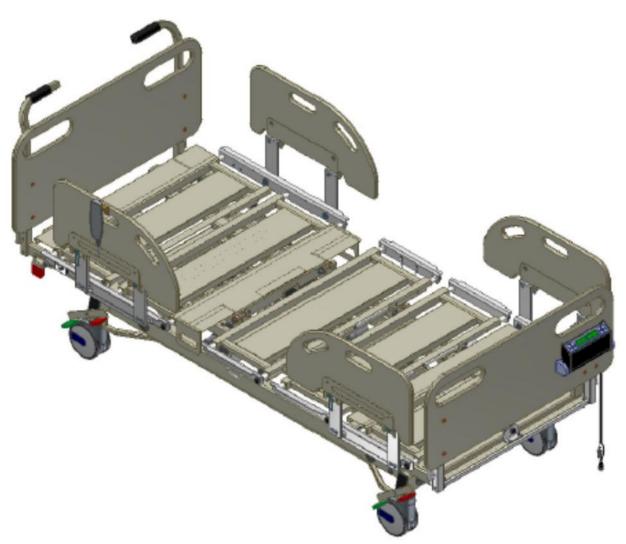
USER MANUAL

Bariatric Acute Care Bed Model 5148PDX & 5154PDX



Gendron Inc. 520 W. Mulberry Street –Suite 100 Bryan, Ohio 43506 www.gendroninc.com



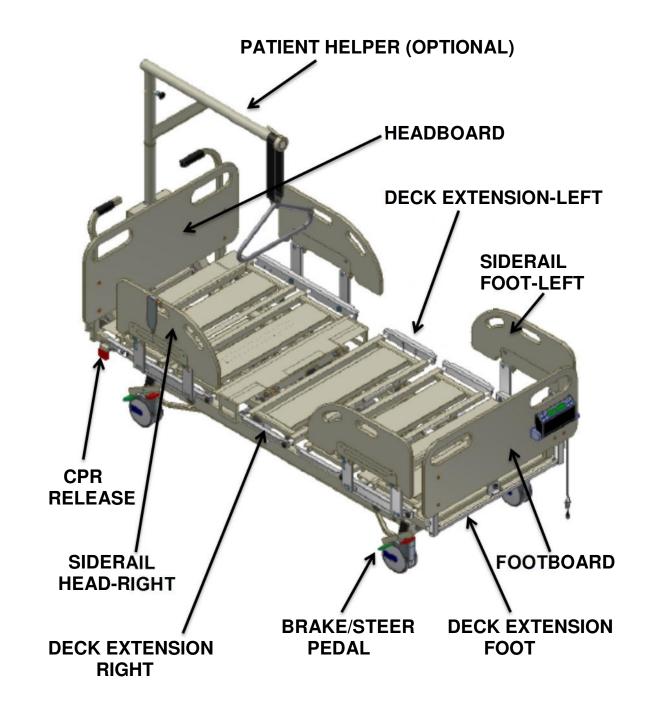


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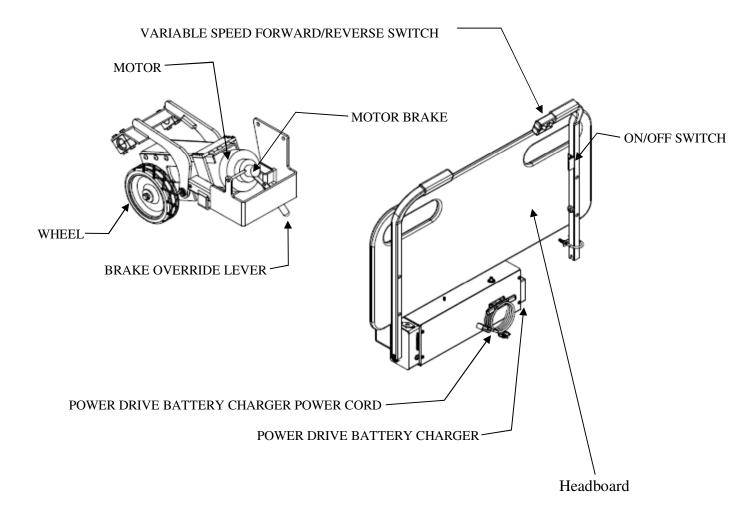


Parts Locator (Bed)





Parts Locator (Power Drive System)





Safety Notes (Bed)



Failure to observe these safety precautions may result in personal injury or mechanical failure. Read all instructions carefully before using the bed.

- When a patient is left unattended or while transporting a patient it is recommended that the siderails are raised.
- When raising the siderails make sure it is completely raised and locked. Gently pull on the siderail to verify that it is latched in position.
- Ensure that all deck extensions are adjusted to the same width. Equipment damage may occur during deck articulation.
- Gently push/pull on the extensions to verify that they are locked in position.
- Do not allow the patient to use the patient helper unless the boom is locked parallel to bed.
- Gently push/pull on the patient helper boom to verify that it is locked in position.
- Do not exceed the rated capacity of the patient helper.
- Do not use patient helper if strap is worn or frayed.
- Do not attempt to remove the patient helper boom while a patient is in the bed.
- Always set the brakes when the bed is occupied unless transporting the patient.
- Before transporting the bed, make sure the power cord is properly stowed. Failure to do so may result in equipment damage.
- The brakes are not designed to stop a bed in motion. Do not operate central brake/steer function when moving the bed.
- Do not move the bed using the siderails. Use the provided push handles or head/foot boards.
- The bed exit alarm is not intended to be a substitute for good nursing practices. This system must be used in conjunction with a sound risk assessment and protocol.



- Watch for pinch points. Keep clear of any mechanism in motion.
- Keep all objects out from under the bed. Certain parts under the bed raise and lower when it is in motion. Make sure there is nothing under the bed to interfere with proper bed operations.
- Make sure the handset cord is properly positioned before operating the bed. Do not allow the cord to get caught in the moving parts of the bed.
- Disconnect the two electrical cables below the footboard before attempting to remove the footboard.
- Before cleaning any portion of the bed, disconnect power cord from wall outlet.
- Before using any cleaning product, test it on the underside of the bed. Never use any volatile or flammable fluid that could cause discoloration or deterioration.
- Do not operate this device if the power cord or any of the cords between the associated parts are cut, frayed or loosely connected.
- Do not use a bed with any missing or damaged parts.
- Do not service this device without first unplugging the power cord and battery. Bed sections can move even with power cord unplugged because of backup battery.
- If service is required it is recommended that you contact Gendron customer service at 1-800-537-2521 or your local authorized Gendron dealer.
- Weight capacity: Never exceed the rated capacity of your bed (combined weight of user and items on bed.) Exceeding weight limit may cause bed to fail.
- Power requirements: Electrical hazard may occur if device is plugged into inadequate power supply. A power source of 120 V AC 60 hertz with a capacity of at least 4 amperes must be available to operate the bed.

Proper grounding is achieved only when bed is connected to "Hospital Grade Receptacle."

Battery Backup: The systems battery automatically charges when the power cord is plugged into an electric outlet. The battery maintains a charge to allow the bed to be operated in case of power failure.



- Unplug battery to prevent discharge during storage. Failure to do so will reduce battery life.
- Always allow head section to fully lower when using CPR release. Failure to do so may damage actuator.
- Disconnect AC power before unplugging any cables on the control module. Failure to do so may result in control module damage.

Safety Notes (Power Drive System)

- Only operate power drive with both hands in appropriate locations on the bed.
- Keep arms and legs inside the bed at all times.
- Motor brake is not designed to bring the bed to a stop. The motor will decelerate to a stop and the brake will engage. Configuration in any other means will result in damage to the system
- Do not short batteries. Before disconnecting batteries remove all jewelry on hands and arms. (Rings, Watches and Bracelets)
- Do not operate bed under the influence of a controlled substance.
- Do not allow standing on bed while in motion.
- When releasing Forward/Reverse Power Drive Control Switch, the bed will gradually slow to a complete stop.



Features (Bed)

- 7-Function articulation

- 1) Raise and lower head section
- 2) Raise and lower knee section
- 3) Raise and lower bed
- 4) Trendelenburg
- 5) Reverse Trendelenburg
- 6) Cardio chair
- 7) Bed flat

- Power functions are powered by 24-volt DC electric actuators.

- Electrical Power: 120 volt AC power transformer converts system to 24-volt DC. Electrical components are UL listed.

- Power plug: Three-prong hospital grade plug.

- Battery backup: Battery backup allows full use of bed when AC power supply is not available for a limited time.

- Pendant control: Pendant control allows the patient access to operation of bed electrical controls. The functions on this handset can be selectively locked out by the caregiver control. Backlighting facilitates use in low light conditions.

- Construction: Constructed entirely of steel, solid frame, powder coat paint.

- Bed deck: Adjustable to widths 39", 48" (on 5148PDX bed) and 39", 48" and 54" (on the 5154PDX bed). Length adjustable from 84" to 92" on both styles of bed.

- Siderails: 2-position swing down type.

- Casters: Heavy duty 6 inch dual wheel casters with central locking and braking system.

- Head section angle indicator for accurate patient positioning.

- CPR release: To rapidly lower the head section pull and hold the CPR release handle.

- Under bed light: Illuminates the area under the bed frame for patient safety in low light conditions.

- Bed exit alarm: Programmable for variable sensitivity, alerts caregiver through the facilities nurse call system or audible alarm in the bed.



- Rotating scale display: Scale display rotates down to protect patient privacy while not in use.

- Caregiver control panel: Allows caregiver access to bed controls and lockouts for patient pendant control.

- Accessory sockets: One IV socket on each corner of bed.
- IV Pole (optional not included): Removable telescopic IV pole.

- O2 holder (optional – not included): Oxygen tank holder can be installed into one of the (4) IV sockets.

Features (Power Drive System)

- ON/OFF Switch: Allows the drive system to be shut off when not in use

- Variable Speed Forward/Reverse Operational Control Switch: Controls the speed and direction while operating the bed's power drive system

- Motor and controller are powered by a 24-volt DC independent circuit
- Quick release controller connection attached to the headboard
- 1-1/2 inch upward suspension travel
- 2-1/4 inch downward suspension travel
- 2 miles per hour maximum forward speed
- 1-1/4 miles per hour maximum reverse speed

- Operates with four wheel central lock in steer position with neutral position available for maneuvering in tight spaces while on a level surface

- Casters: Heavy duty 6 inch dual wheel casters with central locking and braking system.

- Minimum of 1-1/2 hour continues use

- Automatic charger, just plug-in, switch on, and the charger will stop when the batteries are fully charged. Charger may be left on while unplugged

- 1 horse power DC motor

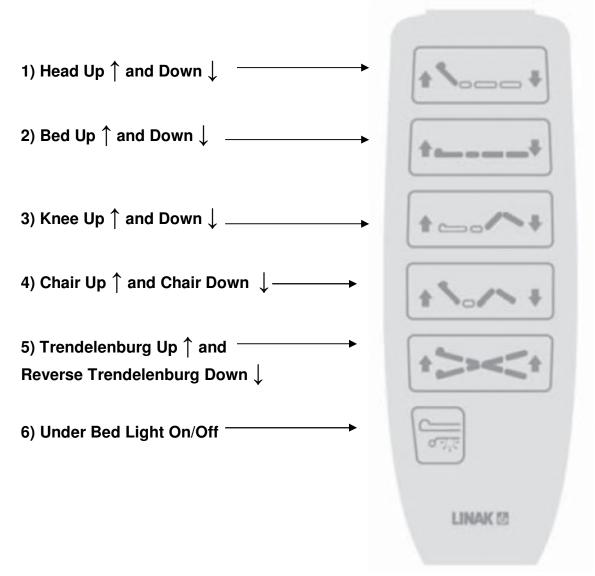


Function & Basic Operation (Bed)

Patient Pendant

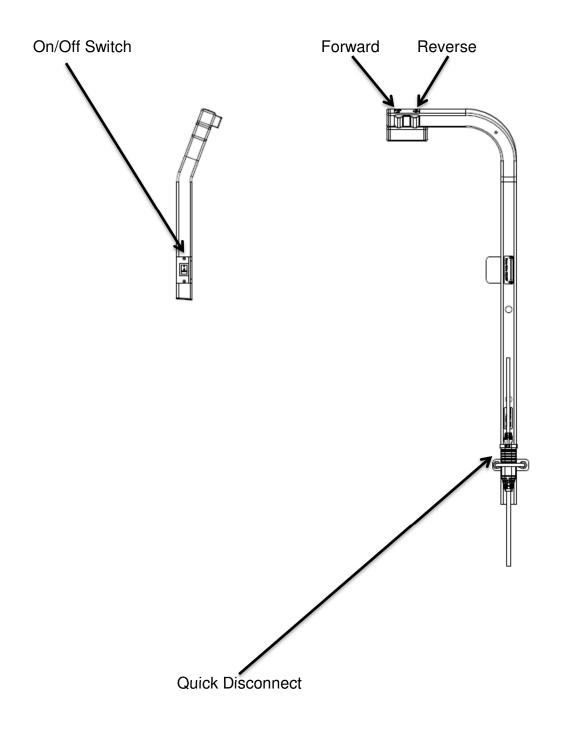
Pendant control allows easy operation of bed controls. Press and hold button to operate each function.

- 1) Raise and lower head section
- 2) Raise and lower bed deck
- 3) Raise and lower knee section
- 4) Cardio chair/bed flat (lowers head, knee and returns bed to lowest height)
- 5) Trendelenburg/ reverse Trendelenburg
- 6) Under bed light on/off





Function & Basic Operation (Power Drive System)





Function & Basic Operation (Power Drive System)

Engage Power Drive

- 1. Ensure both Power Cords are unplugged and properly stored.
- 2. Using the Hand Pendent Bed Control, lower bed to completely Lowest Position.
- 3. Using Brake/Steer foot pedal, set casters in steer position.
- 4. Turn ON Power Drive ON/OFF Switch. When switch is illuminated "RED" Power is on.
- 5. Press Forward/Reverse Power Drive control switch to mobilize bed. Forward/Reverse Power Drive control switch is variable speed.
- 6. For enhanced maneuverability on level surface bed casters may be operated in neutral position.
- When releasing Forward/Reverse Power Drive Control Switch, the bed will gradually slow to a complete stop.

Using Power Drive on incline

When stopping bed on incline, engage four wheel central lock.

Disengage Power Drive

- 1. Bed Must be at complete stop.
- 2. Engage four wheel central lock.
- 3. Use Hand Pendent Bed Control to raise bed. Any elevated Bed Deck Position will disengage Power Drive.
- 4. Turn OFF Power Drive ON/OFF switch.
- In the event of power loss to the power drive system while the drive system is engaged.
 - 1. Engage four wheel central lock.
 - 2. Raise bed.
 - 3. Disengaging four wheel central lock will then allow bed to move.

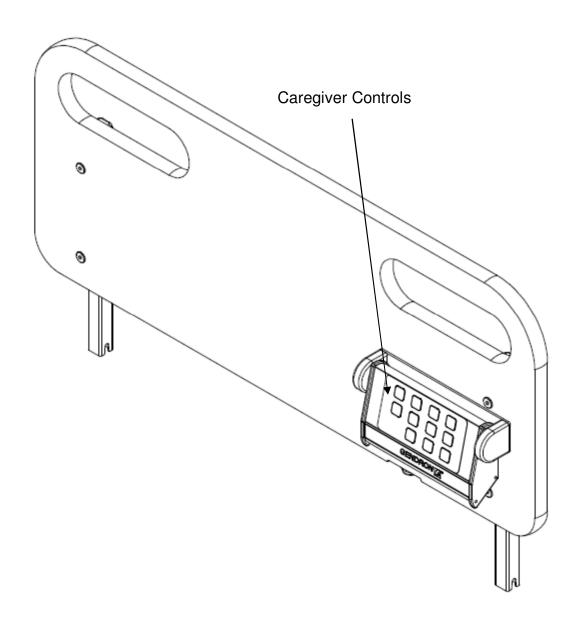
Note:

- If bed power is lost in conjunction with loss of drive power:
 - 1. Engage for wheel central lock.
 - 2. Using brake override lever, disengage drive brake.
 - 3. Disengaging four wheel central lock will then allow bed to move.

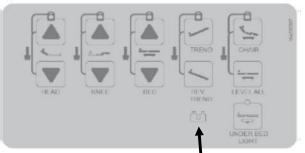


Caregiver Controls

Caregiver controls are located at the foot end of the bed, on the side opposite of the rotating scale display.







Battery Indicator: Red Light (charging), No Light (fully charged)

Lockout control

To lock/unlock a function from being used press and hold the up/down arrow button of the function to be locked/unlocked.

A yellow LED is lit above the buttons of locked functions.



Head/Knee/Bed/Tilt (trendelenburg/ reverse trendelenburg)

Press and hold the button of the function desired +



Cardio chair position

Press and hold the

button.

When the cardio chair button is pushed the head and knee will raise simultaneously to their highest position, then the foot end of the bed will lower (reverse tilt).

Level All

Press and hold the

button.

When the bed flat button is pushed the bed will return to its lowest height and then head and knee sections will lower.

Under bed light



button to turn the light on or off.

A yellow LED is lit above the button when the light is on.



Central Brake/Steer Function

The Brake/Steer pedals are located at each corner of the bed

Neutral Position

When positioning the bed in a small area place the Brake/Steer pedal in the neutral position (pedals level) to release the steer function and brakes.

Steer Position

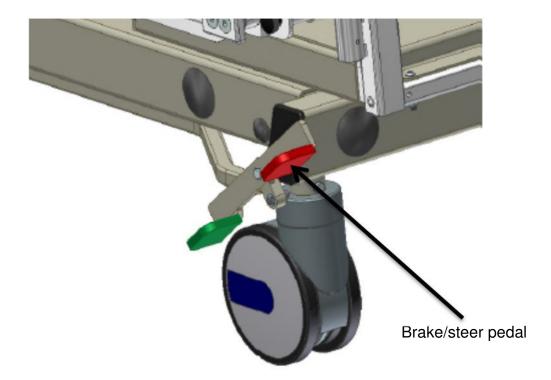
When transporting the bed use the steer function to keep the bed tracking in a straight line and to assist in turning corners.

To activate steer function press down on one of the green Steer pedals.

Brake Position

To set the brakes press down on one of the red Brake pedals.

- Caution: Always set the brakes when the bed is occupied unless transporting the patient.
- Caution: The brakes are not designed to stop a bed that is in motion. Do not operate central brake/steer function when moving the bed. Failure to do so could result in equipment damage or injury.

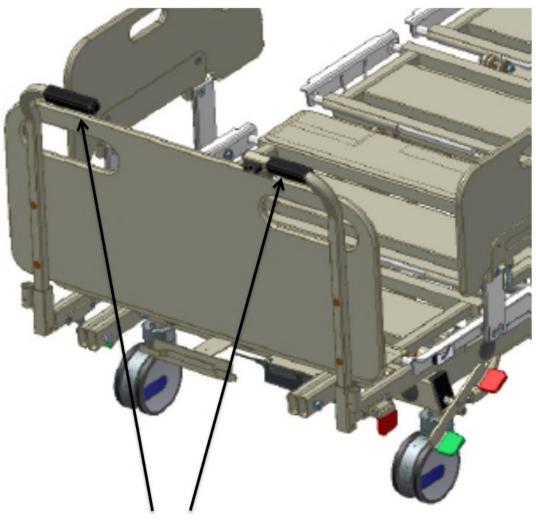




Push Handles

The push handles are located at the head end of the bed, on the headboard, and are used to facilitate moving the bed.

▲ Caution: Do not move the bed using the side rails.



Push Handles



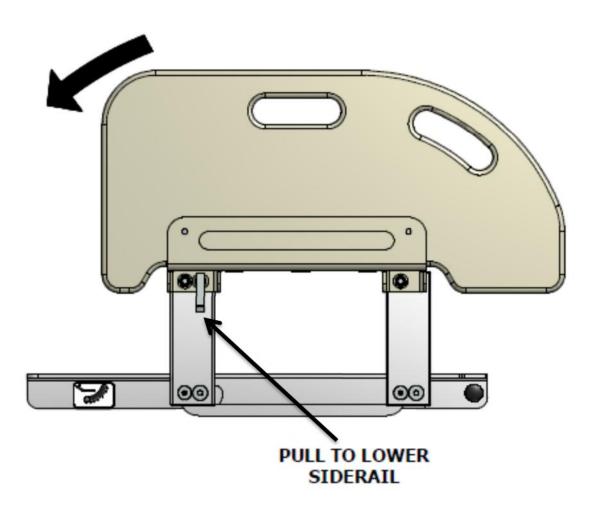
Siderail Operation

Siderails are located on each side of the bed. Siderails have a 2-position swing down operation.

To raise siderail, grasp top section of rail and lift. Allow release pin to snap into the locked position.

Caution: Make sure siderails are securely locked into position to prevent injury. Gently pull on the siderail to verify that it is latched in position.

To lower side rail, pull release lever and lower side rail.





CPR Release

For emergency lowering of head section pull and hold the CPR release handle. The CPR release handle is located at the head end of the bed on both the left and right side.



Caution: Always allow head section to fully lower when using CPR release. Failure to do so may damage the actuator.

Note:

1. CPR release may not operate unless a patient is lying on the bed.

2. After activating CPR function it may be necessary to drive the actuator inward (head down) to reset the actuator before raising the head section.

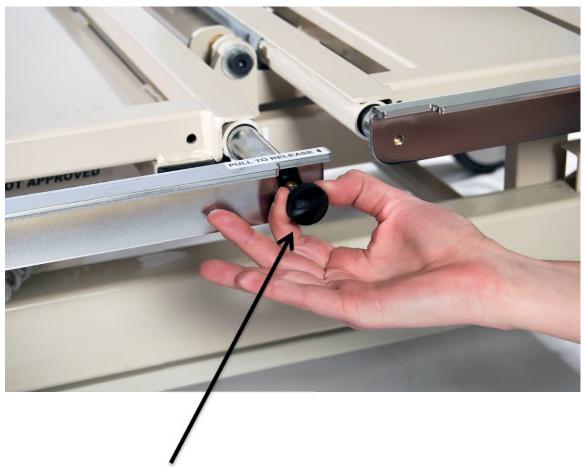




Side Extension

Using the deck extensions the bed width can be changed from 39" to 48" (5148PDX) and 39" to 48" to 54" (5154PDX). To adjust the side extensions pull the black knob that is at the end of each extension and move to the desired position.

- Caution: Gently push/pull on the extension to verify that it is locked in position.
- Caution: Ensure that all side extensions are adjusted to the same width. Equipment damage may occur during deck articulation.
- Caution: Ensure that deck extensions are adjusted to properly fit the mattress. Improperly adjusted extensions may create dangerous gaps between the mattress and siderails.



Release knob



Foot Extension

Using the foot extension, the bed length can be adjusted from 84" to 92". To adjust the foot extension, pull the black knob that is at center of the extension (below the footboard) and move to the desired position.

Caution: Gently push/pull on the extension to verify that it is locked in position.

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Caution: Ensure that the extension is adjusted to properly fit the mattress. An improperly adjusted extension may create a dangerous gap between the mattress and footboard.



Release knob

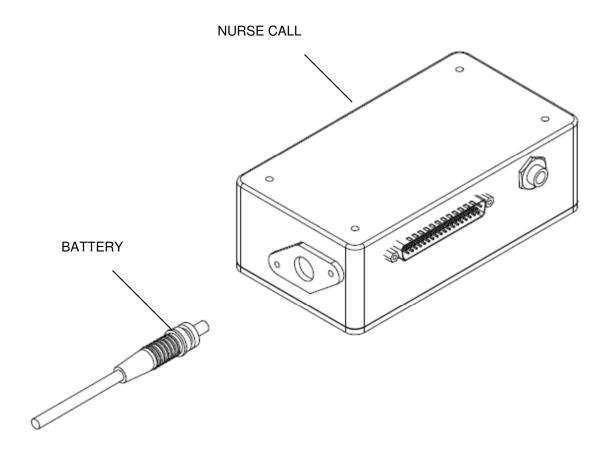


Battery backup

Battery backup allows full use of bed functions when AC power is not available for a limited time.

- Caution: Disconnect battery to prevent discharge during storage. Failure to do so will reduce battery life.
- Caution: Recharging a fully discharged battery may take up to 24 hours.

Battery cable is located at the head end of bed frame and plugs into the nurse call junction box.





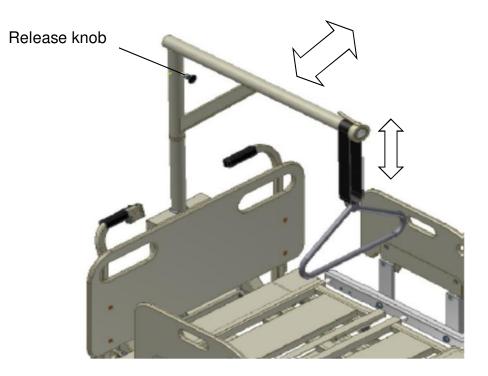
Low Profile Patient Helper (optional – not included)

The patient helper is intended to help the patient raise his or her upper body.

The patient helper handle may be raised or lowered by adjusting the strap.

While the patient helper is not in use, the boom can be rotated 90 degrees in either direction and locked. To rotate the boom, pull the release knob and rotate to the desired position.

- Warning: Do not allow the patient to use the patient helper unless the boom is locked in the position shown below. Failure to do so may result in injury or equipment damage.
- Warning: Gently push/pull on the patient helper boom to verify that it is locked in position.
- Warning: Do not exceed the rated capacity of the patient helper (600 lbs). Patient injury or equipment damage may occur.
- Warning: Do not use patient helper if strap is worn or frayed. Patient injury could occur.
- Warning: Do not attempt to remove the patient helper boom while a patient is in the bed. Patient injury could occur.

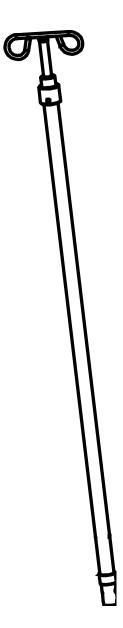




IV Pole (optional – not included)

IV pole may be used at any one of the (4) corners of the bed.

Rotate the yellow release mechanism to raise or lower IV pole.





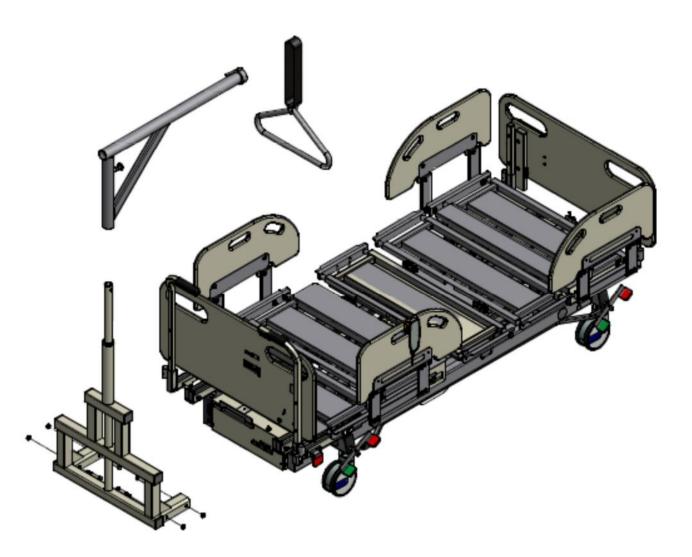
Assembly Instructions

Low Profile Patient Helper

1. Assemble patient helper frame to head end of bed frame using 4 bolts and locknuts.

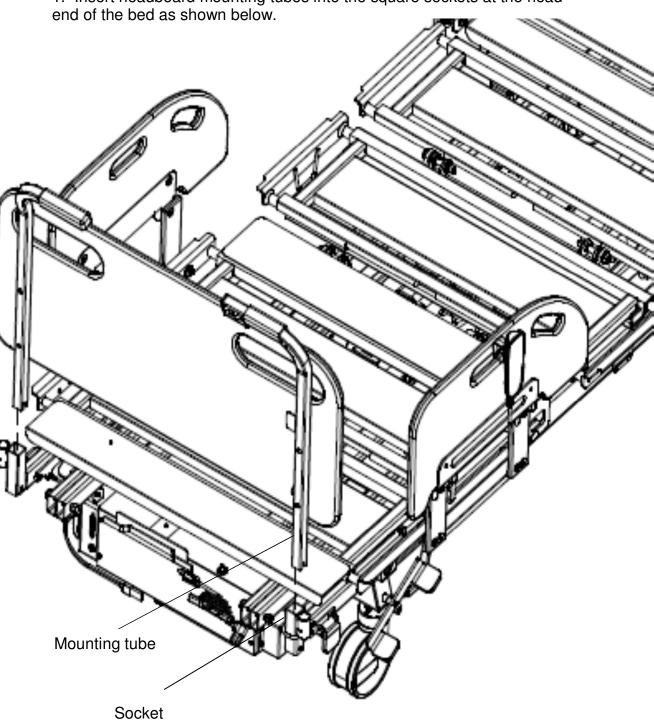
2. Lower patient helper boom onto patient helper frame. Make sure release pin engages frame and holds boom rotation.

3. Slide patient helper handle and strap over end of boom.





Headboard



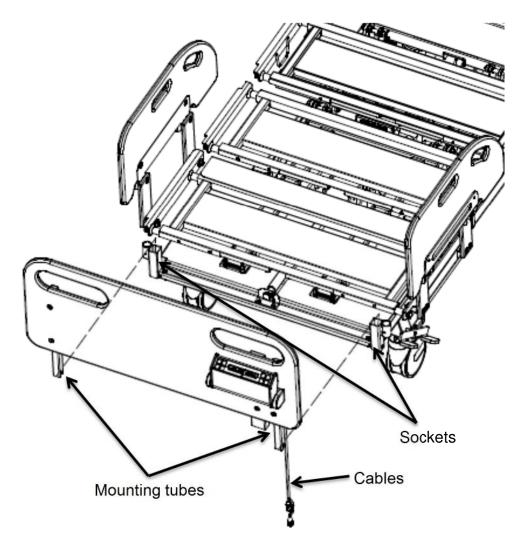
1. Insert headboard mounting tubes into the square sockets at the head



Footboard

1. Insert footboard mounting tubes into the square sockets at the foot end of the bed.

2. Connect the two electrical cables.



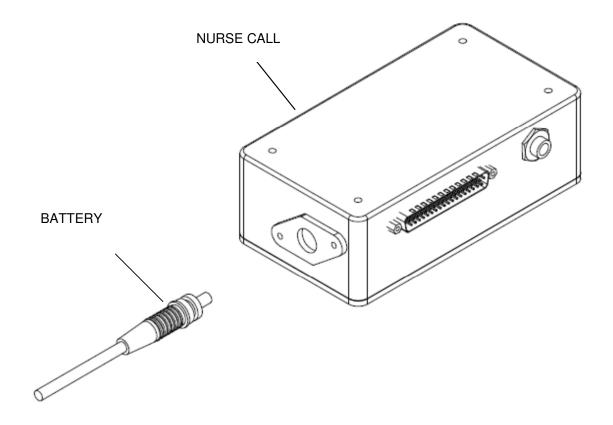
Footboard Removal

Caution: Disconnect the two electrical cables below the footboard before attempting to remove the footboard. Equipment damage may occur.



Battery

1. Plug battery into nurse call junction.





Bed Controls

Linear actuators control head/knee section as well as bed movement.

Control module controls all drive components.

Battery provides backup power in case of power failure.

Under bed light night light illuminates the area under the bed for patient safety.

Handset (shown on page 9) gives patient access to bed controls.

Caregiver keypad is used to control all bed functions. Lockouts can be used to prevent patient from articulating any bed function.

Caution: Disconnect AC power before unplugging any cables on the control module. Failure to do so may result in control module damage.

Power Drive Controls

Drive Motor controls bed movement forwards and backwards providing an assist when bed is under load and being moved elsewhere in the facility..

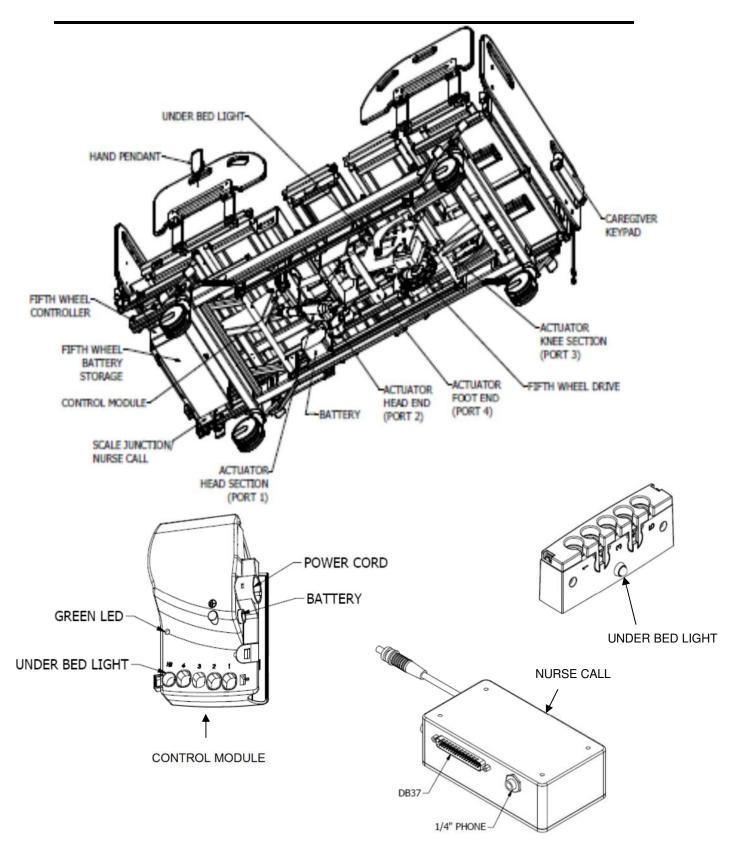
Control Module controls drive motor.

Battery provides power to the drive motor when on/off switch is on.

On/Off Switch turns power on and off to the drive motor using battery power.

Forward/Reverse Switch controls forward and backward motion of the bed





Diagnostics & Repair (Bed)



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Problem	Cause	Solution	
No Functions operate	No power to unit	Check power cord. Is it plugged into receptacle? Check cord for breaks.	
Green Power-on light does not glow	Electrical power cord not properly plugged into control module		
Power cord plugged In but no functions operate	control module	Check for power to receptacle.	
	Bad handset	Replace handset.	
	Bad control module	Replace control module.	
Three actuators operate "OK" one	Bad control module	ISOLATE THE PROBLEM	
actuator will	Bad handset	Interchange connections on control module so that problem	
not operate	Bad actuator motor	actuator is plugged into an actuator connection on the control module that is working satisfactorily. If problem actuator now operates "OK" but actuator that was operating "OK" now has a problem, either the control module or handset is faulty. Replace as required.	
Actuator will not function properly	Defective wiring	Check wiring between control and actuator. Reverse wires.	
or not at all	Defective actuator motor	Replace actuator	
Battery will not charge	Defective wiring	Check wiring between control and battery.	
	Defective battery	Replace battery	
Bed not grounded	Unit is not grounded between power cord and frame or between power cord and wall receptacle	Check ground (green wire) between frame and power cord. Is power cord plugged into a grounded wall receptacle?	
Caregiver control LED's flashing – no functions operate	Controller error	Reset controller- hold knee up and knee down buttons on handset simultaneously for 5 seconds until beep sequence starts	

Diagnostics & Repair (Power Drive System)

Problem

Cause

Solution



Batteries need charged	Ensure batteries are charged.	
Switch not in ON position	Switch will illuminate when power drive is on	
Short in directional control switch	Turn ON/OFF switch to OFF then back to ON.	
Bed not is lowest position	position Lower bed to lowest position.	
Tread wear on wheel	Replace wheel if less than 1/16 inch tread is left on wheel.	
Dirty floor	Clean floor.	
Defective brake	Brake or motor will need to be replaced.	
Dirty floor	Clean floor.	
Bed is on irregular surface Defective actuator motor	Due to the travel limits of the motor suspension some irregularities may result in the wheel loosing traction with floor.	
	Switch not in ON position Short in directional control switch Bed not is lowest position Tread wear on wheel Dirty floor Defective brake Dirty floor Bed is on irregular surface	



<u>Scale</u>

The scale can be used to monitor the patient's weight, change in weight and to alert the caregiver when the patient exits the bed. The scale display rotates down when not in use for patient privacy. The scale system is powered by the beds electrical system therefore no batteries are required.





Menu is used to edit system setup.



Zero Weight press and hold to change the displayed weight to zero. **Do not press when patient is in the bed.**

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Zero Weight Change press and hold to change the displayed weight change to zero.

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Weigh wakes the display. Also displays current weight/weight change data.

Freeze Lets items be added or removed from the bed and not have an effect on the shown patient weight. Also, if a known error exists, lets the caregiver manually correct the shown patient weight. Press and hold to freeze.



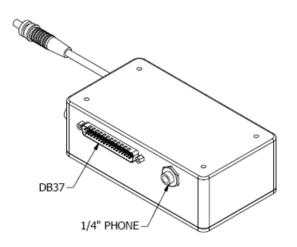
Up/Down arrows. Use up arrow to change menu selection. Use down arrow to toggle value. When in Freeze mode, arrows can be used to make manual adjustments to the weight value.





Bed Exit Alarm press to enable or disable alarm. Use the menu button to program the alarm parameters.

The facility nurse call can be activated by the bed exit alarm if desired by using either the DB37 or 1/4" phono jack located at the head end of the bed. Nurse call extension cables are optional and not included.





To edit scale system setup:



Press Menu



Use **Up** arrow to change menu selection

Use **Down** arrow to toggle value



Press Freeze to save changes or



Weigh to exit without saving changes

The parameters listed below can be changed through the Menu

Bed Exit Alarm on 0-45% of patient weight in 5% increments. 5-15% high sensitivity, 20-30% medium sensitivity, 35-45% low sensitivity.

Bed Exit Alarm on time 30-300 seconds in 30 second increments. Alarm will sound for the amount of time desired between 30-300 seconds.

Units Kg or Lb

Backlight intensity 0-10 in 1 unit increments

To correct shown patient weight

If the shown patient weight is known to be wrong press and hold the **Freeze** button, then use the **Up** and **Down** buttons to correct the shown weight. When adjustments are complete press the **Freeze** button to exit.



Inspection, Cleaning & Maintenance

Perform the following checks before using the bed:

- Do a careful walk around inspection of the bed. Look underneath the bed to make sure there is nothing stored there. This area must be kept clear to avoid any interference with bed parts, which move during operation.

- Lock the casters.

- Plug the power cord into a 120 volt grounded socket with a capacity of at least 4 amperes. Using the handset, cycle the bed through all of its operations. Make sure that everyone including you is clear of the bed during these operations. See that:

- All power bed operations work smoothly and stop in any desired position.

- Bed height, angle of leg lift and backrest can be adjusted properly.

- Trendelenburg operates smoothly and can be stopped in any desired position.

- Lockouts on caregiver control panel function properly.

- Position the siderails, be sure they rotate and lock properly.

- Test CPR release function. CPR release may not operate unless a patient is lying on the bed.

- Inspect patient helper frame and strap. If strap is worn replace immediately.

- When you are satisfied that the bed is operating properly, instruct all personnel who may be involved in the bed operation.

If problems are found, contact Gendron customer service at 800-537-2521 or your authorized Gendron dealer.



Cleaning

- Warning: Before cleaning any portion of the bed, disconnect power cord from the wall outlet.
- Caution: Before using any cleaning product, test it on the underside of the bed. Never use any volatile or flammable fluid (thinner, gasoline, etc.) that could cause discoloration or deterioration.

Use mild soap and water or a nonabrasive hospital-grade detergent disinfectant to clean the bed. Wet a cloth with the cleaning product and wring dry. Then gently wipe off the bed. Use caution when cleaning around electrical connections to prevent shock to the person or damage to the electrical components.

Yearly Inspection and Maintenance

Once per Year:

- 1. Check all of the bolts to be sure that none worked loose.
- 2. Check that all pins are in their locked position and are securely fastened.
- 3. Check all welds for cracks.
- 4. Check all electrical connections for tightness.
- 5. Lubricate all pivot points with FDA approved grease or dry Teflon lubricant.
- 6. Check all electrical wires for any frays, kinks, or deterioration.
- 7. Check lock and steer castors for proper operation.
- 8. Check that CPR function operates properly.

Any discrepancies noted during inspection must be corrected before using the bed.



Specifications

Product name: Acute Care Bariatric Bed

Model: 5148PDX and 5154PDX

Dimensions

Patient Weight capacity: 1000 pounds

Trapeze (optional) capacity: 450 pounds

Overall width (with side extensions in): 41"

Overall length (with foot extension in): 91.8"

Overall height with trapeze (bed in lowest position): A-frame 67.8", H-frame 72.5"

5148PX Bed deck: adjusts 39-48" x 84-92" 5154PX Bed deck: adjusts 39-54" x 84-92"

Bed deck height: adjusts from 16.6-26.6"

Head section angle: 0-70°

Knee angle: 0-20°

Trendelenburg angle: 0-9°

Reverse trendelenburg angle: 0-9°

Siderail length: 26"

Siderail height above bed deck: 17"

Caster size: 6" Heavy Duty Dual Wheel

Floor clearance: 3.5"

Bed Weight: 710 pounds

Note: All dimensions are approximate

This bed meets FDA recommendations to reduce entrapment risk detailed in "Hospital Bed System Dimensional and Assessment Guidance to Reduce Entrapment" issued March 10, 2006 when used with Gendron mattress .14884-F & .14884-1F.



<u>Warranty</u>

Defective parts will be repaired or replaced by the company or its appointed agent. The warranty does not cover damage caused by misuse or negligence, nor does it cover defects or damages by use of unauthorized parts or services by an unauthorized person.

Gendron, Inc. warrants the bed frame to be free from defects in materials and workmanship for a period of (5) years from date of purchase. Wear items including, but not limited to: casters, actuators, control module, handset, battery, battery charger, power cord, cables, release cables, bearings, pins, release knob, trapeze handle assembly and mattress are warranted to be free of defects in material and workmanship for a period of one (1) year. If within such warranty period any such products shall be proven to be defective, such product shall be repaired or replaced, at the company's option. This warranty does not include any labor or shipping charges incurred in replacement part installation or repair of any such product. The company's sole obligation and your exclusive remedy under this warranty shall be limited to such repair and/or replacement.

This warranty gives you specific legal rights, and you may also have other rights that vary from state to state.

For warranty service please contact Gendron, Inc. Return authorization is required. Do not return products without our prior consent.

Freight Damage: The carrier who delivers merchandise to your door is responsible for loss and damages. Acceptance of the shipment by you is acknowledgment that all articles delivered were in good condition and properly packed. Therefore, all claims for loss or damage must be filed immediately with the freight carrier. Then notify us. We will mark our records accordingly. After settling claim, damaged merchandise will be picked up by the freight carrier and returned. Should you need assistance with the claim, call customer service 800-537-2521.

Return Goods: Call customer service at 800-537-2521

Do not return merchandise without prior authorization. All correspondence relating to this warranty must indicate model and serial number and be addressed to:

Gendron, Inc. 520 W. Mulberry St. – Suite 100 Bryan, Ohio 43506

