# **OPERATION AND MAINTENANCE MANUAL**

## **NOA Medical Industries Inc.**



**Resident Bed** 

Manual and Electric



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#### SPECIAL NOTES

WARNINGS/CAUTION NOTICES in this manual apply to hazards or unsafe practices, which could result in personal injury and/or property damage.

#### NOTICE

#### The information in this document is subject to change without notice.

Check all parts for shipping damage before using. DO NOT USE IF DAMAGED. Contact NOA Medical Industries Inc. Customer Service 1 (636) 239-7600 and the freight carrier for further instruction.

This electric bed has been engineered to provide reliable operation.

This bed has been thoroughly tested and inspected prior to shipment.



DO NOT OPERATE THIS EQUIPMENT WITHOUT FIRST READING AND UNDERSTANDING THIS MANUAL. IF YOU ARE UNABLE TO UNDERSTAND THE WARNINGS, CAUTIONS, OR INSTRUCTIONS, CONTACT A HEALTH CARE PROFESSIONAL OR A QUALIFIED TECHNICIAN BEFORE USING THIS EQUIPMENT, OTHERWISE INJURY OR DAMAGE MAY RESULT.

- The bed should be left in its lowest position when unattended to reduce the risk of injury to the resident due to falls while getting into or out of bed or while lying in the bed.
- Do not use near explosive gases.
- Possible fire hazard when used with oxygen administering equipment other than nasal or masked type.
- When using nasal or masked type administering equipment, oxygen or air tubing <u>MUST</u> be routed and secured properly to ensure tubing does not become entangled, kinked, or severed during normal operation of the bed.
- When using liquids in or around the bed, caution should be taken to ensure that liquids of any kind are not spilled. If a liquid is spilled in or around the bed, <u>UNPLUG</u> the bed immediately. Clean up spill and allow bed and area around bed to dry thoroughly before using the electric controls again.
- Close supervision by a caregiver is necessary when this product is used near CHILDREN OR PEOPLE WITH DISABILITIES.
- NEVER PERMIT ANYONE UNDER THE BED AT ANY TIME.
- When operating/moving the bed always ensure that the individual utilizing the bed is positioned properly within the confines of the bed. <u>DO NOT</u> let any extremities protrude over the side or between the rails when performing these functions.
- After installation and before use, make sure all attaching hardware is securely tightened.
- Pendant cord must be routed and secured properly to ensure cord does not become entangled and damaged during normal operation of the bed.

#### WARNINGS

#### (continued)

- Keep all moving parts free from obstruction (i.e. blankets/sheets, heating blankets/pads, tubing, wiring, etc.) which may get tangled around the bed, side rails, or legs during operation of the bed.
- Beds are equipped with locking casters. Casters should be locked at all times except when moving the bed or when operating sub acute care features.
- Do not roll the bed over abrupt thresholds with a resident in the bed.
- The mattress should be a hospital type mattress to allow for proper bed articulation. The mattress must be properly sized to meet entrapment zone dimensional guidelines published by the FDA.
- The side rails are <u>NOT</u> intended and may <u>NOT</u> be used as a restraint. If necessary, a physician or healthcare professional should be consulted for other means of safe restraint.
- When using side rails, if excessive side pressure is exerted on them they can be deformed or broken. Do not use side rails as handles to move the bed.
- Never permit more than one person in/on the bed at any time.
- Body weight should be evenly distributed over the surface of the bed. The bed weight capacity is 500 pounds. This is the total weight of the resident/patient, mattress, bedding, head and foot boards, side rails and any other accessories.
- Do not lie, sit, or lean in such a way that your entire body weight is placed only on <u>RAISED</u> head or foot sections of the bed. This includes while assisting the user in repositioning or transferring in or out of bed.
- The bed is provided with an additional safety feature of a protective earth ground. The electrical cord should only be plugged into a GROUNDED 110/120V outlet. DO NOT ALTER THE PROVIDED PLUG. If the plug does not fit the existing outlet, a licensed electrician should install a correct outlet. Never operate the bed if it has a damaged cord or plug.
- Unplug the power cord when performing any maintenance on the bed.
- Do not open any actuator, pendant, or control box. If these units are opened the warranty is voided.

#### **REDUCING THE RISK OF ENTRAPMENT**

The Hospital Bed Safety Workgroup (HBSW) in partnership with the FDA has recognized potential entrapment zones in hospital bed systems and has developed dimensional guidance to reduce the risk of entrapment. The FDA considers the term "hospital bed system" to encompass the bed frame and its components, including the mattress, bed side rails, head and foot boards, and any accessories to the bed.

The entrapment zones involve the relationship of components controlled by the healthcare facility or individual user. Compliance to the dimensional guidelines for reducing the risk of entrapment is primarily the responsibility of the healthcare facility or the individual user.

Anyone having any involvement with hospital bed systems should review and understand the FDA guidelines. These guidelines, entitled "Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment -Guidance for Industry and FDA Staff," are available at the FDA website.

#### STEPS TO PREVENT BED FIRES

- Inspect the bed's power cord for damage. •
- Connect the power cord directly into a wall-mounted outlet that is in good working order, with no cracks or chips. The plug should fit tightly into the outlet. The ground pin should be intact and secure.
- Do not connect the bed's power cord to an extension cord or to a multiple-outlet strip.
- Do not cover any power cord with a rug. Heat may build up or the cord may be damaged. •
- Inspect the floor beneath the bed for buildup of dust and lint. Ask housekeeping to clean if necessary.
- Inspect the patient's bed controls, looking for signs of damage where liquids could leak in.
- Test the bed and its controls, including patient lockout features, to ensure that the bed can move freely in both directions without damaging any cords.
- Check monitors and other patient equipment for signs of overheating or physical damage.
- Keep linens and clothes away from power sources. •
- Tell maintenance staff about any unusual sounds, burning odors, or unusual movement of a bed. •
- If you suspect overheating, follow your facility's policy for fire safety and get the patient/resident to a safe area if necessary.

Physical Specifications					
Item	76" Length	80" Length	84" Length		
Bed width	35″	35″	35″		
Width w/ side rails	40″	40″	40″		
Sleep deck	76″	80″	84″		
Overall bed length*	80.5″	84.5″	88.5″		
Deck height range	13" to 23"	13" to 23"	13" to 23"		
Safe Working Load*	450 lbs.	450 lbs.	450 lbs.		
Weight of Bed	190 lbs.				
Maximum Back Angle:					
Maximum Hip to Knee Angle: 45 Degrees					

and foot boards, side rails, and other accessories

\*O.A.L. includes both head and foot boards.

\*\*The Safe Working Load is the total weight, including the resident, mattress, bedding, head

evenly distributed on the sleep deck.

#### SPECIFICATIONS AND CONDITIONS



Locating Your Serial Number

The serial number label is located at the foot end of the bed, under the mattress support deck, on the bed frame.

Please have the serial number and model of the bed available when calling Customer Service 1(636) 239-7600.

#### **Environmental Conditions**

Ambient temperature range of 50°F to 104°F +10°C to +40°C Relative humidity range of 30% to 75% Atmospheric pressure range of 20.6 to 31.3 Inches of Hg. **Control Box and Actuators- IP44** 

Protected against dust and splashing water.

#### Pendants- IP66

Protected against dust and low-pressure water.

#### **Electrical Specifications**

Power: 110/120 V.A.C. Frequency: 50/60 Hz Current Rating: 3.15 Amps Duty Cycle: 10% Max. (2 min. on/ 18 min. off)

#### **INSTALLATION**

Required tools (1) - #2 Phillips Head Screwdriver

(1) - Rubber Mallet (for Head and Foot Boards only)

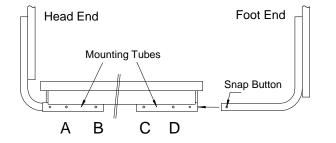
Upon receipt of your new bed, carefully inspect the bed and accessory components for any damage received in transit. Notify the NOA Customer Service at 1 (636) 239-7600 immediately if any product or component has been damaged or is missing from your shipment.

#### Installing the Locking Casters

Insert four (4) locking casters in the sockets of the fixed height legs located at each corner of the bed frame (see bed schematic for further clarification). Additional information regarding caster location can be found in the 'Bed Transport' section of this manual.

#### Installing the Head and Foot Boards

On large orders, beds are shipped with transport legs inserted in the foot board mounting tubes. Remove and discard these legs and replace with foot board brackets. Insert brackets into the mounting tubes until snap buttons align in the holes as indicated below. Ensure that snap buttons are seated in the proper holes prior to bed use.



Bed Length	Head Board Bracket Hole	Foot Board Bracket Hole
76"	В	С
80"	В	D
84"	А	D

A hardware bag containing (8)  $\frac{1}{4}$ -20 x 1.5" machine screws, (8)  $\frac{1}{4}$ -20 insert cap nuts, (1) Adjustable Cable Clamp, and (1) #10-12 x  $\frac{3}{4}$ " wood screw is provided in the Assembly Hardware Box. Insert the provided cap nuts into the pre-drilled holes in head and foot boards using a rubber mallet. If laminated on one side only, install the nuts on the laminated side of the board. Attach head and foot boards to the front face of the vertical bracket legs using provided machine screws. Tighten all hardware.

Beds should be used in conjunction with a hospital grade mattress designed to allow for bed articulation. The mattress should be 6" thick by 36" wide with a length conforming to the sleep deck length (76", 80", or 84"). Place the mattress on the rib-deck sleep surface ensuring that the mattress retention brackets are installed properly. Inspect mattress alignment and verify that there is no gap wide enough to entrap a resident's head or body. Additional information regarding bed entrapment may be obtained from the U.S. Food and Drug Administration Center for Devices and Radiological Health web site.

#### Securing the Power Cord

Approximately 8 feet of exposed power cord is provided with the bed. A cable tie has been supplied so that excess cord can be maintained and secured to the back of the head board. When securing the power cord, ensure that an adequate loose length is maintained to allow for the full range of motion of the bed.

#### **Installing the Corner Mattress Retainers**

Corner Mattress Retainers (PN 3040025) should be installed at each corner of the bed to assist in maintaining proper alignment of the mattress during bed use. In order for the retainers to be effective, beds should be used in conjunction with a hospital grade mattress designed to allow for bed articulation. The mattress should be 6" thick by 36" wide with a length conforming to the sleep deck length (76", 80", or 84"). Mattress retainers should be installed prior to installation of any deck mounted side rails or assist bars.

1. Locate (2) ¼" holes at each bed corner in the outer angle of the head and foot deck. Insert each leg of the Mattress Retainer.

2. With the leg of each side of the Mattress Retainer positioned in the ¼" holes, rotate the Retainer towards the corner of the bed while slowly inserting the legs further into the holes.

 When fully rotated, press the Mattress Retainer into position and then place the mattress on the rib-deck sleep surface. Check that all corners of the mattress are within the Retainers. A slightly compressed fit is desired.







Save these instructions

Ensure that the Retainers hold the mattress securely to prevent mattress slippage during head and foot deck articulation.

# Verify that there are no gaps between the mattress, head and foot boards, side rails, or any other accessories wide enough to entrap a residents head, neck, or body.

Install accessory components as per their instructions.

Your bed is ready for use. The bed should be located and casters locked while the bed is in its lowest position. Adequate spacing must be maintained between the wall and the bed to prevent damage to the bed or walls while raising or lowering the bed. Check to be sure that vertical movement of bed does not interfere with the power cord or plug.

#### Locating and Connecting the Pendant (Handset) Control

For convenience the bed's pendant control may be located on either the left or right side of the bed.

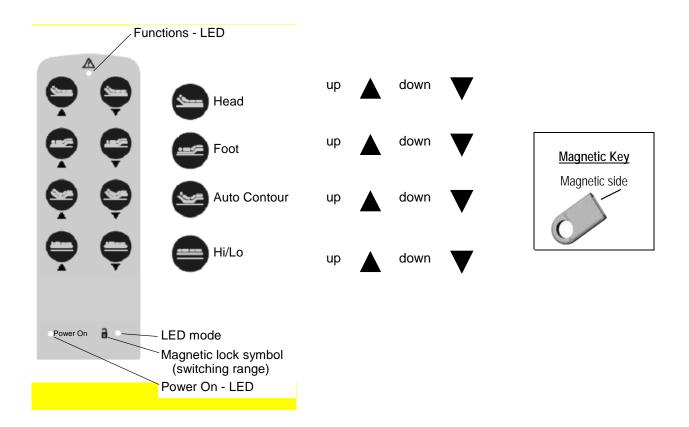
As shipped from the factory the bed has an eight button pendant control plugged into a "Y" cable end on the resident's left hand side as standard. To relocate the pendant to the resident's night side simply unplug the pendant and plug it back into the other end of the "Y" cable on the opposite side of the bed.

Additionally as many as two pendants and one foot board control may be used on a single bed. See pages 9-11 for additional information.

#### **BED OPERATION**

#### **Bed Positioning- Electric**

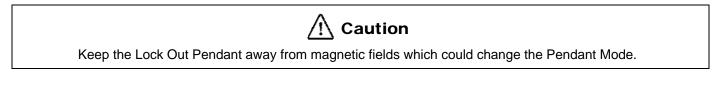
Bed functions are operated with an eight-button hand held pendant control. In addition to individual buttons for head, foot and bed elevation, buttons are provided which allow for an auto-contour feature that operates the head and foot functions simultaneously. Button functions on the hand held pendant control are clearly identified with universal icons. The hand control is provided with an attached bracket for suspending the control from side rails or bed ends. PRIOR TO RAISING OR LOWERING THE BED AND/OR SIDE RAILS, CHECK TO ENSURE THAT THE CORD FOR THE PENDANT CONTROL HAS NOT BECOME ENTANGLED IN BED PARTS. THE CORD SHOULD BE KEPT CLEAR OF MOVING PARTS AT ALL TIMES.



#### **Operation of the Lock Out Pendant**

By passing the magnetic side of the magnetic key over the lock symbol, three modes can be released or locked.

- To put the Lock Out Pendant into operation, connect it to the MCL Control Box through the "Y" cable. The keyboard of the pendant is completely blocked (mode 1). The LED next to the lock symbol does not glow.
- Passing the magnetic side of the magnetic key once over the lock symbol releases the resident comfort functions (mode 2).
   The LED next to the lock symbol glows green.
   The pendant will stay in this mode until the magnetic key is once again passed over the lock symbol.



#### Bed Positioning- Manual

Hand cranks are designed so that when rotated in the clockwise direction from the foot end of the bed, the knee, head, and bed sleep surface will be raised. Conversely, rotating the cranks in a counter-clockwise direction will lower the section or bed. Cranks handles are spring loaded to maintain a solid cranking position, but can still be folded under the bed for storage when not in use. In order to fold crank handles under the bed when the bed elevation is at its lowest level, a 1/8 turn might be required to avoid contact with the floor or other cranks.

#### **Bed Transport**

With casters installed in the fixed height legs, the Resident bed will be supported on floor locks throughout the lift cycle. If bed movement is required, lower the beds to its full down position at which point the floor locks retract and the bed rests on casters.



Casters on Resident Beds have rotation brakes only. Caster swivel can allow for bed motion with little or no resistance. This can result in loss of balance, fall, and personal injury. Ensure that the bed is on fixed floor locks to avoid any bed movement during resident transfer and/or treatment.

#### **Routine Maintenance**

The threaded screws on the manual hand cranks should be periodically lubricated with a multi-purpose lithium based grease. Additionally, all pivot points on the bed should be lubricated with a lightweight oil. Regularly check to ensure that all hardware is properly secure, and no nuts, cotter pins, etc. are missing. Do not over-tighten deck hardware. These fasteners are designed to allow for movement.

#### **ACCESSORIES AND OPTIONS**

#### In-Rail 4 Button and 6 Button Pendant

The In-Rail 4 button and 6 button pendants are designed for easy customer installation in the Tall ½ Length Soft Touch Side Rail (PN 7540011XXX) and the Standard ½ Length Soft Touch Side Rail (PN 7540010XXX).

The In-Rail pendant may be used by itself or in conjunction with any of NOA's other pendants or foot board controls.

Once installed the In-Rail Pendant provides the resident with easy access when adjusting the bed for their personal comfort. The In-Rail Pendant comes equipped with either 4 buttons (PN 4040066) that controls the elevation of the head and foot, or 6 buttons (PN 4040067), which has the additional feature of bed height adjustment.

Because of the symmetrical design of the In-Rail pendant, it can be easily installed facing the outside of the Side Rail for access to the caregiver. When installed in this manner it allows a constant location that provides bed controls for the nursing care staff without searching for a pendant.

Since the In-Rail pendant is mounted in the rail, the damage to the pendant, due to stretching of the cord and dropping of the pendant, is virtually eliminated.

Six button In-Rail pendant (PN 4040066) shown being snapped into a standard height soft touch side rail (PN 7540010BLK).

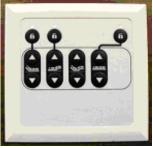


#### Installation Instructions:

- 1. Snap the In-Rail pendant into the side rail. The In-Rail pendant may be mounted to face either the resident or the caregiver.
- 2. Plug the In-Rail pendant cord into either of two patch cords located at the head end of the bed on both the Left and Right sides.
- **Note:** To prevent damage to the pendant cord the cord must be routed on the outside of the bedside rail. Do <u>NOT</u> route the cord between the side rail and the mattress.

#### **Optional Foot Board Control**

Optional Lock Out Foot Board Controls for both Standard (PN 4040060) and Sub Acute (PN 4040061) functions are available.



PN 4040060

#### **Connecting the Optional Foot Board Control Cable:**

- 1. Disconnect the terminator plug which is either:
  - Plugged directly into the MCL Control Box Port or
  - Plugged into the end of an extension cable located at the foot end of the bed as shown in the photo below.
- 2. Connect the Foot Board Control cable to the extension cable that is connected to the MCL Control Box:
  - Lift the locking cover on the extension cable connector.
  - Remove the terminator plug.
  - Connect the Foot Board Control Cable.



Terminator plug

**Note:** The Foot Board Port of the MCL Control Box must have **either** a foot board control cable **or** a terminator plug connected for any of the bed functions to operate. All beds are shipped from the factory with a terminator plug connected to the foot board port of the MCL Control Box.

#### **Optional Battery Backup:**

In the event of a power failure the control box is provided with a power down feature that enables lowering the bed without AC power. In order to use this feature the control box must have the optional MBK battery backup (PN 4040055) and Interconnect cable (PN 4040064).

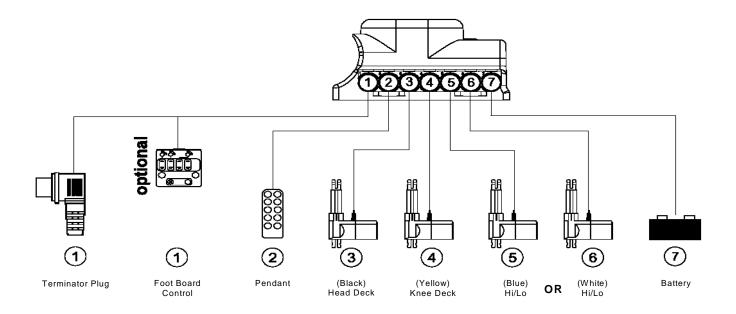


### SERVICING

# **Trouble Shooting**

SYMPTOM	POSSIBLE CAUSE(s)	ACTION
No Power	<ol> <li>Bed is not plugged into A/C power.</li> <li>Cut/damaged power cord.</li> <li>Loose plug for pendant. Cut/damaged pendant cord.</li> <li>Actuator plug not connected.</li> <li>Blown fuse in MCL control box.</li> </ol>	<ol> <li>Check plug to receptacle.</li> <li>Check power cord for damage.</li> <li>Check pendant cord for damage.</li> <li>Check actuator connection to control box. Inspect actuator cord for damage.</li> <li>See Replacement of the Power Fuse.</li> </ol>
Actuators operate, but the wrong movement occurs	<ol> <li>Actuators are plugged into the wrong ports on the Control Box.</li> <li>Cut/damaged pendant cord.</li> <li>Damaged/defective y-cable.</li> </ol>	<ol> <li>See MCL Control Box Socket Identification showing port /socket locations.</li> <li>Inspect pendant cord for damage.</li> <li>Unplug the y-cable and plug the pendant directly into the control box.</li> </ol>
One or more actuators do not function	<ol> <li>Foot Board Control Cable or Terminator Plug is not connected.</li> <li>Foot Board Controls in locked position.</li> <li>Loose or unplugged connection of actuator cord to control box.</li> <li>Cut/damaged actuator cord.</li> <li>Defective actuator.</li> <li>Defective control box.</li> <li>Defective terminator plug.</li> <li>Damaged/defective y-cable.</li> </ol>	<ol> <li>Check Foot Board Control Port to ensure either a cable or terminator plug is present.</li> <li>Press the unlock button on foot board control pad.</li> <li>Check actuator plug to control box.</li> <li>Inspect actuator cord for damage.</li> <li>Replace actuator.</li> <li>Replace control box.</li> <li>Replace terminator plug.</li> <li>Unplug the y-cable and plug the pendant directly into the control box port.</li> </ol>
Bed is not level when operating Hi/Low functions	<ol> <li>Bed bumped a wall or encountered other obstruction causing misalignment of actuators.</li> <li>Bed being operated in the mid-range loaded at one end.</li> <li>Damaged/defective y-cable.</li> </ol>	<ol> <li>Run bed to full up or full down position.</li> <li>Unplug the y-cable and plug the pendant directly into the control box port.</li> <li>Unplug the y-cable and plug the pendant directly into the control box port.</li> </ol>
The handset light turns red	1. The terminator plug is in the wrong location.	<ol> <li>Replace the handset. Place the terminator plug in the foot board control port on the MCL control box or in the foot board control disconnect cord. If the food board control is connected, the terminator plug is not necessary and should be set aside.</li> </ol>

#### MCL Control Box Socket Identification



**Note:** The Foot Board Port of the MCL Control Box must have **either** a foot board control extension cable with a terminator plug or a foot board control cable **or** a terminator plug connected directly to the control box, for any of the bed functions to operate. All beds are shipped from the factory with a terminating plug connected to the foot board port of the MCL Control Box or at the end of an extension cable plugged into the MCL Control Box.

#### **Steps for Isolating Electrical Problems**

- 1. Check all connections.
- 2. Exchange pendant with a known working pendant.
- 3. Exchange actuator plugs at known working control box ports.
- 4. Check actuator with a known working control box.

IF USE OF THIS TROUBLE SHOOTING GUIDE DOES NOT CORRECT THE PROBLEM PLEASE CALL **CUSTOMER SUPPORT AT 1 (636) 239-7600**.

#### **Replacement of the Power Fuse**

#### Replace the fuse with a T-3.15 type fuse only.

- 1. Unplug the power cord.
- 2. With assistance, turn the bed on its side.

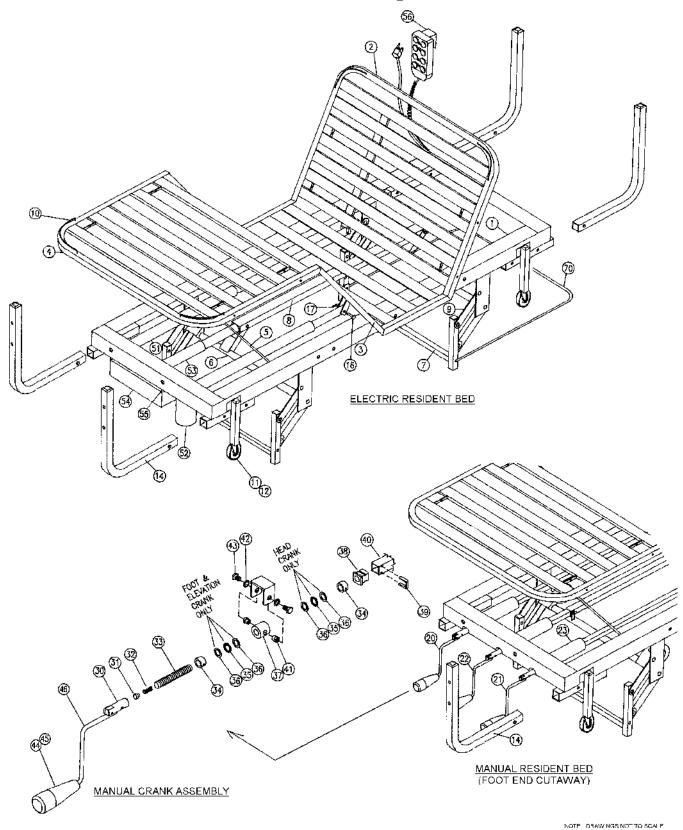
- 3. Using a #1 Phillips screwdriver, remove 4 screws from the fuse access shaft cover (power cord strain relief).
- 4. Remove the connector cover plate from the control box, exposing wires and fuses.
- 5. Using needle nose pliers, grasp the fuse lengthwise on the metal ends.
- 6. Remove the fuse by pulling straight up from the fuse holder.
- 7. Using needle nose pliers, place the new fuse in the pliers, grasping the fuse on the ends. Insert the fuse into the fuse holder of the circuit board.
- 8. Replace the connector cover plate and 4 screws.
- 9. The power cord can now be plugged in and function test the controls.







#### **Resident Bed Diagram**



#### **Resident Bed Parts List**

	PART NUMBER					OTY	DECODIDITION	
ITEM NO.	1030014XXX	1030015XXX	1030016XXX	1030020XXX	1030021XXX	1030022XXX	UII	DESCRIPTION
1	5230006XXX	5230006XXX	5230006XXX	5230006XXX	5230006XXX	5230006XXX	1	Bed Frame with Deck
2	5240002XXX	5240002XXX	5240003XXX	5240002XXX	5240002XXX	5240003XXX	1	Head Deck
3	5240004XXX	5240004XXX	5240004XXX	5240004XXX	5240004XXX	5240004XXX	1	Knee Deck
4	5200044XXX	5200045XXX	5200045XXX	5200044XXX	5200045XXX	5200045XXX	1	Foot Deck
5	3030008	3030008	3030008	3030008	3030008	3030008	2	Leg Lift Support
6	5230005XXX	5230005XXX	5230005XXX	5230005XXX	5230005XXX	5230005XXX	2	Elevation Axle
7	5230004XXX	5230004XXX	5230004XXX	5230004XXX	5230004XXX	5230004XXX	2	Elevation Legs
8	5330009	5330009	5330009	5330014	5330014	5330014	1	Elevation Control Channel
9	5330000XXX	5330000XXX	5330000XXX	5330000XXX	5330000XXX	5330000XXX	4	Elevation Stabilizer Strap
10	3040025	3040025	3040025	3040025	3040025	3040025	4	Mattress Retainer, Corner
11	5220021XXX	5220021XXX	5220021XXX	5220021XXX	5220021XXX	5220021XXX	4	Caster Legs
12	7020000	7020000	7020000	7020000	7020000	7020000	4	Locking Casters (Set of 4)
14	1540001XXX	1540001XXX	1540001XXX	1540001XXX	1540001XXX	1540001XXX	4	Head/Foot Board Bracket
16	4000016	4000016	4000016	4000016	4000016	4000016	4	Clevis Pin, 3/8" Dia. x 2-1/4"
N.S.	-	-	-	4030012	4030012	4030012	3	Clevis Pin, 5/16" x 2-1/2"
17	4000222	4000222	4000222	4000222	4000222	4000222	7	Cotter Pin
20	1530011	1530011	1530011	-	-	-	1	Head Crank Assembly
21	1530012	1530012	1530012	-	-	-	1	Foot Crank Assembly
22	1530004	1530004	1530004	-	-	-	1	Elevation Crank Assembly
23	3500066	3500066	3500066	-	-	-	3	Screw Shaft Cover
N.S.	-	-	-	4020056	4020056	4020056	1	Flat Washer
51	-	-	-	4030022	4030022	4030022	1	Head Actuator
52	-	-	-	4030023	4030023	4030023	1	Foot Actuator
53	-	-	-	4040000	4040000	4040000	1	Elevation Actuator
54	-	-	-	4040053	4040053	4040053	1	MCL Control Box
56	-	-	-	4040057	4040057	4040057	1	Hand Control/Pendant
N.S.	-	-	-	4040062	4040062	4040062	1	Hand Control "Y" Disc. Cable
70	7030013	7030013	7030013	7030013	7030013	7030013	1	Base Brd Bumper Kit

#### Note:

- ٠
- ٠
- Replace XXX with color BLK for black, BEI for beige N.S. Not Shown \*Indicates part is shipped in hardware box (PN 700043XXX). •

#### **Manual Crank Parts List**

	PART NUMBER OTY PER					
ITEM NO.	1530011	1530012	1530004	CRANK	DESCRIPTION	
	Head	Foot	Elevation	CITANIC		
30	4000107	4000107	4000107	1	Crank Hub	
31	4000109	4000109	4000109	1	Plunger	
32	4000111	4000111	4000111	1	Compression Spring	
33	3500069	3500072	3500071	1	ACME Screw	
34	4010003	4010003	4010003	2	Bearing Collar	
35	4000136	4000136	4000136	1	Bearing	
36	4000135	4000135	4000135	2	Bearing Race	
37	4010004	4010004	4010004	1	Pivot Collar	
38	4000187	4000186	4000186	1	Drive Nut	
39	5300025ZIN	5300025ZIN	5300025ZIN	1	Nut Keeper	
40	5330011	5330012	5330007	1	Pull Tube	
41	4010002	4010002	4010002	2	Pivot Bushing	
42	4010011	4010011	4010011	2	5/16" Lock Washer	
43	4000087	4000087	4000087	2	5/16"-18 x 3/4" Hex Head Cap Screw	
44	4000218	4000218	4000218	1	Handle Knob	
45	4000048	4000048	4000048	1	Tinnerman Clip	
46	5200066ZIN	5200066ZIN	5200066ZIN	1	Crank Handle	

#### MAINTENANCE AND CLEANING

Maintenance and cleaning procedures should be performed at least once a year or as required.

#### **Cleaning and Disinfecting The Bed**

- 1. Luplug power cord before cleaning or performing maintenance on electric bed.
- 2. Do not submerge the pendant in liquid.
- 3. Do not steam or pressure wash the bed or any of its components.
- 4. Wipe down actuators, control box, and pendant with a damp, well wrung out cloth or with a disinfecting wipe.
- 5. Excess water or liquid may damage electrical parts and poses a shock hazard.
- 6. Wipe down the remainder of the bed with a disinfectant.
- 7. Allow the bed to dry completely before using.

#### **Periodic Inspection**

- 1. Perform the procedure "STEPS TO PREVENT BED FIRES" listed in this manual.
- 2. Review "REDUCING THE RISK OF ENTRAPMENT" listed in this manual.
- 3. Review and inspect for compliance the "WARNINGS" listed in this manual.
- 4. Check casters to ensure they lock, if applicable, and roll properly.
- 5. Inspect all bed components for damage or excessive wear.
- 6. Visually examine all welds for cracks.
- 7. Inspect the deck components for bending or damage.
- 8. Check the motor actuator shaft and its connections for bending, damage, or excessive wear.
- 9. Check actuator ends and its mounting hardware for bending or excessive wear.
- 10. Inspect all bolts and fasteners. (Do not over tighten bolts at pivot points.)
- 11. Check all cords for cuts or other damage.
- 12. Make sure all plugs are fully seated.
- 13. Make sure all cords are free of moving parts.

# LIMITED WARRANTY

The Manufacturer warrants to the original user ("Customer") all products manufactured by the Manufacturer to be free from defects in material and workmanship under normal use and service for a period of 3 years. If such a defect appears and Customer has given immediate written notice of same, the Manufacturer shall replace or repair such part at the Manufacturer's option. The Manufacturer will require the return of the defective part to establish the claim. The Manufacturer's obligation under this warranty shall be limited to said replacement and/or repair. Installation and freight costs for replaced or repaired items remain the responsibility of the Customer. This warranty does not cover failure due to negligence, accident, deliberate abuse, nor improper installation and/or maintenance. Modifications made to products (including modifications without the expressed written consent of the Manufacturer) shall void this warranty in its entirety. NO FURTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE NOT SPECIFIED HEREIN, ARE MADE BY THE MANUFACTURER, and this warranty sets forth the full extent of the liability arising from the manufacture, use or sale of the products and materials sold hereunder. No allowances will be made for delays or loss of profit, nor for any other special, indirect or consequential damages or injuries, whether based on tort or contract.

Applicable warranty periods commencing from date of shipment from DIRECT SUPPLY are as follows:

- Welds ..... Lifetime
- Electrical components ...... 3 years
- Mechanical components ...... 3 years
- Wood products ......1 year

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