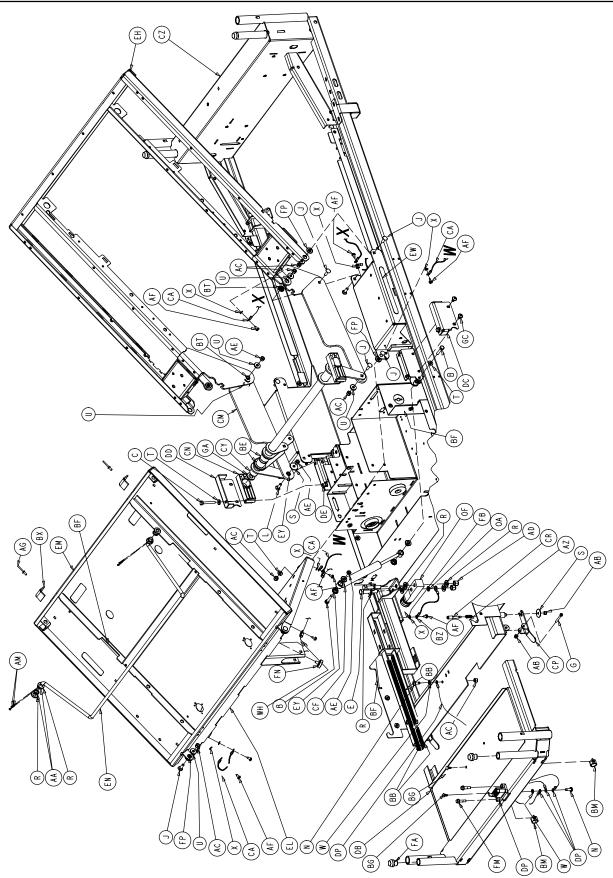
Item	Part No.	Part Name	Qty.
Α	52-503	Bearing Spacer	1
В	81-226	Bearing	2
С	715-1-255	Wheel Bearing	2
D	2025-1-46	Wheel	1

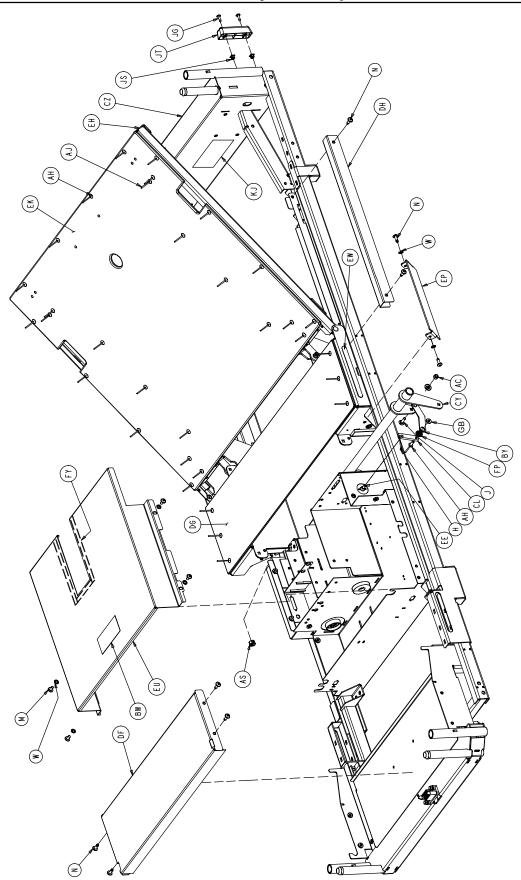
### 3001-200-22 Bottom Cover Assembly

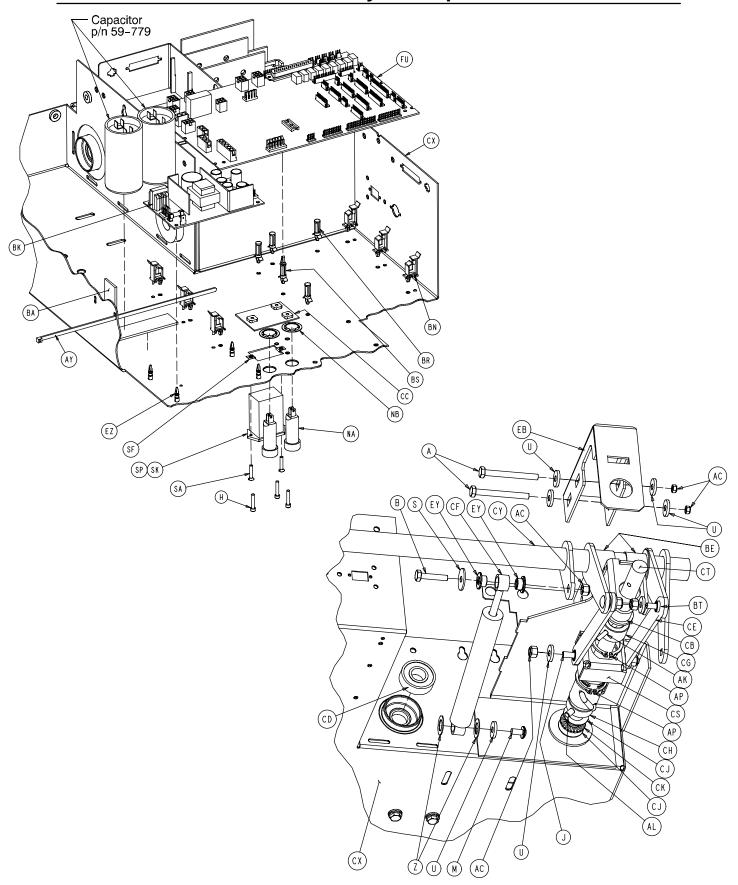


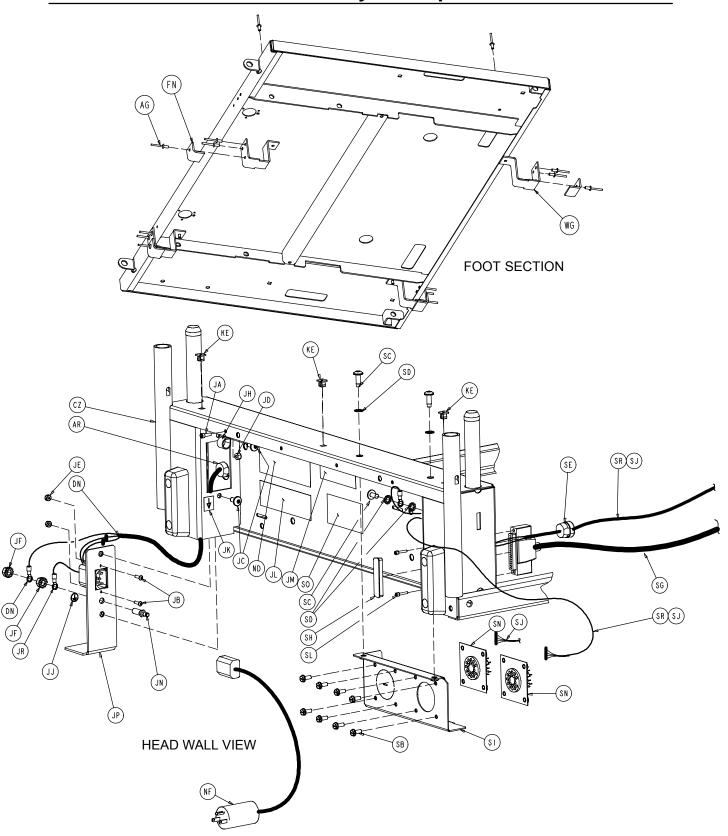
Item	Part No.	Part Name	Qty.
Α	3002-1-100	Bottom Cover	1
В	3000-000-039	Grommet	1

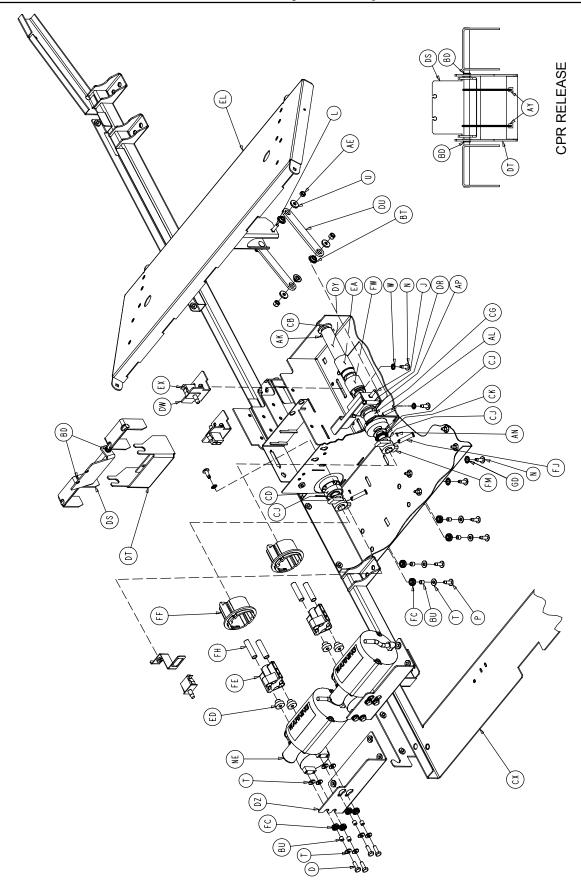


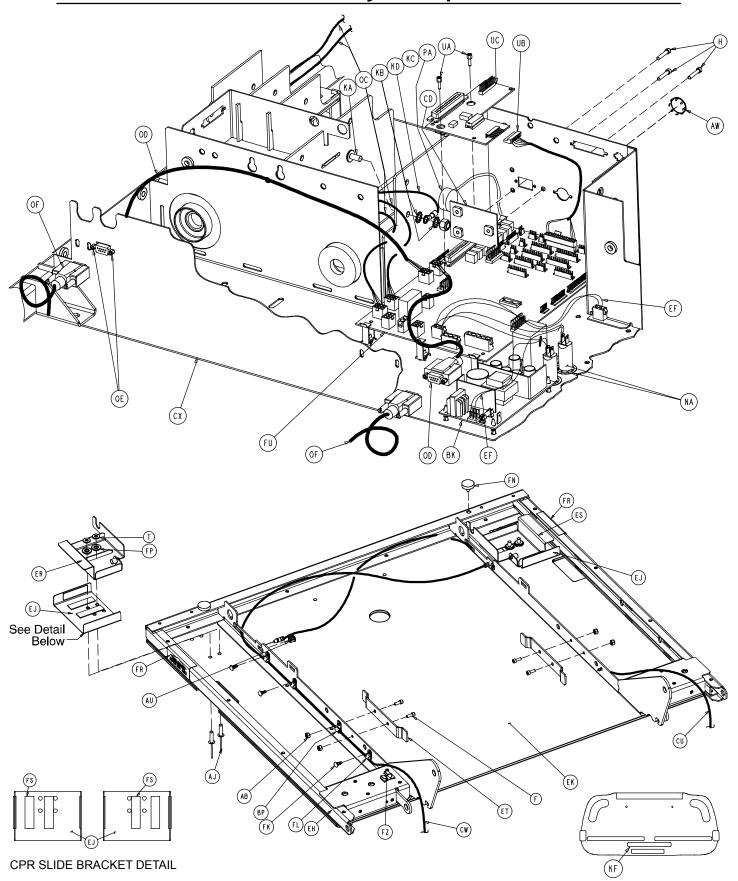


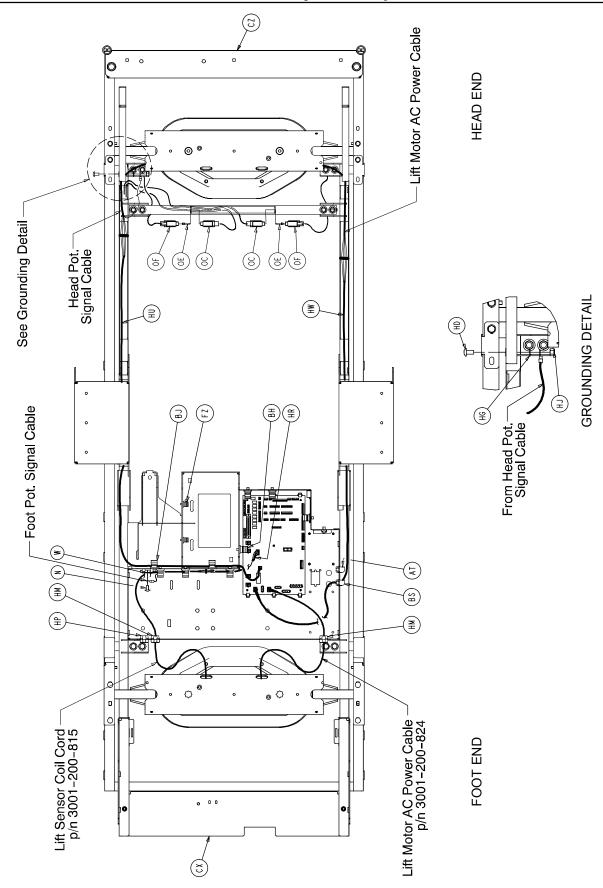


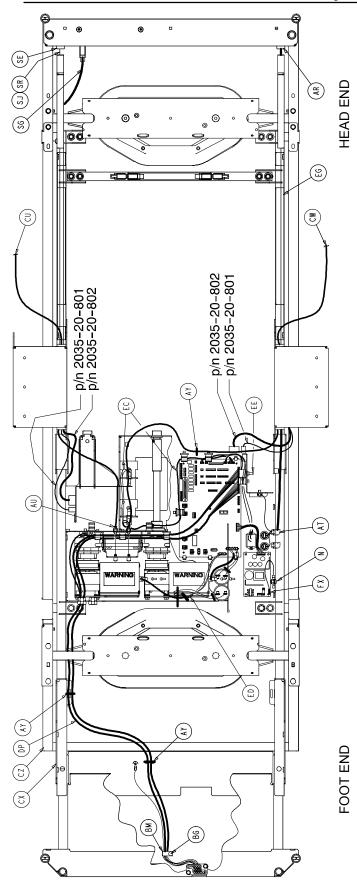


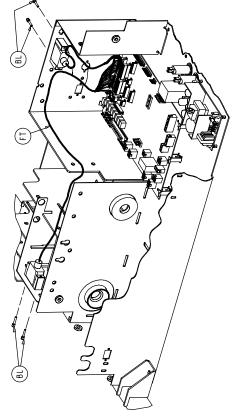




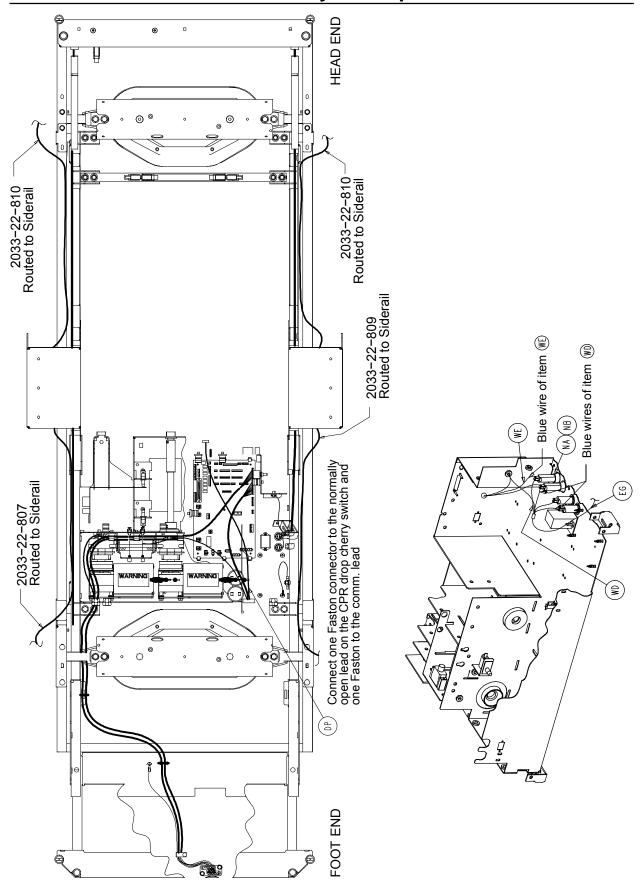








SIDERAIL EXTENSION CABLE ROUTING



# **Litter Assembly and Options**

#### 2030-231-10 Common Litter Components

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	3-23	Hex Hd. Cap Screw	2	BR	59-773	Push Spacer	4
В	3-74	Hex Hd. Cap Screw	3	BS	59-774	Locking PCB Support	1
C	3-78	Hex Hd. Cap Screw	4	BT	81-268	Flange Bearing	14
D	3-214	Hex Hd. Cap Screw	8	BU	715-1-133	Rel. Valve Stop Sleeve	18
E	3-347	Hex Hd. Cap Screw	4	BW	988-2-708	Shock Caution Label	1
F	4-32	Soc. Hd. Cap Screw	4	BX	2020-34-758	Calf Section Rest	2
G H	4-85 4-101	Soc. Hd. Cap Screw	2 4	BY BZ	2025-31-62 2025-31-804	Pot. Actuator Link Ground Jumper	1 4
J	5-19	Soc. Hd. Cap Screw Carriage Bolt	4 18	CA	2025-31-805	Ground Strap	6
K	5-22	Carriage Bolt	4	CB	2025-32-68	Flange Bearing	2
L	5-23	Carriage Bolt	3	CD	2025-32-76	Ball Bearing	2
M	7-58	Truss Hd. Torx	5	CE	2025-32-77	Fowler Actuator Link	2
N	7-63	Truss Hd. Torx	19	CF	2025-32-82	Hydraulic Dampener	2
Р	7-65	Truss Hd. Torx	16	CG	2025-32-84	Fowler Screw Up Stop	1
R	11-4	Washer	16	CH	2025-32-85	Fowler Screw Down Stop	1
S	11-53	Washer	10	CJ	2025-32-86	Thrust Washer	5
Т	11-63	Washer	41	CK	2025-32-87	Roller Cage Bearing	2
U	11-158	Washer	24	CL	2025-231-61	Pot. Timing Clamp	1
W	13-10	Ext. Tooth Lock Washer	16	CM	2025-231-88	Fowler Link	2
X	13-18	Ext. Tooth Lock Washer	14	CN	2025-231-90	Torque Tube Pivot Brg.	2
Y	13-32	Ext. Tooth Lock Washer	2	CP	2025-231-99	Bed Extender Rel. Lever	2
Z	14-7	Washer	2	CR	2025-231-112	Bed Extender Pin Lock	2
AB	16-3	Nylock Nut	4	CS	2025-232-89	Fowler Nut Box	1
AC	16-28	Nylock Nut	22	CT	2025-232-90	Fowler Ball Screw	1
AD AE	16-35 16-102	Nylock Nut	8 8	CU	2035-31-48 2035-31-49	Short CPR Cable Long CPR Cable	1 1
AF	3-224	Nylock Nut Hex Washer Hd. Screw	0 16	CX	2035-31-49	Scale Frame Weldment	1
AG	25-79	Rivet	2	CY	2035-31-51	Torque Tube Weldment	1
AH	25-142	Rivet	29	CZ	2035-31-54	Iso. Frame Weldment	1
ΑJ	25-147	Rivet	4	DA	2035-31-55	Head End Crosstube	1
AK	26-12	Roll Pin	2	DB	2035-31-57	Bed Extender Weldment	1
AL	26-168	Spiral Pin	2	DC	2035-31-64	Torque Tube Ret. Brkt., Lt.	1
AN	27-17	Cotter Pin	2	DD	2035-31-65	Torque Tube Ret. Brkt., Rt.	1
AP	28-120	External Retaining Ring	3	DE	2035-31-66	Torque Block Channel	2
AR	30-27	Strain Relief	1	DF	2035-31-94	Foot Support Cover	1
AS	30-36	Grommet	4	DH	2035-31-100	Wire Channel Cover	2
AT	30-47	Right Angle Strain Relief	1	DJ	2035-31-115	Roller Bracket Cover, Rt.	1
AU	30-52	Snap Bushing	4	DK	2035-31-116	Roller Bracket Cover, Lt.	1
AW	37-221	Hole Plug	1	DL	2035-31-126	Protective Sleeve	2
AX AY	38-111	Cable Tie	10 17	DM DR	2035-31-127	Nylon Stop	2 1
AZ	38-151 38-382	Cable Tie	2	DS	2035-32-52 2035-32-54	Gatch Trigger Weldment CPR Release Wldmt. Brkt.	1 1
BA	44-29	Compression Spring Black Foam Tape	1	DT	2035-32-72	CPR Release Pivot Brkt.	1
BB	44-32	1" Wide Poly Tape	50"	DU	2035-32-77	Gatch Actuator Link	2
BC	52-104	Cable Clamp	2	DW	2035-32-79	Act. Box Cherry Swch. Brkt.	
BD	52-759	Flange Bearing	2	DX	2035-32-84	Gatch Screw Up Stop	1
BE	52-762	Nyliner Bushing	2	DY	2035-32-85	Gatch Screw Down Stop	1
BF	58-56	Black Edge Trim	18"	DΖ	2035-32-88	Act. Box Motor Mtg. Brkt.	2
BG	58-76	Drive Fastener	2	EA	2035-32-90	Gatch Ball Screw Ass'y	1
BH	59-133	Push-Mount Wire Clip	1	EB	2035-32-96	Ball Screw Cover	1
BJ	59-135	Push-Mount Wire Clip	8	EC	2035-32-801	Gatch Limit Switch Cable	1
BK	59-157	Power Supply	1	ED	2035-32-802	Fowler/CPU Jumper Cable	1
BL	59-727	Jack Screw	4	EE	2035-32-803	Fowler Pot. Cable	1
BM	59-743	Wire Harness Clip	2	EF	2035-32-804	Fuse/PCB Cable	1
BN	59-751 50-767	Locking Circuit Bd. Supt.	6	EG	2035-32-805	CPU/Power Supply Cable	1
BP	59-767	Cable Clamp	2	EH	2035-33-50	Fowler Frame Weldment	1

# **Litter Assembly and Options**

#### 2030–231–10 Common Litter Components (Continued)

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
EJ	2035-33-62	CPR Release Slide Brkt.	2	FK	3000-300-477	CPR Conduit Stud	6
EM	2035-35-50	Foot Section Weldment	1	FL	3000-300-478	CPR Conduit Clamp	6
EP	2035-231-85	Seat Section Cover	2	FM	3001-200-228	Mounting Standoff	2
ET	2035-400-565	Siderail Guide Bracket	2	FN	3001-300-8	Thigh Bumper	4
EU	(page 10-35)	Actuator Box Cover Ass'y	1	FP	3001-300-99	Flange Bearing	10
EX	3000-300-58	Switch Plunger	2	FR	3001-300-603	CPR Release Label	2
EY	3000-300-99	Modified Bushing	10	FS	3001-300-663	Velcro Strip	10
ΕZ	3000-300-115	Standoff	4	FT	3001-300-877	Siderail Extension Cable	1
FA	3000-300-349	Head/Foot Board Post Cap	4	FU	2033-700-2	CPU Assembly	1
FB	3000-300-353	Roller	8	FW	5000-30-366	Fowler Nut Adapter	1
FC	3000-300-442	Fowler Drive Grommet	16	FX	5010-80-7	Power Supply Gd. Cable	1
FD	3000-300-455	CPR Isolation Bushing	4	FY	8800-380-000	Neoprene Sponge	1.5'
FE	3000-300-456	CPR Isolator	2	FZ	8815-001-100	Wire Mount Clip	4
FF	3000-300-461	CPR Decoupler	2	GA	11-310	Washer	2
FG	3000-300-462	CPR Wing	2	GB	11-2	Washer	1
FH	3000-300-464	CPR Engagement Spring	4	GC	7-52	Truss Hd. Torx	4
FJ	3000-300-473	Clevis Pin	2	GD	13-38	Ext. Tooth Lock Washer	2

#### 2033-42-11 TriaDyne III Litter Components

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
N	7-63	Truss Hd. Torx Screw	1	JH	34-22	Cord Clamp	1
W	13-10	Ext. Tooth Lock Washer	1	JJ	36-46	220V Ground Label	1
AF	23-25	H. Wash. Hd. Tap. Screw	2	JK	36-115	Earth Ground Label	1
AG	25-79	Rivet	16	JL	1550-90-1	Hosp. Grade Plug Label	1
DG	2033-31-97	Seat Section Skin	1	JM	2011-1-104	<b>Explosion Danger Label</b>	1
DP	2033-31-802	Foot Board/CPU Cable	1	JN	2011-1-215	Grounding Lug	1
EG	2033-31-801	Frame AC Power Cable	1	JP	2035-231-70	A/C Filter Mtg. Plate	1
EK	2033-33-63	Fowler Skin	1	JR	2035-31-803	Power Inlet Cable	1
EL	2033-34-50	Thigh Section Weldment	1	JS	3000-300-002	Plastic Clip Nut	4
ER	2033-233-64	Quick Drop Rel. Brkt., Lt.	1	JT	3000-300-350	Head End Bumper Strip	2
ES	2033-233-65	Quick Drop Rel. Brkt., Rt.	1	WA	4-127	Soc. Hd. Cap Screw	4
EX	3000-300-58	Switch Plunger	1	WB	16-7	Fiberlock Nut	4
FN	3001-300-8	Thigh Bumper	2	WC	34-22	Insulated Metal Clamp	4
FU	3001-407-920	Scale CPU/Headwall PCB	1	WD	2033-31-803	Perc. Pwr. Supply Cable	1
JA	4-5	Soc. Hd. Cap Screw	1	WE	2033-31-807	Percussor AC Pwr. Cable	e 1
JB	4-126	But. Hd. Cap Screw	2	WF	2033-33-11	Cherry Switch Bracket	1
JC	7-58	Truss Hd. Torx Screw	2	WG	2033-34-758	Foot Section Rest	4
JD	16-14	Nylock Nut	1	WH	59-767	Insulated Cable Clamp	4
JE	16-23	Nylock Nut	2	WJ	16-7	Nylock Nut	4
JF	16-33	Nylock Nut	2	WK	3001-300-7	Jack Screw	4
JG	23-80	Truss Hd. Tapping Screw	4	WL	2030-31-205	Cover, No Scale	1

### **Litter Assembly and Options**

# 2033-32-15 TriaDyne III Domestic Components 2030-30-151 Low-Sounding Beeper Option Item Part No. Part Name Qty. Item Part No. Part Name Qty

item	Part No.	Part Name	Qty.	ite
NA	59-179	Circuit Breaker	2	Р
ND	2033-90-1	Specification Label	1	
NE	2035-300-705	Fowler Drive Assembly	2	
NF	39-254	Power Cord	1	

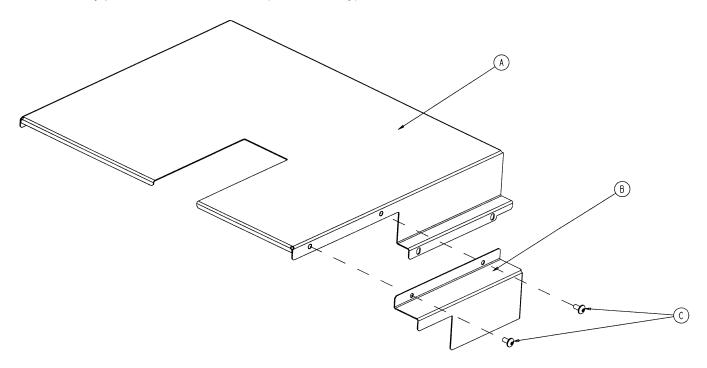
item	Part No.	Part Name	Qty.
PA	3001-508-869	Low Beeper Cable	1

#### 2033-32-20 TriaDyne III Height Option 2030-40-150 Scale & Chaperone® Options

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
HS	2030-331-52	Head End Header Wldmt	. 1	OA	13-32	Ext. Tooth Lock Washer	4
HT	2033-331-53	Foot End Header Wldmt.	1		(page 10-57)	Foot Board	1
				OC	2035-317-805	Load Cell Cable, Head	2
				OD	2035-317-804	Load Cell Cable, Foot	2
				OE	3001-300-7	M/F Screw	8
				OF	3001-307-57	Load Cell	4

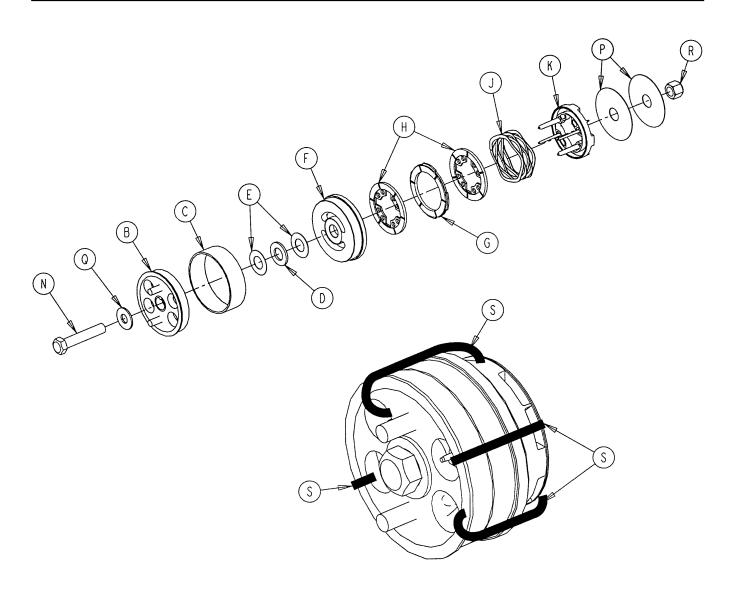
# **Actuator Box Cover Assembly**

Assembly part number 2035-432-75 (reference only)

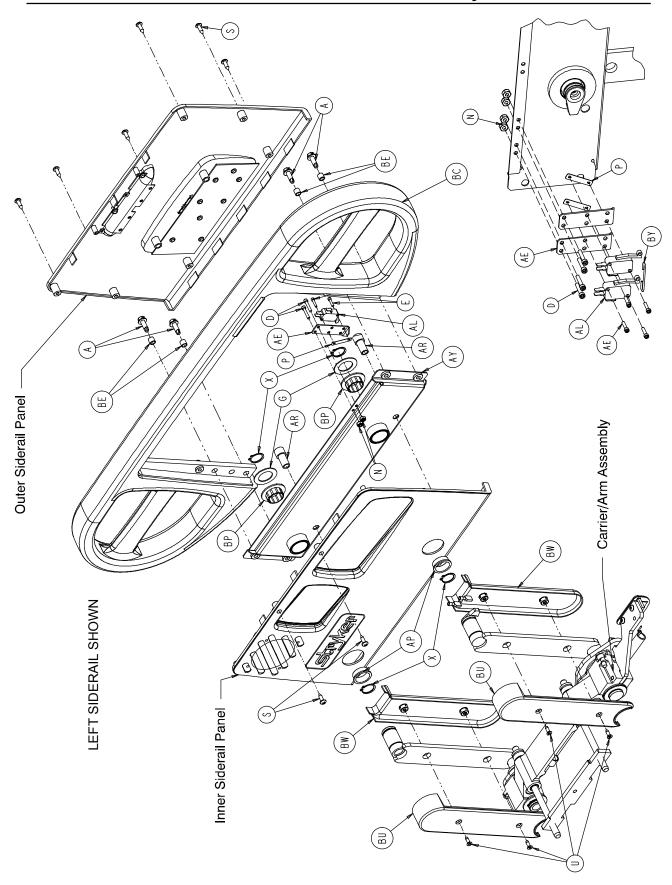


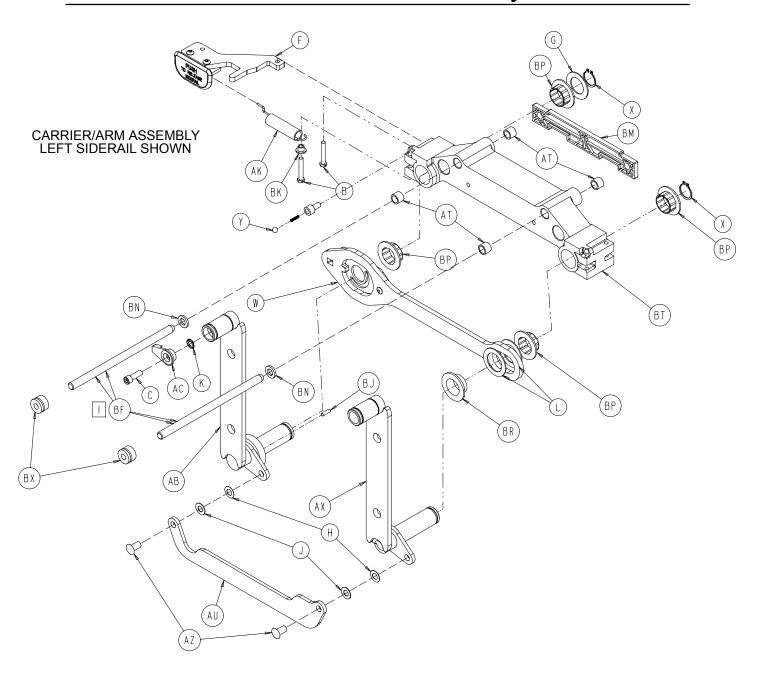
Item	Part No.	Part Name	Qty.
Α	2035-332-75	Main Actuator Box Cover	1
В	2035-332-76	Actuator Box Side Cover	1
С	7-58	Truss Hd. Torx	2

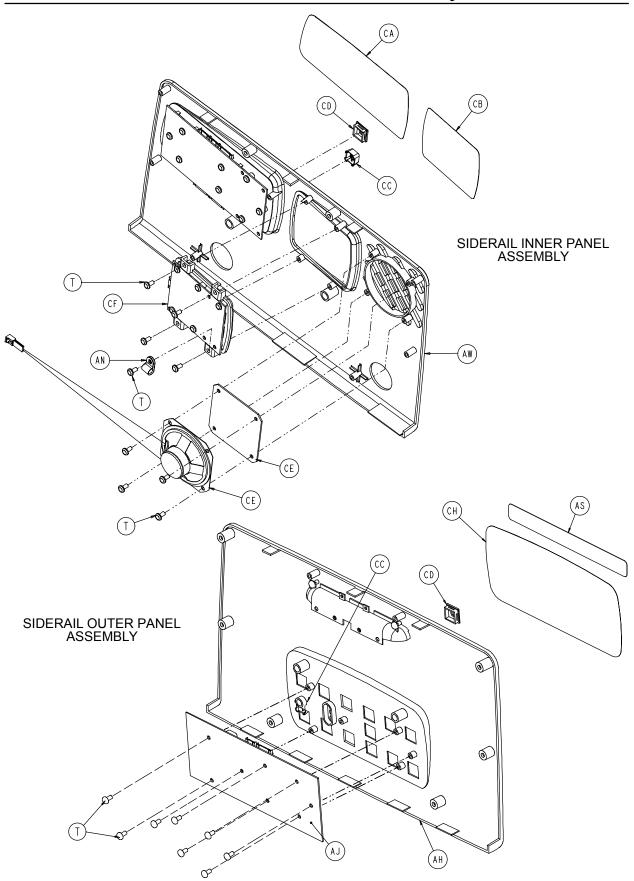
### 3001-300-775 Fowler Brake Kit Assembly



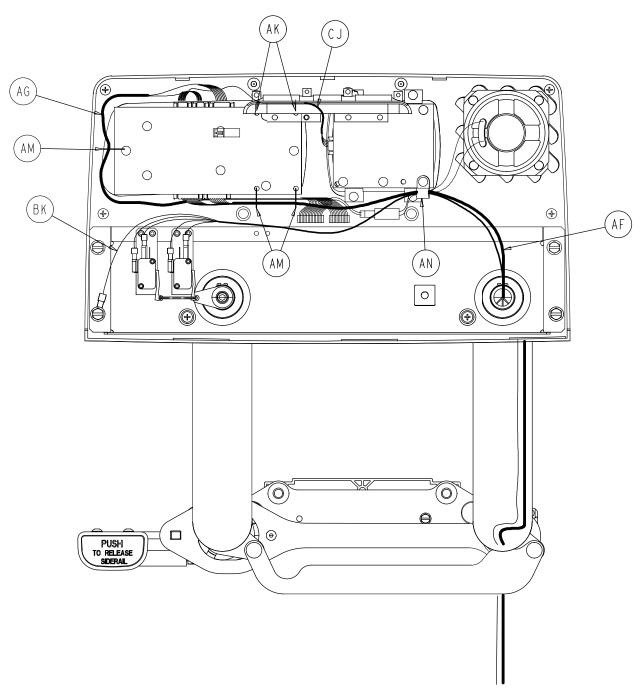
Item	Part No.	Part Name	Qty.
В	3001-300-455	CPR Coupler Assembly	1
С	3000-300-465	CPR Clutch Spring	1
D	81-212	Thrust Needle Roller Brg.	1
Ε	3000-200-224	Idler Gear Thrust Washer	2
F	3001-300-569	Brake Cup	1
G	3001-300-552	CPR Brake Disc	1
Н	3001-300-551	CPR Spring Cup	2
J	3001-300-563	CPR Brake Spring	1
K	3001-300-570	CPR Spring Cup	1
N	3-64	Hex Hd. Cap Screw	1
Р	3000-200-245	Flat Washer	2
Q	11-193	Heavy Flat Washer	1
R	16-12	Nylock Nut	1
S	3000-300-113	8" Wire Tie	4



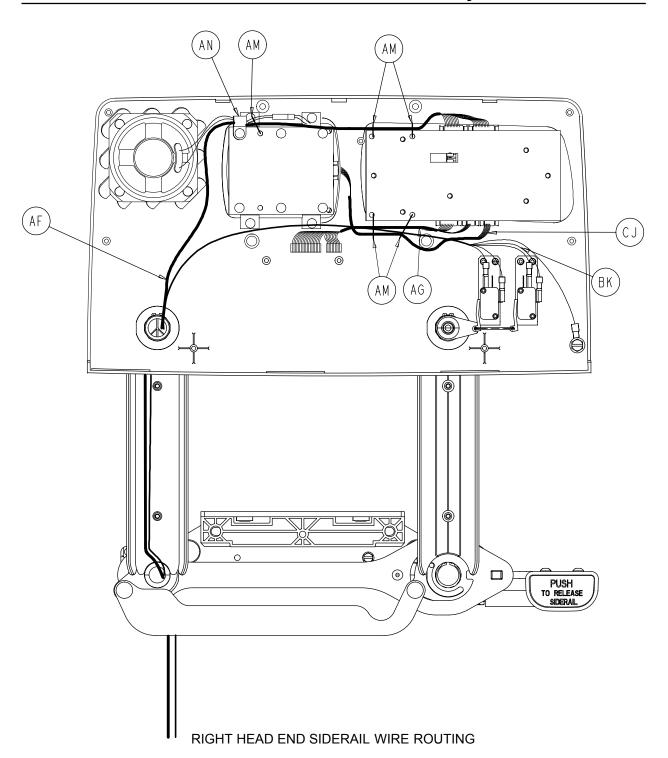




# **Head End Siderail Assembly**



LEFT HEAD END SIDERAIL WIRE ROUTING



# **Head End Siderail Assembly**

#### 2030-401-105 Left Standard Components 2030-401-205 Right Standard Components

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	3-226	Hex Washer Hd. Screw	4	Α	3-226	Hex Washer Hd. Screw	4
В	3-344	Hex Hd. Screw	2	В	3-344	Hex Hd. Screw	2
С	4-9	Soc. Hd. Cap Screw	1	С	4-9	Soc. Hd. Cap Screw	1
D	4-101	Soc. Hd. Cap Screw	2	D	4-101	Soc. Hd. Cap Screw	2
Ε	4-127	Soc. Hd. Cap Screw	2	Е	4-127	Soc. Hd. Cap Screw	2
F	(page 10-44)	Release Lever Ass'y, Left	1	F	(page 10-45)	Release Lever Ass'y, Right	1
G	11-343	Shim Washer	3	G	11-343	Shim Washer	3
Н	11-377	Washer	2	Н	11-377	Washer	2
J	11-491	Steel Shim Washer	2	J	11-491	Steel Shim Washer	2
K	13-10	Ext. Tooth Lock Washer	1	K	13-10	Ext. Tooth Lock Washer	1
L	14-93	Washer	2	L	14-93	Washer	2
N	16-23	Fiberlock Nut	2	N	16-23	Fiberlock Nut	2
Р	16-69	Twin Fastener	1	Р	16-69	Twin Fastener	1
R	23-88	High-Low Tapping Screw	1	R	23-88	High-Low Tapping Screw	1
S	23-90	High-Low Tapping Screw	8	S	23-90	High-Low Tapping Screw	8
Τ	23-112	High-Low Tapping Screw	16	Т	23-112	High-Low Tapping Screw	16
U	1-72	Ph. Flat Hd. Mach. Screw	4	U	1-72	Ph. Flat Hd. Mach. Screw	4
W	(page 10-46)	Latch Ass'y, Head, Left	1	W	(page 10-47)	Latch Ass'y, Head, Right	1
X	28-128	Retaining Ring	6	X	28-128	Retaining Ring	6
Y	(page 10-48)	Detent Clip Assembly	1	Y	(page 10-48)	Detent Clip Assembly	1
AB	2033-401-130	Arm Wldmt., Lt., Hd., Ft.	1	AB	2033-401-230	Arm Wldmt., Rt., Hd., Ft.	1
AC	2035-20-60	Limit Switch Cam	1	AC	2035-20-60	Limit Switch Cam	1
ΑE	2035-20-62	Limit Switch Bracket	1	AE	2035-20-62	Limit Switch Bracket	1
AF	2035-20-802	Siderail Cable	1	AF	2035-20-802	Siderail Cable	1
AG	2035-20-804	Main Outside Cable, Lt.	1	AG	2035-20-803	Main Outside Cable, Rt.	1
AH	(page 10-49)	Outer Panel Assembly	1	AH	(page 10-49)	Outer Panel Assembly	1
AJ	2035-400-900	Outside Circuit Board	1	AJ	2035-400-900	Outside Circuit Board	1
AK	3000-200-334	Release Lever Spring	1	AK	3000-200-334	Release Lever Spring	1
AL AM	3000-300-41 3000-300-114	Micro Switch Cable Tie	1 5	AL AM	3000-300-41 3000-300-114	Micro Switch Cable Tie	1 5
AN	3000-300-114	CPR Conduit Clamp	1	AN	3000-300-114	CPR Conduit Clamp	1
AP	3000-300-478	Wear Bushing	2	AP	3000-300-478	Wear Bushing	2
AR	3000-400-523	Panel Spacer	2	AR	3000-400-523	Panel Spacer	2
AS	3000-400-556	Warning Label	1	AS	3000-400-556	Warning Label	1
AT	3000-400-557	Sleeve Bearing	4	AT	3000-400-557	Sleeve Bearing	4
ΑU	3001-400-11	Head End Timing Link	1	ΑU	3001-400-11	Head End Timing Link	1
AW	(page 10-50)	Inner Panel Assembly, Lt.	1	AW	(page 10-50)	Inner Panel Assembly, Rt.	1
AX	3001-401-128	Arm Wldmt., Lt., Hd., Hd.	1	AX	3001-401-228	Arm Wldmt., Rt., Hd., Hd.	1
ΑZ	3001-400-501	Linkage Rivet	2	ΑZ	3001-400-501	Linkage Rivet	2
BC	3001-400-515	Head Rail	1	BC	3001-400-515	Head Rail	1
BD	3001-400-555	Mounting Bracket	1	BD	3001-400-555	Mounting Bracket	1
BE	3001-400-558	SIderail Spacer	4	BE	3001-400-558	SIderail Spacer	4
BF	2035-400-570	Glide Rod	2	BF	2035-400-570	Glide Rod	2
BJ	3002-400-505	Bypass Pin	1	BJ	3002-400-505	Bypass Pin	1
BM	3002-400-511	Glide Rod Bumper Pad	1	BM	3002-400-511	Glide Rod Bumper Pad	1
BN	3002-400-512	Bumper Washer	2	BN	3002-400-512	Bumper Washer	2
BP	3002-400-513	Pivot Bushing	6	BP	3002-400-513	Pivot Bushing	6
BR	3002-400-519	Latch Bushing	1	BR	3002-400-519	Latch Bushing	1
BT	3002-400-528	Carrier	1	BT	3002-400-528	Carrier	1
BU	5000-20-5	Inner Arm Cover	2	BU	5000-20-5	Inner Arm Cover	2
BW	3001-400-619	Outer Arm Cover	2	BW	3001-400-619	Outer Arm Cover	2
BX	30-40	Grommet	2	BX	30-40	Grommet	2

### **Head End Siderail Assembly**

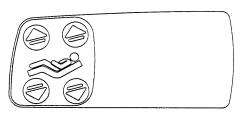
#### 2033-401-105 Left Rail - TriaDyne III

#### 2033-401-205 Right Rail - TriaDyne III

Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
D	4-101	Soc. Hd. Cap Screw	2	D	4-101	Soc. Hd. Cap Screw	2
Е	4-127	Soc. Hd. Cap Screw	2	D	4-127	Soc. Hd. Cap Screw	2
Р	16-69	Twin Fastener	1	Р	16-69	Twin Fastener	1
N	16-23	Fiberlock Nut	2	N	16-23	Fiberlock Nut	2
ΑE	2035-20-62	Limit Switch Bracket	1	ΑE	2035-20-62	Limit Switch Bracket	1
AL	2033-300-41	Micro Switch	2	AL	2033-300-41	Micro Switch	2
AY	3001-400-130	Supt. Wldmt., Hd. End, Lt.	1	AY	3001-400-230	Supt. Wldmt., Hd. End, Rt.	1
BK	2033-22-810	Head End Switches Cable	1	BK	2033-22-810	Head End Switches Cable	1
BY	2033-31-11	Snap Switch Link Wire	1	BY	2033-31-11	Snap Switch Link Wire	1

#### 2033-20-11 TriaDyne III Siderail

Item	Part No.	Part Name	Qty.
CA	2035-000-100	Label, Standard, Left	1
CA	2035-000-200	Label, Standard, Right	1
CC	3001-400-953	Switch Cap	26
CD	3001-400-522	Filler Cap	20
CE	3001-400-517	Speaker Seal	2
CF	3001-400-535	Inner Panel Blank Module	2
CH	2033-000-300	Label, Standard, Left	1
CH	2033-000-400	Label, Standard, Right	1

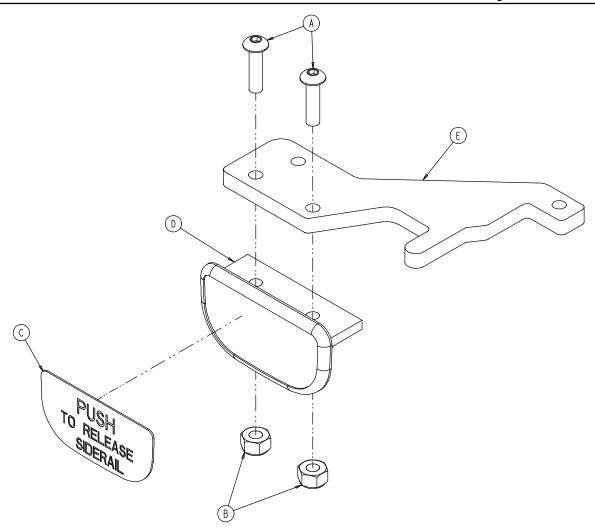


Right Inner Siderail Label



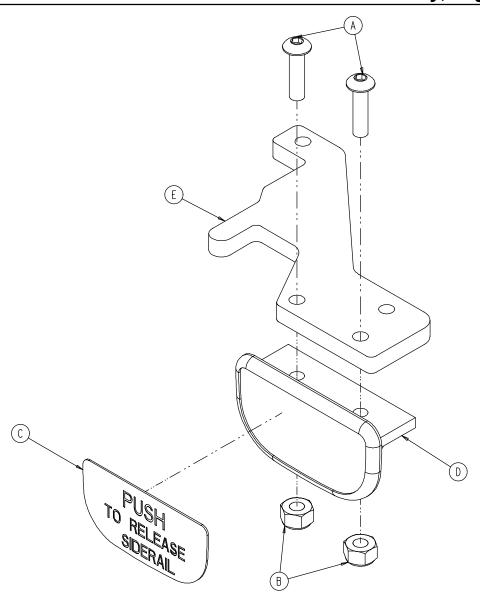
Right Outer Siderail Label

# 3002-400-55 Siderail Release Lever Assembly, Left



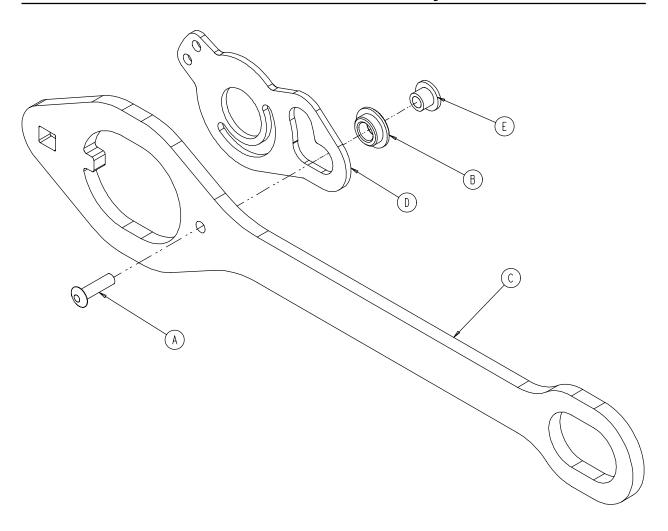
Item	Part No.	Part Name	Qty.
Α	4-278	Socket But. Hd. Cap Screw	2
В	16-2	Hex Nut	2
С	3001-400-505	Release Label	1
D	3001-400-514	Release Lever Pad	1
E	3002-400-510	Release Lever	1

# 3002-400-65 Siderail Release Lever Assembly, Right



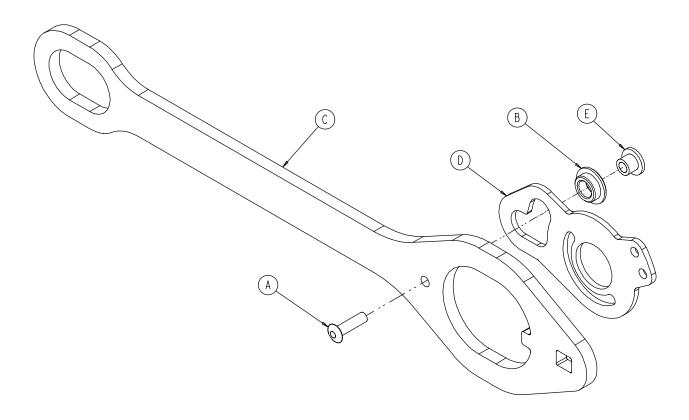
Item	Part No.	Part Name	Qty.
Α	4-278	Socket But. Hd. Cap Screw	2
В	16-2	Hex Nut	2
С	3001-400-505	Release Label	1
D	3001-400-514	Release Lever Pad	1
E	3002-400-510	Release Lever	1

# 3002-400-70 Siderail Latch Assembly, Head End, Left



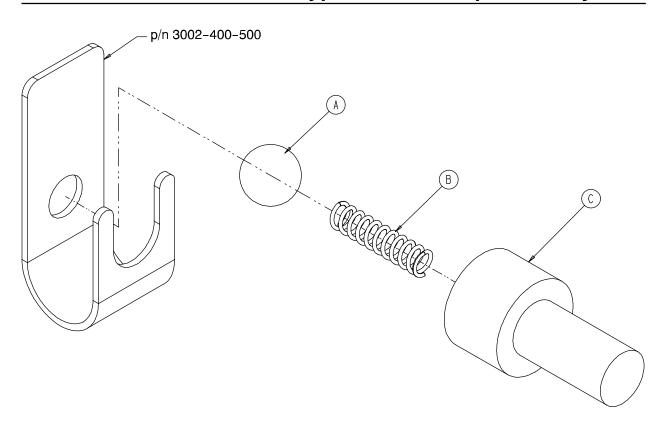
Item	Part No.	Part Name	Qty.
Α	25-86	Blind Rivet	1
В	81-317	Bronze Bushing	1
С	3002-400-501	Latch	1
D	3002-400-503	Head End Bypass Plate	1
E	3002-400-509	Bypass Bushing Spacer	1

# 3002-400-75 Siderail Latch Assembly, Head End, Right



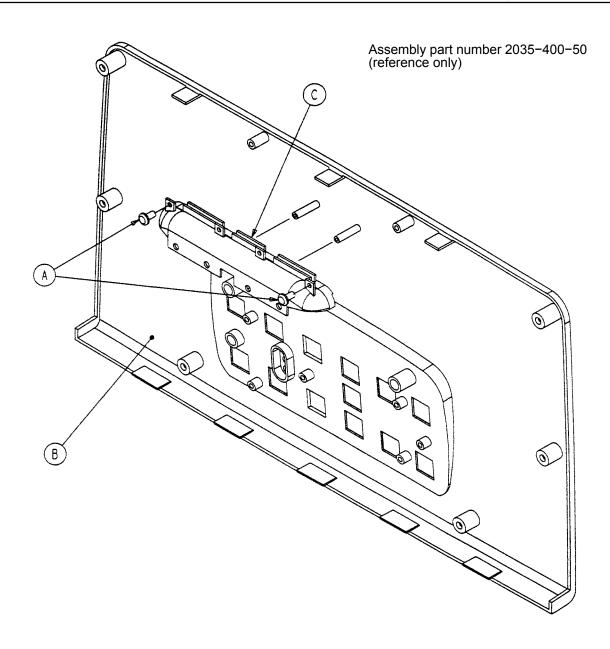
Item	Part No.	Part Name	Qty.
Α	25-86	Blind Rivet	1
В	81-317	Bronze Bushing	1
С	3002-400-501	Latch	1
D	3002-400-503	Head End Bypass Plate	1
Е	3002-400-509	Bypass Bushing Spacer	1

# 3002-400-90 Siderail Bypass Detent Clip Assembly



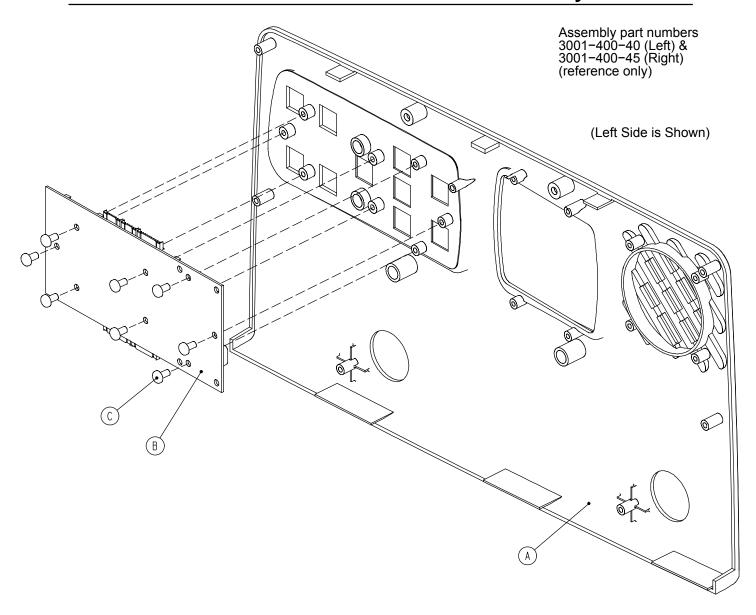
Item	Part No.	Part Name	Qty.
Α	31-137	Steel Ball	1
В	38-464	Compression Spring	1
С	3002-400-524	Bypass Detent Housing	1

### **Head End Siderail Outer Panel Assembly**



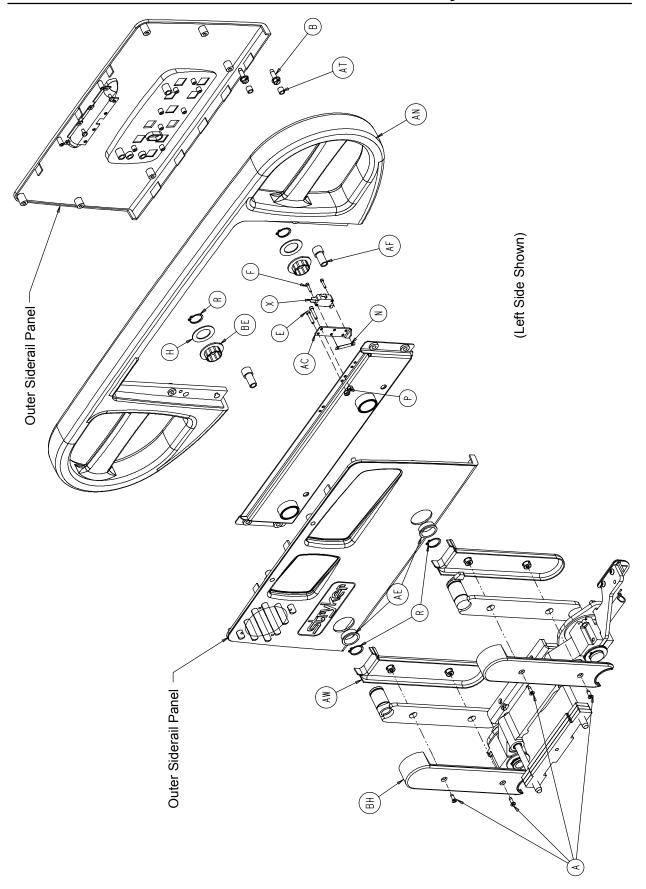
Item	Part No.	Part Name	Qty.
Α	23-112	Hi-Low Tapping Screw	2
В	2035-400-102	Outer Panel	1
С	3001-400-599	Handle Insert	1

### **Head End Siderail Inner Panel Assembly**

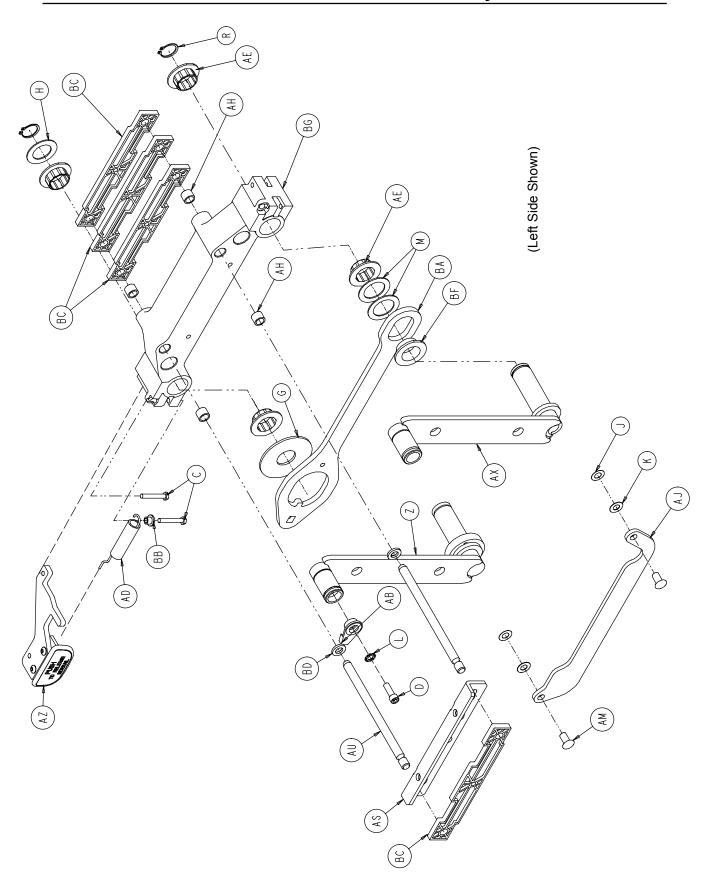


Item	Part No.	Part Name	Qty.
Α	3001-400-101	Left Inner Panel	1
	3001-400-201	Right Inner Panel	1
В	3001-400-900	Inner Siderail PCB Assembly	1
С	23-112	Hi-Low Tapping Screw	8

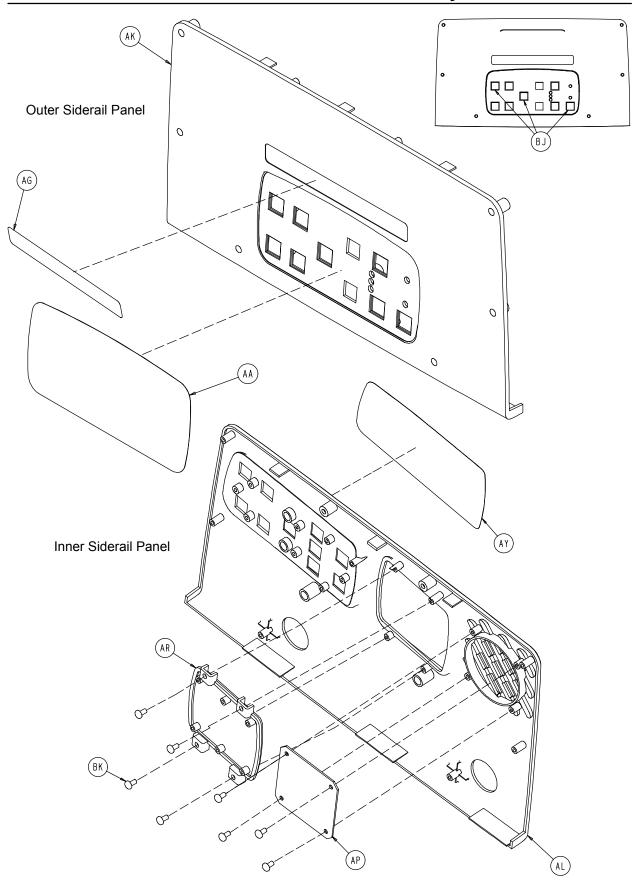
# Foot End Siderail Assembly



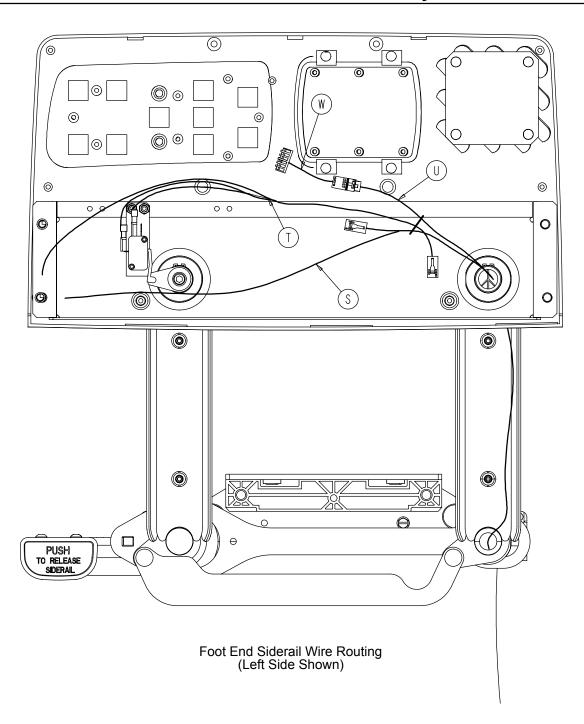
# Foot End Siderail Assembly



## **Foot End Siderail Assembly**



#### **Foot End Siderail Assembly**

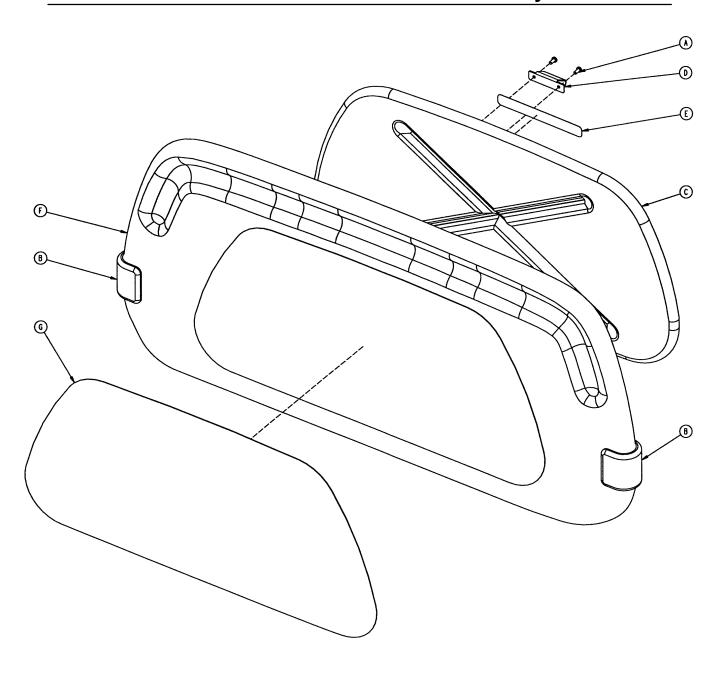


## **Foot End Siderail Assembly**

#### 2033-400-305 Left Common Components 2033-400-405 Right Common Components

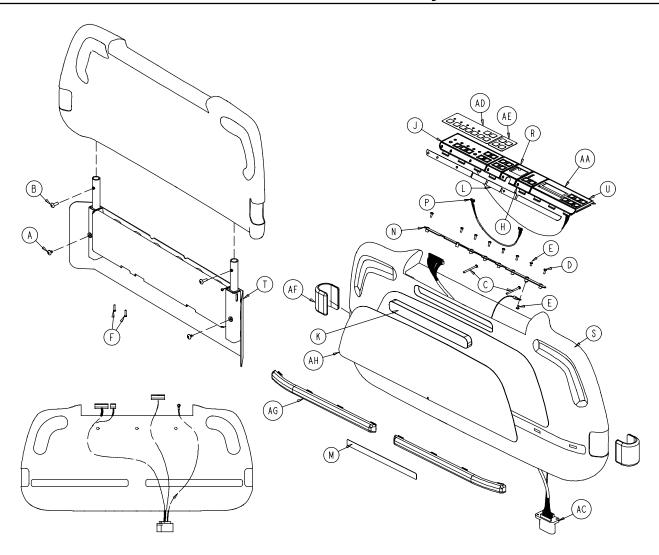
Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	1-72	Ph. Flat Hd. Mach. Screw	4	Α	1-72	Ph. Flat Hd. Mach. Screw	4
В	3-226	Hex Washer Hd. Screw	4	В	3-226	Hex Washer Hd. Screw	4
С	3-344	Hex Hd. Cap Screw	2	С	3-344	Hex Hd. Cap Screw	2
D	4-9	Soc. Hd. Cap Screw	1	D	4-9	Soc. Hd. Cap Screw	1
Ε	4-101	Soc. Hd. Cap Screw	2	Ε	4-101	Soc. Hd. Cap Screw	2
F	4-127	Soc. Hd. Cap Screw	2	F	4-127	Soc. Hd. Cap Screw	2
G	11-185	Washer	1	G	11-185	Washer	1
Н	11-343	Shim Washer	3	Н	11-343	Shim Washer	3
J	11-377	Washer	2	J	11-377	Washer	2
K	11-491	Steel Shim Washer	2	K	11-491	Steel Shim Washer	2
L	13-10	Lock Washer	1	L	13-10	Lock Washer	1
M	14-93	Washer	2	M	14-93	Washer	2
N	16-69	Twin Fastener	1	N	16-69	Twin Fastener	1
Р	16-23	Fiberlock Nut	2	Р	16-23	Fiberlock Nut	2
R	28-128	Retaining Ring	6	R	28-128	Retaining Ring	6
S	2033-22-807	Ft. Siderail Cable, Left	1	S	2033-22-809	Ft. Siderail Cable, Right	1
Т	2033-22-808	Board Cable	1	Т	2033-22-808	Board Cable	1
U	2033-22-811	Siderail Panel Cable	1	U	2033-22-811	Siderail Panel Cable	1
W	2033-22-812	Siderail Jumper Cable	1	W	2033-22-812	Siderail Jumper Cable	1
Χ	3000-300-41	Micro-Switch	1	Χ	3000-300-41	Micro-Switch	1
Υ	3001-400-130	•	1	Υ	3001-400-230	Supt. Wldmt., Head, Right	
Z		Arm Wldmt., Lt., Ft., Ft.	1	Z	2033-401-427	Arm Wldmt., Rt., Ft., Ft.	1
AA	2033-445-635		1	AA	2033-445-635	Foot End Label	1
AB	2035-20-60	Limit Switch Cam	1	AB	2035-20-60	Limit Switch Cam	1
AC	2035-20-62	Limit Switch Bracket	1	AC	2035-20-62	Limit Switch Bracket	1
AD	3000-200-334		1	AD	3000-200-334	Extension Spring	1
ΑE	3000-400-513	3	2	AE	3000-400-513	Wear Bushing	2
AF	3000-400-523	Panel Spacer	2	AF	3000-400-523	Panel Spacer	2
AG	3000-400-556	3	1	AG	3000-400-556	Warning Label	1
AH	3000-400-557	9	4	AH	3000-400-557	Sleeve Bearing	4
AJ	3001-400-11	Head End Timing Link	1	AJ	3001-400-11	Head End Timing Link	1
AK	3001-400-50	Outer Siderail Panel	1	AK	3001-400-50	Outer Siderail Panel	1
AL	3001-400-101	•	1	AL	3001-400-201	Inner Siderail Panel, Right	
AM	3001-400-501	Siderail Linkage Rivet	2	AM	3001-400-501	Siderail Linkage Rivet	2
AN	3001-400-515		1	AN	3001-400-515	Head Rail	1
AP	3001-400-517	•	1	AP	3001-400-517	Speaker Seal	1
AR	3001-400-535		1 1	AR	3001-400-535	Inner Panel Blank Module	1 1
AS AT	3001-400-555 3001-400-558	•	4	AS AT	3001-400-555 3001-400-558	Mounting Bracket Siderail Spacer	4
AU	3001-400-564	Siderail Spacer Glide Rod	2	AU	3001-400-564	Glide Rod	2
AW		Outer Arm Cover	2	AW	3001-400-504	Outer Arm Cover	2
AX	3001-400-019		1	AX	3001-401-128	Arm Wldmt., Lt., Hd., Hd.	1
AY	3001-445-621	Blank Label, Left	1	AY	3001-445-611	Blank Label, Right	1
AZ	(page 10-44)	Release Lever Ass'y, Lt.	1	AZ	(page 10-45)	Release Lever Ass'y, Rt.	1
BA	3002-400-501		1	BA	3002-400-501	Latch	1
BB	3002-400-509	Bypass Bushing Spacer	1	BB	3002-400-509	Bypass Bushing Spacer	1
BC	3002-400-511	Glide Rod Bumper Pad	4	BC	3002-400-511	Glide Rod Bumper Pad	4
BD	3002-400-512	•	2	BD	3002-400-512	Bumper Washer	2
BE	3002-400-513		6	BE	3002-400-513	Pivot Bushing	6
BF	3002-400-519	Latch Bushing	1	BF	3002-400-519	Latch Bushing	1
BG	3002-400-528	Siderail Carrier	1	BG	3002-400-528	Siderail Carrier	1
BH	5000-20-5	Inner Arm Cover	2	BH	5000-20-5	Inner Arm Cover	2
BJ	3001-400-522		3	BJ	3001-400-522	Filler Cap	3
BK	23-112	Hi-Low Tapping Screw	8	BK	23-112	Hi-Low Tapping Screw	8
		5				5	

## 2035-130-010 Head Board Assembly



Item	Part No.	Part Name	Qty.
Α	23-88	Pan Hd. Screw	2
В	2035-500-7	Dark Blue "C" Bumper	2
С	3000-526-1	CPR Board	1
D	3000-526-2	CPR Board Clip	1
E	3000-526-3	CPR Board Label	1
F	3000-600-10	Head Board Clam Shell Ass'y	1
G	3000-600-56	Beige Head Board Laminate	1
Н	72-2-71	"C" Bumper Adhesive	N/A

## **Foot Board Assembly**

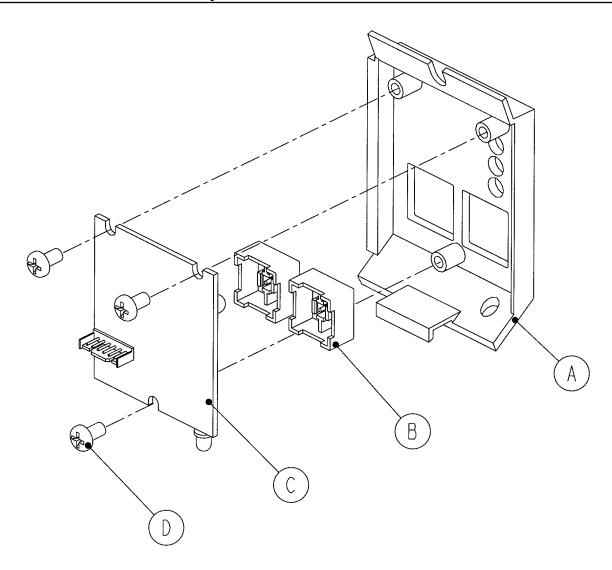


2033-500-11 Standard Components

2033-545-11 TriaDyne III Components

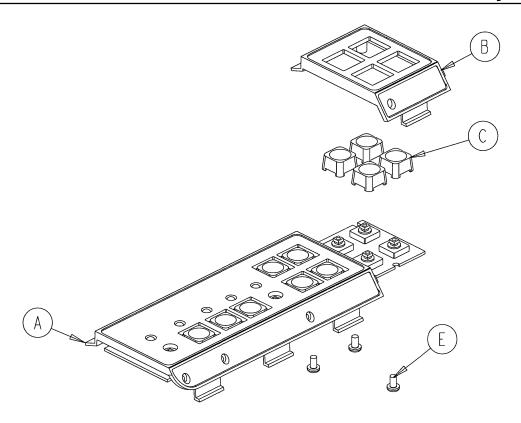
Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	7-53	Truss Hd. Screw	2	L	2033-545-26	KCI Blank Module Label	1
В	7-56	Truss Hd. Screw	7	AA	2030-000-152	KCI Scale Module Label	1
С	23-99	Pan Hd. Screw	2	AC	2033-31-806	Foot Board Drawer Cable	1
D	23-103	Pan Hd. Tapping Screw	7	AD	2030-000-151	Standard Module Label	1
E	50-38	Phillips Hd. Screw	2	ΑE	2035-000-153	Gatch/Fow. Module Label	1
F	50-39	Phillips Hd. Screw	2	AF	2035-500-7	Blue "C" Bumper	2
G	72-2-71	"C" Bumper Adhesive	1	AG	2035-500-8	Blue Strip Bumper	2
Н	(page 10-58)	Bed Exit Module Ass'y	1	AH	3000-500-56	Beige Laminate	1
J	(page 10-59)	KCI Foot Board Module	1				
K	3000-500-8	Chart Rack Cover	1				
M	3000-500-29	Hazard Label	1				
Ν	3001-500-64	Hinge Plate	1				
Р	3001-508-800	Bed Exit Keypad Cable	1				
R	3001-545-3	Blank Module	1				
S	3001-545-10	KCI Clamshell	1				
T	3001-545-110	Foot Board Extender	1				
U	(page 10-61)	Scale Module Assembly	1				

## 3001-508-30 Chaperone® Bed Exit Foot Board Module



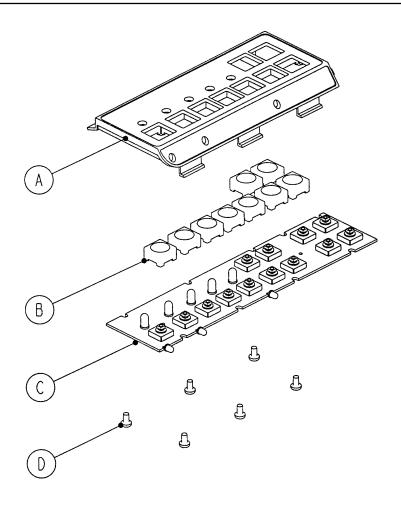
Item	Part No.	Part Name	Qty.
Α	3000-508-1	Bed Exit Module Panel	1
В	3001-400-953	Switch Cap	2
С	3001-508-910	Bed Exit Keypad Ass'y	1
D	23-87	Tapping Screw	3

#### 2033-235-020 KCI Foot Board Module Assembly



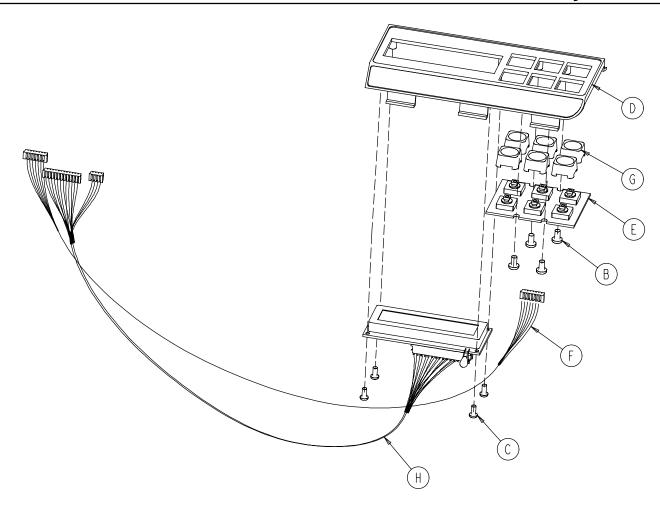
Item	Part No.	Part Name	Qty.
Α	(page 10-60)	Standard Module Assembly	1
В	3000-500-1	Gatch/Fowler Module	1
С	3001-400-953	Switch Cap	4
E	23-87	Pan Hd. Tapping Screw	3

## 3001-500-28 Foot Board Standard Module Assembly



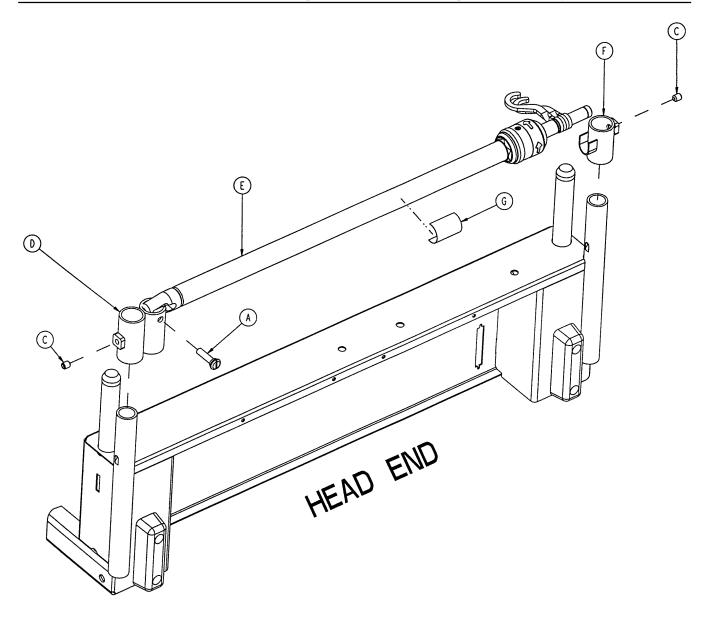
Item	Part No.	Part Name	Qty.
Α	3000-500-2	Foot Board Standard Module	1
В	3001-400-953	Switch Cap	9
С	3001-500-930	Main Foot Board Keyboard	1
D	23-87	Pan Hd. Tapping Screw	6

#### 3002-507-30 Foot Board Scale Module Assembly



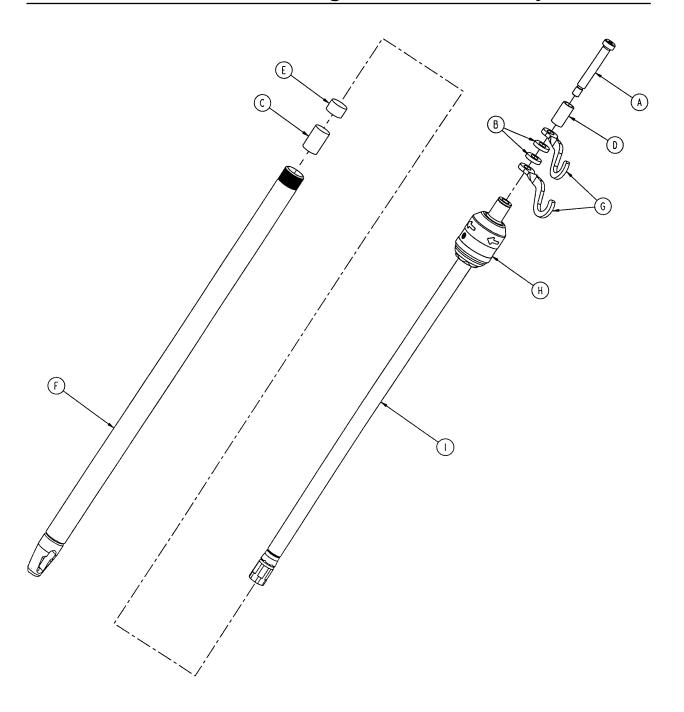
Item	Part No.	Part Name	Qty.
В	23-87	Pan Hd. Hi-Lo Tapping Screw	4
С	23-91	Pan Hd. Hi-Lo Tapping Screw	4
D	3001-507-1	Scale Module	1
E	3001-507-910	Scale Keypad	1
F	3001-507-800	Scale Keypad Cable	1
G	3001-400-953	Switch Cap	6
Н	3002-507-900	Scale Display Cable	1

## 2035-112 Optional 2-Stage I.V. Mounting Assembly, Hd. End



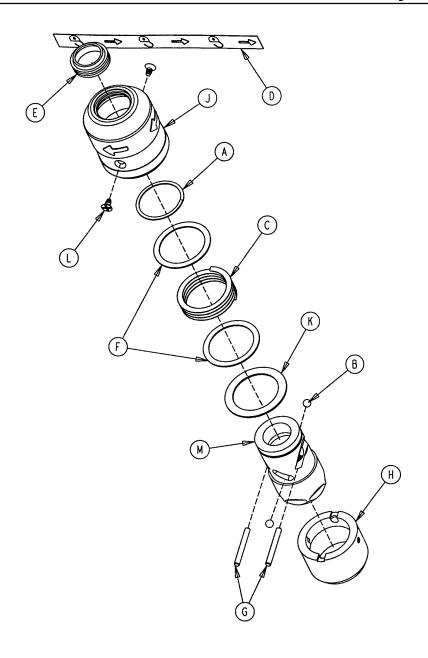
Item	Part No.	Part Name	Qty.
Α	1015-24-35	Retaining Pin	1
С	21-140	Set Screw	2
D	2035-112-1	I.V. Receptacle	1
E	(page 10-63)	I.V. Pole Assembly	1
F	3000-311-16	I.V. Rest	1
G	2035-112-110	Specification Label	1

# 2035-112-10 2-Stage I.V. Pole Assembly



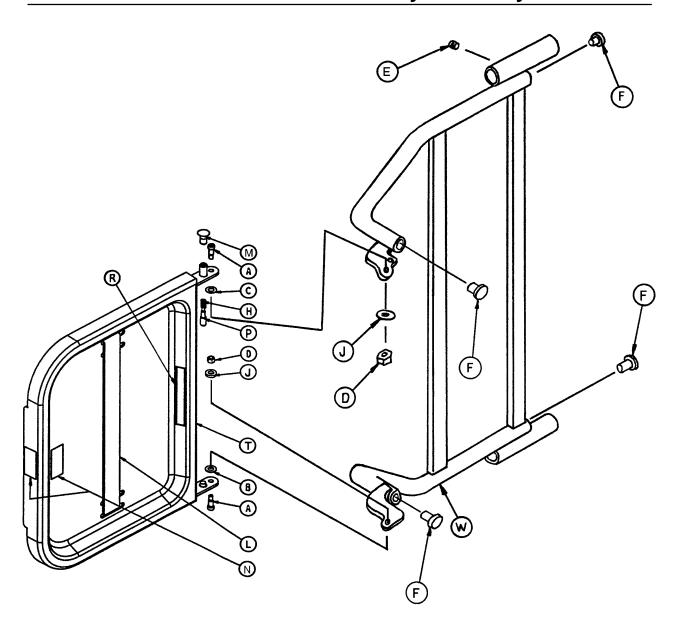
Item	Part No.	Part Name	Qty.
Α	8-31	Soc. Hd. Shoulder Screw	1
В	52-17	Washer	2
С	52-310	Spacer	1
D	926-400-162	Spacer	1
E	1001-259-13	Dampener	1
F	1001-259-32	Base Tube Weldment	1
G	1010-259-16	I.V. Hook	2
Н	(page 10-64)	I.V. Pole Latch	1
1	1211-110-29	2nd Stage Assembly	1

# 2035-110-26 I.V. Pole Latch Assembly



Item	Part No.	Part Name	Qty.
Α	28-167	Retaining Ring	1
В	31-4	Steel Ball	2
С	38-392	Crest-to-Crest Spring	1
D	1211-91-34	Release Label	1
E	1211-110-18	I.V. Latch Seal	1
F	1211-110-20	Washer	2
G	1211-110-21	I.V. Latch Locking Pin	2
Н	1211-110-22	I.V. Latch Guide	1
J	1211-110-24	I.V. Latch O.D. Housing	1
K	1211-110-35	Washer	1
L	1211-110-36	Self-Tapping Screw	2
M	1211-210-23	I.V. Latch I.D. Housing	1

## 2025-120 Defibrillator Tray Assembly



Item	Part No.	Part Name	Qty.	Item	Part No.	Part Name	Qty.
Α	8-49	Soc. Hd. Shoulder Bolt	2	L	1010-50-21	Long Strap	1
В	14-20	Thrust Washer	1	M	1010-50-50	Knob	1
С	14-21	Thrust Washer	1	N	1010-50-57	Max. Weight Label	4
D	16-28	Fiberlock Nut	2	Р	1010-50-242	Lock Pin	1
Ε	21-17	Set Screw	4	R	2025-120-5	Equipment Label	1
F	37-214	Hole Plug	4	S	2025-120-6	Specification Label	1
Н	38-133	Spring	1	Τ	2025-120-18	Tray Assembly	1
J	52-17	Spacer	2	W	2025-120-25	Pivot Weldment Frame	1
K	1010-50-19	"Push/Pull" Label	1				

#### **European Representative**

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