



# User-Service Manual

## Joerns® Camtec Series Bed Frames

### RC Ultra Hi-Lo Bed

Spread Base Bariatric Low Bed  
Model RCUHLB850

To avoid injury, read user's manual before using.



**Camtec**™  
The Caregiver's Choice

## Important Precautions

- ⚠ **Caution:** Rotating parts. Keep fingers and arms clear of bed when mechanism is moving.
- ⚠ **Caution:** Pinch points. Keep objects away from these areas while bed is in motion.
- ⚠ **Caution:** Electrical hazard may occur if bed is plugged into inadequate power supply. Make sure to use a 115 volt, 3 prong, grounded outlet with a capacity of at least 15 amps.
- ⚠ **Caution:** Keep feet clear of casters. Make sure casters are locked before transferring patients.
- ⚠ **Caution:** Make sure that the cords from the control module and pendant are properly positioned before operating the bed. Do not allow either cord to get caught in the moving parts of the bed.
- ⚠ **Caution:** When using a turning mattress, make sure there is a bolster between the mattress and side rail.
- ⚠ **Warning:** Keep all objects out from under bed. Certain parts under the bed raise and lower when the bed is in motion.
- ⚠ **Warning:** Do not place arms or head into frame while operating. Stand clear of the bed frame before operating.
- ⚠ **Warning:** Do not operate this device if the power cord or any of the cords coming from the control module are cut, frayed, damaged or loosely connected.
- ⚠ **Warning:** Do not service the bed without first disconnecting the power cord.
- ⚠ **Warning:** The bed must be unplugged from the wall socket prior to using the emergency crank. Failure to do so may result in damage to the bed and injury to the personnel using the crank.
- ⚠ **Warning:** ESD - electrostatic discharge.
- ⚠ **Warning:** The bed should be left in the lowest position when unattended in order to reduce the risk of injury due to falls while getting into or out of bed, or while lying on the bed.
- ⚠ **Warning:** When raising or lowering bed, casters at the foot end should be in the steer position. Head end should be free to move.

⚠ **Warning: Possible Fire Hazard.** Use nasal mask or ½ bed tent oxygen administering equipment. Oxygen tent should not extend below mattress support platform. Pendant should not be placed in an oxygen enriched environment such as an oxygen tent. Use of electrical circuits in an oxygen-enriched environment could result in a fire hazard.

⚠ **Warning: Possible Injury Or Death.** An optimal bed system assessment should be conducted on each resident by a qualified clinician or medical provider to ensure maximum safety of the resident. The assessment should be conducted within the context of, and in compliance with, the state and federal guidelines related to the use of restraints and bed system entrapment guidance, including the *Clinical Guidance for the Assessment and Implementation of Side Rails* published by the Hospital Bed Safety Workgroup of the U.S. Food and Drug Administration. Further information can be obtained at the following web address: <http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/GeneralHospitalDevicesandSupplies/HospitalBeds/default.htm>.

⚠ **Warning: Possible Injury Or Death.** Use a properly sized mattress in order to minimize the gap between the side of mattress and Side Rails/Assist Devices. This gap must be small enough to prevent resident/patient from getting his/her head or neck caught in this location. Make sure that raising or lowering bed, or contouring the mattress support platform, does not create any hazardous gaps. Excessive gaps may result in injury or death.

⚠ **Warning: Possible Injury Or Death.** Residents/patients may become entangled in pendant cord. Patients with reduced mental acuity should not be allowed access to pendant. Unsupervised use of pendant could result in injury or death.

⚠ **Caution:** Before transporting bed, unplug bed from power source, secure Power Cord on cord storage straps on Head Panel and hang Pendant from Head Panel. Failure to do so could result in Power Cord, pendant cord, or bed damage, thereby creating a potential hazard.

⚠ **Caution:** Extend all four sections on each side prior to adjusting bed position or side rails.

⚠ **Warning:** Use Width Extenders only after the resident/patient is safely positioned in the bed. Failure to do so could result in injury.

**⚠ Caution:** Drainage Bag Loops are not intended for use as tie downs.

**⚠ Warning: Possible Injury Or Death.** Bed safe working load is 850 pounds. This is total weight counting resident/patient, mattress, bedding and any other equipment or persons likely to be on bed. Do not exceed 850-pound safe working load. Exceeding the safe working load could result in property damage, injury or death.

**⚠ Warning: Possible Injury Or Death.** Do not use any Side Rails/Assist Devices until you verify they are locked in place. Failure to lock assist devices may result in injury or death.

**Notice:** Make sure the power cord is unplugged from the power outlet prior to disconnecting/connecting any foot panel cables. Failure to ensure bed is not powered when disconnecting/connecting the foot panel cables may result in damage to the bed's electronic controls.

**⚠ Warning: Possible Injury Or Death.** If using accessories not manufactured, marketed, or provided by Joerns Healthcare for Camtec beds, consult with the manufacturer for compatibility and limitations prior to use. Failure to do so may result in injury or death.

### Bed System Entrapment Information

In April 1999, the U.S. Food and Drug Administration (FDA) in partnership with representatives from the hospital and post-acute bed industry, including Joerns Healthcare, national healthcare organizations, resident advocacy groups, and other federal agencies formed the Hospital Bed Safety Workgroup (HBSW). The workgroup's goal is to improve the safety of bed frames for patients and residents in all health care settings who are most vulnerable to the risk of entrapment. The efforts of the FDA and the HBSW culminated in the FDA's release of recommended guidelines intended to reduce the risk of entrapment, including dimensional limits for critical gaps and spaces between bed system components and clinical guidance for assessment and implementation of bed side rails in various health care settings.

Entrapment zones involve the relationship of bed components often directly assembled by the healthcare facility rather than the manufacturer. Therefore, compliance is the responsibility of the facility.

As the leading manufacturer of long-term care beds and a frontrunner in addressing this critical issue, Joerns Healthcare can offer you the expertise, assistance and products to bring your facility into compliance.

### Joerns Compliance Solutions

Matching the right bed components in order to meet regulatory guidelines can be complex.

That is why Joerns offers a wide array of compliance options. We assist customers in selecting compliant accessories recommended for their specific bed model.

### For More Information

To learn more about compliance options with Joerns products, visit our website at [www.joerns.com](http://www.joerns.com), or contact our Customer Care reps at 800-826-0270 and ask for free informational publications.

To learn more about entrapment zones, assessment methods and guidelines concerning entrapment, contact Joerns Healthcare at 800-826-0270 or consult the FDA website: <http://www.fda.gov/MedicalDevices/ProductsandMedicalProcedures/GeneralHospitalDevicesandSupplies/HospitalBeds/default.htm>.

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## Introduction

The Joerns Camtec Series RC Ultra Hi-Lo Bed (RCUHLB850) has been designed primarily for use in hospitals and other institutions. The frame has a long history as the Camtec model 403649-S supporting care of some of the most challenging patients presented within the care continuum. The unique expandable frame design allows the bed to accommodate support surfaces of up to 48" wide. The bed surface can be adjusted to allow it to pass through a 40" door opening.

The frame is constructed of structural steel. The frames lowest position is approximately 9½" from the floor to the mattress support platform. The frame in the highest position is approximately 29".

The frame is designed to support a safe working load of 850 lbs. Side rails at the head end and foot end are standard. The rotation of the side rails assists in patient ingress and egress.

The trapeze is an available option using a full-frame design purpose built to support bariatric patients for this type of bed and allow convenient adjustability for repositioning. The bed is equipped with (3) locking swivel casters, (1) steering swivel caster and 4 small swivel casters to allow for easy bed movement and facilitate patient transport.

The bed contains four electric drive modules, one for the head, one for the knee, one Hi/Lo for the head end and one Hi/Lo for the foot end of the bed. A hand crank is supplied at the head end of the bed that can be used in the event of a power failure.

## Specifications

**Safe Working Load** ..... 850 lbs  
**Overall Width** ..... 40" expandable to 52"  
**Overall Length** ..... 94"  
**Mattress Support Platform** ..... Width: Adjustable 36", 40", 42", and 48"  
Length: 80"  
**Mattress Support Platform Height** ..... Lowest position (from floor) 9½"  
Highest position 29"

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**Power Requirements** ..... 115 VAC 60Hz 10.5 AMP

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### Operating Conditions

**Ambient Temperature** ..... +10°C to +30°C  
**Relative Humidity** ..... 30% to 95% Non-Condensing  
**Atmospheric Pressure** ..... 700 hPa to 1060 hPa

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### Storage and Shipping Conditions

**Ambient Temperature** ..... -30°C to +50°C Relative  
**Humidity** ..... 10% to 95%  
**Atmospheric Pressure** ..... 500 hPa to 1060 hPa

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**Bed Weight with Side Rails, End Boards** ..... 500 lbs.

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**Motor Duty Cycle for Intermittent Operation** .. 1 minute ON / 10 minutes OFF

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**Head Fowler** ..... Adjustable up to 70 degrees  
**Foot/Knee Gatch** ..... Adjustable up to 40 degrees  
**Trendelenburg** ..... Adjustable up to 12 degrees  
**Reverse Trendelenburg** ..... Adjustable up to 12 degrees

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**Side Rails** ..... Head end and foot end are standard, Rotation type

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**Casters** ..... Diameter 4" ..... Width 2⅜"  
(3) total lock and (1) steer lock  
Diameter 3" ..... Swivel (4)

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**Options** ..... Trapeze  
Mattress  
Foot Extension

## Operation

1. When raising or lowering the bed, the casters at the head end should be locked and the casters at the foot end should be in the steer position. If the casters are locked at both ends at the same time, when raising or lowering the bed, damage to the bed may result.
2. Plug the power cord into a grounded 115 volt socket having a capacity of at least 15 amps. Make sure light on control module is illuminated.
3. Using the hand pendant, cycle the bed through all of its operations. Make sure that everyone is clear of the moving parts during these operations.
4. Use this User-Service Manual to instruct all personnel who are involved in the use of this model bed.
5. When transferring the patient into or out of the bed all four casters should be in the locked position.
6. Width section adjustments are made by pulling tether and sliding out extension.

**⚠ Caution:** Extend all four sections of each side **prior** to adjusting bed position or side rails.

7. Operate side rail using green button and rotating rail to ensure locked in place in up position or rotate down as needed.

**Notice:** Make sure the power cord is unplugged from the power outlet prior to disconnecting/connecting any foot panel cables. Failure to ensure bed is not powered when disconnecting/connecting the foot panel cables may result in damage to the bed's electronic controls.

## Casters

The bed is equipped with (4) locking casters consisting of (3) total lock & (1) steer lock and (4) swivel casters. The steer lock caster is located on the left foot position and will lock the direction of the caster inline (end to end) with the bed when activated. This allows for better control when transporting the patient. For best control the bed should be pushed or pulled from the head end.

Never lock casters at both ends at the same time, when raising or lowering the bed, as permanent damage to the bed may result. All casters should be locked during ingress or egress of patient.



Foot End Caster



Head End Caster

## Five Function Hand Pendant Operation

The **HEAD** up and down buttons cause the head of the bed to raise and lower.

The **FOOT** up and down buttons cause the knees and lower portion of the legs (Knee Gatch) to be raised and lowered.

The **BED** up and down buttons cause the height of the bed to raise and lower.

The **SEAT** up button causes the bed to go into a comfort chair position. The head section and head end of the bed will raise, the knee section will raise and the foot end of the bed will lower.

The **SEAT** down button will cause the bed to return to a supine position

The **TREND** down button will cause the foot end of the bed to raise and the head end to lower with a limiting angle of 12 degrees.

The reverse **TREND** up button will cause the foot end of the bed to go down and the head end of the bed to raise until reaching a limit of 12 degrees.

The **LOCK OUT ACTIVE** light indicates that a Staff Control Lockout feature is active. The hand pendant cannot override the Staff Control

When using the SEAT or TREND functions and want to return to a level position, it is often easiest to lower the bed to its lowest point.

The bed contains four electric drive modules. A hand crank is also supplied, at the head end of the bed; which can be used to adjust the bed in the case of a power or actuator failure. Disconnect the power before using the crank. The pendant should not be used during hand cranking.



## Staff Control Pendant Operation

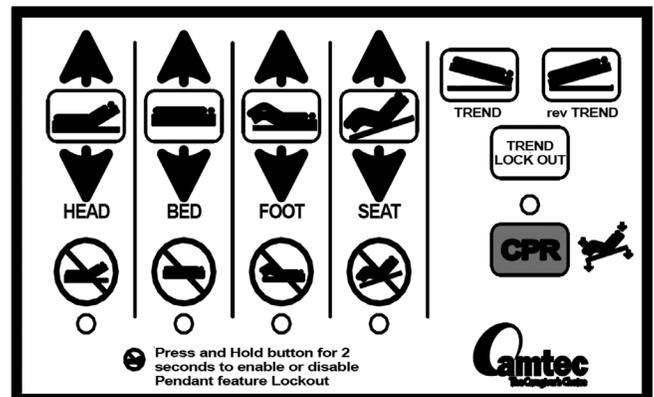
**⚠ Caution:** Keep air therapy pumps clear of staff control.

The staff control pendant is located on the outside of the foot end board. These controls let the staff lock out any single, combination or all of the bed functions.

The functions of the Universal Staff Control operate the same as the Five Function Hand Pendant, but there are some additional functions on the Universal Staff Control.

There is a **LOCK OUT** feature. Press and hold the Lock Out button for 2 seconds to enable or disable the Lock Out feature. The Lock Out activation will be indicated on the Universal Staff Control Pendant.

The **CPR** feature overrides all Lock Outs and returns the bed to a supine position.



## Cleaning and Maintenance

### Cleaning

**⚠ Warning:** High pressure cleaning or power wash are not to be used on any frame part.

**⚠ Warning:** Lock casters when cleaning, inspecting or performing any maintenance on the bed. Lower all mattress support platform sections unless necessary for service access.

#### **Before cleaning any portion of the bed, disconnect the power cord from the wall outlet**

1. Using standard cleaning procedures, wipe down the frame of the bed. Be sure to wear appropriate protection for the type of materials being used.
2. Use cleaning detergents sparingly around the pendant controller, electronic controller and the motors.

### Periodic Inspection and Maintenance

(See Customer Maintenance Check List)

The amount of maintenance required by the bed will be dictated by its use. As a minimum the unit should be periodically inspected every 6 months.

1. After a week or two of usage, check all the bolts to be sure that none of them have worked loose and that all pins are in their normal location and securely fastened. Check all welds.
2. At least once every six months the actuator drive screw should be lubricated using a heavy duty grease such as Drydene #5871 or equivalent.
3. Put light machine oil on all pivot points every 6 months.
4. Check all electrical connections for tightness.
5. Check all electrical wiring for fraying, kinking damage and/or deterioration.

**IF ANY DISCREPANCIES ARE NOTED DURING INSPECTION, THEY MUST BE CORRECTED BEFORE CONTINUED USE OF THE BED.**

Joerns Healthcare Technical Support can provide additional assistance to repair or troubleshoot any problems.

Major service and repair must only be performed by authorized Joerns Healthcare Technical Support, which you may contact at 800.966.6662.

## Troubleshooting

Problem	Possible Cause	Solution
No functions operate	No power to unit	Check that the power cord is plugged into receptacle and light on control module is illuminated.  Check for cord breaks
Power light does not light	Electrical cords not properly plugged into control module	Check all electrical cords and connections.
Power light is on but no functions operate	Bad pendant	Replace pendant
	Bad control module	Replace control module
Three motors operate "OK" One motor will not operate	Bad pendant	<p><b>Isolate the Problem</b> Interchange motor connections on control module. Swap connections on the module so that problem motor is plugged into a motor connection on the module that is working. If the problem motor now operates and the motor that was OK now does not operate, it indicates either the control module or the pendant is faulty. Replace as required.</p>
	Bad control module	
	Bad motor	
	Bad wiring	
<p>If the above does not resolve the problems, call Joerns Healthcare Technical Support at 800.966.6662. Have the serial number of the bed and make the phone call from as close to the bed as practical.</p>		

**Joerns® Camtec Series Bed Frames  
RC Ultra Hi-Lo Bed (RCUHLB850)**

**Customer Maintenance Check List**

S/N Bed \_\_\_\_\_ S/N Controller \_\_\_\_\_

Bed Model \_\_\_\_\_ Date \_\_\_\_\_

				Initial	Date
1	Verify what options are on the bed:				
	Foot End Side Rails	<input type="checkbox"/>	Scale	<input type="checkbox"/>	
	Head End Side Rails	<input type="checkbox"/>	Trapeze	<input type="checkbox"/>	
	Pads (If Applicable)	<input type="checkbox"/>	I.V. Pole	<input type="checkbox"/>	
	Other _____				
2	Verify and record the S/N				
3	Check Head Section operation with pendant				
4	Check Knee Gatch operation with pendant				
5	Check the Bed Elevation operation with pendant				
6	Check the Trendelenburg operation with pendant (If Applicable)				
7	Check the Seat operation with the pendant (If Applicable)				
8	Check casters function: Steer _____ Total _____				
9	Inspect the hardware to ensure that components are fit securely				
10	Check to ensure that the Electrical components are secure				
11	Check Power Cord for the following:				
	A: Check all strain reliefs and cable clamps are secure				
	B: Check for worn areas, cuts or frays				
	C: Check plug for bent or loose prongs				
12	Check that Pendant cord has no damage and that it is secured properly to the control box				
13	Check to ensure that all decals are affixed at proper location				
	Head, Foot and Motor decals				
	Power and Control Cord on Head Board				
	Power and Control on the Control Box				
14	Check the presence and fit of the Mattress Stop				
15	Check the presence, fit and operation of the Emergency Crank				
16	Check the operations of all accessory options noted in #1 above				
17	Check to ensure that the side rails function properly and lock in place				
18	Measure and record the Leakage Current value should be less than 250 microamperes (UL 60601-1) Use Calibrated Model LT544D-20 Digital Safety Analyzer Measured Value _____				
19	Measure and record Line Grounding Resistance. Value should read equal to or less than 0.1 OHMS as measured between the ground wire in the line cord and the bed frame. Measured Value _____				
20	Visually inspect the bed for paint or assembly defects; touch up as needed				
21	Check the Top Expansion (If Applicable) of the Mattress during operation at:				
	Head Section Right _____ Left _____				
	Center Section Right _____ Left _____				
	Upper Knee Gatch Right _____ Left _____				
	Lower Knee Gatch Right _____ Left _____				

**Customer Maintenance Check List Continued...**

	Initial	Date
22 Lubricate all pivot points with a light machine oil. (This should be done approx. every 6 months)		
23 Lubricate the actuator drive screws using a heavy duty grease such as Drydene #5871 or equivalent. (This should be done approx. every 6 months)		
24 If bed is a Scale Bed, check that the scale functions are operating properly		
25 Check that all scale/exit alarm connections are secure		
26 Test bed exit alarm		

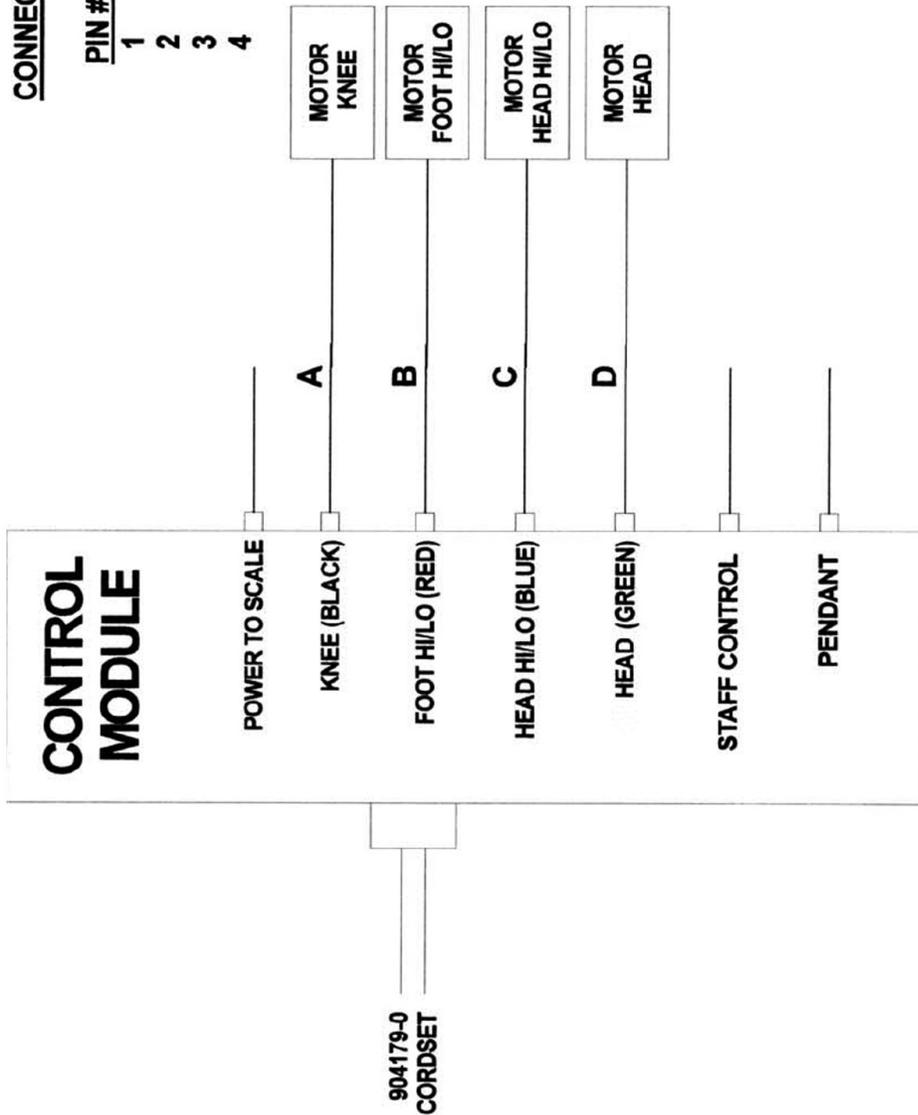
**Comments**

Inspector Signature \_\_\_\_\_ Date \_\_\_\_\_

Appendix A - Wiring Diagram

**CONNECTOR PIN CONNECTIONS**

PIN #	WIRE COLOR
1	WHITE
2	GREEN
3	BLACK
4	RED

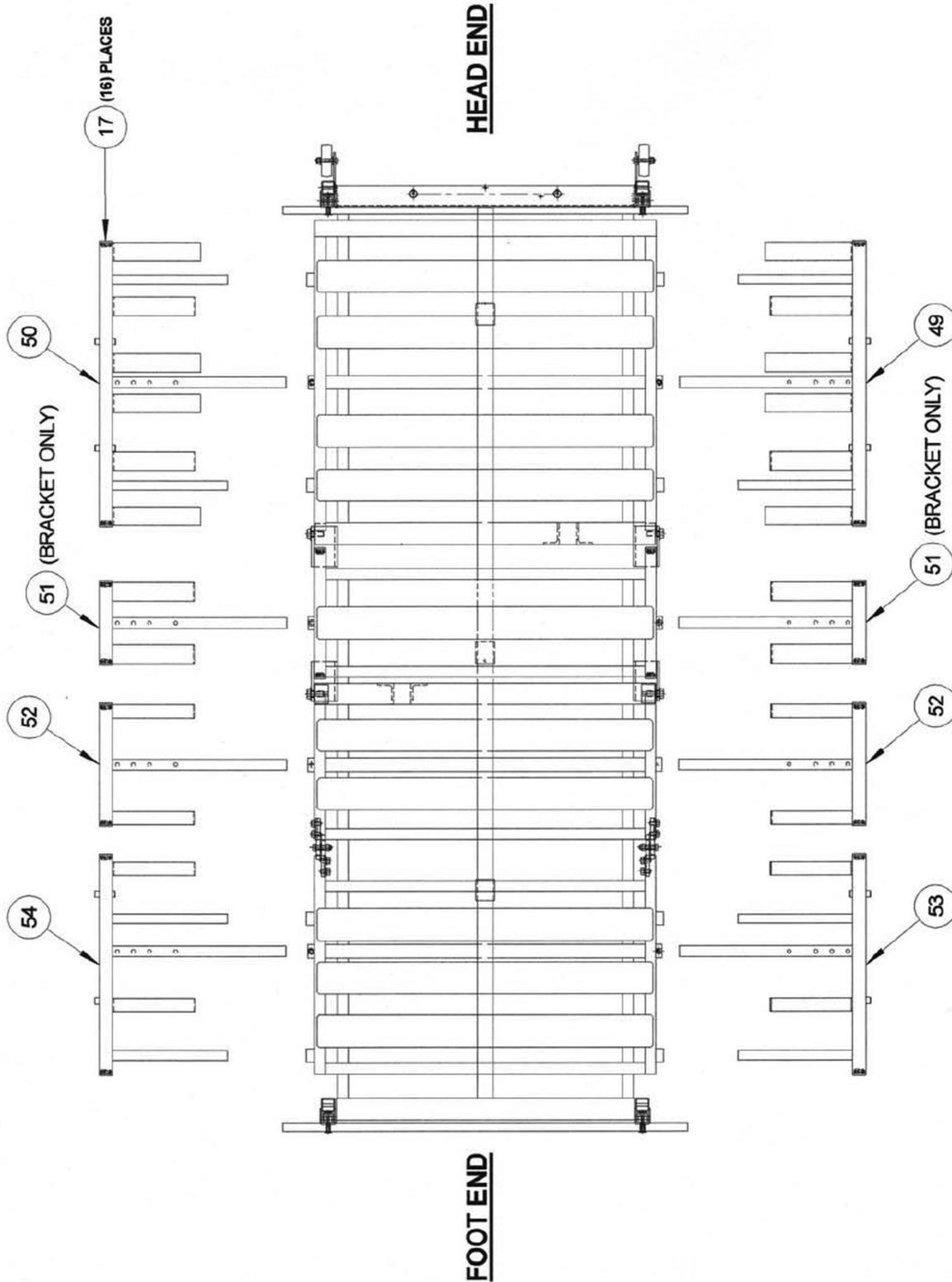


**LEADS:**

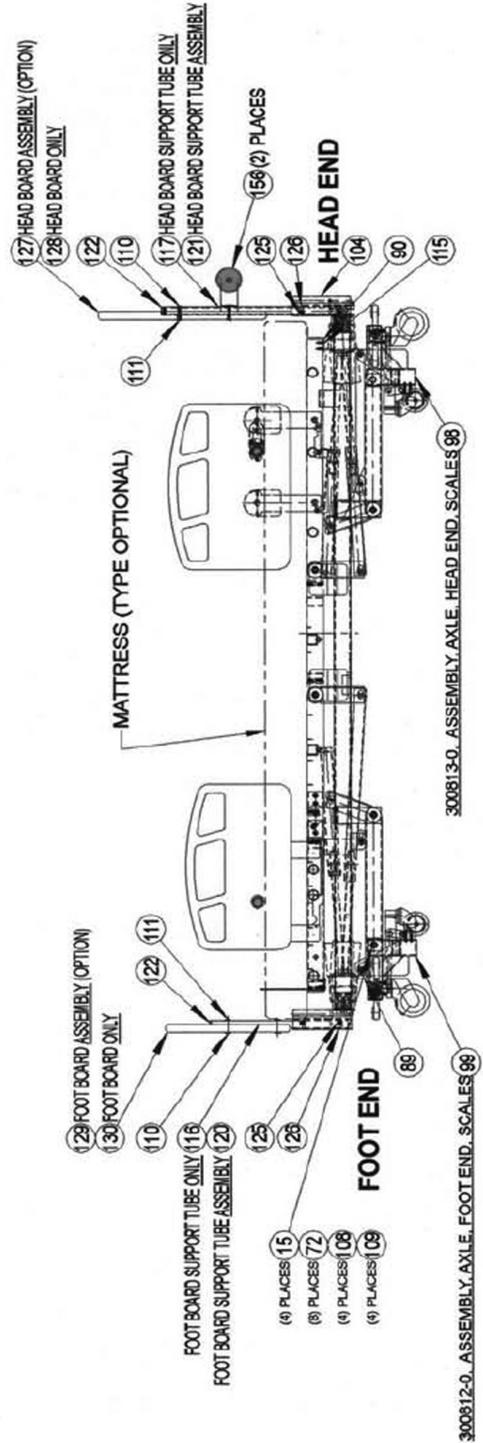
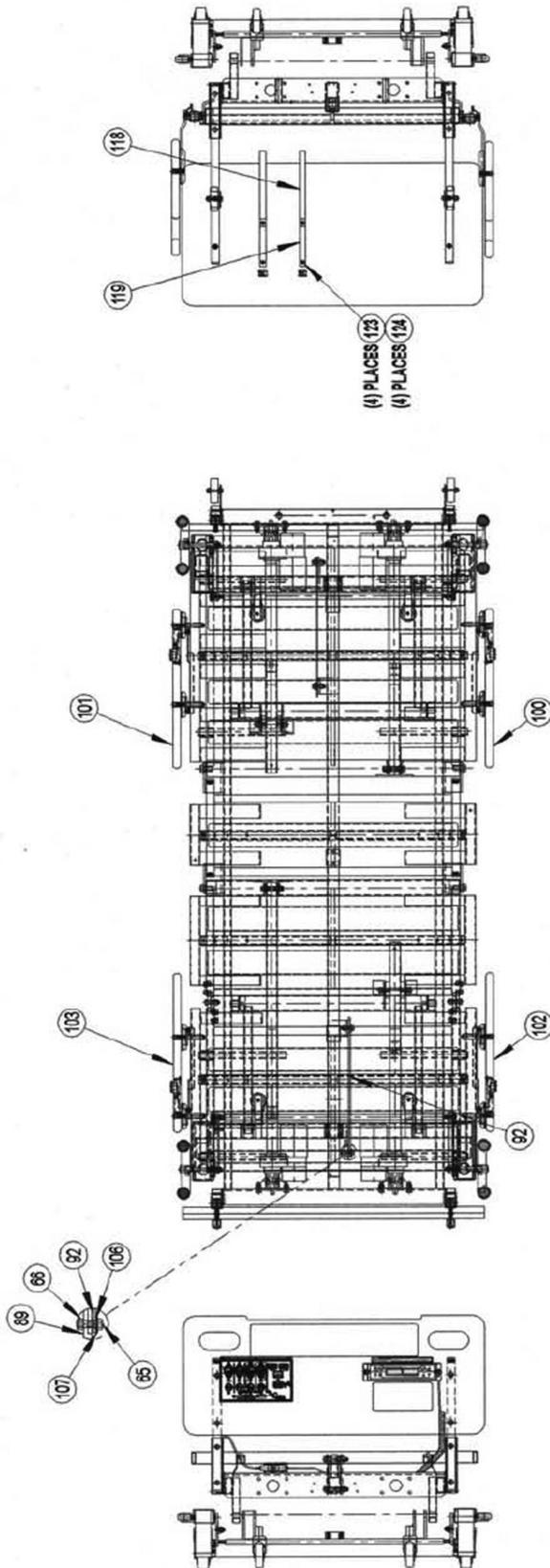
- A = 904003-0 ACTUATOR ASSEMBLY, KNEE GATCH
- B = 904005-0 ACTUATOR ASSEMBLY, HI-LO FOOT
- C = 904005-1 ACTUATOR ASSEMBLY, HI-LO HEAD
- D = 904004-0 ACTUATOR ASSEMBLY, HEAD



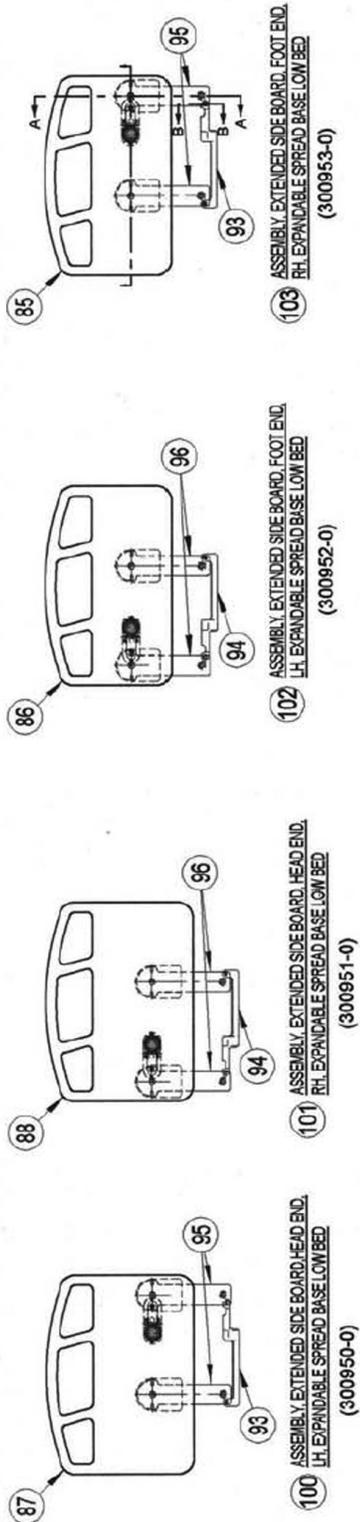
Appendix A - Mattress Support Assembly



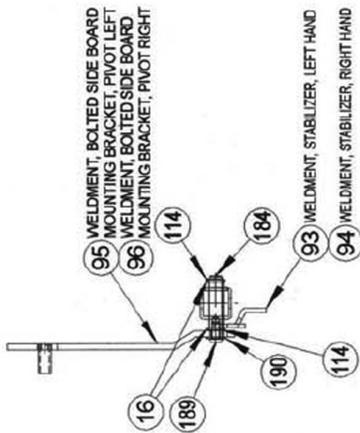
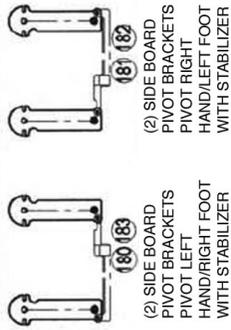
Appendix A - Basic Bed Assembly



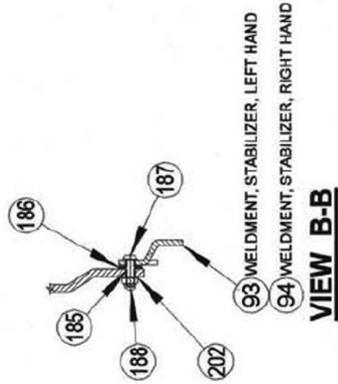
Appendix A - Side Boards and Hardware



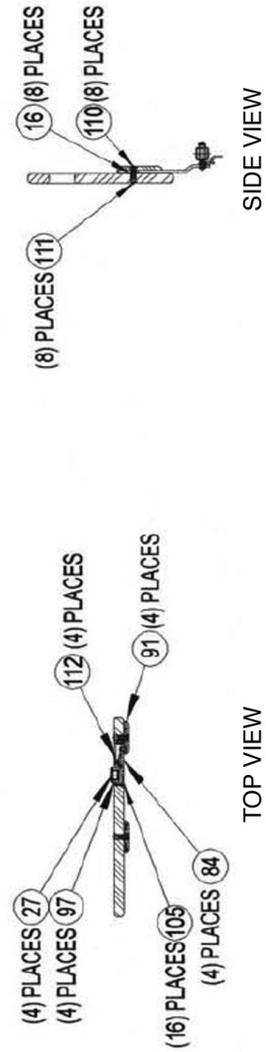
REPLACEMENT SIDE RAIL MOUNTING BRACKETS



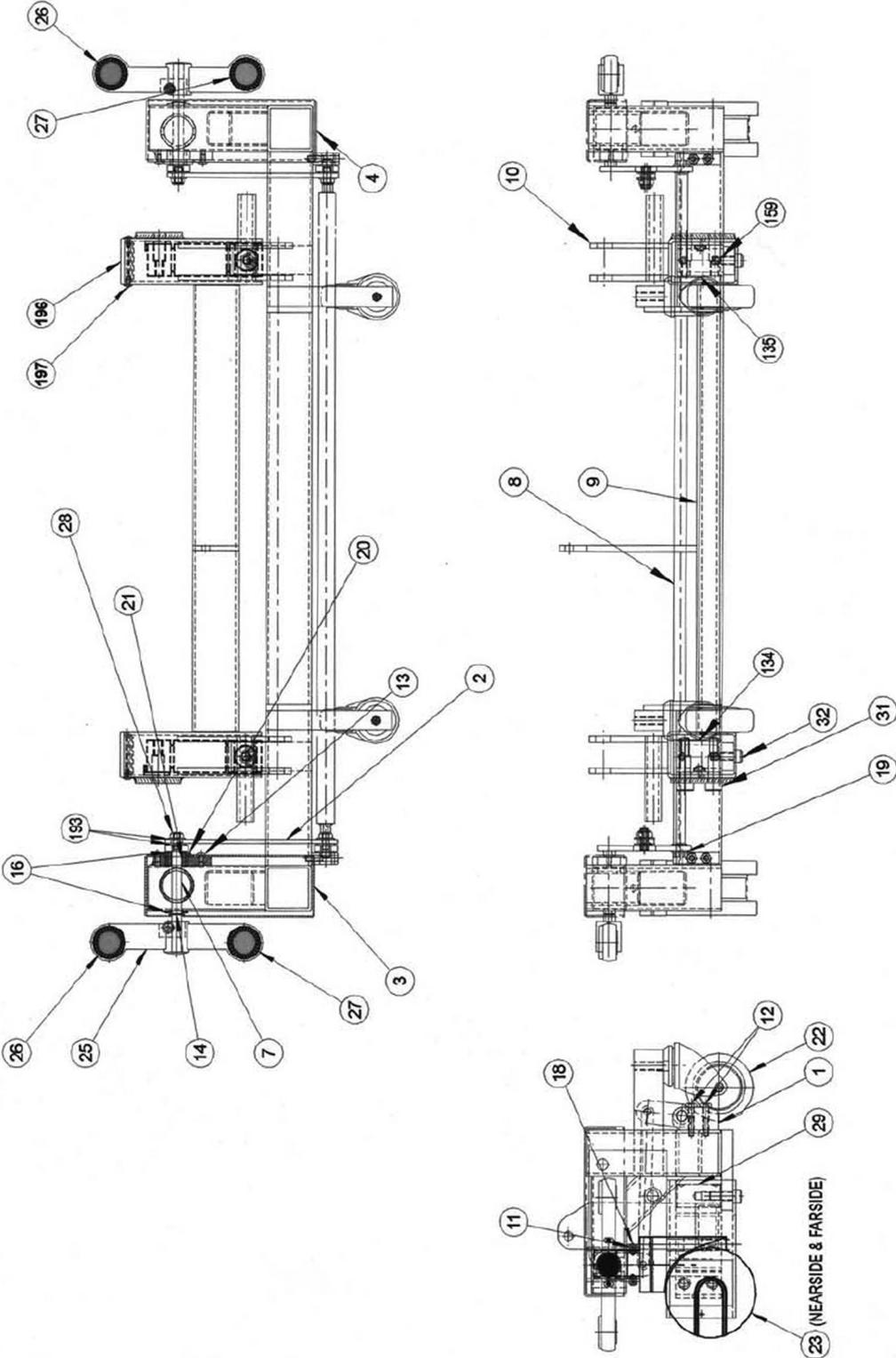
VIEW A-A



VIEW B-B

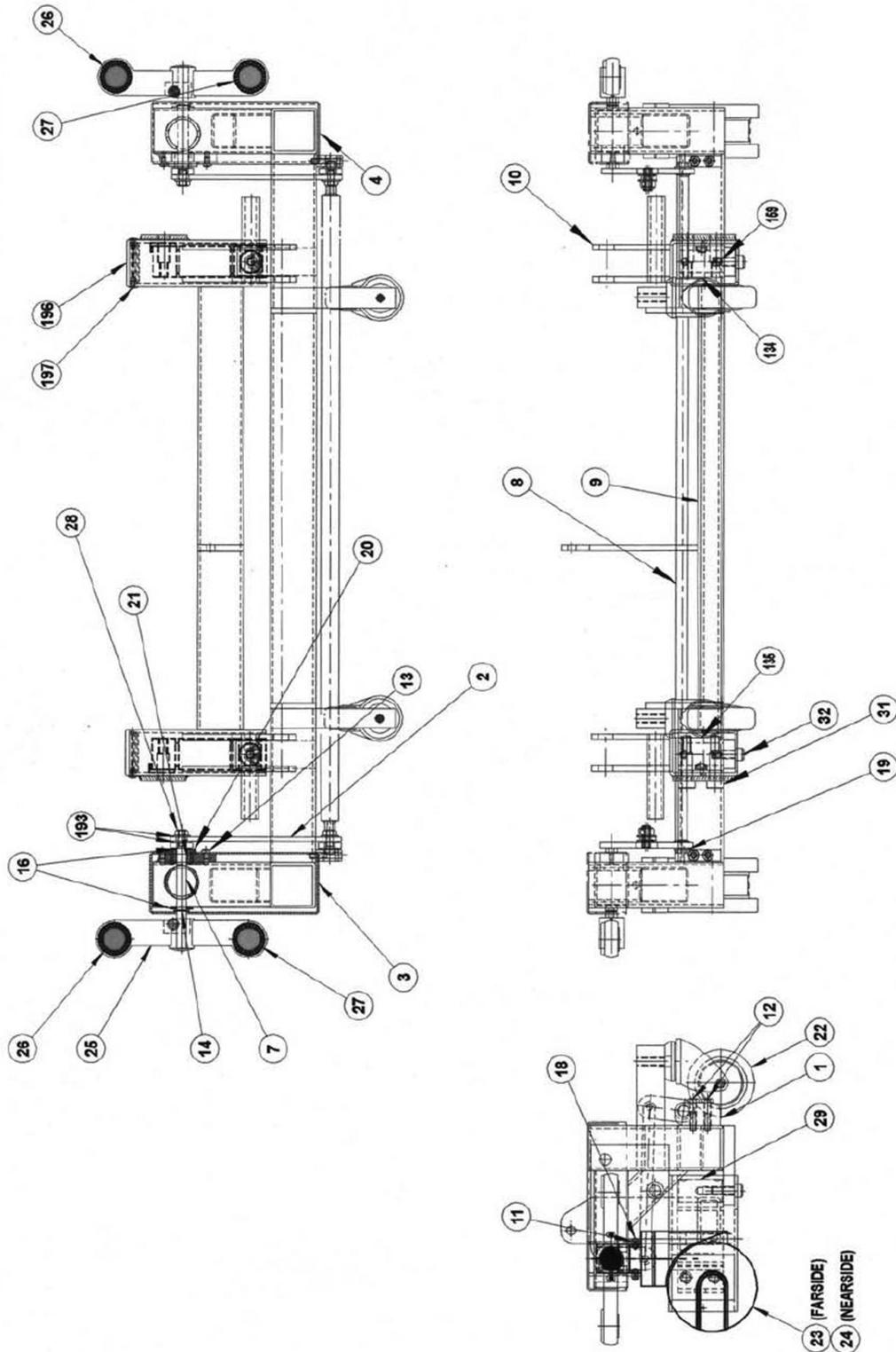


Appendix A - Axle Assembly, Head End



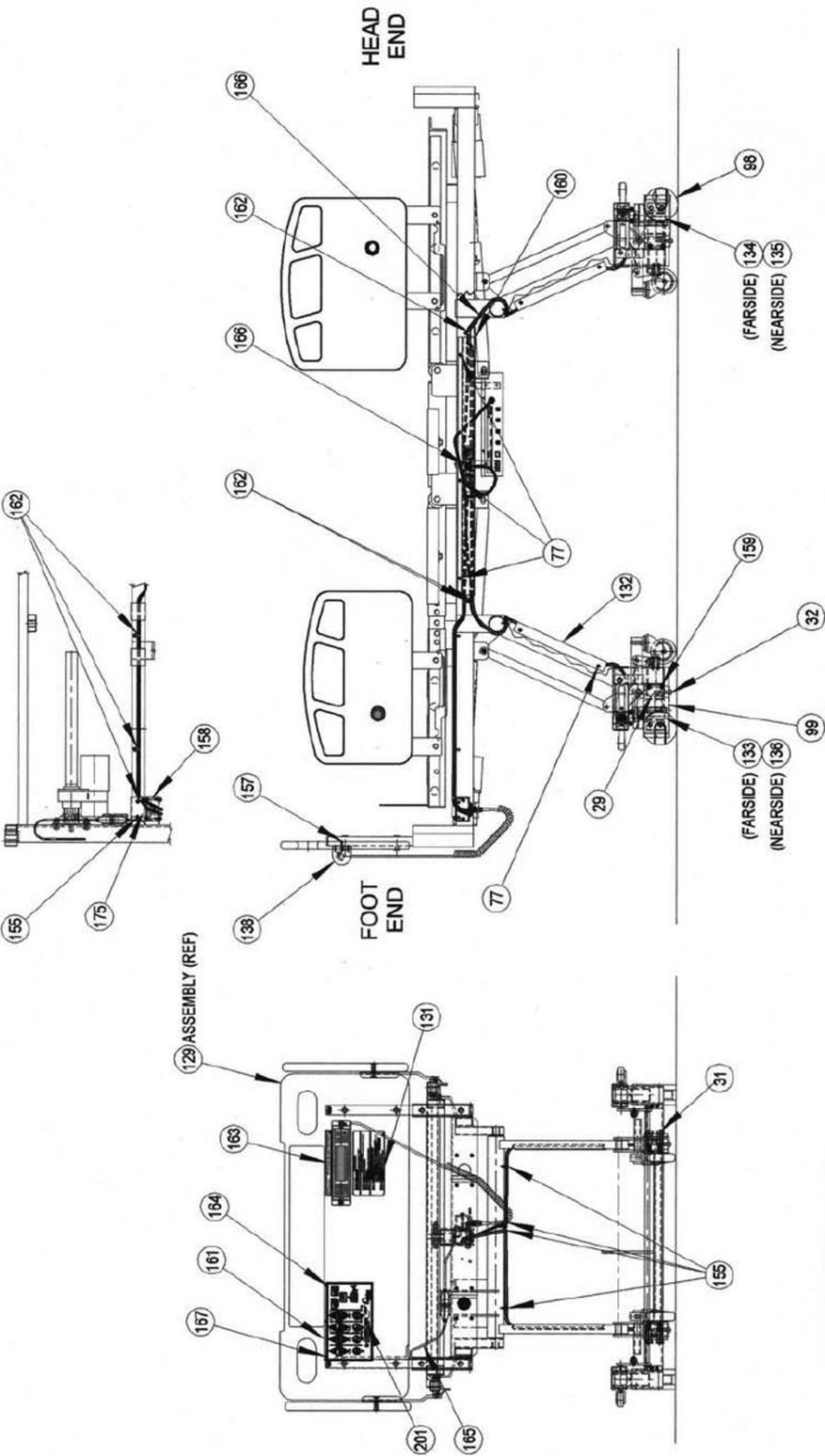
98 **ASSEMBLY, AXLE, HEAD END, SCALES**

Appendix A - Axle Assembly, Foot End



**ASSEMBLY, AXLE, FOOT END, SCALES**

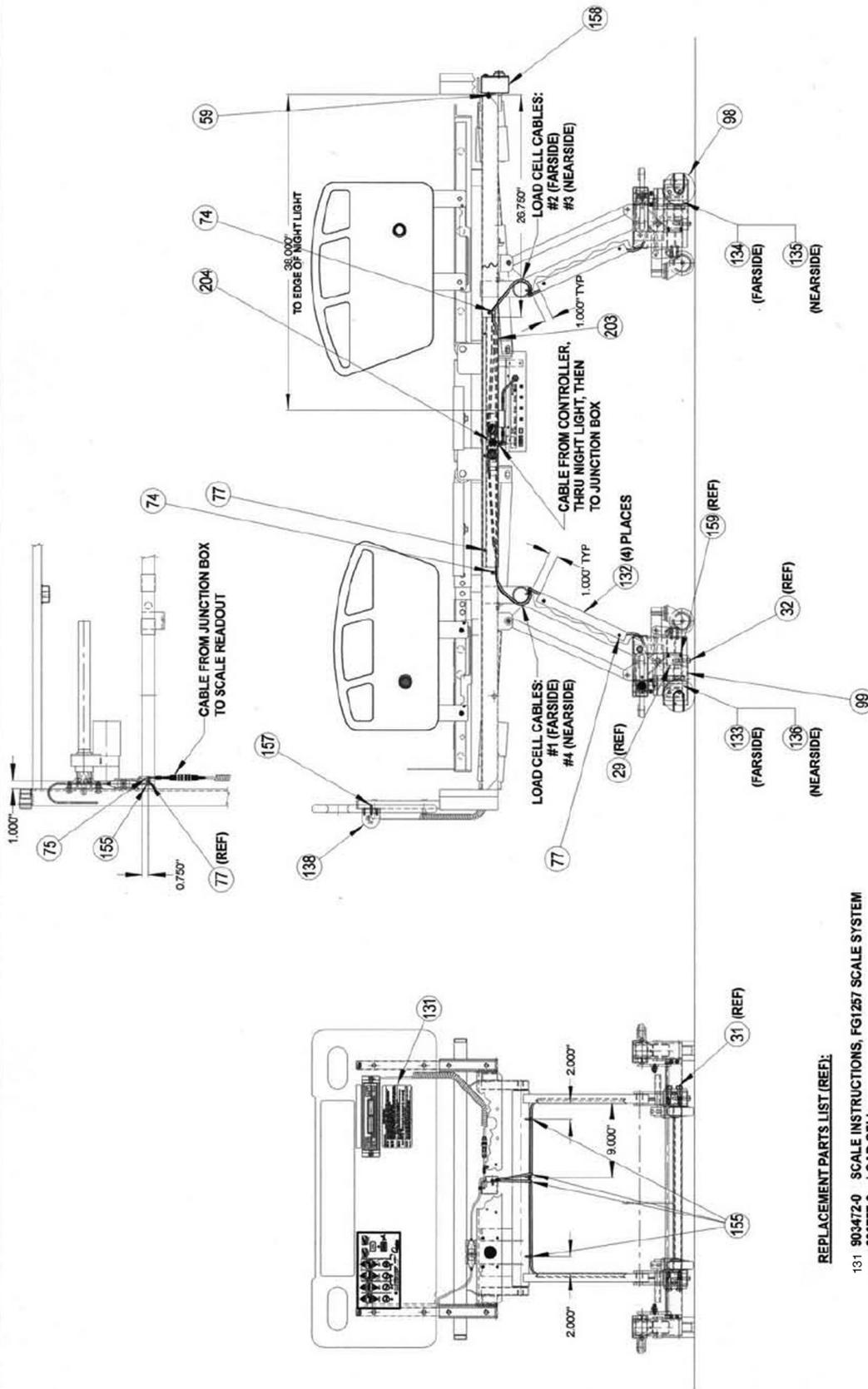
Appendix A - Scale System Assembly FG 1250 Base Scale



**REPLACEMENT PARTS LIST (REF):**

ITEM NO.	DESCRIPTION
131	903766-0 LABEL, SCALE INSTRUCTIONS
133	903777-0 LOAD CELL
134	LOAD CELL
136	LOAD CELL
138	LOAD CELL
158	903773-0 SCALE READOUT, ROTATING, FG1250
166	904113-0 JUNCTION BOX
176	904112-0 CABLE HARNESS, CS3600
	107308-0 BRACKET, JUNCTION BOX MOUNTING

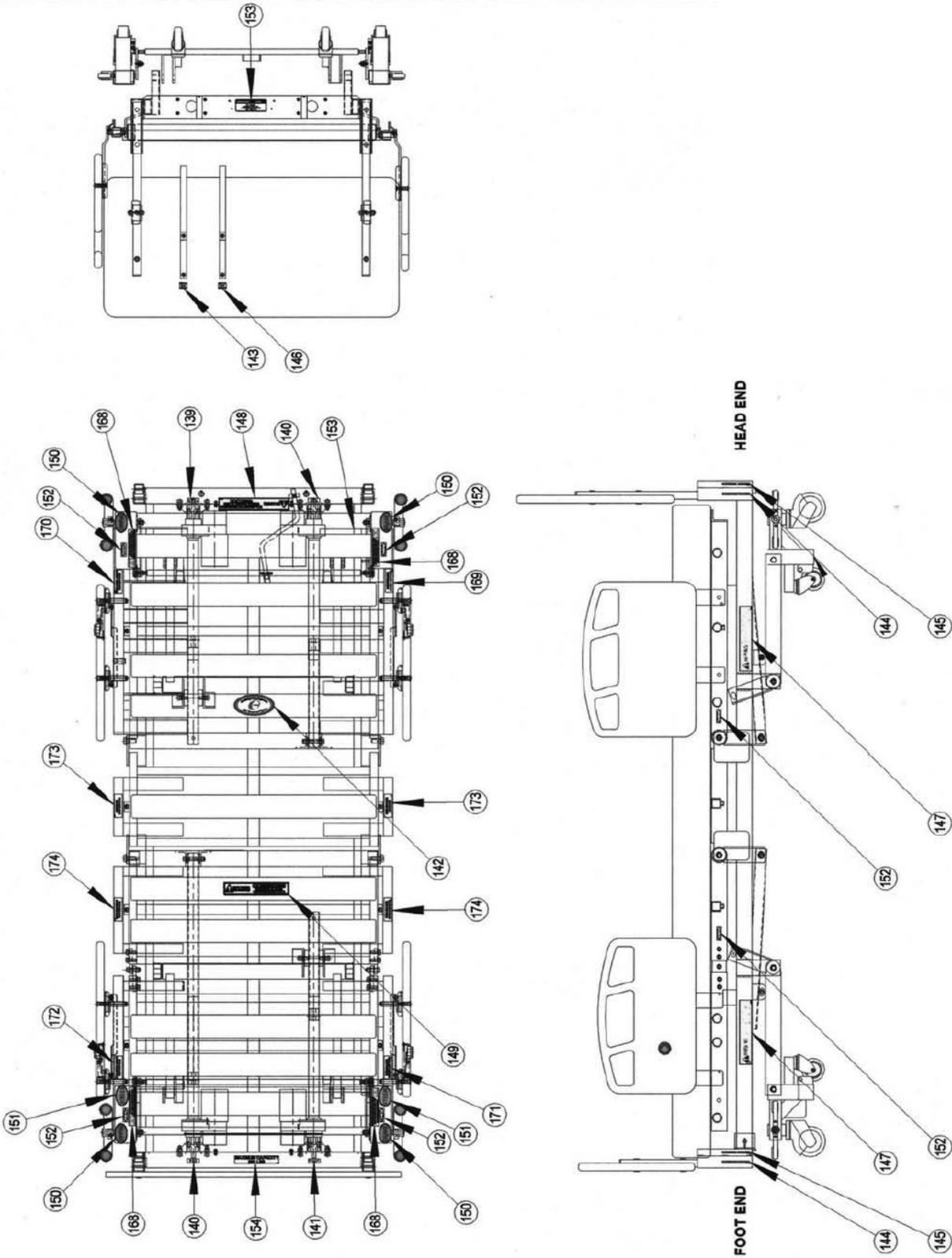
Appendix A - Scale System Assembly FG1257 with Bed Exit/Nurse Call



REPLACEMENT PARTS LIST (REF):

- 131 903472-0 SCALE INSTRUCTIONS, FG1257 SCALE SYSTEM
- 133 903777-0 LOAD CELL
- 134 LOAD CELL
- 135 LOAD CELL
- 136 LOAD CELL
- 204 904112-0 CABLE HARNESS, CS3800
- 158 904193-0 JUNCTION BOX, FG1257 SCALE SYSTEM
- 138 904194-0 SCALE READOUT, ROTATING, FG1257
- 904199-0 CABLE, HOOK-UP, JUNCTION BOX TO SCALE READOUT, FG1257
- 904200-0 CABLE, HOOK-UP, JUNCTION BOX TO NIGHT LIGHT, FG1257
- 904201-0 NIGHT LIGHT, UNDER BED, FG1257
- 904480-0 CABLE POWER CONTROLLER TO NIGHT LIGHT
- 904481-0 CABLE, TRANSDUCER, JUNCTION BOX TO CABLE HARNESS

Appendix A - Label Location



Appendix A - Labels Used on Bed

ITEM NO.	P/N	DESCRIPTION	LABEL
139	903477-0	LABEL, HEAD	
140	903478-0	LABEL, BED	
141	903479-0	LABEL, FOOT	
142	903482-0	LABEL, CAMTEC LOGO CAREGIVERS	
143	903489-0	LABEL, POWER CORD HANGER	
144	903490-0	LABEL, END BOARD SOCKET	
145	903491-0	LABEL, TRAPEZE SOCKET	
146	903500-0	LABEL, PENDANT CORD HANGER	
147	903502-0	LABEL, WARNING KEEP FEET	
148	903505-0	LABEL, IN CASE OF POWER FAILURE	
149	903507-0	LABEL, 2" GAP	
150	903508-0	LABEL, CASTER CAP, TOTAL LOCK	
151	903509-0	LABEL, CASTER CAP, STEER LOCK	
152	903530-0	LABEL, CAUTION PINCH AREA	
153			
154	903569-0	LABEL, MAX. 850 LBS	
168	904392-0	LABEL, WHEN RAISING, MAINTAIN 15" FROM WALL	
169	904438-0	LABEL, SLIDE ID, 3649 LEFT HEAD	
170	904439-0	LABEL, SLIDE ID, 3649 RIGHT HEAD	
171	904440-0	LABEL, SLIDE ID, 3649 LEFT FOOT	
172	904441-0	LABEL, SLIDE ID, 3649 RIGHT FOOT	
173	904442-0	LABEL, SLIDE ID, 3649 MID SECTION	
174	904443-0	LABEL, SLIDE ID, 3649 UPPER KNEE GATCH	
175	903483-0	LABEL, DO NOT PRESS	
131	903472-0	LABEL, SCALE INSTRUCTIONS  Label used on 3649-SS Scale System, FG1257	
131	903768-0	LABEL, SCALE INSTRUCTIONS  Label used on 3649-S Scale System, FG1250	

## Appendix A - Parts List

Item	Part No.	Description
1	107-65-0	Plate, Caster Lock Transmission Pivot
2	107068-0	Plate, Caster Lock Link
3	203649-0	Weldment, Caster Cap RH
4	203648-0	Weldment, Caster Cap LH
5		
6		
7	203526-0	Weldment, Caster Lever Mounting Rod
8	203533-0-	Weldment, Caster Lock Transmission Shaft
9	203602-0	Weldment, Axle, Scale
10	24006640	Weldment, Scale Pivot Axle
11	900085-0	Washer, Lock, ¼" Internal Tooth
12	900149-0	Bolt, Hex, ¼-20 x 1-¼
13	900328-S	Screw, 10-32 UNF x ¼ SS Pan Head Phillips
14	900358-0	Retaining Ring
15	900411-0	Nut, ½-13 Hex, ESNA
16	900419-0	Washer, Nylon, ½ x ¾ x 1/16
17	903458-0	Caplug, 1¼" SQ
18	903630-0	Screw, 6mm x 10mm Pan Head Phillips
19	903631-0	Bushing, Flanged, ⅜" ID x ½" OD
20	903632-0	Bushing, Flanged, ¾" ID x 1" x ⅝" LG
21	903664-0	Bushing, Sleeve, ½" ID x ¾" OD x ⅝" LG
22	903785-0	Caster, 3" w/Stud, Swivel
23	903931-0	Caster, Total Lock
24	903932-0	Caster, Steer Lock
25	903994-0	Lever, Caster Locking
26	903995-0	Plug, Caster Lever, Red
27	903996-0	Plug, Caster Lever, Green
28	904017-0	Nut, 5/16-18 Hex, JAM, ESNA
29	107312-0	Stud, Load Cell Mounting
30		
31	901233-0	Shoulder Bolt, Load Cell, ½" DIA x 1.250" LG
32	903699-0	Screw, ⅜-16 x 1.000" LG Socket Head Cap
33	104592-0	Spacer, ½" x 9/16"
34	903925-0	Casting, Hinge Half
35	106071-0	Spacer, 0.937"
36	106072-0	Spacer, 0.402" x 0.625" OD
37	106141-0	Spacer, 2.032"
38		
39	107073-0	Bushing, Knee Gatch Link Mounting
40		
41	107137-0	Spacer, Knee Gatch Link Mounting

## Appendix A - Parts List

Item	Part No.	Description
42	107382-0	Hanger, Camtec Controller
43	107170-0	Mattress Stop, Flat, Flip-Up
44	107179-0	Link, Knee Gatch Connecting
45	903924-0	Casting, Actuator Mounting
46	203060-0GY	Weldment, Lower Knee Gatch
47	203204-1GY	Weldment, Emergency Crank, Bed
48	24006635GY	Weldment, Leg Link
49	203541-0GY	Weldment, Side Board Support, LH Head
50	203542-0GY	Weldment, Side Board Support, RH Head
51	203543-0GY	Weldment, Mattress Support, Mid Section
52	203544-0GY	Weldment, Mattress Support, Upper Knee Gatch
53	203545-0GY	Weldment, Side Board Support, LH Lower Knee Gatch
54	230546-0GY	Weldment, Side Board Support, RH Lower Knee Gatch
55		
56	203544-0GY	Weldment, Head Section
57	203555-0GY	Weldment, Upper Knee Gatch
58	300587-0	Assembly, Adjustable Side Rail Release Plunger
	9003645-0	Pull Tab, Bed Width Adjustment Pin
59	900094-0	Nut, 10-32 Hex, ESNA
60	900129-0	Washer, Lock 3/8" HELICAL
61	900171-0	Washer, #10 Internal Tooth
62	900658-0	Caplug, RER 1 x 2 - 14-20
63	901007-0	Screw, #10-32 x 5/8" LG, Round Head Phillips Stainless
64	902513-0	Bolt, Hex, 3/8-16 x 1" LG
65	902514-0	Bolt, Hex, 3/8-16 x 1 1/2" LG
66	902518-0	Nut, 3/8-16 Hex, ESNA
67	903115-0	Bolt, Hex, 1/2-13 x 1 1/4" LG
68	903118-0	Bolt, Hex, 3/8-16 x 2 1/2" LG
69	903152-0	Bushing, SS1620 18, 5/8" x 1 1/8"
70	903154-0	Bolt, Hex, 1/2-13 x 2"
71	903172-0	Spring Clip
72	903173-0	Washer, Nylon, 5/8" x 1 1/8" x 1/16"
73	903174-0	Grommet, 3/4" x 1 1/8"
74	903180-0	Cable Clamp 5/16" Nylon
75		
76	903605-0	Washer, Rubber, 1/2" Screw Size
77	903653-0	Screw, #10-24 x 1/2" LG Self Tapping Hex Head
78	903950-0	Pendant, 10 Button DC, XL Series
79	904003-0	Actuator Assembly, Knee Gatch
80	904004-0	Actuator Assembly, Fowler
81	904005-0	Actuator Assembly, Hi-Lo Foot

## Appendix A - Parts List

Item	Part No.	Description
82	904005-0	Actuator Assembly, Hi-Lo Head
83	904009-0	Controller with Molex Connectors, 5 Function
84	904322-0	Cover, Latch, Side Board
85	904323-0	Side Board, Foot End, RH, Spread Base Low Bed
86	904324-0	Side Board, Foot End, LH, Spread Base Low Bed
87	904325-0	Side Board, Head End, LH, Spread Base Low Bed
88	904326-0	Side Board, Head End, RH, Spread Base Low Bed
89	903947-0	Controller, Staff Control
90	904406-0	Strip, Knee Gatch Skid (Old Part Number 107119-0)
91	904329-0	Cover, Side Board Pivot Arm
92	107139-0	Link, Axle Stabilizer
93	203558-0GY	Weldment, Stabilizer, LH, Spread Base Low Bed
94	203559-0GY	Weldment, Stabilizer, RH, Spread Base Low Bed
95	203654-0GY	Weldment, Bolted Side Board MTG Arm, Pivot Left
96	203655-0GY	Weldment, Bolted Side Board MTG Arm, Pivot Right
97	904289-0	Casting, Side Board Release
98		
99		
100	300950-0	Assy, Bolted Side Board, EXP, Pivot Left, LH, Head End
101	300951-0	Assy, Bolted Side Board, EXP, Pivot Right, RH Head End
102	300952-0	Assy, Bolted Side Board, EXP, Pivot Right, LH Foot End
103	300953-0	Assy, Bolted Side Board, EXP, Pivot Left, RH Foot End
104		
105	900053-0	Screw, #10-3/4" LG Flat Head Phillips
106	900991-0	Washer, Nylon, 3/8" x 3/4" x 1/16" Thick
107	902516-0	Washer, Flat, 3/8" Zinc Plated
108	904369-0	Bushing, 1/2" x 5/8" x 7/8"
109	903155-0	Bolt, 1/2-13 x 2 1/2", Hex
110	903165-0	Head Board Nut, 1/4-20 x 17mm
111	903637-0	Head Board Bolt, 1/4-20 x 30mm
112	904000-0	Spring, Compression, 0.480" OD
113		
114	904015-0	Ring, Retaining, .0500" Shaft, E-Style
115	904067-0	Rivet, Drive, Polyamide, 0.250" x 0.750" LG
116	104605-0	Foot Board Support
117	104607-0	Head Board Support
118	106459-0	Strap, Cord Hanger, Velcro Loop
119	106460-0	Strap, Cord Hanger, Velcro Hook
120	300591-0	Assembly, Foot Board Support Tube
121	300592-0	Assembly, Head Board, Support Tube
122	900653-0	Caplug, Square 1"

## Appendix A - Parts List

Item	Part No.	Description
123	903175-0	Washer, Finish, #8 SS
124	903176-0	Screw, #8 x 1/2" LG, Oval Head, Phillips, SS
125	903451-0	Spring, Compression, 0.600" OD x 3/4" LG
126	903452-0	Ball, 5/8" DIA Chrome
127	300242-0	Assembly, Head Board, 39", Meteor Nebula
128	904312-0	Head Board, 39", Meteor Nebula
129	300780-S	Assy, FT BRD, 39" W/Staff Cont. and Scale, Meteor Nebula
130	904328-0	Foot Board, 39" W/Staff Control Pend., Meteor Nebula
131	903472-0	Label, Scale Instructions FG1257
131	903768-0	Label, Scale Instructions FG3600
132	107257-0GY	Cover, Cord, Leg Link
133	903777-0	Load Cell
134		
135		
136		
137		
138	904194-0	Scale Readout, Rotating, FG1257
138	903773-0	Scale Readout, Rotating, FG1000
139	903477-0	Label, Head
140	903478-0	Label, Bed
141	903479-0	Label, Foot
142	903482-0	Label, Camtec Logo Caregivers
143	903489-0	Label, Power Cord Hanger
144	903490-0	Label, End Board Socket
145	903491-0	Label, Trapeze Socket
146	903500-0	Label, Pendant Cord Hanger
147	903502-0	Label, Warning Keep Feet
148	903505-0	Label, In Case of Power Failure
149	903507-0	Label, 2" Gap
150	903508-0	Label, Brake, Caster Cap Total Lock
151	903509-0	Label, Steer, Caster Cap Steer Lock
152	903530-0	Label, Caution Pinch Area
153		
154	903569-0	Label, Max. 850 LBS
155	904071-0	Cable Clamp, 3/16" Nylon
156	300828-0	Assembly, Bumper Wheel
157	900021-0	Screw, #10-32 x 1" LG Flat Head Phillips, Stainless Steel
158	904193-0	Junction Box, FG1257 Scale System
159	903235-0	Screw, 5/16-18 x 3/8" LG Socket Set
160		
161		

## Appendix A - Parts List

Item	Part No.	Description
162		
163		
164		
165		
166		
167	904201-0	Night Light, Under Bed FG1257
168	904392-0	Label, When Raising, Maintain 15" From Wall
169	904438-0	Label, Slide ID, 3649 Left Hand
170	904439-0	Label, Slide ID, 3649 Right Hand
171	904440-0	Label, Slide ID 3649 Left Foot
172	904441-0	Label, Slide ID, 3649 Right Foot
173	904442-0	Label, Slide ID, 3649 Mid Section
174	904443-0	Label, Slide ID, 3649 Upper Knee Gatch
175	903483-0	Label, Do Not Press
180	300966-0	Assembly, Two Side Board Pivot Brackets, Short Rod, Pivot Left Head/Right Foot with Stabilizer
181	300967-0	Assembly, Two Side Board Pivot Brackets, Short Rod, Pivot Right Head/Left Foot with Stabilizer
182		
183		
184	107422-0	Rod, Tapped, Side Board Pivot, Short
185	107427-0	Spacer, Stabilizer Pivot
186	901016-0	Washer, Nylon, 0.312" ID x 0.500" OD x 0.062" Thick
187	904358-0	Screw, ¼-20 UNC x 7/8" LG BUT HD Socket Cap
188	904361-0	Nut, 0.250-20 Hex ESNA, Thin, Zinc Plated
189	904367-0	Screw, 5/16-24 UNF x 5/8" LG BUT HD Socket Cap
190	904368-0	Washer, Flat, Thru Hardened, 0.344" ID x 0.786" OD x 0.056" Thick
191	904407-0	Screw, #4 Sheet Metal x ½" LG Flat Head Phillips, S/S
192	107347-0	Retainer, Staff Control (Old P/N 904414-0)
193	901016-0	Washer, Nylon, 5/16 x ¼ x 1/16
194	900891-0	Bolt, 3/8-16 x ¾" Hex
195	902509-0	Nut, 3/8-16 ESNA, Thin
196	901237-0	Caplug, 2" x 3" x 11 GA
197	903194-0	Screw, #6 x 3/8" LG SS Phillips
198	904179-0	Cordset
199	904072-0	Bolt, Hex, 3/8-16 x 5/8" LG
200		
201	107198-0	Bar, Side Board Pendant Support
202	107525-0	Washer, Stabilizer
203	107313-0	Bracket, Wire Harness Mounting
204	904112-0	Cable Harness, FG1257
204	904113-0	Cable Harness, FG3600

## Accessories FG1250 Base Scale

### FG1250 Basic Operational Flow



#### Initializing System Zero

**Note:** When power is first applied to the system, the display will read “**AC POWER LOST! - REFER TO MANUAL**”. This indicates that there was an interruption in power and to check the patient weight. To reset the system, press the “**FREEZE/RESUME**” button.

Before patient is placed on to the bed, you must first set the system zero. This is done as follows:



**Sets the initial system zero reference.**

1. Press and hold the “**0.0**” button. The displayed message will indicate “**HOLD TO ZERO**” as the digit to the right counts down.
2. When the message changes to “**PLEASE WAIT - HANDS OFF**”, release the button and do not touch the bed. In a few seconds the display will indicate “**WEIGHT = 000.0 LB**” The patient may now be placed on the bed.

**Important:** When the “**0.0**” button is pressed, everything on the weighing surface will be zeroed out on the display. Make sure that all linens, pillows, etc., are in place before pressing the “**0.0**” button so that they will not appear as part of the patient’s weight.

#### Button Functions



After the patient has been placed on the bed, simply press and release the “**ON**” button. The displayed message will read: “**PLEASE WAIT - HANDS OFF**”. Do not touch the bed. After a few seconds the patient’s weight will be displayed.



The **WEIGHT CHANGE** mode is used to monitor the patient’s weight relative to zero.

1. Press the “**WT CHG**” button. The display will read “**WT CHG = (patient weight)**”.
2. Press the “**0.0**” button to set the relative zero.

Any variation in weight will now be viewed as a “**+**” or “**-**” figure relative to zero. Pressing the “**WEIGHT**” button will switch back to the **WEIGHT MODE** allowing you to view the patient’s total weight again.

**Note:** When you reset the system zero, the **WEIGHT CHANGE MODE** will also be reset to zero.



This feature will allow you to make adjustments to the bed without effecting the displayed patient weight.

1. Press the “**FREEZE/RESUME**” button. The display will read: “**FREEZE = (patient weight)**”.
2. Make all necessary adjustments to the bed.

While in the **FREEZE** mode, the “**WEIGHT**” and “**WT/CHG**” keys will allow you to manually adjust the displayed weight reading in the event of a know error. Simply press the “**WEIGHT**” and “**WT/CHG**” keys to make the proper corrections.

**Note:** If **FREEZE** mode is left unattended for more than three minutes, display will read “**LEFT IN FREEZE - REFER TO MANUAL**”. You must press the “**FREEZE/RESUME**” button to exit this mode.



Toggles between POUNDS and KILOGRAMS display modes.

## Moving Bed and Patient

If it becomes necessary to move the bed and/or patient while the scale system is active, use the following procedure:



1. Press the “**FREEZE/RESUME**” button. The display will read: “**FREEZE = (patient weight)**”.
2. Make all necessary adjustments to bed and/or patient.
3. Press the “**FREEZE/RESUME**” button once again to resume normal weight monitoring.

## Loss of Power

If it becomes necessary to disconnect the bed power while the scale is in use:

1. Note the displayed patient weight before disconnecting the power.
2. Unplug the bed and move bed and patient to the new location.
3. When the patient is settled restore the power to the bed.
4. Press the “**FREEZE/RESUME**” button to WAKE-UP the readout. If the weight reading is correct, the system is ready.
5. If the displayed reading is not correct:
  - a. Press the “**FREEZE/RESUME**” button. The display will read “**HOLD (weight)**”
  - b. Use the “**WEIGHT**” and “**WT/CHG**” keys to ramp the displayed value to the correct weight.
  - c. When done, press the “**FREEZE/RESUME**” button once again to save the correction and exit to the normal weighing mode. If you make a mistake, press “**ON**” to about your changes.

**Important:** If you do not know the correct patient weight, you must remove the patient from the bed and re-zero the system.

## System Calibration and Maintenance

**Important:** The following calibration procedure should only be performed by qualified service personnel. The 1228 load cell, itself, has no user serviceable components and should not be tampered with for any reason.

Recalibration is generally not required, but should be checked periodically to ensure accuracy.

### Calibration Procedure



1. Press the “**FREEZE/RESUME**” button to enter the **FREEZE MODE**.



2. When the display indicated “**FREEZE = (weight)**”, press and hold the “**LB/KG**” button. The display will read “**CAL**” as the right hand digit counts down to enter the **CAL MODE**.



3. When in the **CAL MODE**, press the “**0.0**” button to zero the display.



4. Place a known weight on to the weighing surface and compare it to the displayed reading.



5. Use the “**WEIGHT**” and “**WT/CHG**” keys to make any necessary adjustments to the displayed value. The displayed value should be within 0.1% of the calibrated weight plus or minus 1 digit of reading.



6. Press the “**FREEZE/RESUME**” to save changes or “**ON**” to abort changes.

### Calibration Tolerance Table

Low Limit	Applied Load	High Limit
99.9	100.0	100.1
199.8	200.0	200.2
299.7	300.0	300.0
399.6	400.0	400.4
499.5	500.0	500.5
599.4	600.0	600.6
699.3	700.0	700.7
799.2	800.0	800.8
899.1	900.0	900.9
999.0	1000.0	1001.0

### Cleaning and Disinfecting

The readout and transducer for the 1228 Scale System are made of aluminum and steel with a painted surface. You need only exercise caution when cleaning the display window as this is made of clear polyester. We recommend mild soap and water for general cleaning.

Accessories FG1257 Scale with Bed Exit/Nurse Call

FG1257 BASIC OPERATIONAL FLOW



BED EXIT ALARM ENUNCIATOR



PRESS AND HOLD TO ZERO WEIGHT MODE



PRESS AND HOLD TO ZERO WEIGHT CHANGE MODE



**WAKE DISPLAY**  
DISPLAY CURRENT WEIGHT/WTChg DATA



THIS BUTTON CAN BE USED ONLY WHEN WEIGHT IS STABLE. PRESS BUTTON FOR 2 SECONDS TO ACTIVATE THE HOLD MODE. IN THIS MODE THE CAREGIVER MAY ADD OR REMOVE ANY ACCESSORIES FROM THE BED WITHOUT AFFECTING THE DISPLAYED WEIGHT VALUE.



THE KEYS ARE ALSO ACTIVE IN THIS MODE. MANUAL ADJUSTMENTS MAY BE MADE TO THE WEIGHT VALUE.

TO LEAVE THIS MODE AND SAVE CHANGES PRESS AGAIN.

TO LEAVE THIS MODE WITHOUT SAVING, PRESS .



**BED EXIT ALARM** –PRESS TO ENABLE OR DISABLE ALARM. USE THE MENU BUTTON TO PROGRAM THE ALARM PARAMETERS.



LED OFF = DISABLED



LED GREEN = ENABLED



LED RED = ACTIVATED

# Joerns® Camtec Series Bed Frames RC Ultra Hi-Lo Bed (RCUHLB850)



PRESS MENU TO EDIT SYSTEM  
SETUP AND CALIBRATION

FOR EXAMPLE:

▲ BED, EXIT ON 15%  
▼ 0 TO 46% IN 6% INCREMENTS

▲ ON TIME 120 s  
▼ 30 TO 300 (SECONDS IN  
30 SECOND INCREMENTS)

▲ BACKLITE 9  
▼ 0 TO 10

▲ UNITS Kg LB  
▼ TOGGLE "KG" OR "LB" UNITS

▲ MODEL FG1257

▲ SN# xxxxxx SN#xx, xx

▲ 9. xxxxxms gLOCAL

CAL MODE FUNCTIONS - DISPLAY  
INDICATES VERIFY / CAL

▲ +600.5Lb

▲ +60 s OnTime

▲ 9.6037ms gLOCAL

▲ +1102Lb MaxWt

▲ +1000Lb FULL

▲ +500.0Lb HALF

▲ +.12.5Lb OFFSET

USE UP ARROWS TO CHANGE MENU  
SECTION  
USE DOWN ARROWS TO TOGGLE  
VALUE

PRESS TO SAVE CHANGES OR TO EXIT  
WITHOUT SAVING CHANGES

▲ ZPT CAL ▼  
ZERO SCALE ZERGING SCALE  
ADD HALF WEIGHING .....  
ADD FULL WEIGHING .....  
SAVE CAL ???

PRESS TO SAVE CHANGES OR TO EXIT  
WITHOUT SAVING CHANGES

▲ ZPT CAL ▼  
ZERO SCALE ZERGING SCALE  
ADD FULL WEIGHING .....  
SAVE CAL ???

PRESS TO SAVE CHANGES OR TO EXIT  
WITHOUT SAVING CHANGES

▲ +1271 MODEL

▲ +1000 S/N

▲ +6.95368 S  
e+05

▲ +0.00000 dS  
e+99

▲ +6.51836 B100  
e+06

▲ +6.51836 B50  
e+06

▲ +4.85446 B0  
e+06 gLOCAL

▲ 9.6037ms gCAL

## Notes



## Joerns Healthcare Warranty Program

for Joerns® RC Ultra Hi-Lo Bed, Model RCUHLB850

Joerns RC Ultra Hi-Lo Beds, Model RCUHLB850, are guaranteed for a period of one year from the date of delivery, against defects in materials and workmanship, under normal use and service.

This one-year warranty includes all mechanical and electrical components.

Steel structural components on beds are covered under warranty for a period of five years from the date of delivery.

Welds are covered under warranty for the lifetime<sup>1</sup> of the product.

Damage caused by use in unsuitable environmental conditions, abuse or failure to maintain the product in accordance with user and service instructions is not covered.

Any alteration, modification, or repair unless performed by or authorized in writing by Joerns Healthcare, will void this warranty.

### Parts

Joerns beds contain various parts that wear from normal use. These parts are not covered under the stated warranty but are covered for 90 days after date of delivery.

<sup>1</sup> Weld lifetime defined as 15 years.

Joerns Healthcare's obligation under this warranty is limited to supplying replacement parts, servicing or replacing, at its option, any product which is found by Joerns Healthcare to be defective.

Warranty replacement parts are covered by the terms of this warranty until the product's original stated warranty period expires.

When requested by Joerns Healthcare, parts must be returned for inspection at the customer's expense. Credit will be issued only after inspection.

### Service

Most service requests can be handled by the facility Maintenance Department with assistance from the Joerns Healthcare Product Service Department.

Most parts requested can be shipped next day air at the customer's expense.

Should a technician be required, one will be provided by Joerns Healthcare, at our discretion. Only the Joerns Healthcare Product Service Department can dispatch authorized technicians.

This warranty is extended to the original purchaser of the equipment.

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